

Healthcare-Associated Infections Advisory Committee

March 25, 2015

MEMBERS PRESENT: Paul Cieslak, MD
 Jordan Ferris, RN, BSN, CMSRN
 Jamie Grebosky, MD (phone)
 Joan Maca, RN (phone)
 Laurie Murray-Snyder (phone)
 Pat Preston, MS (phone)
 Dana Selover, MD, MPH
 Mary Shanks, RN, MSN, CIC
 Dee DeeVallier
 Diane Waldo, MBA, BSN, RN, CPHQ, CPHRM, LNCC
 Bethany Walmsley, CPHQ, CPPS

MEMBERS EXCUSED: Kelli Coelho, RN, CNOR
 Jon Furuno, PhD
 CsabaMera, MD
 Nancy O'Connor, RN, BSN, MBA, CIC
 Rachel Plotinsky, MD

STAFF PRESENT: Zintars Beldavs, MS, HAI Program Manager
 Genevieve Buser, MD, HAI Medical Epidemiologist
 Kate Ellingson, PhD, HAI Reporting Epidemiologist
 Monika Samper, RN, HAI Reporting Coordinator

ISSUES HEARD:

- Call to Order & Roll Call
- Approval of December 2014 HAIAC Meeting Minutes
- Findings and Key Recommendations from Oregon's Modernization of Public Health Report
- Update on HAI Metrics for Hospital Transformation Performance Program
- HAI Annual Report: Proposed New Formats for Consumers and Providers Plus Facility Specific Report Cards
- OAR Updates
- Follow-Up Influenza Vaccination Analysis: Which Strategies Predict High/Low Vaccination Rates
- New Ebola Funding from CDC to Expand HAIAC to Include Infection Control Assessment and Promotion (ICAP) Sub-Committee: Overview
- CDI Prevention Collaborative Activities: Using NHSN Data to Target Facilities
- Member Updates
- Public Comment/Adjourn

These minutes are in compliance with Legislative Rules. **Only text enclosed in italicized quotation marks reports a speaker's exact words.** For complete contents, please refer to the recordings.

Call to Order & Roll Call
Chair Mary Shanks, Kaiser Westside Medical Center

The meeting was called to order at approximately 1:00 pm. There was a quorum.

Approval of December 2014 HAIAC Meeting Minutes
All Committee Members

Minutes for December 17, 2014 meeting were unanimously approved as written.

Findings and Key Recommendations from Oregon's Modernization of Public Health Report
Cara Biddlecom, Office of State Public Health Director

Overview

- HB 2348, enacted in 2013, authorized establishment of a task force to study and make recommendations to the legislature on requirements and resources needed for an effective public health system.
- The task force produced a comprehensive report, *Modernizing Oregon's Public Health System*, available online: <http://public.health.oregon.gov/About/TaskForce/Pages/index.aspx>.
- The report focused on recommendations that:
 - Consider establishment of regional health departments
 - Enhance efficiency and effectiveness
 - Allow for appropriate partnerships with regional healthcare service providers and community organizations
 - Take into account cultural and historical appropriateness
 - Incorporate best practices

Task Force Recommendations

- Adopt the Foundational Capabilities and Programs for modernizing public health system.
 - Foundational capabilities include:
 - Assessment and epidemiology
 - Emergency preparedness and response
 - Communications
 - Policy and planning
 - Leadership and organizational competencies
 - Health equity and cultural responsiveness
 - Community partnership development
 - Foundational programs include:
 - Communicable Disease Control

- Environmental Health
 - Prevention and Health Promotion
 - Access to Clinical Preventive Services
 - Additional programs as required to address community-specific needs
- Identify and allocate significant and sustained state funding for proper operationalization of Foundational Capabilities and Programs; Oregon rates 46th in the nation for state investment in public health per capita.
 - State mainly reliant on highly prescriptive federal grants that do not support core public health work.
 - Current public health system does not deliver consistent services throughout the state due to a large disparity in county funding.
 - Implement statewide Foundational Capabilities and Programs in waves, as each county is ready, over a timeline to be determined.
 - Grant flexibility to local public health departments to operationalize Foundational Capabilities and Programs as a single county, a single county with shared services, or a multi-county health district.
 - Establish metrics to gauge performance of state and local public health departments.
 - Public Health Advisory Board would assume responsibility for developing metrics and assessing performance of public health agencies.
 - Agencies would report outcomes annually to Advisory Board.
 - Financial or other types of awards would be given to agencies meeting/exceeding benchmarks.

Approval and Implementation of Task Force Recommendations

- Hearings on House Bill 3100 and Senate Bill 663, which contain recommendations from the task force, are scheduled for March 9, 2015.
- Approval of the bills will necessitate:
 - Creation of precise definitions for each capability and program.
 - Development of performance measures and determination of costs based on capability and program definitions.
 - Identification of funding sources by legislature; decision expected in 2017 legislative session.
- Implementation of Foundational Capabilities and Programs would begin in 2017.

Update on HAI Metrics for Hospital Transformation Performance Program
 Diane Waldo, Oregon Association of Hospitals and Health Systems

Overview

- The Hospital Transformation Performance Program (HTTP) is a two-year CMS incentive program that pays facilities for performance on a number of measures out of revenues generated from a Medicaid provider tax.

- Baseline period - facilities paid for submitting baseline data during October 1, 2013 through September 30, 2014.
- Performance period - facilities paid for meeting benchmark or improvement target during October 1, 2014 through September 30, 2015.
- Hospitals eligible for the CMS incentive program include 28 facilities that are assessed an Oregon Medicaid hospital provider tax.
- HTPP is funded through a 1% increase in Medicaid provider tax.
- Performance metrics for the program were crafted by an OHA-led advisory committee authorized by House Bill 2216. The metrics cover two focus areas:
 - Hospital focus – what happens in hospital operations
 - Readmissions: Hospital-Wide All-Cause Readmission
 - Medication Safety: adverse drug events related to insulin, Warfarin, and opioids
 - Patient Experience: staff explain medications and provide discharge information
 - Healthcare-Associated Infections: CLABSI and CAUTI
 - Hospital-CCO Coordination focus – how hospitals engage with community partners and stakeholders
 - Emergency Department Visit Information: share with PCP and other hospitals
 - Behavioral Health: drug/alcohol screening by emergency department and follow-up after hospitalization for mental illness
- Incentive payments are calculated and distributed by OHA. Payments fall into two categories:
 - Floor allocation - a set amount is paid to hospitals submitting data for 75% of measures during baseline period.
 - Allocation per measure achieved - payment is based on facility performance, amount each measure is worth, and hospital size during performance period.

Committee Concerns about HTPP

- Hospitals may report false outcomes to obtain payment.
OHA response: no data validation plans at this time due to limited resources.
- Program may not induce hospitals to meet benchmarks/improvement targets.
Member response: large Medicare provider tax refunds are likely to incentivize facilities to improve performance.

HAI Annual Report: Proposed New Formats for Consumers and Providers Plus Facility-Specific Report Cards
Kate Ellingson, OHA

Report Timeline

- Hospitals and dialysis facilities will confirm data extracted from NHSN between early April and May 15.
 - Ensures quality information reported by facilities
 - Verifies NHSN data accessible to OHA matches facility-reported data published in CMS Hospital Compare reports
- Deadlines for reporting data is dependent on facility type.
 - CMS and Oregon require 3 categories of facilities to report data in NHSN:
 - Hospitals - 2014 data for 12 different metrics due May 15, 2015
 - Dialysis facilities - 2014 dialysis labID events due May 15, 2015
 - Ambulatory surgery centers - Healthcare Worker Influenza Vaccination Survey for 2014-2015 flu season due August 2015
 - Oregon requires long-term care facilities to report healthcare worker influenza vaccination data in SurveyMonkey for 2014-2015 flu season by May 22, 2015.
- Target dates for publishing reports are:
 - HAI annual report by July 31, 2015
 - Healthcare Worker Influenza Vaccination report in fall 2015

Report Content and Format

- Preliminary report design is based on feedback from committee members and CDC focus group.
- Two editions of annual report are planned: short, simple version for consumers and detailed, complex version for providers/savvy consumers.
 - Consumer report will:
 - Displays simple qualitative descriptions instead of SIRs and 95% CIs:
 - * Better – significantly more infections than expected based on national experience
 - * Same - not significantly different from national experience
 - * Worse - significantly fewer infections than expected based on national experience
 - * No conclusion – number of predicted infections less than 1 so no conclusion can be made
 - Include quantitative data to provide context:
 - * Number of patient/catheter/line days or procedures
 - * Number of observed infections
 - * Number of predicted infections
 - Display information in basic tables accompanied by simple explanatory legends.
 - Provider/technical report will contain:
 - Same basic quantitative data as consumer report (observed infections, expected infections, and denominator)
 - Statistical calculations:
 - * Rates - limit to CDI? (see Member Comments section below)
 - * SIR with color-coded confidence interval
 - * Percent SIR changed since previous year

- SIRs/rates stratified by hospital size
 - Tables displaying each facility's complete data for a given HAI on a single line (if possible)
 - Facility-specific report cards
- Both consumer and provider reports will include a concise executive summary with a pictorial display of state-level data.

Committee Concerns

- Committee recommended soliciting feedback on content and format of the consumer report from patient boards that already exist and assemble regularly.
- One member expressed uncertainty about providing rates for HAIs other than CDI because rates are not adjusted for risk factors.

OAR Updates

Monika Samper, OHA

OHA is changing Oregon Administrative Rules to align with CMS reporting mandates:

- Dropping several SCIP measures
- Adding requirement for dialysis facilities to report Healthcare Worker Influenza Vaccination Survey data beginning in fall 2015

Follow-Up Influenza Vaccination Analysis: Which Strategies Predict High/Low Vaccination Rates?

Kate Ellingson, OHA

- Oregon is eliminating three questions, not required by CMS, from healthcare worker influenza vaccination survey effective 2014-2015 influenza season to reduce burden on facilities:
 - Methods used to deliver vaccine
 - Strategies to promote/enhance vaccinations
 - Reasons for declining a vaccination
- OHA analyzed data gathered on discontinued questions. Results for two promotional/enhancement methods were discussed during the meeting (see meeting materials for complete results):
 - No cost versus charge for healthcare worker vaccinations:
 - No significant effect on vaccination rates for hospitals but 95% of hospitals offered no-cost vaccine
 - Significantly higher vaccination rates for ASCs offering free vaccines (>20% do not offer free vaccines)
 - Requiring unvaccinated workers to wear a mask:

- Significant predictor of higher vaccination rates for hospitals
 - Member comment: resisted by unions because employee's vaccination status considered protected healthcare information
 - OHA asked committee members to contemplate whether eliminated questions worthy of inclusion in other surveys.
-

New Ebola Funding from CDC to Expand HAIAC to Include Infection Control Assessment and Promotion (ICAP) Sub-Committee: Overview
Gen Buser, OHA

- OHA is reasonably confident of receiving Ebola ELC competitive grant in near future to build statewide epidemiology and lab capacity and to promote education in collaboration with key organizations.
- Grant is comprised of three components:
 - Consultative, non-regulatory evaluations of Oregon Ebola Tier 2 Assessment Hospitals.
 - Patient care domains in hospitals would be evaluated using an Oregon adaptation of CDC Draft Ebola Hospital Assessment Tool. These domains include:
 - * Facility Infrastructure: Patient Rooms
 - * Patient Transport
 - * Laboratory
 - * Staffing
 - * Training
 - * Personal Protective Equipment (PPE)
 - * Waste Management
 - * Worker Safety
 - * Environmental Services
 - * Clinical Management
 - * Operations Coordination
 - Consultations and analytic reports would be provided after hospital evaluations to encourage development of capacities:
 - * Gap analysis would be shared with each facility.
 - * Follow-up consults would be performed at six-months and one-year.
 - * Aggregate report, summarizing assessment results and lessons learned, would most likely be produced and distributed.
 - Development of statewide infection control capacity to prevent:
 - Healthcare-associated infections
 - * Improve identification and response to outbreaks through education and expansion of outbreak tools.
 - * Align statutes and rules of regulatory agencies to enhance efficiency.

- Other emerging infections
 - * Develop and employ tools to assess each region's capacity for infection control and inter-facility communication.
 - * Educate regions on how to improve capacities.
 - Expansion of Oregon Public Health Laboratory bio-safety capacity.
 - HAI Advisory Committee's role will be to establish an Infection Control Assessment and Promotion (ICAP) subcommittee. This committee will:
 - Develop a plan to guide infection prevention activities based on analysis of collected data and directives from CDC.
 - Modify CDC Draft Ebola Hospital Assessment Tool to meet Oregon requirements.
-

CDI Prevention Collaborative Activities: Using NHSN Data to Target Facilities

Gen Buser, OHA

- OHA received a grant to study *Clostridium Difficile* (CDI) across the healthcare system.
 - Data will be collected through survey questions and site visits to enhance knowledge of CDI transmission, inter/intra-facility communication, and infection prevention methods.
 - Survey sent in fall 2014 to hospitals, skilled nursing facilities, and laboratories to obtain broader understanding of capacities and practices related to both CDI and Carbapenem-resistant *Enterobacteriaceae* (CRE):
 - Infection control support, staff time, and activities
 - Practices for MDRO screening and precautions used
 - CRE questions
 - CDI surveillance, testing, response, and housekeeping
 - Inter- and intra-facility communication of MDROs and precautions
 - Policies and monitoring of practice adherence
 - Education for staff, patients, and infection control staff
 - Antimicrobial stewardship
 - Adequacy of response and facility support; facility priorities
 - Laboratory technology, standards, and capacity
 - Site visits planned at three different hospital and skilled nursing partnerships in two different regions to gather additional data from patient medical records.
-

Member Updates

Open to all members

No committee members had updates.

Public Comment / Adjourn
Chair

No comments from public.

Minutes Reviewed by:

Kate Ellingson

Zintars Beldavs

Exhibit Summary

A – Agenda

B – March 25, 2015 Minutes

C – Modernizing Oregon’s Public Health System

D – Hospital Transformation Performance Program

E – 2014 HAI Annual Report: March Update

F – Healthcare Personnel Influenza Vaccination: A Closer Look at NHSN vs. Oregon-Specific Data Elements

G – Ebola ELC Grant

H – CDI Initiative

2014 HAI Annual Report June Update

Kate Ellingson, PhD
Healthcare-Associated Infections Program
Oregon Health Authority
June 24, 2015

Oregon
Health
Authority

Summer Update: HAI Report



- Progress towards publication
- New CDC recs for report standardization
- Review new report format
- Feedback on Proposed Formats:
 - 2-page executive summary for hospital data
 - Tables for facility-specific data
 - Use of HHS target benchmarks
 - Alternate presentation of influenza vaccination data

2014 HAI Report Contains All Metrics Reportable under OAR 333-018

- Hospitals: CLABSI, CAUTI, MRSA bacteremia, *C. diff*, SSIs(6), & Flu Vax
- Dialysis Facilities: bloodstream infections (BSI) & Access-Related BSI
- Ambulatory Surgical Centers: Flu Vax
- Skilled Nursing facilities: Flu Vax
- Aggregate data
- Facility-specific data

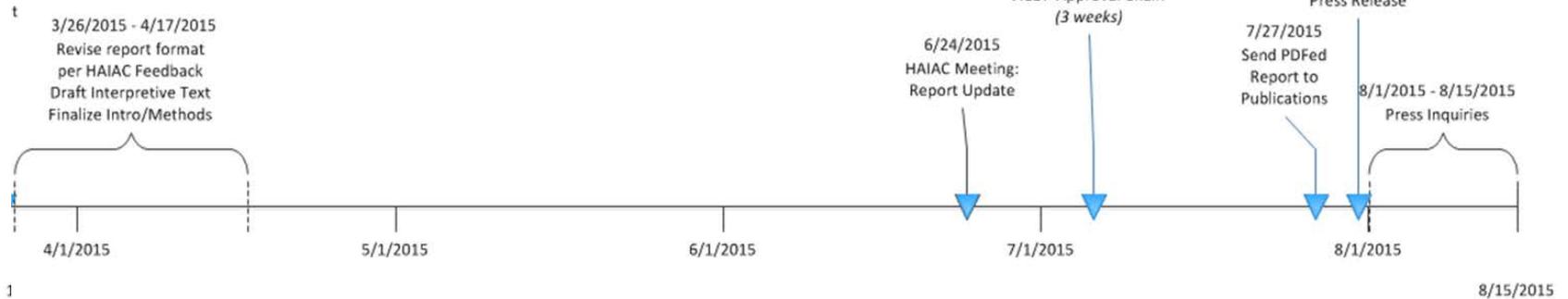


Report Timeline: April – July

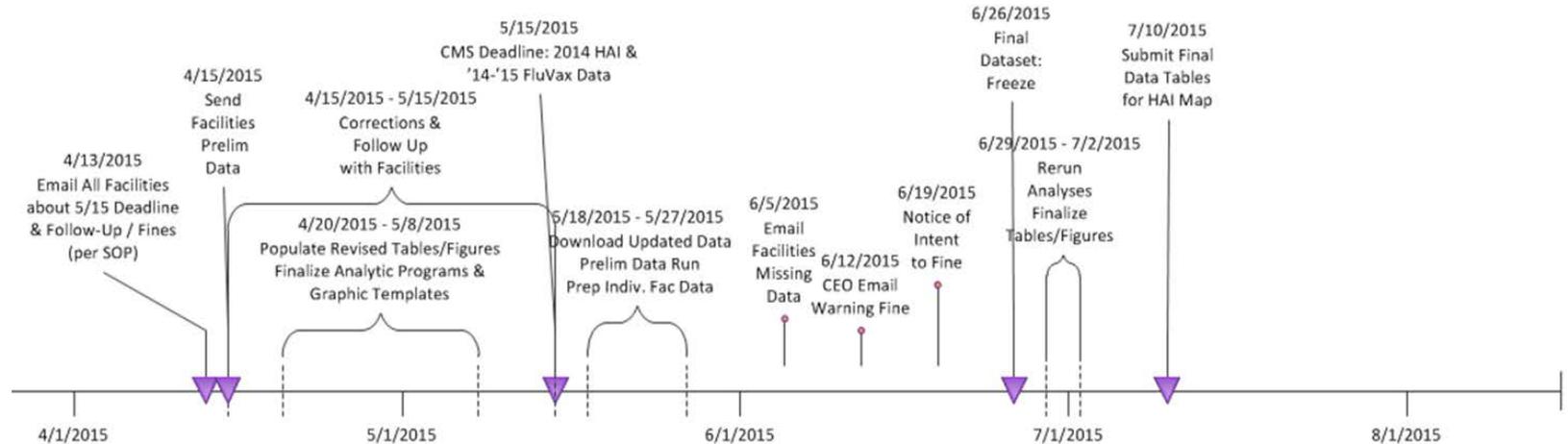
Report Creation & Publication

2014 HAI Annual Report Timeline

Revised: 03/16/2015



Data Collection & Analysis



Confirmation of HAI Data: Almost there

- OHA requires each facility to review & verify data
 - Check to make sure what OHA “sees” is what facility entered
 - Check exemption status
 - Missing data flagged
 - No reporting plan submitted
 - Fewer than 12 months of data submitted
 - Surgical procedures flagged
 - extreme procedure times (IQR5, 5 times the IQR – cut-points for each procedure set in 2010 by NHSN)
 - non-primary closure status
 - misclassification of wound/ASA status
- For hospitals and dialysis facilities, required email confirmation that data were correct by 6/19



Data Confirmation: Painful but Valuable

- 2014 HAI Data Sent to Hospitals & Dialysis (4/15)
- Hospitals: Lots of Corrections Needed
 - Discrepancies due to NHSN group user function
 - Misclassification of surgical closure from import function
 - CAUTI and MRSA bacteremia new in 2014
 - Challenges with turn-over and staff time at CAHs
 - Average of ~ 7 email exchanges with each hospital
 - 57/61 confirmed with complete data
- Dialysis facilities: very few discrepancies
 - Many LDOs have common data manager
 - Highly motivated by CMS incentives
 - 61/61 confirmed



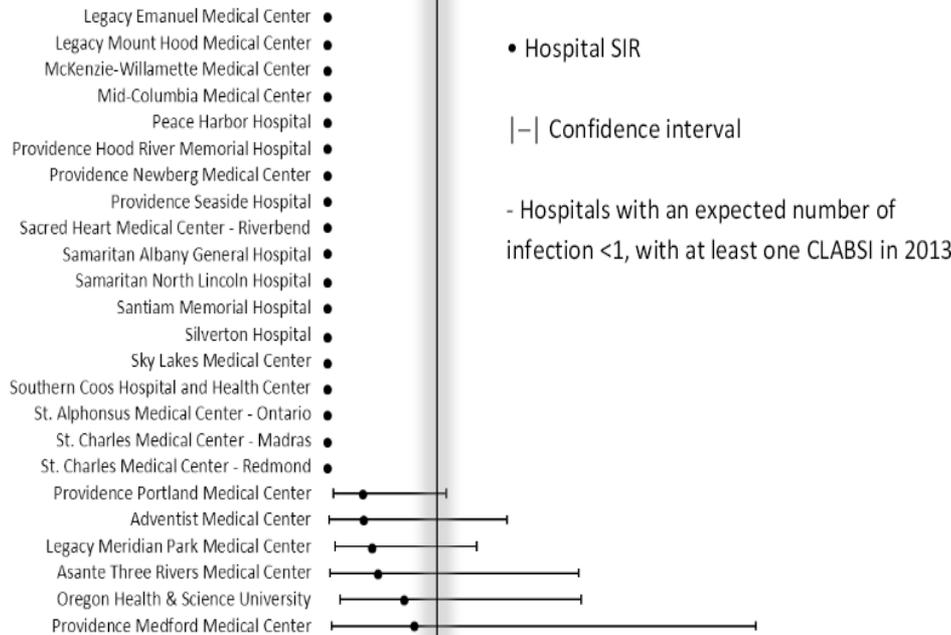
2013 Report Format: KPRO SSI Example

Knee Prosthesis Surgical Site Infections (KPRO) 2013			
Hospital Name	Observed # of KPROs	Expected # of KPROs	KPRO SIR
Adventist Medical Center	1	3.01	0.33
Asante Rogue Regional Medical Center	5	4.00	1.25
Asante Three Rivers Medical Center	1	2.15	0.47
Ashland Community Hospital	2	2.74	0.73
Bay Area Hospital	0	0.00	-

- ▼ SIR is < 1.0 and is less than the national baseline
- ◄ SIR is ≤ 1.0 and is no different than the national baseline
- ▲ SIR is > 1.0 and is no different than the national baseline
- ▲ SIR is > 1.0 and is greater than the national baseline
- No SIR calculated because the expected number of infections is 0

KPRO SSI Standardized Infection Ratio (2009–2013)

Figure 31. Oregon hospital's SIR with confidence intervals for KPRO SSIs in 2013.



SIR

2011	2012	2013	Percent difference	Trend
0.00	0.00	0.33	-	
0.67	0.96	1.25	-66%	

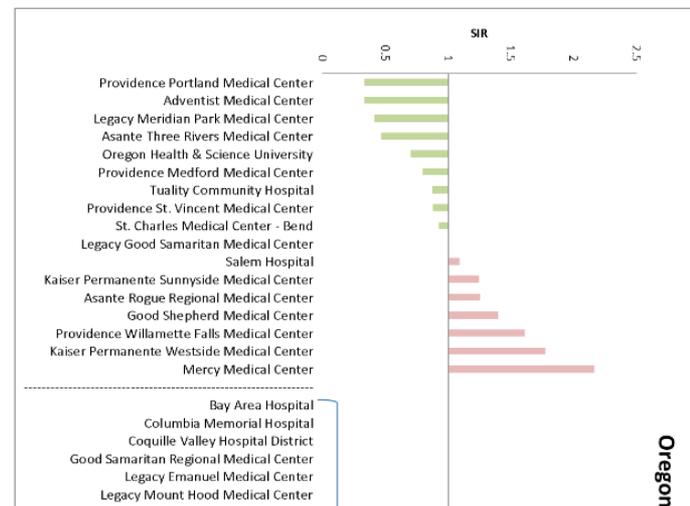
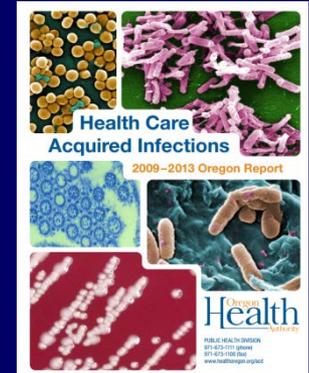


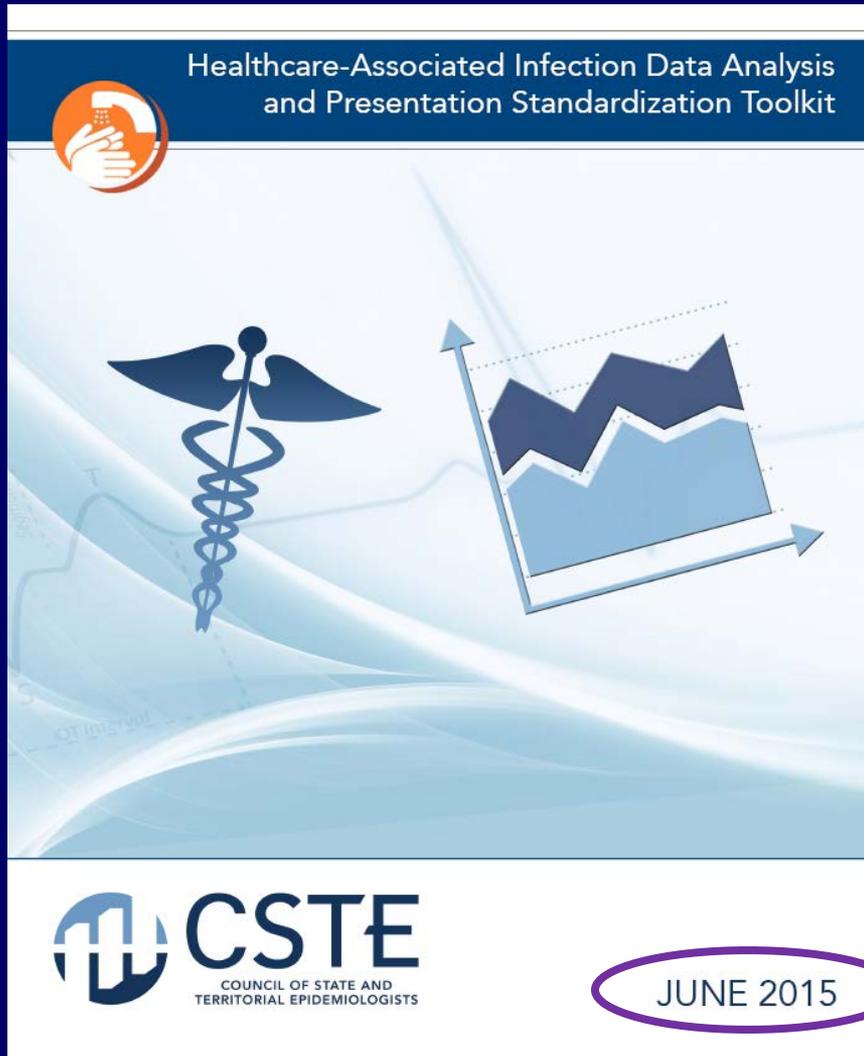
Figure 15. Oregon KPRO SSI SIRs for calendar year 2013

New Directions Since Last Report

- 2013 Annual Report published 8/2014
 - (+) comprehensive, well organized, new graphics
 - (-) too long, not consumer-friendly, bottom line?
- HAIAC Recommendations to date
 - Create a tight executive summary
 - Allow both simple and complex presentation of data
 - Assure availability of granular data when simplifying
 - Aggregate data by hospital size for benchmarking
 - Consider publishing rates in addition to SIRs
 - Seek consumer feedback; e.g., patient boards



CDC/CSTE Report Standardization Toolkit



Key Recommendations

- Create two reports: consumer-friendly & technical provider
- Do not publish rates for SSI, CDI, or MRSA; okay for CLABSI or CAUTI if stratify by location
- Use “better,” “same,” or “worse” language for SIR interpretation in consumer report
- Highlight hospitals with zero infections (recognizes small hospitals)

Working Plan for 2014 HAI Report

- Executive summary: aggregate data
 - Overall picture in Oregon: Successes? Priorities?
 - Graphic designer input, policy maker-friendly
 - 2 page summary for hospital-reported HAIs
 - 1 page summary for dialysis facility events
 - 1 page summary for influenza vaccination
- Publish two reports
 - Consumer Report: simple, guided interpretation
 - Provider Report: technical, assumes background
 - Reports follow similar format
 - Intro, purpose, methods, data, resources
 - Resources will be audience-specific



DRAFT Executive Summary: Page 1

DRAFT document contains PRELIMINARY DATA: NOT FOR DISTRIBUTION OR PUBLICATION

Health Care-Associated Infections in Oregon — 2014

Healthcare-associated infections (HAI) are painful, costly, and potentially deadly infections that patients acquire at healthcare facilities. The Oregon Health Authority seeks to eliminate HAIs and mandates hospitals to report 10 types of HAIs. This page shows the number of HAIs reported in Oregon in 2014. The arrows and percentages show how this number compares to national baseline data collected by the Centers for Disease Control and Prevention (CDC). The  indicates that, in 2014, Oregon met national targets for HAI reductions set by experts at the US Dept. of Health and Human Services (HHS); the  indicates that Oregon did not meet HHS reduction targets in 2014.

LEGEND

-  Statistically Better than National Baseline
-  Statistically Worse than National Baseline
-  Statistically Equal to National Baseline
-  Met HHS Reduction Target
-  Did not Meet HHS Reduction Target

35 CLABSIs
CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

 **70%** 

When a tube is placed in a large vein and not put in correctly or kept clean, it can allow germs to enter the blood and can cause deadly infections.

58 MRSA
LABORATORY-IDENTIFIED HOSPITAL-ONSET MRSA BLOODSTREAM INFECTIONS

 **35%** 

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a bacteria usually spread by contaminated hands. In a hospital, MRSA can cause serious bloodstream infections.

709 C. Difficile infections
LABORATORY-IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS

 **27%** 

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*) bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

182 CAUTIs
CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

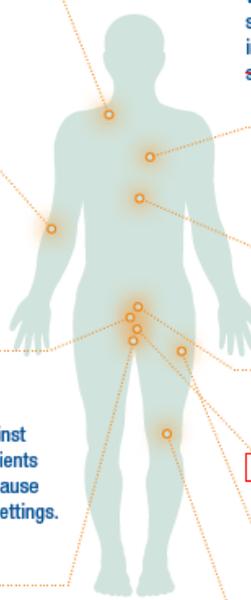
 **11%** 

When a urinary catheter is not put in correctly, not kept clean or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

471 SSIs
SURGICAL SITE INFECTIONS

 **28%**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only skin. Other SSIs can involve deep tissues, organs or implanted materials. ~~The statistics below represent serious deep tissue, organ space or implant infections.~~



20 Heart surgery SSIs  **65%** 

Coronary artery bypass graft with both chest and donor site incisions for revascularization of heart.

55 Back surgery SSIs  **47%** 

Exploration or decompression of spinal cord through removal of part of vertebrae (laminectomy).

49 Hysterectomy SSIs  **9%** 

Abdominal hysterectomy or removal of the uterus.

181 Colon surgery SSIs  **15%** 

Incision, removal, or rejoining of the large or small intestine.

95 Hip replacement SSIs  **19%** 

Surgical procedure to restore integrity and function of hip through prosthesis.

71 Knee replacement SSIs  **35%** 

Surgical procedure to restore integrity and function of knee through prosthesis.

Total HAIs Reported by Oregon Hospitals in 2014: 1455
Total Expected if HHS Reduction Targets Met: 1422

Total Expected Based on National Baselines: 1999
Ultimate Goal: 0

DRAFT Executive Summary: Page 2

PRELIMINARY DATA: NOT FOR DISTRIBUTION OR PUBLICATION

Replace % change with annual trends (see e.g.)??

Health Care-Associated Infections in Oregon — 2014

HAI Type	Nat'l Baseline	HHS Reduction Target	Locations & Exemptions	# Hospitals Reporting: 2014	OHA External Validation Efforts	2014 Oregon SIR	2014 OR vs. Nat'l Baseline	2014 SIR Meets HHS Reduction Target?	2014 OR SIR vs. 2013 OR SIR
CLABSI	2006-08 (SIR=1)	50% (SIR=0.5)	ICUs Only Exempt if <50 central line days	43	2009 data: all hospitals 2012 data: 23 hospitals	0.30	▼ 70%	✓	▲ 3% ^{Trend}
CAUTI	2009 (SIR=1)	25% (SIR=0.75)	ICUs Only	43	None, planned for 2015-16	1.11	▲ 11%	✗	▼ 8%
CDI	2010-11 (SIR=1)	30% (SIR=0.7)	Facility-wide, inpatient No exemptions	60	Current validation of 2013 LabID CDI data	0.73	▼ 27%	✗	▼ 5%
MRSA	2010-11 (SIR=1)	25% (SIR=0.75)	Facility-wide, inpatient No exemptions	60	None, planned for 2015-16	0.65	▼ 35%	✓	▲ 10%
SSI (Overall)	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	Varies by Procedure	(see below)	0.72	▼ 28%	✓	0%
SSI: Heart (CBGB)	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	14	2010-2011 data validated	0.41	▼ 59%	✓	▼ 24%
SSI: Colon	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	45	No validation	0.78	▼ 22%	✓	▲ 3%
SSI: Hip Replacement	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	43	No validation	0.87	▼ 13%	✓	▲ 30%
SSI: Abdominal Hysterectomy	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	38	No validation	0.78	▼ 22%	✗	▲ 2%
SSI: Knee Replacement	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	44	No validation	0.72	▼ 28%	✗	▲ 3%
SSI: Laminectomy (back)	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	21	No validation	0.55	▼ 45%	✗	▼ 24%

THE TAKE AWAY

Compared to national baseline HAI data collected by CDC over the past decade, Oregon had significantly fewer HAIs in 2014. Still, Oregon did not meet national reduction targets for several HAIs in 2014. More prevention work is needed to meet reduction targets and ultimately eliminate HAIs.

Fix Symbols

Oregon
Health
Authority

th
Authority

PRELIMINARY DATA: NOT FOR DISTRIBUTION OR PUBLICATION

Example Table for Consumer Report

Surgical Site Infections (SSI) from Colon Procedures in Oregon's Acute Care Hospitals – 2014

Facility Name	Number of Procedures	Observed Infections	Predicted Infections	How do facility rates compare to national baselines?	Has facility met national reduction target? †
Clean Memorial	54	0	1.7	◀	✓
Town Surgical Hospital	265	2	2.7	▶	✓
Vine Medical Center	161	4	3.6	▶	✗

†Targets set in 2009 by the Department for Health and Human Services for HAI reductions by December 2013 in the National Action Plan to Prevent Healthcare-Associated Infections

Legend	
▶ Fewer infections than predicted, statistically significant	✓ Met 2013 HHS Reduction Target
◀ Fewer infections than predicted, not statistically significant	✗ Did not Meet 2013 HHS Reduction Target
▶ More infections than predicted, not statistically significant	
▶ More infections than predicted, statistically significant	

Proposed

Sample Report Title: Surgical Site Infections (SSI) from Colon Procedures in [STATE's] Acute Care Hospitals, [TIME PERIOD]

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Clean Memorial	Colon Surgery	54	0	1.7	= Same
Town Surgical Hospital	Colon Surgery	265	2	2.7	★ Better
Vine Medical Center	Colon Surgery	161	4	3.6	= Same

CDC/
CSTE
Rec

Legend				
★ Fewer infections (better) than predicted, based on the national experience.*	= About the same number of infections as predicted based on the national experience.*	✗ More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.

*National baseline contains data from 2006 – 2008 for CLABSI and SSI, 2009 for CAUTI, and 2010-2011 for MRSA and C. difficile Laboratory-Identified Events.

Resources for Consumer Report

FAST FACTS: What You Healthcare-Assoc

Note to Authors: Edit this fact sheet as needed, depending on your state's consumer report. Fast Facts was created by the U.S. Department of Health and Environment—infographics were taken from CDC.

- A **surgical site infection** occurs when surgery took place. These involve tissue under the skin to develop. Symptoms may include redness or fluid from the wound.
- **Methicillin-resistant staphylococcus aureus (MRSA)** is a type of bacteria that can cause infections in the blood and other parts of the body.
- **Clostridium difficile** causes severe diarrhea and is usually found in people who have been under medical care.

Sometimes, patients have infections while in medical care. These devices increase the chance of getting an infection.

- A **central line** is a tube that goes into the bloodstream to deliver medicine. A **bloodstream infection** occurs when bacteria or other germs enter the blood. When a central line is not clean, germs can enter the body and cause infections.
- A **urinary catheter** is used to drain urine. A **catheter-associated urinary tract infection (CAUTI)** can occur when bacteria or other germs travel along a urinary catheter, resulting in an infection in your bladder or your kidney.

GUIDE

Influenza virus. If health flu, they hospital or those of the flu
The best and Prevent healthca flu within independent regardle Studies

THINGS TO THIN HEAL

Note to Authors: Edit or add to this list about what to consider, other than medical care.

- Does your doctor recommend a second opinion if there are concerns?
- Is your hospital accredited by an organization that seeks to improve quality?
- Do you know your doctor's credentials and board certification information?
- What infection prevention questions do you have before your surgery?
- Does your healthcare facility provide additional medical treatments?
- If you are planning to have surgery:
 - Does the facility have a patient safety program?
 - Does the facility have a procedure manual?
 - Does the facility have a risk management program?
 - Does the facility have a quality improvement program?
 - Does the facility have a patient safety committee?
 - Does the facility have a patient safety officer?
 - Does the facility have a patient safety hotline?
 - Does the facility have a patient safety training program?
 - Does the facility have a patient safety audit program?
 - Does the facility have a patient safety incident reporting system?
 - Does the facility have a patient safety incident review process?
 - Does the facility have a patient safety incident reporting system?
 - Does the facility have a patient safety incident review process?
- The federal government provides additional information at www.hospitalcompare.gov.
- The Centers for Medicare and Medicaid Services provides information at <http://www.medicare.gov>.



WHAT PATIENTS CAN DO TO PREVENT INFECTIONS

Note to Authors: Edit this section as needed, depending on the infections presented in your state's consumer report.

To prevent all infections:

- If you do not see your healthcare providers clean their hands before caring for you, don't be shy about asking them to do so. This is your healthcare, and you have a right to speak up!
 - Make sure you and your family members and friends keep their hands clean too!
- Ask your healthcare provider what specific steps he/she takes to prevent infections as well as what you can do to prevent infections before, during, and after your visit as it applies to your care.

To prevent central line-associated bloodstream infections (CLABSIs) and catheter-associated urinary tract infections (CAUTIs):

If you have a central line or urinary catheter put in place, ask your doctors and nurses to explain why you need it and how long you will have it.

- Ask your healthcare providers each day if you still need it.
- If the bandage covering your central line becomes wet or dirty, tell your nurse or doctor immediately.
- Tell your nurse or doctor if the area around your central line is sore or red, or you feel feverish.
- Follow your healthcare providers' instructions for the care of the central line or urinary catheter to keep it working as it should and keep it clean and free of germs.
- Do not let family and friends touch the central line tubing or bandage.

To prevent surgical site infections (SSIs):

IMMEDIATELY AFTER YOUR SURGERY AND DURING RECOVERY:

- Avoid touching your incision area and follow all instructions from your doctor about how to take care of your incision.
- Before and after taking care of your incision area, wash your hands or use an alcohol-based hand sanitizer and have any family member helping with your care do the same.
- If you have any infection signs/symptoms like redness, pain, fever, or drainage, call your doctor ASAP.
- Until the incision is completely healed, always use a different washcloth for the incision area than the one used for the rest of your body.
- Keep clean sheets on your bed and make sure the clothes that come in contact with your incision are clean.
- Keep pets away from the incision until healed.

BEFORE YOU LEAVE THE HOSPITAL OR AMBULATORY SURGERY CENTER:

- Make sure you understand how to take care of your wound and ask questions when you are unsure.
- Know who to contact if you have questions or problems after you get home.
- Keep all appointments scheduled at the time of discharge.

To prevent Clostridium difficile infections:

- Take antibiotics only as prescribed by your doctor and complete the course of treatment.
- Tell your doctor if you have recently been on antibiotics or if you get diarrhea within a few months of taking the antibiotics.
- Wash your hands before eating and after using the bathroom.

To prevent methicillin-resistant Staphylococcus aureus (MRSA) infections:

- Clean your hands often, especially before and after changing wound dressings or bandages.
- Keep wounds clean and change bandages as instructed until healed.
- Avoid sharing personal items such as towels or razors.
- Take antibiotics only as prescribed by your doctor and complete the course of treatment.

To prevent influenza or the "flu":

- Get vaccinated against the flu each year, clean your hands often, and cover your cough with your sleeve.

Example Table for Provider Report

Surgical Site Infections (SSI) Standardized Infection Ratio (SIR) Report by Facility, Colon Procedures in Oregon's Acute Care Hospitals – 2014

Facility Name	Number of Procedures	Number of Infections		SIR, Confidence Interval (CI)		SIR Interpretation	HHS Reduction Target? †	Change in SIR since 2013	Trend Since 2011
		Observed	Predicted	SIR	95 % CI				
Clean Memorial	54	0	1.7	0.00	(., 1.45)	▽	✓	0%	
Town Surgical Hospital	265	2	2.7	0.74	(0.51, 0.82)	▽	✓	Down 35%	
Vine Medical Center	161	4	3.6	1.11	(0.73, 1.27)	△	✗	Up 16%	

†Targets set in 2009 by the Department for Health and Human Services for HAI reductions by December 2013 in the National Action Plan to Prevent Healthcare-Associated Infections

Legend

- ▽ Fewer infections than predicted, statistically significant
- △ Fewer infections than predicted, not statistically significant
- ▽ Met 2013 HHS Reduction Target
- ✗ Did not Meet 2013 HHS Reduction Target
- △ More infections than predicted, not statistically significant
- ▲ More infections than predicted, statistically significant

Proposed

Sample Report Title: Surgical Site Infection (SSI) Standardized Infection Ratio (SIR) Report by Facility, Colon Procedures (COLO), Acute Care Hospitals, [STATE], [TIME PERIOD]

Facility Name	Procedure Type	Number of Procedures	Number of Infections		SIR and 95% Confidence Interval (CI)		SIR Interpretation
			Observed	Predicted	SIR	95% CI (Lower, Upper)	
Clean Memorial	COLO	54	0	1.70	0.00	(., 1.45)	= Same
Town Surgical Hospital	COLO	265	2	2.70	0.74	(0.51, 0.82)	★ Better
Vine Medical Center	COLO	161	4	3.60	1.11	(0.73, 1.27)	= Same

CDC/
CSTE
Rec

Legend

★ Significantly fewer infections (better) observed than predicted, based on the national baseline.*	= No significant difference (same) between the number of observed and predicted infections, based on the national baseline.*	✗ Significantly more infections (worse) observed than predicted, based on the national baseline.*	No Conclusion	The SIR is not calculated when the number of predicted infections is less than 1.
--	---	--	---------------	---

*National baseline contains data from 2006 – 2008 for CLABSI and SSI, 2009 for CAUTI, and 2010-2011 for MRSA and C. difficile Laboratory-Identified Events.

Resources for Provider Report

WHAT HEALTHCARE PROVIDERS CAN DO TO PREVENT INFECTIONS

Note to Authors: Edit this section as needed, depending on the infections presented in your state's technical report and/or include infection-specific prevention fact sheets.

To prevent all infections:

- Follow standard and transmission-based precautions meticulously, use appropriate personal protective equipment and perform hand hygiene as indicated.
- Ensure that all medical devices and equipment are cleaned, disinfected, sterilized and/or discarded appropriately.
- Ensure the environment of care is maintained appropriately.
- Speak up if you see co-workers who are not following appropriate infection prevention measures.
- Ensure that information about infection and colonization is communicated during transitions of care.

To prevent central line-associated bloodstream infections (CLABSIs) and catheter-associated urinary tract infections (CAUTIs):

- Follow recommended device insertion practices.
- Follow recommended device maintenance practices.
- Every day, evaluate whether the device is still needed. Ensure it is removed as soon as it is no longer needed.

To prevent surgical site infections:

- Follow a safe surgery checklist before, during, and after surgery.
- When indicated, give an antibiotic before surgery. Make sure the dose is appropriate and it is discontinued in a timely manner.
- Follow recommendations for hand hygiene, personal protective equipment, and antiseptic skin preparation.
- Post-discharge, provide the patient with wound care instructions and education on symptoms of infection.

To prevent *Clostridium difficile* infections:

- Use antibiotics judiciously.
- Implement contact precautions for patients with known or suspected *C. difficile* infection.
- Ensure proper cleaning and disinfection of the environment.

To prevent methicillin-resistant *Staphylococcus aureus* (MRSA) infections:

- Ensure compliance with contact precautions for MRSA-colonized and infected patients.
- Ensure proper cleaning and disinfection of the environment.
- Implement an alert system to enable prompt notification of laboratory-identified or readmitted patients with MRSA to allow prompt initiation of control measures.

To prevent influenza infections:

- Promote good respiratory hygiene practices.
- Encourage people in common areas who have respiratory symptoms to distance themselves from others or wear a surgical mask, if they are able to tolerate it.
- Implement droplet precautions for patients with influenza.
- Administer antiviral treatment and chemoprophylaxis to patients and healthcare personnel when appropriate.

The screenshot shows the Oregon Health Authority website. The main navigation bar includes "Public Health" and "HAI Prevention". The "HAI Prevention" page features a "Safe Injections: One and Only Campaign" section, a "Prevention efforts reinforce patient safety across all health care" section, and an "Our work" section. The "Our work" section lists several initiatives: DROP-CRE Network, HAI Advisory Committee, Interfacility Transfer Communication, and Oregon Patient Safety Commission Collaborative. A "Partners in our prevention efforts" section lists Acumentra Health, Leading Age, and Centers for Disease Control and Prevention HAI Program.

Safe Injections: One and Only Campaign
Most healthcare providers practice safe injections, but unsafe practices do occur and can cause serious harm. The "One & Only" campaign is raising awareness with patients and providers about safe injection practices.

- Learn what OHA is doing
- Campaign website

Prevention efforts reinforce patient safety across all health care.
The purpose of coordinating and reporting HAI prevention efforts is to develop a HAI state prevention plan to coordinate and implement prevention activities and report on progress toward reductions.

Our work

- **DROP-CRE Network**
The Drug Resistant Organism Prevention and Coordinated Regional Epidemiology (DROP-CRE) Network is a unique public-academic partnership whose primary objective is to detect and contain carbapenem-resistant Enterobacteriaceae (CRE) in Oregon.
- **HAI Advisory Committee**
The Healthcare Acquired Infection Advisory Committee (HAIAC) is a statutorily mandated committee to advise Oregon Health Authority (OHA) on the development of a health care acquired infections reporting program in Oregon.
- **Interfacility Transfer Communication**
As part of best practice during patient transfers, information about a patient's medical status, including colonization or infection with a multidrug-resistant organism, should travel with a patient and be readily available to medical providers.
- **Oregon Patient Safety Commission Collaborative**
The Oregon Patient Safety Commission is a semi-independent state agency charged by the Oregon Legislature with the goals of reducing the risk of serious adverse events occurring in Oregon's health care system and encouraging a

Partners in our prevention efforts

- Acumentra Health is committed to improving patient safety, health, and health care through community partnerships and the practical application of science, resulting in quality health solutions
- Leading Age is a charitable organization that aims to expand the possibilities for aging by education, advocacy, and applied research.
- Centers for Disease Control and Prevention HAI Program highlights their work with state health departments to improve HAI tracking and prevention by implementing successful prevention strategies in the entire and state and tracking the impact of that strategy across all hospitals.

Add a list of local prevention partners & resources

From CDC/CSTE

Healthcare Worker Influenza Vaccination

- CDC/CSTE Proposed benchmark is the HHS Healthy People 2020 goal of 90% total HCW vaccination rate
- CDC/CSTE Toolkit recommends a statistical comparison to 90% goal
 - Mid-P Exact test
 - Symbols for interpretation

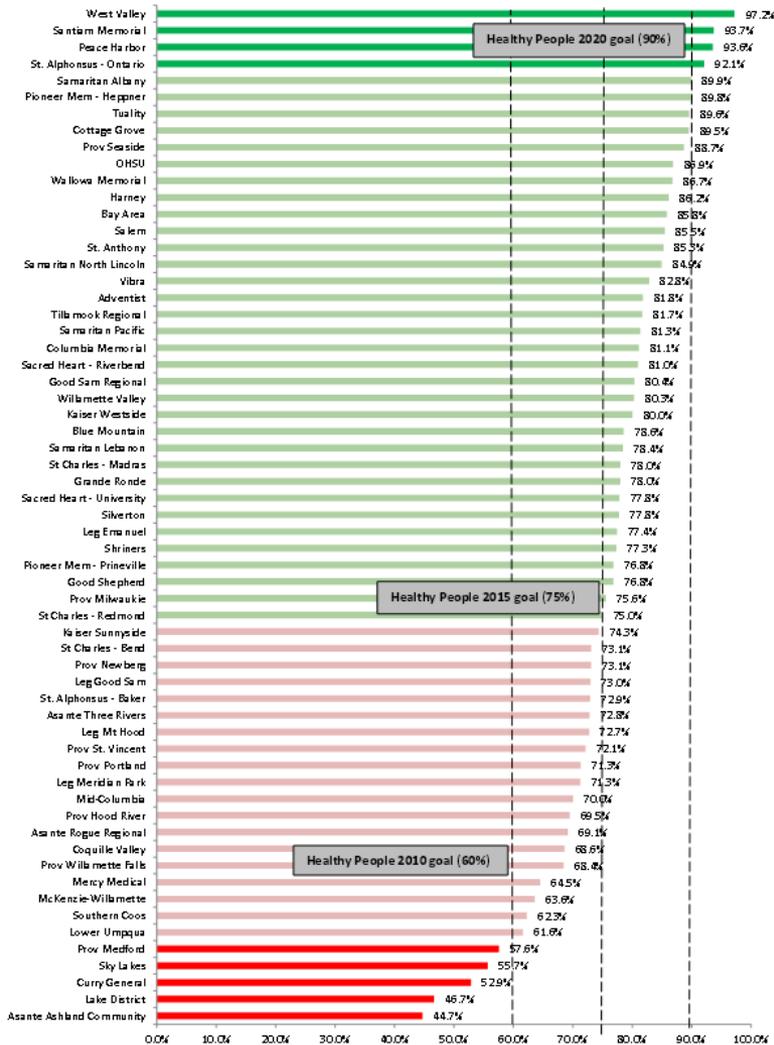
- A) Vaccination is higher (**better**) than the Healthy People 2020 Goal: ★ better
- B) Vaccination is **similar** to the Healthy People 2020 Goal: = same
- C) Vaccination is lower (**worse**) than the Healthy People 2020 Goal: ✘ worse
- D) Data were not reported from this facility: **not reported** (no affiliated symbol)

- Oregon 2014 Annual Report will include
 - Summary data from 2013-14 Flu Vax Report (published Nov., 2014)
 - Not previously published analysis: impact of promotional strategies on rates
 - QUESTION for HAIAC: should we use the statistical comparison?

Healthcare Worker Influenza Vaccination

In Report Published 11/2014

Figure 2: Hospital overall influenza vaccination percentages, 2013—2014 season



- Facility with percent of HCW vaccinated above 90%
- Facility with percent of HCW vaccinated above 75%
- Facility with percent of HCW vaccinated above 60%
- Facility with percent of HCW vaccinated below 60%

Healthcare Worker Influenza Vaccination: Possible Alternate Formats

For Consumer Report....

Healthcare Worker Vaccination in Oregon's Acute Care Hospitals – 2014

Facility Name	Number of HCW Eligible	Number Vaccinated	Vaccination Rate	HP2010 Reduction Target? †
Clean Memorial	507	345	68%	✓
Town Surgical Hospital	6117	5628	92%	✓
Vine Medical Center	1033	599	58%	✗

†HealthyPeople 2010 target vaccination rate: 60%

For Provider Report....

Healthcare Worker Vaccination in Oregon's Acute Care Hospitals – 2014

Facility Name	Number of HCW Eligible	Number Vaccinated	Vaccination Rate	HP2010 Reduction Target? †	HP2015 Reduction Target? †	HP2020 Reduction Target? †	Change in Vaccination Rate since 2013	Additional Vaccinations Needed to Meet HP2015
Clean Memorial	507	345	68%	✓	✗	✗	Up 15%	35
Town Surgical Hospital	6117	5628	92%	✓	✓	✓	Up 26%	n/a
Vine Medical Center	1033	599	58%	✗	✗	✗	Down 45%	176

†HealthyPeople target vaccination rates: 60% for 2010, 75% for 2015, and 90% for 2020

Health Care-Associated Infections in Oregon — 2014

Healthcare-associated infections (HAI) are painful, costly, and potentially deadly infections that patients acquire at healthcare facilities. The Oregon Health Authority seeks to eliminate HAIs and mandates hospitals to report 10 types of HAIs. This page shows the number of HAIs reported in Oregon in 2014. The arrows and percentages show how this number compares to national baseline data collected by the Centers for Disease Control and Prevention (CDC). The indicates that, in 2014, Oregon met national targets for HAI reductions set by experts at the US Dept. of Health and Human Services (HHS); the indicates that Oregon did not meet HHS reduction targets in 2014.

LEGEND

- Statistically Better than National Baseline
- Statistically Worse than National Baseline
- Statistically Equal to National Baseline
- Met HHS Reduction Target
- Did not Meet HHS Reduction Target

35 CLABSIs CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

70%

When a tube is placed in a large vein and not put in correctly or kept clean, it can allow germs to enter the blood and can cause deadly infections.

58 MRSA LABORATORY-IDENTIFIED HOSPITAL-ONSET MRSA BLOODSTREAM INFECTIONS

35%

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a bacteria usually spread by contaminated hands. In a hospitals, MRSA can cause serious bloodstream infections.

709 C. Difficile infections LABORATORY-IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS

27%

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*) bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

182 CAUTIs CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

11%

When a urinary catheter is not put in correctly, not kept clean or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

471 SSIs SURGICAL SITE INFECTIONS

28%

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only skin. Other SSIs can involve deep tissues, organs or implanted materials. ~~The statistics below represent serious deep tissue, organ space or implant infections.~~

20 Heart surgery SSIs **65%**

Coronary artery bypass graft with both chest and donor site incisions for revascularization of heart.

55 Back surgery SSIs **47%**

Exploration or decompression of spinal cord through removal of part of vertebrae (laminectomy).

49 Hysterectomy SSIs **9%**

Abdominal hysterectomy or removal of the uterus.

181 Colon surgery SSIs **15%**

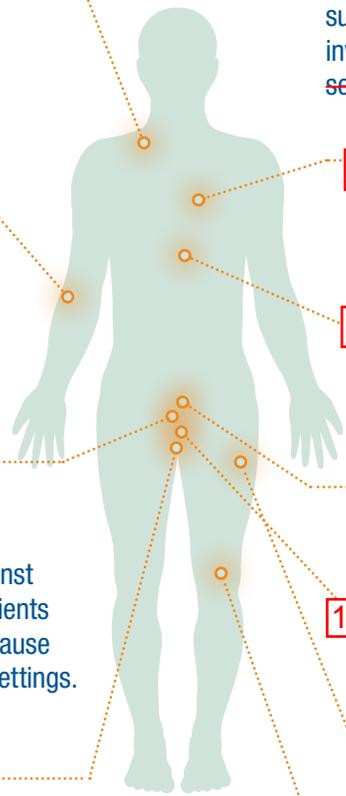
Incision, removal, or rejoining of the large or small intestine.

95 Hip replacement SSIs **19%**

Surgical procedure to restore integrity and function of hip through prosthesis.

71 Knee replacement SSIs **35%**

Surgical procedure to restore integrity and function of knee through prosthesis.



Total HAIs Reported by Oregon Hospitals in 2014: 1455
 Total Expected if HHS Reduction Targets Met: 1422
 Total Expected Based on National Baselines: 1999
 Ultimate Goal: 0

Replace % change with annual trends (see e.g.)??

Health Care-Associated Infections in Oregon — 2014

HAI Type	Nat'l Baseline	HHS Reduction Target	Locations & Exemptions	# Hospitals Reporting: 2014	OHA External Validation Efforts	2014 Oregon SIR	2014 OR vs. Nat'l Baseline	2014 SIR Meets HHS Reduction Target?	2014 OR SIR vs. 2013 OR SIR
CLABSI	2006-08 (SIR=1)	50% (SIR=0.5)	ICUs Only Exempt if <50 central line days	43	2009 data: all hospitals 2012 data: 23 hospitals	0.30	▼ 70%	✓	▲ 3% <small>Trend</small>
CAUTI	2009 (SIR=1)	25% (SIR=0.75)	ICUs Only	43	None, planned for 2015-16	1.11	▲ 11%	✗	▼ 8%
CDI	2010-11 (SIR=1)	30% (SIR=0.7)	Facility-wide, inpatient No exemptions	60	Current validation of 2013 LabID CDI data	0.73	▼ 27%	✗	▼ 5%
MRSA	2010-11 (SIR=1)	25% (SIR=0.75)	Facility-wide, inpatient No exemptions	60	None, planned for 2015-16	0.65	▼ 35%	✓	▲ 10%
SSI (Overall)	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	Varies by Procedure	(see below)	0.72	▼ 28%	✓	0%
SSI: Heart (CBGB)	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	14	2010-2011 data validated	0.41	▼ 59%	✓	▼ 24%
SSI: Colon	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	45	No validation	0.78	▼ 22%	✓	▲ 3%
SSI: Hip Replacement	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	43	No validation	0.87	▼ 13%	✓	▲ 30%
SSI: Abdominal Hysterectomy	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	38	No validation	0.78	▼ 22%	✗	▲ 2%
SSI: Knee Replacement	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	44	No validation	0.72	▼ 28%	✗	▲ 3%
SSI: Laminectomy (back)	2006-08 (SIR=1)	25% (SIR=0.75)	Exempt if <20 procedures	21	No validation	0.55	▼ 45%	✗	▼ 24%

THE TAKE AWAY

Compared to national baseline HAI data collected by CDC over the past decade, Oregon had significantly fewer HAIs in 2014. Still, Oregon did not meet national reduction targets for several HAIs in 2014. More prevention work is needed to meet reduction targets and ultimately eliminate HAIs.

Fix Symbols



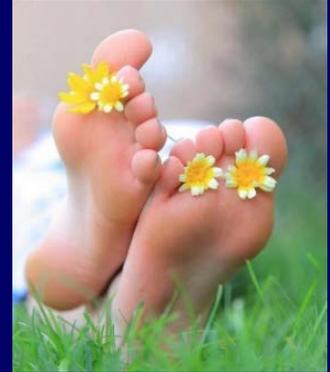
Proposed Update to Oregon State HAI Plan

Kate Ellingson, PhD
Healthcare-Associated Infections Program
Oregon Health Authority
June 24, 2015

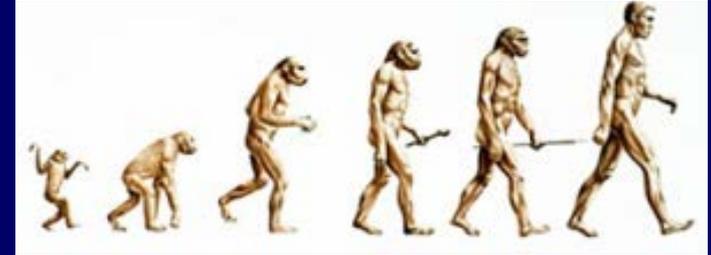


Some Background

- HB 2524 Establishes Mandatory HAI Reporting Program in 2007
- OHA receives \$725K in 2009 from HHS/CDC as part of the Recovery Act (ARRA)
- State Plan required for per ARRA framework
- Official plan submitted September 2009
- Updates to plan in 2013 & 2014



Evolution of Oregon State HAI Plan



- 2009 Plan Organized by ARRA Funding Categories
 - Infrastructure (HAI coordinator, advisory committee maintained)
 - Surveillance (NHSN onboarding & data validation)
 - Prevention (promotion evidence-based practices)
 - Focus primarily acute care settings
- 2013 Updates
 - Expanded goals to include MDRO & CDI prevention
 - Expanded target population to include dialysis, SNFs, & ASCs
- 2014 Updates
 - Increasing emphasis on “data for prevention”
 - Incorporation of HHS prevention targets

Proposed 2015 Updates

- Include Goals CDC-Ebola Supplement Funding
- Healthcare facility consultations/assessments
 - Ebola Assessment Hospitals
 - Other facilities throughout state (25 per Year)
- Expansion of HAIAC to include Infection Prevention Assessment and Promotion (ICAP) Sub-committee
 - Committee will include current & new members
 - Multidisciplinary: IP, physician lead, industrial hygienist, preparedness & regulatory representatives, other interested parties
- Coordination with preparedness/regulatory
- Mapping & outbreak prep initiatives

Goals for State HAI Plan

- Current plan exists in several documents
- In September create cohesive plan
 - ELC funding will be established
 - Plans and staffing for Ebola grant deliverables will be solidified
- Review at September HAIAC
- Approve at December HAIAC



Healthcare-Associated Infection Prevention Plan

Oregon health Authority

Public Health Division

Executive Summary:

Oregon's first State Healthcare-Associated Infection (HAI) plan was created in 2009 to target HAIs in acute care, expanded in 2013 to include MDROs and non-acute care settings, and updated in 2014 to adopt prevention targets set by the US Department of Health and Human Services (HHS). The Oregon State HAI Plan will be updated again in 2015 to include an Infection Control Assessment and Promotion (ICAP) program. The ICAP program will commence with assessment of infection prevention and control practices at Oregon's six Ebola Assessment Hospitals using a standardized tool adapted by CDC's Rapid Ebola Assessment teams to prepare hospitals during the 2014-15 Ebola outbreak. Next, the ICAP program will prioritize assessment of other inpatient, outpatient, and long-term care facilities, based on the NHSN-reported burden of HAIs and adherence to prevention practices targeted in Oregon's HAI state plan. Through gap analysis, targeted training, evaluation, and targeted resource allocation, the ICAP seeks to enhance adherence to standard and transmission-based precautions, safe laboratory and waste management practices, and communication between healthcare and public health partners.

Background:

In June 2007, the Oregon legislature passed House Bill 2524 to create a mandatory HAI Reporting Program in Oregon. The bill stipulated that the Oregon Office for Health Policy and Research (OHPR) conduct the following activities: implement an HAI surveillance and prevention program; maintain a multi-disciplinary HAI Advisory Committee (HAIAC) to advise the OHPR regarding the HAI Reporting Program; require healthcare facilities to HAIs or prevention process measures as determined by OHPR with guidance from the HAIAC, prepare periodic public reports to summarize aggregate and facility-specific HAI data, and regularly evaluate the quality and accuracy of the data collected for the HAI Reporting Program. The HAIAC was established in October 2007, and at that time, 8 of 57 Oregon hospitals were using a system for collecting HAI data. The committee observed that the CDC's National Health and Safety Network (NHSN) surveillance system was emerging to be the nationally preferred network for hospital data. The committee partnered with Association for Professionals in Infection Control (APIC) and the Oregon Association of Hospitals and Health Systems (OAHHS) to provide training for all Oregon hospitals to use NHSN.

In September 2009, the Oregon Public Health Division (OPHD) was awarded a grant of \$724,288 from the American Recovery and Reinvestment Act (ARRA), distributed through HHS, and managed by CDC's Epidemiology and Laboratory Capacity for Infectious Diseases (ELC) program. The funds were to be used to enhance HAI infrastructure, surveillance, and reporting. These goals dovetailed with the activities currently underway as a result of Oregon's House Bill 2524, and the activities overseen by the HAIAC. In 2009, an HAI coordinator was hired to build an HAI program within OPHD's Acute and Communicable Disease Prevention (ACDP). As of December 2009, all hospitals required to report HAI data stipulated by the HAI program, were enrolled and reporting through NHSN. The first

plan submitted to CDC in 2009 followed a standardized structure required of all states receiving ARRA funding for HAI program activities (details below). Since 2009, the HAIAC has expanded the number and types of HAIs that hospitals are required to report (Table 1), and has expanded the types of facilities required to report. Additionally, dialysis facilities are now required to report bloodstream infections, and hospitals, ambulatory surgical centers (ASC), and skilled nursing facilities (SNF) are required to report healthcare personnel vaccination rates as part of the HAI Reporting Program. Activities supported with ARRA funds were expanded in subsequent years by Affordable Care Act (ACA) funds; these funds continued to support basic HAI infrastructure (i.e., a coordinator and oversight of the HAIAC), expanded HAI surveillance and validation activities, and supported prevention collaborative activities in conjunction with partners such as the Oregon Patient Safety Commission and Oregon Health and Science University. In 2015, the OPHD received an ELC Ebola Supplement Grant to expand the coordination of HAI activities with preparedness, regulatory and laboratory communities. Specifically, funds were allocated for mapping and coordination activities to allow enhanced awareness and coordinated response potential throughout public health, regulatory, and healthcare communities. Additionally, the funds were to support standardized assessments and of Ebola Assessment Hospitals as well as other inpatient and outpatient facilities throughout the state. These activities – including the formation of an Infection Control and Assessment and Promotion sub-committee of the HAIAC – are reflected in updates to the Oregon State Plan detailed below.

Summary of Previous State HAI Plans:

- 2009: First official state plan
 - Submitted in standardized format to CDC as stipulation of ARRA funds
 - Publically available here: <http://www.cdc.gov/HAI/pdfs/stateplans/or.pdf>
 - Supported formation of official HAI Program within ACDP to conduct:
 - Infrastructure activities, including formation of state plan, hiring of a state HAI coordinator, and coordination of the HAIAC to build and solidify partnerships
 - Surveillance activities, including validation of NHSN data submitted to OHA per the requirements of the Oregon Mandatory HAI Reporting Program
 - Prevention activities, including development of multi-facility collaboratives to introduce and champion HAI prevention strategies
- 2013: Update to initial plan with the following objectives:
 - Reduce the number of multidrug-resistant organisms (MDRO) and *Clostridium difficile* (CDI) circulating in Oregon healthcare facilities
 - Improve antimicrobial stewardship and environmental cleaning standards
 - Enhance surveillance and detection of HAIs in non-hospital settings including:
 - LTCFs through inclusion of influenza vaccination reporting requirement
 - ASCs through inclusion of influenza vaccination reporting requirement
 - Dialysis centers through addition of dialysis event reporting requirement
 - Promote inter-facility transfer communication regarding patient infection or colonization with MDROs or *C. difficile*
- 2014: Update to include HHS reduction targets as part of HAI Program Goals

- HHS Federal Steering Committee for the Prevention of Healthcare-Associated Infections developed the National Action Plan to Prevent Health Care-Associated Infections: Road Map to Elimination in 2009 with Target goals including
 - CLABSI: 50% reduction by 2013 from national baseline in 2006-2008
 - CAUTI in ICUs: 25% reduction by 2013 from national baseline in 2009
 - MRSA BSI: 25% reduction by 2013 from national baseline in 2010-2011
 - CDI: 30% reduction by 2013 from national baseline in 2010-2011
 - SSI: 25% reduction by 2013 from national baseline in 2006-2008
- Updated plan proposed using these targets to benchmark progress in Oregon and at specific facilities

2015 Plan Updates:

In 2015, the state HAI plan will emphasize enhanced infection control capacities across Oregon healthcare facilities, and enhanced coordination with preparedness and regulatory communities. In April, 2015, the Oregon Health Authority was awarded funding to through an Ebola Supplemental grant to meet these objectives:

- Standardized assessment of and consultation with Oregon's six Ebola Assessment Hospitals on 11 domains defined by CDC's Rapid Ebola Preparedness tools.
- Standardized infection prevention assessment of and consultation with a targeted selection of hospitals, ASCs, dialysis facilities, and SNFs throughout the state
- Expansion of the HAIAC to include an Infection Control Assessment and Prevention Committee (ICAP), comprised of the following multidisciplinary members:
 - Physician lead on infection prevention consultations
 - Infection Prevention Consultant
 - Industrial Hygienist
 - Healthcare Preparedness representative
 - Regulatory Representative
 - HAI Ebola Grant Oversight Staff
- The ICAP subcommittee responsibilities will include:
 - Aggregating findings from consultations
 - Presenting findings to the HAIAC
 - Making recommendations to facilities based on consultative assessments and guidance from the HAIAC
- Enhancing and coordinating inventories of healthcare facility data throughout the state
- Enhancing outbreak detection and response capacity at facility, county, and state levels



EBOLA ASSESSMENT HOSPITALS IN OREGON: READINESS CONSULTATION VISITS

Judy Guzman-Cottrill, DO
June 24, 2015



Objectives

- Describe the Ebola readiness-specific elements of the new Epidemiology and Lab Capacity (ELC) Domestic Ebola Grant awarded to the Oregon Health Authority

September 2014



October 2014



Ebola ELC Competitive Grant

- Ebola Domestic Grant focuses on building statewide infection prevention infrastructure, capacity and education
 - Ebola readiness consultations of Oregon Ebola Tier 2 Assessment Hospitals
 - Develop statewide infection control capacity to prevent HAIs
 - Expand biosafety capacity at Public Health Laboratory

Healthcare Infection Control Assessment and Response (ICAR)

- Program's emphasis is on collaboration, partnership, and active engagement of healthcare facilities and all partners to expand current HAI program
 - **Activity A: Readiness consultation of Ebola Assessment Hospitals (2 years funding)**
 - Activity B: expansion of General Infection Prevention Infrastructure (3 years funding)

ICAR Activity A (Strategy 3)

A.3: Assess readiness of designated Ebola facilities

- Conduct on-site readiness consultations of all designated Ebola assessment hospitals
- Determine gaps in readiness
- Address gaps through consultation and training using CDC-based resources
- Develop mitigation and implement plan with hospital
- Follow up to confirm mitigation of gaps
- CDC Ebola Readiness Assessment Teams may assist with initial assessments to provide on-site training for facilities and state assessment teams

Grant Steering Team

- **Zints Beldavs** Grant Project Oversight
- **Judy Guzman-Cottrill** Ebola Consultations
- **Mary Post** Expansion of General IP Consultations and Education
- **Gen Buser** Surveillance and Outbreak Systems
- **Kate Ellingson** HAIAC Committee and incorporation of analysis & findings from all grant components (assessments, surveillance, regulatory findings) into annually revised HAI Plan

Key Partnerships

- Healthcare Facilities
- Local Health Departments
- OHA, Public Health Division, Acute and Communicable Disease Section
- Oregon State Public Health Laboratory
- HAI Advisory Committee (HAIAC)
- Oregon Patient Safety Commission
- Association for Professionals in Infection Control and Epidemiology (APIC)
- Centers for Disease Control and Prevention (CDC)
- HPP and PHEP
- Emergency Medical Services (EMS)—parallel assessments for out-of-hospital transport
- Oregon Association of Hospitals and Health Systems (OAHHS)

Participating Hospitals

1. Providence Milwaukie Hospital
2. Legacy Good Samaritan Medical Center
3. Kaiser Permanente Westside Medical Center
4. St. Charles Medical Center - Redmond
5. Samaritan Lebanon Community Hospital
6. Asante Ashland Community Hospital

Oregon State Consultation Team Members

- Judy Guzman-Cottrill (Physician Lead)
- Mary Post (Infection Preventionist)
- Daniel Cain (Industrial Hygienist)
- Robert Nickla (Laboratory)

11 Capability Domains

- Facility Infrastructure:
 - Patient room(s)
- Patient Transportation
- Laboratory
- Staffing
- Training
- PPE
- Waste Management
- Worker Safety
- Environmental Services
- Clinical Management
- Operations Coordination

Training Plan

- CDC training courses
- CDC team will perform consultation #1
 - Oregon team observes
- Oregon team will lead consultation #2
 - CDC team will observe
- Oregon team will lead consultations #3 - #6

What will it look like?

- Introductions
- Patient entry to patient care area
- Review 11 domains
- Wrap-up session

Opportunities

- Establish direct consultation with state and federal subject matter experts
 - Not a one-time consultation
- Collaborate and learn from each other
- Share success stories, help mitigate gaps
- Develop a solid infection prevention plan not only for Ebola virus, but for any epidemiologically significant pathogen...

Thank You

Questions or comments?

Discussion

Ebola Grant Activities

Zints Beldavs, Judy Guzman, Kate Ellingson
Healthcare-Associated Infections Program
Oregon Health Authority
June 24, 2015



Discussion Points

- Role of HAIAC and ICAP Sub-committee
- How to target facilities for General IP consult
 - 25 facilities from 6-7 regions in Y1
 - 7 hospitals
 - 3 dialysis facilities
 - 5 ASCs
 - 10 SNFs
- Question for HAIAC: how to we select?

Potential Selection Criteria

- Use of NHSN data: highest burden of HAI
- CMS HAC Score
- OHA hospital & SNF survey results
- Facilities where CRE has been identified
- Facilities with Outbreaks (e.g., Noro, Flu)
- Facilities/regions with PUMs or EAH partners
- Other possible criteria??