## Florida Department of Health

## **Health Care-Associated Infection**

## **Prevention Program**

# Strategic Plan to Prevent Health Care-Associated Infections and Antimicrobial Resistance

2019-2024



Version 1
June 2019
Addendum February 2022

Produced by:
Florida Department of Health
Health Care-Associated Infection Prevention Program
4052 Bald Cypress Way, Bin #A12
Tallahassee, FL 32399

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## **Acronyms and Abbreviations**

AR antimicrobial resistance

ARLN Antimicrobial Resistance Laboratory Network

ASB asymptomatic bacteriuria

ASP antimicrobial stewardship program

AU antimicrobial use

AUR antimicrobial use and resistance

BPHL Bureau of Public Health Laboratories

CAUTI catheter-associated urinary tract infection

CDC Centers for Disease Control and Prevention

CDI Clostridioides difficile infection

CephR extended-spectrum cephalosporin-resistant

CHD county health department

CLABSI central line-associated bloodstream infection

COVID-19 Coronavirus disease

CPO carbapenemase-producing organism

CR carbapenem-resistant

CRE carbapenem-resistant Enterobacterales

CRPA carbapenem-resistant Pseudomonas aeruginosa

DUA data use agreement

ELC Epidemiology and Laboratory Capacity

ELR electronic laboratory reporting
HAI health care-associated infection

HHS U.S. Department of Health and Human Services

ICAR infection control and assessment response

KPC Klebsiella pneumoniae carbapenemase

MDR multidrug-resistant

MDRO multidrug-resistant organism

MRSA methicillin-resistant Staphylococcus aureus

NHSN National Healthcare Safety Network

POC point of contact

SIR standardized infection ratio
SOP standard operating procedure

SSI surgical site infection

TAP targeted assessment for prevention

VAE ventilator-associated event

VRE vancomycin-resistant Enterococci

## **Executive Summary**

Florida has the largest proportion of persons aged 65 years and older in the nation, making up 21.3% of the residential population. A large system of health care facilities has been developed to support its resident population. Additionally, there were over 120 million domestic and international visitors to Florida in 2016, including those coming

through Florida's 14 international airports, with the largest volume coming through Miami and Orlando. There are 315 licensed inpatient hospitals with 213 having emergency departments. There are 439 ambulatory surgery centers, 683 nursing homes and 3,106 licensed assisted living facilities in Florida. \*

Florida serves a diverse population through numerous health care settings.

21.3%

X

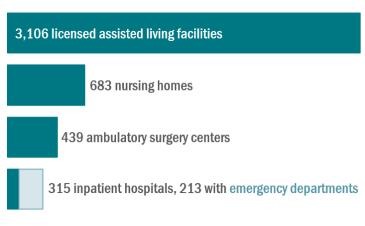
Age 65+

120 million visitors in 2016

Maintaining and building relationships with health care facilities is critical for public health in Florida on multiple fronts:

- Preventing HAIs.
- Investigating and responding to HAI outbreaks.
- Infection control assessments and responses.
- Providing state-level surveillance capacity.

In response to the increasing concerns about the public health impact of HAIs, HHS developed an action plan to help prevent these infections. The HHS Action Plan includes recommendations for surveillance, research, communication, and metrics measuring progress toward national goals.



Three overarching priorities have been identified:

- 1) Establishing five-year national prevention targets (e.g., 50–70% reduction in bloodstream infections).
- 2) Improving the use of quality metrics and supporting surveillance systems to meet targets.
- 3) Prioritizing and implementing current, evidence-based prevention recommendations.

\*Source: Florida Hospital Association, 2015; Association for Health Care Administration, 2015

## **HAI Program Background**

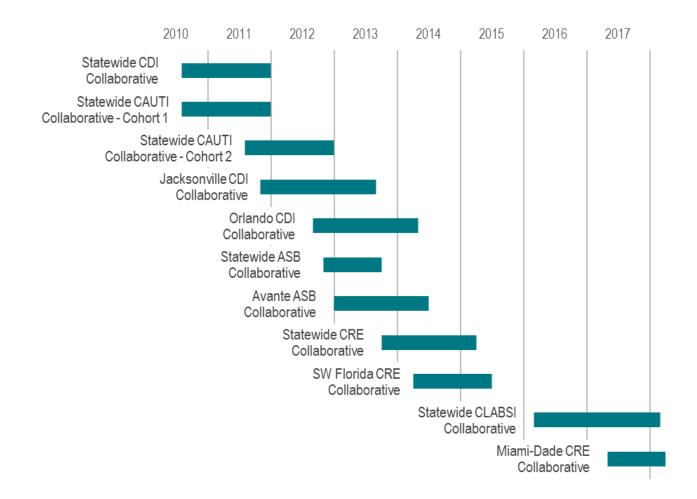
The Florida Department of Health (FDOH) HAI Prevention Program was established in 2010 through the CDC ELC cooperative agreement. Program strategic priorities included:

- Establishing an HAI prevention program infrastructure.
- Conducting HAI and AR surveillance.
- Engaging in prevention activities with internal and external partners (e.g., supporting CHD investigations, responding to outbreaks, and promoting infection control best practices and judicious use of antibiotics).

The FDOH HAI Prevention Program is overseen by the health executive medical director and consists of the program manager, outbreak infection control and response epidemiologist, an infection preventionist, an AR coordinator, a data analyst and an operation specialist. In 2018, FDOH received additional subject matter expertise and field support through the CDC by adding a field medical officer to the HAI Prevention Program. The HAI Prevention Program also supports three CHD HAI epidemiologists.



Since its installation, the HAI Prevention Program has facilitated several statewide and regional collaboratives, working in conjunction with local, state, and federal health care partners to promote effective infection control practices.



HAIs, including infections from antimicrobial-resistant organisms, cause significant harm to patients, are costly and are largely preventable. CDC formally identified eliminating HAIs as a "winnable battle" because HAIs are a national health priority with proven and effective strategies for prevention. FDOH collaboratives have led to a 3.4% decrease in CDI incidence and a 23% decrease in CAUTIs. Building upon these successes is crucial for the continued progress toward the elimination of HAIs and antimicrobial-resistant organisms.

In addition to providing education, training and networking opportunities, FDOH conducts thorough site assessments at each facility participating in a collaborative to assess infection prevention policies and identify areas for improvement. In 2015, CDC created the ICAR assessment, which was designed to evaluate a facility's capability to identify, inform, isolate, prepare for transport and provide care for persons with highly infectious diseases, such as Ebola. The HAI Prevention Program adopted this assessment and created a standardized ICAR process that continues to be used by collaboratives and during outbreak investigations. In 2017, the HAI Prevention Program conducted 34 ICARs, four of which were conducted as part of a collaborative and 10 of which were conducted in response to outbreak investigations.

#### Mission and Vision

**Mission** To promote the prevention and control of health care-associated and antimicrobial-resistant

organism infections using surveillance methods, evidence-based prevention and control

strategies through the collaboration of public and private health agencies.

**Vision** To reduce HAIs within Florida's health care system.

Goal To respond effectively to control HAI outbreaks and prevent HAIs among FDOH care

facilities.

## **Priority Areas**

Four priority areas are identified:



## Infection Prevention Standards and Practices

Goal: Provide education, resources and engagement with stakeholders across the continuum of health care



Surveillance and Outbreak Response to HAIs

Goal: Improve detection, investigation, response and control measures for HAI outbreaks



## **Antimicrobial Stewardship**

Goal: Improve
antimicrobial prescribing
practices; slow
antimicrobial resistance
across the continuum of
care



## Surveillance and Outbreak Response to MDROs and *C. difficile*

Goal: Improve detection, investigation, response and control measures for outbreaks of MDROs and *C. difficile* 

## **Funding**

The HAI Prevention Program is currently funded through the ELC Cooperative Agreement. The goal of this agreement is to prevent and control the spread of infectious disease threats by increasing health department capacity. The current ELC funding cycle is in its final year of a five-year cycle (August 1, 2018–July 31, 2019). The CDC is currently preparing for the launch of a new five-year ELC cooperative agreement, which is set to begin on August 1, 2019 and run through July 31, 2024. As of May 2021, the current ELC funding cycle is in the third year of a five-year cycle (August 1, 2021–July 31, 2022). The activities set forth in this plan are contingent upon continued program funding.

## **Key Strategies**

Cross-cutting topics were identified as key strategies throughout the plan.

Education & Training Develop and evaluate health care professional and FDOH education and training essential for a competent work force that adopts best practices to prevent HAIs and AR. Education for policy makers, administrators and community members will increase awareness, support and investment in efforts to prevent HAIs and AR.

Policy Development Establish FDOH policies with clear standards for acceptable practices. Policies can be used to focus resources on priority areas. Examples include using policies about infection control training as a strategy to achieve the goal of having a competent workforce; policies for HAI and AR reporting help to obtain the data necessary to inform action.

Data & Surveillance Coordinate surveillance to provide data that will be used to measure, inform and guide improvement efforts.

#### Communication

Communicate information effectively to spread best practices for the prevention of HAIs and AR. Improving communication across the continuum of care, particularly when patients transition between health care facilities or providers, will facilitate more timely interventions and prevention of HAIs.

## **Summary of HAI/AR Trends in Florida**

The National and State HAI Progress Report, compiled by the CDC, provides SIRs of selected HAIs compared to the HHS Action Plan SIR goals. These data are used to track progress and target interventions to reduce the incidence of HAIs.

The following acute-care facility summary data were used to guide action planning:

		FL SIR		Trend	% Change 2017	% Difference 2017 FL	HHS Proposed	Target
Metric	2015	2016	2017*	2015–2017	FL vs. 2015 FL	vs. National Baseline	Reduction	Met?
CAUTI	0.89	0.82	0.74		17% ↓	26% ↓	25%	✓
CDI	0.94	0.81	0.68		28% ↓	32% ↓	30%	✓
CLABSI	1.10	0.91	0.81		26% ↓	19% ↓	50%	×
MRSA	1.25	1.12	1.03		17% <b>↓</b>	3% ↑	50%	×
SSI - Abdominal hysterectomy	0.94	0.91	0.89		5% ↓	11% ↓	30%	×
SSI - Colon	1.00	0.81	0.84		16% ↓	16% ↓	30%	X
VAE	1.00	0.82	0.84		16% ↓	16% ↓		

## **2017 HAI Data Summary**

#### **CAUTI**

For all locations (critical care locations, wards) combined, Florida observed 1,639 CAUTIs. Infections predicted were 2,228.97 with an SIR of 0.74 (95% confidence interval of 0.700, 0.772). This translates to a 26% reduction compared to the national referent period, a 17% reduction compared to the 2015 FL SIR and a 11% reduction compared to the 2016 FL SIR. The reduction in CAUTIs were statistically significant.

#### **CDI**

Florida observed 5,488 hospital-onset CDIs. Infections predicted were 8,114.94 with an SIR of 0.68 (95% confidence interval of 0.659, 0.694). This translates to a 32% reduction compared to the national referent period, a 28% reduction compared to the 2015 FL SIR and a 16% reduction compared to the 2016 FL SIR. The reduction in CDIs was statistically significant.

#### **CLABSI**

For all locations (critical-care locations, wards, neonatal intensive-care units) combined, Florida observed 1,633 CLABSIs. Infections predicted were 2,008.47 with an SIR of 0.81 (95% confidence interval of 0.774, 0.853). This translates to a 19% reduction compared to the national referent period, a 26% reduction compared to the 2015 FL SIR and a 10% reduction compared to the 2016 FL SIR. The reduction in CLABSIs was statistically significant.

#### **MRSA**

Florida observed 755 hospital-onset MRSA bacteremia infections. Infections predicted were 729.95 with an SIR of 1.03 (95% confidence interval of 0.962, 1.110). The 2017 FL SIR was 3% higher compared to the national referent period; however, there was a statistically significant reduction of 17% compared to the 2015 FL SIR. The 8% reduction in 2017 FL SIR from 2016 FL SIR was not statistically significant.

#### SSI – Abdominal hysterectomy

Florida observed 109 SSIs following abdominal hysterectomy surgery in adults ≥18 years of age. Infections predicted were 122.62 with a SIR of 0.89 (95% confidence interval of 0.733, 1.068). This translates to a 11% reduction compared to the national referent period, a 5% reduction compared to the 2015 FL SIR and a 3% reduction compared to the 2016 FL SIR. However, the reductions were not statistically significant.

#### SSI - Colon

Florida observed 496 SSIs following colon surgery in adults ≥18 years of age. Infections predicted were 588.72 with an SIR of 0.84 (95% confidence interval of 0.771, 0.919). This translates to a 16% reduction compared to the national referent period and a 16% reduction compared to the 2015 FL SIR. The reductions were statistically significant. The 4% increase in 2017 FL SIR from 2016 FL SIR was not statistically significant.

#### VAE

For all locations (critical-care locations, wards) combined, Florida observed 1,653 VAEs. Infections predicted were 1,964.29 with an SIR of 0.84 (95% confidence interval of 0.802, 0.883). This translates to a 16% reduction compared to the national referent period and a 16% reduction compared to the 2015 FL SIR. The reduction in VAEs was statistically significant. The 3% increase in 2017 FL SIR from 2016 FL SIR was not statistically significant.

## **2017 AR Data Summary**

Along with HAI summary data, AR data for seven bug-drug profiles (i.e., pathogen-antibiotic combinations that are used to describe the bacteria's resistance to specific drugs) is collected after a CLABSI, CAUTI or SSI occurs. These profiles include:

- CephR Klebsiella species
- CR Escherichia coli
- CR Enterobacter species
- CR Klebsiella species
- MDR Acinetobacter species
- MRSA
- VRE

The following acute-care facility summary data were used to guide action planning:

	% Res	% Change 2017	
	2014*	2017	vs. 2014
CephR Klebsiella	19.46	26.46	36 🛧
CR <i>E. coli</i>	1.00	1.56	60 🛧
CR Enterobacter	4.76	7.37	54 🛧
CR Klebsiella	4.60	5.93	28 🔨
MDR Acinetobacter	46.38	26.32	43 ↓
MRSA	58.96	49.73	16 ↓
VRE	71.71	64.43	10 ↓

<sup>\*2015</sup> and 2016 data not available online or through the Florida data use agreement

In 2017, 61 facilities reported at least one month of AU data and 60 facilities reported at least one month of AR data. Another source of AR data is the NHSN AUR module. This module provides a mechanism for facilities to report and analyze AU as a part of antimicrobial stewardship efforts, to evaluate AR data using a standardized approach, to aid in clinical decision making related to AR issues and to prioritize transmission prevention efforts.

The Core Elements of Antibiotic Stewardship Programs, developed by the CDC, are used to assess the robustness of health care facility ASPs. Facilities participating in the NHSN Patient Safety Component are required to complete an annual survey. This survey contains questions that quantify the number of core elements met by each facility.

The following acute-care hospital summary data were used to guide action planning:

	% Hospitals M	% Hospitals Meeting Core Elements of ASPs					
	2015 (n=205)	2016 (n=211)	2017 (n=210)	vs. 2015			
All 7 core elements met	64	76	85	33 个			
Leadership commitment	84	92	98	17 🛧			
Accountability	88	95	94	7 1			
Drug expertise	93	98	95	2 1			
Action	98	100	100	2 1			
Tracking	91	95	99	9 🛧			
Reporting	92	94	96	4 1			
Education	77	86	93	21 🛧			

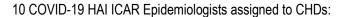
Since 2015, the percentage of facilities meeting all seven core elements has increased from 64% to 85%. The percentage of hospitals meeting each element has increased for all elements.

## **HAI Prevention Program COVID-19 HAI Epi Plan**

In response to the SARS-CoV-2 pandemic, the HAI Prevention Program developed the following response plan:

The HAI Prevention Program coordinates outreach and activities associated with the implementation of infection control assessments within long-term care facilities, acute-care hospitals, dialysis facilities, ambulatory surgery centers, outpatient care facilities, school settings, rehab centers and additional group settings as needed and identified. Infection control assessment and response activities are conducted, either on site or by telephone, to evaluate infection prevention and control practices and identify potential gaps as part of preparedness activities. The HAI Prevention Program provides education and training as a part of identified gap mitigation related to infection prevention and control. Follow-up assessments are conducted as needed. Counties with the highest number of COVID-19 cases are identified for placement of HAI/ICAR epidemiologists to conduct ICAR assessments within identified settings and support outbreak response activities. Regional infection preventionists and infection prevention education specialists are placed throughout the seven regions. The HAI Prevention Program continues to engage with facilities regarding the reporting of point-of-care antigen test results into the NHSN COVID-19 module and the running and analysis of surveillance reports in the COVID-19 module. These activities prompt for direct infection control outreach initiatives. Outreach includes conducting ICARs, providing training and education and facilitating county health department and health care facility access to and use of the COVID-19 patient impact data within NHSN. HAI COVID-19 ICAR epidemiologists also support NHSN COVID-19 module analysis by using data to direct outreach activities and CHD enrollment into the NHSN module. The information below provides an overview of activities and intended outcomes.

Staffing Plan:



2 Miami-Dade

Palm Beach

Broward

Polk

Orange

Hillsborough

Volusia

Lee

Okaloosa

- 1 Data Analyst
- 1 Program Assistant (Tallahassee)
- 3 Project Assistants (Tallahassee)
- 5 Regional Infection Prevention Education Specialists
- 17 Regional Infection Preventionists

- Region 1, 2: Escambia, Santa Rosa, Okaloosa, Walton, Holmes, Washington, Bay, Jackson, Calhoun, Gulf, Liberty, Gadsden, Franklin, Leon, Wakulla, Jefferson, Madison, Taylor, Hamilton, Suwannee, Lafayette, Dixie, Columbia
- Region 3, 5: Nassau, Baker, Duval, Union, Bradford, Clay, St. Johns, Gilchrist, Alachua, Putnam, Flagler, Levy, Marion, Volusia, Lake, Seminole, Orange, Osceola, Brevard, Indian, River, St. Lucie, Martin
- Region 4: Citrus, Hernando, Sumter, Pasco, Hillsborough, Pinellas, Polk, Hardee
- Region 6: Manatee, Sarasota, DeSoto, Charlotte, Lee, Highlands, Okeechobee, Glades, Hendry, Collier
- Region 7: Palm Beach, Broward, Miami-Dade, Monroe

#### **Action Plan**

The following sections outline the key priorities, goals, objectives, strategies and performance measures to guide HAI/AR prevention efforts in Florida over the next five years. Performance measures will be analyzed on a continual basis to monitor progress with each priority area. The FDOH HAI Prevention Program will lead implementation of this plan in partnership with the HAI/AR Prevention Advisory Board.

## **Priority A. Infection Prevention Infrastructure, Standards and Practices**

#### Goal #1: Provide resources and engage with stakeholders across the continuum of health care.

#### Objectives

Objective 1.1
Provide leadership,
coordination and
collaboration between
public health and all health
care delivery settings.

#### **Strategies**

- 1.1.1 Engage statewide HAI prevention leadership through a multidisciplinary HAI advisory board.
- 1.1.2 Establish regional and CHD HAI POC to improve communication between the state and counties. The state will:
  - 1.1.2.a Provide training and education on HAIs and MDROs.
  - 1.1.2.b Establish an inventory list of HAI contacts at both CHDs and health care facilities.
  - 1.1.2.c Coordinate laboratory testing, ICARs and other state-level activities with HAI POC assistance to provide arrangement of lab analyses, data sharing, records collection, ICAR scheduling, outbreak response and consultations.
- 1.1.3 Establish relationships with CHDs for HAI program support and maintain executive-level relationships with federal, state and professional organizations.
- 1.1.4 Improve effective HAI communication within and between facilities. The state will:

#### Performance Measures

- Track the number of meetings/communications with HAI/AR Prevention Advisory Board.
- Create communication plan for sharing with CHDs by November 2019.
- Email communication plan to CHDs by December 2019.
- Distribute annual communication and HAI/AR capacity needs assessment to identify areas for improvement by August 2019 with a response goal of 60%.
- Reach a goal of 60% or greater CHD HAI contact attending annual training on HAIs and MDROs.
- Biannual update of CHD HAI contact list.

		<ul> <li>1.1.4.a Examine barriers to inter-facility communication, including the root causes for why facilities may be reluctant to admit patient due to their infection or colonization status.</li> <li>1.1.4.b Establish an inter-agency workgroup to plan and develop guidance for inter-facility communication.</li> <li>1.1.4.c Develop and distribute standardized reporting criteria for communication during inter- and intra-facility patient transfers including patient HAI/AR history and antimicrobial usage.</li> <li>1.1.4.d Provide solutions and assistance to mitigate identified barriers.</li> <li>1.1.4.e Develop and expand ways to automate inter-facility communication of minimum elements of HAI/AR information during patient transfers.</li> </ul>	S	<ul> <li>Distribute annual needs assessment evaluating barriers to provide timely interfacility communication by January 2020 with a response rate of 40% from each facility type.</li> <li>Summarize results and share with interagency workgroup by March 2020.</li> <li>Develop recommendations on minimum elements of HAI/AR information to communicate during patient transfers to health care facilities by October 2020.</li> <li>Disseminate recommendations on minimum elements of HAI/AR information to communicate during patient transfers to health care facilities by January 2021.</li> <li>Annually publish MDRO activity report on EpiCom.</li> </ul>
	1.1.5	Develop and implement a communication plan to provide updates on state HAI program activities and processes to meet public and private stakeholder needs.  1.1.5.a. Increase HAI awareness in the community through improved Web page content and social media account messages.	•	<ul> <li>Annually update inventory of health care settings and facilities that includes a POC for infection prevention and control (or method for reaching that individual).</li> <li>Provide quarterly HAI/AR data reports to stakeholders.</li> <li>Quarterly evaluate Web page content to ensure HAI/AR education and resources are current.</li> </ul>
Objective 1.2	1.2.1	Establish relationships with state academic partners to assist with the development of HAI prevention initiatives and competency-based training		Develop infection prevention competency- based training module expanding into

Objective 1.2
Develop a health care
workforce that is educated

1.2.1 Establish relationships with state academic partners to assist with the development of HAI prevention initiatives and competency-based training programs for health care settings and future health care professionals.

 Develop infection prevention competencybased training module expanding into dialysis and emergency services by January 2020.

and qualified in supporting
effective infection control
programs.

- 1.2.1.a Explore policy options for implementation to mandate minimum training for personnel charged with overseeing prevention and control into standards of practice.
- 1.2.1.b Consider establishing requirements for education and training of health care professionals in HAI prevention (e.g., certification requirements, public education campaigns and targeted provider education) or work with health care partners to establish best practices for training and certification.
- 1.2.2 Conduct ICARs to identify and analyze strengths and weaknesses within health care facilities.
  - 1.2.2.a Develop resources for the implementation of interventions to address priority areas for improvement.
  - 1.2.2.b Assess trends in HAIs to determine effectiveness of implemented interventions.

- 1.2.3 Provide resources through collaboratives for facilities to participate in quality improvement activities and to incorporate current guidelines and recommendations for infection prevention and control into standards of practice.
- 1.2.4 Establish a COVID-19 response team assigned to coordinate outreach and perform infection control activities associated with the implementation of ICAR assessments within long-term care facilities, acute care hospitals, dialysis facilities and ambulatory surgery centers, outpatient-care facilities,

- Create policy for minimum training standards required for personnel in charge of facility infection prevention and control programs by March 2024.
- Track the number/type of facilities that receive on-site assessments and gap analyses annually.
- Track the number/type of resources developed annually.
- Conduct follow-up ICAR assessments 6 months following initial ICAR.
- Conduct data analysis pre- and post-onsite assessment visits to include improvement in hand hygiene and personal protective equipment compliance rates, number of observations, HAI rates, number of audits and compliance with cleaning and disinfection practices with a goal of a minimum of 20% improvement upon follow up.
- Report the number and type of resources and collaboratives provided to facilities quarterly and share with HAI Advisory Board.
- Onboard HAI Project Assistants, HAI COVID-19 Data Analyst, HAI ICAR COVID Epidemiologists, Regional Infection Prevention Education Specialists

1.2.5	Coordinate activities and outreach associated with projects and collaborations for infection control assessment and response.	Conduct a minimum of 20 ICAR assessments per field team member (on site or Tele-ICAR) among health care
1.2.6	Participate in COVID-19 outbreak investigations, perform on-site readiness assessments and re-assessments and review COVID-19 surveillance data.	facilities (e.g., dialysis, long-term care facilities[LTCFs], dental, outpatient, hospitals), school settings, rehab centers and additional group settings as needed and identified each month in each county/region as identified.  Conduct follow-up assessment (on site or telephone) within 3 weeks of completed report to evaluate for implementation of recommendations.
1.2.7	Develop a dashboard for data analysis with key metrics and interpretation of key findings to identify COVID-19 cases and clusters for containment and response.	<ul> <li>Track number of facilities that received outreach after identification of COVID-19 cases and clusters.</li> </ul>
1.2.8 1.2.8.a	Ensure partnerships with Florida health care coalitions and collaborations with state partners in response to COVID-19.  Identify and evaluate infection prevention and control practices as part of preparedness activities.	Track number of meetings/communications with state partners to ensure appropriate response and infection control outreach initiatives.
1.2.9	Identify CHD team member in each respective county on NHSN COVID-19 reports (weekly, monthly, quarterly) for their respective counties to assist with response and mitigation efforts.	Track number of facilities and CHDs that receive education and training related to infection prevention and control. Minimum 80% facility and CHD participation during training/education events.

school settings, rehab centers and additional group settings as needed and identified.

and Regional Infection Preventionists to all 7 regions in FL.

	<ul> <li>1.2.10 Provide training and education to CHD on:</li> <li>1.2.10.a Infection prevention and control to increase their capacity to serve as a resource when responding to COVID-19 and HAI outbreaks.</li> <li>1.2.10.b NHSN COVID-19 patient/resident impact data in acute care and LTCFs.</li> </ul>	<ul> <li>Report the number CHD staff enrolled in NHSN COVID-19 patient/resident impact data in acute care and LTCFs.</li> </ul>
Objective 1.3 Collect, analyze, interpret	1.3.1 Develop and maintain SOPs for ICAR, TAP strategy, ASPs and the Merlin (Florida's existing surveillance system) HAI outbreak module.  1.3.1 a Provide education and training on the use of SOPs to HAI field staff	<ul> <li>Develop SOPs for ICAR by August 2019.</li> <li>Develop TAP strategy SOPs by August 2019.</li> </ul>

and report HAI/AR surveillance data to direct infection prevention activities.

- Provide education and training on the use of SOPs to HAI field staff and CHDs.
- Conduct annual review of the state HAI Prevention Plan to evaluate 1.3.2 progress toward achieving goals set forth in the plan.

- Develop Merlin SOP by August 2019.
- Track the number of counties that participate in SOP trainings with goal attendance rate of 60%.
- Summarize progress toward achieving goals prepared every 6 months and shared with the HAI Advisory Board.

## Priority B. Surveillance, Outbreak and Response to HAIs

Goal #2: Improve detection, knowledge, investigation and response to HAI outbreaks and AR organism outbreaks.

#### **Objectives**

Objective 2.1
Develop surveillance
activities to improve
outbreak detection and to
ensure a timely and
appropriate response is
provided.

#### Strategies

- 2.1.1 Establish an HAI/AR module within Merlin to monitor and detect HAI/AR outbreaks.
- 2.1.1.a Educate CHDs on the use and entry of HAI/AR events into the surveillance module.

2.1.2 Develop guidelines and definitions to improve the detection and reporting of HAI outbreaks to CHDs.

# Objective 2.2 Strengthen knowledge and response to HAIs, AR and AU occurring across the continuum of care.

- 2.2.1 Enact and maintain a DUA with the NHSN and participating health care facilities for access to HAI events and AR/AU data.
- 2.2.2 Ensure information included in the DUA is complete for appropriate analysis and action planning for targeted populations (i.e., patientlevel identifiers).
- 2.2.3 Extend the DUA to additional settings by incorporating long-term care and outpatient care facilities (outpatient care component).

#### Performance Measures

- Create HAI module for reporting of HAI/AR events by August 2019.
- Track the number of HAI/AR outbreaks in jurisdiction by organism, facility type and HAI category quarterly in HAI Advisory Board Report.
- 60% of CHDs complete annual survey and training on the HAI module by September 2019.
- Create HAI Guidance for Surveillance and Investigation for CHDs to conduct outbreak response by August 2019.
- Renew and expand DUA to cover essential HAI data, demographic information and health care settings for thorough analysis to drive quality improvement strategies by 2022.
- Evaluate current DUA and needs assessment to meet quality objectives by 2022.
- Gain access to and analyze existing data sources that are not currently available to the HAI program (ambulatory surgery, long-term care) by 2022.

	2.2.4	Enhance the quality of reporting into NHSN by conducting data validation and quality checks on identified HAI metrics.	<ul> <li>Complete external data validation on a minimum of five facilities annually. Priority will be based on quality of data by using quarterly data.</li> </ul>
Objective 2.3 Prepare for emerging infectious disease threats that may enter health care facilities.	2.3.1	Collaborate and coordinate with state and local HAI/AR Prevention programs, coalitions, communicable disease programs and emergency preparedness programs to prepare regional response plans for emerging threats and novel pathogens.	<ul> <li>Annually review regional- and facility-specific response plans (as feasible) for selected infectious disease threats.</li> <li>When feasible, perform facility readiness assessments (ICAR) as a coordinated team effort across programs.</li> </ul>
	2.3.2	Administer CDC standardized outbreak assessment tools to determine facilities' capabilities for detection, reporting and response to infectious disease outbreaks and emerging threats.	<ul> <li>Provide summary of gaps for improved understanding of gaps for guidance of recommendations/training/education within 30 days of assessment.</li> </ul>
Objective 2.4 Increase knowledge and competency of relevant health care personnel related to outbreak	2.4.1 2.4.1.a	Educate and train relevant staff in health care facilities across the continuum of care on outbreak preparedness and response for emerging and urgent infectious diseases (e.g., use the CDC Outbreak Investigation Toolkit as a resource).  Conduct a needs assessment to determine gaps in knowledge for the development of tarrected training education modules.	<ul> <li>Conduct annual education to CHDs and health care facilities on HAI/AR outbreak preparedness and response through incorporation of content on detection, investigation and response to infectious</li> </ul>

for the development of targeted training education modules.

preparedness, detection,

containment and resolution.

• Hold regional multidisciplinary meetings to

communication about HAIs and AR within cross-continuum clusters of health care facilities and local health departments through a minimum of 3 drills annually.

• Provide number of meetings, participants,

review gaps and foster improved

disease outbreaks.

	2.4.2	Establish protocols for exchanging information about outbreaks or breaches among state and local government partners (e.g., state survey agencies, licensing boards, infectious diseases authorities).	<ul> <li>Conduct evaluation of needs assessment for continued planning by January 2020.</li> <li>Develop preparedness plan defining processes and tiered response criteria to handle serious infection control breaches (e.g., syringe reuse), suspect cases/clusters, and outbreaks by November 2020.</li> </ul>
Objective 2.5 Use available data sources to drive action and response efforts for the prevention of HAIs and AR organisms.	2.5.1	Identify specific HAI prevention targets consistent with the HHS priorities, to include MRSA, CLABSI, abdominal hysterectomy SSI and colon SSI occurring within FDOH care facilities.	<ul> <li>Identify the number of facilities with high infection rates using TAP reports to recruit a minimum of 50% for collaboration.</li> <li>Annually report the proportion of those facilities for which TAP Facility Assessments were conducted.</li> <li>Annually report the proportion of those facilities for which FDOH provided a completed TAP Feedback Report summarizing TAP Facility Assessment results and identifying potential gaps in infection prevention efforts.</li> </ul>

	<ul> <li>Annually report the proportion of those facilities for which evidence-based infection prevention methods were implemented to address gaps, with a minimum of 80% of recommendations be implemented.</li> <li>Annually report the proportion of those facilities that demonstrated reduction in infection rates following the intervention(s).</li> </ul>
O.F.O. Fotablish an infection provention working group under the state LIAI	Total of the considerate for a configuration of

- Establish an infection prevention working group under the state HAI 2.5.2 advisory board to coordinate HAI collaboratives.
- 2.5.3 Implement new reporting mechanisms and/or requirements where data are insufficient to guide efforts.

- Track the number of meetings and progress from meetings toward meeting set objectives.
- Report progress quarterly to the HAI Advisory Board.
- Evaluate policy options for reporting novel and emerging drug-resistant organisms via ELR by December 2019.

## **Priority C. Antimicrobial Stewardship**

Goal #3: Improve antimicrobial prescribing and slow antimicrobial resistance across the continuum of care.

Objectives

Strategies

Performance Measures

**Objective 3.1** 

Establish an antimicrobial stewardship subcommittee to guide program activities related to stewardship.

• Recruit no more than 10 multi-disciplinary subject matter experts from across

Bolster antimicrobial
stewardship programs in all
health care settings.

3.1.1 Collaborate with academic, state and federal partners to collect data and expand outreach to all health care settings, including but not limited to nursing homes, outpatient facilities and emergency departments.

- 3.1.2 Increase the number of facilities meeting all seven core elements of antimicrobial stewardship by creating and distributing a Floridaspecific toolkit.
- 3.1.2.a Provide education and on-site assistance on the implementation of the elements.

- Florida's geographic regions to serve on subcommittee by October 2019.
- Through quarterly meetings, establish statewide antibiotic stewardship priorities to be distributed to all CHDs by May 2020.
- Submit application for CDC funding in December 2019 to gain access to outpatient prescribing data by summer 2020.
- Conduct analysis of outpatient prescribing practices and present to antibiotic stewardship subcommittee by September 2020.
- Work with subcommittee to identify highprescribers and areas for improvement and provide assistance to those practitioners by April 2021.
- Collaborate with quality improvement networks and organizations monthly for data sharing and cross collaboration for outreach and stewardship assessment of nursing homes and outpatient facilities.
- Create and distribute Florida-specific toolkit of stewardship core elements for all health care settings for which resources are available by January 2020.
- Provide on-site assistance to all hospitals not meeting the seven core elements of stewardship by December 2020.
- Increase the number of hospitals reporting all seven core elements of antimicrobial stewardship to 100% by April 2021.

Objective 3.2 Expand the statewide antimicrobial resistance database.	3.2.1	Integrate Merlin alerts for unusual susceptibility profiles reported via ELR AR data.
	3.2.2 3.2.2.a	Increase the number of facilities reporting into the NHSN AUR modules to expand statewide AR data and to provide facilities with a method for analyzing data and targeting stewardship interventions.  Determine and promote the benefits of using the AUR modules
	3.2.2.b	to aid in recruitment.  Provide education on analysis and use of AUR data.
	3.2.3	Analyze a statewide antibiogram annually using ELR and NHSN data to evaluate trends over time and determine concerning resistance patterns.
	3.2.4	Ensure laboratories are using the most current methods and guidelines for testing and reporting significant AR organisms.

- Establish criteria and response protocol for Merlin alerts based on past data by September 2019.
- Provide training on response protocol for at least 60% of CHDs by April 2021.
- Track the proportion of alerts communicated to CHD and CDC.
- Track the proportion of alerts resulting in outbreak response.
- Distribute assessment to determine benefits and needs of using NHSN AUR modules by October 2019 with a 60% response goal.
- Share summary of assessment with antibiotic stewardship subcommittee by January 2020.
- Based on findings, develop report or provide education to aid facilities in AUR data analysis by April 2020.
- Track the number of facilities reporting into the NHSN AUR modules.
- With antibiotic stewardship subcommittee, create data collection and analysis plan for development of statewide antibiogram by June 2020.
- Distribute annual survey to laboratories to assess laboratory methods and guidelines.
- Provide assistance to laboratories using outdated methods as identified.

## Priority D. Surveillance, Outbreak and Response to MDROs and C. difficile

Goal #4: Slow the emergence and prevent transmission of MDROs and *C. difficile*.

#### **Objectives**

Objective 4.1 Improve surveillance of MDROs and CDI to determine the statewide burden of these organisms.

#### Strategies

4.1.1 Use current surveillance systems to establish the incidence and prevalence of CPOs and CDI.

4.1.2 Explore policy options to mandate the reporting of CPOs and *C. auris*.

4.1.3 Enhance the quality of MDRO reporting by providing guidance and training on standardized case-reporting procedures.

#### Performance Measures

- Develop dashboard report to detect cases and clusters for containment and response efforts by October 2019.
- Track list of responses to the identification of novel MDROs (e.g., non-KPC carbapenemase-producing CRE, Candida auris) that the state and local health departments actively participated in. Include the organism, the time (in days) between the first positive culture of the organism and health department notification and the number of screening cultures performed during the response by December 2019.
- Establish multidisciplinary workgroup for discussion of policy options by September 2019.
- Hold quarterly meetings with majority of multidisciplinary workgroup in attendance starting Q4 of 2019. Record meeting minutes.
- Provide summary report of action to key stakeholders quarterly.
- Create guidelines for case reporting of CRE and other MDROs by July 2019.
- Increase the number of facilities reporting by 5% by January 2020.

- 4.1.4 Determine the capability of Merlin to serve as an MDRO registry for public health and health care providers.
- Conduct needs assessment to evaluate surveillance system and areas for performance improvement by February 2020.
- Compile summary of successes and challenges learned during process of onboarding facilities to new data systems by April 2020.

Objective 4.2 Enhance laboratory capacity for testing MDROs and CDI. 4.2.1 Assess the current capacity and testing practices of BPHL, commercial laboratories and facilities for detecting high-priority MDROs.

- BPHL to provide a list of laboratories with advanced capabilities to perform recommended or advanced testing for high-priority MDROs by December 2019. Partnering with FDOH or other facilities; this information may be available from NHSN survey data and other sources.
- BPHL to provide the number of laboratory personnel trained and proficient in performing all phenotypic testing for CRE and CRPA by January 2020.
- BPHL to provide number of each type of health care facility associated with submitting clinical laboratories by February 2020.

4.2.2	Create recommendations for laboratory testing methods to identify and characterize high-priority organisms, such as CRE (e.g., susceptibility testing only vs. resistance mechanism testing) and <i>C. difficile</i> (e.g., immunoassay vs. molecular and other tests).	Conduct an ani health care pro professionals of testing method:
	amone (c.g., mindioassay vs. molecular and other tests).	collection proce

4.2.3 Recruit laboratories for sentinel site surveillance in collaboration with ARLN.

- Conduct an annual educational event for health care providers and laboratory professionals on the merits of various testing methods and appropriate specimen collection procedures.
- Report annual number of isolates received from participating clinical laboratories by organism and facility type.
- Recruit a minimum of three sentinel site surveillance laboratories by December 2019; increase by three facilities yearly thereafter.

#### Objective 4.3 Standardize outbreak response and containment.

- 4.3.1 Develop and maintain standardized guidance on outbreak response and containment strategy consistent with best practices.
- 4.3.2 Develop and implement a framework for a regional response to contain transmission of MDROs across Florida counties.
- Develop standard outbreak guidance for HAI and AR response and containment by July 2019.
- Develop a formal regional response plan by September 2019.
- Annually evaluate response plan with CHD POCs.

- 4.3.3 Increase awareness in a region through the development of educational and communication materials.
- 4.3.3.a Identify infection control gaps at high-risk transmission facilities through targeted infection control assessments.
- Report the number/types of facilities for which on-site and remote assistance was provided by the HAI program.
- Report the mean number of visits including range, by facility type, made to facilities where on-site technical assistance was provided.
- Report the number of ICARs conducted with a goal of 10% increase from prior year, annually.
- Provide annual summary description of gaps identified and mitigation performed as part of on-site assistance to the HAI Advisory Board.
- Conduct evaluation of performance measures pre- and post-assessment with a goal of at least 50% improvement between pre- and post-assessment.
- Annually report a description of each prevention initiative implemented to the HAI Advisory Board:
  - Number/types of facilities reached
  - Description of interventions used within the initiative
  - Barriers to implementation
  - Changes to the initiative's process measures
  - Reductions in rates (as measured by NHSN) attributed to the initiative
  - Any other outcome changes

## Addendum, February 2022

The following has been provided to serve as an update on the progress of the 2019–2024 Strategic Plan to Prevent Health Care-Associated Infections and Antimicrobial Resistance. Please note the activities set forth in this plan are contingent upon continued program funding.

Priority A. Infection Prevention Infrastructure, Standards and Practices		
Objective 1.1 Provide leadership, coordination and collaboration between public health and all health care delivery settings.		
Performance Measure	Completed on	
Track the number of meetings/communications with HAI/AR Prevention Advisory	April 21, 2021	
Board.	• July 21, 2021	
	• October 20, 2021	
	<ul> <li>January 19, 2022</li> </ul>	
Create communication plan for sharing with CHDs by November 2019.	November 2019	
Email communication plan to CHDs by December 2019.	November 2019. Updated: February 2022	
Distribute annual communication and HAI/AR capacity needs assessment to	January 2022	
identify areas for improvement by August 2019 with a response goal of 60%.		
Reach a goal of 60% or greater CHD HAI contact attending annual training on HAIs	Ongoing; last training held on December 2021	
and MDROs.		
Biannual update of CHD HAI contact list.	Ongoing	
Perform annual needs assessment that will evaluate barriers of timely inter-facility	August 2019	
communication by January 2020 with a response rate of 40% from each facility		
type (i.e., IPs in ACHs, LTACHs, and LTCFs).		
Summarize results and share with inter-agency workgroup by March 2020.	January 2020	
Develop recommendations on minimum elements of HAI/AR information to	August 2019	
communicate during patient transfers to health care facilities by October 2020.		
Disseminate recommendations on minimum elements of HAI/AR information to	August 2019	
communicate during patient transfers to health care facilities by January 2021.		
Annually update inventory of health care settings and facilities that includes a point	Ongoing, last update February 2022	
of contact for infection prevention and control (or method for reaching that		
individual).	4 1104 0004	
Provide quarterly HAI/AR data reports to stakeholders.	• April 21, 2021	
	• July 21, 2021	
	October 20, 2021	

	<ul> <li>January 19, 2022</li> </ul>
Quarterly evaluate Web page content to ensure HAI/AR education and resources are current.	Ongoing, last update September 2021
Objective 1.2 Develop a health care workforce that is educated and	qualified in supporting effective infection control programs.
Develop infection prevention competency-based training module expanding into	Infection control modules are available through CDC resources and through
dialysis and emergency services by January 2020.	TRAIN-FL. Additional module development was not funded.
Create policy for minimum training standards required for personnel in charge of facility infection prevention and control programs by March 2024.	Ongoing
Track the number/type of facilities that receive on-site assessments and gap analyses annually.	Ongoing
Track the number/type of resources developed annually.	Ongoing
Conduct follow-up ICAR assessments 6 months following initial ICAR.	Ongoing
Conduct data analysis pre- and post-on-site assessment visits to include improvement in hand hygiene and personal protective equipment compliance rates, number of observations, HAI rates, number of audits and compliance with cleaning and disinfection practices with a goal of a minimum of 20% improvement upon follow up.	Ongoing
Report the number and type of resources and collaboratives provided to facilities	April 21, 2021
quarterly and share with HAI Advisory Board.	• July 21, 2021
	• October 20, 2021
	• January 19, 2022
Objective 1.3 Collect, analyze, interpret and report HAI/AR surveilla	
Develop SOPs for ICAR by August 2019.	July 2019. Updated: February 2022
Develop TAP strategy SOPs by August 2019.	Project not funded
Develop Merlin SOP by August 2019.	July 2019. Updated: February 2022
Track the number of counties that participate in SOP trainings with goal attendance rate of 60%.	Ongoing
Summarize progress toward achieving goals prepared every 6 months and shared	April 21, 2021
with the HAI Advisory Board.	• July 21, 2021
	• October 20, 2021
	• January 19, 2022
Priority B. Surveillance, Outbreak and Response to HAIs	

Objective 2.1 Develop surveillance activities to improve outbreak de	etection and to ensure a timely and appropriate response is
provided.	and appropriate respondence
Create HAI module for reporting of HAI/AR events by August 2019.	August 2019
Track the number of HAI/AR outbreaks in jurisdiction by organism, facility type and HAI category quarterly in HAI Advisory Board Report.	Ongoing
60% of CHDs complete annual survey and training on the HAI module by September 2019.	Ongoing; last training held on June 16, 2020
Create HAI Guidance for Surveillance and Investigation for CHDs to conduct outbreak response by August 2019.	July 2019. Updated: February 2022
Objective 2.2 Strengthen knowledge and response to HAIs, AR, and	AU occurring across the continuum of care.
Renew and expand DUA to cover essential HAI data, demographic information and health care settings for thorough analysis to drive quality improvement strategies by 2022.	July 2020
Evaluate current DUA and needs assessment to meet quality objectives by 2022.	July 2020
Gain access to and analyze existing data sources that are not currently available to the HAI program (ambulatory surgery, long-term care) by 2022.	July 2020
Complete external data validation on a minimum of five facilities annually. Priority will be based on quality of data by using quarterly data.	Project not funded during budget year 1 or budget year 2 ELC 5-year cooperative agreement (2019–2024).
Objective 2.3 Prepare for emerging infectious disease threats that n	nay enter health care facilities.
Annually review regional- and facility-specific response plans (as feasible) for selected infectious disease threats.	Ongoing
When feasible, perform facility readiness assessments (ICAR) as a coordinated team effort across programs.	Ongoing
Provide summary of gaps for improved understanding of gaps for guidance of recommendations/training/education within 30 days of assessment.	Ongoing
Objective 2.4 Increase knowledge and competency of relevant healt	h care personnel related to outbreak preparedness, detection,
containment and resolution.	
Conduct annual education to CHDs and health care facilities on HAI/AR outbreak preparedness and response through incorporation of content on detection, investigation and response to infectious disease outbreaks.	Ongoing; last training held on June 16, 2020

Hold regional multidisciplinary meetings to review gaps and foster improved communication about HAIs and AR within cross-continuum clusters of health care facilities and local health departments through a minimum of 3 drills annually.	Ongoing; last training held on February 19, 2020
Provide number of meetings, participants, roles, resources created, meeting minutes to HAI advisory board quarterly.	Ongoing; last update given on January 19, 2022
Conduct evaluation of needs assessment for continued planning by January 2020.	January 2020
Develop preparedness plan defining processes and tiered response criteria to	January 2020
handle serious infection control breaches (e.g., syringe reuse), suspect cases/clusters, and outbreaks by November 2020.	
Objective 2.5 Use available data sources to drive action and respon	se efforts for the prevention of HAIs and AR organisms.
Identify the number of facilities with high infection rates using TAP reports to recruit a minimum of 50% for collaboration.	MRSA collaborative: The HAI program provided outreach to the facilities contributing to 71.42% of CADs. This included 25 facilities in region #7 contributing to 46.65% of CADs and 31 facilities in regions #2, #3, #4 and #5. Reports sent to 56 facilities total. 30 facilities were interested in participating in MRSA prevention collaborative.  • Educational webinar covering SSI prevention  • MRSA assessment survey sent to 15 facilities and completed by 3 facilities  • ICARs  • TAP survey for CLABSI, CAUTI and CDI  • MRSA Facility Assessment Tool completed
Annually report the proportion of those facilities for which TAP Facility Assessments were conducted.	In progress
Annually report the proportion of those facilities for which FDOH provided a completed TAP Feedback Report summarizing TAP Facility Assessment results and identifying potential gaps in infection prevention efforts.	In progress
Annually report the proportion of those facilities for which evidence-based infection prevention methods were implemented to address gaps, with a minimum of 80% of recommendations be implemented.	In progress
Annually report the proportion of those facilities that demonstrated reduction in infection rates following the intervention(s).	In progress

Objectives.  Report progress quarterly to the HAI Advisory Board.  Priority C. Antimicrobial Stewardship  Objective 3.1 Bolster antimicrobial stewardship programs in all health care settings.  Recruit no more than 10 multi-disciplinary subject matter experts from across Florida's geographic regions to serve on subcommittee by October 2019.  Through quarterly meetings, establish statewide AS priorities to be distributed to all CHDs by May 2020.  Submit application for CDC funding in December 2019 to gain access to outpatient prescribing data by summer 2020.  Conduct analysis of outpatient prescribers and areas for improvement and provide assistance to those practitioners by April 2021.  Collaborate with QIN-QIO monthly for data sharing and cross collaboration for  April 21, 2021  August 2020  Ongoing  In progress		T i
Report progress quarterly to the HAI Advisory Board.  • April 21, 2021 • July 21, 2021 • October 20, 2021 • January 19, 2022  Evaluate policy options for reporting novel and emerging drug-resistant organisms via electronic lab reporting by December 2019.  Priority C. Antimicrobial Stewardship  Objective 3.1 Bolster antimicrobial stewardship programs in all health care settings.  Recruit no more than 10 multi-disciplinary subject matter experts from across Florida's geographic regions to serve on subcommittee by October 2019.  Through quarterly meetings, establish statewide AS priorities to be distributed to all CHDs by May 2020.  Submit application for CDC funding in December 2019 to gain access to outpatient prescribing data by summer 2020.  Conduct analysis of outpatient prescribing practices and present to antibiotic stewardship subcommittee by September 2020.  Work with subcommittee to identify high-prescribers and areas for improvement and provide assistance to those practitioners by April 2021.  Collaborate with QIN-QIO monthly for data sharing and cross collaboration for  In progress	Track the number of meetings and progress from meetings toward meeting set	In progress
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Prescribing data by summer 2020.  Conduct analysis of outpatient prescribing practices and present to antibiotic stewardship subcommittee by September 2020.  Work with subcommittee to identify high-prescribers and areas for improvement and provide assistance to those practitioners by April 2021.  Collaborate with QIN-QIO monthly for data sharing and cross collaboration for  Ongoing; last update on August 2021  Ongoing; last webinar held on November 2021  In progress	CHDs by May 2020.	
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stewardship subcommittee by September 2020.  Work with subcommittee to identify high-prescribers and areas for improvement and provide assistance to those practitioners by April 2021.  Collaborate with QIN-QIO monthly for data sharing and cross collaboration for  In progress	prescribing data by summer 2020.	
Work with subcommittee to identify high-prescribers and areas for improvement and provide assistance to those practitioners by April 2021.  Collaborate with QIN-QIO monthly for data sharing and cross collaboration for In progress	Conduct analysis of outpatient prescribing practices and present to antibiotic	Ongoing; last update on August 2021
and provide assistance to those practitioners by April 2021.  Collaborate with QIN-QIO monthly for data sharing and cross collaboration for In progress	stewardship subcommittee by September 2020.	
Collaborate with QIN-QIO monthly for data sharing and cross collaboration for In progress	Work with subcommittee to identify high-prescribers and areas for improvement	Ongoing; last webinar held on November 2021
and the state of t	Collaborate with QIN-QIO monthly for data sharing and cross collaboration for	In progress
outreach and stewardship assessment of nursing homes and outpatient facilities.	outreach and stewardship assessment of nursing homes and outpatient facilities.	
Create and distribute Florida-specific toolkit of stewardship core elements for all Approved March 2021		Approved March 2021
health care settings for which resources are available by January 2020.	health care settings for which resources are available by January 2020.	
Provide on-site assistance to all hospitals not meeting the seven core elements of In progress	Provide on-site assistance to all hospitals not meeting the seven core elements of	In progress
stewardship by December 2020.	stewardship by December 2020.	
Increase the number of hospitals reporting all seven core elements of antimicrobial In progress; currently 96% of NHSN participating facilities meet all seven	Increase the number of hospitals reporting all seven core elements of antimicrobial	In progress; currently 96% of NHSN participating facilities meet all seven
stewardship to 100% by April 2021. core elements of antimicrobial stewardship	stewardship to 100% by April 2021.	core elements of antimicrobial stewardship
Objective 3.2 Expand the statewide antimicrobial resistance database.	Objective 3.2 Expand the statewide antimicrobial resistance databa	se.
Establish criteria and response protocol for Merlin alerts based on past data by  November 2019	Establish criteria and response protocol for Merlin alerts based on past data by	November 2019
September 2019.		
Provide training on response protocol for at least 60% of CHDs by April 2021. In progress, last training held on November 2021	Provide training on response protocol for at least 60% of CHDs by April 2021.	In progress, last training held on November 2021

Track the proportion of alerts communicated to CHD and CDC.	Ongoing		
Track the proportion of alerts resulting in outbreak response.	Ongoing		
Distribute assessment to determine benefits and needs of using NHSN AUR modules by October 2019 with a 60% response goal.	In progress		
Share summary of assessment with antibiotic stewardship subcommittee by January 2020.	In progress, last update held January 2022		
Based on findings, develop report or provide education to aid facilities in AUR data analysis by April 2020.	In progress		
Track the number of facilities reporting into the NHSN AUR modules.	As of January 2022: 109 facilities reported at least one month of AU data and 106 facilities reported at least one month of AR data		
With antibiotic stewardship subcommittee, create data collection and analysis plan for development of statewide antibiogram by June 2020.	In progress, last update November 2021		
Distribute annual survey to laboratories to assess laboratory methods and guidelines.	Sent out February 2022. Deadline for facilities to return is March 31, 2022.		
Provide assistance to laboratories using outdated methods as identified.	In progress		
Priority D. Surveillance, Outbreak, and Response to MDROs and C. difficile			
Objective 4.1 Improve surveillance of MDROs and CDI to determine	the statewide burden of these organisms.		
Develop dashboard report to detect cases and clusters for containment and response efforts by October 2019.	In progress		
Track list of responses to the identification of novel MDROs (e.g., non-KPC carbapenemase-producing CRE, Candida auris) that the state and local health departments actively participated in. Include the organism, the time (in days) between the first positive culture of the organism and health department notification and the number of screening cultures performed during the response by December 2019.	Ongoing		
Establish multidisciplinary workgroup for discussion of policy options by September 2019.	In progress		
Hold quarterly meetings with majority of multidisciplinary workgroup in attendance starting Q4 of 2019. Record meeting minutes.	Ongoing		

Provide summary report of action to key stakeholders quarterly.	Ongoing; last update given January 2022		
Create guidelines for case reporting of CRE and other MDROs by July 2019.	July 2019		
Increase the number of facilities reporting by 5% by January 2020.	Ongoing; currently 96% of NHSN participating facilities meet all seven core elements of antimicrobial stewardship		
Conduct needs assessment to evaluate surveillance system and areas for	January 2020		
performance improvement by February 2020.			
Compile summary of successes and challenges learned during process of	January 2020		
onboarding facilities to new data systems by April 2020.			
Objective 4.2 Enhance laboratory capacity for testing MDROs and 0	CDI.		
BPHL to provide a list of laboratories with advanced capabilities to perform	In progress		
recommended or advanced testing for high-priority MDROs by December 2019.			
Partnering with FDOH or other facilities; this information may be available from			
NHSN survey data and other sources.			
BPHL to provide the number of laboratory personnel trained and proficient in	In progress		
performing all phenotypic testing for CRE and CRPA by January 2020.			
BPHL to provide number of each type of health care facility associated with	In progress		
submitting clinical laboratories by February 2020.			
Conduct an annual educational event for health care providers and laboratory	In progress		
professionals on the merits of various testing methods and appropriate specimen			
collection procedures.			
Report annual number of isolates received from participating clinical laboratories by	Ongoing		
organism and facility type.			
Recruit a minimum of three sentinel site surveillance laboratories by December	In progress		
2019; increase by three facilities yearly thereafter.			
Objective 4.3 Standardize outbreak response and containment.			
Develop standard outbreak guidance for HAI and AR response and containment by	July 2019		
July 2019.			
Develop a formal regional response plan by September 2019.	August 2019		
Annually evaluate response plan with CHD POCs.	Ongoing		
Report the number/types of facilities for which on-site and remote assistance was	Ongoing		
provided by the HAI program.			

Report the mean number of visits including range, by facility type, made to facilities where on-site technical assistance was provided.	Ongoing
Report the number of ICARs conducted with a goal of 10% increase from prior year, annually.	Ongoing
Provide annual summary description of gaps identified and mitigation performed as part of on-site assistance to the HAI Advisory Board.	Ongoing; last update given April 2021
Conduct evaluation of performance measures pre- and post-assessment with a goal of at least 50% improvement between pre- and post-assessment.	In progress
Annually report a description of each prevention initiative implemented to the HAI Advisory Board:	Ongoing; last update given January 2022
Number/types of facilities reached	ACH, LTACH, LTCF, VSNFs
Description of interventions used within the initiative	<ul> <li>Data quality outreach</li> <li>Developed tier plan for facility outreach</li> <li>Conducted facility assessments, ICAR and Tele-ICAR</li> <li>Served as subject matter experts for infection prevention and control</li> <li>Conducting education and training webinars for CHD staff and HCPs</li> <li>Development of resources, guidance documents for specialty settings</li> <li>Collaborating with state partners for outreach to support LTCFs with infection prevention and control implementation of best practices</li> </ul>
Reductions in rates (as measured by NHSN) attributed to the initiative	<ul> <li>Increase the percentage of Florida's NHSN-participating facilities meeting all seven core elements of antimicrobial stewardship to 95% by 2021. 2021 progress: 96%.</li> <li>Reduce the standardized infection ratio (SIR) for <i>Clostridioides difficile</i> infections (CDI) in Florida's NHSN participating facilities from 0.68 in 2017 to 0.45 by 2021. 2021 progress: SIR:0.41.</li> </ul>