UCSF Hospital Epidemiology and Infection Control (HEIC) Report

2018 Update

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What is the problem?
(What makes Infection Control directors wake up in a cold sweat)

INFECTION

Susceptible Patients

Pathogens

Environment and Equipment
High risk patients

- Device- and procedure-related infections
  - Central line-associated bloodstream infections
  - Catheter-associated urinary tract infections
  - Surgical site infections
Bad bugs

- Multidrug-resistant organisms
- *Clostridium difficile* infections
Environment and equipment

- Environmental cleaning
- Reprocessing (cleaning, disinfection, sterilization) of patient care equipment

**Deadly CRE Germs Linked to Hard-to-Clean Medical Scopes**

By Sabrina Tavernise  Feb 10, 2015

Officials at the U.C.L.A. Medical Center reported this week that a superbug had infected seven people, killing two of them. Damian Dovarganes/Associated Press
CLABSI: Current conditions

**Adult CLABSIs**

- FY18
  - Number of infections: 57
  - Projected: 40
  - Goal: 40

**Pediatric CLABSIs**

- FY18
  - Number of infections: 48
  - Projected: ≤ 29
  - Goal: ≤ 29
CLABSI: Countermeasures and plans

- BCH
  - CLABSI Prevention Committee
    - Real time CLABSI huddles
    - Multidisciplinary discussions focused on standardizing CVC maintenance
    - CLABSI RN Unit Champions
    - Increase ancillary area engagement
    - Increase Solutions for Patient Safety (SPS) engagement

- Adult CLABSI prevention
  - Oncology/BMT project to improve consistency of CHG bathing
  - Creating a multidisciplinary group to use lessons learned from BCH
**C. difficile Infections: Current conditions**

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### Adult CDI

- **Number of Infections**
  - Jul-17: 10
  - Aug-17: 10
  - Sep-17: 10
  - Oct-17: 10
  - Nov-17: 10
  - Dec-17: 10
  - Jan-18: 20

- **SIR (Surveillance Interval Ratio)**
  - Jul-17: 0
  - Aug-17: 0
  - Sep-17: 0
  - Oct-17: 0
  - Nov-17: 0
  - Dec-17: 0
  - Jan-18: 0

- **Benchmark**
  - Jul-17: ≤176
  - Aug-17: ≤176
  - Sep-17: ≤176
  - Oct-17: ≤176
  - Nov-17: ≤176
  - Dec-17: ≤176
  - Jan-18: ≤172

### Pediatric CDI

- **Number of Infections**
  - Jul-17: 0
  - Aug-17: 0
  - Sep-17: 0
  - Oct-17: 0
  - Nov-17: 0
  - Dec-17: 0
  - Jan-18: 15

- **SIR**
  - Jul-17: 0
  - Aug-17: 0
  - Sep-17: 0
  - Oct-17: 0
  - Nov-17: 0
  - Dec-17: 0
  - Jan-18: 0

- **Benchmark**
  - Jul-17: ≤25
  - Aug-17: ≤25
  - Sep-17: ≤25
  - Oct-17: ≤25
  - Nov-17: ≤25
  - Dec-17: ≤25
  - Jan-18: ≤25
CDI: Countermeasures and actions

- Monitoring adherence to handwashing with soap and water and Enteric Isolation
- Worked with Hospitality to optimize twice daily cleaning of Enteric Isolation rooms
- Avoid unnecessary *C. difficile* testing and treatment
  - Improved availability of relevant information at point of ordering
  - Changed wording of *C. difficile* test results
  - Real-time feedback to ordering providers and nursing staff
- Antimicrobial stewardship work
CAUTI: Current condition

**Adult CAUTIs**
- Number of infections: Jul-17, Aug-17, Sep-17, Oct-17, Nov-17, Dec-17, Jan-18
- SIR: 0, 5, 10
- Benchmark

**Pediatric CAUTIs**
- Number of infections: Jul-17, Aug-17, Sep-17, Oct-17, Nov-17, Dec-17, Jan-18
- SIR: 0, 5, 10
- Benchmark

**FY18**
- Number of CAUTIs: 53 (Projected), ≤ 84 (Goal)
- Number of infections: 2 (Projected), 1 (Goal)
CAUTI: Countermeasures and plans

- Nursing-led work to improve and standardize catheter insertion and maintenance practices
  - Led by Neuro ICU, spread to other areas

- Urinalysis with reflex urine culture orders in place
  - Goal is to avoid unnecessary urine cultures by requiring abnormal urinalysis results

- Plans in place for implementing nurse-driven protocol for catheter removal
  - No catheter-associated UTI if no catheter is in place
  - Make it easier by bypassing the need for an MD order
Reprocessing: Current state

- Patient safety and regulatory priority
- Strengths
  - Centralized high-level disinfection and sterilization under SPD and Endoscopy
- Challenges
  - Transport of equipment to/from SPD
  - Workflow issues around cleaning of equipment at the point of use across settings
  - Potential for equipment to bypass UCSF safeguards
Reprocessing: Countermeasures and plans

- Create a multidisciplinary group to identify a sustainable and reliable process for centralized SPD reprocessing of equipment from various settings
- Improve tracking of equipment requiring high-level disinfection or sterilization across the facility and ensure appropriate reprocessing
Quality

Infection Prevention

Costs

Outcomes