

HEALTHCARE-ASSOCIATED INFECTIONS ADVISORY COMMITTEE

**February 27, 2013
1:00 pm to 3:00 pm**

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

MEMBERS PRESENT: Bruce Bayley, PhD (phone)
Tara Gregory, MS, FNP
Kecia Norling, RN (phone)
Nancy O'Connor, RN, BSN, MBA, CIC
Laurie Murray-Synder (phone - in place of Stacy Moritz, RN, MBA)
Marjorie Underwood, RN, BSN, CIC
Dee Dee Vallier (phone)
Diane Waldo, MBA, BSN, RN, CPHQ, CPHRM, LNCC

MEMBERS EXCUSED: Paul Cieslak, MD
Susan Mullaney
Pat Preston, MS
Dana Selover, MD, MPH
Bethany Walmsley, CPHQ, CPPS
Angel Wynia

STAFF PRESENT: Zintars Beldavs, MS, Healthcare-Associated Infections Program Manager
Margaret Cunningham, MPH, Healthcare-Associated Infections Epidemiologist
Ellen McCleery, Healthcare-Associated Infections Support Analyst
Monika Samper, RN, Healthcare-Associated Infections Reporting Coordinator

ISSUES HEARD:

- Call to Order
- Approval of Minutes
- Staffing
- Committee Organization
- Proposed Addition of CMS Requirements to State OARs

- **State Report Format**
- **Use of SIR in State Report**
- **Next Steps**
- **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	<p>Diane Waldo requested clarification to the December 3, 2012 minutes, on page 3, third paragraph of the "HAI Partnership for Patient Prevention Targets" section:</p> <ul style="list-style-type: none"> • Change from "but data may not show an improvement over time" to "reporting on multiple data areas may not show improvement since original focus was on one to two areas". • Change from "told to do the best that they can" to "prioritize efforts". <p>Both the April 11, 2012 and December 3, 2012 minutes were unanimously approved with changes.</p>	
Staffing Staff	<p>Two additional staff from the Healthcare-Associated Infections Program will be involved with HAI reporting:</p> <ol style="list-style-type: none"> 1. Ellen McCleery will perform data analysis. 2. Monika Samper has assumed Jeanne Negley's position as the HAI Reporting Coordinator. Monika's professional experience encompasses fifteen years of previous employment as a nurse in an acute care ICU and over two years of current employment at the Public Health Division working on the Norovirus study and performing medical record reviews. 	
Committee Organization Chair	<p>Nancy O'Connor presented key points of the Statutory Requirements of OHA, ORS 442.851, and the committee attempted to match members with each of the Oregon Health Authority (OHA) required roles when possible:</p> <ol style="list-style-type: none"> 1. The advisory committee shall consist of 16 members appointed by the administrator – Zintars Beldavs. <i>Note that in a follow-up email, Mr. Beldavs</i> 	<p>Nancy O'Connor will contact Jeannie Negley to identify/clarify the role of each member and report findings back to the committee.</p>

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	<p><i>clarified that according to current statute, as overall administrator for OHA, Dr. Bruce Goldberg is responsible for appointing committee members.</i></p> <p>2. Seven of the members shall be healthcare providers or their designees including:</p> <ul style="list-style-type: none"> a. A hospital administrator who has expertise in infection control and who represents a hospital that contains fewer than 100 beds b. A hospital administrator who has expertise in infection control and who represents a hospital that contains 100 or more beds – Susan Mullaney c. A long-term care administrator – Pat Preston d. A hospital quality director – Diane Waldo e. A physician with expertise in infectious disease – Eric Chang (just resigned from committee) f. A registered nurse with interest and involvement in infection control – Nancy O’Connor g. A physician who practices in an ambulatory surgical center and who has interest and involvement in infection control – Kecia Norling is filling in for Rodger Slevin, who recently resigned <p>3. Nine of the members shall be individuals who do not represent healthcare providers, including:</p> <ul style="list-style-type: none"> a. A consumer representative – Dee Dee Vallier b. A labor representative – Tara Gregory c. An academic researcher – Bruce Bayley d. A healthcare purchasing representative e. A representative of the Oregon Health Authority – Dana Selover f. A representative of the business community g. A representative of the Oregon Patient Safety Commission who does not represent a healthcare provider on the commission – Bethany Walmsley h. The State epidemiologist – Paul Cieslak is filling in for Katrina Hedberg i. A health insurer representative 	

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	<p>4. Members of the advisory committee are not entitled to compensation and shall serve as volunteers.</p> <p>5. Each member of the advisory committee shall serve a term of two years.</p> <p>Although most of the current members have served beyond the term specified in ORS, the committee agreed that exceeding two years does not appear to violate statutory requirements. So, the next steps for the committee would be to:</p> <ul style="list-style-type: none"> • Confirm whether members are agreeable to extending their term • Brainstorm ideas for recruiting members to fill vacant slots 	
<p>Proposed Addition of CMS Requirements to State OARs</p> <p>Staff</p>	<p>Monika Samper proposed the addition of Methicillin-resistant Staphylococcus aureus (MRSA) bacteremia and catheter-associated urinary tract infections (CAUTIs) to Oregon HAI reporting requirements. Centers for Medicare and Medicaid Services (CMS) began requiring mandatory reporting of CAUTIs in 2012 and MRSA bacteremia in 2013 in adult and pediatric ICUs. Oregon Administrative Rules (OARs) currently do not require reporting of either of these HAIs. Hospitals have already been reporting CAUTIs and MRSA bacteremia for CMS, so adding these HAIs will allow for the inclusion of important information in public reports without additional burden. Monika proposed a revision to the OARs and presented the amended version to the committee for approval. In response, a member requested changes to items on page 6:</p> <ul style="list-style-type: none"> • 1g - change from “MRSA” to “MRSA bacteremia” • 2d - change from “facility-wide” to the applicable care locations (to be determined) Facility-wide was later determined to be correct • 2e – change from “CAUTI” to “inpatient CAUTI events” <p>Zintars Beldavs asked whether the committee had any recommendations for future reporting requirements that might be addressed at the next meeting. One member suggested requiring long-term care facilities and ambulatory surgery centers to also report HAIs.</p>	<p>Monika Samper will make corrections to HAI reporting OARs (409-023-000 to 409-023-0035) based on CMS specifications, and Zintars Beldavs will email the amended version to the committee for a vote.</p>
<p>State Report Format</p> <p>Staff</p>	<p>To provide ideas for the upcoming annual report and possible future website renovations, Monika Samper presented a variety of website designs and annual report formats from several other states and compared them to Oregon’s online resources:</p> <ol style="list-style-type: none"> 1. California - website offers a well-designed, interactive map of the entire state. At the top of the screen, BSIs (MRSA and VRE), CLABSIs and SSIs (choice of nine procedure categories) can be selected to view color-coded symbols 	<p>Staff will decide on the best annual report format and email the draft to committee members within the next few weeks.</p>

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	<p>representing each hospital’s level of HAI infections. The HAI levels are defined as: lower, the same, or higher than the average U.S. national rate for SSIs (surgical site infections) and the California rate for MRSA, VRE (Vancomycin-resistant enterococci) and CLABSIs (central line-associated bloodstream infections). Clicking on a symbol will display the hospital name and additional information, depending on the type of HAI. For example, when a symbol representing SSI rates for a given hospital is selected, information for all nine SSI procedures will be displayed.</p> <ol style="list-style-type: none"> 2. Minnesota – a webpage allows users to view data in a variety of formats for selected clinical topics and measures. For example, choosing the Consumer Assessment topic for a particular hospital will illustrate through tables and pie/bar charts how patients rate the facility on a number of measures, including: how often do doctors and nurses communicate well with their patients, how often did patients receive help quickly from hospital staff, and how do patients rate the hospital overall. This format might work well for displaying a variety of measures for Oregon HAIs, for example, SSIs or device-related infections. 3. Oregon – bar charts in the annual report show data for each hospital over a period of 1-3 years for different variables (e.g. CLABSIs, SSIs, and healthcare worker influenza vaccination rates). 4. New York – two reports exemplify different ways of looking at similar SSI data from 2007-2011: <ul style="list-style-type: none"> • A line chart illustrates SIR (standard infection ratio) trends over time for colon, CABG (chest and donor sites), and hip SSIs. • A table lists SIRs for surgical site infections, with the percentage of increase or decrease since 2007, for each year. <p>A third report has a color-coded bar chart to indicate how each hospital’s SSIs compare to the state average in 2011, making it easy to compare hospitals:</p> <ul style="list-style-type: none"> • Red – significantly higher than state average • Grey – 0 infections or not significant • Blue - significantly lower than state average 5. Pennsylvania - one report provides consumers with an unusually straightforward means of comparing hospitals by categorizing their CAUTI rates 	<p>Bruce Bayley offered to send Zintars Beldavs an article, published by a national expert, on how to present quality data to consumers.</p>

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	<p>as: significantly better than predicted, significantly worse than predicted, and omitted because no use of device reported (e.g. no reported use of urinary catheters). Another report summarizes CLABSIs by pathogen in a table for the entire state. This table would be useful to professionals, but consumers are not likely to be familiar with the names of pathogens.</p> <p>6. Tennessee – in the first report, the percentages of a variety of reported organisms related to CLABSIs are displayed in a pie chart. Again, this would not likely be useful to consumers. In the second report, a bar chart of CLABSIs in NICUs, grouped by 5 different rate ranges, uses different colors to distinguish 2010, 2011, and NHSN rates.</p> <p>7. North Carolina – a single page is dedicated to each hospital, similar to Oregon’s annual report, but offers more information, including a comments section where hospitals may explain unfavorable SIRs. Although the Oregon report contains hospital annotations, they are located in a different section of the report with no reference to them on each hospital’s page, making it likely that the reader will overlook critical comments.</p> <p>Observations made by committee members about the content and format of reports and websites presented by Monika included:</p> <ul style="list-style-type: none"> • Due to the inherent problems associated with calculating a SIR (Standard Infection Ratio), comparisons between hospitals using this measure may not be valid (refer to next section for more detailed information on the SIR). • Need to modernize our website by considering elements such as interactive web pages and different chart types for reports. • Website should be geared toward both consumers and healthcare professionals. <p>In accordance with previous years, Oregon’s 2012 annual report deadline has been set for May. In order for the Public Health Division to meet this goal and allow hospitals adequate time to report HAI-related information, staff will begin in March to evaluate data and develop a report format, which will be emailed to committee members for feedback in the next few weeks. After incorporating feedback, the newly renovated report will be presented to the Advisory Committee for approval at the April meeting.</p> <p><i>In follow up to this discussion, the report will come out in June and be provided to</i></p>	

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	<p><i>advisory committee members prior to the June meeting, as happened last year. May is unrealistic as hospitals are required to have data for the previous year complete by 3 months after the end of the year (March) and then have up to 30 days (April) to review and correct the data to be reported. This provides less than one month to analyze data, compile the report, and publish and approximately one week to create and provide data summaries to all hospitals prior to final analysis and compilation of the annual report.</i></p>	
<p>Use of SIR in State Report</p> <p>Staff</p>	<p>Ellen McCleery presented an overview of the Standard Infection Ratio (SIR), developed by the Centers for Disease Control (CDC), to analyze healthcare-associated infection (HAI) data entered into the National Healthcare Safety Network (NHSN) by hospitals. The SIR is calculated as the observed number of HAIs divided by the expected number of HAIs. A SIR greater than 1.0 indicates that more HAIs were observed than expected; conversely, a SIR less than 1.0 indicates fewer HAIs were observed than expected. Computation of the SIR denominator depends on the NHSN module:</p> <ul style="list-style-type: none"> • Procedure-associated module – the statistical probability of a SSI is calculated for each patient by applying a multivariate logistic regression model ¹ using NHSN aggregate data from a baseline period of 2006-2008. The resultant probability is then summed for all patients in a given hospital to obtain the number of expected SSIs for that facility. • Device-associated module – expected number of CLABSIs and CAUTIs is calculated, using device-specific infection rates stratified by location², from a standard population (NHSN aggregate data) during a baseline period. 2006-2008 is the baseline period for CLABSIs and 2009 for CAUTIs. <p>Two distinct issues concerning SIR calculations are:</p> <ol style="list-style-type: none"> 1. Accuracy of predicting the expected number of SSIs for a facility is dependent on the variables selected for inclusion in logistic regression analysis. 2. Changes in SIRs may be due to a shift in a variable other than the number of infections, a phenomenon referred to as a shifting base distortion. This <p>1. The Independent variables incorporated in the logistic regression model are: age, ASA, procedure duration, and whether facility is associated with a medical school.</p> <p>2. A location is an area/unit within a hospital that provides specific patient services, as defined by the CDC. Examples include: Medical/Surgical Critical Care, Orthopedic Ward, and Medical Ward.</p>	

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	<p>phenomenon is mainly a concern when calculating the expected number of device-associated HAIs because the use of risk strata, rather than a multivariate model, is employed. The CDC is addressing this issue through the development of a more sophisticated method for stratifying by risk, using logistic regression, similar to the model used for SSIs.</p> <p>To obtain more information about SIRs, Zintars Beldavs contacted Jonathan Edwards, a statistician at the CDC and developer of the NHSN use of SIR, and David Birnbaum, the HAI Program Manager for Washington State Department of Health who published concerns over use of the SIR. David Birnbaum’s primary concern is that the SIR, while appropriate for analyzing HAI trends over time, may not be valid for hospital comparisons. Jonathan Edwards stressed the importance of first determining the target audience and that the SIR is the most appropriate measure for seeing how a hospital compares with expected infection rates and also for comparing a hospital over time. Consumers would likely use SIRs to establish the best facility for their care; whereas, hospitals would use SIRs, in part, to evaluate whether HAIs are decreasing over time. After considering the pros and cons, Zintars suggested that Oregon introduce SIRs but also continue to make rates available for hospital comparisons.</p> <p>Meeting participants also had some questions about SIRs. The current SIR is benchmarked against data that is four to six years old, and thus might make US hospitals appear especially successful in their efforts to reduce HAIs. To correct this problem, the CDC is considering changing the point of reference. A committee member added: many performance systems move their benchmarks periodically as rates improve; and facilities implementing this methodology need to get used to the idea that, although their SIRs indicate they have lower than expected infection rates (along with all other hospitals), they may deteriorate when the point of reference is changed. Continually moving benchmarks for SIRs, however, makes it difficult to ascertain the change in each hospital’s HAIs over time, a staff member commented.</p> <p>Although not perfect, members agreed to adopt the SIR because it’s currently the primary measure used by the CDC for HAIs, and many states are following suit. However, members emphasized the need to find a way to educate all stakeholders on how to interpret SIRs and their limitations.</p>	

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<p>Next Steps</p> <p>Chair</p>	<ol style="list-style-type: none"> 1. To address declining meeting attendance, Zintars Beldavs and Nancy O'Connor will contact members to: <ul style="list-style-type: none"> • Communicate how important they are to the functioning of the committee • Identify barriers to attending meetings • Pinpoint reasons for diminishing interest in the committee 2. Members will develop plans to rejuvenate the committee. 3. Meeting attendees were encouraged to make recommendations, taking into account all stakeholders, for the 2012 Oregon annual report before the next meeting. 4. Committee meetings for the remainder of 2013 will be scheduled for the fourth Wednesday every two months, from 1:00 pm-3:00 pm, beginning in April, to allow members adequate time to plan around these meetings. 	
Public Comment / Adjourn	No public comments	

Next meeting will be April 24, 2013, 1:00 pm to 3:00 pm, at the Portland State Office Building, Room 1C.

Submitted By: Diane Roy

Reviewed By: Zintars Beldavs

EXHIBIT SUMMARY

- A – Agenda
- B – April 11, 2012 Minutes
- C – December 3, 2012 Minutes
- D – Proposed Addition of CMS Requirement to State OARs
- E – Summary of State Reports
- F – SIR Summary