

**HEALTHCARE-ASSOCIATED INFECTIONS ADVISORY COMMITTEE**

**September 25, 2013  
1:00 pm to 3:00 pm**

**Portland State Office Building, Room 1C  
800 NE Oregon Street  
Portland, OR 97232**

**MEMBERS PRESENT:** Paul Cieslak, MD  
Kelli Coelho, RN, CNOR  
Jon Furuno, PhD  
Jamie Grebosky, MD (phone)  
Tara Gregory, MS, FNP  
Karen Kellar, RN, MSN, CENP  
Csaba Mera, MD  
Daniel Mitten  
Laurie Murray-Snyder  
Rachel Plotinsky, MD  
Janet Sullivan, RN  
Dee Dee Vallier  
Diane Waldo, MBA, BSN, RN, CPHQ, CPHRM, LNCC

**MEMBERS EXCUSED:** Shantell Mason  
Nancy O'Connor, RN, BSN, MBA, CIC  
Pat Preston, MS  
Dana Selover, MD, MPH  
Bethany Walmsley, CPHQ, CPPS

**STAFF PRESENT:** Zintars Beldavs, MS, Healthcare-Associated Infections Program Manager  
Monika Samper, RN, Healthcare-Associated Infections Reporting Coordinator  
Ann Thomas, MD, MPH, Acute and Communicable Disease Medical Epidemiologist

- ISSUES HEARD:**
- **Call to Order**
  - **Approval of Minutes**
  - **Introduce New Committee Members**
  - **Share HAI Report and Legislation PowerPoint**
  - **Discussion/approval of New HAI Rules and SFNI**
  - **Discuss proposed Oregon HAI Prevention Plan**

- **Update from Hospital Association**
- **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.

Item	Discussion	Follow-Up
Call to Order	The meeting was called to order at approximately 1:00 pm. There was a quorum.	
Approval of Minutes  Chair	Approval of the June 26, 2013 minutes will be deferred until the next meeting in December because the new committee members have not yet been appointed by Dr. Bruce Goldberg, the administrator for the Oregon Health Authority.	
Introduce New Committee Members  OHA Staff	<p>Monika Samper introduced all 18 committee members, of which 9 are new to the group. Each member was recruited to fill a specific and crucial role on the committee based on their expertise and interests as mandated by the Statutory Requirements of OHA, ORS 442.851. The list of members, along with their organizational affiliation and role on the committee, is provided below:</p> <ol style="list-style-type: none"> <li>1. Paul Cieslak, MD, Manager of Acute and Communicable Disease Prevention section of the Oregon Public Health Division - State epidemiologist (designated representative for Katrina Hedberg)</li> <li>2. Kelli Coelho , Clinical Director at RiverBend Ambulatory Surgery Center – representative for a physician who practices in an ambulatory surgical center who has an interest and involvement in infection control</li> <li>3. Jon Furuno, Associate Professor with the Department of Pharmacy Services at OHSU and the Department of Pharmacy Practice at OSU - academic researcher</li> <li>4. Jamie Grebosky, MD, Vice President of Medical Affairs at Asante Rogue Regional Medical Center – hospital administrator who has expertise in infection control and who represents a hospital that contains 100 or more beds</li> <li>5. Tara Gregory, Nursing Practice Consultant at the Oregon Nurses Association - labor representative</li> <li>6. Karen Kellar, Vice President of Patient Care Services at Tillamook Regional Medical Center - hospital administrator who has expertise in infection control and who</li> </ol>	

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	<p>represents a hospital that contains fewer than 100 beds.</p> <ol style="list-style-type: none"> <li>7. Shantell Mason, Director of Nursing at Nehalem Valley Care Center - long-term care administrator</li> <li>8. Csaba Mera, MD, Deputy Chief Medical Officer at Regence BlueCross BlueShield of Oregon - health insurer representative</li> <li>9. Daniel Mitten, Executive Director at the Oregon Coalition of Health Care Purchasers - healthcare purchasing representative</li> <li>10. Laurie Murray-Snyder, Quality Improvement Specialist and HAI Lead at Acumentra (ad hoc committee member) - representative of a quality improvement organization</li> <li>11. Nancy O'Connor, Manager of Infection Prevention at Salem Hospital (ad hoc committee member) - registered nurse with interest and involvement in infection control</li> <li>12. Rachel Plotinsky, MD, Medical Director of Infection Prevention Program at Providence St. Vincent Medical Center - physician with expertise in infectious disease</li> <li>13. Pat Preston, Executive Director of Geriatric Infection Control, Inc - representative of the business community</li> <li>14. Dana Selover, MD, Manager of Healthcare Regulation and Quality Improvement at the Oregon Public Health Division - representative of the Oregon Health Authority</li> <li>15. Janet Sullivan, Infection Preventionist at Oregon Health and Science University - registered nurse with interest and involvement in infection control; also serving as chair for the committee</li> <li>16. Dee Dee Vallier - consumer representative</li> <li>17. Diane Waldo, Director of Quality and Clinical Services at the Oregon Association of Hospitals and Health Systems - hospital quality director</li> <li>18. Bethany Walmsley, Executive Director of Oregon Patient Safety Commission - representative of the Oregon Patient Safety Commission who does not represent a healthcare provider on the commission.</li> </ol>	
<p>Share HAI Report and Legislation Power Point</p> <p>OHA Staff</p>	<p>The Healthcare-Associated Infection (HAI) program of the Oregon Public Health Division (OHPD) worked extremely hard to develop the HAI annual report that encompasses four years of data collected since 2009. This data, which is mandated by CMS and the State of Oregon, is entered by hospitals into the National Healthcare</p>	

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	<p>Safety Network (NHSN) database and extracted by OHPD for reporting purposes. When analyzed, the NHSN data revealed an exciting discovery: Oregon is below the national norm on almost every HAI measure.</p> <p>Katrina Hedberg, MD, epidemiologist for the State of Oregon, had the opportunity to present this report to the House and Senate Healthcare committees several weeks ago. A PowerPoint outlining Dr. Hedberg's talk is included in the packet of meeting materials and is discussed below.</p> <p><u>ICU CLABSIs – page 11</u></p> <p>The first chart displays the rate of CLABSIs per 1,000 central line days and the second chart denotes the percentage of hospital ICUs reporting any central line-associated blood stream infections (CLABSIs). Particularly in the latter graph, the incidence of infections is high in 2009, but drops dramatically in subsequent years. This drop is promising but might also be partially explained by the fact that 2009 data have been validated, whereas other years have not. In statewide validation of 2009 CLABSI data for all 58 hospitals reporting, OHPD previously identified a significant number of CLABSIs that had not been reported by facilities. OHPD validators determined that discrepancies resulted from misinterpretation of CDC criterion, relying on clinical judgment instead of applying NHSN surveillance definitions, or missing relevant information when examining patient charts, as well as other reasons. Validation therefore is very important to obtain accurate data. OHPD is currently initiating validation of 2012 CLABSIs through a recent grant award. A subset of medical records at <b>targeted hospitals</b> will be reviewed:</p> <ul style="list-style-type: none"> <li>• All patients with a reported CLABSI in 2012</li> <li>• A random sample of patients with a positive blood culture in 2012 but no reported CLABSI</li> </ul> <p>Although some of the reduction in CLABSIs between 2010 and 2012 may reflect under-reporting, the low numbers are likely also attributable to the concerted efforts by hospitals to reduce HAIs. The Oregon Association of Hospitals and Health Systems (OAHHS), the first organization to spearhead CLABSI prevention efforts, has observed a sharp decrease in reported infections since new clinical practices have been implemented thanks to collaborative endeavors and other factors.</p>	

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	<p><u>NICU CLABSIs – page 12</u>  Between 2011 and 2012, NICU central-line associated blood stream infections increased slightly while the percentage of hospitals reporting infections decreased. Despite only two years of data for the seven hospital NICUs in Oregon, the decrease is noteworthy.</p> <p><u>Colon SSIs - page 14</u>  Colon surgical site infections show a trend similar to NICU CLABSIs. From 2011 to 2012, the percentage of procedures with SSIs rose somewhat while the percentage of hospitals reporting any infections dropped slightly.</p> <p><u>CABG SSIs – page 15</u>  Coronary artery bypass graft surgical site infections fell in 2012 and hospitals reporting infections declined in both 2011 and 2012. However, the higher number of infections for 2009 and 2010 are more likely to be accurate because the data was verified by OPHD.</p> <p><u>Hip Replacement SSIs – page 16</u>  The number of procedures resulting in an SSI and the number of hospitals reporting infections exhibit a modest reduction from 2011 to 2012.</p> <p><u>Knee Replacement SSIs – page 17</u>  Hospitals reporting SSIs only decreased slightly between 2009 and 2012, but the quantity of knee replacement surgeries performed increased 20%; one hypothesis was that this change might be due to the growth of the aging population. The number of procedures increased from 7712 in 2009 to 9149 in 2012, but only an additional 9% of hospitals reported any infections.</p> <p><u>Laminectomy SSIs – page 18</u>  Very little change occurred between 2011 and 2012 in the percentage of procedures with SSIs and the percentage of hospitals reporting infections.</p> <p><u>Clostridium Difficile Infections (CDI) – page 19</u>  Only 2012 Oregon data has been collected, so no comparative numbers exist. Nonetheless, Oregon's incidence of CDI is below the national norm.</p> <p><u>Healthcare Worker Influenza Vaccination – page 20</u></p>	

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	<p>The percentage of workers vaccinated dropped from 2011-2012 for unknown reasons. <i>Note that this report was created prior to the final healthcare worker influenza vaccination report, which will be completed soon and should be considered final for these measures.</i></p> <p>Rates used in the legislature presentation—CLABSIs per 1000 central line days and number of infections per 100 procedures—are common and easy for the general public to understand. However, simple rates do not take into account risk factors, such as procedure duration and ASA scores and thus do not provide an ideal method to compare facilities to expected norms. To address this issue, the standard infection ratio (SIR), a calculation developed by the CDC, was introduced in the most recently published annual report. The downside of the SIR is that it is not intuitive. Readers will most likely need to peruse the explanation of the SIR provided at the beginning of the report to understand how to interpret it, and those with little or no statistical knowledge may have difficulty grasping the explanation. (The SIR is discussed in more detail later in the HAI Prevention Plan section.)</p>	
<p>Discuss and Approve New HAI Rules &amp; SFNI</p> <p>OHA Staff</p>	<p>The Oregon Health Authority (OHA) revised some of the Oregon Administrative Rules (OAR 333-018-0100 – 333-018-0145), which align with Centers for Medicare and Medicaid Services’ (CMS) requirements by mandating the reporting of methicillin-resistant Staphylococcus aureus (MRSA) lab ID bacteremias and catheter-associated urinary tract infections (CAUTIs). These changes were already approved by the HAI Advisory committee at the April 24, 2013 meeting, but OHA attorneys and the legislative policy analyst requested for the document to be reviewed one more time by members. OARs revisions were also made with the help of attorneys, on September 23, 2013, to the reporting specifications for outpatient dialysis facilities on page 9 under OAR 333-018-012. The previous dialysis reporting rule was possibly overly vague: “Dialysis facilities shall begin collecting data for the HAI reporting program for services provided on and after January 1, 2013 pursuant to rules amended no later than July 1, 2012”. The amended rule stipulates that facilities reporting events to CMS must provide the same information to OHA.</p> <p>As explicated in the Statement of Need and Fiscal Impact, the inclusion of the MRSA Lab ID bacteremias and CAUTIs to OARs reporting requirements will not significantly impact healthcare facilities because they are already reporting these infections to CMS.</p>	

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	Similarly, the clarification of reporting rules for dialysis centers does not change data previously mandated by OHA and therefore will not affect facilities.	
<p>HAI Prevention Plan</p> <p>OHA Staff</p>	<p>The Healthcare-Associated Infections (HAIs) Prevention Plan, dated December 31, 2009, was created in response to House Bill 2524. Derived from the template of a federal grant application, from which Oregon received funds to establish an HAI reporting program, the basic components of the plan are:</p> <ul style="list-style-type: none"> <li>• Implement an HAI reporting program</li> <li>• Establish an HAI Advisory Committee to advise OHA regarding reporting</li> <li>• Enroll healthcare facilities in the National Healthcare Safety Network (NHSN)</li> <li>• Compile and report data in a usable format</li> <li>• Make reports available to the public</li> <li>• Develop preventative efforts</li> </ul> <p>OHA and the advisory committee have met most of the goals in the HAI Prevention Plan, so new objectives are being sought. HAI program staff mentioned some preliminary analyses of preliminary large-scale studies indicate that most HAIs may not be related to devices or procedures and also that CDC and other priorities appear to point to the importance of <i>Clostridium difficile</i> (<i>C. diff</i>), multi-drug resistant organisms (MDROs), and antimicrobial stewardship as priorities. Infection prevention measures will need to include:</p> <ul style="list-style-type: none"> <li>• Development of evidence-based standardized infection control processes</li> <li>• Improvement of environmental cleaning standards</li> <li>• Enhanced surveillance of HAIs in nonhospital settings</li> <li>• Regular validations of data reported by facilities to ensure accuracy</li> <li>• Promotion of inter-facility transfer communication</li> </ul> <p>Hospitals and agencies are already working hard on these issues. Acumentra formed a coalition with 6 hospitals to reduce <i>C. diff</i>, the Oregon Patient Safety Commission (OPSC) and Oregon Association of Hospitals and Health Systems (OAHHS) are focusing on antimicrobial stewardship, and OHSU has begun an initiative to avoid <i>C. diff</i> infections through environmental cleaning, antibiotic stewardship, and appropriate hand hygiene. OPSC also has an upcoming project with infection prevention staff from three to five hospitals who will collaborate with surrounding long-term care facilities on MDRO <i>C. diff</i> prevention.</p>	

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	<p>Hand washing, a crucial infection control measure, is a priority in healthcare facilities as evidenced by the allocation of considerable resources to improve compliance. Although easy to perform, surveillance has shown that hand washing does not always take place due to a variety of reasons. A Joint Commission surveillance toolkit implemented by OAHHS has provided insight into obstacles preventing hand hygiene; the resulting data has been used to devise appropriate education for targeted groups and departments with low compliance rates. Another surveillance technique employed by hospitals entailed measuring product usage to ascertain hand hygiene adherence and, surprisingly, the findings closely matched those obtained from application of the Joint Commission toolkit. To supplement employee surveillance and education, patients are being taught to expect and demand hand washing from healthcare staff. Although substantial efforts are being put into this infection prevention method, hand hygiene continues to be an ongoing issue.</p> <p>Inter-facility transfer communication has recently moved to the forefront of concerns due to the growing awareness of the frequency that patients arrive at a healthcare facility without crucial medical information such as: the originating facility, current medications, and MDRO status. To improve communication, OHA is collaborating with stakeholders to establish protocols and devise a comprehensive standardized form to ensure optimal patient care. Transfer policies will broadly define a healthcare facility and will include a provision directing healthcare staff to notify the originating facility of missing paperwork. As a starting point, OHA is requesting any documents that might prove useful in the development of an inter-facility communication form from committee members.</p> <p>While members concurred on goals, opinions on the role of the committee in assisting healthcare organizations with prevention of reportable conditions were varied. Many attendees expressed a desire to move beyond surveillance and reporting, the original scope of the HAI Prevention Plan, in order to make a significant contribution to the community. Ideas included:</p> <ul style="list-style-type: none"> <li>• Identify HAI priorities informed by analysis of NHSN data</li> <li>• Ascertain best practices—for surveillance, empowering patients, and educating and motivating staff—by researching efforts taking place across the country.</li> <li>• Develop small programs, incorporating clear and simple information, to</li> </ul>	



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	<p>disseminate best practices to healthcare organizations</p> <ul style="list-style-type: none"> <li>• Utilize the expertise and resources of members to organize and implement collaborative projects focused on best practices</li> <li>• Provide guidance on the establishment of policies. The committee, comprised of members with varying employment histories and areas of proficiency, would be able to offer valuable insights and perspectives.</li> </ul> <p>Although the aforementioned ideas are commendable , the purpose of the committee as defined by OARs is to advise the director of the Oregon Health Authority on what conditions ought to be reportable and what the annual report should look like. So, how can both the established role of the committee and the aspirations of members be incorporated into meetings? A viable compromise, agreed upon by attendees, is to perform mandated work first followed by a roundtable discussion focused on developing recommendations.</p> <p>When the committee begins to evaluate options for the format and content of the next report, Oregon rules and legislation need to be taken into account. Oregon House Bill 2524 was established as a result of consumer demand for infection data that would enable the general public to make informed decisions about their healthcare. Subsequently, Oregon Administrative Rules were modified to include regulations requiring the reporting of specific healthcare-associated infections. Particularly relevant to the committee is OARS 333-018-0130, HAI Public Disclosure, which directs OHA to “disclose data and accompanying explanatory documentation in a format which facilitates access and use by the general public and healthcare providers”. In light of these objectives, many members expressed dissatisfaction with the last report because the graphs, which differ substantially from commonly used bar or line charts, are difficult for most people to understand. The graphs employ horizontal lines and circles with intersecting vertical lines to display each hospital’s Standard Infection Ratio (SIR) and confidence interval for various HAIs in relation to the national average:</p> <ul style="list-style-type: none"> <li>• The horizontal dashed line illustrates the national average SIR for comparison with other data (individual hospitals, state averages, etc.)</li> <li>• The circles signify the hospital SIR: <math>\frac{\text{number of reported infections}}{\text{number of predicted infections (based on national average)}}</math></li> </ul>	

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	<ul style="list-style-type: none"> <li>○ SIR below 1 – fewer infections reported than predicted</li> <li>○ SIR equal to 1 –reported infections equals predicted infections</li> <li>○ SIR above 1 – more infections reported than predicted</li> <li>● The solid vertical lines represent the 95% confidence interval (i.e., there is a 95% chance that the true value of the SIR is within the designated confidence interval). <ul style="list-style-type: none"> <li>○ The longer the line, the fewer infections reported by a hospital and less the SIR can be relied on as an accurate measure.</li> <li>○ A confidence interval running through both colors indicates that the infection rate is not significantly different than predicted whereas one entirely in one color indicates that there is a significant difference. If the vertical line/confidence interval is entirely in the orange portion of the graph, more infections were reported than predicted; conversely, if the vertical line/confidence interval is entirely in the green portion of the graph, fewer infections were reported than predicted.</li> </ul> </li> </ul> <p>The height of the confidence interval therefore is not indicative of the actual value of the SIR. Nonetheless, the vertical lines can be easily confused with bars used in traditional bar charts. To fix the problem, OHA staff suggested color-coded bar charts to illustrate standard infection ratios: red for SIRs worse than national average, green for SIRs better than the national average, and blue for SIRs statistically the same as the national average. Members proposed:</p> <ul style="list-style-type: none"> <li>● Display graphs by condition rather than by hospital to reduce the number of charts and to facilitate comparisons among hospitals. Different colors might be incorporated to distinguish high performers from low performers.</li> <li>● Use symbols (e.g., stars) or text (e.g., above expected, expected, and below expected) to indicate the rating of facilities for each reportable condition. For example, stars might be used to show a hospital’s standing on CAUTIs: three stars for above expected, two stars for expected, and one star for below expected.</li> <li>● Create a web-based tool to search for facility ratings by condition.</li> </ul> <p>Since the charter of the committee is to publish a report in a format that facilitates use by healthcare providers and the general public, OHA staff requested volunteers for a</p>	

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	<p>subcommittee dedicated solely to the basic design of the report. Diane Waldo and Karen Kellar generously volunteered their time. Meeting attendees offered these suggestions for the annual report:</p> <ul style="list-style-type: none"> <li>• At the beginning of the document, provide simple, easy-to-use tables comparing hospitals for each HAI; in the remainder of the report, if necessitated, present SIRs with confidence intervals.</li> <li>• Include gross numbers to enhance utility. Readers may be interested, for example, in the total number of hip replacements performed at each facility as an indicator of expertise.</li> <li>• Add a resource section for hospitals excelling in HAI prevention to share their best practices.</li> <li>• Consider reducing the size of the report due to limited OHA resources available for the project</li> </ul> <p>OARs mandates publication of the report no later than April 30<sup>th</sup> of each year, an impossible deadline. Facilities have until April 15<sup>th</sup> to enter their infection data into the National Healthcare Safety Network (NHSN), database, which only leaves April 16 through April 30 for OHA staff to: extract data from NHSN, validate the data, send data to hospitals for review, wait up to 30 days for hospitals to respond as required by OARS, and work with facilities to resolve discrepancies. The statute needs to be changed, but this entails a long process.</p> <p>Once published, OARs specifies that the report should be easily accessible to the intended audience. Members proposed: making the report available online and placing hardcopies, such as a 3-fold informational sheet, in hospitals and clinics to allow patients to look at facility infection rates before agreeing to a procedure.</p>	
<p>Standing Agenda: Oregon Association of Hospital &amp; Health Systems (OAHHS)</p> <p style="text-align: center;">Diane Waldo</p>	<p>The Oregon Association of Hospital &amp; Health Systems (OAHHS), in partnership with the Health Research and Educational Trust (HRET), is working with 31 hospitals through the OAHHS/HRET Health Engagement Network (HEN), which is part of a nationwide coalition aimed at eliminating hospital-acquired conditions. The remaining Oregon hospitals currently participating in a HEN belong to Intermountain Healthcare Network, Premier Network, or Washington State Hospital Association (WSHA) Network. All four networks are focused on standardizing best practices to avoid hospital-acquired infections. Specific focus areas being addressed are:</p>	

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	<ul style="list-style-type: none"> <li>• Adverse drug events (ADE)</li> <li>• Catheter-associated urinary tract infections (CAUTI)</li> <li>• Central line-associated blood stream infections (CLABSI)</li> <li>• Injuries from falls and immobility</li> <li>• Obstetrical adverse events/early elective deliveries (EED)</li> <li>• Hospital-acquired pressure ulcers (HAPU)</li> <li>• Surgical site infections (SSI)</li> <li>• Venous thromboembolism (VTE)</li> <li>• Ventilator-associated pneumonia (VAP)</li> <li>• Preventable readmissions</li> </ul> <p>90% of hospitals participating in the OAHHS/HRET Health Engagement Network have undertaken one or more of these target areas. Initially, CMS, in an attempt to encourage hospitals to join the network, did not have minimum requirements. Now the motto is for hospitals to participate in two to five HAI targets and better yet, all ten focus areas. Ten areas though is a difficult goal to sell. To facilitate success, hospitals are advised by OAHHS to select targets that would most benefit their facility and patient population. The efforts of the network have indeed been worthwhile as indicated by data collected: 30% improvement in CLABSI, CAUTI, EED, and SSI.</p> <p>In 2014, OAHHS plans to shift away from the 10 focus areas to concentrate on HAIs showing little or no improvement such as CDI, adverse drug events, VTE, and falls with injury. Continuation of the program is contingent on funding from HRET.</p>	
Public Comment / Adjourn	No public comments	

**Next meeting will be December 18, 2013, 1:00 pm to 3:00 pm, at the Portland State Office Building, Room 1C.**

Submitted By: Diane Roy

Reviewed By: Monika Samper  
Zintars Beldavs

**EXHIBIT SUMMARY**

- A – Agenda**
- B – June 26, 2013 Minutes**
- C – Healthcare-Associated Infections in Oregon**
- D – Oregon Administrative Rules**
- E - Statement of Need and Fiscal Impact**
- F – Healthcare Acquired Infection Prevention Plan**