

SPECIAL COMMUNICATIONS

APIC/CHICA-Canada infection control and epidemiology: Professional and practice standards

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The Professional and Practice Standards document was developed by the Practice Standards Task Force, which was appointed by the Boards of the Association for Professionals in Infection Control and Epidemiology, Inc (APIC) and Community and Hospital Infection Control Association-Canada (CHICA-Canada). The Task Force was appointed in 1997 to develop practice standards for the infection control profession, because no such document previously existed. The APIC and CHICA-Canada boards recognized that without written standards of professional practice, regulatory and accrediting agencies and health care consulting firms have no written reference from which to define infection control competency. The document was developed with input from APIC and CHICA-Canada membership. Both organizations used extensive methods to obtain input from all members.

The document is in 2 sections and addresses infection prevention and control practices as well as professional standards for the infection control professional. It can be used by infection control professionals to demonstrate value as professionals and to define and demonstrate the value of their infection control program.

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This document was developed by the Association for Professionals in Infection Control and Epidemiology, Inc (APIC), and the Community and Hospital Infection Control Association-Canada (CHICA-Canada). Both professional organizations believe they have a responsibility to their memberships and the public they serve to develop practice and professional standards.

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Standards are authoritative statements that reflect the expectations, values, and priorities of the profession. While voluntary, these standards provide direction and a framework for the evaluation of practice in meeting the needs of the customers served. Standards also define the profession's accountability to the public, including the consumer, community, health care worker, and the health care industry, in terms of desired outcomes for which infection control professionals (ICPs) are responsible. These standards can be used to identify areas for professional growth, develop job descriptions, and provide criteria for performance evaluations.

The purpose of these standards is to define conditions that, if satisfied, will increase the likelihood that high-quality

ity infection control practice will be provided. The standards may be applied to a broad spectrum of practice settings. They provide the basis for planning educational programs designed to facilitate the ICP's ability to achieve the standards, as well as address career advancement objectives. This is particularly important because ICPs come from different professional disciplines and with varying levels of educational preparation and experience. The professional organizations believe that a baccalaureate degree is the minimum educational preparation for entry into the professional role. However, in recognition of the current demographics of the field, ICPs without a baccalaureate degree are considered compliant with entry-level educational standards as long as certification is maintained.

These standards include key criteria that can be used to evaluate both the competency of practice and the individual. In general, the standards will remain stable over time as they reflect the organizations' philosophy and values; the criteria, however, will be reviewed periodically to ensure that they incorporate and address current scientific knowledge, clinical practice, and technology.

The key criteria represent multiple skills considered necessary to meet the demands of the evolving health care environment. It is expected that the ICP will meet or exceed the criteria associated with the Professional Standards (PS) and be *capable* of meeting those associated with the Infection Control Practice Standards (ICPS) regardless of applicability to their specific practice setting.

Not all members of the infection control workforce will meet the criteria herein. The professional associations promulgating these standards are committed to meeting the needs of the entire infection control community whether their professional goals focus on skill attainment, maintenance, or advancement.

This document addresses comprehensive practice standards for infection surveillance, prevention, and control (ISPC) programs across the continuum of care and includes professional standards for the ICP. Another document developed by the Society for Healthcare Epidemiology of America, Inc (SHEA), and APIC describes recommendations for the infrastructure and essential activities for infection control in hospitals. These documents together provide a framework for program and practice assessment.

PROFESSIONAL STANDARDS

Professional Standards (PS) describe a level of individual competence in the professional role. Professionals strive to maintain integrity and a high degree of competency through education and training. Professionals are expected to engage in activities appropriate to their education, role, and practice setting. Key criteria for each standard can be used for professional performance evaluation.

PS1. Professional accountability

The ICP is responsible for the development, evaluation, and improvement of his/her own practice in relation to the practice standards for infection control.

Key criteria

- Establishes and works toward professional goals and objectives
- Performs regular self-evaluations to identify strengths and areas for improvement
- Seeks constructive feedback regarding professional practice
- Participates in professional organizations

PS2. Qualifications

The ICP meets certain minimum qualifications to enter the profession.

Key criteria

- Has knowledge and experience in areas of patient care practices, microbiology, asepsis, disinfection/sterilization, adult education, infectious diseases, communication, program administration, and epidemiology
- Has a baccalaureate degree*
- Attends a basic infection control training course within the first year of entering the profession

PS3. Professional development

The ICP acquires and maintains current knowledge and skills in the area of infection prevention and control and epidemiology.

Key criteria

- Becomes certified in infection control within 5 years of entry into the profession and maintains certification
- Advances his/her knowledge and skills through continuing education
- Pursues formal education in health care epidemiology
- Maintains a knowledge base of current infection prevention and control information through peer networking, Internet access, published literature, and/or professional meetings
- Advances the field of infection prevention and control and epidemiology through support of related research

*The professional organizations believe that a baccalaureate degree is the minimum educational preparation for this professional role. As of October 1998, current ICPs without a baccalaureate are considered to meet the qualification standard as set forth in PS2 as long as certification in infection control is maintained.

PS4. Leadership

The ICP serves as a leader, mentor, and role model for the profession.

Key criteria

- Shares knowledge and skills with others
- Recognizes and supports the importance of research in shaping the practice of infection control
- Promotes the value of the scientific basis of infection control and epidemiology
- Brings creativity and innovation to practice
- Seeks opportunities to influence policymaking bodies

PS5. Ethics

The ICP makes decisions and performs activities in an ethical manner.

Key criteria

- Maintains confidentiality
- Practices in a nonjudgmental, nondiscriminatory manner and is sensitive to diversity
- Recognizes and resolves conflict of interest situations
- Supports the profession's code of ethics

PRACTICE STANDARDS

Infection Control Practice Standards (ICPS) describe practice competence. It is beyond the scope of these standards to describe all infection control practice settings. ICPs should strive to incorporate relevant components of these standards to their own practice. Key criteria for each standard can be used in program development, evaluation, and enhancement.

ICPS1. Infection prevention and control practice

The ISPC program consists of effective prevention and control activities that are specific to the practice setting, the population served, and the continuum of care.

Key criteria

- Integrates surveillance findings into the organization's plan for improvement of practice and patient outcomes
- Reviews, analyzes, and applies existing regulations, standards and/or guidelines of applicable professional organizations and governmental agencies
- Recommends new or revised practices or procedures based on currently accepted, evidence-based infection prevention and control strategies

- Reviews, analyzes, and applies pertinent information from current scientific literature and publications
- Integrates relevant public health issues into practice

ICPS2. Epidemiology

The ISPC program applies epidemiologic principles and statistical methods, including risk stratification, to identify target populations, analyze trends and risk factors, and design and evaluate prevention and control strategies.

Key criteria

- Conducts surveillance and investigations by using epidemiologic principles
- Uses appropriate statistical techniques to describe the data, calculate rates, and critically evaluate significance of findings

ICPS3. Surveillance

The ISPC program uses a systematic approach to surveillance to monitor the effectiveness of prevention and control strategies that are consistent with the organization's goals and objectives.

Key criteria

- Develops a surveillance plan based on the population(s) served, services provided, and previous surveillance data, if available
- Ensures surveillance design is consistent with selected internal or external comparative database(s)
- Selects indicators based on the projected use of the data (ie, external benchmarking and/or internal trending)
- Uses standardized definitions for the identification and classification of events, indicators, or outcomes
- Analyzes surveillance data, including the calculation of risk-adjusted rates appropriate to the indicator(s) when sufficient data are available
- Reports epidemiologically significant findings to appropriate customers*
- Periodically evaluates the effectiveness of the surveillance plan and modifies as necessary

ICPS4. Education

The ISPC program serves as an educational resource for infection prevention and control and health care epidemiology.

*Typically defined by the populations (internal and external) served by the health care organization and specified within the infection control plan

Key criteria

- Routinely assesses the educational needs of customers and develops educational objectives and strategies to meet those needs
- Collaborates in the development, delivery, and evaluation of educational programs or tools that relate to infection prevention, control, and epidemiology
- Continuously evaluates the effectiveness of educational programs and learner outcomes

ICPS5. Consultation

The ISPC program provides expert knowledge and guidance in epidemiology and infection prevention and control-related issues.

Key criteria

- Maintains access to current information on infection prevention and control and epidemiology
- Provides knowledge on the function, role, and value of the program to customers
- Collaborates in the integration of pertinent regulatory requirements, accreditation standards, guidelines, and current ISPC practice into policies and procedures
- Ensures that findings, recommendations, and policies of the ISPC program are disseminated to appropriate groups or individuals
- Provides consultation to administration, committees, staff, and managers on issues regarding infection prevention and control and epidemiology

ICPS6. Performance improvement

The ISPC program is an integral component of the plan for improvement of practice and patient outcomes.

Key criteria

- Identifies opportunities for improvement based on indicators, process and outcome measures, other findings, and/or observations
- Coordinates the organization's infection prevention and control improvement activities
- Participates in the organization's multidisciplinary improvement strategies
- Contributes epidemiologic skills to improvement processes

ICPS7. Program management and evaluation

The ISPC program systematically evaluates the quality and effectiveness of the ISPC plan appropriate to the practice setting.

Key criteria

- Develops and annually reviews a program plan with measurable objectives
- Determines appropriate resources needed to accomplish the proposed plan*
- Communicates any resource variance to administration and modifies program plan if needed
- Periodically evaluates the effectiveness of the ISPC program
- Assesses customer needs and satisfaction and integrates findings into the ISPC program

ICPS8. Fiscal responsibility

The ISPC program incorporates the principles of fiscal responsibility.

Key criteria

- Considers both clinical outcomes and financial implications when making recommendations for changes in practice
- Evaluates use of newly developed ISPC technology or products for cost-effectiveness
- Integrates cost accounting data into the analysis of nosocomial infection reports
- Documents cost reduction in the organization through ISPC program activities

ICPS9. Research

The ISPC program applies relevant research† findings to infection prevention and control practice.

Key criteria

- Critically evaluates research and incorporates findings
- Disseminates relevant published research findings through practice, education, or consultation
- Organizes and shares findings from surveillance activities or outbreak investigations
- Participates in infection prevention and control-related research independently or collaboratively
- Publishes or presents research findings to assist in advancing the field of infection prevention and control and epidemiology

References

1. Scheckler WE, Brimhall D, Buck AS, Farr BM, Friedman C, Garibaldi RA, et al. Requirements for infrastructure and essential activities of infection control and epidemiology in hospitals: a Consensus Panel Report. *AJIC Am J Infect Control* 1998;26:47-60.

*The APIC Research Foundation and the CDC are studying appropriate staffing needs.

†May include informal epidemiologic studies such as outbreak/cluster investigations or surveillance findings

2. American Nurses Association. Standards of Clinical Nursing Practice. Washington (DC): ANA; 1991.
3. The role of the infection control practitioner—CHICA-Canada. Can J Infect Control 1996;11:36-7.
4. Applied Management Professionals for Certification Board of Infection Control. A national job analysis of the infection control professional. Final report. Washington (DC): Applied Management Professionals for Certification Board of Infection Control; 1997.

APIC CODE OF ETHICS

APIC believes strongly that its members must uphold the highest standards of ethical, professional behavior

- To hold paramount the safety, health, and welfare of the public in the performance of professional duties
- To act in such a manner as to uphold and enhance personal and professional honor, integrity, and dignity of the profession
- To treat with respect and consideration all persons, regardless of race, religion, gender, abilities, age, or national origin
- To engage in infection control and epidemiologic research in a professional manner
- To collaborate with and support other infection control professionals to improve competency in the science of infection control and epidemiology
- To build professional reputations on the merit of services and refrain from competing unfairly with others
- To strive constantly to educate constituents regarding professionalism and skills in infection control and epidemiology
- To be in compliance with the bylaws, laws, and regulations, domestic or foreign, that are applicable to APIC
- To refuse gratuities, gifts, or favors that might impair or appear to impair professional judgment, or offer any favor, service, or thing of value to obtain special advantage