South Carolina Healthcare Associated Infections (HAI) Prevention Action Plan

The Hospital Infections Disclosure Act (**HIDA**), SC Code of Laws, Chapter 7 Article 20, requires inpatient acute care, inpatient long term acute care hospitals and inpatient rehabilitation facilities to report selected healthcare-associated infections and prevention processes to the South Carolina Department of Health and Environmental Control (**DHEC**). All data are reported through the National Healthcare Safety Network, a secure, internet-based surveillance system that is maintained by the Division of Healthcare Quality Promotion at CDC. In accordance with the HIDA reporting mandate 79 facilities are currently required to report to DHEC. Reporting hospitals submit data on a continuous, monthly basis and DHEC publicly reports aggregate, facility-specific data twice a year which is posted on the DHEC HAI webpage http://www.scdhec.gov/Health/FindingQualityHealthcare/CompareHospitalInfectionRates/

The following summary of assets provides the basic foundation for South Carolina's public health infrastructure for HAI Surveillance & Prevention:

1) **HAI Surveillance Data**: The HIDA public reports (available online at: http://www.scdhec.gov/Health/FindingQualityHealthcare/CompareHospitalInfectionRates/ComparisonToolReports/) provide most of the data needed to measure the selected outcomes and prevention targets identified in the National HAI Prevention Action Plan. DHEC ensures the accuracy and completeness of the data through ongoing validation activities. Hospitals may also use these data for internal quality measures and to share with other facilities enrolled in prevention collaboratives.

2) **HAI Core Public Health Staff for Surveillance and Public Reporting:** The Department of Health and Environmental Control (DHEC) HAI staff includes 1 ELC funded HAI Epidemiologist, 1 ELC and state funded physician HAI Section Director and 1 part-time state funded Infection Preventionist.

3) **Partnership Organization and Advisory Committee** - **South Carolina Healthcare Alliance for Infection Prevention (SCHAIP):** The HIDA Advisory Committee partners with the South Carolina Healthcare Alliance for Infection Prevention (SCHAIP). SCHAIP brings state partners together for the purpose of implementing a coordinated, effective approach to performing infection prevention initiatives in South Carolina. This partnership serves as the multi-disciplinary advisory taskforce which provides the statewide organizational foundation to coordinate, facilitate, and support the implementation of the South Carolina HAI Prevention Plan. SCHAIP partners include SCHA, DHEC, APIC, HAI subject matter experts, associations representing the continuum of care, state and federal agencies, and consumers.
While individual SCHAIP partners are responsible to their funding sources for performance and outcomes, each will also work with SCHAIP to ensure collaboration, communication, and implementation of the state HAI Prevention Plan to most effectively utilize the resources available.

4) South Carolina has a community of highly knowledgeable, skilled, and committed healthcare professionals (physicians, nurses, laboratorians, etc.) working in infection prevention and epidemiology to provide the expertise needed to achieve the targeted reductions in HAIs.

The following summary of barriers and limitations may prevent planning and implementation:

1) Funding is severely limited by the recurring state budget reductions as revenues decline; South Carolina has received HAI infrastructure funding from the ELC grant, and ELC Ebola supplemental funding for Infection Control Assessment Program (Activity A) and Targeted Health Care Infection Prevention Programs (Activity B). Additional grant funding is needed to expand prevention efforts of the program.
2) Infection prevention staffing shortages and high turnover at reporting facilities result in reporting challenges.
3) Lack of a structured, coordinated, and funded Infection Prevention Training Program to set priorities, determine target audiences, etc.

Planning Processes and Assumptions:

- The South Carolina HAI Plan action items are numbered in each of the six CDC Category Tables beginning with the number (1) one. (e.g. in Table # 1, Action Item 1.; In Table # 2. Action Item 1, Action Item 2., etc.)
- Plans were developed and will be updated periodically with input received from the SCHAIP, HIDA and from public health professionals within DHEC.
- The "Infrastructure" needed to establish an effective public health HAI prevention program includes:
    - public health staff and resources
    - strong partnerships and effective collaboratives
    - accurate and complete data on HAI reporting metrics
- The SCHAIP partners, committees, and workgroups will participate in identifying and prioritizing needs and resources andin the implementation of HAI prevention activities.
- The HAI Plan describes a broad assessment and planning process in order for the SCHAIP partners to be ready to pursue and justify funding opportunities if they arise.
- Accountability will be defined in the planning process.
- Plan implementation and timelines are contingent upon maintaining existing resources and obtaining additional resources from state, federal, and /or private grant funds.
    - Implementation plans are designated as 1) implemented or planned with existing resources, or 2) planned - contingent upon new resources.
- Plans will also include proposed incentives, training, and workforce development for healthcare facilities as resources develop, to continue to expand activities across the continuum of care.
- DHEC will seek funds for public health resources through potential CDC grants and work with appropriate SCHAIP partners to seek funding through other available state, federal, and private grant resources.

1. Enhance HAI program infrastructure

Successful HAI prevention requires close integration and collaboration with state and local infection prevention activities and systems. Consistency and compatibility of HAI data collected across facilities will allow for greater success in reaching state and national goals. Please select areas for development or enhancement of state HAI surveillance, prevention, and control efforts.

Table 1: State infrastructure planning for HAI surveillance, prevention, and control.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	1. Establish statewide HAI prevention leadership through the formation of multidisciplinary group or state HAI advisory council I. Collaborate with local and regional partners (e.g., state hospital associations, professional societies for infection control and healthcare epidemiology, academic organizations, laboratorians, and networks of acute care hospitals and long term care facilities). **Action 1. Established the SC Healthcare Alliance for Infection Prevention (SCHAIP),** a formal SC HAI infrastructure organization and partnership to facilitate planning, development, and implementation of HAI prevention initiatives in SC. Lead agencies and organizations are the SC Hospital Association (SCHA), SC Department of Health and Environmental Control (DHEC), the Association of Professionals in Infection Control and Epidemiology – Palmetto Chapter (APIC-Palmetto), and the South Carolina Society for Respiratory Care (SCSRC). Additional stakeholders represented on the committee include clinical laboratory representation and patient advocate representation. The SCHAIP committee agreed that SCHAIP would include the role of the HAI Prevention Plan Advisory Committee in its mission. SCHAIP subcommittees are formed on an as needed basis when training, research, and general HAI needs are identified by the committee.	Implemented and ongoing; the group meets quarterly in conjunction with the HIDA Advisory Group

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☐	Additional members/stakeholders are recruited on an as needed basis, to provide advice and to include representatives across the continuum of care, consumers, and relevant disciplines. **SCHAIP Goals include:** • Ensure coordination and communication between SCHAIP partners, including public health, to facilitate planning and implementation, define roles and identify resources, prevent gaps and duplication of efforts and track projects and timelines. • Coordinate initiatives and facilitate consensus on issues related to infection prevention throughout the state. • Promote healthcare facility leadership support for infection prevention efforts and resources • Facilitate integration of infection prevention into education and training for all healthcare disciplines across the state. • Continue to support APIC's mentoring program for Infection Preventionists. • Establish formal Implementation Committees or temporary Workgroups, as appropriate, to develop a plan, implement, and evaluate selected initiatives. Identify lead organization responsible for chairing the committees (e.g. APIC – Palmetto, Chairs the Training Committee). II. NEW: Include hospital preparedness partners (e.g., hospital/healthcare coalitions funded through the ASPR Hospital Preparedness Program). Additional representation from accrediting and/or licensing agency with surveyor authority is ideal. III. NEW: Engage HAI advisory committee in potential	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☒	roles and activities to improve antibiotic use in the state (antibiotic stewardship) **Action 2:** Planning to conduct Antibiotic Stewardship training for healthcare facilities including nursing homes, and long term care facilities	April 2016
☐	☐	IV. NEW: Engage HAI advisory committee in activities to increase health department's access to data and subsequently use those data in prevention efforts **Action 3:** Working on a projects to analyze Cdiff data and CRE data. The Cdiff data from NHSN and CHESS is merged with the discharge data. The main objective of the project is to understand the risk factors for community acquired and hospital acquired CDiff infections. The analysis plan was discussed with the HAI advisory committee, and the inputs from the discussion were incorporated in the analysis plan.	Started February 2015 and ongoing
☒	☐	V. Identify specific HAI prevention targets consistent with HHS priorities **Action 4.** HAI Prevention Targets were set based upon SCHAIP input and existing data bases **Summary of HAI Prevention Targets and Goals from 2008 – 2013** a. *Central Line Associated Bloodstream Infections (*CLABSI) - Reduce the CLABSI SIR by at least 50% from baseline or to zero in ICU and other locations by 2013. Support for this selection is based upon the fact that hospitals are mandated to report CLABSIs to DHEC via the National Healthcare Safety Network (**NHSN**) and data are available beginning July 2007. HIDA reporting requirements have been expanded beyond critical care to all locations.	Implemented and ongoing

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		SCHA CLABSI Collaborative This collaborative includes 21 hospital; the baseline measurements were made from Sept 2008 through August 2009. The main objective of the intervention program was to understand the facility's progress towards reducing CLABSI rate, and to implement comprehensive Unit-based safety program: **CCME CLABSI Collaborative:** From 2011-2013, CCME had a CLABSI collaborative in which 8 hospitals participated. The baseline SIR was 0.97 and post –intervention, it was 0.61. b. Clostridium *difficile* (C diff) – At least 30% reduction in hospitalizations with C. difficile per 1000 patient discharges. (AHRQ). Support for this selection is based upon the data availability from the Office of Research and Statistics. Reporting of C.diff into NHSN was mandated by SC HIDA law since January 2015. **CCME CDI Collaborative:** CCME had a CDiff collaborative (2012-2013) in which 11 hospitals participated. The goal was to begin implementation of an antimicrobial stewardship program and 90% hospitals successfully implemented at least on ASP component. c. *Surgical Site Infections* (SSI) - Reduce the admission and readmission SSI SIR by at least 25% from baseline or to zero.	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		Selection of this target is based upon the availability of SSI data for coronary artery bypass and hip and knee replacement surgeries as reported into NHSN since 2007 as mandated by the SC HIDA law. Reporting can be expanded to provide outcome measures for prevention collaboratives for other facilities across the continuum of care. SSI Prevention collaborative are planned, contingent upon receiving resources for staff, travel, and training. d. *Catheter associated urinary tract infection* (CAUTI): Reduce the CAUTI SIR by at least 25% from baseline or to zero in ICU and other locations by 2013. HIDA reporting requirements do **NOT** include CAUTI. **CCME CAUTI Collaborative:** CCME had a CAUTI collaborative that included 7 hospitals from 2011-2013, **SCHA CAUTI Collaborative:** CCME had a CAUTI collaborative that included 18 hospitals from Jan 2012 through May 2013 **Goals for 2015 – 2020** a. Central Line Associated Bloodstream Infections (CLABSI) - Reduce the CLABSI SIR by at least 50% from 2015 baseline or to zero in ICU and ward-located patients. Infections from Mucosal Barrier Injury (MBI) will be excluded from the calculation. b. Methicillin-resistant Staphylococcus aureus (MRSA) infections – Reduce healthcare-associated MRSA infections by 75% from the	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		2007-2008 baseline. Reduce facility-onset MRSA by 50% from the 2015 baseline. c. Clostridium difficile infections (CDI) – Reduce facility-onset CDI infections in facility-wide healthcare facilities by 30% from 2015 baseline.	
		Other activities or descriptions:	
☒	☐	2. Establish an HAI surveillance prevention and control program i. Designate a State HAI Prevention Coordinator **Action 5. Designated HAI Plan Coordinator**. A full time HAI plan coordinator was initially supported with state funds, and then continued with ARRA funds in late 2009 and then continued with ELC ACA HAI funds beginning in 2012. ii. Develop dedicated, trained HAI staff with at least one FTE (or contracted equivalent) to oversee HAI activities areas (Integration, Collaboration, and Capacity Building; Reporting, Detection, Response, and Surveillance; Prevention; Evaluation, Oversight, Communication, and Infection Control) **Action 6. Maintain existing state funded Public Health Staff** Current state funding supports an hourly, part time Infection Preventionist	Completed

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	who is responsible for the HAI data validation program. Federal funds obtained are used to support additional activities for HAI validation projects. State funds established in 2007 – with ongoing efforts to sustain funding: Current state funding (partial) and current ELC funding (partial) supports a full time HAI section director.	Completed
☒	☐	**Action 7. Hiring activities are ongoing for 6 additional positions that includes 2 epidemiologists, 3 infection preventionist, and 1 nurse consultant**. New staff will be involved in prevention collaborative, improve public health capacity to detect and investigate outbreaks, participate in HAI training, provide data analysis, interpretation, and dissemination for prevention quality measures; and to develop and provide HAI prevention subject area expertise for prevention collaboratives and activities. **Existing Core Public Health Staff:** HAI Section Director -1.0 FTE partial state, partial ELC HAI HAI Coordinator 100% ELC HAI HAI Infection Preventionist -part time, hourly	Ongoing
		Other activities or descriptions:	
		d. Integrate laboratory activities with HAI surveillance, prevention, and control efforts. i. Improve laboratory capacity to confirm emerging resistance in HAI pathogens and perform typing where appropriate (e.g., outbreak investigation support, HL7	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		messaging of laboratory results)	
☐	☒	**Action 8.** Develop HAI Prevention infrastructure / partnership described in Action 1 to facilitate and support the development of Laboratory capacity to support HAI Prevention, to confirm outbreaks and confirm emerging resistance. The South Carolina Department of Health and Environmental Control (SC DHEC) Bureau of Laboratories (BOL) supports HAI outbreak investigations by performing confirmatory (PCR and PFGE) testing on submitted isolates. With additional funding, capacity can be increased to improve MDRO surveillance, particularly the identification of CRE infections, and conducting whole genome sequencing of isolates to identify the virulent resistant species.	TBD - Planned contingent upon resources for lab capacity.
☐	☒	**Action 9.** Establish HAI Lab Capacity and SCHAIP Workgroup to identify gaps, needs, and seek grant resources to provide for lab staff, equipment and supplies and address issues of scale, cost, contracts, and public health lab capacity. Potential laboratory support will be established through the state Public Health Laboratory and/ or through one or more of the state's large Medical Center laboratories. It is recognized that to accomplish this goal, the SCHAIP partnership will work to create access to subject area experts from the large hospitals and academic medical centers. These will include hospital epidemiologists, infectious disease specialists, pharmacists, and laboratorians. The SCHAIP infrastructure will be developed to evaluate the proposals and to facilitate the process of obtaining resources and fully developing and integrating lab capacity into HAI surveillance, prevention, and control. **Action Plan. Develop and implement the SC HAI Lab Response Network to provide ongoing HAI lab capacity in SC. Work with SCHAIP partners** Activities will include:	TBD -Additional activities contingent upon resources.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☒	• Establish and fund lab network with staff, equipment, supplies and data base (**contingent upon new resources**) • Typing – Pulse field gel electrophoresis (capability) – Whole genome sequencing – Multiple-locus-variable number tandem repeat analysis (MLVA) • Sequencing – bacteria/viruses (mycobacteria) • Fill gaps in capacity: • C. difficile culture • phage typing at DHEC (CDC) • antibiotic susceptibility test	TBD - Lab Network Implementation contingent upon new resources
		Other activities or descriptions:	
☒	☐	e. Improve coordination among government agencies or organizations that share responsibility for assuring or overseeing HAI surveillance, prevention, and control (e.g., State Survey agencies, Communicable Disease Control, state licensing boards) **Action 10.** Improve interagency healthcare workers' understanding of state agencies HAI policies, procedures, and expectations. • SCHAIP has maintained legal representation with a committee member from the DHEC Office of General Counsel since the formation of the committee. • Establish DHEC procedures to ensure inter-agency coordination for HAI surveillance, prevention, and control and appropriate sharing of information to detect, prevent and control HAIs. • Establish formal communication between public health and health licensing to report category "A" breaches that are identified during	Implemented and ongoing Action items contingent upon resources.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	licensing surveys. **Action 11.** Ensure legal representation on the SCHAIP committee: • Communicate all regulations related to HAI prevention activities with the SCHAIP stakeholders • Maintain legal counsel for reporting requirements, public reports, reporting compliance issues, data sharing between stakeholders, etc.	Completed
☐	☒	**Action 12.** Identify strategies, methods, and partners to provide incentives and support for healthcare facilities and health professionals to implement best practices and obtain training in infection surveillance, prevention and control. SCHAIP Planning Committee will: • Establish low cost, accessible training resources and disseminate information to Healthcare workers • Develop a MOU with the South Carolina Hospital Association for Data Sharing among SCHAIP members	March 2014
		Other activities or descriptions:	
		f. Facilitate use of standards-based formats (e.g., Clinical Document Architecture, electronic messages) by healthcare facilities for purposes of electronic reporting of HAI data. Providing technical assistance or other incentives for implementations of standards-based reporting can help develop capacity for HAI surveillance and other types of public health surveillance, such as for conditions deemed reportable to state and local health agencies using electronic laboratory reporting (ELR). Facilitating use of standards-based solutions for external reporting also can strengthen relationships between healthcare facilities and regional nodes of healthcare information, such as Regional Health Information Organizations. (RHIOs) and	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	Health Information Exchanges (HIEs). These relationships, in turn, can yield broader benefits for public health by consolidating electronic reporting through regional nodes. **Action 13.** Identify technical support needs and resources and define process to ensure coordination of information and opportunities. Develop ELR capacity in CHESS data to be used in conjunction with NHSN data in support of the movement to make surveillance data more objective/standardized for electronic capture.	Completed
		Other activities or descriptions:	

Table 2: State planning for surveillance, detection, reporting, and response for HAIs

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		1. Improve HAI outbreak detection and investigation	
☒	☐	i. Work with partners including CSTE, CDC, state legislatures, and providers across the healthcare continuum to improve outbreak reporting to state health departments **Action 1**. Develop and disseminate clear reporting guidelines and definitions for HAI outbreaks**.** (DHEC will lead process with existing staff and input from relevant SCHAIP members (e.g. APIC, ID Physicians).	Ongoing
☐	☒	ii. Establish protocols and provide training for health department staff to investigate outbreaks, clusters, or unusual cases of HAIs. **Action 2**. Identify HAI outbreak training goals and opportunities for DHEC staff. **Action 3. a.** Define public health staff competencies, knowledge, skills, and abilities needed to investigate HAI outbreaks.	Ongoing January 2016
☐	☒	iii. Develop mechanisms to protect facility/provider/patient identity when investigating incidents and potential outbreaks during the initial evaluation phase, where possible, to promote reporting of outbreaks **Action 3.b.** Define policies and procedures for reporting and consulting on HAI outbreaks between relevant state agencies**.**	Implemented in 2012 and ongoing

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☒	**Action 4.** Define policies and procedures for public release of information during initial phase of outbreak investigations. (DHEC - with existing staff.) iv. Improve overall use of surveillance data to identify and prevent HAI outbreaks or transmission in HC settings (e.g., hepatitis B, hepatitis C, multi-drug resistant organisms (MDRO), and other reportable HAIs) **Action 5.** Train facility and healthcare staff to use own data to identify clusters / outbreaks. (Responsible: DHEC Infection Preventionist (IP) during hospital Validation site visits and SCHAIP Training Committee to include in the Training Plan.)	Implemented and ongoing Implemented in 2011, and ongoing
		Other activities or descriptions:	
☐	☒	2. Enhance laboratory capacity for state and local detection and response to new and emerging HAI issues. **Action 6.** Identify plan to submit and communicate lab data from existing resources. Define Lab capacity plan based on gaps and resources identified in the planning process (see Infrastructure Category). **Action 7.** Develop and implement the SC HAI Lab Response Network to provide ongoing HAI lab capacity in SC for HAI Outbreak detection and tracking. Activities will include: • Establish and fund lab network with staff, equipment,	1st Quarter 2010 Contingent upon resources to establish HAI Lab Network.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		supplies and data base to fill in the gaps in capacity (contingent upon new resources).	
		Other activities or descriptions:	
☐	☒	3. Improve communication of HAI outbreaks and infection control breaches i. Develop standard reporting criteria including, number, size, and type of HAI outbreak for health departments and CDC **Action 8.** DHEC will develop HAI Outbreak policies and procedures to include: • Communicate Outbreak prevention information rapidly to facilities and, providers (including Infectious Disease physicians) via Health Advisories / Alerts. • Describe outbreak reporting and communication process • Disseminate targeted early warning data about unusual clusters via Health advisories, Health alerts, and e-mails to facilities and providers	1st Quarter 2016 The new staff will be expected to fulfill these expectations
☐	☒	ii. Establish mechanisms or protocols for exchanging information about outbreaks or breaches among state and local governmental partners (e.g., State Survey agencies, Communicable Disease Control, state licensing boards) **Action 9**. Define process for communicating information during outbreaks and breaches of practice standards between state partner agencies	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		Other activities or descriptions:	
		4. Identify at least 2 priority prevention targets for surveillance in support of the HHS HAI Action Plan	
☒	☐	i. Central Line-associated Bloodstream Infections (CLABSI)	
		Action 10. Priority Prevention surveillance: Central Line-associated Bloodstream Infections (CLABSI 1) - per 1000 device days by ICU and other locations. • Stop BSI Collaborative – 22 hospitals enrolled at this time; 1st training provided 10-30-09 • Selection supported by the availability of active surveillance data reported into NHSN from medical – surgical ICUs since 2007 and the addition of reporting requirements for all acute care locations in 2009.	Implemented in 2007 and ongoing
☒	☐	ii. *Clostridium difficile* Infections (CDI)	
		Action 11. **Priority Prevention surveillance: *Clostridium difficile* Infections (CDI)** – case rate per patient days from administrative /discharge data for ICD-10 CM coded C.diff infections. CDI data available and selected for prevention target	Established SC baseline C. difficile administrative claims data report in 4th Quarter 2009
☐	☐	iii. Catheter-associated Urinary Tract Infections (CAUTI)	
☐	☒	iv. Methicillin-resistant Staphylococcus aureus (MRSA) Infections	
		Action 12. Priority Prevention surveillance: Methicillin-resistant	Implemented in

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	Staphylococcus aureus (MRSA) Infections MRSA BSI lab data tracked in NHSN. The HAI reports includes MRSA incidence rate for each facility and the SIR. v. Surgical Site Infections (SSI) **Action 13**. Priority Prevention surveillance: Surgical Site Infections (SSI) • Deep incision and organ space infection rates using NHSN definitions. • Active SSI surveillance data reporting required in NHSN for all acute care hospitals for selected procedures in all hospitals where these procedures are performed (except where designated only for hospitals ≤ 200 beds). o Coronary Artery Bypass Graft (CBGB) (both chest and donor site incisions) o Coronary Artery Bypass Graft (CBGC) (with chest incision only) o Hysterectomy (abdominal - HYST) o Hip – prosthesis- (HPRO) o Knee – prosthesis – (KPRO) o Colon (COLO) - (only report from hospitals of 200 beds or less)	2013 and ongoing Established baseline data July 2007
☐	☐	vi. Ventilator-associated Pneumonia (VAP)	
		Other activities or descriptions:	
☒	☐	5. Adopt national standards for data and technology to track HAIs (e.g., NHSN). i. Develop metrics to measure progress towards national goals (align with targeted state goals). (See Appendix 1).	Implemented data collection in 2007

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	ii. **Action 14**. Adopted NHSN for mandatory HAI reporting in 2006**.** iii. Establish baseline measurements for prevention targets **Action 15.** Baseline data for CLABSI and SSIs established and in NHSN. Standardized Infection Rations (SIRs) will be used to measure trends over time. Administrative claims data report has been established for *C. difficile* baseline from data beginning 2008.	Implemented and on-going
		Other activities or descriptions:	
☒	☐	6. Develop state surveillance training competencies i. Conduct local training for appropriate use of surveillance systems (e.g., NHSN) including facility and group enrollment, data collection, management, and analysis **Action 16.** Surveillance training: Establish and implement a training session for NHSN Users in new facilities and newly hired IP and support staff in existing facilities using NHSN. (Assigned to SCHAIP Training Committee for planning, with activities to be supported by partnership members as resources are identified Training to include: • NHSN Enrollment • NHSN Training - Patient Safety Protocols • Case studies to ensure accurate application of surveillance case definitions. All inpatient acute care hospitals are using NHSN and staff were	Ongoing

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒ ☐	☐ ☒	initially trained via two separate state wide trainings in February 2007 and April 2008 and conducted by the partnership with SCHA, APIC Palmetto, and DHEC. Ongoing training is needed to prepare new users as a result of high staff turnover in facilities. **Action 17.** Establish the "Jump Start" Site Visits for facilities for new NHSN Users where no other NHSN users are on staff to provide mentoring and orientation. DHEC IP visits new staff and APIC Palmetto developed references and resource notebooks for new IPs. **Action 18.** Develop a plan to establish and combine resources for a formal HAI Training program in SC to ensure HAI surveillance, prevention, and control competencies in the healthcare workforce. SCHAIP will coordinate the planning process. A lead organization will be identified and funding will be pursued through state, federal, and private grants. a. The HAI Training program will: o Base the curriculum upon nationally (e.g. APIC) defined core competencies and content for: ▪ Infection Preventionists ▪ Basic HAI knowledge and skills needed by all healthcare professionals/ workers. ▪ Advanced HAI knowledge and skills needed by selected categories of healthcare professionals/ workers o Identify competencies and rapidly ensure access to training for emerging infections. o establish recommendations for minimum standards for training and licensure	Implemented 10-2009

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		o facilitate access to existing training resources to include access to low cost web based training o Ensure access to high quality, advanced training and mentoring opportunities and case studies. o Facilitate access to infectious disease and infection prevention professionals for consultation, training, and policy development. b. Identify state, federal, and private grant resources to establish the program from a partnership (SCHA, DHEC, AHEC, HSSC, APIC, etc.). Coordination assigned to the SCHAIP Training Committee with additional consultation from state and national professional groups.)	
		Other activities or descriptions:	
☒	☐	7. Develop tailored reports of data analyses for state or region prepared by state personnel **Action 19.** Develop tailored reports of data analyses for state or region prepared by state personnel. • Current HIDA reports are on DHEC website prepared by HIDA staff (www.scdhec.gov/hai) include CLABSI, SSI, and MRSA rates and SIRs. • Specific reports to measure the progress toward national targets will be developed from the data in the SC HIDA NHSN data base. • Evaluate data reports and develop additional reports as HAI Prevention initiatives are program funded	Implemented: 2-8-08 and process of developing and evaluating reports is ongoing
		8. Validate data entered into HAI surveillance (e.g., through healthcare records review, parallel database comparison) to	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	measure accuracy and reliability of HAI data collection **Action 20.** Validate data entered into HAI surveillance (e.g., through healthcare records review, parallel database comparison) to measure accuracy and reliability of HAI data collection DHEC Infection Preventionist – began pilot validation protocol in March 2008.	Implemented March 2008 and process is ongoing
☒	☐	i. Develop a validation plan	Completed
☒	☐	ii. Pilot test validation methods in a sample of healthcare facilities	Completed
☒	☐	iii. Modify validation plan and methods in accordance with findings from pilot project	Completed
☒	☐	iv. Implement validation plan and methods in all healthcare facilities participating in HAI surveillance	Completed and ongoing
☒	☐	v. Analyze and report validation findings	Completed and ongoing, annually
☒	☐	vi. Use validation findings to provide operational guidance for healthcare facilities that targets any data shortcomings detected	Process ongoing
		Other activities or descriptions:	
☐	☒	9. Develop preparedness plans for improved response to HAI i. Define processes and tiered response criteria to handle increased reports of serious infection control breaches (e.g., syringe reuse), suspect cases/clusters, and outbreaks **Action 21.** Develop and include response procedures in DHEC HAI Outbreak protocols to include surveillance, detection, response, and	Additional staff

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		reporting. Additional DHEC resources defined in Table 1. Infrastructure - Action Plan are needed to expand activities for outbreak investigations in HC facilities.	needed to implement.
		Other activities or descriptions:	
☐	☐	10. Collaborate with professional licensing organizations to identify and investigate complaints related to provider infection control practice in non-hospital settings and set standards for continuing education and training **Action 22**. Facilitate a meeting with health professional licensing organizations to discuss: • Developing formal protocols for complaint investigation • Establishing minimum standards or guidelines for training and licensure • Including all healthcare workers, plus those in non-hospital settings in the Training competencies and needs.	By 3rd Quarter 2016
		Other activities or descriptions:	
☒	☐	11. Adopt integration and interoperability standards for HAI information systems and data sources i. Improve overall use of surveillance data to identify and prevent HAI outbreaks or transmission in HC settings (e.g., hepatitis B, hepatitis C, multi-drug resistant organisms (MDRO), and other reportable HAIs) across the spectrum of inpatient and outpatient healthcare settings **Action 23.** DHEC uses CDC NBS system for Public Health Surveillance and has implemented Electronic Lab Reporting (ELR) from clinical labs. DHEC has encouraged hospitals to use standardized HL-7	Implemented and

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	messaging and electronic download of lab and surgical data into NHSN to reduce the burden of reporting. Future activities will depend upon technical guidance from CDC and incentives for healthcare facilities and vendors. ii. Promote definitional alignment and data element standardization needed to link HAI data across the nation. **Action 24.** SC DHEC selected NHSN with standardized definitions for the mandatory reporting data base**.** To the extent knowledge and resources are available, we will continue to promote this effort.	ongoing; additional guidance is needed if public health is to facilitate intra hospital IT standards. Ongoing
		Other activities or descriptions:	
☒	☐	12. Enhance electronic reporting and information technology for healthcare facilities to reduce reporting burden and increase timeliness, efficiency, comprehensiveness, and reliability of the data i. Report HAI data to the public **Action 25**. SSI and CLABSI reporting into NHSN began in July 2007 with the first public report posted in February 2008 and every 6 months after. MRSA lab ID event reporting began in January 2013, and the first public report was in Oct 2013	Completed and ongoing
		Other activities or descriptions:	
☒	☐	13. Make available risk-adjusted HAI data that enable state agencies to make comparisons between hospitals. **Action 26.** DHEC reported the first Hospital Compare report using Standardized Infection Ratios (SIRs) in February 2009.	Completed and ongoing – annually since Feb. 2008.
		Other activities or descriptions:	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☒	14. Enhance surveillance and detection of HAIs in nonhospital settings **Action 27.** The following actions will be promoted by DHEC for outbreak detection and education: • Continue annual notification of Non-hospital settings to promote reporting of potential HAIs that are on the list of reportable conditions (e.g. Hepatitis B and C) • Encourage healthcare workers from non-hospital settings to participate in HAI educational opportunities. (Include these non-hospital workers in the Training Plan. • Implement reporting and response protocols for outbreaks • Promote SSI – post discharge surveillance reporting • Identify options to link professional credentials and re-licensure to education and training for the Training and Laws and Regulations Committee.	Planned contingent upon resources.
		Other activities or descriptions:	

3. Prevention

State implementation of HHS Healthcare Infection Control Practices Advisory Committee (HICPAC) recommendations is a critical step toward the elimination of HAIs. CDC and HICPAC have developed evidence-based HAI prevention guidelines cited in the HHS Action Plan for implementation. These guidelines are translated into practice and implemented by multiple groups in hospital settings for the prevention of HAIs. CDC guidelines have also served as the basis for the Centers for Medicare and Medicaid Services (CMS) Surgical Care Improvement Project. These evidence-based recommendations have also been incorporated into Joint Commission standards for accreditation of U.S. hospitals and have been endorsed by the National Quality Forum. Please select areas for development or enhancement of state HAI prevention efforts.

Table 3: State planning for HAI prevention activities

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☒	1. Implement HICPAC recommendations i. Develop strategies for implementation of HICPAC recommendations for at least 2 prevention targets specified by the state multidisciplinary group. **Action 1.** Prevention Target – reduce hospitalizations with C. difficile: a. Reconvene the SC APIC / DHEC Antibiotic Resistance Workgroup and additional partners (e.g. Health Licensing, Infectious disease physicians) under the new SCHAIP Infrastructure to: • Update the 2007 SC Antibiotic Resistant Organisms Strategic Plan • Revise 1998 "SC Guidelines for Prevention and Control of Antibiotic Resistant Organisms in Healthcare Settings" to include guidance from the HICPAC MDRO Guidelines in Healthcare Settings, 2006. • Include HICPAC and other nationally accepted HAI Prevention guidance for discussion during the planned revisions of the HAI related Health Regulations. b. Identify opportunities to fund and implement at least one	Ongoing

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☒	Antimicrobial Stewardship Prevention Collaborative. c. Include topics on Antibiotic Resistance in HC Settings and HICPAC Guidelines in the HAI training plan. **Action 2.** Prevention Target: SSI 1 – Reduce the admission and readmission SSI SIR by at least 25% from baseline or to zero. a. Include HICPAC Recommendations and other Safe Surgery recommendations for SSI Prevention in the HAI Training Plan. b. Identify opportunities to fund and implement an SSI Prevention collaborative.	Implement SSI training based on Training Plan and resources - Prevention Collaborative contingent upon resources
	☒	*Other activities or descriptions:* **Action 3.** Define SCHAIP process for a timely review of all new or revised HICPAC Guidelines and develop an implementation plans. a. For each new or revised HICPAC guideline, establish a SCHAIP workgroup and implementation plan to include alerting Healthcare Facilities of the new guidelines, identifying training needs, performance indicators, and policy implications.	Implemented in 2nd Quarter 2011 and ongoing
☒	☐	2. Establish prevention working group under the state HAI advisory council to coordinate state HAI collaboratives i. Assemble expertise to consult, advise, and coach inpatient healthcare facilities involved in HAI prevention collaborative **Action 4.** The SC Healthcare Alliance for Infection Prevention (SCHAIP) will identify a specific Collaborative Workgroup for each collaborative to	STOP BSI workgroup was established in 2009 but has been inactive.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		include subject area experts. Experts are accessible, however each collaborative will need funding to support staff time. A STOP BSI Collaborative Workgroup was started for the CLABSI Prevention Collaborative but has been inactive. Consideration will be given to reconvene when the goals are established.	Workgroup will be reconvened. Access to subject area experts contingent upon resources.
		Other activities or descriptions:	
		Establish HAI collaboratives with at least 10 hospitals (i.e. this may require a multi-state or regional collaborative in low population density regions)	
☒	☐	**Action 5. a.** CLABSI – "STOP BSI" Prevention established with 22 hospitals. The STOP BSI working group was in place to consult, advice and coach the facilities currently enrolled in the CLABSI Prevention Collaborative, but has been inactive. Consideration can be given to reconvene the group.	Implemented 2009
☐	☒	**Action 5.b**. Establish a prevention working group for C.diff and / or SSIs.	Expanding Collaborative - contingent upon resources.
☒	☐	i. Identify staff trained in project coordination, infection control, and collaborative coordination	Implemented CLABSI - 2009 and ongoing.
☒	☐	ii. Develop a communication strategy to facilitate peer-to-peer learning and sharing of best practices	Implemented CLABSI - 2009 and ongoing.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☒	☐	iii. Establish and adhere to feedback of a clear and standardized outcome data to track progress	Implemented CLABSI - 2009 and ongoing.
		Other activities or descriptions:	
☒	☐	3. Develop state HAI prevention training competencies i. Consider establishing requirements for education and training of healthcare professionals in HAI prevention (e.g., certification requirements, public education campaigns, and targeted provider education) or work with healthcare partners to establish best practices for training and certification **Action 6**. DHEC and SCHAIP Training Committee will facilitate discussion to establish training competencies / requirements and identify incentives and best practices for training and certification for HAI prevention to include many partners in the process (DHEC, SCHA - Duke Endowment, AHEC, Professional Licensing Boards, Academic Medical Centers, DHHS, Colleges of Nursing and Medicine, Rural Health)	1st Quarter 2016
		Other activities or descriptions:	
☐	☒	4. Implement strategies for compliance to promote adherence to HICPAC recommendations i. Consider developing statutory or regulatory standards for healthcare infection control and prevention or work with healthcare partners to establish best practices to ensure adherence **Action 7.** Identify regulatory strategies to ensure best practices in Laws/ Regulations Committee established by SCHAIP to provide consultation to Health Licensing during the Hospital Regulations Review planned for 1st	Discussions to begin 1st Quarter 2016 and ongoing.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		Quarter 2010.	
☐	☒	**Action 8.** Include incentives and educational strategies to promote adherence to HICPAC standards and other best practices.	Discussions to begin in 1st Quarter 2016 and ongoing
		ii. Coordinate/liaise with regulation and oversight activities such as inpatient or outpatient facility licensing/accrediting bodies and professional licensing organizations to prevent HAIs	
☐	☒	**Action 9.** SCHAIP Legal/ Regulations Committee to identify and address barriers to implementing standards and guidelines. (e.g. hand hygiene dispensers – fire; infectious wastes). (reference guidelines)	Discussions to begin 1st Quarter 2016 and ongoing until barriers resolved.
☐	☒	**Action 10.** Review of laws and regulations and incentives to include facilitated discussion of recommendations submitted during the SCHAIP Taskforce meetings**.** • Consider including establishing minimum requirements for: a) hospitals to have a minimum # of Infection Preventionist FTEs / 100 beds in healthcare facilities, b) include other IP responsibilities such as additional outpatient practices, long term care, and care delivery environmental in the minimum FTE calculation, c) consider other measurements (e.g. adjusted pt. volume), d) consider available IP work	Begin review of Hospital Regulations 1st Quarter 2016 with existing resources.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☒	force Consider establishing statewide guidelines or recommendations instead of "requirements" as a minimum (e.g. identify incentives such as HIDA recognition for high level of performance iii. Improve regulatory oversight of hospitals, enhance surveyor training and tools, and add sources and uses of infection control data **Action 11.** DHEC will work with SCHAIP committee to identify "basic infection control 101" training needs for facility surveyors to be able to identify breeches in infection control.	Begin review of Incentives with SCHAIP Taskforce Include in training plan and contingent upon resources
☐	☐	iv. Consider expanding regulation and oversight activities to currently unregulated settings where healthcare is delivered and work with healthcare partners to establish best practices to ensure adherence **(Planning for expanding oversight to unregulated settings is not feasible at this time. There is no legal authority and current staffing for the regulated facilities is very limited and more budget cuts have been announced.)**	
☐	☐	5. Enhance prevention infrastructure by increasing joint collaboratives with at least 20 hospitals (i.e. this may require a multi-state or regional collaborative in low population density regions) **See proposed prevention collaboratives for C.diff and SSI - Pending additional resources**.	**Pending additional resources**.
		Other activities or descriptions:	

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☐	6. Establish collaborative(s) to prevent HAIs in nonhospital settings (e.g., long term care, dialysis)	**Pending additional resources**.
		Other activities or descriptions:	

4. Evaluation and Communication

Program evaluation is an essential organizational practice in public health. Continuous evaluation and communication of findings integrates science as a basis for decision-making and action for the prevention of HAIs. Evaluation and communication allows for learning and ongoing improvement. Routine, practical evaluations can inform strategies for the prevention and control of HAIs. Please select areas for development or enhancement of state HAI prevention efforts.

Table 4: State HAI communication and evaluation planning

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		1. Conduct needs assessment and/or evaluation of the state HAI program to learn how to increase impact i. Establish evaluation activity to measure progress toward targets and	
☐	☒	**Action 1**. Establish DHEC Tracking Table to identify responsibilities of Divisions and timelines.	1st Quarter 2016
☐	☒	**Action 2.** Establish SCHAIP Organizational Chart and Tracking Table to identify plans, responsibilities, time lines and document progress toward goals and targets.	1st Quarter 2016
		ii. Establish systems for refining approaches based on data gathered	
☐	☒	**Action 3.** Tracking system will include outcome measures and data documenting progress toward targets. Committees to report progress to SCHAIP meeting every other month, or as otherwise designated, and include evaluation and revised plans and strategies as needed. .	1st Quarter 2016
		Other activities or descriptions (not required):	
		2. Develop and implement a communication plan about the state's HAI program and about progress to meet public and private stakeholders needs	

☐	☒	i. Disseminate state priorities for HAI prevention to healthcare organizations, professional provider organizations, governmental agencies, non-profit public health organizations, and the public **Action 4.** Develop and implement a SCHAIP communication plan for the state's HAI program to meet public and stakeholder's needs. Include state priorities for HAI prevention to healthcare organizations, professional provider organizations, governmental agencies, non-profit public health organizations, and the public.	2nd Quarter 2016
		Other activities or description	
☐	☒	3. Provide consumers access to useful healthcare quality measures Disseminate HAI data to the public **Action 5**. Continue public reporting of selected HAIs • Develop Healthcare Quality Reports to include Prevention Initiatives. • Develop objectively measured recognition program – consistent with guidelines.	Implemented in2nd Quarter 2011
		Other activities or descriptions:	
☐	☒	4. Guide patient safety initiatives i. Identify priorities and provide input to partners to help guide patient safety initiatives and research aimed at reducing HAIs **Action 6**. Establish SCHAIP priorities for initiatives and research. SCHAIP Infrastructure partners and committees are keys to establishing effective communications and feedback between partners to accomplish this goal. DHEC has an established HAI surveillance, validation, and public reporting program using NHSN standards. HSSC is the lead in HAI research, SCHA has a strong patient safety and quality program, APIC Palmetto has a long history of providing infection prevention education and mentoring for IPs. Based on the discussion during the SCHAIP meeting priorities will be established for prevention	By 3rd Quarter 2016, complete formal plan

		initiatives and research.	
		Other activities or descriptions:	

Healthcare Infection Control and Response (Ebola-associated activities)

The techniques and practice on which infection control protocols are based form the backbone of infectious disease containment for pathogens that are otherwise amplified and accelerated in healthcare settings. Investments in a more robust infection control infrastructure will prevent many HAIs transmitted to, and among, patients and health care workers.

Table 5: Infection Control Assessment and Response

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
☐	☒	1. Create an inventory of all healthcare settings in state. List must include at least one infection control point of contact at the facility	March, 2016
☐	☒	2. Identify current regulatory/licensing oversight authorities for each healthcare facility and explore ways to expand oversight	
		Action 1. Review Infection Control Section of the Minimal Standards for Licensing Hospitals and Institutional General Infirmaries document and schedule a meeting with representatives from Health Regulation and Licensing.	September 2015
	☒	**Action 2**. Develop a list of potential additions or edits to the document	December 2015

		that could expand oversight and submit to Health Regulation and Licensing to help determine what could be incorporated into their regulatory practices.	
	☒	**Action 3.** Provide final version of edits to Health Regulation and Licensing	May 2016
	☒	**Action 4.** Discuss with agency representatives to the board of nursing the feasibility of implementing infection control training into certification requirements	December 2015
	☒	**Action 5**. Develop implementation plan for incorporating infection control training into nursing certification requirements.	April 2016
		Other activities or descriptions:	
		3. Assess readiness of Ebola-designated facilities within the state i. Use CDC readiness assessment tool and determine gaps in infection control	
☒	☐	**Action 6.** Hire ICAP Program Coordinator	November 2015
☒	☐	**Action 7.** Assemble team to perform on-site assessment of Ebola.	One facility assessment
☒	☐	**Action 8.** Schedule on-site assessments of 3 remaining facilities interested in becoming Ebola Treatment Centers.	Completed, 3 remaining
		Action 9. Complete all initial assessments of facilities interested in becoming Ebola Treatment Centers using the CDC readiness assessment tool	Implemented and ongoing

☒	☐	ii. Address gaps (mitigate gaps)	
☒	☐	**Action 10.** Have at least 3 facilities with gaps mitigated. Will target getting all 4 of these facilities mitigated but will set milestone at 3, in case a facility has difficulty fully mitigating all gaps.	Implemented and ongoing
☒	☐	**Action 11**. Develop and maintain a line list of facilities and mitigation activities	October 2015 and ongoing
☐	☒	**Action 12**. Present findings from assessment visits to the SCHAIP subcommittee within one month of the visit.	September 2015, and ongoing
		iii. Conduct follow-up assessments	
☐	☒	**Action 13**. Complete follow up assessment on at least 1 facility	November 2015
☒	☐	**Action 14.** Complete follow up assessment of all 3 facilities. Will target getting all 4 of these facilities having undergone the follow up assessment but will set milestone at 3 in case a facility has difficulty fully mitigating all gaps	March 2016
		Other activities or descriptions:	
		4. Assess outbreak reporting and response in healthcare facilities i. Use standard assessment tool and determine gaps in outbreak reporting and response	

☐	☒	**Action 15.** Work with CDC to develop an outbreak assessment tool	November 2015
☐	☒	**Action 16.** Utilize assessment tool to perform assessment of healthcare facility capacity to detect outbreaks, notify public health, and initiate an appropriate response	December 2015
☐	☒	**Action 17.** Review and analyze findings to determine gaps in HAI outbreak reporting and response.	April 2016
☐	☒	**Action 18.** Work with partners to develop a plan to improve outbreak reporting and response and communicate it to healthcare facilities.	May 2016
		ii. Address gaps (mitigate gaps)	
☐	☒	**Action 19.** Commonly identified gaps can be summarized and communicated to a larger number of healthcare facilities in addition to those who underwent assessment. This will help facilitate better reporting and response to HAI outbreaks across the state	May 2016
		iii. Track HAI outbreak response and outcome	
☐	☒	**Action 20.** Work with CDC to develop a plan for tracking outbreak response and outcome	November 2015
☐	☒	**Action 21.** Implement the tracking plan and establish baseline data.	December 2015
☐	☒	**Action 22.** Develop an initial summary report of results of tracking outbreak reporting and response.	April 2016

Table 6: Targeted Healthcare Infection Prevention Programs

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		1. Expand infection control assessments	
☒	☐	i. Expand assessments to other additional facilities and other healthcare settings and determine gaps in infection control	Implemented and ongoing
☐	☒	**Action 1.** Hire 3 Infection Preventionists in 3 strategic locations around the state. Will use partners such as APIC and SCHA to recruit for these positions	December 2015
☐	☒	**Action 2.** Perform assessments in 25 acute care hospitals where gaps are identified. Year 1 will include facilities who report under HIDA as we have established IP contacts with these facilities and anticipate being able to start quickly with these facilities. SCHA will help promote the benefit of these assessments to acute care facilities.	December 2015
☐	☒	**Action 3.** Perform assessments in 3 LTACs. As with acute care hospitals, LTACs also report under HIDA and we have established IP contacts for these facilities	December 2015
☐	☒	**Action 4.** Perform assessments in 3 IRFs. As with acute care hospitals and LTACs, IRFs also report under HIDA.	December 2015
☐	☒	**Action 5.** Perform assessments in 50 LTCFs. In year 1 assessments will also begin in LTCFs. Under activity A, the nurse consultant will be developing an inventory of LTCF infection prevention contacts which can assist the IP in reaching out to these facilities. Health Regulations and Licensing has identified contacts to communicate with DADE infection preventionists to help prioritize facilities to undergo infection control assessments	March 2016

☐	☒	ii. Address gaps (mitigate gaps) **Action 6.** Provide follow up report to facilities summarizing the gaps identified during the assessment visit	April 2016
☐	☒	iii. Conduct follow-up assessments **Action 7.** Perform follow-up assessments in all acute care hospitals where gaps are identified. It is anticipated that the majority of acute care facilities assessed in year 1 will have completed mitigation efforts and the follow-up assessment completed by the end of year.	April 2016
☐	☒	**Action 8.** Perform follow-up assessments in all LTACS where gaps are identified. As with acute care hospitals it is anticipated that the majority of LTACs assessed in year 1 will have completed mitigation efforts and the follow-up assessment completed by the end of year.	April 2016
☐	☒	**Action 9.** Perform follow-up assessments in all IRFs where gaps are identified. As with acute care hospitals it is anticipated that the majority of IRFs assessed in year 1 will have completed mitigation efforts and the follow-up assessment completed by the end of year.	April 2016
☐	☒	**Action 10**. Perform follow-up assessments in all LTCFs where gaps are identified. As some LTCFs may undergo the assessment visit late in year one, some may need to have the follow-up assessment carry over to year 2.	April 2016
		Other activities or descriptions:	
☐	☐	2. Increase infection control competency and practice in all healthcare settings through training i. Incorporate general infection control knowledge and practice	

☐	☐	assessments of competency into state licensing board requirements, credentialing, and continuing education requirements for clinical care providers (e.g., medical license, admitting privileges) and/or licensing/accreditation requirements for healthcare facilities. ii. Develop a sustainable training program based on CDC guidance and technical assistance to perform training, prioritizing on-site train-the-trainer programs in key domains of infection control, including the incorporation of hands on evaluations and competency assessments of best practices and a system to monitor ongoing compliance and competency.	
		Other activities or descriptions:	
☒ ☐ ☐	☐ ☒ ☒	3. Enhance surveillance capacity to improve situational awareness, describe emerging threats, and target onsite assessments to implement prevention programs i. Build capacity to analyze data reported by facilities in a defined region to allow for a comprehensive assessment of potential healthcare-associated infection threats, and communicate Results with healthcare facilities. **Action 11**. Hire an enhanced surveillance program coordinator. **Action 12.** Perform CRE analysis and include facility-specific data in HIDA Interim Report. The program coordinator work with CDC to develop a plan for analysis. The individual will also consult with the HIDA Advisory Committee to determine how to the present data in the HIDA Interim Report. Additional data could be provided to the facility with their own specific data beyond what is released in the public report to help target facilities with CRE and guide infection prevention efforts. **Action 13.** Add dialysis event surveillance to the metrics required to be reported under HIDA. The program coordinator will work with ESRD	Hiring will be finalized by October 2015 Preliminary analysis of the data performed and presented to the HIDA advisory committee June 2016

		Network 6 to prepare the 133 dialysis facilities in South Carolina to confer rights to the DHEC users group.	
☒	☐	**Action 14.** Work with the Revenue and Fiscal Affairs (RFA) Office in DHEC to perform linkage of NHSN CDI data to data from the South Carolina List of Reportable Diseases database as well as Healthcare Cost and Utilization Project (HCUP) data. Clostridium difficile was made a reportable condition in South Carolina in January 2015. By utilizing this data along with data from HCUP, additional information can be obtained such as prior healthcare exposures of cases including long term care exposure. ii. Work with CDC to guide analytic direction and identify facilities for prioritized assessments/response iii. Improve outbreak reporting capacity by developing an infrastructure that includes clear definitions of infectious threats of epidemiologic importance that are communicated to facilities	January 2016
☐	☒	**Action 15.** Develop definitions of infectious threats of epidemiologic importance. Separate documents will be tailored toward different types of healthcare facilities: acute care hospitals, long term care facilities, and dialysis centers.	June 2016
☐	☒	**Action 16.** Disseminate definitions to healthcare facilities. This will be an ongoing process. Initial distribution will be through known infection prevention contacts in acute care hospitals as well as through external partners such as SCHA, CCME, and ESRD Network 6. They will also be provided to Health Regulations and Licensing to distribute to regulated facilities. As the inventory is developed this will also serve as a resource for distribution of these definitions iv. Implement a response plan to address potential emerging threats identified by using enhanced surveillance	December 2016

☐ ☐	☒ ☒	**Action 17.** Develop protocols for response to HAI outbreaks. This will include the roles of the program coordinator, DADE IP, and regional epidemiologist to investigate, provide targeted recommendations, as well as education to facility staff to prevent future infections **Action 18**. The program coordinator will review existing DADE guidance documents on HAIs and other infections that infection plays a key role in management such as Ebola and measles to ensure they are complete and updated to be consistent with current guidelines. Determination can be made whether guidance documents for additional pathogens are needed.	April 2016 September 2015
		Other activities or descriptions:	

Appendix 1

Metrics included in the South Carolina's Hospital Infections Disclosure Act (HIDA) public reports

Metric Number and Label	Original HAI Elimination Metric	HAI Comparison Metric	Measurement System	National Baseline Established (State Baselines Established)	National 5-Year Prevention Target	Coordinator of Measurement System	Is the metric NQF endorsed?
1. CLABSI	CLABSIs per 1000 device days by ICU and other locations	CLABSI SIR	CDC NHSN Device-Associated Module	2006-2008 (proposed 2009, in consultation with states)	Reduce the CLABSI SIR by at least 50% from baseline or to zero in ICU and other locations	CDC	Yes*
2. C diff (new)		*C. difficile* SIR	CDC NHSN MDRO/CDAD Module LabID‡	2009-2010	Reduce the facility-wide healthcare facility-onset *C. difficile* LabID event SIR by at least 30% from baseline or to zero	CDC	No
3. MRSA (new)		MRSA bacteremia SIR	CDC NHSN MDRO/CDAD Module LabID‡	2009-2010	Reduce the facility-wide healthcare facility-onset MRSA bacteremia LabID event SIR by at least 25% from baseline or to zero	CDC	No
4. SSI	Deep incision and organ space infection rates using NHSN definitions (SCIP procedures)	SSI SIR	CDC NHSN Procedure-Associated Module	2006-2008 (proposed 2009, in consultation with states)	Reduce the admission and readmission SSI§ SIR by at least 25% from baseline or to zero	CDC	Yes¶

* NHSN SIR metric is derived from NQF-endorsed metric data

† NHSN does not collect information on daily review of line necessity, which is part of the NQF

‡ LabID, events reported through laboratory detection methods that produce proxy measures for infection surveillance

§ Inclusion of SSI events detected on admission and readmission reduces potential bias introduced by variability in post-discharge surveillance efforts

¶ The NQF-endorsed metric includes deep wound and organ space SSIs only which are included the target.