

**Self-Study Report**  
Prepared for the  
**Council on Education for Public Health**  
by the

**Instituto Nacional  
de Salud Pública**

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de Salud Pública

Universidad No. 655 Colonia Santa María Ahuacatlán  
Cerrada Los Pinos y Caminera C. P. 62100  
Cuernavaca, Morelos, México

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# Self-Study Report

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# Acronyms Used in This Document

ALAESP	Latin American Association of Schools of Public Health
AMESP	Mexican Association of Schools of Public Health
ANUIES	National Association of Universities and Institutions of Higher Education
APHA	American Public Health Association
APR	Admission, Promotion, and Retention Program
ASPH	Association of Schools of Public Health
BI-RADS	Breast Imaging-Reporting and Data System
BIREME	Latin American Center for Information on Health Sciences
BIRMEX	Biological and Reagents Laboratory of Mexico
BSC	Balanced Scorecard
BVS	Virtual Health Library
CAA	External Academic Commission
CAB	Abstracts Center for Agricultural Bioscience International
CAD	Academic and Teaching Commission
CAI	Academic Research Commission
CATHALAC	Water Center for the Humid Tropics of Latin America and the Caribbean
CCINSHAE	Coordinating Commission of National Institutes of Health and Regional Specialty Hospitals
CDC	Centers for Disease Control and Prevention (U.S.)
CEDESS	State Centers for Health Systems Development
CEIS	External Commission of Health Research
CENAPRED	National Center for Disaster Prevention
CENAVECE	National Center of Epidemiological Surveillance and Disease Control
CENEVAL	National Evaluation Center for Higher Education
CENIDSP	Information for Public Health Decisions Research Center
CENSIDA	National Center for Prevention and Control of AIDS
CEPH	Council on Education for Public Health
CESAG	Center for Higher Education in Administration and Management (Senegal)
CIDE	Center for Research and Teaching in Social Sciences
CIEE	Evaluation and Surveys Research Center
CIFRHS	Inter-institutional Commission for the Development of Human Resources in Health
CINyS	Nutrition and Health Research Center
CINVESTAV	Advanced Studies Research Center of the National Polytechnic Institute
CISEI	Infectious Disease Research Center
CISIDAT	Consortium for Research on HIV/AIDS/TB
CISP	Population Health Research Center
CISS	Health Systems Research Center
Cofepris	Commission for Protection Against Sanitary Risks
COHRED	Council on Health Research for Development
COMERI	Internal Regulatory Improvement Committee
CONABIO	National Commission for Knowledge and Use of Biodiversity
CONACYT	National Council for Science and Technology
Conadic	National Council against Addictions
CONAFOR	National Forest Commission
CONAHEC	Consortium for North American Higher Education Collaboration

CONGISP	International Congress on Research in Public Health
CONUEE	Internal Committee for National Energy Efficiency Commission
CRISP	Regional Public Health Research Center
CUDI	University Corporation for Internet Development
DAF	Office of Administration and Finance
DIF	System for Comprehensive Family Development
Ecosur	College of the Southern Border
ENCEL	Evaluation Survey of Rural Homes
ENSADEMI	Survey of Health and Rights for Indigenous Women
ENSANUT	National Health and Nutrition Survey
ERP	Enterprise Resource Planning
ESPM	School of Public Health of Mexico
EXANI	National Postgraduate Enrollment Exam
FUNSALUD	Mexican Health Foundation
GIS	Geographic Information System
GRE	Graduate Record Examination
HACU	Hispanic Association of Colleges & Universities
HBV	Hepatitis B Virus
HPV	Human Papillomavirus
IARC	International Agency for Research on Cancer
ICM	Medical Science Researcher
IDRC	International Development Research Center
IMSS	Mexican Institute for Social Security
IMSP	Mesoamerican Institute of Public Health
Indemaya	Institute for the Development of Mayan Culture of the State of Yucatán
Indre	Institute for Diagnostics and Epidemiological Reference
INE	National Ecology Institute
Inecol	Ecology Institute
INEGI	National Statistics and Geography Institute
INmujer	National Institute of Women
INPER	National Institute of Perinatology
INSalud	Health Institute Network
INSP	Instituto Nacional de Salud Pública (National Institute of Public Health)
Iresie	Higher Education and Educational Research Journal Index
ISECH	Health Institute of Chiapas
ISI-Web	Institute for Scientific Information-Web
ISR	Earned Income Tax
ISSSTE	Institute for Social Security and Services for State Workers
IVA	Value-Added Tax
Lacot	Analytical Laboratory for Tobacco Compounds
LIM	Mission-Oriented Research Line
MEXFAM	Mexican Foundation for Family Planning
MPH	Master of Public Health
NAAIS	Center for Compilation and Analysis of Health Information

NGO	Non-Governmental Organization
NIBSC	National Institute of Biological Standards & Control (U.K.)
NIH	National Institutes of Health
NIST	National Institute of Standards & Technology (U.S.)
NLM	National Library of Medicine
PAHO	Pan American Health Organization
PAT	Annual Work Plan
PCR	Polymerase chain reaction
PEDD	Program for Teaching Performance Incentives
PND	National Development Program
PNPC	National Honors Graduate Program
PROFAE	Alumni Academic Training Program
PRONASA	National Health Program
PROSESA	Health Sector Program
PTP	Final Professional Project
Rebics	Central South Region Library Network
SAC	Office of Academic Affairs
SAN	Storage Area Network
SASE	System for Addressing Student Requests
SciELO	Scientific Electronic Library network
Sedesol	Ministry for Social Development
SEP	Ministry of Public Education
SFP	Ministry of Public Administration
SHCP	Ministry of Finance and Public Credit
SIID	Electronic Information System for Research and Teaching
SMSP	Mesoamerican Public Health System
SNI	National System of Researchers
SSA	Ministry of Health
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TdC	Control Tables
tropEd	Network of Institutions of Higher Education in International Health
UDUAL	Organization of Latin American Universities
ULV	Ultra Low Volume Aerial Spray
UN	United Nations
UNACH	Autonomous University of Chiapas
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNAM	National Autonomous University of Mexico
UNDP	United Nations Development Program
UNICACH	University of Arts and Sciences of Chiapas
UNICEF	United Nations Children's Fund
UPS	Uninterruptible Power Sources
USAID	United States Agency for International Development
VNOC	Videoconferencing Operations Center
VTD	Vector-borne Diseases
WHO	World Health Organization

# Glossary

*Following are of terms whose meanings are specific to the INSP or to public health in Mexico.*

**Academic Bodies:** This term is frequently used in Mexico to refer to all committees, commissions and other specific groups in which professors and INSP authorities work together to discuss matters related to the development and assessment of graduate programs.

**Commission:** A group of members that join to analyze and take decisions about specific matters at the INSP. It usually has the same purpose as a committee.

**Credit:** Mexico's Ministry of Education assigns 0.0625 credits per hour of learning activities, which are defined as follows: "Learning activities shall be understood as all activities in which the student participates to acquire the knowledge or skills required by a study plan." In Mexico, 1 credit is equal to 16 hours of learning activity (e.g., class activities, independent study, community or lab activities) performed during an academic semester of 20 weeks. Thus, 1 credit in the Mexico system equals 1.3 credits in the U.S. system.

**ICM Level:** ICMs, or medical science researchers, are categorized by the National Institutes of Health into one of six levels according to education and research productivity. The levels are ICM-A through ICM-F, with ICM-F being the highest.

**Residence program:** A residence program in Mexico is a three-year graduate degree program offered in general and specific areas of medicine. It is part of the specialization activities available exclusively to medical students, who can access them only through a national examination (the National Medical Residency Exam). Residence programs train medical students through a multidisciplinary approach that combines academic content with training in health services at different levels of care in Mexican and foreign health institutions. Students must carry out six rotations of practicum activities in hospitals and local/regional health centers as part of this program.

**Specialty:** In Mexico a specialty is a one-year graduate degree program. Candidates must have a bachelor's degree to be eligible for this program, which is similar to a certificate program offered in the United States.

**Staff:** This group includes all administrative personnel at the INSP with positions of mid- to high-level authority who have academic or administrative decision-making authority. Examples include department heads, deans or associate deans, and research center directors. Although part of the administrative personnel at the INSP, they have roles with more responsibility and higher authority.

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# Preamble

## A BRIEF HISTORY

The Instituto Nacional de Salud Pública (INSP), or National Institute of Public Health of Mexico, was created in 1987 as the result of a strategic initiative to consolidate public health research, graduate training and continuing education within Mexico's Ministry of Health (SSA). The goal was to create a single institution that would train highly qualified public health practitioners and academicians and create an atmosphere that would promote collaboration in public health research and education.

Three existing institutions from the government health sector merged to create the INSP: the Mexican School of Public Health, the Population Health Research Center and the Infectious Disease Research Center. The merger combined the long teaching tradition of the Mexican School of Public Health (founded in 1922) with new research approaches in public health. The result is an institution with a multidisciplinary perspective that is able to study the population-based dimensions of health, disease and health/disease determinants, as well as the organized social response to disease prevention and health promotion. A fundamental premise for creating the INSP was that excellence in public health education could be achieved only in a context in which both faculty and students actively participated in cutting-edge research for improving the population's health. The objective was to educate public health professionals and academicians while conducting high-quality research.

In 1995, the INSP was reorganized to further enhance and expand public health research and education. The Institute formed additional research centers and brought in leading academicians and public health practitioners. In addition, degree programs became linked directly to a research center, which promoted faculty participation in both teaching and research requiring all experienced researchers to teach. The Faculty Colleges (collegiate bodies that focus on specific fields of study) were created to support and focus teaching programs. These colleges serve as the academic core for program development and provide forums for critical discussion and exchange of ideas among academicians. The reorganization has allowed the INSP to make major advances in integrating teaching and research, conducting multidisciplinary mission-oriented research, and developing high-quality, cutting-edge practices in health promotion and disease prevention that advance public health in Mexico.

## WHO WE ARE TODAY

The INSP has become one of the largest public health institutions in the developing world and is the leading institution for teaching, research and service to improve public health not only in Mexico but in all of Latin America. The INSP programs reflect public health's tripartite focus: utilizing biomedical sciences, employing population-based approaches to research and practice, and supporting health systems research.

Within the Association of Schools of Public Health (ASPH), the INSP is one of just two member institutions that offer professional and academic degrees to the Spanish-speaking public health community. The instruction, research and services provided by the INSP reflect the cultural, social and economic realities of Mexico, a developing, middle-income country. These activities target health professionals who work not only in Mexico but also across Latin America, the United States and, increasingly, worldwide. The INSP therefore fulfills a critical need within the public health community in Latin America and around the world.

The current Director General/Dean of the INSP is Dr. Mario Henry Rodriguez Lopez, and the Associate Academic Dean is Dr. Laura Magaña Valladares. The deputy directors of the research centers are highly qualified researchers with a strong commitment to enhancing instruction, research and service activities in fulfillment of the INSP's mission. INSP faculty members include epidemiologists, physicians, biologists, psychologists, sociologists, anthropologists, environmental engineers, toxicologists, statisticians, nutritionists, chemists and other specialists in the field of public health. The main campus is located in the city of Cuernavaca, 70 kilometers south of Mexico City. The INSP also has campuses in Mexico City and Tapachula, Chiapas.

Since receiving CEPH accreditation in 2006, the INSP has improved its training programs by carrying out curriculum reform focused on competency-based education, offering continuing education through multiple formats (online, executive and blended), reorganizing research to become mission-oriented, adding planning and evaluation dimensions, and developing public health services that are linked to scientific results from INSP research projects. In addition, the INSP has increased its international scope by collaborating with other institutions in Latin America, the United States and Europe through its 2008 accreditation in tropEd, a network of higher education institutions in international health.

In accordance with its mission, the INSP constantly works to enhance academic opportunities and to strengthen its role in Mexico in order to improve population health promotion and social equity, with a specific focus on vulnerable social groups. In order to achieve this goal, the INSP collaborates with federal and state governments, national and international health organizations, community groups and alumni. The INSP's integration of

education and research provides the synergy needed to strengthen and expand public health activities, increase the quality of teaching and research and improve public health practice in Mexico and Latin America.

This self-study provides detailed information about the INSP's multifaceted efforts, ongoing projects and contributions to the field of public health.

## Criterion I.0

# The School of Public Health

## 1.1

**Mission.** The school shall have a clearly formulated and publicly stated mission with supporting goals and objectives. The school shall foster the development of professional public health values, concepts and ethical practice.

The Instituto Nacional de Salud Pública (INSP), Mexico's National Institute of Public Health, is a public institution dedicated to the fulfillment of its mission, vision and objectives, as outlined below.

### Required Documentation

#### 1.1.A

A clear and concise mission statement for the school as a whole.

**INSP mission statement:** To contribute to social equity by promoting the highest standards of health for the population through the generation of knowledge, innovation in health systems and training of highly qualified public health professionals.

**INSP vision statement:** To be a national and international leader in the practice and development of public health.

Both can be consulted in the INSP'S Five- to Ten-Year Strategic Plan 2007-2012 (available in an on-site resource file).

#### 1.1.B

One or more goal statements for each major function by which the school intends to attain its mission, including instruction, research and service.

Since its establishment in 1922, the INSP has strived to create and meet goals that support quality and innovation in each of its three main functions: instruction, research and service.

**Instruction.** The INSP has pioneered the development of public health instruction in Latin America. The Institute's master's and doctoral programs are continually updated to reflect evolving community needs. They have been designed with a focus on competencies that emphasize the practical application of knowledge and that promote a comprehensive vision of learning. Stated goals for instruction are:

- To prepare competent graduates to be leading professionals in their areas of specialization within public health.
- To provide relevant, competencies-based instruction in public health at the graduate and continuing education levels.

**Research.** The INSP is committed to conducting cutting-edge research that both informs students' education and contributes to overall knowledge in the field. The Institute's stated goals for research are:

- To contribute to the creation of original knowledge to improve public health conditions through "mission-oriented research" that identifies factors affecting the health of various populations and determines effective community interventions. Subjects of analysis include populations (epidemiological research), health systems (systems research), individuals (clinical research) and cellular parts (molecular biology).
- To promote a multidisciplinary approach to generating knowledge aimed at meeting public health challenges.
- To produce knowledge that translates into actions and policies in diverse sectors (e.g., health, education, social development), thus ensuring that health services benefit the people of Mexico, Latin America and around the globe.

**Collaboration and service.** Because the INSP is a government institution, service is, by law, part of the INSP's mandate\* (Appendix I.1.b). In addition to the functions of education and research, the INSP's purpose includes strengthening health services by conducting health surveys, providing support for epidemiological monitoring of infectious diseases and other health problems, developing diagnostic technologies for transmissible diseases, and evaluating and/or performing diagnostic services for community sectors that require these services, among other activities.

The INSP's strategic partners in these efforts represent the academic, community, business, health and government sectors. Partners include research universities and institutes, pharmaceutical companies, clinics and hospitals, medical schools, community-based organizations, foundations, international organizations,

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\* The law of the National Institutes of Mexico will be available as an on-site resource file and can be consulted for more information in [http://www.diputados.gob.mx/LeyesBiblio/ref/ins/LINS\\_orig\\_26may00.pdf](http://www.diputados.gob.mx/LeyesBiblio/ref/ins/LINS_orig_26may00.pdf)

health-related professional associations, and public entities at the federal, state and municipal levels. The INSP works with these groups on an ongoing basis to serve the public by meeting public health needs. Some examples of these strategic partners include the Mexican Social Security Service, the National Autonomous University of Mexico, the Pan American Health Organization, Pfizer, GlaxoSmithKline, the Ministry of Foreign Relations, the Ministry of Education, the National Council of Science and Technology, MEXFAM (Mexican Foundation for family planning), FUNSALUD (Mexican Health Foundation), the World Bank, the Bill and Melinda Gates Foundation, the National Center for the Control and Prevention of HIV/AIDS, and the National Institutes of Statistics, Geography and Informatics, among many others.

The INSP goal statements for collaboration and service are:

- To maintain a close connection with communities throughout Mexico in order to identify and meet the needs of various populations in promoting and improving public health.
- To generate state-of-the-art knowledge based on scientific evidence to support decision-making that promotes healthy lifestyles.
- To assist the academic, community, business, health, and government sectors in designing, implementing and evaluating public health policies and programs.
- To work with academic, community, business, health and government partners to identify and address critical national and global public health priorities.

### 1.1.C

A set of measurable objectives relating to each major function through which the school intends to achieve its goals of instruction, research and service.

To fulfill its mission and vision, the INSP has developed a Five- to Ten-Year Strategic Plan that establishes key goals, measurable objectives and concrete actions to guarantee the effectiveness, efficiency, relevance, profitability and transparency of the institution's priority action areas: mission-oriented research, post-graduate education, and collaboration and service. All areas of the institutional community participate in the planning of the Institute's activities. With the approval of the Governing Board, the Director General/Dean presents the Five-Year Strategic Plan. Then a consultation process is initiated during which the Institute gathers proposals from the research centers and the Office of Academic Affairs for specific annual objectives and actions that can fulfill INSP mission, vision and strategic plan. The results of this consultation are translated into the Annual Work Plan (PAT), which unites all of the interests of the INSP from the areas of instruction, research and service and is developed collaboratively including faculty, staff, students and constituents perspectives.

The strategic vision, goals and objectives of the INSP are established in accordance with the National Development Program (PND) 2007-2012, as presented in the National Health Program (PRONASA) and the Health Sector Program (PROSESA)\* of the Mexican federal government. The INSP's strategic plan (2007-2012) establishes essential objectives among the three core areas, each with measurable goals that are included in the Annual Work Plan (PAT). As an example, in 2010 the INSP took 237 specific actions to meet its objectives (available in an on-site resource file).

### Instruction

**Strategic Objective:** Provide outstanding training and preparation for future experts in the field of public health through professional and research programs.

#### Measurable Objectives:

- Operate competency-based, relevant and innovative academic programs by reviewing and revising the programs every 3 years.
- Maintain Council on Education for Public Health (CEPH) and National Council for Science and Technology (CONACyT) accreditation for all programs in 2011.
- Achieve European certification in 2011.
- Operate a student exchange program with funding as part of the academic program by 2009.
- Offer diverse opportunities to train faculty in teaching strategies every year through at least one yearly teacher training program.
- Offer diverse and flexible training formats for working professionals (executive, virtual and blended formats) by 2009.
- Increase the number of continuing education participants by 20% by 2011.
- Increase the number of e-learning courses by 30% by 2011.
- Launch the INSP Virtual Campus in 2010 and ensure its successful operation by 2012.
- Establish relationships with international educational institutions with the goal of initiating collaborative graduate programs in 2010, and ensure their successful management.
- Create a Student Support Services and Campus Life Department in 2009.
- Strengthen the collegiate bodies by updating academic regulations and promoting regular evaluation processes.

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<?> The National Development Program (PND) 2007-2012 is available at <http://pnd.presidencia.gob.mx>; National Health Program (PRONASA) 2007-2012 is available at [http://portal.salud.gob.mx/descargas/pdf/pns\\_version\\_completa.pdf](http://portal.salud.gob.mx/descargas/pdf/pns_version_completa.pdf); the Health Sector Program (PROSESA) 2007-2012 is available at [http://portal.salud.gob.mx/descargas/pdf/plan\\_sectorial\\_salud.pdf](http://portal.salud.gob.mx/descargas/pdf/plan_sectorial_salud.pdf).

- Achieve a position of academic leadership with national and international academic bodies in public health and participate in at least three collaborative or international projects each year.

## Research

**Strategic Objective:** Produce knowledge with high strategic value for the improvement of health.

### Measurable Objectives:

- Ensure that 100% of newly contracted researchers are associated with mission-oriented research lines (LIMs) by 2012.
- Increase researchers' national and international collaborations by 50% by 2012.
- Increase the percentage of INSP researchers in the National System of Researchers (SNI) to 80% by 2012.
- Increase INSP scientific production from 1.5 to 2 articles per researcher by 2012.
- Promote the development of new research projects in diabetes mellitus, cardiovascular disease, cancer, environmental health and reproductive health by 2012.
- Implement large-scale, evidence-based health interventions with evaluation processes in schools, health establishments, and communities across Mexico by 2012.
- Generate scientific information about successful health policies and programs for the prevention of obesity and chronic disease in Mexico by 2012.
- Create a cross-disciplinary unit for Research in Health Information and Intelligence Systems by 2012.

## Collaboration and Service

**Service Strategic Objective:** Evaluate service and intervention programs with wide-ranging coverage in the health sector.

### Measurable Objectives for Service:

- Evaluate 10 national social programs and 15 national health programs relating to social development by 2017.
- Consolidate health program evaluation in the areas of qualitative research, process evaluation and econometrics by 2012.
- Create a Digital Survey Database for national consultation by 2012.
- Develop academic relationships between INSP's Evaluation and Surveys Research Center (CIEE) and international organizations.
- Create the Latin American Impact Evaluation Association by 2012.

**Collaboration Strategic Objective:** Promote collaboration and technical support both nationally and internationally to influence the public agenda and respond to current and future social health needs and demands with superior products and services.

### Measurable Objectives for Collaboration:

- By 2012, create the Mesoamerican Institute for Health Human Resources Development.
- Join the EUROsociAL consortium and coordinate the health systems governance committee by 2017.
- Establish Two State Centers for Health Systems Development (CEDESS) across Mexico by 2012.
- Create a Department for Evaluation, Development and Technological Adaptation to carry out human clinical trials for vaccines approved for Phase I, II, III and IV studies.
- Create two reference centers for the diagnosis of causal pathogens for emergent and re-emergent diseases by 2012.
- Strengthen the INSP and National Center of Epidemiological Surveillance and Disease Control's (CENAVECE) Epidemiological Surveillance Program.
- Establish an Environmental Toxicology Laboratory at the Mexico City Campus by 2010.
- Create a unit for Population Health in the area of HDV-DNA.
- Create a Regional Reference and Service Center in order to calculate human exposure to tobacco.
- Create a Regional Reference and Service Center to determine the population with human papillomavirus (HPV).
- Develop LIM topics for vulnerable groups, social protection and human resources for health by 2009 (achieved).
- Develop a Core Health Leadership Group.

### 1.1.D

A description of the manner in which mission, goals and objectives are developed, monitored and periodically revised and the manner in which they are made available to the public.

The mission is reviewed and updated every five years through a collaborative process that includes academic meetings and consultations to involve all the different internal sectors of the INSP as well as the external community. The mission, goals and objectives are evaluated by the main collegiate bodies to assess their ongoing pertinence and incorporate relevant modifications, which receive final authorization from the Governing Board. Regular meetings with authorities in government health services, non-governmental organizations (NGOs) and other entities requiring or benefiting from the INSP's services and programs ensure their participation in the periodic evaluation of the stated mission, goals and objectives.

In response to CEPH's observations regarding the INSP's 2006 Self-Study Report, since 2008 the development of strategic objectives and the achievement of goals set out in the PAT have been monitored on a quarterly basis. The PAT is created within the context of national and sector programs prepared by the federal government, as well as of the INSP's Five- to Ten-Year

Strategic Plan; it encompasses the short-range activities that the INSP must carry out to meet its goals and objectives. The PAT is a public document and is available on the institutional website (see an example in Appendix I.1.d).

Institute professors/researchers participate in the development of the PAT through their corresponding research centers and areas within the INSP, resulting in a document that is used to plan, implement and evaluate the goals and actions each year. Every 3 months a report describing the progress for each objective relating to instruction, research and service activities is made available on the INSP's website (Appendix I.1.d). The report includes a "traffic light" system to identify the extent to which each objective has been met. This method consists of evaluations of actions needed to meet the objectives, which are completed by the corresponding INSP areas. The "traffic light" method facilitates oversight of the outlined objectives and helps to establish timely control measures when the need to redirect an action is detected.

### 1.1.E

A statement of values that guide the school, with a description of how the values are determined and operationalized.

As a federal agency, the INSP must have values that are consistent with those issued by the federal government. The INSP has an Ethics, Values and Conduct Committee in which representatives from all sectors of the institutional community participate. INSP values are determined by this committee and are analyzed through consultations with all members of the Institution. The values were endorsed by the institutional community in a public meeting in 2006. The Ethics, Values and Conduct Committee is responsible for publicizing and revising the values as needed. The institutional values that define and guide the Institute's work are:

- a. **Excellence.** Promote an organizational culture that supports updating the INSP's mission, postgraduate education goals, mission-oriented research and health promotion in order to achieve excellence in public health. Excellence is defined as continually implementing public health programs to improve the health of the population, develop quality strategic research pertinent to the needs of the country's health system and provide relevant service.
- b. **Responsibility.** Promote responsible management and commitment to the mission and vision of the institution through leading by example and demonstrating responsible and respectful interaction with the community.
- c. **Freedom.** Respect and preserve creative freedom to carry out mission-oriented research, teach without imposing particular belief or forms of thought, and encourage a culture that respects intellectual freedom and freedom of opinion.
- d. **Transparency.** Provide clear and timely accounting of institutional activities and the use of funds, human resources and infrastructure to all individuals and groups who participate in the Institute's activities and are affected by its performance.
- e. **Equity and fairness.** Participate in the struggle to achieve health equity in Mexico and the Latin American region, and promote these values within the Institute as well as in interactions with other individuals, groups and institutions. Strengthen equality within the workplace independent of gender, race, economic position, religion and sexual orientation.
- f. **Ethics.** Maintain the highest standards of responsibility and integrity, as established by the code of honor and ethics, whose principal goal is to strengthen these values within the institutional community.
- g. **Honesty.** Develop all institutional activities with transparent and clear reporting in order to meet the demands of the INSP community as well as its stakeholders and the Mexican population.
- h. **Social commitment.** Ensure that all work is guided by a sense of commitment to the needs of the population and develop academic activities that contribute to improving health.

A Code of Ethics, Values and Conduct has been developed (Appendix I.1.e) in accordance with the Law for the National Institutes of Health, and the INSP monitors the fulfillment of this code. These values are put into practice through the following actions:

1. **Distribution of the institutional Code of Ethics, Values and Conduct to all persons new to the Institute** (administrative personnel, professors/researchers and students). This action is implemented by email. In addition, the information is publicly available online.
2. **Composition and operations of the Ethics, Values and Conduct Committee.** The committee is composed of members of the community (Art. 4 of the Regulation for Ethics, Values and Conduct—see Appendices I.1.e. and I.2.a-1). It has the authority to monitor the fulfillment of this code and to sanction any serious violations. All claims made by members of the institutional community (students, professors/researchers or administrative personnel) are reported to the Committee for examination and opinion. The Ethics, Values and Conduct Committee is responsible for assessing the severity of the claims and determining penalties for misconduct for any member of the INSP who violates the institutional code of ethics and conduct.
3. **Application of the Institutional Culture Program.** This program contains new objectives, the latest of which establishes "mechanisms for the elimination of harassment, including sexual harassment, and discrimination within the Federal Public Administration."

4. **An annual survey** that evaluates the organizational environment. This survey reveals the level of commitment to and fulfillment of institutional values of INSP personnel, among other factors.

### 1.1.F

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The INSP has a clearly stated mission with well-defined objectives and goals that are consistent with the Government of Mexico's National Strategic Health Plan.
- The INSP regularly examines its objectives and goals by monitoring and reporting on progress.
- The Institute promotes public health values, concepts and ethical practices, and all of this information is made available to the public in various ways.

#### Weakness

- The INSP's diversity of programs and campuses demands constant action to disseminate specific, measurable goals in a clear way across all sectors of the Institution and to involve all participants in a collective effort to achieve the Institute's mission.

#### Future Plans

- Strategies will be strengthened and diversified to inform all of the INSP community in of the institution's goals, objectives and guidelines. For example, the institutional Code of Ethics, Values and Conduct as well as annual results from the Work Plan will be available in ways other than the website, including through the virtual campus, posters, and oral presentations, among others.

## 1.2

**Evaluation and Planning.** The school shall have an explicit process for evaluating and monitoring its overall efforts against its mission, goals and objectives; for assessing the school's effectiveness in serving its various constituencies; and for planning to achieve its mission in the future.

The INSP has an explicit process to evaluate and monitor efforts to fulfill its mission, goals and objectives; to assess the school's effectiveness in serving its various constituencies; and to plan how it will achieve its mission in the future.

#### Required Documentation

### 1.2.A

Description of the evaluation procedures and planning processes used by the school, including an explanation of how constituent groups are involved in these processes.

All of the INSP's core activities (instruction, research and service), as well as its administrative and accounting processes, are planned and evaluated both externally and internally. Because the INSP is a part of the Ministry of Health (as explained in Criterion 1.3.A), evaluation and planning are subject to government oversight.

The *external* process includes sending reports on a 3-month, 6-month and annual basis for evaluation by important constituents such as the Ministry of Health (SSA), the Ministry of Education (SEP), the Ministry of Public Administration (SFP), the Ministry of Finance and Public Credit (SHCP), funding entities, The National Council for Science and Technology (CONACyT) and accrediting agencies. External control and evaluations enable the Institute to fulfill the functions required by the government.

The administrative entities that enable the planning and evaluation process and the involvement of various constituent groups are as follows:

**Governing Board.** The Governing Board is responsible for evaluating the Institute's performance with respect to its mission, objectives and strategic goals. In addition to the Minister of Health, who serves as president, the Board includes important constituent representatives that help assess the INSP's effectiveness, including those from the National Health Institutes, the Ministry of Education, the Ministry of Finance and Public Credit, and public academic institutions (see D.1. in Appendix 1.2.a-1). The INSP's Director General/Dean presents the Board with a self-evaluation that details the INSP's programmatic activities and results. The Board evaluates performance, recommends improvements and issues decisions. The Board's functions include approving the Institute's annual budget and work program in the areas of instruction, research and service, approving modifications of programs and projects resulting from previous evaluations, establishing guidelines for the use of resources, approving or modifying the basic structure of the entity and defining guidelines and norms for work structure and salaries.

**Control and Auditing Committee.** The Control and Auditing Committee serves as a strategic reviewer and forum for making decisions on issues such as strengthening internal control, fulfilling institutional objectives, achieving goals, reporting on programs and budgets, resolving issues raised during institutional audits, providing follow-up on decisions made by the Governing Board and other committees, implementing modernization and administrative development efforts, carrying out austerity measures and administering programs designed to increase transparency.

**External Academic Commission (CAA).** This commission is composed of the INSP's Director General/Dean, Directors of all the INSP's research centers, the Associate Academic Dean and representatives from the scientific community, including Research Center Directors from the National Autonomous University of Mexico (UNAM) and Advanced Studies Research Center of the National Polytechnic Institute (CINVESTAV), academic community representatives from the National Association of Universities and Institutions of Higher Education (ANUIES) and Health Education, and authorities from the Ministry of Education (see Committee A.1 in Appendix 1.2.a-1). The CAA meets twice a year to evaluate the advances of the academic program, analyze the academic goals and activities of the PAT, recommend improvements and provide input regarding the Institute's annual and long-term strategic planning in regard to teaching.

**Academic and Teaching Commission (CAD).** This commission regulates and evaluates all academic aspects of the INSP's educational programs. It meets twice a year to formulate recommendations and decisions related to current and new programs, student and faculty performance and evaluation, and strategic planning and accreditation. CAD monitors adherence to teaching norms and procedures established by the Institute. It also presents proposals to the CAA for the allocation of teaching performance incentives, in accordance with the General Regulations for Postgraduate Study. This commission is composed of presidents of faculty colleges, general program coordinators, Research Centers Directors, student representatives, the Associate Academic Dean and the Director General/Dean (see Committee A.2 in Appendix 1.2.a-1).

**Directive Council.** The Directive Council actively participates in planning, monitoring and evaluating all programs and activities. It meets monthly and is responsible for the overall operation of the Institute. During this meeting, each member reports on advances made toward fulfilling their objectives. Under the leadership of the Director General/Dean, the council is composed of the Research Center Directors, the Associate Academic Dean and the directors of the Planning and Office of Administration and Finance (DAF). The Director for Planning is responsible for following up on Council decisions.

**Consultation with constituents.** The INSP consults frequently with its strategic partners to maintain a permanent dialogue with employers, clients, students, alumni and others in the community, resulting in a strong capacity to monitor and modify the Institute's education and service programs. The chief objectives of this activity are to: a) identify the needs of strategic partners through forums for direct feedback (described below); b) analyze this feedback and communicate the knowledge generated back to the INSP's constituents; c) strengthen institutional participation in the development of a public health agenda; and d) guarantee the relevance and quality of the Institute's academic programs, products and services. These goals are achieved through a vari-

ety of mechanisms, including national and international discussion forums, participation in regional meetings and public awareness campaigns, and the promotion of laws, programs and public policies that benefit public health.

For example, the INSP conducted two consultation forums during the first half of 2010. The INSP's Directive Council and international experts in global health participated in the first forum, held as part of the First Latin American Congress on Global Health and the XIX Annual Meeting of the Global Health Education Consortium in April 2010 (Appendix 1.2.a-2). This forum generated important recommendations about the competencies that a health professional should have upon graduating from a professional program in public health. The second forum gathered representatives of more than 40 public and private institutions considered to be the INSP's most important national strategic partners, along with the INSP's Directive Council and research staff. The objective of this meeting was to gather points of view and suggestions to strengthen Institute's research, teaching and service areas. Activities carried out for the second half of 2010 include consultation with strategic partners at the state and municipal levels, with the same objectives.

To get feedback from students, the Office of Academic Affairs organizes student assemblies twice a year during which the Associate Academic Dean discusses important topics and gets students' perspective on aspects of the academic program that may need to be adjusted or improved. Alumni participate in a periodic survey in which they comment on their level of satisfaction with their academic and professional training (see criterion 2.7.B). This information is sent to the corresponding areas of the INSP so that the adjustments and improvements can be made.

#### **Institutional academic program planning and evaluation.**

The INSP has put into place evaluation procedures and planning processes to evaluate its strategic programs, with coordination from the Office of Planning. The evaluation and monitoring of institutional annual work plans as well as the actions developed for this purpose are lined up with the mission, vision, objectives and goals proposed in the 5 and 10-year Strategic Plan of the INSP. The strategic plan is based also on the principle described in the National Development Plan "Equal Opportunities", which is additional to the institutional commitment of working towards the expansion of capacities and improvement of living conditions of those most in need.

The strategic plan has established the objectives described in Criterion 1.1.c. (consistent with those defined in the National Development Program (from the period 2007-2012, set out in the National Health Program 2007-2012 and the Health Sector Program 2007-2012), which have measurable goals and concrete actions, in response to the three main areas of INSP (instruction, research and service).

Actions designed to fulfill the strategic INSP goals and objectives are evaluated internally and externally by the institutional administration and control bodies, through the following monitoring tools: 1. Self-assessment Reports (every six months and annually) 2. Control boards of annual work programs (integrated every three months.) 3. Balanced Scorecard (BSC), which have the necessary structure for the integration of institutional performance reports.

The INSP planning and evaluation instruments include the following:

**1. Annual Work Plan (PAT).** To guarantee the fulfillment of its mission, vision, goals and objectives, the INSP internally evaluates and monitors its efforts through the institutional PAT. As noted earlier, the PAT is developed within the framework of national and sector programs set out by the federal government, as well as by the INSP Strategic Plan. Specifically, the Institute bases the PAT on the strategic principles of the PND, which are included in the PRONASA and PROSESA 2007-2012.\*

The PAT includes goals, activities and annual indicators proposed by each research center and the Office of Academic Affairs and developed collaboratively by all work teams. The PAT facilitates the conceptualization, design, implementation and evaluation of the INSP's projects and activities. It provides a clear structure for the planning process and communicates essential information related to the INSP's goals and objectives. At the end of each year, the Directive Council holds an academic retreat to evaluate progress on the fulfillment of the PAT's program goals. This evaluation defines the priorities for the next year. Each Director shares this information with his or her team so they can collectively identify the actions and strategies needed for the next year's plan. The research centers and the Office of Academic Affairs organize academic retreats with their staff to assess and analyze how well they have met their objectives. This analysis allows the institutional process and operational policies to be appropriately modified. The latest PAT will be available as an on-site resource.

**2. Balanced Scorecard (BSC).** Since 2007, important efforts have been made to apply a BSC (a widely used strategic planning and management system) to incorporate strategy-based administration into the Institute's management. The BSC system was implemented to monitor and increase the performance of INSP personnel with respect to the Institute's mission and goals. The activities that have been carried out for this purpose are:

- Development of a plan to implement the BSC (2007). Leaders and co-leaders were named to implement the tool.
- Creation of work teams to be trained in the design, implementation and development of strategic plans using the BSC methodology.
- Personalized advising to guarantee understanding and appropriate development of the BSC methodology.
- Development of strategic maps that include the actions required to fulfill INSP mission for each of its main functions.\*

Putting this tool into practice enabled the INSP to identify the contributions of all actors involved in the process and to establish criteria to evaluate individual, group and institutional performance. In addition, the BSC's strategic maps made it possible to establish specific mechanisms for monitoring, evaluation, feedback and improvement of the research centers, Academic Affairs and LIMs. Once the strategic maps were structured, an analysis was conducted of a range of BSC perspectives (products, internal processes, learning and growth) to identify important objectives. In addition, the INSP worked directly with constituents from the government sector, national and international sponsors, the scientific community, the public and private health sectors, alumni, community organizations, NGOs, and educational institutions to create forums for discussion and analysis that would identify pressing needs for inclusion in the Institute's research, teaching and service activities. Additional meetings are being held with key government constituents to establish agreements for teamwork and to open new funding opportunities. The directors of the research centers coordinate these meetings.

In 2009, control tables (TdCs) were developed to implement the BSC system. These TdCs were designed to establish objectives, initiatives, goals, indicators and parameters for yearly follow-up. The INSP holds monitoring meetings on a semiannual basis to review, gather feedback on and update the TdCs. These meetings have improved use of the BSC tool and helped with strategic planning.

**3. Annual reports presented to the community.** The INSP generates an activities report twice a year. This report outlines progress made in instruction, research and service, as well as actions taken in the areas of administration, informatics and planning, in accordance with the objectives and goals established in the PAT. This document is available to all internal and external communities online at <http://www.insp.mx/Portal/Inf/planeacion/pri/index.php/>; its objective is to demonstrate how the advances proposed in the PAT—as well as new ideas generated during the previous 6-month period—con-

\* For more information go to [http://portal.salud.gob.mx/descargas/pdf/pns\\_version\\_completa.pdf](http://portal.salud.gob.mx/descargas/pdf/pns_version_completa.pdf) for PRONASA and to [http://portal.salud.gob.mx/descargas/pdf/plan\\_sectorial\\_salud.pdf](http://portal.salud.gob.mx/descargas/pdf/plan_sectorial_salud.pdf) for PROSESA.

\* For examples and more information see <http://www.insp.mx/planeacion-estrategica/balanced-scorecard-bsc.html>

tribute to the achievement of the INSP's strategic objectives. The Director General/Dean first presents this report to the Governing Board, which ensures that the INSP's activities are consistent with its mission, vision, and medium- and long-term strategic plans. These reports are then presented formally in a meeting with the entire institutional community, including students, professors/ researchers, and administrative personnel. The session is also transmitted live on the web for those who cannot attend in person. This strategy keeps the INSP community informed of progress on completing planned institutional activities as well as any modifications to activities.

At the end of the year the INSP creates a detailed report, called the Annual Memory (available at <http://www.insp.mx/Portal/Inf/memorias/acordeon/memoria2009.html>), to keep internal and external communities informed of the INSP's advances in meeting its strategic objectives and to generate a record of the work carried out during the year. This document is widely distributed to each area within the INSP as well as all constituencies and collegiate bodies. The report is made publicly available to provide information about the Institute's activities to all interested parties.

### 1.2.B

Description of how the results of evaluation and planning are regularly used to enhance the quality of programs and activities.

All academic groups within the INSP periodically review the results of evaluation and planning in all areas. Each group is responsible for monitoring specific areas of performance and making necessary adjustments or interventions. Three examples of how the results of evaluation and planning are used to enhance the quality of programs and activities are:

- 1). The Directive Council reviews the PAT quarterly to ensure appropriate achievement of goals and objectives. This review enables the INSP to identify possible deviations and to establish any necessary adjustments or control measures. The "traffic light" method (described in Criterion I.1.D) is employed to evaluate the completion of established activities. The results of this evaluation are used to update and refocus the INSP's activities as needed. Updates are available to the community online.
- 2). During monthly meetings, the faculty colleges monitor student graduation rates and other academic issues. The results are used to remove obstacles that delay student graduation in each program.
- 3). Regular consultation forums with internal and external constituents help identify new competencies to include in training public health professionals. These forums generate important recommendations that are incorporated into curriculum updates, which occur every 3 years.

The Office of Academic Affairs periodically holds meetings with academic bodies and administrative personnel to analyze the results of the evaluations and determine whether any modifications are necessary for enhancing program quality.

### 1.2.C

Identification of outcome measures that the school uses to monitor its effectiveness in meeting its mission, goals and objectives. Target levels should be defined and data regarding the school's performance must be provided for each of the last three years.

Quarterly evaluations of the fulfillment of objectives established in the PAT delineate the degree to which each of the strategic objectives, goals and activities proposed in the Strategic Plan have been achieved. Currently the INSP attends to more than 200 objectives yearly to fulfill its mission and goals. The Office of Planning is responsible for monitoring the effectiveness and fulfillment of each goal and for developing a qualitative analysis. This analysis provides the Directive Council with the information it needs to develop or strengthen actions to address any objectives for which more work is required. (Analyses from the past three years will be available as an on-site resource file.) In addition, semiannual monitoring through the BSC and TdC tools enables group leaders to strengthen current actions and establish new actions to ensure that the INSP fulfills its mission, goals and objectives.

The INSP's administration is based on a strong, coherent and widely implemented monitoring and control process that directly addresses the need to maintain the highest standards in research, teaching and service. Detailed results, as reported in the last three institutional annual reports, are available to the public on the INSP website and will be available as an on-site resource file. Some of the most important outcome measures for monitoring effectiveness in meeting the INSP's mission, goals and objectives during 2007-2010 can be found in Table 1.1.

### 1.2.D

An analytical self-study document that provides a qualitative and quantitative assessment of how the school achieves its mission, goals and objectives and meets all accreditation criteria, including a candid assessment of strengths and weaknesses in terms of the school's performance against the accreditation criteria.

The present report serves as the required, analytical self-study document. The response to each criterion incorporates an assessment that includes quantitative and qualitative data of the school's strengths and weaknesses.

**Table 1.1**  
**Outcome Measures For Monitoring Effectiveness in Meeting Mission, Goals and Objectives,**  
**Academic Years 2007-2010**

Outcome Measure	Target	AY2008	AY2009	AY2010
Mission, goals and strategic objectives update actions	Every 5 years	Yes	Yes	Yes
Consultation with constituents	At least one action every 2 years	1	0	2
Fulfillment of Annual Work Plan (PAT) goals	≥80%	112/149=80%	171/192=89%	228/243=93%
% of graduate programs certified by the National Council for Science and Technology (CONACyT)	80%	18/23=78%	22/25=88%	22/27=82%
School certified by external accreditation council (CEPH)	Yes	Yes	Yes	Yes
Graduate programs reviewed and revised every 3 years	100%	19/23=82%	25/25=100%	27/27=100%

In addition to this report, the INSP conducts an extensive strengths, weaknesses, opportunities and threats (SWOT) analysis every year. (Results of the SWOT analysis from the past three years can be found in Appendix 1.2.d-1 and are included in the PAT) Finally, the INSP regularly conducts a self-evaluation exercise for programs registered with and accredited by CONACyT. (Appendix 1.2.d-2 shows an example of the analysis performed for the Master of Public Health program.) This periodic exercise has facilitated the design of this self-study, especially in regard to the participation of representatives from different groups within the INSP community (professor/researchers, directors, students, alumni and other constituents).

### 1.2.E

An analysis of the school's responses to recommendations in the last accreditation report.

To address CEPH's comments and recommendations resulting from the 2006 Accreditation Report, the INSP defined a series of objectives and actions, as described below. The Institute has made major progress in incorporating core knowledge into all programs, assessing and advancing student achievement, and promoting faculty and student diversity. Programs to increase graduation rates and promote a culture of evaluation linked to the planning process have also been put into place. Overall, the actions that have been implemented in response to the previous report are significantly strengthening the INSP.

#### Core Knowledge Practice and Culminating Experiences

**The 2006 accreditation report noted that in the Master's degree in Health Management, students took courses in only four of the five core areas in public health.** The INSP added a course in "Environmental Health and Management" to the curricular map in March 2006. Currently,

as presented in Criterion 2.3, all of the INSP's programs include required courses in the five core areas of public health.

#### Assessment of Student Achievement

**The last report recommended measures to increase graduation rates.** Graduation rates are a constant challenge for degree programs in Mexico, and the issue is especially important for the INSP for a variety of economic and social reasons. Scholarships are granted only for the period in which students are enrolled in courses; upon completing their classroom credits, many students return home to work. When students must work to ensure the economic survival of their families, degree completion can be significantly delayed. The Institute also serves many first-generation graduate students and others who face hurdles to completion. Taking these conditions into account, the INSP has taken measures to increase graduation rates. For example, the Institute has elected to adopt the Final Professional Project (PTP) as an alternative to the thesis for completing professional programs. The PTP is a written report based on the professional practicum that addresses a specific topic in public health (see Criterion 2.4). The INSP also promotes the constant monitoring of programs through collegiate body coordinators, who work with students who may be struggling to graduate on time. These coordinators offer specific workshops and mentoring to discuss specific strategies to complete the thesis or PTP.

The greatest emphasis is on ensuring that students complete their final project before returning to their places of origin. Thus, INSP requested scholarship extensions from CONACyT (the accrediting agency that grants scholarship funds for programs that fall under the National Honors Graduate Programs, or PNP) to cover the period during which students are working on their final project. Authorization was granted to provide students with this economic support starting in September 2010. This achievement

should result in students graduating before they return to the work force. All these efforts have resulted in improving graduation rates, although the challenge remains to reduce the average number of years required for students to graduate.

**The prior report recommended formalizing an advising system to monitor students' performance.** In 2007, the INSP implemented an institutional tutoring program, assigning a tutor for each student at the time of enrollment to provide advice and follow-up on students' progress. Tutors closely monitor students' achievements and promote the efficient completion of studies through meetings at least three times per semester. Following these meetings, the tutor sends a report to the student's faculty college with an evaluation of academic performance and problems or delays in expected progress, particularly with regard to the thesis or PTP protocol. The faculty colleges evaluate the reports and determine what, if any, action is needed. In 2009, the Department of Student Affairs and Campus Life (described in Criterion 4.6) was created to coordinate the tutoring program and extracurricular strategies to improve student performance. As part of the extracurricular academic program, full-time students in all degree programs are offered a scientific writing course that helps them to complete their final thesis, article or PTP.

**The previous report indicated a need for formal and long-term follow-up study with graduates.** In response, the INSP established a program for alumni follow-up and a formal Alumni Academic Training Program (PROFAE), which includes an alumni survey to identify post-graduate educational needs. PROFAE not only identifies alumni job placement (Criterion 2.7.B, section D) but also offers continuing education in public health topics. This effort includes bulletins and periodic meetings to maintain contact with alumni.

### Faculty Diversity

**The report noted the need for efforts to increase the participation of women as faculty and administrators. It also noted the low number of women among thesis directors and other management positions.** The INSP has made a major effort to incorporate women into faculty and the leadership of the collegiate bodies, resulting in a significant increase in the appointment of women as thesis directors and faculty college presidents. In 2004, 47% of full-time faculty were women; in 2009 this figure increased to 58.7%. In 2004, 37.6% of thesis directors were women, while in 2009 this figure was 56.2%. In addition, the Institute has worked to appoint women to the Directive Council. Women were appointed in each of the last two available positions, although one of these researchers chose not to renew her candidacy for the position of Director of the Regional Center for Public Health Research (CRISP) after her 3-year term ended. Data on faculty diversity are described in detail in Criterion 4.3.

### Student Diversity

**The report noted a need for more balance between medical and non-medical students, as well as more students over the age of 40 and efforts to incorporate indigenous students.** In an attempt to foster greater diversity among students, the INSP has initiated strategic promotional campaigns in a range of non-medical sectors to attract a wider range of applicants. This effort has brought about significant results in creating a multidisciplinary student body, decreasing the number of medical profile students in the programs from 78.5% in 2004 to 47.5% in 2009. In terms of age, national education policy over the past decade has favored younger students in post-graduate studies (for example, some scholarships are restricted among postgraduate students over the age of 40), a bias that is reflected in enrollment at the INSP. Recognizing this trend, INSP has sought to diversify the age of students by offering programs in executive and online formats. These two formats benefit the population of older professionals in mid-level positions who are not able to attend full-time degree programs. This strategy has allowed the INSP to increase the number of students over 40 years old from 19.3% in 2004 to 30.5% in 2009. The online format also allows distance learning and benefits women who cannot leave their family for long periods of time to study. Currently, 58% of students in the Master of Public Health program with an online format are women.

As described in detail in Criterion 4.3, in Mexico racial identities are viewed differently than in the United States, which makes it more difficult to foster racial diversity. Nevertheless, the INSP has taken action over the past several years to target indigenous populations. For example, the Institute has organized academic promotion campaigns and collaborative agreements in states with significant indigenous populations, such as Chiapas and Quintana Roo. This effort has enabled the enrollment of indigenous students, as described in detail in Criterion 4.5.B. In addition, it has led to administrative efforts to promote higher education for this group of students, such as the Ford Foundation's creation of scholarships that target indigenous populations. In 2010 two students were admitted with such scholarships.

### Ongoing Evaluation

**CEPH noted that adequate planning was shown but more systematized evaluation actions were needed.** To promote and strengthen a culture of evaluation to supplement the planning processes, the INSP created the Institutional Office of Planning (described in Criterion 1.3.C), which provides continuous evaluation and follow-up through scheduled meetings. All constituents, including students and the external community, participate in this evaluation process. For example, New processes, such as the constituent-based qualitative analysis and the BSC (described fully in Criterion 2.1.A), have helped the INSP

broaden and systematize evaluation among all of its constituencies. In addition, the Office of Academic Affairs has an area of evaluation that coordinates evaluation strategies for faculty, students, alumni and employers. (This process is described in more detail in Criterion 2.7.) While creating a culture of evaluation is a process that requires time, the results can already be appreciated as will be shown in Criterion 2.7.

### 1.2.F

A description of the manner in which the self-study document was developed, including effective opportunities for input by important school constituents, including institutional officers, administrative staff, teaching faculty, students, alumni and representatives of the public health community.

Two years before the accreditation period expired, the INSP designed a work program made up of five groups to organize activities related to developing the self-study. These groups involved representatives from different sectors of the institutional community in order to produce a comprehensive analysis and evaluation of the INSP's current status. The work groups and their functions were as follows:

1. **General coordination.** The INSP Office of Academic Affairs assumed leadership of the process. The principal function was to design, implement and oversee the plan to develop and integrate the self-study, and prepare the final site visit evaluation.
2. **Criteria-based committees.** The main functions of these committees were to compile and analyze information and write the responses for the criteria. Five criteria committees were created with the direct participation of 30 people, including faculty, students, administrators, alumni and institutional officers.
3. **Integration committee.** The function of this committee was to supervise and review progress in developing the self-study document, as well as to incorporate input from different sectors within the INSP. The committee had eight members: two representatives from the Directive Council (research center directors), two representatives from the CAD (faculty college presidents), an academic program coordinator, a researcher, an alumnus, a government health service representative, and a student representative (the president of the Student Association).
4. **Communication committee.** The mandate of this committee was to create an information campaign to raise awareness and provide information about the process for developing the self-study, as well as to promote a favorable institutional environment for the study's completion.
5. **External reviewers.** National and international reviewers were selected from the public health community with which INSP maintains academic and professional relationships. The

reviewers were requested to evaluate the self-study and make pertinent contributions based on their professional perspectives.

In order to increase opportunities for all constituents to participate, the self-study was originally written in Spanish and then translated into English. It was also published on the website to receive open feedback from all INSP community. Appendix 1.2.f. provides a list of the INSP members (a total of 91) who participated in the preparation of the self-study.

### 1.2.G

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The INSP has an extensive and complete evaluation process that involves both external and internal constituents, including collegiate bodies, authorities and accreditation agencies.
- The INSP carries out evaluations on an annual, semiannual and quarterly basis to measure achievement of its mission, goals, and objectives; assess how it serves constituents; and plan for the future based on these evaluations.
- The Annual Work Plan (PAT) has worked as an efficient strategy to facilitate evaluation and follow-up in all areas of the INSP.
- The self-study process included the participation of the different collegiate bodies responsible for the evaluation activities of all INSP main functions. These same collegiate bodies have assumed responsibility for following up on the most important recommendations from the last accreditation process, such as boosting graduation rates and establishing ongoing evaluation processes.
- The INSP implemented a program for alumni follow-up that provides feedback to all academic activities to ensure quality.

#### Weaknesses

- A program for alumni follow-up has been implemented, but additional strategies are required to improve the ability to gather sufficient alumni response.
- Several areas have developed actions to identify employers' points of view, but more coordination is required to integrate responses.

#### Future Plans

- One Center will be in charge of the organization of the institution evaluation to improve communication, analysis of evalua-

tion results and the design of collaboration strategies between all the areas involved.

- Strategies will be implemented to develop systematic procedures to gather alumni information.

### 1.3

**Institutional Environment.** The school shall be an integral part of an accredited institution of higher education and shall have the same level of independence and status accorded to professional schools in that institution.

#### Required Documentation

##### 1.3.A

A brief description of the institution in which the school is located, along with the names of accrediting bodies (other than CEPH) to which the institution responds.

The INSP is an independent public institution that is one of a group of 12 National Institutes of Health associated with the Ministry of Health of Mexico (SSA). The other 11 institutes are focused primarily on providing medical care and secondarily on conducting basic research and teaching with a clinical focus. The INSP is unique among the National Institutes of Health in Mexico because of its academic mission; it is recognized as an institution of higher education by the Ministry of Public Education (SEP) and the National Association of Universities and Institutes of Higher Education (ANUIES) (see Appendix 1.3.a). The INSP is also member of the International Association of National Public Health Institutes (IANPHI).

The INSP has created academic ties with the most influential educational bodies in the country, as well as with international universities, research centers, community organizations and health related agencies. Other than CEPH, the agencies that accredit the INSP are:

- **Ministry of Public Education (SEP).** All programs offered by the INSP are accredited by the SEP, the official agency that regulates and accredits academic institutions and educational programs at the national level in Mexico.
- **National Council for Science and Technology (CONACyT).** CONACyT (see <http://www.conacyt.mx/>) has accredited the INSP as an institution of educational excellence for many years. CONACyT, an independent public agency within the education sector of the Mexican government, has accredited the Institute's master's and doctoral programs since 1992. CONACyT recognizes high-quality degree programs, as demonstrated by solid academic facilities, high graduation rates, strong scientific productivity and infrastructure that foster

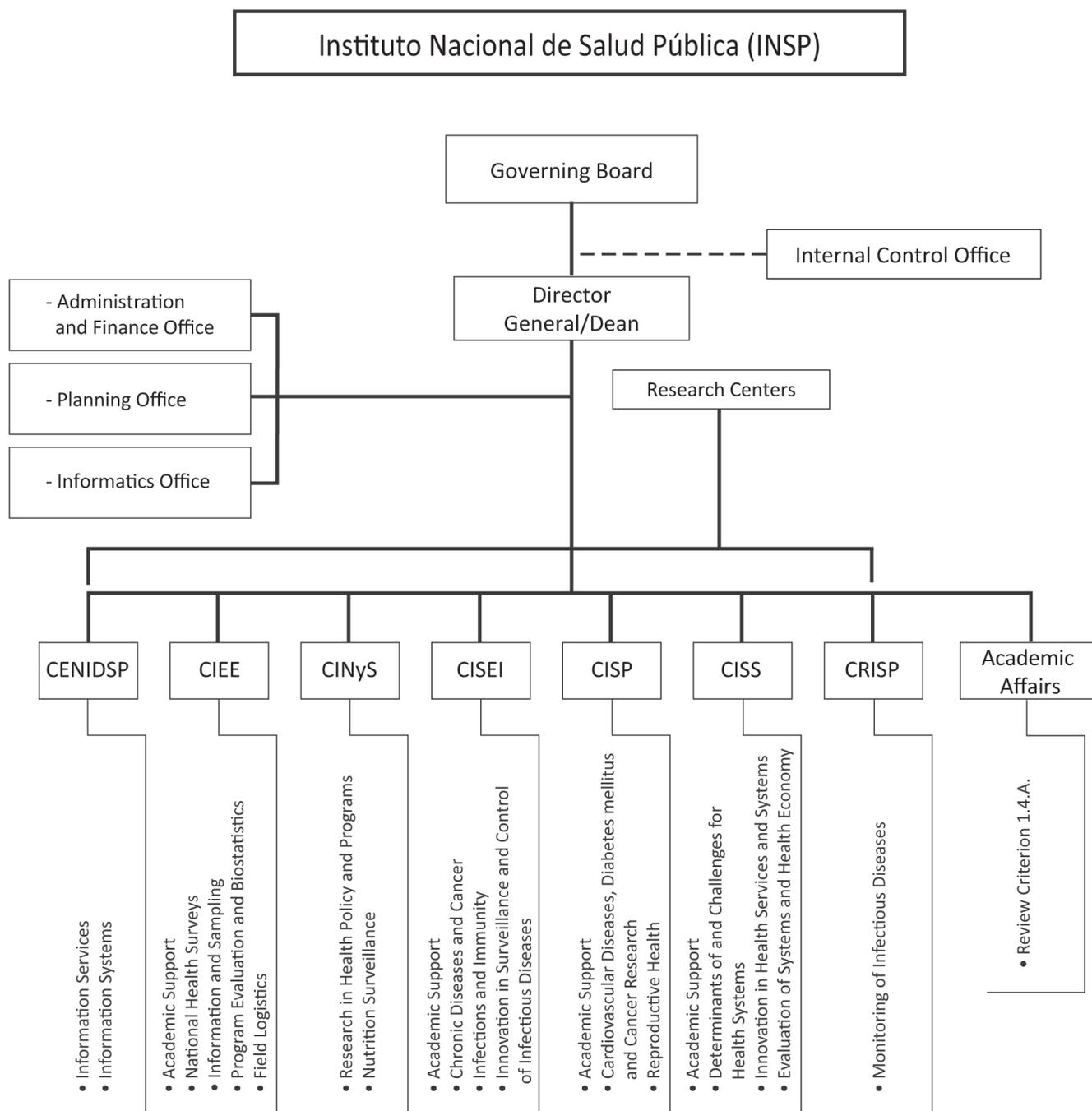
outstanding results. Accredited institutions receive funds for research and student scholarships. Institutions are certified as research centers or centers of excellence in education; INSP accreditation includes both. CONACyT accreditation must be renewed every five years; the INSP was most recently accredited in 2007.

- **National Association of Universities and Institutes of Higher Education (ANUIES).** ANUIES is a non-governmental agency composed of higher education institutions in Mexico that meet educational quality standards. ANUIES' mission is to assist with the standardization of educational programs and continually improve higher education institutions in terms of teaching, research, and the extension of culture and services. It has incorporated 152 public and private universities and institutions of higher education, which together are responsible for 80% of the undergraduate and graduate higher education matriculation in the country. The INSP has been formally affiliated with the ANUIES since 1997.
- **Other agencies.** A number of international agencies have recognized the INSP as well. For example, the Institute is recognized as a World Health Organization (WHO) Collaborating Center in three areas: malaria, environmental health and accident prevention. In 2007, the United Nations University (UNU) designated the INSP as a collaborating member working on the UNU Program on Food and Nutrition. The Joint United Nations Program on HIV/AIDS (UNAIDS) designated the INSP as a collaborating member for this illness. In addition, the INSP houses the Latin American Center for Information on Health Sciences (BIREME), which is connected with the Latin American Medical Library, the Pan American Health Organization (PAHO) and the WHO. In 2009, the INSP became a collaborating organization with tropEd, an international network of institutions of higher education in international health.

##### 1.3.B

One or more organizational charts of the university indicating the school's relationship to the other components of the institution, including reporting lines.

The INSP organizes its academic program through three main structures: *Research Centers*, where all faculty and programs are assigned; the *Office of Academic Affairs*, which coordinates the operation of all academic activities (see Criterion 1.4.B); and the *Collegiate Bodies*, which monitor the performance of academic programs to ensure quality in aspects ranging from student selection and success to faculty performance and curriculum. The INSP organizational chart showing the research centers and reporting lines appears in Figure 1.1j, below. The structure of the Office of Academic Affairs is shown in Figure 1.2 (see Criterion 1.4.A), and the structure of the collegiate bodies is shown in Fig-



\*CENIDSP: Information for Public Health Decisions Research Center; CIEE: Evaluation and Surveys Research Center; CINyS: Nutrition and Health Research Center; CISEI: Infectious Disease Research Center; CISP: Population Health Research Center; CISS: Health Systems Research Center; CRISP: Regional Public Health Research Center.

**Figure 1.1. INSP Organizational Structure**

ure 1.3. (see Criterion 1.4.C). All academic and research departments report directly to the Director General/Dean. Financial oversight is managed by the Administration and Finance Office (DAF), and the Internal Control Office performs audits. Each academic program has a full-time coordinator and an adjunct coordinator, all of whom are faculty members who report to a particular research center.

### 1.3.C

#### A brief description of the university practices regarding

##### **a. Lines of accountability, including access to higher-level university officials.**

In Mexico, the highest authority in the health sector is the SSA, which is responsible for public health as well as promoting and regulating medical care in the country. Within the SSA is the Coordinating Commission of National Institutes of Health and Regional Specialty Hospitals (CCINSHAE), which coordinates the activities of the 12 National Institutes of Health, including the INSP. The INSP has direct communication with the Minister of Health through his role as chair of the Institute's Governing Board. In addition, the INSP's Director General/Dean participates in monthly meetings held by the General Coordinator to evaluate the activities of the National Institutes of Health and to oversee their progress.

The Director General/Dean is directly accountable to the Governing Board. Reporting to the Director General/Dean are the Associate Academic Dean, who directs the Office of Academic Affairs, and seven adjunct directors who are responsible for the research centers. The Office of Academic Affairs is responsible for Institutional planning, operations and evaluation of all academic activities.

For administrative issues, the Director General/Dean is assisted by the directors of Planning and of Finance and Administration. The Director of Planning evaluates programs in terms of institutional objectives and goals and assists the Director General/Dean with the strategic plan, as well as with monitoring the implementation and completion of the work plan. The Director of Administration and Finance manages the INSP's general budget, oversees all contracts and scholarships, and is responsible for managing information within the INSP. The director is also responsible for supervising the use of the facilities.

The service and support areas (DAF and the Office of Planning and the Internal Control Office) collaborate with the other areas in the INSP to support work related to the specific academic, research and service areas. These areas present reports to the Director General/Dean, with the exception of the Internal Control Office, which, though part of the INSP, reports directly to the

federal SFP. The Director of Informatics is responsible for operational planning and the acquisition, distribution and maintenance of computers, software programs and other related technologies, as well as managing the INSP's computer laboratories and maintaining the Institute's website.

In regard to academic issues, the professors discuss matters relating to the curriculum, students' progress, the course selections, teacher evaluations and others through the Faculty Colleges and Teaching Collegiate Bodies. Faculty Colleges are discipline-based entities that coordinate academic activities and make recommendations regarding academic programs. All professors participate as members of at least one Faculty College. Any professor can meet with the Associate Academic Dean to discuss specific issues.

##### **b. Prerogatives extended to academic units regarding names, titles and internal organization.**

The Director General/Dean is responsible for the academic quality and finances of the INSP, which are reported to the SSA through the CCINSHAE and the Governing Board. The Director General/Dean and Governing Board analyze all actions and processes related to the diverse areas of institutional development. Issues related to teaching, the faculty and the student body are coordinated by the Office of Academic Affairs, which collaborates directly with the Director General/Dean and the Research Centers. The Research Centers, coordinated by their corresponding Directors, oversee the academic programs in the areas whose research lines best correspond to the scientific field of the relevant concentration area (detailed in Table 1.2). This structure fosters the interaction of students and their final work with specific research projects. The Directors of the centers appoint academic coordinators for the programs and ensure sufficient faculty to support the programs. The Directors of the Research Centers are researchers and professors with a wide academic experience in the Center, appointed by the Director General.

The directors of the Research Centers are responsible for fulfilling their respective center's mission and are charged with providing academic leadership, appointing academic coordinators and ensuring sufficient faculty to support programs, establishing the internal structure of each center in keeping with INSP guidelines. Each center conducts research, teaching and service activities in a specific public health area.

- **Information for Public Health Decisions Research Center (CENIDSP):** CENIDSP was created to deliver products and services based on scientific public health research to different actors of society, including government officials, academic researchers, health professionals and the general public. The center's activities focus on translating and disseminating scientific evidence-based knowledge to promote effective decision-making, policy formulation, human resources training and

**Table 1.2**  
**Academic Programs Assigned to Research Centers**

## ACADEMIC PROGRAMS ASSIGNED TO RESEARCH CENTERS

Research Center	Program
Information for Public Health Decisions Research Center(CENIDSP)	<ul style="list-style-type: none"> <li>• Master of Public Health with concentration in Biostatistics and Information Systems</li> </ul>
Evaluation and Surveys Research Center (CIEE)	<ul style="list-style-type: none"> <li>• Master of Health Sciences with concentration in Biostatistics</li> <li>• Master of Health Sciences with concentration in Health Economics</li> </ul>
Nutrition and Health Research Center (CINYS)	<ul style="list-style-type: none"> <li>• Master of Public Health with concentration in Nutrition</li> <li>• Master in Clinical Nutrition</li> <li>• Master of Health Sciences with concentration in Nutrition</li> <li>• Doctorate in Science in Public Health in Population Nutrition</li> </ul>
Infectious Disease Research Center (CISEI)	<ul style="list-style-type: none"> <li>• Master of Public Health with concentration in Infectious Diseases</li> <li>• Master of Health Sciences with concentration in Infectious Diseases</li> <li>• Master of Health Sciences with concentration in Vaccinology</li> <li>• Doctorate in Science in Public Health with concentration in Infectious Diseases</li> </ul>
Population Health Research Center (CISP)	<ul style="list-style-type: none"> <li>• Residence in Public Health and Preventive Medicine</li> <li>• Master of Public Health with concentration in Epidemiology</li> <li>• Master of Health Sciences with concentration in Environmental Health</li> <li>• Master of Health Sciences with concentration in Epidemiology</li> <li>• Master of Health Sciences with concentration in Clinical Epidemiology</li> <li>• Master of Public Health with concentration in Environmental Health</li> <li>• Master of Health Sciences with concentration in Reproductive Health</li> <li>• Doctorate in Science in Public Health with concentration in Epidemiology</li> <li>• Doctorate in Public Health</li> </ul>
Health Systems Research Center (CISS)	<ul style="list-style-type: none"> <li>• Specialty in Health Promotion</li> <li>• Master of Public Health with concentration in Social and Behavioral Sciences</li> <li>• Master of Public Health with concentration in Health Administration</li> <li>• Master of Health Sciences with concentration in Health Systems</li> <li>• Doctorate in Science in Public Health with concentration in Health Systems</li> </ul>
Regional Public Health Research Center (CRISP)	<ul style="list-style-type: none"> <li>• Master of Public Health with concentration in Vector-borne Diseases</li> <li>• Master of Health Sciences with concentration in Vector borne Diseases</li> </ul>

healthy lifestyles. CENIDSP uses advanced technologies to develop information systems that aid in the planning, operation, monitoring and evaluation of health systems.

- **Evaluation and Surveys Research Center (CIEE):** The CIEE specializes in conducting surveys, improving medical geography research, and producing and disseminating public health statistics in order to improve population health. As part of its activities, the CIEE promotes inter-institutional and interdisciplinary work and develops conceptual comparisons of national health sector statistics in order to strengthen public health actions and policies. The Center is a member of the National Statistical Service and maintains the DNA and blood serum bank of the SSA.
- **Nutrition and Health Research Center (CINyS):** CINyS was created to identify population health problems resulting from poor nutrition and develop food programs. CINyS research focuses on the causes of malnutrition for specific groups of the Mexican population, the implementation of food programs, and the effects of the nutrition transition on growth, obesity and chronic disease. Also, the CINyS works with the

SSA to create public health policies and provide information at the federal and state levels to develop specific actions to improve nutrition. The CINyS focuses its efforts on researching the causes of poor nutrition and improving health systems through research, service and teaching.

- **Infectious Disease Research Center (CISEI):** The CISEI's mission is to comprehensively study infectious diseases and promote active participation in the biotechnology revolution in order to develop new diagnostic and control procedures. The CISEI aims to increase applied public health research in the region, develop innovative methodologies for epidemiological surveillance, and create new disease prevention and control measures.
- **Population Health Research Center (CISP):** The CISP has the objectives of contributing to the knowledge and control of priority health problems, designing effective strategies to organize health services, and promoting the development of the field of public health. The CISP has a core group of academic researchers who have developed a broad portfolio of research projects that promote excellence in public health practice.

- **Health Systems Research Center (CISS):** The CISS was created to strengthen higher education and research development and investigate the relationships between of environmental, occupational, and population health. The CISS provides the SSA with technical and scientific consulting and support regarding intra- and inter-sector decisions and actions. The center also provides strategic support for states that require regulatory oversight and intervention, especially in regard to border regions, industrial areas, and cities.
- **Regional Public Health Research Center (CRISP):** Located in the southern region of Mexico, in Tapachula, Chiapas, the CRISP is focused on vector-borne diseases (SVET) and regional pandemics as well as other priority areas of this region. The CRISP focuses on two research lines: prevention and control of vector-borne diseases and environmental health. It also provides diagnostic services for malaria, insecticides evaluation and pest control. Among its objectives are to identify and define strategic partners in the region; promote the research, teaching and service in the national and international context; train professionals for excellence in the field of in vector-borne diseases; assess public health needs; and produce knowledge to improve health.

The Office of Academic Affairs and the directors of the research centers of the INSP form part of the INSP's Directive Council, a group of high-level advisors to the Director General/Dean regarding matters of institutional strategy and leadership. The collegiate bodies also support the operation of academic programs (see Criterion 1.5.A), overseeing all academic issues of the programs. The Director General/Dean is also advised by two commissions: the Academic and Teaching Commission (CAD) and the Academic Research Commission (CAI).

The Office of Academic Affairs is responsible for supervising all academic programs. It provides leadership in developing innovative programs and enabling the INSP to respond to changes in the field of public health as well as to the needs of the country in terms of training workers in this field. The Office of Academic Affairs also promotes an interdisciplinary environment that fosters teaching, learning and practicum activities for students and professors, in addition to coordinating and supervising actions to maintain high-quality, relevant and effective academic programs. This includes: **a)** student recruitment, acceptance, evaluation and graduation; **b)** student mentoring and counseling, practicums and general issues concerning professor-student relations; **c)** development, organization and evaluation of courses and programs; **d)** development and evaluation of the faculty; **e)** administrative support for student scholarships; and **f)** accreditation processes.

The academic programs are organized around the research centers. The INSP has evolved out of strong research centers and has demonstrated that this organizational structure is functional. Its greatest strength is derived from collegiate bodies that guaran-

tee inclusive, democratic practices that are multidisciplinary and committed to academic quality.

### **c. Budgeting and resource allocation, including budget negotiations, indirect cost recoveries, distribution of tuition and fees, and support for fund-raising.**

The INSP receives funds from the federal government, program tuition, grants and established contracts and agreements (specific allocations are described in detail in Criterion 1.6.A).

The most important aspect of **federal funds** for the INSP's activities is that the budget for salaries for academic and administrative personnel (with the exception of temporary staff) is guaranteed through a subsidy provided by the federal government through the Ministry of Health (SSA). **External funds** are obtained through grant requests to national and international donors for research or capacity-building, collaborative contracts and service agreements. Grants have been received from a wide variety of sources, including CONACyT, the U.S. National Institutes of Health (NIH), the United Nations Children's Fund (UNICEF), PAHO, WHO, the the International Development Research Center (IDRC), the U.S. Centers for Disease Control and Prevention (CDC), and the United States Agency for International Development (USAID), among others (see Appendix 3.1.b for a complete list of external funding sources for research). Other external funds are received from specific agreements for continuing education and contracts for services such as evaluations and surveys. Academic programs are largely funded by the federal budget and external funds, since tuition fees do not cover all educational costs. Tuition and academic fees are used to cover operational costs for academic services, such as personnel, educational technology services, student services, and curriculum design.

Each of the INSP's academic areas develops the budget required to carry out its activities and fulfill its goals for the PAT. The directors of the research centers, the Associate Academic Dean, the Directors of Planning and Administration and Finance, and the Director General/Dean are responsible for reviewing the budget. The Director General/Dean and the Governing Board then analyze and justify the estimated budget. The Governing Board is responsible for approving or modifying the final budget and the INSP's annual financing plan. The proposal is submitted to the National Ministry of Finance, which reviews it and incorporates it into the general federal budget. This is sent to the National Congress for review and final approval.

The federal government's contribution to the INSP's budget increased 9.3% between 2005 (\$22,042,900 USD) and 2010 (\$24,108,000 USD). External funding contributed \$163,062,700 USD in those years with funds from external resources (grants and contracts) and from national and international agencies. (See Criterion 1.6.B for specific data.) In total, INSP funding (federal,

tuition and external resources) increased by \$2.59 million (5.1%) between 2005 and 2009. This increase allowed INSP to cover deficits in 2008 and 2009 using the surplus from previous years, as shown in Table 1.3.

#### **d. Personnel recruitment, selection and advancement, including faculty and staff.**

Although it is part of the Ministry of Health (SSA), the INSP has the authority to recruit, hire and promote faculty. It carries out recruitment policies, performance reviews and evaluations of academic personnel according to guidelines established by the General Coordination of National Institutes of Health in PRONASA 2007-2012 ([http://portal.salud.gob.mx/contenidos/programa\\_nacional/programa\\_07.html/](http://portal.salud.gob.mx/contenidos/programa_nacional/programa_07.html/)) and the Law for National Institutes of Health (<http://www.diputados.gob.mx/LeyesBiblio/pdf/51.pdf/>). With respect to nonacademic personnel (primarily administrative positions), the INSP adheres to the recruitment, selection and promotion policies of the SSA. The INSP also follows Mexico's federal government policies with regard to nondiscrimination and equal opportunity for hiring and promotion for both academic and administrative personnel (Table 1.4).

The selection process for professors who join the INSP as full-time faculty is based on guidelines from the General Coordination of National Institutes of Health; the INSP's Research Commission is responsible for coordinating this process and evaluating applications. As with schools of public health in the United States, each Faculty College is responsible for appointing professors who will teach specific courses each semester. The assignment of faculty and the need for new professors are discussed within those

bodies. After internal evaluation in the Faculty Colleges with support from the Office of Academic Affairs, the Research Centers' Directors have final responsibility for hiring new faculty. Faculty Colleges are also responsible for faculty promotion, attending all the assessment procedures described in Criterion 4.1.D. This process is overseen by the Office of Academic Affairs and the Research Center Directors. Hiring and promotion procedures are described more fully in Criterion 4.2.

#### **e. Academic standards and policies, including establishment and oversight of curricula.**

As a higher education institution, the INSP adheres to the education guidelines and policies of the academic authorities responsible for the accreditation and certification of postgraduate education programs in Mexico, in particular those of the SEP and CONACyT. The INSP is free to define and establish academic guidelines for the design, evaluation and implementation of curriculum. This is carried out through its highest collegiate bodies, such as the CAA, CAD and faculty colleges.

The Office of Academic Affairs is responsible for academic leadership and planning the INSP's educational activities. It implements and periodically evaluates programs jointly with the research centers. The faculty is part of the Research Centers, and is supported by their Research Centers Directors to develop teaching/learning activities for the academic program, including teaching, program coordination, thesis supervision, practicums, advising and mentorship. The different faculty colleges and their specialized chapters are responsible for ongoing evaluation and revision of course content, student and faculty selection, and the

**Table 1.3**  
**INSP Annual Incomes and Expenditures, 2005-2010\***

	2005	2006	2007	2008	2009	2010
Total Yearly Income	49,919,500	52,662,800	48,131,300	46,499,600	52,509,600	50 985,700
Total Yearly Expenditures	40,639,500	50,239,700	43,207,500	46,558,600 <sup>i</sup>	53,268,700 <sup>i</sup>	49 878,600

Note: Figures are in U.S. dollars; exchange rate (25th May 2010) = 13.18 pesos/U.S. dollar.

<sup>i</sup> In 2008 and 2009 there was an outflow greater than annual income. But this difference was covered with surpluses from previous years.

**Table 1.4**  
**Guidelines for the Recruitment, Selection and Promotion of INSP Personnel**

Position	Guidelines
Management	Civil Service Career guidelines from the federal government ( <a href="http://www.ordenjuridico.gob.mx/Federal/Combo/L-95.pdf/">http://www.ordenjuridico.gob.mx/Federal/Combo/L-95.pdf/</a> )
Professors/researchers	General Coordination of National Institutes of Health regulations on hiring, promotion and retention ( <a href="http://www.ccinshae.salud.gob.mx/interior/investigacion.html/">http://www.ccinshae.salud.gob.mx/interior/investigacion.html/</a> )
Administrative personnel	Federal government guidelines (General Work Conditions, Appendix 1.3.c)

relevance and academic development of the programs. This enables a specialized approach to the different subject areas.

The different areas of the Office of Academic Affairs sets academic goals related with the development and supervision of study plans, the development of the programs' pedagogical evaluations and program innovation. These tasks are carried out jointly with the collegiate bodies (see Figure 1.3 and Criterion 2.6.E). Final decisions are made by the representatives of the academic bodies and educational programs, which include the CAD for educational programs and the Academic Research Commission (CAI) for research programs. The CAA is consulted if an institutional definition is required for decisions regarding crucial academic policies. Criterion 1.5 provides specific information on the functioning of these bodies.

Academic standards and policies are developed by the faculty colleges and provide oversight for the development of the curriculum (described in detail in Criterion 1.5).

### 1.3.D

Identification of any of the above processes that are different for the school of public health than for other professional schools, with an explanation.

Unlike most Mexican schools of public health found in public and private universities and medical schools, the INSP exists within the SSA. Although it receives federal funds, it is an independent and autonomous entity.

### 1.3.E

If a collaborative school, descriptions of all participating institutions and delineation of their relationships to the school.

The INSP is not a collaborative school but an educational institution that offers autonomous and independent education programs.

### 1.3.F

If a collaborative school, a copy of the formal written agreement that establishes the rights and obligations of the participating universities in regard to the school's operation.

This criterion is not applicable.

### 1.3.G

Assessment of the extent to which this criterion is met.

This criterion is met.

## Strengths

- The INSP is an independent academic institution with authority over its budget and academic standards, as well as recruitment and promotion of faculty.
- The INSP has been accredited and recognized for academic excellence by all education accreditation agencies in Mexico, including the National Council for Science and Technology (CONACyT). In addition, the INSP received CEPH accreditation in 2006.
- INSP's location within the Ministry of Health (SSA) allows a direct relationship with all health sectors, which facilitates collaboration in teaching, research and service activities.
- As the only National Health Institute recognized as an institute of higher education by the Ministry of Education (SEP) and ANUIES, the INSP has created opportunities for academic liaisons with both public health organizations and education networks at the national and international levels. These collaborations provide direct benefits in academic quality.
- All of the INSP's most important practices are developed with the participation of collegiate bodies, which allows the involvement of internal and external constituents while promoting collective responsibility for the Institute's activities.

## Weaknesses

- Although it is recognized as an institute of higher education by the SEP and ANUIES, the INSP's ascription as a National Health Institute can impede access to federal funds awarded to other public universities in areas such as memberships, technological educational platforms and teacher training.
- Since INSP is a National Health Institute, its personnel recruitment, selection and advancement of faculty is done according guidelines for the rest of the National Health Institutes. This means that promotion depends more on research activities than on teaching. For that reason most of the full-time faculty are also researchers in medical sciences.

## Future Plans

- The INSP will develop more collaborations with SEP and ANUIES to analyze the possibilities for funding from those sources.
- The INSP will continue to advocate for the inclusion of teaching and service activities in the general policies of the National Health Institutes to recognize all three fundamental roles of our faculty.

**1.4**

Organization and Administration. The school shall provide an organizational setting conducive to teaching and learning, research and service. The organizational setting shall facilitate interdisciplinary communication, cooperation and collaboration. The organizational structure shall effectively support the work of the school's constituents.

The INSP provides an organizational setting conducive to teaching and learning, research and service. Interdisciplinary communication, cooperation and collaboration are priorities, as is maintaining an organizational structure that supports the work of the school's constituents.

**Required Documentation**

**1.4.A**

One or more organizational charts showing the administrative organization of the school, indicating relationships among its component offices, departments, divisions, or other administrative units.

The INSP has a formal organizational structure that determines the administrative organization of its research centers, the Office of Academic Affairs, the Office of Administration and Finance (DAF), the Office of Planning, and the Internal Control Office. This structure is shown above in Figure 1.1 (Criterion 1.3.B) and is also available online at the INSP's website, <http://www.insp.mx/>.

The Office of Academic Affairs coordinates educational activities with the support of the collegiate bodies. Figure 1.2 depicts the structure of the Office of Academic Affairs, headed by the Associate Academic Dean, Dr. Laura Magaña Valladares.

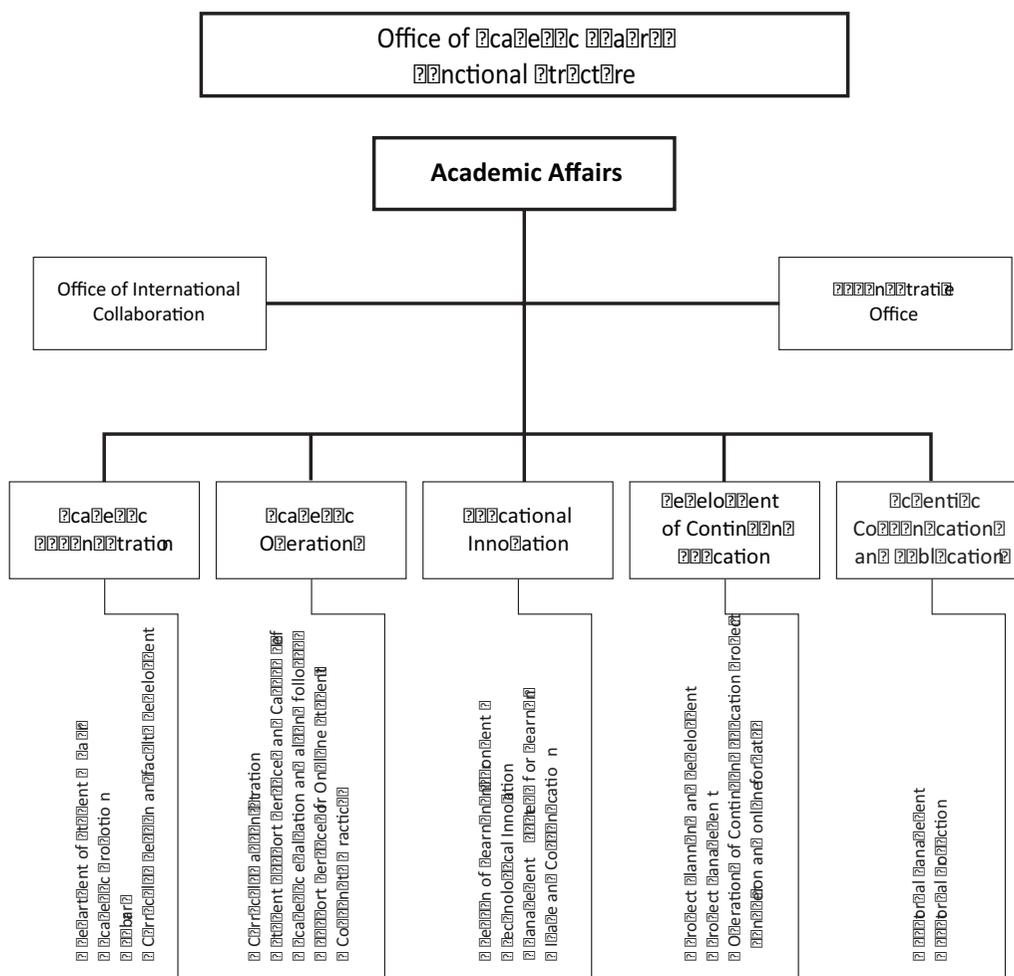


Figure 1.2. Organizational Structure of the Office of Academic Affairs

### 1.4.B

#### Description of the roles and responsibilities of major units in the organizational chart.

The INSP has an Organizational Manual to inform academic and administrative personnel about the Institute's mission, vision and organization, including all units included in the organizational structure and their objectives, responsibilities and general functions. The Organizational Manual includes research centers, the Office of Academic Affairs and all the units at INSP. It is a normative document that governs functions and offers support to the entire institutional community to optimize processes. The Organizational Manual is available online at the INSP's website.

The Office of Academic Affairs is responsible for leadership, coordination, and supervision of all academic activities, including the development of educational programs at the INSP. To carry out the activities related to academic leadership, the Office of Academic Affairs is supported by the departments listed in Figure 1.2. The functions of these departments are described in Table 1.5, below.

### 1.4.C

#### Description of the manner in which interdisciplinary coordination, cooperation and collaboration are supported.

The INSP structure brings together faculty from all research centers, as well as academic coordinators, student representatives, educational authorities and members of the community. The Academic Program coordinators appointed by the Research Center Director and the Office of Academic Affairs manage the opera-

tion of the academic programs. Interdisciplinary collaboration is promoted through the participation of each professor in several collegiate committees. In the collegiate committee meetings, professors from all disciplines and research areas interact to analyze academic issues, providing different points of view and job experiences and thus promoting an interdisciplinary approach. Student representation on the collegiate committees also fosters interdisciplinary communication and cooperation. This structure creates interdisciplinary groups that collaboratively analyze and resolve issues related to instruction, research and service that impact the INSP. The main objectives of the collegiate committees are to respond to the needs of all different sectors of the Institute and to establish permanent communication with all the actors involved in the academic, research and service processes. (For a detailed description of the most important collegiate bodies see Criterion 1.5.A and Appendix 1.2.a-1.)

Decisions related to academic and research issues are specifically dealt with in a collegiate manner to promote cooperation and involvement of all INSP sectors in the operation of its programs. This is demonstrated by the fact that all professors participate in at least one collegiate body. An important example of interdisciplinary coordination is the work of the Faculty Colleges—discipline-based groups in which professors who are responsible for courses in a specific discipline, regardless of program or research center, collaborate with peers on academic activities and on formulating recommendations and policies related to academic programs. Each Faculty College is supervised by a Research Center aligned with its discipline. Center Directors interact with Faculty Colleges to supervise their operation and their involvement in the academic operation of their programs.

**Table 1.5**  
**Functions of the Units within the Office of Academic Affairs**

Department	Functions and Responsibilities
Academic Administration	Coordinate academic administration through the processes of student selection, enrollment and follow-up; establish communication with all collegiate bodies in the institution and monitor the fulfillment of regulations related to academic processes.
Academic Operations	Carry out operations, evaluation and follow-up for the INSP's academic program; support student performance through actions that ensure the quality of the teaching and learning process.
Educational Innovation	Design and implement innovative teaching and learning tools and formats and administer e-learning programs.
Development of Continuing Education	Design and conduct needs assessment for training and operate the continuing education programs.
Scientific Communications and Publications	Coordinate and perform the INSP's editorial and production activities.
Office of International Collaboration	Administer inter-institutional and international collaborations and agreements as well as visits from international professionals.
Administrative Office	Administer and supervise resources for operating academic programs; with the other department, monitor student and faculty achievement and student outcomes; oversee strategic planning relating to academic areas in collaboration with the Office of Planning.

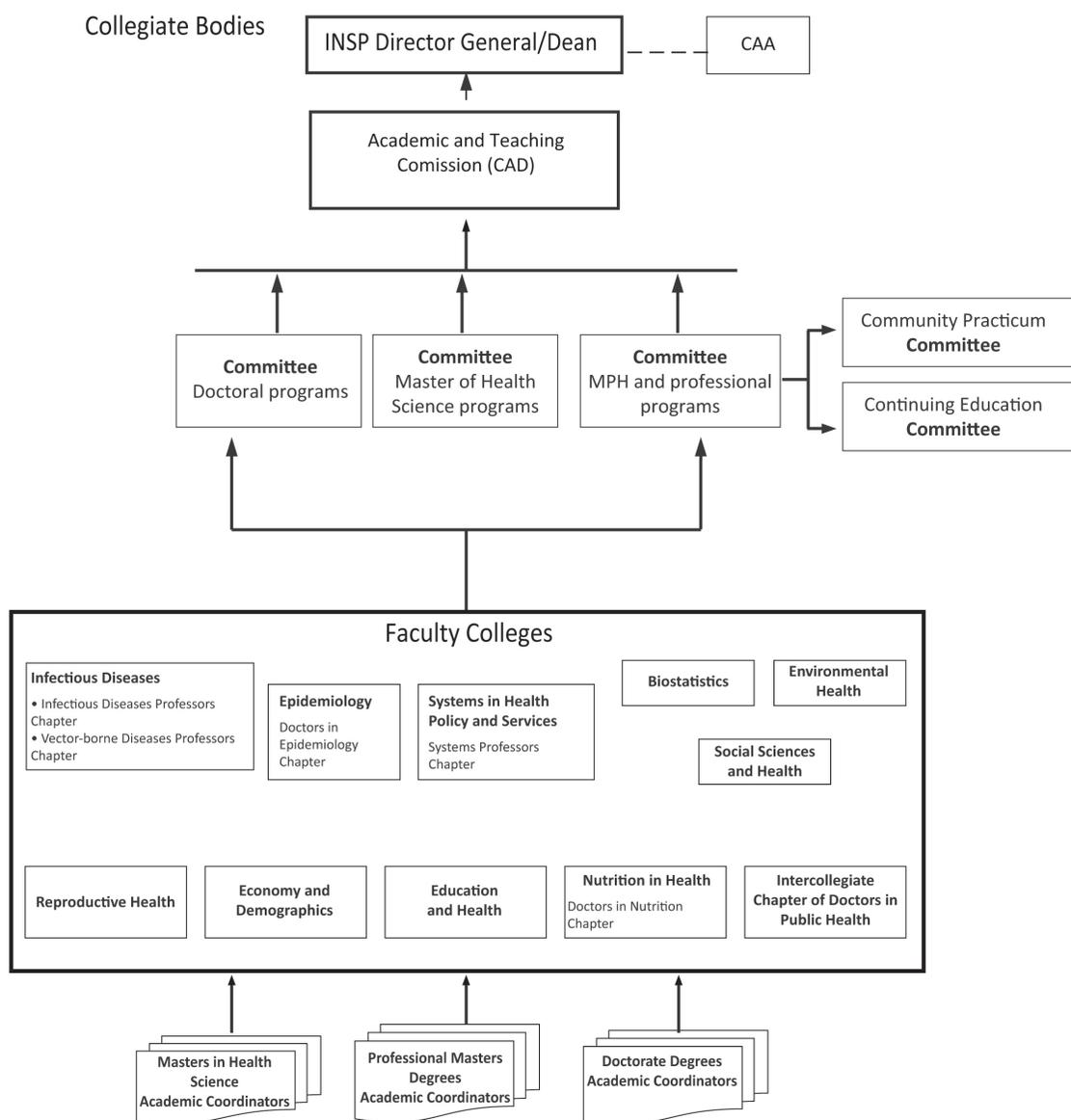
The interrelationships among the academic collegiate bodies are shown in Figure 1.3. Figure 1.4 (in Criterion 1.5.A) also shows the cooperation between academic and research collegiate bodies.

**1.4.D**

Identification of written policies that are illustrative of the school’s commitment to fair and ethical dealings.

The Institute has a range of internal regulations and policies that promote equitable and fair practices in relation to daily activities, among which are:

- **Academic regulations.** The Institute’s academic regulations define the functions and commitments of all members of the collegiate bodies and establish policies designed to create academic equality and fairness in professor-student relations. The statutes of the General Regulations for Graduate Study include a section on ethical conduct (Article 28) that students must observe. (All academic regulations will be available in an on-site file.) In addition, the Regulations for Faculty Colleges cover all statutes that govern faculty activities. It defines the obligations and conditions of equality to be adhered to in assigning a professor to academic activities and establishes balance in academic relations with students.



**Figure 1.3. Interdisciplinary Coordination and Collaboration within the INSP**

All professors are evaluated equally based on the Evaluation Program, the results of which are analyzed in the meetings of each Faculty College.

- **Ethics, Values and Conduct Committee.** The INSP's Ethics, Values and Conduct Code is based on the Code of Ethics for Public Personnel of the Federal Public Administration. The Ethics, Values and Conduct Code and pertinent policies are established by the INSP's Ethics, Values and Conduct Committee, which is responsible for monitoring adherence to these policies and providing any necessary follow-up among all sectors of the INSP. Ethics policies are presented in Appendix 1.1.e.
- **Institutional Culture Program with a Gender Perspective.** The INSP participates in this federal program, created by the National Institute of Women (INmujer), which is designed to prevent gender discrimination. Its objective is to provide guidelines for federal agencies like the INSP, to guarantee the application of equitable practices toward women and men. The INSP promotes the program's guidelines throughout the community, primarily through the Internet. The Planning Office supervises the inclusion of these guidelines in policy establishment, for example in personnel recruitment and promotion. More details of the program can be found in an on-site file.

### 1.4.E

Description of the manner in which student grievances and complaints are addressed, including the number of grievances and complaints filed for each of the last three years.

Articles 106 and 107 of the General Regulations for Graduate Study (see Criterion 1.4.D) indicate the process that students should follow to report complaints related to academic matters. If the complaint is connected to an act of abuse, discrimination or violation of individual rights, the student should report it to the Ethics, Values and Conduct Commission (Criterion 1.4.D), which in turn analyzes the case and issues a ruling.

In addition, the Office of Academic Affairs provides the following channels to address any other conflict or student complaint:

1. Receipt of the complaint by the academic coordinator or tutor. For problems directly connected with the program in which students are enrolled, this process allows and them to request intervention or support from the corresponding entities. These may include the Office of Academic Affairs or the collegiate bodies that address academic processes, depending on the nature of the conflict.
2. Communication through student representatives for the collegiate bodies and the Student Association. These entities refer student complaints to the Office of Academic Affairs or to the relevant commission for intervention.

3. Student meetings with the Associate Academic Dean and personnel from diverse areas from the Office of Academic Affairs. Meetings with students have been held on a semi-annual basis since 2007 to address issues, analyze group problems and hear feedback about students' experiences.
4. Receipt of individual complaints by the Office of Student Affairs and the Student Support Services and Campus Life Department. As these offices have the greatest degree of student contact, they receive (in person, in writing or via email) student complaints for response or referral.

Tracking of specific student complaints started in 2009 based on input from the 2006 CEPH review. It is still a new system under development. Over the past three years, most complaints and requests have been related to issues such as paperwork, interactions with tutors or staff, the functioning of classroom services (such as electrical installations, curtains and clocks), and the need for class materials (e.g., markers, flipchart paper and erasers) (Table 1.6).

To provide an option for anonymous complaint reporting, in 2009 the Office of Student Affairs implemented the System for Addressing Student Requests (SASE). Requests from students are received electronically or in comment boxes placed in strategic locations on the INSP campus. Responses are provided within 24 hours.

The Academic Administration Office reviews and classifies requests, suggestions and complaints according to type: administrative, academic, and those related to the facilities. The form for submitting requests is available to students through e-mail and at the comment boxes. Appendix 1.4.e offers more information about the process for addressing requests as well as the form for submitting requests.

In 2010 there was a general MPH student complaints related with tuition and fees due to a request from the Student Association where they asked for a reduction in the MPH tuition. Students argue that tuition should be based on the number of the courses but the program cost in based on the degree. All the degree programs cost about the same. This issue was clarified in a students' assembly so that all doubts and questions could be resolved for all MPH students.

### 1.4.F

Assessment of the extent to which this criterion is met.

This criterion is met.

**Table 1.6**  
**Record of Student Complaints**

Issue	2009	2010	2011
Problems with personnel service at Student Affairs Office	1	0	0
Classroom services and other facilities (light, lamps, equipment, didactic material, security)	2	1	1
Problems with student procedures (credentials, records, institutional email, faculty evaluations, etc.)	3	6	0
Insufficient space for student work outside the classroom	1	0	0
Review of grades	1	0	3
Problems with coordinators/tutors/faculty	2	2	1
Problems with classes/hours	2	2	2
Tuition and Fees	0	1*	1
Student problems with institutional health insurance	0	0	2
Other	1	0	2
Total	13	31	12

### Strengths

- The INSP has a well-defined organizational structure that supports academic and teaching functions.
- The collegiate bodies are structured based on different disciplines, with structures and processes in place to facilitate interdisciplinary collaboration.
- The interaction established by the highest academic entity promotes and stimulates academic collaboration among the Faculty Colleges.
- There are clear rules and policies available to all the Institution's members that promote ethics and just practices in all INSP activities.
- The INSP has clear statutes governing the quality of academic activities and a diversified channel structure for handling student requests and complaints.

### Weakness

- All interdisciplinary collegiate committees have an important role in the academic operation of the programs. Although this structure promotes interdisciplinary collaboration, it has become complex and sometimes slows operational processes of the academic programs that depend on committee decisions.

### Future Plans

- The INSP will develop a self-evaluation process to identify strategies to make the interdisciplinary committee work more efficient and fluent.

### 1.5

**Governance.** The school administration and faculty shall have clearly defined rights and responsibilities concerning school governance and academic policies. Students shall, where appropriate, have participatory roles in conduct of school and program evaluation procedures, policy-setting and decision-making.

The INSP's administration and faculty have clearly defined rights and responsibilities concerning school governance and academic policies. In addition, students have participatory roles in school and program evaluation procedures, as well as in policy-setting and decision-making.

### Required Documentation

#### 1.5.A

**Description of the school's governance and committee structure and processes.**

The Governing Board is the Institute's highest entity. In accordance with Article 15 of the Federal Law for Public Agencies and the Law for National Institutes of Health, the INSP's Governing Board established a set of organizational regulations that govern the activities of the Institute and establish academic policies for assigning responsibilities to each discipline, as well as the obligations and rights of the entire academic community. Among its functions is the selection of the Director General/Dean of the Institute, who serves for a term of five years with the possibility of serving a second five-year term.

The Director General/Dean is responsible for institutional policies and decision-making related to educational and research programs, with a focus on developing and strengthening institutional policies. In performing these functions, the Director General/Dean relies on internal proposals received from collegiate bodies, as well as on external advisors and advising councils (e.g. the Directive Council). Substantive decisions are presented to the Governing Board for review and approval (see Figure 1.4).

INSP has committees to regulate governance, instruction, research and service activities. The committee structure and its processes are described below, with an emphasis on the most important committees in each activity. For details about each committee's members and the functions, see Appendix 1.2.a-1.

### Governance Committees

The commissions in charge of INSP governance are the Governing Board and the Directive Council, described in Criterion 1.2.A. Two offices (the Administration and Finance Office and the Internal Control Office) and two Committees (the Directive Council and the Financial Committee) participate in the INSP's financial oversight. The Administration and Finance Office is responsible for financial activities, which are overseen by the Directive Council.

To guarantee periodic evaluation of financial administration in each area, a Financial Committee was created that reports to the Directive Council. This committee oversees resource distribution and financial operation of the research, instruction and service projects. Serving on this committee are the Center Directors, the Associate Academic Dean, a representative from the Administration and Finance Office and the Academic Affairs Office, and the head of the Administrative Office in each Research Center. The Internal Control Office, whose members are appointed by federal authorities, analyzes all internal financial processes and use of financial resources to ensure compliance with federal guidelines. This office makes recommendations to the General Director and monitors the activities of the Administration and Finance Office, periodically to the Ministry of Finance or other federal bodies.

### Instruction Committees

The most important committees governing academic instruction follow.

**The External Academic Commission (CAA).** This is an external, interdisciplinary advisory collegiate body composed of six representatives from higher education institutions in Mexico invited by the Governing Board. It monitors the INSP's teaching activities and provides feedback and strategic recommendations. Its main function is to be a consultation committee that uses the

educational experience of its members in other universities, both public and private, to formulate recommendations to the Director General about the academic program, the academic quality and adjustments or innovations in educational strategies.

**The Academic and Teaching Commission (CAD),** The CAD is the highest academic collegiate body within the Institute. It includes presidents of the Faculty Colleges and program committees, student representatives and the Directive Council, which enables the integration of all areas and levels related to academic decision-making. Representatives are selected according to each group's own guidelines (e.g., students representatives are chosen by their peers). The CAD meets every six months to plan, monitor and evaluate academic programs. For example, it reviews all the academic policies previously discussed in the Faculty Colleges and program committees, as well as design or review of programs, strategies to promote graduation rates and other academic issues defined by the Office of Academic Affairs.

**Program Committees.** The INSP has established three interdisciplinary committees to regulate the organization and processes of the academic programs: the *Professional Programs Committee* (which oversees the MPH program), the *Master of Health Science Committee*, and the *Doctoral Programs Committee*. These committees are composed of faculty coordinators from the concentration areas (each program has a full-time coordinator and an adjunct coordinator), as well as peer-selected student representatives and representatives from the Office of Academic Affairs. These committees are in charge of the development, coordination, analysis and follow-up of student enrollment, retention and graduation processes. Program committees meet monthly and maintain relationships with the corresponding Faculty Colleges and students. Each committee has specific guidelines for conducting its activities as part of the INSP's academic regulations. In addition, the *Community Practicum Committee*, an ad hoc committee under the coordination of Professional Programs Committee, monitors the operation of the Community Practice program for MPH students. Its members include the president of the Professional Programs Committee, the professors who act as community advisors, academic coordinators of all the MPH areas and the operational coordinator of the Community Practice program.

**Faculty Colleges.** All the professors participate in the Faculty College that oversees the courses they teach. These committees coordinate academic activities and formulate recommendations and rulings related to academic programs, courses, teaching quality, qualifying exams, knowledge-based exams, study guides, students, faculty, regulations, supervision and evaluation. The colleges' main responsibility is to maintain the quality of the academic programs they coordinate and the courses that they offer. The INSP's Faculty Colleges address all the activities in the academic program concentration areas and respond to their needs. Each

Faculty College meets monthly and holds special sessions when necessary. The minutes of the sessions are online with access only to the INSP community.

Within some of the Faculty Colleges, chapters have been created (five in all) to oversee the doctoral degree programs. There is also an inter-collegiate group focused on addressing only the Doctorate in Public Health program, in which Ph.D.s from other Faculty Colleges who are experts in diverse topics offered through the program participate. The 11 colleges and 5 chapters are:

1. Faculty College for Social Sciences and Health
2. Faculty College for Biostatistics and Data Processing
3. Faculty College for Reproductive Health
4. Faculty College for Epidemiology
  - a. Chapter for overseeing the doctoral program in epidemiology
  - b. Chapter for overseeing the Residence in Public Health and Preventive Medicine
5. Faculty College for Environmental Health
6. Faculty College for Systems in Health Policy and Services
  - a. Chapter for overseeing the doctoral program in health systems
7. Faculty College for Health Economics
8. Faculty College for Infectious Diseases
  - a. Chapter for overseeing the doctoral program in infectious diseases
  - b. Chapter for overseeing the doctoral program in vector-borne diseases
9. Faculty College for Nutrition and Health
10. Faculty College for Education and Health
11. Intercollegiate Faculty College for Doctorate in Public Health

Each Faculty College has a president and a secretary, selected by the members of each college. The membership of the college depends on the courses each professor teaches since academic review, among other functions, is the responsibility of every Faculty College. The list of members is presented in Appendix 1.5.a. Details about the functions and roles of these collegiate bodies are described in the regulations for faculty colleges and academic personnel (a summary of which appears in Appendix 1.2.a-1). All their agreements are available for the internal INSP community on the Institute's website.

**The Continuing Education Committee.** This ad hoc committee that establishes and regulates procedures for the practice, operation and evaluation of the Continuing Education Program. The committee has representatives from each Research Center, appointed by their Center Directors, to incorporate their academic opinions in the continuing education program (see Appendix 1.2.a-1). This committee is coordinated by the Office of Academic Affairs' Department of Continuing Education (see Criterion 3.3.A).

## Research and Service Committees

Both research and service activities are conducted by the research centers. Commissions involved in the decisions related with research and service activities are as follows:

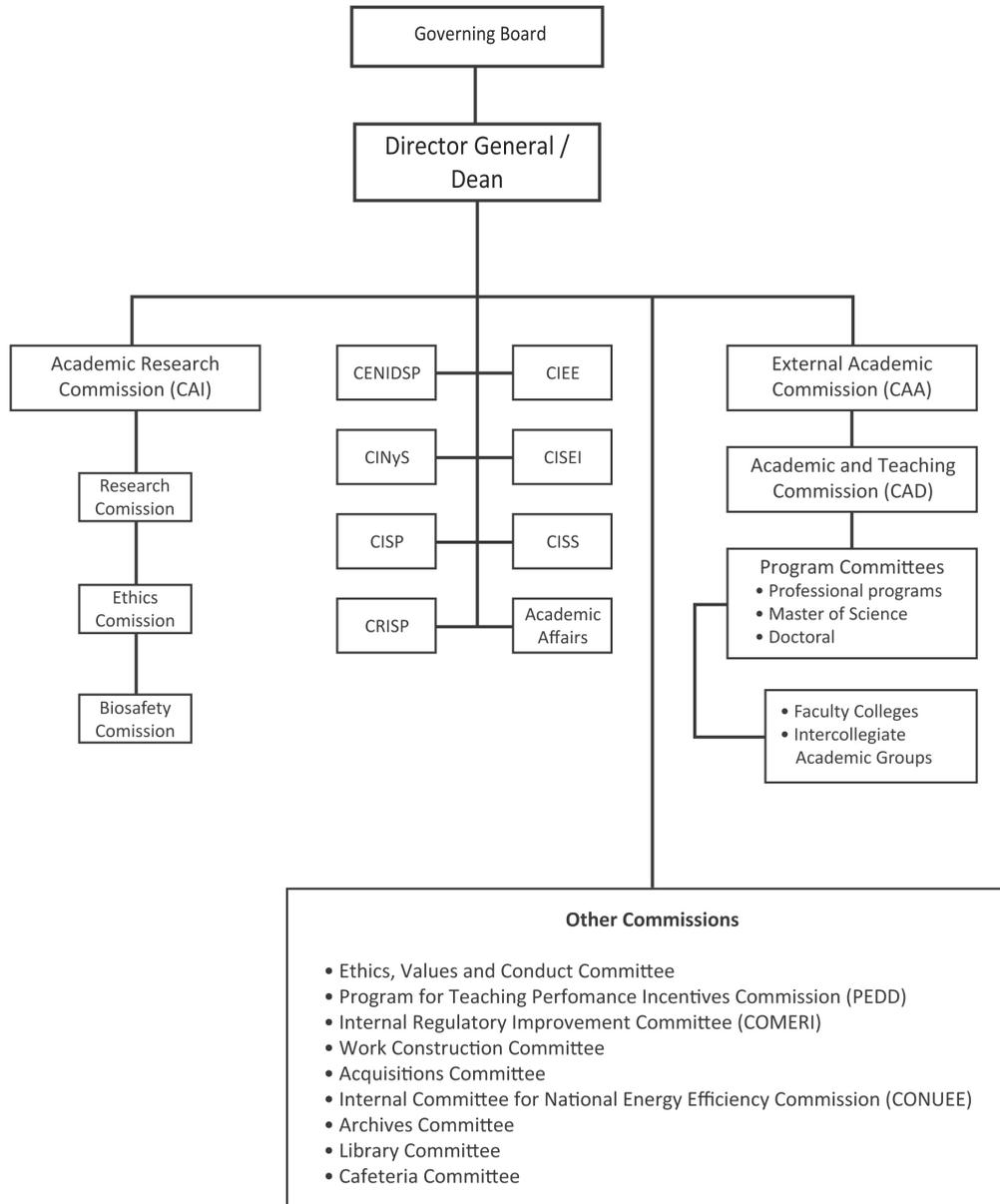
- **The Academic Research Commission (CAI)** regulates scientific activities and is composed of adjunct directors of the research centers and the higher-ranking researchers at the INSP. Its main objective is to update and implement quality guidelines to evaluate the performance of professors/researchers in the educational programs and to develop the INSP's research and service strategic program. The CAI works closely with three other commissions: the Research Commission, the Ethics Commission and the Biosafety Commission. These are collegiate bodies of a technical-consultative nature that follow established regulations and procedures (available at <http://www.insp.mx/normateca/>).
- **The Research Commission** is in charge of technical supervision to verify quality standards in the research conducted at the INSP.
- **The Ethics Commission** is in charge of reviewing thesis protocols to assure that the ethical considerations of a research project are satisfactorily addressed.
- **The Biosafety Commission** reviews thesis protocols to ensure that the biosafety considerations of research projects are satisfactorily addressed.

Each of these bodies works actively with other committees to improve the INSP's academic, research and service activities and government (see Figure 1.4). The Office of Academic Affairs coordinates and monitors the academic activities of the collegiate bodies and, with the support of the Center Directors, ensures that the rulings they issue strictly adhere to academic and administrative regulations. The Office of Academic Affairs also monitors academic programs to ensure that the rights of students and professors are upheld. Complete information on committee objectives and members appears in Appendix 1.2.a-1.

## Governance and Committee Structure and Processes, Particularly as They Affect:

**General school policy development.** The INSP has autonomy over the development and modification of its curriculum and academic standards. This activity is performed by the different commissions, with ongoing consultation and leadership by the Office of Academic Affairs. The CAD is the collegiate body responsible for developing school policies related to teaching; for areas related to research, the CAI assumes this responsibility. The CAA analyses the policy recommendations and approves them, and in turn sends them to the Rules and Regulations Committee for final approval.

## Structure of the INSP's Collegiate bodies



**Figure 1.4. Hierarchical Structure and Collegiate Bodies of the INSP**

**Planning.** All areas of the INSP, including faculty, staff, students and other constituents (e.g. alumni, employers, authorities of the Ministry of Health) participate in the planning process. One of its major results is the Annual Work Plan (PAT), which unites all of the interests of the INSP in instruction, research and service and is developed collaboratively. The Office of Planning is responsible for guaranteeing that the institutional mission, vision, goals and objectives are met. To this end, it consults with different

areas of the INSP to generate and promote effective strategies, improve institutional processes and strengthen the organization through planning. Internally, these activities and procedures are assigned to the Office of Planning through the Director's Office; INSP departments that provide academic support share in these responsibilities. Externally, the INSP seeks to adapt the guidelines issued for developing the PAT to those of the Ministry of Finance and Public Credit (SHCP).

The chief functions of the Office of Planning are:

1. Support the strategic planning process to keep the PAT current by coordinating the participation of the administrative areas responsible for program and project goals.
2. Analyze productivity reports of research, teaching and service activities, monitor progress toward meeting the goals of the INSP's administrative areas and maintain a database with this information.
3. Evaluate the progress of the different work programs against the goals defined by the administrative areas in order to implement any necessary strategic actions and correct possible deviations.
4. Support the management of administrative areas by providing timely information regarding deviations found in program and project progress, as well as the possible causes, so that they can be corrected.
5. Integrate data from the PAT and other reports for internal use as well as external decision-making.
6. Participate in the development of research and teaching project budgets submitted to oversight agencies (government institutions that oversee use of federal resources allocated for research and teaching) and monitor their consistency with INSP goals and objectives, as well as administrative goals.
7. Participate in the integration of information related to administrative indicators as well as information requested for Control and Auditing Committee meetings.
8. Participate in educational activities related to the INSP's planning functions and institutional development to propose mechanisms for improvement.
9. Follow up on activities related to the implementation of the balanced scorecard.
10. Annually update the INSP's Organization Manual and procedures manuals for the research centers, the Office of Academic Affairs and the various other areas.

Table 1.7 outlines the ways various collegiate bodies participate in the Institute's planning activities, according to their areas of responsibility.

**Budget and resource allocation.** The INSP's budget is developed each year based on the PAT and takes into account the resources required to accomplish goals and activities. The design of this budget involves diverse areas of the INSP, as indicated in Criterion 1.3.C. Each division designs its budget to meet the Annual Work Plan (PAT). The budget is reviewed by the Directive Council and then submitted to the Governing Board, which determines the final distribution of funds to develop the year's financial plan. The proposal is then sent to the SSA for review and evaluation. Once approved, it is submitted to the SHCP to verify its fiscal feasibility. It is then sent for final authorization by the Congress, since the INSP is a federal entity. The SSA distributes the authorized budget allocation for the year to all the National Institutes of Health. The Director General/Dean sends relevant information to each research center and departments.

Once the annual federal budget is approved, the Administration and Finance Office, with the approval of the Director General, allocates the budget according to the priorities and needs of each institutional area. The three categories to which resources can be designated are:

1. **Human resources.** The federal budget covers the payroll of INSP personnel. The majority of human resources are allocated to activities that support the substantive work areas of the INSP.
2. **Material resources.** To allocate materials, the Office of Administration and Finance (DAF) evaluates the needs of each area according to the number of people and types of activities performed in that area.
3. **Services.** These include expenses such as food, water, telephone, electricity, travel, memberships, consultations, and

**Table 1.7**  
**Participation of the Academic Commissions in the INSP's Planning Process**

Commission	Activities Related to the INSP's Planning Process
Directive Council	<ul style="list-style-type: none"> <li>• Advise the Director General/Dean on appropriate strategies for the INSP to achieve its mission and goals.</li> <li>• Establish an annual plan that is monitored quarterly.</li> </ul>
Academic Research Commission (CAI)	<ul style="list-style-type: none"> <li>• Advise the Director General/Dean on strategic planning and the design of the INSP's Annual Research Program.</li> <li>• Approve the INSP's Annual Research Program.</li> <li>• Perform periodic consultations with institutions in the health sector, other government institutions and civil society to identify relevant health problems and research priorities.</li> </ul>
Academic and Teaching Commission (CAD)	<ul style="list-style-type: none"> <li>• Prepare annual strategic plans for school development.</li> <li>• Monitor school progress.</li> </ul>
Faculty Colleges	<ul style="list-style-type: none"> <li>• Plan and oversee collegiate activities related to the evaluation, supervision and implementation of educational programs.</li> </ul>

document delivery services. Funds are allocated according to documented need as well as to the types of activities performed and the number of personnel in the area.

Each Research Center and the Office of Academic Affairs receives external funding from grants, collaborative agreements and service contracts (e.g., training and development for health service providers at an external institution). The allocation of these resources is used to meet the specific objectives of the project. Overhead funding from these projects is used to cover indirect costs.

The Internal Control Office ensures that the distribution of the budget follows administrative and legislative regulations (see details in Criterion 1.6.A). Two more committees participate in the budget supervision: the Public Work Construction Committee and the Acquisition Committee. See Appendix 1.2.a-1 for details regarding the roles of these committees.

### **Student recruitment, admission, and award of degrees.**

The Office of Academic Affairs coordinates the student selection process, from recruitment to student acceptance and enrollment. Every year the Office of Academic Affairs develops recruitment activities to identify applicants from diverse sectors who meet enrollment standards for the academic programs. The Faculty Colleges are responsible for evaluating candidates and completing the selection process. Each Faculty College analyzes the number of professors available to provide quality attention to the academic needs of the students to define how many students are accepted each year. Selections are then ratified by the academic program committees. The admission process is described in the student handbook (available at <http://www.inspvirtual.mx>) and in the Academic Program (available at <http://www.insp.mx>) and involves the following steps:

1. Submission of the candidate's enrollment application.
2. Completion of the academic requirements for each program (e.g., minimum grade point average of 8.0 on a scale of 1 to 10 in the previous academic degree; academic recommendation letters).
3. Successful completion of examinations, including the General Knowledge Examination from the National Evaluation Center for Higher Education (CENEVAL), English and mathematics exams and a psycho-pedagogical evaluation. Other evaluations are applied to some academic programs to determine specific aptitudes and knowledge.
4. Completion of a selection interview with professors/researchers in the chosen program area.
5. Evaluation and compilation of the results of the examinations by academic coordinators.
6. Review and ruling by faculty colleges responsible for final acceptance decisions.

7. Ratification of the results by the academic committees (Professional Program Committee, Academic Program Committee, Doctoral Program Committee).
8. Communication of the results to applicants.

The procedure for obtaining academic degrees is defined by specific regulations for the academic programs and requires that students:

1. Have an assigned thesis committee and director.
2. Register their thesis or final professional project (PTP) protocol.
3. Develop their thesis/PTP and get approval by committee for defense.
4. Defend their thesis/PTP with a graduation jury.

All academic programs require satisfactory completion of all courses and other requirements defined by the study plan. The MPH program also requires satisfactory completion of the professional practicum. All of these requirements are provided in the student handbook, available on the INSP website, <http://www.inspvirtual.mx> (see also Appendix 4.15).

The Faculty Colleges, along with other academic commissions, are also responsible for evaluating student performance and awarding degrees. The participation of the different academic commissions in student admission and degree conferral is outlined in Table 1.8, below.

**Faculty recruitment, retention, promotion and tenure.** The INSP has the authority to recruit its faculty body and determine promotions. To contract, evaluate and review the performance of academic personnel, the INSP adheres to the policies established by the General Coordination of the National Institutes of Health. These policies establish that full-time faculty are contracted as Medical Science Researchers (ICM) and allow them to participate in research, teaching and service activities. The professor/researchers from the INSP are part of the Institutional System of Medical Sciences Researchers (SIICM) of the SSA. The commissions listed in Table 1.8 also participate in faculty recruitment.

Recruitment, retention and promotion of professor/researchers are determined by an evaluation program implemented by the Coordinating Commission of National Institutes of Health and Regional Specialty Hospitals (CCINSHAE). The program seeks to stimulate faculty promotion and tenure. It operates through annual calls for applications with specific criteria, procedures and deadlines for determining acceptance, promotion, and tenure. The calls are open to all researchers of the National Institutes of Health and Specialty Hospitals of the SSA. The program provides appointments of Medical Sciences Researchers (ICM) at six levels, from "A" to "F," which are determined according to the fol-

**Table 1.8**  
**Role of the Academic Commissions in Student Admission and Degree Conferral**

Commission	Role in Student Admission and Degree Conferral
Academic and Teaching Commission (CAD)	<ul style="list-style-type: none"> <li>Establishes policies and criteria for student selection.</li> <li>Develops strategies to guarantee the academic quality of the programs.</li> <li>Monitors the fulfillment of school regulations and adherence to educational procedures established by the INSP.</li> </ul>
Program Committees	<ul style="list-style-type: none"> <li>Supervise the student selection process and provide follow-up with regard to academic performance.</li> </ul>
Research Commission	<ul style="list-style-type: none"> <li>Authorizes students' research protocols and ensures quality.</li> </ul>
Ethics Commission	<ul style="list-style-type: none"> <li>Reviews thesis protocols to ensure that the ethical considerations of a research project are satisfactorily addressed, both theoretically and in practice.</li> </ul>
Biosafety Commission	<ul style="list-style-type: none"> <li>Reviews thesis protocols to ensure that the biosafety considerations of a research project are satisfactorily addressed, both theoretically and in practice.</li> </ul>
Faculty Colleges	<ul style="list-style-type: none"> <li>Evaluate enrollment applications and select final candidates.</li> <li>Assign tutors to accepted students.</li> <li>Appoint thesis and PTP directors and advisors.</li> <li>Appoint the evaluation panel for degree examinations.</li> <li>Evaluate student performance and documentation for conferring academic degrees.</li> </ul>

lowing criteria: work experience, degree and academic development, publication in refereed journals, presentation of research papers at scientific meetings, funding for research protocols, and management or consultancy-related thesis research.

For retention and promotion, the External Commission of Health Research (CEIS) evaluates each candidate's academic merit. The CEIS is a consultation entity for health research composed of researchers representing the National Institutes of Health, Specialty Hospitals and the CCINSHAE, who conduct the assessment through objective criteria set out in Ministry of Health regulations (Appendix 4.1.d-1). The CEIS analyzes the curriculum vitae and merit of the candidates and issues an opinion that determines the income and level of candidates. Health sciences researchers are evaluated by the CEIS every three years for categories A, B and C and every five years for categories D, E and F to advance or remain in their category according to its standards. The commissions listed in Table 1.9 also participate in faculty recruitment.

**Academic standards and policies.** In accordance with Article 9 of the General Regulations for Postgraduate Studies, all objectives, policies, rules and general academic guidelines for postgraduate studies are revised and established by the Academic and Teaching Commission (CAD) and approved by the External Academic Commission (CAA). The process for creating academic policies to govern the INSP's programs follow an ascending order, starting with the faculty colleges, which begin the analysis and discussion, then the analysis is sent to the Academic Program Committees, if approved, they are presented to the CAD and finishes with the final approval in the CAA. These processes ensure that all parties (students, faculty, administrative staff and external community) are included.

**Research and service expectations and policies.** The INSP's research and service activities have been organized around a central policy for the development of the Mission-Oriented Research Lines (LIMs), described in detail in Criterion 3.1. For that reason,

**Table 1.9**  
**Role of Commissions in the Faculty Selection Process**

Commission	Role in the Faculty Selection Process
Academic Research Commission (CAI)	<ul style="list-style-type: none"> <li>Advise the Director General/Dean on the hiring, evaluation and retention of academic personnel (professors/researchers).</li> </ul>
Faculty Colleges	<ul style="list-style-type: none"> <li>Define criteria for assigning professors to teach courses within each educational program. This process includes a) issuing a public notice regarding selection of a professor for a course, b) reviewing the results of student evaluations of professors proposed for a course, c) issuing the ruling for the appointment, d) providing a performance follow-up on how the course is being taught, and e) analyzing the results of the faculty member's student evaluations.</li> </ul>

service is developed by the research centers in accordance with various research projects. As research and service are substantive areas of work, the collegiate bodies participate directly in developing related expectations, policies and guidelines based on policies established by the Coordinator of the National Institutes of Health, and within the context of PRONASA. Table 1.10 outlines the role of the different commissions in setting research and service expectations and policies.

### 1.5.B

A copy of the constitution, bylaws or other policy document that determines the rights and obligations of administrators, faculty and students in governance of the school.

The INSP is guided by its Founding Decree, which is included in the federal regulations governing the National Institutes of Health (Appendix 1.1.b). The Academic and Administrative Regulations of the INSP clearly define the rights and responsibilities of the faculty body, students enrolled in all postgraduate programs, and collegiate bodies providing follow-up on all academic activities defined by the curriculum plans. These regulations include: **a)** rules for the performance of professors, academic authorities and degree programs (Appendix 1.5.b-1) and program committees (determination of how professors and students should participate in governance through their participation in academic committees—Appendix 1.5.b-2); and **b)** rules for ethical practices and appropriate behavior (Appendix 1.1.e).

Full-time administrative staff are governed by the General Work Conditions (Appendix 1.3.c), an agreement that the SSA establishes with the workers' union every three years and that regulates labor relations between authorities and staff. In addition, administrative personnel participate in various commissions that analyze and review decisions related to administrative development and institutional operations (Appendix 1.2.a-1).

### 1.5.C

A list of school standing and important ad hoc committees, with a statement of charge, composition, and current membership for each.

A list of existing commissions in the INSP with all their members, statements of charges, their functions and periodical meetings is presented in detail in Appendix 1.2.a-1.

### 1.5.D

Identification of school faculty who hold membership on university committees, through which faculty contribute to the activities of the university.

The strength of the INSP is its commitment to collegiate decision-making and the involvement of faculty in all academic decisions. All faculty belong to at least one collegiate body and 106 INSP faculty members participate in more than one collegiate entity (e.g., Faculty Colleges, degree program commissions, research commissions, other commissions) responsible for making decisions related to academics, research and service as described in Appendices 1.2.a-1 and 1.5.a.

### 1.5.E

Description of student roles in governance, including any formal student organizations, and student roles in evaluation of school and program functioning.

**Student participation in commissions.** In response to recommendations from CEPH during the previous accreditation, the INSP has implemented student participation in those collegiate bodies that make important decisions regarding the educational programs. Student representatives participate actively in the different academic groups and their analysis, feedback and per-

**Table 1.10**  
**Role of Commissions in Setting Research and Service Expectations and Policies**

Commission	Functions
Academic Research Commission (CAI)	<ul style="list-style-type: none"> <li>• Develops recommendations and rulings according to the research areas within the INSP.</li> <li>• Advises on the INSP's strategic planning related to research and service activities.</li> <li>• Provides consultations to external institutions to identify relevant health problems and define research and service priorities.</li> <li>• Monitors and evaluates the development of research lines and research groups and investigators.</li> <li>• Advises on hiring, evaluation and retention of researchers.</li> </ul>
Research Commission	<ul style="list-style-type: none"> <li>• Ensures that research projects meet the INSP's policies and strategic objectives.</li> <li>• Evaluates protocols, preliminary and final reports and publications resulting from the research.</li> <li>• Evaluates research and service related products (conferences, training of researchers and other activities supporting research).</li> </ul>
Ethics Commission	<ul style="list-style-type: none"> <li>• Reviews thesis protocols to ensure that ethical considerations of research projects are satisfactorily resolved, both theoretically and in practice.</li> </ul>
Biosafety Commission	<ul style="list-style-type: none"> <li>• Reviews thesis protocols to ensure that biosafety considerations of research projects are satisfactorily resolved, both theoretically and in practice.</li> </ul>

spective are extremely valuable for program policy formulation, monitoring of academic processes, and planning and evaluation activities. Table 1.11 describes student participation in the different commissions. In all cases, student representatives in a post-graduate program have voice and vote.

**INSP Student Association.** The INSP has a Student Association that organizes students and defines their participation in the Institute's activities. Their objective is "to develop, promote and encourage successful interaction of the educational community (students, administrators, teachers, researchers, administrative and general staff) to achieve academic excellence and promote high-quality human relationships..." The Association has statutes designed by the students themselves to govern their functions and activities (Appendix 1.5.e). The Student Association also collects funds through social and recreational activities. Each year students choose an executive committee, which maintains contact with the Office of Academic Affairs and other INSP authorities to analyze joint strategies for solving academic or administrative situations that affect the student population.

The Student Association coordinates elections of student representatives for the various commissions and meets periodically with these representatives to develop and define the student position on various issues. At least three times per year, it meets with the greater student community to analyze the academic situation and gather suggestions and opinions about issues of interest. These meetings allow students to evaluate the school and its programs and to identify specific issues to be raised with the Associate Academic Dean in general student assemblies twice a year. The work carried out by the Student Association, in coordination with the Office of Academic Affairs, has allowed the creation of efficient communication channels between students and the various administrative bodies to support ongoing improvements in comprehensive training.

To strengthen student participation in evaluating INSP programs and gain the perspectives of students from all programs, in early 2011 the Office of Academic Affairs implemented a

student satisfaction survey that is applied after graduation. The results of this evaluation are sent to the offices responsible of the processes evaluated to improve their activities by attend to students' recommendations. Also, for the first time, in June 2011 the INSP initiated an open consultation with students about strategic topics that allows further evaluation of school and program functioning. This exercise entailed the use of focus groups including students from all the programs and formats. The results of this activity will be very helpful for improving the quality of academic processes and the design of new strategies to maintain academic quality. From now on this action will be done every 2 years.

### 1.5.F Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The INSP's diversity of commissions demonstrates that the Institute's most important decisions are made in a collegiate manner with the participation of representatives from multiple sectors including teachers, researchers, students, administrative personnel and external actors.
- The collegiate bodies constantly evaluate the Institute's regulations—which clearly define the functions, rights and obligations of each sector—and keep them current.
- Students have opportunities for participation and decision-making power with voice and vote in diverse collegiate bodies. Their contributions enrich the evaluation of academic programs and program development.

#### Weakness

- Faculty participation in the collegiate bodies creates heavy workloads for professors due to frequent sessions and must be recognized as activities that should be compensated.

**Table 1.11  
Student Participation on INSP Commissions**

Commission	Student Representation
Academic and Teaching Commission (CAD)	• Three student representatives: one doctoral student, one from the Master of Health Sciences program and one from the Master of Public Health program.
Professional Programs Committee	• One student representative of the professional programs designed by the Student Association.
Science Programs Committee	• Two student representatives (one from the first year and one from the second year of the Master of Health Sciences program).
Doctoral Programs Committee	• One student representative from each of the five doctoral programs.
Ethics, Values and Conduct Committee	• One student from the Student Association when assessment is required.

## Future Plans

- Faculty evaluations will be reviewed to recognize participation in academic commissions as an important criterion affecting faculty compensation.

### 1.6

**Resources.** The school shall have resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.

As a government-supported institution, the INSP has adequate resources to fulfill its stated mission, goals and objectives relating to education, research and service.

## Required Documentation

### 1.6.A

A description of the budgetary and allocation processes, sufficient to understand all sources of funds that support the teaching, research and service activities of the school. This should include, as appropriate, discussion about legislative appropriations, formula for funds distribution, tuition generation and retention, gifts, grants and contracts, indirect cost recovery, taxes or levies imposed by the university or other entity within the university, and other policies that impact on the resources available to the school.

Because the INSP is a federal institution, its budgetary and allocation processes are regulated by the Federal Law for Fiscal Responsibility and Budgeting, the Income Law, the Expense Budget of the Federation, the Cost Objects Classifier, the Law for Value Added Taxes and its regulations, and the Law for Earned Income Tax (available at [www.normateca.gob.mx/](http://www.normateca.gob.mx/)). These laws also govern the INSP's administration of resources. With regard to withholdings, under Mexican law, education-related activities and the INSP's academic services such as graduate programs, continuing education and training are exempt from the value-added tax (IVA) and the earned-income tax (ISR); income derived from research is subject to both taxes. As a federal entity, the INSP is also subject to the Law for the National Institutes of Health (which determines how these institutes' resources should be administered) and other federal laws.

Within this legal framework, running expenses related to the school are covered by federal resources, tuition and academic fees and external resources from projects developed by the research centers and the Office of Academic Affairs.

**Federal resources.** These are resources that have been allocated by the federal government. They cover the salaries of all

personnel as well as basic expenses and services (e.g., payment for electricity, water and telephone services) and priority actions according to the annual work plan (PAT) in each area. This means that funding allocation favors actions related to the major functions of the INSP that support its strategic objectives. If there is a surplus at the end of the year it is returned to the federal government. If federal funding is not enough to cover PAT actions, then other funds are used for this purpose.

### **Tuition and academic fees from educational programs.**

These are funds generated by the INSP's academic activities, specifically related to student's tuition and academic fees (e.g., services such as printing academic records) for educational programs. Tuition is based on an evaluation of costs and is regulated by a "recovery fees tabulator" developed by the Office of Academic Affairs. This tabulator is submitted annually to the Ministry of Health's General Department of Assets for the Public Benefit for review and submission to the Ministry of Finance and Public Credit (SHCP), which authorizes it and records the updated costs. These resources are used to cover expenses related to a part of personnel academic services that work in the Office of Academic Affairs, educational technologies, student services, curriculum design, maintenance of the INSP's online campus, and memberships fees, among others.

**External resources.** External funding includes resources generated from grants (e.g., from CONACyT, WHO, NIH, and other institutions), collaborative agreements with national and international organizations and service contracts for academic activities, such as continuing education, consulting, research and service. The allocation of resources received from these projects is specified by the departments conducting the work according to the needs they deem necessary for carrying out the projects satisfactorily. Overhead costs are calculated into the agreements to allow the INS to meet indirect costs (e.g., administrative services). Any surplus from these resources that are not related to specific grant-related work are usually held in reserve to cover the next year's expenses.

### 1.6.B

A clearly formulated school budget statement, showing sources of all available funds and expenditures by major categories, since the last accreditation visit or for the last five years, whichever is longer. See Table 1.12 (CEPH Data Template A).

### 1.6.C

If the school is a collaborative one sponsored by two or more universities, the budget statement must make clear the financial contributions of each sponsoring university to the overall school budget. This should be accompanied by a description of how tuition and other income is shared, including

**Table I.12 (Template A)**  
**INSP Income and Expenditures by Major Category, Fiscal Years 2005 to 2010**

	2005	2006	2007	2008	2009	2010
<b>INCOME</b>						
Tuition and fees <sup>i</sup>	4.1	9.2	39.4	115.7	646.2	937.2
State appropriation <sup>ii</sup>	22 042.9	22 981.7	19 807.5	22 351.5	24 602.4	24 108.0
University funds <sup>iii</sup>	NA	NA	NA	NA	NA	NA
Grants and contracts	27 872.5	29 671.9	28 284.4	24 032.4	27 261.0	25 940.5
Indirect cost recovery <sup>iv</sup>	NA	NA	NA	NA	NA	NA
Endowments	NA	NA	NA	NA	NA	NA
Gifts	NA	NA	NA	NA	NA	NA
Other (explain)	NA	NA	NA	NA	NA	NA
Total Income	49 919.5	52 662.8	48 131.3	46 499.6	52 509.6	50 985.7
<b>EXPENDITURES</b>						
Faculty salaries and benefits	9 265.6	10 553.0	10 173.6	11 751.2	12 776.9	16 683.5
Staff salaries and benefits	11 479.76	14 738.22	14 220.9	14 528	14 660.72	7 520.7
Operations	1 335.6.15	1 803.8.7	1 601.1.25	1 709.7.8	2 204.0.25	2 174.8.9
Travel	2 056.79	2 880.08	2 515.05	2 583	2 418.93	2 416.6
Student support	107.7	136.3	142.5	220.5	208.2	225.6
University Tax	NA	NA	NA	NA	NA	NA
Other (Expenses from investments) <sup>v</sup>	4 373.5	3 893.4	1 44.2	378.1	1 163.7	1 283.3
Total Expenditures	40 639.5	50 239.7	43 207.5	46 558.6 <sup>vi</sup>	53 268.7 <sup>vi</sup>	49 878.6

Notes: Figures are in thousands of U.S. dollars; exchange rate (25th May 2010) = 13.18 pesos/U.S. dollar. NA=Not applicable.

- i The increase in tuition since 2008 stems from a change in how this category is calculated. From 2005 to 2008, this figure included only tuition from students enrolled in the INSP's main educational programs. From 2008 till now, income from continuing education activities, previously in a separate category, was incorporated.
- ii Federal funds.
- iii This category does not apply to the INSP, as it has no agreements with other higher education institutions to provide courses or financial support to students enrolled in educational programs. Scholarships received from CONACyT are deposited directly into students' accounts.
- iv These costs are directly included in the tabulator corresponding to the agreements.
- v These expenditures relate to the acquisition of furniture and equipment to support the development of research and teaching projects. They are considered an investment, as they increase the assets of the INSP.
- vi In 2008 and 2009 there was an outflow greater than annual income; in previous years there was an external resources surplus that was used to cover the expenses for those 2 years.

Source: Sub-department of Financial Resources, February 2011.

indirect cost returns for research generated by school of public health faculty who may have their primary appointment elsewhere.

This criterion does not apply to the INSP.

### 1.6.D

A concise statement or chart concerning the number (headcount) of faculty in each of the concentration areas identified in Criterion 2.1 employed by the school as of fall for each of the last three years. If the school is a collaborative one, sponsored by two or more institutions, the statement or chart must include the number of faculty from each participating institution.

The INSP full-time faculty includes professors and researchers. In 2011, there are 233 full-time and 72 part-time faculty members (Table I.13). All professors support the academic programs as teachers, thesis directors, tutors, and practicum advisors. The primary areas in which faculty are assigned is shown in Table I.14.

### 1.6.E

A table showing faculty, students, and student/faculty ratios, organized by department or specialty area, or other organizational unit as appropriate to the school for each of the last three years. These data must be presented in table format (see CEPH Data Template B) and include at least the following information: a) headcount of primary faculty who support the teaching programs (primary faculty are those with

**Table I.13**  
**Faculty in the INSP's Academic Programs by Area of Concentration, 2008-2011**

Program	Full-time				Part-time			
	2008	2009	2010	2011	2008	2009	2010	2011
Specialty in Health Promotion	NA	NA	NA	5	NA	NA	NA	0
Residence in Public Health and Preventive Medicine	5	5	6	5	2	2	2	4
Master of Public Health								
Epidemiology	14	10	10	10	3	4	5	3
Health Systems Administration	8	8	6	12	3	3	3	10
Environmental Health	7	7	7	6	3	3	3	3
Biostatistics and Information Systems	9	9	8	7	1	1	1	0
Social Sciences and Behavioral Science	14	13	12	9	3	3	5	4
Nutrition	9	9	8	9	0	0	0	0
Vector-borne Diseases	NA	5	5	6	NA	0	0	0
Infectious Diseases	NA	5	9	8	NA	0	0	0
Public Health (online format)	7	7	7	7	17	17	17	19
Total	68	73	72	74	30	31	34	39
Master in Clinical Nutrition	7	7	6	6	1	1	1	9
Master of Health Sciences								
Epidemiology	11	12	11	11	4	5	5	2
Clinical Epidemiology	5	5	5	4	1	1	1	1
Biostatistics	9	9	9	6	2	3	3	2
Environmental Health	5	6	6	5	5	5	5	6
Reproductive Health	6	6	6	6	1	1	1	0
Health Systems	13	12	13	11	2	2	2	2
Nutrition	21	16	17	15	2	2	1	2
Health Economics	11	11	12	13	2	2	2	1
Infectious Diseases	22	22	24	21	2	2	2	1
Vector-borne Diseases	20	15	17	16	0	0	0	0
Vaccinology	5	5	5	5	1	1	1	0
Total	128	119	125	113	22	24	23	17
Doctorate in Health Sciences								
Epidemiology	8	7	5	5	1	1	1	1
Health Systems	7	7	6	6	0	0	0	0
Infectious Diseases	5	5	5	5	0	0	0	0
Total	20	19	16	16	1	1	1	1
Doctorate in Science in Population Nutrition	NA	7	6	4	NA	1	1	1
Doctorate in Public Health	10	10	11	10	0	0	0	1
Total	238	240	242	233*	56	60	62	72

NA= Not applicable, because programs were not open in that year.

Source: Department of School Administration, Office of Academic Affairs, December 2011.

\*Note: The group of positions that are vacant when the professors left the INSP in 2010-2011 are now available and ready to be occupied.

**Table I.14**  
**INSP Faculty Resources by Primary Program Area, 2011**

Department/Program Area	FT Faculty	PT Faculty	FTE Contributed by PT Faculty (100%= 1)	Master's Degree (Y/N)	Doctoral Degree (Y/N)
Epidemiology	32	17	4.25	Y	Y
Health Systems Administration	30	25	6.25	Y	Y
Environmental Health	10	10	2.5	Y	N
Biostatistics & Information Systems	20	3	0.75	Y	N
Social and Behavioral Sciences	20	4	1	Y	N
Nutrition and Health	33	12	3	Y	Y
Vector-borne Diseases	22	0	0	Y	N
Infectious Diseases	39	1	0.25	Y	Y
Health Economics	18	0	0	Y	N
Reproductive Health	9	0	0	Y	N
<b>Total</b>	<b>233</b>	<b>72</b>	<b>18</b>		

Source: Department of School Administration, Office of Academic Affairs, December 2011.

primary appointment in the school of public health), b) FTE conversion of faculty based on % time or % salary support devoted to the instructional programs, c) headcount of other faculty involved in the teaching programs (adjunct, part-time, secondary appointments, etc), d) FTE conversion of other faculty based on estimate of % time commitment, e) total headcount of core faculty plus other faculty, f) total FTE of core and other faculty, g) headcount of students in department or program area, h) FTE conversion of students, based on 9 or more credits per semester as full-time, i) student FTE divided by regular faculty FTE and j) student FTE divided by total faculty FTE, including other. All schools must provide data for a), b) and i) and may provide data for c), d) and j) depending on whether the school intends to include the contributions of other faculty in its FTE calculations.

Students, faculty, and student-faculty ratios for 2008 to 2011 are shown in Tables I.15, I.16, I.17 and I.18. The formula used to calculate these figures appears in Table I.19.

#### 1.6.F

A concise statement or chart concerning the availability of other personnel (administration and staff).

Table I.20 shows administrative and staff personnel at the INSP during 2008-2011. Administrative personnel includes those who organize and support the operation of the INSP's main activities, for example secretaries, technical, specific support staff and heads

of departments in charge of a specific project. Staff includes the Dean, the Associate Academic Dean, General Directors and Assistant Managers in charge of the planning, the coordination and oversight of the main activities in the areas of the INSP.

#### 1.6.G

A concise statement or chart concerning amount of space available to the school by purpose (offices, classrooms, common space for student use, etc.), by program and location.

The INSP has three campuses: Cuernavaca, Morelos; Mexico City (Tlalpan); and Tapachula, Chiapas. In all, the Institute's facilities encompass an area of 76,000m<sup>2</sup> with 47,667 m<sup>2</sup> of interior space.

The main campus located in Cuernavaca encompasses an area of 56,000 m<sup>2</sup> (approximately 12 acres) and houses the majority of the academic programs offered by the INSP. It has several buildings that include administrative offices, cubicles for researchers, a library, a cafeteria, an auditorium, laboratories, meeting rooms, lounges, an animal house and insectarium, three apartment buildings for researchers and a parking lot for 270 vehicles. The academic spaces are distributed throughout the lower levels and first floor of the building, with a total of 15 classrooms that are shared by all programs and distributed each semester by the Student Affairs Department. The main building also has two seminar halls and a computer laboratory. The lower level has several classrooms, an auditorium and the first level of the library. Students frequently use the library, the cafeteria and one meeting space near the classrooms area to develop collaborative work. The plans for all these spaces can be found in Appendix I.6.g.

**Table I.15**  
**Faculty, Students and Student/Faculty Ratios by Department or Specialty Area, 2008**

2008	HC Core Faculty	FTE Core Faculty	HC Other Faculty	FTE Other Faculty	Total Faculty HC	Total FTE Faculty	HC Students	FTE Students	SFR by Core FTEF	SFR by Total FTEF
Master of Public Health (MPH)										
Epidemiology	14	14	3	0.8	17	14.8	44	31.5	2.3	2.1
Health Administration	22	22	3	0.8	25	22.8	87	56	2.5	2.5
Environmental Health	7	7	3	0.8	10	7.8	13	12	1.7	1.5
Biostatistics	9	9	1	0.3	10	9.3	7	5	0.6	0.5
Social and Behavioral Sciences	14	14	3	0.8	17	14.8	41	33.5	2.4	2.3
Nutrition	9	9	0	0.0	9	9.0	15	9	1.0	1.0
Vector-Borne Diseases	0	0	0	0.0	0	0.0	0	0	0	0
Infectious Diseases	0	0	0	0.0	0	0.0	0	0	0	0
MPH Total	75	75	13	3.3	88	78.3	207	147	2.0	1.9
Master of Health Sciences (MHS)										
Epidemiology	11	11	4	1.0	15	12.0	14	14	1.3	1.2
Clinical Epidemiology	5	5	1	0.3	6	5.3	12	12	2.4	2.3
Biostatistics	9	9	2	0.5	11	9.5	4	4	0.4	0.4
Environmental Health	5	5	5	1.3	10	6.3	6	6	1.2	1.0
Reproductive Health	6	6	1	0.3	7	6.3	6	6	1.0	1.0
Health Systems	13	13	2	0.5	15	13.5	19	19	1.5	1.4
Nutrition	21	21	2	0.5	23	21.5	20	20	1.0	0.9
Health Economics	11	11	2	0.5	13	11.5	5	5	0.5	0.4
Infectious Diseases	22	22	2	0.5	24	22.5	13	13	0.6	0.6
Vector-Borne Diseases	20	20	0	0.0	20	20.0	5	5	0.3	0.3
Vaccinology	5	5	1	0.3	6	5.3	25	12.5	2.5	2.4
MHS Total	128	128	22	5.5	150	133.5	129	116.5	0.9	0.9
Doctorate in Public Health Sciences (DPHS)										
Epidemiology	18	18	1	0.3	19	18.3	21	21	1.2	1.2
Health Systems	7	7	0	0.0	7	7.0	14	14	2.0	2.0
Infectious Diseases	5	5	0	0.0	5	5.0	4	4	0.8	0.8
DPHS Total	30	30	1	0.3	31	30.3	39	39	1.3	1.3
Doctorate of Science in Population Nutrition	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Doctorate in Public Health	10	10	0	0.0	10	10.0	9	4.5	0.5	0.5
TOTAL	238	238	35	8.8	273	246.8	384	307	1.3	1.1

**Key:**

HC = Head Count

Core = Full-time faculty who support the teaching programs

FTE = Full-time-equivalent

FTEF = Full-time-equivalent faculty

Other = Adjunct, part-time and secondary faculty

Total = Core + Other

SFR = Student/Faculty Ratio

**Table I.16**  
**Faculty, Students and Student/Faculty Ratios by Department or Specialty Area, 2009**

2009	HC Core Faculty	FTE Core Faculty	HC Other Faculty	FTE Other Faculty	Total Faculty HC	Total FTE Faculty	HC Students	FTE Students	SFR by Core FTEF	SFR by Total FTEF
Master of Public Health (MPH)										
Epidemiology	10	10	4	1.0	14	11.0	33	21.5	2.2	2
Health Administration	10	10	3	0.8	13	10.8	79	50	5.0	4.7
Environmental Health	7	7	3	0.8	10	7.8	10	10	1.4	1.3
Biostatistics	9	9	1	0.3	10	9.3	3	3	0.3	0.3
Social and Behavioral Sciences	13	13	3	0.8	16	13.8	29	26	2	1.9
Nutrition	9	9	0	0.0	9	9.0	7	6.5	0.7	0.7
Vector-Borne Diseases	5	5	0	0.0	5	5.0	0	0	0	0
Infectious Diseases	5	5	0	0.0	5	5.0	3	3	0.6	0.6
Master of Public Health (On line)	17	17	17	4.3	34	21.3	126	63	3.7	3.0
MPH Total	85	85	31	7.8	116	92.8	290	183	2.2	2.0
Master of Health Sciences (MHS)										
Epidemiology	12	12	5	1.3	17	13.3	10	10	0.8	0.8
Clinical Epidemiology	5	5	1	0.3	6	5.3	10	10	2	1.9
Biostatistics	9	9	3	0.8	12	9.8	8	8	0.9	0.8
Environmental Health	6	6	5	1.3	11	7.3	5	5	0.8	0.7
Reproductive Health	6	6	1	0.3	7	6.3	8	8	1.3	1.3
Health Systems	12	12	2	0.5	14	12.5	24	24	2	1.9
Nutrition	16	16	2	0.5	18	16.5	15	15	0.9	0.9
Health Economics	11	11	2	0.5	13	11.5	7	7	0.6	0.6
Infectious Diseases	22	22	2	0.5	24	22.5	13	13	0.6	0.6
Vector-Borne Diseases	15	15	0	0.0	15	15.0	8	8	0.5	0.5
Vaccinology	5	5	1	0.3	6	5.3	23	11.5	2.3	2.2
MHS Total	114	114	23	5.8	137	119.8	131	119.5	1.0	1.0
Doctorate in Public Health Sciences (DPHS)										
Epidemiology	7	7	1	0.3	8	7.3	20	20	2.9	2.8
Health Systems	7	7	0	0.0	7	7.0	9	9	1.3	1.3
Infectious Diseases	5	5	0	0.0	5	5.0	4	4	0.8	0.8
DPHS Total	19	19	1	0.3	20	19.3	33	33	1.7	1.7
Doctorate of Science in Population Nutrition	7	7	1	0.3	8	7.3	5	5	0.7	0.7
Doctorate in Public Health	10	10	0	0.0	10	10.0	22	11	1.1	1.1
TOTAL	240	240	57	14.3	297	254.3	481	351.5	1.5	1.4

Key:

HC = Head Count

Core = Full-time faculty who support the teaching programs

FTE = Full-time-equivalent

FTEF = Full-time-equivalent faculty

Other = Adjunct, part-time and secondary faculty

Total = Core + Other

SFR = Student/Faculty Ratio

**Table I.17**  
**Faculty, Students and Student/Faculty ratios by Department or Specialty Area, 2010**

2010	HC Core Faculty	FTE Core Faculty	HC Other Faculty	FTE Other Faculty	Total Faculty HC	Total FTE Faculty	HC Students	FTE Students	SFR by Core FTEF	SFR by Total FTEF
Specialty in Public Health and Preventive Medicine	6	6	2	0.5	8	6.5	30	30	5	4.6
Master of Public Health (MPH)										
Epidemiology	10	10	5	1.3	15	11.0	34	22	2.2	2
Health Administration	6	6	3	0.8	9	6.8	30	25	4.2	3.7
Environmental Health	7	7	3	0.8	10	7.8	8	8	1.1	1
Biostatistics	8	8	1	0.3	9	8.3	3	3	0.4	0.4
Social and Behavioral Sciences	12	12	5	1.3	17	13.3	21	21	1.8	1.6
Nutrition	8	8	0	0.0	8	8.0	9	9	1.1	1.1
Vector-Borne Diseases	5	5	0	0.0	5	5.0	0	0	0	0
Infectious Diseases	9	9	0	0.0	9	9.0	9	9	1	1
Master of Public Health (On line)	7	7	17	4.3	24	11.3	102	51	7.3	4.5
MPH Total	72	72	34	8.5	106	80.5	216	148	2.1	1.8
Master of Clinical Nutrition	6	6	1	0.3	7	6.3	9	9	1.5	1.4
Master of Health Sciences (MHS)										
Epidemiology	11	11	5	1.3	16	12.3	3	3	0.3	0.2
Clinical Epidemiology	5	5	1	0.3	6	5.3	10	10	2	1.9
Biostatistics	9	9	3	0.8	12	9.8	4	4	0.4	0.4
Environmental Health	6	6	5	1.3	11	7.3	11	11	1.8	1.5
Reproductive Health	6	6	1	0.3	7	6.3	16	16	2.7	2.6
Health Systems	13	13	2	0.5	15	13.5	23	23	1.8	1.7
Nutrition	17	17	1	0.3	18	17.3	19	19	1.1	1.1
Health Economics	12	12	2	0.5	14	12.5	11	11	0.9	0.9
Infectious Diseases	24	24	2	0.5	26	24.5	20	20	0.8	0.8
Vector-Borne Diseases	17	17	0	0.0	17	17.0	11	11	0.6	0.6
Vaccinology	5	5	1	0.3	6	5.3	20	10	2	1.9
MHS Total	125	125	23	6.0	148	131.0	148	138	1.1	1.1
Doctorate in Public Health Sciences (DPHS)										
Epidemiology	5	5	1	0.3	6	5.3	15	15	3	2.9
Health Systems	6	6	0	0.0	6	6.0	8	8	1.3	1.3
Infectious Diseases	5	5	0	0.0	5	5.0	7	7	1.4	1.4
DPHS Total	16	16	1	0.3	17	16.3	30	30	1.9	1.8
Doctorate of Science in Population Nutrition	6	6	1	0.3	7	6.3	7	7	1.2	1.1
Doctorate in Public Health	11	11	0	0.0	11	11.0	31	15.5	1.4	1.4
TOTAL	242	242	62	15.5	304	257.3	471	377.5	1.6	1.5

Key:

HC = Head Count

Core = Full-time faculty who support the teaching programs

FTE = Full-time-equivalent

FTEF = Full-time-equivalent faculty

Other = Adjunct, part-time and secondary faculty

Total = Core + Other

SFR = Student/Faculty Ratio

**Table I.18**  
**Faculty, Students and Student/Faculty ratios by Department or Specialty Area, 2011**

2011	HC Core Faculty	FTE Core Faculty	HC Other Faculty	FTE Other Faculty	Total Faculty HC	Total FTE Faculty	HC Students	FTE Students	SFR by Core FTEF	SFR by Total FTEF
Specialty in Health Promotion	5	5	0	0	5	5	13	6.5	1.3	1.3
Specialty in Public Health and Preventive Medicine	5	5	4	1	9	6	26	26	5.2	4.3
Master of Public Health (MPH)										
Epidemiology*	10	10	3	0.8	13	10.8	26	18	1.8	1.7
Health Administration*	12	12	10	2.5	22	14.5	30	24	2.0	1.7
Environmental Health	6	6	3	0.8	9	6.8	6	6	1.0	0.9
Biostatistics and Information Systems**	7	7	0	0	7	7	33	20	2.9	2.9
Social and Behavioral Sciences	9	9	4	1	13	10	23	23	2.6	2.3
Nutrition	9	9	0	0	9	9	14	14	1.6	1.6
Vector-Borne Diseases	6	6	0	0	6	6	6	6	1.0	1.0
Infectious Diseases	8	8	0	0	8	8	8	8	1.0	1.0
Master of Public Health (On line)	7	7	19	4.8	26	11.8	41	20.5	2.9	1.7
MPH Total	74	74	39	9.8	113	84	187	139.5	1.9	1.7
Masters in Clinical Nutrition	6	6	9	2.3	15	8.3	15	15	2.5	1.8
Masters in Health Sciences (MHS)										
Epidemiology	11	11	2	0.5	13	11.5	6	6	0.5	0.5
Clinical Epidemiology	4	4	1	0.3	5	4.3	5	5	1.3	1.2
Biostatistics	6	6	2	0.5	8	6.5	3	3	0.5	0.5
Environmental Health	5	5	6	1.5	11	6.5	8	8	1.6	1.2
Reproductive Health	6	6	0	0	6	6	7	7	1.2	1.2
Health Systems	11	11	2	0.5	13	11.5	11	11	1.0	1.0
Nutrition	15	15	2	0.5	17	15.5	19	19	1.3	1.2
Health Economics	13	13	1	0.3	14	13.3	4	4	0.3	0.3
Infectious Diseases	21	21	1	0.3	22	21.3	25	25	1.2	1.2
Vector-Borne Diseases	16	16	0	0	16	16	15	15	0.9	0.9
Vaccinology***	5	5	0	0	5	5	NA	NA	NA	NA
MHS Total	113	113	17	4.3	130	117	103	103	0.9	0.9
Doctorate in Public Health Sciences (DPHS)										
Epidemiology	5	5	1	0.3	6	5.3	15	15	3.0	2.8
Health Systems	6	6	0	0	6	6	8	8	1.3	1.3
Infectious Diseases	5	5	0	0	5	5	10	10	2.0	2.0
DPHS Total	16	16	1	0.3	17	16	33	33	2.1	2.1
Doctorate of Science in Population Nutrition	4	4	1	0.3	5	4.3	9	9	2.3	2.1
Doctorate in Public Health	10	10	1	0.3	11	10.3	27	13.5	1.4	1.3
TOTAL	233	233	72	18	305	251	413	345.5	1.5	1.4

Data as for October 30th, 2011.

\*Note: The MPH with concentration areas in Epidemiology and Health Administration are offered in full time and executive format.

\*\*Note: The MPH with concentration area in Biostatistics and Information Systems is offered in both full time and on line format.

\*\*\*Note: The MHS with concentration area in Vaccinology was closed in 2011 and is in process of redesign to transform in a MPH program.

Key:

HC = Head Count

Core = Full-time faculty who support the teaching programs

FTE = Full-time-equivalent

FTEF = Full-time-equivalent faculty

Other Faculty = Adjunct, part-time and secondary faculty

Total Faculty = Core + Other

SFR = Student/Faculty Ratio

**Table I.19**  
**Formula used for calculating FTE Faculty and Students**

#### Faculty

The formula to calculate the work effort (FTE) of each faculty member is as follows:

Full-time Professors:

- a. Professors/researchers with full-time positions = 1 FTE

External professors (those without a permanent position):

- b. Half-time (those who teach more than 2 courses per semester) = .5 FTE
- c. Part-time (those who teach less than 1 course per semester) = .25 FTE

#### Students

The formula to calculate the work effort (FTE) of each student is as follows:

Students in a program with a classroom- based format are considered full time = 1 FTE

Students who study in programs with online or executive format are considered part time = .5 FTE

Note: The INSP considers faculty as all professors who have a full-time position regardless of whether they teach classes during the semester; nevertheless, they are available 100% for undertaking activities at the INSP when required.

**Table I.20**  
**Distribution of INSP Administrative Personnel and the Staff, 2008-2011**

Area	Personnel	2008	2009	2010	2011
Office of the Director	Staff	1	1	1	1
	Administrative	7	4	4	6
Internal Control Office	Staff	1	1	1	2
	Administrative	13	13	14	11
Infectious Disease Research Center (CISEI)	Staff	6	6	6	6
	Administrative	58	58	61	61
Regional Public Health Research Center (CRISP)	Staff	1	1	1	1
	Administrative	100	101	92	87
Population Health Research Center (CISP)	Staff	5	5	5	4
	Administrative	58	63	64	64
Health Systems Research Center (CISS)	Staff	5	5	5	5
	Administrative	27	26	26	28
Nutrition and Health Research Center (CINyS)	Staff	3	3	3	3
	Administrative	22	26	25	26
Office of Academic Affairs	Staff	5	5	5	5
	Administrative	66	66	66	63
Information for Public Health Decisions Research Center (CENIDSP)	Staff	3	3	3	3
	Administrative	21	22	19	20
Evaluation and Surveys Research Center (CIEE)	Staff	5	5	5	4
	Administrative	44	42	39	35
Office of Administration and Finance (DAF)	Staff	4	4	4	3
	Administrative	120	120	122	115
Office of Informatics	Staff	3	3	3	3
	Administrative	18	18	17	17
Office of Planning	Staff	1	1	1	1
	Administrative	10	7	7	6
Total		607	609	599	580

Source: Human Resources Office. September, 2011.

The Mexico City campus, where programs in the executive format takes place, encompasses an area of 11,000 m<sup>2</sup> and has four buildings (4,000 m<sup>2</sup> of interior space) that include administrative offices, cubicles for researchers, five classrooms, an auditorium that holds 100 people, a multiuse room, a computer lab for 25 users, a library, and a parking lot for 100 vehicles.

The Regional Public Health Research Center (CRISP), located in Tapachula, encompasses 9,000 m<sup>2</sup> with 2,800 m<sup>2</sup> of interior space. It includes a classroom, eight laboratories, two animal houses, two insectariums, a library and offices. Online courses are supported by technological infrastructure housed at the Cuemavaca campus.

### 1.6.H

A concise statement or floor plan concerning laboratory space, including kind, quantity and special features or special equipment.

The INSP has 25 laboratories for research and educational activities. The laboratories are coordinated by various research centers, as detailed in Table 1.21.

### 1.6.I

A concise statement concerning the amount, location and types of computer facilities and resources for students, faculty, administration and staff.

**Information technology services.** The Institute offers the following informatics services to students, faculty, administration and staff at the INSP:

- **E-mail accounts.** All INSP personnel (students, faculty, administration and staff) have the right to an e-mail account stored on one of the institutional servers to receive institutional communications and to send and receive messages (up to 30 MB) free of external advertising.
- **Wireless network for personal equipment.** At each location the Institute maintains wireless network service with high-speed Internet access that covers the buildings on campus. All personnel can obtain a password to use the network at any of the three campuses.
- **Computer centers on the three campuses.** Each center has computers, a multimedia screen and video projector and a permanent Internet connection. Centers offer 24-hour use and monitoring through closed-circuit television. The computers have software for processing, management and analysis (statistical and epidemiological) of databases as well as standard word processing and spreadsheet functionality.

**Computer equipment, servers and storage.** The INSP has 45 servers supporting systems such as websites, databases, geographic information systems, electronic mail and enterprise resource planning (ERP). The institute currently has the following equipment:

These computer resources are located in classrooms, faculty and administrative offices, the library and the computer centers, accessible to students 24 hours a day, seven days a week.

**Other Equipment.** Other types of technological equipment include the following:

- **Communications.** The INSP has a first-class certified network with a fiberoptic trunk network that provides voice, data and video communication services to the three campuses. This allows a wireless network that covers the buildings on the Cuemavaca campus and some of the outside area.
- **Printing services.** INSP has an institutional system covering all three campuses, with 30 multifunctional high-performance machines that provide printing, photocopying, scanning and sending and receiving faxes for up to 3,300 users (students, faculty, administration and staff).
- **Videoconferences.** A high-speed connection allows for real-time transmission of voice, video and data for videoconferencing. The videoconference room is certified by the Videoconferencing Operations Center (VNOC) of the National Autonomous University of Mexico (UNAM). A storage server saves video recordings of select conferences, which can be downloaded by users for viewing.

### 1.6.J

A concise statement of library/information resources available for school use, including description of library capabilities in providing digital (electronic) content, access mechanisms and guidance in using them, and document delivery services.

**Libraries.** The INSP has two libraries: the José Luis Bobadilla library in Cuemavaca and a library on the Tapachula campus. Together, they have roughly 49,300 classified volumes, 3,297 theses and 855 scientific periodicals that are available for use by students, researchers and the general public. The José Luis Bobadilla library supports research and training activities in public health. It has 46,000 books on public and environmental health, epidemiology, biostatistics, health statistics, administration services and social medicine, in addition to 3,297 theses, 2,200 videos, 2,753 volumes in the health economics collection, and 355 current scientific journals and database packages. This is one of the most complete

**Table 1.21**  
**Description of INSP Laboratories**

No.	Laboratory	Description or Purpose	Research Center	Wet/ Dry Lab.	Special Features & Equipment
1	Vector Biology Laboratory		CRISP	Wet	
2	Vector Control Laboratory		CRISP	Wet	
3	Insect Taxonomy Laboratory		CRISP	Wet	
4	Immune Parasitology Laboratory	For the development of research and educational activities for the Master of Health Sciences in Vector-borne Diseases programs.	CRISP	Wet	The 8 laboratories at the CRISP have special equipment including electrophoresis chambers, ELISA readers, Perkin Elmer thermocycler and Perkin Elmer thermocycler for DNA.
5	Biochemical Laboratory 1		CRISP	Wet	A detailed list of equipment and floor plan will be available in an on-site resource file.
6	Biochemical Laboratory 2		CRISP	Wet	
7	Molecular Biology and Genetics Laboratory		CRISP	Wet	
8	Insecticide Laboratory		CRISP	Wet	
9	The Analytical Laboratory for Tobacco Compounds (Lacot)	For tobacco research. Researchers at Lacot analyze tobacco compounds and related metabolites, providing technical and scientific support for the effects of active tobacco consumption and exposure to environmental tobacco smoke.	CISP	Wet	Lacot is located at the Mexico City campus. A detailed list of equipment and floor plan will be available in an on-site resource file.
10	The Laboratory of Molecular Diagnosis in Human Papillomavirus (HPV)	To study scientific advances in the molecular diagnosis of HPV that are integrated with research on cervical cancer prevention.	CISP	Wet	This facility is fully equipped with a samples reception area and specialized equipment for genotypification and hybrid capture. A detailed list of equipment and floor plan will be available in an on-site resource file.
11	Regenerative Medicine Laboratory	This laboratory is used for research and teaching activities. Work focuses on studying the main cells from different regions of the organism to understand and eventually manipulate tissue regeneration for transplants or other uses, with a specific focus on tertiary prevention of diseases of high epidemiologic relevance.	CISP	Wet	This laboratory is located on the ground floor of the CISEI building at the Cuemavaca campus, enclosed in a 15m <sup>2</sup> area. A detailed list of equipment will be available in an on-site resource file.
12	Nutrition Laboratory	This laboratory contributes to nutrition research by conducting trials and analytically determining nutrients, metabolites, risk indicators and biochemical markers.	CINyS	Wet	Located in the Cuemavaca, this lab uses a large variety of analytical technologies (immunoassay, liquid and gas chromatography, atomic absorption, mass spectrometry and optical plasma emission). It has equipment used to measure corporal composition and corresponding energy costs and to analyze food composition, particularly lipids. A detailed list of equipment and the floor plan will be available in an on-site resource file.
13	Genomic sequencing laboratory	Genomic sequences studies are performed at this laboratory.	CISEI	Wet	This laboratory is located in the CISEI building in Cuemavaca. Special equipment includes a Coulter article counter and analyzer for quantifying the amount of particles in a complex mixture and a 2100 Bioanalyzer (Agilent) for analyzing microcapillaries (microchips) in DNA, RNA and protein concentrations.
14	Molecular diagnosis unit	Allows identification and molecular analysis.	CISEI	Wet	Located in the CISEI in Cuemavaca, this lab has special equipment for applied Biosystems, such as MALDI-TOF and Voyager II mass spectrometry, which allows identification of proteins from organisms whose genome has been sequenced using the mass fingerprinting technique. A detailed list of equipment will be available in an on-site resource file.
15	Small animal house and insectarium	Enables researchers to obtain, reproduce and store high-quality biological components needed for animal research.	CISEI	Wet	This contains a facility for small animals used in experiments for research projects.

(Continúa)

(Continuación)

16	Influenza Laboratory	This laboratory was established after the Influenza A/H1N1 pandemic to study this disease.	CISEI	Wet	This has an area for sample placement and for control of positive samples and special equipment, such as a real-time Thermocycler FAST7900 (Applied Biosystems). A detailed list of equipment will be available in an on-site resource file.
17	Genomic sequencing laboratory	Studies for constructing PCR libraries, emulsion rupture and sequencing, basic bio-informatic analysis, genome sequencing of bacteria and viruses, molecular analysis of the diversity of lymphocyte repertoire and human genetic diversity.	CISEI	Wet	This lab houses a Roche 454 Titanium Genome Sequencer.
18	Genomics and proteomics Laboratory	This laboratory carries out DNA sequencing and proteomic analysis.	CISEI	Wet	This has special equipment for analysis such as a Voyager system (including Maldi-TOF) from Applied Biosystems to carry out proteomic analyses and a DNA sequencing system (Applied Biosystem 3100). A detailed list of equipment will be available in an on-site resource file.
19	Cryopreservation facility	This facility serves mainly as a storage unit for biological samples but is also used to conduct laboratory work.	CISEI	Wet	This lab has a cryopreservation unit that encompasses a 300m <sup>2</sup> area in which biological samples are stored. A detailed list of equipment will be available in an on-site resource file.
20-25	Six laboratories for molecular virology, sexually transmitted diseases, and vector-borne diseases and bacterial resistance	At these laboratories, research is conducted in the areas of molecular virology, sexually transmitted diseases, vector-borne diseases and bacterial resistance, in connection with Master of Health Sciences and Master of Public Health programs that have concentrations related to these research areas.	CISEI	Wet	A detailed list of equipment will be available in an on-site resource file.

Note: CRISP=Regional Public Health Research Center; CISP=Population Health Research Center; CInyS= Nutrition and Health Research Center; CISEI=Infectious Disease Research Center.

**Table I.22**  
**INSP Computer and Technological Equipment**

	Students	Faculty	Administrative	Total
Desktop computers	53	252	858	1,163
Portable computers	0	98	541	639
Printers	All printers are located in common areas available to all users.			423
Scanners	Scanners are located in common areas available to all users.			60
Multimedia projectors	This equipment is available for students, faculty and staff in the classrooms.			48

collections in the field. The Institute supported a multiyear effort between 2005 and 2009 to build this collection in order to meet the needs of the academic programs and research projects.

The José Luis Bobadilla library is open Monday through Friday, 8:00 to 20:30, and Saturdays from 8:00 to 14:30. The library provides traditional services such as use of materials within its facilities, checkouts, document reproduction (photocopies, etc.) and study areas. Students, faculty, researchers and health professionals can access electronic resources such as periodicals, databases, and online books and catalogues to locate works in the collection search for national and international documents, consult indices of publication contents, send contents of publications to researchers, and review author references, bibliographies and specialized scientific articles.

The CRISP houses the second library, located on the Tapachula campus, which contains a collection of 3,300 book titles and 165 scientific journals, as well as Lilacs and Artemisa databases. Students, faculty and researchers at this location, at the Mexico City Campus and in the online program have access to more than 6,581 journals with complete text, from five EBSCOhost Research Databases and online scientific journals, in addition to 8,255 documents with complete text housed at the Chochrane Plus library.

**Electronic Resources.** The José Luis Bobadilla library has the following electronic databases: EBSCOhost Research Databases, Virtual Health Library Mexico, Iberoamerican Cochrane Database, Cochrane Library Plus, Popline, Biomed Central, Lilacs y Proyecto Colima, ARIES, Artemisa online, Official Journal of the

Federation (Diario Oficial de la Federación), HighWire Press, Index of Latin American Journals in Sciences-Periodical (Índice de Revistas Latinoamericanas en Ciencias-Periódica), Index of Higher Education Journals (Índice de Revistas de Educación Superior (Iresie)), Health Services Research & Public Health Information Programs PloS Medicine, PubMed, National Library of Medicine (NLM), SciELO Mexico and online doctoral theses at the university, among others. These are available for researchers, students and members of the public with an interest in public health.

Through memberships in advisory groups and higher education associations, the INSP has gained free subscriptions to the EBSCO Academic Search Premier database, which offers the complete text of more than 4,650 journals. In addition, the Central South Region Library Network of ANUIES offers access to providers of online information sources such as Ovid, Elsevier, Science Direct and Springer, among others. The INSP has also established agreements for the exchange of information with 58 higher education and other institutions across the country. The availability of these sources of information and services is disseminated through e-mail and the Institute's website.

The INSP's Virtual Health Library (BVS) offers the public an electronic source for information about various aspects of health, scientific literature databases, health terminology and scientific communications, among many other topics, as well as comprehensive information on priority health programs, with content determined by an advisory committee. The BVS has a collection of more than 1,500 full-text documents available. In the past two years, more than 150,000 BVS users have registered from Mexico, the United States, Peru, Colombia, Spain, Argentina and other countries.

**Document Delivery Services.** The library serves information requests from the INSP's scientific and academic community, the pharmaceutical industry and health researchers in Mexico, the United States, Latin America, Spain and other regions. Documents requested by students, faculty, researchers and health professionals are obtained from national sources through the establishment of collaborative agreements and information exchanges with other higher education institutions. To familiarize students and the academic community with the sources of information available at the library, guided tours and presentations of services and access to databases are offered throughout the year on request and during orientation classes for newly enrolled students.

Information about document services and the online program is also disseminated through email. In addition, new acquisitions bulletins are posted regularly on the Intranet and the library's website. Library staff respond to requests in a timely manner through one of four email addresses registered to the library. Students, faculty, researchers and health professionals have ac-

cess to electronic resources as indicated in the section on book and periodical library services.

### 1.6.K

A concise statement describing community resources available for instruction, research and service, indicating those where formal agreements exist.

For students in the MPH program to conduct their community practicum, the INSP collaborates with the SSA and state health ministries to serve communities where there is a need to design regional and municipal health centers and to implement and evaluate public health interventions. In addition, the INSP identifies communities that can benefit from this activity or that require public health interventions, and contracts with municipal authorities for students to conduct their work together with community members.

Formal agreements are established on a yearly basis with state and municipal authorities to facilitate contact with community leaders, access to common spaces (such as schools and health centers) and identify local residents to serve as key informants to work with the students. For example, working with community members, the Professional Programs Committee determined that students in the MPH program would conduct their 2009 community practicums in Santa María Ahuacatlán—a neighborhood in Cuernavaca close to the INSP's main campus—to strengthen collaborative relationships and provide public health services to one of the INSP closest communities. To this end, the INSP established an agreement with health authorities in the state of Morelos. Criterion 2.4 describes recent community projects.

For students to conduct practicum activities during rotations in the Residence in Public Health and Preventive Medicine (see Criterion 2.1 and 2.4), specific collaborative agreements are made with the diverse health institutions of the SSA that fall under this jurisdiction. A description of the institutions that have been part of student rotations is found in Criterion 2.4.D.

### 1.6.L

A concise statement of the amount and source of "in-kind" academic contributions available for instruction, research and service, indicating where formal agreements exist.

The INSP has two types of academic contributions that can be considered in-kind and that support instruction, research and service. The first is library and access to online database resources received as a result of the Institute's membership in advisory committees and the higher education associations that certify quality degrees, such as CONACyT and University Cor-

poration for Internet Development (CUDI), among others (see Criterion 1.6.J).

The second in-kind academic contribution comes from the inter-institutional activities and relationships of each area of the INSP. Specifically, the Office of Academic Affairs establishes agreements with other institutions to share activities and/or resources that enrich academic activities. As of May 2010, the INSP had 31 general agreements in effect with institutions from Latin America, Canada, the United States and Europe, as well as with NGOs. The action areas of these agreements encompass a wide range of activities in the field of public health, such as hosting visiting academics, researchers and students; conducting research projects; developing didactic materials or publications; and teaching courses or workshops. Table 1.23 lists the existing agreements

signed by the INSP's Office of Academic Affairs to support these activities.

These agreements are, to a great degree, the result of the INSP's membership in national and international organizations whose substantive functions involve public health. Table 1.24 details the associations and organizations in which the INSP participates and that generate specific projects that translate into academic contributions benefiting instruction, research and service in the INSP, such as teacher and student exchanges, joint academic events, etc.

In addition to the agreements and memberships described above, research projects are also developed with various health organizations, with activities strongly oriented toward producing results

**Table 1.23**  
**Agreements Established by the Office of Academic Affairs Resulting in In-kind Contributions for the INSP**

	Institution	Period
1	Christopher Newport University	1992-undefined date
2	Facultad de Salud Pública del Instituto Superior de Ciencias Médicas de La Habana, Cuba	1991-undefined date
3	Centre de Santé Publique du Centre Hospitalier Universitaire de Québec	1997-undefined date
4	Fundación Oswaldo Cruz de Brasil	1992-undefined date
5	Fundación Salvadoreña para la Salud y el Desarrollo Humano	2000-undefined date
6	Instituto Nacional de Cancerología de Colombia	2000-undefined date
7	Ic Net Limited (consulting firm)	2006-undefined date
8	Instituto Hondureño de Seguridad Social	1991-undefined date
9	New England Research Institute	1997-undefined date
10	Secretaría de Estado en el Despacho de Salud Pública, Tegucigalpa, Honduras	1992-undefined date
11	University of Arkansas	2007-7 August 2012
12	University of California, Berkeley	2008-March 2013
13	Universidad de Chile	2008-May 2013
14	Emory University	2007-May 2012
15	University of Illinois	2005-2010
16	Universidad Industrial de Santander, Colombia	2007-2012
17	Johns Hopkins University	1993-undefined date
18	Universidad Nacional de Colombia	May 2007-2012
19	Universidad de Caldas en Manizales, Colombia	1996-undefined date
20	University of Notre Dame, Center for Bioengineering and Pollution Control	1992-undefined date
21	Universidad Peruana Cayetano Heredia	1993-undefined date
22	Universidad de San Carlos de Guatemala	2006-June 2011
23	University of South Florida	2007- October 2012
24	Simon Fraser University	2006-October 2009
25	Tulane University	1991-undefined date
26	Yale University School of Medicine	1995-undefined date
27	Cornell University	2008-August 2012
28	Ministerio de Salud de la República del Paraguay	2009-2014
29	Network of Institutions for Higher Education in International Health (tropEd), Erasmus Mundus Program	2010-2015
30	L'École des Hautes Études en Santé Publique, Francia	2010- 2015
31	Central American and Panamanian Nutrition Institute	Current

**Table I.24**  
**INSP Membership in National and International Organizations**

	Organization	Member since:
National	Mexican Association of Schools of Public Health (AMESP)	Founding member, 1985
	National Council of Science and Technology (CONACyT)	1992
	National Association of Universities and Institutions of Higher Education (ANUIES)	1997
International	Latin American Association of Schools of Public Health (ALAESp)	1959
	Union of Universities of Latin America Unión de (UDUAL)	2001
	Council on Health Research for Development (COHRED)	2004
	Association of Schools of Public Health (ASPH)	2006
	Network of Institutions for Higher Education in International Health (tropEd)	2008
	Hispanic Association of Colleges & Universities (HACU)	2009
	Consortium for North American Higher Education Collaboration (CONAHEC)	2009
	Association of Schools of Public Health in the European Region (ASPHER)	2010

**Table I.25**  
**Outcome Measures for Adequacy of Resources, FY2007-2010**

Outcome Measure	Target	FY2008	FY2009	FY2010
Average Expenditures per FTE Student (see Table 1.25)	≤7,500	\$6,879	\$7,274	\$6,917
Research Dollars per FTE Faculty (see Table 1.26)	\$55,000	\$ 49,370	\$ 52,570	\$68,940
Extramural Funding (service and training costs) (see Table 1.27)	\$1,200,000	\$1,616,580	\$1,131,980	\$2,179, 942
Student/Faculty Ratio (see Criterion 1.6.E. and Tables 1.15-1.17)	≤ 5:1	1.3:1	1.4:1	1.5:1

Note: Figures are in U.S. dollars; exchange rate = \$13.18 (25<sup>th</sup> May, 2010) per U.S. dollar.

that will benefit a large sector of society. This activity is described in detail in Criterion 3.1.B.

### 1.6.M

Identification of outcome measures by which the school may judge the adequacy of its resources, along with data regarding the school's performance against those measures for each of the last three years. At a minimum, the school must provide data on institutional expenditures per full-time-equivalent student, research dollars per full-time-equivalent faculty, and extramural funding (service or training) as a percent of the total budget.

The Institute tracks the adequacy of its resources by calculating institutional expenditures per full-time equivalent (FTE) student, research dollars per FTE faculty, and extramural funding as a percentage of the total budget, as well as the student/faculty ratio

in all our programs. These outcome measures are shown for the last 3 years in Table 1.25 and detailed in Tables 1.26-1.28.

**Expenditures per FTE Student.** Table 1.26 presents the expenditures per FTE student in the different INSP programs. The cost per student is calculated by adding all the expenses for the activities that each program offers to students, including the cost per teaching hour, wages for administrative and technical staff, and annual fees for technological platforms used for the classes (e.g., blackboard, webex platforms). It also includes indirect costs to cover school facilities. The cost for professional programs, master of health sciences and the doctoral programs is different because of variation in the length of the program.

**Research Dollars per FTE Faculty.** Table 1.27 shows research expenses per FTE faculty for the 2008-2010 period. These figures represent the average annual salary per professor-researcher. The INSP pays salaries for researchers out of the federal budget.

**Table I.26**  
**Expenditures per FTE Student by Program, 2008-2010**

Program	Duration	Total Cost Per Student		
		2008	2009	2010
Professional Programs	18-24 months	\$6,385	\$6,717	\$6,194
Master of Health Sciences	2 years	\$6,551	\$6,971	\$6,819
Doctoral Programs	4 years	\$7,700	\$8,133	\$7,738
Average Cost per Student		\$6,879	\$7,274	\$6,917

Note: Figures are in U.S. dollars. Exchange rate = \$13.18 (25<sup>th</sup> May 2010) per U.S. dollar.  
Source: Academic Administration Area 2011.

**Table I.28**  
**Financing Service and Training Activities, 2008-2010\***

2008	2009	2010
\$1,616,580	\$1,131,980	\$2,179,942
<b>3.5% of total budget</b>	<b>2.2% of total budget</b>	<b>4.3% of total budget</b>

Note: Figures are in U.S. dollars; exchange rate = \$13.18 (25<sup>th</sup> May, 2010) per U.S. dollar.  
\* Costs of training and service activities resulting from the INSP's agreements/contracts.

Source: Sub-department of Financial Resources, February 2011.

### **Extramural funding as a percentage of the total budget.**

To carry out all of the service and training activities of the INSP's research centers and areas, resources are used from agreements with participating institutions established for such purposes. Table I.28 lists costs for these activities over the past three years.

### **1.6.N**

Assessment of the extent to which this criterion is met.

This criterion is met.

**Table I.27**  
**Research Dollars per FTE Faculty, 2008-2010\***

2008	2009	2010
\$ 49,370	\$ 52,570	\$68,940

Note: Figures are in U.S. dollars; exchange rate = \$13.18 (25<sup>th</sup> May, 2010) per U.S. dollar.

\* Figures reflect average annual salary per professor/researcher.

Source: Sub-department of Financial Resources, February 2011.

### **Strengths**

- Programs have been strengthened through the participation of faculty from the research centers in educational programs; the availability of adequate infrastructure for instruction and research; and library resources and informatics that support students, faculty and staff in conducting their work.
- Effective management of federal resources, tuition, grants and contracts received by the INSP has enabled the successful development of the Institute's instruction, research and service activities.
- The agreements the INSP has with other institutions for teaching, research and service allow financing of academic activities that are not supported by federal resources, such as academic exchanges for students and faculty and academic events among others (e.g. Academic Conferences).

### **Weaknesses**

- Federal funding is not always sufficient to support all academic programs. For that reason the INSP needs to add sources of revenue to guarantee enough resources for the programs.
- Due to programs expansion over the last 5 years, classrooms space is beginning to be insufficient.

### **Future Plans**

- The INSP plans to construct new facilities for the academic programs.
- The INSP will establish more partnerships and add new sources of revenue.



**Criterion 2.0****Instructional programs****2.1**

Master of Public Health Degree. The school shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional masters degree in at least the five areas of knowledge basic to public health. The school may offer other degrees, professional and academic, and other areas of specialization, if consistent with its mission and resources.

The areas of knowledge basic to public health include:

- Biostatistics – collection, storage, retrieval, analysis and interpretation of health data; design and analysis of health-related surveys and experiments; and concepts and practice of statistical data analysis;
- Epidemiology – distributions and determinants of disease, disabilities and death in human populations; the characteristics and dynamics of human populations; and the natural history of disease and the biologic basis of health;
- Environmental health sciences – environmental factors including biological, physical and chemical factors that affect the health of a community;
- Health services administration – planning, organization, administration, management, evaluation and policy analysis of health and public health programs; and
- Social and behavioral sciences – concepts and methods of social and behavioral sciences relevant to the identification and solution of public health problems.

The INSP offers a range of instructional programs that reflect its stated mission and goals, including the MPH, whose concentration areas include the five core areas of knowledge. The Institute also offers other professional and academic degrees as described throughout this Criterion.

**Required Documentation****2.1.A**

An instructional matrix presenting all of the school's degree programs and areas of specialization, including undergraduate degrees, if any. If multiple areas of specialization are available within departments or academic units shown on the matrix, these should be included. The matrix should distinguish between professional and academic degrees and identify any programs that are offered in distance learning or other formats. Non-degree programs, such as certificates or continuing education, should not be included in the matrix.

The INSP offers 28 graduate programs in three educational formats: full time, which requires full-time dedication from students; an executive format (part-time); and an online format. Degrees include specialty degrees (described below), master's degrees and doctoral degrees, with two type of orientation, academic and professional. Professional programs are oriented toward training practitioners who will implement public health interventions in the health sector. Academic programs are oriented toward training researchers in public health.

The instructional matrix (Table 2.1) describes the characteristics for each degree program.

In Mexico a specialty is a one-year graduate program where a bachelor's degree is a prerequisite. A residence program is a three-year graduate program that is offered in general and specific areas of medicine. The residence is part of the specialization activities available exclusively to medical students; a high score on the National Medical Residency Exam is required for entry to the program. This program trains medical students through a multidisciplinary approach that combines academic content with

**Table 2.1**  
**Instructional Matrix**

	Academic	Professional	Educational Format		
			Full time (Full- time)	Executive	Online
<b>Specialty Degree</b>					
Specialty in Health Promotion		SHP			X
Residence in Public Health and Preventive Medicine		RPHPM	X		
<b>Master's Degree</b>					
Master of Public Health with concentration in Epidemiology		MPH	X	X	
Master of Public Health with concentration in Health Systems Administration		MPH	X	X	
Master of Public Health with concentration in Environmental Health		MPH	X		
Master of Public Health with concentration in Biostatistics and Information Systems		MPH	X		X
Master of Public Health with concentration in Social and Behavioral Sciences		MPH	X		
Master of Public Health with concentration in Nutrition		MPH	X		
Master of Public Health with concentration in Vector-borne Diseases		MPH	X		
Master of Public Health with concentration in Infectious Diseases		MPH	X		
Master of Public Health		MPH			X
Master in Clinical Nutrition		MCN	X		
Master of Health Sciences with concentration in Epidemiology	MHS		X		
Master of Health Sciences with concentration in Clinical Epidemiology	MHS		X		
Master of Health Sciences with concentration in Biostatistics	MHS		X		
Master of Health Sciences with concentration in Environmental Health	MHS		X		
Master of Health Sciences with concentration in Reproductive Health	MHS		X		
Master of Health Sciences with concentration in Health Systems	MHS		X		
Master of Health Sciences with concentration in Nutrition	MHS		X		
Master of Health Sciences with concentration in Health Economics	MHS		X		
Master of Health Sciences with concentration in Infectious Diseases	MHS		X		
Master of Health Sciences with concentration in Vector-borne Diseases	MHS		X		
Master of Health Sciences with concentration in Vaccinology	MHS			X	
<b>Doctoral Degrees</b>					
Doctorate in Public Health Sciences with concentration in Epidemiology	DPHS		X		
Doctorate in Public Health Sciences with concentration in Health Systems	DPHS		X		
Doctorate in Public Health Sciences with concentration in Infectious Diseases	DPHS		X		
Doctorate in Public Health Sciences in Population Nutrition	DPHSPN		X		
Doctorate in Public Health		DPH		X	

training in health services at different levels of care in national and foreign health institutions. Students must carry out six rotations which consist of practicum activities in hospitals and local and regional health centers.

### 2.1.B

The school bulletin or other official publication, which describes all curricula offered by the school for all degree programs. If the school does not publish a bulletin or other official publication, it must provide for each degree program and area of concentration identified in the instructional matrix a printed description of the curriculum, including a list of required courses and their course descriptions.

The INSP produces the annual publication *Academic Program*, which describes the Institute's educational offerings for each academic year. This document is available in Appendix 2.1.b-1 and on the Institute's website at <http://www.insp.mx/>. In addition, the list of courses required for each program is available at [http://cursos.insp.mx/INSP20/drupalv2/iframe/thickbox/acreditaciones/List\\_of\\_Required\\_Courses\\_of\\_INSP\\_Programs.pdf](http://cursos.insp.mx/INSP20/drupalv2/iframe/thickbox/acreditaciones/List_of_Required_Courses_of_INSP_Programs.pdf) (see also Appendix 2.1.b-2).

### 2.1.C

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The INSP has diverse academic offerings in its graduate programs. The MPH program has eight concentration areas, including each of the five core areas in public health. The Institute also offers other professional and academic programs, including five doctoral programs.
- The INSP offers curricula in several educational formats, including part-time and online formats. This has been a successful strategy for meeting the educational demands of diverse population.
- Required courses and course descriptions are widely available. The *Academic Program* publication is useful both for promoting the INSP's programs and for making information about them available to the public. It is printed in hard copy form to allow distribution at academic fairs and public health events as well as an online for general viewing.

#### Weaknesses

- The concentration areas of the Programs could be better aligned with the Mission-Oriented Research Lines (LIMs) to

make it easier for all the students to be involved in research projects related to the LIMs.

- Due to the space constraints of the INSP facilities, we cannot currently expand the curriculum.

#### Future Plans

- The INSP is implementing *Formation Lines*, a strategy for including other public health areas in the programs. This project gives students from all programs the opportunity to specialize in new areas linked to the LIMs through their optional courses. This initiative has already been implemented in some research centers but still needs to be improved and diversified as well as promoted more widely among students.
- The INSP is seeking funding for a project to construct new facilities on the Cuernavaca campus. This construction will provide more availability of space, allowing the INSP to offer more programs.

## 2.2

**Program Length.** An MPH degree program or equivalent professional masters degree must be at least 42 semester credit units in length.

All of the INSP's MPH degree programs surpass the program length requirement of at least 42 semester credit units.

#### Required Documentation

### 2.2.A

Definition of a credit with regard to classroom/contact hours.

The guidelines established by Mexico's Ministry of Public Education (SEP) (see Appendix 2.2.a) assign 0.0625 credits per hour of learning activities, which are defined as follows: "Learning activities shall be understood as all activities in which the student participates to acquire the knowledge or skills required by a study plan." Accordingly, 1 credit is equal to 16 hours of learning activity (e.g., class activities, independent study, community or lab activities, among others) performed during an academic semester of 20 weeks.

Learning activities can be achieved in two ways: 1) with academic guidance, in classrooms, centers, workshops or laboratories or other locations; or 2) independently, outside established class hours and as part of an autonomous process related to the study plan or learning unit. For example, an epidemiology course has 3 hours of classroom activities and 3 hours of independent work weekly during a 20-week academic semester. That is 120 hours of learning time. If these 120 hours are multiplied by .0625 credits per hour, this course gives a total of 7.5 credits.

### 2.2.B

Information about the minimum degree requirements for all professional degree curricula shown in the instructional matrix. If the school or university uses a unit of academic credit or an academic term different than the standard semester or quarter, this should be explained and an equivalency presented in a table or narrative.

The INSP must comply with the SEP's degree requirements, which specify a *minimum* number of credits for each degree in graduate programs, as follows: for specialty, 45 credits; for a master program, 75 credits; and for a doctorate program, 75 credits (after completing the master). As described in Criterion 2.2.A, a credit in the Mexican systems is equivalent to 16 hours of class or contact time during a semester. All our programs are over the minimum required by the Mexican Ministry of Public Education (SEP) and CEPH' requirements. The credits for each INSP program in both Mexican and U.S. systems can be seen in Table 2.2.

Details about the number of Mexican credits for courses in each program are available in the INSP's curricular maps at [http://cursos.insp.mx/INSP20/drupalv2/iframe/thickbox/acreditaciones/List\\_of\\_Required\\_Courses\\_of\\_INSP\\_Programs.pdf](http://cursos.insp.mx/INSP20/drupalv2/iframe/thickbox/acreditaciones/List_of_Required_Courses_of_INSP_Programs.pdf) or in Appendix 2.1.b-2.

### 2.2.C

Information about the number of MPH degrees awarded for less than 42 semester credit units, or equivalent, over each of the last three years. A summary of the reasons should be included.

Students must complete at least 114 Mexican credits (equivalent to 85.5 semester-credit units in the United States as described in Criterion 2.2.B) to receive an MPH degree from any of the Institute's professional programs. There have been no degrees awarded with fewer credits over the last three years.

### 2.2.D

Assessment of the extent to which this criterion is met.

This criterion is met.

### Strengths

- The INSP offers master's programs that are three to four full-time semesters long and consist of a minimum of 114 Mexican credits (equivalent to 85.5 U.S. semester-credits) This fulfills the credit requirements established by the SEP as well as by CEPH.

**Table 2.2**  
**Credits Assigned per Program**

PROGRAM	Total Credits (Mexican system)	Total Credits Equivalence approximately in U.S. system*	Mexican Credits per Academic Semester (20 weeks)					
			1	2	3	4	5	6
Specialty Programs								
Specialty in Health Promotion	61	50.25	31	30	—	—	—	—
Residence in Public Health and Preventive Medicine	164	123	32	40	33	23	18	18
Master of Public Health								
Master of Public Health with concentration in Epidemiology	114	85.5	56	38	20	—	—	—
Master of Public Health with concentration in Health Systems Administration	118	88.5	56	39	23	—	—	—
Master of Public Health with concentration in Environmental Health	117	87.8	56	34	27	—	—	—
Master of Public Health with concentration in Biostatistics and Information Systems	118	88.5	56	40	22	—	—	—
Master of Public Health with concentration in Social and Behavioral Sciences	115	86.3	56	40	19	—	—	—
Master of Public Health with concentration in Nutrition	114	85.5	56	29	29	—	—	—
Master of Public Health with concentration in Vector-borne Diseases	114	85.5	56	38	20	—	—	—
Master of Public Health with concentration in Infectious Diseases	115	86.3	56	36	23	—	—	—
Master of Public Health ( <i>online format</i> )	114	85.5	48	24	8	34	—	—
Master in Clinical Nutrition	118	88.5	46	25	26	21	—	—
Doctorate in Public Health	105	78.8	25	21	20	17	14	8

\*Note: Credits reflect the Mexican system, described in Criterion 2.2.A; 1 Mexican credit equals approximately .75 U.S. credit unit.

- The duration in the programs allows the practicum experience in the Master of Public Health and the acquisition of the core, specific and cross-cutting public health competencies in all the programs.

### Weakness

- The total number of credits in the Master of Public Health program is distributed in only three semesters. This has been challenging to students because it causes a heavy workload.

### Future Plans

- Successful efforts with CONACyT were made to extend scholarships for students in the Master of Public Health program so they can have a fourth semester to complete their required and optional credits and finalize their culminating experience for graduation. The Faculty Colleges, Program Committees and the Office of Academic Affairs will continue to follow up on the results of this experience with periodical assessment meetings.

## 2.3 Public Health Core Knowledge. All professional degree students must demonstrate an understanding of the public health core knowledge.

As described in Criterion 2.1.a, INSP offers the following professional public health programs: Specialty in Health Promotion, Residence in Public Health and Preventive Medicine, Master in Public Health and Doctorate in Public Health. All professional degree students at the INSP have to demonstrate understanding of public health core knowledge through the accreditation of the required courses.

### Required Documentation

#### 2.3.A

Identification of the means by which the school assures that all professional degree students have a broad understanding of the areas of knowledge basic to public health. If this means is common across the school, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

All MPH programs share common required courses in the five core areas of knowledge in public health and students need to pass the courses with a minimum score of 7.0 (on a scale 1-10) to ensure that students have a thorough understanding of core areas. The Specialty in Health Promotion includes in their courses

contents for a broad understanding of the basic areas of knowledge of public health (for detail see the syllabus of these courses in Appendix 2.3.a). The Residency in Public Health and Preventive Medicine has courses in common with the core courses in the MPH program, which cover basic knowledge areas in public health. In addition, the Doctorate in Public Health includes mandatory seminars to cover these five core areas. Table 2.3 details the courses for all professional public health programs that provides core public health knowledge. Up-to-date syllabi in English will be available in the on-site file during the campus visit.

Criterion 2.8 describes the courses and formats that cover the core knowledge areas in the Master of Clinical Nutrition.

#### 2.3.B

Assessment of the extent to which this criterion is met.

This criterion is met.

### Strengths

- All programs are competency-based and incorporate the five core areas.
- All concentration areas of the Master of Public Health share common courses in the five core areas. This allows an interdisciplinary approach that enriches the learning experience among students in these core areas.

### Weaknesses

- We can identify no weaknesses in meeting this criterion.

### Future Plans

- The INSP will continue to implement innovative strategies to assess the acquisition of students' competencies related to the core public health areas for all programs, especially the Master of Public Health (see Criterion 2.7).

## 2.4

Practical Skills. All professional degree students must develop skills in basic public health concepts and demonstrate the application of these concepts through a practice experience that is relevant to the students' areas of specialization.

All professional degree students at the INSP must develop skills in core public health concepts and demonstrate the application of these concepts through a practicum experience that is relevant to the students' areas of specialization.

**Table 2.3**  
**Required Courses Encompassing the Five Core Areas of Public Health Knowledge**  
**for Professional Programs**

Program	Core Area and Required Courses	Mexican Credits
Master of Public Health	Epidemiology:	
	• Epidemiology (EP01)	8.0
	• Epidemiological surveillance and intelligence systems (EP32)	6.0
	Health Systems:	
	• Health systems (SP33)	4.0
	• Health administration (SP39)	4.0
	Biostatistics:	
	• Basic biostatistics (BE01)	8.0
	Environmental Health Sciences:	
	• Environmental and occupational health (SA01)	8.0
	Social and Behavioral Sciences:	
	• Social determinants in public health (CS15)	8.0
	• Health promotion and education (ED03)	5.0
• Applied qualitative research methods (CS01)	6.0	
• Bioethics (SP38)	5.0	
Specialty in Health Promotion	Epidemiology:	
	• Fundamentals of Public Health and Health Promotion (ED22)	5.0
	Health Systems Administration:	
	• Planning and Evaluation: Situational Analysis, Prioritization and Design of Initiatives (ED28)	8.0
	• Public Health Policy (SP40)	3.0
• Leadership and Advocacy (SP41)	3.0	
Specialty in Health Promotion	Biostatistics:	
	• Fundamentals of Public Health and Health Promotion (ED22)	5.0
	• Research Methodologies in Public Health (ED32)	6.0
	Environmental Health:	
	• Fundamentals of Public Health and Health Promotion (ED22)	5.0
	• Social Determinants of Health (CS13)	5.0
	Social and Behavioral Sciences:	
	• Health Education (ED29)	4.0
	• Health Communications (ED30)	6.0
	• Social Determinants of Health (CS13)	5.0
• Leadership and Advocacy (SP41)	3.0	
Residency in Public Health and Preventive Medicine	Epidemiology (EP01)	7.5
	Basic Biostatistics (BE01)	7.5
	Environmental and Occupational Health (SA01)	7.5
	Social Sciences in Public Health (CS02)	5.0
	Mexican Health System (SP28)	4.0
Doctorate in Public Health	Epidemiology:	
	• Applied epidemiology seminar (DSP15)	7.5
	Health Services Administration:	
	• Seminar in health systems, services and policies (DSP05)	7.5
	Biostatistics:	
	• Biostatistics seminar (DSP08)	7.5
	Environmental Health Sciences:	
	• Seminar in environmental health sciences (DSP15)	7.5
Social and Behavioral Sciences:		
• Seminar in social sciences and public health (DSP14)	7.5	

## Required Documentation

### 2.4.A

Description of the school's policies and procedures regarding practice experiences, including selection of sites, methods for approving preceptors, approaches for faculty supervision of students, means of evaluating practice placement sites and preceptor qualifications, and criteria for waiving the experience.

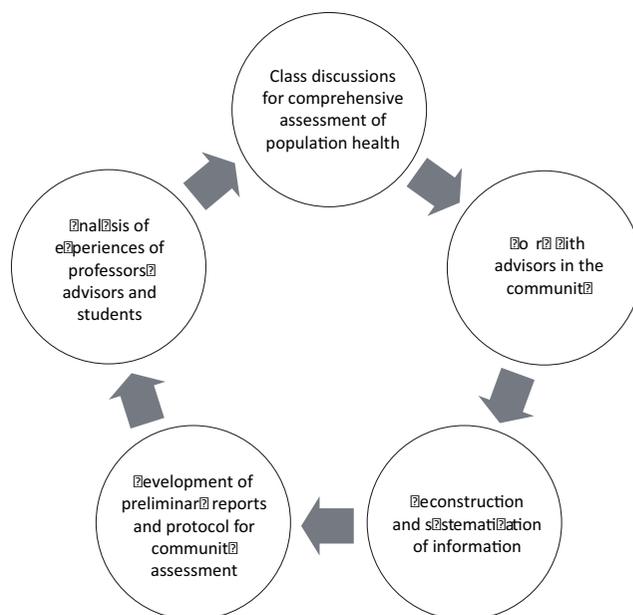
### Master of Public Health

As part of the MPH, students take theoretical-practicum courses enabling them to integrate their acquired public health knowledge by working in the community or health services. Practicum activities begin in the first semester and continue through the academic program for two more semesters. The experience can be incorporated into the development of the Final Professional Project (PTP) or thesis (described in detail in Criterion 2.5.A). Practicums require that each student demonstrate the ability to put into practice the skills and knowledge acquired through the program. This reflects the student's future ability to identify public health problems in a given area, establish their relevance in the social and cultural context of the health conditions of a population, and design strategies for analyzing the factors that influence these problems.

During the first semester, students take a course called Comprehensive Assessment of Population Health (Appendix 2.4.a), in which they deal with different issues related to how to work in a community, identify a health problem and develop a community health assessment. These theoretical-methodological references are strengthened and expressed through teamwork facilitated by practicum advisors who accompany students in the community. There, students apply what they learned in class, obtain community information and later reconstruct and systematize the information through preliminary reports. These reports serve as input for the development of protocols and comprehensive population health assessments. Figure 2.1 illustrates the activities conducted during this course.

Through this course (Comprehensive Assessment of Population Health), students complete 70 hours of community work. The other 160 hours of community work are completed in Professional Practicum I and II at the second and third semester of the full time MPH program and in the second part of the first year and the first part of the second year of the academic cycles for the executive and on line formats.

For the full time MPH programs practicum sites are located in the municipalities of Morelos and other nearby areas characterized by a high index of marginalization and complex health problems.



**Figure 2.1 Activities of the First-Semester Comprehensive Assessment of Population Health Course**

The MPH programs that are offered in the campus of Tapachula and the executive and on line formats the practicum sites are defined with the collaboration of the governmental local health authorities that detect those communities with major health problems and the need to receive a population health assessment in the area where students are. They are thus fertile spaces for students to work closely with real public health problems and for the communities to benefit from the knowledge of public health specialists. Full time students and students from the executive format are integrated in community practice teams with peers from different areas of concentration in order to promote multidisciplinary work. Due to the diverse locations of the students from the MPH on line format they develop their practice activities in the communities individually with the supervision of the practicum advisors.

During the first semester as part of the activities in the course of Comprehensive Assessment of Population Health (DISP), together the student and the practicum advisor—a professor in the program who has experience in public health interventions—conduct four information-gathering visits to the site throughout the semester. Full time students during the last two weeks of the semester return to conduct an intensive practicum in the community. In the MPH on line and executive formats students and practicum advisors develop a time-plan to develop these activities during their first year.

The activities they undertake in this first practicum are as follows:

1. Conduct a preliminary visit to “wander” around the community and become familiar with its actors. Following this visit, students submit a report on the health profile of the population.
2. Visit health centers, libraries and administrative offices to compile information on diagnostic examples from the community.
3. Identify the ways in which the community and its leaders/ members are organized to conduct a participatory diagnostic analysis.
4. Evaluate the community to identify the types of instruments to use for collecting information.
5. Collect information missing from previous visits and conclude the diagnostic work (last two weeks).

Following all the visits, students generate progress reports that are presented in class for evaluation and discussion. The final result of the information compiled during the visits is the development of the protocol. To develop the assessment, students from the full time MPH spend the last two weeks of the semester working intensively as a group to analyze the information and develop the report. The students from executive and on line programs design schedules together with practicum advisors and local health authorities. The learning product includes the presentation of the health assessment report to the community and the health authorities.

During subsequent semesters, students take the Professional Practicum I and II, during which they carry out activities according to their area of concentration and complete 160 hours in a community or public health program. In the full time and executive format students conform groups with their partners from the same concentration area of the MPH program. These experiences are overseen by the academic program coordinator of each concentration area and the Professional Program Committee which analyze the best places for students to develop the professional practicum in the next semesters or academic cycles. The professional practicum takes place during the second and third semesters of the academic period.

These experiences are designed to give students the theoretical-methodological elements needed to design health interventions for a specific public health problem in their area of concentration, utilize effective methods for implementing the intervention, identify different types of evaluations and choose the best type to evaluate the scope of their intervention. To maximize learning, the practicum is tied strongly to curriculum content, and students receive follow-up and systematic guidance from a team of faculty advisors. These advisors, in close communication with the professor, facilitate the analysis of field experiences and the development of specific learning products to incorporate into the PTP or thesis.

**Criteria for selecting practicum sites.** Practicum sites are chosen according to the public health issues related to the stu-

dent's specific area of concentration as well with the orientation of health authorities that help identify communities with important public health problems and needs. The INSP does not allow practicums that provide only administrative experience. The INSP's Community Practice Operations Office established in 2010 helps coordinate activities among the academic advisors, students and the academic coordinator and follows up on students' community activities. This office also develops links with community and health authorities in order to offer students a variety of possible placement sites for each area of concentration, based on the criteria noted. These options are defined each academic year and can include health care programs and services, community organizations, and government and non-governmental organizations, among others. Students choose a site from the list and the academic coordinator gives final authorization. The overall practice activities are supervised by the Professional Program Committee.

**Methods for approving advisors.** Each year, the different Faculty Colleges assign professors to act as practicum advisors to assist the students (for more details see Appendix 2.4.a.), beginning in their first semester with the Comprehensive Assessment of Population Health course and through completion of the Professional Practicum I and II. The Community Practice Operations Office helps form teams with the advisors and submits them for approval by the Community Practicum Committee, an ad hoc group of the Professional Programs Committee that supports and monitors the development of community and professional practicum programs. Advisors must fulfill the following requirements:

- Experience in community work.
- Ability to adapt to and integrate different geographical, socio-cultural and economic contexts.
- Availability (time) to support students in developing community practice and intermediate products during the Comprehensive Assessment of Population Health and Professional Practicum I and II courses.
- Personal characteristics such as flexibility, empathy, ability to listen and leadership.
- At least a master's degree in a field related to public health.

Approximately 20 advisors are selected each semester to work with students from the concentration areas. The Education and Health Faculty College is responsible for supervising the practicum in the first semester. During the second and third semesters, the Faculty Colleges from the appropriate concentration areas supervise the practicum. The practicum experience is compulsory and cannot be waived under any circumstances.

Students are monitored throughout their practicum by the Community Practicum Committee. They are required to write and present periodic reports about their experience. At the end of the practicum, students must write a final report and give an

oral presentation with a comprehensive assessment of population health for the different communities to which they were assigned. In preparing the report and presentation, students receive guidance from their advisors and the Community Practice Operations Office.

### **Residence in Public Health and Preventive Medicine**

This program trains residents in public health and preventive medicine through a multidisciplinary approach that combines academic content with training in health services at different levels of care in national and foreign health institutions. Students must carry out six rotations during which they perform public health activities at public hospitals, local and regional health centers, and health districts.

Students start the first rotation with basic activities in health systems management and begin to design, implement and evaluate preventive health programs. During the other five rotations students develop practice experiences related to their courses and to the sites in which they're working. The selection of the sites where the rotations are developed is directly indicated by the Ministry of Health. Students also carry out community practicums to help respond to urgent health and environmental problems when requested (e.g., dengue outbreak, influenza epidemic, health care and health services supervision during a flood). Criterion 2.4.D provides information on the agencies with which students perform their rotations. There is no possibility of waiving the practicum experience since the rotations are a fundamental part of the program.

### **Doctorate in Public Health**

The Doctorate in Public Health is the only professional program of all doctorates. It has an executive format that consists of intensive in-person activities twice a year, which allows all students to complete their program while they are still working in public health-related activities. (Working in public health is a requirement for acceptance into the program.). In a three-year period students visit INSP six times. Each visit lasts for a month where they take an average of three seminars. Their work experience helps students establish practicum experiences during their academic program. To help integrate course content and assess their competencies, students must complete a community practicum experience in their sixth semester. Due to participation in public health activities through their jobs, they are required to fulfill these requirements in another site often related to their job placement.

**Criteria for selecting practicum sites.** Since the Doctorate in Public Health program only opened in 2008, students had their

first practicum experience in 2011. For the 2008 class practicum sites were selected in institutions with acknowledged leadership in the Mexican health sector and according to the topic in which students were writing their thesis. They were chosen to provide relevant information to students by means of their innovative management processes and the possibility of offering quality learning activities. Institutions are also chosen because of their relevance in the definition of policies in the health sector. A list of students, thesis topics, practicum institutions and advisors is detailed in Criterion 2.4.b.

**Methods for approving advisors.** The program provides students with institutional and academic advisors. All advisors should hold a doctoral degree and have previous experience in advising students. Institutional advisors should have a clear understanding of INSP procedures to support students in their everyday interaction with the institution. Therefore, all institutional advisors are members of INSP staff. Academic advisors are experts in their academic field in order to support students in the practicum experience and the processes of elaborating thesis protocols, presenting the protocol exam, carrying out applied research and presenting the final thesis report. Initial proposals for advisors are sent to the program's academic coordinator and taken to the correspondent Faculty College for approval.

**Approaches for faculty supervision of students.** Supervision of students is carried out through several actions. The program's academic coordinator assigns the first semester institutional advisors who help students move through institutional procedures. These advisors meet periodically with their students and report to the academic coordination. Every six months all students have to produce a written report on their progress in the program. This report has to be signed by their advisors. Periodically the coordinator calls for collective meetings with students to learn about their achievements. A student representative attends the meetings of the Doctoral Committee and meets with the coordinator to report on students' performance, any problems they have encountered and ways to solve them.

### **2.4.B**

Identification of agencies and preceptors used for practice experiences for students, by program area, for the last two academic years.

### **Master of Public Health**

The main agency used for the practicum experience in the first semester of the MPH is the Ministry of Health (SSA). Appendix 2.4.b presents the complete list of practicum experiences of students in the MPH program between 2005 and 2010, including the communities in which the projects and PTPs were developed.

For full-time students, the practicum has been implemented in different urban and semi-urban communities across the state of Morelos. The communities have different socioeconomic levels and marginalization indices. In the executive format—based at the Mexico City campus—students and advisors conduct the practicum in different municipalities in Mexico City, and in the online program students execute the practicum in their local communities around the country. (The executive format, where courses are taken during weekends, and the online format, are described in Criterion 2.12.)

One of the expected competencies for all first-semester MPH students is to be able to perform a comprehensive health assessment in a community, so the practicum program works closely with local and state authorities to determine sites. In the second and third semesters, during Professional Practicum I and II, these competencies are differentiated according to students' concentration area. In the last two semesters students are expected to develop a specific intervention, apply it to the community and evaluate the results. These processes are oriented toward students' respective concentration areas. Each area of concentration is responsible for maintaining close relationships with communities to help students complete their practicums.

## Doctorate in Public Health

The Doctorate in Public Health began in 2008. For that reason 2011 is the first time for practice experiences for the first generation of students. Agencies were identified to provide relevant experiences for students considering their managerial processes and overall quality. For an agency to be selected for practicum it can be public or private but it must be highly regarded in the health field in Mexico. The preceptors include faculty who participate in the program with experience in activities related to those developed in the practicum and also practitioners that work in the agencies selected. The complete list of agencies and preceptors used for the first practicum experience of the program is detailed in Table 2.4.

### 2.4.C

Data on the number of students receiving a waiver of the practice experience for each of the last three years.

The community practicum is a mandatory requirement for all professional program students. No waivers are issued.

**Table 2.4**  
**Agencies and Practicum Advisors for DrPH Students**  
**Class 2008-2011.**

Student	Preceptors and institutions	Thesis topic	Practicum Objective
Ana Teresa Romero Calderón	Leonora Rojas National Institute of Ecology	Effect of air pollution in the health conditions of the population in the State of Guanajuato	To get involved in projects that influence health policy.
Héctor Sandoval Luna	Eduardo González Pier Mexican Institute of Social Security	Financial protection of the workers of the Central Bank of Mexico	To participate in activities related financial protection to the affiliates of a major social health insurance institution.
Name	Preceptors and institutions	Thesis topic	Practicum Objective
Erick Azamar Cruz	Juan Eugenio Hernández. National Institute of Public Health	Patterns of maternal mortality in the State of Oaxaca	To participate in a national data center containing information on maternal mortality.
Luis Alberto Mercado Hernández	Mariana Ramírez Federal Commission for the Protection Against Health Risks	Feasibility of developing an information system to monitor pollution indicators and its relevance to public health in the state of Hidalgo	To get involved in actions related with the design of policies and programs implemented to protect the Mexican population against health risks including environmental ones.
Leith Soledad León Maldonado	Aurora del Rio Center for Health Equity. Ministry of Health	Communicating knowledge on prevention of cervix cancer in Mexico. Strategies to reach social disadvantaged populations	Review actions of the Mexican institution responsible for policy-design to improve equity in women participation in health issues.
Josefina Mota Rodríguez	Francisco Caballero National Commission on Health Social Protection	Social exclusion and health coverage in the state of Guanajuato	To analyze strategies put in place by the institution responsible to finance health services to poor Mexican populations.
Teresa Shamah Levy	Adolfo Chávez Villasana National Institute of Nutrition	Analysis of a survey on nutritional patterns in primary schools in the State of Mexico	To participate in actions related with the research and academic approach to nutritional factors in one of the most prestigious clinical research institutions in the country.

#### 2.4.D

Data on the number of preventive medicine, occupational medicine, aerospace medicine, and public health and general preventive medicine residents completing the academic program for each of the last three years, along with information on their practicum rotations.

The Residence in Public Health and Preventive Medicine began in 2006. Students in this program have 3 years to complete their studies; consequently, as of 2010 only two classes of students have completed the program, with a total of 11 alumni. Table 2.5 specifies the number of alumni and the institutions in which each class of students carried out their rotations.

Rotations for students in the Residence in Public Health and Preventive Medicine are carried out in establishments pertaining to the three health care levels of the National Health System. The first-year rotation is carried out in sanitary districts (areas in each state of Mexico organized by the Ministry of health to attend their health needs) and related health centers. During this time students become familiar with and analyze the organization and operations of these entities—which are considered to be the basic functional structures of the National Health System—as well as understand the populations that are represented in primary-level health care. In particular, students analyze the functioning of local epidemiology surveillance services and the implementation of most of the health promotion and disease prevention programs.

The second-year rotation is conducted in public general hospitals that represent secondary-level health care. Students analyze hospital structures and operations, especially the application of systems for the surveillance and prevention of nosocomial infections and other preventive programs. These rotations are comple-

mented by work in planning and regulating areas where disease prevention and control programs are designed and evaluated. Finally, there is a “free rotation” in the last year of the program that takes place at an establishment within the health system where students have the opportunity to conduct the final stage of their thesis work.

#### 2.4.E

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- Community and professional practicums are a central part of the INSP's professional programs and are conducted throughout the student's educational training. This experience helps build important relationships between the INSP and different communities across the country.
- Students realize practicum activities in real community settings. This helps them develop real-world experience and practical skills.
- A redesign of the MPH program in 2010 focuses practicum experiences on each concentration area and contributes to students' academic training by encouraging them to integrate and apply specific course content; therefore, it is a mandatory part of the curriculum.
- Collegiate bodies monitor program performance by reviewing sites and preceptor qualifications, overseeing faculty assignments as practicum advisors, and regularly assessing student work.
- In the MPH, students from all concentration areas form groups to develop community practicum activities. This promotes interdisciplinary work.

**Table 2.5**  
**Practicum Students and Locations for the Residence in Public Health and Preventive Medicine, 2006-2010**

Class	Students Completing the Program	Institutions Where Practicum Rotations were Conducted
2006-2009	5	Rotation 1: Central Cuernavaca Sanitary District Rotation 2: Jojutla, Morelos Sanitary District Rotation 3: State Health Services of Morelos Rotation 4: ISSSTE District of Morelos Rotation 5: Hospital Calero ISSSTE, Morelos
2007-2010	6	Rotation 1: Central Cuernavaca Sanitary District Rotation 2: Jojutla, Morelos Sanitary District Rotation 3: State Health Services of Morelos, Rotation 4: General Department for Health Promotion Rotation 5: M. Gea González General Hospital Rotation 6: National Center for Epidemiological Monitoring and Disease Control/ CENAVECE

## Weakness

- In some cases, faculty would benefit from more training in supervising community activities.
- The federal budget does not assign resources to finance practicum activities.

## Future Plans

- The Office of Academic Affairs will develop training courses for faculty acting as preceptors.
- In 2010 the INSP created the Community Practice Operations Office to support the operation and follow up of the practicum activities. This office will also help facilitate data integration for all areas involved in the practicum program. In addition, the office will work with the academic coordinators and community preceptors to develop guidelines for conducting community activities in each concentration area of the MPH.
- Diverse strategies are being analyzed to find funding sources to support the practicum experience.

## 2.5

**Culminating Experience.** All professional degree programs identified in the instructional matrix shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.

The INSP requires culminating experiences for all professional degree programs to ensure that each student demonstrates skills and knowledge integration in his or her field of study.

### Required Documentation

#### 2.5.A

Identification of the culminating experience required for each degree program. If this is common across the school's professional degree programs, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

The culminating experience of each program is tied to the academic orientation of the program to help assess the specific competencies that the students are expected to acquire as a result of their learning activities in the program. For instance, a Final Professional Project (PTP) is expected in professional programs where practicum activities are conducted, including the MPH, or a *tesina*, a specific project available only in the Specialty in Health Promotion. Thesis is required in the academic programs and doctorates where students focus more on research activities. Nevertheless, if

students in the INSP's professional degree programs are interested in developing a thesis as a culminating experience, they can.

The PTP is an integrative project based on the field experience gained during the community and professional practicums. For the PTP, students usually present a community health assessment, a viable intervention to address a public health problem and an evaluation of the intervention. Students present their progress as they work on the PTP to help ensure that they stay on track. When the PTP report is complete, the Faculty College approves a degree committee to which the student must present and defend it (see Appendix 2.5.a).

The PTP was initiated in recent years for graduating classes in the MPH program in response to CEPH's suggestion in the last evaluation that the INSP should offer graduation options aside from the thesis that are more suitable for professional degrees. The PTP has since become the most frequently selected culminating experience among MPH students. In the first year it was offered, 50% of students chose this option to complete their degree; for the class of 2009, 62% chose this option, and for the class of 2010, 90% chose it. Appendix 2.4.b provides a detailed list of PTPs developed since 2006.

Students can also choose to complete their degree with thesis work focused on the implementation of an operational research project. This work similarly facilitates integration of the different competencies of the program. To help guarantee that students gain the most comprehensive training while completing their thesis or PTP, a committee composed of a thesis director and one or two advisors guides them throughout the process. This committee is assigned by the Faculty Colleges.

The so called *Tesina* is required as a final academic project for the Specialty in Health Promotion. A *tesina* consists in a culminating project that can be realized choosing one of the following 3 formats: a study-case in a health promotion topic, a health promotion program assessment or a literature review based on the search and analysis of health promotion recent and relevant studies. A director and several academic advisors chosen from the faculty are assign to students to help them develop their work throughout the program and at the end they must present and defend their project with a group of faculty that qualifies the importance of the final project and the competencies acquired by the student. Students are promoted to use their professional experience in the development of the *tesina* because the professional orientation of the program.

In order to obtain a Residence in Public Health and Preventive Medicine degree, students must develop a thesis based on a current public health program in which they were involved during their rotations. The thesis procedures and requirements for this degree are the same as for the rest of the programs.

In the case of the Doctorate in Public Health, students must present an applied research thesis and pass the qualifying exam to obtain their degree. At the beginning of the program they are assigned an academic advisor who has to be in contact permanently with students, particularly in those periods where they are not present at INSP (due to its executive format). Tutors have to report every semester about the progress of their assigned students. Once students are assigned a thesis supervisor, this person becomes responsible of the academic progress of the student but the original advisor remains active until graduation. Furthermore, students have to send a report to the Program Coordination every semester which has to be signed by their advisors, thesis supervisors. Failing to provide the six-month progress report by the student causes cessation from the program according to institutional regulations. Competencies are assessed throughout the program using different strategies. Students have to take 10 in-person seminars over the three-year period. All seminars have to be accredited by the student to continue the program. By the end of the second year students have to present their research protocol before a jury composed by 5 members of the faculty with a doctoral degree. After presenting their protocol, students are required to pass an exam containing 5 cases public health related to be answered in one week. Each case focuses on a different public health area and are prepared by the faculty responsible of seminars. Students are given one of these cases to be responded compulsorily and a second case which they can choose according to their area of preference. By the end of the third year students have to defend their thesis before a jury with similar characteristics as the protocol one. The Academic regulations (that will be available as an on-site resource file) details the process to defend the thesis.

In addition, students must meet the degree requirements stipulated in the Regulations for the Doctoral and Postdoctoral Programs in Public Health Sciences and the Doctorate in Public Health.

### 2.5.B

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- In conjunction with the community and professional applied fieldwork, the PTP and thesis are integrative culminating experiences that demonstrate proficiency in the required competencies for the professional and academic programs as well as the ability to synthesize, integrate and apply knowledge and skills acquired through coursework and other experiences.
- The culminating experience of each program is tied to the academic orientation of the program. The PTP and *tesina* is

offered in the professional programs that focus on practitioner training, including the MPH, and the thesis is required in the academic programs and doctorates where students are expected to focus on research activities. Students of professional programs can develop a thesis if they are interested in doing so, giving them flexible options for graduation.

#### Weaknesses

- The professional practice experiences in the MPH program are in diverse sites but all in the state of Morelos because of lack of funding to send students to more remote locations.
- MPH students have reported that three semesters were insufficient to develop a PTP on time.

#### Future Plans

- Strategies will be developed to find resources to support practice experiences in communities outside of Morelos.
- The INSP is requesting that CONACyT provide one more semester of scholarship funding for MPH students. The Committee for Professional Programs and the Office of Academic Affairs will follow up if this scholarship expansion is useful in supporting the fulfillment of the culminating experience for MPH students.
- The various collegiate bodies will continue to follow up on graduation rates to identify and propose more efficient strategies for facilitating the fulfillment of the culminating experiences among students in all programs.

## 2.6

**Required Competencies.** For each degree program and area of specialization within each program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of educational programs.

All degree programs within each area of specialization have clearly stated competencies that guide the development of educational programs.

#### Required Documentation

##### 2.6.A

Identification of schoolwide core public health competencies that all MPH or equivalent professional degree students are expected to achieve through their courses of study.

The INSP has made a major effort to guarantee that all study programs are competency-based, including professional competencies

that all students must develop in the core areas of public health as well as specific competencies for their areas of concentration.

The competencies in the Master in Public Health (MPH) program in its three formats (full time, executive and online) are designed so that professionals are able to identify and analyze health needs and problems as well as plan, design, implement and evaluate actions to promote health through the analysis of health determinants including biological, social, environmental and health systems factors. The core and cross-cutting competencies for the program are outlined in Table 2.6.

In addition to core competencies, all of the INSP's educational programs take into account the importance of promoting cross-cutting competencies in areas such as oral and written communication, effective use of information technologies, and the development of leadership and critical thinking skills. These competencies are further reinforced through an extracurricular academic program that includes complementary activities. Criterion 2.6.C provides more information regarding cross cutting competencies and the specific competencies by area of concentration within the other professional and academic programs, and Criterion 2.8 describes competencies for the Master in Clinical Nutrition.

## 2.6.B

A matrix that identifies the learning experiences by which the core public health competencies are met. If this is common across the school, a single matrix will suffice. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

The INSP supports participatory, action-based education to develop core public health competencies. The syllabus of each course describes the various learning experiences developed for that class, all of which target specific competencies. For each professional program a matrix shows which course promotes the achievement of every core public health competency (Appendix 2.6.b).

This pedagogical model promotes the development of learning experiences in classroom and other academic activities that enhance the acquisition of core and cross-cutting competencies in all programs. Table 2.7 identifies the principal learning experiences by which core public health competencies are met. These learning experiences are common across the school, except where noted on the table.

To strengthen core and cross-cutting competencies and develop skills in integrating knowledge in a particular field of study, students must complete the **extra-curricular academic program**. This program includes a workshop for writing scientific articles in which all students participate when they are writing their PTP or thesis. The extra-curricular academic program also requires students to attend monthly institutional seminars conducted by public health officials regarding core public health topics. Academic coordinators and advisors often suggest that students participate in particular seminars to develop their PTP or thesis. This program also assigns a professor to each student at the beginning of his or her studies who acts as a tutor or advisor through the entire program. This tutor is designated by the Faculty College that supervises the student's program (see Criterion 4.6 for details). Finally, to improve communication skills, students are required to take English courses either at the INSP or on their

**Table 2.6**  
**Core and Cross-Cutting Competencies for the Master of Public Health**

### Professional Core Competencies

1. Apply health promotion and disease prevention approaches to reduce the impact of current and emerging health problems at the population level.
2. Conduct comprehensive assessments of population health at the local, regional, national and global levels, incorporating social determinants, especially for vulnerable and socially marginal groups.
3. Prioritize health needs and problems using different decision-making methods.
4. Design and implement interventions (policies, programs, resources, services) to improve the health of the population.
5. Apply communication and education strategies to improve populations' health.
6. Participate in systems to control and monitor outbreaks for the timely detection of situations posing a public health risk and monitor the impact of prevention and control interventions for priority health problems.
7. Conduct community work in an ethical manner, with a service-oriented attitude and a commitment to applying the principles of equity and respect for the dignity of all people.
8. Comprehensively evaluate actions and/or programs in public health to continually improve them and provide accountability.
9. Use scientific evidence in decision making related to public health.

### Cross-Cutting Competencies

1. **Communication:** Select and prepare material for different audiences.
2. **Leadership:** Create and communicate a shared vision for a better future and commitment to reach proposed objectives.
3. **Ethics:** Uphold ethical values and professional practices involved in public health decisions, taking into consideration the effect of these decisions on community autonomy, equity, and social justice; also, maintain a commitment to personal and institutional development.
4. **Managing cultural diversity:** Interact with people from diverse cultural, socioeconomic, educational, sexual orientation, ethnic, demographic and professional backgrounds in a sensitive, effective and professional manner.
5. **Critical thinking:** Recognize the dynamic interactions between human and social systems and the way in which they affect relations among individuals, organizations and communities.
6. **Lifelong learning:** Make a personal commitment to ongoing education.

**Table 2.7. Learning Experiences for the Acquisition and Development of Core Competencies**

Learning Experience	Competency Acquired
Consult and analyze diverse materials	Students consult diverse materials to support the educational process, including book chapters, journal articles, multimedia materials and online documents on a variety of public health issues. Students have access to literature and references to support discussion, promote a more profound understanding of concepts, and foster informed and active class participation.
Individual work	This activity helps students to organize ideas, systematize learning and provide a foundation for participating in teamwork.
Presentation of issues and exchange of ideas	The presentation and exchange of different points of view on an issue is a demanding activity that involves the development, use and creative interpretation of arguments as well as the ability to listen and maintain an open attitude. The professor must create a climate that invites discussion and debate on relevant issues.
Writing for a variety of purposes	Throughout the educational process, students develop the ability to write different types of texts, including abstracts, essays, syntheses, research protocols, funding proposals, and conceptual or mental maps.
Collaborative work	Students work in a collective manner to solve problems and conduct activities or research assigned by the professor. Students must develop collaborative skills such as listening, respecting the ideas of others, and making well-founded group decisions. This provides better learning results for the individual as well as the group.
Laboratory practicum	Students conduct a series of exercises or resolve problems, with ongoing advice from the professor in specialized laboratories.
Project-based learning	Through their work in the community, students confront situations in which they can retrieve, comprehend and apply what they have learned in the class to solve problems or develop proposals. This learning method helps students apply acquired knowledge to design and evaluate interventions or programs.
Problem-based learning	Students self-direct their learning as needed to resolve problems that are posed to them while integrating different knowledge areas. Work is carried out in small groups, requiring the use of a series of skills and attitudes that are not practiced through an expository strategy.
Learning Experience	Competency Acquired
Case studies	This technique is used for establishing diagnoses and making decisions about problems in which human relations play an important role. This technique requires that students determine the best way to analyze a problem, conduct an analysis, make decisions, and exhibit agility in determining courses of action. The faculty present diverse cases related to a current public health issue, and students work collectively or individually to create a possible solution. The solutions are then discussed in a plenary session.
Seminar	Seminars are developed in the context of academic plurality and liberty. Students are responsible for reading the material assigned for each session in advance and actively participating in classroom discussions. This exercise encourages intellectual autonomy, dialogue on the texts, and the development of analytical, reasoning and debating skills. To achieve the objectives of the seminar, professors develop flexible question guides to facilitate discussion during the sessions.
Field experiences during the professional practicum (available only in professional programs)	This experience enables students to become familiar with various problems in public health through operational research. It involves the participation of the population and consideration of the community's socioeconomic and cultural context in determining effective interventions. During the practicum students develop multiple competencies, such as the ability to: 1) interact in a sensitive, effective and professional manner with persons with different cultural, socioeconomic, educational, ethnic and demographic characteristics; 2) construct a comprehensive health diagnosis that takes into account the strengths, resources and needs of the community, using an eco-social approach and methodologies and tools from different areas in public health; 3) analyze the health-disease situation of the community to prioritize health needs and requirements; 4) facilitate the community's awareness of its health-disease condition and the need to introduce interventions with their active participation; 5) design health interventions using appropriate methodologies and tools that strengthen health determinants and support community development; and 6) develop and implement interventions that include the participation of key actors across political, economic and social sectors of the community. The practicums are designed to build on knowledge and experiences obtained in the classroom.
Use of new technologies (virtual platform)	Through online platforms, students conduct different activities such as sending class assignments to the professor, consulting and downloading materials (videos, texts, audio) selected by the professor, and participating in discussion forums through email, announcement boards, or wiki. They also participate in collaborative activities.
Hospital rotations (only in the Residence in Public Health and Preventive Medicine)	Students participate in rotations in diverse programs and systems related to epidemiology, public health and preventive medicine. The objective is to enable students to apply the theoretical knowledge and skills gained during their residency program to a proposed intervention for one or more problems detected during the rotation. Professors select the hospital programs in advance and maintain contact with supervisor in charge of the student's rotation to provide feedback regarding the practicum.

own. The activities of the extra-curricular academic program aim to strengthen the skills and competencies that students need to successfully complete in each program.

## 2.6.C

Identification of a set of competencies for each program of study, major or specialization, depending on the terminology used by the school, identified in the instructional matrix, including professional and academic degree curricula.

This section describes in detail the competencies for each study program at the INSP, including academic and professional programs at the master and doctorate levels.

### Master of Public Health

In addition to the core and cross-cutting competencies that apply across the MPH program (discussed in Criterion 2.6.A), specific competencies have been developed for each area of concentration (see Table 2.8).

**Table 2.8**  
**Specific Competencies for the Master of Public Health, by Area of Concentration**

Area	Specific Competencies
Epidemiology	<ol style="list-style-type: none"> <li>1. Contribute to the creation and dissemination of epidemiological knowledge by participating in the design, implementation and evaluation of research projects.</li> <li>2. Plan surveillance, research and epidemiological response activities for epidemiologic prevention and control programs.</li> <li>3. Implement health interventions based on epidemiological information and evidence.</li> <li>4. Conduct studies following national and international regulations and ethical principles.</li> <li>5. Use informatics resources to manage databases, conceptual maps and analysis of information.</li> <li>6. Monitor principal health problems and determinants to establish trends and projections that enable recognizing contingency situations such as outbreaks and other epidemiological emergencies.</li> <li>7. Monitor and study outbreaks to obtain timely and reliable information for the control of epidemiological emergencies.</li> <li>8. Evaluate the epidemiological profile of a population through the analysis of determinants of the health-disease-treatment process to propose comprehensive health interventions.</li> <li>9. Evaluate data derived from routine sources of information that enable appropriate decision-making related to the prevention and control of health events.</li> <li>10. Evaluate epidemiological prevention and control programs to plan surveillance, research and epidemiological response activities.</li> </ol>
Biostatistics and Information Systems	<ol style="list-style-type: none"> <li>1. Interpret information obtained from health information systems using population information and statistical methods to improve understanding of the health-disease process.</li> <li>2. Identify factors that determine the quality and use of information to propose strategies for continual improvement.</li> <li>3. Apply ethical principles to the interpretation, management and dissemination of health information to ensure its reliability.</li> <li>4. Plan health information systems to produce evidence for decision-making.</li> <li>5. Implement health information systems to produce evidence for decision-making.</li> <li>6. Analyze statistical information and literature on health information systems to continually keep public health specialists current.</li> <li>7. Evaluate information systems, identifying the factors that determine the quality and use of the information, to propose strategies for continual improvement.</li> </ol>
Environmental Health Sciences	<ol style="list-style-type: none"> <li>1. Describe environmental factors that can influence the health-disease process of the population to improve prevention, control and treatment efforts.</li> <li>2. Identify sources, routes and means of exposure to environmental contaminants that determine the primary risks to the health of the population.</li> <li>3. Collaborate in the application and updating of laws, regulations and sanitation and environmental rules to prevent and provide protection from different risks to population health and well-being.</li> <li>4. Participate in the development of operational research projects related to environmental exposures, as well as the analysis of results and their application to the practice of public health.</li> <li>5. Apply basic sanitation principles to protect the health of the population.</li> <li>6. Apply basic research principles for occupational health and hygiene to protect the health of workers.</li> <li>7. Educate the population about the importance of participating in the identification of health problems related to environmental exposures.</li> <li>8. Evaluate the effect of environmental exposures on human health for the purpose of management and treatment.</li> <li>9. Evaluate environmental health interventions.</li> </ol>
Health Systems Administration	<ol style="list-style-type: none"> <li>1. Identify organizational and socio-environmental factors that affect the management and performance of health systems and services.</li> <li>2. Develop plans, services, programs, projects and strategies to improve the management and quality performance of health systems and services.</li> <li>3. Organize health systems and services according to the needs and demands of the health of the population.</li> <li>4. Manage health organizations with a participatory approach.</li> <li>5. Foster social commitment in the management of health services.</li> <li>6. Apply the legal framework that governs the right to protect health.</li> <li>7. Manage information systems for appropriate decision-making related to health.</li> <li>8. Evaluate the performance of organizations and persons related to health systems and services.</li> </ol>
Social and Behavioral Sciences	<ol style="list-style-type: none"> <li>1. Explain organized social responses to identify strengths and weaknesses in population health care.</li> <li>2. Promote collaborative strategies for identifying and making decisions regarding health problems in the population.</li> <li>3. Apply effective communication strategies in health messages and campaigns directed toward different social groups based on theoretical and methodological principles in the area of health communications.</li> <li>4. Apply social and behavioral science models and theories to measure knowledge, perception, attitude, beliefs, and behavior to effectively evaluate initiatives.</li> <li>5. Generate initiatives based on social and behavioral science theories and models to modify habits and conduct related to health problems.</li> <li>6. Analyze the role of social determinants of health.</li> <li>7. Develop the capacity to advocate for the participation of social groups in the design, implementation and evaluation of public health policies.</li> <li>8. Design and evaluate health promotion initiatives based on social and behavioral science theories and models to decrease health inequities.</li> </ol>

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Nutrition	<ol style="list-style-type: none"> <li>1. Determine the nutritional status of different populations through the use, analysis and interpretation of appropriate research.</li> <li>2. Identify the environmental determinants of nutrition status at the community, family and individual levels to develop comprehensive analytical models.</li> <li>3. Identify the social determinants of individual and community responses to the use of programs that support nutrition to promote the participation of community members as change agents.</li> <li>4. Contribute to the design, implementation, and evaluation of population nutrition programs and strategies for the adequate prevention and treatment of nutrition and health problems.</li> <li>5. Contribute to the analysis and development of policies and plans for the prevention and treatment of nutrition problems in specific populations.</li> <li>6. Analyze trends in nutrition problems in order to predict future problems and plan ahead.</li> </ol>
Vector-borne Diseases (VTDs)	<ol style="list-style-type: none"> <li>1. Describe the health-disease pattern of a VTD reference population through the interpretation of indicators for the health-disease process.</li> <li>2. Explain the natural history of VTDs and their modes of transmission to implement actions for the prevention and control of diseases and risks.</li> <li>3. Develop programs and strategies for epidemiological surveillance, prevention and control of vectors and reservoirs.</li> <li>4. Analyze the VTD epidemiological profile from an eco-social perspective.</li> <li>5. Describe sources and routes of the population's exposure to environmental risks associated with the presence of vectors and reservoirs.</li> <li>6. Apply basic sanitation principles and those specific to vectors to protect the health of the population.</li> <li>7. Participate in the development and evaluation of operational research projects related to exposure to VTDs, as well as the analysis of results and their application to control practices.</li> <li>8. Motivate an organized social response, fostering the participation of the population, in the diagnosis of and solutions to VTDs.</li> <li>9. Identify the organizational and environmental factors that affect the health of the population and the performance of health systems and services as related to vector-borne diseases.</li> <li>10. Approach public health problems related to vector-borne diseases with a comprehensive focus that includes cultural differences.</li> </ol>
Infectious Diseases	<ol style="list-style-type: none"> <li>1. Continually analyze the risks of various infectious diseases.</li> <li>2. Analyze health policies in the area of infectious diseases.</li> <li>3. Develop and implement epidemiological surveillance, prevention and control programs in the area of infectious diseases.</li> <li>4. Develop and use indicators and procedures for epidemiological surveillance to recognize the presence of outbreaks and control infectious diseases.</li> <li>5. Use scientific information from research on infectious diseases to develop policies, plans and programs for prevention and control in populations.</li> <li>6. Evaluate the response of health systems (policies, plans and programs) to health damage caused by infectious diseases and encourage the participation of the population by developing messages for the public that explain the threats of these diseases and finding solutions to these health problems.</li> </ol>

Both executive and on line formats of the MPH programs share the same set of core and cross-cutting set of competencies that the full time format as described before in Criterion 2.6.a. The executive and on-line MPH programs attend the specific competencies of the concentration area that these modalities offered.

### Specialty in Health Promotion

The Specialty in Health promotion began in early 2011 and has a total of 61 credits. As noted in Criterion 2.1.A, in Mexico a specialty is a one-year graduate program where a bachelor's degree is a prerequisite to enter the program.

Its objective is to train health promotion specialists who will provide leadership in designing, implementing and evaluating initiatives to improve the health conditions of different populations using a multidisciplinary approach. Professional and cross-cutting competencies are described in Table 2.9.

### Residence in Public Health and Preventive Medicine

The general objective of the Residence in Public Health and Preventive Medicine is to develop medical professionals with comprehensive, evidence-based perspectives capable of identifying, prioritizing and monitoring problems and needs essential for pop-

ulation health. In addition, they must plan, implement and evaluate health interventions required to improve public health. The core competencies for the program are outlined in Table 2.10.

### Master of Health Sciences

Competencies for the Master of Health Sciences program are aimed at developing professionals in research and teaching who are capable of the following: 1) identifying and analyzing population health needs and problems through research projects; and 2) using evidence to offer solutions for the biological, environmental and economic/social spheres. The core and cross-cutting competencies common to all areas within the Master of Health Sciences program appear in Table 2.11; a detailed breakdown by area of concentration follows in Table 2.12.

### Doctorate in Public Health

The Doctorate in Public Health trains and educates professionals to be able to comprehensively evaluate the most pressing health problems and needs at the population level. This enables professionals to plan and implement policies, programs and projects to improve population health, while demonstrating effective leadership with an emphasis in social sciences. The competencies for the program are outlined in Table 2.13.

**Table 2.9**  
**Competencies for the Specialty**  
**in Health Promotion**

Professional Competencies

1. Design, manage and evaluate health promotion initiatives that include community participation and are appropriate for the cultural characteristics of the population.
2. Demonstrate leadership in developing change processes and strategies to empower individuals and communities to achieve self-care.
3. Translate scientific information into appropriate language for community members and decision makers.
4. Propose and critically analyze health promotion policies within a given area.
5. Advocate across and within sectors to influence the determinants that impact health.
6. Facilitate effective relationships and alliances with the community and health institutions as well as other social sectors.

Cross-Cutting Competencies

1. Use oral, written, graphic and numeric information for different audiences, employing a range of formal and informal media.
2. Use scientific evidence to guide professional practice.
3. Effectively manage information and communication technologies.
4. Develop abilities in negotiation, conflict resolution and organization of collective activities across sectors and disciplines, using intercultural and gender approaches.

**Table 2.10**  
**Competencies for the Residence in Public Health**  
**and Preventive Medicine**

Professional Competencies

1. Apply current epidemiological concepts and methods to evaluate the general population health profile and prioritize problems to apply necessary prevention and control measures.
2. Design and implement epidemiological surveillance systems to solve specific population health problems and evaluate the impact of interventions.
3. Perform epidemiological studies of outbreaks and emergency situations to implement prevention and control measures in a timely manner.
4. Appropriately apply descriptive and inferential statistical methods to the operation of local statistical information systems to support the development of the health system.
5. Evaluate the availability of products and services for the prevention and control of diseases and risks in the population to gain a sound understanding of the structure and functioning of Mexico's health system.
6. Design, implement and evaluate programs and activities for health promotion and the prevention and control of diseases and risks to improve the health status of diverse populations.
7. Analyze and identify the impact of social and environmental risk determinants to apply necessary protection measures.
8. Develop recommendations for health system decision makers for preventing and controlling diseases and health risks.
9. Apply normative frameworks that correspond to the different aspects of carrying out epidemiological work.
10. Apply appropriate research methods to identify and evaluate social determinants of health.

**Table 2.11**  
**Core and Cross-Cutting Competencies**  
**for the Master of Health Sciences**

Professional Core Competencies

1. Identify and analyze public health problems and needs based on the five core areas: epidemiology, biostatistics, social and behavioral sciences, environmental health sciences, and health systems.
2. Integrate and apply methodologies for analysis appropriate to the planning, implementation and evaluation of research projects focused on solving public health problems.
3. Analyze and interpret results from scientific research.
4. Publish and disseminate results from scientific research in the scientific community and the general population.
5. Demonstrate skills for interdisciplinary work, with emphasis on the development of principles and values such as solidarity, equity and respect for the dignity of all individuals.
6. Implement professional activities according to ethical rules and principles, with a service-oriented attitude and social commitment, and based on current scientific knowledge

Cross-Cutting Competencies

1. Critically analyze scientific articles.
2. Use general informatics tools to support research and teaching activities.
3. Apply social skills to collaborative work.
4. Effectively apply oral and written communication tools in the work context.
5. Practice effective and efficient decision-making.
6. Develop teaching skills.

## Doctorate in Public Health Sciences

The competencies for the Doctorate in Public Health Sciences are aimed at developing professionals who are able to conduct independent and original public health research; design and implement education programs; and provide professional consulting in population health, health systems and infectious diseases. Professional core competencies and cross-cutting competencies common to all areas within this degree program appear in Table 2.14; a detailed breakdown by area of concentration follows in Table 2.15.

The Doctorate in Public Health Sciences in Population Nutrition (created in 2009) is designed to train leading researchers to generate and disseminate knowledge, technologies and strategic methodologies in population nutrition. Core and cross-cutting competencies for this program appear in Table 2.16.

### 2.6.D

A description of the manner in which competencies are developed, used and made available to students.

To develop professional competencies, the INSP appoints an academic committee composed of faculty, academic coordina-

**Table 2.12**  
**Specific Competencies for the Master of Health Sciences, by Area of Concentration**

Area of Concentration	Master of Health Sciences Specific Competencies
Clinical Epidemiology	<p>Analyze the scientific literature related to clinical and epidemiological research and discern its contents.  Propose improvements to clinical practice through the application of evidence-based medicine.  Link clinical practice and knowledge obtained from the study of intra-hospital epidemiology to the community.  Apply advanced statistical models using specialized statistical packages.  Analyze ethical aspects of clinical research to protect the rights of study subjects.  Develop scientific texts with language that is accessible to the general community.  Design and implement clinical research projects.</p>
Biostatistics	<p>Identify the needs of research projects and translate them into the statistical context as it applies to public health.  Apply basic sample design and estimation procedures to sample sizes for different types of epidemiological studies, as well as understand complex designs.  Propose and justify statistical analysis strategies for research projects related to public health.  Develop statistical analyses that respond to the objectives of a research project related to public health.  Implement strategies to disseminate results obtained from statistical analyses.  Evaluate the statistical analyses developed by research projects and analyze their limitations.  Establish appropriate interactions with the client in the different stages of a project.  Manage the appropriate statistical package throughout the different stages of a project.  Fulfill all ethical norms that govern statistical processes and public health.</p>
Environmental Health Sciences	<p>Comprehensively research and evaluate the diverse environmental factors that influence health and the quality of life of populations, as well as develop collaborative research with groups from different disciplines related to environmental health.  Evaluate the way in which the human organism is exposed to environmental contaminants and use molecular biology tools to understand mutagenesis and carcinogenesis processes associated with contaminants.  Develop surveillance plans according to the type of research being conducted, the characteristics of the contaminant and the environment in which the measurements are made.  Analyze environmental research results and use data in decision-making.  Analyze current environmental regulations and collaborate in groups that propose modifications related to health.  Recognize work-related health problems and generate research proposals to identify preventive criteria and basic fundamentals of sciences related to the health-disease process of workers.  Select and apply a methodology for evaluating risks that is appropriate to the type of environmental problem, and provide different strategies for managing that problem.  Design and implement interventions in populations exposed to environmental contaminants.  Develop risk communication programs related to environmental health and directed toward the general population, decision-makers and other social actors.</p>
Reproductive Health	<p>Identify and evaluate the magnitude, seriousness and determinants of reproductive health problems.  Analyze the impact on health of gender, political, ethical, social, cultural and psychological factors related to sexual and reproductive health.  Develop conceptual frameworks within the field of sexual and reproductive health that will allow public health problems to be identified and addressed.  Design and conduct qualitative and quantitative studies on sexual and reproductive health, and construct appropriate measurement instruments.  Analyze and interpret qualitative and quantitative data related to sexual and reproductive health.  Identify the principal components of research related to sexual and reproductive health.  Develop a monitoring and evaluation plan for sexual and reproductive health programs.  Know Mexican and international technical standards for sexual and reproductive health care.  Interpret indicators of reproductive health.</p>
Health Systems	<p>Identify the conceptual models that enable relating the components, functions, levels, interrelations and determinants of health systems.  Participate in health systems research for and evaluation of public health initiatives.  Synthesize and develop information that influence policies and technical standards in public health.  Analyze the organization, financing, utilization, equity, efficiency, effectiveness, quality and accessibility of health systems.  Design and implement health-related research projects and interventions for the improvement of health systems and services.  Evaluate the reform processes in health systems at the local, regional, national and international levels.  Contribute to the design of research-based policies and programs for equitable health with the highest quality and efficiency.  Analyze the administration of health systems to increase the impact of the Millennium Health Goals.  Evaluate the performance of health systems, including the effective coverage of health needs, dignified treatment and social protection.</p>
Health Economics	<p>Use microeconomics, econometrics and economic evaluations to analyze priority problems in public health and evaluate health programs and interventions.  Use the fundamentals of the scientific method to tackle priority public health problems from an economic perspective.  Identify the distinctive characteristics of the economic perspective to deal with public health problems.  Utilize tools for the analysis of information, such as probability and statistical mathematics.  Identify priority and relevant problems for public health research that can be approached with a health economic perspective in an appropriate and pertinent manner.  Identify the critical components of health programs and policies that enable the proposal of hypotheses for evaluation.  Suggest and justify the design of research and/or evaluations using an economic theoretical framework and propose methodologies to analyze and process the information.  Generate the necessary information for satisfactorily handling proposed research or evaluation problems.</p>

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Vector-borne Diseases (VTDs)	<p>Identify the ecological principles associated with insect vector diseases.</p> <p>Manage the basic concepts of insect behavior and physiology (physical and chemical mechanisms).</p> <p>Describe the morphology of insects and its relation with body part functions, as well as different adaptation patterns.</p> <p>Distinguish the biochemical and molecular mechanisms that lead to resistance to insecticides and know the prospects for future insecticides.</p> <p>Be familiar with the characteristics of VTDs—transmission, diagnosis, prevention and control—as well as the biology of biochemical and molecular interaction of pathogens with humans and vectors.</p> <p>Distinguish the criteria and technical and methodological bases for the systematic sampling of vectors in the field and laboratory.</p> <p>Design and evaluate vector control strategies.</p> <p>Design a research project based on the identification of opportunity areas in knowledge of biological and epidemiological determinants of VTDs.</p>
Area of Concentration	<p>Master of Health Sciences</p> <p>Specific Competencies</p>
Infectious Diseases	<p>Address specific public health problems and analyze theoretical and practical components of knowledge in infectious diseases.</p> <p>Distinguish the elements of strategies to prevent and control infectious diseases that are relevant to public health.</p> <p>Use scientific information from research in infectious diseases.</p> <p>Identify the factors that interact between host, pathogenic agents and the environment, that contribute to the appearance and spread of infectious diseases.</p> <p>Apply the primary methodological laboratory strategies for studying infectious diseases.</p> <p>Evaluate the problems and needs of programs to prevent and control infectious diseases.</p> <p>Distinguish the principal cellular, biochemical and molecular processes of infectious and producer agents of diseases relevant to public health.</p> <p>Apply knowledge at the border of biomedical disciplines related to basic research on infectious agents relevant to public health.</p>
Nutrition	<p>Evaluate nutrition status and the magnitude and seriousness of nutritional problems in populations using field methods that include diet and biochemical anthropometry.</p> <p>Identify the individual, social, and environmental factors and the organized social response related to the nutritional status of the population.</p> <p>Analyze and interpret data from studies on public nutrition using appropriate statistical methods.</p> <p>Contribute to the planning, coordination, implementation and evaluation of programs and initiatives for solving public nutrition problems.</p> <p>Define the role of agencies, advisory bodies and professional organizations responsible for the development and dissemination of technical information in the development of nutritional norms.</p> <p>Know and critically evaluate policies and technical standards related to public nutrition to exercise an influence on them in the future.</p> <p>Identify and analyze ethical problems in public nutrition work with respect to research as well as programs and regulatory factors.</p>
Vaccinology	<p>Analyze problems and needs in the production and evaluation of vaccines that enable the development of a framework of priorities for addressing those problems.</p> <p>Identify factors related to interactions among the host, immunogenes and the environment that can contribute to the safety and effectiveness of vaccines.</p> <p>Interpret and evaluate the principal differences between the production of bacterial and viral vaccines.</p> <p>Apply and evaluate the principal methodological strategies for laboratory work related to the study of vaccines, as well as the development of research projects and clinical trials, and their analysis and interpretation.</p> <p>Determine the primary cellular, biochemical and molecular processes involved in vaccines important to public health.</p> <p>Apply and discuss knowledge at the border of biomedical and biotechnological disciplines for the production and evaluation of vaccines.</p> <p>Evaluate proposals for technical regulations related to vaccinology and surveillance strategies in the field.</p> <p>Design and develop programs for training others in areas related to vaccines.</p>

**Table 2.13**  
**Competencies for the Doctorate in Public Health**

Professional Competencies

1. Use operational and applied research to evaluate health needs and factors that influence people's health and quality of life with an emphasis in social sciences.
2. Design and evaluate intervention strategies to improve the health of the population.
3. Lead groups to develop research that corresponds to priority health needs and problems, based on analyses of the socioeconomic, political and cultural characteristics of populations.
4. Generate public health policies based on scientific evidence to improve overall quality of life.
5. Contribute to the development of public health human resources through the design, implementation and evaluation of academic programs.

Cross-Cutting Competencies

1. Lead workgroups to successfully advance the public health agenda.
4. Generate effective intra- and inter-institutional communication and foster institutional collaboration.
3. Generate multidisciplinary contributions from multicultural and community perspectives to solve public health problems.
4. Implement professional tasks according to norms and ethical principles, and demonstrate both a service-oriented attitude and social commitment.

tors and external experts in public health along with an educational curriculum development specialist. This committee is in charge of analyzing labor market demand, identifying educational needs, and designing appropriate competencies for each program whenever it is designed or reviewed. This analysis includes two fundamental elements: 1) an internal analysis to determine whether a proposed study program coincides with the INSP's mission, objectives and principles; and 2) an external analysis of other programs and the socioeconomic and labor market needs of the region and country. During this process, the committee carries out the following activities:

- Review and compare educational programs for health professionals offered by institutions in Mexico and around the world to identify innovative and relevant pedagogical models and study programs.
- Consult with international experts using the following strategies: surveys administered to researchers, service providers, and health system authorities; online and in-person interviews

**Table 2.14**  
**Core and Cross-Cutting Competencies**  
**for the Doctorate in Public Health Sciences**

Professional Core Competencies

1. Analyze different approaches and models that have been developed for the study of public health.
2. Apply different public health models to the comprehensive analysis of health needs.
3. With community participation, develop independent, original and interdisciplinary research that is respectful of social and gender equity in public health.
4. Incorporate innovative theoretical-methodological developments in public health in the Specialty area.
5. Participate in the generation of scientific evidence for decision-making in public health in the Specialty area, with an emphasis on health promotion.
6. Provide technical consulting in public health at the national and international levels in the Specialty area.
7. Develop human resources for public health in the Specialty area.
8. Establish mechanisms for connecting knowledge creators and decision-makers to influence the development of health policies.
9. Develop strategies for research funding opportunities and design and write grant applications.

Cross-Cutting Competencies

1. Develop critical analyses of the state of knowledge and information in public health.
2. Actively participate in interdisciplinary work teams.
3. Carry out written and oral communication in a professional manner.
4. Demonstrate commitment and continual effort in performing professional tasks.
5. Develop teaching skills.

with specialists and alumni; and discussion groups with experts regarding specific topics such as labor market demand (see Criterion 2.6.E for more detail).

The information obtained through these activities and a description of the process are documented in a written report which is

submitted to the Academic and Teaching Commission (CAD) for approval and is publicly accessible on the web. Using this document as reference, the Program Design Committee identifies and defines professional and cross-cutting competencies as well as courses, learning methods and evaluations in order to achieve competencies. These competencies and all other aspects of the curriculum are reviewed by various collegiate bodies, including Faculty Colleges, the CAD, the External Academic Commission (CAA), and the pedagogical team of the Department of Curriculum Design. Once the competencies and all other components have been approved, they are incorporated into the curriculum and made available to students in the following ways:

- **INSP website** ([www.insp.mx](http://www.insp.mx)), where the academic programs and their respective competencies can be reviewed online or downloaded;
- **Brochures and flyers** promoting academic programs, which are distributed at national and international conferences and career fairs;
- **Introductory courses** for newly enrolled students, during which academic coordinators inform students about the competencies;
- **Course overviews and syllabi**, which are distributed at the beginning of the semester.

Appendix 2.6.d shows the process for designing competencies and some examples of how competencies are disseminated and adopted by the INSP.

When the competencies of the program are approved, Faculty Colleges design the courses taking as reference the core professional and specific competencies of each program. The competencies define the main contents of the course and guide

**Table 2.15**  
**Specific Competencies for the Doctorate in Public Health Sciences, by Area of Concentration**

Area of Concentration	Doctorate in Public Health Sciences Specific Competencies
Epidemiology	<ol style="list-style-type: none"> <li>1. Propose research topics and design and implement original epidemiological research projects with a multidisciplinary approach.</li> <li>2. Apply epidemiological methods to identify health needs, disease determinants (transmittable and non-transmittable) and optimal health levels.</li> <li>3. Generate epidemiological evidence that is useful for decision-making related to public health.</li> <li>4. Advise on the application of epidemiological methods and planning, implementation and evaluation of health programs and interventions.</li> <li>5. Integrate ethical and biosafety factors into research projects and programs for the prevention, control and treatment of diseases and the promotion of health.</li> </ol>
Health Systems	<ol style="list-style-type: none"> <li>1. Apply a health systems approach to the conceptualization of research problems in public health.</li> <li>2. Apply analytical models of health systems to problems related to organized social responses, taking into account socio-cultural factors.</li> <li>3. Implement conceptual and methodological frameworks appropriate to health systems research to respond to public health problems.</li> <li>4. Generate scientific evidence that assists decision-making related to health systems.</li> <li>5. Provide technical consulting at the national and international levels in the area of health systems.</li> </ol>
Infectious Diseases	<ol style="list-style-type: none"> <li>1. Design and implement original research projects in systems biology, genetic epidemiology, or microbiology and molecular immunology for infectious diseases that affect public health.</li> <li>2. Analyze and interpret epidemiological, clinical and biomedical information provided by research in infectious diseases and public health.</li> <li>3. Apply methods for planning, implementing and evaluating strategies to monitor and control infectious diseases.</li> <li>4. Contribute to the development and evaluation of programs to detect, prevent and control infectious diseases that affect public health.</li> </ol>

**Table 2.16**  
**Core and Cross-Cutting Competencies**  
**for the Doctor in Public Health Sciences**  
**in Population Nutrition**

Professional Core Competencies

1. Generate strategic knowledge that contributes to improvement in population health and nutrition, considering perspectives from diverse disciplines, issues of social and gender equality, and community participation.
2. Analyze the magnitude, distribution, and biological, cultural, social, and economic determinants of major nutrition problems at the global level and in Latin America and specifically examine the relationship of these issues to health and social development.
3. Based on scientific evidence (qualitative and quantitative), design programs and policies to prevent and control poor nutrition and promote good nutrition, taking into account organized social responses and ethical and biosafety factors.
4. Monitor the development of programs and policies for improving the nutritional status of the population, and evaluate their impact to guide decision-making.
5. Provide consulting for decision-makers and civil society on issues related to population nutrition.
6. Develop useful research methodologies on population nutrition.
7. Develop competitive research proposals on nutrition in public health, based on scientific evidence.
8. Develop teaching skills based on participatory learning methods.
9. Disseminate evidence-based information on nutrition by contributing to books, journal articles and documents directed toward decision-makers and the general public.
10. Interact with multidisciplinary research groups and other areas of public health (e.g., economy, anthropology) to analyze and plan actions for improving the nutritional status of the population.
11. Plan and coordinate fieldwork to respond to questions that arise during the research process.

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Cross-Cutting Competencies

1. Develop critical analyses of the state of knowledge and information in public health.
2. Actively participate in interdisciplinary work teams.
3. Carry out written and oral communication in a professional manner.
4. Demonstrate commitment and continual effort in performing professional tasks.

each professor in creating the learning methods and evaluations needed to achieve and measure students' mastery of the competencies. The professor is responsible for the academic planning of the courses and receives teaching and instructional orientation from the Academic Affairs Office area in charge of the curriculum design and faculty development.

Periodically when a course is offered by a new professor his or her work plan is analyzed by the Faculty College, whose members give academic feedback about the learning experiences that will be used in the class, as well as the most appropriate forms of evaluation to verify achievement of the competencies. Some Faculty Colleges ask external expert peers to analyze the courses. When the course plan has approval, the professor develops a detailed work plan. This work plan includes all the contents to be studied, the competencies that the student will acquire in each topic, the learning activities and supporting literature and the evaluation forms that will be developed. This detailed plan

is communicated to the students to guide class activities through all the semester. Examples of these work plans will be available in an on-site file.

To verify and maintain the coverage of the competencies across all the degree programs, the departments of Curriculum Design and Curriculum Administration within the Academic Affairs Office has each professor submit his or her work plan before the beginning of the semester for assessment and any adjustment, if needed. At the end of the semester students evaluate the professor's course delivery, including specifically coverage of all the topics and competencies described in the course work plan.

### 2.6.E

A description of the manner in which the school periodically assesses the changing needs of public health practice and uses this information to establish the competencies for its educational programs.

The INSP periodically consults constituents as part of a process for evaluating its overall efforts (described in Criterion 1.2.A). Consultation forums are developed with strategic partners (including directors of health research centers; representatives of other public health schools in Mexico, Latin America, the United States and Europe; alumni; and government, community and business representatives, among others) to gather feedback on the INSP's substantive tasks as well as suggestions for incorporating new thematic areas and competencies in the academic programs. (An example of forum results can be found in Appendix 2.6.e-1.) The INSP uses information from these activities to update competencies and other program elements to ensure that the Institute's instruction, research and service remain relevant in the face of changing public health needs.

Every three years academic programs are redesigned following the process published online under "Cuadernos de la Sac: Program Design." This process is conducted by the Curriculum Design department of the Office of Academic Affairs and includes:

1. **Study of cutting-edge trends in plans and programs.** Plans and programs from other institutions with innovative practices are analyzed.
2. **Consultation with experts.** To obtain critical viewpoints on the relevance of each academic program, experts are consulted both internally (INSP researchers) and externally (researchers from other national and international institutions).
3. **Surveys of potential students.** Potential students are surveyed to determine their needs and interests.
4. **Consultations with employers.** Health care employers are interviewed to identify their needs and guide analysis of the relevance of academic programs.

5. **Dialogue with professors.** Discussion groups are held with professors who teach within the academic program to ensure that their opinions are factored into the redesign.
6. **Dialogue with students.** Discussion groups are held with students to gather their opinions and perceptions of the academic programs to be redesigned.
7. **Survey of alumni.** Alumni are surveyed to identify the importance and frequency of use of competencies in daily work activities and during the learning process.
8. **Constituent consultation.** Findings of the consultation forums described above are analyzed and integrated into the restructuring process.

These elements are used to define competencies and content. (Appendix 2.6.e-2 presents the report developed for restructuring of the MPH as an example.)

### 2.6.F

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- All of the INSP's programs are competency-based. Each program was designed by faculty, discipline experts and pedagogic experts with knowledge of the core competencies needed in each concentration area.
- Competencies are explicit, measurable, widely disseminated, available for current and prospective students, and demonstrably tied to the INSP's mission, goals and objectives. These competencies guide the curriculum planning process.
- All programs include cross-cutting competencies that allow students to develop diversified skills that enrich their education.
- In all programs, competencies are regularly assessed and updated to ensure their ongoing relevance. Consultation with external constituents, for example INSP's strategic partners, helps monitor and adjust each program's competencies to maintain their relevance and quality.
- All current course syllabi are structured to define how the course teaches competencies.

#### Weakness

- Despite the different mechanisms for disseminating competencies to all INSP's members, students sometimes have difficulty identifying them through all their academic activities.

#### Future Plans

- The Office of Academic Affairs will work with the Faculty Colleges to promote more efficient strategies for disseminating competencies among all students. One specific action is to supervise the first week of classes to ensure that professors review the syllabus for each course in detail.
- Recommendations from the last external evaluation process (2010), which identified new competencies that students should acquire, will be included in the 2011 analysis used to redesign the Master of Health Sciences and future programs that are redesigned every 5 years.

### 2.7

**Assessment Procedures.** There shall be procedures for assessing and documenting the extent to which each student has demonstrated competence in the required areas of performance.

#### Required Documentation

##### 2.7.A

Description of the procedures used for monitoring and evaluating student progress in achieving the expected competencies.

For all its degree programs, the INSP uses three procedures to monitor and evaluate students' achievement of expected competencies:

1. **Course evaluations.** All courses have well-defined competencies that students develop throughout the class. Upon completion, the competencies are evaluated using tools identified in each course. The Department of Student Affairs analyzes students' grades and grade point averages to monitor their achievements each semester.
2. **Presentation and defense of the culminating experience.** Another evaluation mechanism is the presentation and defense of the degree thesis or Final Professional Project (PTP). The thesis or PTP is presented to a review and evaluation committee made up of professors who are experts in the selected topic, who assess students' performance and competencies. In the doctoral programs special sessions are developed each semester in which students present progress on their thesis to their review committee so faculty experts in the appropriate area can make suggestions to help students improve and finish their work. These presentations and the final defense of the

PTP and thesis are the best mechanisms for monitor and verifying students' achievement of the expected competencies.

3. **General competency examination.** The INSP is currently developing an instrument, which makes use of public health case studies to evaluate the degree to which MPH graduates have achieved the required competencies in their field. This strategy is still in the preliminary stage and is currently optional, but it will become a requirement in 2012. (See Criterion 2.7.B for more information about the exam.)

For the Master of Public Health, the practicum experience is also an opportunity for competency assessment. This experience requires that students apply in a real community setting the knowledge, skills, techniques and attitudes acquired in their courses, both core classes and those specific to each concentration area. Students in the MPH program present their final practicum projects to the Community Practicum Committee, where their preceptors and the general academic coordinator of the program comment on their work. These reviewers, along with community representatives invited to the presentation, also discuss strategies for enhancing actions to improve public health conditions in the communities where the practicum experience was developed. Students' performance at these presentations is part of their general assessment for the practicum.

The INSP is developing a more comprehensive plan to evaluate competencies, including a portfolio strategy to gather evidence regarding the academic achievement of competencies on an ongoing basis for students in all the programs. This strategy will allow students to show to the faculty involved in their program the fulfillment of each expected competency by making available academic evidence (e.g., essays, health diagnoses, scientific articles, other publications) developed through their stay. The INSP will be ready to launch this initiative at the end of 2012. A description of the future plans will be presented in the on-site resource file.

## 2.7.B

Identification of outcomes that serve as measures by which the school will evaluate student achievement in each program, and presentation of data assessing the school's performance against those measures for each of the last three years.

The achievement measures used by the INSP are course grades, graduation rates and job placement. To evaluate results over time, the Institute examined academic achievement of students enrolled at the MPH program of the classes that completed their studies in 2008, 2009, and 2010. The outcome measures are detailed in Table 2.17. The INSP has begun to implement general competency examinations for MPH students, but there are results only from 2009, as seen in detail below.

### Course Grades

An evaluation was performed on the grades obtained by students enrolled in the postgraduate programs that began in the years 2005, 2006 and 2007. The mean grades for the courses in the core areas of public health obtained by students enrolled for 2005 on a scale of 1 to 10 was 8.84 (range 8.75-8.92), for students enrolled in 2006 was 8.69 (range 8.59-8.78) and for students enrolled in 2007 was 8.82 (range 8.73-8.90). See Table 2.18, below, for mean grades broken out by core area. For all cases analyzed, there were no grades under 8.0.

### General Competency Examinations

For the Master of Public Health programs, the INSP has instituted general competency exams to evaluate students' competencies. The exam is based on case studies and consists of five sections corresponding to the core areas of public health. A separate component measures students' ability to make decisions.

**Table 2.17**  
**Outcome Measures for Evaluating Achievement among Students Graduating in the last 3 years 2009-2011**

Outcome Measure	Target	2005 Class	2006 Class	2007 Class
Mean course grade in core public health areas	8.5	8.84		8.82
MPH graduation rate (full time format)	80%	96%	78%	83%
MPH graduation rate (executive formats)	80%	NA	62%	Class 2007-2011 still has not fulfill its maximum time to graduate
Proportion of employed graduates working in public health	80%	86%	80%	80%

Note: In Mexico courses grades have a scale from 0 to 10.0. At the INSP, the minimum passing grade is a 7.0.

**Table 2.18**  
**Mean Grades and Ranges of Students Enrolled in Postgraduate Programs in Core Areas of Public Health**

Course	2005 Class	2006 Class	2007 Class
Social Sciences	9.30 (9.15-9.45)	8.95 (8.79-9.12)	8.60 (8.45-8.75)
Epidemiology	8.51 (8.35-8.67)	8.17 (8.00-8.34)	8.70 (8.50-8.85)
Biostatistics	8.99 (8.83-9.16)	8.92 (8.75-9.09)	8.88 (8.73-9.04)
Environmental Health	8.59 (8.46-8.72)	8.68 (8.55-8.81)	8.70 (8.56-8.80)
Health Systems Administration	8.80 (8.67-8.94)	8.81 (8.66-8.95)	9.19 (9.05-9.32)
Mean Grade (range)	8.84 (8.75-8.92)	8.69 (8.59-8.78)	8.82 (8.73-8.90)

In 2009, the general competency examination was administered to a pilot sample of 18 graduating students from the MPH program. The exam was reviewed and adjusted and administered again in 2010 and 2011. For 2012, it will be administered annually to all graduates at the end of each academic year. This three-year experience will be evaluated to decide if this general examination is useful to assess students' competencies. There are also plans to develop a portfolio project in 2012 as an alternative to this examination, as noted in Criterion 2.7.A.

### Graduation Rates

**Master of Public Health.** Students from the Master of Public Health have 4 years time to graduate from the year they entered to the program. Overall, graduation rates among students in the

full-time MPH program were 96% for the class of 2005, 81% for the class of 2006, and so far 92% for the class that enrolled in 2007 (see Table 2.19).

The classes with graduation dates completed in the last 3 years (2005-2007) achieved graduation rates with quality standards. The class that enrolled in 2006 is following the strategies described earlier (Criterion 1.2.E) to improve graduation rates, so better results are expected at the end of the current academic semester. Usually students take longer to graduate and the rates improve in the fourth year.

Graduation rates for the executive program take a longer time to reach acceptable levels. The program runs six months longer than full-time programs (2 years total), and students take more

**Table 2.19**  
**Enrollment and Graduation Rates for the Master of Public Health (full time format) for Classes 2005-2007**

Academic Program	2005 Class			2006 Class			2007 Class		
	Enrolled	Graduated	Graduation Rate	Enrolled	Graduated	Graduation Rate	Enrolled	Graduated*	Graduation Rate*
Master of Public Health	No.	No.	%	No.	No.	%	No.	No.	%
Health Systems Administration	5	4	80	13	9	69	7	6	86
Epidemiology	10	10	100	12	10	83	6	5	83
Social and Behavioral Sciences	10	10	100	11	10	91	9	9	100
Environmental Health	2	2	100	6	5	83	2	2	100
Biostatistics									
Total	27	26	96	42	33	81	24	20	92

\*As of November 30<sup>th</sup>, 2011.

Notes:

a. Gray cells indicate that the program was not running in that year.

b. The Master of Public Health with a concentration in Biostatistics was not open in 2005-2007 in a class oriented format because of low student applicants with interest in full time dedication. Instead in 2006, the program was open in executive format (see Table 2.18) and in 2010, the program was redesigned and became the Master of Public Health with a concentration in Biostatistics and Information Systems, which helped attract student interest for class oriented format with full time dedication in Cuemavaca Campus.

time to graduate because most of them hold middle- and higher-level positions in the Ministry of Health at the federal or state level. They have a time allowed of 4.5 years to graduate. Once they finish their course credits, they take more time to finish their thesis or PTP. The school's challenge is to improve graduation rates of executive format students within four years, a limit established by the INSP. At present the only class that has fulfilled graduation time is very close to reach quality standards (79%). With a strategy in place to speed up graduation rates, the INSP expects to show better results at the end of the current semester (see Table 2.20).

**Master of Health Sciences.** The Master of Health Sciences program includes 2 years of coursework plus an additional 2 years to finalize the thesis. For that reason the latest class that has completed the time for graduation rates is the one that corresponds to 2004-2007. The class that should have started in 2006 was not open because all Master of Health Sciences programs were completely redesigned so they were not available for new enrolled students in that year. The graduation rate for the 2004-enrolled class is 86%; for 2005 it is 84%; and for the most recent the 2007 class is as far as November 2011, 72% (See Table 2.21.)

### Doctorate Programs

In Table 2.22. are shown the graduation rates for all the Doctorate programs. The new guidelines (approved in 2010) for the Doctorate in Public Health Sciences allow students a maximum of 5 years to graduate after they enter the program. The previous guidelines that still apply to classes that enrolled in

**Table 2.20**  
**Enrollment and Graduation Rates for the Master of Public Health (executive format) for the Class Enrolled in 2006**

Academic Program	2006 Class		
	Number enrolled	Number graduated*	Percentage graduated *
Master of Public Health			
Health Systems Administration	6	5	83
Epidemiology	12	11	92
Social and Behavioral Sciences	5	3	60
Environmental Health	2	1	50
Biostatistics	4	3	75
Total	29	23	79

\*As of November 30<sup>th</sup>, 2011.

2003-2009 allow a maximum of 6 years to graduate after they start the Doctorate program. The Doctorate in Public Health started in 2008 and the Doctorate of Science in Population Nutrition until 2009 for that reason student are still attending courses and are not in time to graduate.

Classes from the Doctorate in Public Health Sciences that enrolled on 2003 and 2004 have obtained adequate results (91% and 86%) and the class that began in 2005 is close to fulfilled the expected graduation rate (75%) still having one semester more to graduate.

**Table 2.21**  
**Enrollment and Graduation Rates for the Master of Health Sciences for Classes 2004-2007**

Academic Program	2004 Class			2005 Class			2007 Class		
	Enrolled	Graduated	Graduation Rate	Enrolled	Graduated	Graduation Rate	Enrolled	Graduated	Graduation Rate
Master of Health Sciences	No.	No.	%	No.	No.	%	No.	No.	%
Epidemiology	4	4	100	6	5	83	7	5	71
Clinical Epidemiology	5	4	80	6	4	67	7	5	71
Biostatistics	4	4	100						
Environmental Health	9	7	78	6	6	100	6	5	83
Reproductive Health	6	4	67	5	5	100	6	4	67
Health Systems	4	3	75	4	3	75	5	3	60
Nutrition	7	7	100	10	9	90	11	6	55
Health Economics				6	5	83	5	5	100
Infectious Disease	6	5	83	8	6	75	7	6	86
Vector-Borne Diseases	5	5	100						
Total	50	43	86	51	43	84	54	39	72

\*As of November 30<sup>th</sup>, 2011.

Note: Gray cells indicate that the program did not enroll new students that year. The concentration in Vaccinology started until 2008.

**Table 2.22**  
**Graduation Rates for the Doctorate in Public Health Sciences for Classes Enrolled in 2003-2005**

Academic Program	2003-2009 Class			2004-2010 Class			2005-2011 Class		
	E	G*	GR	E	G*	GR	E	G*	GR
Doctorate in Public Health Sciences with concentration in:	No.	No.	%	No.	No.	%	No.	No.	%
Epidemiology	4	4	100	3	3	100	5	4	80
Health Systems	3	2	67	3	2	67	3	2	67
Infectious Disease	4	4	100	1	1	100	0	0	0
Total	11	10	91	7	6	86	8	6	75

Key: E= Enrolled G: Graduates G.R.: Graduation Rate

\* As of November 30<sup>th</sup>, 2011.

### Job Placement

As part of the evaluation of student achievement, the INSP has begun to survey alumni to identify their job placements and the application of competencies they developed during their academic program. A total of 367 students graduated between 2007 and 2010 from different classes belonging to all the programs. The survey was sent to all 367 alumni in the period of Fall 2009-Spring 2011, of whom 192 (52%) responded.

Among graduates from the MPH programs, 84% of students returned to previous jobs or found new ones in the government health sector (mostly in the Ministry of Health), 2.8% are working in activities related with health care delivery, 0.7% work in private practice, 6.9% are involved in teaching or research in a university or other education institution, 0.7% work in a proprietary organization, 1.4% are gaining further education and 3.4% are not employed.

Among graduates from the Master of Health Sciences programs, 65.3% of students returned to their jobs or found new ones in the government health sector, 4.1% participate in activities in health care, 26.5% in activities related to teaching or research in a university or other education institution and 4.1% are not employed. Among graduates from the Doctoral program, 60% of students found work in the government health sector, 40% work in teaching and research. See Table 2.23 for detailed results.

Of the graduates who reported working in the health sector, 80% entered or returned to positions as the Coordinator or Chair of a Health Systems Department, usually in agencies within the Ministry of Health. Students who most frequently reported achieving these positions are in the fields of health system/service administration and epidemiology. The survey has shown that more than 80% of graduates found new jobs or returned to their jobs within six months after graduation. The INSP is in the

**Table 2.23**  
**Job Placement of Students Who Graduated in 2007-2010**

Academic Program	Area of Work (number and percentage of graduates)									# of Alumni 2007- 2010	# of Survey Respondents	% of Total Respondents by Program
	Gov't	Non-profit	Hospital/ Health Care Delivery	Private Practice	Univ./ Research	Proprietary	Further Education	Non-health	Not Emp.			
Master of Public Health	121 (84%)	0 (0%)	4 (2.8%)	1 (0.7%)	10 (6.9%)	1 (0.7%)	2 (1.4%)	0 (0%)	5 (3.5%)	216	144	67%
Master of Health Sciences	32 (65.3%)	0 (0%)	2 (4.1%)	0 (0%)	13 (26.5%)	0 (0%)	0 (0%)	0 (0%)	2 (4.1%)	134	49	37%
Doctorate in Public Health Sciences	6 (60%)	0 (0%)	0 (0%)	0 (0%)	4 (40%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	17	10	59%
Total Survey Respondents	154 (80.2%)	0 (0%)	2 (1%)	1 (0.5%)	27 (14.1)	1 (0.5%)	1 (0.5%)	0 (0%)	6 (3.1%)	367	192	52%

process of strengthening its strategy for systematically collecting alumni information.

### 2.7.C

If the outcome measures selected by the school do not include degree completion rates and job placement experience, then data for these two additional indicators must be provided, including experiential data for each of the last three years. If degree completion rates, in the normal time period for degree completion, are less than 80%, an explanation must be provided. If job placement, within 12 months following award of the degree, is less than 80% of the graduates, an explanation must be provided.

Degree completion rates and job placement are presented in Criterion 2.7.B. Graduation rates are one of the INSP's greatest concerns. The Institute has studied this issue extensively, including examining factors affecting low graduation rates and strategies for addressing these factors:

- **Maximum allowable time for graduation.** The MPH program can be completed in 1.5 years, but the INSP allows students a maximum of 3 years to graduate. Students can request an extension of 1 additional year if they can provide an appropriate reason. Thus, students are allowed a maximum of 4 years to obtain their degree. This long period of time often reduces students' commitment to finishing their degree in a shorter amount of time.

*Action taken to address this issue and promote graduation:* A new policy is in the final stage of approval so that starting in 2011 students will be allowed a maximum of 3 years to obtain an MPH degree in the full-time program and 4 years in the executive and online formats.

- **Difficulty of scheduling work on the final project given the program's academic demands.** The MPH is very demanding and requires a high level of student dedication to complete the academic program as well as 3 semesters of practicum, foreign language instruction, and electives, among other requirements. This makes it challenging for students to develop their thesis or PTP during the academic program. Therefore many students write the PTP after they complete their class work.

*Action taken to address this issue and promote graduation:* Beginning in 2010, students will be required to present work in progress on their thesis or PTP at pre-scheduled seminars during the second and third semesters in order to ensure the progressive development of the projects with advisors' support until completion.

- **Need for students to return to work.** After finishing their academic work, most INSP students return to their jobs

or other activities in states across the country, which makes it difficult for them to complete their thesis or PTP.

*Action taken to address this issue and promote graduation:* The INSP has made an agreement with CONACyT, the federal agency that provides scholarships for INSP students, to extend scholarships for one extra semester so that students can be supported financially while finishing their thesis or PTP. This scholarship extension will be authorized as of September 2010.

- **External thesis directors with multiple priorities.**

Some thesis directors are chosen from other institutions for their specific expertise in an area. Their workloads and priorities outside of the INSP can affect their relationships with students.

*Action taken to address this issue and promote graduation:* In the case of an external thesis director, an internal faculty member will be assigned to help advise the student and ensure adherence to the project timeline.

In addition to these specific strategies, the INSP has also instituted several broad changes designed to help students complete their graduation requirements:

1. Personalized and systematic monitoring by academic coordinators and the Faculty Colleges.
2. Workshops to review progress and present advances, enabling students and professors to identify possible problems and their solutions and promote student-student support.
3. Individual sessions with students to make them aware of the importance of obtaining a degree on time to accredit their knowledge.

The collegiate bodies will gauge the success of these efforts through regular evaluations of graduation rates and time to completion. All academic groups and coordinators will meet periodically to assess the situation and create more efficient supervision strategies to monitor the advances of students in all programs.

### 2.7.D

A table showing the destination of graduates by specialty area for each of the last three years. The table must include at least a) government (state, local, federal), b) nonprofit organization, c) hospital or health care delivery facility, d) private practice, e) university or research institute, f) proprietary organization (industry, pharmaceutical company, consulting), g) further education, h) non-health related employment, or i) not employed.

Tables 2.24 through 2.27 provide details about the destination of graduates by year and specialty area. This data includes all the alumni that graduated during the period 2007-2010 from different classes of all the INSP programs (see Criterion 2.7.B).

**Table 2.24  
Destination of Graduates by Program Area, 2007**

Program Area	Government		Nonprofit		Hospital/ Health Delivery		Private Practice		University/ Research		Proprietary		Further Education		Non-Health Related		Not Employed		Total Response	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Master of Public Health with concentration in Epidemiology	8	89							1	11									9	100
Master of Public Health with concentration in Health Systems Administration	8	100																	8	100
Master of Public Health with concentration in Environmental Health	1	50							1	50									2	100
Master of Public Health with concentration in Social and Behavioral Sciences	4	67							2	33									6	100
Master of Public Health with concentration in Nutrition	4	80							1	20									5	100
Master of Public Health on line	3	100																	3	100
MPH alumni from other classes	1	50							1	50									2	100
Master of Health Sciences with concentration in Epidemiology	3	75							1	25									4	100
Master of Health Sciences with concentration in Environmental Health	2	100																	2	100
Master of Health Sciences with concentration in Reproductive Health	4	80							1	20									5	100
Master of Health Sciences with concentration in Health Systems	1	100																	1	100
Master of Health Sciences with concentration in Nutrition	4	80							1	20									5	100
Master of Health Sciences with concentration in Infectious Diseases	2	100																	2	100
Master of Health Sciences with concentration in Vector-borne Diseases	3	100																	3	100
Master of Health Sciences Alumni from other classes	1	50							1	50									2	100
Doctorate in Public Health Sciences with concentration in Epidemiology	2	50							2	50									4	100
Doctorate in Public Health Sciences with concentration in Health Systems	3	75							1	25									4	100
Total	54	81	0	0	0	0	0	0	13	19	0	0	0	0	0	0	0	0	67	100

Source: 2007-2010 databases, Department of Scholar Administration (DAE) and Alumni Academic Training Program (PROFAE).

**Table 2.25**  
**Destination of Graduates by Program Area, 2008**

Program Area	Gov't		Nonprofit		Hospital/ Health Delivery		Private Practice		University/ Research		Proprietary		Further Education		Non-Health Related		Not Employed		Total Response			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Master of Public Health with concentration in Epidemiology	6	86													1	14	7	100				
Master of Public Health with concentration in Health Systems Administration	5	72									1	14					7	100				
Master of Public Health with concentration in Environmental Health	2	100															2	100				
Master of Public Health with concentration in Biostatistics and Information Systems	2	66.7							1	33.3							3	100				
Master of Public Health with concentration in Social and Behavioral Sciences	6	100															6	100				
Master of Public Health with concentration in Vector-borne Diseases																			1	100	1	100
Master of Public Health (online)	11	100																			11	100
MPH Alumni from other classes	5	83						1	17												6	100
Master of Health Sciences with concentration in Clinical Epidemiology	1	100																			1	100
Master of Health Sciences with concentration in Biostatistics																			1	100	1	100
Master of Health Sciences with concentration in Environmental Health	2	100																			2	100
Master of Health Sciences with concentration in Reproductive Health	1	100																			1	100
Master of Health Sciences with concentration in Health Systems										1	100										1	100
MHS Alumni from other classes	5	100																			5	100
Doctorate in Public Health Sciences with concentration in Epidemiology																					1	100
Doctorate in Public Health Sciences with concentration in Health Systems	1	100																			1	100
Total	47	84	0	0	0	0	0	1	2	3	5	1	2	1	2	0	0	3	5	56	100	

Source: 2007-2010 databases, Department of Scholar Administration (DAE) and Alumni Academic Training Program (PROFAE).

**Table 2.26  
Destination of Graduates by Program Area, 2009**

Program Area	Gov't		Nonprofit		Hospital/ Health Delivery		Private Practice		University/ Research		Proprietary		Further Education		Non-Health Related		Not Employed		Total Response	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Master of Public Health with concentration in Epidemiology	14	100																	14	100
Master of Public Health with concentration in Health Systems Administration	8	80			1	10			1	10									10	100
Master of Public Health with concentration in Environmental Health																	1	100	1	100
Master of Public Health with concentration in Biostatistics and Information Systems	1	100																	1	100
Master of Public Health with concentration in Social and Behavioral Sciences	6	75							2	25									8	100
Master of Public Health (online)	21	100																	21	100
MPH Alumni from other classes																	1	100	1	100
Master of Health Sciences with concentration in Epidemiology									1	100									1	100
Master of Health Sciences with concentration in Environmental Health	2	100																	2	100
Master of Health Sciences with concentration in Reproductive Health									3	100									3	100
Master of Health Sciences with concentration in Health Systems									1	50							1	50	2	100
Master of Health Sciences with concentration in Nutrition									3	100									3	100
Master of Health Sciences with concentration in Infectious Diseases	1	100																	1	100
Master of Health Sciences Alumni from other classes																	1	100	1	100
Doctorate in Public Health Sciences with concentration in Epidemiology																			0	0
Total	53	77	0	0	2	3	0	0	11	16	0	0	0	0	0	0	3	4	69	100

Source: 2007-2010 databases; Department of Scholar Administration (DAE) and Alumni Academic Training Program (PROFAE).

**Table 2.27**  
**Destination of Graduates by Program Area, 2010**

Program Area	Government		Nonprofit		Hospital/ Health Care Delivery		Private Practice		University/ Research		Proprietary		Further Education		Non-Health Related		Not Employed		Total Response		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Master of Public Health with concentration in Epidemiology	3	100																		3	100
Master of Public Health with concentration in Health Systems Administration	2	33			2	33			1	17			1	17			1	100		6	100
Master of Public Health with concentration in Environmental Health Information Systems																				1	100
Master of Public Health with concentration in Biostatistics and Sciences									2	100										2	100
Master of Public Health with concentration in Nutrition					1	100														1	100
Other generations alumni																					
Master of Health Sciences with concentration in Epidemiology																					
Master of Health Sciences with concentration in Clinical Epidemiology									1	100										1	100
Master of Health Sciences with concentration in Biostatistics																					
Master of Health Sciences with concentration in Environmental Health																					
Master of Health Sciences with concentration in Reproductive Health																					
Master of Health Sciences with concentration in Health Systems																					
Master of Health Sciences with concentration in Nutrition																					
Master of Health Sciences with concentration in Health Economics																					
Master of Health Sciences with concentration in Infectious Diseases																					
Master of Health Sciences with concentration in Vector borne Diseases																					
Master of Health Sciences with concentration in Vaccinology																					
Other generations alumni																					
Doctorate in Public Health Sciences with concentration in Epidemiology																					
Doctorate in Public Health Sciences with concentration in Health Systems																					
Doctorate in Public Health Sciences with concentration in Infectious Diseases																					
Doctorate in Public Health Sciences with concentration in Population Nutrition																					
Doctorate in Public Health																					
Other programs																					
Total	5	36	0	0	3	21	0	0	4	29	0	0	1	7	0	0	1	7	14	100	

\*The data information includes the one collected from Fall 2009 til 31/01/2011.

Source: Includes graduates in years 2007-2010 , Department of Scholar Administration (DAE) and Alumni Academic Training Program (PROFAE).

**2.7.E**

In public health fields where there is certification of professional competence, data on the performance of the school's graduates on these national examinations for each of the last three years.

This criterion does not apply to the INSP because Mexico does not have national evaluations that certify professional competencies in any of the fields of public health.

**2.7.F**

Data describing results from periodic assessments of alumni and employers of graduates regarding the ability of the school's graduates to effectively perform the competencies in a practice setting.

To evaluate the competencies of public health professionals trained at the INSP—and to provide feedback for curriculum revisions—the Institute periodically surveys graduates electronically and at public health meetings. These surveys integrate both specific and open questions and responses. The objective of the survey is to identify the importance of the competencies in graduates' professional tasks and the frequency with which they are used in daily practice. The survey assess 8 professional and 10 cross-cutting competencies as well as specific competencies in epidemiology and biostatistics (4), environmental health (5), administration (5) and social sciences (3) (for more detail, see Appendix 2.7.f).

In 2009, a survey was administered to 52 alumni from across the INSP's programs who were working as public health professionals. The mean age of the sample was 47.8 years; there were 36 women and 16 men. Of the competencies acquired during their academic training, those most relevant to graduates were:

1. Analyze information from the diagnostic process to prioritize health needs and requirements.
2. Apply knowledge gained during the practicum.
3. Coordinate entities to obtain information and develop and implement epidemiology surveillance systems.
4. Apply basic health research principles.
5. Monitor health laws, regulations and standards and advocate for enforcement and appropriate updates.
6. Demonstrate and promote social commitment in the administration of health services.
7. Analyze the role of social and behavioral factors in public health.

Cross-cutting competencies were perceived as the most useful in work situations, with an emphasis on the development of principles and values such as solidarity, equity and respect for human dignity. Other competencies noted were coordinating fieldwork to control outbreaks and other epidemiological emergencies; monitoring

the application of laws, regulations and standards related to health and promoting enforcement and updating of these regulations; analyzing the role of social factors and behavior in health-disease processes; and promoting social participation in the improvement of health services, valuing and respecting cultural diversity.

The INSP also carries out periodic assessments of employers through consultation forums with strategic partners (see Criterion 1.2.A). The results of these activities allow the identification of employers' and strategic partners' needs and demands through direct feedback. In these meetings employers give recommendations about how to improve the quality of the INSP's academic programs and guarantee their relevance to current public health needs. In the two last consultation forums conducted during the first half of 2010, employers and strategic partners offered several recommendations to strengthen alumni performance in specific competencies as a result of assessments of graduate job performance. Some of these recommendations were:

- To improve academic promotion by efficiently detecting requests for professional training in public health areas throughout the country.
- Strengthen the curricular design of academic programs, particularly in terms of competencies related to technical knowledge in policy management and practicum experience in policy problem-solving.
- Improve knowledge of public administration operation and services through practical experience in this area.
- Promote students' capacity to develop efficient communication skills with civil society sectors and health systems, both locally and globally.
- Develop academic relationships with other educational institutions in the country and establish links with industries and companies for internships.

All the information received through these forums is shared with the areas responsible for the design and operation of major activities. The information is discussed and analyzed in order to develop high-impact strategies to strengthen institutional work. Specific results of employers' suggestions can be found in Tables 14-16 located in Appendix 1.2.a-2.

**2.7.G**

Assessment of the extent to which this criterion is met.

This criterion is met except for the few classes of the programs that are still in process of reaching 80% graduation rates.

**Strengths**

- The INSP uses diverse mechanisms to evaluate mastery of competencies.

- The Institute has established systematic programs to track graduate job placements; alumni have reported success in finding jobs within 6 months after graduation in areas related to their program of study.

### Weakness

- Students take longer to graduate than the time the INSP has defined for each program. Particularly in the Master of Public Health executive format, students take a longer time to graduate because of their job activities.

### Future Plans

- Efforts to improve graduation rates within the INSP's timeline are ongoing. Strategies employed to increase efficient completion include individual follow-up with students to monitor progress, with the support of an advisor who accompanies the student from enrollment to graduation; workshops for writing scientific articles to help students complete their final products; and periodic analysis of graduation rates through meetings with academic coordinators, program committees and Faculty Colleges.
- One major change that is expected to produce favorable results is the extension of CONACyT scholarships. The INSP successfully negotiated an extension beginning in 2010 so that, when needed, students can receive funding to remain at the INSP for up to 6 months after they finish their coursework to complete their final product, although this benefit extends only to full-time students.
- In 2011 the INSP will implement a new strategy to assess competencies through a portfolio project. For this project, students select academic work demonstrating each core, specific and cross-cutting competency for their programs. Portfolios are assessed by a committee at the end of the program.

## 2.8

**Other Professional Degrees.** If the school offers curricula for professional degrees other than the MPH or equivalent public health degrees, students pursuing them must be grounded in basic public health knowledge.

### Required Documentation

#### 2.8.A

Identification of professional degree curricula offered by the school, other than those preparing primarily for public health careers, and a description of the requirements for each.

In addition to the MPH, the Specialty in Health Promotion, the Residence in Public Health and Preventive Medicine and the

Doctorate in Public Health, the INSP offers as professional program a Master in Clinical Nutrition.

### Master in Clinical Nutrition

The development of professionals in the field of nutrition continues to evolve in Mexico. Although nationally 43% of graduates with a bachelor's degree in nutrition are working in clinical nutrition, specializations in this field are few. A clinical nutritionist is a health professional who can both evaluate the nutritional status of individuals and promote support systems to prevent and treat important nutrition-related illnesses. These professionals work in hospitals, ambulatory clinics, and a variety of centers and offices to care for the nutritional needs of healthy, at-risk and sick individuals.

The general objective of this master's-level program is to train expert clinical nutritionists who can provide high-quality, effective and safe nutritional care; prevent diseases related to nutrition; take into account current scientific evidence to decrease the risks of disease; and address public health problems through the use of critical thinking and timely decision making.

Successful candidates are graduates of bachelor programs in nutrition or similar fields with demonstrable experience and skills in clinical nutrition. Students must complete a two-year program of study, including a daily professional practicum that takes place throughout the second year. Part of the program is completed at the National Institute of Perinatology in Mexico City, an institution that collaborates to develop the academic program, especially in terms of the practicum experiences.

Students complete two practicum internships (Clinical Nutrition Internship I and II) during their third and fourth semesters. Students carry out professional practices in different areas of clinical nutrition during which they learn to assess the nutritional status of patients with chronic degenerative diseases, design and implement individual nutritional care plans and monitor the nutritional and clinical outcomes of these patients. Competencies for the program are delineated in Table 2.28.

Students from this program develop a PTP to graduate. This project engenders creating a clinical nutrition case report which, like PTPs in other programs, is defended in an oral presentation. The case report is drawn from the practicum experiences (Clinical Nutrition Internship I and II). During that activity, students must select a health condition that is of interest and conduct an extensive literature review to find the strongest scientific evidence regarding the nutritional management of this disease. The student selects a patient with this disease from one of his or her rotations and prepares a case report detailing a nutritional care plan and the patient's response to the intervention. This project ensures that each student demonstrates skills and integration of knowledge in clinical nutrition and public health.

**Table 2.28**  
**Core and Cross-Cutting Competencies**  
**for the Master in Clinical Nutrition**

Professional Core Competencies

1. Develop epidemiological prevention and control measures and programs for both healthy and sick individuals through the organization of individual or group nutritional care and the use of specific educational materials.
2. Develop and apply design and analysis methodologies that are appropriate for planning, implementing and evaluating programs for health promotion and disease prevention.
3. Propose improvements for clinical nutrition practice through the application of current scientific evidence to promote behavior change and treatment adherence.
4. Evaluate the nutritional status of healthy and sick individuals to develop a nutritional diagnosis.
5. In consultation with other members of the health team, design individual nutritional care plans directed toward risk reduction and disease prevention and control.
6. Implement and evaluate enteral and parenteral nutrition for clinically stable individuals as well as for those with complex health conditions.

Cross-Cutting Competencies

1. Base professional tasks on current scientific knowledge and perform them in an ethical manner, with an attitude of service and social commitment.
2. Develop interdisciplinary work skills with an emphasis on the development of principles and values such as solidarity, equity and respect for human dignity.
3. Critically review scientific literature to improve the health level of the population.
4. Use general informatics tools to support research and teaching.
5. Apply social skills for collaborative work.
6. Effectively use oral and written communication tools in carrying out the work.
7. Practice effective and efficient decision making applied to clinical nutrition matters.

**2.8.B**

Identification of the manner in which these curricula assure grounding in public health core knowledge. If this means is common across these other professional degree programs, it need be described only once. If it varies by program, sufficient information must be provided to assess compliance by each program.

**Master in Clinical Nutrition**

The Master in Clinical Nutrition shares courses with the MPH program, including Social Determinants of Health, Bioethics, Epidemiology, and Biostatistics, in addition to some of the courses in the Environmental and Health Systems concentration. Table 2.29 shows core knowledge courses and credits for this program.

**2.8.C**

Assessment of the extent to which this criterion is met.

**This criterion is met.**

**Strengths**

- All professional programs offered by the INSP include competencies in the five core areas of public health to ensure that every student obtains public health core knowledge.
- The academic offerings for professional degrees other than the MPH and doctoral degrees strengthens the INSP's reach and relevance and widens opportunities for professionals working in health-related activities.

**Table 2.29**  
**Core Knowledge Courses in the Master in Clinical Nutrition Program**

Core Areas of Public Health	Courses That Cover Core Areas	Credits
Epidemiology	Epidemiology (EP01)	8.0
Health Systems Administration	Health Systems Seminars (SP04)	4.0
Biostatistics	Biostatistics (BE01)	8.0
Environmental Health	Environmental Health (SA08)	4.0
Social and Behavioral Sciences	Social Determinants of Health (CS15)	8.0
	Bioethics (SP38)	5.0

## Weaknesses

- We have identified no weaknesses in this area.

## Future Plans

- The Faculty College and the Office of Academic Affairs will closely follow up students' achievement in its first year of the program's development to ensure competencies in the core public health areas. If required, complementary activities will be developed with students to enrich their academic achievements.

## 2.9

**Academic Degrees.** If the school also offers curricula for academic degrees, students pursuing them shall obtain a broad introduction to public health, as well as an understanding about how their discipline-based specialization contributes to achieving the goals of public health.

### Required Documentation

#### 2.9.A

Identification of all academic degree programs, by degree and area of specialization. The instructional matrix may be referenced for this purpose.

The academic programs are identified in the instructional matrix (Table 2.1) in Criterion 2.1.A.

#### 2.9.B

Identification of the means by which the school assures that students in research curricula acquire a public health orientation. If this means is common across the school, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

The academic research programs are directly related to the INSP's mission and objectives for each substantive research area. Thus, students in these programs work on research projects that focus on national public health priorities. In addition to research training, all academic programs have measures in place to guarantee that students are trained in the five core areas of public health:

- I. All academic programs share three core courses: Epidemiology, Biostatistics and Bioethics.

2. Each academic program includes within its own curriculum courses for Social and Behavioral Sciences, Health Systems and Environmental Health, with a program-specific focus.
3. Two annual seminars (courses where specific and variable topics are explored with students) are offered in Health Systems and Environmental Health. These seminars are required for graduation.
4. Numerous elective courses in basic areas of public health are offered during the school year and over the summer.
5. As part of the extracurricular academic program, students attend monthly seminars offered by the INSP, with lectures from public health officials oriented toward core topics in public health.

In addition, all degree programs offer supplementary courses in public health for students in the intermediate and advanced stages of their studies. For example, after finishing the common core courses, Master of Health Sciences students with a concentration in epidemiology must enroll in the following courses: Selected Topics in Epidemiology, Intermediate Methods in Biostatistics, and Sampling. Students in the Master of Health Sciences concentrating on health systems must enroll in courses on Health Economics, Social Sciences in Public Health, and Applied Statistics for Health Systems.

#### 2.9.C

Identification of the culminating experience required for each degree program. If this is common across the school's academic degree programs, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

To obtain a Master of Health Sciences degree, students must develop a thesis based on original empirical research. To accomplish this, students may join a research group, which allows them to participate in diverse stages of research on a range of public health topics. Students do fieldwork to collect information and participate in the analysis stage. In both cases, students develop research questions aimed at testing hypotheses of public health issues relevant to national priorities. A thesis committee composed of a director and two advisors ensures that students conduct high-quality work and receive sufficient guidance. Both the thesis topic and the committee are approved by the members of the corresponding Faculty Colleges, who verify that the committees are made up of experts in the study topic. During the summer, and as part of the extracurricular academic program, workshops on writing scientific articles are taught so that students who are in the writing stage of their work receive training and guidance. The thesis must be approved by the Thesis Committee and defended as part of the degree examination before a panel of professors/researchers in the topic area.

The same process applies for students in doctoral programs. These students must also develop one article based on their research that is accepted for publication by a top-tier scientific journal or prepare and send two articles for possible journal approval. The qualifying exam required for all doctoral programs also constitutes a culminating experience due to its integrative approach to competencies developed throughout the training. Figure 2.2 describes the process doctoral students must follow to graduate.

**2.9.D**  
Assessment of the extent to which this criterion is met.

This criterion is met.

**Strengths**

- The INSP offers an ample variety of academic programs pertinent to its mission with a strong research orientation.
- Students enrolled in the academic degree programs have a wide range of opportunities to complete training in the core areas of public health and to obtain first-hand experience and

a multidisciplinary understanding of these core areas. Students gain knowledge of the core areas of public health in the following ways: 1) required core courses in public health across all academic master programs; 2) elective courses in public health; 3) required seminars in environmental health and health systems; 4) monthly seminars held throughout the academic year in which public health officials participate as lecturers; and 5) complementary courses in all program areas.

- During their education and training, all students from academic programs have the opportunity to interact with professionals working in the field of public health.
- The culminating experience of all academic programs—both master’s and doctoral—is directly relevant to the program’s orientation. The program engages students in research activities that are integrated into a thesis that is supervised by a thesis committee and is orally defended during the degree exam.

**Weakness**

- An academic program usually demands a heavy workload from students to finish their thesis or articles in time for graduation.

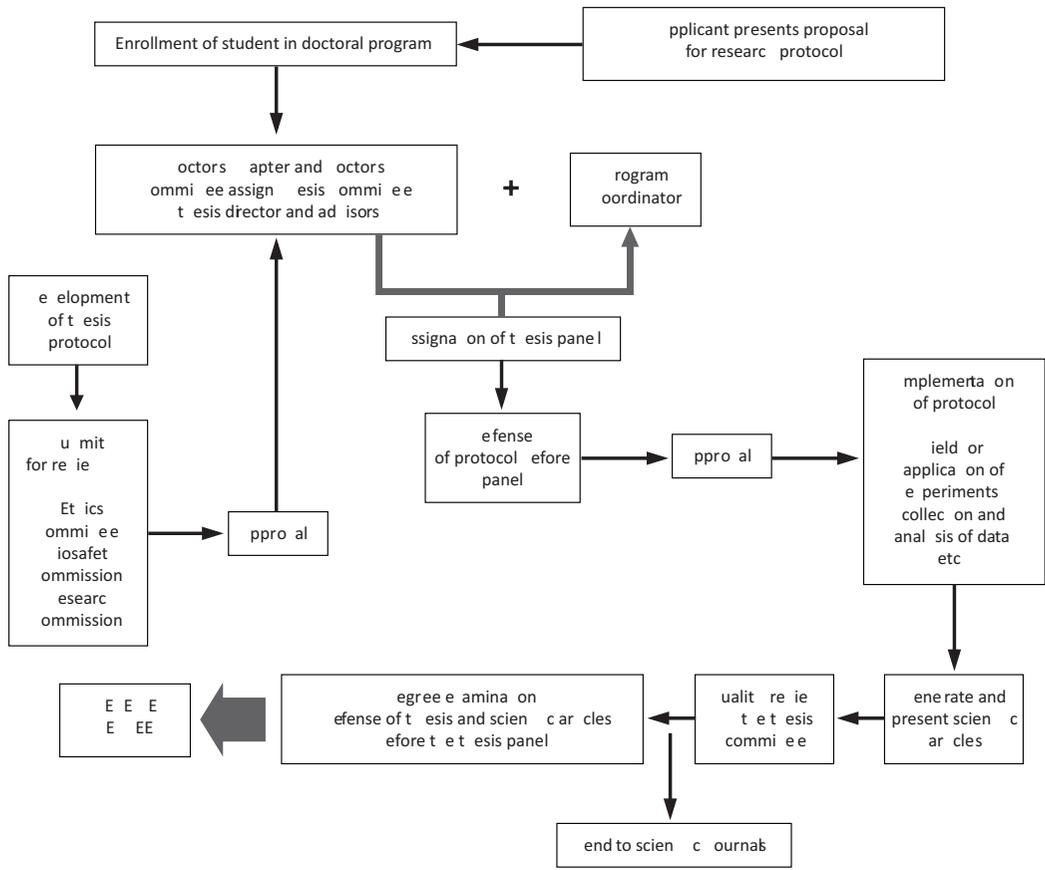


Figure 2.2. Graduation Requirements for Doctoral Students in Academic Programs

## Future Plans

- A redesign of the Master of Health Sciences program is in process for 2011 that will evaluate the possibility of instituting a lower quantity of credits for class activities and providing more time for students to work on their culminating thesis or article.

### 2.10

**Doctoral Degrees.** The school shall offer at least three doctoral degree programs that are relevant to any of the five areas of basic public health knowledge.

#### Required Documentation

##### 2.10A

A Identification of all doctoral programs offered by the school, by degree and area of specialization. The instructional matrix may be referenced for this purpose. If the school is a new applicant and has graduates from only one doctoral program, a description of plans and a timetable for graduating students from the other two doctoral programs must be presented, with university documentation supporting the school's projections.

The doctoral programs are included in the instructional matrix (Table 2.1).

##### 2.10.B

Data on the number of active students in each doctoral degree program as well as applications, acceptances, enrollments and graduates for the last three years.

Information on doctoral student admissions, enrollment, and graduation for the past three years, including the number of active students, is presented in Tables 2.30 and 2.31.

The programs that have graduates are the Doctorate in Public Health Sciences with concentration areas in Epidemiology, Health Systems and Infectious Diseases. Since the Doctorate in Public Health opened in 2008 and the Doctorate in Public Health Sciences in Population Nutrition began in 2009, the time that students have to graduate still has not been completed so they do not have any graduates yet.

According to guidelines for the classes that enrolled before 2010 the three Doctorates in Public Health Sciences programs last up to 4 years with the possibility of extending for graduation to 6 years, so graduation rates were analyzed for classes enrolled in 2003-2005. At the time of this evaluation, the total graduation rate for the 2003 class was 91%, for the 2004 class was 86%, and for the 2005 class is 75% so far with still one semester to graduate (Table 2.31).

Excessive workloads, late selection of thesis topics and economic or personal problems (for example, students needing to return to their place of origin to work once they complete their coursework and their scholarships end) are the most important factors that delay graduation among doctoral students. To support graduation rates, the academic coordinators and the Faculty Colleges supervise students' progress. The academic coordinators guide students from their first semesters, supervising the selection of the thesis topic, helping choose the most appropriate thesis advisor and soliciting the support of other advisors to facilitate access to research opportunities linked to the thesis project. Each student is assigned an advisor named tutor on entrance to the program. This advisor periodically reports on student progress and identifies possible problems that could delay graduation. In

**Table 2.30**  
**Data on Doctoral Student Applicants, Acceptances, and Enrollment for Classes Entering in 2008-2010**

Program	2008-2014			2009-2015			2010-2016			2011-2017		
	Applications	Acceptances	Enrollments									
Doctorate in Public Health Sciences with concentration in Epidemiology	15	5	5	16	7	7	6	3	3	16	5	5
Doctorate in Public Health Sciences with concentration in Health Systems	10	5	4	8	5	5	4	0	0	14	5	4
Doctorate in Public Health Sciences with concentration in Infectious Diseases	1	1	1	3	3	3	8	4	3	9	4	4
Doctorate in Public Health	26	9	9	36	13	13	38	10	9	18	7	7
Doctorate in Public Health Sciences in Population Nutrition *				10	6	6	9	3	2	8	3	2
Total	52	20	19	73	34	34	65	20	17	65	24	22

Note: Gray squares means that the Program was not open in that year.

\*Program began in 2009.

**Table 2.31**  
**Graduation Rates for the Doctorate in Public Health Sciences for Classes Enrolled in 2003-2005**

Academic Program	2003-2009 Class			2004-2010 Class			2005-2011 Class		
	E	G*	GR	E	G*	GR	E	G*	GR
<i>Doctorate in Public Health Sciences with concentration in:</i>	No.	No.	%	No.	No.	%	No.	No.	%
Epidemiology	4	4	100	3	3	100	5	4	80
Health Systems	3	2	67	3	2	67	3	2	67
Infectious Disease	4	4	100	1	1	100	0	0	0
Total	11	10	91	7	6	86	8	6	75

Key: E= Enrolled                      G: Graduates                      G.R.: Graduation Rate

\* As of November 30<sup>th</sup>, 2011.

subsequent semesters the academic coordinator organizes meetings to monitor progress and reports to the collegiate bodies that participate in the supervision of each doctoral program. In addition, doctoral students present biannual reports on their thesis progress with their thesis advisor. The research center directors also participate in the supervision of the students' academic progress and, when needed, the collegiate bodies work to find possible solutions to specific problems.

### 2.10.C

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The INSP offers five doctoral degrees--three Doctorates in Public Health Sciences, one Doctorate in Public Health Science in Population Nutrition and one professional Doctorate in Public Health—with qualified and sufficient faculty, as seen in Criterion 1.6.D.
- The Doctorate in Public Health is offered in an executive format. This format accommodates professionals who are working in managerial positions in the health system.

#### Weakness

- The graduation rates for the Doctorate in Public Health Sciences take longer to reach acceptable levels.

#### Future Plans

- To support graduation rates in doctoral programs, the academic coordinators and the Faculty Colleges that supervise students' progress will maintain and strengthen the follow-up actions described in Criterion 2.10.B.

### 2.11

**Joint Degrees.** If the school offers joint degree programs, the required curriculum for the professional public health degree shall be equivalent to that required for a separate public health degree.

This criterion does not apply, since the INSP does not offer joint degree programs.

### 2.12

**Distance Education or Executive Degree Programs.** If the school offers degree programs using formats or methods other than students attending regular on-site course sessions spread over a standard term, these programs must a) be consistent with the mission of the school and within the school's established areas of expertise; b) be guided by clearly articulated student learning outcomes that are rigorously evaluated; c) be subject to the same quality control processes that other degree programs in the school and university are; and d) provide planned and evaluated learning experiences that take into consideration and are responsive to the characteristics and needs of adult learners. If the school offers distance education or executive degree programs, it must provide needed support for these programs, including administrative, travel, communication, and student services. The school must have an ongoing program to evaluate the academic effectiveness of the format, to assess teaching and learning methodologies and to systematically use this information to stimulate program improvements.

The INSP offers online and executive formats for Master of Public Health programs. These formats address the need to provide quality for training for professionals who implement the National Health Program in all the areas of the Ministry of Health (SSA). The INSP is in constant communication with the SSA to develop appropriate competencies and train its health workforce while they are implementing public health policies and programs within the country and across the region. The executive and online formats are aligned with the INSP's mission, vision and goals for training public health professionals. These formats are subject to the same quality control processes as full-time programs, and they are responsive to the characteristics and needs of adult working learners as described below, including the application of clearly articulated and rigorously evaluated learning outcomes.

## Required Documentation

### 2.12.A

Identification of all degree programs that are offered in a format other than regular, on-site course sessions spread over a standard term, including those offered in full or in part through distance education in which the instructor and student are separated in time or place or both. The instructional matrix may be referenced for this purpose.

The INSP offers the MPH program through an online format and two of its areas of concentration in an executive format. Also offers since 2011 the Specialty in Health Promotion in an on line format and the Master of Health Sciences with a concentration in Vaccinology and the Doctorate in Public Health degree in an executive format. All of these programs are identified in the instructional matrix (Table 2.1).

### 2.12.B

Description of the distance education or executive degree programs, including an explanation of the model or methods used, the school's rationale for offering these programs, the manner in which it provides necessary administrative and student support services, the manner in which it monitors the academic rigor of the programs and their equivalence (or comparability) to other degree programs offered by the school, and the manner in which it evaluates the educational outcomes, as well as the format and methodologies.

The INSP developed the online and executive programs to respond to increasing demand for a variety of educational offerings that would allow those in the workforce to study while they keep working. The MPH is offered both in an online and an executive format, and the Master in Health Sciences with a concentration

in Vaccinology and the Doctorate in Public Health are offered in an executive format. Also, the Specialty in Health Promotion is offered in an on line format. The INSP identified a need for capacity building among health service personnel with middle and high-level professional positions whose jobs prevent them from attending a graduate program in a full time format, but who want to better understand current trends and issues in public health and develop competencies in designing, implementing and evaluating public health interventions. Thus, these programs contribute to the INSP's ability to prepare leaders who will create and implement effective public health policies in the country and the region.

The following sections describe the online and executive programs for the MPH, the on line format of the Specialty in Health Promotion, the executive format for the Master in Health Sciences with concentration in Vaccinology and the Doctorate in Public Health. These programs follow the same curricular plan and competencies as described in Criteria 2.3.A. and 2.6.A.

## Master of Public Health, Online Format

The online MPH program—which the INSP calls in-service, as it targets professionals who want to complete the program while continuing to work—is offered to health services workers and public health decision makers. This program was needed because the Ministry of Health at the federal and state level needed to upgrade the skills of its personnel in order to implement health reforms and innovate public health practices and perspectives while maintaining personnel in their jobs. The online format provided an opportunity to bolster daily public health experience with theoretical and methodological training to improve professional performance.

**Competencies.** Required competencies are the same as those for full-time MPH programs. Students must demonstrate achievement of the same core, cross-cutting and area-specific competencies regardless of program format. (see Criteria 2.6.a and 2.6.c.)

**Student support services.** In order to accommodate students in the online MPH, the academic coordinators, the library, the Student Support Services and Campus Life Department and the Student Affairs and Academic Promotion Department expanded their administrative and support services using virtual media and telephone. For example, there is a free phone number (during office hours) that students can call for technical and academic assistance. They can also contact support staff through email. If special support services are required, the academic coordinator steps in to help. Students can also receive direct, in-person services at all three campuses. In addition, the Office of Support Services for Online Students was established exclusively for the online MPH to provide necessary administrative support and service to remote students.

All the main activities at INSP Cuernavaca Campus are transmitted in real time by Webex (synchronous technology) to allow online students to participate and develop a feeling of belonging to the Institute. They are notified of events by email, the virtual campus and the INSP website so they can plan to participate.

**Curriculum structure.** The program lasts 24 months and students must dedicate approximately two to three hours daily to coursework. The program is divided into four cycles of 6 months each. Table 2.32 shows the components of the program's academic cycles. The first two cycles integrate courses corresponding to the common core courses necessary for the MPH. During the third cycle, students enroll in courses corresponding to their area of concentration, and during the fourth cycle they take elective courses. Students work on their community practicums and the PTP throughout the program. They have an additional 2 years after completing coursework to graduate, during which time they must complete the practicum and the PTP.

The community practicum and the culminating experience follow the same requirements as the full time program. The PTP includes

five products: 1) a comprehensive health diagnostics report; 2) a report prioritizing health needs, based on the diagnostics results; 3) a specific intervention project; 4) a report on the implementation of the intervention; and 5) a comprehensive evaluation model for the intervention. and it is the only community option for on-line students to graduate so it is based completely in practicum, and professional practicum. The first two products are developed during the first two cycles, the third during the third cycle, and the fourth and fifth during the last cycle, which is composed of optional units and allows time for tutorial work required for the PTP. The integration of all these products constitutes the final project that is defended in a degree examination held at the INSP facilities. This is the only time when students must come to the INSP main campus.

**Teaching-learning methodology.** The online MPH program is based on a tutorial education model that incorporates both asynchronous training (where students learn on their own time) and synchronous training (where students interact in real time with professors and other students). This teaching-learning methodology is supported by the Blackboard and Webex technology

**Table 2.32**  
**Courses of the Online Master of Public Health Program, by Academic Cycle**

Courses	Credits
Cycle 1. Core Courses: Analysis of the Health Situation and Community Practicum	
Epidemiology (EP16)	8.0
Biostatistics (BE34)	8.0
Environmental and Occupational Health (SA31)	8.0
Health Administration (SP39)	5.0
Health Systems (SP37)	5.0
Community Practicum: Comprehensive Assessment in Population Health (ED34)	4.0
Cycle 2. Core Courses: Contextual Analysis	
Bioethics (SP38)	5.0
Social Determinants of Health (CS15)	8.0
Applied Methods in Qualitative Research (CS10)	6.0
Health Promotion and Education (ED03)	5.0
Epidemiological Surveillance and Intelligence Systems (EP33)	6.0
Community Practicum: Comprehensive Diagnostics in Population Health: Public Health Interventions (ED04)	4.0
Cycle 3. Advanced Public Health Courses and Professional Practicum I	
Four advanced courses in core public health areas agreed with students.	20.0
Professional Practicum I (SP47)	6.0
Development of PTP	0
Cycle 4. Elective Courses and Professional Practicum II	
4-6 credits of elective courses	4.0-6.0
Professional Practicum II (SP48)	6.0
Development of PTP	0

platforms. The asynchronous component ensures ongoing learning by allowing each student to participate in the process at his or her own time, with very specific periods established for the review of topics and submission of daily activities and homework. The synchronous weekly component allows students to connect with their group and thus benefit from the knowledge of the team of professors and tutors who are experts in their field, exchange ideas with their peers, and feel connected to the group and the institution.

The content of each course (objectives, topics, learning activities, evaluations and bibliographical material) are available online for students to consult at any time. Students must cover one of the topics and complete assigned learning activities each week. On average, the time dedicated to the program is 10 to 15 hours per week. In addition, a weekly 2-hour real-time (synchronous) session is held, during which the full-time professor/researcher presents the fundamental ideas of the topic, guides the students in discussion and learning activities, and answers questions. This has proven to be a very demanding and intensive format.

**Teaching team.** The process of producing and operating the online MPH involves a broad multidisciplinary team that oversees the quality of the program. The primary participants are as follows:

1. The **academic coordinator**, who is responsible for supervising the overall performance of the program and ensuring support for student learning and outcomes.
2. The **professor** and **adjunct professor** for each course, designated by the corresponding Faculty College.
3. **Tutors (course facilitators)**, who are professionals from diverse disciplines qualified in the content of each program as well as in operating the systems used for the learning process. Their interdisciplinary backgrounds are beneficial not only for their teaching and research activities but also for meeting the needs of diverse students within each group. Each provides daily follow-up for a maximum of 15 students.
4. An **online team** that designs learning environments and is responsible for planning, designing, operating and evaluating online courses.
5. The **regional or state advisor**, who is responsible for advising students on the practicum experience and supervising the development of the PTP. Students are assigned state advisors based on the geographic area in which they live. Advising is carried out in person every 15 to 20 days for the duration of the program.
6. The **operational coordinator**, who is responsible for assisting students with the online process, providing follow-up and resolving technical problems.

**Learning evaluation and monitoring of academic rigor.**

Each course is rigorously evaluated according to specific criteria

in the same way as full time courses. However, given the format, evaluations for online courses tend to include strategies such as essays, study cases, exams, exercises, and group and individual assignments and projects. In addition, each semester progress on the PTP is evaluated by a qualified panel composed of a professor/researcher at the INSP, a public health educator from a regional health services center and a regional advisor. At the end of the program, just as in the full-time program, the students defend their PTP before a panel at the INSP facilities.

The INSP monitors academic rigor in the online format through several strategies:

- **Candidates' selection process:** The selection of candidates is as rigorous as it is with the classroom-oriented format. The final decision is a result of collegiate evaluation and analysis completed by the Professional Programs Committee.
- **Faculty selection:** Faculty Colleges select the professor responsible for each course in the same way they do for the classroom-oriented format.
- **Course design:** Once a teacher designs a course, it is reviewed by the academic coordinator and the pedagogic team that designs the learning environments to ensure consistency of pedagogical characteristics used in the online format. This review is assessed with the teacher and the assistant professor. It is uploaded for students only after it is validated by all areas.
- **Course monitoring:** The academic coordinator constantly monitors factors such as attendance, the professor's performance and responsiveness in answering questions, and any academic problems students have during the course.
- **Course evaluation:** Guidelines and requirements for student evaluation for each course are determined at the beginning of the activities and available for review via the technological platform. Using this platform, at any time students can review their performance during the course in order to receive feedback from the professor and academic coordinator. At the end of the course students complete an assessment of the course and the teacher. These evaluations are sent to teachers and discussed in meetings with the academic coordinator in order to guide improvements in the following year.

**Evaluation of format and methodologies.** Every 6 months the academic coordinator meets with students and regional advisors to review PTP progress, academic activities and student advising. These meetings are organized at the regional venues where students perform their community practices and meet with the advisors. In these meetings students present the progress they have made on their PTP and receive feedback from their advisor, the academic coordinator and a representative of a regional health sector. The technological platform allows course assessment to take place continuously. For example, the Webex platform issues a list of student attendance and the time

when they participated in the course session. The sessions are recorded to verify student and professor participation and are made available online so that students, teachers and the academic coordinator can review the session. All courses, including question forums, chat rooms and activities carried out during the course are recorded and stored for future evaluation by collegiate bodies. This has been especially useful for analyzing requests for student grades revisions.

### Master of Public Health, Executive Format

The main reason to offer the MPH in an executive format at the Tlalpan Campus is that Mexico City has the largest concentration of the country's public health professionals, agencies and public health entities. Although the federal and municipal health system is located in Mexico City, there is no school of public health there. (In contrast, in other states there are public health schools at public universities.) Therefore, it was important to provide health professionals in Mexico City with an executive format that offers participation over the weekend. These individuals are given permission by their employers to participate in the program one business day per week on Fridays, and they also attend classes on Saturdays.

This format serves mainly working public health professionals at health entities in the Mexico City metropolitan area, which includes the city and all surrounding areas, including the cities of Toluca and Texcoco. This is the most heavily populated urban area in the country and has a large training demand due to the high number of health entities. The concentration areas offered for this format are decided each year depending on demand. Since the MPH in the executive format started, there have been concentration areas in Epidemiology, Biostatistics, Health Systems Administration, Social and Behavioral Science, Environmental Health and Nutrition. These concentration areas open when there are enough applicants.

The classroom sessions for the executive format take place at the INSP's Mexico City campus. Students have access to a computer laboratory and student workrooms. As with the online format, the academic coordinator, the library, the Student Support Services and Campus Life Department and the Student Affairs and Academic Promotion Department have expanded their administrative and support services for students using virtual media and telephone. The academic coordinator resolves special issues that need to be taken care of at the Cuemavaca Campus. When students are accepted, the Office of Academic Affairs organizes an induction course with activities and information sessions that are transmitted by videoconference to all three campuses. A group of representatives from the departments responsible for student orientation and services hold in-person meetings at the beginning of the program with executive program students at the Mexico City Campus to welcome them and discuss specific issues.

An office exclusively to attend administrative and student support services is in place in the Mexico City Campus six days a week. Most of the personnel in Student Affairs Office attend regular in-person sessions at the Mexico City campus to provide any needed support for students.

**Curriculum structure.** The executive MPH program lasts 20 months, during which students participate in in-person sessions on Fridays from 7:00 to 18:00 and Saturdays from 7:00 till 14:00 at the Mexico City campus. Both the curriculum plan and the culminating integrative experience are the same as those for the full-time program, and students are expected to demonstrate the same competencies as their full-time counterparts.

The program is divided into three cycles of approximately six months each. The first two cycles include courses corresponding to the core requirements, and the third includes courses in specific areas of concentration (Table 2.33). During the program, students conduct a community practicum and Professional Practicum I and II. The three academic cycles are evaluated and approved annually by the Faculty Colleges.

**Teaching-learning methodology.** The executive program is based on a pedagogical model adapted to the needs of working adult students, since nearly all students hold jobs in health institutions and can attend classes only on weekends. In-person sessions on Fridays and Saturdays are combined with virtual activities that enable students to work as their schedule allows. Because the in-person sessions offer intensive adaptations of course content, the executive format enables rapid adoption of the constructivist education model. This format takes advantage of the maturity and work experience of the majority of the students, and broadens the experience of the teachers, thus ensuring better results from the learning and teaching process.

This program strongly encourages active participation of students by using didactic techniques that are learning-centered rather than teaching-centered. This gives students a more relevant and proactive role in the educational process. The courses incorporate didactic material based on cases, problems and projects, thereby strengthening the acquisition of concepts and the development of competencies. Some professors prefer the traditional model that uses lectures; therefore, the INSP is working to encourage effective teaching training strategies and promote interactive sessions with students.

With respect to community practicums, the executive format follows the same model as the in-person format, and its curriculum plan includes the integration and evaluation of community-based learning. This involves developing a population health assessment, a prioritization exercise and an intervention proposal. As a culminating experience and an opportunity to show integration of the information acquired, students must complete a PTP in order to

**Table 2.33**  
**Courses of the Executive MPH Program, by Academic Cycle**

Courses	Credits
Cycle 1. Core Courses: Analysis of the Health Situation and Community Practicum	
Epidemiology (EPI6)	8.0
Biostatistics (BE34)	8.0
Environmental and Occupational Health (SA31)	8.0
Health Administration (SP39)	5.0
Health Systems (SP37)	5.0
Community Practicum: Comprehensive Assessment in Population Health. (ED04)	4.0
Cycle 2. Core Courses: Contextual Analysis	
Bioethics (SP38)	5.0
Social Determinants of Health (CS15)	8.0
Applied Methods in Qualitative Research (CS10)	6.0
Health Promotion and Education (ED03)	5.0
Epidemiological Surveillance and Intelligence Systems (EP33)	6.0
Community Practicum: Comprehensive Diagnostics in Population Health: Public Health Interventions (ED24)	4.0
Cycle 3. Concentration-Specific Courses and Professional Practicum I	
Four advanced courses from one of the following concentration areas:	
• Epidemiology (EPI6)	20.0
• Health Administration (SP39)	
• Social and Behavioral Sciences CS15)	
• Biostatistics and Information Systems (BE42)	
• Environmental Health (SA31)	
Professional Practicum I (SP47)	6.0
Development of PTP	0
Cycle 4. Elective Courses and Professional Practicum II	
4-6 credits of elective courses	4.0-6.0
Professional Practicum II (SP48)	6.0
Development of PTP	0

graduate. Similar to the full time format, they can also choose to do a thesis based on a public health topic from the community or professional practicum.

#### **Learning evaluation and monitoring of academic rigor.**

Student evaluation and graduation requirements for the executive MPH are the same as those for the full-time program and are governed by the corresponding academic regulations. Each course is evaluated according to the criteria assigned at the beginning of the course, and at the end of the course students complete an assessment of the academic activities performed and of the professor's performance. These assessments are sent to the professor, the academic coordinator and the Faculty College that assigned the professor to the course. In addition, the committee for professional degree programs meets monthly to monitor program performance and educational outcomes of students in both the executive and online formats.

**Evaluation of format and methodologies.** Each academic year the executive format program is reviewed by Faculty Colleges and the research directors. Alumni follow-up has shown that graduates from this format have received promotions or better salaries upon finishing the program. This data shows that INSP is meeting the training needs of the health system in the metropolitan area, especially in regard to the Ministries of Health at the federal and regional levels.

#### **Specialty in Health Promotion, Online Format**

As noted in Criterion 2.1.A, in Mexico a specialty is a one-year graduate program where a bachelor's degree is a prerequisite to enter the program. The Specialty in Health promotion began in early 2011 and has a total of 61 Mexican credits. It is offered in an on line format to allow to fulfill the objective of training

health promotion specialists who will provide leadership in designing, implementing and evaluating initiatives to improve the health conditions of different populations using a multidisciplinary approach while they are working.

Candidates must have prior education and training in communications, social or health sciences, anthropology, education, nutrition, psychology or similar areas, in addition to experience and interest in community work, health services, health promotion and education, and the management, design and implementation of public health policies. To ensure practical experience, as a requirement for acceptance to the program candidates must work at a health agency for the duration of the program.

**Competencies and Curriculum structure.** Core and cross-cutting competencies for this program are described in Table 2.9 in Criterion 2.6.c. The Specialty is one year long and includes two semesters with 10 courses organized in three curricular axis (conceptual, methodological and design and analysis of health promotion programs) as can be seen in the Appendix 2.1.b-2.

**Student support services.** To guarantee the follow up of the students there is an academic program coordinator and support services offered by the Student Support Services and Campus Life Department and the Student Affairs and Academic Promotion Department that provide their administrative and support services using virtual media and telephone.

**Teaching-learning methodology.** The online format of all programs is based on a tutorial education model that incorporates asynchronous training where students decide their own time to realize the academic activities and synchronous training when students interact in real time with professors and other students. This format used the Blackboard and Webex technology platforms that helps provide the content of each course and the bibliographical material available online for students to consult at any time. Students must cover one of the topics and complete assigned learning activities each week. There is an academic team that helps develop all the activities as is detailed in the MPH on line format.

**Learning evaluation and monitoring of academic rigor.** Each course is review and assess by the Faculty College of Education and Health with the collaboration of the academic program coordinator. They are responsible of the academic follow up of students, faculty and the pedagogical format. As the rest of the graduate programs students assess at the end of each course the quality of the academic activities and the teachers participation. The faculty in charge of the courses implement assessment actions to review the accomplishment of the competencies expected in students and the Faculty College also reviews permanently in its collegiate meetings the development and results of

the programs as well as coordinates the selection process and graduation of the students.

### **Master of Health Sciences with a Concentration in Vaccinology**

As part of a concerted effort to ensure academic excellence, the INSP and the state-owned vaccine maker *Laboratorios de Biotológicos y Reactivos de México* (BIRMEX) signed an agreement to design a new program, the Master of Health Sciences (MHS) with a concentration in Vaccinology, to be offered by the INSP. This program will help Mexico and other Latin American countries to gain highly specialized personnel trained in research, development and production of vaccines in order to prevent and control the main preventable infectious diseases in the region.

**Curriculum structure.** The program fosters the interdisciplinary training of vaccinology scientists through: (1) role modeling by experienced faculty advisors; (2) flexible but rigorous didactic preparation in a wide variety of biomedical disciplines; (3) a comprehensive multidisciplinary approach to vaccinology from basic science, to preclinical development, to clinical trials/research, to vaccine uptake and community outreach; (4) pursuit of a vaccinology-related dissertation research project under the supervision of experienced faculty members; and (5) development of professional and ethical behavior that promotes high-quality research and effective interdisciplinary interactions. The complete program has been evaluated by the Faculty College of Infectious Diseases, which meets monthly to discuss problems and solutions regarding the program and its students.

Initially, this program was opened specifically for health professionals working at BIRMEX holding a biological, chemistry or medicine degree. Students work on academic activities only two days a week, Friday and Saturday, over a 3-year period. To access the program candidates must have a knowledge of or interest in vaccines and vaccine-preventable diseases.

Table 2.34 lists the required courses for this program. Courses are taken at the INSP campus and at the BIRMEX facilities, both in Mexico City. The Instituto Nacional de Virología (INV) has reopened with increased capacity and is expected to be able to meet all domestic demand for polio, tetanus and diphtheria (TD) and diphtheria, pertussis and tetanus (DPT) vaccines, as well as snake and scorpion antivenoms and biological reagents. These facilities are also available for the program and support research in a wide range of vaccinology research topics that are useful for students.

**Teaching-learning methodology.** This program is composed of full time courses that include several teaching-learning methodologies such as faculty lectures, group exercises and individual and group assignments. At the final stage of the program,

**Table 2.34**  
**Courses of the Master in Health Sciences**  
**with a Concentration in Vaccinology, by Academic Cycle**

Courses	Credits
Cycle 1. Basic	
Clinical Microbiology (EI14)	7.5
Immunology (EI15)	5.0
Basic Vaccinology (EI16)	5.0
Biotechnology in vaccines (EI17)	3.8
Epidemiology (EP01)	10.0
Biostatistics (BE01)	10.0
Cycle 2. Intermediate	
Vaccine Production I (EI27)	5.0
Bioprocesses in Vaccines (EI28)	7.5
Bioethics (SP38)	3.8
Pre-clinic Vaccine Evaluation in Humans (EI29)	7.5
Bioassays Statistics (BE29)	5.0
Residency I (EI30)	3.8
Research Seminar I (EI32)	3.8
Cycle 3. Advanced	
Vaccine Production II (EI33)	5.0
Quality Control and Safety in Vaccines (EI34)	7.5
Monitoring Vaccine Safety (EI35)	5.0
Economics in Vaccines (EI37)	3.8
Residency II (EI36)	3.8
Research Seminar II (EI38)	3.8
Cycle 4. Thesis	
Thesis Seminar (EI39)	3.0
Optional Courses	8.0

students pursue a vaccinology-related dissertation research project under the supervision of experienced faculty members.

**Teaching team.** Designing and operating the MHS program outside INSP facilities in Cuernavaca involves a broad multidisciplinary team that oversees the quality of the program. The primary participants are as follows:

1. The **academic coordinator**, who is responsible for supervising the overall performance of the program and to ensure support for student learning and outcomes.
2. The **professor** and **adjunct professor** for each course, designated by the corresponding Faculty College.
3. **Advisors (course facilitators)**, who professionals from diverse disciplines qualified in the content of each program. Their in-

terdisciplinary backgrounds are beneficial not only for their teaching and research activities but also for meeting the needs of diverse students within each group.

4. The **operational coordinator**, who is responsible for assisting students with the scholarly process, providing follow-up and resolving technical problems.

#### **Learning evaluation and monitoring of academic rigor.**

Each course is rigorously evaluated according to specific criteria in the same way as the rest of full time courses at INSP. Students have access to the Blackboard e-Education platform. Using this platform, at any time students can review the complete program, access course materials and receive feedback from the professor and academic coordinator. At the end of the course students complete an assessment of the course and the professor. These evaluations are sent to the professors and discussed in meetings with the academic coordinator of the program and members of the Faculty College in order to propose adjustments and improvements in the following year.

**Practicum and culminating experience.** Students have the opportunity to work on practicum experiences during Residency I and II courses at the intermediate and advanced cycles of the curriculum. Here, they attend well-equipped vaccine production facilities at BIRMEX where they learn and practice specific vaccine processes according to their theses protocol, which they start in Residency I.

During cycle 2, with the help of the academic coordinator, a thesis committee is arranged for each student, consisting of a thesis director and one or two thesis assessors who work with the student to develop a vaccinology-related dissertation research project under the supervision of experienced faculty members. Students have 2 years after completing their coursework to graduate, during which time they must complete their thesis protocol and write a final report or have a ready-to-send paper with the results of their projects.

Graduated students can apply their knowledge and find jobs at BIRMEX, at the National Institutes of Health in Mexico, in the academic field at different universities and at the National Center for the Health of Infants and Adolescents, which is the government branch in charge of supervising public policy in matters affecting the health of the infants and adolescents, including vaccination.

#### **Doctorate in Public Health, Executive Format**

In the last 10 years, the INSP has sought to build stronger relationships with decision-making areas in the health system and health services at both the federal and local levels. Various strategies have been developed to link the academic community with decision-making areas, including specific publications, workshops and meetings. A strategic project in this field has been the design

and launch of the Doctorate in Public Health program, which aims to train operational personal to develop skills in research, evaluation, planning and use of scientific information. The INSP created the Doctorate in Public Health in response to the need to train officials and professionals involved in public health at managerial and leadership levels in public, private and civil society institutions without requiring them to miss work.

**Curriculum structure.** The program lasts 3 years (6 semesters) and has an executive format with a blended learning method. This method includes classroom based courses and academic activities on line with the support of the technological platforms. The three-year program accepts individuals with leadership potential and focuses on cognitive and conceptual development. The program has already accepted its third generation of students. Although the program was designed for the national market, it has received students from five countries in Latin America.

Competencies for the Doctorate in Public Health are described in Criterion 2.6. The program consists of 13 full time seminars: 11 cover core and substantive areas of public health (social sciences, epidemiology, systems and services, environmental health, biostatistics, program evaluation, etc.) and 2 are thesis seminars (see Table 2.35).

**Teaching-learning methodology.** Each year students spend 2 months (the months of April and October of each year) in intensive full time seminars and courses at the Cuernavaca campus; the rest of the time they take online courses and are monitored by individual advisors and the academic coordinator. The full time seminars are complemented by 3 online seminars that cover research, bioethics and leadership. All seminars are taught by qualified teachers with doctoral degrees. Each seminar is evaluated independently. Through this model, students can continue working as they progress in their doctoral training.

The academic level of a doctorate in public health is the same as that of a doctorate of science. While a doctorate in science focuses on training researchers, a doctorate in public health seeks to strengthen the capabilities of individuals who are involved in designing and implementing policies and programs on a daily basis. The doctorate in public health allows students to develop the ability to respond to epidemiological challenges and manage service operations at several levels, including planning and implementation, with special emphasis on developing leadership skills.

**Practicum experience.** Community practice for the Doctorate in Public Health has been designed to help students become familiar with leading public and health institutions. This allows students to learn about operating models and the ways in which each institution promotes health and is positioned strategically in

**Table 2.35**  
**Seminars of the Executive Doctorate**  
**in Public Health**

Year 1
Advanced Seminar in Public Health (DC01)
Epidemiology Seminar (DSP15)
Concentration Area-specific Seminar I (DSP16)
Health Systems, Policies and Services Seminar (DSP18)
Environmental Health Seminar I (DSP20)
Research Seminar I (DSP17)
Year 2
Health Program Evaluation Seminar (DSP21)
Biostatistics Seminar (DSP22)
Research Seminar II (DSP19)
Bioethics Seminar (DSP22)
Concentration Area-specific Seminar II (DSP25)
Thesis Seminar I (DSP26)
Year 3
• Workshops and Advanced Thesis Seminars
• Leadership Workshop (DSP27)
• Teaching Skills Workshop (DSP28)
• Thesis Seminar II (DSP29)
• Thesis Seminar III (DSP30)
• Community Practicum

the health national system. This practice is guided by INSP teachers so that students can analyze the importance of these aspects of public health practice during their doctoral training.

**Culminating experience.** Students must defend their thesis protocol in the second year, submit a qualifying test demonstrating integrated knowledge and present their thesis at the end of the third year. At the beginning of the program, each student is assigned an advisor who is an INSP researcher. This advisor monitors the student's progress and identifies and assists in resolving any problems that arise. Once the student identifies the area of his or her thesis, a director and an advisory group of two or three members is selected. When the thesis protocol is ready, the student presents it before a jury of three specialists in the thesis topic. This process allows the student to begin to develop the thesis, which is defended at the end of the third year. The student has the option to defend the entire thesis or two publishable papers. The student is provided with constant support and guidance, and advisors assess student progress every semester.

**Program and learning evaluation.** This program follows all INSP regulations for doctoral programs. The Intercollegiate

Faculty College for Doctorate in Public Health meets monthly to oversee the appropriate operation of the program and to evaluate performance and student outcomes.

### 2.12.C

#### Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The online and executive formats guarantee quality programs through sound pedagogical systems, technologies and administration. The use of special technological platforms used for nontraditional education allows for diversity in learning and teaching activities.
- These formats allow the INSP to provide better coverage nationwide for the development of human resources in the area of public health and thus fulfill its educational mission.
- Through these formats, the INSP has been able to meet the training needs of working health professionals and therefore support the operation and implementation of the national health system.
- These formats have allowed students in their middle of their careers to pursue graduate education without leaving the workforce. This is a very important strategy to widen the access of graduate education in public health to all kinds of popu-

lations because scholarships provided for full-time students by CONACyT apply only to students younger than 40 years old.

#### Weaknesses

- Due to the distance of the places of origin in which our students are located there are few opportunities for physical contact with the principal campus. This physical separation presents challenges for students in terms of developing a sense of belonging at the Institute.
- Programs with these formats do not have scholarships. The principal source of funding with scholarships in programs is CONACyT, but this federal organism only provides scholarships to full-time students.

#### Future Plans

- Strategies are being developed to enhance and diversify the contact with students from programs with online and executive formats, such as developing an introductory course at the beginning of the program at some of the principal campuses or arranging special videoconference meetings.
- In the first three months of 2011 the Office of Academic Affairs and the academic coordinators of the programs with online and executive formats will send a proposal to CONACyT requesting scholarships and other academic recognition for these programs.

**Criterion 3.0**

# Creation, Application, and Advancement of Knowledge

**3.1**

Research. The school shall pursue an active research program, consistent with its mission, through which its faculty and students contribute to the knowledge base of the public health disciplines, including research directed at improving the practice of public health.

The INSP pursues an active research program, consistent with its mission, through which its faculty and students contribute to the knowledge base of the public health disciplines, including research directed at improving the practice of public health.

**Required Documentation****3.1.A**

A description of the school's research activities, including policies, procedures and practices that support research and scholarly activities.

The Institute's research activities are focused on developing effective health policies, generating scientific knowledge for decision makers in the health sector and implementing interventions aimed at improving health system performance.

During 2008-2010 the INSP supported the development of more than 400 research and service projects, and as of June 2011, 320 projects were under way. All of these research projects must adhere to the policies and procedures dictated by the Institute's research, ethics and biosafety commissions and are evaluated by these bodies.

**Research Policies**

All of the INSP's research policies serve the Institute's research mission to improve the health of the population by producing, disseminating and implementing scientific knowledge about public health. To ensure the relevance of the INSP's research activities for current health priorities in Mexico, the Institute has formalized three basic commitments. Research activities should: 1) support health actions and policies; 2) be oriented toward producing scientific knowledge that helps reduce health inequities; and 3) establish strategies that support health sector efforts to achieve universal coverage for services.

In 2008, the INSP began a process to restructure its actions to better support research and teaching. One of its main strategies was the design of *mission-oriented research*. To support this strategy the INSP developed mission-oriented research lines (LIMs), which are public health research topics that promote cross-disciplinary activities across different research centers. This process was developed under the leadership of nationally and internationally recognized leaders in health research and education, who were able to identify and integrate 15 existing LIMs and 3 new LIMs defined by the INSP.

**Research Procedures**

Each INSP research project has to belong to a LIM and be in concordance with its objectives. Any proposed new LIMs are analyzed by the Academic Research Commission (CAI) to assess whether they meet the objectives of the INSP's mission. With this procedure the INSP ensures that all research activity is oriented to its mission and supports high-priority activities. Ongoing meetings are held by a group of important researchers affiliated with the research centers who generate, disseminate and implement knowledge in public health within and across disciplines.

The Director General/Dean of the INSP promotes the coordination and integration of the existing and new LIMs in conjunction with the research centers and the Academic Research Commission (CAI). The CAI is a committee made up of INSP Level F researchers in medical sciences (corresponding to Level II and III of the National System of Researchers (SNI), described in Criterion 3.1.D), directors of the research centers (presided over by the Director General/Dean), and the president of the Research Commission (a separate entity), who serves as technical secretary. Table 3.1 shows how all LIMs are coordinated among the research centers.

The INSP's academic and administrative regulations contain general provisions regarding the Institute's commissions and support areas which are aimed at meeting the institutional objectives of research, instruction and service. Appendix 3.1.a presents the regulations that specifically govern research activities. The following commissions are in charge of overseeing research activities and procedures (see Criterion 1.5 for more information on the INSP's committee structure):

**Table 3.1**  
**Coordination of Mission-Oriented Research Lines among the INSP's Research Centers**

	Primary Center	Secondary Center	No. of Current Research Projects, 2011*
<b>Existing Research Lines</b>			
1. Cancer prevention and control	CISP	CISEI	32
2. Health and vulnerable groups	CISS	CINyS	12
3. Prevention and control of vector-transmitted diseases	CISEI	CRISP	31
4. Prevention and control of tuberculosis	CISEI		9
5. Environmental health	CISP		30
6. Prevention of injuries and violence	CISP	CISS	7
7. Sexual health and prevention of AIDS and STDs	CIEE	CISS	17
8. Promotion of healthy lifestyles	CISP	CISS	18
9. Medications in public health: access, use and antimicrobial resistance	CISS	CISEI	9
10. Human resources in health	CISS	SAC	8
11. Social protection in health	CISS	CISEI	7
12. Evaluation of health programs and policies	CIEE	CINyS	27
13. Obesity, diabetes and cardiovascular disease	CINyS	CISP	41
14. Malnutrition	CINyS		13
15. Reproductive health	CISP	CISS	15
<b>New Research Lines (2011)</b>			
1. Emerging viral diseases	CISEI		1
2. Vaccines	CISEI		17
3. Regenerative medicine	CISP	CISEI	3
Other research projects			23
<b>Total</b>			<b>320</b>

\* Includes current research projects as of June 2011.

Key: STDs: Sexually transmitted diseases; CISP: Population Health Research Center; CISS: Health Systems Research Center; CISEI: Infectious Disease Research Center; CIEE: Evaluation and Surveys Research Center; CINyS: Nutrition and Health Research Center; CRISP: Regional Public Health Research Center; SAC: Office of Academic Affairs.

1. The **CAI** formulates recommendations and rulings according to each competency area within public health. Its functions include: a) develop an annual research and service program appropriate for the competencies and resources of the research groups; b) establish processes, mechanisms and guidelines to facilitate the development of projects that respond to concrete demands of the health sector; c) evaluate the performance of individual scientific contributions, research groups, and research lines; d) approve proposals for programs and research lines presented by researchers; and e) design and operate a research monitoring system for studies and projects that respond to specific public health demands and needs.
2. The **Research Commission** is responsible for evaluating and approving protocols and producing preliminary and final reports and publications. This is the main collegiate body in charge of the quality assessment of research activities at the INSP. It issues rulings and provides follow-up regarding quality standards for research. It also evaluates the performance of professor/

researchers and reports findings to the Director General/Dean. In addition, it participates in research training through conferences and seminars, academic and research evaluation, capacity-building for researchers and advisors, promotion of academic exchange, and other activities that support high-quality research.

3. The **Ethics Commission** protects the rights, well-being and safety of those who participate in scientific research conducted by the INSP (alone or in collaboration with other institutions) to ensure that the methods used do not expose participants to unnecessary risks.
4. The **Biosafety Commission** issues technical opinions on questions dealing with biosafety in research raised by the Research Commission. This group also reviews research methods, materials and facilities to ensure the physical and biological safety of personnel, research subjects, the community and the environment.

The External Commission of Health Research (CEIS) of the Coordinating Commission of National Institutes of Health and Regional Specialty Hospitals (CCINSHAE) is a national body that is responsible for overseeing research qualifications in the health personnel that works in the Ministry of Health and has an important role in their Promotion, Retention and Incentives related with scientific productivity.

The INSP has an online tool to support research activities, the Electronic Information System for Research and Teaching (SIID) (see <https://siid.insp.mx/>). The SIID serves as a clearinghouse for information about all ongoing research activities and offers functions that allow researchers to:

- Establish efficient procedures for recording and updating data on research activities.
- Review protocols developed by the Research, Ethics and Biosafety Commissions.
- Generate periodical reports solicited by the authorities (e.g., CONACYT, CCINSHAE) about research activities.
- Disseminate information about INSP research and findings in the community.
- Receive timely information to support incentives and awards programs for professor/researchers.

### Research Practices

- In accordance with Articles 6 and 7 of the Law for National Health Institutes (Appendix 1.1.b), the INSP has in place the following research practices:
- Conduct clinical, epidemiological and experimental research and studies related to basic technological development in the areas of biomedics and socio-medics in order to understand, prevent, diagnose and treat diseases, rehabilitate those affected, and promote health measures.
- Publish research results and disseminate technical and scientific information about advances in public health.
- Promote and host national and international meetings for scientific exchange as well as conferences for coordination and cooperation with similar institutions.
- Advise specialized research, teaching and service centers and public health institutions across the country.
- Promote actions to protect and promote health.
- In collaboration with the Ministry of Health (SSA), support activities to update data on the country's general health situation.
- Study and design scientific research methods and techniques related to health.
- Conduct public health surveys across Mexico.
- Support epidemiological surveillance of infectious diseases and other existing and potential health problems in Mexico.
- Contribute to the development of diagnostic technology related to communicable diseases appropriate for national needs.
- Serve as a reference center for reporting on infectious diseases.

### 3.1.B

A description of current community-based research activities and/or those undertaken in collaboration with health agencies and community-based organizations. Formal research agreements with such agencies should be identified.

#### Community-based Research

Community-based research is a fundamental part of the INSP's research program, including the student practicum experience, as well as an essential component of the SSA's mission. All research centers develop projects (see Criterion 3.1.C) that include the active participation of community members and diverse institutions. Table 3.2 includes some examples.

#### Research Carried Out in Collaboration with Health Organizations

The INSP collaborates closely with national and international health organizations, as well as with the SSA, the state health systems and community-based organizations. With these organizations, the Institute develops research projects to generate knowledge, evaluate projects, test public health interventions, inform public policies and educate the general public about relevant results through mass media. Some examples of research activities carried out with health organizations with which the INSP has formal agreements include:

- **Pan-American Health Organization (PAHO).** The INSP collaborated with this organization to administer the Global Health Professionals Survey and conduct a study on road safety in the Americas to construct a diagnosis of such situations worldwide using standardized methodology.
- **Mexico-California Health Initiative for the Americas.** Factors related to migration have been studied.
- **National Center for Gender Equity and Reproductive Health.** A comprehensive evaluation of the detection of breast cancer was conducted in seven states, including a study of the validity and reproducibility of the interpretation of mammograms by Mexican radiologists. Also a group of non-physicians were trained for pregnancy, childbirth and puerperium care in rural medical units affiliated with the SSA.
- **SSA.** A community intervention was implemented that consisted of a hybrid capture test using vaginal self-sampling in homes to identify HPV DNA to establish the test's usefulness in the timely detection of cervical cancer. Also, in 2009 an Evaluation of the Performance of Public Hospitals was conducted.
- **SSA, National Council against Addictions (Conadic), Federal Commission for Protection against Sanitary Risks (Cofepris) and non-governmental organizations (NGOs).** Consulting was provided for the development and fulfillment of policies to control tobacco use at the federal and local levels.

**Table 3.2**  
**Examples of INSP Research Projects That Include Community Participation**

Project	Description
Pediatric unit in environmental health	The purpose of this project is to improve the environmental conditions in which children grow and develop. With funding from the U.S. Environmental Protection Agency, it aims to eradicate health problems caused by environmental risks—aggravated by poverty, lack of education and environmental injustice—through a well-structured educational program aimed at training and educating health service providers and elementary school students.
Sample study of children in Campos, Colima	The inhabitants of this community filed a complaint with the state government regarding atmospheric emissions from a nearby thermoelectric generator. The Colima government requested a study to analyze the potential effects of atmospheric contaminants on the respiratory health of the community. The results validated the community's concerns and enabled the development of proposals for medium- and long-term solutions.
Identification, treatment and prevention of diseases associated with chemical and biological contamination in Alpuyecá, Morelos	This project seeks to initiate and document community involvement in participatory action research involving community members, researchers and local health and ecology authorities. This collaboration will channel the efforts and resources available for addressing the most important environmental health problems in this community, and achieve a process for ongoing education with a focus on health promotion.
Evaluation of exposure to dioxins and furans, and their potential effects on the health of mother-child binomials in Santa Ana Xalmimilulco, Puebla	Development of a joint project with the Ministry of Health of Puebla to discover the risk and the perception of risk on the part of study participants with regard to the presence of a nearby incinerator. The study involves collaboration with community leaders as well as elementary school students. The results will be provided to study participants, decision makers and the general population.
Educational week on smoking control	An activity targeting students, teachers and the general public to raise awareness and provide information about short- and long-term health damage caused by tobacco use as well as control strategies. A statewide poster competition on the topic is also conducted.
Implementation and evaluation of a strategy to detect the human papillomavirus (HPV) for the prevention of cervical-uterine cancer in Morelos	The objective of this study is to evaluate the implementation of hybrid capture technology through vaginal samples taken at home from 122,000 women in the state of Morelos. The project was developed in collaboration with the state Ministry of Health, with financing from the General Department on Equity and Gender. Since the beginning of the study coverage has been increased for women with a high risk of cancer who had previously participated in a prevention study.
Education for prevention of dengue in Tapachula, Chiapas	The CRISP has designed, implemented, evaluated and validated an educational strategy to prevent dengue in local elementary schools.
Analysis of the epidemiological importance of the <i>Triatoma dimidiata</i> genotype in the transmission of Chagas disease in southern Mexico	This study includes health education activities related to Chagas disease, particularly the importance of recognizing and avoiding the presence of chinch bugs in the home and measures to prevent this disease.
Genetic strategies to control the transmission of dengue	A study developed in collaboration with the University of California, Davis, which includes community-based activities to develop experiments with mosquitoes and health promotion and education actions.
Infestation Control Unit, CRISP	This unit conducts activities to control insect disease vectors in diverse locations and communities in Mexico.
Evaluation of the federal Healthcare Program for Adults Aged 70+ in Rural Zones (PAAM70 and Over)	This program, operated by the Ministry for Social Development (Sedesol), seeks to improve income levels and life conditions among rural elderly populations. The CIEE conducted an impact evaluation to determine the effect of the program on its beneficiaries. Factors evaluated were income, expense and savings patterns, health and nutrition, social and family support networks, residential arrangements, and interaction between program beneficiaries and officials. The objective is to understand how the program affects community and social processes that impact the health of this population.
Exposure to manganese in the population residing in Molango, Hidalgo (Phase II)	In collaboration with the state Ministry of Health of Hidalgo, this project seeks to understand how mining and agro-forest-livestock activities, as well as socio-economic and cultural dynamics, impact the presence of manganese in the ecosystem. Work includes consulting on the environmental monitoring system to establish an official norm for the concentration of airborne manganese in the area. The purpose is to generate knowledge that will improve the quality of life of the inhabitants and to create proposals for sustainable and participatory environmental management.
Evaluation of the health risks from exposure to heavy metals among inhabitants from four municipalities around Lake Chapala	This project evaluates the effects on health of exposure to arsenic and mercury as a result of consuming fish from Lake Chapala, and identifies other means of exposure. The results enable the development of a control and prevention proposal that involves municipal, state and federal authorities, with significant participation from community members.
Community intervention to prevent child obesity in students 6 to 10 years of age in Tlaltizapan and San Nicholas, Morelos	This community project is carried out with the National Institute of Pediatrics and the consultant's office of Chile's Institute of Nutrition and Food Technology. Evaluations of the impact of the intervention were carried out in schools and other areas of the community. The project evaluated the dynamics of water and food consumption, physical activity and food availability in the schools, glucose and lipid levels in blood, and anthropometric height/weight measures.
Community research in Xoxocotla, Morelos	The INSP has been carrying out research projects in the semi-rural community of Xoxocotla, Morelos, for more than 10 years. These investigations have identified community situations associated with health problems—for example, the effect of a limited ability to promote healthy diets and physical activity on obesity and other conditions. Examples of the investigations carried out in this community include: 1) the effects of care interventions on infant nutrition; 2) participative community-oriented research aimed at improving nutrition and decreasing obesity and the risk of cardiovascular disease among Mexican women; and 3) design and evaluation of a participative and sustainable health care model among adult patients at the Xoxocotla Health Center, including prevention of obesity, diabetes, and hypertension and commitment to health treatment.
ESMaestras disease prevention study	This study was carried out with the objective of detecting risk factors for breast cancer and other diseases among a large sample of women (100,000) with teaching careers who will receive follow-up for 20 years. All the communities from the region are involved (urban, rural and indigenous).
An integral intervention to reduce road accidents among young people in two cities	This study includes an educational intervention with young people from private junior high and high schools in Cuernavaca and Mérida and a social communication campaign in which they participate. The program sensitizes students to the issues through videos and testimonies, and reports scientific data on the main risk behaviors. Group work with the students helps them determine strategies for protecting themselves and their friends when driving or traveling as passenger.

- **Federal Secretaries of Health and Social Development.** Projects were developed to evaluate social and health programs, such as Progresá and Oportunidades (in English, "Opportunities").
- **National Institute of Pediatrics.** A community study is being carried out with this institution on the prevention of obesity in Tlaltizapán, Morelos.
- **The System for Comprehensive Family Development (DIF).** Research was conducted on the contribution of school breakfasts, provided by the DIF, to the nutritional status of children.
- **Mexican Council against Tobacco Smoke.** Research was conducted on the health costs attributable to the consumption of tobacco in Mexico.
- **Institute for Social Security and Services for State Workers (ISSSTE).** Consulting was provided for the development of the Master Infrastructure Plan for this institute.
- **Ministries of Health and the Mexico City Government.** Projects were conducted to detect, treat and prevent diseases in penitentiaries in Mexico City.
- **Ministry of Health of the State of Morelos.** In this community intervention, a strategy to detect HPV to prevent and control cervical-uterine cancer was implemented and evaluated. Also, with the **State Health Services of Morelos** studies were conducted on allergies and asthma in children; on the identification, treatment and prevention of diseases associated with chemical and biological contamination, with a focus on health promotion in Alpuyecá; and on contamination generated by open-air garbage dumps.
- **The State of Mexico Health Institute.** This collaborative project evaluated the sub-program for vaccinating children under 5 years of age.
- **Guerrero Institute for the Comprehensive Care of Older Adults.** Evaluations were conducted on life and well-being conditions of older adults and the Program for Better Living.
- **State Health Services of Michoacán, Nayarit, Sinaloa and Chihuahua.** The causes of malaria and community participation in the eradication of this disease have been studied.
- **State Health Services in Veracruz.** Taking advantage of the infrastructure and experience of both institutions, this project establishes the operative bases and mechanisms for coordinating research projects on tuberculosis.
- **ABC Hospital of Mexico City.** This project studied calcium complementation during pregnancy and its effect on lead absorption.

Criterion 3.1.c provides data of the research projects over the last three years (2008-2010). Of a total of 417 INSP research projects in those years, 154 (37%) are community-based, many of which are the result of formal agreements with health agencies, federal and state organizations.

### 3.1.C

A list of current research activity of all primary and secondary faculty identified in Criterion 4.1.a and 4.1.b, including amount and source of funds, for each of the last three years. This data must be presented in table format and include at least the following information organized by department, specialty area or other organizational unit as appropriate to the school: a) principal investigator, b) project name, c) period of funding, d) source of funding, e) amount of total award, f) amount of current year's award, g) whether research is community based, and h) whether research provides for student involvement.

In the period between January 1, 2008 and December 31, 2010 the INSP developed 417 research projects linked to the mission-oriented research lines (LIMs). Appendix 3.1.c provides a list of research activities by primary and secondary faculty developed in the years 2008-2010. The amount of award reflected in the column titled "Amount current year" reflects the budget received at the INSP during the last fiscal year reported (2010). If no amount is reflected in this column it means no additional budget was released for that research project during that fiscal year. The projects have been organized by INSP research centers.

During 2008-2010, there was a 32% increase in research projects conducted by the seven research centers. Out of 417 projects, 396 (98%) had funding (external, internal or both external and internal), and only 21 projects (5%) does not have funding. Most projects received grants from external sources (93%) or have both internal and external funds (5%). The research center with the most research projects in 2008-2010 was the Population Health Research Center (CISP). Of the 417 research projects, 154 (37%) were community-based research and 163 (39%) involved student participation. A summary of the active research projects for the last three years 2008 -2010 can be seen in Tables 3.3-3.7.

### 3.1.D

Identification of measures by which the school may evaluate the success of its research activities, along with data regarding the school's performance against those measures for each of the last three years. For example, schools may track dollar amounts of research funding, significance of findings (e.g., citation references), extent of research translation (e.g., adoption by policy or statute), dissemination (e.g., publications in peer-reviewed publications, presentations at professional meetings), and other indicators.

**Table 3.3**  
**Summary of INSP Research Projects, 2008-2010**

Research Center	Total Research Projects (2008-2010)	External (National & International) Funding	Internal & both internal and external Funding*	Community- Based	Student Participation
CENIDSP	15	15	0	1	5
CIEE	82	78	0	2	10
CINYS	58	51	7	31	42
CISEI	66	59	4	18	24
CISP	118	110	4	70	42
CISS	47	46	2	21	19
CRISP	31	29	2	11	21
Total	417	388 (93%)	19 (5%)	154 (37%)	163 (39%)

\*Note: Some research projects had both internal and external funding.

**Table 3.4**  
**INSP Research Projects by Year, 2008-2010**

Research Center	2008	2009	2010	Total Active Research Projects
CENIDSP	7	4	8	15
CIEE	46	54	51	82
CINYS	46	27	22	58
CISEI	30	49	56	66
CISP	55	84	103	118
CISS	13	26	31	47
CRISP	23	25	19	31
Total	220	269	290	417

In the last 3 years (2008-2010), scientific productivity has increased at the INSP in terms of the number and quality of scientific products and researchers. The significance and dissemination of results have increased as well, indicating that the Institute has maintained its high standards of excellence while increasing the impact of its findings, especially through the adoption of scientific results in public health policies, as will be described in this section. Data from 2001 to 2010 is presented later to describe the continuous increase of research activities in the INSP in the last decade.

The INSP measures the success of its research program in five areas: 1) the number of research projects and the percentage of protocols approved; 2) dissemination of research and the significance of research findings through the publication of scientific

**Table 3.5**  
**Source Funding for Research Projects, 2008-2010**

Research Center	2008 Research Projects			2009 Research Projects			2010 Research Projects			Total 2008-2010		
	External Funding	Internal Funding	No Funding	External Funding	Internal Funding	No Funding	External Funding	Internal Funding	No Funding	External Funding	Internal Funding	No Funding
CENIDSP	7	0	0	4	0	0	8	0	0	15	0	0
CIEE	45	0	1	53	0	1	47	0	6	78	0	4
CINYS	42	7	1	24	4	2	21	1	1	51	7	4
CISEI	27	3	0	44	4	2	49	4	3	59	4	3
CISP	53	2	0	81	4	0	95	3	5	110	4	8
CISS	13	0	0	25	2	0	31	1	0	46	2	0
CRISP	21	2	0	23	1	2	17	0	2	29	2	2
Total *	208	14	2	254	15	7	268	9	17	388	19	21

\*Note: Some research projects had both internal and external funding.

**Table 3.6**  
**INSP Community-based Research Projects, 2008-2010**

Research Center	2008	2009	2010	Total Community-based Research Projects*
CENIDSP	0	0	1	1
CIEE	2	1	1	2
CINYS	37	22	16	31
CISEI	9	18	15	18
CISP	33	47	64	70
CISS	4	13	15	21
CRISP	6	7	11	11
Total	91	108	123	154

\*Note: Some of the community-based research projects were active in the 3 years period (2008-2010). For the total, those were taken into consideration as only 1 project in the 3 last years.

**Table 3.7**  
**INSP Research Projects with Student Participation, 2008-2010**

Research Center	2008	2009	2010	Total Research Projects with Student Participation*
CENIDSP	1	1	3	5
CIEE	3	10	8	10
CINYS	36	25	14	42
CISEI	18	24	19	24
CISP	25	32	36	42
CISS	8	19	13	19
CRISP	16	17	13	21
Total	106	127	106	163

\*Note: Some of the research projects with student participation were active in the 3 years period (2008-2010). For the total, those were taken into consideration as only 1 project in the 3 last years.

articles, particularly in high-impact journals; 3) the number of research faculty and the number ranked nationally as part of the National System of Researchers (SNI); 4) the number of research activities with funding and agencies funding INSP research; and 5) the use of research conducted by INSP in the design of evidence-based public health programs and policies. Information on the Institute's overall performance regarding the first 4 outcome measures with their quantitative targets can be seen in Table 3.8. Research impact on public policy does not have a measurable target, but examples in a following section demonstrate the INSP's success in this area.

### Number of Research Projects and Protocols Approved

In 2001, the INSP had 84 projects under development, compared with 282 in 2010—an increase of 335% in a decade (Table 3.9). In 2010, the Research, Ethics and Biosafety Commissions evaluated 130 new projects, 101 of which (78%) were approved. Between 2001 and 2010, 837 projects were evaluated and 602 (72%) approved.

### Research Dissemination and Significance

In terms of dissemination of research activities, a total of 229 articles were published by INSP researchers in 2010, compared with 78 articles in 2001—an increase of 294% in those years (Table 3.10). Scientific article publication is one of the main measures of research success promoted among all INSP researchers. Economic and promotion incentives for researchers who publish scientific articles are available both internally and externally through participation in the SNI and the National Health Institutes' periodical assessment.

Another measure to identify research success is the quality of the scientific journals in which articles are published. Scientific journals in Mexico are classified according to their quality and scientific impact on a scale of I to V, with V being the highest and the most influential level. In 2010, 77 of the articles published by INSP researchers appeared in highly influential Group IV and V scientific journals, compared with 15 in 2001, reflecting an increase of 327% in a decade (Table 3.11). INSP researchers have consistently and significantly increased the publication of articles in Group IV and V journals, which are indexed in the *Journal Citation Report and/or Social Science* as having an impact factor of 3.0-5.99 and 6.0 and above, respectively.

### Number and National Ranking of Research Faculty

Most full-time professors begin as researchers in medical sciences at the INSP and carry out research as their main activity before becoming involved in teaching and service activities. In 2010, there were 168 research positions, compared with 123 positions in 2001—an increase of 37%

Two quality indicators demonstrate the INSP's increase in scientific productivity: 1) the number of professor/researchers who belong to the SNI; and 2) the number of professor/researchers who increase their researcher category level, which is determined according to productivity standards set by the National Institutes of Health.

The SNI is a prestigious and selective national system created by the federal government that is used for all scientific disciplines. The SNI grants researchers the title of "national researcher" based on their

**Table 3.8**  
**Outcome Measures for Research Activities, FY 2007-2010**

Outcome Measure	Target	FY2008	FY2009	FY2010
# of Research Projects	Increase of $\geq 5\%$ yearly	42% (213)	24% (265)	6% (282)
% of Research Protocols Approved	$\geq 60\%$ yearly	76%	64%	78%
# of Scientific Articles Published	$\geq 200$	192	228	229
% of Articles Published in High-Impact Journals (Groups IV and V; see Table 3.9)	$\geq 30\%$	33%	20%	34%
% of Full-Time Faculty with SNI Designation	$\geq 50\%$	47% (112/238)	50% (121/240)	50% (120/242)
% of Research Projects with Funding	$\geq 90\%$	99% (211/213)	94% (258/265)	93% (265/282)
# of Agencies Funding INSP Research	$\geq 50$ yearly	82	87	105
# Citation References of INSP Research scientific articles	Not defined	No data	293	152

**Table 3.9**  
**Evaluation of Protocols, 2001-2010**

Protocols Evaluated	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Evaluated Total	37	39	65	89	40	25	120	144	148	130
Approved Total	37	28	60	28	21	24	99	110	94	101

**Table 3.10**  
**Number of Articles Published by INSP Researchers, 2001-2010**

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
# of Articles	78	104	127	118	121	140	160	192	228	229

**Table 3.11**  
**Number of Articles by INSP Researchers Appearing in High-Impact Scientific Journals (Groups IV and V), 2001-2010**

2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
IV	V	IV	V	IV	V	IV	V	IV	V										
10	5	10	5	19	0	19	5	13	4	32	10	29	12	50	14	30	15	49	28

production of relevant scientific works, as well as other rigorous peer-reviewed academic indicators. The SNI ranks researchers on a scale from “candidate” through Level III (the highest level), depending on their scientific productivity. Researchers can lose their SNI accreditation if they do not maintain high productivity standards. The number of INSP researchers who belong to the SNI increased from 45 in 2001 to 120 in 2010—an increase of 266% in almost a decade (see Table 3.12).

In addition to the SNI, the INSP Research Commission evaluates researchers' scientific productivity every 3 years according to standards established by the National Institutes of Health (NIH). The INSP ranks researchers' medical science researcher (ICM) level on a scale of ICMA to ICMF, with ICMF being the highest (see Table 3.13). The academic requirements to obtain each category are described in Appendix 3.1.d. In the last three years, both the number of INSP researchers in the

**Table 3.12**  
**SNI Categorization of INSP Researchers, 2001-2010**

SNI Categories	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Candidate	7	9	9	10	14	17	14	13	12	8
Level I	29	29	27	27	35	41	65	73	78	81
Level II	6	9	10	10	11	12	14	17	20	19
Level III	3	4	3	4	7	7	9	9	11	12
Total	45	51	49	51	67	77	102	112	121	120

**Table 3.13**  
**INSP Researchers by ICM Category, 2001-2010**

ICM Level	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
ICMA	31	23	23	23	23	23	26	26	26	25
ICMB	39	46	46	46	46	46	35	38	38	43
ICMC	27	27	27	28	28	28	48	51	51	51
ICMD	9	12	12	12	12	12	17	17	17	30
ICME	9	9	9	7	7	7	10	9	9	9
ICMF	8	8	8	9	9	9	10	10	10	10
Total Researchers Evaluated	123	125	125	125	125	125	146	150	151	168

Note: ICM = Medical Science Researcher. The categories ICMA-ICMF correspond to increasing classification levels (A-F) according to the National Institutes of Health criteria. (Details on these levels can be found in Appendix 3.1.d-2.)

SNI and the INSP classification level of these researchers have increased.

### Research Funding

One of the greatest challenges to developing research in Mexico is funding. At the INSP each main researcher applies for grants and receives support from his or her research center. Steady increases in the number of agencies that provide grants to fund research activities has meant that the INSP's has been able to obtain financial resources for almost all recent research projects (95%). The number of agencies that fund INSP research has increased 40% over the last four years (Table 3.14). Among the most important of these agencies are the National Council for Science and Technology (CONACyT), the various entities with the SSA, the World Health Organization (WHO), the Pan-American Health Organization (PAHO), the National Institute of Women (INmujer), the World Fund for the Environment, the Inter-American Development Bank, and The Global Fund to Fight AIDS, Tuberculosis and Malaria, among others. Information on funding for each research activity is available in Appendix 3.1.c.

**Table 3.14**  
**Number of Funding Agencies Supporting INSP Research, 2007-2010**

Year	2007	2008	2009	2010
Agencies Providing Research Grants	75	82	87	105

### Examples of INSP Research Used in the Design of Public Health Programs and Policies

INSP research has been instrumental in developing and refining numerous public policies in Mexico. INSP researchers participate in the design, analysis, evaluation and monitoring of public health in Mexico and the region. The evaluation of health programs and interventions has provided information for guiding community interventions and decision making for social programs across Mexico. The INSP has become a reference institution for the national health system for generating, disseminating, integrating and applying scientific knowledge to attend public health problems.

Following are recent examples of INSP research used in evidence-based program design and policy making in Mexico.

- The INSP conducts periodic national surveys to identify the magnitude, distribution and trends of public health problems in Mexico. In 1999, the National Nutrition Survey found a large proportion of children with iron-deficiency anemia. The results were presented to the SSA and Sedesol and recommendations were made to implement or modify programs to improve the iron status of Mexican children. A federal program that distributes subsidized milk to low-income households was adapted to fortify the milk with iron and other micronutrients. Rigorous impact evaluations have demonstrated the effectiveness of the new program in reducing anemia.
- Mexico is experiencing an obesity epidemic, which affects all ages and social groups. The INSP has conducted epidemiological studies on the magnitude, distribution and trends of obesity. In specific studies in elementary schools and other settings, INSP researchers have developed interventions to test strategies to prevent and control obesity. Using this information, the INSP has advised the SSA in developing a national agreement for preventing obesity, which was signed by the government, civil society, INSP and industry and announced by the President of Mexico in early 2010.
- The INSP is developing research to evaluate the impact of public policies to control tobacco use among adult smokers. The objective of this project is to evaluate the psychosocial and behavioral impact that public policies promoted by the WHO's Framework Convention on Tobacco Control has on a representative sample of Mexican smokers. The policies studied include: a) increased taxes on tobacco sales; b) regulations to increase the size and format of health warnings on cigarette packs; c) prohibition of smoking in public areas and workplaces; and e) services to help smokers quit smoking. Preliminary results were presented before a national forum in 2010. The INSP has shown that both scientific knowledge and information on the emotional impact of smoking policies are important for effective decision making. Recently approved tobacco control legislation (General Tobacco Control Law and the Protection Act for Non-smokers in Mexico City) was largely influenced by INSP research and advocacy.
- In 2009, the INSP evaluated the *Oportunidades* program of the Mexican Institute for Social Security (IMSS), which provides health services across Mexico. The study reviewed the norms and operation of the program and monitored the achievement of strategic targets. The study identified opportunities to improve the program and evaluated users' perception of the health services offered. The evaluation found fragmentation and heterogeneity in the provision of health services and a need to improve documentation. This study has helped the program to improve health care for its beneficiaries.
- In Mexico, the INSP is the principal advisor on public policies for the prevention and control of cancer in women. As a re-

sult of population-based studies on cervical cancer screening programs, HPV testing has been adopted at the federal level, with a particular focus on the country's poorest areas. This has led to more efficient detection of precursors to cancer lesions in high-risk women. In the past 15 years, evidence generated by the INSP has led to increases in screening, improvements in diagnosis and treatment, and substantial reductions in cervical cancer mortality rates.

- Researchers of the LIM *Medications in public health: access, use and antimicrobial resistance* developed the report "Regulation and Promotion of Proper Use of Antibiotics in Mexico: Proposed Guidelines for Action." This document was circulated among decision makers in February 2010 and influenced the policy issued by the SSA in May 2010 that regulates the sale of antibiotics in pharmacies.

### 3.1.E

#### A description of student involvement in research.

Since research is one of the three main activities at the INSP, student from all programs have the opportunity to collaborate directly with researchers. These opportunities include internships in the departments of the 7 research centers, specialization in specific research topics, academic short stays in other universities and jobs working on research projects. Over the past three years (2008-2010), students were involved in 163 research projects, 37% of the total of research activities conducted by the INSP.

To learn about the different research topics and projects related to the LIMs, students attend a series of workshops and conferences given by researchers during an orientation course one week before the beginning of their first semester. Through these activities all students are invited to participate in research projects. Also, during the first semester of the program, the LIMs' projects are presented so that students are aware of the opportunities for internships in research projects. Students' involvement in specific LIM-related research projects usually helps them to develop their culminating product (thesis, scientific article or final professional project [PTP]). A student's research thesis may be part of an ongoing research project or use information from previous projects. The PTP involves community-based participatory research, which is carried out by students and faculty in specific topics identified in the first semester and approved by the assigned committees. Both of these terminal projects can be further developed to become a scientific publication.

A new program to involve students in research, called *formation lines*, allows students to specialize in specific research topics. Through this program, students can use optional credits to study courses that will help them deepen their knowledge in a public health topic related to a specific LIM. This program has been implemented since 2010 and is coordinated by a researcher who encourages students to develop their thesis on a topic related to

the research project. This experience gives students opportunities to apply for scholarships for research internships in other universities, develop internal internships in a research project related to the LIM, and present papers at national or international conferences as well as to develop their thesis. Students can work on topics such as global health, pharmacoepidemiology, AIDS, and health program assessment. There are future plans to develop more research topics linked to the LIMs as a strategy to promote student involvement in research and in authoring or co-authoring scientific publications.

Another stimulus to involve students in research activities is the availability of scholarships for short research stays at national and international universities to help students finish their thesis or a scientific article for graduation. These scholarships are available to all students who study in INSP programs that are part of CONACyT's accreditation quality program (see Criterion 1.3.A). Currently few students apply for these scholarships, so the INSP needs to strengthen actions to promote more participation.

To enhance the dissemination of student scholarly work related to research activities, the INSP supports the Student Association in organizing the annual "*Jornadas Académicas*," a one-day academic conference where students from all programs present their research experiences, including their thesis or PTP findings. Many students also present posters at the biannual Congress of Public Health Research, an international conference organized by the INSP involving more than 200 national and international institutions, universities and health organizations. Students are also an important part of the planning and organization of academic research conferences hosted by the INSP. For example, in 2011 more than 60 students from all programs served on the organizing committee for two international conferences.

Some students, because of their participation in research activities during their academic program, get temporary jobs working on a research project while they finish their academic credits and are working to complete their thesis or PTP. This participation strengthens their research skills and sometimes results in authoring or co-authoring scientific articles associated with the research activity before they graduate.

### 3.1.F

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- One of the principal strengths of the INSP is its continued advances in research. In particular, during the last three years projects have been developed with an extensive variety of na-

tional and international health institutions and organizations, and there has been significant growth in research productivity.

- The results of INSP research has influenced public policy. The government relies at INSP ability to generate evidence for its decision making.
- The organization of research into mission-oriented research lines has ensured that all research is directly relevant to the Institute's mission.
- Researchers have generated diverse and important research projects related to community needs and the most pressing public health problems in the country and region. This approach supports both instruction and service by involving students and community members in research projects.
- In recent years, unprecedented growth in research activity has led to increases in scientific production, new positions, researcher ratings, funding and impact on public health policy and practice.
- The quality of research projects is periodically assessed by Collegiate Bodies created specifically for that objective.
- The INSP has been successful in attracting external funding to finance research activities, making it the foremost developer of research in public health in Mexico.

#### Weakness

- Most students do not have time to get involved in research projects until they finish their course workload. This practice sometimes delays graduation.
- Few students have applied for CONACyT scholarships for academic short stays to develop research activities at other universities.

#### Future Plans

- New strategies are in place to motivate students and faculty to publish together.
- Strategies will be diversifying to will to promote more students to apply for CONACyT scholarships to develop short academic stays at other universities.
- The redesign of the Master in Health Science the program will include the opportunity for students to get involved in research activities beginning in the first semester.

### 3.2

Service. The school shall pursue active service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.

The INSP is highly active in a range of service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.

## Required Documentation

### 3.2.A

A description of the school's service activities, including policies, procedures and practices that support service. If the school has formal contracts or agreements with external agencies, these should be noted.

As said in Criterion 1.1.B, service is, by law, part of INSP's mandate. The INSP's Organic Statute (legislation outlining the INSP's fundamental responsibilities) and internal regulations provide guidelines for service policies and practices. Service activities offered by the INSP play a fundamental role in serving two key goals: to prevent public health problems and promote population health. The INSP's Organic Statute (2007) establishes in Article 3 the following objectives, among others:

- I. Develop clinical, epidemiological, experimental and technological development research in bio- and socio-medical areas to help the understanding, prevention, diagnosis and treatment of diseases and the rehabilitation of patients, as well as to promote public health.
- II. Publish research and the results of academic activities as well as technical and scientific data related to public health topics.
- IX. Advise and act as a consultant to the Ministry of Health whenever it is required.
- X. Act as a technical and policy advisor to all governmental entities in its specialization areas, as well as to private organizations or individuals.
- XI. Act as a consultant to the specialized research centers, universities or hospitals of the states or any health organization that requires the service.
- XIV. Implement as service activities the development of surveys in public health areas and the design diagnostic technology that attends national health needs, specifically in transmittable diseases.

All of the primary services provided by the Institute serve the objectives and policies described earlier. These services fall into one of five categories:

1. **Large-scale evaluations and surveys.** The INSP faculty, with the support of students, conduct large-scale evaluations of programs and public initiatives that help the Mexican government identify social, behavioral and economic factors involved in the development and success of these initiatives. These evaluations also provide feedback on the impact of these initiatives and offer recommendations for improvement. The INSP also leads National Health Surveys, which are included in Table 3.14, in the following section.
2. **Community outreach services.** Most of these services are related to research that is already in progress and provide sup-

port for social groups through laboratory services and health promotion activities for the community.

3. **Information creation, translation, and dissemination and other actions to broaden access to scientific knowledge in public health.** Through these activities, the INSP's infrastructure and expertise facilitate access to knowledge by creating, improving, and distributing information about public health.
4. **Direct services by faculty.** The Institute's professor/researchers have become renowned within Mexico and beyond, and they act as scientific consultants in public health for educational institutions, government entities, and social and health organizations both nationally and internationally. Services include reviewing scientific documents, evaluating scholarships, developing and reviewing research protocols, providing technical advice, serving on scientific committees, and collaborating with federal and state governments to design and develop health projects, among others.
5. **Development of online resources and informatics services.** The development of online education and the use of information and communication technologies have improved the INSP's capacity to offer a broad range of education, training, and design resources and to disseminate public health information to diverse institutions around the world.

When aimed at the general public, services are provided free of charge or with a minimal recovery fee. If an institution requires a deliverable with a specific design, an agreement that stipulates the commitments, obligations and budget of each party is established in order to provide the service.

### 3.2.B

A list of the school's current service activities, including identification of the community groups and nature of the activity, over the last three years.

The INSP provides a variety of important services related to large-scale evaluations and surveys, community outreach services, information translation and dissemination and access to scientific knowledge, among other services. In this regard, the INSP plays a role similar to that of the U.S. Centers for Disease Control and Prevention (CDC).

## Large-Scale Evaluations and Surveys

**Evaluation of programs and public policies with social and health components.** Three of the most important examples in this area are: 1) evaluation of the health and nutrition component of *Oportunidades*, a federal program offered through the Mexican Institute for Social Security (IMSS) that provides education, health, nutrition and income support for low-income individuals and families; 2) national evaluation of the quality of health services in public health clinics and hospitals; and 3) participation in the evaluation of *Seguro Popular de Salud*, a program that guarantees

basic health care and accident coverage to low-income segments of the population.

**Design, application and analysis of national and regional surveys.** The programs and actions of the state and national health programs are aimed at increasing overall population health and ensuring effective access to quality health care services and strategies. The INSP generates relevant scientific information through the application of national and regional surveys that evaluate the performance of health and nutrition policies and practices, as well as social development. It also makes recommendations about programs and strategies to meet public needs.

Since 1988, a significant effort has been made in Mexico to generate periodic information on the population's health status and access to health services. This information is gathered through National Health Surveys (conducted in 1988, 1994, 2000 and 2006) and National Nutrition Surveys (1988, 1999 and 2006), in which the INSP has played an important role. Organizations from diverse sectors, particularly health, social development and education, have used the results of these surveys to improve their work.

The survey methodology allows for comparisons over time of pressing issues on the national agenda, including disease burden, nutritional status and access to health services. The ongoing nature of these surveys provides a longitudinal look at the progress and gaps in health and nutritional status, programs and access to services. This information has become essential for decision making at various government levels and allows the challenges created by demographic, behavioral and environmental changes involving population health outcomes to be better understood and anticipated. A list of all surveys conducted from 2008 to 2010 are shown in Table 3.15.

### Community Outreach Services

The INSP offers technical and specialized consulting for community groups that seek services in public health topics through specific units related to the research projects. Students, faculty and administrative staff participate actively in these units and provide community services such as specialized presentations and strategic preventive actions to promote community health. Most of these services are free; however, some services, especially those required by private organizations, have a cost stipulated in formal agreements. In addition to work performed by various INSP units, the INSP has support facilities such as insectariums and a biotery. Various INSP units have provided extensive consulting for community groups, as described below.

**Insecticide Evaluation Unit.** This unit evaluates the biological effectiveness of existing and new insecticides used to control disease vectors. CRISP personnel working in the unit evaluate the quality and effectiveness of application methods and equipment

for the insecticides. In addition, the unit provides consulting, training, and follow-up on the use and handling of insecticides for the chemical control of disease vectors for entomological personnel, SSA staff, and employees of private companies in the health sector. The unit also provides evaluation consulting, including the different types of evaluations, protocols and methodologies, and administrative processes and costs.

**Strategic Intelligence Unit.** This unit was created in 2009 to support decision makers in the Disease Prevention and Health Promotion unit within the SSA and the Director General/Dean of the INSP. The unit comprises a multidisciplinary team of professionals from distinct research and service centers in the Institute who develop reports to support effective strategic decision making for health issues based on various geo-reference tools, sources of information, and statistical techniques and methods. This work team has done research on topics such as dengue, mortality due to violence, maternal mortality, and mortality due to HIV.

**Infestation Control Unit.** This unit provides training and evaluation services for states and municipalities on activities to prevent and control dengue, malaria and other vector-transmitted diseases (VTDs). It also conducts support activities in response to specific environmental conditions, such as the floods in northern Chiapas in 2007 and Tabasco during 2008. This unit applies insecticides to control mosquitoes and other pests for public and private institutions and healthcare and government entities. It also provides advice, training and monitoring for chemical control of disease vectors (dengue, malaria, Chagas disease, etc.). These services are specifically designed for entomological personnel and health technicians of the SSA throughout Mexico but is especially directed to state and local health personnel. Staff provide community talks and social promotion efforts to achieve greater collaboration with the community.

### Unit for the Diagnosis of Vector-transmitted Diseases.

This unit was created to support health services in the state of Chiapas for activities related to population health care. Its operation began with the diagnosis of malaria over 20 years ago. The general public has access to this service at no charge, as there is subsidized funding (90% from research projects and 10% from the federal government to cover microscopy supplies) to pay for diagnostic analysis for three diseases: malaria, dengue, and Chagas disease. As an extension of this service, trials of new diagnostic tests are also conducted for the community in Tapachula, in partnership with the INSP's research projects and with prior agreement from communities or municipalities. These trials include rapid tests for malaria as well as serology, PCR and rapid tests for Chagas disease in municipalities within the Program for Participatory Diagnostics (National Fund for Health Promotion).

**Vector and reservoir taxonomy unit.** This unit came about through the development of research projects to identify disease

**Table 3.15**  
**Large-Scale Surveys and Program Evaluations Conducted by the INSP, 2008-2010**

Year	Surveys	Year	Program Evaluations
2006-2009	Food and Nutrition Program Survey (CONEVAL)	2006-2009	Evaluation of Birth Models
2008	National Survey of Health in Primary and Secondary Schools	2008-10	Impact Evaluation of the National Healthcare Program for Adults Aged 70+ in Rural Areas
2008	National Survey of Vaccination Coverage (influenza, pneumococcus and tetanus) in Older Adults	2008	Impact Evaluation of the National Daycare Program (ongoing)
2008	National Survey of Vaccination Coverage	2008	Impact Evaluation of Performance-based Contracting for General Health and HIV/AIDS Services in Rwanda (ongoing)
2008	Survey of the International Study to Evaluate Policies for Tobacco Control	2008-09	External Evaluation of the IMSS's Oportunidades Program
2008	Survey of the Study of Cervical Cancer Vaccine against HPV in Mexico	2008	External Evaluation of the Mi Familia Progresiva Program in Guatemala (ongoing)
2008	National Survey of Pharmaco-resistance in Tuberculosis	2009	Evaluation Design of the Mesoamerican Health Initiative
2008	Evaluation Survey of the National Register of Beneficiaries of the "Seguro Popular" Program	2010	Impact Evaluation of the "Bridging the Gap between Immediate and Long-term Responses to the Global Food Crisis" Project
2008	National Survey on Exclusion, Intolerance and Violence in High Schools	2010	Evaluation of the Program for the Prevention of Youth Violence
2008	Survey on the Evaluation of the Healthcare Program for Adults Aged 70+ in Rural Areas	2010	External Evaluation of the Food Security Program of the State of Mexico (ongoing)
2009	National Survey on Housing Living Levels III		
2009	Survey of the Evaluation of the Vaccination Program for Children under 5 Years in the State of Mexico		
2009	Daycare Program Evaluation Baseline Survey		
2009	External Evaluation Survey for the IMSS's Oportunidades Program		
2009	Youth Violence Prevention Program Evaluation Survey		
2009	Second National Survey on Exclusion, Intolerance and Violence in High Schools		
2009	Ministry of Health Hospital Performance Survey		
2009	Survey of the Evaluation of the HPV Screening Strategy in the State of Morelos		
2009	"Oportunidades" Urban Evaluation Survey 2009		
2009	Study on Global AGEing and Adult Health Survey		
2009	Daycare Program Follow-up Survey		
2010	Disease Detection in Mexico City Prisons Survey		
2010	Evaluation of the Impact of the Scholarship Program for Upper-Middle School Students		
2010	Oportunidades Urban Evaluation Survey 2010		
2010	Immunization Coverage Survey		
2010	National influenza A-H1N1 Virus Survey		
2010	First National Disability Perceptions Survey		

vectors in different regions in Mexico. The unit receives requests from personnel at the state of Chiapas Health Institute to identify specimens. Four specific projects are currently under way: 1) geographic diversity and distribution of medically important culicid species in the west central region of Mexico, financed by the National Commission for Knowledge and Use of Biodiver-

sity (CONABIO); 2) genetic strategies to control dengue virus transmission and to identify and corroborate species associated with the production of *Aedes*; 3) ecology and incrimination of cutaneous leishmaniasis vectors and reservoirs in the border region of Chiapas; and 4) feeding ecology of *Aedes aegypti* larva populations in artificial breeding containers in southern Chiapas.

The unit's capabilities are being increased to identify mammals and birds associated with zoonosis transmission, with and without vector measurement. For specific cases that involve vectors and reservoirs, an area for collected biological samples and tissue banks is being created.

**Unit for the spatial analysis of health risks.** This unit was created in 2006 to support research projects and provide consulting for civil and sanitation authorities with regard to spatial and temporal analyses of disease transmission. The unit participates in multiple collaborative networks in order to increase the analysis of factors associated with climatic phenomena, disasters and climate change. This unit has also trained personnel from health services of the state of Chiapas and the NGO Maternity without Risks in geo-reference methodologies and the use of geographic information systems, and has designed courses for CRISP's Continuing Education Program. The unit maintains relationships with international organizations such as WHO, PAHO, and the United National Development Program (UNDP) national organizations such as the National Center for Disaster Prevention (CENAPRED), the National Statistics and Geography Institute (INEGI), the National Forest Commission (CONAFOR), the National Autonomous University of Mexico (UNAM), and the National Ecology Institute (INE); and regional organizations such as the Health Institute of Chiapas (ISECH), Southern Border College, and the Autonomous University of Chiapas (UNACH).

**Center for Compilation and Analysis of Health Information (NAAIS).** This unit comprises a multidisciplinary group of researchers in public health, demographics, geography and computer system engineers who are responsible for compiling geographic information systems and analyzing information relevant to the field of public health. Personnel at the NAAIS generate and analyze information related to vital statistics, health services and epidemiology. The NAAIS maintains a public access website portal for a database of health data applied to a geographic information system for different topics (e.g., mortality, morbidity, hospital discharges) during specific periods, as well as SSA resources and census data. Projects developed by this group include both a health information system component and a medical geographic component to facilitate decision making in different entities within the SSA. Some of its projects include:

- **Master Infrastructure Plan.** The geographic information system (GIS), known as the Master Sector Plan for Health Care Resources, is a tool for decision makers from the SSA involved in planning for state health services. This system enables users to obtain information about existing health services infrastructure, find out about the current demand for health services and resources, and judge the feasibility of obtaining access to different populations in terms of travel time.
- **Water Quality Monitoring System for Consumption.** This system supports the activities of the national Commission for Protec-

tion against Sanitary Risks (Cofepreis) in monitoring the quality of water for human consumption through the automation of processes for verifying residual chlorine. The system enables geo-referencing of monitoring points, the weekly capture of information related to residual chlorine values, and the illustration of weekly and monthly results through thematic maps and timeline graphs. The system operates in 236 sanitation districts in 32 states and has found more than 500,000 instances of residual chlorine, protecting Mexicans that live in those states from overexposure to chlorine.

- **Information system for surveillance of the type A H1N1 influenza virus.** During the public health emergency caused by this virus, personnel with the Department of Medical Geography of the CENIDSP developed two informatics tools that were incorporated into the SSA's Single Epidemiologic Surveillance Platform. The first, the Negative Notification Network, facilitates immediate notification of probable cases of this type of influenza at more than 600 hospital medical units. The information is stored in a database that is shared with the second tool, the Geographic Information System for Surveillance of Type A H1N1 Influenza. This tool maps notifications from the Negative Notification Network, the incidence rate of the virus, and suspected and confirmed cases at the state, municipal and medical unit levels. This system enables the construction of thematic maps of the epidemic's evolution and allows graphing of suspected and confirmed cases. The Geographic Information System stores data from medical units and schools for more than 50 cities across Mexico.
- **LuneSaludable Program.** This project was implemented to promote the occupational, personal and family health of the institutional community. It is designed to address public health topics in an accessible manner on a monthly basis. The program conducts various activities related to health promotion, disease prevention and timely diagnosis of diseases, in addition to conferences, workshops and physical activity events that benefits students, faculty and administrative staff. Appendix 3.2.b-1 provides details about these service activities.

**Analytical Laboratory for Tobacco Compounds (Lacot).**

This laboratory (described in Criterion 1.6.H) conducts analyses of tobacco compounds and related metabolites, providing technical and scientific support to quantify active tobacco consumption and involuntary exposure to environmental tobacco smoke. This information is a service provided to government and health organizations to aid decision making and to reinforce tobacco legislation.

**The Genomic and Proteomic Studies Unit.** This unit supports researchers from public and private institutions by conducting genomic and proteomic studies using state-of-the-art techniques. The unit provides support for DNA sequencing and identifying proteins by mass spectrometry. The results of DNA and proteomic sequencing have multiple applications for research in areas related to medicine, veterinary medicine and agriculture.

**Health services for communities.** As a result of the research carried out in communities where health problems have been detected, the INSP offers services to improve community health. Three examples are described below:

- As part of the ESMaestras disease prevention research project (referred to in Criterion 3.1.B), the INSP offers services such as free clinical studies, disease prevention talks, a health newsletter, and tips for healthy lifestyles to more than 100,000 women teachers in rural, urban and indigenous communities across Mexico. It also offers medical follow-up for 20 years to prevent and provide an early detection of frequent diseases like breast and cervical cancer and diabetes, among others. This project was made possible through a formal agreement with the National Union of Education Workers, one of the biggest such organizations in the country.
- Nutritional evaluation and promotion was provided for 60 low-income families of the “La Vía” community who live in informal housing in Cuernavaca, Morelos.
- A community intervention was organized to prevent obesity among 6- to 10-year-old students in Tlaltizapan, Morelos. Actions taken include regulating the food sold at schools, organizing and supporting community events that promote physical activity, implementing healthy spaces in schools, improving the quality of physical education classes, creating and/or strengthening health and school nutrition committees, developing competitions to educate the community, coordinating with Health Services personnel to promote healthy eating habits and physical activity, and giving nutrition talks to children, parents, teachers and school food service personnel.

### Information Creation and Dissemination and Access to Scientific Knowledge

Mechanisms and services through which the INSP offers information on public health include the following:

**Official website.** The INSP is one of the main sources of information on public health in Mexico. This service is provided in many ways, and the website plays an important role in making information available to the public through means such as interviews with INSP specialists, media reports about public health problems and social strategies to promote healthy life styles. The Institute's website receives roughly 350,000 visits per month. Through this website the general public has access to institutional information about education and capacity-building programs, topics and projects related to the LIMs, an electronic library catalog, databases from INSP surveys (<http://www.insp.mx/encuestoteca/>), and the electronic version of the INSP's journal *Salud Pública de México (Journal of Mexican Public Health)*, among others.

**International Congress on Research in Public Health (CONGISP).** This meeting is held every two years to disseminate

scientific knowledge generated by the INSP academic community and other institutions and to encourage dialogue among individuals and organizations involved in public health research, promotion and prevention. Each congress has more than 1,500 national and international participants, including representatives from academia, health authorities and community organizations, as well as students and the general public.

**José Luis Bobadilla Library.** As described in Criterion 1.6.J, this library offers both the internal and external communities the most extensive collection outside Mexico City of publications on public health. It is a key resource for students at the Institute and local schools of medicine, nursing and social work, as well as for other health institutions and NGOs in the surrounding area. In the last three years (2008-2010), 489 students from other universities and 6,446 professors and researchers from other educational institutions used this library. There has been a gradual decrease in the number of physical visits over the last three years and an increase in online visits to information databases through the library's webpage. The library provides the following external services to academic community that requires them:

- **Electronic document retrieval service and Loansome Doc.** The INSP library provides access to and the ability to search for and retrieve digital versions of scientific articles published in Mexico and abroad. Users from public and private institutions can request and obtain full-text documents available in NIH and other databases such as Integra Medline and Premedline. The INSP also participates in the Loansome Doc® document delivery service, which allows users to request articles from PUBMED.
- **Virtual Health Library (BVS)** (<http://bvs.insp.mx>). In view of the institutional commitment to improving access to information, the BVS was developed in a cooperative venture with the Latin American Center for Information on Health Sciences (BIREME). This virtual library provides free access to all users from Latin American and Caribbean countries to scientific publications contained in a wide range of national and international databases. The BVS also offers information on important health topics and access to information from a range of other health institutions.
- **BVS HIV/AIDS** (<http://bvssida.insp.mx>). This resource, along with BVS Nutrition and SciELO Mexico (below), grew out of a program for technical cooperation among the INSP, PAHO/BIREME and other institutions. BVS HIV/AIDS is a collection of data sources on HIV/AIDS, which in turn contain information generated by a network of professionals and institutions in Mexico dedicated to researching the disease.
- **SciELO México** (<http://www.scielo.org.mx>). This is a free online book and periodical library that includes recognized Mexican academic publications in all areas of science. The SciELO Mexico collection includes a regional Scientific Electronic Library network made up of the national collections from 13 Latin

American countries. SciELO Mexico is the result of collaboration among the INSP, UNAM, and the CENIDSP.

- **Artemisa Online.** As a complementary service, the INSP coordinates this index of Mexican health journals. For 15 years, this index has been the cornerstone of the dissemination of scientific health knowledge produced in Mexico. The INSP provides free access to this collection.
- **Electronic pharmacovigilance search service.** This digital service finds national and international reports regarding adverse reactions to pharmaceutical products and active pharmaceutical ingredients. Users (often those from health organizations or other education institutions) can receive a bibliography of articles and reports on the product.

**Dissemination program.** The INSP is active in communicating original research results in public health—through the journal *Salud Pública de México*—and in disseminating other public health information. It has an extensive program for institutional publications directed toward a diverse audience that includes scientists, health experts, decision makers and the public. Publications include:

- **Salud Pública de México (Journal of Mexican Public Health).** This journal offers a multidisciplinary approach to public health and provides a forum for discussing important topics in the field. It fosters debate on the ways in which to address the changing health needs of the population and how to organize the social response. This publication has been in circulation for 45 years and is included in numerous national and international indices, including Medline, Social and Behavioral Sciences, Index Medicus, EMBASE, Global Health Abstracts, SciELO, and Artemisa Online.
- **Textbooks.** The INSP edits Spanish-language public health textbooks for students in public health and medical programs, including its own publications as well as co-publications with leading private medical publishers.
- **Executive Summaries for decision making in health systems.** The results of research on social health determinants in vulnerable populations in Mexico have led to recommendations for health authorities to help improve health policies and programs. The CISS publishes executive summaries of its research specifically designed to inform decision making on public health issues affecting specific populations.
- **Viva Salud (Healthy Living).** This institutional bulletin is a communication tool for recognizing work in the institutional community and disseminating the results of such work to the general public.
- **Radio Broadcast.** INSP has weekly radio broadcasts for one hour in which researchers from INSP speak with the public about public health issues. This has become a popular and accessible way to disseminate knowledge in the community.
- **Other publications.** The INSP generated 10 public-oriented publications in 2007, 11 in 2008 and 8 in 2009. These pub-

lications include survey results, health program evaluations, research results and scientific review and analysis of public health topics. Details on these publications are available in Appendix 3.2.b-2.

**Institutional seminars for decision makers.** The INSP offers an annual program of 12 seminars whose audience includes SSA personnel and other health authorities. INSP researchers and authorities present advances in scientific research on public health topics of national priority. The INSP Director General/Dean and the research centers collaborate to organize these seminars to ensure the dissemination of state-of-the-art scientific knowledge for decision making. These seminars are conducted on a regular basis in the central facilities of the SSA and are transmitted via Internet around the country.

**Intra-institutional seminar program.** This program began in 2009 to internally disseminate information about research projects developed within the LIMs. Throughout the year, each research group has the opportunity to present to the INSP community the design, advances and results of one of more than 250 research projects. The presentation can be made in person or via videoconference sessions whose audience includes students, researchers and also graduates from all programs. In 2009, 87 seminars and 30 videoconferences were held (Table 3.16). Appendices 3.2.b-3 and 3.2.b-4 describe these seminars in detail.

### Direct Services by Faculty

INSP faculty serve as reviewers and members of editorial boards for a wide range of Mexican and international publications, such as *Emerging Infectious Diseases*, *Environmental Health Perspectives*, and *Health Policy and Planning*, among others. In addition, they evaluate articles for roughly 35 international medical journals, including *The Lancet*, *The New England Journal of Medicine*, *The British Medical Journal*, *Health Affairs* and *AIDS*.

Another important service provided by the faculty is free academic consulting for diverse health-related organizations, including those within the United Nations, the World Bank, USAID and the U.S. President's Emergency Plan for AIDS Relief. Professor/researchers also provide technical consulting for different federal and state institutions in Mexico related to public health on topics such as incorporating gender perspectives in health programs, evaluating the nutritional component of the national *Oportunidades* program, and training health workers to conduct quality epidemiological research. The professor/researchers also serve communities at the local level by advising municipal governments in areas where there is a high risk of Chagas and other diseases to establish prevention and control measures. In addition, they work with NGOs to develop informational, educational and communication materials about early detection of breast cancer and mental health for people with disabilities. The professor/researchers also

**Table 3.16**  
**Intra-Institutional Seminars, 2009-2010**

Month	Seminars 2009	Seminars 2010	Videoconferences 2009	Videoconferences 2010	Total
January	7	2	-	-	9
February	10	10	-	-	20
March	8	12	3	1	24
April	10	8	3	2	23
May	7	7	5	2	21
June	10	12	4	3	29
July	4	4	2	-	10
August	-	-	2	2	4
September	9	9	2	2	22
October	8	10	3	2	23
November	10	6	4	2	22
December	4	2	2	-	8
Total	87	82	30	16	215

work with indigenous women in their communities to develop collective leadership and productive programs.

Furthermore, INSP professor/researchers contribute their expertise to various national and international advisory committees, such as the National Council on Cervical, Uterine and Breast Cancer, the WHO's Molecular Entomology Committee, the United Nations University Food and Nutrition Program for Human and Social Development, and the Scientific and Technical Advisory Committee of the WHO Special Program for Research and Training in Tropical Diseases. They participate in a wide range of activities such as community programs, international conferences, symposiums and workshops on public health. Also, they lead sessions and roundtables in their respective areas of expertise and regularly participate as reviewers of research projects presented to the CONACyT for funding.

Every six months, a report of all the service activities by the INSP is presented to the Executive Council. The participation of faculty in these activities is a fundamental part of their annual performance evaluations. Appendix 3.2.b-5 specifies the types of free direct services provided by INSP faculty.

### Development of Online Resources and Informatics Services

These services involve developing virtual spaces and information systems to facilitate access to and efficient use of information to inform scientific research, teaching, and decision making.

1. **Evaluation and technical assistance for electronic biomedical journals.** The CENIDSP offers consulting to improve editorial

processes and standardization of scientific production through electronic media (e.g., evaluation and technical assistance to meet international quality standards to facilitate the addition of Mexican journals to indices such as ISI Web, Index Medicus, Lilacs, etc).

2. **Development of platforms for online consultation.** The INSP has highly qualified personnel for developing geographic information systems (GISs) in health, which are key for epidemiological surveillance, monitoring of health risks, and disease prevention and health promotion. These systems also capture and disseminate data generated by other health organizations. GIS information is used to plan and locate public infrastructure for health care services.
3. **Internet transmission of academic meetings.** The INSP's Informatics Department provides technical assistance for transmitting academic meetings via Internet, thus facilitating the participation of personnel from any of the Institute's campuses as well as externally. This platform enables the transmission of meetings held in various parts of the country and around the world. Some of the more recent experiences have included academic meetings with experts in England, Chile, the U.S. and Spain, among others.
4. **Development of digital public health libraries.** This service provides technical assistance for the LIMs and public institutions seeking virtual libraries that adhere to national and international criteria governing the architecture of such resources.
5. **Virtual INSP 2.0.** Managed by the Office of Academic Affairs, Virtual INSP 2.0 (<http://inspvirtual.mx/>) is a virtual space that enriches learning by providing INSP personnel, students, professor/researchers, and other interested parties with the most recent and relevant information about the INSP's academic programs. The website allows users to collaborate on public

health issues and build learning communities. It seeks to promote the collaborative, collective, and open construction of new knowledge. The website has multiple interactive sections, including the Documentation Center, where students, professor/researchers and the public can consult the INSP's physical and electronic collections and access open courses published under Creative Commons Licenses.

### 3.2.C

Identification of the measures by which the school may evaluate the success of its service program, along with data regarding the school's performance against those measures for each of the last three years.

The measures employed by the INSP to evaluate the performance of its service program are the number of large-scale evaluations and surveys, the activities that support the creation and dissemination of scientific information, the number of faculty providing direct service and the demand for online resources developed. The success of this last category is measured according to the number of individual users, in institutional seminars and videoconferences, as well as the production of scientific texts (See Table 3.17).

**Number of large-scale evaluations and surveys.** The INSP measures its success in this area by the number of large-scale evaluations and surveys completed. The Institute completed 6 such surveys and evaluations in 2008, 15 in 2009 and 9 in 2010. The INSP has become a leading institution in this field, conducting all major national evaluation surveys. Through coordination with the Mesoamerican Institute of Public Health (IMSP), the INSP has also entered the Mesoamerican region to provide these services.

**Number of public health seminars.** Over the last three years a total of 34 public health seminars were developed, with an audience that included 4,163 health authorities and SSA personnel, to provide information to guide decision making. In 2010, 12

seminars were held with 912 in-person participants and 1,319, virtual attendees; in 2009, 10 seminars reached a total of 110 in-person participants and 892 electronic participants; and in 2008, 12 seminars reached 840 participants. By creating a direct channel for communication between the scientific and academic communities at the INSP and government authorities responsible for decision making in public health, these seminars have enabled the creation and modification of public health policies, as well as the development of intervention and research programs that respond directly to social health needs.

**Number of intra-institutional seminars.** For the last two years the INSP has provided intra-institutional seminars that are also open to external researchers and others to provide new public health knowledge based on the INSP's research. In 2009, 87 seminars and 30 videoconferences were held, and in 2010, 82 seminars and 16 videoconferences were offered for this purpose. This service provides ongoing education, allowing external professionals and especially INSP graduates to keep up-to-date on important public health topics.

**Number of public health books published.** The publication of books that include research results and analysis of public health topics studied in the INSP is an important part of the service of disseminating and popularizing science. From 2005 to 2010, the INSP produced 46 publications about the results of relevant research projects in scientific and social fields. The INSP published a total of 13 books on research and other topics in 2008, 16 in 2009 and 15 in 2010. In addition, *Salud Pública de México* published 6 issues and 4 supplements each year in past three years.

**Increase and diversification of direct services provided by faculty.** In order to measure the success of direct services provided by faculty, the INSP takes into consideration faculty participation on article review panels, committees, advisory councils, scientific associations, advising for students in other institutions, and free technical consulting for international organizations, public agencies and NGOs.

**Table 3.17**  
**Outcome Measures for success of Service Practices, FY2008-2010**

Outcome Measure	Target	FY2008	FY2009	FY2010
# of large-scale evaluations and surveys	5	6	15	9
# of public health seminars for health authorities	10	12	10	12
# of Intra-Institutional seminars for internal and external audiences	80 Per year	No data	80 seminars & 37 videoconferences	82 seminars & 16 videoconferences
# of public health books published	≥10 Per year	13	16	15
# of faculty involved in providing direct services	≥40	60	69	75
# visits to the INSP website	≥1,000,000	1,428,760	4,298,366	1,943,216

From 2008 to 2010, 139 INSP participated in the evaluation of scientific articles for 84 national and international journals. In addition, 32 members of the INSP community belonged to the editorial committees of 19 scientific journals in the health sector.

- With respect to advising and technical consulting, at least 86 INSP researchers coordinated technical consulting projects for 66 international organizations in 2008-2010. At the national level, 42 experts from the INSP led projects for 33 federal and state public entities. In addition, 38 researchers provided technical assistance to 20 NGOs and the educational sector.
- During the past three years, 21 researchers at the INSP participated as guests or members of 20 international committees, while 13 participated in 11 national councils.
- During this period, 27 INSP professor/researchers participated as evaluators on external scholarship committees, and 35 faculty members participated on 23 committees to evaluate protocols for external researchers. In addition, 29 faculty members served in 24 national and international academies/associations, as well as in organizing committees for at least 18 international research meetings. In addition, 24 teachers served as thesis advisors and directors for students from other national and international educational institutions.

**Increase in demand for online resources and informatics services.** The indicator to evaluate service in this category is visits to the institutional website, particularly the most visited sections. The INSP website registered more than 7 million visits from 2008 to 2010. Table 3.18 shows the sections of the website most visited each year. It is important to highlight the sections dedicated to information resources (such as online libraries) and online education, which are commonly used by external researchers and health professionals.

### 3.2.D

#### A description of student involvement in service.

The INSP incorporates students in service activities that enrich their education and training. For example, students who have completed their coursework participate in the design and analysis of health evaluations, the results of which form the basis of their final projects. Also, students from the Master of Health Sciences with a concentration in VTDs participate in insecticide testing with the Infestation Control Unit as part of their training. In addition, as part of their postgraduate thesis work or to develop research projects, students participate in the design and administration of surveys or in the analysis of the resulting databases. They may also participate in fieldwork in their places of origin or as part of their professional practice, as their academic schedule permits. The INSP's extension of these services to different areas of the SSA allows students to conduct health interviews as part of national surveys and work with other National Institutes of Health. For example, during the influenza pandemic in 2009, students from the Residence in Public Health and Preventive Medicine helped with the epidemiologic surveillance at health centers. Students also participate in service activities at laboratories.

INSP students also develop a local community project through which they provide services to a social group for the improvement of public health as part of their PTP. The INSP provides students in professional degree programs with opportunities to conduct their professional practicum in the government, the community or the civil sector, and in many cases these projects are connected with the INSP's service areas. As part of their practicum experience, students conduct a health assessment of the community and develop an intervention for vulnerable

**Table 3.18**  
**Visits to the INSP Website, 2008-2010**

2008	2009	2010
1,428,760 visits	4,298,366 visits	1,943,216 visits.
Sections most visited: <ul style="list-style-type: none"> <li>• Online education</li> <li>• Media presence</li> <li>• <i>Salud Pública de México</i></li> <li>• 2009-2010 academic offerings</li> <li>• 2009 National Congress on Public Health</li> </ul>	Sections most visited: <ul style="list-style-type: none"> <li>• Online education</li> <li>• Media presence</li> <li>• <i>Salud Pública de México</i></li> <li>• Academic information</li> <li>• Virtual Health Library (BVS)</li> <li>• Research and services</li> <li>• Course on influenza</li> </ul> <p>• Note: Due to the influenza pandemic in 2009, this page received more visits than in other years.</p>	Sections most visited: <ul style="list-style-type: none"> <li>• Academic information</li> <li>• Research and services</li> <li>• Nutrition and services</li> <li>• Health Systems</li> <li>• Nutrition and Health National Survey 2006</li> <li>• Admission Process</li> <li>• Continuing Education</li> <li>• Population Health</li> </ul>

groups. They also give presentations about preventing disease, organize activities for health promotion, and design solutions to address community health issues. Later, students present the final health assessment to community members and local government authorities. These meetings help the community to express specific needs and develop proposals with their local authorities to improve their public health conditions. For 2010, 115 students were involved in service activities, as detailed in Table 3.19.

### 3.2.E

#### Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The INSP has become the most important institution that provides public health services in Mexico, as well as a center for advising—through the participation of its professor/researchers in a variety of social, community and government organizations—and a provider of direct services that impact communities.
- Most service activities are linked to the LIMs and help fulfill the Institute's mission.
- The INSP offers a great diversity of services through inter-institutional cooperation fostered through a number of important collaborative agreements with health and higher education institutions and NGOs in Mexico and throughout Latin America.

- Faculty members, staff members and students are involved in the INSP's service activities.
- MPH students provide health diagnoses and interventions for communities through their practicum activities as part of their academic program.
- The INSP's infrastructure provides the tools needed to broaden the Institute's service activities throughout the health sector and the general community.
- The INSP has become the national evaluator of excellence for some of the most important public health problems and programs in the country, which is demonstrated through the completion of large-scale evaluations and surveys.
- The Institution also serves the public through publications and other means of disseminating scientific knowledge aimed at the academic community and the general public.

#### Weakness

- The INSP has a great deal of potential to increase and diversify its service activities, but faculty are generally more focused on research and teaching.
- The emphasis on direct services to the community is a new initiative and could be strengthened.

#### Future Plans

- The CENIDSP research center is developing strategies to reach the community and other actors to expand the groups benefiting from INSP activities.

**Table 3.19**

#### Student Participation in Service Activities, 2010

Service Activity	Students Participating
Large-Scale Evaluations and Surveys	3
Community Outreach Services	
Insecticide Evaluation Unit	5
Infestation Control Unit	5
Insectariums	15
Biotery	5
Health services for communities (health diagnosis in communities through practicum experience by MPH students)	42
Information, Translation, and Dissemination Services and Access to Scientific Knowledge	
Official website	9
José Luis Bobadilla Library	9
Institutional seminars for decision makers	9
Intra-institutional seminar program	13
<b>Total</b>	<b>115</b>

### 3.3

**Workforce Development.** The school shall engage in activities that support the professional development of the public health workforce.

The INSP engages in a wide variety of activities that support the professional development of the public health workforce as part of its mission.

#### Required Documentation

##### 3.3.A

A description of the school's continuing education program, including policies, needs assessment, procedures, practices, and evaluation that support continuing education and workforce development strategies.

Consistent with INSP's strategic objectives, the development and continuing education of health personnel in different institutions and at various levels (upper and middle management and

operational staff) has been a constant effort. At the INSP, continuing education is considered to be an ongoing, comprehensive, dynamic and participatory process for health professionals responding to population health needs; thus, the Department of Continuing Education within the INSP's Office of Academic Affairs designs and offers a broad range of educational options. These includes full time programs at INSP campuses or other sites throughout Mexico, online and blended formats ranging from 40-hour courses to 160-hour programs for health professionals working in diverse institutions.

The Department of Continuing Education currently uses four strategies to train the public health workforce:

- 1. On-site training.** Every year formal agreements are signed to train health personnel in different states. Both the federal and state governments hire the INSP to develop training programs in different topics such as epidemiology, health promotion, prevention of chronic diseases and nutrition, among others. INSP faculty participates actively in providing on-site training, usually over the weekend. Faculty get an extra payment for their hours teaching continuing education courses as well as credits toward the Program for Teaching Performance Incentives (PEDD).
- 2. Summer continuing education program.** Every year a successful summer program called *Continuing Education Program in Public Health and Epidemiology* is offered at the INSP's three campuses. This program began 14 years ago as a joint initiative with Johns Hopkins University and has become widely recognized as an important strategy for educating an extremely diverse population. Students and professors from a wide variety of Mexican and international institutions participate in the program. Each year the INSP hosts more than 1,000 students who choose from among more than 50 course offerings. Appendix 3.3.a offers more detailed information about this program's courses, students and professors for the period 2007-2010.
- 3. Online courses.** Since 2005 when the first online course was developed, the INSP's online program has grown significantly. More than 4,000 students participate annually in at least one course. The courses are developed through formal agreements with the federal government, state governments and private health sector entities. The INSP uses both synchronous (Webex) and asynchronous (Blackboard) platforms to operate the courses. The technical staff for e-learning education consists of 3 instructional design specialists, 3 multimedia specialists, 2 platforms experts and 2 quality control managers. For each program, academic and operational coordinators are appointed. There is a complete specialized team to develop and operate the courses. Virtual INSP 2.0 has e-learning resources and courses that are offered free to the public. As an example, for the influenza outbreak emergency in 2009, the INSP develop an online course for which 45,000 people registered.

- 4. Videoconferences.** The INSP offers health professionals a series of videoconferences on public health research to broaden its scientific dissemination and continuing education activities. Videoconferences are presented by the Institute's researchers and experts from other health and scientific research institutions. They are transmitted using the INSALUD Network to sites with videoconference rooms or by using Webex for sites that do not have such rooms. The annual videoconference program completed its ninth series in 2010. More than 70 sessions have been conducted and transmitted to 35 sites at the national level as well as to sites in Central and South America, including public universities, health institutions, private higher education institutions and some of the National Institutes of Health. Through the videoconferences, relevant public health information has been disseminated to more than 6,200 participants over the past three years (Table 3.20).

#### Continuing Education Procedures, Practices, and Evaluation

The Continuing Education Committee establishes and regulates procedures for the practice, operation and evaluation of the continuing education program, as stipulated in Article 1 of the Regulations on Continuing Education. This committee has representatives from each of the INSP's research centers and is chaired by the Department of Continuing Education, which operates the program. This committee is in charge of approving the annual program as well as the pedagogical and technical structure of the courses.

An evaluation instrument is designed and administered for each course to determine participant satisfaction with both the pedagogical aspects of the course and the technical structure. The continuing education courses on specific topics are usually 40 hours long. There are also diploma programs, which are 160 hours long. After each course, students are evaluated. The continuing education program is promoted via the web and at academic fairs and special events hosted by the federal and state Ministries of Health. Also, information is included in the annual academic program publication. Some courses are made possible through formal agreements with health organizations or government entities and are offered to a specific population. All the

**Table 3.20**  
**Participants in the INSP's Videoconference Program, 2008-2010**

	2008	2009	2010	Total
Number of sessions	15	15	17	47
Destination sites	12	13	41	66
Number of participants	1,503	1,758	3,010	6,271

other courses are open for public health professionals and the public in general.

### Assessment of Educational and Training Needs

To identify and address the demand for education and training in the field of public health, every three years a needs assessment is conducted by the Continuing Education Committee. This survey targets health personnel covering operational, logistical and strategic levels in health services, and includes the participation of the Ministries of Health and state-level heads of education. In addition, the INSP's ongoing mechanisms for gathering constituent perspectives (described in Criterion 1.2) include evaluation of continuing education needs.

In 2009, 22 states participated in the needs assessment survey. The majority of respondents worked at the operations level, and one-fourth were in decision-making positions in the health system. Most of those surveyed requested year-long training courses during the afternoons and weekends. Table 3.21 shows training and education priorities among respondents. The survey asked respondents to identify all the public health topics in which they were interested. The highest-ranking priorities among those offered were epidemiology, health promotion, research methodology, health systems management and biostatistics.

Both mechanisms for assessing needs are key elements for getting feedback from the health professionals, employers, and community members for planning the annually Continuing Education offerings. In addition, specific evaluations of each course help drive this process.

**Table 3.21**  
**Survey Results for Training and Education Priorities for Public Health, 2009**

Public Health Topics of Interest for Training	% of Responses
Epidemiology	66
Health promotion	46
Research methodology	46
Health systems management	37
Biostatistics	30
Nutrition	28
Social and behavioral sciences	26
Environmental Health	26
Vector-Borne Diseases	21

Note: Respondents were asked to indicate all areas of interest, so percentages do not reflect exclusive answers and do not total 100%.

Source: INSP questionnaire to detect education and training needs, 2009.

### 3.3.B

Description of certificate programs or other non-degree offerings of the school, including enrollment data for each of the last three years.

The Institute considers all non-degree educational offerings to be continuing education, as is described in Criterion 3.3.C.

### 3.3.C

A list of the continuing education programs offered by the school, including number of students served, for each of the last three years. Those that are offered in a distance learning format should be identified.

The INSP offers an extensive continuing education program, with courses grouped into three categories: diploma programs, standard courses and videoconferences. Diploma programs consist of four 40-hour courses within a specific topic area. Standard or independent courses are also offered; they usually include a total of 40 hours each of learning activities also flexible according to the academic need of the audience. Videoconferences usually last 3 hours and address diverse public health topics by INSP specialists. Their audience is primarily INSP graduates who are working within public health.

#### Diploma Programs

Each diploma program consists of 4 courses of 40 hours each, all related to a specific topic, for a total of 160 hours. Topics range from administration and management to epidemiology. Between 2008 and 2010, more than 18,000 continuing education students participated in the INSP's diploma programs. Table 3.22 provides a list of the INSP's full time and online diploma programs for 2008-2010.

#### Standard Courses

INSP also offers, in all formats, an extensive list of courses for continuing education. These courses are generally taken by health professionals as part of specific agreements with federal and state governments for their personnel training or by particular individuals or alumni. They are offered around the year but particularly in the summer. The courses are listed by discipline in Table 3.23.

#### Videoconferences

INSP offers as a strategy to cover distance professionals, videoconferences for continuing education in specific topics of public health. See Table 3.24.

The INSP's continuing education program has recorded significant growth over the last three years, particularly because of

**Table 3.22**  
**INSP Continuing Education Diploma Programs, 2008-2010**

	Diploma Program	Classroom- based	Online
1	Management and Administration of Health Systems and Services	x	
2	Public Health with an Emphasis on Epidemiology	x	
3	Quality Management in Health Services	x	
4	Epidemiology with an Emphasis on Nutrition	x	
5	Health Promotion and Education	x	
6	Administration and Management Skills with an Emphasis on the Social Health Protection System		x
7	Multidisciplinary Management of Diabetes Mellitus Type 2		x
8	Clinical Prevention of Chronic Diseases		x
9	Multidisciplinary HIV/AIDS Prevention and Intervention	x	
11	Public Health	X	
12	Teacher Training in a Competency-based Curriculum	x	x
13	Leadership in Health Promotion	x	
14	Health Economics	x	
15	New Topics in Public Health	x	x
16	Multidisciplinary Care of the Elderly with an Emphasis on Prevention and Health Promotion		x
17	Leadership and Management Skills in Health Systems		X
18	Nursing Interventions in Public Health		X
19	Clinical Prevention of Chronic Non-communicable Diseases		x
20	Clinical Research for Public Health	x	x
21	Public Health and Sanitation Assistance	X	
22	Leadership for Public Health Research	X	
23	Health Services Planning		x
24	Basic Geriatrics for Primary Care		x
25	Eating Disorders		x
26	Leaders across Borders		X
27	Statistics	X	
28	Applied Epidemiology	X	
29	Epidemiology	X	
30	Toward a New Culture of Health in Elementary Schools		X
31	Global Health	X	
	Total # of Students, 2008-2010	4,978	13,488

the increase of offerings through online education, as shown in Table 3.25.

### 3.3.D

A list of other educational institutions or public health practice organizations, if any, with which the school collaborates to offer continuing education.

The INSP collaborates with a range of educational institutions and health organizations to develop training programs and promote capacity-building in public health. In addition to its work with individual institutions, the INSP also works with networks specifically created to build capacity and develop national and international workforce capabilities. Two such networks are described below.

### State Centers for Health Systems Development (CEDESS)

The INSP developed and operates the CEDESS, which act as coordinating bodies between the INSP and funding agencies, academics, and health institutions. The strategic objectives of the CEDESS are to strengthen leadership and management of state health systems, improve health, and ensure dignified treatment and financial protection for the population. The CEDESS are gradually implemented in high-priority states through grants and training for community organizations, which are then empowered to operate research, teaching, training and technical assistance programs following INSP quality standards. The CEDESS allow the INSP to expand coverage for health systems research, teaching, and training services in coordination with academic institutions and state authorities. Currently, CEDESS are operating

**Table 3.23**  
**Standard Courses in the INSP's Continuing Education Program, 2008-2010**

Area/Course	Number of Students Enrolled					
	2008		2009		2010	
	Full time	Online	Full time	Online	Full time	Online
General Public Health						
Vaccinations and public health	20		12		19	
Global health: challenges for Latin America	13					
Qualitative methodology in public health research	67		53		28	
Social sciences in public health	30				31	
Writing workshop for preparing scientific articles in the area of public health	17		40		18	
Principles of conduct in public health and practical considerations in their application	27					
Competency-based teaching for public health	21		17			
Basic ethics and philosophies in public health			30			
Analysis, development and presentation of comprehensive diagnostics in health			30			
Strategies for tobacco control in Mexico: implementation of federal and local legislation	31		30		40	
Fundamentals of global health			34		5	
Theoretical foundations of public health: evaluation and implementation of behavior change interventions					27	
Public health policy and advocacy					37	
Epidemiology						
Basic epidemiology	56		55		183	
Intermediate epidemiology					21	
Epidemiological surveillance of systems	14		23			
Epidemiology of respiratory diseases						
Case and control studies (intermediate)			15			
Diabetes mellitus: epidemiology, diagnosis, and prevention					10	
Tumor biomarkers, molecular epidemiology and treatment of breast cancer	30					
Introduction to the study of insects with an emphasis on medical entomology			5		8	
Entomology of dengue					7	
Epidemiology applied to control vectors	10					
Pharmacoepidemiology	13		19		20	
Occupational epidemiology	14					
Physical activity and public health for epidemiological research and community programs	17		22			
Social epidemiology and intervention implications					14	
Ethics in multinational research					21	
Cancer epidemiology					67	
Outbreak study					28	
Environmental Health						
Systematic review of epidemiology			14			
Evaluation of environmental risks	17		18			
Communication of risk in environmental health	23		25		11	
Toxicological bases for the evaluation of health risks			21		14	
Ecosystem approaches to human health						
Health in relief operations (HELP)			18			
Etiology of disease vectors and implications for their control	1					
Ecosystem approaches to human health						
Evaluation of sanitation risks	25		23			
Introduction to engineering applied to environmental sciences			11			
Environmental epidemiology and gene-environment interaction			15			
Risk assessment in vulnerable communities					32	

(Continúa)

(Continuación)

Health at work			17
Training program in environmental health and prevention of chronic diseases in Latin America			16
Administration and Management			
Policy makers and the political analysis of health system reform			
Health services management	47	46	50
Administration of health services		30	
Design and evaluation of health programs		30	
Health policies		29	25
Continual improvement of the quality of health services	40	10	
Continual improvement of the quality of care in hospitals			
Health administration			
Contracting as a mechanism for building mixed networks for health services			
Governance and social protection system in health: analysis, indicators and instruments	7		
Health systems and administration	30		
Health systems, with an emphasis on popular insurance			27
Management and leadership in regional health policies and programs			53
Threats to health: national and international security in the 21 <sup>st</sup> century			19
Health Promotion			
Training community assessment and health promotion			
Health promotion and education		30	
Public health promotion	29	26	
Promotion of community health	6	28	
Training in the scientifically based practice of health promotion		819	
Workshop on participatory community research			
Introduction to social marketing for promoting healthy lifestyles	29		
Workshop on the development of operational abilities in health promotion		98	
Community learning	30	30	31
Systematic planning for health promotion programs		29	
Evaluation of the effectiveness of health promotion		30	
Technicians training in primary health care			2,903
Compared models in health promotion			25
Infectious Diseases			
Chagas disease and triatomines			
Epidemiology and control of nosocomial infections		19	
Clinical management of patients with HIV			
Current situation regarding tuberculosis			
Nosocomial infections		89	
Dengue prevention			34
Measurement methods of risks quantification associated with STD/HIV in mobile populations			8
Reproductive Health			
Health and gender	33	23	30
Hereditary breast and ovarian cancer			
Epidemiology applied to reproductive health			
Health and sexual and reproductive rights in the context of human rights	8	8	7
Population aging and health in Mexico			
Techniques for organizing and systematizing knowledge for the development of a maternal-perinatal epidemiological transition model	25		
Breast health and the detection and treatment of breast cancer		102	79
Quality assurance in breast and cervical cancer screening programs			84
Development of abilities for management of actions for the early detection of breast cancer	236		

(Continúa)

(Continuación)

Training health professionals in improving maternal care						76
Training on rehabilitation of victims and aggressors in intimate partner violence						19
Biostatistics						
Basic biostatistics	61		42			63
Introduction to the STATA statistical package (basic)	26		17			18
Statistical modeling using the STATA package (intermediate)	16		16			26
Regression analysis for public health research						
Structural models with latent variables						
Analysis of life prolongation						
Management and analysis of surveys						29
Tools for spatial analysis of public health information using GIS	13		12			15
Introduction to sampling techniques in public health	19		14			
Statistical methods in genetic epidemiology	15					12
Logistic regression models and extensions	25		26			16
Information systems			30			
Modeling for economic evaluation						
Analysis of data with the STATA statistical package			16			
STATA statistical package (intermediate)			15			
Longitudinal data analysis			34			25
Nutrition						
Functional foods from a public health perspective			20			
Design and analysis of nutrition surveys						
Workshop on monitoring and evaluating population, health and nutrition programs	21		16			21
Fats, diet and health	16					
Substantiating nutritional statements and healthy properties: An international perspective for Mexico			45			
Alimentary orientation						34
Estimated distribution of usual dietary intake in populations using a 24-hour recall						25
Systematic reviews and meta-analysis of epidemiology and nutrition literature						18
Epidemiological methods for measuring physical activity						19
Science, health and the food supplements market						80
Special Topics/Others						
Training and education for medical operations and care		814		104		
Strategies for identifying family violence						
Molecular bases of genomic medicine	9		13			10
Workshop: description structure for resources public health access			10			
Social determinants of health and equality in the context of globalization			38			16
Health legislation						30
Total # of Students	951	1,889	1,429	286	4,282	239

in the states of Mexico and Oaxaca with an intensive continuing education program to build capacity. Additional centers will be established in other states in the future.

One example of CEDESS activities is the development, in collaboration with the Health Institute of the State of Mexico, of a training program for women who work as primary health care technicians and in related health careers. This program includes several training elements, including: a) training for 4,000 women technicians in primary health care and other health careers who work at the operational level of health systems in the State of

Mexico; b) activities with 50 state health managers to gain awareness of the importance of municipal cooperation in creating and monitoring community-based projects for health promotion; c) training 30 authorities from the Health Institute of the State of Mexico in a 160-hour **Health Promotion Leadership** course, as well as 30 authorities in a 160-hour online **Management Strengthening for Organizational Improvement** course, and authorities in the MPH program; and d) continuing training in technological information and communication skills used for health management purposes in 19 sanitation jurisdictions.

**Table 3.24**  
**Videoconferences in the INSP's Continuing Education Program, 2008-2010**

	2008		2009		2010	
	Name	# of Students	Name	# of Students	Name	# of Students
1	The importance of stewardship in health systems	70	Health policies in Latin America: Prospects and challenges	150	Influenza in Mexico: Challenges and opportunities	102
2	The control of snuff in Mexico: Creating environments 100% smoke- and snuff-free	110	Natural phenomena and man: what they are and how they affect us	90	Dangerous pedestrians' path: getting run over a public health problem	120
3	Beverage consumption for a healthy life: recommendations for the Mexican population	107	Lung function and air pollution in children	120	Decision making and management of the <i>Seguro Popular</i>	140
4	Evaluation of three models of care at birth	64	Vitamin D deficiency: The unrecognized epidemic	180	Natural and anthropic phenomena: What are they? How do they affect us?	170
5	Health marketing	70	Socio-cultural barriers to early detection of breast cancer	155	Leadership services for better health	160
6	Risk factors for breast cancer	110	Use of health services in the first level of care	80	Implementation of new technologies for cervical cancer prevention in Mexico	192
7	HPV vaccines and cervical cancer	68	Educational intervention in oral health: A successful experience	130	Dengue in Mexico: three decades of experience	190
8	Health communication: A tool for healthy living	50	Therapeutic vaccines against cervical cancer	117	The use of educational and behavioral theories to develop and/or change health behaviors	208
9	Community-level oral health	76	Health communication	90	Control, elimination or eradication of vaccine-preventable diseases	176
10	Migrant health: needs and options for the development of transnational health insurance	60	Effective distance education to train and Public Health Human Resources in Mexico	110	Hepatitis C: A hidden public health problem	201
11	Tuberculosis	242	Promotion and health education at the community level	133	Institutional determinants of effective coverage of first-level health services in Mexico	105
12	The application of genomics and proteomics in solving public health problems	84	Methicillin-resistant <i>Staphylococcus aureus</i> community-acquired infections	90	Diet and risks of Type 2 Diabetes	267
13	Markers of sexually transmitted infections: results ENSANUT 2006	147	News in the diagnosis, treatment and comorbidity associated with pulmonary tuberculosis	130	Health care model for seniors in indigenous areas	230
14	Public Health Leadership	145	Social vulnerability and its effects on health	96	Complications of pulmonary tuberculosis and challenges for its control	293
15	Analytical model of dengue transmission networks	100	Favorable learning styles in teaching-learning process for health professionals	87	Transnational health system of migrants	141
16	-	-	-	-	Beyond the classroom: innovative teaching and learning strategies	181
17	-	-	-	-	Health in correctional facilities from a public health perspective	134
	Total # students	1503		1758		3010

**Table 3.25**  
**Total Students Trained in the INSP's Continuing Education Program, 2008-2010**

Continuing Education Format	2008		2009		2010	
	Classroom- based	Online	Classroom- based	Online	Classroom- based	Online
Diploma programs	1,952	4,778	1,459	4,265	1567	4,445
Standard courses	951	1,889	1,429	286	4,282	239
Videoconferences	0	1,503	0	1,758	0	3,010
Total students by format	2,903	8,170	2,888	6,309	5,849	7,694
Total Students by Year	11,073		9,197		13,543	

## Mesoamerican Institute of Public Health (IMSP)

The IMSP is a regional capacity-building initiative under the Mesoamerican Public Health System (SMSP). The IMSP helps strengthen national health systems through the development and expansion of regional strengths in public health systems in collaboration with academic institutions and regional ministries of health, with the support of the SSA and the financial backing of the Carlos Slim Health Institute. The IMSP is made up of the INSP, the University of Costa Rica, the Center for Health Research and Studies of the National Autonomous University of Nicaragua, the University of El Salvador, the Gorgas Memorial Institute for Health Studies of the Republic of Panama, the Faculty of Medical Sciences of the University of San Carlos of Guatemala, the College of the Southern Border of Mexico, the Integration and Development Project of Mesoamerica, and the Executive Secretariat of the Council of Ministers of Health of Central American.

The IMSP's chief objectives are to contribute to the governance of the SMSP; to provide technical support for the development of the Mesoamerican health agenda; to strengthen the technical capacity of the regional health programs that make up the SMSP; and to support the integration of regional health programs into national health programs. To fulfill these objectives, the IMSP implements three strategic Mesoamerican programs: 1) training and continuing education for public health professionals, 2) institutional strengthening and development, and 3) technical support and knowledge management.

**Other Collaborations.** The INSP also collaborates closely with a range of other educational institutions, public health systems and organizations to offer continuing education. Table 3.26 provides a list of the institutions with which INSP collaborates to provide continuing education.

### 3.3.E

Assessment of the extent to which this criterion is met.

This criterion is met.

### Strengths

- The INSP has become a national and international reference center for continuing education and training for professionals in public health due to its diverse curriculum and academic quality. Most of the personnel working in the government health sector from federal entities are trained through the INSP's continuing education programs.
- The use of a wide range of educational formats (in-person, online, blended) allows broad access to continuing education in diverse areas across Mexico and around the world. This

**Table 3.26**  
**INSP Collaborations with Other Institutions and Health Organizations in Continuing Education, 2008-2010**

#### Educational Institutions

- University of North Carolina at Chapel Hill
- Mount Sinai School of Medicine
- UCLA, Fogarty International Training Program
- Johns Hopkins University, Bloomberg School of Public Health
- Emory University, School of Public Health
- American University in Beirut (Lebanon)
- University of Arizona
- Royal School of Public Health in Amsterdam
- Université Victor Segalen II, Bordeaux, France
- TropEd European Network
- University of Chile
- University of Paraguay
- University of the West Indies (Trinidad)
- Semmelweis University Health Services Management Training Center (Hungary)
- University of California at Berkeley
- School of Family and Public Health Medicine, University of KwaZulu-Natal (South Africa)
- Juarez Autonomous University of Tabasco

#### Community and Social Organizations

- Carlos Slim Institute of Health
- Breast Cancer Initiative
- General Hospital of Mexico
- Private Hospital of the Cruz Azul Cooperative Society
- Un Kilo de Ayuda (**A Pound of Help**)
- Health for the Americas Initiative

#### Federal and State Health Organizations

- National Center for Gender Equity and Reproductive Health
- National Institute of Respiratory Diseases
- Mexican Council against Smoking
- Decentralized Government Organization of Tabasco Health Services
- National Center for Prevention and Control of AIDS (CENSIDA)
- Guerrero Health Services
- Institute of Public Health of the State of Guanajuato
- National Commission for Social Health Protection
- Institute of Health of the State of Mexico
- Institute of Health of the State of Aguascalientes
- Morelos Health Services

#### Private Companies

- Pfizer
- AstraZeneca

#### National and International Health Organizations

- CISIDAT: Consortium for Research on HIV/AIDS/TB (CISIDAT-Mexico)
- Joint United Nations Programme on HIV/AIDS (UNAIDS)
- Center for Research and Teaching in Social Sciences (CIDE-Mexico)
- International Development Research Center (IDRC)
- USAID: Health Policy Initiatives and Training, Internships, Exchanges and Scholarships
- Center for Higher Education in Administration and Management (CESAG-Senegal)
- International Union against Tuberculosis and Lung Disease
- Futures Institute (U.S.)
- IC NET LIMITED, Dominican Republic
- Mexico-USA Border Health Commission

strategy allows the participation of students from all Mexican states, as well as from other parts of Latin America and around the world.

- Enrollment in the INSP's continuing education programs has increased significantly over the last five years, indicating growth in coverage and impact. Online education has been crucial for generating this growth.
- The assessment of continuing education needs through a survey conducted every three years and the program to consult with constituents has allowed the INSP's research centers and the Office of Academic Affairs to develop an array of programs and strategies that meet the needs of professionals in charge of public health activities and the organizations with which the INSP collaborates to offer continuing education.
- The strength of the continuing education programs has led to diverse and ongoing inter-institutional relationships to improve the skills and performance of the public health workforce.

- The income from continuing education activities finances other academic activities that have no federal funding.

### **Weakness**

- Due to the diverse activities of INSP's faculty in research, teaching and service, not all faculty participate in continuing education.

### **Future Plans**

- The research center directors are incorporating planning strategies to balance the workload of faculty to allow them to participate to a greater degree in continuing education.

**Criterion 4.0****Faculty, Staff and Students****4.1**

**Faculty Qualifications.** The school shall have a clearly defined faculty which, by virtue of its distribution, multidisciplinary nature, educational preparation, research and teaching competence, and practice experience, is able to fully support the school's mission, goals and objectives.

The INSP has a clearly defined and highly capable faculty that fully supports the Institute's mission, goals and objectives in instruction, research and service. Faculty members have exceptional educational preparation and skill in teaching and research as well as a wide range of disciplinary knowledge and practice experience, which they bring to bear in preparing students to become public health professionals.

**Required Documentation****4.1.A**

A table showing primary faculty who support the degree programs offered by the school. It should present data effective at the beginning of the academic year in which the self-study is submitted to CEPH and should be updated at the beginning of the site visit. This information must be presented in table format, organized by department, specialty area or other organizational unit as appropriate to the school and must include at least the following: a) name, b) title/academic rank, c) FTE or % time, d) tenure status or classification e) gender, f) race, g) graduate degrees earned, h) discipline in which degrees were earned, i) institution from which degrees were earned, j) current teaching areas, k) current research interests, and l) current and past public health practice activities.

Appendix 4.1.a includes a table (CEPH Data Template F) with details related to 233 full-time faculty who participated in INSP educational programs in 2011, by area.

**4.1.B**

If the school uses other faculty in its teaching programs (adjunct, part-time, secondary appointments, etc), summary data on their qualifications should be provided in table format, organized by department, specialty area or other organizational unit as appropriate to the school and must include at least: a) name, b) title/academic rank, c) title and current employment, d) FTE or % time allocated to teaching program, e) gender, f) race, g) graduate degrees earned, h) discipline in which degrees were earned, and i) contributions to the teaching program.

Appendix 4.1.b includes a table (CEPH Data Template G) with detailed information related to 72 part-time professor/researchers who contributed in the INSP's educational programs in 2011.

**4.1.C**

Description of the manner in which the faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if used by the school.

In order to integrate into the curriculum a wide range of experiences from the field, the INSP employs numerous part-time faculty members who are working professionals at health institutions in the public, social and private sectors. In addition, professionals in the field are frequently appointed as directors or advisors for the students' theses and final professional projects (PTPs).

Service professionals who participate in the academic program as part-time professor/researchers must have at least a master's degree and be actively involved in the health system or the community in a public health capacity. The incorporation of these professor/researchers into the Institute's teaching activities is completed through formal contracts, through which the responsibilities of both parties are established.

Following are two examples that demonstrate the importance of part-time personnel in the INSP's academic program:

1. **The community practicum** in the MPH program requires students to conduct fieldwork in communities and participate in activities with community members over an extended period of time (three semesters). The guidance of part-time faculty members in this process is of key importance, as they have knowledge of local conditions, can facilitate access to information, and serve as liaisons between full-time professor/researchers and students. This is particularly important for the online MPH.
2. **Specialized areas in the curriculum.** The INSP seeks to integrate the views of practitioners in specialized courses, or specialized areas in the curriculum of certain courses, in order to provide a comprehensive learning experience for students. Part-time faculty candidates are identified and proposed by the Faculty Colleges to become part of their academic collegiate bodies.

#### 4.1.D

Identification of outcome measures by which the school may judge the qualifications of its faculty complement, along with data regarding the performance of the school against those measures for each of the last three years.

The INSP has established as its main criteria for measuring faculty qualifications the percentage of faculty who have a doctoral degree, the number of full-time professors recognized as members of the National System of Researchers (SNI), and mean ratings on the student course evaluations. Table 4.1 summarizes these and other measures for academic years 2008-2010.

#### Faculty with Doctoral Degrees

In 2010, 56% (135) of the INSP's full-time faculty had Ph.D. degrees and all have at least masters' degrees. Faculty members have doctoral degrees in a wide range of fields, including epidemiology, biochemistry, nutrition, immunology, sociology, infectious diseases, biomedical sciences, pathology and health systems, among others. Among full-time professors, 20% completed their postgraduate studies at major foreign universities and 80% got their degrees in Mexico. The doctoral degree allows faculty to gain access to higher levels in the ICM program that regulates most of the admissions for full-time professors to the INSP. Faculty with doctoral degree also usually have more research activities than those with master's degrees, who are often more focused on teaching-related activities.

#### Evaluation of Full-Time Faculty

The Admission, Promotion and Retention (APR) Program for ICMs has six levels, from "A" to "F", which are determined according to research productivity and professional experience. Within the INSP, the individual's ICM level determines his or her participation in research protocols, collegiate bodies and leadership positions. For example, according to the CCINSHAE rules for APR the internal guidelines of the INSP Research Commission, researchers with levels ICM A and B are able to participate in protocols in collaboration with other researchers. In contrast, researchers with levels ICM C, D, E and F are able to carry out research protocols and contribute to human resources training independently.

**Table 4.1**  
**Outcome Measures for Faculty Qualifications, AY 2008-2010**

Outcome Measure	Target	AY2008	AY2009	AY2010
% of full-time faculty with a doctoral degree	60%	56% 132/238	55% 133/240	56% 135/242
# of full-time faculty evaluated as ICM	70%	84% 200/238	77% 185/240	69% 168/242
% of full-time faculty recognized as members of the SNI	50%	47% 112/238	50% 121/240	50% 120/242
# of full-time faculty recognized in the PEDD	30	40*	36	47
Student ratings on course evaluations (4-point Likert scale)	Mean of $\geq 3.5$ in members of Faculty Colleges	3.5	3.5	3.5
# of faculty receiving awards/honors from external organizations	Measure not defined	No data	24	16

Key:

**APR Program:** The Admission, Promotion and Retention Program for Medical Science Researcher (ICM) conducted by the Coordinating Commission of the National Institutes of Health and Regional Specialty Hospitals (CCINSHAE).

**SNI:** National Research System of Mexico.

**PEDD:** Program for Teaching Performance Incentives.

\*In 2008 it is included the 35 faculty evaluated in 2007 plus the 5 professors that participate in the PEDD in 2008. Further explanation is given below.

Every three years, full-time professor/researchers are prompted to develop an academic performance evaluation to be reviewed by the External Commission of Health Research (CEIS). The CEIS is a body of support and consultation on health research composed of researchers representing the National Institutes of Health, High Specialty Hospitals and the CCINSHAE who conduct the assessment through objective criteria established in the rules of the Call for Encouragement of Research. Faculty performance is reviewed on the basis of academic merit in accordance with the commission's internal regulations, which are defined to ensure that academic performance is consistent with the institution's objectives and mission. The results are used in decisions regarding promotion and continued employment at the INSP.

This evaluation is monitored by the CCINSHAE, which regulates the processes for contracting, promoting and retaining INSP researchers. (CCINSHAE's criteria are described in Appendix 3.1.d-2 and its regulations in Appendix 4.1.d-1.) These evaluations factor into the promotion of full-time faculty to higher research categories according to their teaching, service and research productivity profiles.

In the last three years, most faculty have belonged to level C. It is worth noting that in 2009, the number of professor/researchers belonging to level D increased from 13% to 18% of the total (Table 4.2). Nevertheless in 2010 the professors that decided not to be evaluated increased but this number decreased again in 2011.

### Incorporation of Faculty in the National System of Researchers

The National System of Researchers (SNI) was established by the President of Mexico to recognize the work of professionals dedicated to producing scientific and technological knowledge. The acceptance and promotion of researchers in the SNI is determined through an evaluation by the National Council for Science and Technology (CONACyT). The objective of the SNI is to promote and strengthen the quality of scientific and technological research and innovation in Mexico. All researchers who work in institutions of higher education and public, private and social research institutes are eligible to apply to the SNI.

The system assigns researchers to the following categories: Candidate, Level I, Level II and Level III. A researcher's category is determined according to his or her productivity, including articles, books, book chapters, patents, technological developments, innovations, thesis advising, courses taught, training of researchers, participation in collegiate or editorial review bodies, and consulting commissions (particularly those of the CONACyT). Commissions for different areas of knowledge are responsible for reviewing the curriculum vitae of the candidates, taking into consideration professional achievements and career trajectory, and determining the appropriate level and salary. The assessments issued by these committees are authorized by the Approval Council according to objective criteria stated in SNI regulations.

**Table 4.2**  
**Number of Full-Time Professors by ICM Research Level, 2008-2011**

	ICM Research Level							Total
	A	B	C	D	E	F	Not Evaluated	
2008	31	43	60	31	18	17	38	238
	(13%)	(18%)	(25%)	(13%)	(8%)	(7%)	(16%)	(100%)
2009	13	35	54	44	21	18	55	240
	(5%)	(15%)	(23%)	(18%)	(9%)	(8%)	(23%)	(100%)
2010	25	43	51	30	9	10	74	242
	(10%)	(18%)	(21%)	(12%)	(4%)	(4%)	(31%)	(100%)
2011	19	38	54	44	16	17	45	233
	(8%)	(17%)	(23%)	(19%)	(7%)	(7%)	(19%)	(100%)

Key:

ICM = Medical Science Researcher. ICM levels A-F correspond to increasing classification levels according to the National Institutes of Health criteria (CCINSHAE). (Details on these levels can be found in Appendix 3.1.d-2.)

Source: School Administration and Research Committee and Department of School Administration, INSP 2011.

The number of INSP researchers who are SNI members increased by 57% in the past four years, from 77 in 2006 to 120 in 2010. In the last two years there has been more stability in that growth of SNI members because after the researcher has been accepted to a greater level this evaluation lasts 3 years before they need to be evaluated again so their status remains stable for that period. Because SNI criteria are so rigorous, belonging to the system is both a source of prestige and an effective measure of quality.

### Performance Incentive Programs

The INSP has two programs that annually evaluate the academic progress of faculty and, when appropriate, award economic recognition. The first is the Program for Performance Incentives for Researchers in Medical Sciences (see Appendix 4.1.d-2). This SSA program recognizes research and academic achievement by providing salary bonuses for different levels (A-F) achieved.

The second is the Program for Teaching Performance Incentives (PEDD), which evaluates teaching and grants academic recognition and financial bonuses to qualifying faculty (see Appendix 4.1.d-3). Only full time faculty, can participate in this program. PEDD ranks faculty on a scale of I to IX, with IX the highest. In the last five years, the quality of teaching performance has increased substantially, as has the number of faculty participating in the program. Before 2009, the PEDD evaluation was developed one every two years. The last evaluation before 2009 was done in 2007 where 35 full time faculty participated and in 2008 was promoted that 5 professors more were evaluated the PEDD. Since 2009 the PEDD become an annual evaluation and has attracted in the last two years (2009-2010) the interest of the Faculty increasing its participation as can be seen below (see Table 4.3). Also professors that have been evaluated in the PEDD have improved their qualifications in the last 3 years. For 2010 the majority of faculty evaluated obtained the highest levels of evaluation (Level V to IX).

**Table 4.3**  
**Results of PEDD Faculty Evaluations, 2008-2010**

	2008	2009	2010
			II=2
# of Faculty Achieving Level I-IV	0	0	III=2
		V=1	IV=3
	VIII=1	VI=2	VI=4
# of Faculty Achieving Level V-IX	IX=4	VII=3	VII=1
		VIII=3	VIII=3
		IX=27	IX=30
Total Evaluated	5	36	47

### Student Evaluation of Faculty

Each semester, once grades are submitted, students evaluate the performance of their teachers and tutors/advisors, including full-time, part-time, and visiting faculty. The Faculty Colleges are responsible for analyzing the evaluations of professor/researchers assigned to the courses. Each college is in charge of the supervision and academic analysis of courses whose disciplines fall within its purview (see Appendix 4.1.d-4). Table 4.4 shows results of faculty evaluations for the last three years (2008-2010), on a scale of 1-4. The evaluation procedures and structure of the evaluation instrument are described in Criterion 4.2.D.

According to the INSP teaching evaluations, an average of 3.0 is considered good. The scores obtained by faculty across colleges in each of the past three years averaged at least 3.5, which are considered very good. These evaluations are presented to the Faculty Colleges and the professor/researchers for feedback. They are also used to detect teacher-training needs. If a professor does not obtain again good evaluations, the Faculty College either denies course assignment or recommends specific actions for improvement.

Usually the professors with the best teaching evaluations are those who are involved in key teaching activities within the graduate programs, such as thesis supervision, practicum assessment, and tutoring. Professors who have ICM categories of A-C, usually those with a master's degree, are generally more involved in teaching-related activities than are those with higher ICM levels, who may teach only one or two courses because their academic workload focuses more on research activities.

**Table 4.4**  
**Results of Student Evaluations of Faculty, 2008-2010**

Faculty College	Average Evaluation Scores		
	2008	2009	2010*
Education and Health	3.66	3.51	3.03
Epidemiology	3.69	3.46	3.63
Nutrition and Health	3.50	3.15	3.43
Environmental Health	3.73	3.74	3.53
Biostatistics and Data Processing	3.50	3.67	3.53
Health Economics	3.36	3.56	3.47
Social Sciences and Health	3.38	3.17	3.43
Reproductive Health	3.17	3.48	3.93
Systems in Health Policy and Services	3.52	3.30	3.54
Infectious Diseases	3.71	3.83	3.71
Mean score across Faculty Colleges	3.52	3.49	3.52

\*This evaluation period ended in February 2011 (data as of 20/07/2011).

## Faculty Awards and Recognition

External academic bodies or health institutions have also evaluated INSP faculty performance for their contributions to public health. INSP faculty have received a range of national and international awards for their academic performance. Examples from 2009 and 2010 are listed in Table 4.5.

### 4.1.E

Assessment of the extent to which this criterion is met.

The criterion is met.

### Strengths

- The INSP has highly trained full-time faculty who are well qualified to meet student needs in the academic programs.
- The INSP's faculty successfully meet rigorous internal and external evaluation criteria.
- Practitioners join the INSP faculty on a part-time basis, and their professional experience enables them to enrich curricular activities and training.
- The INSP has a variety of programs and activities to evaluate the performance and academic profiles of faculty in order to ensure satisfactory academic quality outcomes. This evaluation strategy actively encourages the integration of teaching and research activities with the INSP's mission and vision.
- The results of student course evaluations in all formats for the last three years show good to very good ratings (3 or more on a scale of 1-4).
- INSP faculty have received national and international recognition for their academic performance.

### Weakness

- Due to federal policies, research activities are more recognized and awarded than are teaching activities in all educational institutions. This practice produces a challenge for INSP in determining how to encourage teaching while ensuring adequate time for research.

### Future Plans

- Teaching Performance Incentive programs like the PEDD will be used to recognize teaching activities and other funding will be explored to recognize good teaching.
- The Office of Academic Affairs is working on using technology to simplify some of the academic procedures required of professors, such as advising reports, course work-plans, and minutes of Faculty College meetings. This action will make teaching-related activities less time consuming, which should encourage faculty to engage in more research while maintaining high teaching standards.

## 4.2

Faculty Policies and Procedures. The school shall have well-defined policies and procedures to recruit, appoint and promote qualified faculty, to evaluate competence and performance of faculty, and to support the professional development and advancement of faculty.

The INSP has well-defined policies and procedures to recruit, appoint and promote qualified faculty, to evaluate faculty competence and performance, and to support the professional development and advancement of its teaching/research staff.

### Required Documentation

#### 4.2.A

A faculty handbook or other written document that outlines faculty rules and regulations.

Faculty rules and regulations are available on the INSP website. As of this year, a hard copy of the faculty manual, which provides the most important procedures, regulations, and information for professor/researchers, will be distributed to each faculty member. This document is part of the collection published by the Office of Academic Affairs (see Appendix 4.2.a).

#### 4.2.B

Description of provisions for faculty development, including identification of support for faculty categories other than regular full-time appointments.

The INSP has several provisions in place to promote faculty development. First, full-time professor/researchers are given the opportunity to take academic leave with full salary to complete postgraduate studies at national or foreign educational institutions. They are also able to take periodic sabbaticals during which they go to external institutions for one year in order to strengthen their teaching and research activities and academic development. (Sabbaticals and academic leave follow the academic regulations, which are included in Appendix 3.1.a.) In the past three years, five professor/researchers have taken academic leave and five professors have taken sabbatical stays in other institutions.

The INSP also promotes teacher training for full-time, part-time, and visiting professor/researchers. In 2006, a competency-based model was adopted for instruction in all educational programs; as a result, faculty needed to be trained in new strategies to foster teaching and learning processes consistent with the new model. Every year training activities are offered to all professors as part of a formal Faculty Training Program (see Appendix 4.2.b). The program continually seeks ways to add flexibility by incorporating

**Table 4.5**  
**INSP External Faculty Awards, 2009-2010**

Award	Institution	Researcher	Research Center
Recognition of the best research in the area of adolescents in the framework of the World Conference on Snuff and Health, Mumbai, India	World Health Organization (WHO)	Mtra. Edna Arillo Santillán Mtra. Rosibel Rodríguez Bolaños Dr. Eduardo Lazcano Ponce.	CISP
Pan-American Prize for Nutrition, Food Science and Technology, Grupo Bimbo, in the area of human nutrition	Food and Nutrition Bulletin	Dr. Armando García Guerra, Dr. Mario Flores Aldana Dra. Sonia Rodríguez Ramírez	CINyS
Recognition by the Health Commission of the LX Legislature, H. Chamber of Deputies	Health Commission of the LX Legislature, H. Chamber of Deputies	INSP	INSP
Kellogg Award for Excellence in International Nutrition Research	American Society for Nutrition (ASN)	Dr. Juan Rivera Dommarco	CINyS
2009 Researchers in obesity, diabetes and cardiovascular disease, at the International Conference on Nutrition in Thailand	International Congress of Nutrition (ICN 2009)	Safdie Margarita, Islas Ana Aburto-Jennings Nancy González-Casanova Inés Salvo Deborah Bonvecchio Anabelle Rivera Juan	CINyS
Human Resources for Health researchers, ranked second	LXIII 2009 Annual Meeting of the Mexican Society of Public Health, A. C.	María de Lourdes Alemán Escobar RA Salcedo Álvarez R. Hamilton Figueroa M. Lezama Torres Doris Ortega Altamirano	CISS
Scopus Award 2009	Awarded by SCOPUS / CONACYT for scientific publications in 2009	Dra. Janine Madeleine Ramsey Willoquet	CRISP
Rosenkranz Award 2009	Rosenkranz Award 2009	Dr. Mario Henry Rodríguez López	CRISP
Member of The Obesity Society	The Obesity Society	Dr. Simon Barquera	CINyS
Candidate for "Malaria Champion of the Americas 2009"	Global Health Center at George Washington University and the Pan American Health and Education Foundation (PAHEF)	Dr. Mario Henry Rodríguez López	CISEI
Prize for best doctoral thesis in public health 2009, given at the XIII National Meeting of Researchers on Health	Coordinating Committee of National Institutes of Health and High Specialty Hospitals	Dr. Ángel Francisco Betanzos Reyes.	CISEI
Aaron Saenz Garza Pediatric Medical Research Award	Association General and Mr. Aaron Saenz Garza	Dr. Albino Barraza Villarreal	CISP
Francisco Ruiz Sánchez Award, First Place, Clinical Microbiology Research	Mexican Association of Infectious Diseases and Clinical Microbiology	Dr. Jesús Ulises Garza Ramos Martínez	CISEI
Francisco Ruiz Sánchez Award	XXXV Annual Congress of the Mexican Association of Infectious Diseases and Clinical Microbiology (AMIMC)	Dr. Jesús Silva Sánchez	CISEI
Epidemiology Award	Pfizer Research Fund 2010	Dr. José Ramos Castañeda	CISEI
Appointment as Technical Secretariat of the Traffic Injury Research Network	Traffic Injury Research Network	Dr. Ricardo Pérez Núñez	CISS
Recognition of academic work	Vicente Lombardo Toledano, City Council of Science and Technology in Morelos State	Dr. Juan Ángel Rivera Dommarco	CINyS
Second place, poster contest	XIX National Congress of Immunology, Mexican Society of Immunology	Dr. Salvador Hernández Martínez	CISEI
2010 Appointment to the State System of Researchers of Science and Technology Council of the State of Morelos	State System of Researchers of Science and Technology Council of the State of Morelos	Dr. Guillermo Perales Ortiz	CISEI
Appointment as full member of the National Academy of Medicine	National Academy of Medicine	Dra. Martha Hajar Medina	CISP
Appointment as full member of the National Academy of Medicine	National Academy of Medicine	Dr. Simón Barquera Cervera	CINyS
Career excellence award	Organizing Committee of the Second Symposium on Medical Research	Dr. Eduardo Lazcano Ponce	CISP
Award for the poster "Health and Nutrition of the Elderly in Yucatan, Mexico"	Universidad Autónoma de Yucatán, 117th Anniversary of the Faculty of Medicine	Dra. Teresa Shamah Levy	CINyS
Appointment to the Committees on Prevention, Monitoring and Evaluation and Care for the National Council for the Prevention and Control of HIV/AIDS (CONASIDA)	CONASIDA	Dr. Eduardo Lazcano Ponce Mtro. Sergio Bautista Dr. René Leyva	CISP
Appointment as Distinguished Visitor of the Veracruz Port City Council for participation in the Franco-Mexican Conference on Infectious Diseases	Veracruz Port City Council	Dr. Celso Ramos Garcia	CISEI

new modules and formats into the training (e.g., online activities, full time workshops, learning objects/resources). The program offers a range of online and full time courses throughout the year to accommodate each faculty member's schedule and didactic needs (see Table 4.6).

One of the most important actions to meet training needs is the development in 2006 of the Diploma Course in Teaching. The course was initially full time but an online format has since been developed. The modules of the program use different didactic methodologies, through which participants experience the learning process, participate in teamwork activities, and receive feedback from the course professor both in person and via email. The online format has facilitated the participation of faculty from all INSP campuses. Current topics include competency-based teaching, strategies for meaningful learning (collaborative work, problem-based learning, project-based learning, and case studies), and competency-based evaluations. In the past three years, more than 330 professor/researchers have been trained through this program. Faculty are invited to take the whole program over a period of two years. If a professor/researcher receives a poor teaching performance evaluation, he or she is required to take a specific course or seek pedagogical advice from the Curriculum Design and Faculty Development Department.

The full time workshops are two hours long and are offered to all faculty by expert instructors. The purpose of the workshops is to enrich teaching interventions with the use of didactic methodological tools as well as to create opportunities for faculty reflection and interaction. Learning objects are digital information units designed to develop the competencies needed for successful faculty performance in a specific area. These objects are self-directed

and generally used within a series of exercises that are accompanied by a self-evaluation. Learning objects include competency-based evaluations and evaluation instruments.

The INSP also supports continuing education in public health and related areas so that full-time, part-time, and visiting faculty can review and update the content of their courses. The Institute actively disseminates announcements about courses and programs offered by national and international educational institutions (for example, the Erasmus Mundus program, which is part of the tropEd Network, and the Certificate Program in Epidemiology for Health Management organized by Johns Hopkins University). The INSP also grants scholarships to faculty so that they can participate in the INSP's Continuing Education Program in Public Health and Epidemiology and continuing education programs at other institutions. From 2007 to 2010, 505 INSP professor/researchers (full time, part-time and visiting faculty) participated in courses offered by the INSP's summer program.

In addition, the INSP promotes faculty exchange as part of its faculty development efforts. The INSP's collaborations with other institutions provide opportunities for faculty to work at other universities. In the last two years, faculty have gone to the University of Emory, the Royal Public Health School of Amsterdam, the Institute for International Health and Development, Queen Margaret University in Edinburgh, and University College London among others to develop academic stays.

#### 4.2.C Description of formal procedures for evaluating faculty competence and performance.

Faculty competence and performance evaluation involved different academic bodies and individuals, from students to Faculty Colleges to research center directors. There are also internal and external procedures to assess performance:

1. **Evaluations by research center directors.** Each faculty member belongs to one of the seven research centers at the INSP and must develop an annual work plan that includes teaching, research and service activities. At the end of the year, the director of each center evaluates the productivity of the professor/researcher and the relevance of his or her activities to the center's work plans and the Institute's objectives.
2. **Evaluations by Faculty Colleges.** Among the functions of these collegiate bodies is evaluating the academic performance and activities of its members, as well as supervising their teaching competence. These evaluations are factored into promotions and into assigning professor/researchers for courses. For course assignment Faculty Colleges mainly take into consideration the academic preparation and experience and data related with peer recognition of their work (e.g. scholarships, academic awards, academic invitation for scientific events, exter-

**Table 4.6**  
**Elements of the INSP's Teacher Training Program**

<i>Diploma Course in Teaching</i>	
	<i>Online modules:</i>
1	<ul style="list-style-type: none"> <li>• Competency-based education (40 hours)</li> <li>• Competency-based evaluations (60 hours)</li> <li>• Teaching strategies for meaningful learning (60 hours each)</li> </ul>
	<i>Full time workshops (2 hours each):</i>
	<ul style="list-style-type: none"> <li>• Teaching competencies</li> <li>• Teaching practices</li> </ul>
2	<ul style="list-style-type: none"> <li>• Case methods and case design</li> <li>• Strategies for working with information and communication technologies in the classroom</li> <li>• Evaluation methods</li> <li>• Other topics, determined each year</li> </ul>
	<i>Learning objects (online):</i>
	<ul style="list-style-type: none"> <li>• Evaluation instruments</li> </ul>
3	<ul style="list-style-type: none"> <li>• Competency-based evaluation</li> <li>• Developing competencies</li> <li>• Other topics, determined each year</li> </ul>

nal and internal academic collaboration, among other issues). They are also in charge of the supervision of teaching performance and the Faculty College promotes that each full time professors participates in courses, direction of thesis or PTP, mentoring and academic participation in collegiate bodies. For these processes Chapters III and IV in the fifth Title of the Regulations for Faculty Colleges and Academic Personnel describe the evaluation criteria in detail (available as on-site resource).

3. **Student evaluation of faculty.** This is described in detail in Criterion 4.2.D, below.
4. **Evaluation of full-time faculty by the Research Commission every three years.** This process is described in criterion 4.1.D. To evaluate and monitor teaching and research competence and performance, the INSP offers two performance incentives. The PEDD requires professor/researchers to demonstrate their performance of academic activities for the previous year according to the program's regulations (Appendix 4.1.d-3). Faculty members are ranked according to teaching performance on a scale of I to IX, examining three main factors: 1) quality, taking into account student evaluations, pedagogic training, participation in collegiate bodies, and thesis advising activities; 2) dedication to teaching, which entails the production of didactic materials, contribution to the design and review of academic programs and participation in continuing education and training courses; and 3) experience, or years teaching. The program to incentivize research is the Program for Performance Incentives for Researchers in Medical Sciences, in which the National Institutes of Health categorizes researchers into six levels, A-F (see Criterion 4.1.D). Both programs provide strong performance incentives in the form of salary bonuses.

These evaluations are also used for faculty retention and promotion. The Faculty Colleges use student evaluations to select professors to teach courses every semester. Course evaluations results are available to Faculty College presidents, the academic program coordinator and the professor evaluated. The Faculty Colleges use these results to suggest specific actions for improving teaching, with follow-up from the academic coordinator.

Students' evaluations also have an impact on the PEDD performance incentive program. A committee with representative professors from each research center evaluates faculty members and determines their teaching level using faculty reports, including student evaluations, which demonstrate their overall performance. The research center directors do a similar overall evaluation of their faculty through the annual work report. This evaluation can determine promotion or retention as well as participation in activities that are assigned directly by the center director, such as the appointment of academic program coordinators or participation in a specific academic project.

#### 4.2.D

##### Description of the processes used for student course evaluation and evaluation of teaching effectiveness.

Student evaluations examine both the quality of the teaching-learning process and the performance of professor/researchers. They also evaluate the acquisition of required competencies and identify opportunities for strengthening these competencies. Evaluation reports are delivered to professor/researchers, Faculty Colleges and the research center directors to help them continue to strengthen faculty competencies. These reports allow the INSP to take action to improve overall performance—e.g., by providing materials needed for faculty development and designing workshops to improve didactic abilities—as well as to gauge individual performance.

The evaluation instrument (see Appendix 4.2.d) has been administered since 2006 and is continually updated. The current evaluation instrument has six sections focused on identifying specific teaching competencies (see Table 4.7 for a summary), and includes multiple-choice questions based on a 4-point Likert scale.

The process used by students to evaluate courses and teaching performance includes the following steps:

- At the end of each academic semester, students complete an online evaluation for each course.
- The information is processed and a report is generated indicating which areas need strengthening. (This form will be available in the on-site file.)
- The final evaluation reports are sent to individual faculty only after the students have received their grades. Final results are also available to academic program coordinators and Faculty College presidents.

A summary of course evaluations for the past three years will be available in the on-site file.

#### 4.2.E

##### Description of the emphasis given to community service activities in the promotion and tenure process.

Faculty must incorporate teaching, research and service activities into their annual work plan, which requires the approval of the director of his or her research center. Most of the professor/researchers participate in community service activities as part of their research, teaching or direct service to community, and they receive annual evaluations from their directors that include these elements. (Examples of these annual work plans will be available during the site visit.)

**Table 4.7**  
**Competencies Addressed in Student Course and Teaching Evaluations**

Section/Competency	Description
Knowledge of subject matter	Evaluate the professor's mastery of course content, the degree to which it is up to date, and its relationship with other units in the curricular plan.
Professional responsibilities	Evaluate the professor's degree of commitment to his or her students, expressed as punctuality, attendance, feedback, etc.
Organization of the course	Evaluate the organization and implementation of the course plan.
Didactic and communication strategies	Evaluate the openness of the professor to dialogue and acceptance of differing points of view as well as the ability to foster specific values that he or she demonstrates by example. In addition, evaluate whether these strategies foster critical thinking and enable relating theory to practice.
Teaching strategies	Evaluate the relevance of teaching strategies with respect to student needs; that is, implementation of strategies that accommodate different student learning styles.
Evaluation of learning	Assess the professor's ability to ensure that students are evaluated throughout the semester and are given feedback during the process. Evaluate the accomplishment of the learning evaluation with the desired competencies, in addition to the educational methodology.

Source: Office of Academic Affairs, 2009.

Experience in community and service activities are also considered by Faculty Colleges in order to assign professor/researchers as community practicum advisors. Specific guidelines for community practices are provided to all faculty (see Appendix 4.2.e) who are evaluated in part on their adherence to these guidelines if they participate in the practicum experience.

#### 4.2.F Assessment of the extent to which this criterion is met.

This criterion is met.

##### Strengths

- The INSP has clear regulations to guide academic activities and performance. A faculty handbook with all the required information is available in electronic and hard copy formats to both full- and part-time professors.
- The INSP promotes faculty professional development through programs that encourage pursuit of further academic degrees; sabbatical leave and teaching stays allowing faculty to teach or conduct research at other institutions; and a permanent program of training to improve teaching skills.
- The Institute has created flexible academic training programs to improve faculty's participation in professional development, including full time and on-line formats and a Diploma Course in Teaching.
- The INSP has diverse mechanisms and procedures to evaluate the qualifications and performance of professor/researchers—which include the participation of collegiate bodies, students and institutional authorities—to ensure that their academic

activities are in line with the mission and objectives of the Institute. The results of the evaluations have been useful for providing continual feedback for professor/researchers and the Faculty Colleges.

##### Weakness

- Although flexible options have been offered, it is difficult for some faculty to participate in scheduled training activities for pedagogic development.

##### Future Plans

- The Office of Academic Affairs works every year to expand the flexibility of the training activities for the faculty. In 2011 some courses are will be offered in an intensive, short-period format to help professors schedule their attendance.

#### 4.3. Faculty and Staff Diversity. The school shall recruit, retain and promote a diverse faculty and staff, and shall offer equitable opportunities to qualified individuals regardless of age, gender, race, disability, sexual orientation, religion or national origin.

The INSP fosters diversity by recruiting, retaining and promoting faculty and staff who are diverse in gender, age, place of origin and professional profile. The Institute offers equitable opportunities for qualified individuals regardless of age, gender, race, disability, sexual orientation, religion or national origin.

## Required Documentation

As a result of Mexico's socio-cultural history, in Mexico the concept of diversity is not measured by racial or ethnic indicators, but rather using other indicators more appropriate to the national culture. Mexican population is largely racially mixed. The indigenous population in the country is almost 10% of the total. Due to the exclusionary connotations that have existed in the past, neither race, sexual orientation, religion, nor ideological preferences are recorded by institutions in Mexico. The **Federal Law of Transparency and Access to Public Government Information** forbids requesting any personal data that could affect the person's privacy, including information on race, religion, and ethnicity. Therefore, the INSP does not request or have a record of such information for faculty or administrative staff.

In Mexico, diversity is evaluated using other criteria such as age, gender, place of origin and profession among others. These indicators enable the INSP to demonstrate diversity in the Mexican context and have thus been added to the data requested by the CEPH.

Nevertheless, INSP recognizes that further efforts should be made to attract people from indigenous groups. Although these groups do not have all of the same opportunities as other social sectors to reach graduate education, efforts are being made to promote educational advancement in these populations.

## 4.3.A

Summary demographic data on the school's faculty, showing at least gender and ethnicity.

The categories in CEPH Data Template H are U.S.-focused and the breakdown does not apply to INSP for the reasons given above. Therefore, although Table 4.8 follows this template, information for many of the categories cannot be recorded. The data presented in Table 4.8 shows a majority of Hispanic/Latino faculty (encompassing all faculty of Mexican origin). Diversity can be seen in the balance of males to females and the proportion of international faculty, which are variables that INSP can record.

At the end of 2011 INSP Faculty has 46.2% male professor/researchers and 53.8% female professor/researchers. Of the male professor/researchers, 95% are categorized as Hispanic (i.e., Mexican) and 5% are from other countries. For female professor/researchers, 95.7% are Hispanic and 4.3% are foreign. For both genders the most frequent international origins of professor/researchers are the U.S., Colombia and Peru.

For more information about faculty age, state of origin and profession see Criterion 4.3.F, which shows more diversity variables for INSP faculty, as well as Appendix 4.3.a. for the years 2008-2010.

**Table 4.8**  
**Summary Demographic Data for Current Core and Other Faculty, 2011**

	Core (Full-Time) Faculty		Other Faculty		Total	
	No.	%	No.	%	No.	%
Male	99	70.2	42	29.8	141	46.2
African American	0	0.0	0	0.0	0	0.0
Caucasian	0	0.0	0	0.0	0	0.0
Hispanic/Latino	97	72.4	37	27.6	134	43.9
Asian/Pacific Islander	0	0.0	0	0.0	0	0.0
Native American/Alaska Native	0	0.0	0	0.0	0	0.0
Unknown/other	0	0.0	0	0.0	0	0.0
International	2	28.6	5	71.4	7	2.3
Female	134	81.7	30	18.3	164	53.8
African American	0	0.0	0	0.0	0	0.0
Caucasian	0	0.0	0	0.0	0	0.0
Hispanic/Latina	128	81.5	29	18.5	157	51.5
Asian/Pacific Islander	0	0.0	0	0.0	0	0.0
Native American/Alaska Native	0	0.0	0	0.0	0	0.0
Unknown/other	0	0.0	0	0.0	0	0.0
International	6	85.7	1	14.3	7	2.3
Total	233	76	72	24	305	100

### 4.3.B

Summary demographic data on the school's staff, showing at least gender and ethnicity. Data must be presented in table format.

As mentioned in Criterion 4.3.A, the only categories the INSP records according to organizational practices in Mexico are gender and nationality. Table 4.9 presents the demographic data on the INSP's full-time staff.

Table 4.9 shows that 52.2% of full-time administrative staff is women and 46.4% are men, and most are Hispanic/Latino. Some 3% of full-time administrative staff are international. Criterion 4.3.F provides diversity variables for INSP's full-time administrative staff, such as state of origin.

### 4.3.C

Description of policies and procedures regarding the school's commitment to providing equitable opportunities without regard to age, gender, race, disability, sexual orientation, religion or national origin.

#### Equity and Fairness Policies

As a national institute, the INSP applies federal policies that promote equal opportunities for candidates and employees regardless of age, gender, race, disability, sexual orientation, religion, or national origin. As indicated in Criterion 1.1.E, equity and fairness are fundamental values of the Institute, as stated in the INSP's Code of Ethics and Code of Conduct. In addition, the federal government has put into practice the National Program for Accountability and Transparency 2008-2012 for all its entities, out of which grew the Program for Institutional Culture and Gender Equity in Public Administration. The program calls for an institutional obligation to "establish mechanisms to eliminate abuse, sexual harassment and discriminatory practices within the federal public administration" and prohibits discriminatory practices in public institutions. (Appendix 4.3.c includes the complete program.) The INSP diligently follows and upholds these policies.

In the event that a person within the institutional community lodges a complaint about a perceived discriminatory practice, the case is turned over to the Ethics, Values and Conduct Commission, which evaluates the seriousness of the violation and determines sanctions. This commission addresses complaints brought by the Institute's administrative personnel, students and professor/researchers. If an administrative staff member presents a complaint against another administrative staff member, a workers' union representative is incorporated into the committee. If the accused is a professor/researcher or student, a corresponding representative is included.

**Table 4.9**  
**Demographic Data for Administrative Personnel,\* 2010**

	Full-Time Staff	
	No.	%
Male	278	46.4
African American	0	0
Caucasian	0	0
Hispanic/Latino	273	45.5
Asian or Pacific Islander	0	0
Native American/Alaska Native	0	0
Unknown/other	0	0
International	5	0.9
Female	313	52.2
African American	0	0
Caucasian	0	0
Hispanic/Latina	303	50.5
Asian or Pacific Islander	0	0
Native American/Alaska Native	0	0
Unknown/other	0	0
International	10	1.7
Total	599	100%

\*INSP employees who are not professor/researchers or students.

#### Procedures to Guarantee Equal Opportunity

To guarantee a hiring process that is equitable and based on institutional values and policies, the INSP Human Resources Department carries out candidate selection and hiring according to the following procedures:

1. The department with an opening informs the Human Resources Department of the need to recruit candidates. This is done using a specific form for personnel requests.
2. The opening is announced on the INSP intranet and, when possible, posted on external employment boards (e.g., at other institutions or universities, depending on the position) with the statement, "By law, no candidate will be excluded on the basis of age, sex, race, disability, sexual orientation, religion or national origin."
3. Psychometric examinations are administered to leading candidates.
5. The files for the three candidates with the best results are turned over to the Human Resources Department to conduct interviews.
6. If the department with the opening desires, technical evaluations are administered.

7. Results of the evaluations are turned over to the supervisor of the department with the opening, who then conducts interviews.
8. If a satisfactory candidate accepts the position, the process for completing a contract begins.
9. If no satisfactory candidate is found, the procedure is repeated beginning with step 2.

#### 4.3.D

Description of recruitment and retention efforts used to attract and retain a diverse faculty and staff, along with information about how these efforts are evaluated and refined over time.

##### **Recruitment and Retention of a Diverse Faculty Body**

The SSA, through the CCINSHAE, has created the Hiring, Promotion and Retention Program, which is conducted once a year through public notices. Its objective is to promote the academic development of researchers and the training, development and retention of diverse personnel who work in health-related research. (The complete text of this notice is available in Appendix 4.3.d.) This program—applicable only to full-time or salaried professor/researchers at the National Institutes of Health—promotes fair and open conditions for hiring, promotion and retention. To guarantee recruitment of personnel from all regions of the country, the notice is disseminated through the INSP webpage, by email and through publications such as the bulletin *Viva Salud*, which is sent to diverse health institutions across Mexico.

In addition, the INSP has been successful in efforts to increase employment contracts for full-time female faculty. This has led to a greater incorporation of women in academic coordination and management positions, and over the past five years has led to the promotion of women to positions of high responsibility, such as leadership in the Faculty Colleges (where 54% of presidents are women) and thesis directors (56% of whom are women), among others.

One mechanism for retaining diverse staff is the recognition of academic activities through the Performance Incentives for Researchers in Medical Sciences and the PEDD (described in Criterion 4.1.D). These programs ensure that faculty are retained and rewarded on the basis of objective performance criteria.

##### **Recruitment and Retention of Diverse Administrative Personnel**

Some of the INSP's successful actions to recruit a diverse administrative body are:

- Dissemination of public notices for administrative positions in states that are not well represented.

- Dissemination of job descriptions for available positions at all levels through diverse communication channels, to have broader reach.
- Promotion of policies for access to equitable conditions for all candidates for administrative positions regardless of state of origin or nationality. This has enabled workers from diverse parts of the country to be incorporated into the administrative staff.

#### 4.3.E

Description of efforts, other than recruitment and retention of core faculty, through which the school seeks to establish and maintain an environment that supports diversity.

The INSP has made efforts to foster and maintain a diverse environment within the community—one composed of individuals from different regions of the country and the world with heterogeneous academic and ideological interests regarding public health, in a country where cultural, social, economic and ideological diversity is a constant. This environment is encouraged by conducting and disseminating research projects on topics that encompass the cultural and health diversity of vulnerable groups, creating communication campaigns to highlight the diverse activities performed by the INSP community, and developing cultural and sport activities as well as social networks that foster a respectful and tolerant environment.

##### **Research on Topics Encompassing Cultural Diversity and the Health of Vulnerable Groups**

One of INSP's strategies to raise awareness about diversity issues both externally and within the INSP community is to promote and disseminate the results of research about groups and populations that represent the heterogeneity of the country. For example, the Institute has a LIM on health and vulnerable groups, such as indigenous peoples, migrants, women, children, and the elderly, among others; these groups are considered to be vulnerable because of the social conditions in which they live.

In addition, a variety of research is developed to analyze gender-related health issues, such as the reproductive health of women in poverty, comparative quality of medical care in hospitals, human resources in the health sector, and gender-sensitive approaches to interpersonal relationships, among others. These projects help to establish collaborative networks with social, government and academic organizations that facilitate contact between students, faculty and a wide range of actors and areas, and enrich the professional activity of the institutional community. The results of this research are presented to the rest of the institutional community through diverse publications and the intra-institutional seminar program described in Criterion 3.2.

## Recognition of the INSP Community's Diverse Members and Activities

The INSP's monthly bulletin, *Viva Salud*, (<http://www.insp.mx/gaceta-insp.html>), disseminates topics derived from the Institute's teaching and research activities described above, as well as interviews with professor/researchers and students that reflect their diverse points of view on public health topics as well as personal information to help those in the INSP community get to know one another. This has allowed the recognition and dissemination of ideologies, activities, interest and proposals from diverse sectors of the INSP and has fostered knowledge of the thematic and empirical diversity of the institutional community. Each issue of the bulletin is dedicated to a specific topic, representing all the areas in development at the Institute. (Issues of this bulletin that deal with topics such as the health of vulnerable groups, environmental health for all, social networks, and student exchange experiences, among others will be available during the CEPH evaluation visit.)

In addition, the communication campaign "*Reconocernos*" (in English, "Recognize Us") was initiated in 2010 with the objective of disseminating throughout the institutional community information about the people working at INSP and their activities as they contribute to fulfilling the Institute's mission. This has helped foster a better understanding of the diversity of the INSP community, recognize the diversity among us and promote tolerance and acceptance as one of INSP values.

### Foreign Social Network

A group named the "Foreign Legion" has existed at the INSP since 2008 and includes more than 30 students, professor/researchers and administrative personnel from different locations throughout the Americas. This group organizes social activities and has helped to establish social networks to support its members, serving to ease the process of adapting to life in Mexico. It has contributed to preventing individuals from dropping out due to difficulty adapting to graduate school and/or being away from home. The social experiences provided by this group have also

enabled the different sectors of the institution (administrative, student, teaching) to interact and to learn about traditions and lifestyles from other countries.

### Cultural and Sports Programs

The workers union and the student association, with support from institutional authorities, hold a series of cultural and sporting activities throughout the year on INSP campuses, including sports tournaments, chess, photographic exhibitions, and others. These activities provide social opportunities for administrative personnel, faculty and students to interact outside of the classroom or office, and creates opportunities to foster exchange of knowledge, respect and tolerance.

#### 4.3.F

Identification of outcome measures by which the school may evaluate its success in achieving a diverse faculty and staff, along with data regarding the performance of the school against those measures for each of the last three years.

One of the INSP's objectives has been to maintain a core of full-time, part-time professor/researchers and administrative staff reflecting diversity in age, gender, profession and place of origin, as Mexico is geographically, culturally and socially diverse. The specific outcome measures and its targets are detailed in Table 4.10. A further description is provided below.

### Results of Strategies for Achieving a Diverse Faculty Body

The evolution of faculty characteristics from 2008 to 2010 is analyzed below.

- **Full-time professor/researchers.** Of the 238 professor/researchers who made up the full-time faculty in 2008, 58.4% were women and 41.6% were men. In 2009 58.8% were women and 41.3% were men and in 2010 55.0% were women and 45.0% men (see Table 4.11). The number of women has remained at

**Table 4.10**  
**Outcome Measures for Faculty and Staff Diversity, AY2008-2010**

Outcome Measure	Target	AY2008	AY2009	AY2010
% of full-time faculty who are women	50%	58%	59%	55%
# of disciplines represented by full-time faculty	50	55	58	58
% of Mexican states represented by full-time faculty	75%	75%	78%	78%
% of administrative staff members who are women	50%	52%	52%	52%
% of Mexican states represented by administrative staff	75%	81%	81%	81%

a narrow majority over the three years, which has improved the incorporation of women in positions of authority.

- **Part-time professor/researchers.** The participation of women as part-time professor/researchers in the faculty has been less than that for full-time professor/researchers. The percentages have remained essentially unchanged, with women holding 38-39% of these positions from 2008 to 2010 (Table 4.11).
- **Thesis directors and Faculty College presidents.** A notable change has been observed in the makeup of thesis directors since the last accreditation, when 2004 data showed that only 37.6% were women. From 2006 to 2009, out of 144 professor/researchers who served as thesis directors, 81 (56.3%) were women. Appendix 4.3.a shows quantitative data in detail for 2007-2010. Currently, the 50% of Faculty College presidents are women, which was not the case for the last accreditation when they represented a small minority in these academic positions of authority.

### Other Diversity Criteria

As noted earlier, because ethnic diversity in Mexico is not registered, the INSP identifies other indicators to illustrate the diversity of the faculty, including age, profession, gender and place of origin.

**Age distribution.** The faculty has an adequate age distribution, ranging from 25 to 84 years and with the most of the faculty concentrated in the range of 31 to 60 years of age (87%). The INSP has a balance of full-time faculty who were hired upon completing their postgraduate studies (17% are 31-36 years old), faculty who have extensive professional experience (54% are 37-48 years old and 25% are 49-66 years old). This heterogeneity reflects a wide range of faculty experience, which enriches the academic program.

**Professional or educational discipline.** From 2008 to 2010, professional diversity among full-time faculty increased slightly as a result of fostering multidisciplinary and interdisciplinary teaching and research in public health. This differs from what was observed several years ago, when the predominant profession (more than

80%) was medicine. The diversity is shown in the number and variety of professions among faculty. In 2008 faculty represented 55 different professions, and in 2009 and 2010 they represented 58 professions, with only 28% of faculty members coming from medicine (see Table 4.12). See Appendix 4.3.a. for detailed data.

**Place of origin.** Places of origin of full-time faculty are quite varied. This group of professor/researchers is highly representative of national diversity, as INSP achieved state diversity in the last decade and has maintained it ever since. INSP faculty come from 25 out of 32 of Mexican states as well as 15 other countries. Table 4.13 shows the most common places of origin for faculty (for all data see Appendix 4.3.a).

### Diversity of the Administrative Body

The INSP actively encourages diversity among its administrative staff. Staff characteristics from 2008-2010 are analyzed below and in Appendix 4.3.f.

**Gender.** Women represent a slight majority of administrative personnel, and the proportion of women has remained stable over the past three years (52% women and 48% men). The INSP has made significant efforts to incorporate more women into high-level positions. Currently, out of 43 middle and upper-level positions, 10 are held by women. In the last accreditation, there was only one woman on the Directive Council. This year, women hold two Directive Council positions: Director of the Office of Academic Affairs and Director of the CISEI. It is important to note that two of the three openings on the Directive Council in the last four years have been filled by women.

**Place of origin.** As expected, each of the three INSP campuses has a high percentage of workers whose place of origin is near their place of work (Mexico City, Morelos and Chiapas). Nonetheless, the INSP has personnel from the majority of the states in the country. Administrative staff comes from 26 of the 32 states in the country, representing 81% of the national territory (Table 4.14). In addition, 15 workers are from foreign countries.

**Table 4.11**  
**Number of Full- and Part-Time Faculty by Gender, 2008-2010**

Year	Full-Time			Part-Time		
	Women	Men	Total	Women	Men	Total
2008	139 (58.4%)	99 (41.6%)	238	22 (39.3%)	34 (60.7%)	56
2009	141 (58.8%)	99 (41.3%)	240	23 (38.3%)	37 (61.7%)	60
2010	133 (55.0%)	109 (45.0%)	242	24 (38.7%)	38 (61.3%)	62

Source: Academic Administration, 2009.

**Table 4.12**  
**Professional Disciplines of Full-Time Faculty, 2008-2010**

Professional Disciplines	2008	2009	2010
Medicine	28%	28%	28%
Biology	13%	13%	14%
Nutrition	8%	8%	7%
Economics	4%	4%	5%
Psychology	5%	5%	5%
Actuary	3%	3%	3%
Informatics	3%	3%	2%
Sociology	3%	3%	2%
Nutrition and food sciences	2%	2%	2%
Chemical pharmaceutical biology	2%	2%	3%
Other disciplines (e.g., education, nursing, dentistry, social anthropology, political science, administration, social work)	29%	30%	29%

**Table 4.13**  
**Full-Time Faculty by Place of Origin, 2008-2010**

Places of Origin	2008	2009	2010
Mexico City	45.0%	44.6%	43.8%
Morelos	10.9%	10.8%	10.7%
Chiapas	5.0%	5.0%	5.4%
Veracruz	4.6%	4.6%	5.0%
Guerrero	2.5%	2.9%	2.9%
Puebla	2.5%	2.5%	2.5%
State of Mexico	2.1%	2.1%	2.9%
Sinaloa	1.7%	1.7%	1.7%
Other states (17)	10.6%	10.8%	17.3%
Foreign	15.1%	15.0%	13.2%
	(16 countries)	(16 countries)	(15 countries)
Total	100%	100%	100%

### 4.3.G

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- Although the concept of diversity is not centered on ethnic characteristics in Mexico, and institutions do not record this type of data due to the restrictions of federal law, the INSP has been successful in developing a faculty and administrative body that is diverse in terms of gender, age, place of origin and

**Table 4.14**  
**INSP Administrative Staff by Place of Origin, 2008-2010**

Place of Origin	2008	2009	2010
Distrito Federal	38.2%	37.8%	38.1%
Morelos	23.1%	23.0%	23.0%
Chiapas	14.0%	14.3%	13.4%
Guerrero	5.8%	5.9%	6.3%
Estado de México	2.5%	2.5%	2.5%
Puebla	2.3%	2.5%	2.3%
Veracruz	1.6%	1.6%	1.7%
Jalisco	0.8%	0.8%	0.8%
Michoacán	0.8%	0.8%	0.8%
Guanajuato	0.7%	1.0%	0.8%
Hidalgo	0.7%	0.7%	0.8%
Other (17 states)	7.2%	6.7%	6.8%
Foreign countries	2.3%	2.5%	2.5%

professional profile. (See Appendix 4.3.a. for more detailed information.) In addition, successful measures have been put into place to recruit and retain diverse teaching and administrative staff, including a large group of faculty and staff from foreign countries.

- Encouraging an interdisciplinary and multidisciplinary approach to public health has been important in creating a diverse environment in which faculty from a wide range of professions have contributed broader perspectives on public health problems, as opposed to the medical focus that had prevailed for years.
- The INSP has established a gender equity policy to prevent and promptly resolve any instances of perceived discrimination.
- The INSP is making an ongoing effort to hire women for positions with greater academic responsibility and leadership, as has occurred for thesis directors, program coordinators and Faculty College presidents.

#### Weakness

- Although the number of women with high-level academic responsibility has increased dramatically in the last five years, women are still a minority on the directive council.

#### Future Plans

- The INSP will keep supporting promotion policies to encourage the placement of women in positions with high-level responsibility when such positions become available.
- Academic faculty exchange will be encouraged through collaboration agreements with other national educational institutions to bring in external professors with a broad range of expertise and experience.

## 4.4

**Student Recruitment and Admissions.** The school shall have student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the school's various learning activities, which will enable each of them to develop competence for a career in public health.

The INSP has numerous policies and procedures in place designed to recruit and admit qualified individuals who are capable of taking advantage of the school's learning activities to develop competence for a career in public health.

### Required Documentation

#### 4.4.A

Description of the school's recruitment policies and procedures.

The INSP's recruitment efforts focus on candidates with solid academic histories and a firm commitment to public health. The Department of Student Affairs and program coordinators are responsible for recruitment. They use a range of strategies to recruit students from diverse fields from around the country and other Spanish-speaking countries. In particular, recruitment targets those who are finishing their education as doctors, nurses, biologists, chemists, psychologists, economists, social scientists and other related professions. The Institute also recruits candidates who work in public health at the local, state and national levels and those finishing their service period or residency in hospitals. Following are some of the approaches used to recruit candidates with widely diverse backgrounds.

1. Widespread recruitment of students in Mexico:
  - Mass media
  - Website
  - Distribution of the academic program, posters, brochures and other materials to state Ministries of Health, academic institutions, NGOs, communities and interested organizations
  - Advertisements in newspapers (including *Reforma* and *La Jornada*) and leading Mexican medical journals (*Salud Pública de México*, *Artemisa*, *Hypatia*)
  - Announcements through university radio stations across the country
  - Promotion at recruitment fairs held in different cities across the country
2. Activities focused on groups interested in the Institute's academic offerings:
  - Visits with academic departments at the Ministries of Health in all 32 states

- Meetings with department heads at major hospitals and with directors of schools of medicine, dentistry, nursing, psychology and other relevant areas at diverse universities
  - Electronic reminders of application dates sent to education department heads at the Ministries of Health, as well as to directors of the schools mentioned above
3. Activities at public health events:
    - Promotion during annual meetings of the Mexican Society of Public Health, the Society of Infectious Diseases, Biostatistics, Environmental Health, and others
    - Promotion during the International Congress on Research in Public Health (CONGISP) and other national and international health congresses
    - Promotion campaign during the INSP's Continuing Education Program in Public Health and Epidemiology, during which information on all subject areas in the academic and professional programs are distributed
    - Ongoing promotion of degree programs during certificate courses and videoconferences
  4. Activities to recruit international students:
    - Distribution of recruitment materials to the Ministries of Health in Central and South American countries and the Caribbean as well as PAHO offices and Mexican embassies and consulates
    - Promotion at recruitment fairs and congresses held outside of Mexico
    - Participation in expositions and academic events organized by the Hispanic Association of Colleges and Universities (HACU), the American Public Health Association (APHA), and other Latin American academic and public health institutions

#### 4.4.B

Statement of admissions policies and procedures.

### Admissions Policies and Requirements

Each year the INSP admits new students to all of its postgraduate programs. Students are selected through a rigorous evaluation of their admissions file, which is conducted by the collegiate bodies. The Institute has a non-discrimination policy, and admissions decisions are made without reference to race, ethnicity, place of origin, color, citizenship, beliefs, affiliation, gender, sexual orientation, age, marital status, or disabilities.

The minimum requirements for applying to the Specialties, Master and Doctoral programs are as follows:

1. Admission application submitted to the appropriate academic program.
2. Minimum grade point average of 8.0 (on a scale of 0 to 10) for the bachelor degree; the diploma or grade transcripts from the last degree completed must be submitted.

3. Two letters of recommendation for the master's program and four letters for the doctoral program.
4. Résumé with work and academic history, along with copies of corroborating documentation.
5. Photocopies of any published articles and papers presented at academic events.
6. Institutional proposal letter if the applicant works in the Ministry or Health.
7. For independent students (those without an institutional proposal), a letter of request to the INSP's Director General/Dean stating the reasons for wanting to apply and a commitment to cover the tuition costs according to INSP payment procedures if accepted.
8. For students whose native language is not Spanish, demonstration of Spanish comprehension.

Applicants must also take the following tests:

1. **National Postgraduate Enrollment Exam (EXANI III)** (for Mexican students only). This exam is similar to the Graduate Record Examination (GRE) in the US. It is given by the National Evaluation Center for Higher Education (CENEVAL). The INSP establishes minimum scores required for acceptance.
2. **General Exam** (for international students only). The thematic content of this exam is similar to that of the CENEVAL exam, which foreign students are not eligible to take.
3. **Institutional diagnostic exams in mathematics and psychometrics.** Both of these exams are delivered online. The mathematics exam, developed by the Faculty College for Biostatistics, tests knowledge of math concepts and skills. The psychometric exam evaluates candidates' interests, skills and analytical abilities.
4. **Specific exams.** Some programs administer additional exams specific to their area.

In addition, every applicant is interviewed by at least two members of the Faculty College that oversees the program for which he or she is applying. Students may also be asked to complete additional requirements, depending on the department to which they are applying. (For example, some departments may ask for more advanced mathematics evaluations, presentation of research protocols, etc.)

### Admissions Procedures

Student applications are filled on line and reviewed by the Department of Student Affairs. Once the files for all candidates are complete, they are reviewed by the Faculty Colleges, which are responsible for the final admissions decision for each program. All the requirements are publicly available in the academic program edited annually and available on the INSP website.

In addition to submitting application and other materials, all candidates must be interviewed in person or online by an INSP professor/researcher designated to coordinate the program in which the candidate wishes to enroll. The interview is designed to evaluate the candidate based on reasons for applying to the program, previous experience applying to postgraduate programs, previous experience in public health activities, knowledge of public health problems and control programs, and plans for the future.

The number of students selected for each academic year is determined by the Faculty Colleges and approved by the Academic and Teaching Commission (CAD). The quota for each program depends on the number of professor/researchers assigned to the programs and their ability to meet student needs. Once the results of the selection process are obtained, an acceptance or rejection letter is sent to the candidate. An Orientation week is organized for all students accepted on the three campuses.

#### 4.4.C

Examples of recruitment materials and other publications and advertising that describe, at a minimum, academic calendars, grading, and the academic offerings of the school. If a school does not have a printed bulletin/catalog, it must provide a printed web page that indicates the degree requirements as the official representation of the school. In addition, references to website addresses may be included.

Each year the INSP produces a publication called the **Academic Program** available on the website and in hard copy (see Appendix 2.1.b-1.), which describes the INSP's graduate and continuing education programs in full time, executive and online formats. This publication also includes information about the INSP's structure, organization, history, admission procedures, grading and academic calendar. The Institute also produces brochures and promotional posters for individual academic programs. Samples of these materials will be available during the site visit.

#### 4.4.D

Quantitative information on the number of applicants, acceptances and enrollment, by program area, for each of the last three years. Data must be presented in table format.

See Table 4.15 (CEPH Data Template J) for data on the number of applicants, acceptances and enrollment by program area for 2008-2010. Note that the Specialty in Health Promotion, shown on the instructional matrix in Table 2.1, does not appear here because it was not in operation until 2011.

**Table 4.15**  
**Quantitative Information on Applicants, Acceptances, and New Enrollments**  
**by Specialty Area, Academic Years 2008–2011**

Program	AY2008			AY2009			AY2010			AY2011		
	Ap.	Ac.	E.									
Specialty in Health Promotion	NA	NA	NA	NA	NA	NA	NA	NA	NA	37	13	13
Residence in Public Health and Preventive Medicine*	NA	NA	NA	NA	NA	NA	32	32	30	10	10	7
Master of Public Health (MPH)												
Epidemiology	41	17	14	37	20	19	62	19	14	57	14	13
Health Systems Administration	119	59	58	60	25	22	79	10	9	96	22	22
Environmental Health	8	5	2	7	7	7	5	1	1	5	5	5
Biostatistics and Information Systems	8	4	3	1	0	0	6	5	3	56	25	23
Social and Behavioral Sciences	24	20	16	20	11	11	28	12	11	31	12	12
Nutrition	7	5	4	6	4	4	17	8	6	21	8	8
Vector-borne Diseases	2	0	0	1	0	0	NA	NA	NA	9	8	6
Infectious Diseases	NO	NO	NO	4	4	3	9	7	6	8	3	2
Master of Public Health, online format	NA	NA	NA	170	90	73	66	29	29	47	22	22
MPH Total	209	110	97	306	161	139	272	91	79	330	119	113
Master in Clinical Nutrition	NA	NA	NA	NO	NO	NO	43	12	9	47	7	6
Master in Health Sciences (MHS)												
Epidemiology	11	7	7	9	4	4	10	0	0	12	6	6
Clinical Epidemiology	10	5	5	9	6	5	16	5	5	10	0	0
Biostatistics	7	4	4	10	5	4	2	0	0	8	3	3
Environmental Health	2	1	0	7	6	5	7	6	6	9	4	3
Reproductive Health	2	0	0	15	10	8	23	9	8	10	0	0
Health Systems	18	10	6	17	15	14	27	10	7	17	7	4
Nutrition	18	9	9	12	6	6	31	14	13	32	8	6
Health Economics	NO	NO	NO	13	7	7	13	4	4	10	0	0
Infectious Diseases	7	6	6	13	8	7	32	13	13	21	13	13
Vector-borne Diseases	6	5	5	3	3	3	9	8	8	11	7	7
Vaccinology	32	25	25	NO	NO	NO	6	0	0	NO	NO	NO
MHS Total	113	72	67	108	70	63	176	69	64	140	48	42
Doctorate in Public Health Sciences (DPHS)												
Epidemiology	15	5	5	16	7	7	6	3	3	16	5	5
Health Systems	10	5	4	8	5	5	4	0	0	14	5	4
Infectious Diseases	1	1	1	3	3	3	8	4	3	9	4	4
DPHS Total	26	11	10	27	15	15	18	7	6	39	14	13
Doctorate in Public Health Sciences in Population Nutrition	NA	NA	NA	10	6	5	9	3	2	8	3	2
Doctorate in Public Health	26	9	9	36	13	13	38	10	9	18	7	7
Total	374	202	183	487	265	235	588	224	199	629	221	203

\*Candidates for the Residence in Public Health and Preventive Medicine are pre-accredited through the National Residence Exam. For that reason they are all accepted.

Key: Ap= Applied, Ac= Accepted, E=Enrolled, NA=Not applicable (program was not yet in operation); NO=Not offered (program was not offered that year).

Source: Office of Student Affairs (October 30th, 2011).

There has been significant demand for the INSP's postgraduate programs (academic and professional master's and doctoral degrees) over the past 4 years, as shown in the table 4.15. From 2008 to 2011, a total of 1117 candidates submitted applications for the Master of Public Health, of whom 43% were accepted. In 2008 and 2009, there was an increase in the number of candidates as a result of the MPH online format and the MPH executive format with a concentration in Health Administration.

With regard to the Master of Health Sciences, 537 applications were received in 2008-2011 and 48% of these were accepted. For the doctoral programs, over the last 3 years a total of 255 applications were received, of which 38% were accepted. Because of the interest on the part of graduates from the MPH in continuing their studies, the Doctorate in Public Health was opened in 2008, which contributed to a rise in total doctoral applications in that year. Similarly, the opening of the Doctorate in Public Health Sciences in Population Nutrition increased 2009 applications.

Because of the ongoing difficulty of recruiting students for the biostatistics area, the program was redesigned to incorporate the area of information systems, as mentioned in the matrix in Criterion 2.1. This modification allowed the program to reopen in 2010 and served to increase demand from students who are interested in a more applied focus in biostatistics. Besides the full time format the program also was offered in an on line format. This incremented the applicants recruitment. In 2011 the Specialty in Health Promotion open for the first time in an on-line format.

#### 4.4.E.

Quantitative information on the number of students enrolled in each specialty area identified in the instructional matrix, including headcounts of full- and part-time students and a full-time-equivalent conversion, for each of the last three years. Non-degree students, such as those enrolled in continuing education or certificate programs, should not be included. Explain any important trends or patterns, including a persistent absence of students in any program or specialization. Data must be presented in table format. See CEPH Data Template K.

See Table 4.16 for data on the number of students enrolled in each specialty area identified in Figure 2.1 in Criterion 2.1.A. The number of students enrolled includes all students that are studying a course in the program in that academic year (AY), including new enrollments and active students from other semesters.

In 2009 it occurred an important increment in the enrollments due to the offer of the Master in Public Health in an on line format. This new format allowed students from all the country to study and work at the same time. The Master of Public Health

with a concentration in vector-bone diseases was not open until 2011 since it required a special agreement with the State Health Services of Chiapas, which asked for that program for the training of its personnel. The Health Services of Chiapas faced budget cuts, but the agreement was applied in 2011 and the program open on the Tapachula campus in the fall of 2011. In 2011 the Specialty in Health Promotion open and also there was an increment of students in the MPH with concentration area in Biostatistics and Information Systems in an on line format.

#### 4.4.F

Identification of outcome measures by which the school may evaluate its success in enrolling a qualified student body, along with data regarding the performance of the school against those measures for each of the last three years.

The INSP uses two variables to measure the success of its strategy for selecting a qualified student population for enrollment in the MPH, master of health sciences and doctoral programs: 1) number of applicants who meet admission requirements (the acceptance rate for each program every year), and 2) scores obtained by candidates on the CENEVAL exam. Data for the outcome measures in the last 3 years is presented in Table 4.17.

#### Acceptance Rate

The acceptance rate—reflecting the percentage of students who meet the rigorous admissions requirements—is an indicator of the selectivity of the school. The proportion of applicants who meet the INSP's admission requirements has declined in the last three years. This reduction is in part a result of the focus of the Faculty Colleges and the professors who develop the interviews for the admission process on selecting only those candidates with characteristics that indicate strong promise not only of good academic performance during the program but also the ability to graduate on time.

#### CENEVAL Score

The Faculty Colleges have determined that there should be a minimum grade of 1,000 points (out of a total of 1,300) in the CENEVAL exam as a qualification criterion to select the best applicants. The average score of applicants on the CENEVAL exam has remained above 1000 for the past three years.

Table 4.18 shows average CENEVAL scores for applicants broken down by postgraduate program. Those in the doctoral program have the highest scores, followed by Master of Health Sciences and MPH. Scores among all groups have improved between 2008 and 2010, although 2009 scores were slightly higher than in other years. In all years and all programs, applicants have exceeded the 1,000-point target.

**Table 4.16**  
**Students Enrolled in Each Degree Program by Area of Specialization, Academic Years 2008–2011**

Program	AY2008			AY2009			AY2010			AY 2011		
	HC FT	HC PT	FTE	HC FT	HC PT	FTE	HC FT	HC PT	FTE	HC FT	HC PT	FTE
Specialty in Health Promotion	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	13	6.5
Residence in Public Health and Preventive Medicine	NA	NA	NA	NA	NA	NA	30	0	30	26	0	26
Master of Public Health (MPH)												
Epidemiology	19	25	31.5	10	23	21.5	10	24	22	10	16	18
Health Administration	25	62	56	21	58	50	20	10	25	18	12	24
Environmental Health	11	2	12	10	0	10	8	0	8	6	0	6
Biostatistics	3	4	5	3	0	3	3	0	3	7	26	20
Social and Behavioral Sciences	26	15	33.5	23	6	26	21	0	21	23	0	23
Nutrition	3	12	9	6	1	6.5	9	0	9	14	0	14
Vector-borne Diseases	0	0	0	0	0	0	NA	NA	NA	6	0	6
Infectious Diseases	NO	NO	NO	3	0	3	9	0	9	8	0	8
Master of Public Health, online format	NA	NA	NA	0	126	63	0	102	51	0	41	20.5
MPH Total	87	120	147	76	214	183	80	136	148	92	95	139.5
Master in Clinical Nutrition	NA	NA	NA	NA	NA	NA	9	0	9	15	0	15
Master in Health Sciences (MHS)												
Epidemiology	14	0	14	10	0	10	3	0	3	6	0	6
Clinical Epidemiology	12	0	12	10	0	10	10	0	10	5	0	5
Biostatistics	4	0	4	8	0	8	4	0	4	3	0	3
Environmental Health	6	0	6	5	0	5	11	0	11	8	0	8
Reproductive Health	6	0	6	8	0	8	16	0	16	7	0	7
Health Systems	19	0	19	24	0	24	23	0	23	11	0	11
Nutrition	20	0	20	15	0	15	19	0	19	19	0	19
Health Economics	5	0	5	7	0	7	11	0	11	4	0	4
Infectious Diseases	13	0	13	13	0	13	20	0	20	25	0	25
Vector-borne Diseases	5	0	5	8	0	8	11	0	11	15	0	15
Vaccinology	0	25	12.5	0	23	11.5	0	20	10	NO	NO	NO
MHS Total	104	25	116.5	108	23	119.5	128	20	138	103	0	103
Doctorate in Public Health Sciences (DPHS)												
Epidemiology	21	0	21	20	0	20	15	0	15	15	0	15
Health Systems	14	0	14	9	0	9	8	0	8	8	0	8
Infectious Diseases	4	0	4	4	0	4	7	0	7	10	0	10
DPHS Total	39	0	39	33	0	33	30	0	30	33	0	33
Doctorate in Public Health Sciences in Population Nutrition	NA	NA	NA	5	0	5	7	0	7	9	0	9
Doctorate in Public Health	9	0	9	22	0	22	31	0	31	27	0	27
Total	239	145	311.5	244	237	362.5	315	156	393	305	108	359

**KEY:** HC=Head count; FT=Full-time students (9 credits or more per semester); PT=Part-time students (0.5 FTE each--executive programs, alternative campuses and online format); FTE=Full-time equivalent students; NA=Not applicable (program was not yet in operation); NO=Not offered (program was not offered that year).

**Source:** Office of Student Affairs (July 2011).

**Table 4.17**  
**Outcome Measures for Student Recruitment and Admissions, AY2007–2010**

Outcome Measure	Target	AY2008	AY2009	AY2010
Acceptance rate for MPH		52.6% 209/110	52.6% 306/1161	33.5% 272/191
Acceptance rate for MHS	50%	61.9% 70/113	64.8% 70/108	39.3% 69/176
Acceptance rate for doctoral programs		40% 20/52	46.6% 34/73	30.8% 20/65
Applicants' mean CENEVAL score	≥1,000	1,030	1,078	1,028

**Table 4.18**  
**Average CENEVAL Score of INSP Applicants by Postgraduate Program, 2008-2010**

Program	Average Score		
	2008	2009	2010
Master of Public Health	1,025	1,074	1,069
Master of Health Sciences	1,040	1,078	1,055
Doctorate	1,075	1,125	1,104

#### 4.4.G

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The INSP performs promotion activities through several dissemination strategies (radio, website, brochures, personal sessions, and presence at academic events, among others) in all the federal entities of Mexico, different academic and health institutions, and among communities with varied populations. These actions have been effective in recruiting a significant number and diversity of candidates, which enables the selection of the most qualified applicants.
- There are clear guidelines and procedures to conduct the admission process.
- Final admissions decisions are taken by the Faculty Colleges, which helps guarantee the quality and objectivity of the process.
- Over recent years, test scores and other assessments results obtained by students accepted to INSP's programs have maintained satisfactory levels, which means the Institute has a student population that fulfills its selection criteria.

#### Weakness

- The admissions process is long and the administrative process could be simpler.

#### Future Plans

- Ongoing efforts to automate all the administrative processes to facilitate student activities have focused largely on the admissions process. In 2011 the INSP launched an online application system allowing all applicants, academic program coordinators, Faculty Colleges and professors to submit and review data online.

#### 4.5.

**Student Diversity.** Stated application, admission, and degree-granting requirements and regulations shall be applied equitably to individual applicants and students regardless of age, gender, race, disability, sexual orientation, religion or national origin.

The INSP is dedicated to enrolling the most qualified students and serving a student body that reflects the diversity of the Mexican population. Therefore, all application, admission, and degree-granting requirements and regulations are applied equitably to individual applicants and students regardless of age, gender, race, disability, sexual orientation, religion or national origin.

#### Required Documentation

##### 4.5.A

Description of policies, procedures and plans to achieve a diverse student population.

The INSP offers postgraduate programs to all persons regardless of gender, age, marital status, socio-economic status, disability, sexual orientation, religion, place of origin and nationality, which is reflected in recruitment procedures as detailed in Criterion 4.4.A. The application and selection process provides the same opportunities for all candidates. Acceptance criteria focus on prior academic performance, examination scores, experience and expression of desire to acquire and apply knowledge in the field of public health. Individual or cultural characteristics do not influence the selection process. Thus, the Institute operates according to the non-discrimination policy defined in the General Regulations for Postgraduate Studies; this policy is included in academic promotion materials as well as on the INSP's website.

As explained in Criterion 4.3 with respect to the faculty and administrative bodies, in Mexico the concept of student diversity is not measured by racial or ethnic indicators, but rather using variables that are more appropriate to the national context. That said, approximately 10% of the student population belongs to an ethnic or indigenous group. Although this data is not registered due to the Federal Law to Prevent and Eliminate Discrimination, this figure is proportional to their numbers in the general population. In Mexico these sectors have limited educational and development opportunities, which decreases their chances for attaining postgraduate levels of study. See 4.5.B for a description of efforts to increase recruitment for this group.

One of the INSP's missions is to contribute to equity through the development of public health professionals in Mexico and Latin America. Because of its mission and principles, it is an inclusive institution. The INSP is one of two public health schools within the Association of Schools of Public Health (ASPH) (the other is Puerto Rico) whose objectives include providing education and training in public health disciplines for Hispanic populations across Mexico, Latin America and worldwide (including the U.S.). In the American context, the INSP significantly contributes to increasing the number of Hispanic public health professionals through high-quality education and training. Its recent incorporation and participation in the Hispanic Association of Colleges & Universities (HACU) aims to attract and train Hispanic students living in the U.S.

#### **4.5.B**

**Description of recruitment efforts used to attract a diverse student body, along with information about how these efforts are evaluated and refined over time.**

To attract a diverse student body, the INSP has conducted a variety of activities to recruit candidates with heterogeneous characteristics in terms of gender, age, place of origin and professional background. Recruitment efforts have been carried out in different states and have included students who are about to finish their bachelor degree studies, as well as workers and officials from diverse age groups who have an interest in public health studies. Active promotion of the academic program has been carried out in all 32 states in Mexico, with an effort to reach remote communities and populations in each state to ensure diversity.

In an effort to recruit students from indigenous communities, the INSP established a collaboration agreement with the Ministry of Indigenous Peoples of the state of Chiapas to intensively promote academic programs among indigenous students. A similar collaboration agreement is soon to be established with the Institute for the Development of Mayan Culture of the State of Yucatán (Indemaya). The incorporation of more indigenous students into the INSP's academic program is expected as a result of these

efforts. In addition, in 2010 the Ford Foundation's Program for the Advancement of Indigenous People has supported two students from indigenous communities of Chiapas and Guatemala with full scholarships to the INSP.

Efforts to recruit demographically diverse student populations include recruitment of foreign students through promotional activities carried out in Latin American countries and the U.S. Over the past three years, the Institute has participated in academic and research events in Colombia, Costa Rica, Honduras and the U.S. as an exhibitor with a promotional booth to disseminate materials.

To recruit candidates from diverse academic background areas, the INSP disseminates public notices not only to graduates in health areas but also to those in the social sciences, humanities, biological sciences, administration, economics, hard sciences and other disciplines. This is consistent with the Institute's multidisciplinary postgraduate offerings and results in classes where students from diverse educational backgrounds can exchange knowledge, thus enriching the learning experience. The INSP also promotes academic programs at CONACyT postgraduate fairs, which are attended by graduates from different disciplines and universities across the country.

#### **4.5.C**

**Quantitative information on the demographic characteristics of the student body, including data on applicants and admissions, for each of the last three years. Data must be presented in table format.**

As discussed in Criterion 4.3, CEPH Data Template L is U.S.-centric, and several categories do not apply to the INSP. In addition to Table 4.19 below, which provides data on demographic characteristics of the student body from 2008 to 2011, see Tables 4.20–4.26 in Criterion 4.5.D for INSP-specific data for the years 2008-2010 with other demographic characteristics that reflect diversity in the INSP student body.

#### **4.5.D**

**Identification of measures by which the school may evaluate its success in achieving a demographically diverse student body, along with data regarding the school's performance against these measures for each of the last three years.**

Measures used to evaluate the diversity of the student body include an analysis of the distribution of enrolled students by age, gender, place of origin and profession. Table 4.20 summarizes performance against these measures for the past three years.

For data report INSP student body is integrated with the new enrollments of each year and active students from other semesters

**Table 4.19**  
**Demographic Characteristics of the Student Body, 2008-2011**

		2008		2009		2010		2011	
		Male	Female	Male	Female	Male	Female	Male	Female
African American	Applied	0	0	0	0	0	0	0	0
	Accepted	0	0	0	0	0	0	0	0
	Enrolled	0	0	0	0	0	0	0	0
Caucasian	Applied	0	0	0	0	0	0	0	0
	Accepted	0	0	0	0	0	0	0	0
	Enrolled	0	0	0	0	0	0	0	0
Hispanic/Latino	Applied	139	220	179	273	194	362	230	352
	Accepted	82	112	101	151	75	136	91	110
	Enrolled	72	103	89	135	70	116	83	105
Asian or Pacific Islander	Applied	0	0	0	0	0	0	0	0
	Accepted	0	0	0	0	0	0	0	0
	Enrolled	0	0	0	0	0	0	0	0
Native American/ Alaska Native	Applied	0	0	0	0	0	0	0	0
	Accepted	0	0	0	0	0	0	0	0
	Enrolled	0	0	0	0	0	0	0	0
Unknown/Other	Applied	0	0	0	0	0	0	0	0
	Accepted	0	0	0	0	0	0	0	0
	Enrolled	0	0	0	0	0	0	0	0
International	Applied	6	9	15	20	13	19	14	33
	Accepted	2	6	4	9	5	8	7	13
	Enrolled	2	6	3	8	5	8	4	11
SUBTOTAL	Applied	145	229	194	293	207	381	244	385
	Accepted	84	118	105	160	80	144	98	123
	Enrolled	74	109	92	143	75	124	87	116
TOTAL (Male & Female)	Applied	374		487		588		629	
	Accepted	202		265		224		221	
	Enrolled	183		235		199		203	

**Table 4.20**  
**Outcome Measures for Student Diversity, Academic Years 2008–2010**

Outcome Measure	Target	AY2008	AY2009	AY2010
% of students enrolled aged 35+	≥25%	25.7%	25.6%	23.1%
% of women students	50%	64.3%	60.7%	62.4%
% of Mexican states represented by students' place of origin	80%	78% (25/32)	97% (31/32)	94% (30/32)
% of students enrolled from a non-medical profession	≥50%	56.2%	53.8%	57.4%
# of non-medicine professions represented	≥20	24	26	25

that are taking at least a course of the program in the academic year (AY) reported. Total for students in each academic year refers the same students described in Table 4-16.

**Age.** Table 4.21 shows the number and percentage of students enrolled by age group. The largest age group is the 26- to 30-year-olds, who make up about a third of the total student body, but there are a significant number of students over 40 years old, reaching up to 60 years old. The INSP has made concerted efforts to maintain a representative group of students older than 35 years to support access to academic opportunities among experienced public health professionals, although educational policies in Mexico for the last 15 years have given students aged 21-25 years the greatest economic support (i.e., scholarships) for graduate programs.

**Gender.** Table 4.22 shows a breakdown of students enrolled by gender. Over the past four years the Institute has had a higher percentage of female students than male, with females making up 62% of the student body in 2010. This has been an important change in all education graduate programs throughout Mexico because women were previously a minority in the highest levels of education.

Table 4.23 shows the diversity of students by place of origin, including Mexican states and other countries. Mexico has 32 states, and the INSP has a large representation of most of the country's

**Table 4.21**  
**Number and Percentage of Students Enrolled by Age Group, 2008-2010**

Age Group	2008	2009	2010
21 to 25 years	91 (23.7%)	88 (18.3%)	95(20.2%)
26 to 30 years	126 (32.8%)	158 (32.8%)	189(40.1%)
31 to 35 years	88 (22.9%)	104 (21.6%)	78(16.6%)
36 to 40 years	39 (10.2%)	58 (12.1%)	43(9.1%)
41 a 45 years	22 (5.7%)	35 (7.3%)	31(6.6%)
46 to 50 years	12 (3.1%)	26 (5.4%)	22(4.6%)
51 to 55 years	4 (1%)	10 (2.1%)	11(2.3%)
56 to 60 years	2 (0.5%)	2 (0.4%)	2(0.4%)
Total	384	481	471

**Table 4.22. Number and Percentage of Students Enrolled by Gender, 2008-2010**

Gender	2008	2009	2010
Male	137 (35.7%)	189 (39.3%)	177 (37.6%)
Female	247 (64.3%)	292 (60.7%)	294 (62.4%)
Total	384	481	471

**Table 4.23**  
**Number of Students Enrolled by Place of Origin, 2008-2010**

State/Country	2008	2009	2010
Aguascalientes	0	6	2
North Baja California	0	1	1
South Baja California	0	1	9
Campeche	0	1	0
Chiapas	3	8	18
Chihuahua	3	3	4
Coahuila	2	2	3
Colima	3	5	5
Mexico City	134	118	111
Durango	0	7	1
The State of Mexico	41	49	52
Guanajuato	34	69	50
Guerrero	4	4	7
Hidalgo	8	12	7
Jalisco	8	15	10
Michoacán	9	7	7
Morelos	69	62	64
Nayarit	0	1	1
Nuevo León	1	4	6
Oaxaca	2	2	3
Puebla	10	9	7
Querétaro	1	11	3
Quintana Roo	5	6	3
San Luis Potosí	5	8	9
Sinaloa	1	2	7
Sonora	3	5	7
Tabasco	1	6	6
Tamaulipas	2	0	1
Tlaxcala	1	3	4
Veracruz	5	7	14
Yucatán	5	27	24
Zacatecas	0	1	0
Colombia	10	9	11
Bolivia	4	1	0
Russia	1	0	0
Ecuador	2	0	0
Costa Rica	0	1	1
Cuba	1	2	2
Nicaragua	1	2	3
Guatemala	1	1	1
Paraguay	3	3	5
Peru	1	0	1
United States of America	0	0	1
Total	384	481	471

territory with students from nearly all states. In 2010 students came from 30 of the 32 states (94%), up from 25 states (78%) in 2008. The number of foreign students has increased slightly each year, from 24 in 2008 to 25 in 2010. Students from Colombia have been the most frequent foreign group to apply for INSP programs.

Table 4.24 shows a complete breakdown of the student population by professional or educational background. Although medical professions are strongly represented, students come from a wide range of backgrounds. The INSP has been developing strong efforts to promote its graduate programs among a wide range of institutions and organizations. These efforts have improved the variety of students with nonmedical backgrounds, allowing the public health programs to develop a more multidisciplinary approach. This was very different in 2006, when the large majority of the INSP student body came from the medical field.

Roughly half of the students come from medical backgrounds; nevertheless, this percentage has decreased in comparison with previous years (43% in 2010 in contrast with 44% in 2008). In 2010, students from non-medical backgrounds were the majority (57.4%).

#### 4.5.E

Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- The INSP is diverse, inclusive and non-discriminatory in terms of age, gender, place of origin and the professional education of students. In Mexico, diversity is not measured in racial and ethnic terms; nonetheless, specific actions have been undertaken to attract and incorporate students from diverse ethnic and social groups across the country, in recognition of the idea that the inclusion of different perspectives enhances the education of all students.
- More than 57% of students come from non-medical backgrounds, a major change in recent years.
- The INSP has a variety of measures in place to evaluate its efforts to achieve a diverse student body. Students represent a broad range of ages, educational and professional backgrounds, knowledge areas, and places of origin, as well as an appropriate gender balance, all of which contributes to a rich, multidisciplinary environment within the postgraduate programs. The student body also has representatives of indigenous communities, especially from the states of Yucatán, Chiapas, Guerrero and Oaxaca.

**Table 4.24**  
**Number of Students Enrolled by Professional or Educational Background, 2008–2010**

Profession/Education Area	2008	2009	2010
Actuarial science	5	6	0
Social sciences	5	3	4
Biology	38	28	37
Communications sciences	2	3	4
Education sciences	3	1	1
Dental surgery	13	9	4
Public accounting	3	2	1
Economics	9	12	8
Pharmaceutical sciences	4	6	21
Nursing	25	28	30
History	1	0	0
Pediatric medicine	1	1	1
Environmental engineering	3	2	4
Computer systems engineering	7	7	9
Biochemical engineering	17	37	16
Industrial engineering	1	5	3
Medical surgery	167	221	200
Nutrition	43	48	67
International relations	1	0	2
Psychology	17	30	30
Social work	2	4	2
Veterinary/zoo technology	5	7	8
Genome sciences	4	1	0
Administration	0	4	8
Public health	0	2	1
Mathematics	3	4	3
Social anthropology	3	4	3
Law	2	2	2
Public relations/advertising	0	2	0
Industrial agronomic engineering	0	1	1
Ophthalmology	0	1	1
Total	384	481	471

#### Weakness

- Although the proportion of students from indigenous groups is representative of their numbers in the general population, it is still lower than desired.

#### Future Plans

- The INSP continues to carry out specific actions to promote diversity in the selection of students from indigenous groups across Mexico and to create an academic environment with appropriate support to ensure success.

## 4.6

**Advising and Career Counseling.** There shall be available a clearly explained and accessible academic advising system for students, as well as readily available career and placement advice.

The INSP has an accessible academic advising system and career and placement advice for students.

### Required Documentation

#### 4.6.A

Description of the advising and career counseling services, including sample orientation materials such as student handbooks.

The INSP offers to its students specific programs, resources and activities to advise and support them during their academic stay at the Institution as well as when they become alumni.

While they are students, the Student Affairs and Campus Life Department is in charge of designing and coordinating services and resources to advise and support students during their programs' activities. Services include information presented in a variety of formats as well as access to individual advisors.

### Resources to Support Students

The INSP offers clear documents and other resources to help students understand institutional processes. In addition, ongoing support processes are in place to help students attain their educational objectives, from enrollment to graduation. The following points are key elements of this strategy:

1. **Student Handbook.** This informative document is available electronically to all students. It contains topics of interest to students as well as information on procedures and regulations that govern activities throughout their educational process (see Appendix 4.6.a).
2. **INSP Virtual Campus 2.0.** This website presents a range of information, including daily updates on national and international conferences, funding opportunities and academic news, as well as a section called "student community" that features the Student Handbook and other information, such as:
  - *Student Life:* Managed in participation with the Student Association as part of the Student Life Program, this section provides information regarding housing, food and social and cultural events; students can also submit comments and/or suggestions about student resources and services.
  - *Online Student Orientation:* This section provides answers to students' most frequently asked questions and enables

school authorities to interact with the student community asynchronously to resolve concerns and receive suggestions. A database of the information is available on the website, so it can be accessed by all INSP students and the external community. Questions arising in this online space facilitate updating the Student Handbook with topics of interest to students. This section is managed by the Office of Academic Affairs.

3. **Orientation Week.** This program is held the week before the academic year begins. New students participate in conferences and workshops held at all three campuses. This gives them immediate access to important information about the Institute—such as pedagogic models, public health topics and educational programs—and helps them identify strategies for success. During this week, students interact for the first time with academic facilitators who will serve to guide and advise them throughout the program (advisors, tutors, academic coordinators, etc.).
4. **Formación Integral del Estudiante (Comprehensive Student Education).** This publication describes in detail the procedures and objectives of the student support programs and is available to students and faculty online and in hard copy.

### Individuals Who Provide Advice and counseling services

Throughout the program, students are assigned several academic advisors from whom they can obtain guidance related to important decisions they will make with regard to their program and future career.

1. **Tutor:** When a student is accepted, the corresponding Faculty College assigns a faculty member who will serve as a tutor from enrollment to graduation. This is part of the Institutional Tutoring Program, whose primary objectives are to ensure academic success and prevent student dropout. The principal function of the tutor is to guide the student through the educational terrain. This work is carried out in association with the Faculty Colleges and the Student Affairs and Campus Life Department, which creates an academic support network. During the academic semester, the tutor works with the student and develops periodic performance reports. Thus, issues that could negatively impact a student's performance over the course of his or her program are identified early and addressed by the tutor or referred to the appropriate authority to be resolved.
2. **Academic coordinator:** This faculty member is responsible for providing academic guidance in the area of concentration of the student's chosen program. He or she oversees academic activities to ensure they are carried out according to plan, advises students on academic processes that influence their educational development, and serves as an intermediary with other faculty members and collegiate bodies if there are problems or administrative needs.

3. **Psycho-pedagogical counselor:** Counseling is available to all students who need personalized attention related to psychological problems or other problems that present learning obstacles. The most common problems addressed are study strategies, stress management, problems adapting to the institution and the pedagogic model, interpersonal conflicts and temperament problems. If individual guidance does not resolve the problem, the student is referred to internal or external entities qualified to address the situation. This service is available to students at the Mexico City and Tapachula campuses via telephone or email.

For additional advice, any student who wishes to address questions or issues to the Student Affairs and Campus Life Department in person may do so. Students can also request advice, support or referrals by email, which has been highly useful in addressing the needs of students from the Mexico City and Tapachula campuses and those in online programs.

### Career Counseling

A significant proportion of students have jobs when they enter the INSP, and return to them on graduation. Since the INSP is usually the Institution in charge of the academic training for health personnel working in the Ministry of Health career counseling is not required frequently. For that reason career counseling has been an activity recent at the INSP. Frequently those students who do require career counseling during their academic stay have the opportunity to learn about it from INSP researchers, as well as those in the communities and institutions in which students conduct their research and service activities. Sometimes experience during their final projects gives them direct access to potential employers.

Also, through the Academic Evaluation and Alumni-Follow up Departments, the INSP has begun to develop activities that help recent graduates gain information about careers and job placement. One of the activities realized in the Alumni Follow-up Program is to develop an alumni network that allows networking and information exchange about job opportunities. This network has been constructed through the **Alumni INSP Facebook Network**, which has been successful in improving communication among alumni and between alumni and the INSP. In addition, the INSP offers at least one annual meeting of alumni to promote interaction and expand the alumni database, as well as to offer continuing education courses and to promote job opportunities from various health institutions that work with the INSP or that are recruiting new staff.

The INSP also maintains contact with the alumni through e-mail. The INSP encourages its alumni to maintain their institutional e-mail address that was assigned to them as students to keep informed about continuing education opportunities and academic events that can strengthen their career performance. Social networks like **Facebook** have been a successful in helping the Ins-

titute notify alumni about job openings among organizations and institutions that collaborate with the INSP as well opportunities that alumni share with each other. Some of the institutions that frequently contact the INSP with job information for INSP graduates include public organizations like Mexican Institute for Social Security (IMSS), the Ministry of Health (SSA), health services in other government offices, and private organizations in public health-related areas. The most frequent job opportunities offered are in the areas of epidemiology, hospital administration and infection prevention in health clinics.

### 4.6.B

Description of the procedures by which students may communicate their concerns to school officials, including information about how these procedures are publicized and about the aggregate number of complaints submitted for each of the last three years.

Students can use a wide range of channels to communicate their concerns or complaints to INSP authorities. There are specific procedures according to the nature of the complaint or concern—academic, administrative, personal or infrastructure-related. Table 4.25 presents procedures for addressing student concerns; see also Criterion 1.4.E for information on channels for addressing student complaints.

When the solutions to concerns and complaints are of benefit to the rest of the students and do not contain personal or private information, they are publicized—with the help of the Student Association—through institutional email and INSP Virtual 2.0. Students are also notified about issues at periodic assemblies held by the Office of Academic Affairs.

Concerns and complaints analyzed by the collegiate bodies are recorded in the meeting minutes of each commission. Most complaints involve relatively minor issues. The official recording of student complaints began in 2009, at which time 44 individual requests and comments have been received and attended (see Table 1.6 in Criterion 1.4.E), the most common of which addressed problems with paperwork.

### 4.6.C

Information about student satisfaction with advising and career counseling services

The INSP has designed different evaluation instruments to identify students' satisfaction with advising and career counseling services (these will be available as onsite resource). The results are shown in Table 4.26.

The results obtained by the different instruments have provided feedback for student services and are used to guide ongoing efforts to improve them. According to the data supplied

**Table 4.25**  
**Procedures to Address Student Complaints**

Issue	Procedure	Entity/Entities Responsible
Complaints or problems related to academic development (faculty, courses, curriculum structures, community practicums, graduation process, etc.)	Grade review: A student can request a grade review from the faculty member. If the faculty member disagrees, the student can request that the Faculty College intervene. Curriculum issues (e.g., courses, the practicum): If the complaint is individual, it can be resolved by the program coordinator or the person responsible for the activity. In the case of a group complaint, an analysis can be requested from the collegiate bodies through student representatives.	Program coordinator Faculty Colleges Program Committees: Professional, Sciences, Doctorate, Academic and Teaching Commission (CAD)
Administrative or infrastructure-related issues	Problems with the physical space (classrooms, auditorium, and didactic materials): These are reported to Office of Academic Affairs. Problems with school administrative processes: The student should consult the corresponding area to request a review of his or her case. Problems with cafeteria services, supply store, etc.: These usually affect the entire student body and are generally communicated to the Student Association, which refers the problem to INSP authorities.	Department of Academic Affairs and Academic Promotion Office of Academic Affairs Student Affairs and Campus Life Department
Personal concerns (health problems, etc.)	Abuse, discrimination or violation of individual rights: The student should report the issue to the Ethics, Values and Conduct Commission for analysis and resolution. Personal problems that can interrupt student progress (health or mood disorders, stress, problems with partners, etc.) are reported to the Student Affairs and Campus Life Department and are analyzed through a personal interview. Anonymous reports: Students can anonymously report a concern or complaint by sending an email or filling out a form and putting it in one of the boxes found near the classrooms.	Commission for Ethics, Values and Conduct (see Criterion 1.4.D) Student Affairs and Campus Life Department Department of Academic Administration

**Table 4.26**  
**Student Satisfaction with Advising and Career Counseling Services**

Evaluation Date	Type of Evaluation	Program Evaluated	Comments
2007	Survey to evaluate the tutoring system	MPH and MHS	70% of the responses said that tutor support was useful, and that they trusted the tutor to discuss questions and concerns and find ways to solve problems.
2008	Survey to evaluate the tutoring system	MPH and MHS	80% of the responses said that tutor support was useful, and that they trusted the tutor to discuss questions and concerns and find ways to solve problems.
2009	Focus group	MPH and MHS	Students considered tutoring to be important for their academic performance. They perceived the tutor figure as an important person for advising regarding making decisions.
2009	Survey to evaluate the tutoring system	MPH and MHS	56% of the responses said that tutor support was useful, and that they trusted the tutor to discuss questions and concerns and find ways to solve problems.
2010	Survey on student perception of INSP student services	MPH and MHS	80% of students said their tutor supported them in their academic progress and guided them with making decisions. 85% have received support from the program coordinator. 80% were satisfied with the information and guidance provided by the Institute.

Notes: MPH=Master of Public Health; MHS=Master of Health Sciences.

by the evaluation instruments, INSP's services have strengthened over time. The tutor and program coordinator have fulfilled their functions to support and guide students, and advising services have been useful for academic progress.

#### 4.6.D

### Assessment of the extent to which this criterion is met.

This criterion is met.

#### Strengths

- In the past three years, the INSP has worked to develop a comprehensive system for guiding and advising students, in which all sectors involved in educational processes participate: professor/researchers who serve as tutors, academic coordinators, collegiate bodies and school authorities.
- The guidance and advising system is subject to constant evaluation and improvement. Feedback is received from both students and academic figures (tutors, coordinators, and Faculty Colleges). This has allowed for ongoing modifications to maintain the relevance and usefulness of resources and services to support student success. Evaluations have shown student satisfaction with these activities.
- The INSP has several options to identify and conduct students' opinions and complaints. Continuous efforts are made to diversify and improve the channels of communication between students and school authorities.
- The use of technological platforms has improved communication with students across campuses and learning formats (online and executive formats), as well as among alumni.

#### Weakness

- Although provided, career counseling is recent and still is a challenge to be fully developed.

#### Future Plans

- Contact with alumni will be strengthened through periodic meetings which will include assessments to will help identify strategic actions to develop and diversify career counseling.

### 4.7.

### Student and Faculty Exchange Program

According to the INSP's mission and objectives, academic exchange is an important part of both the educational process for students and the professional development of faculty. These efforts and their principal results are discussed briefly below.

The INSP's involvement in international and national networks has brought about cooperative agreements and alliances between the Institute and organizations in Latin America, the U.S. and, more recently, Europe. The INSP is part of the Association of Schools of Public Health (ASPH), the European International Network of Institutions for Higher Education in International Health (tropEd), HACU, the Consortium for North American Higher Education Collaboration (CONAHEC), the Organization of Latin American Universities (UDUAL) and the Latin American Association of Schools of Public Health (ALAESP), as well as national organizations such as the National Association of Universities and Institutions of Higher Education (ANUIES), the Mexican Association of Schools of Public Health (AMESP) and CONACyT. The INSP also has more than 52 active agreements with universities.

These agreements and networks have enabled students, faculty and researchers at the Institute to gain an international perspective on public health. To support these relationships, the INSP has developed academic exchange programs with diverse foreign institutions seeking to offer their own students and faculty the opportunity to gain international experience. The Office of Student Affairs advises INSP students who wish to participate in foreign exchange and supports international students who want to come to the INSP.

#### Mechanisms for Facilitating Academic Mobility

The INSP takes advantage of various mechanisms for supporting academic mobility that allow students, faculty and researchers to participate in foreign exchanges or to attend summer programs, participate in research or service activities, or take specialization or graduate courses at institutions that are part of the associations to which the INSP belongs. Among these mechanisms are the following:

- **Erasmus Mundus Program.** This program promotes academic exchange and intercultural dialogue between European and non-European institutions. It offers scholarships for students and faculty from Asia, Africa and Latin America to participate in exchange programs at European universities affiliated with tropEd.
- **ANUIES.** This organization's Network for National Mobility helps establish, develop and strengthen relations among universities within Mexico, giving students, faculty and administrators the opportunity to study and teach in affiliated institutions across the country.
- **CONAHEC.** Through this organization, whose objective is to build a cooperative academic community throughout North America, the INSP promotes internationalization by establishing two-way student exchanges with institutions in the U.S. and Canada.

- **HACU.** Through the Department for International Cooperation, collaboration networks are established with institutions affiliated with HACU in the U.S. and Puerto Rico to increase student and faculty exchanges.
- **CONACyT.** This organization offers a program called “Mixed Scholarships,” which offers economic support for students enrolled in INSP programs that are part of the National Program of Quality Postgraduate Studies to conduct short academic stays at foreign educational institutions.
- **Foreign Relations Ministry.** This ministry periodically disseminates public notices announcing scholarships from different organizations that support academic exchanges such as visiting researcher and professor programs.

In addition to these mechanisms, the INSP has established 52 international collaboration agreements (see Criterion 1.6.L) that enable students, faculty and researchers to participate in exchanges with institutions in Latin America, Canada, the U.S. and Europe. Agreements have also been signed with universities belonging to ASPH, which facilitates the flow of exchanges with the INSP.

These opportunities are disseminated throughout the INSP community via email, INSP Virtual 2.0, and *Viva Salud*.

### Results and Academic Benefits

Through just one academic exchange program—*Compañeros* (in English, “Friends”), a program established by the INSP and Emory University—more than 40 Mexican and U.S. students participated in student exchanges from 2007 to 2010. In 2009, the INSP received 17 students from South and Central American countries, and Mexican students participated in exchanges in countries such as Germany, the U.S. and Japan. For 2010, 22 students from United States and Equatorial Guinea attended the INSP for academic purposes and students from INSP participate in academic exchange. In addition, since 2007 the INSP has received 237 visiting professors from foreign institutions (see Appendix 4.7) as a result of national and international cooperation activities. INSP faculty members have also participated in international exchanges at educational institutions in Amsterdam, London, Edinburgh, Dublin, and Atlanta, United States.

**Respuesta del Council  
on Education  
for Public Health**





# CEPH

COUNCIL ON EDUCATION FOR PUBLIC HEALTH

1010 Wayne Avenue, Suite 220 ■ Silver Spring, MD 20910  
Phone: (202) 789-1050 ■ Fax: (202) 789-1895 ■ Web: [www.ceph.org](http://www.ceph.org)

October 19, 2012

Mauricio Hernández Ávila, MD, DSc  
General Director  
Instituto Nacional de Salud Publica  
Av. Universidad 655, Carrada de Pinor y Caminera  
Colonia Santa Maria Ahuacatitlán  
Morelos, C.P. 62100  
Cuernavaca, Mexico

Dear Dr. Hernández:

On behalf of the Council on Education for Public Health, I am pleased to advise you that the CEPH Board of Councilors acted at its October 11-13, 2012 meeting to accredit the Escuela de Salud Publica de Mexico at the Instituto Nacional de Salud Publica for a seven-year term, extending to December 31, 2019.

We are enclosing a copy of the Council's final accreditation report. The report is also being transmitted to the chief executive officer of your university as the Council's official report. This is identical to the team's report that you received prior to our meeting.

I would call your attention to the disclosure provisions in our adopted procedures. The school is expected to make its official accreditation report available to the public on request 60 days following the accreditation decision. The school may make the report (with the final self-study) available in full on its website, or it must clearly indicate on the website how to request a copy of either document. See p. 26 of the [Accreditation Procedures, amended June 2012](#) for additional information. You may append a written response whenever you distribute the report. The official report also will be available on request from CEPH after 60 days, but it is our intent to refer all initial requests to you. If you provide this office with a copy of a written response by December 3, 2012, we will be pleased to append it whenever we respond to a request for the report. Please note that this response is optional.

We would also like to remind you that whenever an accredited school or program undergoes a substantive change, it is obligated to provide written notification to CEPH of the intended change. Substantive changes are defined in the procedures manual, but generally include offering a new degree, adding or discontinuing an area of specialization, offering a degree program in a different format or at a distant site and making major revisions to the curricular requirements. Additional information about substantive changes is available on our [website](#).

We appreciated the many courtesies and helpfulness extended to the site visit team.

Sincerely,

Stephen W. Wyatt, DMD, MPH  
President

Enclosure

cc: CEPH Councilors

**Council on Education for Public Health  
Adopted on October 13, 2012**

REVIEW FOR ACCREDITATION  
OF THE  
SCHOOL OF PUBLIC HEALTH  
AT THE  
INSTITUTO NACIONAL DE SALUD PÚBLICA DE MEXICO

COUNCIL ON EDUCATION FOR PUBLIC HEALTH

SITE VISIT DATES:

February 7-9, 2012

SITE VISIT TEAM:

Iman Hakim, MD, PhD, MPH, Chair  
Cheryl Addy, PhD  
David Potenziani, PhD  
Matthew Stefanak, MPH

SITE VISIT COORDINATOR:

Mollie Mulvanity, MPH

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## Introduction

This report presents the findings of the Council on Education for Public Health (CEPH) regarding the Instituto Nacional de Salud Pública. The report assesses the school's compliance with the *Accreditation Criteria for Schools of Public Health, amended June 2005*. This accreditation review included the conduct of a self-study process by school constituents, the preparation of a document describing the school and its features in relation to the criteria for accreditation, and a visit in February 2012 by a team of external peer reviewers. During the visit, the team had an opportunity to interview school and university officials, administrators, teaching faculty, students, alumni and community representatives, and to verify information in the self-study document by reviewing materials provided on site in a resource file. The team was afforded full cooperation in its efforts to assess the school and verify the self-study document.

The Instituto Nacional de Salud Pública (INSP), or National Institute of Public Health of Mexico, was created in 1987 as the result of a strategic initiative to consolidate public health research, graduate training and continuing education within Mexico's Ministry of Health (SSA). The goal was to create a single institution that would train highly qualified public health practitioners and academicians and create an atmosphere that would promote collaboration in public health research and education.

Three existing institutions from the government health sector merged to create the INSP: the Mexican School of Public Health, the Population Health Research Center and the Infectious Disease Research Center. The merger combined the long teaching tradition of the Mexican School of Public Health (founded in 1922) with new research approaches in public health. The result is an institution with a multidisciplinary perspective that is able to study the population-based dimensions of health, disease and health/disease determinants, as well as the organized social response to disease prevention and health promotion. A fundamental premise for creating the INSP was that excellence in public health education could be achieved only in a context in which both faculty and students actively participated in cutting-edge research for improving the population's health. The objective was to educate public health professionals and academicians while conducting high-quality research.

In 1995, the INSP was reorganized to further enhance and expand public health research and education. The Institute formed additional research centers and brought in leading academicians and public health practitioners. In addition, degree programs became linked directly to a research center, which promoted faculty participation in both teaching and research requiring all experienced researchers to teach. The Faculty Colleges (collegiate bodies that focus on specific fields of study) were created to support and focus teaching programs. These colleges serve as the academic core for program development and provide forums for critical discussion and exchange of ideas among academicians. The reorganization has allowed the INSP to make major advances in integrating teaching and research, conducting multidisciplinary

mission-oriented research, and developing high-quality, cutting-edge practices in health promotion and disease prevention that advance public health in Mexico.

INSP was first accredited by CEPH in 2006 for a term of five years, with an interim report due in 2008. The interim report was accepted. In 2010, CEPH acted to postpone the site visit for INSP's second accreditation review for administrative reasons and extended the school's accreditation term by one year to accommodate the rescheduled site visit. This report reflects the school's second CEPH accreditation review.

## Characteristics of a School of Public Health

To be considered eligible for accreditation review by CEPH, a school of public health shall demonstrate the following characteristics:

- a. The school shall be a part of an institution of higher education that is accredited by a regional accrediting body recognized by the US Department of Education.
- b. The school and its faculty shall have the same rights, privileges and status as other professional schools that are components of its parent institution.
- c. The school shall function as a collaboration of disciplines, addressing the health of populations and the community through instruction, research, and service. Using an ecological perspective, the school of public health should provide a special learning environment that supports interdisciplinary communication, promotes a broad intellectual framework for problem-solving, and fosters the development of professional public health concepts and values.
- d. The school of public health shall maintain an organizational culture that embraces the vision, goals and values common to public health. The school shall maintain this organizational culture through leadership, institutional rewards, and dedication of resources in order to infuse public health values and goals into all aspects of the school's activities.
- e. The school shall have faculty and other human, physical, financial and learning resources to provide both breadth and depth of educational opportunity in the areas of knowledge basic to public health. As a minimum, the school shall offer the Master of Public Health (MPH) degree in each of the five areas of knowledge basic to public health and a doctoral degree in at least three of the five specified areas of public health knowledge.
- f. The school shall plan, develop and evaluate its instructional, research and service activities in ways that assure sensitivity to the perceptions and needs of its students and that combines educational excellence with applicability to the world of public health practice.

These characteristics are evident in the INSP. As a Mexican institution of higher education, the school is not subject to review by US regional accrediting bodies. The school is, however, subject to institutional financial, administrative and academic oversight by several Mexican governmental bodies that provide institutional quality assurance in a manner that is equivalent to, and in some cases exceeds, US regional accreditation. The school functions as one of Mexico's national institutes of health, operating within the federal health ministry (SSA), and the school and its faculty have prerogatives equivalent to those of other SSA institutes. Because INSP's director general/dean reports directly to the Mexican minister of health, rather than to a university president and/or provost, the school's status, rights and privileges exceeds those of US-based accredited schools of public health in many respects.

The school's varied faculty experience and structure based on population-specific research centers ensure that the school is grounded in an interdisciplinary approach. Its federally-defined mandate

requires the school's faculty and students to conduct instruction, research and service that are infused with public health values, and the school's many close ties to communities and health agencies throughout Mexico ensure a continuing drive for public health practice relevance in all of the school's activities.

The school has adequate resources to offer its instructional programs, including professional masters-level training and doctoral training in public health core knowledge areas. It has developed and implemented comprehensive systems to plan and evaluate its activities to ensure that they meet both student needs and public health system needs throughout Mexico.

## **1.0 THE SCHOOL OF PUBLIC HEALTH.**

### **1.1 Mission.**

**The school shall have a clearly formulated and publicly stated mission with supporting goals and objectives. The school shall foster the development of professional public health values, concepts and ethical practice.**

This criterion is met. The school has a mission statement and a set of goals with detailed and measurable objectives. The statement and objectives were developed in a school-wide and collaborative process. They are regularly monitored and reported in an open and public manner.

The school's mission is as follows: To contribute to social equity by promoting the highest standards of health for the population through the generation of knowledge, innovation in health systems and training of highly qualified public health professionals.

The school's vision is as follows: To be a national and international leader in the practice and development of public health.

To fulfill its broad mission, the school has the following primary goals across the areas of instruction, research, and service:

#### Instruction

- To prepare competent graduates to be leading professionals in their areas of specialization within public health.
- To provide relevant, competencies-based instruction in public health at the graduate and continuing education levels.

#### Research

- To contribute to the creation of original knowledge to improve public health conditions through "mission-oriented research" that identifies factors affecting the health of various populations and determines effective community interventions. Subjects of analysis include populations (epidemiological research), health systems (systems research), individuals (clinical research) and cellular parts (molecular biology).

- To promote a multidisciplinary approach to generating knowledge aimed at meeting public health challenges.
- To produce knowledge that translates into actions and policies in diverse sectors (e.g., health, education, social development), thus ensuring that health services benefit the people of Mexico, Latin America and around the globe.

#### Service

- To maintain a close connection with communities throughout Mexico in order to identify and meet the needs of various populations in promoting and improving public health.
- To generate state-of-the-art knowledge based on scientific evidence to support decision-making that promotes healthy lifestyles.
- To assist the academic, community, business, health, and government sectors in designing, implementing and evaluating public health policies and programs.
- To work with academic, community, business, health and government partners to identify and address critical national and global public health priorities.

The school's mission is reviewed and updated every five years. The school follows a process set out in the National Development Program (PND) 2007-2012, as presented in the National Health Program (PRONASA) and the Health Sector Program (PROSESA) of the Mexican federal government. The school developed a strategic plan (2007-2012) with essential objectives in the three core areas that included measurable goals in each year's Annual Work Plan (PAT).

All areas of the institutional community participated in the planning process. Beginning with the Governing Board, the director general/dean presented the Five-Year Strategic Plan to the school. In a consultative process, the school gathered proposals from the research centers and the Office of Academic Affairs for specific annual objectives and actions that can fulfill the school's mission, vision and strategic plan. The results of this consultation are translated into the PATs, which unite all of the interests of the school from the areas of instruction, research and service and are developed collaboratively including faculty, staff, students and constituents' perspectives.

In response to CEPH observations in the school's 2006 Self-Study Report, since 2008 it has monitored the development of strategic objectives and the achievement of goals set out in the PAT on a quarterly basis.

The school follows values that are consistent with those of the federal government as its agency. The school has an Ethics, Values and Conduct Committee in which representatives from all sectors of the institutional community participate. The latest values statement was endorsed by the institutional community in a public meeting in 2006. The values highlighted include excellence, responsibility, freedom, transparency, equity and fairness, ethics, honesty, and social commitment. In some cases, the school's statement of values exceeds those of the federal government, particularly in the realm of sexual orientation.

The school also created a code of ethics to guide action, and the Ethics, Values and Conduct Committee is responsible for monitoring fulfillment of the code. The committee has authority to examine and render an opinion on any serious violations about the conduct of students, professors/researchers or administrative personnel. It is responsible for assessing the severity of the claims and determining penalties for misconduct for any member of the INSP who violates the institutional code of ethics and conduct.

### **1.2 Evaluation and Planning.**

**The school shall have an explicit process for evaluating and monitoring its overall efforts against its mission, goals and objectives; for assessing the school's effectiveness in serving its various constituencies; and for planning to achieve its mission in the future.**

This criterion is met. The school has a detailed process of strategic planning and evaluation that includes overlap with other planning processes of relevant components of the Mexican federal government, as described in Criterion 1.1. The school has a five-year strategic plan (2007-2012) with essential objectives in the three core areas that include measurable goals in each year's PAT.

Five administrative entities enable the planning and evaluations process: Governing Board, Control and Auditing Committee, External Academic Commission (CAA), Academic and Teaching Commission (CAD) and the Directive Council. These groups are supplemented by consultation with constituents including employers, clients, students, alumni and others in the community.

The school monitors fulfillment of goals and objectives using the following tools: 1. self-assessment reports (every six months and annually), 2. PAT review (every three months.) and 3. Balanced Scorecard Reports (BSC), which are structured to integrate performance reports from the various institutional components. These instruments provide regular (monthly, quarterly, semi-annually, and annually) reports to evaluate individual, group and institutional performance. All academic groups review the results of evaluation and planning and make necessary adjustments or interventions. The school monitors more than 200 objectives annually to fulfill its mission and goals.

The school was responsive to recommendations from the previous accreditation report in 2006 and developed a systematic method of conducting the current self-study that included representatives from different sectors of the institutional community in order to produce a comprehensive analysis and evaluation of the school's current status.

At the site visit, the school provided specific documents showing the linkage between measurable objectives and data across four academic years to show progress.

### 1.3 Institutional Environment.

**The school shall be an integral part of an accredited institution of higher education and shall have the same level of independence and status accorded to professional schools in that institution.**

This criterion is met. The INSP is an independent public institution with an organizational setting that is unique among CEPH-accredited schools of public health. In contrast to US-based schools of public health, which are located within universities, the INSP is one of 12 national institutes of health associated with the Ministry of Health of Mexico (SSA). Within the SSA, the Coordinating Commission of National Institutes of Health and Regional Specialty Hospitals (CCINSHAE) coordinates the activities of the 12 national institutes of health, including the INSP. While the other 11 institutes provide health care and conduct research, the INSP is an academic institution with a focus on teaching, applied research and service. The INSP is recognized as an institution of higher education by the Mexican Ministry of Public Education (SEP) and the National Association of Universities and Institutes of Higher Education (ANUIES). The INSP is also member of the International Association of National Public Health Institutes (IANPHI).

The INSP has direct communication with the minister of health through his role as chair of the INSP's Governing Board. The director general/dean of the INSP participates in monthly meetings to evaluate the activities of the national institutes of health and to oversee their progress, and the general director/dean is directly accountable to the INSP's governing board.

Each institute has an analogous governing body to which its director general reports. Thus, the INSP general director/dean has the same authority as the general directors of the other national institutes within the Ministry of Health, including oversight of the academic and research programs, recruitment and promotion of faculty, preparation of budget proposals, control of funds allocated to the institute and strategic plan preparation. A SSA organizational chart was presented to reviewers during the site visit.

The INSP has complete autonomy over the development, revision, evaluation and implementation of its curricula and academic standards. Educational institutions in Mexico do not follow a regional accreditation system similar to the US. As an academic unit, the INSP is regulated and accredited by the Mexican Ministry of Public Education (SEP). In addition to accreditation by SEP, the masters and doctoral degree programs of the INSP are also accredited by the National Council of Science and Technology (CONACYT). Since 1997 the INSP has also been accredited by the National Association of Universities and Institution of Higher Education (ANUIES), a non-governmental organization that selectively certifies institutions of higher education in Mexico. It has accredited 152 public and private universities and institutions of higher education, which together are responsible for 80% of the undergraduate and graduate higher education matriculation in the country.

The director general/dean is responsible for the academic quality and finances of the INSP, which are reported to the SSA through the CCINSHAE and the Governing Board. The director general/dean and Governing Board analyze all actions and processes related to the diverse areas of institutional development. Issues related to teaching, the faculty and the student body are coordinated by the Office of Academic Affairs, which collaborates directly with the director general/dean and the research centers.

Although it is part of SSA, the INSP has the authority to recruit, hire and promote faculty. It carries out recruitment policies, performance reviews and evaluations of academic personnel according to guidelines established by SSA. With respect to administrative positions, the INSP adheres to the recruitment, selection and promotion policies of the SSA. The INSP also follows Mexico's federal government policies with regard to nondiscrimination and equal opportunity for hiring and promotion for both academic and administrative personnel. The budget for salaries for academic and administrative personnel is guaranteed through a subsidy provided by the federal government through the SSA.

In a structure similar to departments in schools of public health in the United States, the school's Faculty Colleges are responsible for appointing professors who will teach specific courses each semester. The assignment of faculty and the need for new professors are discussed within those bodies. After internal evaluation in the Faculty Colleges with support from the Office of Academic Affairs, the research centers' directors have final responsibility for hiring new faculty.

#### **1.4 Organization and Administration.**

**The school shall provide an organizational setting conducive to teaching and learning, research and service. The organizational setting shall facilitate interdisciplinary communication, cooperation and collaboration. The organizational structure shall effectively support the work of the school's constituents.**

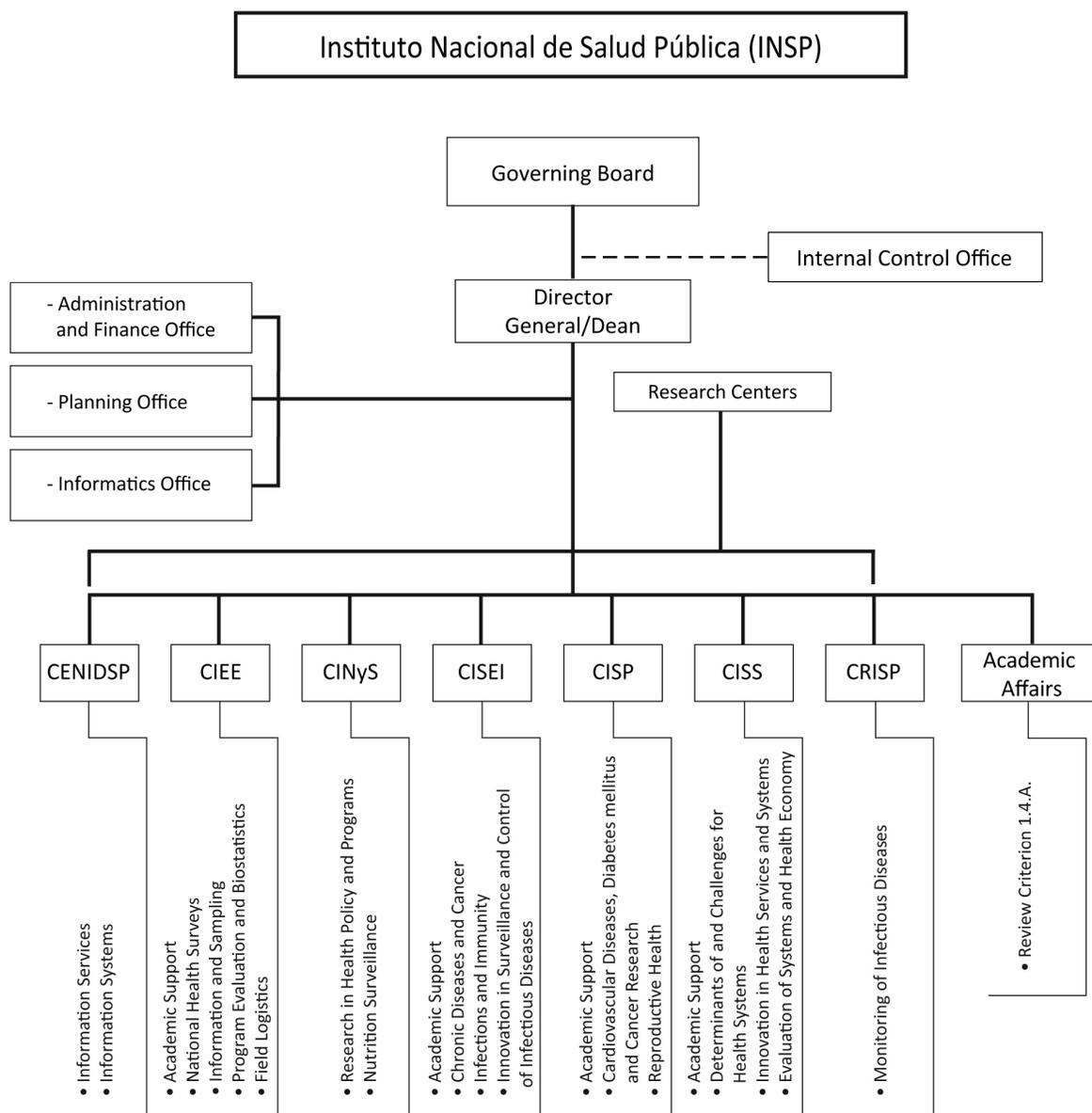
This criterion is met. The organizational structure of the INSP is comprised of the general director/dean's office, four support areas, the Academic Affairs Office and seven research centers with teaching missions. The organizational chart depicting the relationships within the INSP is shown in Figure 1.

The INSP organizes its academic program through three main structures: research centers, where all faculty and programs are assigned; the Office of Academic Affairs, which coordinates the operation of all academic activities; and the Faculty Colleges ("collegiate bodies"), which monitor the performance of academic programs.

Each academic program has a full-time coordinator and an adjunct coordinator, all of whom are faculty members who report to a particular research center. The associate academic dean, the seven directors who direct the research centers as well as the directors of planning, informatics, and finance and

administration report to the general director/dean of INSP. The Internal Control Office performs audits, and although it is part of the INSP, it reports directly to the federal ministry of public administration (SFP).

**Figure 1. Instituto Nacional de Salud Pública Organizational Structure**



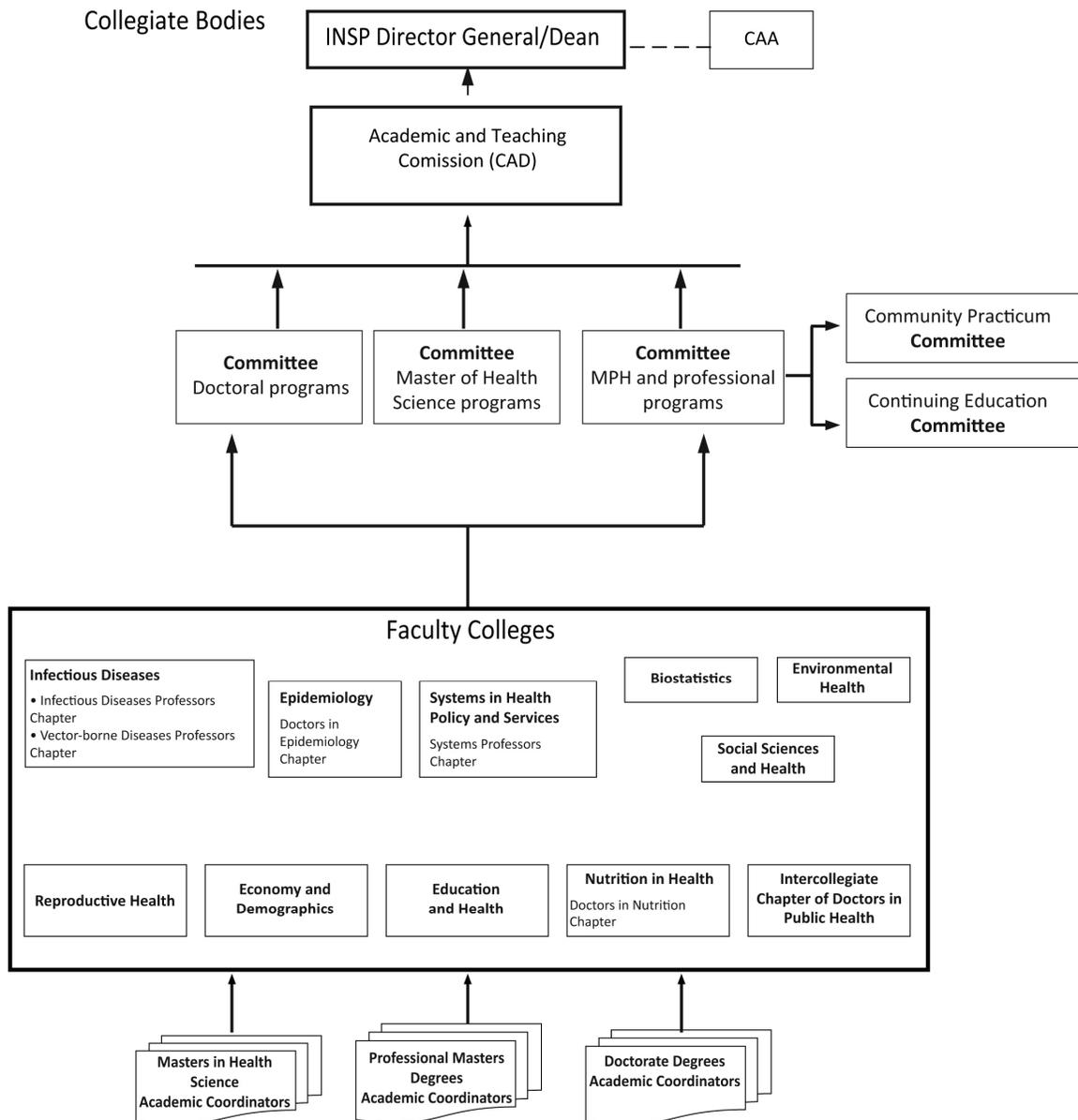
The research centers, coordinated by directors, oversee the academic programs in the areas whose topic areas (“research lines”) best correspond to the scientific field of the relevant concentration area. The academic program coordinators are appointed by the Research Center Director and the Office of Academic Affairs to manage the operation of the academic programs. Interdisciplinary collaboration is promoted through the participation of each professor in several collegiate committees.

The associate academic dean and the directors of the research centers of the INSP form part of the INSP's Directive Council, a group of high-level advisors to the director general/dean regarding matters of institutional strategy and leadership. The collegiate bodies also support the operation of academic programs. The director general/dean is also advised by two commissions: the Academic and Teaching Commission (CAD) and the Academic Research Commission (CAI). The interrelationships among the academic collegiate bodies are shown in Figure 2.

In regard to academic issues, faculty members discuss matters relating to the curriculum, students' progress, the course selections, teacher evaluations and others through the faculty colleges and teaching collegiate bodies. Faculty colleges are discipline-based entities that coordinate academic activities and make recommendations regarding academic programs. All professors participate as members of at least one faculty college. Any professor can meet with the associate academic dean to discuss specific issues.

The Institute has a range of internal regulations and policies that promote equitable and fair practices in relation to daily activities. The INSP's Ethics, Values and Conduct Code is based on the Code of Ethics for Public Personnel of the FSP. The INSP participates in a Mexican governmental initiative, the Institutional Culture Program with a Gender Perspective, a federal program created by the National Institute of Women to prevent gender discrimination. The INSP began tracking students' complaints in 2009 and provides channels to address those complaints.

**Figure 2. INSP Academic Structure**



**1.5 Governance.**

**The school administration and faculty shall have clearly defined rights and responsibilities concerning school governance and academic policies. Students shall, where appropriate, have participatory roles in conduct of school and program evaluation procedures, policy-setting and decision-making.**

This criterion is met. The school’s administrators and faculty have clearly defined rights and responsibilities concerning school governance and academic curriculum and policies.

The highest internal committee is the Directive Council, comprised of the director general/dean, research center directors, associate academic dean and the directors of the Office of Planning and the Office of Administration and Finance. Membership on some committees is defined by administrative role, eg, the research center directors serve on both the Directive Council and the Financial Committee. The presidents of the Faculty Colleges and program committees serve on the Academic and Teaching Commission (CAD), which is the highest academic collegiate body.

Every faculty member belongs to at least one Faculty College based on teaching responsibilities. The Faculty Colleges provide the structure for governance related to courses and curricular programs, including policies and student evaluation. Within a college, there may be one or more “chapters” to focus specifically on doctoral programs. Program Committees are intercollegiate groups that coordinate policies and procedures for professional programs, master of health science programs and doctoral programs.

The Academic Research Commission (CAI) has a similar role to CAD for research initiatives. Within the larger CAI are smaller commissions for technical supervision, review for ethical/protection of subjects consideration, and biosafety. Other intercollegiate committees include those responsible for continuing education; ethics, values and conduct; program for teaching performance incentives; internal regulatory improvement; work construction; acquisitions; archives; library and cafeteria.

The structure of the comprehensive assessment of population health (DISP), community practice and final professional project sequence of requirement illustrates the involvement of the professional practice community with the INSP. These experiences are designed in the context of state and local needs and thus are guided by input of this group of constituents. Community representatives have opportunities to provide input into the school’s curriculum and were the impetus for development of the online and executive format programs.

Student representatives reported active involvement in several faculty committees and in the student association; some students reported participation in the self-study process. Students cited several examples of how their specific input was incorporated into program modifications, eg, expanding the MPH from an 18-month to a two-year program, and the value of committee participation to their personal professional development. Finally, the student-led INSP Student Association sponsors social, cultural, sporting and service events for students.

## 1.6 Resources.

The school shall have resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.

This criterion is met. The Mexican federal government provides the primary funding support for the INSP. This support has increased by 9.3% between 2005 (\$22,042,900 USD) and 2010 (\$24,108,000 USD) and it mainly covers the salaries of all personnel as well as basic expenses and services and priority actions defined by the PAT in each area. The budget for salaries for academic and administrative personnel, excluding temporary staff, is guaranteed through a subsidy provided by the Mexican federal government through the SSA. Table 1 presents the INSP's budget.

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>INCOME</b>						
Tuition and fees <sup>i</sup>	4.1	9.2	39.4	115.7	646.2	937.2
State appropriation <sup>ii</sup>	22 042.9	22 981.7	19 807.5	22 351.5	24 602.4	24 108.0
University funds <sup>iii</sup>	NA	NA	NA	NA	NA	NA
Grants and contracts	27 872.5	29 671.9	28 284.4	24 032.4	27 261.0	25 940.5
Indirect cost recovery <sup>iv</sup>	NA	NA	NA	NA	NA	NA
<b>Total Income</b>	<b>49 919.5</b>	<b>52 662.8</b>	<b>48 131.3</b>	<b>46 499.6</b>	<b>52 509.6</b>	<b>50 985.7</b>
<b>EXPENDITURES</b>						
Faculty salaries and benefits	9 265.6	10 553.0	10 173.6	11 751.2	12 776.9	16 683.5
Staff salaries and benefits	11479.76	14738.22	14220.9	14528	14660.72	7 520.7
Operations	13356.15	18038.7	16011.25	17097.8	22040.25	21748.9
Travel	2056.79	2880.08	2515.05	2583	2418.93	2 416.6
Student support	107.7	136.3	142.5	220.5	208.2	225.6
Other (Expenses from investments) <sup>v</sup>	4373.5	3 893.4	144.2	378.1	1 163.7	1 283.3
<b>Total Expenditures</b>	<b>40639.5</b>	<b>50239.7</b>	<b>43207.5</b>	<b>46558.6</b> <sup>vi</sup>	<b>53268.7</b> <sup>vi</sup>	<b>49 878.6</b>

**Notes: Figures are in thousands of U.S. dollars; exchange rate (25<sup>th</sup> May 2010) = 13.18 pesos/U.S. dollar.**

NA=Not applicable.

<sup>i</sup> The increase in tuition since 2008 stems from a change in how this category is calculated. From 2005 to 2008, this figure included only tuition from students enrolled in the INSP's main educational programs. From 2008 till now, income from continuing education activities, previously in a separate category, was incorporated.

<sup>ii</sup> Federal funds.

<sup>iii</sup> This category does not apply to the INSP, as it has no agreements with other higher education institutions to provide courses or financial support to students enrolled in educational programs. Scholarships received from CONACyT are deposited directly into students' accounts.

<sup>iv</sup> These costs are directly included in the tabulator corresponding to the agreements.

<sup>v</sup> These expenditures relate to the acquisition of furniture and equipment to support the development of research and teaching projects. They are considered an investment, as they increase the assets of the INSP.

<sup>vi</sup> In 2008 and 2009 there was an outflow greater than annual income; in previous years there was an external resources surplus that was used to cover the expenses for those 2 years.

Each of the INSP's academic areas develops the budget required to carry out its activities and fulfill its goals for the PAT. The directors of the research centers; the associate academic dean; the directors of planning and of administration and finance; and the director general/dean are responsible for reviewing the budget. The director general/dean and the Governing Board then analyze and justify the estimated

budget. The Governing Board is responsible for approving or modifying the final budget and the INSP's annual financing plan. The proposal is submitted to the National Ministry of Finance, which reviews it and incorporates it into the general federal budget. This is sent to the National Congress for review and final approval.

Another significant source of support is non-governmental funding, including grants and contracts, tuition and academic fees. Tuition and academic fees from educational programs are used to cover expenses related to academic services personnel, educational technologies, student services, curriculum design, maintenance of the INSP's online campus and membership fees, among others.

External funding includes resources generated from grants, collaborative agreements with national and international organizations and service contracts for academic activities, such as continuing education, consulting, research and service. Any surplus from these resources that are not related to specific grant-related work are usually held in reserve to cover the next year's expenses. Gifts and grants showed some fluctuation over the last five years with a 6.9% decrease between 2005 (\$27,872,500) and 2010 (\$25,940,500). However, site visitors were informed that the research funding was significantly higher in 2011 because of the administration of the national nutritional survey. External research funding is an important source of support for future growth since most students from Mexico receive tuition waivers.

In total, INSP funding (federal, tuition and external resources) increased by \$2.59 million (5.1%) between 2005 and 2009. This increase allowed INSP to cover deficits in 2008 and 2009 using the surplus from previous years.

With 233 full-time faculty members, the overall student/faculty ratio (SFR) is 1.5:1. Based on federal regulations, INSP considers students in the online or executive programs as part-time students (0.5 FTE) because they are enrolled in the program while working as public health professionals, though their participation in credit hours does not differ from the "full-time" students; the SFR reported here is based on students' actual participation in credit hours, rather than on the governmental definition.

The total number of INSP staff and administrative personnel in 2011 is 580 compared to 607 in 2008. Per student expenditure in 2010 was \$6,194 for the professional programs, \$6,819 for the master of health sciences and \$7,738 for the doctoral programs.

The INSP's main campus is located on 12 acres (56,000 m<sup>2</sup>) in Cuernavaca, State of Morelos, Mexico and houses the majority of the INSP's academic programs. The INSP's second campus is located on 2.6 acres (11,000 m<sup>2</sup>) in Mexico City (Tlalpan headquarters) and houses the executive programs. A third site is located on two acres (9,000 m<sup>2</sup>) in Tapachula, State of Chiapas and houses the regional public health

research center as well as support for the online programs. The INSP has 25 laboratories for research and educational activities.

All INSP personnel have email accounts and access to wireless networking at the three campuses. Each center has computers, a multimedia screen with video projector and a permanent Internet connection. The INSP has 45 servers supporting systems such as websites, databases, geographic information systems, electronic mail and enterprise resource planning. These computer resources are located in classrooms, faculty and administrative offices, the library and the computer centers and are accessible to students 24 hours a day, seven days a week.

The INSP has two libraries: the José Luis Bobadilla library in Cuernavaca and a library on the Tapachula campus. Together, they have roughly 49,300 classified volumes, 3,297 theses and 855 scientific periodicals that are available for use by students, researchers and the general public. Through memberships in advisory groups and higher education associations, the INSP has gained free subscriptions to the EBSCO Academic Search Premier database, which offers the complete text of more than 4,650 journals. In addition, the Central South Region Library Network of ANUIES offers access to providers of online information sources such as Ovid, Elsevier, Science Direct and Springer. The INSP's Virtual Health Library (BVS) offers the public an electronic source for information about various aspects of health, scientific literature databases, health terminology and scientific communications, among many other topics.

The INSP collaborates with the SSA and state health ministries, identifies communities, and contracts with municipal authorities for students to conduct their work together with community members. Formal agreements are established on a yearly basis with state and municipal authorities to facilitate contact with community leaders and identify local residents to serve as key informants to work with the students.

## **2.0 INSTRUCTIONAL PROGRAMS.**

### **2.1 Master of Public Health Degree.**

**The school shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional masters degree in at least the five areas of knowledge basic to public health. The school may offer other degrees, professional and academic, and other areas of specialization, if consistent with its mission and resources.**

This criterion is met. The school offers the required professional masters degrees in the five core areas of public health knowledge. In response to declining enrollment numbers and identified health sector needs in Mexico, the school recently redesigned the professional degree in biostatistics to focus on biostatistics and information systems; the redesign involved changing courses from a purely

methodological focus to a more applied approach that involves identifying and using data systems, as well as communication skills, in addition to performing classical analyses of data.

The school also offers an array of additional academic and professional masters degrees, including MPH concentrations in nutrition, infectious diseases and vector-borne diseases, and offers five doctoral degrees, one of which is a professional degree.

Finally, the self-study presents two professional graduate degrees that do not have exact analogues in the US education system: 1) the specialty in health promotion is a one-year graduate program where a bachelors degree is a prerequisite. 2) The residence in public health and preventive medicine is a part of medical students' specialization activities and is similar, though not identical, to US medical students' residency programs. Because of the difficulty in translating the specialty in health promotion to a masters degree equivalent for purposes of accreditation, this review will treat the specialty in health promotion as a certificate program, rather than a degree. The residence in public health for physicians, however, is treated as a professional degree equivalent to the MPH.

<b>Table 2. Degrees Offered</b>		
	Academic	Professional
<b>Masters Degrees</b>		
Epidemiology	MHS	MPH*
Health Systems Administration		MPH*
Environmental Health	MHS	MPH
Biostatistics & Information Systems	MHS	MPH^
Social & Behavioral Sciences		MPH
Nutrition	MHS	MPH
Vector-Borne Diseases	MHS	MPH
Infectious Diseases	MHS	MPH
Online (Public Health)		MPH^
Clinical Nutrition	MHS	
Clinical Epidemiology	MHS	
Reproductive Health	MHS	
Health Systems	MHS	
Health Economics	MHS	
Vaccinology	MHS**	
<b>Doctoral Degrees</b>		
Epidemiology	DPHS	
Health Systems	DPHS	
Infectious Diseases	DPHS	
Population Nutrition	DPHSPN	
Public Health		DPH*
<b>Specialty Degrees</b>		
Public Health & Preventive Medicine		RPHPM

\*Offered in executive format.

^Offered in online format.

\*\*Discontinued—currently in teach-out mode.

Two of the masters degree programs are offered in a fully online format, and three masters programs and one doctoral program are offered in executive formats. All degree programs have structured curricula with well-defined required coursework.

The online public health degree is identical to the MPH degrees with concentrations in epidemiology, management, social and behavioral sciences or biostatistics and information systems, with the following exceptions: 1) the program concentration for each cohort is defined by the needs of the specific population of students, eg, federal ministry employees dealing with sanitary conditions and 2) the online degree structures its practice and culminating experiences slightly differently, though the expectations and competencies are identical of those for full-time students.

## **2.2 Program Length.**

**An MPH degree program or equivalent professional masters degree must be at least 42 semester credit units in length.**

This criterion is met. The program defines curricula on the Mexican credit system. One credit is equal to 16 hours of learning activity performed during an academic semester of 20 weeks. The self-study explains that “learning activity” time may be accrued with academic guidance (in classrooms, laboratories, etc.) or independently, outside established class hours as part of an autonomous process related to the study plan. The self-study provides the example of an epidemiology course that requires three hours of classroom activities and three hours of independent work weekly during a 20-week academic semester (120 hours of learning time, 60 of which are in the classroom). The conversion to Mexican credits offers 7.5 credits for this epidemiology course, and the American system would award approximately four semester-credit hours.

The public health masters degrees require 114-115 Mexican credits, which are approximately equivalent to 60 US semester-credits.

## **2.3 Public Health Core Knowledge.**

**All professional degree students must demonstrate an understanding of the public health core knowledge.**

This criterion is met. All MPH students are required to complete nine courses in the five core areas of public health knowledge. All students obtaining the MPH degree, regardless of their area of concentration, must complete the required nine courses totaling 62 Mexican credit hours, regardless of whether they are obtaining their degrees on campus or through the distance-based or executive programs. Students must attain a passing score of 7.0 (on a scale of 1-10) in their required courses to assure that they have a broad understanding of the areas of knowledge basic to public health.

Students in the executive-format Doctorate in Public Health program (DPH) complete mandatory seminars in each of these five core areas of knowledge of public health that are tailored to the doctoral level and focus on leadership applications. Preventive medicine residents complete a distinct set of required courses in the five core areas of knowledge as well.

Site visitors reviewed all curricula and syllabi on site and verified appropriate depth of coverage of the five core public health knowledge areas.

#### **2.4 Practical Skills.**

**All professional degree students must develop skills in basic public health concepts and demonstrate the application of these concepts through a practice experience that is relevant to the students' areas of specialization.**

This criterion is met. Community and professional practica are a central part of the school's professional programs and are fully integrated throughout the course of a student's educational experience. All professional degree students are required to complete a practice experience; under no circumstances are waivers granted. MPH students begin preparing for their practice experience in their first semester Comprehensive Assessment of Population Health Course (DISP), during which they complete 70 hours of community work culminating in the presentation of a community health assessment to health authorities in the community. During subsequent semesters, MPH students take two more professional practica, during which they form teams to complete 160 hours of practice experience related to their area of concentration with a state or local public health agency. This continuum of practical experience beginning with the DISP, culminates in the Final Professional Project (PTP) for most MPH students, although some MPH students choose to write a thesis as the culminating experience, as described in Criterion 2.5.

All practice activities are supervised by the school's Professional Program Committee. The school's Community Practice Operations Office, established in 2010, coordinates activities among students, academic advisors and practicum advisors and works with state and local public health authorities to identify local priorities for community practice experiences. Full-time MPH program practicum sites are located in municipalities in the state of Morelos; the MPH program at the Tlachula campus identifies sites near that campus, and the executive MPH program locates sites in Mexico City municipalities. Online MPH program students identify practice sites in their communities in consultation with their advisors. All students are monitored throughout the practicum by the Community Practicum Committee. They are required to write and present periodic reports about their experience.

The school's Professional Practicum Experience Guide prescribes procedures for selection of practicum sites, practicum evaluation criteria and selection of community practicum advisor team members.

Students in the executive-format DPH program are required to complete a community practicum experience in their sixth semester at a site other than their place of employment. Preventive medicine residents receive their practice experience in the course of six required rotations at public hospitals, local and regional health centers and health (sanitary) districts.

### **2.5 Culminating Experience.**

**All professional degree programs identified in the instructional matrix shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.**

This criterion is met. Students in the MPH program must complete a final professional project (PTP) or a thesis as the culminating experience. The PTP is an integrative project based on field experience gained during the community and professional practica; thesis work is focused on the implementation of an operational research project. Students in the residence in public health and preventive medicine must develop a thesis based on a current public health program in which they were involved during their rotations.

Students in the doctorate in public health must present an applied research thesis and pass the qualifying exam to obtain their degree. They are assigned an academic advisor and a thesis supervisor who have to review and sign the student progress report every semester before submission to the program coordinator. By the end of the second year students have to present their research protocol to a committee of five faculty members. After presenting their protocol, students are required to pass an exam containing five public health related cases to be answered in one week. By the end of the third year students have to defend their thesis before a similar committee.

Site visitors discussed all of the culminating experience options with faculty and students. Faculty use rubrics linked to cross-curricular competencies to assess all culminating experience options, and site visitors review indicated that students produce rigorous, integrative products that draw together classroom and practice-based learning.

### **2.6 Required Competencies.**

**For each degree program and area of specialization within each program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of educational programs.**

This criterion is met. The school has defined competencies for each degree program and concentration and has mapped required coursework to the competencies. The MPH degree, for example, has 15 core and cross-cutting competencies, and the concentrations each have six to ten competencies that relate to the required concentration-specific coursework.

The competency development and ongoing review process begins with centralized data collection: review of other educational programs and surveys and in-person interviews with researchers, practitioners and alumni. The Program Design Committee uses these data to develop competencies, which are then vetted and implemented by a variety of committees, including the Faculty Colleges, who are ultimately responsible for integrating competencies into curricular design. The Academic Affairs Office, through its departments of Curriculum Design and Curriculum Administration, verifies the competency mapping process. All syllabi list the covered competencies, and introductory courses include targeted discussion of competencies.

Students who met with site visitors were familiar with the competencies and spoke of their role in providing input for and ongoing evaluation of the defined competency sets.

Faculty who met with site visitors were uniformly well-versed in and comfortable with the concept of competency-based education and with the competencies defined for their specific degrees and concentrations. The Academic Affairs Office plays a strong role in ensuring consistency, but all faculty could speak to the need to design each course lecture or activity to engage students in competency development. They also were consistent in their ability to identify the role of competencies in guiding practice and culminating experiences.

## **2.7 Assessment Procedures.**

**There shall be procedures for assessing and documenting the extent to which each student has demonstrated competence in the required areas of performance.**

This criterion is met. The school has identified methods to assess students' attainment of competencies through varied experiences embedded in the curriculum and through each degree option's culminating experience. MPH students' required practicum serves as an additional opportunity to assess competency attainment.

Since coursework is mapped to competencies, the activities completed in required courses provide the first level of assessment of student learning. For all degrees, the culminating experience, such as the thesis, dissertation or PTP, is assessed by faculty who verify competency attainment. The assessments of MPH students' practicum presentation, conducted by the Community Practicum Committee of preceptors and faculty, are also structured to allow for competency attainment.

The school is developing and pilot-testing several other mechanisms for assessment of student learning, including a portfolio strategy for MPH students, which is scheduled to be implemented at the end of 2012. The school has been testing and gradually deploying a "general competency exam."

The school tracks several aggregate measures of student achievement. It has met or surpassed its goals for mean course grade in core courses (for MPH students) and for the proportion of employed MPH graduates working in public health (86%, 80% and 80%, over the last three years).

The school also tracks graduation rates for all of its degree programs. Students who pursue the MPH program in a full-time format have high completion rates—the most recent three cohorts for whom data are available have graduation rates of 96%, 81% and 92%. Students enrolled in the executive format for the MPH program have not graduated at the same rate as full-time students; the self-study explains that students enrolled in this format typically hold middle- and higher-level positions in the Ministry of Health at the federal or state level, and these students' completion of a thesis or PTP has been less structured and more independent, after the completion of coursework. These factors have presented challenges with achieving timely graduation, but the school has implemented a number of steps to better structure the thesis/PTP experience in particular. Only one class has reached the maximum time to graduation, and its graduation rate is 79%. The school expects rates to improve steadily, starting with the next cohorts who will reach their maximum time. For MHS students, only two years of graduation data are available—in 2006, the school did not admit any new MHS students, as it was in the midst of restructuring the curriculum. For the two classes for whom data are available, graduation rates are 86% and 84%. For the doctoral degrees that have been established long enough to have reached maximum time to graduation, graduation rates are 91% and 86%.

The self-study presents a very detailed plan of targeted steps to continue to improve graduation rates, particularly of students who enroll in part-time formats. Graduation rates were an area of deficiency in the school's last accreditation review, and subsequent interim and annual reporting has focused on efforts toward improving degree completion. First, the school provided an alternative to the thesis for professional programs (the PTP, described in previous sections). Beginning in September 2010, the school took steps to ensure that students complete their final projects before returning to their places of origin, by achieving authorization from the national government to provide students with economic support while completing their final projects. The school implemented a new advising program in 2007 that included an institutional tutoring program to monitor students' performance, especially with regard to completion of the final project, and added an extracurricular scientific writing course for all full-time students. Finally, the school responded to the previous report's indication of the need for regular follow up with alumni. The school established a program for follow-up and a formal Alumni Academic Training Program (PROFAE), to survey alumni to identify post-graduate educational needs.

The school tracks job placement and other measures through an alumni survey. The most recent deployment had a 52% response rate. Among MPH graduates, 84% returned to previous jobs in the government health sector (primarily in the Ministry of Health) or found new jobs in this sector; 7% are

involved in research or teaching at a university or similar institution; 1% are enrolled in further education; and 3% work in areas related to health care delivery. Among MHS graduates, 65% returned to previous jobs in the government health sector (primarily in the Ministry of Health) or found new jobs in this sector; 27% are involved in research or teaching at a university or similar institution; and 4% work in areas related to health care delivery. Among doctoral graduates, 60% found work in the government health sector and 40% work in university teaching and research.

Other data from alumni and employer surveys have been used in the school's efforts to validate and refine its competencies. Data indicate a generally high level of competence and identify emerging areas in need of development, such as improving students' knowledge of public administration and operations and improving communication skills.

### **2.8 Other Professional Degrees.**

**If the school offers curricula for professional degrees other than the MPH or equivalent public health degrees, students pursuing them must be grounded in basic public health knowledge.**

This criterion is met. The school offers the Master of Clinical Nutrition as an "other" professional degree. The competencies for this program have substantial overlap with the MPH competencies, reflecting the program's grounding in public health concepts and population approaches. While clinical nutrition students do not complete the same extensive set of public health core classes as MPH students do, students in this degree program clearly receive extensive exposure to basic public health knowledge and the population approach. Students complete core courses in epidemiology, biostatistics, social determinants of public health and bioethics. In addition, students must complete courses in health systems and environmental sciences but are allowed to choose from various available courses, including those that are tailored to nutrition-based themes.

### **2.9 Academic Degrees.**

**If the school also offers curricula for academic degrees, students pursuing them shall obtain a broad introduction to public health, as well as an understanding about how their discipline-based specialization contributes to achieving the goals of public health.**

This criterion is met. The school offers the Master of Health Sciences (MHS) with eleven concentrations, the Doctorate in Public Health Sciences (DPHS) with three concentrations and the Doctorate in Public Health Sciences in Population Nutrition (DPHSPN). Students in all of these academic programs complete three core courses in epidemiology, biostatistics and bioethics and have exposure to the other core public health knowledge areas. In addition to numerous elective courses in basic areas of public health, students in the full-time programs attend monthly seminars on a variety of current public health topics, and this participation specifically targets exposure to the core public health knowledge areas that are not already covered in required coursework.

The school offered the MHS in vaccinology to only one cohort in collaboration with a private producer of vaccines, BIRMEX. Based on curricular review and demand for the concentration, the school is in the process of restructuring the program as an MPH with a concentration in vaccinology. Site visitors were concerned that the MHS program did not have a sufficiently broad introduction to public health, but based on the information provided on site that students are no longer admitted to the current program, this is not a compliance issue; the program is not listed in the 2012-2013 academic bulletin. The cohort in this program first enrolled in Fall 2008; these students are currently working on thesis projects and should graduate by December 2012.

All students in academic programs complete at least one culminating experience. Students completing the Master of Health Sciences degree must develop a thesis based on original research. The research process includes developing research questions, data collection, analysis and interpretation. The thesis committee provides guidance to the student and must approve the final thesis defense. Students in the academic doctoral programs must complete a similar process. To complete the doctoral thesis requirements, a student must have one article based on the research accepted for publication in a top-tier scientific journal and two manuscripts submitted for review. In addition, doctoral students must demonstrate integration of competencies developed during the training to pass the qualifying exam.

#### **2.10 Doctoral Degrees.**

**The school shall offer at least three doctoral degree programs that are relevant to any of the five areas of basic public health knowledge.**

This criterion is met with commentary. The school offers three DPHS degrees with concentrations in epidemiology, health systems and infectious disease. The school also offers a professional DPH and the specialized academic degree, the DPHSN, discussed in Criterion 2.9. The latter degree programs were established in 2008 and 2009, respectively, and have yet to graduate any students. The professional DPH is delivered in an executive format for working professionals.

Doctoral students all have academic coordinators who guide their progress through the program as well as an advisor who monitors the student's progress. Students are required to present biennial reports on their progress to their thesis advisors.

The self-study provided data on the number of active students in each doctoral degree program with graduation rates by year of enrollment from 2003-2008, 2004-2009, and 2005-2010.

The commentary relates to the requirement that accredited schools must have doctoral programs relevant to three of the five core areas of basic public health knowledge. The DPHS degrees clearly address two core areas: epidemiology and health services administration. The other doctoral degrees, however

(DPHS in infectious diseases, DPHSPN and professional DPH) do not readily fit into the specific list of remaining core areas. Nevertheless, site visitors determined that the core area of social and behavioral sciences is well represented in both the DPH and the program in Nutrition. These two programs' competencies reflect substantial social and behavioral science content as well as course work in the social determinants of health, program evaluation and other related topics.

### **2.11 Joint Degrees.**

**If the school offers joint degree programs, the required curriculum for the professional public health degree shall be equivalent to that required for a separate public health degree.**

This criterion is not applicable.

### **2.12 Distance Education or Executive Degree Programs.**

**If the school offers degree programs using formats or methods other than students attending regular on-site course sessions spread over a standard term, these programs must a) be consistent with the mission of the school and within the school's established areas of expertise; b) be guided by clearly articulated student learning outcomes that are rigorously evaluated; c) be subject to the same quality control processes that other degree programs in the school and university are; and d) provide planned and evaluated learning experiences that take into consideration and are responsive to the characteristics and needs of adult learners. If the school offers distance education or executive degree programs, it must provide needed support for these programs, including administrative, travel, communication, and student services. The school must have an ongoing program to evaluate the academic effectiveness of the format, to assess teaching and learning methodologies and to systematically use this information to stimulate program improvements.**

This criterion is met. The school offers the MPH program in an online format and the concentrations in epidemiology and health systems administration in an executive format. The Master of Health Sciences with a concentration in vaccinology and the Doctorate in Public Health are also offered in an executive format, although this MHS has been closed to future admissions.

The school has developed the online and executive format programs in response to demand for advanced training for public health professionals whose jobs prevent them from attending a full-time graduate program. The online and executive formats for the MPH programs address a specific need identified by the SSA to upgrade the skills of its personnel in order to implement health reforms and innovate public health practices and perspectives. Required competencies for these programs are identical to those for the full-time MPH programs. The online format incorporates both synchronous and asynchronous training, supported by the Blackboard and WebEx technology platforms. Students are expected to complete the course work in 24 months (four cycles of six months each) with additional time to complete the practicum and culminating experience. The only time online students are required to visit the main campus in Cuernavaca is to defend the final practicum project; online students do not have the thesis option.

The executive format MPH program is offered at the Tlalpan campus in Mexico City, with intense course delivery scheduled on Fridays and Saturdays. The public health core and concentration courses are completed in three cycles of six months each. Courses in the executive format follow learning-centered didactic techniques to encourage more active student participation. For both online and executive format program delivery, students must complete the same community practicum experiences and the final professional practicum as full-time MPH students.

Preselection of students for the online MPH programs occurs at the state and local area. Public health officials identify both potential students and preferred areas of concentration. Based on the demands and faculty recommendations for admission, faculty identify specific concentrations for delivery for a given cohort in the online program. The executive format currently includes concentrations in epidemiology and health systems. A student may complete a hybrid program of executive format for the public health core and online format for the concentration courses.

Faculty developed the executive format MHS in vaccinology specifically to meet the needs of the state-owned vaccine maker BIRMEX. The courses were delivered on Fridays and Saturdays in Mexico City (INSP campus and BIRMEX campus). Teaching methodologies included faculty lectures, group exercises and both individual and group assignments; students completed thesis research analogous to the full-time MHS students. Students completed the program within three years.

The Doctorate in Public Health is also offered only in executive format. The blended delivery format includes classroom-based courses and online academic activities. For each year of the three year program, students spend two separate months at the Cuernavaca campus for intensive full-time seminars. A series of online seminars complement these onsite activities. Students in the Doctorate in Public Health complete a qualifying exam and thesis research, satisfying all INSP regulations for doctoral programs.

The school has expanded student support services to address any needs of students in the online and executive format programs. Personnel can be contacted by phone or email for both technical and academic assistance. Each program has an academic coordinator responsible for overall delivery of the program and student support in addition to the more specialized staff for various technical problems. Both full-time faculty and regional tutors indicated that the program coordinator and tutors maintain frequent contact with the students to assure appropriate progress and ongoing evaluation.

Students in any of the online and executive format programs must satisfy the same standards as full-time students with respect to both course-level and program-level requirements. Faculty regularly review student performance and student evaluation metrics to assure ongoing academic quality and to make

adjustments as necessary. In addition to evaluating academic assignments, faculty can monitor student attendance/participation on the WebEx platform. For the online MPH program, the academic coordinator meets with students and regional advisors every six months to review progress and advisement activities; these meetings occur at regional venues.

### **3.0 CREATION, APPLICATION AND ADVANCEMENT OF KNOWLEDGE.**

#### **3.1 Research.**

**The school shall pursue an active research program, consistent with its mission, through which its faculty and students contribute to the knowledge base of the public health disciplines, including research directed at improving the practice of public health.**

This criterion is met. The INSP has seven research centers and it receives research funding from the Ministry of Health and from external grantors including the national council for science and technology (CONACyT), WHO, PAHO, the World Fund for the Environment, the Inter-American Development Bank, and The Global Fund to Fight AIDS, Tuberculosis and Malaria, among others. The number of agencies that fund INSP research has increased 40% over the last four years. During 2008-2010, there was a 32% increase in research projects conducted by the seven research centers. Out of 417 projects, 396 (98%) had funding (external, internal or both external and internal), and only 21 projects (5%) do not have funding. Most projects received grants from external sources (93%) or have both internal and external funds (5%). The research center with the most research projects in 2008-2010 was the Population Health Research Center (CISP). Of the 417 research projects, 154 (37%) were community- based research and 163 (39%) involved student participation

All faculty are expected to initiate and conduct peer-reviewed research. In the last five years (2005-2010), scientific productivity has increased at the INSP in terms of the number and quality of scientific products and researchers. As discussed in Criterion 4.2, INSP faculty are classified by "level," and levels progress from A (lowest) to F (highest). Level C or higher professors serve as principal investigators and student research project advisors. Faculty are expected to obtain individual accreditation by the National System of Researchers (SNI) and work to advance to its highest level. SNI accreditation, which has four levels, is based on the researcher's academic preparation, scientific productivity, participation and accomplishments in graduate education and capacity building within academic institutions in Mexico, and ability to attract external funding. The number of INSP researchers who belong to the SNI increased by 79% from 67 in 2005 to 120 in 2010. INSP researchers published 229 articles in 2010 compared to 121 articles in 2005 and 77 of the articles published by INSP researchers appeared in highly influential group IV and V scientific journals, compared to 17 articles in 2005.

Over the past three years (2008-2010), students were involved in 163 research projects, 39% of the total of research activities conducted by the INSP. Students from all programs have the opportunity to

collaborate directly with researchers. These opportunities include internships, academic short stays in other universities and jobs working on research projects. Students' involvement in specific research projects often helps them to develop their culminating experience project. A student's research thesis may be part of an ongoing research project or use information from previous projects.

In 2010, INSP started a new program (Formation Lines) in which students can use optional credits to specialize in specific research topics related to specific lines of research identified as institutional priorities (LIMs). This program gives students opportunities to apply for scholarships for research internships in other universities, develop internal internships in a research project related to the LIM and present papers at national or international conferences as well as to develop their thesis. To enhance the dissemination of student scholarly work related to research activities, the INSP supports the student association in organizing the annual "Jornadas Académicas," a one-day academic conference where students from all programs present their research experiences, including their thesis or PTP findings. Students are an important part of the planning and organization of academic research conferences hosted by the INSP. In 2011, more than 60 students from all programs of study served on the organizing committee for two international conferences.

### **3.2 Service.**

**The school shall pursue active service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.**

This criterion is met. Service, by Mexican law, is part of the school's mandate. The school is active in a range of service activities consistent with its mission, through which faculty and students contribute to the advancement of public health practice. Service activities fall in five broad categories:

- Large-scale evaluations and surveys (the school conducts the National Health Survey, for example)
- Community outreach services
- Information creation, translation, and dissemination and other actions to broaden access to scientific knowledge in public health
- Direct services by faculty
- Development of online resources and informatics services

Various school units provide extensive support to the federal and state governments and community groups, and include an Insecticide Evaluation Unit, Unit for the Diagnosis of Vector-borne Diseases, Infestation Control Unit and a Center for Compilation and Analysis of Health Information. Direct services to communities include nutritional education programs for low income families in Cuernavaca and an obesity prevention program for students in Tlaltizapan, Morelos. Faculty serve as reviewers and members of editorial boards for a wide range of Mexican and international publications and serve as unpaid consultants to international organizations. Faculty also serve local communities by advising local governments and NGOs about disease prevention and health promotion. A report of all service activities at the school is presented to the Governing Council twice a year.

Faculty must incorporate service activities into their annual work plans, which require the approval of the director of the faculty member's research center. Faculty are evaluated annually on their progress toward achieving service goals in their individual workplans. The self-study documents an extensive array of faculty service and presents data on self-defined outcome measures for service productivity. Target goals for service were met in each of the three years reported.

The school engages students in service activities to enrich their education and training. The self-study presents student service participation data for 2010, when 115 students participated in community outreach services and evaluations.

### **3.3 Workforce Development.**

**The school shall engage in activities that support the professional development of the public health workforce.**

This criterion is met. The school has a wide variety of modalities and programs to assess workforce training needs and programs to address them. The school's Department of Continuing Education offers programs at INSP campuses and other sites throughout Mexico, as well as online and blended formats ranging from 40-hour courses to 160-hour programs for health professionals working in diverse institutions. These programs include on-site training of health professionals, a summer continuing education program and online and videoconference courses. The Continuing Education Committee establishes and regulates the procedures for the programs and receives input from representatives from each of the school's research centers. The committee also receives feedback from students about each course.

The school conducts a needs assessment every three years to target health personnel covering operational, logistical and strategic levels in health services, and includes the participation of the Ministries of Health and state-level heads of education. During the latest assessment period, in 2009, 22 states participated in the assessment survey and provided input for the topical areas needing training and educational opportunities. The school used the survey results to identify and rank the topics of interest for training and offered courses in the highest ranked areas.

The school has developed State Centers for Health Systems Development (CEDESS) in high-priority states to strengthen leadership and management of state health systems, improve health and ensure dignified treatment and financial protection for the population. The school has also acted regionally with the Mesoamerican Public Health System (SMSP) to provide training to strengthen national health systems across Central America. The INSP implements three strategic Mesoamerican programs: 1) training and continuing education for public health professionals, 2) institutional strengthening and development and 3) technical support and knowledge management. The school also works with more

than 50 international educational institutions, governmental organizations, and private companies to offer continuing education.

The school also offers the Specialty in Health Promotion, which is a very rigorous academic and practice-based professional training option.

Over the 2008-2010 period, the school offered more than 30 “diploma programs” (structured continuing education opportunities) serving more than 18,000 students; 900 standard courses to over 9,000 student; and 17 videoconference programs serving over 6,000 students—providing training and educational opportunities to over 33,000 students in total, most of whom are SSA employees or employees of a Mexican state or local governmental health agency.

#### **4.0 FACULTY, STAFF AND STUDENTS.**

##### **4.1 Faculty Qualifications.**

**The school shall have a clearly defined faculty which, by virtue of its distribution, multidisciplinary nature, educational preparation, research and teaching competence, and practice experience, is able to fully support the school’s mission, goals and objectives.**

This criterion is met. The full-time faculty, together with part-time faculty, has extensive training and expertise in diverse disciplines and is eminently qualified to support the school’s academic and professional programs and its research and service activities.

The self-study documents 233 full-time faculty and 72 part-time faculty who contributed to the school’s research, instructional and service programs in 2011. Slightly more than half of the full-time faculty (135 of 242 in academic year 2010) have earned doctoral degrees; the vast majority have at least masters level training. In 2010, 69% were recognized as medical science researchers (ie, level of C or above, based on Mexican national research center guidelines). While this proportion varies across discipline, every major area has a broad distribution of faculty levels to support the research and teaching missions, including sufficient faculty to support the doctoral programs. In addition, 120 of the full-time faculty are members of the National System of Researchers, requiring a supplemental reevaluation by CONACyT every three years.

All faculty are actively involved in teaching and research, with a minimum requirement of teaching at least one course per year. Masters-trained faculty teach only masters-level courses, while doctoral-level faculty teach both masters- and doctoral-level courses. Faculty must earn the level of C or above to submit a grant proposal, although faculty at all levels can be collaborators and are required to be involved in research.

Many of the school's part time faculty are working professionals in various public health agencies and institutions who share their experience for the community practicum experiences and for specialized areas within the curricular programs. The self-study reports limited public health experience outside of the INSP for full-time faculty, but the broader role of the institute suggest that all faculty are involved in public health practice due to the SSA's requirements for the Institute.

Few faculty have a professional public health degree (eg, MPH or DrPH) or a degree from an accredited school or program other than INSP. However, the faculty clearly believe INSP graduates are the most qualified individuals for available faculty positions, and many students aspire to work at INSP upon graduation. In addition, faculty often teach in a discipline outside of their original training, eg, PhD in Statistics but teaching in Nutrition and Health or DPHS in Epidemiology but teaching in Health Systems. However, site visitors' review of self-study documentation and on-site discussions indicate that faculty are well-prepared to teach the courses to which they are assigned.

#### **4.2 Faculty Policies and Procedures.**

**The school shall have well-defined policies and procedures to recruit, appoint and promote qualified faculty, to evaluate competence and performance of faculty, and to support the professional development and advancement of faculty.**

This criterion is met. The school's faculty are part of the Institutional System of Medical Sciences Researchers (SIICM) of the SSA. Recruitment, retention and promotion of faculty are determined by an evaluation program implemented by the Coordinating Commission of National Schools of Health and Regional Specialty Hospitals (CCINSHAE). Faculty appointments of Medical Sciences Researchers (ICM) are at six levels, from "A" to "F," which are determined according to the following criteria: work experience, degree and academic development, publication in refereed journals, presentation of research papers at scientific meetings, funding for research protocols and management or consultancy-related thesis research. Faculty members progress through the ranks based on annual reviews of research funding, publication, successful teaching and service.

The school publishes faculty rules and regulations on its website as well as a hardcopy faculty manual provided to each faculty member annually. The manual provides substantial information about the teaching responsibilities and resources relating to educational duties for faculty members.

The school has several practices and provisions to promote faculty development. Faculty have opportunities to take academic leave with full salary to complete postgraduate studies at national and foreign educational institutions. They also can take sabbaticals for one year to strengthen their teaching and research activities.

The school promotes teacher training for all faculty using a competency-based model for instruction and offers resources in several modalities throughout the academic year. Since 2006, the school has offered a diploma course in teaching for INSP faculty members to support competency-based teaching, strategies for meaningful learning (collaborative work, problem-based learning, project-based learning, and case studies) and competency-based evaluations. There are also workshops and online resources for teacher training. The school also promotes faculty exchanges with other academic institutions.

The school has a detailed procedure to evaluate faculty competence and performance that include evaluations by research center directors, evaluations by the faculty member's collegiate body, student evaluations and an evaluation of full-time faculty by the Research Commission every three years. Student course evaluations play an important part in the Program for Teaching Performance Incentives (PEDD).

Online teaching evaluations by students are provided at the end of each academic semester. They examine both the quality of the teaching-learning process and the performance of professor/researchers, as well as the acquisition of required competencies and identify opportunities for strengthening these competencies. These reports are provided to faculty as well as research center directors.

Faculty members include teaching, research and service activities in their annual work plans and must be approved by the director of his or her research center. Most participate in community services activities as part of their research, teaching or direct service to the community and are evaluated annually by their directors.

#### **4.3 Faculty and Staff Diversity.**

**The school shall recruit, retain and promote a diverse faculty and staff, and shall offer equitable opportunities to qualified individuals regardless of age, gender, race, disability, sexual orientation, religion or national origin.**

This criterion is met. The Mexican population is largely racially mixed. In Mexico the concept of diversity is not measured by racial or ethnic indicators, but rather using other indicators such as age, gender, place of origin and profession among others. The indigenous population in the country is almost 10% of the total. During the period reflected in the self-study document, INSP maintained a stable recruitment of faculty and administrative staff (~15%) from states with indigenous population.

The only categories the INSP records according to organizational practices in Mexico are gender and nationality. Therefore, diversity is addressed as the balance of males to females and the proportion of international faculty. Among full-time faculty, the number of women has remained at a narrow majority over the last three years. At the end of 2011, the INSP had 46.2% male professor/researchers and 53.8% female professor/researchers. Of the male professor/researchers, 95% are categorized as

Mexican and 5% are from other countries. For female professor/researchers, 95.7% are Mexican and 4.3% are foreign. For both genders the most frequent international origins of professor/researchers are the US, Colombia and Peru.

Among INSP full-time administrative staff 52.2% are women and 46.4% are men, and most are Mexicans. Around 3% of full-time administrative staff are international

From 2008 to 2010, professional diversity among full-time faculty (>55 professions) increased slightly as a result of fostering multidisciplinary and interdisciplinary teaching and research in public health. This differs from what was observed several years ago, when the predominant profession (more than 80%) was medicine. Places of origin of full-time faculty are quite varied as INSP faculty come from 25 out of 32 of Mexican states as well as 15 other countries.

As a national institute, the INSP applies federal policies that promote equal opportunities for candidates and employees regardless of age, gender, race, disability, sexual orientation, religion or national origin. In addition, the federal government established the National Program for Accountability and Transparency 2008-2012 for all its entities, out of which grew the Program for Institutional Culture and Gender Equity in Public Administration which requires institutional obligation to “establish mechanisms to eliminate abuse, sexual harassment and discriminatory practices within the federal public administration” and prohibits discriminatory practices in public institutions. The INSP Human Resources Department carries out candidate selection and hiring according to a set of procedures and guidelines to guarantee a hiring process that is equitable and based on institutional values and policies.

The SSA, through the Coordinating Commission of National Institutes of Health and Regional Specialty Hospitals (CCINSHAE), has created the Hiring, Promotion and Retention Program to promote the academic development of researchers and the training, development and retention of diverse personnel who work in health-related research. It is conducted once a year through public notices and disseminated through the INSP webpage, by email and through a variety of publications to guarantee recruitment of personnel from all regions of the country.

The INSP established several measures to successfully recruit and retain a diverse administrative body. A notable change has been observed in the makeup of thesis directors since the last accreditation. Over the past five years, the INSP has been successful in recruiting and promoting women to positions of high responsibility, such as leadership in the Faculty Colleges (54% of presidents are women) and thesis directors (56% of whom are women).

The INSP has made efforts to foster and maintain an environment that support cultural diversity within the institute. One of INSP's strategies to raise awareness about diversity issues both externally and within the INSP community is to promote and disseminate the results of research about groups and populations that represent the heterogeneity of the country. For example, the Institute has a mission oriented research line (LIM) on health and vulnerable groups, such as indigenous peoples, migrants, women, children and the elderly.

The INSP's monthly bulletin, Viva Salud, disseminates topics derived from the Institute's teaching and research activities as well as interviews with professor/researchers and students reflecting their diverse points of view on public health topics as well as personal information to help those in the INSP community get to know one another. In addition, INSP initiated the communication campaign "Recognize Us" in 2010 to disseminate information about INSP personnel and their research activities. This campaign led to better understanding of the diversity of the INSP community and promoted tolerance and acceptance as one of INSP values.

The "Foreign Legion" group has existed at the INSP since 2008 to socially support INSP students, faculty and staff from nations other than Mexico and ease the process of adapting to life in Mexico. The social experiences provided by this group have also enabled the different sectors of the institution to interact and to learn about traditions and lifestyles from other countries. In addition, the workers union and the student association, with support from institutional authorities, hold a series of cultural and sporting activities throughout the year on INSP campuses.

#### **4.4 Student Recruitment and Admissions.**

**The school shall have student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the school's various learning activities, which will enable each of them to develop competence for a career in public health.**

This criterion is met. The school has policies and procedures in place designed to recruit and admit qualified students. The school undertakes widespread recruitment activities in Mexico and in other Spanish-speaking countries. There has been a sustained demand for professional degree programs in the last four years. From 2008 to 2011, there were 1,117 applicants for the MPH degree, of whom 43% were accepted. The number of candidates increased in 2008 and 2009 after an executive and online format for the degree was offered. Due to ongoing difficulties in recruiting biostatistics students, the degree was broadened to incorporate the area of information systems, allowing the program to reopen in 2010 and admit students. The self-study presents data on applications, admissions, and enrollments for all degree programs and program areas for academic years 2008-2011.

The self-study also presents detailed information about the admissions process. Minimum requirements for admission to all graduate programs include a minimum grade point average, results from the National Postgraduate Enrollment Exam and letters of recommendation. Every applicant is interviewed by at least two faculty members from the program area to which the student is seeking admission. Some program areas administer additional entrance exams specific to their area. Online MPH students are pre-selected by their employers in the Mexican health services but must meet the same requirements for admission as other MPH students.

The school has an impressive rate of matriculation for students accepted into its professional and academic degree programs. The self-study noted a drop in acceptance rates for all degree programs below the school's target of 50% for academic year 2010. The self-study, however, explained this drop by citing a new emphasis on selecting students who will be able to graduate on time and improve the school's graduation rate. The school is working to shorten the admissions process by migrating administrative processes to a web-based application in the near future.

#### **4.5 Student Diversity.**

**Stated application, admission, and degree-granting requirements and regulations shall be applied equitably to individual applicants and students regardless of age, gender, race, disability, sexual orientation, religion or national origin.**

This criterion is met. The school offers postgraduate programs to all persons regardless of gender, age, marital status, socioeconomic status, disability, sexual orientation, religion, place of origin or nationality. Although the school does not record membership in an ethnic or indigenous group in accordance with Mexican law, the school estimates that 10% of the student body belongs to one of these groups; this figure is proportionate to their numbers in the general population. The school does track enrollment by Mexican state of origin in an effort to assure that states with large indigenous populations are well represented in the student body.

In an effort to recruit students from indigenous communities, the school has established an agreement with the Ministry of Indigenous Peoples in the state of Chiapas to promote its academic programs among indigenous students. A similar agreement will soon be established with the Institute for the Development of Mayan Culture of the State of Yucatan. Other strategies to recruit geographically diverse students include recruitment of foreign students from elsewhere in Latin America and the United States. Approximately 5% of students enrolled in 2008-2010 were from other countries in Latin America.

#### **4.6 Advising and Career Counseling.**

**There shall be available a clearly explained and accessible academic advising system for students, as well as readily available career and placement advice.**

This criterion is met. The school has a weeklong in-person orientation at each of its sites during the week before each academic year begins. During the in-person orientation, new students participate in conferences and workshops and meet and interact with advisors, tutors, academic coordinators and other faculty and staff. The school also offers an online student orientation as a supplement—the Office of Academic Affairs manages this site, which is also accessible to the external community. The online orientation site directs users to resources and answers frequently asked questions, and staff regularly update the site to reflect recent questions or issues.

The school has an online, comprehensive student handbook, which outlines procedures and regulations, and the school has a “virtual campus” website, updated daily with content on conferences, funding opportunities and academic news. It also includes a student life section, managed in participation with the Student Association, with information on housing, food, social and cultural events as well as resources available to students.

Academic advising occurs in the relationship of the student with two individuals: a tutor, assigned from the home Faculty College, who follows the student from application acceptance to graduation; and an academic coordinator, a faculty member responsible for providing academic guidance in the area of concentration. These positions have complementary responsibilities, and tutors complete regularly scheduled performance reviews at intervals throughout the degree completion process. The Student Affairs and Campus Life Department offers additional support, particularly in connecting students to appropriate information and resources, and often receives and handles student requests by e-mail. Surveys of graduating students indicate positive ratings of the tutor system and of the relationship with individual tutors; the positive trend is generally increasing, though 2009 data indicate slightly lower satisfaction with tutors.

Career counseling is a relatively recent development for the school. Because the school is the institution responsible for the academic training of personnel working in the Ministry of Health, most students already have jobs, receive needed training and then return to their jobs after completing the training. The self-study indicates that there has been little demand for career counseling, but the school has begun to develop and implement activities through the Academic Evaluation and Alumni Follow-Up Departments that help recent graduates access information about careers and job placement. These offices have focused, in particular, on facilitating virtual networking among alumni. Annual alumni continuing education and social events also allow faculty and staff to present connections with employers, and the school maintains e-mail contact with many alumni, providing information on job openings from a number of agencies and ministries that contact INSP when they have openings. Students who met with site visitors expressed great confidence about their ability to find new post-graduate employment, if they wished for it, based on the school's reputation and network of collaborators and alumni in government

agencies and international NGOs. Some students expressed an interest in working at one of INSP's research centers after graduation and expressed frustration that the centers' rapid growth in recent years has meant that there is little physical space for new researchers.

The school has a number of channels that allow students to communicate grievances or concerns. The student handbook and campus website delineate the processes and responsible entities for registering concern related to matters from grades to problems with administrative processes, to abuse and discrimination. All of the bodies responsible for handling such concerns keep minutes. Since 2009, 44 individual requests have been received and attended; most addressed relatively minor issues.

## Agenda

### Council on Education for Public Health Accreditation Site Visit

#### Instituto Nacional de Salud Publica

February 7-9, 2012

#### Tuesday, February 7, 2012

- 9:00 am Meeting with Self-Study Coordinators  
Laura Magaña  
Bruma Palacios
- 9:15 am Team Review of Resource File and Other Documentation Provided
- 10:00 am Meeting with INSP leadership  
Mario Henry Rodriguez, Dean  
Miguel Angel González Block, Director of the Research Center in Health Systems  
Juan Rivera, Director of the Research Center in Nutrition and Health  
Laura Magaña, Associate Academic Dean.  
Armando Vieyra, Director of Planning Office.  
Ma. Lourdes García, Director of Research Center in Infectious Diseases  
Julieta Ivone Castro, Bioethics Committee  
Cynthia Maya, President of the INSP Student Association  
Ruy Pérez, Chief of the Department for Experimental Medicine in the General Hospital of Mexico  
Eduardo Lazcano, Director of the Research Center in Population Health  
Juan Eugenio Hernández, Director of the Research Center of Information for Public Health Decisions  
Juan Pablo Gutiérrez, Director of the Research Center in Evaluation and Surveys
- 11:15 am Break
- 11:40 am Conference Call with former Mexican Minister of Health  
José Angel Córdova
- 11:50 am Break
- 12:00 pm Meeting with Individuals Re: Self-Study & Resources  
María de Lourdes García, Director of the Research Center in Infectious Diseases  
María de Lourdes Alemán, Faculty  
Carlos Conde, Faculty  
Jimena Fritz, Former president of the Student Association  
Laura Magaña, Associate Academic Dean  
Juan Eugenio Hernandez, Director CENIDSP  
Armando Vieyra, Director, Planning Office  
Karla Avril Osnaya. Responsible for the Office of Human Resources  
Saul Lara, Head of Informatics Office  
Natalia López, Head of Library  
Lorena Castillo, Responsible for the Department of Student Affairs
- 12:30 pm Break
- 12:40 pm Lunch with Community Representatives, Employers and Strategic Partners  
Elia Lara Lona, Assistant to the Minister of Health, State of Guanajuato.  
H. Arturo Barrio, Director of the Integration and Development program for Mesoamérica, Ministry of Foreign Affairs  
Victor Caballero, Former Minister of Health, State of Morelos  
Aurora del Río Zolezzi, Director of Gender Equity at the National Center of Gender Equity and Reproductive Health  
Miguel Cruz López, Chief of the Medical Research Unit in Biochemistry at the National Medical Center  
Juan Tamayo, Chair of the National Council for Nephrology, Mexico.  
Eduardo Pesqueira Villegas, Director of Health Digital Systems-HD, Mexico.  
Heladio Gerardo Verver y Vargas Ramírez, Legislator from the Federal Congress, Former Minister of Health of Zacatecas
- 1:45 pm Break

- 2:00 pm Executive Session/Review of Resource File
- 3:00 pm Meeting 1 with Faculty and Other Personnel on Curricular Issues (professional degrees)  
 Juan Fco. Molina, Master in Public Health (MPH), Health Administration  
 Margarita Márquez, MPH, Social and Behavioral Sciences  
 Angélica Angeles, MPH, Epidemiology  
 Albino Barraza, MPH, Environmental Health  
 Janet Real, Residence in Public Health and Preventive Medicine  
 Nidia Sosa, Responsible of the Community Practice Operations Office  
 Elsa Yunes, Academic Responsible for the Community Practice program  
 Rosa Isela Ontiveros, Member of the community of Rio Escondido, Acatlipa, Temixco, Morelos  
 Esteban Cruz, Responsible for the Office of Curriculum Administration
- 3:45 pm Break
- 4:00 pm Meeting 2 with Faculty and Other Personnel on Curricular Issues (professional degrees)  
 Luz Arenas, MPH, Social and Behavioral Sciences  
 Juan Fco. Molina, Master in Public Health (MPH), Health Administration  
 Elizabeth Ferreira, MPH, Infectious Diseases  
 Rosaura Atrisco, MPH, on line program  
 Lourdes Gpe. Flores, MPH, Epidemiology, executive format  
 Mary Carmen Baltazar, MPH, Environmental Health  
 Gustavo Nigenda, Doctorate in Public Health  
 Juan Rauda, Epidemiology, Executive program  
 Jesús Vértiz, Health systems and policies, Executive program  
 Jorge Montes, Biostatistics area and community practicum advisor for the MPH program  
 Citlali Archundia, Responsible of the Office of Curriculum Design and faculty development  
 Miguel Angel Reyes, Department of Student Affairs  
 Bruma Palacios, Responsible of the Office for Academic Operations
- 4:45 pm Break
- 5:00 pm Meeting 3 with Faculty and Other Personnel on Curricular issues (academic and other professional degrees)  
 Gabriela Torres, General Coordinator of the Master of Health Sciences (MHS) Committee  
 Mario Flores, MHS, Nutrition  
 Horacio Riojas, MHS, Environmental Health  
 Vicente Madrid, Doctorate in Health Sciences (DHS), Infectious Diseases  
 Hortencia Reyes, DHS, Health Systems  
 Teresita Gonzáles de Cosío, Doctorate in Public Health Sciences in Population Nutrition  
 Julia Blanco, Environmental Health  
 Blanca Pelcastre, Social and Behavioral Sciences  
 Ana Burguete, Epidemiology  
 Luisa Torres, Epidemiology  
 Adriana Ramírez, Secretary for the Doctoral Program Committee and Responsible for the Office of Academic Administration
- 5:45 pm Executive Session
- 6:30 pm Adjourn

**Wednesday, February 8, 2012**

- 9:15 am Meeting on Executive and Online Degree Programs  
 Gustavo Nigenda, Doctorate in Public Health  
 Rosaura Atrisco, MPH on line program  
 Juan Rauda, MPH executive program  
 Noé Guarneros, Professor and practicum advisor of the Social and Behavioral sciences area in the MPH executive program  
 Clara Juárez, Professor of the Social and Behavioral Sciences area in the MPH executive program  
 Aurelio Cruz, Professor of Epidemiology in the MPH executive and on-line program  
 Mirza Margarita Tec Kumul, student from the MPH online program  
 Baltazar León\*\*, Employer from the MPH on line students and Director of Planning Office in the state of Tabasco  
 Mónica Cureño\*\*, Employer from the MPH executive students and Head of the Epidemiological Surveillance Unit in the Hospital Juárez of Mexico  
 Irma Sánchez, Responsible of the Office for Design of Learning Environments  
 Liusmary Ojeda, Responsible for the Operation of Distance Education  
 Cynthia Rosas, Responsible for Educational Innovation Office
- 10:00 am Meeting with Faculty

Héctor Lamadrid  
Lina Sofia Palacio  
Marcia Galván  
Luisa María Sánchez  
Lorena Castillo  
Rosibel Rodríguez  
*Lourdes Flores Luna*  
Sandra Leticia Rodríguez  
Mary Carmen Baltazar  
Javier Idrovo  
Irene Parada del Toro  
César Infante

11:00 am Break

11:15 am Meeting on Research  
Eduardo Lazcano, Chair of the Research Committee  
Roxana Solis. Responsible for the SIID-Information System for research and teaching activities  
Salvador Villalpando  
Julieta Ivone Castro  
Mara Tellez, Program and Health Policies Evaluation research line  
Juan Rivera, Malnutrition research line  
Cristina Herrera, Vulnerable groups research line  
Horacio Riojas, Environmental Health research line  
Jesús Silva, Public Health Drugs research line  
María de Lourdes Campero, Sexual and reproductive health research line  
Nelly Salgado, Researcher in medical sciences level F, Social and Behavioral Sciences  
Armando Arredondo, Researcher in medical sciences level F, Health systems and Policies  
Lizbeth López, Researcher in medical sciences level F, Epidemiology

12:00 pm Break

12:15 pm Lunch with Students  
Javier Alquicira, MPH-Health Administration  
Jimena Fritz, Doctorate in Health Sciences, Epidemiology  
Yanet Fortunata López, MPH  
Jesús Alberto Salas, Residence in Public Health & Preventive Medicine  
Claudia Ivonne Ramírez, Doctorate in Public Health Sciences in Population Nutrition  
Ricardo Baruch Domínguez, MPH-Social and Behavioral Sciences  
Zafiro del Carmen Andrade, MHS-Health Systems  
Lizbeth San Román, MPH-Infectious Diseases  
Luis Segura, MPH  
Isabel Santiago, MPH Social and Behavioral Sciences

1:15 pm Executive Session

3:00 pm Meeting on Service and Workforce Development  
Juan Eugenio Hernández, Director of the Research Center in Information for Public Health Decisions  
Edgar Leonel González, Responsible for Academic Support at the CENIDSP.  
Juan Pablo Gutiérrez, Director of the Research Center in Evaluation and Surveys  
Luz Miriam Reynales, Responsible for the Department of Tobacco Research  
Jesús Martínez Barneche, Full time professor and researcher for the Infectious Diseases Area  
Teresa Téllez, Responsible for the Operation of the Summer Annual Program  
Mónica García, Director for Prevention and Health Promotion in the Ministry of Health at the State of Oaxaca.  
Jorge Sebastián H., Regional Coordinator for Health Services, State of Tamaulipas  
Mario Márquez, Ministry of Health, State of Jalisco  
Luis Enrique Rodríguez, Office of Continuing Education Projects  
Miguel Mejía, Office of Development and Virtual Continuing Education

3:45 pm Break

4:00 pm Meeting on Faculty Policies and Procedures and Faculty Diversity  
Ignacio Domínguez, Director of Administration and Finance Office  
Karla Avril Osnaya. Responsible for the Office of Human Resources  
Eduardo Lazcano, Faculty Evaluation and Promotion Committee  
Humberto Lanz, Faculty Evaluation and Promotion Committee  
Lionor Rivera, Reproductive Health  
Julio César Campuzano, Biostatistics  
Jesús Silva, Full time professor for the Infectious Diseases area.  
Adriana Ramírez, Coordinator of the PEDD program.

Esteban Cruz, Responsible for the Office of Curriculum Administration  
Bruma Palacios, Responsible of the Office for Academic Operations.  
Citlali Archundia, Responsible of the Office of Curriculum Design and faculty development

4:45 pm Meeting on Student Recruitment, Advising and Career Counseling and Student Diversity  
Socorro Parra, Full time professor and tutor for Epidemiology area  
Nayeli Macías Morales, Full time professor and tutor for Nutrition and Health area  
Belkis Aracena, Master in Health Sciences (MHS), Health Systems  
Carlos Conde, MHS, Infectious Diseases  
José Luis Torres\*\*, MHS, Vector Borne Diseases  
Emanuel Orozco, Health Systems, Policies and Services  
Blanca Pelcastre, Intercollegiate Faculty College for Doctorate in Public Health  
Hector Lamadrid, Biostatistics  
Sandra Treviño, Education and Health  
Lorena Castillo, Responsible for the Department of Student Affairs  
Carlos Linares, Responsible for Academic Exchange program  
Luz María Lara, Responsible for the Tutoring Program

5:30 pm Meeting with Alumni  
Eduardo Ortiz, MHS, Epidemiology  
Luz Adriana Nava, MPH, Social and Behavioral Sciences  
Kirvis Torres Poveda, Doctorate in Public Health Sciences, Infectious Diseases  
Gloria Fernández\*\*, MHS, Infectious Diseases  
Ma. Cecilia González, Doctorate in Public Health Sciences, Epidemiology  
Luis Meave Gutiérrez\*\*, MPH, Health Administration  
Pierre Abis\*\*, MPH, Epidemiology  
Rubén López, MHS, Epidemiology

6:00 pm Executive Session

6:30 pm Adjourn

**Thursday, February 9, 2012**

9:00 am Executive Session

1:00 pm Exit Interview