

HAI/AR Collaborating Partners Committee
Maine Quality Forum (MQF) • Maine Centers for Disease Control

**Minutes of the Committee's meeting of November 3, 2017
at Pine Tree Room at 2 Anthony Avenue, Augusta, Maine**

In attendance:

Members: Ann Graves, Cathy Dragoni, Gwen Rogers, Jennifer Liao, Karynlee Harrington, Kathy Day, Lynn Johnston, Sandra Harris, Sandy Parker, Siiri Bennett,

Staff: Brittany Roy (Maine CDC), Stuart Bratesman

Guests: Crystal Canney (UNE), Danielle Watford (Healthcentric Advisors), Judy Tupper (Muskie School at USM), Sharon Emerson (Genesis Healthcare), Steve Butterfield (Consumers for Affordable Health Care), Troy Cutler (MaineGeneral)

Summary of recommendations approved by vote

The following recommendations were approved during the meeting:

1. Add the hip replacement (HPRO) and knee replacement (KPRO) Surgical Site Infection (SSI) measures to Maine Rule Chapter 270 and require hospitals to begin submitting the data to NHSN in 2020. Data presentation needs to be addressed so it shows the data in the best way for consumers. Explanations of risk stratification should be addressed as well.

Result: Unanimously approved with 12 votes

2. The Committee will make no recommendations on infection preventionist (IP) capacity until there are evidence-based metrics. We currently lack sufficient data on the relationship between IP staffing levels and HAI incidence to make recommendations on IP staffing requirements.

Result: Unanimously approved with 12 votes

3. The Maine CDC should invite hospitals to voluntarily submit antibiograms. The Maine CDC would then assess the feasibility of aggregating the individual antibiograms into a State antibiogram and explore the usefulness of regional antibiograms. The Maine CDC would not publish the antibiograms, but it would present its findings to the HAI/AR Collaborating Partners.

Result: Unanimously approved with 11 vote

Summary of Follow Up Items

1. MQF will seek feedback from the group regarding different approaches to public reporting of infection rates for knees and hips on CompareMaine at both the consumer (summary) view and non-consumer (detailed) view.

2. Develop a glossary of terms to be provided at future meetings for the benefit of guests and committee members.

Ms. Roy called the meeting to order at 12:10.

The minutes were read and approved.

Old Business

Can Inpatient Prospective Payment System (IPPS) Hospitals and Critical Access Hospitals (CAHs)¹ report hip and knee replacement Surgical Site Infections (SSIs) to the federal CDC's National Health Safety Network (NHSN) by January 2020?

At its last meeting, the committee asked Mr. Cutler to poll other hospital infection preventionists (IPs) on the feasibility of reporting knee and hip replacement SSIs to NHSN in 2020. Mr. Cutler told the committee that none of the IPs objected to such a requirement.

Ms. Graves added that most CAHs already report knee and hip SSI data to NHSN and nearly all the rest will soon be doing so.

Dr. Rogers said she knew of only one Maine hospital not already collecting knee and hip SSI data despite the lack of a federal requirement.

In response to a request at the committee's last meeting, Ms. Harrington reported that the federal Agency for Healthcare Research and Quality's (AHRQ) MONAHRQ healthcare quality indicator reporting system did not have any hip or knee SSI measures.

The NHSN reports the results of each hospital's SSI data as a risk-adjusted Standardized Infection Ratio (SIR).² Ms. Roy described NHSN's risk stratification methods for their hip and knee SSI measures. The risk stratification for both measures takes into account age, anesthesia, the patient's American Society of Anesthesiologists Physical Status Classification score (ASA Score), body mass index, diabetes, the duration of the procedure, type of procedure, trauma and wound class. Risk stratification for knee replacement accounts for patient gender and whether the hospital has a medical school affiliation. Risk stratification for hip replacement includes hospital bed size.

Members compared the merits of reporting SIRs versus infection rates. They commented on the importance of including the sample size denominator whenever rates are reported.

Ms. Day requested that a glossary of terms be provided at future meetings for the benefits of guests and committee members.

Ms. Roy displayed examples of how Oregon, Wisconsin, Nevada and Massachusetts present hip and knee replacement SSI data in their public reports.

Ms. Harrington noted current discussions about presenting quality indicator data in two different formats on the CompareMaine.org website: a consumer format and professional format.

¹ Medicare reimburses most acute care inpatient hospitals by using a Prospective Payment System (PPS) that bases the level of payment on each patient's medical diagnoses. Medicare reimburses smaller, mostly rural Critical Access Hospitals (CAHs) based on actual costs.

² The Standardized Infection Ratio divides the observed number of infections by the predicted number of infections. The predicted number of infections is based on the 2015 national HAI aggregate data and is risk adjusted for each facility using variables found to be significant predictors of HAI incidence.

☞ The committee unanimously approved the following recommendation with 12 votes:

Add the hip replacement (HPRO) and knee replacement (KPRO) Surgical Site Infection (SSI) measures to Maine Rule Chapter 270 and require facilities to report to NHSN in 2020. Data presentation needs to be addressed so it shows the data in the best way for consumers. Explanations of risk stratification should be addressed as well.

The discussion of inter-facility communication issues began with Ms. Watford's presentation on existing communication tools and current development efforts in Maine.

Mr. Cutler noted the Joint Commission's recent Sentinel Event Alert on "Inadequate Hand-off Communication" (Sentinel Event Alert, Issue 58, September 12, 2017).

Ms. Watford distributed copies of the *Western Maine Health Transfer to ED Document Checklist*, and the *Interact 4.0 Nursing Home to Hospital Transfer Form*. She said that most groups are using the Interact 4.0 form as the starting point for developing their own forms.

Members noted the importance of including emergency medical services in the form development efforts. Ambulance crews sometimes fail to be alerted when their patient has a serious transmissible infection.

Ms. Johnston conveyed the nursing homes' need to avoid creating more paperwork, but noted both the incompatibilities between different hospital and nursing facility electronic healthcare record systems and the differences between each hospital's specifications for the data elements to include in inter-facility patient transfer information reports. When her facility received patients from a hospital, she sometimes has to search through a 50-page transfer form to find information on lab cultures. She hoped a broadly compatible electronic system could be developed.

Ms. Emerson noted that Genesis Healthcare has incorporated the Interact transfer form into their electronic medical records system, but they have to print it and send it to the hospital on paper.

Ms. Roy raised the issue of sharing information about lab results that arrive after a patient has already been transferred to another facility.

Dr. Rogers recommended adding a space for "pending cultures" to the Isolation Precautions section of the Western Maine patient transfer form. There was general agreement with her recommendation.

The committee also discussed the general desirability of a statewide directory of who to contact at each hospital and nursing facility for further information related to patient transfers. Several members suggested listing contact information by position title instead of by name to avoid problems raised by staff turnover. The best number to call might differ depending on the type of information needed.

The topic then turned to the results of surveys on hospital infection preventionist (IP) capacity issues. Within the sample of the Association for Professionals in Infection Control and Epidemiology (APIC) national MegaSurvey, 3.9% said their state published average IP staffing levels by hospital. According to the survey results, there were an average 4.0 IP FTEs at the corporate level responsible for an average 18.8 hospitals, and 2.0 IP FTEs at the hospital level responsible for an average 9.6 hospitals or facilities.

A 2014 NHSN survey of 975 hospitals found an average 1.2 IPs per 100 beds. A study of 120 hospitals published this year in *Infection Control & Hospital Epidemiology* found a range of 0.22-to-3.0 IPs per 100 beds and an average of one IP per 149 beds. The study found only mixed results when comparing CMS Hospital-Acquired Condition scores (HAC scores)³ to IP staffing levels.

☞ After discussion, the following recommendation was unanimously approved with 12 votes:

The Committee will make no recommendations on infection preventionist (IP) capacity until there are evidence-based metrics. We currently lack sufficient data on the relationship between IP staffing levels and HAI incidence to make recommendations on IP staffing requirements.

New Business

Antibiotic and Drug Shortages

Dr. Liao provided an overview of antibiotic and drug supply shortages. Although the issue has been in the news due to the current hurricane-related shut down of pharmaceutical manufacturing plants in Puerto Rico, drug shortages have been a recurring problem over the years. Between 2001 and 2017, the annual number of drug shortages recorded by the University of Utah Drug Information Service has varied between 58 and 267. Many of the shortages involve sterile injectables due to their highly specialized manufacturing process. Antibiotics are among the most common.

Seven manufacturers account for most of the U.S. generic drug market and their manufacturing lines run at full capacity 24-hours-a-day. When problems arise, there is little excess capacity to take up the slack. When drug shortages occur, the FDA employs a variety of mitigation strategies.

Antibiotic drug shortages can lead to a variety of clinical problems including treatment delay and forced reliance on suboptimal alternatives.

Dr. Liao reviewed the Institute for Safe Medication Practices' 2010 recommendations on managing drug shortage crises. She also described a variety of online resources from the FDA, the American Society of Health-System Pharmacists (ASHP) Drug Shortages Resource Center and the U.S. CDC.

She also offered that the Maine CDC HAI/AR program can:

- Maintain references for drug (antibiotic) shortages
- Provide consultation on drug supply shortages, particularly in regards to infection control and antimicrobial stewardship/use
- Facilitate communication of critical drug supply shortages with direct public health implications to Maine facilities and/or patients

However, she said there was no existing infrastructure to work with facility-specific antimicrobial stewardship/P&T teams.

³ The HAC score is the CMS weighted composite measure of a hospital's incidence of healthcare acquired infections and other adverse events.

Committee members discussed pros and cons of public advisories on antibiotic and other drug shortages. Without voting, there was general agreement that if a drug or antibiotic shortage has significant public health impact on Maine citizens, then an advisory should be issued by the Maine CDC.

Patient Education

Ms. Roy reviewed the various activities Maine CDC will pursue to mark this year's World Antibiotic Awareness Week. They include newspaper letters to the editor, newsletters, and a social media campaign with Facebook ads and posts, posts and chats on Twitter and participation in CDC's thunderclap for US Antibiotic Awareness Week. Maine CDC will also host an antibiotic awareness table at its Infectious Disease Conference, and purchase movie theater ads on 155 screens across 19 different theaters for two weeks in December.

State Antibigram

Dr. Liao described antibiograms as an antimicrobial resistance "report card" usually published annually. She displayed examples and explained that antibiograms:

- Guide the selection of appropriate antibiotics;
- Allow facilities measure trends in antibiotic resistance rates and spot emerging strains; and
- Serve as a vital component in the core elements of antibiotic stewardship.

Dr. Liao also reviewed the process for developing antibiograms.

Members discussed the pros and cons of creating statewide and/or regional antibiograms.

☞ The members unanimously approved the following recommendation with 11 votes.

The Maine CDC should invite hospitals to voluntarily submit antibiograms. The Maine CDC would then assess the feasibility of aggregating the individual antibiograms into a State antibiogram and explore the usefulness of regional antibiograms. The Maine CDC would not publish the antibiograms, but it would present its findings to the HAI/AR Collaborating Partners.

The group discussed a tentative schedule with a meeting on the 4th Friday of February, May, August and October.

The following meeting topics were announced for next year:

- 2018 Topics from HAI State Plan 2015-2018
 - HAI: Public Reporting of Outbreak data
 - HAI: External Validation update
 - AR: Explore patient education regarding culturing, results, regimen
- HAI State Plan 2019-2023.

The meeting adjourned at 3:58 PM.