Name: _____

Date: _____

Competency Self-Assessment Activity for Novice or Becoming Proficient IPs

CBIC Core Competencies – APIC Competency Model Future-Oriented Competency Domains

Self-Assessed Rating Scale and Comfort Level (Knowledge/Skills/Experience/Confidence):
1. No idea 2. Unsure 3. Some knowledge 4. Know it

Competency categories, CBIC domains	IP practice areas as identified in CBIC practice analysis	Assessment of personal competency in each practice area	For each category list one specific question you have and/or learning goal (something you would like to learn more about!)
For more details on the CBIC exam content categories visit https://www.cbic.org/CBIC/Exam-Prep-Resources.htm			
Identification of infectious disease processes (CBIC) *22 exam items	a. Interpret the relevance of diagnostic and laboratory reports	1 2 3 4	• Specific IPC question you have (could be related to your own facility) and/or learning goal (area you want to learn more about).
	b. Identify appropriate practices for specimen collection, transportation, handling, and storage	1 2 3 4	
	c. Correlate clinical signs and symptoms with infectious disease process	1 2 3 4	
	d. Differentiate between colonization, infection and contamination	1 2 3 4	
	e. Differentiate between prophylactic, empiric and therapeutic uses of antimicrobials	1 2 3 4	
Surveillance and epidemiologic investigation (CBIC) *24 exam items	a. Design of surveillance systems	1 2 3 4	• Specific IPC question you have (could be related to your own facility) and/or learning goal (area you want to learn more about).
	b. Collection and compilation of surveillance data	1 2 3 4	
	c. Interpretation of Surveillance Data	1 2 3 4	
	d. Outbreak investigation	1 2 3 4	
Preventing /controlling the transmission of infectious agents (CBIC) *25 items	a. Develop evidence-based/informed infection prevention and control policies and procedures	1 2 3 4	• Specific IPC question you have (could be related to your own facility) and/or learning goal (area you want to learn more about).
	b. Collaborate with relevant groups in planning community/facility responses to biologic threats and disasters (e.g., public health, anthrax, influenza)	1 2 3 4	
	c. Identify and implement infection prevention and control strategies related to • Hand hygiene	1 2 3 4	
	• Cleaning, disinfection and sterilization	1 2 3 4	
	• Wherever healthcare is provided (e.g. patient care units, operating rooms, ambulatory care center, home health, pre-hospital care)	1 2 3 4	

	• Infection risks associated with therapeutic and diagnostic procedures and devices (e.g., dialysis, angiography, bronchoscopy, endoscopy, intravascular devices, urinary drainage catheter)	1 2 3 4	
	• Recall of potentially contaminated equipment, food, medications, and supplies	1 2 3 4	
	• Transmission-based Precautions	1 2 3 4	
	• Appropriate selection, use, and disposal of Personal Protective Equipment	1 2 3 4	
	• Patient placement, transfer, discharge	1 2 3 4	
	• Environmental pathogens (e.g., Legionella, Aspergillus)	1 2 3 4	
	• Use of patient care products and medical equipment	1 2 3 4	
	• Immunization programs for patients	1 2 3 4	
	• Influx of patients with communicable diseases	1 2 3 4	
	• Principles of safe injection practices	1 2 3 4	
	• Identifying, implementing and evaluating elements of Standard Precautions/ Routine Practices	1 2 3 4	
	• Antimicrobial stewardship	1 2 3 4	
Management and communication (CBIC) *13 items	a. Planning	1 2 3 4	• Specific IPC question you have (could be related to your own facility) and/or learning goal (area you want to learn more about).
	b. Communication and feedback	1 2 3 4	
	c. Quality/performance improvement and patient safety	1 2 3 4	
Education and research (CBIC) *11 items	a. Education	1 2 3 4	• Specific IPC question you have (could be related to your own facility) and/or learning goal (area you want to learn more about).
	b. Research	1 2 3 4	
Employee /occupational health (CBIC) *11 items	a. Review and/or develop screening and immunization programs	1 2 3 4	• Specific IPC question you have (could be related to your own facility) and/or learning goal (area you want to learn more about).
	b. Collaborate regarding counseling, follow up, and work restriction recommendations related to communicable diseases and/or exposures	1 2 3 4	
	c. Collaborate with occupational health to evaluate infection prevention-related data and provide recommendations	1 2 3 4	
	d. Collaborate with occupational health to recognize healthcare personnel who represent a transmission risk to patients, coworkers, an communities	1 2 3 4	

	e. Assess risk of occupational exposure to infectious diseases (e.g., *Mycobacterium tuberculosis,* bloodborne pathogens)	1 2 3 4	
Environment of Care (CBIC) *14 items	a. Recognize and monitor elements important for a safe care environment (e.g., Heating-Ventilation-Air Conditioning, water standards, construction	1 2 3 4	• Specific IPC question you have (could be related to your own facility) and/or learning goal (area you want to learn more about).
	b. Assess infection risks of design, construction, and renovation that impact patient care settings	1 2 3 4	
	c. Provide recommendations to reduce the risk of infection as part of the design, construction, and renovation process	1 2 3 4	
	d. Collaborate on the evaluation and monitoring of environmental cleaning and disinfection practices and technologies	1 2 3 4	
	e. Collaborate with others to select and evaluate environmental disinfectant products	1 2 3 4	
Cleaning, Sterilization, Disinfection, Asepsis (CBIC) *15 items	a. Identify and evaluate appropriate cleaning, sterilization and disinfection practices	1 2 3 4	• Specific IPC question you have (could be related to your own facility) and/or learning goal (area you want to learn more about).
	b. Collaborate with others to assess products under evaluation for their ability to be reprocessed	1 2 3 4	
	c. Identify and evaluate critical steps of cleaning, high level disinfection, and sterilization	1 2 3 4	

CBIC Core Competencies:

The CBIC core competencies are designed to prove foundational competency in the profession through the passing of CBIC's certification examination, resulting in the IP earning the CIC® credential.

CBIC core competencies are evidence-based, reflective of current practice, and updated every four to five years through research of practice analysis surveys completed by practicing infection prevention professionals. IPs renew and enhance their skills and application of the core competencies throughout their careers.

Note: Once certification in infection control (CIC) has been achieved, competency is highly individualized and technically complex. It is driven by multiple factors, including educational opportunities, practice setting, and personal interests. Because competency is highly personalized and develops across the career span, no infection preventionist (IP) is expected to be "advanced" in all areas at any particular time. The goal is to identify areas for individual improvement so that professional development becomes a lifelong endeavor.

2019 APIC Competency Model

The APIC Competency Model has six future-oriented competency domains (each with subdomains). These are topical areas of knowledge, skills, abilities, and personal attributes that have been identified as relevant in the next 3-5 years for growth of the IP and IPC profession.

The future-oriented competency domains serve to:

- anticipate and proactively integrate advances in the field
- emphasize strategic areas of need and growth for the profession and the dynamic nature of the evolving IP role

- engage IPs to cultivate their knowledge and skills throughout their career within all interconnected domains to meet the needs of patients across the continuum of care
- reinforce APIC's vision of health care without infection and mission of creating a safer world through prevention of infection

APIC Future-oriented Competency Domains and Definitions from which the Concepts are Derived

APIC Future-oriented Competency Domain/subdomain: a topical area of knowledge, skills, abilities, and personal attributes that has been identified as relevant in the next 3-5 years for growth of the IP and IPC profession

- **Competence:** the ability to do something successfully with sufficient knowledge and skills (Merriam-Webster, 2019).
- **Competency**: observable and measurable knowledge, skills, abilities, and personal attributes that improve performance and result in success (University of Nebraska, 2019).
- **Domain**: a specified sphere of activity or knowledge (Merriam - Webster, 2019).
- **Subdomain**: a subdivision of a domain.
- **Competency Domains**: are related sets of foundational abilities representing the required elements and outcomes that define the knowledge, skills, experience, attitudes, values, behaviors, and established professional standards. (National Board of Osteopathic Medical Examiners, 2019).

Four IP Career Stages in the APIC Competency Model

IP career stages are represented by four concentric circles (see model on next page) depicting progression from Novice to Expert. The **Novice IP** is new to the rules and concepts that govern IPC and relies on them to guide her or his practice.

New to the model is the **Becoming Proficient** career stage, between the Novice and Proficient stages, which represents the period when the IP is building on novice competencies and developing more involved, intricate, and independent skills.

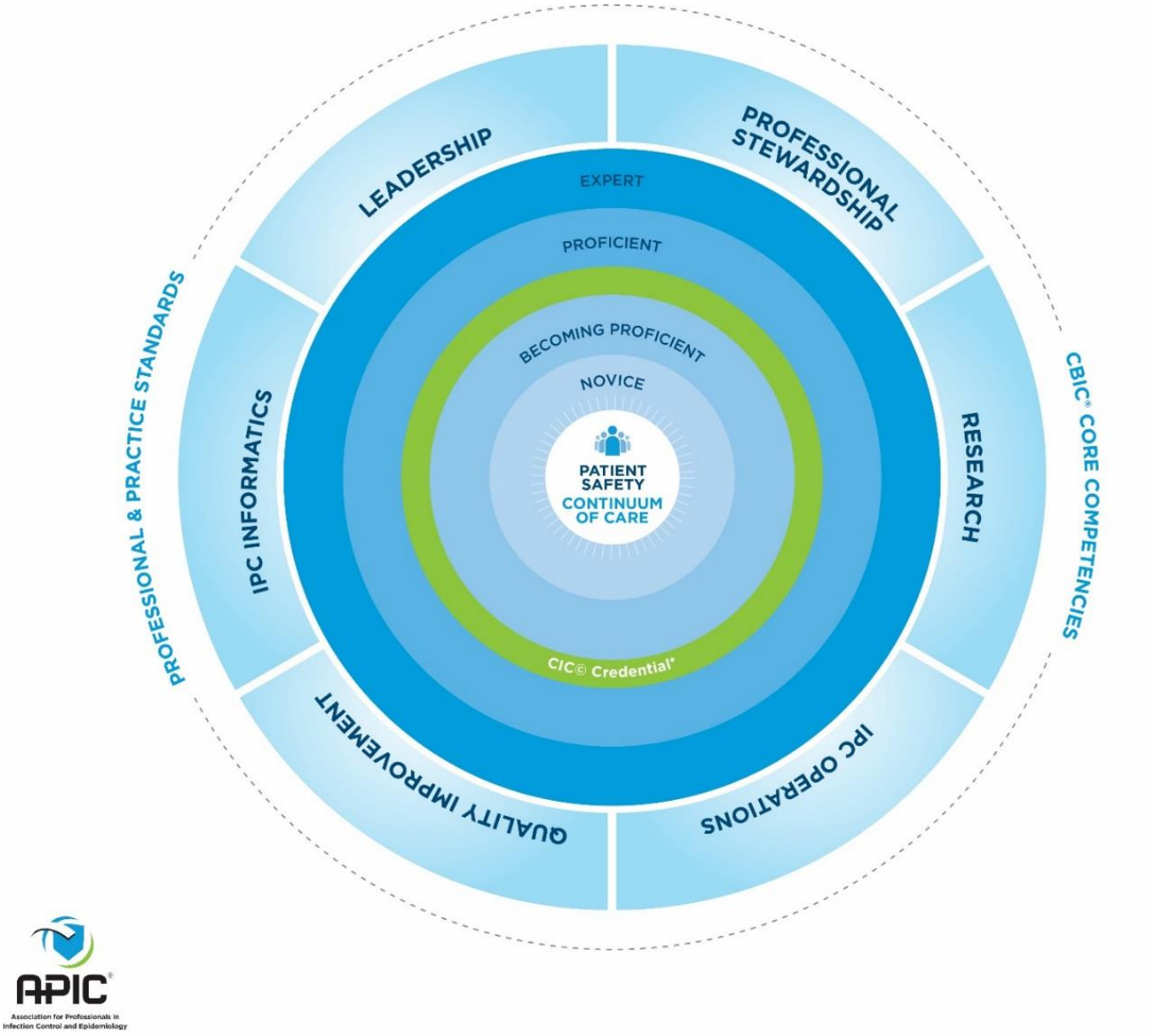
Moving outward through the model, IPs are challenged to become certified in infection prevention and control (CIC®), the gold standard by which an IP demonstrates core competency. The CIC® credential denotes mastery of fundamental knowledge required for competent performance of current infection prevention practice and signifies movement into the **Proficient** stage.

While not quantified by years of practice, experience remains an important source of skill development as the IP progresses along the career path. The **Expert** career stage is defined by mastery of domain content, which can include role modeling or teaching, but generally signifies enhancement and expansion of the IPC profession.

APIC Professional and Practice Standards (PPS)

The APIC Competency Model for the Infection Preventionist includes the CBIC core competencies and the APIC Professional and Practice Standards (PPS). These foundational documents and elements reside on the outermost circle of the updated model, indicating how they support IP professional development. The PPS outlines the role and scope of an IP. Reference: Bubb TN, Billings C, Berriel-Cass D, et al. APIC professional and practice standards. Am J Infect Control. 2016;44(7):745-749.

(2019) Updated APIC Competency Model for Professional Development in IPC



2019 APIC Competency Model Future-Oriented Competency Domains and Subdomains

For definitions of each subdomain visit APIC's website: https://apic.org/Professional-Practice

Self-Assessed Rating Scale and Comfort Level (Knowledge/Skills/Experience/Confidence):
1. No idea 2. Unsure 3. Some knowledge 4. Know it

Future-Oriented Competency Domain: **Leadership**

Infection preventionists (IPs) use leadership skills to establish a clear vision for IPC programs throughout the continuum of care. To establish that vision, the IP must collaborate with other leaders and colleagues to align IPC program goals with the strategic goals of the organization.

Subdomains identify future-oriented skill sets to guide the IP in the process of influence, implementation, and innovation to generate and enhance the commitment, capabilities, methods, and resources needed to translate visions and plans into reality. The development of these skills throughout their career will prepare IPs for leadership opportunities that may arise in the future.

Subdomains:

○ **Communication**	1	2	3	4
○ **Critical Thinking**	1	2	3	4
○ **Collaboration**	1	2	3	4
○ **Behavioral Science**	1	2	3	4
○ **Program Management**	1	2	3	4
○ **Mentorship**	1	2	3	4

- Rate yourself overall on this future-oriented competency domain: **1 2 3 4**
- Specific IPC question or learning goal (area you want to learn more about):

Future-Oriented Competency Domain: **Professional Stewardship**

Professional Stewardship: The continuously changing world of health care and infection prevention requires dedicated stewards that will allow the profession to develop, adjust, and uphold a respectable and reliable reputation. IPs must be willing and ready to be held accountable for an entity larger then themselves and the organizations for which they work. IPs are responsible for and entrusted with the future of the profession and hold the potential to produce meaningful change within infection prevention practice. Professional stewardship and the subdomains it encompasses are future-oriented and develop as IPs advance in their knowledge, experience, and expertise.

Subdomains:

○ **Accountability**	1	2	3	4
○ **Ethics**	1	2	3	4
○ **Financial Acumen**	1	2	3	4
○ **Population Health**	1	2	3	4
○ **Continuum of Care**	1	2	3	4
○ **Advocacy**	1	2	3	4

- Rate yourself overall on this future-oriented competency domain: **1 2 3 4**
- Specific IPC question or learning goal (area you want to learn more about):

Future-Oriented Competency Domain: **Quality Improvement**

Quality improvement is a fundamental framework that IPs must use to systematically improve care and reduce infections within their health care setting and throughout the continuum of care. Quality improvement requires meaningful analysis and use of data; a clear comprehension of how to assess risk, apply risk reduction strategies, and incorporate performance improvement methodology; and the ability to maintain a focus on patient safety. Progression in the future-oriented quality improvement subdomains will allow IPs to implement stable processes, reduce variation, and improve outcomes to establish a culture of safe and quality care within their health care organizations and promote this culture throughout the profession.

Subdomains:

○ **IP as Subject Matter Expert**	1	2	3	4
○ **Performance Improvement**	1	2	3	4
○ **Patient Safety**	1	2	3	4
○ **Data Utilization**	1	2	3	4
○ **Risk Assessment and Risk Reduction**	1	2	3	4

- Rate yourself overall on this future-oriented competency domain: **1** **2** **3** **4**
- Specific IPC question or learning goal (area you want to learn more about):

Future-Oriented Competency Domain: **IPC Operations**

IPC Operations: While all model domains address IPC content, this domain highlights specific future-oriented competency content that crosses clinical, technical, and leadership subdomains. The broad scope of functions contained in the IPC operations domain use proactive and reactive approaches to conduct surveillance, identify infection risks, implement infection interventions, and mitigate risks.

Subdomains:

○ **Epidemiology and Surveillance**	1	2	3	4
○ **Education**	1	2	3	4
○ **IPC Rounding**	1	2	3	4
○ **Cleaning, Disinfection, Sterilization**	1	2	3	4
○ **Outbreak Detection and Management**	1	2	3	4
○ **Emerging Technologies**	1	2	3	4
○ **Antimicrobial Stewardship**	1	2	3	4
○ **Diagnostic Stewardship**	1	2	3	4

- Rate yourself overall on this future-oriented competency domain: **1** **2** **3** **4**
- Specific IPC question or learning goal (area you want to learn more about):

Future-Oriented Competency Domain: **IPC Informatics**

IPC Informatics: Information and diagnostic technologies and their applications are rapidly evolving and highly dynamic. IPs must keep abreast of and proficient in using and leveraging systems to input, analyze, extract, and manage data to support and drive data integrity, streamlining of processes, innovative IPC practices, and positive patient outcomes. Future-oriented concepts such as rapid identification mechanisms for data and diagnostic laboratory tests, real-time decision making, data dissemination, machine learning, and artificial intelligence are all important for IPs.

Subdomains:

- **Surveillance Technology** 1 2 3 4
- **Electronic Medical Records (EMR) and Electronic Data Warehouse (EDW)** 1 2 3 4
- **Data Management, Analysis, and Visualization** 1 2 3 4
- **Application of Diagnostic Testing Data and Techniques** 1 2 3 4

- Rate yourself overall on this future-oriented competency domain: **1** **2** **3** **4**
- Specific IPC question or learning goal (area you want to learn more about):

Future-Oriented Competency Domain: **Research**

Research is an essential skill set that supports and advances the IPC field. The content in this domain highlights the importance of applied research and implementation science for the IP. Incorporating research constructs into the role equips the IP with the opportunity to synthesize, apply, and evaluate research information to develop and demonstrate IPC and epidemiological expertise.

Subdomains:

- **Evaluation of Research** 1 2 3 4
- **Comparative Effectiveness Research (CER)** 1 2 3 4
- **Implementation and Dissemination Science** 1 2 3 4
- **Conduct or Participate in Research or Evidence-Based Practice** 1 2 3 4

- Rate yourself overall on this future-oriented competency domain: **1** **2** **3** **4**
- Specific IPC question or learning goal (area you want to learn more about):