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# Certification in Infection Prevention and Control

*Value of Certification – what's in it for me?*

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CBIC Board Director  
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# Disclosures

- None of the presenters at this session have received financial support or in-kind support from a commercial sponsor.
- Sandra Callery is President – elect for CBIC
- None of the presenters have any other potential conflicts of interest to declare

# What Certification means for me...



# Certification Board in Infection Prevention and Control and Epidemiology (CBIC)

A voluntary, independent, multidisciplinary Board

**Mission:** Provide pathways to assess and maintain infection prevention competency

**Vision:** Healthcare without infection through verifiable competency

# CBIC, ctd.

Established by the Association for Professionals in Infection Control and Epidemiology, Inc. (APIC) in 1981; CBIC is an affiliate of APIC

Accredited by the National Commission for Certifying Agencies (NCCA)

Member of the Institute for Credentialing Excellence (ICE), formerly National Organization for Competency Assurance (NOCA)



# CBIC by the numbers

- Currently 8,384 ICPs certified in Infection Prevention and Control (CIC<sup>®</sup>) in over 40 countries
- Over 271 associate Infection Prevention and Control (a-IPC<sup>™</sup>)



# Why Certify?

- Reaffirms that through study and hard work, certificants attain an internationally recognized level of knowledge in the infection prevention and control field
- Supports future knowledge and skills
- Enhances professional credibility and prestige
- Grants personal satisfaction



## Brief Report

## Value of certification in infection prevention and control

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## Key Words:

Competency  
Compliance  
Professional standards  
Career Growth  
Certification

The Certification Board of Infection Control and Epidemiology conducted a marketing research study to determine the perceived value of the certification in infection prevention and control among infection prevention professionals and other stakeholders. Four thematic categories were identified: certification process and standards; professionalism, competency, and career growth; patient care, safety, infection prevention and control; and regulatory compliance. Respondents stated that certification demonstrated professional competency, increased career growth, improved regulatory compliance, was important in influencing legislation, and improved the practice of infection prevention and control. Opportunities were to reevaluate eligibility criteria and examination difficulty; demonstrate how certification increases financial compensation and organizational recognition; and offer recertification through continuing education based on the study findings. Strategic recommendations and next steps were incorporated into the strategic plan. This article is an overview and summarizes the study findings.

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Specialty certification demonstrates competency and commitment to the profession.<sup>1</sup> Certification validates knowledge using standardized testing methods. Accredited certification further demonstrates the quality and integrity of the certification process. The Certification Board of Infection Control and Epidemiology (CBIC) administers the only nationally accredited certification in infection prevention and control (IC). CBIC is accredited by the National Commission on Certifying Agencies, a member of the Institute for Credentialing Excellence. The National Commission on Certifying Agencies accredits certifying agencies to ensure the health, welfare, and safety of the public through accreditation. CIC is one measure of competency and mastery of health care infection prevention and control (IPC) knowledge. Competency defines the professional role.<sup>1</sup> There are over 7,000 individuals with CIC. Although most are from the United States and Canada, there is a growing need for certification outside North America including Europe.<sup>2</sup>

Infection preventionist (IP) competencies assessed during the CIC examination are identification of infectious disease process; surveillance and epidemiologic investigation; preventing and controlling

the transmission of infectious agents and health care-associated infection; employee and occupational health; management and communication; education and research; environment of care; and cleaning, sterilization, disinfection, and asepsis.<sup>3</sup> The Association for Professionals in Infection Control and Epidemiology (APIC) developed the IP Competency Model in 2012. That model states the transition from novice to proficient is accomplished once one passes the IC examination.<sup>4</sup> This statement supports the idea that certification is an important career milestone using the framework of the APIC Competency Model.

Certification represents both the individual's and the institution's commitment for continual improvement of IPC practices as well as the certificant's contribution to health care personnel and patient safety.<sup>5</sup> There are many ways to measure the value of certification. Bernard et al<sup>6</sup> described higher overall self-assessed competency among certified respondents ( $P < .001$ ). Landers et al<sup>7</sup> reported the salary of those with the CIC credential was 25% higher than those without CIC credential (\$85,911 vs \$68,817;  $P < .01$ ). Carrico et al<sup>8</sup> found that those who had IC scored significantly higher in overall program performance in 5 major program areas than respondents who were not certified (54% vs 43%;  $P = .003$ ). The 5 major program areas were immunization program management; vaccines provided to health care personnel; vaccine handling practices; training provided for the individual(s) responsible for the program; and quality indicators for the program. Krein et al<sup>9</sup> reported that hospitals with a certified IP on staff had a higher safety

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Conflicts of interest: James F. Marx, Sandra Callery, and Roy Boukdjian are members of the Certification Board of Infection Control and Epidemiology, Inc.

# AJIC – Value of Certification

- CBIC used a market research study design to determine the perceived value of the certification in infection prevention and control (CIC) among infection prevention and control professionals and other stakeholders.
- Four thematic categories were identified:
  - certification process and standards
  - professionalism, competency, and career growth
  - patient care, safety, infection prevention and control
  - regulatory compliance.

# Value of Certification

American Journal of Infection Control 47 (2019) 1265–1269

Infection Preventionists (IP) with CIC:

- √ - Higher overall self-assessed competency
- √ - Salaries 25% higher than non-CIC IP
- √ - Scored significantly higher in program performance in the 5 major Infection Prevention and Control program areas including immunization programs and educational offerings
- √ - USA jurisdictional scan showed that 77% of potential employers either required CIC **or** “CIC preferred” in their job postings.

# Why the CIC®?

- Represents commitment to continual improvement of infection prevention and control functions and their contribution to healthcare and patient safety
- Fosters a recognized professional community that helps to reduce infections in healthcare settings
- The *only* accredited certification in infection prevention and control

# Objectives of Certification

- Provides standardized measure of current knowledge required for persons practicing infection prevention and control
- Encourages individual growth and study, thereby promoting professionalism
- Formally recognizes professionals in infection prevention and control who fulfill the requirements for certification and recertification

# Use of the CIC<sup>®</sup> Credential

- Only individuals who have successfully passed the proctored, initial certification examination and have maintained current certification, through the recertification process\* may use the CIC<sup>®</sup> credential.
- The CIC<sup>®</sup> credential may be used on resumes, business cards, letterhead, and other professional communications.
- The CIC<sup>®</sup> credential may not be used for product or other endorsements.

\*Recertification is obtained by examination or continuing education.

# The Certification Process



# The CIC<sup>®</sup> Examination

- Aligned with recognized practice standards for Infection Control and Healthcare Epidemiology
- The *only* standardized measurement of essential knowledge, skills, and abilities expected of infection prevention and control professionals in North America
- Developed from a practice analysis of Infection Prevention and Control Professionals in the U.S., Canada and other countries
- Recognized by APIC and IPAC Canada as the standard for certification in infection control

# Applying for the CIC<sup>®</sup> Examination

- Ensure eligibility requirements are met
- Review the *Candidate Handbook* for additional information, applications, and suggested reference materials
- Apply online at [www.cbic.org](http://www.cbic.org) or submit a paper application to the CBIC office
- Pay \$375<sup>US</sup> examination and application fee

# Taking the Examination

- Proctored examination
- Required for initial certification
- Administered at assessment centers throughout the United States, Canada and other international sites
- 90-day window from application approval to exam completion
- 150 multiple choice questions; 135 of which are scored
- ALL examination questions are the copyrighted property of CBIC

**Eligibility**

# Eligibility for Certification

Successful certification indicates competence in the actual practice of infection prevention and control and healthcare epidemiology, and is intended for individuals who are actively accountable for the infection prevention and control program within their current position.

# Eligibility Requirements

1. Completed post-secondary education in a health-related field including but not limited to medicine, nursing, laboratory technology, or public health. Post-secondary includes public or private universities, colleges, community colleges.
2. Direct responsibility for the infection prevention program activities in a healthcare setting
3. Work experience, defined as active engagement in infection prevention, determined by a current job description, for compensation, for a minimum of:
  - At least one year full-time employment  
OR
  - Two (2) years part-time employment  
OR
  - Completed 3,000 hours of infection prevention work experience earned during the previous three (3) years

# Eligibility Requirements

Required IPAC Practice elements include:

- Identification of infectious disease processes
- Surveillance and epidemiologic investigation
- Preventing and controlling the transmission of infectious agents
- Environment of care
- Cleaning, disinfection, sterilization, and asepsis

**AND** at least two (2) of the remaining three (3) components:

- Employee / occupational health
- Management and communication
- Education and research

# Eligibility for Recertification

- Individuals who are currently certified are *automatically eligible* for recertification every 5 years.
- Recertification can be obtained by:
  - Examination
  - Continuing Education (IPUs)



Associate in Infection Prevention  
and Control (a-IPC™)

# Associate – Infection Prevention and Control (a-IPC) Examination

- The perfect stepping stone to prove a candidate's foundational knowledge, interest and dedication to the field and provide him or her with the confidence to launch a career in IPC.
- Ideal for a candidate who would like to learn more about infection prevention and control and apply this knowledge to his or her current role or to evolve into another role.

## a-IPC Eligibility for Certification

- Intended for those individuals who do not meet the CIC<sup>®</sup> eligibility requirements and others interested in IPC
- No experience or job-specific requirements needed to apply
- \$295 application fee (US dollars)

# a-IPC Examination

- Proctored examination
- 100 questions total, 85 questions scored
- 120 minutes to take the exam
- Same content areas tested as the CIC®

# a-IPC Eligibility for Recertification

- The a-IPC is not renewable. Once the three-year period is up, it is expected that candidates will continue on to get their CIC<sup>®</sup>.

**Passing the a-IPC<sup>™</sup> exam does not automatically qualify you for the CIC<sup>®</sup>.  
You must still meet the CIC eligibility requirements to sit for the CIC<sup>®</sup>.**

Preparing for the examination

# Preparing for the Examinations

- Download the respective Content Outline
- Create a study plan
- Review reference material (as listed in the Candidate Handbook), journals and standards, including APIC and IPAC Canada's Practice Standards
- Form a study group amongst your peers
- Visit CBIC's [Exam Prep Resources](#) page

# CIC Examination Content Outline

Content Domain	Items
Identification of Infectious Disease Processes	22
Surveillance and Epidemiologic Investigation	24
Preventing/Controlling the Transmission of Infectious Agents	25
Employee/Occupational Health	11
Management and Communications	13
Education and Research	11
Environment of Care	14
Cleaning, Sterilization, Disinfection, Asepsis	15



# a-IPC Examination Content Outline

Content Domain	Items
Identification of Infectious Disease Processes	14
Surveillance and Epidemiologic Investigation	15
Preventing/Controlling the Transmission of Infectious Agents	16
Employee/Occupational Health	7
Management and Communications	8
Education and Research	7
Environment of Care	9
Cleaning, Sterilization, Disinfection, Asepsis	9

# Exam References

## Primary References:

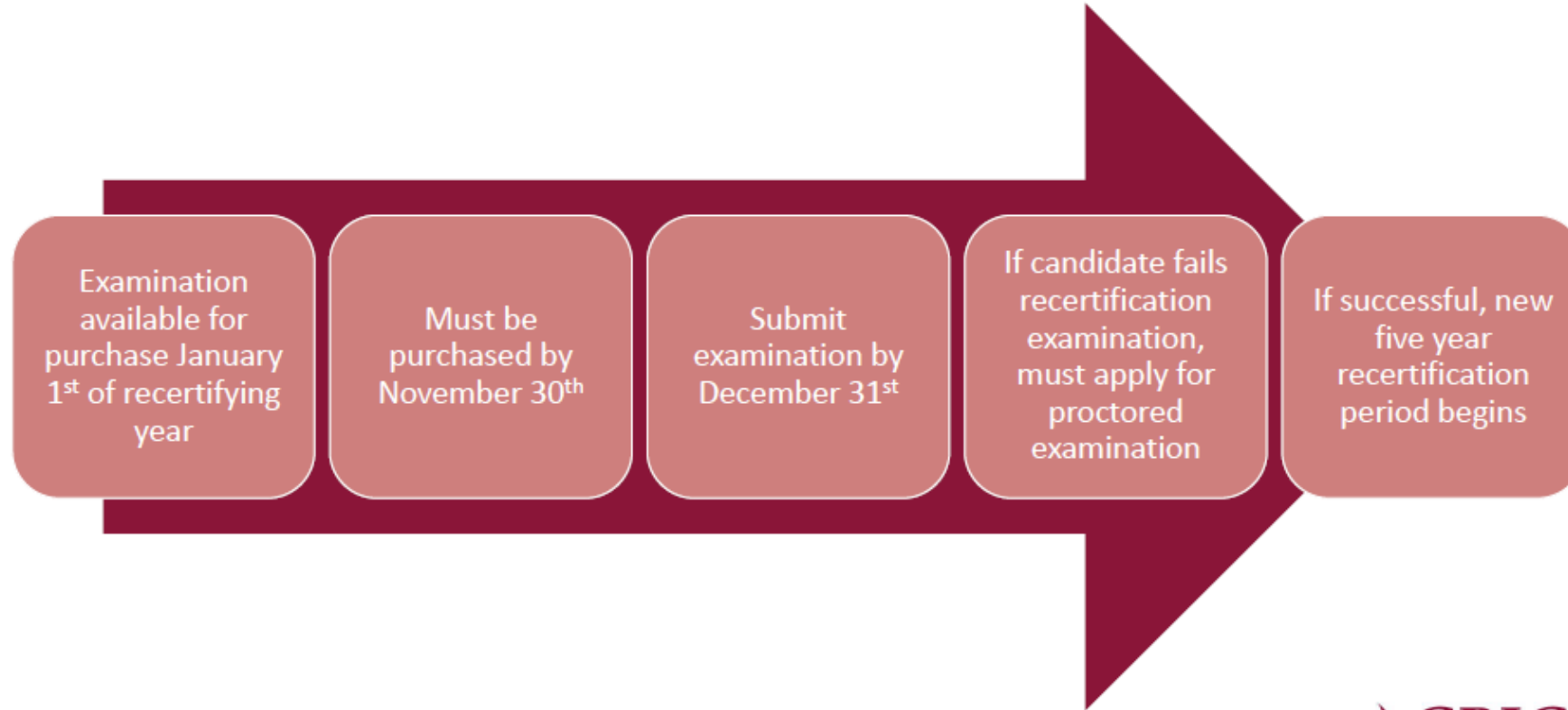
- *APIC Text of Infection Control and Epidemiology*, 4th ed., Volume I, Volume II and Volume III, APIC, Washington, DC, 2014.\*\*
- Kulich P, Taylor D, eds. *The Infection Preventionist's Guide to the Lab*, APIC, Washington, DC, 2012.
- Heymann, D., ed. *Control of Communicable Diseases Manual*, 20th ed., Washington, DC: American Public Health Association; 2015.
- Chachere, Catherine Alesich and Angela S. Hernandez. *Ready Reference for Microbes*, 4th ed., APIC; 2018.

# The Recertification Process

# Recertification Examination

- Self-administered (non-proctored), multiple choice, internet-based from any location
- Questions are based on the most current CBIC practice analysis
- The purpose of the recertification examination is to demonstrate continued knowledge mastery in the field of infection prevention and control

# Recertification by Examination Timeline



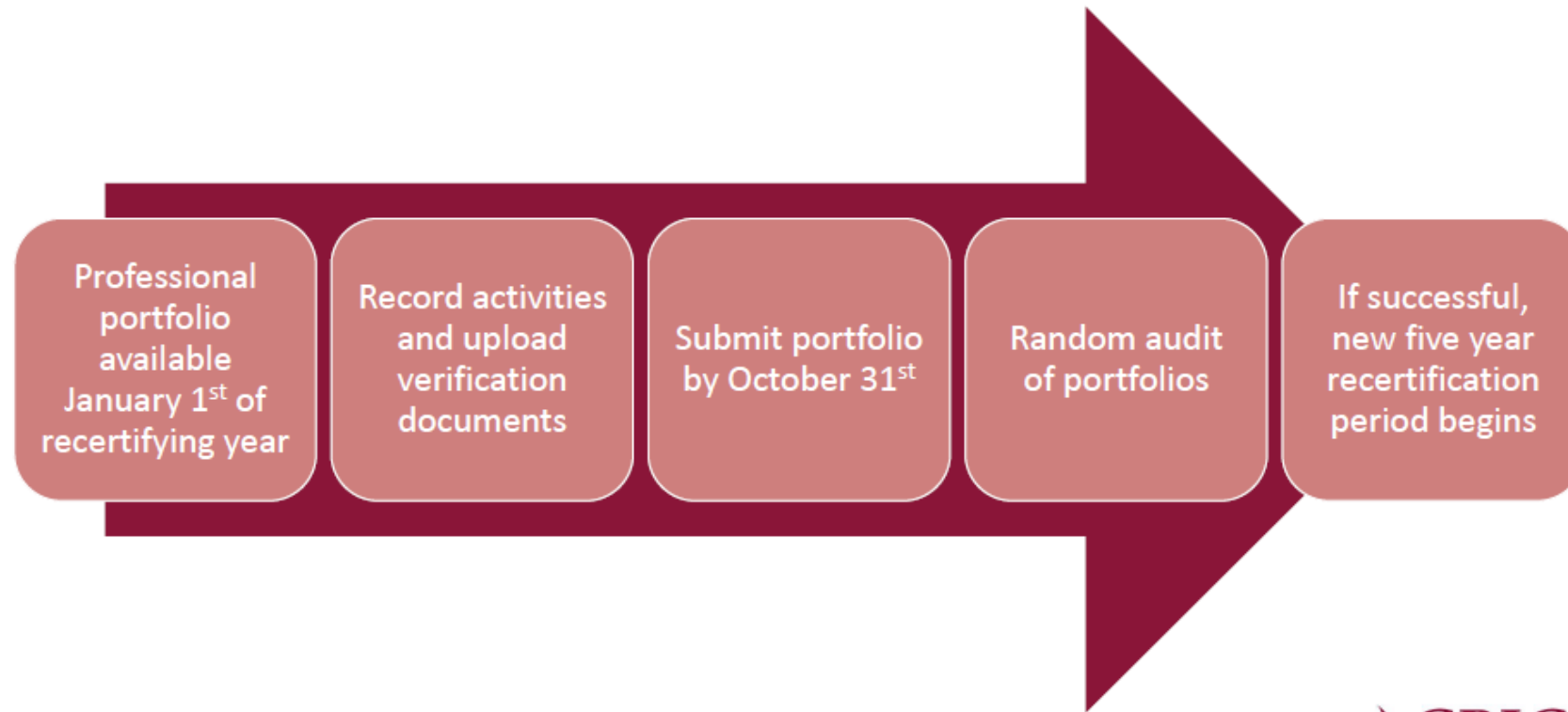
# Recertification by Continuing Education

- Domain-specific Infection Prevention Units (IPUs)
- Available to all candidates who hold the CIC® and are up for recertification beginning in 2020
- Candidates can accumulate IPUs at any point during 5-year recertification period from the *submission date* of previous recertification examination or IPUs portfolio
- Candidates must submit professional portfolios to equal a minimum of 40 IPUs

# Examples of Potential Accredited Providers



# Recertification by IPU's Timeline





# Resources

## CBIC Executive Office:

555 East Wells Street  
Suite 1100  
Milwaukee, WI 53202  
Phone: (414) 918-9796  
Fax: (414) 276-3349  
Web site: [www.cbic.org](http://www.cbic.org)  
Email: [info@cbic.org](mailto:info@cbic.org)

## Testing Company:

### Prometric

Phone: (800) 278-6222 (toll free  
U.S., U.S. Territories, and Canada)  
Website: [www.prometric.com/cbic](http://www.prometric.com/cbic)



Questions?