

MDCH SHARP NHSN USERS CONFERENCE CALL
Wednesday, September 24, 2014

Thank you to those who were able to join our monthly NHSN users' conference call. If you were unable to participate on this call, we hope that you will be able to participate next month. Any healthcare facility is welcome to participate in these calls, whether they are sharing NHSN data with us or not. These conference calls are voluntary. Registration and name/facility identification are **not** required to participate.

Our monthly conference calls will be held on the 4th Wednesday **every other** month at 10:00 a.m. **Our next conference call is scheduled for November 19th, 2014 (note: one week early due to the Thanksgiving holiday).**

Call-in number: 877-336-1831

Passcode: 9103755

Webinar: <http://breeze.mdch.train.org/mdchsharp/>

Suggestions for agenda items and discussion during the conference calls are always welcome! Please contact Allie at murada@michigan.gov to add items to the agenda.

HIGHLIGHTS FROM CONFERENCE CALL

Welcome & Introductions

Allie welcomed participants on the call and SHARP staff in the room were introduced. Participants were reminded to put their phones on mute or to press *6.

General Updates

Allie reviewed general NHSN updates with the group. These updates can be found in the attached powerpoint presentation.

Update on Reports

Allie announced that the 2013 Q3 report had been posted and emailed out to the listserv. The 2013 Q4 report was in final editing stages and will be released soon after the call. She provided some basic figures from these reports, found in the attached powerpoint. She also provided a preview of the TAP (targeted assessment for prevention) reports that will be included in the 2013 annual report, due for release by the end of 2014.

Ebola Update

Noreen Mollon gave an update on Ebola and Enterovirus D68. She provided current case counts and precaution information to the group. For more information on ebola, please visit the CDC website at <http://www.cdc.gov/vhf/ebola/>. For more information on enterovirus, please visit the CDC website at <http://www.cdc.gov/non-polio-enterovirus/outbreaks/EV-D68-outbreaks.html>.

VIM in Michigan

Jennie Finks read the following update on VIM in Michigan provided by Brenda Brennan: Per the NHSN newsletter call for isolates in April 2014, CDC has detected 2 carbapenem-resistant *Pseudomonas aeruginosa* isolates that produce Verona Integron-Encoded Metallo- β -lactamase (VIM) from a single healthcare facility in SE Michigan (sent to CDC via BOL). *Isolates meeting definition need to be non-susceptible (NS) to carbapenems but S to aztreonam and have the blaVIM gene via PCR.*

Background

CDC notified MDCH SHARP on 9/2/14 and again on 9/10/14 to report VIM was detected by PCR in *Pseudomonas aeruginosa* isolates sent for testing by clinical laboratory from Michigan. The first isolate reported on 9/2 was collected on 7/31/14 from urine (80 y/o male – patient #1) and the second isolate reported on 9/10 was collected on 8/21/14 from urine (72 y/o female – patient #2).

Patient #1 History

The patient is a 80 y/o male who lives in SE Michigan (transferred to the acute care facility from LTAC facility). The patient presented and was admitted on 7/31/14 for altered mental status and right-sided weakness. The patient has had numerous acute care and LTAC hospitalizations in the past 90 days. No history of infection or colonization with other MDROs. The patient has had both central lines and mechanical ventilation (in past and current admission). The patient has a history of bacterial (enterococcus) endocarditis, chronic UTIs, stroke, AFib and diabetes. The patient was just finishing a 2-week course of gentamicin and a 6-week course of ampicillin for endocarditis. When MDCH spoke to the IP at the facility, the patient had just been re-admitted to the facility from home on 9/1/14 for altered mental status. Current urine culture was negative. No antibiotics were prescribed. Patient is currently in contact precautions.

Patient #2 History

The patient is a 72 y/o female who lives in SE Michigan (transferred to the same acute care facility as Patient #1 from an extended care facility). The patient presented and was admitted on 8/21/14 for sepsis (urinary tract, pulmonary and decubitus issues on presentation) and advanced dementia. The patient has had numerous acute care and ECF hospitalizations in the past 90 days. The patient has a history of MRSA infection. Indwelling devices include urinary catheters. The patient presented with advanced debility reflective of advanced Parkinson's dementia. The patient experienced rapid decline over the past month or so. The patient was discharged to hospice on 8/31 and expired later that day.

Since both VIMs were detected/submitted from the same facility, we had the IP investigate possible overlaps. Per the IP, there were no overlaps in patient location (unit, ward, or floor) or days admitted. The patients came in from different ECF/LTAC with multiple problems. Per CDC, these cases are mostly likely due to unrecognized intermediaries between the two patients. If it were a healthcare provider, that would be

extremely hard to sort out. To note, there is no standard screening protocol for *Pseudomonas*. The facility is actively looking for patients and continues to put any suspect carbapenem-resistant *Pseudomonas* sp. patients in contact precautions.

Future Meeting Schedule

In the future, SHARP Unit NHSN calls will be every other month. They will still be held on the 4th Wednesday at 10am. Allie will send out reminders through the MDCH SHARP listserv regarding these calls.

Next Meeting

The next SHARP Unit NHSN conference call is scheduled for November 19, 2014 (one week early due to Thanksgiving) at 10:00 a.m.

NHSN User Group Call

September 24, 2014

MDCH SHARP Unit

mdch-sharp@michigan.gov

User Contact Info in NHSN

- It is important that we have current contact information for sending updates
- Go to “Facility” – “Facility Info” – “Contact Information”
 - “Edit” or “Reassign” roles
 - Anyone with administrative rights can reassign primary contacts for each component
 - Facility administrator can reassign a new facility administrator

SHARP Unit Listserv

- Receive emails from the SHARP Unit about NHSN calls, HAI Surveillance Reports, and Newsletters
- Email mdch-sharp@michigan.gov to be added or subscribe directly at https://public.govdelivery.com/accounts/MIDCH/subscriber/new?topic_id=MIDCH_130

Migration to SAMS

- Email from CDC on September 12th
 - There will be NO more digital certificates issued
 - If you still have one and haven't migrated yet, it will still work
 - Application for SAMS is quite different from renewing digital certificate and takes longer
 - Be aware of CMS deadlines when applying because they will not be able to rush SAMS application requests

CMS Requirements

- HCP Flu vaccination reporting is gearing up
 - Ambulatory Surgery Centers will be required to report this season
 - LTACs and IRFs are also reporting (including IRFs which are units within acute care facilities)
 - Acute care hospitals have the same reporting techniques as last year
 - HCP Flu vaccination outpatient reporting begins this flu season – sum inpatient and outpatient numbers

CMS Requirements (Wards)

- NEW! January 2015: Ward locations for CLABSI and CAUTI reporting.
 - Includes: medical, surgical, and med/surg wards
 - Make sure you follow the location descriptions to report the specific ward types indicated
 - http://www.cdc.gov/nhsn/PDFs/pscManual/15LocationsDescriptions_current.pdf

CMS Requirements (Wards)

CDC Location Label	CDC Location Code
Medical Ward	IN:ACUTE:WARD:M
Medical/Surgical Ward	IN:ACUTE:WARD:MS
Surgical Ward	IN:ACUTE:WARD:S
Pediatric Medical Ward	IN:ACUTE:WARD:M_PED
Pediatric Medical/Surgical Ward	IN:ACUTE:WARD:MS_PED
Pediatric Surgical Ward	IN:ACUTE:WARD:S_PED

CMS Requirements

- New! January 2015: LTAC and IRFs reporting MRSA bacteremia and CDI LabID facility-wide
 - If an IRF is a unit within an acute care hospital, the “facility-wide” reporting for the IRF will be “unit-wide”.

NHSN Updates from CDC

- Beginning January 2015:
 - Expansion of CRE reporting options
 - CAUTI definition changes (separating yeast UTIs)
 - Most definitions will be tweaked and simplified
 - Present at Time of Surgery (PATOS) added to SSI reporting

NHSN Updates from CDC

- Newsletter outlining major changes will be released in the next couple of weeks
- CDC will produce 10-15 minute webinars with a slide presentation
- Protocols posted late November/early December
- In-person training February 17-19th, 2015

NHSN Updates from CDC

- Why all these changes?
 - 2015 is the year for a new baseline
 - All future data will refer back to 2015, so want to get definitions as final as possible
 - SIRs in 2015 will be the last to use current baseline data

Reports Update

- 2013 Q3 has been posted to www.michigan.gov/hai website
- 2013 Q4 will be released very soon
- 2013 Annual Report is in progress

2013 Q3 and Q4 Report Highlights

**2013 Q3
MRSA Rates**

Table 4. Cumulative Michigan MRSA Rate						
	Facilities	Number of MRSA Events	Number of Patient Days	Number of Patient Admits/Encounters	MRSA Rate ¹	MRSA Prevalence Rate ²
MRSA Inpatient LabID ³	82	1,065 LabID ⁴	1,123,850	268,372 Admits	0.9476	0.3968
MRSA Bacteremia LabID ⁵	82	384 LabID	1,123,850	268,372 Admits	0.3417	0.1431↓
MRSA Outpatient LabID ⁶	10	139 LabID	----	119,040 Encounters	----	0.1168↓

Michigan Rate

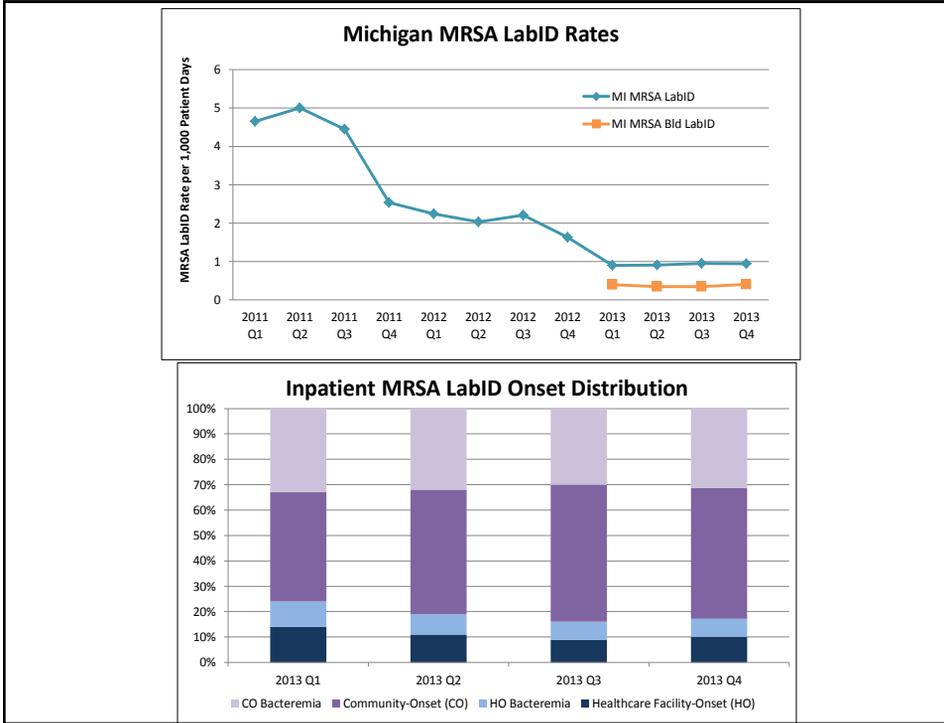
¹MRSA Rate: Methicillin-Resistant *Staphylococcus aureus* (MRSA) rate. This is the number of MRSA LabID Events or surveillance infections per 1,000 patient days.
²MRSA Prevalence Rate: This is the number of MRSA LabID Events per 100 patients admitted or 100 encounters.
³MRSA Lab ID: MRSA Laboratory-Identified (LabID) Event. This is an option within the Multidrug-Resistant Organism / Clostridium difficile Infection (MDRO/CDI) Module of NHSN for tracking laboratory results without conducting additional surveillance for infections.
⁴There are fewer MRSA LabID Events indicated here than in Table 2 because events used to calculate a rate require denominator data (patient days and/or admissions). Those without denominator data were excluded from the calculation.
⁵MRSA bacteremia LabID: MRSA LabID event from a blood specimen
⁶MRSA outpatient LabID: MRSA LabID event specimen collected in an outpatient location, and reported only if the hospital is reporting outpatient events. If a patient is then admitted as an inpatient, these events are also reported as inpatient events, and are attributed to the admitting location.
↓ Or ↑ Indicates that the rate is statistically significantly lower or higher than previous quarter (respectively).

**2013 Q4
MRSA Rates**

Table 4. Cumulative Michigan MRSA Rate						
	Facilities	Number of MRSA Events	Number of Patient Days	Number of Patient Admits/Encounters	MRSA Rate ¹	MRSA Prevalence Rate ²
MRSA Inpatient LabID ³	85	1,096 LabID ⁴	1,164,309	271,230 Admits	0.9413↓	0.4041
MRSA Bacteremia LabID ⁵	85	409 LabID	1,164,309	271,230 Admits	0.3513	0.1508
MRSA Outpatient LabID ⁶	10	115 LabID	----	105,852 Encounters	----	0.1086

Michigan Rate

¹MRSA Rate: Methicillin-Resistant *Staphylococcus aureus* (MRSA) rate. This is the number of MRSA LabID Events or surveillance infections per 1,000 patient days.
²MRSA Prevalence Rate: This is the number of MRSA LabID Events per 100 patients admitted or 100 encounters.
³MRSA Lab ID: MRSA Laboratory-Identified (LabID) Event. This is an option within the Multidrug-Resistant Organism / Clostridium difficile Infection (MDRO/CDI) Module of NHSN for tracking laboratory results without conducting additional surveillance for infections.
⁴The number of MRSA LabID Events indicated in this table is less than the number of MRSA LabID Events indicated in Table 2. This is because events used to calculate a rate required denominator data (patient days and/or admissions). Those without denominator data were excluded from the calculation.
⁵MRSA bacteremia LabID: MRSA LabID event from a blood specimen
⁶MRSA outpatient LabID: MRSA LabID event taken in an outpatient location, and reported only if the hospital is reporting outpatient events. These events are also reported in inpatient location, and are attributed to the admitting location.
↓ Or ↑ Indicates statistically significantly less than or greater than previous quarter (respectively).



2013 Q3 CDI Rates

	Facilities	Number of CDI Events	Number of Patient Days	Number of Patient Admits/ Encounters	CDI Rate ¹	CDI Prevalence Rate ²
CDI Inpatient LabID ³	82	2,145 LabID ⁴	1,042,213	249,272 Admits	20.5812	0.8605
CDI Outpatient LabID ⁵	10	85 LabID	----	118,220 Encounters	----	0.0719

Michigan Rate

¹CDI Rate: *Clostridium difficile* rate. This is the number of CDI LabID or surveillance events per 10,000 patient days.
²CDI Prevalence Rate. This is the number of *C. diff* LabID events per 100 patients admitted or per 100 encounters.
³CDI Lab ID: *Clostridium difficile* Infection (CDI) Laboratory-Identified (LabID) Event. This is an option within the Multidrug-Resistant Organism / *Clostridium difficile* Infection (MDRO/CDI) Module of NHSN for tracking laboratory results without conducting additional surveillance for infections.
⁴The number of CDI LabID Events indicated in this table is less than the number of CDI LabID Events indicated in Table 3. This is because events used to calculate a rate required denominator data (patient days and/or admissions). Those without denominator data were excluded from the calculation.
⁵CDI outpatient LabID: CDI LabID event specimen collected in an outpatient location, and reported only if the hospital is reporting outpatient events. If a patient is then admitted as an inpatient, these events are also reported as inpatient events, and are attributed to the admitting location.

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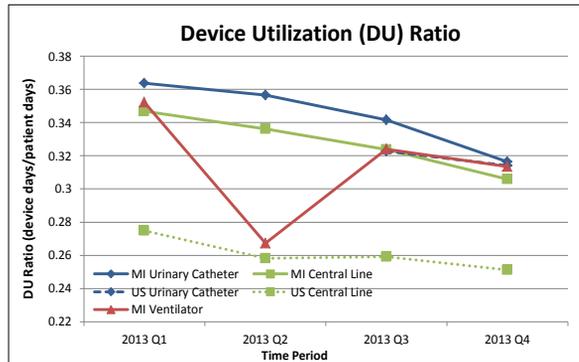
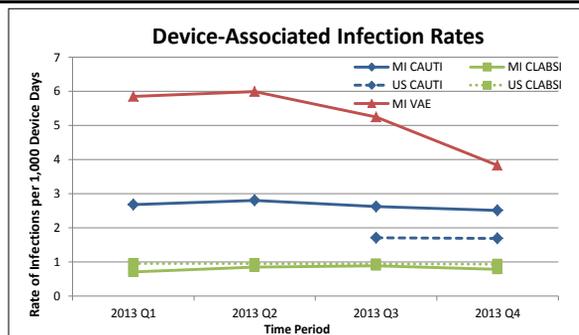
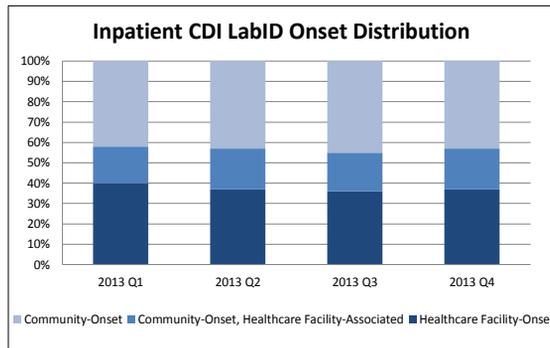
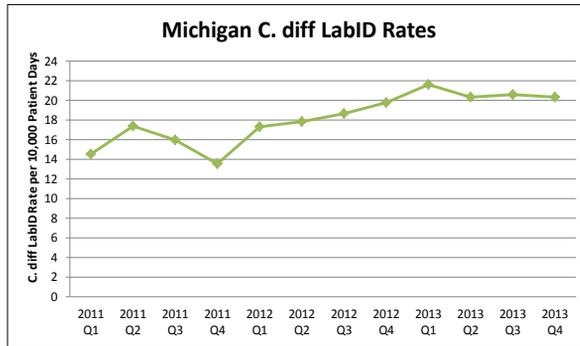
2013 Q4 CDI Rates

	Facilities	Number of CDI Events	Number of Patient Days	Number of Patient Admits/ Encounters	CDI Rate ¹	CDI Prevalence Rate ²
CDI Inpatient LabID ³	85	2,203 LabID ⁴	1,084,712	254,193 Admits	20.3095	0.8667
CDI Outpatient LabID ⁵	10	70 LabID	----	105,080 Encounters	----	0.0666

Michigan Rate

¹CDI Rate: *Clostridium difficile* rate. This is the number of CDI LabID or surveillance events per 10,000 patient days.
²CDI Prevalence Rate. This is the number of *C. diff* LabID events per 100 patients admitted or per 100 encounters.
³CDI Lab ID: *Clostridium difficile* Infection (CDI) Laboratory-Identified (LabID) Event. This is an option within the Multidrug-Resistant Organism / *Clostridium difficile* Infection (MDRO/CDI) Module of NHSN for tracking laboratory results without conducting additional surveillance for infections.
⁴The number of CDI LabID Events indicated in this table is less than the number of CDI LabID Events indicated in Table 3. This is because events used to calculate a rate required denominator data (patient days and/or admissions). Those without denominator data were excluded from the calculation.
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↓ or ↑ Indicates statistically significantly less than or greater than previous quarter (respectively).



2013 Q3 SIRs

Table 10.

Standardized Infection Ratios (SIR)								
Type of Infection	Number of Hospitals	Procedures Done	Device Days or Patient Days	Observed ¹	Predicted ²	MI SIR ³	MI p-value ⁴	MI 95% CI ⁵
CAUTI ⁶	83	N/A	95,159 DD	266	210.102	1.266	0.0002	1.121, 1.425
CLABSIs ⁷	80	N/A	89,238 DD	91	188.6229	0.482	<0.0001	0.391, 0.590
CLABSIs ICU ⁸	80	N/A	81,058 DD	79	168.0667	0.470	<0.0001	0.375, 0.583
CLABSIs NICU ⁹	16	N/A	8,180 DD	12	20.5563	0.584	0.0464	0.316, 0.992
SSI ¹⁰	76	11,995	N/A	287	277.701	1.033	0.3173	0.919, 1.158
SSI COLO ¹¹	74	2,139	N/A	140	128.865	1.086	0.3477	0.917, 1.278
SSI HYST ¹²	68	1,971	N/A	40	36.954	1.082	0.6033	0.784, 1.460
MRSA Bac LabID ¹³	79	N/A	1,111,185 PD	66	80.1519	0.823	0.1076	0.642, 1.041
C.diff LabID ¹⁴	79	N/A	1,032,385 PD	765	851.0855	0.899	0.0029	0.837, 0.964

Michigan Data US Data

¹Observed: Number of infections (CAUTI, CLABSIs or SSIs) reported during the time frame.
²Predicted: The number of CAUTIs or CLABSIs predicted based on the type of hospital unit(s) under surveillance, or the number of SSIs predicted based upon 2009 national SSI rates by procedure type.
³SIR: Standardized Infection Ratio: Ratio of observed events compared to the number of predicted events, accounting for unit type or procedure. An SIR of 1 can be interpreted as having the same number of events that were predicted. An SIR that is between 0 and 1 represents **fewer** events than predicted, while an SIR of greater than 1 represents **more** events than expected.
⁴p-value: An SIR p-value of <0.05 is considered significantly different than expected. It can be either significantly worse (if the SIR is greater than 1 and the p-value is <0.05) or significantly better (if the SIR is less than 1 and the p-value is <0.05).
⁵95% CI: 95% confidence interval around the SIR estimate. A 95% CI indicates that 95% of the time, the actual SIR will fall within this interval.
⁶CAUTI: Catheter-Associated Urinary Tract Infection. CAUTIs are defined using symptomatic urinary tract infection (SUTI) criteria or Asymptomatic Bacteremic UTI (ABUTI) criteria. UTIs must be catheter-associated (i.e. patient had an indwelling urinary catheter at the time of or within 48 hours before onset of the event).
⁷CLABSIs: Central Line-Associated Blood Stream Infection. CLABSIs are laboratory-confirmed bloodstream infections (LCBI) that are not secondary to a community-acquired infection, or an HAI meeting CDC/NHSN criteria at another body site. BSIs must be central line associated (i.e., a central line or umbilical catheter was in place at the time of, or within 48 hours before, onset of the event).
⁸CLABSIs ICU: CLABSIs from ICU locations only
⁹CLABSIs NICU: CLABSIs from NICU locations only
¹⁰SSI: Surgical Site Infection. Includes any superficial incisional, deep incisional, or organ/space SSI.
¹¹SSI COLO: Inpatient Colon surgeries
¹²SSI HYST: Inpatient Abdominal Hysterectomies
¹³MRSA Bacteremia LabID: Inpatient facility-wide MRSA bacteremia Laboratory-identified Event
¹⁴Clostridium difficile LabID: Inpatient facility-wide Clostridium difficile Laboratory-identified Event
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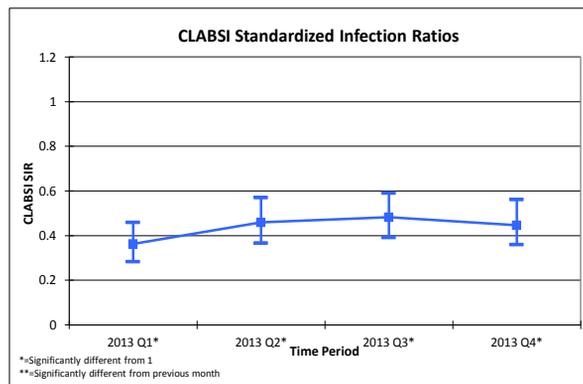
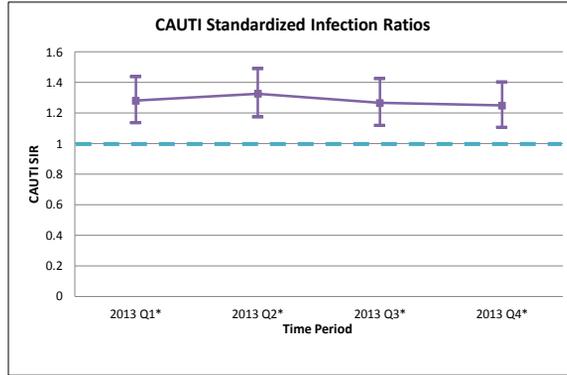
2013 Q4 SIRs

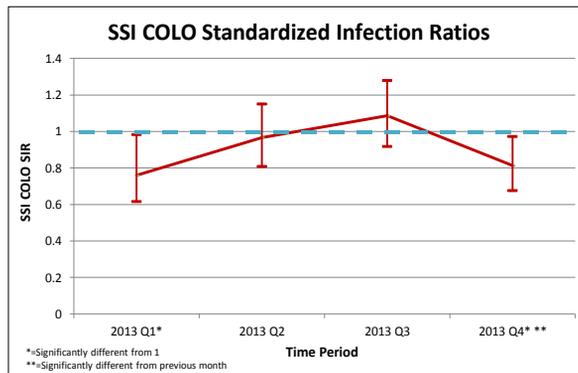
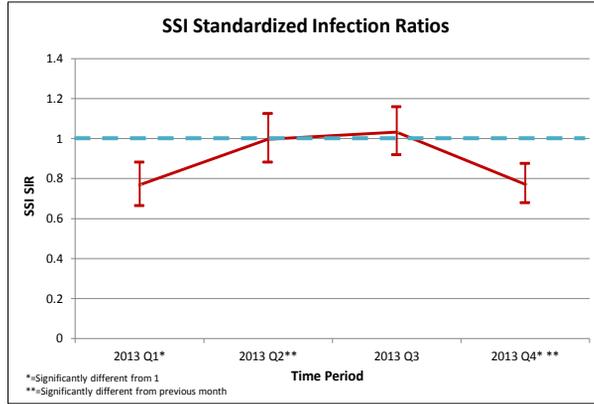
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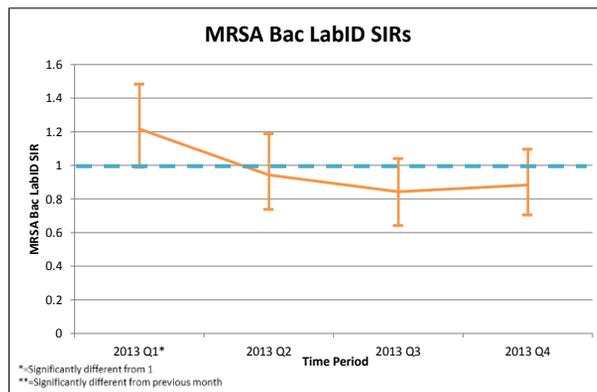
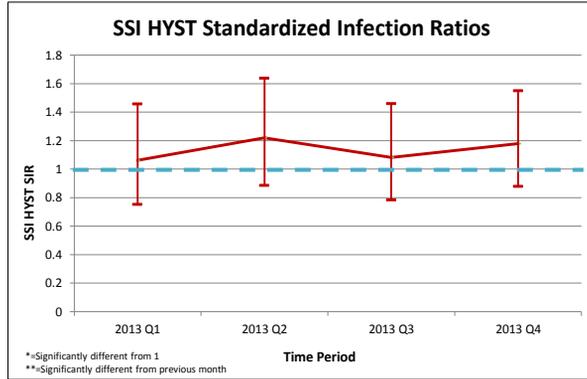
Standardized Infection Ratios (SIR)								
Type of Infection	Number of Hospitals	Procedures Done	Device Days or Patient Days	Observed ¹	Predicted ²	MI SIR ³	MI p-value ⁴	MI 95% CI ⁵
CAUTI ⁶	87	N/A	100,676 DD	274	219.2497	1.250	0.0004	1.108, 1.404
CLABSIs ⁷	84	N/A	91,900 DD	86	192.9266	0.446	<0.0001	0.359, 0.561
CLABSIs ICU ⁸	84	N/A	82,973 DD	77	170.4866	0.452	<0.0001	0.359, 0.561
CLABSIs NICU ⁹	17	N/A	8,927	9	22.4400	0.401	0.0016	0.196, 0.736
SSI ¹⁰	81	13,514	N/A	239	309.5430	0.772↓	<0.0001	0.679, 0.875
SSI COLO ¹¹	80	2400	N/A	117	143.9260	0.813↓	0.0237	0.675, 0.971
SSI HYST ¹²	74	2162	N/A	48	40.7430	1.178	0.2595	0.878, 1.549
MRSA Bac LabID ¹³	85	N/A	1,189,685 PD	79	89.4367	0.883	0.2685	0.704, 1.095
C.diff LabID ¹⁴	85	N/A	1,109,626 PD	834	926.2102	0.900	0.0022	0.841, 0.963

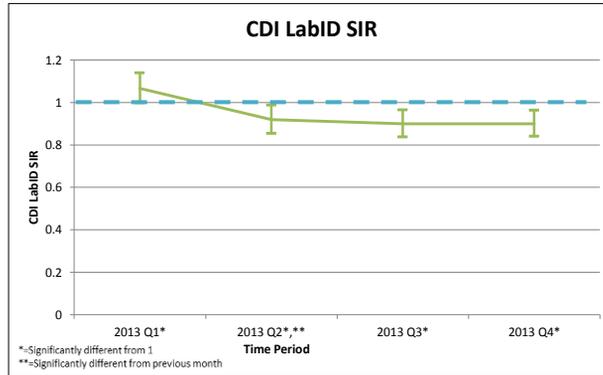
Michigan Data US Data

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2013 Annual Report Preview

TAP Reports

