Healthcare Quality Reporting Program

STEERING COMMITTEE

3/16/16, 2:00-3:00pm
Department of Health, Room 401

1. **Welcome & meeting objectives (2:00pm)**
   - Meeting chair: N. Alexander-Scott
   - Program staff: E. Cooper, S. Viner-Brown, T. Mota, V. Carroll
   - Voting members in attendance (5/17): L. McDonald, N. Oliver, P. Parker (via phone), J. Shaw, P. Winderman (for Ted Almon)
2. **Review previous action items (2:05pm)**
   - Send out link to HIT Data on the Department of Health website (Emily) – Complete
   - Update the Hand Hygiene Agreement and cover letter and distribute with minutes (Emily) – Complete
   - Send out a link to the State Inventory report (Emily) – Complete
3. **Hand Hygiene Agreement (2:10pm)**

Emily opened the discussion by providing the committee with a brief background of the Hand Hygiene Agreement, noting that it has been created to support the varied hospital hand hygiene initiatives and provide meaningful, reportable data without creating undue burden on facilities. This agreement includes direction to facilities about hand hygiene policies and trigger points at which facilities would be asked to submit additional related data to the program. Additionally, the committee is hopeful that this agreement will facilitate conversation between infection prevention staff and hospital leadership.

- *Review submitted data*

  Emily distributed a draft of the Hospital Hand Hygiene Data Report and Methods document, noting that this data has not been finalized or published yet. She reported that the state's 11 acute-care hospitals, Butler Hospital and the Rehabilitation Hospital of RI have all completed the Agreement.

  The Data Report reflects whether the facility has the suggested policy elements and whether they have submitted all of the information related to hand hygiene goals and hand hygiene-related deficiencies to RIDOH. Specifics about goals and deficiencies are not included on the report. The Methods document defines what is being measured within each of the policy elements, what information is being reported to RIDOH and definitions of key terms used in the report.

  Emily noted that the Data Report reflects 'Yes' responses from all facilities for all questions. With next year's questionnaire we can follow up to see how facilities are progressing on their reported goals. Dr. Alexander-Scott asked if the group though the information looked accurate, given their experience with the listed facilities. Emily explained that we can ask for additional information from hospitals to support their questionnaire response; Dr. Alexander-Scott suggested we request that information.

The committee asked why other hospitals, such as Eleanor Slater, were not included. Emily explained that our HAI reports generally focus on acute-care providers, but that other facilities, such as Butler, often choose to participate. With the group's agreement Dr. Alexander-Scott asked that we include Eleanor Slater in this report and send them the Hand Hygiene Agreement to complete.

- *Next steps*
  - Finalize the Data Report and Methods document and prepare for publication
  - Review hospital hand hygiene policies
  - Send Hand Hygiene Agreement to Eleanor Slater Hospital

4. **HIT Survey (2:20pm)**

Emily distributed copies of the 2015 HIT Survey reports for review. Emily explained that all of the data being reviewed during this meeting can be found on RIDOH's website. These reports include aggregate Summary and Detail reports and a data book. The data book provides a broad overview of the completed aggregate analysis; additional analyses are included in the Summary and Detail reports. There is also a provider-level report available on the Department of Health website.

Emily went on to note that because the data has been stable in recent years, and to reduce the survey burden on physicians, we are going to shift the survey from annual to biennial. The next survey year will be 2017, so that this survey can be on the same timeline as the Healthcare Inventory Surveys. During the non-survey years we will have more time with the data allowing for a 'deeper dive' into the data, and create additional reports and expand our outreach to stakeholders.

A brief review of the data began with the Physician Summary Report. It was observed that, among respondent, a higher percentage of hospital-based physicians were using EHRs than office-based physicians. Additionally, office-based PCPs have a higher rate of EHR use than office-based non-PCPs, including higher use of EHRs for patient engagement and e-prescribing.

The CurrentCare report reflected a relatively low use of Current Care, and no significant change is these numbers from the previous year. It was noted that with some of the new methods of integrating CurrentCare into a physician's EHR, they may not realize that some of the information they are seeing is being fed into the system by CurrentCare.

The E-Prescribing report reflected lower use than desired for the Prescription Monitoring Program (PMP) for patients using opioids or benzodiazepines; however, RIDOH is currently working on a new system for the PMP that should facilitate use.

In looking at the report on the Impact of EHRs, it was observed that of those who use EHRs, most agree that it improves billing, communication, patient safety and quality improvement; however, few agree that EHRs improves clinical workflow, job satisfaction and communication with outside physicians.

In the Physician Respondents without EHR report, it was observed that more than half of the respondents not currently using an EHR do not plan on implementing an EHR in the future. Cost and functionality were the top reasons for not implementing an EHR. The group felt it would be helpful if they could see respondent age information to see how age and/or years in practice impact lack of EHR use.

The final report discussed was the APRN and PA Summary report. It was observed that their results closely mirrored the physician results, which may be directly related to where they are practicing. Emily noted that additional analysis of this data has not been requested in previous years.

- *What additional reports should be created?*

  The committee suggested the following additional analysis:

  - Expanded analysis of respondents without EHRs, including age and other possible reasons for non-use
  - Compare our data with the Inventory Survey data

- *Are there additional stakeholders that we should target when disseminating the reports/data?*

  Dr. Alexander-Scott felt that we should advance our focus on behavioral health and noting physicians who also identify as psychiatric doctors. Additionally with more data, intractability functions would be beneficial to stakeholders.

5. Program updates (2:45pm)

- *Infection Prevention Assessments*

  Emily explained that the CDC created assessment tools for acute-care hospitals, long-term care facilities, dialysis providers and ambulatory care centers. These assessments are meant to be performed onsite at the facilities by RIDOH. In Rhode Island, all hospitals and nursing homes will be asked to complete the tool as a self-assessment. We are requesting that the responses be submitted to Emily without facility names so that the blinded data can be aggregated before being sent to the RIDOH. This data will be used by RIDOH and other stakeholders so that we can better understand infection prevention practices and capacity at the state level.

  Once that phase is complete, three hospitals and fifteen nursing homes will be asked to participate in an onsite visit with a representative from RIDOH. We are looking for facilities that are willing to volunteer for the onsite visit. The self-assessment tool should roll out in March, with a four-week turnaround time; we plan to complete the on-site visits by this fall.

- *CDC Facility Inventory*

  As part of the CDC ELC Ebola Supplemental grant we have been asked to create an internal inventory of facility-level information related to infection prevention. Most of the information we are required to have in our inventory is already on file (number of facilities under state jurisdiction, contact information for facilities, etc.). We will be working with the offices of Facility Regulations and Licensure to collect additional information about state regulations specific to infection prevention and control.

6. Open forum (2:55pm)

Judith Shaw shared a NPR article titled why 'Patients Leave the Hospital with Superbugs on Their Hands' that she felt was pertinent to the program's work. This article, as well as the original letter from the Journal of the American Medical association referenced by the NRP article, will be included with the minutes.

7. Action items

- Distribute 'Patients Leave the Hospital with Superbugs on Their Hands' article (Emily)
- Reach out to Eleanor Slater and ask them to complete the Hand Hygiene Agreement (Emily)
- Review hospital hand hygiene policies (Emily)
- Complete additional analysis on HIT Survey data (program staff)

Next meeting: May 18, 2016

Patients Leave The Hospital With Superbugs On Their Hands

Updated March 13, 2014 8:00 AM ET Published March 12, 2014 2:52 PM ET

Encouraging doctors and nurses to wash their hands frequently has always been considered an effective way to curb the spread of infection in hospitals and other health facilities.

But a research letter published Monday in *JAMA Internal Medicine* points to another key group of people who aren't always keeping their hands so clean and probably should: patients.

Researchers focused on inner-city Detroit and looked at patients who went from hospitals to post-acute care facilities — places like rehabilitation centers, skilled-nursing facilities, hospice and long-term care hospitals. They found that almost 1 in 4 adults who left the hospital had on their hands a superbug: a virus, bacteria or another kind of microbe that resists multiple kinds of medicine.

While in post-acute care, about 10 percent of patients picked up another superbug. Of those who had superbugs, 67 percent still had them upon being discharged, even if they hadn't gotten sick.

These findings add to a growing body of research about hand hygiene and the patient's role in infection transmission, and speak to a problem with health care facilities — they can increase the odds of getting sick.

The paper's authors suggest a so far underused strategy for addressing that concern: getting patients to wash their hands.

Conventional wisdom has long held that doctors and nurses who go from patient to patient are most likely to transmit germs. As a result, few health care settings really make patient hand-washing a major priority, said Leah Binder, president of the Leapfrog Group, a nonprofit organization that grades hospitals on patient safety.

The paper, she said, "really requires an immediate response" from safety advocates.

"We have to revise hand hygiene policies to include patients. One of the main strategies on hand hygiene is to make it easy to wash hands," she said. "Most hospitals have either sinks or dispensers near the door of every room, so that it's very easy for a provider walking in to immediately wash their hands. Do we make it easy for patients to wash their hands? I doubt it."

Beyond that kind of architectural change, signs should be visible around facilities to remind patients about hand washing, she said.

But just because patients are carriers of superbugs doesn't mean they will get sick, said Lona Mody, a professor of internal medicine at the University of Michigan-Ann Arbor, and the study's corresponding author. There needs to be more research to measure the relationship between carrying germs and falling ill, she added.

If you have superbugs on your hands, though, you probably have them elsewhere, too — in your skin or in your gut, said Louise Dembry, president of the Society for Healthcare Epidemiology of America and a professor of medicine, infectious diseases and epidemiology at Yale. Having them on your hands makes them easier to spread.

Plus the patients in these kinds of facilities are, almost by definition, more vulnerable to infection, Binder said — they've just come out of a hospital where they needed a high level of care.

"I find it not difficult to imagine" that a number of these patients will end up with serious infections, she said.

Spreading germs is also easier to do in post-acute settings, Dembry noted, since patients are more likely to interact with each other. Patients are encouraged to move around more and, as a result, more likely to touch medical equipment and furniture, among other things, which can spread the germs, Mody said. Overall, these circumstances increase the odds of transmitting germs and up the need for better hand-washing protocols.

Dembry added that hand washing can be only one part of any strategy to prevent infection. Medical tools and machines need to be kept clean. Culturally, patients should feel comfortable asking each other if they've washed — and steer clear if they might be infectious.

As health care facilities are increasingly evaluated on how well they care for patients, they should be rewarded for things like promoting clean hands, Mody said.

For instance, "if an institution has a program that enhances patient hand hygiene, the quality of that place should be considered higher," she said.

This story was produced as part of a partnership between NPR and Kaiser Health News, an independent health journalism organization.

Letters

RESEARCH LETTER

Multidrug-Resistant Organisms on Patients' Hands: A Missed Opportunity

Multidrug-resistant organisms (MDROs) are increasingly prevalent in post-acute care (PAC) facilities.[1,2] Increased contact between health care workers, the environment, and patients in PAC facilities can increase the risk of MDRO cross-transmission[3,4] because PAC patients may need assistance with activities of daily living and are encouraged to be mobile outside of their room for rehabilitation, dining, and other recreational activities. Much more than other anatomic sites, patients' hands are more likely to come in contact with environmental surfaces, health care workers' hands, and other patients in PAC facilities. Our objective was to evaluate baseline, new acquisition, and duration of MDRO hand carriage among patients newly admitted to PAC facilities from acute care hospitals.

Methods | This prospective observational cohort study in 6 PAC facilities in metropolitan Detroit and Southeast Michigan was approved by the institutional review board of the University of Michigan. After obtaining written informed consent, the dominant hands of newly admitted PAC patients were sampled. We swabbed the palm, fingers, and around nails of patients' hands. Samples were collected at baseline (day of enrollment), day 14, and monthly for up to 180 days or until discharge from the facility. Methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant *Enterococcus* (VRE), and resistant gram-negative bacilli (RGNB) were identified using standard microbiological methods. Gram-negative bacilli resistant to either ceftazidime, ciprofloxacin, or imipenem were defined as RGNB.

Results | Of 826 consecutive eligible PAC patients approached for the study, 357 (43.2%) agreed to participate and were followed for 806 visits (mean, 2.3 visits; range, 1-8 visits). Most participants were female (54.9%), with a mean age of 75.8 years.

Nearly one-quarter (86 of 357 [24.1%]) had at least 1 MDRO on their hands on discharge from an acute care hospital and admission to the PAC facility (**Table**). Baseline hand carriage rates of VRE, MRSA, and RGNB were 13.7%, 10.9%, and 2.8%, respectively. During follow-up (**Figure**), 34.2% of patients' hands (122 of 357) were colonized with an MDRO, with 10.1% of patients (36 of 357) newly acquiring 1 or more MDROs. Specifically, 7.1% (22 of 308 at risk), 6.3% (20 of 318 at risk), and 3.1% (11 of 347 at risk) of patients newly acquired VRE, MRSA, and RGNB colonization, respectively. MRSA and VRE colonization were more likely to be persistent, with 37.3% (22 of 59) and 22.5% (16 of 71) of patients colonized at multiple visits, whereas RGNB colonization on the same patient's hand was never obtained at follow-up. Overall, 67.2% of MDRO-colonized patients (82 of 122) remained colonized at discharge.

Discussion | Our study shows that patients commonly bring MDROs on their hands on discharge from an acute care hospital and acquire more during their stay at the PAC facility. This, combined with frequent antibiotic use in PAC patients, increases the probability that MDROs introduced to a PAC facility will be transmitted to other frail patients and to health care workers—and, most important, that the MDRO will persist in the facility. Current quality measures that address infection prevention fail to adequately address patient hand hygiene. Despite concerns raised by some recent studies,[5-7] patient handwashing is not a routine practice in hospitals to date. Owing to PAC patients' increased mobility and interaction with the environment, health care workers, and other patients, we believe that it is even more important to implement routines that enforce washing of patients' hands than in the acute care setting.[1]

We did not conduct molecular typing for MDROs, and our analysis was limited to patients who were newly admitted to PAC facilities. Therefore, our estimates do not reflect the patients who were already residing in the facility, some of them long-term, and may underestimate the magnitude of hand colonization and its impact on transmission.

Our study provides critical and emerging evidence that patient hand hygiene is a greatly underappreciated strategy for MDRO reduction efforts in PAC facilities as well as acute care

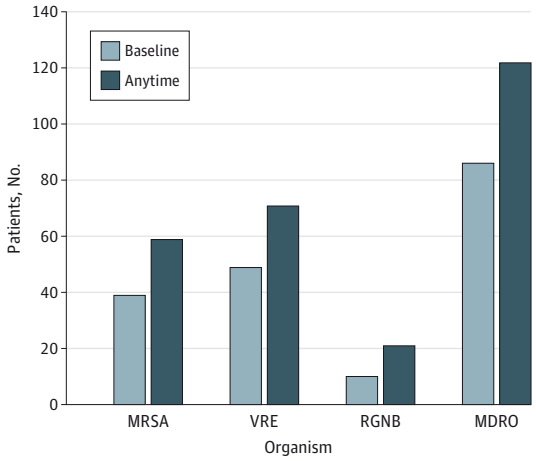
Table. Baseline Patient Hand Carriage of MDROs in 6 Post-Acute Care Facilities

	Organisms, No. (%)			
Facility (Patients, No.)	MRSA	VRE	RGNB	Any MDRO[a]
1 (81)	8 (9.9)	7 (8.6)	2 (2.5)	16 (19.8)
2 (47)	6 (12.8)	6 (12.8)	1 (2.1)	12 (25.5)
3 (85)	9 (10.6)	9 (10.6)	2 (2.4)	19 (22.4)
4 (81)	8 (9.9)	16 (19.8)	2 (2.5)	21 (25.9)
5 (26)	3 (11.5)	5 (19.2)	3 (11.5)	8 (30.8)
6 (37)	5 (13.5)	6 (16.2)	0	10 (27.0)
Total (357)	**39** (10.9)	**49** (13.7)	**10** (2.8)	**86** (24.1)

Abbreviations: MDRO, multidrug resistant organism; MRSA, methicillin-resistant *Staphylococcus aureus*; RGNB, resistant-gram negative bacilli; VRE, vancomycin-resistant *Enterococcus*.

[a] At least 1 MDRO.

Figure. Patient Hand Carriage of Organisms at Baseline and Follow-up



MDRO indicates multidrug resistant organism; MRSA, methicillin-resistant *Staphylococcus aureus*; RGNB, resistant-gram negative bacilli; and VRE, vancomycin-resistant *Enterococcus*. During the entire follow-up period, 34.2% (122 of 357) patients were colonized by at least 1 MDRO. MRSA, VRE, and RGNB were colonized on patients hands at rates of 16.5% (59 of 357), 19.9% (71 of 357), and 5.9% (21 of 357), respectively.

hospitals. Further interventions and development of performance measures to address this issue are overdue.

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Author Contributions: Dr Mody had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.
Study concept and design: Cao, Lansing, Mody.
Acquisition, analysis, or interpretation of data: All authors.
Drafting of the manuscript: Cao, Mody.
Critical revision of the manuscript for important intellectual content: All authors.
Statistical analysis: Cao, Mody.
Obtained funding: Mody.
Administrative, technical, or material support: Lansing, Mody.
Study supervision: Min, Mody.

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