Healthcare-Associated Infections Advisory Committee

December 16, 2015

MEMBERS PRESENT:
Paul Cieslak, MD
Kelli Coelho, RN, CNOR
Larlene Dunsmuir (in place of Jordan Ferris)
Jon Furuno, PhD
Laurie Murray-Snyder
Rachel Plotinsky, MD (phone)
Pat Preston, MS (phone)
Mary Shanks, RN, MSN, CIC
Diane Waldo, MBA, BSN, RN, CPHQ, CPHRM, LNCC (phone)

MEMBERS EXCUSED:
Jamie Grebosky, MD
Joan Maca, RN
Csaba Mera, MD
Nancy O’Connor, RN, BSN, MBA, CIC
Dana Selover, MD, MPH
Dee Dee Vallier
Bethany Walmsley, CPHQ, CPPS

STAFF PRESENT:
Zintars Beldavs, MS, HAI Program Manager/ACDP Section Manager
Genevieve Buser, MD, HAI Public Health Physician
Kate Ellingson, PhD, HAI Reporting Epidemiologist
Monika Samper, RN, HAI Reporting Coordinator

ISSUES HEARD:
- Call to Order and Roll Call
- Approval of September 2015 HAIAC Meeting Minutes
- OAR Updates : Oregon Reporting Requirements for 2016
- Partner Update: HAI Initiatives Led by Acumentra Health
- HAI Outbreaks and MDRO Update
- HAI Interactive Map Update & Other Efforts to Make NHSN Data Actionable
- Proposed Update to State HAI Plan and Vote on Plan
- Findings from CDC/OHA-funded Ebola Assessment Hospital Consultations
- Findings from CDC/OHA-funded Consultations for Non-acute Care
- 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
Chair Mary Shanks

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

Approval of September 2015 HAIAC Meeting Minutes
All Committee Members

Minutes for September 23, 2015 meeting were unanimously approved as written.

OAR Updates: Oregon Reporting Requirements for 2016
Monika Samper, OHA

The OHA poster listing healthcare-associated infection (HAI) reporting requirements for both CMS and Oregon is being revised. Updates to the poster, scheduled to be published in January 2016, will include:

- Every instance of the text “Proposed rule change for January 2015” will be eliminated.
- Language of poster will be modified to match exact wording of CMS reporting mandates.
- Structural modifications to the poster to clarify reporting requirements across settings.
- Addition of mandatory outbreak reporting for healthcare settings.

Action Item
OHA asked committee members to provide feedback on the poster by the end of the year.

Partner Update: HAI Initiatives Led by Acumentra Health
Laurie Murray-Snyder, Acumentra Health

Acumentra Health, a nonprofit organization, is working to improve the quality, safety, and effectiveness of healthcare for Oregon Medicare and Medicaid beneficiaries through a variety of approaches.

- Serves as Oregon’s Medicare Quality Improvement Organization (QIO), which is affiliated with HealthInsight Quality Innovation Network-Quality Improvement Organization (QIN-QIO), a regional 4-state network encompassing Nevada, New Mexico, Oregon, and Utah. Initiatives administered by QIN-QIO include:
  - Care coordination - decrease unnecessary hospital admissions/readmissions, improve transitions of care, and prevent adverse drug events through better coordination of care.
  - HAI prevention - reduce aggregate standardized infection ratios (SIRs) of CAUTIs, CLABSIs, VAEs, and C. difficile infections, reported in NHSN by 16 hospitals participating in project, in order to meet national benchmarks.
Nursing Home Quality Care Collaborative - curtail unnecessary antipsychotic medications, decrease *C. difficile* infections, and incorporate Quality Assurance and Performance Improvement (QAPI) programs to enhance care, services, and quality of life for residents.

Behavioral health initiative - increase primary care screening and referral for depression/alcohol misuse and reduce readmissions to inpatient psychiatric facilities by improving transitional care and outpatient mental health follow-up after hospitalization.

Boost immunizations - help providers raise adult immunization rates for influenza, pneumonia, and shingles and improve documentation of patient vaccinations through use of ALERT Immunization Information System (IIS) registry.

Cardiovascular health and Million Hearts - work with primary care providers and home health agencies to improve cardiovascular health with an emphasis on blood pressure control.

Meaningful use of health information technology (HIT) - offer education and technical assistance for health information technology (HIT) systems to enhance physician coordination of preventive services in medical offices and to support hospital quality improvement efforts and attainment of Medicare incentive program requirements.

Quality reporting and incentive programs - assist eligible providers including hospitals, physicians, and ambulatory surgery centers with understanding CMS methodology and achieving performance goals of CMS value-based payment and quality reporting programs.

Everyone with Diabetes Counts - expand access to Diabetes Self-Management Education (DSME) to reach more Medicare beneficiaries; goal is educate 980 patients by 2019.

- Acts as External Quality Review Organization for Oregon’s Medicaid program - conducts reviews of Coordinated Care Organizations (CCOs) and managed care organizations for OHA.
- Engaged in multiple research projects.
  - Prescription Drug Monitoring Program (PDMP) - explores how doctors can use data from PDMP, a web-based tool containing data for all controlled substance prescriptions dispensed to Oregon residents, to improve opioid prescribing practices.
  - Beneficiary and Family Advisory Council - recruiting members to share ideas and feedback on project activities aimed at improving health and healthcare for Medicare and Medicaid beneficiaries in Oregon.

**Discussion**

Oregon Hospital Association noted that Oregon Health Leadership Council (OHLC) is supporting efforts to permit information from PDMP to be included in Emergency Department Information Exchange (EDIE) notifications. EDIE is a web-based technology that enables intra- and inter-emergency department communication.

**HAI Outbreaks and MDRO Update**

Lexie Zhang and Gen Buser, OHA
OHA provided information about reportable diseases, an update on recent outbreaks, and an overview of projects and legislated policies designed to reduce HAIs.

- **Mandated reportable diseases (see OAR 333-018-0000 for details)**
  - **Definition of reportable disease:**
    - Any case of a disease specified as reportable in OAR 333-018-0015
    - Any case of a disease, infection, or condition that is:
      - Highly transmissible
      - Results in serious or severe health consequences
      - A known or suspected common-source outbreak
      - An uncommon illness of potential public health significance
  - **Reporting requirements:** each healthcare provider or any individual knowing of or suspecting a case of a reportable disease must notify the appropriate public health agency within specified time limit.

- **Outbreaks**
  - 56 outbreaks were reported to the Oregon Public Health Division since September 1, 2015: 12 norovirus, 30 gastroenteritis, 12 respiratory, and 2 rashes.
  - 53% of outbreaks from September 1 – December 10, 2015 were healthcare associated with norovirus and noro-like outbreaks being the most common etiology.
  - HAI outbreak is defined as:
    - Two or more cases of the same disease
    - Epidemiologically linked (e.g., received care at same facility, work at same business/organization, or ate at same restaurant)
    - Occurring in a healthcare setting, specifically any facility paid to provide healthcare
  - **Outbreak expectations**
    - Facilities and providers are required to report outbreaks in a timely manner, share necessary patient and provider/facility information, and participate in discussions concerning recommendations.
    - Public health will make recommendations, work with providers to ensure patient safety, and educate facilities and providers as indicated.

- **Interfacility Transfer Rule (OAR 333-019-0052)** - Oregon Administrative Rules require a referring facility to notify the receiving facility when transferring a patient who is infected or colonized with a multidrug-resistant organism (MDRO) or pathogen that warrants Transmission-based Precautions. Examples include norovirus, tuberculosis, and *C. difficile*.

- **Carbapenem-resistant Enterobacteriaceae (CRE)**
  - 208 cases of CRE have been reported since November 2010.
    - Only nine of the cases were identified as cabapenemase-producing CRE, but no transmission was found during investigations.
    - The most commonly reported organisms were: *Enterobacter*, *Klebsiella*, and *E. Coli*.
  - 2016 CRE toolkit has been published and is available on OHA website.

- **C. Difficile Collaborative** - three hospitals and seven skilled nursing facilities have enrolled in the collaborative. Efforts are focused on:
  - Surveillance through NHSN
Antibiotic utilization and resistance – OHA received grant funding to recruit hospitals to begin submitting data into the National Healthcare Safety Network (NHSN) AU/AR module. Regional antibiograms will be created from collected data to better understand antibiotic usage, hone stewardship efforts, and prevent multi-drug resistant organisms.

Discussion
Committee members recommended informing facilities of the little-known Oregon statute that designates common-source outbreaks as reportable. One member suggested OHA give a presentation on the topic at an APIC meeting.

Action Items
➢ OHA will coordinate efforts with the Oregon Hospital Association to communicate to healthcare facilities and providers what constitutes a reportable outbreak and responsibilities of persons suspecting an outbreak.
➢ OHA will provide an overview of reported outbreaks at every meeting in response to the committee’s positive feedback to today’s presentation.
➢ OHA will schedule an APIC presentation on reportable outbreaks.
➢ OHA will schedule a webinar on reportable outbreaks as part of OHA-Oregon Patient Safety Commission (OPSC) lunch-and-learn webinar series.

HAI Interactive Map Update and Other Efforts to Make NHSN Data Actionable
Kate Ellingson and Lexie Zhang, OHA

OHA demonstrated a preliminary online HAI interactive Oregon map and report that was created with new innovative software. This online document will replace the old cumbersome map currently available on the OHA website.
➢ Advantages of new tool include:
  o Easier to refresh data regularly
  o Ability to present all data for each facility in one location
  o Expanded content: provides most of data and information contained in the full annual report
  o Improved readability
    ▪ Many pages of document have been copied directly from published reports including: pages from executive summary and consumer report and bar charts of aggregate SIRs and confidence intervals from provider report.
    ▪ Facility-level technical data from provider report is exhibited in easy-to-read tables through an interactive map.
  o User-friendly
Prominent arrows allow effortless scrolling through pages of report and associated maps.
Symbols representing each facility's location on an Oregon map can be pressed to open a table containing detailed data for the selected organization.

- Healthcare worker influenza vaccination data may be moved to a separate map/report due to the recent interest in vaccination rates.

**Discussion**

- OHA plans to contact patient and family boards in an effort to obtain feedback on the annual report and map.
- Committee members recommended exchanging red and green color of triangles/circles throughout report with different shades of color or various types/sizes of symbols to accommodate color-blind readers.
- Meeting attendees proposed replacing circles on healthcare worker vaccination map with an assortment of symbols to distinguish facility types. Moreover, an option to filter or sort by facility type would be beneficial.

**Action Items**

- OHA would like the committee to test the new Oregon HAI interactive map and provide feedback.
- OHA will create separate maps for influenza vaccinations at different facility types.
- OHA will notify the committee when the map is available on state website.

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**Proposed Update to State HAI Plan and Vote**

Kate Ellingson, OHA

OHA proposed incorporating goals of CDC-Ebola Supplemental Funding into State HAI Plan. Proposed additions include:

- Establish an Infection Control Assessment and Prevention (ICAP) subcommittee within HAI Advisory Committee to guide Ebola grant activities.
  - ICAP subcommittee would be comprised of:
    - Ebola Assessment Hospital consultation team - infection preventionist, physician lead, laboratory sciences expert, and industrial hygienist
    - Members of preparedness community – state Health Security Preparedness and Response (HSPR) and local Public Health Emergency Preparedness (PHEP) liaison
    - Members of regulatory community – Health Care Regulation and Quality Improvement (HCRQI) and Office of Licensing and Regulatory Oversight (OLRO)
    - Members of provider boards – medical, nursing, and pharmacy boards
    - Infection Prevention Specialists – sterilization and reprocessing, environmental infection prevention, and other specialists as needed

- ICAP subcommittee would be responsible for:
  - Advising facility consultation teams
  - Making recommendations for remediation
Identifying synergies with ongoing HAI prevention, regulatory, or preparedness efforts

- Create an inventory of all healthcare facilities in the state including contact information, up-to-date publically reported infection rates, and potentially other metrics recommended by ICAP subcommittee.
- Provide standardized assessment of and consultation with Oregon’s six Ebola Assessment Hospitals on 12 domains.
- Offer standardized infection prevention assessment of and consultation with targeted selection of hospitals, ambulatory surgery centers, long-term care facilities, dialysis facilities, and outpatient clinics throughout the state employing CDC tools.

**Motion**

A motion was made to add the proposed updates to the state HAI plan. The motion was seconded and then unanimously approved.

**Action Items**

- OHA will send a list of ICAP candidates to the committee for review prior to establishing a final list.
- OHA will update state plan and begin process to expand HAIAC committee membership composition as defined in statute.

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**Findings from CDC/OHA-funded Ebola Assessment Hospital Consultations**

*Judy Guzman, OHA*

Six Oregon Ebola Assessment Hospitals were evaluated by Oregon’s Ebola Consultation Team using a CDC assessment tool to determine their readiness to safely and effectively care for persons under investigation (PUI) for Ebola. These “baseline” consultation visits revealed:

- Multi-disciplinary teamwork is outstanding and staff has strong administrative support.
- Ebola plans are generally excellent.
- Hospitals are working in silos; consultation team would like to see improved communication and collaboration between hospital IPC and preparedness teams.
- Inpatient admission of a PUI would be very disruptive and could affect the hospital’s ability to provide general medical care to community.
- Pediatric PUI policy needs to be strengthened; currently no written plan or algorithms exist. For example, threshold for admitting pediatric PUI to assessment hospital versus treatment hospital needs to be established.
- Ambulatory evaluation plan for low-risk PUI ought to be considered. Two healthcare systems have successfully performed an evaluation without admitting the patient.
- Patient transport protocol requires elucidation.
  - Who is responsible for arranging patient transport to and from hospitals at local, state, and federal levels?
  - Should high-risk PUIs be transported immediately to an Ebola treatment center?
Plan for SW Washington residents seeking care at an Oregon hospital needs to be developed including management of persons under monitoring (PUMs) and transport of PUIs.

Procedure for cleaning ambulance after transporting PUI requires clarification by local health departments (LHDs).
  - Are paramedics or hospital staff responsible for decontaminating ambulance and waste storage/removal of contaminated PPE?
  - If paramedics are responsible for cleaning ambulance, instruction on federal OSHA regulations by LHDs is essential. (Some EMS partners having been using bleach spray to decontaminate ambulance, which is not consistent with OSHA directives.)

Lab capacity varies among hospitals. Consultation team investigating whether Oregon State Public Health Lab (OSPFL) would be able to perform influenza and Ebola PCR testing.

Hospitals with a catchment area covering multiple counties may not receive notification of a person under monitoring (PUM) from LHDs outside of their county. Consultation team has been able to resolve this issue by working with hospitals and LHDs.

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**Findings from CDC/OHA-funded Consultations for Non-Acute Care**

Mary Post, OPSC & OHA

Presentation postponed until next meeting due to time constraints.

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**Public Comment / Adjourn**

Chair

No comments from public.

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**Minutes Reviewed by:**

Kate Ellingson

**Exhibit Summary**

A – Agenda
B – September 23, 2015 Minutes
C – Reducing Healthcare-Associated Infections in Hospitals: QIN-QIO Initiatives with Acumentra Health
D – Healthcare-Associated Outbreaks: Update & Review
E – Healthcare-Associated Infection Prevention Plan
F – Proposed Update to Oregon State HAI Plan
G – High-Level Findings from Ebola Assessment Hospital Consultations
OREGON ADMINISTRATIVE RULES
OREGON HEALTH AUTHORITY, PUBLIC HEALTH DIVISION
CHAPTER 333

DIVISION 18

DISEASE REPORTING

Health Care Acquired Infection Reporting and Public Disclosure

333-018-0100
Definitions
The following definitions apply to OAR 333-018-0100 through 333-018-0145:
(1) "Adult ICU" means all specialty and non-specialty intensive care units that care for adults as defined in the NHSN Manual.
(2) "ASC" means an ambulatory surgical center as defined in ORS 442.015 and that is licensed pursuant to ORS 441.015.
(3) "Authority" means the Oregon Health Authority.
(4) "CBGB" means coronary bypass graft surgery with both chest and graft incisions, as defined in the NHSN Manual.
(5) "CAUTI" means catheter-associated urinary tract infection as defined in the NHSN Manual.
(6) "CDC" means the federal Centers for Disease Control and Prevention.
(7) "CDI" means Clostridium difficile infection as defined in the NHSN Manual.
(8) "CLABSI" means central line associated bloodstream infection as defined in the NHSN Manual.
(9) "CMS" means the federal Centers for Medicare and Medicaid Services.
(10) "Collection Month" means the month in which an infection was identified.
(11) "COLO" means colon procedures as defined in the NHSN Manual.
(12) "Committee" means the Health Care Acquired Infections Advisory Committee established in section 4, chapter 838, Oregon Laws 2007.
(13) "Dialysis facility" means outpatient renal dialysis facility as defined in ORS 442.015.
(14) "Dialysis Event" means an event that occurs in individuals who receive dialysis as defined by the NHSN Manual.
(15) "Follow-up" means post-discharge surveillance intended to detect CBGB, COLO, HPRO, HYST, KRPO, and LAM surgical site infection (SSI) cases occurring after a procedure.
(16) "HAI" means health care acquired infection as defined in section 2, chapter 838, Oregon Laws 2007.
(17) "Health care facility" means a facility as defined in ORS 442.015.
(18) "Hospital" means a facility as defined in ORS 442.015 and that is licensed pursuant to ORS 441.015.
(19) "Hospital Inpatient Quality Reporting Program (HIQRP)" means the initiative administered by CMS that provides a financial incentive to hospitals to report designated quality measures, mandated by section 501(b) of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003.
(20) "HPRO" means hip prosthesis procedure as defined in the NHSN Manual.
(21) "HYST" means abdominal hysterectomy procedure as defined in the NHSN Manual.
(22) "ICU" means an intensive care unit as defined in the NHSN Manual.
(23) "KPRO" means knee prosthesis procedure as defined in the NHSN Manual.
(24) "Lab ID" means laboratory-identified event as defined in the NHSN Manual.
(25) "LAM" means laminectomy procedure as defined in the NHSN Manual.
(26) "Licensed satellite" means hospital-affiliated outpatient clinics.
(27) "LTCF" means a long term care facility as defined in ORS 442.015.
(28) "MDS" means the CMS minimum data set nursing home resident assessment and screening tool.
(29) "Medical ICU" means a non-specialty intensive care unit in which at least 80 percent of patients served are adult medical patients.
(30) "Medical/Surgical ICU" means a non-specialty intensive care unit in which less than 80 percent of patients served are adult medical, adult surgical, or specialty patients.
(31) "MRSA" means methicillin-resistant Staphylococcus aureus as defined in the NHSN Manual.
(32) "NHSN" means the CDC's National Healthcare Safety Network.
(33) "NHSN Inpatient" means a patient whose date of admission to the healthcare facility and the date of discharge are different days as defined in the NHSN Manual.
(34) "NHSN Manual" means the 2014 patient safety component protocols, established by the CDC's NHSN, which govern the HAIs and other information required by CMS to be reported by health care facilities, found at http://www.cdc.gov/nhsn/Training/patient-safety-component/, and incorporated by reference.
(35) "NICU" means a specialty intensive care unit that cares for neonatal patients.
(36) "Non-specialty ICU" means an intensive care unit in which patients are medical, surgical, or medical/surgical patients.
(37) "Oregon HAI group" means the NHSN group administered by the Authority.
(38) "Overall-facility wide" means data are collected for the entire facility as defined in the NHSN Manual.
(39) "Patient information" means individually identifiable health information as defined in ORS 179.505.
(40) "Pediatric ICU" means a specialty intensive care unit that cares for pediatric patients.
(41) "Person" has the meaning given that term in ORS 442.015.
(42) "Procedure" means an operative procedure as defined in the NHSN Manual.
(43) "Provider" means health care services provider as defined in ORS 179.505.
(44) "QIO" means the quality improvement organization designated by CMS for Oregon.
(45) "SCIP" means the Surgical Care Improvement Project, established through collaborative efforts of the Joint Commission and CMS.
(46) "SCIP-Inf-1" means the HAI process measure defined as prophylactic antibiotic received within one hour prior to surgical incision, published by SCIP effective July 1, 2006.
(47) "SCIP-Inf-2" means the HAI process measure defined as prophylactic antibiotic selection for surgical patients, published by SCIP effective July 1, 2006.
(48) "SCIP-Inf-3" means the HAI process measure defined as prophylactic antibiotics discontinued within 24 hours after surgery end time (48 hours for cardiac patients), published by SCIP effective July 1, 2006.
(49) "SCIP-Inf-4" means the HAI process measure defined as cardiac surgery patients with controlled 6 a.m. postoperative serum glucose, published by SCIP effective July 1, 2006.
(50) "SCIP-Inf-6" means the HAI process measure defined as surgery patients with appropriate hair removal, published by SCIP effective July 1, 2006.

(51) "SCIP-Inf-9" means the HAI process measure defined as urinary catheter removed on postoperative day one or postoperative day two with day of surgery being day zero, published by SCIP effective July 1, 2006.

(52) "SCIP-Inf-10" means the HAI process measure defined as surgery patients with perioperative temperature management, published by SCIP effective July 1, 2006.

(53) "Specialty ICU" means an intensive care unit in which at least 80 percent of adult patients served are specialty patients, including but not limited to oncology, trauma, and neurology.

(54) "SSI" means a surgical site infection event as defined in the NHSN manual.

(55) "Staff" means any employee of a health care facility or any person contracted to work within a health care facility.

(56) "State agency" has the meaning given that term in ORS 192.410.

(57) "Surgical ICU" means a non-specialty intensive care unit in which at least 80 percent of patients served are adult surgical patients.

Stat. Auth.: ORS 442.420 & OL 2007, Ch. 838 | 1-6 & 12
Stats. Implemented: ORS 179.505, 192.410, 192.496, 192.502, 441.015, 442.400, 442.405, & OL 2007, Ch. 838 | 1-6 & 12

333-018-0110
HAI Reporting for Hospitals
(1) Hospitals must report to the Authority the following HAIs:
   (a) CLABSI in:
       (A) Adult, pediatric, and neonatal ICUs; and
       (B) Adult and pediatric, medical, surgical, and medical/surgical wards.
   (b) SSIs for inpatient CBGB, COLO, HPRO, HYST, KPRO and LAM procedures.
   (c) CAUTI in:
       (A) Adult and pediatric ICUs; and
       (B) Adult and pediatric medical, surgical, medical/surgical wards, and inpatient rehabilitation wards.
   (d) Inpatient CDI facility-wide lab ID events, excluding neonatal and well-baby units.
   (e) Inpatient MRSA bacteremia lab ID events.

(2) Hospitals must report to the Authority all fields required to be reported by NHSN in accordance with the NHSN manual, including discharge dates.
(3) A hospital must report the information required in section (1) of this rule to the Authority no later than 30 days after the end of the collection month.

(4) A hospital must have an infection preventionist (IP) who actively seeks out HAIs required to be reported under this rule by screening a variety of data from various sources that may include but are not limited to:
   (a) Laboratory;
   (b) Pharmacy;
   (c) Admission;
   (d) Discharge;
   (e) Transfer;
(f) Radiology;
(g) Imaging;
(h) Pathology; and
(i) Patient charts, including history and physical notes, nurses’ and physicians’ notes, and
temperature charts.

5) An IP shall use follow-up surveillance methods to detect SSIs for procedures listed in section
(1) of this rule using at least one of the following:
(a) Direct examination of patients’ wounds during follow-up visits to either surgery clinics or
physicians’ offices;
(b) Review of medical records, subsequent hospitalization records, or surgery clinic records;
(c) Surgeon surveys by mail or telephone;
(d) Patient surveys by mail or telephone; or
(e) Other facility surveys by mail or telephone.

6) A hospital may train others employed by the facility to screen data sources for these
infections required to be reported in section (1) of this rule but the IP must determine that the
infection meets the criteria established by these rules.

7) Hospitals that report the information in subsection (1)(a) to (e) of this rule through NHSN in
order to meet CMS reporting requirements, may, in lieu of reporting this information directly to
the Authority, permit the Authority to access the information through NHSN. A hospital that
permits the Authority to access the information through NHSN must:
(a) Join the Oregon HAI group in NHSN;
(b) Authorize disclosure of NHSN data to the Authority as necessary for compliance with these
rules, including but not limited to summary data and denominator data for all SSIs, the annual
hospital survey and data analysis components for all SSIs, and summary data and denominator
data for all adult, pediatric and neonatal ICUs; and
(c) Permit the Authority to access data reported through NHSN dating back to when reporting
was first required by CMS for the different HAIs.

8) All hospitals must report to the Authority on a quarterly basis the following HAI process
measures, including but not limited to definitions, data collection, data reporting and training
requirements:
(a) SCIP-Inf-1;
(b) SCIP-Inf-2;
(c) SCIP-Inf-3;
(d) SCIP-Inf-4;
(e) SCIP-Inf-6;
(f) SCIP-Inf-9; and
(g) SCIP-Inf-10.

9) Hospitals that report the information in section (8) of this rule to CMS or the Joint
Commission do not have to provide the information directly to the Authority; the Authority will
access the information through CMS or the Joint Commission. If a hospital is not reporting the
information in section (8) of this rule to CMS or the Joint Commission, in accordance with CMS
or Joint Commission reporting requirements, it must provide the information to the Authority no
later than on the 15th calendar day, four months after the end of the quarter. As CMS reporting
requirements for SCIP measures are removed, reporting requirements for the Authority will
change accordingly.
Annual Influenza Summary
Each hospital, including hospital-affiliated licensed outpatient satellites, ASC, Dialysis facility, LTCF, and IRF must submit an annual survey to the Authority, no later than May 31, on a form prescribed by the Authority, regarding influenza vaccination of staff. Facilities must report at least the following information:
(1) Number of staff with a documented influenza vaccination during the previous influenza season;
(2) Number of staff with a documented medical contraindication to influenza vaccination during the previous influenza season;
(3) Number of staff with a documented refusal of influenza vaccination during the previous influenza season; and
(4) Facility assessment of influenza vaccine coverage of facility staff during the previous influenza season and plans to improve vaccine coverage of facility staff during the upcoming influenza season.

Stat. Auth.: ORS 442.420 & OL 2007, Ch. 838 | 1-6 and 12
Stats. Implemented: ORS 442.405 & OL 2007, Ch. 838 | 1-6 and 12
Hospitals and Long-Term Acute Care Hospitals

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<tr>
<th>CMS Requirements (date requirement enacted)</th>
<th>OREGON Requirements (date requirement enacted)</th>
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<td>N/A</td>
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**NHSN Annual Survey**
- **Hospitals:** All adult, pediatric, and neonatal ICUs (2011)
- **Adult and pediatric medical, surgical, and medical/surgical wards (2015)**
- **LTACH:** All adult and pediatric ICUs and wards (Oct. 2012)

**SSI**
- Colon surgery, inpatient (2012)
- Abdominal hysterectomy, inpatient (2012)

**CAUTI – Ventriculostomy**
- Colon surgery, inpatient (2017)

**MrSA Bacteremia Lab ID Event**
- **Hospitals:** Facility-wide, inpatient (2013) – excluding neonatal and well-baby
- **LTACH:** Facility-wide, inpatient (2013)

**SCIP**
- **SCIP-INF-10 (2011)**
  - (No longer reportable: SCIP-INF-1, 2, 3, 4, 6, and 9)

**Healthcare Worker Influenza Vaccination**
- Hospitals: Inpatient (2013) and outpatient (2014)
- **Inpatient:** Inpatient (2015)
- **Inpatient Psychiatric Facilities:** (2015)

**HAI Measurement Type**

<table>
<thead>
<tr>
<th><strong>HAI Measurement Type</strong></th>
<th><strong>LONG-TERM CARE FACILITIES</strong></th>
<th><strong>AMBULATORY SURGERY CENTERS</strong></th>
<th><strong>DIALYSIS FACILITIES</strong></th>
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<td><strong>OREGON REQUIREMENTS</strong></td>
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<td><strong>DIALYSIS EVENT</strong></td>
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<tr>
<td><strong>OTHER</strong></td>
<td>All minimum data set (IMPS) elements required by the Skilled Nursing Facility Prospective Payment System</td>
<td>All minimum data set (IMPS) elements including urinary tract infection in the last 30 days (2012)</td>
<td>N/A</td>
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**HAI – Healthcare-associated infection**
- **NHSN – National Healthcare Safety Network**
- **CLABSI – Central line-associated bloodstream infection**
- **SSI – Surgical site infection**
- **CAUTI – Catheter-associated urinary tract infection**
- **MRSA – Methicillin-resistant Staphylococcus aureus**
- **SCIP – Surgical Care Improvement Project**

**ADDITIONAL MANDATORY REPORTING**
Communication of Multidrug-resistant Organisms during Patient Transfer:
When a referring healthcare facility transfers or discharges a patient who is infected or colonized with a multidrug-resistant organism (MDRO) or pathogen requiring Transmission-based Precautions, transfer documentation must include written notification of the infection or colonization to the receiving facility.7

Mandatory outbreak reporting: Healthcare facilities and providers are required to report outbreaks of HAIs including MDROs of public health significance and common source outbreaks.8

**FOOTNOTES**
1. Long-term acute care hospitals are licensed as acute care hospitals in Oregon and therefore are subject to the same reporting requirements as hospitals.
2. CMS HAI reporting requirements are for prospective Payment System hospitals, not critical access hospitals or children’s hospitals.
3. OHA has retrospective access to any HAI data made reportable to CMS prior to the Oregon requirements.
4. Oregon HAI reporting requirements apply to all Oregon hospitals except those with waiver from HAI Reporting Program. (Waivers are granted for CLABSI when facilities have fewer than 50 central line days and for SSI Reporting when facilities perform fewer than 20 mandatory procedures annually.)
5. Inpatient rehabilitation wards are recognized and licensed as acute care facilities in the state of Oregon.
NHSN Update: 
2015 Preliminary Data 

Kate Ellingson, PhD 
HAIAC Meeting 
March 23, 2016
Central Line-Associated Bloodstream Infection (CLABSI)

- 52 acute care hospitals reporting
- 169,455 central line days
- 130 infections
- SIR: 0.45 (0.38-0.53)
- 55% fewer infections than predicted
- HHS target for 2013=50% reduction
Observed CLABSIs by Location
N=130 Overall

- Medical/Surgical Critical Care
- Medical Ward
- Medical/Surgical Ward
- Surgical Ward
- Neonatal Critical Care (Level II/III)
- Pediatric Medical/Surgical Ward
- Pediatric Medical/Surgical Critical Care
- Surgical Cardiothoracic Critical Care
- Surgical Critical Care
- Medical Critical Care
- Medical Cardiac Critical Care
- Pediatric Medical Ward
- Neurosurgical Critical Care
- Neonatal Critical Care (Level III)

Chart: Observed CLABSIs: 2015, Al

- NICUs: 9%
- Adult & Pediatric Wards: 52%
- Adult & Pediatric ICUs: 39%
CLABSI Standardized Infection Ratios (SIRs) by Location Type: 2015

- NICUs
- Adult & Pediatric ICUs
- Adult & Pediatric Wards
- OVERALL
Catheter-Associated Urinary Tract Infection (CAUTI)

- 55 acute care hospitals reporting
- 189,615 catheter days
- 186 infections
- SIR: 0.54 (0.47-0.62)
  - 56% fewer infections than predicted
  - HHS target for 2013=25% reduction
  - Major changes in CAUTI definition
Observed CAUTI by Location: N=186 Overall

- Medical/Surgical Critical Care
- Medical Ward
- Neurosurgical Critical Care
- Medical/Surgical Ward
- Surgical Ward
- Surgical Cardiothoracic Critical Care
- Surgical Critical Care
- Medical Critical Care
- Medical Cardiac Critical Care
- Rehabilitation Ward
- Pediatric Medical/Surgical Critical Care
- Pediatric Medical/Surgical Ward
- Pediatric Medical Ward

Number of CAUTI

Adult & Pediatric Wards 37%
Adult & Pediatric ICUs 63%
CAUTI Standardized Infection Ratios (SIRs) by Location Type: 2015
Surgical Site Infection (SSI): Complex Deep/Organ Space

- 34763 procedures reported
- 196 complex SSIs
- SIR: 0.59 (0.51-0.67)
- 41% fewer than predicted
- 2013 HHS target=25% reduction
Procedure Counts and Infections

Complex Surgical Site Infections

```
<table>
<thead>
<tr>
<th>Procedure Type</th>
<th>Procedures Performed</th>
<th>Infections Observed</th>
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<tbody>
<tr>
<td>CBGB</td>
<td>2000</td>
<td>5</td>
</tr>
<tr>
<td>COLO</td>
<td>3000</td>
<td>7</td>
</tr>
<tr>
<td>HPRO</td>
<td>8000</td>
<td>10</td>
</tr>
<tr>
<td>HYST</td>
<td>2000</td>
<td>3</td>
</tr>
<tr>
<td>KPRO</td>
<td>6000</td>
<td>5</td>
</tr>
<tr>
<td>LAM</td>
<td>4000</td>
<td>4</td>
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</table>
```

Procedure Count  Infections Observed
Surgical Site Infection SIRs: 2015

Deep Incisional / Organ Space SSI Standard Infection Ratios (SIRs)

SIR

0.2

0.4

0.6

0.8

1.0

1.2

CBGB  COLO  HPRO  HYST  KPRO  LAM  OVERALL

Procedure Type
**C. difficile LabID Reporting**

- 60 acute care hospitals reporting
- 1,384,114 patient days
- 898 hospital-onset infections
- SIR: 0.88 (0.82-0.94)
- 12% fewer infections than expected
- HHS target for 2013: 30% reduction
MRSA Bloodstream Infection LabID Reporting

- 57 acute care hospitals reporting
- 1,485,425 patient days
- 49 hospital-onset infections
- SIR: 0.58 (0.43-0.75)
- 42% fewer infections than expected
- HHS target for 2013: 25% reduction
Next Steps

• Verify data with facilities
  – Facility-specific spreadsheets by 3/31
  – Finalize by 4/29

• Abbreviated print reports
  – Executive summary
  – Aggregate data by infection

• Facility-specific data on data.Oregon.gov

• Facility-specific data on updated map
Questions?
Follow Up?

Kate Ellingson
katherine.ellingson@state.or.us
<table>
<thead>
<tr>
<th>Etiology</th>
<th>Count</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norovirus</td>
<td>30</td>
<td>LTCF (20), school (2), restaurant (3) other* (5)</td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Salmonella</em></td>
<td>1</td>
<td>workplace</td>
</tr>
<tr>
<td><em>Shigella</em></td>
<td>1</td>
<td>MSM/Homeless population</td>
</tr>
<tr>
<td>Sapovirus</td>
<td>3</td>
<td>LTCF</td>
</tr>
<tr>
<td>Cryptosporidium</td>
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<td>DCC (1), community (1)</td>
</tr>
<tr>
<td>unknown</td>
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<tr>
<td>Respiratory</td>
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<tr>
<td>Influenza</td>
<td>5</td>
<td>LTCF (3), Hospital (1), school (1)</td>
</tr>
<tr>
<td>RSV</td>
<td>3</td>
<td>LTCF (2), school (1)</td>
</tr>
<tr>
<td>Mixed (RSV + human</td>
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<td>LTCF</td>
</tr>
<tr>
<td>metapneumovirus)</td>
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<td></td>
</tr>
<tr>
<td>Strep pyrogenes</td>
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<td>school</td>
</tr>
<tr>
<td>Coronavirus</td>
<td>1</td>
<td>Hospital/LTCF</td>
</tr>
<tr>
<td>Unknown</td>
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<td>school (4), LTCF (3), shelter (1)</td>
</tr>
<tr>
<td>Rash</td>
<td>4</td>
<td>school</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>school (2), Hospital (1)</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td></td>
</tr>
</tbody>
</table>

*Other includes: cafeteria, private home, caterer, shelter
Healthcare associated outbreaks, Jan 1-Mar 18th, 2016

- Healthcare associated infections account for 54.2% (n=45) of all outbreaks from January to March 2016
- Most common syndrome was gastroenteritis
  - 75.5% of all outbreaks in a healthcare setting (n=34)
  - All but 2 outbreaks were in LTCF
    - Other 2 were in hospitals
- Of the 34 outbreaks, 20 were confirmed (2+ positive specimens) norovirus
  - 15/20 are norovirus GII

<table>
<thead>
<tr>
<th>Norovirus GII</th>
<th># Outbreaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GII.4 Sydney</td>
<td>4</td>
</tr>
<tr>
<td>GII.4 Untypeable</td>
<td>2</td>
</tr>
<tr>
<td>GII.2</td>
<td>1</td>
</tr>
<tr>
<td>GII. 3</td>
<td>1</td>
</tr>
<tr>
<td>GII.17 Kawasaki</td>
<td>1</td>
</tr>
<tr>
<td>Not typed (yet)</td>
<td>6</td>
</tr>
</tbody>
</table>

- 3 confirmed sapovirus all in ALF
Healthcare associated outbreaks, Jan 1-Mar 18\textsuperscript{th}, 2016

- 10 out of 45 (22\%) healthcare associated outbreaks were respiratory in nature
- 8/10 (80\%) occurred in a LTCF
- 2/10 (20\%) occurred in a hospital wing

<table>
<thead>
<tr>
<th>Etiology</th>
<th># Outbreaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A</td>
<td>3</td>
</tr>
<tr>
<td>Influenza B</td>
<td>1</td>
</tr>
<tr>
<td>RSV</td>
<td>1</td>
</tr>
<tr>
<td>RSV/human metapneumovirus</td>
<td>1</td>
</tr>
<tr>
<td>Coronavirus</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>3</td>
</tr>
</tbody>
</table>
Outbreak Reporting

• Encourage all facilities to report outbreaks
  – Defined as 2 or more cases with symptoms clustered in time and space
• Why report?
  – Surveillance system: depends on you to report your outbreaks
  – Non regulatory (at all, whatsoever)
  – Help with laboratory testing
  – Consultation with epidemiologists trained in outbreak response
• Recently had a hospital report our first SSI cluster
  – Our role: consultation with the IPs, bring in subject matter expertise
Zika Updates & Resources

Zika Virus Updates

10 things Oregonians should know about Zika

1. Zika is primarily mosquito-borne. It can also be sexually transmitted from men who develop Zika symptoms after infection to their partners.

2. Two types of mosquitoes are known to spread Zika virus; neither is found in Oregon.

3. Symptoms of Zika include fever, rash, joint pain and redness of the eyes.

4. Zika symptoms are mild, and serious illness requiring hospitalization is uncommon.

5. There is some evidence that Zika might put babies at risk of birth defects when this association has not been proven and is under active investigation.

6. A handful of Zika cases have occurred in Oregon in recent years; all were associated with Zika transmission.

7. There is no treatment or vaccine for Zika, but it can be prevented by using insect mosquito bites, and avoiding unprotected sex with persons infected with the virus.

8. The Oregon Health Authority (OHA) is working with local county health departments to identify and test appropriate persons for Zika virus.

9. The Centers for Disease Control and Prevention (CDC) is providing testing for ZOBT to patients in state public health labs.

10. The CDC recommends pregnant women postpone travel to areas where Zika is circulating to a Zika-affected region and who have a pregnant partner should avoid

Confirmed Zika Cases in Oregon, 2016

As of 3/22/2016

Travel-associated cases: 6
Oregon mosquito-acquired cases: 0
Total: 6

Zika Virus Information for Oregon Health Care Providers

Anyone returning from an area where Zika virus is circulating should avoid mosquito bites for at least 2 weeks after returning to avoid possible transmission of Zika virus into Oregon's mosquito population.

Men returning from regions with active Zika transmission should avoid unprotected sex with pregnant partners for the duration of pregnancy.

SEE ALSO: Zika virus updates and Zika virus information for travelers

On this page:

- Disease reporting
- Symptoms
- Whom to test
- Information to collect
- Testing process
- Women considering pregnancy
- Pregnant women and men with pregnant partners
- For pediatric providers


Bitly.com/ZikaOregon
Thank You

http://public.health.oregon.gov

alexia.y.zhang@state.or.us
HEALTHCARE-ASSOCIATED INFECTIONS
ADVISORY COMMITTEE:
EBOLA GRANT OVERVIEW PART B

March 23, 2016
Mary T. Post, RN, MS, CNS, CIC
Director, Infection Prevention
Oregon Patient Safety Commission
Centers for Disease Control (CDC) Ebola Grant

Focus: build 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
Part B. Targeted Infection Prevention Assessments

- The CDC is funding on-site infection prevention assessments for facilities across the continuum of care.
- Oregon is using a regional approach in facility selection with a goal to build partnerships between facilities in the same vicinity.
- 25 facilities will be offered the opportunity for consultations during the first year; numbers will increase to a minimum of 35 in subsequent years.
- Include Local Health Department, local APIC member on visits.
  - Cross-pollination, practice ICAR tools.
Selection Criteria

• Team reviewed the following data elements
  • Point system using HAI NHSN Data (two years), HAI CADs
  • Outbreak and unusual pathogen data (e.g., Noro, Flu, CRE, NTM)
  • CMS Nursing Home Compare (star rating)
  • Healthcare worker Influenza immunization rates
  • Regulatory Surveyors Recommendation
  • Regional Dialysis Network Recommendation

• Some facilities have requested consults due to infection clusters

• Thoughts for future:
  • Focus on region, healthcare chains or systems
  • Focus on facilities with new Infection Preventionists
General Infection Prevention Assessments

- 19 assessments provided to date
  - 2 ASC, 1 Clinic, 6 hospital, 3 dialysis center, 1 assisted living facility, 6 nursing home/skilled nursing facility
- Four more are scheduled to be completed by next week with the remaining 2 first year consultations to be completed by April 15, 2016
  - Remaining: 1 hospital, 3 long-term care, 2 ambulatory
- Initial challenges getting through the door have been resolved
What Are the Consultations Like?

• CDC has developed 4 different tools – Acute Care, Long-term Care, Dialysis, and Ambulatory
• Each tool has different domains and requirements
• Template agendas have been created for each facility setting
• The majority of information to complete the tool is now obtained through observations, audits, and staff interviews in the clinical care areas
During the visit

- Opening Conference
- Brief tour of facility (Dialysis, Ambulatory, LTCF’s)
- Perform unit observations, audits, and staff interviews (varies by facility type)
- Chart audits- interfacility transfer communication, antibiotic orders
- Review IC Policy & Procedures, educational training records
- Address additional concerns
- Exit Conference
- Visit length varies by facility size, but most take a full day
Observations and Audits

- Blood glucose monitoring and medication administration
- Hand hygiene and contact precautions
- Urinary or vascular catheter insertion and/or maintenance audits
- Environmental cleaning – bathroom and room cleaning
- Wound care
- Catheter access techniques
- Surgical procedure including OR set-up and room turnover
- Observations and interviews in sterile processing departments including high-level disinfection procedures
A Caution Regarding the Findings

• For most domains, the CDC Tools routinely ask about:
  • Observational competency training programs on hire, annually, and when equipment changes
  • Periodic audits (monitors and documents) with performance feedback to personnel
• The majority of facilities have zeros in most domains that require observational competencies, with the exception being dialysis facilities
• This is not reflective of the quality of care provided nor a regulatory requirement; rather it is reflective of the processes the CDC and others would like to see facilities have in place in the future
HOSPITAL DATA
Infection Control Program Infrastructure

• Five of six facilities met all infrastructure requirements (83%)
• One facility had outdated infection control policies and procedures
• 50% of Infection Preventionists were certified in infection prevention
Hand Hygiene Domain

- Only one hospital met all elements of the hand hygiene domain (17%)
- Hospitals routinely had audits with performance feedback, but lacked observational competencies
- Supplies were available (100%)
- Policies promote preferential use of alcohol based handrubs (100%)
Personal Protective Equipment (PPE) Domain

• No facility met all elements primarily due to observational competency and audit requirements
• PPE supplies were available (100%)
• If appropriate, hospitals had required N-95 mask fit testing programs (100%)
Prevention of Catheter-Associated Urinary Tract Infection Domain

- No hospital met all elements of the domain due to competency and audit requirements
- 66% had identified champions for CAUTI prevention activities
- 33% assessed catheter necessity on a daily basis
- All used NHSN data to drive improvement efforts
- 83% provided feedback of data to frontline staff
Prevention of Central Line-Associated Bloodstream Infection Domain

• No hospital met all elements of the domain due to competency and audit requirements
• 17% had identified champions for CLABSI prevention activities
• 50% assessed catheter necessity on a daily basis
• All used NHSN data to drive improvement efforts
• 66% provided feedback of data to frontline staff
Prevention of Ventilator-Associated Event (VAE) Domain

- No hospital met all elements of the domain due to competency and audit requirements
- 50% had identified champions for VAE prevention activities
- 100% assessed ventilator necessity on a daily basis
- 100% had daily spontaneous breathing trials with lightening of sedation and oral hygiene programs
- All used NHSN data to drive improvement efforts
- 66% provided feedback of data to frontline staff
Injection Safety Domain

- No hospital met all elements of the domain due to competency and audit requirements
- No hospital has drug diversion prevention program that includes consultation with the IP program when drug tampering is suspected or identified to assess patient safety risks
- No hospital could describe how they would assess risk to patient if tampering is suspected or identified
- Observational findings:
  - Most hospitals have eliminated use of multidose vials with the exception of the anesthesia carts
  - Compliance with USP 797 Immediate use guidelines, labeling guidelines were frequently observed
Prevention of Surgical Site Infection (SSI) Domain

- No hospital met all elements of the domain due to competency and audit requirements
- 100% had surgical care improvement program
- All used NHSN data to drive improvement efforts
- 83% provided feedback of data to frontline staff and surgeons
- Observational Findings:
  - Instructions for application of CHG surgical skin antiseptic including drying time was not consistently followed
  - Discussion and feedback regarding sterile technique beneficial
  - Review of OR set-up and turnover helpful
Prevention of Clostridium Difficile Infection (CDI) Domain

• No hospital met all elements of the domain due to competency and audit requirements
• 33% had identified champions for CDI prevention activities
• 100% used NHSN data to drive prevention activities
• 66% provides feedback to frontline staff
• 17% had specific antibiotic (ATB) stewardship strategies in place to reduce CDI
  • 66% had strategies in place to reduce unnecessary use of ATBs that are high-risk for CDI (e.g., fluoroquinolones)
  • 50% reviewed appropriateness of ATBs prescribed for treatment of other conditions (e.g., UTIs) with new or recent CDI diagnosis
Environmental Cleaning Domain

• No hospital met all elements of the domain due to competency and audit requirements
• 33% had policies that clearly define responsibilities for cleaning and disinfection of non-critical equipment

Observational Findings:
Environmental Services staff able to articulate dwell times for specific disinfectants as well as practices for transmission-based precautions
Device Reprocessing Domain

- No hospital met all elements of the domain due to competency and audit requirements
- 100% maintained load documentation
- 83% maintained log for QC checks of high-level disinfectants
- 17% consult IP when new equipment or products will be purchased
- No hospital had a P & P outlining hospital risk assessment process in the event of a reprocessing error
- Observational Findings:
  One breach observed during immediate-use sterilization
  Recommendations made regarding labeling, packing, workflow
Systems for Healthcare Associated Infection and Multidrug-Resistant Organisms (MDROs) Domain

- 83% had systems in place for early detection and management of potentially infectious persons at initial points of entry to the hospital and during the hospital stay.
- 66% had interfacility communication of isolation requirement in place, but 66% was not in written form on front face sheet.
- 17% have a system to notify facilities where patients have been transferred of positive culture results.
- No facility reported consistent facility notification of identified infections that may be related to care at the facility that were present on admission.
- 50% of facilities had ATB Stewardship program that meets the 7 CDC core elements.
LONG-TERM CARE FACILITY DATA
Infection Control Program and Infrastructure Domain

• 80% had identified IP, usually the DNS
• Time reported spent on IC by IP on average was 4 hours a month
• All report IP training, though not at APIC/SHEA or state IP Fundamentals course
• All use policies and procedures based on CDC guidelines, but many do not have facility specific policies (e.g., use purchased text or corporate policy manuals)
Healthcare Personnel and Resident Safety Domain

• One facility (20%) meet all domain requirements
• 100% have work-exclusion policies concerning avoiding contact with residents when ill
• All conduct employee TB screening
• 60% of facilities need to conduct facility specific annual TB Risk assessment
• 100% offered free Hepatitis B and influenza vaccinations to employees. Reported vaccination rates ranged from 50%-80%
• 100% screen residents for TB on admission to the facility
• 60% are screening residents for two pneumococcal vaccine
Surveillance and Disease Reporting Domain

- 80% had written intake procedures to ID potentially infectious persons on admission
- 60% have system for notification of IP when MRDOs or CDI are reported by clinical lab
- 40% have written surveillance plan
- 80% do not have processes in place to follow up on clinical information when residents are transferred to acute care hospitals for management of suspected infections, including sepsis
- 100% have procedures in place to report and notify county health departments of potential outbreaks and reportable infections
Hand Hygiene Domain

- No LTCF met all elements of the hand hygiene domain
- 20% had policies for preferential use of alcohol-based hand rub
- No facilities had observational competencies and audits in place with performance feedback
- 60% had supplies necessary for HH
- Observational findings:
  - Audited HH rates ranged between 30-50%
  - HH commonly not practices after glove removal, esp. by EVS staff
Personal Protective Equipment (PPE) Domain

- No facility met all elements primarily due to observational competency and audit requirements
- 80% have PPE selection and use policies
- 100% have transmission-based precautions P & P
- 80% had supplies available, though gowns were not always readily accessible
  - Observational findings:
  - Gown use needs to be increased for standard precautions, esp. when changing soiled bed lines and doing wound dressing changes
Respiratory/Cough Etiquette Domain

• One facility met all elements of the domain
• 80% have signage posted at entrances
• 80% have required supplies located at entrances and common areas
• 80% educate families and visitors to notify staff and take appropriate precautions if they are having symptoms of respiratory infection
• All staff receive education on respiratory precautions
Antibiotic Stewardship (ASP) Domain

• No LTCF met all elements of the domain
• LTCFs report not having leadership support, identified individuals accountable for leading ASP efforts, policies and procedures, or ADP education of providers and staff
• 80% report access to individuals with ATB prescribing expertise
• All facilities report access to a report summarizing ATB use from pharmacy data
  • Audit Findings:
    • 50% of medication orders are not written with indication nor stop dates
Injection Safety and Point of Care Domain

• No LTCF met all elements of the domain due to competency and audit requirements
• All facilities have supplies necessary for safe injection practices
• All LTCFs had drug diversion prevention policies in place
• Observational findings:
  • Facilities were not always using approved glucometer monitoring in-between resident use
  • One facility was using a glucometer not approved for multi-resident use
  • Multi-dose vials other than for TB were not shared
  • Insulin pens were not shared between residents
Environmental Cleaning Domain

- No LTCF met all elements of the domain due to competency and audit requirements
- 80% had written cleaning/disinfection policies for routine and terminal cleaning, including for rooms of residents on contact precautions (e.g., CDI)
- 20% clearly define responsibilities for cleaning and disinfection of non-critical equipment

Observational Findings:
- Use of microfiber products common
- Environmental Services staff not able to articulate dwell times for specific disinfectants nor consistent solution mixing practices
- Staff often not following clean-dirty work flow with appropriate removal of gloves as
AMBULATORY FACILITY FINDINGS-PART ONE
Findings

• Three ambulatory facilities have had consultations to date
• 2 of 3 do not have designated IP with adequate training
• None have competency based training programs
• All offer HBV and influenza vaccine to HCW
• All have surveillance programs in place
• None have competency based Hand Hygiene, PPE selection, blood glucose monitoring, or injection safety training programs or audits
• Use of shared multi-dose vials in immediate clinical areas observed
• Respiratory Hygiene/Cough Etiquette programs in place
• Environmental cleaning training and audits have not been implemented
• Lapses in sterilization of reusable devices and high-level disinfection practices observed
DIALYSIS FACILITY FINDINGS-
PART ONE
CDC Urging Dialysis Providers and Facilities to Assess and Improve Infection Control Practices to Stop Hepatitis C Virus Transmission in Patients Undergoing Hemodialysis

The Centers for Disease Control and Prevention (CDC) has received an increased number of reports of newly acquired hepatitis C virus (HCV) infection among patients undergoing hemodialysis. Infection control lapses in dialysis care could expose patients to HCV. Any case of new HCV infection in a patient undergoing hemodialysis should prompt immediate action. CDC is urging dialysis providers and facilities to:

1) Assess current infection control practices and environmental cleaning and disinfection practices within the facility to ensure adherence to infection control standards;
2) Address any gaps identified by the assessments;
3) Screen patients for HCV, following CDC guidelines, to detect infections, determine treatment potential, and halt secondary transmission; and
4) Promptly report all acute HCV infections to the state or local health department.
Findings

• Three dialysis facilities have had consultations to date
• 2 of 3 have designated IP with specific IP training
• All facilities had competency based training programs with periodic audits
• All offer HBV and influenza vaccine to HCW as well as screen for TB
• All have surveillance programs in place
• None have competency based Hand Hygiene, PPE selection, blood glucose monitoring, or injection safety training programs or audits
• Use of shared multi-dose vials in immediate clinical areas observed
• Respiratory Hygiene/Cough Etiquette programs in place
• Dialysis station disinfection training and audits have not been implemented; no facility complies with CDC recommendations
• CDC catheter exit site care recommendations not being followed
Summary of Findings Across the Continuum of Care

• Sharing of multi-dose vials in immediate care areas and labeling and use of immediate use medications remains an issue for anesthesiologists; recommend partnership with pharmacy
• Implementation of Oregon IFT written communication requirements is incomplete
• Reports such as bundle elements are sometimes lost with EHR implementation
• Antibiotic stewardship programs are being implemented in hospitals, but other settings require additional support and resources
• Instrument sterilization and high-level disinfection practices can be improved across all facility settings
• Training programs for Environmental Services teams need to be developed and implemented
• The Infrastructure of Infection Prevention programs outside the hospital setting need additional dedicated, trained resources
Consultation Takeaways

• Consultations have validated the reasons for ongoing competency-based training, performance feedback, and routine auditing of infection prevention practices
  • Hardwires training for new employees and new graduates
  • Rural areas often orienting staff who have no experience in their new positions so they need robust training programs
  • Practices “drift” unless reinforced
  • Individuals responsible for a process leave employment and no one is trained to continue the effort
  • When there are no infections for several months, (e.g., CAUTIs, CLABSIs), it’s still important to celebrate and keep everyone thinking about prevention
  • Presence and feedback is an important component of infection prevention – care happens at the bedside
Next Steps

• Finalize first year baseline consultations
• Continue analysis of findings during April
• Plan mitigation on-site consultations
• Incorporate findings into IP Fundamentals Training Course and other educational offerings
• Hold regional meetings between healthcare facilities, local county health departments, emergency preparedness representatives with state health department involvement
• Begin identifying second year facilities who may benefit from a general IP consultation
Prevention Focus: Making Every Injection Safe

Kate Ellingson, PhD
HAIAC Meeting
March 23, 2016
Small CDC Grant to Improve Injection Safety Practices in OR

- Member state: One and Only Campaign
- Raise awareness
  - Public health professionals
  - Provider communities
- Focus on rural area
  - Survey of practices
  - Targeted interventions
Safe Injection Practices

- >50 outbreaks in US from 1998-2014 due to unsafe injections
- >700 patients infected
- >150,000 patients notified of potential exposure
- Syringe reuse
- Improper use of single/multi dose vials
- Improper use of glucose monitoring equipment

http://www.oneandonlycampaign.org/
Syringe Reuse: Unthinkable? Think again

Infection Control Assessment of Ambulatory Surgical Centers

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Arjun Srinivasan, MD
Joseph F. Perz, DrPH, MA

Context More than 5000 ambulatory surgical centers (ASCs) in the United States participate in the Medicare program. Little is known about infection control practices in ASCs. The Centers for Medicare & Medicaid Services (CMS) piloted an infection control audit tool in a sample of ASC inspections to assess facility adherence to recommended practices.

Objective To describe infection control practices in a sample of ASCs.

Design, Setting, and Participants All State Survey Agencies were invited to participate. Seven states volunteered; 3 were selected based on geographic dispersion, number of ASCs each state committed to inspect, and relative cost per inspection. A stratified random sample of ASCs was selected from each state. Sample size was based on the number of inspections each state estimated it could complete between June and October 2008. Sixty-eight ASCs were assessed; 32 in Maryland, 16 in North Carolina, and 20 in Oklahoma. Surveyors from CMS, trained in use of the audit tool, assessed compliance with specific infection control practices. Assessments focused on 5 areas of infection control: hand hygiene, injection safety and medication handling, equipment reprocessing, environmental cleaning, and handling of blood glucose monitoring equipment.

Main Outcome Measures Proportion of facilities with lapses in each infection control category.

Results Overall, 46 of 68 ASCs (67.6%; 95% confidence interval [CI], 55.9%-77.9%) had at least 1 lapse in infection control; 12 of 68 ASCs (17.6%; 95% CI, 9.9%-28.1%) had lapses identified in 3 or more of the 5 infection control categories. Common lapses included using single-dose medication vials for more than 1 patient (18/64; 28.1%; 95% CI, 18.2%-40.0%), failing to adhere to recommended practices regarding reprocessing of equipment (19/67; 28.4%; 95% CI, 18.6%-40.0%), and lapses in handling of blood glucose monitoring equipment (25/54; 46.3%; 95% CI, 33.4%-59.6%).

Conclusion Among a sample of US ASCs in 3 states, lapses in infection control were common.

JAMA. 2010;303(22):2273-2279

OVER THE LAST SEVERAL DECADES, health care delivery in the United States has shifted toward the outpatient setting; ambulatory surgery in particular has been an area of immense growth. Ambulatory surgical centers (ASCs) are defined by the Centers for Medicare & Medicaid Services (CMS) as facilities that operate exclusively to provide surgical services to patients who do not require hospitalization or stays in a surgical facility longer than 24 hours.1
Resources for Long-term Care Facilities

BE AWARE DON’T SHARE

Insulin pens that contain more than one dose of insulin are only meant for one person.

Insulin pens should never be used for more than one person.

They are only approved for use on individual patients, even when the needle is changed or when there is leftover medicine. No exceptions.

ONE INSULIN PEN, ONLY ONE PERSON

The One & Only Campaign is a public health effort to eliminate unsafe medical injections. To learn more about safe injection practices, please visit OneandOnlyCampaign.org.

For the latest news and updates, follow us on Twitter @injectionsafety and Facebook/OneandOnlyCampaign.

This material was developed by CDC. The One & Only Campaign is made possible by a partnership between the CDC Foundation and Lilly USA, LLC.
Drug Diversion: not just a hospital problem

Drug diversion* spreads infection from healthcare providers to patients

Healthcare Provider
with Hepatitis C or other bloodborne infection tampers with injectable drug

Contaminated injection equipment and supplies present in the patient care environment

Exposure of patient results from use of contaminated drug or equipment for patient injection or infusion

*Drug diversion occurs when prescription medicines are obtained or used illegally by healthcare providers.

For more information, visit CDC.Gov/Injectionsafety/Drugdiversion
Multi-State HCV Outbreak: 2012

- 45 cases of HCV in NH, KS & MD associated with radiology technician
- David Kwiatkowski diverts opiates in MI, KS, AZ, MD, NY, PA, NH
- Investigation reveals holes in licensure, certification, placement, hospital detection programs, and peer/supervisor reporting
- Perpetrator sentenced to 39 years in prison

Why? Increasing Opioid Use

Figure 2. Rates of opioid overdose deaths, opioid sales, and opioid substance abuse treatment admissions, United States, 1999-2010

Mechanisms of Diversion

- **False documentation:**
  - medication dose not actually administered to the patient or “wasted” but instead saved for later use

- **Scavenging** of wasted medication (e.g., removal of residual medication from used syringes)

- **Theft by tampering:**
  - removal of medication from a container or syringe and replacement with saline or other solution
CDC Resources

http://www.cdc.gov/injectionsafety/drugdiversion/
Injection Safety Training Videos

http://www.oneandonlycampaign.org/content/audio-video

OREGON PUBLIC HEALTH
Acute & Communicable Disease Prevention
Questions?
Follow Up?

Kate Ellingson
katherine.ellingson@state.or.us
HEALTHCARE-ASSOCIATED INFECTIONS ADVISORY COMMITTEE: CAUTI PREVENTION IN LONG-TERM CARE

March 23, 2016
Mary T. Post, RN, MS, CNS, CIC
Director, Infection Prevention
Oregon Patient Safety Commission
Incidence of UTIs in NH/SNFs

- UTIs are the most commonly reported and treated infection in NH/SNF residents
- UTIs account for 30% of hospital readmissions from NH/SNFs within 30 days
- CMS estimates UTIs cost the healthcare system $450 million each year
- Catheter use only 5% in NH/SNFs
Clinical Manifestations of UTIs in Elderly

- 50% of bloodstream infections in NH/SNF residents are associated with UTIs (28 day mortality 5%)
- Risk of UTI increases 3-7% every day with Foley in place
- Impaired renal function makes antibiotic management difficult
Oregon Stop UTI Initiatives

Two separate urinary tract infection (UTI) prevention grants working together

- **AHRQ Long-Term Care Collaborative**
  (funded by Agency for Healthcare Research and Quality Safety Program for Long-Term Care: CAUTI)
  - Seventeen facilities enrolled (9 completed project)

- **Portland Metro Collaborative Pilot**
  (funded by Oregon Long-Term Care Quality Fund Grant)
  - Ten facilities enrolled (9 completed project)
AHRQ: CAUTI Cohort Participants

- **Cohort 1**
- **Cohort 2**

The map shows the distribution of Cohort 1 and Cohort 2 across various states in the United States.
# Stop UTI Initiatives Timeline

<table>
<thead>
<tr>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug</td>
<td>Sep</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>Onboarding webinars</td>
<td></td>
</tr>
<tr>
<td>Training webinars</td>
<td></td>
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<tr>
<td>Coaching webinars</td>
<td></td>
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<tr>
<td>Learning sessions</td>
<td></td>
</tr>
<tr>
<td>Data collection and submission</td>
<td></td>
</tr>
<tr>
<td>Phone consultation</td>
<td></td>
</tr>
<tr>
<td>Pilot tools</td>
<td></td>
</tr>
<tr>
<td>On-site consultation</td>
<td></td>
</tr>
</tbody>
</table>

AHRQ Collaborative and Pilot Group

Pilot Group only
Infections are a leading cause of illness and death in nursing homes.

These infections include catheter-associated urinary tract infections (CAUTIs).

**CAUTI**

**Catheter Removal**
- Think about catheters in any of your residents. Are the catheters really necessary?
- Remove the catheter if there is no good indication for it. (See below.)
- Every resident deserves a chance to be catheter-free and infection-free.

**Aseptic Insertion**
- Only trained personnel should insert catheters.
- Use hand hygiene, and insert using aseptic technique.
- Use the smallest catheter size that will work for the resident.
- Avoid contamination of the catheter.
- Use catheter securing devices.

**Use Regular Assessments**
- Insert new urinary catheters only when there is a good indication.
- Consider alternatives to using a urinary catheter.
- Use a bladder ultrasound to guide management.
- Implement a process to see whether residents need catheters.

**Training for Catheter Care**
- Train staff, resident, AND family.
- Maintain a closed drainage system, and maintain unobstructed urine flow.
- Use routine hygiene. Do not clean the perineal area with antiseptics.
- Routine catheter changes, urinalysis, and cultures are not required.

**Incontinence Care Planning**
- Consider alternatives to using a urinary catheter when developing individual resident care plans and behavioral interventions.
- Consider timed and prompted voiding and use of a voiding diary.

**Appropriate Indications for a Urinary Catheter**
- To assist healing of stage III or stage IV perineal and sacral wounds in incontinent residents
- Chronic and acute urinary retention or obstruction
- Hospice or palliative care associated with intractable pain

Would you like to know more? Participation in the AHRQ Safety Program for Long-Term Care: CAUTI gives you access to informative resources and events such as educational webinars and state-level training sessions that will help you to provide safer care for your residents. Talk to the project lead in your facility, or visit www.ltcquality.org (login and password: ltcquality).

**The AHRQ Safety Program for Long-Term Care: CAUTI**

Funded by the Agency for Healthcare Research and Quality
Urine Cultures and Antibiotics

• Avoid obtaining urine cultures unless clinically indicated
• Expect urine cultures to be positive in the elderly - bacteriuria does not necessarily equate to infection
• Use cultures to guide antibiotic selection
• Do not treat asymptomatic bacteriuria except for select conditions
Stop UTI Initiatives

NHSN UTI Criteria Algorithm

Did the date of event* occur 3 or more calendar days* after the resident’s most recent admission* to your facility?

**NO**

Not a long-term care facility (LTCF) reportable UTI

Please inform the referring facility of the possible infection

**YES**

Did the resident have an indwelling catheter (e.g., Foley catheter) in place on the date of event AND was the catheter in place for >2 calendar days?

**NO**

Does the resident meet one of the following sets of criteria?

**YES**

Did the resident have an indwelling catheter that was removed ≤ 2 calendar days before date of event?

**YES**

**ONE OR MORE** of the following with no alternate source:
- Fever*
- Rigors*
- New onset hypotension (low blood pressure), with no alternate site of infection
- New onset confusion/functional decline AND Leukocytosis*
- New costovertebral angle* pain or tenderness
- New or marked increase in suprapubic (lower abdominal) tenderness
- Acute pain, swelling or tenderness of the testes, epididymis, or prostate
- Purulent (milky, pus-like) discharge from around the catheter

**AND ANY** of the following:

If urinary catheter in place:
- Positive culture with ≥ 10⁵ (i.e., 100,000) CFU/ml of any microorganisms from indwelling catheter specimen

If urinary catheter removed within last 2 calendar days:
- A voided urine culture with ≥ 10⁵ (i.e., 100,000) CFU/ml of no more than 2 species of microorganisms
- Positive culture with ≥ 10⁴ (i.e., 100) CFU/ml of any microorganisms from straight in/out catheter specimen

**AND**

No localizing urinary signs or symptoms (i.e., no urgency, frequency, acute dysuria, suprapubic tenderness, or costovertebral angle pain or tenderness)

If no catheter is in place, fever alone would not exclude ABUT if other criteria are met

**AND ANY** of the following:

- Acute dysuria (painful urination)
- Acute pain, swelling, or tenderness of the testes, epididymis or prostate

**EITHER** of the following:
- Fever*
- Leukocytosis*

**AND ONE OR MORE** of the following:
- Costovertebral angle* pain or tenderness
- New or marked increase in suprapubic (lower abdominal) tenderness
- Gross hematuria (blood in the urine)
- New or marked increase in one or more of the following: urinary incontinence, urinary urgency, urinary frequency

**TWO OR MORE** of the following:
- Costovertebral angle* pain or tenderness
- New or marked increase in suprapubic (lower abdominal) tenderness
- Gross hematuria (blood in the urine)
- New or marked increase in urinary incontinence
- New or marked increase in urinary urgency
- New or marked increase in urinary frequency

**AND Either** of the following:
CAUTI Rate Compared to Cohort 2

<table>
<thead>
<tr>
<th>Month</th>
<th>Cohort 2 Facilities</th>
<th>All active OR facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 2014</td>
<td>5.63</td>
<td>4.69</td>
</tr>
<tr>
<td>Dec 2014</td>
<td>6.98</td>
<td>4.42</td>
</tr>
<tr>
<td>Jan 2015</td>
<td>4.96</td>
<td>2.07</td>
</tr>
<tr>
<td>Feb 2015</td>
<td>4.32</td>
<td>0.00</td>
</tr>
<tr>
<td>Mar 2015</td>
<td>4.39</td>
<td>2.49</td>
</tr>
<tr>
<td>Apr 2015</td>
<td>3.46</td>
<td>1.25</td>
</tr>
<tr>
<td>May 2015</td>
<td>4.13</td>
<td>0.00</td>
</tr>
<tr>
<td>Jun 2015</td>
<td>4.29</td>
<td>2.46</td>
</tr>
<tr>
<td>Jul 2015</td>
<td>4.00</td>
<td>4.87</td>
</tr>
<tr>
<td>Aug 2015</td>
<td>2.97</td>
<td>1.52</td>
</tr>
<tr>
<td>Sep 2015</td>
<td>3.33</td>
<td>1.53</td>
</tr>
<tr>
<td>Oct 2015</td>
<td>2.83</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Catheter Utilization

![Graph showing catheter utilization trends from Nov 2014 to Oct 2015.]

- Cohort 2 Facilities:
  - Nov 2014: 4.13%
  - Dec 2014: 4.66%
  - Jan 2015: 4.46%
  - Feb 2015: 4.74%
  - Mar 2015: 4.77%
  - Apr 2015: 4.63%
  - May 2015: 4.22%
  - Jun 2015: 4.46%
  - Jul 2015: 4.35%
  - Aug 2015: 4.46%
  - Sep 2015: 4.37%
  - Oct 2015: 4.38%

- All active OR facilities:
  - Nov 2014: 5.30%
  - Dec 2014: 6.84%
  - Jan 2015: 7.96%
  - Feb 2015: 7.25%
  - Mar 2015: 5.66%
  - Apr 2015: 5.57%
  - May 2015: 4.93%
  - Jun 2015: 4.59%
  - Jul 2015: 4.68%
  - Aug 2015: 4.68%
  - Sep 2015: 3.85%
  - Oct 2015: 3.29%
Urine Culture Order Rate Compared to Cohort 2

<table>
<thead>
<tr>
<th>Month</th>
<th>Cohort 2 Facilities</th>
<th>All active OR facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 2014</td>
<td>3.01</td>
<td>2.68</td>
</tr>
<tr>
<td>Dec 2014</td>
<td>3.16</td>
<td>3.19</td>
</tr>
<tr>
<td>Jan 2015</td>
<td>3.37</td>
<td>2.78</td>
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<tr>
<td>Feb 2015</td>
<td>3.39</td>
<td>2.76</td>
</tr>
<tr>
<td>Mar 2015</td>
<td>3.26</td>
<td>3.08</td>
</tr>
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<td>Apr 2015</td>
<td>3.35</td>
<td>2.70</td>
</tr>
<tr>
<td>May 2015</td>
<td>3.10</td>
<td>2.32</td>
</tr>
<tr>
<td>Jun 2015</td>
<td>3.42</td>
<td>2.20</td>
</tr>
<tr>
<td>Jul 2015</td>
<td>3.32</td>
<td>2.41</td>
</tr>
<tr>
<td>Aug 2015</td>
<td>3.36</td>
<td>2.33</td>
</tr>
<tr>
<td>Sep 2015</td>
<td>3.05</td>
<td>2.40</td>
</tr>
<tr>
<td>Oct 2015</td>
<td>2.74</td>
<td>2.19</td>
</tr>
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</table>
Antibiotic Starts
January 2015- October 2015

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Oregon Total Antibiotic Starts</td>
<td>43</td>
<td>33</td>
<td>45</td>
<td>30</td>
<td>43</td>
<td>31</td>
<td>34</td>
<td>30</td>
<td>25</td>
<td>35</td>
</tr>
</tbody>
</table>
Urine Cultures Ordered and Antibiotic Start Metrics Essential

<table>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td># of CAUTIs</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of SUTIs</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of ABUTIs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Catheter Days</td>
<td>279</td>
<td>252</td>
<td>97</td>
<td>69</td>
<td>124</td>
<td>60</td>
<td>62</td>
<td>155</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Resident Days</td>
<td>1866</td>
<td>1652</td>
<td>1969</td>
<td>1953</td>
<td>1736</td>
<td>1803</td>
<td>1791</td>
<td>1819</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Urine Cultures Sent</td>
<td>5</td>
<td>1</td>
<td>10</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Antibiotic Starts</td>
<td>11</td>
<td>1</td>
<td>11</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Improvements in Surveillance Practices

Surveillance Practices Before and After STOP UTIs Initiative, Percent Positive Responses (Often and Always)

<table>
<thead>
<tr>
<th>Practice</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track UTI rates over time</td>
<td>29%</td>
<td>86%</td>
</tr>
<tr>
<td>Track SUTIs monthly</td>
<td>29%</td>
<td>86%</td>
</tr>
<tr>
<td>Track CAUTIs monthly</td>
<td>29%</td>
<td>86%</td>
</tr>
<tr>
<td>Use standardized infection criteria to determine CAUTIs</td>
<td>29%</td>
<td>86%</td>
</tr>
<tr>
<td>Share surveillance data with quality committee/infection oversight</td>
<td>14%</td>
<td>71%</td>
</tr>
<tr>
<td>Share surveillance data with physicians</td>
<td>14%</td>
<td>43%</td>
</tr>
</tbody>
</table>
Improvements in Surveillance Practices

Surveillance Practices for UTI Determination, Before and After STOP UTIs Initiative (Often and Always Responses)

Note: A smaller percentage represents better practice.

- Before
- After

- Record UTI when provider orders antibiotics to treat
  - Before: 71%
  - After: 100%

- Record UTI when a resident has positive urine test
  - Before: 71%
  - After: 86%
What Else the Data Tells Us

• Improvements seen in facility surveillance practices
• Participants found some of the high-touch components “often or always helpful” to their success
  • Learning Sessions (86%)
  • Monthly site visits (72%)
  • Monthly data PowerPoint with facility specific information and OPSC feedback (71%)
Positive Responses for Each Dimension Comparison
Baseline/Follow-up Safety Culture Survey Results

1. Overall Perceptions of Resident Safety
   - Baseline (N = 896) 89%
   - Final (N = 415) 90%

2. Feedback & Communication About Incidents
   - Baseline (N = 896) 86%
   - Final (N = 415) 88%

3. Supervisor Expectations & Actions Promoting Resident Safety
   - Baseline (N = 896) 82%
   - Final (N = 415) 84%

4. Organizational Learning
   - Baseline (N = 896) 71%
   - Final (N = 415) 74%

5. Management Support for Resident Safety
   - Baseline (N = 896) 71%
   - Final (N = 415) 77%

6. Training & Skills
   - Baseline (N = 896) 68%
   - Final (N = 415) 71%

7. Compliance with Procedures
   - Baseline (N = 896) 66%
   - Final (N = 415) 70%

8. Teamwork
   - Baseline (N = 896) 75%
   - Final (N = 415) 77%

9. Handoffs
   - Baseline (N = 896) 63%
   - Final (N = 415) 63%

10. Communication Openness
    - Baseline (N = 896) 61%
    - Final (N = 415) 67%

11. Nonpunitive Response to Mistakes
    - Baseline (N = 896) 56%
    - Final (N = 415) 67%

12. Staffing
    - Baseline (N = 896) 52%
    - Final (N = 415) 58%
Oregon’s Challenges Mirror National Challenges

Turnover

• Leadership turnover in seven out of twelve facilities
• Staff turnover was problematic for multiple facilities
• Staff and provider turnover require frequent re-orientation to the project

Time

• Finding time to work on the project with teams continues to be a barrier; use “Huddles”
Need to Implement Strategies to Reduce Unnecessary Urine Tests and Reduce Treatment of Asymptomatic UTIs in the Elderly Across the Continuum of Care
Successes

- Reduced CAUTI’s by 93%, catheter utilization by 42%, urinary tract infections by 30%, and unnecessary urine tests by 47%
- Improvements in each of the culture survey domains
- Facilities report providers return from conferences stating, “We are going to work on antibiotic stewardship”
- Improved clinical assessment skills, documentation, and communication at participating facilities
- National Healthcare Safety Network (NHSN) adding “urine cultures sent” as new metric for UTI Module
- Dr. Nimalie Stone, CDC, is using Oregon’s data reports as examples to revise NHSN Data Output Menu for long-term care facilities
The Core Elements of Antibiotic Stewardship for Nursing Homes

National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion
Conclusion

• Urinary tract infections and their diagnosis is a challenge in the elderly
• Implementation of evidenced-based practices can reduce UTIs and unnecessary urine cultures as well as antibiotic use
• Tools and resources are available to assist LTCFs in UTI Prevention and Antibiotic Stewardship
• NHSN’s LTC UTI module requires a lot of facility support to help with enrollment and reporting
Thank You to the Teams Who Crossed the Finish Line

Avamere Facilities
- Hillsboro
- Oregon City

Marquis Facilities
- Piedmont
- Centennial
- Forest Grove
- Oregon City

Radiant Senior Living
- Baycrest Village Health Center

Independent
- Mennonite Home
- Presbyterian Community Care Center
Topics for Future Meetings

- IP, SNF, ASC, OP survey summaries
- Long-term care/residential settings
- Data-driven regulatory, licensing & credentialing update recommendations
- Addressing lapses in environmental cleaning & instrument reprocessing
- Next steps: Ebola Assessment Hospitals
- NHSN infection-specific focus