MARYLAND HEALTH CARE COMMISSION

Summary of the Healthcare-Associated Infections (HAI)
Advisory Committee Meeting

October 28, 2015

Committee Members Present
Sara E. Cosgrove, MD, MS
Maria E. Eckart, RN, BSN, CIC
Emily Heil, PharmD
Debra Illig, RN, MBA, CLNC (conference call)
Lynne V. Karanfil, RN, MA, CIC (conference call)
Peggy A. Pass, RN, BSN, MS, CIC (conference call)
Michael Anne Preas, RN, BSN, CIC (conference call)
Brenda Roup, Ph.D, RN, CIC (conference call)
Jack Schwartz, JD (conference call)
Renee Webster, RS
Lucy Wilson, MD, ScM

Committee Members Absent
Anthony Harris, MD, MPH
Andrea Hyatt, CASC
Robert Imhoff
Patricia Swartz, MPH, MS
Kerri Thom, MD

Public Attendance
Eleena Bower, VHQC (conference call)
Nicolai Buhr, DHMH
Mary Clance (conference call)
Sule Gerovich, HSCRC
Surbhi Leekha (conference call)
Stephanie Mayoryk (conference call)
Lillian Regel, AGS
Katie Richards, DHMH
Deb Smith, VHQC (conference call)
Karen Smith, AGS
Geeta Sood (conference call)
Elisabeth Vaeth (conference call)
Carol Whalen, VHQC (conference call)
Justin Ziombra, MHA (conference call)

Commission Staff
Theressa Lee
Julie Deppe
Evanson Mukira
Eileen Witherspoon

1.   **Call to Order**

Theressa Lee, Director, Center for Quality Measurement and Reporting, called the meeting to order at 1:00 p.m.

2.   <u>**Review of Previous Meeting Summary**</u>

The minutes of the previous meeting on May 20, 2015 were accepted by the committee with no corrections.

3.   <u>**October Update to the *Maryland Health Care Quality Reports* Website**</u>

Ms. Lee stated the *Maryland Health Care Quality Reports* website has been updated with more current charge and medical condition volume information. The URL is also in the process of being updated to healthcarequality.mhcc.maryland.gov. There were also updates to two HAIs: MRSA and CAUTI.

Ms. Witherspoon noted that MRSA data was reported for facility-wide inpatient locations for calendar year 2014. She noted the SIR for the state was 1.16, or 16% higher number of infections than expected. NHSN requires all positive MRSA blood specimens to be reported as proxy measures of infections. Ms. Witherspoon noted that only healthcare-facility onset cases are publicly reported. She said timing of the test is very important for this measure. There were 34 more infections than expected for the state. Seven hospitals however reported zero infections. Four hospitals did worse than expected and accounted for 20% of statewide total infections. No hospitals did better than expected. Due to NHSN limitations with the use of the SIR, seven smaller hospitals did not have a SIR calculated as they were not expected to have at least one infection. Ms. Witherspoon said MHCC is reaching out to hospitals that did worse than expected and also working with stakeholders such as VHQC to share information and facilitate hospital participation in prevention and surveillance activities. Dr. Cosgrove noted that her hospital is investigating their data and finding patients that have been transferred from other institutions with MRSA bacteremia present on admission that are being counted against their hospital. She said it may be due to timing of blood cultures.

Mr. Mukira noted that calendar year 2014 CAUTI data in ICUs only was reported. There were 601 CAUTI cases which was 370 more infections than expected. Maryland's SIR is 1.62 and worse than expected. However, three hospitals performed better than expected. Nine hospitals did worse than expected. Eight hospitals reported zero infections. Mr. Mukira is following up with the hospitals that performed worse and many have enacted measures to improve their performance. He noted that the definition of CAUTI changed in 2015 to exclude candida as a primary organism. Mr. Mukira said that 203 of the calendar year 2014 CAUTI infections were due to candida. In 2015, CAUTI surveillance was also expanded to medical, surgical, and medical/surgical wards. Ms. Lee noted that it may be difficult to compare 2014 to 2015 with these changes.

Mr. Mukira also reviewed the flu vaccination results. He noted that Maryland hospitals have improved from 78% in the 2009/10 flu season to 97% for the 2014/15 flu season. Last year Maryland was ranked first in the nation but this year the state is second behind Colorado. Mr. Mukira noted that long term care facilities have also improved their vaccination rate from 57% during the 2010/11 flu season to 85% this flu season. Only facilities with more than 10 beds are included in this reporting which is 230 nursing homes. Of these 95 facilities had a 95% or higher

vaccination rate. Mr. Mukira also noted that 46 hospitals have a mandatory influenza vaccination policy and the number of employees being vaccinated continues to increase each year.

4.   NHSN Technical/Definition Issues

Denominator Data Issue for Facilities with Multiple EDs and Observation Units
Ms. Witherspoon noted that a question came in from a hospital with several emergency departments that were each mapped into NHSN, however, they only had access to a single denominator number to report into NHSN. NHSN stated the hospital could have one emergency department mapped and report one denominator or they could continue to have several emergency departments mapped and it would be up to the hospital to divide the denominator number across the locations.

Inpatient Definition for SSI
Ms. Witherspoon stated another question was received asking if overnight observation patients would count as an "inpatient" for the SSI reporting. NHSN stated the patient would count if the calendar day of admission is not the same calendar day of discharge. Ms. Regel noted that NHSN changed the language to "inpatient procedure" to further clarify that the hospital location was not the deciding factor on whether a patient would be included or not.

5.   Webinar on HAI Data Validation

Ms. Lee stated that onsite chart reviews of HAI data have happened over the past 4 years. However MHCC no longer has the resources for onsite reviews for all HAI groups at all hospitals. Staff have been looking for alternatives that could facilitate ongoing review of the data and create tools for hospitals to look at their own data. She said a screening tool would use HSCRC data and other data submitted by hospitals to check against the data in NHSN. Ms. Lee said this current data review looked at 5 different and complex HAIs. She would like feedback on the results and also on how to best present the information to hospitals. She emphasized that it is not punitive, but educational. It will provide hospitals with tools and information to look at their own data. MHCC plans to hold a webinar within the next couple of weeks for the hospitals. Hospitals will receive their specific reports in advance. CFOs and others will be invited to participate along with the IPs. The beginning of the webinar will emphasize the financial implications of the public reporting of the data including QBR and MHACs.

Ms. Smith from Advanta Government Services (AGS) commented that no onsite validation was done this year so all the data in the presentation is considered potential cases. It provides data for hospitals to review themselves and may or may not show issues. Ms. Regel noted that 2014 data was reviewed. She noted the data review focused on first quarter 2014 SSI, CAUTI, and CLABSI data, and first and second quarter 2014 MRSA bacteremia and CDIF LabID events. Potential reporting errors were identified as well as opportunities for multidisciplinary process improvement. She noted that medical record documentation is very important along with leadership responsibility for correct HAI reporting.

Highlights of the webinar:
SSI Q1 2014:
- 94 DIP/OS SSIs reported out of 8,469 procedures reported to NHSN. KPROs made up almost 40% of all procedures.
- Lowest risk surgery is CBGC; highest risk surgery is COLO.
- Likely seeing same issues that were identified in last year's audit.
- HSCRC data was used to verify stays, potential over- and under-reported procedures or SSIs, and verify that qualifying procedures reported to NHSN were coded in HSCRC data.
  - 343 (4.1%) potential over-reported procedures (NHSN data with no HSCRC coding match or no HSCRC procedure coded)
  - 1,097 (13%) potential under-reported procedures (qualifying procedures in HSCRC but not reported to NHSN)
- SSIs detected during same stay or readmission to the same facility
  - 5 potential over-reported DIP/OS SSI
  - 141 (150%) potential under-reported SSIs identified during a readmission
  - 105 (112%) potential under-reported SSIs identified during the same stay, excluding colon surgeries
  - 79 (96%) of 82 eligible NHSN SSI were found to have a HSCRC stay match
- HSCRC administrative data was effective in identifying potential over-reported denominators and potential under-reported denominators and numerators, except for same stay colon surgeries. Colon infection codes are a large subset that lack specificity and colon procedures have a higher potential for initial admission diagnosis codes being other infection codes like abscess or fistula.
  - Ms. Gerovich suggested using the POA indicator. Ms. Regel said if a patient has a qualifying procedure then the POA indicator is not relevant. The patient still needs to be followed for a possible SSI.
- Recommendations for the hospitals
  - Identify multidisciplinary responsibilities in SSI surveillance process analysis
  - Review NHSN definitions and instructions for reporting
  - Implement a process for capturing all specified procedures (COLO codes have expanded greatly with ICD-10)
  - Multidisciplinary review of key reporting elements needed
  - Key elements need to be documented and retrievable
- Ms. Gerovich asked if hospitals are ranked to see where they stand among other facilities. Ms. Regel said each facility is compared to the state data.
- Ms. Lee noted this is the best alternative we have to continue reviewing the data without having onsite auditors. The results show where there may be issues and MHCC could target hospitals or specific cases for more in-depth reviews.
- Mr. Ziombra asked how hospitals should give feedback on the data review. Ms. Lee said there would be a presentation of the findings with the opportunity to ask questions and raise concerns at that point or afterwards via email.

CAUTI & CLABSI Q1 2014:
- HSCRC data was used to verify a critical care stay for the patient, to check if an infection and device insertion were coded.

- o 147 (97%) of CAUTIs were verified for an admission
- o 49 (100%) of CLABSIs were verified for an admission
- o Critical care stay identified in 99% of CAUTI cases; 92% of CLABSI cases
- o Device insertion coded was very low for CAUTI at 3%, but at 78% for CLABSI
- o UTI coded in 51% of CAUTI cases; central line related infection coded in only 22% of CLABSI cases.
- o HSCRC infection coding data is likely not valuable for looking for under-reporting of CAUTIs and CLABSIs.
  - ▪ Ms. Gerovich and Ms. Regel discussed the differences between surveillance and clinical definitions. Ms. Lee noted that the insertion should be coded in all cases in HSCRC data. The infection coding is more of a gray area due to NHSN definitions versus clinical definitions. Ms. Regel noted that without a medical record review, it is not possible to determine if there is an issue. Ms. Lee noted that these results can be used for hospitals to take a closer look at their data. Ms. Gerovich noted the importance for hospitals to report correctly in both NHSN and HSCRC data as it has financial implications including a 3% penalty on the line with HSCRC.
- Recommendations
  - o Identify stakeholders
  - o Collect patient and device days same time each day, electronic collection must be manually validated
  - o Check if facility meets criteria for use of new NHSN weekly device day reporting option
  - o Encourage unit-based ownership, post infection and utilization rates, create action plans if doing worse than expected.
  - o HIM & nursing management should investigate device insertion coding deficiency to determine if there is an issue.
- Ms. Preas is aware of the colon denominator issues as many cases are not originally coded as colon surgeries. Ms. Regel stated that colon surgeries would need to be coded and that is an issue that was discovered. Ms. Preas noted this is a systems issue which is much bigger than HAI surveillance. She said that her facility has workarounds to deal with this. Ms. Preas said the list MHCC provided with possible under and over-reported cases was helpful in finding errors. Ms. Preas asked about CLABSI coding where the case did not meet NHSN definitions so was not reported. Ms. Regel noted that HSCRC data is not as valuable for finding potential over and under-reported CLABSIs and CAUTIs. Ms. Lee noted that HSCRC data is used as a screening tool because on-site reviews for all hospitals are no longer financially feasible for MHCC. This is another way to look at the data and target possible problem areas. Each hospital will get case specific information. This tool is provided to hospitals to supplement their efforts. Ms. Lee said if this is not helpful to hospitals, then staff can look into other ways to validate the HAI data in a cost-effective way. She noted that the screening tool can also identify hospitals with large discrepancies and these facilities could be targeted for an on-site review. Ms. Regel noted that culture results were going to be requested for CLABSI and CAUTI but due to the difficulties from the hospitals in providing LabID cultures, the decision was made to not request CLABSI and CAUTI data as well. A question was asked about next steps.

Ms. Regel stated these are potential events that would have been reviewed with an on-site review and the facility would need to clarify. Ms. Lee said MHCC will review the results and may focus on facilities or event types with large number of discrepancies. Ms. Karanfil asked when the data was going back to hospitals. Ms. Lee said it will be going out in the next week or two. Ms. Karanfil agreed it was a systems issue and very complex with changes in reporting and QBR. She agreed that resources are needed at all levels to make sure the data is accurate. Ms. Lee agreed that the goal is more accurate data sets. The group discussed the need for executive-level involvement with this reporting. Ms. Mayoryk asked who would be invited to the hospital webinar. She recommended inviting CEOs, IT, and quality VPs. Ms. Regel and Ms. Smith noted that OR and lab also needed to be present. Ms. Preas recommended that MHCC or MHA send the notice to CMOs/CFOs stressing the importance that they attend along with their perioperative, lab, and infection prevention leads. Ms. Lee said CFOs/CEOs, the IPs, and interested parties will be invited and it will be noted that others should attend as well. Ms. Smith asked if the methodology was important to review. Ms. Mayoryk said the methodology may be confusing and the focus should be on the results. Ms. Preas said that it could be stated as HSCRC data was used as a screening tool to identify gaps that may or may not financially impact your organization with regards to public reporting. Ms. Witherspoon asked if the facilities would be willing to send in lab data for CLABSI and CAUTI in the future. Ms. Preas said yes and that chart review is still necessary to understand how discrepancies occur. Ms. Lee said that is the next step but not as many on-site reviews will be held. Ms. Preas noted that vendor denominator data is not always accurate including the need to include all procedure code fields.

LabID Event (MRSA/CDIF) Q1&2 2014:
- Proxy measures
- HSCRC both inpatient and outpatient data was used. Facility crosswalks were requested to match NHSN reporting locations to lab specimen collection locations.
    - Checked if specimen date was within a HSCRC stay
    - Identified potential over- and under-reported specimens
- 156 (27%) of 583 MRSA events were hospital onset; 1,356 (41%) of 3,334 CDIF events were hospital onset.
- Data submission challenges
    - Excel format
    - Lack of IT, lab, and HIM support
    - Unable to identify outpatient locations; issues completing crosswalks between NHSN and lab locations
- Results
    - Admission verified in 94% of CDIF and 93% of MRSA.
    - Potential reporting errors could include a single case having multiple reporting errors: 1,812 for CDIF and 692 for MRSA.
        - Ms. Gerovich asked if MRSA was more likely to have multiple errors. She asked for the number of cases that were affected. Ms. Regel said this included mismatches in lab data and NHSN data such as locations or date of events. Ms. Gerovich asked if MRSA and CDIF coding was found in the HSCRC data. Ms. Regel noted that potential reporting errors on this

slide was not related to HSCRC coding. The coding information and potential error examples will be added for the hospital webinar. Ms. Gerovich said providing categories on errors would be helpful- date, location, coding, etc.

- Recommendations
  - o Identify interdepartmental stakeholders
  - o Review NHSN definitions and instructions for reporting
  - o Ensure documentation is complete and retrievable
  - o Lab specific processes
    - ▪ Need accurate list of NHSN inpatient and facility affiliated outpatient locations with corresponding lab collection abbreviations
    - ▪ All positive specimens should be documented, archived and retrievable with mandatory reporting elements
- Ms. Whalen stated that there is alignment and collaboration between the stakeholders in the need to reinforce leadership involvement in a systems level approach. She said that VHQC requires senior leadership to sign off on projects to emphasize this. Ms. Lee stated that stakeholders can hopefully work together to improve reporting and outcomes.
- Ms. Lee said staff will prepare for the webinar for the hospitals and update the slides based on feedback. The webinar may be held on November 18th in place of the next HAI Advisory Committee.

6.   **Other Business**

Dr. Wilson stated that Illinois has an XDRO (drug-resistant organisms) registry where clinic labs are available for query in a database. A discussion has begun but there is no additional information at this point. Ms. Richards noted that CSTE is also forming a working group with interested states.

Adjournment: Next Meeting Date- January 27, 2016

Ms. Lee adjourned the meeting at 3:15 pm. She reminded the committee the next meeting is scheduled for January 27, 2016.