Blueprint Proposal for Expansion of HAI Reporting for Hospitals

The HAI Advisory Committee has been in discussion for the last couple of months around the strategic direction of the work of the Committee and the reporting program. The Committee has expressed the need for a long-term vision and goals for the HAI reporting program in order to effectively use the time and expertise of the members as well as effectively implement the goals of the enabling legislation.

The HAI reporting program can serve as a foundation to align Oregon with national and local initiatives to reduce infections. The US Department of Health and Human Services has identified infections in hospitals as the first priority for expanding collection, reporting and prevention efforts over the next 5 years. These include:

- Catheter-Associated Urinary Tract Infection
- Central Line-Associated Blood Stream Infection
- Surgical Site Infection
- Ventilator-Associated Pneumonia
- MRSA
- *Clostridium difficile*

Oregon is in a unique opportunity in that the majority of hospitals are already utilizing NHSN through the mandatory reporting program as well as utilizing NHSN for internal quality improvement and prevention efforts. In addition, the Oregon Association of Hospitals and Health Systems has been actively engaged in developing a safe table and best practice resources for hospitals especially around MRSA and the NHSN MDRO module.

The following proposal is intended to discuss when infection reporting should be expanded as the US HHS and other national experts have agreed on what should be a state's priority steps to have a greatest influence on health care outcomes, safety and containing health care costs.

Proposal #1: All SSI procedures reporting mandatory by January 2012

- Step 1: Recommended prioritization for expansion
    - HCAIAC prioritize all of the NHSN SSI procedures using the following criteria into tiers
        - Criteria to utilize should be mortality/morbidity of infections, volume in Oregon hospitals, priority for Oregon hospital staff by burden and interest, existing or emerging best practices for prevention
    - Expand reporting program at appropriate times
    - List to be finalized in January 2010
- Step 2: Implementation of expansion through administrative rules
    - Establish small working group to assist staff in drafting rules
    - Present draft rules for Committee in March 2010

- Finalize rules for public comment in May 2010

Proposal #2: Mandatory reporting of MDRO through NHSN starting January 1, 2012

- Step 1
  - Formalize collaboration between OHPR and external stakeholders around MDRO module of NHSN and other activities
  - Develop recommendations for pilot program
  - Recruit hospitals for voluntary pilot program in 2011
- Step 2
  - Publish white paper about process similar to NY state HAI paper
  - Develop learning collaborative for hospitals around use of MDRO module
- Step 3
  - Draft rules to Committee March 2011 for inclusion of all hospitals for 2012
  - Final rules to Committee May 2011
- Step 4
  - Hold MRDO conference in Summer 2011 to include technical assistance around NSHN and other tools for prevention and best practices

Proposal #3: Begin reporting "structure" process measures of best practices in 2010

- Step 1
  - Identify "best practices" for prevention and quality improvement for infection control (i.e. NISQIP, Checklists)
  - Develop an annual reporting form for hospitals that indentify implementation and use of best practices
- Step 2
  - Establish small working group to assist staff in drafting rules
  - Present draft rules for Committee in March 2010
  - Finalize rules for public comment in May 2010
- Step 3
  - Incorporate "structure" measures into annual report

NHSN SSI procedure	Infection Rate Pooled mean (RC 1-3)[1]	Volume in Oregon Hospitals, 2007	Rate * Volume
Cesarean Section (CSEC)	1.5-2.64	14,045	211
Laminectomy (LAM)	.73-2.44	9608	70
Exploratory laparoscopic abdominal surgery (XLAP)	1.96	6883	135
Hip Prosthesis (HPRO)	.75-2.97	6023	45
Spinal fusion (FUSN_	.72-4.13	5310	38
Gallbladder surgery (CHOL)	0.69	4751	33
Open reduction of fracture (FX)	1.07-2.66	4560	49
Appendix surgery (APPY)	1.49-3.49	4364	65
Abdominal Hysterectomy (HYST)	1.12-4.37	4293	48
Colon surgery (COLO)	4.18-10.86	4250	178
Vaginal hysterectomy (VHYS)	.76-1.26	3062	23
Pacemaker (PACE)	0.22	2862	6
Small bowel surgery (SB)	2.62-6.31	2653	70
Herniorrhaphy (HER)	2.47-4.36	2572	64
Cardiac surgery (CARD)	1.17-1.71	2129	25
Gastric surgery (GAST)	1.84-4.86	2024	37
Craniotomy (CRAN)	2.15-4.68	1944	42
Carotid Endartectomy (CEA)	0.42	1436	6
Breast surgery (BRST)	.8-2.74	1216	10
Bile duct, liver or renal dialysis surgery (BILI)	.99-16.34	979	10
Peripheral vascular bypass surgery (PVBY)	2.00-6.69	942	19
Ventricular shunt (VSHN)	2.8-5.16	900	25
Rectal Surgery (REC)	2.85	606	17
Abdominal aortic aneurysm repair (AAA)	1.82-5.21	261	5
Arteriovenostomy for renal dialysis (AVSD)	0.99	183	2
Refusion of spine (RFUSN)	2.6-9.88	0	0

[1] National Healthcare Safety Network (NHSN) Report, data summary for 2006 through 2007, issued November 2008. Jonathan R. Edwards, MStat, Kelly D. Peterson, BBA, Mary L. Andrus, BA, RN, CIC, Margaret A. Dudeck, MPH, Daniel A. Pollock, MD, Teresa C. Horan, MPH, and the National Healthcare Safety Network Facilities

Project Abstract Summary

Healthcare-associated infections (HAIs) are a significant cause of morbidity and mortality. They are among the top ten leading causes of death in the US, accounting for an estimated 1.7 million infections and 99,000 deaths in hospitals alone in 2002. In 2007, the Oregon state legislature passed House Bill 2524, which created a mandatory HAI reporting program and assigned lead responsibility to the Office for Oregon Health Policy and Research (OHPR). OHPR is responsible for the development and analysis of health policy in Oregon and serves as the policymaking body for the Oregon Health Plan. HB 2524 also authorized the creation of the Healthcare-Acquired Infection Advisory Committee (HCAIAC); its role is to advise OHPR on the development of the HAI Reporting Program. The co-chair of the HCAIAC is the director of the Oregon Patient Safety Commission (OPSC), a semi-independent state agency, which has a mission to reduce the risk of adverse events in Oregon's health care system and promote quality improvement activities. Although the Oregon Public Health Division (OPHD), the state's public health agency, has had representation on the HCAIAC, OPHD has not been directly involved in HAI surveillance in Oregon.

The CDC's National Healthcare Safety Network (NHSN) was chosen as the reporting system to be used for inpatient HAI outcome measures. Quarterly inpatient reporting to NHSN began January 1, 2009 in Oregon and includes central line-associated bloodstream infections in ICUs and surgical site infections (coronary artery bypass graft surgery and knee prosthesis procedures). All Oregon hospitals have been reporting these measures since January 2009.

Recovery Act funding in Oregon will be used to expand the existing HAI Reporting Program and support more focused planning efforts to reduce HAIs in Oregon. The specific objectives are to:

1) Increase collaboration among OHPR, OPHD, and the OPSC;
2) Integrate their efforts with other partners in the state working on HAIs;
3) Improve the capacity of OPHD, the state's public health agency, to participate in and strengthen the state's HAI surveillance system, as well as its own ability to report, detect, and respond to HAIs; and
4) Develop a cohesive state process for developing multicenter evidence-based prevention collaboratives in order to make measurable progress toward the National Prevention Targets outlined in the HHS Action Plan to Prevent HAIs.

OHPR will recruit and hire a State HAI Prevention Coordinator who will lead a statewide HAI planning process and work to ensure that the state plan, once developed, will be implemented. The position will have a main role in promoting collaboration and integration of all groups in the state involved with HAIs and avoiding duplication of efforts. OPHD will hire a HAI Date Coordinator who will work closely with staff at OHPR to further promote use of the NHSN in the state as well as estimate the burden of and risks for HAIs in Oregon, develop and implement validation studies of NHSN data, and develop the capacity for electronic reporting of laboratory data into the NHSN. Lastly, OPSC will hire a Prevention Collaborative Manager to spearhead the development of prevention collaboratives based on the National Prevention Targets decided upon during the state HAI planning process.

Notes on Telephone Conference Call Re: HAI Reporting in Pennsylvania Long Term Care Facilities

Participants: October 8, 2009 Conference Call Participants: Dr. Woodruff English, James Dameron, and Ron Jamtgaard from Oregon plus Mike Doering (Exec. Dir.), William Marella (Program Director), Sharon Bradley, and Ronda Maretti from the Pennsylvania Patient Safety Authority.

Purpose: Introduce Oregon participants to the HAI reporting system for long term care facilities in Pennsylvania.

Background: In 2007, the Pennsylvania legislature passed a law requiring all hospitals and nursing homes to report to CDC and the State all healthcare acquired infections using NHSN data formats. However, at that time CDC was not ready for nursing homes to begin reporting. The State developed an alternative to NHSN reporting and implemented a locally-developed software data collection system for nursing homes. Under the aegis of the State's Patient Safety Authority, data are now being collected from 220 hospitals using NHSN and from 715 nursing homes using programs designed specifically for the nursing home industry. In general, nursing homes report less information than hospitals.

Progress: After the software was developed, training for nursing homes was conducted at 30 sites around the State. Staff members were trained on what and how to report. As of October 8, the new system had been operating for 3.5 months and had generated 11,000 reports. Training of nursing home staff was scheduled for 2.5 hours whereas hospital staff members were given 14 hours. A crude level of harm score is used in the nursing homes. Hospitals use a 10-item harm score. Nursing homes are less complex. In the first 3 months, all but 6 of the 715 nursing homes had submitted reports.

The Patient Safety Authority differs from the State's Health Department in that the focus of the Authority is on reporting – not accountability. The Health Department defines access rights and supplies data to the Patient Safety Authority.

The Patient Safety Authority uses domain experts to define reporting outputs. Advisories are issued quarterly. Facilities use it for their own use. They plan to launch analytic reports for Nursing Homes within one month. Their notification rules require that a patient or patient's representative be notified in writing within seven days of an acquired infection. [Parenthetically, Oregon has a similar reporting requirement.]

Quality improvement payments are sent to hospitals. The State funds all HAI activities with an appropriation of up to one million dollars per year; that sum is matched by Federal MediCal funds to pay for all HAI activities.

The reporting mandates on Nursing Homes differ from Hospitals in both infection types and criteria. Nursing Home reporting is less reliant on laboratory or radiology results – especially in rural facilities. William Morella, Program Director of the

Pennsylvania Patient Safety Authority, used slides during our concurrent telephone and online conference. The 34-page Adobe file is attached to this email. The slides describe the process used, distinctions between hospital and nursing home reporting, surveillance and warning techniques, and planned analytic methods.

MDS Reports are used for quality control, but it is felt that infections are under reported. Hospitals provide lots of denominator data – including catheter days and resident days. NHSN uses 15 pages of location data but the State's nursing home system uses only 5 locations. The online system edits field data before accepting a screen and prompts for corrections – thereby reducing errors in the input data.

Best practices: State collects data on vaccinations for hospital staff. It is already in the MDS reporting by nursing homes also. MDS also provides resident patient vaccination data. The State representatives on this conference call felt that monitoring of vaccine levels for patients as well as staff was critical. Nursing homes use CMS terminology for "need for catheter" on a form where units check all that apply.

The Patient Safety Authority is now looking at infection rates for outliers. Patient Safety staff did some phone work with nursing homes. They found that some nursing homes had infection rates that were too high, and some too low, to reflect reality. They assume they need to go from raw data to crude infection rates to risk adjusted rates.

Counting both Department of Health and Patient Safety Authority staff, the infection reporting program is funded for 6 to 8 full time equivalent staff. The group has received 20,000 reports from 200 hospitals over the past six months. A Surveillance Alert in being added for nursing homes.

Public access to data is provided by the Department of Health. Data are available by facility. The Oregon group asked Bill Marella if the software and procedures and definitions were transferable to another state. Some of their work is owned by University Health System Consortium. Their statute and procedure gives them access to NHSN data entered on the CDC System. We were referred to Stacey Mitchell in the Department of Health for further discussion of system portability and costs. She is the primary contact with EDS, the firm that developed their nursing home software. Over 20 states have some infection reporting, but only a few require reports from nursing homes.

Respectfully,

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Portland, OR 97229
503 297 6240
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Healthcare-Associated Infections: State Plans

Department of Health & Human Services
Office of the Secretary
Office of Public Health & Science

Web Conference
Wednesday, August 19, 2009

Goals

- Provide background and guidance regarding the development of state plans
- Hear/Discuss questions and comments related to the development of state plans

Agenda

- Background
- HHS Action Plan: Development and Implementation
- Recovery Act Funds Targeting HAIs
- Healthy People 2020
- State Plans: Legislation and Development
- Questions

Healthcare-Associated Infections (HAIs)

- What are they?
  - Bloodstream infections, urinary tract infections, pneumonia, surgical site infections
- The Problem
  - **1.7 million HAIs** in hospitals—unknown burden in other healthcare settings
  - **99,000 deaths** per year
  - **$26-33 billion** in added healthcare costs
- HAI Prevention
  - Implementing what we know for prevention can lead to up to a **70%** or more reduction in HAIs

Increasing Needs for Public Health Approach Across the Continuum of Care

Acute Care Facility

Home Care

Outpatient/ Ambulatory Facility

Long Term Care Facility

HHS Action Plan to Prevent Healthcare-Associated Infections

Development and Implementation

United States Government Accountability Office

GAO

Testimony

Before the Subcommittee on Health Care, Committee on Finance, U.S. Senate

For Release on Delivery
Expected at 2:30 p.m. EDT
Wednesday, March 18, 2009

HEALTH-CARE-ASSOCIATED INFECTIONS IN HOSPITALS

Continuing Leadership Needed from HHS to Prioritize Prevention Practices and Improve Data on These Infections

Statement of Dr. Marjorie Kanof, Managing Director
Health Care

GAO-09-516T

GAO Report: Recommendations for HHS

- Improve central coordination of HHS-supported prevention and surveillance strategies
- Identify priorities among CDC guidelines to:
  - Promote implementation of high priority practices
- Establish greater consistency and compatibility of the HAI-related data across HHS systems to:
  - Increase reliable national estimates of HAIs

HHS Steering Committee for the Prevention of HAI

- Charge: Develop an Action Plan to reduce, prevent, and ultimately eliminate HAIs
- Plan will:
  - Establish national goals for reducing HAIs
  - Include short- and long-term benchmarks
  - Outline opportunities for collaboration with external stakeholders
  - Coordinate and leverage HHS resources to accelerate and maximize impact

Tier One Priorities

HAI Priority Areas

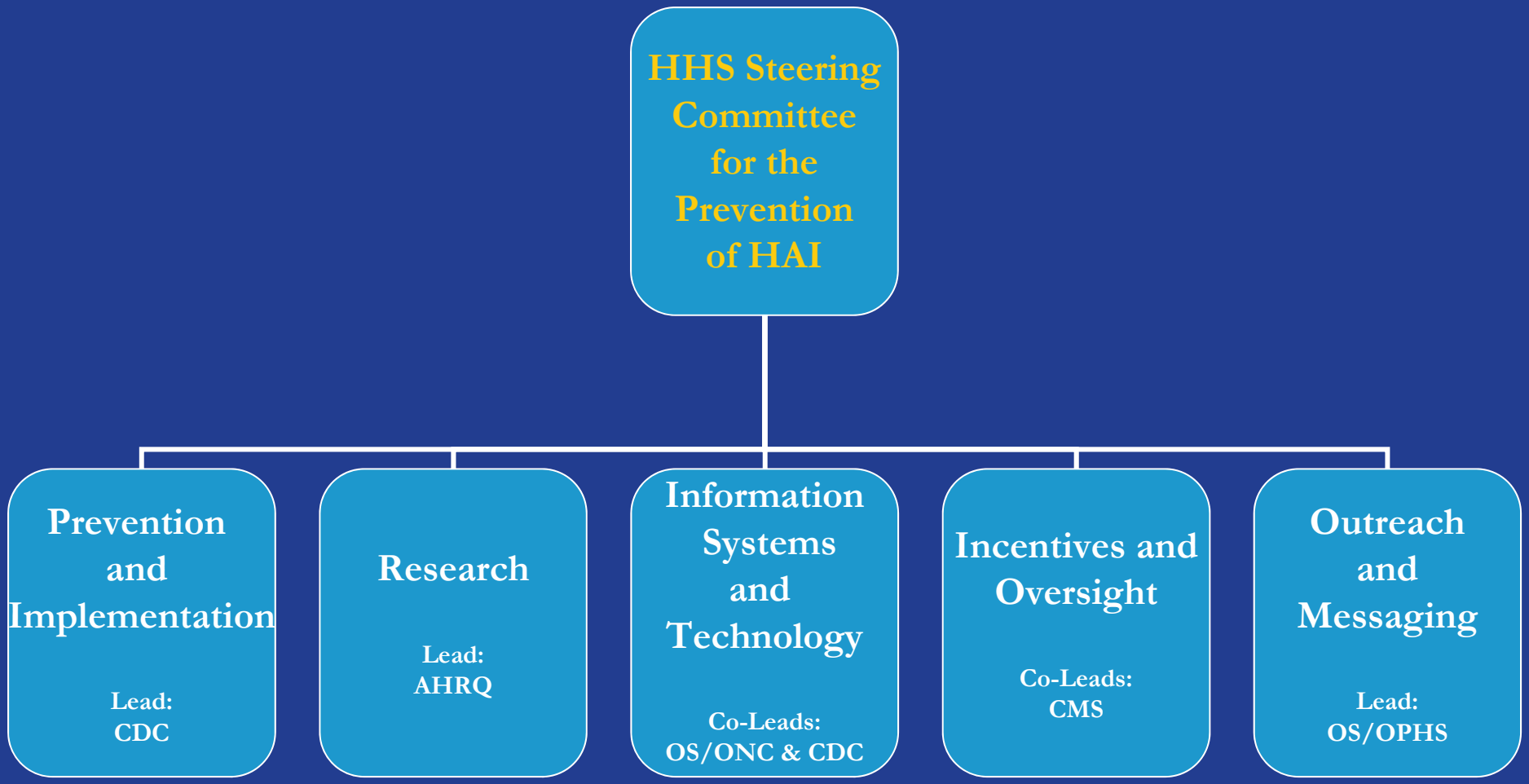
- Catheter-Associated Urinary Tract Infection
- Central Line-Associated Blood Stream Infection
- Surgical Site Infection
- Ventilator-Associated Pneumonia
- MRSA
- *Clostridium difficile*

Implementation Focus

- Hospitals

***Tier Two will address other types of healthcare facilities**

Steering Committee Working Group Structure



HHS Action Plan

- Initial version issued in January 2009
- Public comment received in February 2009
- Revision finalized in June 2009
- HHS Action Plan Website

  www.hhs.gov/ophs/initiatives/hai

Stakeholder & Public Engagement

- Hold five stakeholder/public engagement meetings
  Washington, DC – Tuesday, June 30 (National Level)
  Denver, CO – Saturday, July 25 (Regional/State Level)
  Chicago, IL – Thursday, July 30 (Regional/State Level)
  Seattle, WA – Thursday, Aug 27 (Regional/State Level)
  Chicago, IL – Tuesday, Sept 22 (Regional/State Level)

- Engage professional and public stakeholders in the HHS Action Plan
- Request input on priorities and strategies
- Additional Information
  www.hhs.gov/ophs/initiatives/hai

American Reinvestment and Recovery Act Funds

Preventing Healthcare-Associated Infections

Building State Programs to Prevent HAIs

- Project Description:
  - Create and expand state-based HAI prevention collaboratives
  - Build a public health HAI workforce in states
  - Enhance states abilities to assess where HAIs are occurring

- Agency Lead: CDC
- Collaborating Agencies: AHRQ and CMS
- Funds Source & Amount: ARRA ($40 M)
- CDC HAI Recovery Act Website

  www.cdc.gov/nhsn/ra

New Ambulatory Surgery Center Infection Instrument

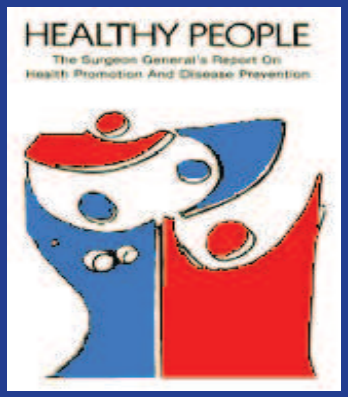
- Project Description:
  - Nationwide application of a new infection control survey instrument (designed by CMS & CDC)
  - Use of new tracer methodology
  - Use of multiple-person teams for ASCs over a certain size or complexity, and greater frequency than the current 10-year average inspection frequency (goal 3 years)

- Agency Lead: CMS
- Collaborating Agencies: CDC
- Funds Source & Amount: 2-year funding with ARRA grant dollars of $1 million in FY09 and the remaining $9 million in FY10

Healthy People 2020: Defining the Nation's Health Objectives

Healthy People: What is it Now?

- A comprehensive set of national ten-year health objectives
- A framework for public health priorities and actions
- Guided health policy decisions for 3 decades
- www.healthypeople.gov



Draft Mission Statement

- Healthy People 2020 strives to:
  - Identify nationwide health improvement priorities;
  - Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress;
  - Provide measurable objectives and goals that are applicable at the national, state, and local levels;
  - Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge;
  - Identify critical research, evaluation, and data collection needs.

Healthy People 2020 – Phase II New Topic Areas

- Access to Health Services
- Adolescent Health
- Children's Health
- Genomics
- Global Health
- Older Adults
- Healthcare-Associated Infections
- Quality of Life
- Social Determinants of Health
- Blood Disorders and Blood Safety
- Healthy Places
- Preparedness

State Plans

Legislation and Development

State Plan Legislation

- Fiscal Year 2009 Omnibus Bill:
  - Requires states receiving Preventive Health and Health Services (PHHS) Block Grant funds to certify that they will submit a plan to the Secretary of HHS not later than **January 1, 2010**
  - State plans will:
    - Be consistent with the HHS Action Plan
    - Contain measurable 5-year goals and interim milestones for preventing HAIs
    - Be reviewed by the Secretary of HHS with a summary report submitted to Congress by **June 1, 2010**

PHHS Block Grant
Congressional Intent

Preventive Health and Health Services Block Grant

As part of an HHS-wide initiative to reduce healthcare-associated infections (HAIs) coordinated by the HHS Office of the Secretary, the bill includes language that each State must certify that it will submit a plan by January 1, 2010 to the Secretary of Health and Human Services for reducing HAIs to be eligible for the full allotment in this Act under the Preventive Health and Health Services Block Grant. State plans shall be consistent with the Department of Health and Human Services national action plan for reducing such infections.

The bill also includes additional funding to provide States increased support for a wide range of public and preventive health activities. States are strongly encouraged to use these increased resources to invest in strategies to reduce HAIs through collaborations with public health departments and healthcare facilities and to begin to develop statewide plans.

State Plan Template

- Provides framework to ensure progress towards five-year national prevention targets as described in the HHS Action Plan in the following areas:
  - Develop or Enhance HAI Program Infrastructure
  - Surveillance, Detection, Reporting, and Response
  - Prevention
  - Evaluation, Oversight, and Communication

State Plan Template

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 facilities (LTCFs)) ii. Identify specific HAI prevention targets consistent with HHS priorities	
			Other activities or descriptions (not required):	
	☐	☐	2. Establish an HAI surveillance prevention and control program i. Designate a State HAI Prevention Coordinator	

State Plan Template

- State HAI Plan Template provides choices for developing or enhancing state HAI prevention activities
  - States can choose to target different levels of HAI prevention efforts indicated by checking appropriate boxes. This can serve as the state's HAI plan for submission.
  - The template is designed to be flexible and accommodate states at different levels of planning.
  - If your state has an existing plan, you may choose to incorporate that plan into the template or submit the existing plan in place of the template.
- CDC will be providing relevant training and technical support for Recovery Act HAI programs
- State Plan Template

  www.cdc.gov/ncidod/dhqp/stateHAIplan.html

Timeline

- July 1, 2009 – All States certified that they will submit a plan to CDC and therefore received their full Block Grant funding
- August 19, 2009 – HHS/OS call with States and partners
- October 19-20, 2009 – CDC to host ELC Recovery Act grantee meeting in Atlanta, GA
  - State plans will be part of the discussion
- January 1, 2010 – State plans due to HHS/OS
- January 1, 2010 through June 1, 2010 – HHS Secretary to conduct a review of the State plans with CDC technical support
- June 1, 2010 – HHS Secretary provides report to the Committees on Appropriations of the House of Representatives and the Senate

Submission Process

- Email to haistateplans@hhs.gov
- Mail to:

  HAI State Plans

  Department of Health & Human Services

  Office of the Secretary, Office of Public Health & Science

  200 Independence Avenue SW, Room 716G

  Washington, DC 20201
- Plans must be submitted by January 1, 2010

HHS HAI Programs &Resources to Support States

Division of Healthcare Quality Promotion (CDC)

www.cdc.gov/ncidod/dhqp

Healthcare Infection Control Practices Advisory Committee Guidelines (CDC)

www.cdc.gov/ncidod/dhqp/hicpac_pubs.html

National Healthcare Safety Network (CDC)

www.cdc.gov/NHSN and nhsn@cdc.gov

Prevention of Central Line-Associated Bloodstream Infections: Audio Feature (AHRQ)

www.healthcare411.ahrq.gov/featureAudio.aspx?id=939

HHS HAI Programs &Resources to Support States

Quality Improvement Organizations (CMS)

Background

Medicare Quality Improvement Community (MedQIC)

www.qualitynet.org/medqic

How to Partner with QIOs

QIO Synergy

www.qiosynergy.org

All Medicare Quality Improvement Work

CMS Quality of Care Center

www.cms.hhs.gov/center/quality.asp

Points of Contact & Important Links

Questions?

Office of Public Health & Science

Office of the Secretary, Department of Health & Human Services

haistateplans@hhs.gov

HHS Action Plan to Prevent Healthcare-Associated Infections

www.hhs.gov/ophs/initiatives/hai

State HAI Plan Template

www.cdc.gov/ncidod/dhqp/stateHAIplan.html

What Happens if a Plan is Not Submitted?

- At this time, no penalties for non-submission exist
- States are strongly urged to follow this timeline because the state plans:
  - Should be linked to ARRA funded HAI activities, which do have a wide range of accountability measures in place
  - Will assist the Federal Government in identification of future funding opportunities and opportunities for technical support to States

Questions?