State of New Hampshire Healthcare-Associated Infections Plan
December 2009

Background on the New Hampshire Healthcare-Associated Infection Program

The New Hampshire Department of Health and Human Services (NH DHHS) has been actively engaged in developing a healthcare-associated infections (HAI) surveillance program since 2007. During the 2006 legislative season, the New Hampshire legislature passed a bill creating NH RSA 151:32-35, which requires hospitals to identify, track, and report HAI to NH DHHS effective July 1, 2007. RSA 151:33 specifically requires reporting of central line-associated blood stream infections (CLABSI), surgical site infections (SSI), ventilator-associated pneumonia (VAP), central line insertion practices (CLIP), surgical antimicrobial prophylaxis (SAP), and influenza vaccination rates. The intent of the law is to provide HAI data by hospital in a publicly accessible forum for hospital comparison. The passage of the 2006 bill did not include funding to carry out these activities, and as such, mandatory reporting was not implemented in July 2007 as directed. In 2007, after passage of the 2006 bill mandating reporting of HAI to NH DHHS without providing funding or positions to implement the activities, NH DHHS engaged partners to consider possible approaches on implementing the law. These partners included the NH Healthcare Quality Assurance Commission and the NH Infection Control and Epidemiology Professionals. The workgroup initially decided to conduct a small pilot project in the first half of 2008 to test the use of the Centers for Disease Control and Prevention's (CDC) National Healthcare Safety Network (NHSN) for mandatory HAI reporting. Four acute care hospitals reported SSI in knee arthroplasties and CLABSI in one inpatient unit for the 6-month pilot project. At completion of the pilot project in July 2008, NH DHHS officially decided to use NHSN for mandatory reporting.

In September 2008, NH DHHS notified the 26 acute care hospitals in NH that they would be required to enroll in NHSN and report the mandated HAI data beginning January 1st, 2009. NH DHHS, with consideration of the law, required that hospitals initially report the following measures:

- Central line-associated blood stream infections in adult intensive care units (via NHSN)
- Central line insertion practices in all adult intensive care units (via NHSN)
- Surgical site infections following coronary artery bypass graft, colon surgeries, and knee arthroplasty (via NHSN)
- Surgical antimicrobial prophylaxis (via Centers for Medicare and Medicaid Services)
- Influenza vaccination in patients and staff (via NH DHHS web survey)
- Ventilator-associated pneumonia is not being monitored at this time

With the support of CDC staff and the NH Healthcare Quality Assurance Commission, NH DHHS coordinated a one-day training for hospital quality, infection prevention, and information technology staff in November 2008 to review reporting requirements, NHSN

definitions, and the NHSN enrollment and reporting processes. All 26 acute care hospitals successfully enrolled in NHSN and began reporting the required data in January 2009.

In the spring of 2009, NH DHHS formed a HAI Technical Advisory Workgroup. The purpose of the Technical Advisory Workgroup (TAW) is to provide scientific and infection prevention expertise to the NH DHHS HAI Reporting Program. The TAW is not intended to be an oversight group, but instead a forum for stakeholder participation in decision making around the NH HAI Program. The TAW is a 13-member group that includes representation from stakeholders across NH and includes representatives from various sizes and types of hospitals, infection control associations, the NH Hospital Association, and the NH Healthcare Quality Assurance Commission. The TAW is expected to meet two times each year.

In August 2009, NH DHHS received $737,551 in federal funding from CDC to further develop and support NH's Healthcare-Associated Infections Program. Many of the planned activities described in this document are only made possible by the availability of this funding, which expires in December 2011. Any changes in funding or personnel would affect the State's ability to complete the planned activities.

State of New Hampshire Healthcare-Associated Infections Plan

In response to the increasing concerns about the public health impact of HAI, the US Department of Health and Human Services (HHS) developed an Action Plan to Prevent Healthcare-Associated Infections (HHS Action Plan) in 2009. The HHS Action Plan includes recommendations for surveillance, research, communication and metrics for measuring progress towards national goals.

In a concurrent development, the 2009 Omnibus bill requires states receiving Preventive Health and Health Services Block Grant funds to certify that they will submit a plan to reduce HAI to the Secretary of Health and Human Services not later than January 1, 2010. In order to assist states in responding within the short timeline required by that language and to facilitate coordination with national HAI prevention efforts, the CDC provided a template to assist state planning efforts in the prevention of HAI. The following plan uses the provided template format. The template targets four areas: 1.) Develop or Enhance HAI Program Infrastructure, 2.) Surveillance, Detection, Reporting, and Response, 3.) Prevention, and 4.) Evaluation, Oversight and Communication.

NH DHHS intends to develop a more comprehensive State HAI Plan in 2010, which will include the elements addressed in the CDC template in greater detail.

1. Develop or 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 allows for greater success in reaching state and national goals.

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

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level I	☒	☐	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)	Already Implemented
	☒	☐	ii. Identify specific HAI prevention targets consistent with HHS priorities	Already Implemented
			Other activities or descriptions (not required): In 2009, NH DHHS formed a HAI Technical Advisory Workgroup (TAW). The TAW is a 13-member group that includes representation from stakeholders across NH and includes representatives from various sizes and types of hospitals, infection control associations, the NH Hospital Association, and the NH Healthcare Quality Assurance Commission. The two HAI prevention targets selected for surveillance and prevention are CLABSI and SSI.	
	☒	☐	2. Establish an HAI surveillance prevention and control program i. Designate a State HAI Prevention Coordinator	Already Implemented
	☒	☐	ii. Develop dedicated, trained HAI staff with at least one FTE (or contracted equivalent) to oversee the four major HAI activity areas described in this plan.	Already Implemented

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			Other activities or descriptions (not required): With receipt of federal money in August 2009, NH DHHS created a full time position to serve as the State HAI Program Coordinator. This position was filled on October 30th, 2009. This individual will oversee the four major HAI activity areas. HAI-specific training will be provided to the individual over the coming months using the federal funds.	
	☒	☐	3. 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 messaging of laboratory results)	Already Implemented
			Other activities or descriptions (not required): Currently, the Public Health Laboratories (PHL) provides confirmatory testing and molecular characterization of outbreak-associated Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* isolates, organisms which are not routinely reportable (only in outbreak settings). This additional testing provided is useful in assessing extent of the outbreak and possible sources of infection. In previous years, these laboratory methods have been used in healthcare-associated outbreak investigations. The PHL has enabled electronic laboratory reporting (ELR) for sending laboratory test results to the Communicable Disease Control and Surveillance Sections (CDCSS).	
Level II	☒	☐	4. 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)	Already Implemented

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			Other activities or descriptions (not required): The State Survey Agency (NH DHHS Bureau of Health Facilities Administration) has representation on the HAI TAW. Additionally, the CDCSS routinely communicates with this agency during healthcare-related outbreak investigations and the agency participates as appropriate in weekly disease control Outbreak Team meetings where infectious disease outbreaks and cases of interest are discussed.	
	☐	☒	5. 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 ELR. Facilitating use of standards-based solutions for external reporting can also strengthen relationships between healthcare facilities and regional nodes of healthcare information and can yield broader benefits for public health by consolidating electronic reporting.	Begins January 13th, 2010 and will continue through June 30th, 2011.
			Other activities or descriptions (not required): NH DHHS will contract with a vendor to conduct a statewide ELR and electronic data exchange assessment to evaluate hospital laboratory information systems, HL7 message creation capability, and messaging ability at each of the 26 acute care hospitals. NH DHHS, through the contractor, would then provide funding to four to six (15-23%) hospitals to assist them with developing an ELR mechanism in their facility to report laboratory data to NHSN and to consider ways to send other clinical information using clinical document architecture messaging.	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation

Please also describe any additional activities, not listed above, that your state plans to undertake. Please include target dates for any new activities.

6. Provide educational opportunities and resources to NH DHHS Staff and hospital infection prevention staff to build long-lasting infection prevention and surveillance expertise in the State (ongoing through December 31, 2011)

NH DHHS will use federal funds to develop statewide expertise in infection prevention and surveillance through training and workforce development, conference attendance, development of reporting and prevention materials, and purchase of healthcare epidemiology textbooks and other resources. NH DHHS coordinates an annual HAI reporting meeting for hospitals each fall where reporting requirements and surveillance definitions are reviewed. Additionally, NH DHHS intends to contract with the Association for Professionals in Infection Control and Epidemiology (APIC) to provide the EPI 101 course (Fundamentals of Infection Surveillance, Prevention and Control) in 2010 and EPI 201 (Beyond the Fundamentals: Enhancing Practice Using Epidemiologic Principles) in 2011. The HAI Program Coordinator will enroll in data analysis and statistical software courses to develop data analysis and reporting skills for development of quarterly and annual HAI data reports. The HAI Program Coordinator will also attend the annual APIC or Society for Healthcare Epidemiology of America (SHEA) meeting. NH DHHS will purchase several healthcare epidemiology and infection prevention textbooks (Mayhall's Hospital Epidemiology and Infection Control, Bennett and Brachman's Hospital Infections, Wenzel's Prevention and Control of Nosocomial Infections, the APIC text, etc) and intends to develop HAI surveillance and reporting posters and materials.

2. Surveillance, Detection, Reporting, and Response

Timely and accurate monitoring remains necessary to gauge progress towards HAI elimination. Public health surveillance has been defined as the ongoing, systematic collection, analysis, and interpretation of data essential to the planning, implementation, and evaluation of public health practice, and timely dissemination to those responsible for prevention and control.[1] Increased participation in systems such as the National Healthcare Safety Network (NHSN) has been demonstrated to promote HAI reduction. This, combined with improvements to simplify and enhance data collection, and improve dissemination of results to healthcare providers and the public are essential steps toward increasing HAI prevention capacity.

The HHS Action Plan identifies targets and metrics for five categories of HAIs and identified Ventilator-associated Pneumonia as an HAI under development for metrics and targets:

- Central Line-associated Blood Stream Infections (CLABSI)
- *Clostridium difficile* Infections (CDI)
- Catheter-associated Urinary Tract Infections (CAUTI)
- Methicillin-resistant *Staphylococcus aureus* (MRSA) Infections
- Surgical Site Infections (SSI)
- Ventilator-associated Pneumonia (VAP)

Work is ongoing to identify optimal metrics and targets for VAP infection nationally. However, detection and measurement with existing tools and methods can be combined with recognized prevention practices in states where an opportunity exists to pursue prevention activities on that topic.

State capacity for investigating and responding to outbreaks and emerging infections among patients and healthcare providers is central to HAI prevention. Investigation of outbreaks helps identify preventable causes of infections including issues with the improper use or handling of medical devices; contamination of medical products; and unsafe clinical practices.

[1] Thacker SB, Berkelman RL. Public health surveillance in the United States. Epidemiol Rev 1988;10:164-90.

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

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level I	☒	☐	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	Already Implemented
	☐	☒	ii. Establish protocols and provide training for health department staff to investigate outbreaks, clusters or unusual cases of HAIs.	December 2010
	☒	☐	iii. Develop mechanisms to protect facility/provider/patient identity when investigating incidents and potential outbreaks during initial evaluation to promote outbreak reporting	Already Implemented
	☐	☒	iv. Improve overall use of surveillance data to identify and prevent HAI outbreaks or transmission in HC settings	December 2010
			Other activities or descriptions (not required): In NH, any recognized or suspected outbreak is reportable by law to NH DHHS. Confidential information provided during an outbreak investigation is held under strict confidentiality and security procedures. NH DHHS investigates all suspected outbreaks. For many types of outbreaks (gastrointestinal, respiratory, multi-drug resistant organisms, etc), protocols exist to guide the investigation; however, no such protocols exist specifically for healthcare-associated outbreaks. Surveillance data is used routinely to detect potential outbreaks, however, not in a systematic way. In 2010, NH DHHS will develop a more comprehensive State HAI Plan, which will address surveillance for and response to outbreaks.	
	☐	☒	2. Enhance laboratory capacity for state and local detection and response to new and emerging HAI issues.	January 2010 through December 2011.

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			Other activities or descriptions (not required): While the PHL performs testing on MRSA and *C. difficile* during outbreak investigations, little information is available that describes the strains that are circulating in hospitals and communities within NH. Such information would be helpful during outbreak investigations, since the significance of outbreak strains identified is often unclear without baseline strain information. In 2010 and 2011, the PHL will recruit five NHSN-participating hospitals to submit isolates of MRSA and *C. difficile* to the PHL for confirmatory testing and molecular characterization. The PHL will use Pulsed-Field Gel Electrophoresis to provide strain characterization data. Additional techniques, such as sequencing, will be investigated to supplement characterization data. Characterization data will be linked to epidemiologic data to evaluate disease characteristics and strain distribution within NH.	
Level II	☐ ☒	☒ ☐	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 ii. Establish mechanisms or protocols for exchanging information about outbreaks or breaches among state and local governmental partners (e.g., State Survey or Licensing agencies, Communicable Disease Control)	December 2010 Already Implemented
			Other activities or descriptions (not required): Detailed standard reporting criteria for outbreaks are not currently developed in NH. Such information can be included in the comprehensive State HAI Plan to be developed in 2010. Mechanisms for sharing information between Bureau of Health Facilities Administration and CDCSS already exist, though could be clearly described in the comprehensive State HAI Plan.	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			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)	Already Implemented
	☐	☐	ii. *Clostridium difficile* Infections (CDI)	
	☐	☐	iii. Catheter-associated Urinary Tract Infections (CAUTI)	
	☐	☐	iv. Methicillin-resistant Staphylococcus aureus (MRSA) Infections	
	☒	☐	v. Surgical Site Infections (SSI)	Already Implemented
	☐	☐	vi. Ventilator-associated Pneumonia (VAP)	
			Other activities or descriptions (not required): In NH, currently hospitals are required to report: • Central line-associated blood stream infections in adult intensive care units (via NHSN) • Surgical site infections following coronary artery bypass graft, colon surgeries, and knee arthroplasty (via NHSN) Both measures have been selected for monitoring and prevention activities in support of the HHS HAI Action Plan. Authority to monitor any additional measures by DHHS would need to be provided for in state law.	
			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).	Already Implemented
	☒	☐	ii. Establish baseline measurements for prevention targets	Already Implemented

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			Other activities or descriptions (not required): In NH, currently hospitals are required to report: • Central line-associated blood stream infections in adult intensive care units (via NHSN) • Surgical site infections following coronary artery bypass graft, colon surgeries, and knee arthroplasty (via NHSN) Both measures have been selected for monitoring and prevention activities in support of the HHS HAI Action Plan. 2009 data (first full year of public reporting), will be used as an initial baseline for monitoring progress.	
	☒	☐	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	Already Implemented
			Other activities or descriptions (not required): NH DHHS has held an annual training meeting for hospital NHSN participants in November 2008 and October 2009 with between 50 and 75 participants each. Training included facility and group enrollment, data collection, management, and analysis. Ongoing annual training is planned for 2010 and 2011.	
	☐	☒	7. Develop tailored reports of data analyses for state or region prepared by state personnel	June 2010
			Other activities or descriptions (not required): After completion of annual data validation activities, an annual HAI state data report will be provide to the public each June. Additionally, the HAI Program Coordinator can provide data reports for hospitals or others as requested.	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level III			8. Validate data entered into HAI surveillance (e.g., through healthcare records review, parallel database comparison) to measure accuracy and reliability of HAI data collection	
	☐	☒	i. Develop a validation plan	January-March 2010
	☐	☒	ii. Pilot test validation methods in a sample of healthcare facilities	April 2010
	☐	☒	iii. Modify validation plan and methods in accordance with findings from pilot project	April 2010
	☐	☒	iv. Implement validation plan and methods in all healthcare facilities participating in HAI surveillance	April-May 2010 and Annually
	☐	☒	v. Analyze and report validation findings	June 2010 and Annually
	☐	☒	vi. Use validation findings to provide operational guidance for healthcare facilities that targets any data shortcomings detected	June-July 2010 and Annually
			Other activities or descriptions (not required): NH DHHS will contract with an agency with infection prevention expertise to develop a validation plan for NH's HAI reporting program. This contract will go into effect around January 2010, with a final data validation plan expected by April 2010. The HAI Program Coordinator will conduct data validation activities at each facility between, work with hospitals to correct any errors, and produce a report on data validation findings such that any issues can be addressed in future trainings.	
	☐	☒	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	December 2010

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			Other activities or descriptions (not required): In 2010, NH DHHS will develop a more comprehensive State HAI Plan, which will include preparedness plans for response to HAI incidents and outbreaks.	
	☐	☐	10. Collaborate with professional licensing organizations to identify and investigate complaints related to provider infection control practice in non-hospital settings, and to set standards for continuing education and training	
			Other activities or descriptions (not required): Not planned at this time.	
	☐	☒	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	No timeline anticipated at this time
	☐	☒	ii. Promote definitional alignment and data element standardization needed to link HAI data across the nation.	No timeline anticipated at this time
			Other activities or descriptions (not required): These efforts require national projects and guidelines. NH DHHS can participate in these efforts, but leadership will come from national organizations.	
			12. Enhance electronic reporting and information technology for healthcare facilities to reduce reporting burden and increase timeliness, efficiency, comprehensiveness, and reliability of the data	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	☐	☒	i. Report HAI data to the public	June 2010 and Annually
			Other activities or descriptions (not required): NH DHHS will contract with a vendor to conduct a statewide ELR and electronic data exchange assessment to evaluate hospital laboratory information systems, HL7 message creation capability, and messaging ability at each of the 26 acute care hospitals. NH DHHS, through the contractor, would then provide funding to four to six (15-23%) hospitals to assist them with developing an ELR mechanism in their facility to report laboratory data to NHSN and to consider ways to send other clinical information using clinical document architecture messaging. An annual HAI state data report will be provide to the public each June.	
	☐	☒	13. Make available risk-adjusted HAI data that enables state agencies to make comparisons between hospitals.	June 2010 and Annually
			Other activities or descriptions (not required): An annual HAI state data report will be provide to the public each June. The report will include risk-adjusted HAI data by hospital for comparison.	
	☐	☐	14. Enhance surveillance and detection of HAIs in nonhospital settings	
			Other activities or descriptions (not required): Not planned at this time. Authority to conduct this type of surveillance would need to be provided for in state law.	

Please also describe any additional activities, not listed above, that your state plans to undertake. Please include target dates for any new activities.
None.

3. Prevention

State implementation of HHS Healthcare Infection Control Practices Advisory Committee (HICPAC) recommendations is a critical step towards the elimination of HAIs. CDC with HICPAC has 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 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.

Table 3: State planning for HAI prevention activities

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level I	☒	☐	1. Implement HICPAC recommendations. i. Develop strategies for implementation of HICPAC recommendations for at least 2 prevention targets specified by the state multidisciplinary group.	Already Implemented
			Other activities or descriptions (not required): The two HAI prevention targets selected for monitoring in NH are CLABSI and SSI. There are several ongoing collaboratives in the state that work to reduce these infections including: 1. High Five for a Healthy New Hampshire: Five-component statewide initiative to monitor and improve hand hygiene rates among all levels of healthcare workers and includes 1) leadership commitment, 2) availability of products, 3) hand hygiene training and competency verification, 4) measurement, and 5) feedback and accountability. 2. Patient Safety Checklist: Recognizing that surgical safety is a major priority for healthcare safety and quality improvement and New Hampshire hospitals and ambulatory surgery centers are committed to implementing evidence based practice, every hospital and ASC in New Hampshire will adopt and post a safety	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			checklist in all procedure areas where an incision is made or anesthesia is administered. This Safety Checklist differs from the commonly used 'time-out' process which confirms site, patient and procedure, in that it is designed to improve communication among team members and promote consistency of care delivered. The Safety Checklist involves oral communication by teams as to the completion of essential steps for ensuring safe care at three critical junctures: prior to anesthesia, prior to incision or procedure, and before leaving operating room or procedure area. 3. STOP BSI: Two-year program to reduce the occurrence of CLABSI developed by Johns Hopkins University Quality and Safety Research Group in partnership with the Michigan Health & Hospital Association Keystone Center. The improvement model includes a checklist, staff training, leadership involvement, collection of surveillance data, and analysis and discussion of defects. Additionally, by law, NH DHHS monitors central line insertion practices and surgical antimicrobial prophylaxis measures for comparison to infection data.	
	☐	☐	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 collaboratives	
			Other activities or descriptions (not required): Not planned at this time as working group under the TAW. Currently the New Hampshire Healthcare Quality Assurance Commission serves in this capacity.	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			3. Establish HAI collaboratives with at least 10 hospitals (i.e. this may require a multi-state or regional collaborative in low population density regions)	
	☒	☐	i. Identify staff trained in project coordination, infection control, and collaborative coordination	Already Implemented
	☒	☐	ii. Develop a communication strategy to facilitate peer-to-peer learning and sharing of best practices	Already Implemented
	☒	☐	iii. Establish and adhere to feedback of a clear and standardized outcome data to track progress	Already Implemented
			Other activities or descriptions (not required): As described above, there are several ongoing collaboratives in the state that work to reduce HAIs including: 1. High Five for a Healthy New Hampshire 2. Patient Safety Checklist for all procedural areas 3. STOP BSI These collaboratives are coordinated by the New Hampshire Healthcare Quality Assurance Commission.	
	☐	☐	4. 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	
			Other activities or descriptions (not required): Not planned at this time.	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level II			5. 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	Already Implemented
	☒	☐	ii. Coordinate with regulation and oversight activities such as inpatient or outpatient facility licensing/accrediting bodies and professional licensing organizations to prevent HAIs	Already Implemented
	☐	☐	iii. Improve regulatory oversight of hospitals, enhancing surveyor training and tools, and adding sources and uses of infection control data	
	☐	☐	iv. Consider expanding regulation and oversight activities to currently unregulated settings where healthcare is delivered or work with healthcare partners to establish best practices to ensure adherence	
			Other activities or descriptions (not required): While not comprehensive, NH DHHS maintains some regulatory authority related to infection prevention hospital activities as there are infection control regulatory guidelines that currently exist in the NH Hospital Licensing Rules He-P 802.21. No additional activities in this area are planned at this time.	
	☒	☐	6. 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)	Already Implemented
			Other activities or descriptions (not required): The 'High Five' campaign is a statewide initiative to monitor and improve hand hygiene compliance and is organized under the auspices of the NH Healthcare Quality Assurance Commission with staff support	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			provided by the Foundation for Healthy Communities (FHC). In order to take fundamental steps towards eliminating healthcare-associated infections in NH hospitals, the aim of the initiative is to have 100% compliance with hand hygiene (HH) as recommended in the CDC Guideline for Hand Hygiene in Health-Care Settings in all NH hospitals. The initiative relies on five components to improve compliance and includes the following: 1) leadership commitment, 2) availability of products, 3) hand hygiene training and competency verification, 4) measurement, and 5) feedback and accountability. This ongoing initiative has been established since 2008 and currently has a 20-person multidisciplinary group to advise and guide the project. All 26 acute care hospitals in NH are currently participating in the initiative. The current goal of the initiative is demonstrated improvement in hand hygiene compliance (≥85% statewide hand hygiene compliance) with demonstrated reductions (10% each year) in statewide rates of CLABSI and SSI.	
	☒	☐	7. Establish collaborative to prevent HAIs in nonhospital settings (e.g., long term care, dialysis)	Already Implemented
			Other activities or descriptions (not required): In addition to the 26 acute care hospitals, all 24 ambulatory surgical centers in NH have committed to the "High Five" for Hand Hygiene campaign.	

Please also describe any additional activities, not listed above, that your state plans to undertake. Please include target dates for any new activities.
None.

4. Evaluation and Communications

Program evaluation is an essential organizational practice in public health. Continuous evaluation and communication of practice 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 to occur. Routine, practical evaluations can inform strategies for the prevention and control of HAIs.

Table 4: State HAI communication and evaluation planning

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level I	☐ ☐	☒ ☒	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 towards targets and ii. Establish systems for refining approaches based on data gathered	December 2010 and ongoing December 2010 and ongoing
			Other activities or descriptions (not required): NH DHHS has not completed an HAI Program needs assessment to date, nor has NH DHHS identified measures to assess program performance and improvement. In 2010, NH DHHS will develop a more comprehensive State HAI Plan, which will include a section on HAI program evaluation.	
	☐	☒	2. Develop and implement a communication plan about the state's HAI program and 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	December 2010

			Other activities or descriptions (not required): In 2010, NH DHHS will develop a more comprehensive State HAI Plan, which will include an HAI communications plan.	
Level II	☐	☒	3. Provide consumers access to useful healthcare quality measures	June 2010
			Other activities or descriptions (not required): An annual HAI state data report will be provide to the public each June, which will include the measures allowable by law.	
Level III	☒	☐	4. Identify priorities and provide input to partners to help guide patient safety initiatives and research aimed at reducing HAIs	Already Implemented
			Other activities or descriptions (not required): The New Hampshire Healthcare Quality Assurance Commission was established in 2005 by the NH state legislature to look at healthcare quality issues including healthcare-associated infections and patient safety. This group, which includes representatives from all acute care hospitals and ambulatory surgical centers, coordinates several statewide prevention initiatives. A representative from NH DHHS (State Epidemiologist) serves on this group and provides HAI program updates and input into statewide prevention work.	

Please also describe any additional activities, not listed above, that your state plans to undertake. Please include target dates for any new activities.
None.

A Note about the Format of this Plan (Template for State Healthcare-Associated Infections Plans)

In response to the increasing concerns about the public health impact of healthcare-associated infections (HAIs), the US Department of Health and Human Services (HHS) has developed an Action Plan to Prevent Healthcare-Associated Infections (HHS Action Plan). The HHS Action Plan includes recommendations for surveillance, research, communication and metrics for measuring progress towards national goals. Three overarching priorities have been identified:

- Progress towards 5-year national prevention targets (e.g.,50-70% reduction in bloodstream infections);
- Improve use and quality of the metrics and supporting systems needed to assess progress towards meeting the targets; and
- Prioritization and broad implementation of current evidence-based prevention recommendations.

In a concurrent development, the 2009 Omnibus bill requires states receiving Preventive Health and Health Services (PHHS) Block Grant funds to certify that they will submit a plan to reduce HAIs to the Secretary of Health and Human Services not later than January 1, 2010. In order to assist states in responding within the short timeline required by that language and to facilitate coordination with national HAI prevention efforts, the Centers for Disease Control and Prevention (CDC) drafted a template to assist state planning efforts in the prevention of HAIs.

The template will help to ensure progress towards national prevention targets as described in the HHS Action Plan, wherein CDC is leading the implementation of recommendations on National Prevention Targets and Metrics and the implementation of priority prevention recommendations, while allowing flexibility to tailor the plan to each state's specific needs.

The template provides choices for developing or enhancing state HAI prevention activities in the four areas identified above. States can choose to target different levels of HAI prevention efforts indicated by checking appropriate boxes. (Level I indicates basic elements to begin HAI prevention efforts, Level II for intermediate and Level III more mature efforts). This completed template serves as the state's HAI plan to meet the requirements of the 2009 Omnibus bill. If a state has an existing plan, the state may choose to incorporate that plan into the template or submit the existing plan in place of the template provided; however, maintaining the format of the template is preferable as it allows for easier aggregation of activities across states. NH DHHS intends to develop a more comprehensive State HAI Plan in 2010, which will include the elements addressed in the CDC template in greater detail.

For each section, elements are chosen that best support current activities or planned activities. Current activities are those in which the state is presently engaged and includes activities that are scheduled to begin using currently available resources. Planned activities represent future directions the state would like to move in to meet currently unmet needs, contingent on available resources and competing priorities. A section for additional activities is included to accommodate plans beyond the principal categories.