

I live in Windsor, CO



I cover 13 hospitals in five states for Banner Health – 5 in CO; 1 in NE; 3 in WY; 1 in CA; 1 in NV; and 2 in northern AZ. 9 of these are CAH. Three of the 12 are close to Windsor.

Fort Collins







Infection Prevention Wastern Reginealth



APIC Mile High Colorado Chapter 022 President 2013

Infection Preventionist since 1994, Certified since 1996

Served on the CBIC Practice Analysis Task Force – 2014; CBIC Test Committee 2014-2017



National Forest

Estes Park

My husband and I have three children, six grandchildren and some property in the mountains where we enjoy hiking, fishing, kayaking, and camping with all of them





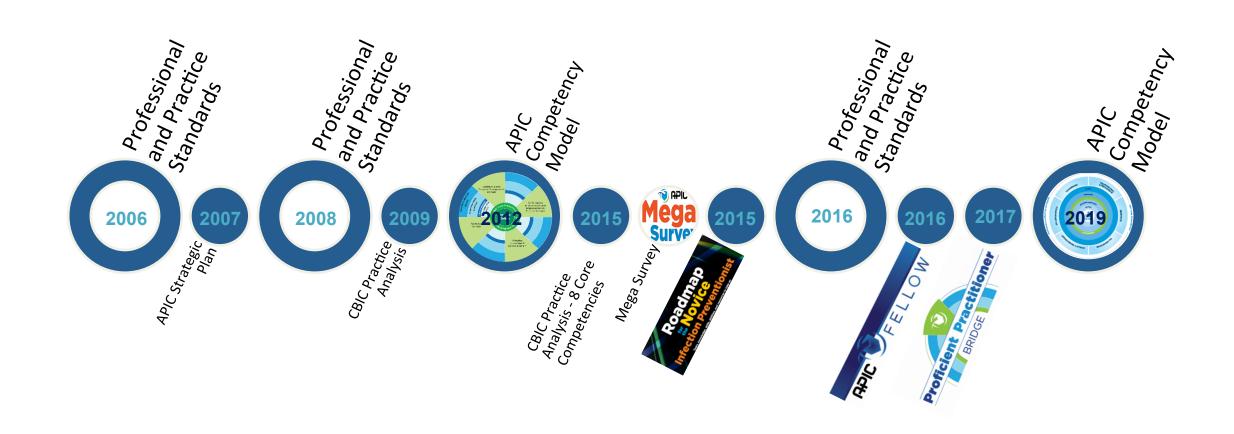
# Mentoring and Training the New IP

# Objectives:

At the end of this presentation, participants will be able to:

- Identify gaps in the knowledge, skills, and abilities of new infection preventionists.
- Apply practice and study methods to bridge identified gaps.
- Assess infection prevention competency at the novice, accomplished, and advanced level.

# **KEY MILESTONES: IPC Professional Development**



Contents lists available at ScienceDirect



#### American Journal of Infection Control



journal homepage: www.ajicjournal.org

Practice forum

Identifying changes in the role of the infection preventionist through the 2014 practice analysis study conducted by the Certification Board of Infection Control and Epidemiology, Inc



Lita Jo Henman MPH, CIC <sup>a,\*</sup>, Robert Corrigan MS <sup>b</sup>, Ruth Carrico PhD, RN, CIC <sup>c</sup>, Kathryn N. Suh MD, FRCPC, CIC <sup>d</sup>, Practice Analysis Survey Development Team <sup>†</sup>, Practice Analysis Review and Test Specification Development Team <sup>†</sup>

#### American Journal of Infection Control 43 (2015) 664-8



Contents lists available at ScienceDirect

#### American Journal of Infection Control



journal homepage: www.ajicjournal.org

Practice forum

#### APIC professional and practice standards

Tania N. Bubb PhD, RN, CIC <sup>a,\*</sup>, Corrianne Billings BS, BSN, RN, CIC <sup>b</sup>, Dorine Berriel-Cass MA, BSN, RN, CIC <sup>c</sup>, William Bridges PhD <sup>d</sup>, Lisa Caffery MS, BSN, RN-BC, CIC <sup>e</sup>, Jennifer Cox RN, BSN, CIC <sup>f</sup>, Moraima Rodriguez BS, MT(ASCP), CIC, CHSP <sup>g</sup>, Jessica Swanson RN, BAN <sup>h</sup>, Maureen Titus-Hinson MHA, BSN, RN, CIC <sup>i</sup>

American Journal of Infection Control 44 (2016) 745-9

## **FUTURE-ORIENTED COMPETENCY DOMAINS**

Competence

 the ability to do something successfully with sufficient knowledge and skills

**Domain** 

 a specified sphere of activity or knowledge

Competency

• observable and measurable knowledge, skills, abilities, and personal attributes that improve performance and result in success

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.

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

### THE 2019 APIC COMPETENCY MODEL

### **Future-oriented Competency Domains**

#### **LEADERSHIP**

- Communication
- \*Critical Thinking
- Collaboration
- Behavioral Science
- \*Program Management
- Mentorship

# PROFESSIONAL STEWARDSHIP

- Accountability
- Ethics
- Financial Acumen
- Population Health
- Continuum of Care
- Advocacy

#### QUALITY IMPROVEMENT

- IP as Subject
   Matter Expert
- \*Performance Improvement
- Patient Safety
- Data Utilization
- Risk Assessment and Risk Reduction

#### **IPC OPERATIONS**

- \*Epidemiology& Surveillance
- \*Education
- IPC Rounding
- Cleaning,
   Disinfection,
   Sterilization
- Outbreak
   Detection and
   Management
- Emerging Technologies
- \*Antimicrobial Stewardship
- DiagnosticStewardship

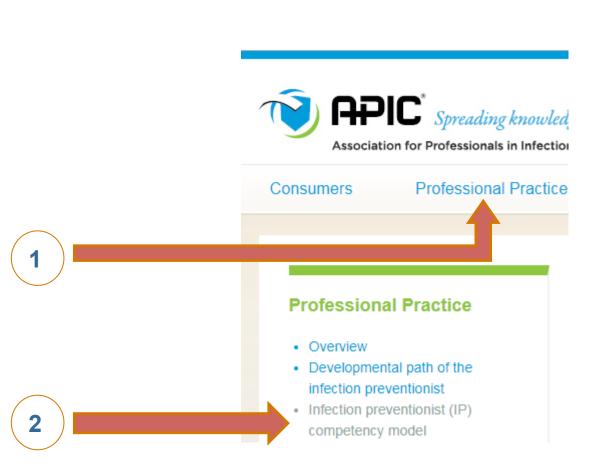
# IPC INFORMATICS

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

#### **RESEARCH**

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

# THE 2019 APIC COMPETENCY MODEL: Interactive!



<u>Infection Preventionist (IP) Competency Model Link</u>

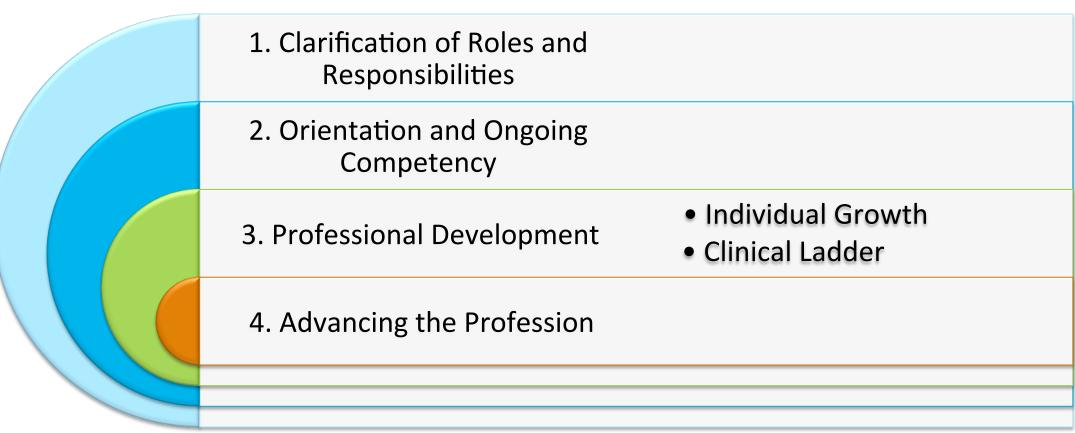


#### **Professional Stewardship**

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.

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.





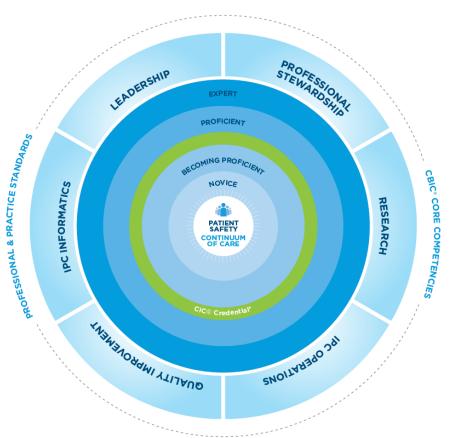
# **Clarification of Roles and Responsibilities**

### **Job Descriptions**

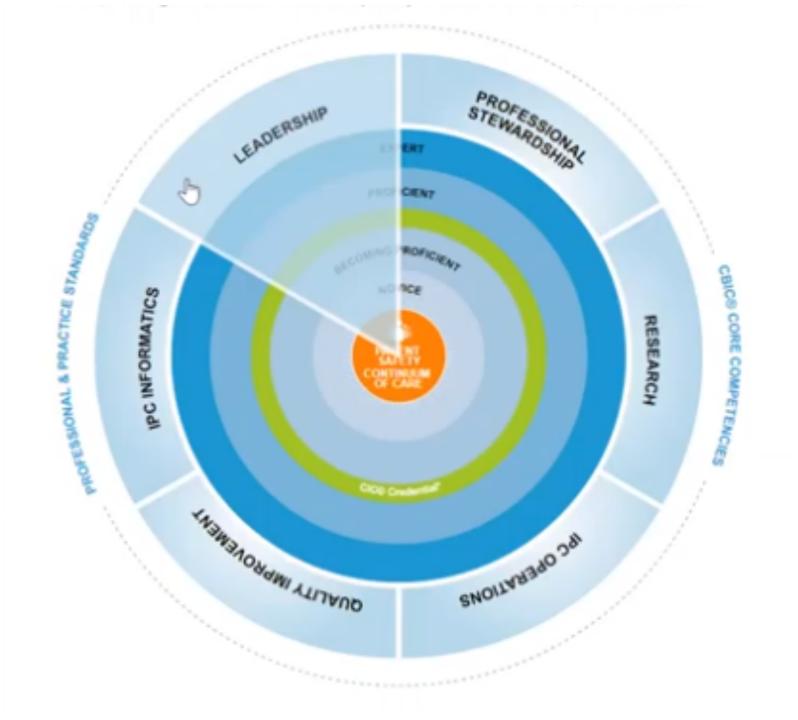
- Use Professional and Practice Standards & Competency Model –
- IP Specialists

IP role clarity within multidisciplinary teams

Guide leadership communication







Patient Safety at the Center – the **APIC Competency** Model provides an outline for growth and increased proficiency in the field of Infection Prevention.

# PPS: STANDARDS OF PRACTICE (SOP)



# SAMPLE IP JOB DESCRIPTIONS

APIC Job Description SAMPLE

Have you used this?

#### Developed by APIC's Professional Development Committee, May 2019 apic.org/competencymodel

#### Sample Job Description for the Infection Preventionist

#### Job Description

Job Title: Infection Preventionist

Job Summary:

The Infection Preventionist (IP) is responsible for identifying, investigating, monitoring, and reporting healthcare-associated infections. The IP collaborates with teams and individuals to create infection prevention strategies, provide feedback, and sustain infection prevention strategies.

#### Qualified Candidate:

Educational and Certification Requirements

- Baccalaureate degree in nursing, public health, epidemiology, clinical laboratory science, medical technology or related field.
- Certification in Infection Control and Epidemiology (i.e.: CIC® preferred) or, attainment within years after employment

#### Essential Skills:

- Analytical
- Problem solving
- Collaboration
- Strong oral and written communication skills
- Ability to implement evidence-based guidelines
- Conflict resolution
- · Program and project management
- Expertise in data collection and analysis, report writing, and data presentation
- · Familiar with software technologies

Reports to:	
Job Duties:	
(Note the key a	ccountabilities/responsibilities of the job)

- 1. Program Management:
  - Develop, implement, and evaluate the organizational infection prevention program.

  - Develop an annual surveillance plan based on the population(s) served, services provided, and analysis of surveillance data.
  - Utilize epidemiologic principles to conduct surveillance and investigations.
  - · Evaluate and modify the surveillance plan as necessary.



ABOUT APIC The Association for Professionals in Infection Control and Epidemiology (APIC) is creating a safer world through the prevention of infection. APIC's nearly 16,000 members develop and direct infection prevention and control programs that save lives and improve the bottom line for healthcare facilities. APIC advances its mission through patient safety, education, implementation science. competencies and certification, advocacy, and data standardization. Visit us online at www.apic.org.

1400 Crystal Drive, Suite 900 Arlington, VA 22202





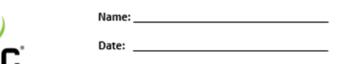


# STANDARDS OF PROFESSIONAL PERFORMANCE



### STANDARDS OF PROFESSIONAL PERFORMANCE

Professional Accountability



- Self-development
- Goals and objectives Annual
- Competency self-assessment
- 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. Low Confidence Level

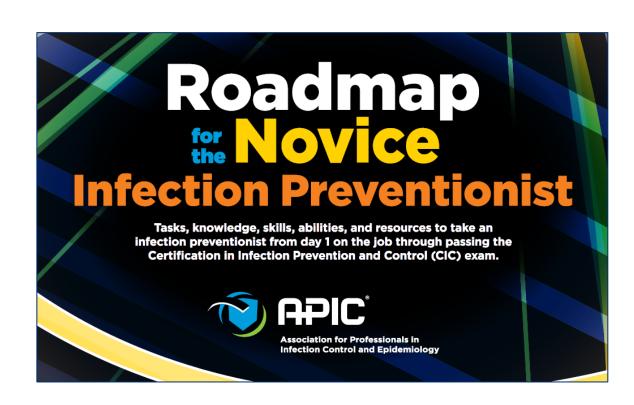
2. Some Knowledge/Experience

3. Good confidence level

- Maintaining knowledge of evidence-based research
- Active participation in professional organizations
- Advocating for safe practices and implementing policies

### Orientation

- Ensure standardization during onboarding
- Adapt the Roadmap and Core
   Competencies into your orientation process
- Recent Update Online
   "interactive" with completion checklists link:
   Novice Roadmap



- Ongoing Competency
  - Ensure individual ongoing competency
  - Novice Roadmap
  - Novice and Becoming Proficient Self Assessment Tool



Name:	

#### 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. Low Confidence Level 2. Some Knowledge/Experience 3. Good confidence level

How many of you have ever used??

- Ongoing Competency
  - Ensure individual ongoing competency
  - Novice Roadmap
  - Novice and Becoming Proficient
  - Proficient Practitioner Bridge



- Ongoing Competency
  - Ensure individual ongoing competency
  - Novice Roadmap
  - Novice and Becoming Proficient Self Assessment
  - Proficient Practitioner Bridge
  - Adapt to competency statements

Using the model to develop internal tools allows for a consistent methodology when evaluating IP competency assessment



### APPLICATION OF THE MODEL: ADAPT TO COMPETENCY STATEMENTS

#### **Future-oriented Competency Domain Content:**

**Leadership: Collaboration** 

Increasingly, and with the trend expected to continue to grow in the future, an IP's work is executed effectively and sustainably only through working with multiple departments and disciplines to carry out the IPC program's goals. Infection prevention and control touches many areas of health care and often involves sectors that are governed by their respective regulations and standards. An IP may be required to facilitate/lead interdisciplinary projects, serving as a champion for a culture of safety. Doing so requires situational awareness, emotional intelligence, and strategic vision. At other times, collaboration might mean encouraging teamwork and getting the most from others. It might also mean being able to negotiate your program needs in the larger context of the group or facility.

Different types of leadership skills are required to collaborate effectively, including "followership": learning to provide expertise in a supporting role while not officially being the team leader. Qualities of a good follower might include listening to and respecting others' opinions, demonstrating commitment, displaying loyalty, and working well with others to achieve consensus. It also means having a willingness to challenge leaders and offer constructive criticism.

# APPLICATION OF THE MODEL: ADAPT TO COMPETENCY STATEMENTS



- The IP demonstrates effective emotional intelligence, listening, and learning skills and is acquiring baseline knowledge about each department and team in which she or he interacts.
- The IP is beginning to understand the diverse areas of responsibility in her or his new role and is developing relationships with department staff outside of Infection Prevention

# APPLICATION OF THE MODEL: ADAPT TO COMPETENCY STATEMENTS

Novice

- The IP demonstrates effective emotional intelligence, listening, and learning skills and is acquiring baseline knowledge about each department and team in which she or he interacts.
- The IP is beginning to understand the diverse areas of responsibility in her or his new role and is developing relationships with department staff outside of Infection Prevention

Becoming Proficient

- The IP collaborates well with peer groups and can work well with diverse groups.
- The IP is developing collaboration skills by assuming a role in a focused group project.
- With ongoing guidance, the IP is becoming more independent in collaborating with key stakeholders.

**Proficient** 

- The IP actively suggests and seeks ideas to improve quality, efficiency, and effectiveness.
- The IP is able to prepare for group meetings by identifying key issues and expectations and is able to identify resources most likely to guide project tasks.
- The IP is able to engage all members in the discussion with respect and professionalism

Expert

- The IP actively pursues collaboration and discussion by facilitating and leading diverse groups, welcoming opinions, respectfully challenging perspectives, and modeling effective listening skills.
- The IP encourages ownership of the process by group members, highlights group successes, builds a sense of shared accomplishment, and reinforces success by becoming an advocate for the group's decisions.

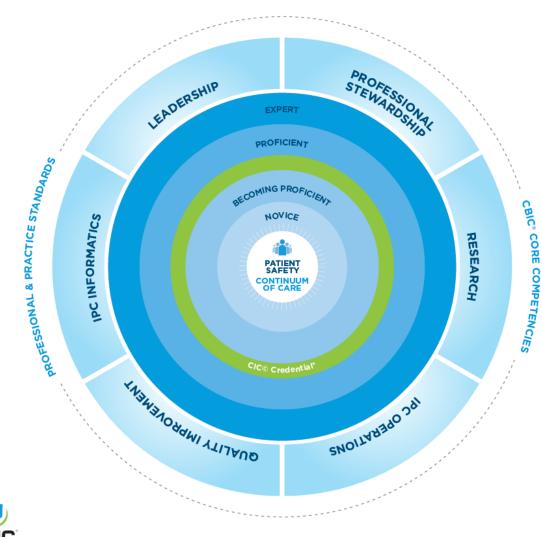
# **Annual IP Competency**

# **CMS and Joint Commission**

Almost always review IP HR records
Specifically look for

- > IP Annual Competency
- > IP Training records
- > IP Certification

- Professional Development
  - Individual Growth





WEEK 1 – Introduction to the Infection Prevention & Control Program				
Learning Activity	Skill Building	Meetings	Date of Completion/ Comments	
Intro to IC Team  • Meet IC Manager & IC Medical Director  • Meet IP Program Manager  • Meet Quality Management Director  • Review personal responsibilities/expectations  Hospital tour; review hospital leadership structure	READ Infection Prevention and Control Programs (Chapter 1) Occupational Health (Ch. 100) Accrediting & Regulatory Agencies (Ch. 4)	Attend any committee, team or medical staff meetings as appropriate and any scheduled in- services.  Attend IC Committee meeting at alternate facility		
Review Infection Prevention Program  Review IP&C policies & procedures  Occ. Health P&Ps  Review IC Committee meeting minutes & surveillance reports  Review surveillance forms for healthcare-associated infections (HAIs)  Introduction to Regulatory: CMS/TJC/State  OSHA, NIOSH, FDA,  CDC, APIC, AHA, SHEA  Review of national and local APIC  Membership, websites, literature, professional practice				
Review resources  • Books, websites, library access, sharepoint sites, computer, various software				

WEEK 2 - Surveillance/Microbiology				
Learning Activity	Skill Building	Meetings	Date of Completion/ Comments	
Tour microbiology lab	READ	Attend Infection		
Meet micro staff	Microbiology Basics - (Ch.24)	Prevention & Control		
Hands on with micro tech	Lab Testing & Diagnostics – (Ch. 25)	Committee meeting		
Review daily culture reports with mentor  • Review NHSN criteria	Microorganisms —	Attend IC NEO Presentation as an		
Review NHSN modules	<ul> <li>Gram positive and gram negative (Chapters 93,94,76,77,75,87,72,84,71,85)</li> </ul>	observer		
Communicable Disease reporting process	<ul> <li><u>Viruses</u> (Chapters 80,97,81,82,90,86,88,98, 96, 89)</li> </ul>			
Review IC Committee meeting minutes & surveillance reports	<ul> <li><u>Fungi</u> (Ch. 78)</li> <li><u>Mycobacteria</u> (Ch. 95)</li> </ul>			
<ul> <li>Review surveillance forms for healthcare-associated infections (HAIs)</li> </ul>	Parasites (Ch. 99)     CJD & Other Prion Diseases (Ch. 73)			
Training on Cerner	Foodborne Illnesses (Ch. 83)			
Micro/HAI Surveillance	Diarrheal Diseases: Viral, Bacterial, Parasitic (Ch. 79A, 79B, 79C)			
	Sexually Transmitted Diseases (Ch. 91)			
	Microbiology References: Control of Communicable Diseases Manual; Sanford Guide to Antimicrobial Therapy			

#### WEEK 3 - Infection Prevention Basics

Learning Activity	Skill Building	Meetings	Date of Completion/ Comments
Review Hand Hygiene policy and hand hygiene	Observe isolation practices; review Cerner Discern		
data for facility and process for collecting data.	alert process.	Attend facility CAUTI Team, CLABSI Team and	
Review Banner policies: Standard Precautions, Contact Precautions, Droplet Precautions, and	Perform hand hygiene observations with mentor.	SCIP Team meetings.	
Airborne Precautions.	Observe sterile procedure (e.g., line insertion, wound care, dressing change)	Attend System IP meeting	
Review policies on Central Line Insertion &		Attend Infection	
Maintenance.	Spend time in Sterile Processing, review OR/CSPD	Prevention & Control	
Review prevention strategies for CLABSI, UTI, VAP, SSI (e.g. SHEA Compendium; APIC text.	sterilizer logs with manager, observe Endoscopy scope cleaning process.	meeting	
(in, our (e.g. or ann)	stope tioming protests.	Attend IC NEO	
Review types of disinfectants and EVS	Spend time with EVS manager. Observe room	Presentation as Observer	
procedures	cleaning procedure.		
Micro/HAI Surveillance	Site visit to linen and infectious waste hauling companies.		
	Review required IC education for HCW and current NEO IC Presentation		
	READ General Principles of Epidemiology (Ch. 10)		
	Risk Factors Facilitating Infection Transmission (Ch. 21), Isolation Precautions (Ch. <u>29</u> ), Hand Hygiene (Ch. 27), Aseptic Technique (Ch. 30)		
	Infections in Indwelling Medical Devices (Ch. 35), Biofilms (Ch. 70), Pneumonia (Ch. 36), Surgical Site Infection (Ch. 37), Intravascular Device Infection (Ch. 34), Urinary Tract Infection (Ch. 33))		
	Cleaning, Disinfection, and Sterilization (Ch. 31)		
	Environmental Services (Ch. 107), Laundry, Patient Linens, Textiles and Uniforms (Ch. 111), Waste Management (Ch. 113)		

WEEK 4 - Hospital-Acquired Conditions (HACs)

Learning Activity	Skill Building	Meetings	Date of Completion/
Review Surveillance using NHSN Definitions  Catheter Associated Urinary Tract Infection (CAUTI)  Central Line Associated Bloodstream Infection (CLABSI)  Surgical Site Infection (SSI)  Ventilator Associated Events (VAE)  Review HAC's data with your mentor  CLABSI  VAP  SSI  CAUTI  Facility rounds with mentor  Micro/HAI Surveillance  Review HAC rate for your facility, compare with other facilities, NHSN.  Calculate ICU Infection Rates and prepare report with Mentor  Attend Safety Rounds	READ Infection Prevention and Control Programs (Ch.1), Surveillance (Ch. 11)  Intravascular Device Infection (Ch. 34)  Urinary Tract Infections (Ch. 33)  Bacteria (Chapters 93,94,76,77,75,87,72,84,71) Mycobacteria (Ch. 95)  Pneumonia (Ch. 36)  Surgical Site Infection (Ch. 37)  Use of Statistics (Ch. 13)  Statistical Process Control (Ch. 14)  Risk Adjusted Comparaison (Ch. 15)	Attend PSI/HAC system or team meetings.  Attend facility CLABSI, VAP, CAUTI, SCIP Team meetings  Present IC NEE Presentation with mentor  • Mid Program orientation review with Mentor or IP manager.	Comments

<del>+ ↑</del>	WEEK 5 – Patient Care Practice (Clinical) Areas

WEEK 5 - Patient Care Practice (Clinical) Areas			
Learning Activity	Skill Building	Meetings	Date of Completion/ Comments
Micro/HAI Surveillance	Present IC NEO Presentation - Mentor present if	Attend Medical Staff	
Micro/FIA1 Surveillance	1		
	appropriate	Committee meetings, as	
Tour nursing units: ED, Critical Care, WIS		appropriate	
(L&D, Post-partum, Nursery), Pediatric services	Review CMS, JCAHO and DHS regulations		
(NICU/CCN, PICU), Progressive Care,	/	Attend all required	
Med/Surg, OOU, Surgery/Pre-op/PACU with	Review Nursing P&Ps	committee meetings and	
mentor	Tecview Ivalaning I cer s		
mentor	D : T0015	facility team meetings with	
	Review ICC Minutes, SSI Reports, and IC	IP Sr. Manager; present	
Tour OP areas: ATU, Radiation Oncology, OPS, Cardiovascular Services (Cath Lab)	procedures for Data Collection.	reports, as appropriate	
010, 011001110011000 (01111100)	READ		
Review Banner Health websites, resources,			
leadership structure, People Resources P&Ps	Perinatal Care (Ch. 43)		
including compensation, clerical support, etc.	1 0211111112 0210 (0111 10)		
meddang compensation, ciencal support, etc.	N		
	Neonates (Ch. 41)		
Review appropriate P&P and prepare in-service			
outline (i.e., lice & scabies, MDROs, etc.);	Pediatrics (Ch. 42)		
prepare audiovisual material and handouts for in-			
service.	Geriatrics (Ch. 40)		
Meet with Public Health Dept. Facility Liaison	Intensive Care (Ch. 59)		
Meet with Fublic Health Dept. Facility Liaison	Intensive Care (Cn. 39)		
Meet with Education Director and Nurse	Surgical Services (Ch. 68)		
Educators re: Orientation & Annual Updates.			
	Cardiac Catheterization and Electrophysiology (Ch.		
Review membership, literature, & professional	50)		
practice of National APIC; attend local chapter	1 - 7		
	Endoscopy (Ch. 55)		
meeting.	Endoscopy (Cn. 55)		
	D: 1 : (01 am		
	Dialysis (Ch. 39)		
	Ambulatory Care (Ch. 48)		
	<u> </u>		
	Behavioral Health (Ch. 49)		
	Delia I I Cartin (Gr. 17)		
	Double Louise 1 / FMS / Ch. 54)		
	Pre-hospital / <u>EMS</u> (Ch. 54)		
	Disaster Response (Ch. 119)		

WEEK 6 - Patient Care Clinical Support Areas

Learning Activity	Skill Building	Meetings	Date of Completion/ Comments
Prepare for and present NEO IC Presentation	Observation of staff hand hygiene practices during	Attend all required	
	rounds/surveillance	committee meetings with	
Meet with Accreditation and Regulation Manager		IP Sr. <u>Manager</u> ; present	
and Risk Manager	Observation of staff standard precautions/isolation	reports, as appropriate	
Micro/HAI Surveillance	practices during rounds/surveillance		
Micro/ FIAT Surveillance	Prepare Annual IC Update education program for		
Spend one hour reviewing websites, resources,	targeted departments; review last year's		
leadership structure, personnel policies including	presentation(s)		
compensation, clerical support, etc.	F		
	READ		
Tour clinical support areas with mentor: Medical			
Imaging, Laboratory/Micro, Respiratory	Nutritional Services (Ch. 109)		
Therapy, Nutritional Services, Radiation	T 1		
Oncology, Rehab Services (PT/OT/Speech),	Laboratory Safety (Ch. 108)		
Spiritual Care, Volunteers	Pharmacy Services (Ch. 110)		
Meet with Respiratory Therapy, Medical	Filanniacy Services (Ch. 110)		
Imaging, Pharmacy, Laboratory, Nutritional	Respiratory Care Services (Ch. 63)		
Services, Radiation Oncology Directors			
	Imaging Service & Radiation Oncology (Ch. 67)		
Meet with Occupational Health Manager and			
tour department. Review Occupational Health	Interventional Radiology (Ch. 60)		
P&Ps.	B. 1.77		
Meet with Librarian	Rehabilitation Services (Ch. 66)		
Meet with Librarian	Volunteers and Other Nonemployees Who Interact		
Present in-service	with Patients (Ch. 102)		
110001111111111111111111111111111111111	WILL 2 220112 (OLL 102)		
One hour reading current IC Journals	Immunization in the Healthcare Workers (Ch. 103)		
Review policy on Dog Therapy/Service Animals	The Pregnant Healthcare Worker (Ch. 104)		
Assembly ADIC level about	16:5: 7		
Attend APIC local chapter meeting.	Minimizing Exposure to Blood and Body Fluids		
	(Ch. 105)		
	Animals Visiting Healthcare Facilities (Ch. 122)		

WEEK 7 - Ancillary Services	/ Emergency Preparedness	/ Outbreak Investigation
-----------------------------	--------------------------	--------------------------

Learning Activity	Skill Building	Meetings	Date of Completion/
Brit A THE C 1 TO THE	01	A., 1 11	Comments
Tour Ancillary Services: Facilities, EVS/Transport/Linen storage, and meet managers with Mentor	Observation of staff hand hygiene practices during rounds/surveillance	Attend all required committee meetings with IP Senior Manager;	
Micro/HAI Surveillance	Observation of staff standard precautions/isolation practices during rounds/surveillance	present reports, as appropriate	
Spend one hour reviewing Banner Health websites, resources, leadership structure, personnel policies including compensation, clerical support, etc.	Meet with IP Senior Manager and Infection Control Medical Director; review progress made during Mentor Program and remaining areas of concern/opportunities for improvement		
Spend one hour with Mentor and onsite IP Manager reviewing performance and areas for opportunity identified during Mentor Program, as well as plan of action to address these areas	READ Environmental Services (Ch. 107)		
Practice on computer – input surveillance data/ review existing reports and create pending	Laundry, Patient Linens, Textiles, and Uniforms (Ch. 111)		
committee reports	Waste Management (Ch. 113)		
Review all routine reports required for presentation to local committees/	Maintenance and Engineering (Ch. 112)		
Departments.	Heating, Ventilation and Air Conditioning (Ch. 114)		
Assist Mentor or IP manager in conducting an Outbreak investigation if opportunity exists.	Water Systems Issues and Prevention of Waterborne Infectious Diseases in Healthcare Facilities (Ch. 115)		
	Construction and Renovation (Ch. 116)		
	Emergency Management (Ch. 119)		
	Infectious Disease Disasters: Bioterrorism, Emerging Infections, and Pandemics (Ch. 120)		
	Outbreak Investigation (Ch. 12) Review system policy on Outbreak Investigation (#3815)		

#### RECOMMENDED REFERENCE MATERIALS

#### Recommended Minimum Required Reference Materials

#### A. Reference Books:

- Carrico, Ruth, Editor. The APIC Text of Infection Control and Epidemiology, 3rd Edition. Washington DC: APIC; 2009. Text and CD ROM
- Mayhall, C. Glen, Editor. Hospital Epidemiology and Infection Control, 3rd Edition. Philadelphia: Lippincott, Williams & Wilkins; 2004.
- Jarvis, William. Bennett & Brachman's Hospital Infections, 5th Edition. 2007
- Heymann, David L., Editor. Control of Communicable Diseases Manual, 19th Edition. Washington, D.C.: American Public Health Association; 2008.
- Brooks, Kathy. Ready Reference to Microbes, 2nd Edition. Washington, D.C.: APIC; 2007.
- Abrutyn, E. et al. Saunders Infection Control Reference Service. Philadelphia: WB Saunders; 1998

#### B. Journals:

- Morbidity and Mortality Weekly Report (MMWR): <a href="http://www.cdc.gov/mmwr">http://www.cdc.gov/mmwr</a>
- 2. American Journal of Infection Control: <a href="http://www2.us.elsevierhealth.com/scripts/om.dll/serve-action=searchDB&searchDBfor=home&ID=ic">http://www2.us.elsevierhealth.com/scripts/om.dll/serve-action=searchDB&searchDBfor=home&ID=ic</a>
- 3. Infection Control and Hospital Epidemiology: http://www.ichejournal.com/

#### C. Websites:

- APIC: <a href="http://www.apic.org/">http://www.apic.org/</a>
- Premiere Safety: <a href="http://www.premierinc.com/all/safety/publications/08-03">http://www.premierinc.com/all/safety/publications/08-03</a> full txt.htm
- FDA: http://www.cfsan.fda.gov/
- FDA FoodSafety: <a href="http://www.foodsafety.gov/">http://www.foodsafety.gov/</a>
- To get on APIC listserv: apicinfo@apic.org
- CDC: <a href="http://www.cdc.gov/">http://www.cdc.gov/</a>
- CMS: http://www.cms.gov/
- IHI: http://www.ihi.org/ihi
- The Joint Commission: http://www.jointcommission.org/
- NHSN: <a href="http://www.cdc.gov/nhsn/">http://www.cdc.gov/nhsn/</a>
- NIOSH: http://www.cdc.gov/niosh/
- OSHA: <a href="http://www.osha.gov/">http://www.osha.gov/</a>
- SHEA: <a href="http://www.shea-online.org/">http://www.shea-online.org/</a>

# Orientation Checklist

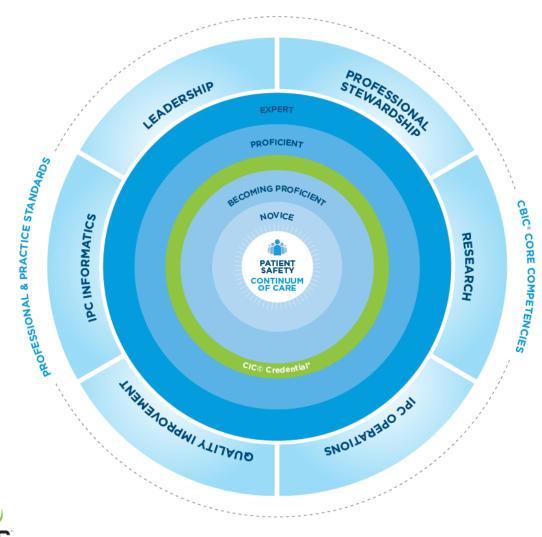
				Clinical					ince/Epidemiology		ation/Consultations	Management	ance Improvement	hip	entation Science	- ч	logy	ional Health	
Orientation	APIC	IP Policy		Observations					ila	tio	8	E	Ė	<u>8</u>	Ĕ	5	ē	at	
Bibliography and	Text	location/	Contact	/Isolation	Clinical	Clinical	Department	Other	2	B	la	ogra	£	ade	ple	8	ondo	ט ט	Completion
Curriculum	Chapter	database	Person	Rounds	Education	Projects	Orientation	References	Sur	B	Co	Pr	Pe	ĝ	Ē	Re	Те	8	Date

# **GET TO KNOW YOUR:**

- 1. Microbiologist/Lab managers
- 2. Central Sterilization/High Level Disinfection Manager(s)
- 3. Environmental Services Manager
- 4. Food Service/Culinary Manager
- 5. Engineering/Facilities/Plant Operations Manager
- 6. Quality Manager
- 7. Occupational Health Manager
- 8. Perioperative Manager
- 9. Antimicrobial Stewardship Pharmacists/Physicians

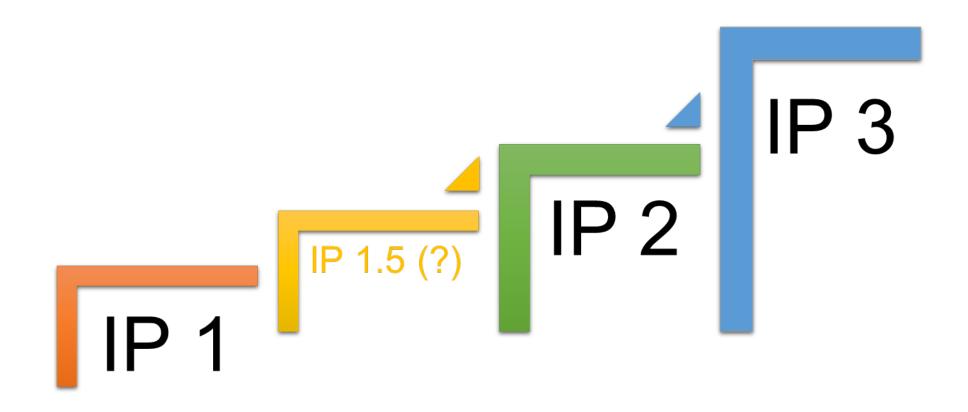
Spend time with these scopes of practice!!

- Professional Development
  - Individual Growth
  - Clinical Ladder



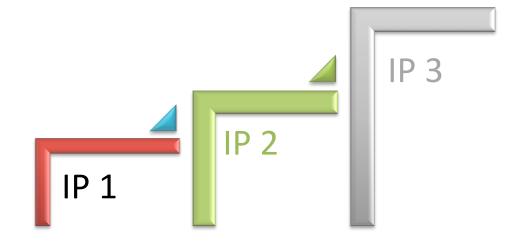


# **CLINICAL LADDER**



# **CLINICAL LADDER**

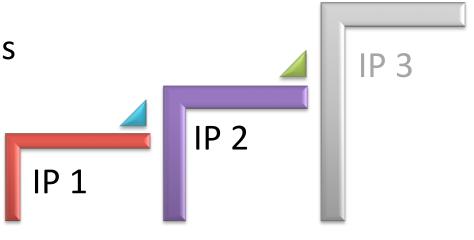
- Level 1, 2, 3, and/or 4 Infection Preventionists
- Specify Criteria to Advance to Next Level
- Education Requirements
- Certification Requirements
- Project Requirements
- Competency Requirements
- Example of Clinical Ladder



## **CLINICAL LADDER**

## • IP Level I - Level II

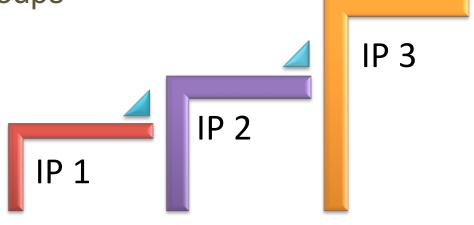
- -Mentor and guidance from those IP's in level 2 or 3
- -Successful certification
- Actively apply core competencies
- –Active participation on PI/IS teams
- Assisting in developing policies
- –Actively participates in committees/teams



## **CLINICAL LADDER**

## • IP Level II – Level III

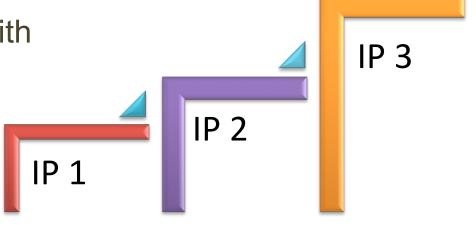
- Maintain certification
- Application of future oriented domains (FOD)
- Leading PI/IS teams/Projects
- Identify the need for and autonomously revises policies
- Participates on a Committee/Participates Local/National APIC
- Present internally and externally to large groups
- Moving to autonomous practice/ Subject Matter Expert



## **CLINICAL LADDER**

# Professional Advancement Ladder PI/IS Project examples:

- SSI Reduction for Total Hips and Knees
- Nurse Driven Foley Removal Protocol
- Nurse Driven C. difficile Protocol Built in EMR
- Hand Hygiene Campaign
- C. difficile Reduction Bundle Implementation
- Develop Business Case for a New Product with Successful Implementation



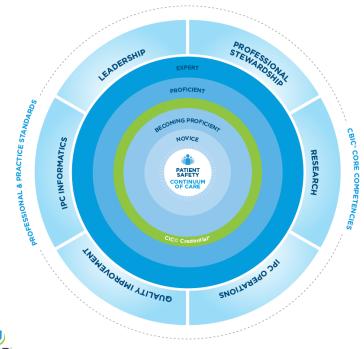
# Clinical Ladder Success

- Vary by facility size
  - Important to recognize Infection Preventionists at rural facilities
     where they likely practice alone, and have multiple responsibilities
- Advancement of knowledge, skills, and abilities
- Successful Certification (CBIC)
- Advancement opportunity examples:
  - Infection Preventionist
  - Infection Preventionist, Sr Program Manager (CIC)
  - Infection Prevention Director (CIC and Master's in related field)

# APPLICATION OF THE MODEL

# Advancing the Profession

- Advanced practice education programs
- Educational curriculum
- Recruitment tool







FELLOW OF THE ASSOCIATION FOR PROFESSIONALS IN INFECTION CONTROL AND EPIDEMIOLOGY

# Advancing the Profession

# Certification

Competency Advancement Assistance (CAA) Program https://apic.org/education-and-events/certification/caa/

# Tuition Reimbursement/Scholarships Join local APIC chapter

Volunteer for Chapter Office Volunteer for Chapter Committees

Volunteer for National APIC Committees/Teams
Attend Conferences
Volunteer for CBIC





This section of the handbook outlines resource materials recommended by CBIC for examination preparation. The expanded examination content outline provided below, is a useful tool for course and curriculum preparation and to judge the relevance of topics to the content of the examination. The below content outline is for the initial certification examination. *Please note:* The recertification examination content outline contains the same content as listed below but the scored domains and number of items in each domain area may vary slightly. This section also contains reference lists for all examinations, as well as information about the CBIC practice examination.

#### 2020 CIC® Examination Content Outline

#### 1) Identification of Infectious Disease Processes (22 items)

- a. Interpret the relevance of diagnostic and laboratory reports
- b. Identify appropriate practices for specimen collection, transportation, handling, and storage
- c. Correlate clinical signs and symptoms with infectious disease process
- d. Differentiate between colonization, infection and contamination
- e. Differentiate between prophylactic, empiric and therapeutic uses of antimicrobials

#### 2) Surveillance and Epidemiologic Investigation (24 items)

- a. Design of Surveillance Systems
  - Conduct a risk assessment on the population served, services provided, and regulatory or other requirements
  - Develop goals and objectives based upon the risk assessment
  - 3. Develop a surveillance plan based on the goals identified from the risk assessment
  - 4. Evaluate periodically the effectiveness of the surveillance plan and modify as necessary
  - Create a notification system based on surveillance plan including epidemiologically significant findings
  - Integrate surveillance activities across health care settings (e.g., ambulatory, home health, long term care, acute care)
  - Establish mechanisms for identifying individuals with communicable diseases requiring follow-up and/or transmission based precautions
- b. Collection and Compilation of Surveillance Data
  - Use a systematic approach to record surveillance data
  - 2. Organize and manage data in preparation for analysis
  - 3. Calculate the incidence or prevalence of infections
  - Calculate specific infection rates/ratios (e.g., provider-specific, unit-specific, device-specific, procedure-specific, Standardized Infection Ratio)
  - Use of standardized definitions



#### c. Interpretation of Surveillance Data

- Generate, and validate surveillance data
- Use basic statistical techniques to describe data (e.g., mean, standard deviation, rates, ratios, proportions)
- 3. Monitor and interpret the relevance of antimicrobial susceptibility patterns
- 4. Compare surveillance results to published data and/or other relevant benchmarks
- 5. Analyze and interpret data using appropriate methods
- Prepare and present findings in an appropriate format that is relevant to the audience/ stakeholders (e.g., graph, tables, charts)
- Develop and facilitate corrective action plans based on surveillance findings
- When to implement an epidemiological study to investigate a problem (e.g., case control, cohort studies)

#### d. Outbreak Investigation

- 1. Verify existence of outbreak
- Collaborate with appropriate persons to establish the case definition, period of investigation, and case-finding methods
- 3. Define the problem using time, place, person, and risk factors
- 4. Formulate hypothesis on source and mode of transmission
- 5. Implement and evaluate control measures, including ongoing surveillance
- 6. Prepare and disseminate reports

#### 3) Preventing/Controlling the Transmission of Infectious Agents (25 items)

- a. Develop evidence-based/informed infection prevention and control policies and procedures
- Collaborate with relevant groups and agencies in planning community/facility responses to biologic threats and disasters (e.g., public health, anthrax, influenza)
- c. Identify and implement infection prevention and control strategies related to:
  - Hand hygiene
  - Cleaning, disinfection, and sterilization
  - Wherever healthcare is provided (e.g., patient care units, operating room, ambulatory care center, home health, pre-hospital care)
  - Infection risks associated with therapeutic and diagnostic procedures and devices (e.g., dialysis, angiography, bronchoscopy, endoscopy, intravascular devices, urinary drainage catheter)
  - 5. Recall of potentially contaminated equipment, food, medications, and supplies
  - Transmission-based Precautions
  - 7. Appropriate selection, use, and disposal of Personal Protective Equipment
  - Patient placement, transfer, and discharge
  - Environmental pathogens (e.g., Legionella, Aspergillus)
  - 10. Use of patient care products and medical equipment
  - 11. Immunization programs for patients
  - The influx of patients with known/suspected communicable diseases (e.g., bioterrorism, emerging infectious diseases, syndromic surveillance)
  - 13. Principles of safe injection practices (e.g., parenteral medication administration, single use of syringes and needles, appropriate use of single and multi-dose vials)
  - Identifying, implementing and evaluating elements of Standard Precautions/Routine Practices (e.g., respiratory hygiene/cough etiquette)
  - 15. Antimicrobial stewardship





- a. Review and/or develop screening and immunization programs
- Collaborate regarding counseling, follow up, and work restriction recommendations related to communicable diseases and/or exposures
- Collaborate with occupational health to evaluate infection prevention-related data and provide recommendations
- d. Collaborate with occupational health to recognize healthcare personnel who may represent a transmission risk to patients, coworkers, and communities
- Assess risk of occupational exposure to infectious diseases (e.g., Mycobacterium tuberculosis, bloodborne pathogens)

#### 5) Management and Communication (13 items)

#### a. Planning

- Develop, evaluate, and revise a mission and vision statement, goals, measurable objectives, and action plans for the Infection Prevention and Control Program
- Assess needs then recommend specific equipment, personnel, and resources for the Infection Prevention and Control Program
- Participate in cost benefit assessments, efficacy studies, evaluations, and standardization of products
- Recommend changes in practice based on current evidence, clinical outcomes, and financial implications
- Incorporate business modeling to assign value to prevention of and/or presence of healthcare-associated infection (e.g., cost/benefit analysis, return on investment)

#### b. Communication and Feedback

- Provide infection prevention and control findings, recommendations, and reports to appropriate stakeholders
- 2. Facilitate implementation of policies, procedures, and recommendations
- Communicate effectively with internal and external stakeholders (e.g., transitions of care, reporting of notifiable diseases)
- Collaborate with internal and external stakeholders in the identification and review of adverse and sentinel events
- Evaluate and facilitate compliance with accreditation standards/regulatory requirements
- Perform and create a personalized development plan. (e.g., set goals, maintain competence)

#### c. Quality Performance Improvement and Patient Safety

- Participate in quality/performance improvement and patient safety activities related to infection prevention and control (e.g., failure mode and effects analysis, plan-do-study-act)
- Develop, monitor, measure, and evaluate performance indicators to drive quality improvement initiatives
- Select and apply appropriate quality/performance improvement tools (e.g., "fishbone" diagram, Pareto charts, flow charts, Strengths-Weaknesses-Opportunities-Threats, Gap Analysis)



#### 6) Education and Research (11 items)

#### a. Education

- Assess needs, develop goals and measurable objectives for preparing educational offerings
- 2. Prepare, present, or coordinate educational content that is appropriate for the audience
- Provide immediate feedback, education, and/or training when lapses in practice are observed
- Evaluate the effectiveness of education and learner outcomes (e.g., observation of practice, process measures)
- Facilitate effective education of patients, families, and others regarding prevention and control measures
- Implement strategies that engage the patient, family, and others in activities aimed at preventing infection

#### b. Research

- Conduct a literature review
- Critically appraise the literature
- Facilitate incorporation of applicable research findings into practice

#### 7) Environment of Care (14 items)

- Recognize and monitor elements important for a safe care environment (e.g., Heating-Ventilation-Air Conditioning, water standards, construction)
- b. Assess infection risks of design, construction, and renovation that impact patient care settings
- Provide recommendations to reduce the risk of infection as part of the design, construction, and renovation process
- d. Collaborate on the evaluation and monitoring of environmental cleaning and disinfection practices and technologies
- e. Collaborate with others to select and evaluate environmental disinfectant products

#### 8) Cleaning, Sterilization, Disinfection, Asepsis (15 items)

- a. Identify and evaluate appropriate cleaning, sterilization and disinfection practices
- b. Collaborate with others to assess products under evaluation for their ability to be reprocessed
- c. Identify and evaluate critical steps of cleaning, high level disinfection, and sterilization

Please note: In the CIC® exam, the term "standards precautions" is equivalent to the Canadian term "routine practices."

#### 2020 a-IPC Examination Content Outline

- 1) Identification of Infectious Disease Processes (14 items)
- 2) Surveillance and Epidemiologic Investigation (15 items)
- 3) Preventing/Controlling the Transmission of Infectious Agents (16 items)
- 4) Employee/Occupational Health (7 items)
- 5) Management and Communication (8 items)
- 6) Education and Research (7 items)
- 7) Environment of Care (9 items)
- 8) Cleaning, Sterilization, Disinfection, Asepsis (9 items)



## 2020 References (CIC® and a-IPC)

References have been categorized as primary and secondary sources for content information. Most questions are based on material in the primary references. Secondary references may be useful to help clarify more detailed issues in specific practice settings or content areas such as microbiology.

## 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.
- Brooks, Kathy. Ready Reference for Microbes, 4th ed., APIC; 2018.

## Secondary References:

- Current Recommendations of the Advisory Committee on Immunization Practices (ACIP).
- Current guidelines, standards, and recommendations from CDC, APIC, SHEA, and Public Health Agency of Canada.
- Pickering, Larry K, ed. Red Book, 30th ed., Elk Grove Village, IL: American Academy of Pediatrics; 2015.



# **ACKNOWLEDGEMENTS**

Home > Applying APIC's Competency Model

https://apic.org/applying-apics-competency-model/

## **Applying APIC's Competency Model**



## Heather Bernard, DNP RN CIC FAPIC



- COVID-19 Corps Infection Prevention and Control Specialist at NY State Department of Health
  - CDC Foundation
- Professional Development Committee
  - Chair
- No Disclosures

## Angel Mueller, MPH CIC FAPIC



- System Infection Prevention Director
  - UnityPoint Health
- Professional Development Committee
  - Vice Chair
- Disclosures: Member of Cepheid Speakers Bureau

# REFERENCES

## APIC Competency Model Paper - 2019

# American Journal of Infection Control 47 (2019) 602–614 Contents lists available at ScienceDirect

### American Journal of Infection Control

journal homepage: www.ajicjournal.org



#### Commentary

Advancing the profession: An updated future-oriented competency model for professional development in infection prevention and control



Corrianne Billings BS, BSN, RN, CIC <sup>a,\*</sup>, Heather Bernard DNP, RN, CIC, FAPIC <sup>b</sup>, Lisa Caffery MS, BSN, RN-BC, CIC, FAPIC <sup>c</sup>, Susan A. Dolan RN, MS, CIC, FAPIC <sup>d</sup>, John Donaldson MAT, MS <sup>e</sup>, Ericka Kalp PhD, MPH, CIC, FAPIC <sup>f</sup>, Angel Mueller MPH, CIC, FAPIC <sup>g</sup>

## **APIC Competency Model Application Paper**



Contents lists available at ScienceDirect

### American Journal of Infection Control

journal homepage: www.ajicjournal.org



#### Major Article

Creation of a competency-based professional development program for infection preventionists guided by the APIC Competency Model: steps in the process



Heather Bernard DNP, RN, CIC <sup>a,\*</sup>, Diana Hackbarth PhD, RN, FAAN <sup>b</sup>, Russell N. Olmsted MPH, CIC <sup>a</sup>, Denise Murphy BSN, MPH, CIC, CPPS, FAAN <sup>a</sup>

<sup>a</sup> Mohawk Valley Health System; Faxton St. Luke's Healthcare, St. Elizabeth's Medical Center Infection Prevention Departments, Utica, NY

b Loyola University, Chicago, IL

Janet Conner 970-580-1373 jconner6512@gmail.com