MEMBERS PRESENT:  Paul Cieslak, MD  
Kelli Coelho, RN, CNOR (phone)  
Jamie Grebosky, MD (phone)  
Laurie Murray-Snyder  
Rachel Plotinsky, MD (phone)  
Pat Preston, MS (phone)  
Dana Selover, MD, MPH  
Dee Dee Vallier (phone)  
Diane Waldo, MBA, BSN, RN, CPHQ, CPHRM, LNCC  
Bethany Walmsley, CPHQ, CPPS

MEMBERS EXCUSED:  Jordan Ferris, RN, BSN, CMSRN  
Jon Furuno, PhD  
Joan Maca, RN  
Csaba Mera, MD  
Nancy O’Connor, RN, BSN, MBA, CIC  
Mary Shanks, RN, MSN, CIC

STAFF PRESENT:  Zintars Beldavs, MS, HAI Program Manager  
Kate Ellingson, PhD, HAI Reporting Epidemiologist  
Judith Guzman, DO, Physician Lead for HAI Ebola Consultations

ISSUES HEARD:  
- Call to Order and Roll Call  
- Approval of March 2015 HAIAC Meeting Minutes  
- Member Updates: Round Robin  
- OAR Updates on Healthcare Worker Influenza Vaccination  
- 2014 HAI Annual Report: Preliminary Results/Trends, CDC-Endorsed Format, and Executive Summary with Graphics  
- Updated State Plan to Include Infection Control Assessment and Prevention (ICAP) Subcommittee of the HAIAC  
- Overview of Upcoming Ebola Assessment Hospital Consultations and CDC Site Visit  
- Group Discussion on Ebola Funding Supplement, Facility IPC Assessments, and HAIAC Role  
- 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 and Roll Call
Kate Ellingson, OHA (filling in for Chair Mary Shanks)

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

Approval of March 2015 HAIAC Meeting Minutes
All Committee Members

Minutes for March 25, 2015 meeting were unanimously approved as written.

OAR Updates on Healthcare Worker Influenza Vaccination
Kate Ellingson, OHA (filling in for Monika Samper)

Dialysis facilities will be required to report healthcare worker influenza vaccination data through NHSN beginning in the 2015-2016 flu season.

2014 HAI Annual Report: Preliminary Results/Trends, CDC-Endorsed Format, and Executive Summary with Graphics
Kate Ellingson, OHA

Report Data

➤ 2014 Oregon annual report will require a large amount of data to cover the growing number of reportable HAIs.
  o Hospitals:
    * Central line-associated bloodstream infections (CLABSIs)
    * Catheter-associated urinary tract infections (CAUTIs)
    * Methicillin-resistant Staphylococcus aureus (MRSA) bacteremia
    * Clostridium difficile infections (CDIs)
    * Six types of surgical site infections (SSIs)
    * Healthcare worker influenza vaccinations
  o Dialysis Facilities – bloodstream infections (BSIs) and access-related BSIs
  o Ambulatory Surgery Centers – healthcare worker influenza vaccinations
  o Skilled nursing facilities - healthcare worker influenza vaccinations

➤ Facility data must be verified prior to publication to ensure completeness and accuracy.
  o Data downloaded from NHSN has been sent to healthcare organizations to confirm that information accessible to OHA matches actual data entered by facilities.
Incomplete or invalid data has been identified and forwarded to facilities for correction: missing reporting plans and data, abnormally long surgical procedure times, and inconsistent data such as misclassification of wound/ASA status.

Denominator data of hospitals claiming exemption from reporting mandates has been checked to ensure exemption criteria were met with regard to volume of annual surgical procedures and device days.

- Verification of NHSN data is nearly finished for most healthcare organizations.
  - 57 out of 61 hospitals and all dialysis facilities have submitted complete data and confirmed accuracy of OHA reports through confirmation emails.
  - Ambulatory surgery center data cannot be confirmed until later because CMS has extended their reporting deadline until late August 2015.

- Common reasons for invalid data were software issues and inexperience with NHSN/HAI definitions.
  - Glitch with NHSN group user function caused data discrepancies.
  - Malfunction during import of data from EMRs into NHSN resulted in surgical closure status erroneously defaulting to non-primary closure.
  - Unfamiliarity with CDC definitions of CAUTI and MRSA bacteremia, new CMS reporting requirements effective January 1, 2014, lead some facilities to submit erroneous data.
  - Employee turnover and a lack of CMS reporting incentives for hospitals with less than 25 beds created challenges for OHA. Hospital staff were not always knowledgeable about HAI definitions, and in some cases, were not enrolled in NHSN.

Resources for Design and Content of Report

- Committee proposals:
  - Provide concise report in easy-to-read format.
  - Create tight executive report summarizing all Oregon reportable HAIs.
  - Offer both simple data for consumers and complex data for providers/technically savvy readers.
  - Present aggregate data by hospital size for benchmarking.
  - Consider inclusion of infection rates.
  - Solicit consumer feedback from sources such as patient boards (will not be implemented until next year due to time constraints).

- CDC and Council of State and Territorial Epidemiologists (CSTE) key recommendations for standardization of state reports:
  - Create different reports for consumers and providers to accommodate each group’s interests.
  - Do not publish rates for SSIs, *Clostridium difficile*, or MRSA; only use SIRs because they incorporate risk adjustment, which makes inter-hospital comparison fairer. Rates are acceptable for intra-hospital comparison of CLABSIs and CAUTIs, for example, when stratified by patient location.
  - Use terms “better”, “same”, or “worse” in consumer report to describe SIRs in relation to national baseline.
Recognize hospitals with zero infections (primarily small facilities) whose SIR may not be statistically significant or cannot be calculated because the predicted number of infections is less than 1, but be mindful of limitations.

Draft 2014 HAI Annual Report: Report Outline & Executive Summary

- Separate reports are presented for consumers and providers.
  - Consumer report provides simple metrics and patient-oriented information.
  - Provider report incorporates complex statistics and healthcare-related materials.
- Both reports will have the same organizational structure:
  - Introduction
  - Purpose
  - Methods
  - Executive summary
  - Detail-level data by facility type
  - Resources
- Each report includes an executive summary with aggregate data to provide an overall picture of Oregon.
- Executive summary for hospital-reported HAIs is comprised of a 2-pages:
  - Consumer page integrates basic data into a drawing of a human figure:
    * Total infections for each HAI type.
    * Percentage total infections are above/below national baseline.
    * Symbols signifying:
      - Oregon’s SIR in relation to national baseline data collected by CDC.
      - Whether Oregon met 2013 national targets for HAI reductions set by the U.S. Department of Health and Human Services (HHS).
  - Provider page displays both simple and technical metrics in a table format including:
    * HHS reduction targets
    * Criteria for exemption status
    * Standard infection ratio
- Executive summaries for dialysis facility-reported events and healthcare worker vaccinations combine consumer and provider information in a 1 page report.

Draft HAI Report Facility-Level Data

- Hospital section for consumers:
  - Quantitative data is limited to number of procedures, observed infections, and predicted infections. The number of procedures allows comparisons among hospitals.
  - Symbols are used to convey more complex information.
    * Color-coded directional triangles signify how a facility’s SIR compares to national baseline data.
      - Green - fewer infections than predicted, statistically significant
      - Gray - not statistically significant
      - Red - more infections than predicted, statistically significant
    * Green check mark and red “X” indicate whether Oregon met 2013 HHS targets.
- 50% reduction in CLABSIs;
- 25% reduction in SSIs, CAUTIs, and MRSA
- 30% reduction in *C. difficile* infections
  - Basic information is furnished about each HAI and what patients can do to protect themselves from infections.

➤ **Full Report for Providers:**
  - Additional data such as SIR, 95% confidence interval, and change since last year.
  - Synopsis is provided on what providers can do to prevent HAIIs along with a list of prevention partners and resources (yet to be compiled).

➤ **Healthcare worker influenza vaccination section offers two formats for presenting facility-level data:**
  - Color-coded bar chart ordered by facility healthcare worker vaccination rates (format used in previous HAI annual reports). The bar color represents the target year for Healthy People (HP) goals established by the U.S. Office of Disease Prevention and Health Promotion:
    * Dark green – vaccination rate above 90%; 2020 HP goal
    * Light green - vaccination rate above 75%; 2015 HP goal
    * Light red - vaccination rate above 60%; 2010 HP goal
    * Dark red - vaccination rate below 60%
  - Table format which incorporates CDC/CSTE guidelines and OHA ideas.
    * Both consumer and provider report contain basic vaccination data and employ a green check mark/red “X” to indicate whether facilities met Healthy People targets.
    * Provider report includes percentage of change in vaccination rate since 2013 and the number of additional vaccinations needed to meet Healthy People 2015 goal.

**Committee Recommendations**

➤ Consumer executive summary:
  - Remove number of infections and HHS reduction target data; only provide information related to Oregon’s rank on the national distribution.
  - Add text explaining that all metrics in the executive summary, so readers are not required to refer to legend.
  - Move some of the circles on human figure to better indicate location of infection.

➤ Consumer and provider executive summaries: add simple metric to signify how Oregon compares to the nation, such as 30% better. OHA noted that 2013 national data is available in CDC reports, so comparative data can be published.

➤ Throughout report:
  - Use verbiage, such as “better”, “same”, or “worse”, in addition to color-coded triangles, to accommodate color-blind readers and eliminate need to refer to legend.
  - Add footnote specifying that HHS infection reduction targets are for 2013.

**OHA Comments**

HHS reduction targets were added to the report this year because they are considered to be more up-to-date performance measures than SIRs:
The SIR, calculated by dividing observed number of infections by expected number of infections, inflates a hospital’s success at preventing infections because the denominator is derived from old national baseline data collected six to nine years ago.  

2013 HHS goals seek to reduce SIRs by a given percentage rather than evaluate outcomes based on old data.

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**Updated State Plan to Include Infection Control Assessment and Prevention (ICAP) Subcommittee of the HAIAC**

Kate Ellingson, OHA

Topic will be covered at a future meeting due to time limitations.

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**Overview of Upcoming Ebola Assessment Hospital Consultations and CDC Site Visit**

Judy Guzman, OHA/OPSC

**Ebola Domestic Grant Statewide Objectives:**

- Build infection prevention infrastructure through Ebola readiness consultations with Oregon tier 2 assessment hospitals. Ebola assessment hospitals include:
  - Providence Milwaukie Hospital
  - Legacy Good Samaritan Medical Center
  - Kaiser Permanent Westside Medical Center
  - St. Charles Medical Center – Redmond
  - Samaritan Lebanon Community Hospital
  - Asante Ashland Community Hospital
- Develop statewide infection control capacity to prevent HAIs including device-associated infections and surgical site infections (SSIs).
- Expand bio-safety capacity at Public Health Laboratory.

**Healthcare Infection Control Assessment and Response (ICAR)**

- ICAR program developed by CDC emphasizes collaboration, partnership, and active engagement of healthcare facilities and partners across the country to expand HAI program.
  - Exciting opportunity at the state level to work closely with hospitals to improve infection prevention infrastructure.
    - Hospitals will have multiple opportunities to consult directly with both state and federal subject-matter experts.
    - Participants will be able to share success stories and learn from each other.
  - Partners include a variety of groups and organizations.
    - Grant steering committee is planning and driving activities to ensure goals of Ebola Domestic Grant are met.
Activity A component of ICAR program entails readiness consultations with Ebola assessment hospitals to ensure facilities are prepared to safely and effectively care for patients with possible/confirmed Ebola until transfer to a treatment facility (2-year funding).

- State assessment team will conduct onsite baseline consultation at all tier 2 hospitals to establish current state of readiness. Team will be comprised of lead physician, infection preventionist, industrial hygienist, and laboratory consultant.
- Readiness consultation will evaluate eleven capability domains:
  - Facility infrastructure: patient rooms – space for donning and doffing and adequate air flow.
  - Patient transportation – ability to safely transport patient from home to hospital and from hospital entry points to care areas.
  - Laboratory – safe and effective handling of blood and body fluids.
  - Staffing – ample staff to care for patient for approximately 3 days of testing to rule in/rule out Ebola.
  - Training
  - Personal protective equipment (PPE) – sufficient and appropriate PPE and adequate staff training on how to use equipment.
  - Waste management Proper disposal
  - Worker safety of contaminated
  - Environmental services patient care items.
  - Clinical management Well established emergency
  - Operations coordination operation coordination (EOC) plan.
- Gaps in readiness will be addressed through consultation and training using CDC-based resources.
- Gap mitigation efforts will be evaluated during follow-up visits coupled with guidance on how to strengthen infection prevention plan.

Activity B component of ICAR program focuses on expansion of general infection prevention infrastructure (3-year funding). Oregon will develop and provide training and education for healthcare workers across the state, including critical access hospitals, dialysis facilities, ambulatory surgery centers, skilled nursing facilities, and outpatient clinics to bolster HAI prevention programs.

- HAI Advisory Committee will provide feedback on criteria for selecting the next group of facilities to receive general IP consult. Potential selection criteria might include: highest infection burden based on NHSN data, CMS HAC score, or HAI outbreak such as Norovirus.
- ICAP subcommittee will be established to analyze and present aggregate data collected from readiness consultations to HAI Advisory Committee in order to enable development of effective infection prevention policies. Subcommittee will be composed of readiness assessment team, physician from OHA regulatory department, and other interested parties.

Implementation of ICAR program is well underway in Oregon.
5 out of 6 assessment hospitals have confirmed site visit dates scheduled from the last week in July until the end of September 2015.

CDC will provide onsite training for facilities and state assessment team during initial consultations.

* CDC ICAR team will conduct first consultation at Providence Milwaukie Hospital while the Oregon team observes.
* Oregon team will lead second consultation at Legacy Good Samaritan Medical Center while CDC assists and critiques performance.
* Debriefing session will be held after consultations completed.

**Group Discussion on Ebola Funding Supplement, Facility IPC Assessments, and HAIAC Role**

Zints Beldavs, OHA and Judy Guzman, OHA/OPSC

Topic not covered due to time limitations.

**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 – 2014 HAI Annual Report June Update
D – Proposed Update to Oregon State HAI Plan
E – Ebola Assessment Hospitals in Oregon: Readiness Consultation Visits
F – Discussion Ebola Grant Activities
Oregon 2014 Annual Report
Healthcare-Associated Infections & Healthcare Worker Influenza Vaccination

Kate Ellingson, PhD
Healthcare-Associated Infections Program
Oregon Health Authority
September 23, 2015
Objectives

• Update on 2014 Annual Report
  – Status on release
  – Materials included in provider & consumer formats

• Review aggregate Oregon data and trends

• Review facility-specific tables
  – Facility names redacted until official release

• Discussion: how to make mandatorily reported data more actionable
Status & Format

• Revised release date: 9/28/2015
• Full/Provider Report
  – 87 pages, landscape orientation
  – Detailed facility-specific data
  – All-Oregon data with trends over time for each metric
• Consumer Report
  – 38 pages, portrait orientation
  – Concise facility-specific data; light on statistics
  – Tips for consumers and families on prevention
  – No trends over time
• Executive Summary in both versions
Executive summary: Health care-associated infections in Oregon hospitals — 2014

Health care-associated infections (HAIs) can have devastating consequences for patients. The summary below shows how 2014 data from 61 Oregon hospitals compares to: 1) recent HAI data for the U.S. as a whole; and 2) national HAI reduction targets set for 2013 by the U.S. Department of Health and Human Services (HHS).

SSIs
SURGICAL SITE INFECTIONS
An SSI occurs when germs enter a surgical wound during or after surgery, leading to skin, muscle, deep tissue, organ space, bone, or implant infection.

CLABSIs†
CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS 35 INFECTIONS
A CLABSIs occurs when germs enter the blood along a tube (central line) placed in a large vein.

- Oregon hospitals ✔ Performed statistically better than the U.S.
- Oregon hospitals ✔ Exceeded national reduction target set by HHS

MRSA BLOODSTREAM INFECTIONS (MRSA BSIs)
HOSPITAL-ONSET MRSA BSI 61 LABORATORY-IDENTIFIED EVENTS
An MRSA BSI is a difficult to treat infection caused by germs that enter the body through wounds or medical devices.

- Oregon hospitals ✔ Performed statistically better than the U.S.
- Oregon hospitals ✔ Exceeded national reduction target set by HHS

C. Difficile infections
HOSPITAL-ONSET C. DIFFICILE 732 LABORATORY-IDENTIFIED EVENTS
C. difficile spreads to patients from unclean hands and surfaces in hospitals, leading to colon infection and diarrhea.

- Oregon hospitals ✔ Performed statistically better than the U.S.
- Oregon hospitals ✗ Did not meet national reduction target set by HHS

CAUTIs
CATHETER-ASSOCIATED URINARY TRACT INFECTIONS 182 INFECTIONS
CAUTIs occur when germs travel up a urinary catheter that was not put in correctly, not kept clean, or left in too long.

- Oregon hospitals ✔ Performed statistically equal to the U.S.
- Oregon hospitals ✗ Did not meet national reduction target set by HHS

Coronary artery bypass graft (heart surgery) 20 SSI
- Oregon hospitals ✔ Performed statistically equal to the U.S.
- Oregon hospitals ✔ Exceeded national reduction target set by HHS

Laminectomy (back surgery) 56 SSI
- Oregon hospitals ✔ Exceeded national reduction target set by HHS

Colon surgery 183 SSI

Abdominal hysterectomy surgery 49 SSI
- Oregon hospitals ✔ Performed statistically equal to the U.S.
- Oregon hospitals ✔ Exceeded national reduction target set by HHS

Hip replacement surgery 56 SSI
- Oregon hospitals ✔ Performed statistically equal to the U.S.
- Oregon hospitals ✗ Did not meet national reduction target set by HHS

Knee replacement surgery 41 SSI
- Oregon hospitals ✔ Performed statistically equal to the U.S.
- Oregon hospitals ✔ Exceeded national reduction target set by HHS

THE TAKE AWAY
In 2014, Oregon hospitals exceeded national targets for reducing bloodstream infections and infections following heart, back and knee surgeries. More work is needed to prevent C. difficile infections, catheter-associated urinary tract infections and infections following colon, hysterectomy and hip surgeries.

* Statistical comparisons made using the Oregon 2014 standardized infection ratio (SIR) for each infection; see table.
† All CLABSIs combined for adult and neonatal ICUs; see table for separate data by ICU type
<table>
<thead>
<tr>
<th>Health care-associated infection type</th>
<th>National baseline years</th>
<th>HHS reduction target*</th>
<th># OR hospitals reporting(^{1})</th>
<th>2014 Oregon SIR(^{1})</th>
<th>2014 SIR meets HHS reduction target?</th>
<th>2014 OR SIR vs. 2013 natl SIR(^{1})</th>
<th>2014 OR SIR vs. 2013 OR SIR(^{1})</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI in adult ICUs</td>
<td>2006–2008</td>
<td>50% (SIR=0.5)</td>
<td>41</td>
<td>0.24</td>
<td>✔ YES</td>
<td>✔ Statistically better</td>
<td>16%</td>
</tr>
<tr>
<td>CLABSI in NICUs</td>
<td>2006–2008</td>
<td>50% (SIR=0.5)</td>
<td>7</td>
<td>0.60</td>
<td>✗ NO</td>
<td>✗ Statistically equal</td>
<td>103%</td>
</tr>
<tr>
<td>CAUTI in ICUs</td>
<td>2009</td>
<td>25% (SIR=0.75)</td>
<td>42</td>
<td>1.11</td>
<td>✗ NO</td>
<td>✗ Statistically equal</td>
<td>N/A (no 2013 data)</td>
</tr>
<tr>
<td><em>C. difficile</em> hospital-onset LabID events</td>
<td>2010–2011</td>
<td>30% (SIR=0.7)</td>
<td>61</td>
<td>0.73</td>
<td>✗ NO</td>
<td>✔ Statistically better</td>
<td>4%</td>
</tr>
<tr>
<td>MRSA BSI hospital-onset LabID events</td>
<td>2010–2011</td>
<td>25% (SIR=0.75)</td>
<td>61</td>
<td>0.65</td>
<td>✔ YES</td>
<td>✔ Statistically better</td>
<td>N/A (no 2013 data)</td>
</tr>
<tr>
<td>SSI: Heart (CBGB)</td>
<td>2006–2008</td>
<td>25% (SIR=0.75)</td>
<td>14</td>
<td>0.35</td>
<td>✔ YES</td>
<td>✔ Statistically equal</td>
<td>42%</td>
</tr>
<tr>
<td>SSI: Back (laminectomy)</td>
<td>2006–2008</td>
<td>25% (SIR=0.75)</td>
<td>22</td>
<td>0.53</td>
<td>✔ YES</td>
<td>✗ No 2013 national data</td>
<td>38%</td>
</tr>
<tr>
<td>SSI: Colon</td>
<td>2006–2008</td>
<td>25% (SIR=0.75)</td>
<td>38</td>
<td>0.85</td>
<td>✗ NO</td>
<td>✔ Statistically equal</td>
<td>10%</td>
</tr>
<tr>
<td>SSI: Abdominal hysterectomy</td>
<td>2006–2008</td>
<td>25% (SIR=0.75)</td>
<td>35</td>
<td>0.91</td>
<td>✗ NO</td>
<td>✔ Statistically equal</td>
<td>20%</td>
</tr>
<tr>
<td>SSI: Hip replacement</td>
<td>2006–2008</td>
<td>25% (SIR=0.75)</td>
<td>42</td>
<td>0.83</td>
<td>✗ NO</td>
<td>✔ Statistically equal</td>
<td>14%</td>
</tr>
<tr>
<td>SSI: Knee replacement</td>
<td>2006–2008</td>
<td>25% (SIR=0.75)</td>
<td>43</td>
<td>0.65</td>
<td>✔ YES</td>
<td>✔ Statistically equal</td>
<td>6%</td>
</tr>
</tbody>
</table>


\(^{1}\) Hospitals are exempt from reporting CLABSI if fewer than 50 central line days, CAUTIs if they have no ICUs and specific SSIs if fewer than 20 procedures performed annually

\(^{2}\) Standardized Infection Ratio: (observed infections)/(expected # based on risk-adjusted national baseline rates)

\(^{3}\) No 2014 national data available at the time of report publication, so 2013 data were used, available here: [www.cdc.gov/hai/progress-report/index.html](http://www.cdc.gov/hai/progress-report/index.html)

\(^{4}\) None of the changes in state SIRs from 2013 to 2014 were statistically significant
Example of Provider Report Summaries

Brief summary of HAI

Describes Oregon performance in 2014

SIR trends over time with 95% CIs

What can providers do to prevent HAI?

Central line-associated bloodstream infections (CLABSI) in adult intensive care units (ICU)

Central line-associated bloodstream infections (CLABSIs) occur when microorganisms enter the bloodstream through central venous catheters. Mortality from CLABSIs is approximately 12–25%.

Since 2009, hospitals in Oregon have reported CLABSIs in adult medical, surgical, and medical-surgical ICUs as required by the HAI reporting program. Beginning in 2015, hospitals also will report CLABSIs for all adult and pediatric medical wards. In 2014, Oregon’s SIR was 0.24, meaning Oregon had 76% fewer infections than would be predicted based on risk-adjusted national baselines. Further, Oregon hospitals exceeded the 2013 HHS target SIR of 0.5 (Figure 1, green line). When comparing Oregon’s adult ICU 2014 CLABSI SIR to the most recent annual adult ICU SIRs published by CDC (Figure 1, purple line), Oregon’s SIR was statistically lower ($p<0.0001$).

Figure 1. Oregon CLABSI standardized infection ratios (SIR) in adult ICUs: 2009–2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Oregon SIR</th>
<th>SIR with 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0.26</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>0.24</td>
<td></td>
</tr>
</tbody>
</table>

National Benchmarks:
- National baseline
- 2013 national SIR
- HHS target SIR

CDC prevention resources: [www.cdc.gov/HAI/bsi/CLABSI-resources.html](http://www.cdc.gov/HAI/bsi/CLABSI-resources.html)
CLABSI in adult ICUs

Figure 1. Oregon CLABSI standardized infection ratios (SIR) in adult ICUs: 2009–2014

- National baseline = 1.00 (2006—2008)
- 2013 HHS target = 0.50
- 2013 National SIR = 0.50

Oregon SIRs for CLABSI in adult ICUs:

- 2009: 0.83
- 2010: 0.45
- 2011: 0.36
- 2012: 0.35
- 2013: 0.28
- 2014: 0.24

95% confidence interval around SIR
CLABSI in NICUs

Figure 2. CLABSI standardized infection ratios with 95% confidence intervals for Oregon NICUs: 2011–2014

- National baseline = 1.00 (2006-2008)
- 2013 HHS target = 0.50
- 2013 National SIR = 0.49

Oregon SIRs for CLABSI in NICUs

- 2011: 0.42
- 2012: 0.64
- 2013: 0.30
- 2014: 0.60

95% confidence interval around SIR
CLABSI in adult ICUs

Figure 1. Oregon CLABSI standardized infection ratios (SIR) in adult ICUs: 2009–2014

- National baseline = 1.00 (2006—2008)
- 2013 HHS target = 0.50
- 2013 National SIR = 0.50

Oregon SIRs for CLABSI in adult ICUs

- 2009: 0.83
- 2010: 0.45
- 2011: 0.36
- 2012: 0.35
- 2013: 0.28
- 2014: 0.24

95% confidence interval around SIR
CAUTI in adult & pediatric ICUs

Figure 3. CAUTI standardized infection ratio (SIR) for Oregon ICUs

- 2013 National SIR = 1.18
- National baseline = 1.00 (2009)
- 2013 HHS target = 0.75

Oregon SIR for CAUTI in ICUs

- Oregon state SIR
- 95% confidence interval around SIR

2014
**C. Difficile LabID Events: Facility-wide**

Figure 4. Aggregate hospital-onset *C. difficile* identified through laboratory records for Oregon: 2013–2014

- **National baseline = 1.00 (2010–2011)**
- **2013 National SIR = 0.90**
- **2013 HHS target = 0.70**

- Oregon SIRs for HO-CDI LabID: facility-wide

<table>
<thead>
<tr>
<th>Year</th>
<th>Oregon SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>0.68</td>
</tr>
<tr>
<td>2013</td>
<td>0.76</td>
</tr>
<tr>
<td>2014</td>
<td>0.73</td>
</tr>
</tbody>
</table>

95% confidence interval around SIR
Figure 5. Aggregate hospital-onset facility-wide MRSA bacteremia identified through laboratory records for Oregon — 2014

- National baseline = 1.00
- 2013 National SIR = 0.92
- 2013 HHS target = 0.75

- Oregon SIR for HO-MRSA BSI: Facility-wide
- Oregon state SIR
- 95% confidence interval around SIR
SSI following CBGB

Figure 6. Aggregate SIRs for SSI following coronary artery bypass graft (CBGB) surgery for Oregon: 2009–2014

- National baseline = 1.00 (2006—2008)
- 2013 HHS target = 0.75
- 2013 National SIR = 0.60

Oregon SIRs for SSI following CBGB

<table>
<thead>
<tr>
<th>Year</th>
<th>Oregon SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.66</td>
</tr>
<tr>
<td>2010</td>
<td>0.58</td>
</tr>
<tr>
<td>2011</td>
<td>0.57</td>
</tr>
<tr>
<td>2012</td>
<td>0.43</td>
</tr>
<tr>
<td>2013</td>
<td>0.61</td>
</tr>
<tr>
<td>2014</td>
<td>0.35</td>
</tr>
</tbody>
</table>

95% confidence interval around SIR
SSI following laminectomy

Figure 7. Aggregate SIRs for SSI following laminectomy (LAM) surgery for Oregon: 2011–2014

- Oregon SIRs for SSI following LAM
- 2011: 0.61
- 2012: 0.61
- 2013: 0.84
- 2014: 0.53

- National baseline = 1.00 (2006–2008)
- 2013 HHS target = 0.75

95% confidence interval around SIR
SSI following colon surgery

Figure 8. Aggregate SIRs for SSI following colon (COLO) surgery for Oregon: 2011–2014

- National baseline = 1.00
- 2013 National SIR = 0.92
- 2013 HHS target = 0.75

Oregon SIRs for SSIs following COLO

- 2011: 0.76
- 2012: 0.79
- 2013: 0.78
- 2014: 0.85

95% confidence interval around SIR
SSI following abdominal hysterectomy

Figure 9. Aggregate SIRs for SSI following abdominal hysterectomy (HYST) surgery for Oregon: 2011–2014

- National baseline = 1.0 (2006—2008)
- 2013 National SIR = 0.86
- 2013 HHS target = 0.75

Oregon SIRs for SSI following HYST

- 2011: 0.80
- 2012: 0.43
- 2013: 1.13
- 2014: 0.91

95% confidence interval around SIR
SSI following hip prosthesis surgery

Figure 10. Aggregate SIRs for SSI following hip prosthesis (HPRO) surgery for Oregon: 2011–2014
SSI following knee prosthesis surgery

Figure 11. Aggregate SIRs for SSI following knee prosthesis (KPRO) surgery for Oregon: 2009–2014

- Oregon SIRs for SSI following KPRO

<table>
<thead>
<tr>
<th>Year</th>
<th>Oregon SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.86</td>
</tr>
<tr>
<td>2010</td>
<td>0.98</td>
</tr>
<tr>
<td>2011</td>
<td>1.06</td>
</tr>
<tr>
<td>2012</td>
<td>1.07</td>
</tr>
<tr>
<td>2013</td>
<td>0.69</td>
</tr>
<tr>
<td>2014</td>
<td>0.65</td>
</tr>
</tbody>
</table>

- National baseline = 1.00 (2006—2008)
- 2013 HHS target = 0.75
- 2013 National SIR = 0.60

95% confidence interval around SIR
Bloodstream infection in freestanding outpatient clinics

Table 15. National pooled means (2013) and Oregon pooled means (2014) for bloodstream infections (BSI) by access type

<table>
<thead>
<tr>
<th>Access type</th>
<th>National pooled mean</th>
<th>Oregon pooled mean</th>
<th>Percent difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1.27</td>
<td>0.50</td>
<td>-65%</td>
</tr>
<tr>
<td>Fistula</td>
<td>0.48</td>
<td>0.21</td>
<td>-57%</td>
</tr>
<tr>
<td>Graft</td>
<td>0.88</td>
<td>0.44</td>
<td>-50%</td>
</tr>
<tr>
<td>Any CVC</td>
<td>3.21</td>
<td>1.37</td>
<td>-57%</td>
</tr>
<tr>
<td>Tunneled CVC</td>
<td>3.24</td>
<td>1.35</td>
<td>-58%</td>
</tr>
<tr>
<td>Non-tunneled CVC</td>
<td>2.78</td>
<td>3.30</td>
<td>19%</td>
</tr>
</tbody>
</table>

Figure 13. Influenza vaccination rates for all health care workers (HCW) by influenza season and health care facility type

- Healthy People 2020 target
- Healthy People 2015 target

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospitals</th>
<th>Skilled nursing facilities</th>
<th>Ambulatory surgical centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011–2012</td>
<td>59%</td>
<td>47%</td>
<td>51%</td>
</tr>
<tr>
<td>2012–2013</td>
<td>71%</td>
<td>54%</td>
<td>67%</td>
</tr>
<tr>
<td>2013–2014</td>
<td>77%</td>
<td>67%</td>
<td>67%</td>
</tr>
<tr>
<td>2014–2015</td>
<td>79%</td>
<td>57%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Table 17. Aggregate HCW influenza vaccination rate data for the 2014–2015 influenza season for hospitals, ambulatory surgical centers and skilled nursing facilities stratified by HCW type.

<table>
<thead>
<tr>
<th>Facility and worker type</th>
<th>Total number of HCW eligible for vaccination*</th>
<th>Aggregate rate of influenza vaccination among eligible HCW</th>
<th>Aggregate rate of influenza vaccine declination by eligible HCW</th>
<th>Aggregate rate of unknown vaccination status among eligible HCW</th>
<th>Change in rate of HCW influenza vaccination since 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All health care worker (HCW)</td>
<td>92,648</td>
<td>79%</td>
<td>9%</td>
<td>13%</td>
<td>+3%</td>
</tr>
<tr>
<td>Employees</td>
<td>69,637</td>
<td>84%</td>
<td>10%</td>
<td>5%</td>
<td>+1%</td>
</tr>
<tr>
<td>Independent practitioners</td>
<td>9,398</td>
<td>58%</td>
<td>3%</td>
<td>40%</td>
<td>0%</td>
</tr>
<tr>
<td>Other contractors</td>
<td>1,404</td>
<td>39%</td>
<td>2%</td>
<td>59%</td>
<td>-29%</td>
</tr>
<tr>
<td>Students/Volunteers</td>
<td>12,209</td>
<td>67%</td>
<td>5%</td>
<td>28%</td>
<td>+3%</td>
</tr>
<tr>
<td>Ambulatory surgical centers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All HCW</td>
<td>5,039</td>
<td>70%</td>
<td>16%</td>
<td>14%</td>
<td>+4%</td>
</tr>
<tr>
<td>Employees</td>
<td>3,026</td>
<td>70%</td>
<td>20%</td>
<td>10%</td>
<td>-1%</td>
</tr>
<tr>
<td>Independent practitioners</td>
<td>1,817</td>
<td>70%</td>
<td>9%</td>
<td>21%</td>
<td>+11%</td>
</tr>
<tr>
<td>Other contractors</td>
<td>102</td>
<td>61%</td>
<td>23%</td>
<td>17%</td>
<td>+16%</td>
</tr>
<tr>
<td>Students/Volunteers</td>
<td>93</td>
<td>78%</td>
<td>4%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Skilled nursing facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All HCW</td>
<td>15,749</td>
<td>57%</td>
<td>16%</td>
<td>26%</td>
<td>+2%</td>
</tr>
<tr>
<td>Employees</td>
<td>13,497</td>
<td>61%</td>
<td>18%</td>
<td>20%</td>
<td>+5%</td>
</tr>
<tr>
<td>Independent practitioners</td>
<td>327</td>
<td>54%</td>
<td>5%</td>
<td>41%</td>
<td>+35%</td>
</tr>
<tr>
<td>Other contractors</td>
<td>339</td>
<td>57%</td>
<td>9%</td>
<td>34%</td>
<td>0%</td>
</tr>
<tr>
<td>Students/Volunteers</td>
<td>1,586</td>
<td>25%</td>
<td>1%</td>
<td>74%</td>
<td>-24%</td>
</tr>
</tbody>
</table>

* Includes total number of health care worker (HCW), including employees, licensed independent practitioners, other contractors, students, and volunteers without documented medical contraindication for influenza vaccination.
## Facility-specific table example: provider report

### Table 3. Facility-specific 2014 annual CLABSI data for adult ICUs (n=41)

<table>
<thead>
<tr>
<th>Hospital name*</th>
<th>Central line days</th>
<th>Standardized infection ratio (SIR)</th>
<th>Meets HHS target or zero infections(\text{g})</th>
<th>Observed vs. predicted from nat’l. baseline (2006–2008)</th>
<th>Percentile range on 2013 national SIR distribution (lower = better)(\text{**})</th>
<th>Change in SIR since 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Observed infections</td>
<td>Predicted infections †</td>
<td>SIR</td>
<td>Lower 95% CI</td>
<td>Upper 95% CI</td>
<td></td>
</tr>
<tr>
<td>1,029</td>
<td>0</td>
<td>1.5</td>
<td>0.00</td>
<td>![Image]</td>
<td>1.94</td>
<td>✓</td>
</tr>
<tr>
<td>996</td>
<td>2</td>
<td>1.5</td>
<td>1.34</td>
<td>0.22</td>
<td>4.42</td>
<td>![Image]</td>
</tr>
<tr>
<td>1,316</td>
<td>0</td>
<td>2.0</td>
<td>0.00</td>
<td>![Image]</td>
<td>1.52</td>
<td>✓</td>
</tr>
<tr>
<td>116</td>
<td>0</td>
<td>0.2</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>6,800</td>
<td>3</td>
<td>16.6</td>
<td>0.18</td>
<td>0.05</td>
<td>0.49</td>
<td>✓</td>
</tr>
</tbody>
</table>
# Dialysis bloodstream infection table example

<table>
<thead>
<tr>
<th>Dialysis facility name</th>
<th>Access type</th>
<th>Patient-months</th>
<th>Number BSI</th>
<th>Rate: BSI/100 patient-months</th>
<th>Comparison to national pooled mean</th>
<th>Percentile on nat'l distribution (lower = better)</th>
<th>Change since 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>All</td>
<td>247</td>
<td>1</td>
<td>0.41</td>
<td>Fewer infections</td>
<td>79%</td>
<td>-13%</td>
</tr>
<tr>
<td>All</td>
<td>Fistula</td>
<td>150</td>
<td>1</td>
<td>0.67</td>
<td>More infections</td>
<td>49%</td>
<td>+9%</td>
</tr>
<tr>
<td>All</td>
<td>Graft</td>
<td>44</td>
<td>0</td>
<td>0.00</td>
<td>Fewer infections</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>Any CVC</td>
<td>53</td>
<td>0</td>
<td>0.00</td>
<td>Fewer infections</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>Tunneled central line</td>
<td>53</td>
<td>0</td>
<td>0.00</td>
<td>Fewer infections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>Non-tunneled central line</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Legend:**
- ▲: More infections
- ▼: Fewer infections
- ▶: Statistically fewer infections
- n/a: Not applicable
# Healthcare worker influenza vaccination table example: 2014-15

<table>
<thead>
<tr>
<th>Facility name</th>
<th># HCW eligible for influenza vaccine*</th>
<th>Rate of influenza vaccination for eligible HCW</th>
<th>Rate of vaccine declination by eligible HCW</th>
<th>Rate of “unknown vaccine status” for eligible HCW</th>
<th>Change in vaccination rate since last season</th>
<th>Met HP2015 target (75%)</th>
<th>Met HP2020 target (90%)</th>
<th>Additional HCW needed to vaccinate to reach HP2020†</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>4,362</td>
<td>74%</td>
<td>8%</td>
<td>18%</td>
<td>+4%</td>
<td>✓</td>
<td>✓</td>
<td>703</td>
</tr>
<tr>
<td></td>
<td>449</td>
<td>84%</td>
<td>5%</td>
<td>11%</td>
<td>-4%</td>
<td>✓</td>
<td>✓</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>4,781</td>
<td>76%</td>
<td>6%</td>
<td>18%</td>
<td>+5%</td>
<td>✓</td>
<td>✓</td>
<td>687</td>
</tr>
<tr>
<td></td>
<td>964</td>
<td>74%</td>
<td>9%</td>
<td>17%</td>
<td>+8%</td>
<td>✓</td>
<td>✓</td>
<td>157</td>
</tr>
</tbody>
</table>

* Includes total number of health care worker (HCW), including employees, licensed independent practitioners, other contractors, students and volunteers without documented medical contraindication for influenza vaccination

† Calculated as: (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere) / (total number of HCW eligible for influenza vaccination)

‡ Percentage change not calculated if vaccination rate was 0% during the 2013–2014 influenza season, or if hospital did not report influenza vaccination to OHA in 2013–2014

§ Calculated as: (total HCW eligible for vaccination * 0.9) – (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere)
Example of Consumer Report Summary

Central line-associated bloodstream infections (CLABSI) in adult intensive care units (ICU)

A “central line” or a “central catheter” is a tube placed into a patient’s large vein, usually in the neck or chest, which is used to draw blood and give fluids and medications. It may be left in place for several weeks. A central line-associated bloodstream infection (CLABSI) can occur when germs travel down the central line and enter the blood. Great gains in prevention have been made over the past decade by following evidence-based recommendations for insertion and maintenance of central lines.

What can patients and families do to prevent CLABSI in Adult ICUs?

- Ask a health care provider if the central line is absolutely necessary, and ask them to help you understand the need for it and how long it will be in place.
- Pay attention to the bandage and the area around the central line. If the bandage comes off or gets wet or dirty, tell a health care worker right away.
- Tell a health care worker if the area around the catheter is sore or red or if the patient has a fever or chills.
- Do not let any visitors touch the catheter or tubing, and remind anyone visiting the patient to wash their hands — before and after they visit.
- The patient should avoid touching the tubing as much as possible.
- Ask staff if they use a central line insertion checklist and whether they follow recommended practices for safely maintaining central lines.
- Speak up about any concerns so health care personnel are reminded to follow the best infection prevention practices.
- For more information, see: www.cdc.gov/hai/ssi/CLABSI_resources.html

Table 2. Facility-specific 2014 annual CLABSI data for adult ICUs (n=41)

<table>
<thead>
<tr>
<th>Hospital name*</th>
<th>Central line days</th>
<th>Observed infections</th>
<th>Predicted infections</th>
<th>Meets 2013 HHS target of zero infections</th>
<th>Comparison to national baselines (2006–2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Oregon</td>
<td>55,064</td>
<td>23</td>
<td>96.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- # observed
- # predicted
- HHS target or zero infections
- Comparison to nat’l baselines

Brief summary of HAI

What can patients and families do to prevent <HAI>
## Dialysis BSI in Consumer Report

<table>
<thead>
<tr>
<th>Facility name</th>
<th># HCW eligible for influenza vaccine*</th>
<th>Rate of influenza vaccination for eligible HCW</th>
<th>Rate of vaccine declination by eligible HCW</th>
<th>Rate of &quot;unknown vaccine status&quot; for eligible HCW</th>
<th>Change in vaccination rate since last season</th>
<th>Met HP2015 target (75%)</th>
<th>Met HP2020 target (90%)</th>
<th>Additional HCW needed to vaccinate to reach HP2020†</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>708</td>
<td>79%</td>
<td>7%</td>
<td>15%</td>
<td>+7%</td>
<td>✔</td>
<td>✘</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>4,362</td>
<td>74%</td>
<td>8%</td>
<td>18%</td>
<td>+4%</td>
<td>✘</td>
<td>✘</td>
<td>703</td>
</tr>
<tr>
<td></td>
<td>449</td>
<td>84%</td>
<td>5%</td>
<td>11%</td>
<td>-4%</td>
<td>✔</td>
<td>✘</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>4,781</td>
<td>76%</td>
<td>6%</td>
<td>18%</td>
<td>+5%</td>
<td>✗</td>
<td>✖</td>
<td>687</td>
</tr>
<tr>
<td></td>
<td>964</td>
<td>74%</td>
<td>9%</td>
<td>17%</td>
<td>+8%</td>
<td>✖</td>
<td>✖</td>
<td>157</td>
</tr>
</tbody>
</table>

* Includes total number of health care worker (HCW), including employees, licensed independent practitioners, other contractors, students and volunteers without documented medical contraindication for influenza vaccination

† Calculated as: (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere) / (total number of HCW eligible for influenza vaccination)

‡ Percentage change not calculated if vaccination rate was 0% during the 2013–2014 influenza season, or if hospital did not report influenza vaccination to OHA in 2013–2014

§ Calculated as: (total HCW eligible for vaccination * 0.9) – (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere)
# HCW Influenza Vaccination in Consumer Report

<table>
<thead>
<tr>
<th>Facility name</th>
<th># HCW eligible for influenza vaccine*</th>
<th>Rate of influenza vaccination for eligible HCW*</th>
<th>Met HP2015 target (75%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,480</td>
<td>84%</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>516</td>
<td>58%</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>3,801</td>
<td>69%</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>1,343</td>
<td>78%</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>1,219</td>
<td>78%</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>224</td>
<td>53%</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>349</td>
<td>58%</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>577</td>
<td>83%</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>258</td>
<td>51%</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>231</td>
<td>82%</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>308</td>
<td>83%</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>2,928</td>
<td>75%</td>
<td>✓</td>
</tr>
</tbody>
</table>
Discussion: making data actionable

• CDC encouraging regular downloads of NHSN data and follow-up with outlier facilities

• How to define outlier facilities for prevention?
  – Those worse than national baselines?
  – Consider statistical significance?
  – Comparison to current national data?
  – Different criteria for small v. large hospitals?
  – Prioritize certain HAIs based on Oregon aggregate data?

• Considerations for data quality
  – OHA not funded for continued external validation
  – Do high rates reflect poor surveillance or poor performance?
  – What can we do to encourage better data quality?
Oregon HAIAC HAI Program Update
Are we there yet?

Zintars Beldavs
HAI Program Manager
Wednesday, September 23rd
Where we want to go → The Path to Zero

- Detect → Protect → Evaluate → Reinvigorate
  - No patient or facility is an island
  - Regional interconnectedness of healthcare systems
  - Integrate approaches for maximum effectiveness
    - Antibiotic Stewardship
    - CDI ↔ MDROs
Where we are: Detect

- National Healthcare Safety Network (NHSN)
- Reportable Conditions – CRE
- Laboratory Capacity
  - Carba-NP and PCR for CRE
- Emerging Infections Program (EIP)
  - Candidemia, CDI, CR-PA
  - Prevalence Studies
- Inter-facility transfer notification
Where we are: Protect

• Regional Systems Approaches and collaboratives
  – MDRO, Dialysis BSIs, Stewardship
  – CDI and IFT Hub Effort
• Education
  – Webinars, Meetings
• Outbreak Response
  – Any Carbapenemase
  – Multi-facility Clusters

Take Steps Now! Public health departments should lead coordination.

- Identify the health care facilities in the area and how they are connected.
- Dedicate staff to improve connections and coordination with health care facilities in the area.
- Work with CDC to use data for action to better prevent infections and improve antibiotic use in health care settings.
- Know the antibiotic resistance threats in the area and state.
Where we are: Validate, Analyze, and Evaluate

- Validation of HAI data
  - CLABSI (2x), CDI, CABG SSIs
- Emerging Infections Program (EIP)
  - Mortality Study
  - Studies to improve surveillance
    - NHSN definitions
    - Denominator simplification project
  - CDI Risk factors, co-infection, etc.
- Ebola assessment facility consultations
Where we are going: Reinvigorate

- CDI/MDRO/Stewardship Regional Prevention Hubs
- Statewide infection control evaluation and support
  - Focus on LTCFs and other needed settings
- Injection safety outreach
- Finding ways to make NHSN actionable
  - Increase HCWI vaccination
  - Outbreak detection
  - Targeting facilities for prevention
Where we are going: Reinvigorate

• More Outbreak Response Capacity
• Special studies
  – CRE hospital effluent, CRE prevalence
• Evaluation and assurance of IFT notification requirement

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<th>Oregon Skilled Nursing Facility Survey 2015: Preliminary data</th>
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When will we get there? What else is needed?

- What are appropriate goals?
  - Zero?
  - Low prevalence?

- How can we maximize existing resources?

- How can we better inform efforts by most impacted?
  - Patients and family members impacted
  - Healthcare workers preventing HAIs
  - Everyone – any of us might face an HAI
Thank You!

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HEALTHCARE-ASSOCIATED INFECTIONS
ADVISORY COMMITTEE:
EBOLA GRANT OVERVIEW PART B

September 23, 2015

Mary T. Post, RN, MS, CNS, CIC
Director, Infection Prevention
Oregon Patient Safety Commission
Objective

Describe the General Infection Prevention Assessment specific elements of the new Epidemiology and Lab Capacity (ELC) Domestic Ebola Grant awarded to the Oregon Health Authority
CDC Ebola Grant

Focus: building statewide infection prevention infrastructure, capacity and education

• Conduct Ebola readiness consultations of Oregon Ebola Tier 2 Assessment Hospitals
• Develop statewide infection control capacity to prevent healthcare associated infections
• Expand biosafety capacity at the Public Health Laboratory
Key Partnerships

- Healthcare facilities
- Local health departments
- Oregon Health Authority (OHA), Public Health Division, Acute and Communicable Disease Section
- Oregon State Public Health Laboratory
- HAI Advisory Committee (HAIAC)
- Association for Professionals in Infection Control and Epidemiology (APIC)
- Centers for Disease Control and Prevention (CDC)
- Hospital Preparedness Program (HPP) and Public Health Emergency Preparedness Program (PHEP) liaisons
- Emergency Medical Services (EMS)—parallel assessments for out-of-hospital transport
- Regulatory agencies and licensing boards
- Professional organizations
Healthcare Infection Control Assessment and Response (ICAR)

- A.1: Expand State HAI Plan and Advisory Group
- A.2: Improve coordination between OHA and healthcare settings
- A.3: Assess readiness of designated Ebola facilities
- A.4: Assess and improve HAI outbreak reporting and response
ICAR Activity B (Strategy 1)

B.1: Expand infection prevention consultations

- Expand both number of facilities and depth of content
  - Include long term care facilities, ASCs, dialysis, medical clinics
- Incorporate follow up assessments to document mitigation
- Regional approach - work with HPP and county health departments
- Contract with state APIC certified infection preventionists
- Similar to Nebraska Infection Control Network
- Resource and tool development
Goal: identify common gaps and trends so state and national agencies can target improvement strategies

Selection criteria involves a review of multiple data sources: outbreak or unusual pathogens, NHSN data, regulatory surveys, influenza immunization data, and regional partners

Consultations will be scheduled for September-November

25 facilities targeted for this year

• Seven hospitals
• Five ambulatory surgery centers
• Ten long-term care facilities
• Three dialysis centers
Initial Scheduling Call

- Purpose of consult collaborative, not regulatory
- Focus on quality improvement
- Receive assessment forms pre-visit
- Ask if there are areas where they would appreciate additional assistance
- Review what they can expect during the visit and how findings will be used
- What will happen if there are identified gaps/lapses in infection control
During the Visit

• Opening conference
• Brief tour of facility
• Meet with individuals responsible for the IP program
• Use assessment tool to assess IP program infrastructure, competency–based training and routine auditing of IP practices
• Perform recommended observations (varies by facility type)
• Exit conference
• Initial visits will take 4-8 hours
Assessment Domains

- Infection Control Program and Infrastructure
- Infection Control Training, Competency, and Implementation of Policies and Practices
  - Hand Hygiene
  - Personal Protective Equipment (PPE)
  - Injection Safety
  - Environmental Cleaning
  - Equipment Reprocessing
  - Other (based on facility setting)
- Systems to Detect, Prevent, and Respond to HAIs and MDROs
ICAR Activity B (Strategies 2 & 3)

B.2: Increase infection control competency and practice

- Incorporate improved competency into credentialing, continuing education, licensing
- Sustainable training with partners
  - Regional training workshops around assessments and tools
  - Five infection prevention fundamentals training courses over three years - includes local and state health departments and regulatory surveyors

B.3: Enhance surveillance analytic and reporting capacity
Infection Prevention Education

- Infection Prevention Fundamentals Training Course
  - Target dates are the last week in February

- Additional training courses
  - Hands-on instrument reprocessing course
  - ASC and long-term care specific courses

- Webinars and/or consult opportunity for specific topics
Conclusions

Oregon has an excellent opportunity to

- Build the state’s infection prevention infrastructure
- Establish systems for early identification and management of pathogens and outbreaks
- Promote partnerships between agencies across the continuum of care
- Close gaps in licensing/credentialing requirements
- Provide on-site assessments and free educational opportunities
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