

# Understanding the ICAR tool and Using it to Improve the Infection Prevention Program

Andrea Flinchum, MPH, BSN, CIC  
Healthcare-Associated Infection Prevention Program Manager  
Division of Epidemiology and Health Planning  
Infection Prevention Boot Camp  
September 26, 2017



**Kentucky Public Health**  
Prevent. Promote. Protect.



# Objectives

- Describe the components of the Infection Control Assessment Response (ICAR) tool
- Discuss common ICAR findings in Kentucky facilities and how they can be used to develop interventions aimed at improving the Infection Prevention and Control Program



# ICAR

- Developed by Centers for Disease Control and Prevention (CDC)
- Used to assist health departments in assessing infection prevention practices
- Guide quality improvement
- May also be used by healthcare facilities to conduct internal quality improvement audits



# Settings

- Tool was developed for the following settings:
  - Acute Care Hospitals
  - Long Term Care
  - Outpatient Settings
  - Hemodialysis Facilities

<https://www.cdc.gov/hai/prevent/infection-control-assessment-tools.html>



# Acute Care Hospitals – Overview

Section 1: Facility Demographics

Section 2: Infection Control Program and Infrastructure

Section 3: Direct Observation of Facility Practices (Optional)

Section 4: Infection Control Guidelines and Other Resources



**Facility**

**Demographics**



# Domains for Gap Assessment

- Infection Control Program and Infrastructure
- Infection Control Training, Competency, and Implementation of Policies and Practices
- Systems to Detect, Prevent, and Respond to Healthcare-Associated Infections and Multidrug-Resistant Organisms (MDROs)



# **Infection Control Program and Infrastructure**





# Kentucky Results

- Infection Control Program and Infrastructure
  - ACH - 69% (n=9) No gaps in domain
  - LTACH - 100% (n=3) At least one gap in domain
  - Critical Access Hospitals 100% (n=1) No gaps in domain



# **Infection Control Training, Competency, and Implementation of Policies and Practices**



# Sub-Domains

- Hand Hygiene
- Personal Protective Equipment
- Prevention of Catheter-associated Urinary Tract Infection (CAUTI)
- Prevention of Central Line-associated Bloodstream Infection (CLABSI)
- Prevention of Ventilator-associated event (VAE)
- Injection Safety
- Prevention of Surgical Site Infection (SSI)
- Prevention of *Clostridium difficile* infection (CDI)
- Environmental Cleaning
- Device Reprocessing

# Kentucky Results

## Hand Hygiene

- ACH – 54% (n=7) No gaps in domain
- LTACH - 33% (n=1) No gaps in domain
- Critical Access Hospitals 100% (n=1) At least one gap in domain
  - ❑ Hospital has a competency-based training program for hand hygiene
    - ❑ Personnel are required to demonstrate competency with hand hygiene following each training

# Kentucky Results

## Personal Protective Equipment (PPE)

- ACH – 23% (n=3) No gaps in domain
- LTACH - 100% (n=3) At least one gap in domain
- Critical Access Hospitals 100% (n=1) At least one gap in domain
  - ❑ Hospital has a competency-based training program for use of PPE
    - ❑ Personnel are required to demonstrate competency with selection and use of PPE (i.e. correct technique is observed by trainer) following each training.

# Kentucky Results

## Prevention of CAUTI

- ACH – 100%(n=13) At least one gap in domain
- LTACH - 100% (n=3) At least one gap in domain
- Critical Access Hospitals 100% (n=1) At least one gap in domain
  - ❑ Hospital has a competency-based training program for insertion of urinary catheters
    - ❑ Training is provided at least annually
  - ❑ Hospital has a competency-based training program for maintenance of urinary catheters
    - ❑ Personnel are required to demonstrate competency with catheter maintenance (i.e. correct technique is observed by trainer) following each training

# Kentucky Results

## Prevention of CLABSI

- ACH – 85% (n=11) At least one gap in domain
- LTACH - 100% (n=3) At least one gap in domain
- Critical Access Hospitals 100% (n=1) At least one gap in domain
  - ❑ Hospital provides feedback from audits to personnel regarding their performance for management of ventilated patients
  - ❑ Hospital routinely audits (monitors and documents) adherence to recommended practices for management of ventilated patients (e.g. suctioning, administration of aerosolized medications)

# Kentucky Results

## Prevention of VAE

- ACH – 92% (n=12) At least one gap in domain
- LTACH - 100% (n=3) At least one gap in domain
- Critical Access Hospitals - Not applicable
  - ❑ Hospital has a competency-based training program for insertion of central venous catheters
    - ❑ Training is provided at least annually/Hospital routinely audits (monitors and documents) adherence to recommended practices for insertion
  - ❑ Hospital has a competency-based training program for maintenance of central venous catheters
    - ❑ Respondent can describe how feedback is provided/frequency of feedback



# Kentucky Results

## Injection Safety

- ACH – 100% (n=13) At least one gap in domain
- LTACH - 67% (n=2) At least one gap in domain
- Critical Access Hospitals - 100% (n=1) At least one gap in domain
  - ❑ Hospital routinely audits (monitors and documents) adherence to safe injection practices
  - ❑ Hospital has a drug diversion prevention program that includes consultation with the IP program when drug tampering (involving alteration and substitution) is suspected or identified to assess patient safety risks.

# Kentucky Results

## Prevention of SSI

- ACH – 69% (n=9) At least one gap in domain
- LTACH - 67% (n=2) Not applicable
- Critical Access Hospitals - 100% (n=1) No gaps in domain
  - Hospital routinely audits (monitors and documents) adherence to recommended infection control practices for SSI prevention

# Kentucky Results

## Prevention of CDI

- ACH – 77% (n=10) At least one gap in domain
- LTACH - 100% (n=3) At least one gap in domain
- Critical Access Hospitals - 100% (n=1) No gaps in domain
  - ❑ Hospital has specific antibiotic stewardship strategies in place to reduce CDI
  - ❑ Hospital educates patients and family members about the risk of CDI with antibiotics

# Kentucky Results

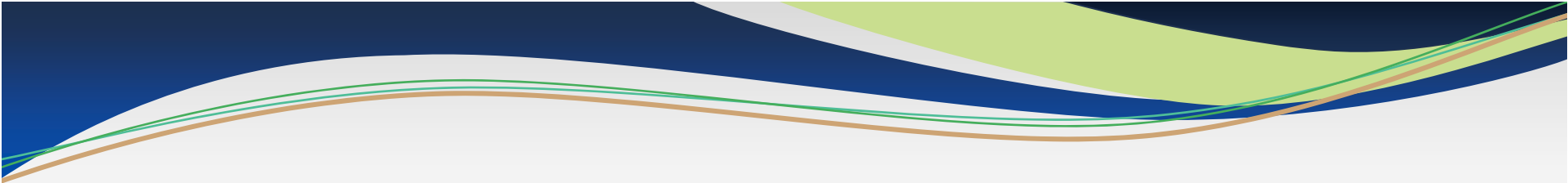
## Environmental Cleaning

- ACH – 62% (n=8) At least one gap in domain
- LTACH - 100% (n=3) At least one gap in domain
- Critical Access Hospitals - 100% (n=1) No gaps in domain
  - Hospital has policies that clearly define responsibilities for cleaning and disinfection of non-critical equipment, mobile devices, and other electronics (e.g. ICU monitors, ventilator surfaces, bar code scanners, point-of-care devices, mobile work stations, code carts, airway boxes)

# Kentucky Results

## Device Reprocessing

- ACH – 54% (n=7) No gaps in domain
- LTACH - 100% (n=3) At least one gap in domain
- Critical Access Hospitals - 100% (n=1) No gaps in domain
  - ❑ Hospital routinely audits (monitors and documents) adherence to reprocessing procedures for critical devices
  - ❑ Audits occur in all locations where critical devices are reprocessed including locations where initial cleaning steps are performed
  - ❑ IP program is consulted whenever new equipment or products will be purchased or introduced to ensure implementation of appropriate reprocessing policies and procedures



**Systems to Detect,  
Prevent, and Respond to  
Healthcare-Associated  
Infections and Multidrug-  
Resistant Organisms  
(MDROs)**

# Kentucky Results

## Systems for HAIs and MDROs

- ACH – 69% (n=9) At least one gap in domain
- LTACH - 100% (n=3) At least one gap in domain
- Critical Access Hospitals - 100% (n=1) No gaps in domain
  - ❑ Hospital has system in place for early detection and management of potentially infectious persons at initial points of entry to the hospital including rapid isolation as appropriate
  - ❑ Hospital has system in place for INTER-facility communication of infectious status and isolation needs of patients prior to transfer to other facilities and prior to accepting patients from other facilities



# Kentucky Results

## 7 Core Elements of Antibiotic Stewardship Program

- ACH – 77% (n=10) Meet all 7 core elements
- LTACH - 67% (n=2) Meet all 7 core elements
- Critical Access Hospitals - 100% (n=1) Meet all 7 core elements





# Observations



# Long Term Care – Overview

Section 1: Facility Demographics

Section 2: Infection Control Program and Infrastructure

Section 3: Direct Observation of Facility Practices (Optional)

Section 4: Infection Control Guidelines and Other Resources



# Facility Demographics



# Domains for Gap Assessment

- Infection Control Program and Infrastructure
- Healthcare Personnel and Resident Safety
- Surveillance and Disease Reporting
- Hand Hygiene
- PPE
- Respiratory/Cough Etiquette
- Antibiotic Stewardship
- Infection Safety and Point of Care Testing
- Environmental Cleaning



# **Infection Control Program and Infrastructure**



# Kentucky Results

## Infection Control Program and Infrastructure

- LTC – 100% (n=3) No gaps in domain
  - ❑ Specified person responsible for coordinating the program
  - ❑ Specified person has received training
  - ❑ Written infection control policies
  - ❑ Policies reviewed annually
  - ❑ Written plan for emergency preparedness



# Kentucky Results

## Healthcare Personnel and Resident Safety

- LTC – 67% (n=2) No gaps in domain
  - ❑ The facility educates personnel on prompt reporting of signs/symptoms of a potentially transmissible illness to a supervisor
  - ❑ The facility documents resident immunization status for pneumococcal vaccination at time of admission

# Kentucky Results

## Surveillance and Disease Reporting

- LTC – 100% (n=3) At least one gap in domain
  - ❑ The facility has a written surveillance plan outlining the activities for monitoring/tracking infections occurring in residents in the facility
  - ❑ The facility has a written plan for outbreak response which includes a definition, procedures for surveillance and containment, and a list of syndromes or pathogens for which monitoring is performed





# Kentucky Results

## Hand Hygiene

- LTC – 100% (n=3) At least one gap in domain
  - ❑ The facility provides feedback to personnel regarding their hand hygiene performance

## PPE

- LTC – 33% (n=2) No gaps in domain
  - ❑ The facility audits (monitors and documents) adherence to PPE use (e.g. adherence when indicated, donning/doffing)

# Kentucky Results

## Respiratory and Cough Etiquette

- LTC – 67% (n=2) At least one gap in domain
  - ❑ The facility has signs posted at entrances with instructions to individuals with symptoms of respiratory infection to:
    - ❑ Cover their mouth/nose when coughing or sneezing
    - ❑ Use and dispose of tissues
    - ❑ Perform hand hygiene after contact with respiratory secretions



# Kentucky Results

## Antibiotic Stewardship

- LTC – 67% (n=2) At least one gap in domain
  - ❑ The facility identified individuals accountable for leading antibiotic stewardship activities
  - ❑ The facility has access to individuals with antibiotic prescribing expertise (ID trained physician or pharmacist)

# Kentucky Results

## Injection Safety and Point of Care Testing

- LTC – 67% (n=2) At least one gap in domain
  - ❑ Personnel who perform point of care testing receive training and competency validation on injection safety procedures at time of employment
  - ❑ The facility audits (monitors and documents) adherence to injection safety procedures during point of care testing



# Kentucky Results

## Environmental Cleaning

- LTC – 100% (n=3) At least one gap in domain
  - ❑ The facility has written cleaning/disinfection policies which handling of equipment shared among residents (e.g. blood pressure cuffs, rehab therapy equipment)
  - ❑ Appropriate personnel received job-specific training and competency validation on cleaning and disinfection procedures within the last 12 months



# Observations



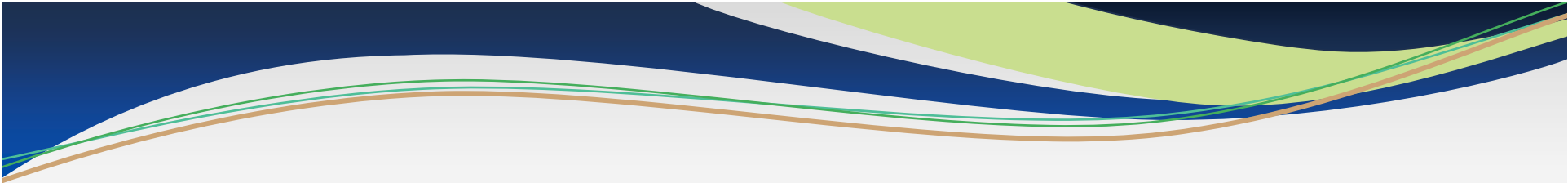
# Outpatient Settings – Overview

Section 1: Facility Demographics

Section 2: Infection Control Program and Infrastructure

Section 3: Direct Observation of Facility Practices (Optional)

Section 4: Infection Control Guidelines and Other Resources



# **Facility Demographics**





# Domains for Gap Assessment

- Infection Control Program and Infrastructure
- Infection Control Training and Competency
- Healthcare Personnel Safety
- Surveillance and Disease Reporting
- Hand Hygiene
- PPE
- Infection Safety (if applicable)
- Respiratory/Cough Etiquette
- Point-of-Care Testing (if applicable)
- Environmental Cleaning
- Device Reprocessing (sterilization and high level disinfection)



# **Infection Control Program and Infrastructure**



# Kentucky Results

## Infection Control Program and Infrastructure

- Output – 100% (n=1) At least one gap in domain
  - ❑ Written infection prevention policies and procedures are current, and evidence-based guidelines (e.g. CDC, HICPAC), regulations or standards
  - ❑ At least one individual trained in infection prevention is employed by or regularly available to manage the facility's infection control program



# Kentucky Results

## Infection Control Training and Competency

- Output 100% (n=1) No gaps in domain

## Healthcare Personnel Safety

- Output 100% (n=1) At least one gap in domain
  - ❑ Facility has well-defined policies concerning contact of personnel with patients when personnel have potentially transmissible conditions including:
    - ❑ Work-exclusion policies that encourage reporting of illnesses and do not penalize with loss of wages, benefits, or job status



# Kentucky Results

## Surveillance and Disease Reporting

- Output – 100% (n=1) At least one gap in domain
  - ❑ An updated list of diseases reportable to the public health authority is readily available to all personnel
  - ❑ Facility can demonstrate knowledge of and compliance with mandatory reporting requirements for notifiable diseases, healthcare associated infections (as appropriate) and for potential outbreaks



# Kentucky Results

## Hand Hygiene

- Output – 100% (n=1) At least one gap in domain
  - ❑ Facility routinely audits (monitors and documents) adherence to hand hygiene

## PPE

- Output – 100% (n=1) At least one gap in domain
  - ❑ Sufficient and appropriate PPE is available and readily accessible to healthcare provider (HCP)



# Kentucky Results

## Injection Safety

- Output – 100% (n=1) At least one gap in domain
  - Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids or contaminated equipment

## Respiratory Hygiene/Cough Etiquette

- Output – 100% (n=1) At least one gap in domain
  - Did not meet one item in this domain, no respiratory hygiene or cough etiquette practice or policy



# Kentucky Results

## Point-of-Care Testing

- Output – 100% (n=1) At least one gap in domain
  - ❑ HCP who perform point-of-care testing receive training on recommended practices
  - ❑ Facility routinely audits (monitors and documents) adherence to recommended practices during point-of-care testing



# Kentucky Results

## Environmental Cleaning

- Output – 100% (n=1) At least one gap in domain
  - ❑ Facility routinely audits (monitors and documents) adherence to cleaning and disinfection procedures, including using products in accordance with manufacturer's instructions
  - ❑ HCP engaged in environmental cleaning wear appropriate PPE to prevent exposure to infectious agents or chemicals

# Kentucky Results

## Device Reprocessing

- Output – 100% (n=1) At least one gap in domain
  - ❑ Facility routinely audits (monitors and documents) adherence to reprocessing procedures
  - ❑ Routine maintenance for reprocessing equipment is performed by qualified personnel in accordance with manufacturer instructions
  - ❑ A workflow pattern is followed such that devices clearly flow from high contamination areas to clean/sterile areas (i.e., there is clear separation between soiled and clean workspaces)



# Observations



## Next steps....

- Facility receives a report describing how the domains are met/not met with recommendations for mitigating those gaps
- Report includes observations made
- Resources provided to help mitigate gaps
- Regulations are provided where needed
- Best practices shared from sister facilities
- Follow up visit/call if wanted/needed





# Thank you for your attention

Andrea Flinchum, MPH, BSN, CIC

HAI Prevention Program Manager

Kentucky Department for Public Health

[Andrea.Flinchum@ky.gov](mailto:Andrea.Flinchum@ky.gov)

Phone 502-564-3261 ext. 4248

Fax 502-564-2816