CDI Success Story

Presented by: Lisa Beauch BSN, RN, CAPA, CPAN, CIC

Regional Manager, Infection Prevention

Mercy Health

May 9, 2018

Mercy Health St. Anne Hospital is a 123-bed community hospital in Toledo, Oh. Mercy Health is the largest healthcare system in Ohio and also serves Kentucky

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341 Days Without a *C. difficile* Infection: How Mercy Health – St. Anne Hospital Reduced *C. difficile* Infection Rates to Zero

Posted on November 1, 2017 by CDC's Safe Healthcare Blog

Guest Author: Lisa Beauch BSN, RN, CAPA, CPAN, CIC Infection Prevention, Toledo Regional Manager Mercy Health

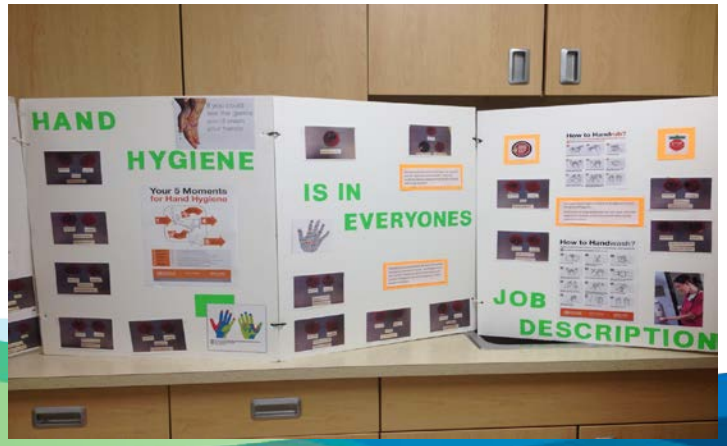
Lisa Beauch BSN, RN, CAPA, CPAN, CIC

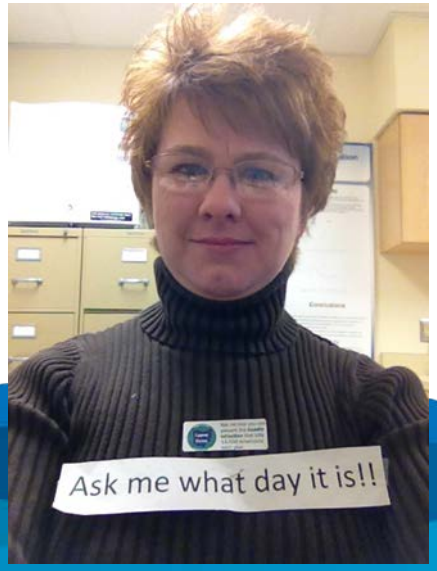
C. difficile (C. diff) is the most common cause of healthcare-associated diarrhea in U.S. hospitals. Reducing healthcare-acquired *Clostridium difficile* infections (CDIs) is a complex and evolving battle. But it's a battle that can be won. At Mercy Health — St. Anne Hospital, a 100-bed community hospital in Toledo, Ohio, my team and I used a multi-component strategy to reduce CDI rates and from July 2016 to July 2017 successfully eliminated all healthcare-associated CDI cases.

Prior to 2015, St. Anne Hospital had 40% more infections than predicted from baseline. Aiming to improve, my team and I worked with administration at both the hospital and system level to reduce the hospital's rate of CDI. We began by initiating a "days since last" approach on the hospital's daily safety call. Each unit shared their daily CDI-related information including number of patients on the unit with known or suspected CDI, number awaiting specimen collection or results, and what day of hospitalization CDI was confirmed. While this call was effective in bringing CDI to the forefront of attention, more needed to be done.

In 2015, we started tracking CDI cases by their location in the hospital. This showed nearly all cases of CDI patients spent time in the ICU, so my team and I ensured each ICU room underwent additional steps in terminal cleaning using bleach and UV light. In addition, we implemented a policy that required the

This was not the first time…. 2013/2014





Infection Prevention is never dull!!

2015 Infection Prevention headlines

- Worst of flu season could be over
- CRE infections tied to dirty scopes - Olympus issues urgent update on how to clean scopes linked to CRE outbreak
- Measles spread to 17 states
- Ebola cases rise for the first time in 2015

Never assume…

July 30, 2015

- Hospital ratings by infection prevention: 9 best, 12 worst | 5 indices for a high-performing OR | 25 largest nonprofit hospitals | AZ hospital to shut down after losing Medicare funding

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Clinical Leadership & Infection Control

Consumer Reports rates hospitals on infections: 9 highest, 12 lowest performing hospitals

July 29, 2015 | Print | Email

While those nine were shining stars when it comes to infection prevention, some hospitals performed much worse on preventing MRSA, *C. diff*, SSIs, CAUTIs and CLABSIs. The following 12 hospitals, listed alphabetically, are the lowest-rated in infection prevention, according to *Consumer Reports*:

3. Floyd Memorial Hospital and Health Services (New Albany, Ind.)
4. Fremont-Rideout Health Group (Marysville, Calif.)
5. Little Company of Mary Hospital and Health Care Centers (Evergreen Park, Ill.)
6. Mercy St. Anne Hospital (Toledo, Ohio)
7. Riverview Medical Center (Red Bank, N.J.)
8. Rockdale Medical Center (Conyers, Ga.)
9. St. Petersburg (Fla.) General Hospital
10. The Charlotte Hungerford Hospital (Torrington, Conn.)

"What seems to us as bitter trials are often blessings in disguise.“

Oscar Wilde

Summary of Mercy St. Anne's *Clostridium difficile* Infection (CDI) Review May 2016 Site Visit

No.	Item Reviewed	Identified Issue	Recommendation
14	Communication between caregivers regarding isolation needs	Communication methods varied between assessed departments with a combination of bedside and telephonic reports. Isolation needs appeared to only be communicated consistently when a patient had a history of multi-drug resistant organisms (MDRO), or previously assessed isolation needs, and a flag was present in the EPIC system. Symptoms requiring isolation based on current admission only appeared if an order for isolation was entered, which was not routinely occurring.	Promote awareness of symptom-based isolation requirements, and educate staff regarding the process surrounding order entry and subsequent communication between inpatient, outpatient, bed placement, and ancillary departments. Full utilization of the Awarix bed placement system is an unrealized opportunity (this issue was discussed at length with the facility IP).
15	Isolation signage	Signage placement was an issue between departments. The sign was intended to be placed via a magnet on the door frame in such way that the sign could be seen when traveling down the hall. Signs were not placed consistently, and as previously mentioned, the Awarix bed placement system was not fully utilized. Lack of standardization could lead to confusion and compliance concerns.	Standardized signage placement between departments. An example trifold design was discussed with the facility IP that attaches to the door frame via magnets. Additional detail can be provided if requested.
16	Isolation Compliance	Mercy St. Anne is not routinely monitoring isolation compliance.	Department managers and staff are responsible for following the policy within their units. Empower staff to stop one another when they identify a compliance issue. Note: Isolation compliance was an identified IP concern. During the surveyor's assessment of Mercy St. Anne, all staff were compliant with isolation precautions.

Summary of Mercy St. Anne's *Clostridium difficile* Infection (CDI) Review May 2016 Site Visit

No.	Item Reviewed	Identified Issue	Recommendation
9	Are patients being appropriately tested for CDI	1. Physicians are ordering tests based on one episode of diarrhea or diarrhea after laxative use (see facility IP case summary). 2. Staff are ordering CDI testing when screen is positive, but the current screen is very sensitive and the patient may not have a documented bowel movement for several days after admission. If a sample is sent on day 4 or after, and it is positive, the CDI is now considered HO, even if the test was ordered at admission.	1. After multidisciplinary discussion with physician and administrative involvement, determine the criteria for CDI-related diarrhea. Once defined, update CDI screen and educate staff and providers regarding expectations. When inappropriate tests are ordered, bring this to the attention of administration and medical staff for correction. 2. CDI stool testing should be self-limited. If a patient is unable to produce a sample after 48 hours, they are unlikely to be a true CDI case. In the event the patient becomes symptomatic, the test could be reordered. IP at Mercy St. Anne is performing a manual review to identify these orders and cancel them. This is a problem-prone process and is not occurring on weekends or after hours.
10	Lab testing	Lab staff were interviewed. A policy is in place regarding the testing of formed stools and repeat testing. However, all labs are batch sent to another facility for testing and the group was unsure of the rejection rate for formed samples, or the number of samples that were retests.	Develop a communication process between the laboratory processing the CDI samples and the lab/IP staff at Mercy St. Anne. This communication would facilitate the IP's ability to educate and provide feedback to physicians and staff who may be inappropriately sending stool for testing.
11	Duration of CDI isolation precautions	During Mercy St. Anne's assessment, the IP identified that contact isolation adherence was an area of concern, especially in the ED where patients are not routinely being isolated based on symptoms. Please note that the policy for this area states that patients should be isolated. Due to the acuity of patients and availability of staff, the ED was not evaluated on the day of the CDI assessment.	Review current policy and procedure for isolation precautions for CDI patients with administrative and physician support. Consider adapting a policy for the ED with consideration that this department is an outpatient area of the hospital. Once the policy is reviewed and/or updated, re-educate staff regarding expectations with specific focus on the importance of symptom-based isolation precautions (this issue was discussed at length with the facility IP).
12	Is there a system in place for patients to perform hand	Multiple staff members were interviewed. There is not a process in place to promote patient hand hygiene. Dietary had discontinued providing moist	Recommend reviewing current practices to determine the most viable option for the facility. Many products are available that could be provided to

Evaluation and Research on Antimicrobial Stewardship's Effect on *Clostridium difficile* (ERASE *C. difficile*) Project

Toolkit for Reduction of Clostridium difficile Through Antimicrobial Stewardship

Prepared
Agency fo
U.S. Depa
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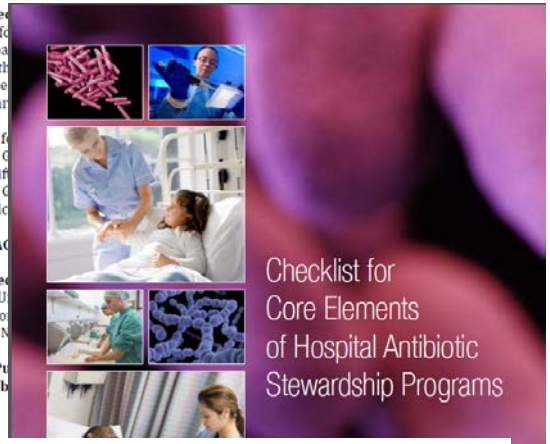

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY JUNE 2014, VOL. 35, NO. 6

SHEA/IDSA PRACTICE RECOMMENDATION

Strategies to Prevent *Clostridium difficile* Infections in Acute Care Hospitals: 2014 Update

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PURPOSE

Previously published guidelines are available that provide comprehensive recommendations for detecting and preventing healthcare-associated infections (HAIs). The intent of this document is to highlight practical recommendations in a concise format designed to assist acute care hospitals in implementing and prioritizing their *Clostridium difficile* infection (CDI) prevention efforts. This document updates "Strategies to Prevent *Clostridium difficile* Infections in Acute Care Hospitals,"[1] published in 2008. This expert guidance document is sponsored by the Society for Healthcare Epidemiology of America (SHEA) and is the product of a collaborative effort led by SHEA, the Infectious Diseases Society of America (IDSA), the American Hospital Association (AHA), the Association for Professionals in Infection Control and Epidemiology (APIC), and The Joint Commission, with major contributions from representatives of a number of organizations and societies with content expertise. The list of endorsing and supporting organizations is presented in the introduction to the 2014 updates.[2]

SECTION 1: RATIONALE AND STATEMENTS OF CONCERN

I. Increasing rates of CDI

C. difficile now rivals methicillin-resistant *Staphylococcus aureus* (MRSA) as the most common organism to cause HAIs in the United States.[4-5]

A. In the United States, the proportion of hospital discharges in which a patient received the *International Classification of Diseases, Ninth Revision, Clinical Modification* discharge diagnosis code for CDI more than doubled between 2000 and 2009.[6] CDI rates may have leveled off, but they remain at historically high levels. These increases have been seen in pediatric and adult populations, but the elderly have been disproportionately affected.[6] CDI incidence has also increased in Canada and Europe.[7-9] Data on the changing epidemiology of CDI in pediatric patients are limited and are confounded by the prevalence of asymptomatic carriage of *C. difficile* among infants and very young children and by the presence of other pathogens among children with diarrhea and positive for *C. difficile*.[10-13]

B. CDI with onset outside the hospital may be more common than previously recognized, with more than 50% of CDIs having onset in the community. In addition, more than 75% of CDI cases have onset outside the acute care hospital.[13] CDI present on admission to the hospital may increase the risk of CDI for other hospitalized patients.[14-16]

C. There have been numerous reports of an increase in CDI severity.[4,5,17-19] Most reports of increases in the incidence and severity of CDI have been associated with the BI/NAP1/027 strain of *C. difficile*.[6,9,16,19] Some studies have found that this strain produces more toxin A and B in vitro than most other strains of *C. difficile*, and it may produce more spores.[20-22] It also produces a third toxin (binary toxin) and is highly resistant to fluoroquinolones. A strain commonly found in animals, polymerase chain reaction (PCR) ribotype 078 (which also has *tcdC* gene

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Infect Control Hosp Epidemiol 2014;35(6):628-645
 0899-823X/2014/3506-0002$15.00. DOI: 10.1086/676023

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CDC > Healthcare-associated Infections (HAI)

Preventing Healthcare-associated Infections

Healthcare-associated infections (HAI) are a threat to patient safety. CDC provides national leadership in surveillance, outbreak investigations, laboratory research, and prevention of healthcare-associated infections. CDC uses knowledge gained through these activities to detect infections and develop new strategies to prevent healthcare-associated infections. Public health action by CDC and other healthcare partners has led to improvements in clinical practice, medical procedures, and the ongoing development of evidence-based infection control guidance and prevention successes.

HHS Action Plan to Prevent Healthcare-associated Infections

The prevention and reduction of healthcare-associated infections is a top priority for the U.S. Department of Health and Human Services (HHS). The HHS Steering Committee for the Prevention of Healthcare-Associated Infections was established in July 2008, the Steering Committee, along with scientists and program officials across HHS, developed the *HHS Action Plan to Prevent Healthcare-Associated Infections*, providing a roadmap for HAI prevention in acute care hospitals.

INFECTION CONTROL ASSESSMENT TOOLS

Tools to assist health departments in assessing infection prevention practices and guide quality improvement activities.

THE TARGETED ASSESSMENT FOR PREVENTION (TAP) STRATEGY

The TAP strategy is a method to use data for action to prevent HAIs.

See the library of Infection Control Guidelines

Healthcare-associated Infections

Prevention Toolkits

Example Infection Control Transfer Forms

- Example 1 [PDF – 263 KB]
- Example 2 [PDF – 240 KB]

Acute Care MDRO Control Activity Assessment Tool

- Acute Care Facility Multidrug-resistant Organisms Control Activity Assessment Tool [PDF – 402 KB]

Tools by Setting

Long-term Care

- Prevention Tools, Guidelines and Resources

Dialysis

- Audit Tools, Protocols and Checklists

Slide sets by Device

CLABSI – Central Line-associated Bloodstream Infections

- Checklist for Prevention of Central Line Associated Blood Stream Infections [PDF – 177 KB]

Evaluating Environmental Cleaning

- Options for Evaluating Environmental Cleaning also available for download [PDF – 389 KB]

Target – Assess – Prevent (TAP) Strategies https://www.cdc.gov/hai/prevent/tap.

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    - TAP CDI Implementation Guide
    - TAP CLABSI Implementation Guide
- Toolkits +
- Basic Infection Control and Prevention Plan for Outpatient Oncology Settings +

CDC > Healthcare-associated Infections (HAI) > Preventing HAIs

The Targeted Assessment for Prevention (TAP) Strategy

National Healthcare Safety Network (NHSN) Update

Please note: As of March 2017, the NHSN application has been updated to Version 8.6.2. Implications pertaining to running TAP Reports in NHSN include:

- The risk adjustments used to calculate the Standardized Infection Ratios (SIRs) have been updated in accordance with the new 2015 Rebaseline. All NHSN PS risk-adjusted summary measures, including the metric used by TAP Reports to rank locations and/or facilities, the Cumulative Attributable Difference (CAD) metric, will use this updated Rebaseline moving forward. Visit CDC's NHSN website for more information about the

TAP Resources

Target

- Individual Facility User – TAP 'How To' Guide [PDF – 1.41 MB]
- Group User – TAP 'How To' Guide [PDF – 1.35 MB]
- Targeted Assessment for Prevention of Healthcare-Associated Infections: A New Prioritization Metric – Journal article by Soe et al. published in *Infection Control & Hospital Epidemiology* describing the cumulative attributable difference (CAD) metric.
- Example Letter [DOC – 172 KB] – From a State Health Department to a Healthcare Facility, encouraging participation in state and regional prevention collaboratives.
- TAP Strategy Reports – NHSN Guidance on Generating a TAP Report
- TAP Glossary of Terms March 2015 [PDF – 127 KB]
- TAP Training – NHSN Data Entry and Analysis

Assess

- CAUTI TAP Facility Assessment Tool v2.0 – May 2016 [PDF – 2 MB]
- CDI Facility Assessment Tool – Instructions [PDF – 383 KB]
- CDI Facility Assessment Tool [PDF – 1,024 KB]
- CDI Facility Assessment Tool – Lab section [PDF – 277 KB]
- CDI Facility Assessment Tool – Stewardship section [PDF – 313 KB]
- CLABSI TAP Facility Assessment Tool v2.0* – August 2016 [PDF – 924 KB]
- CLABSI TAP Facility Assessment Tool v3.0* – March 2018 [PDF – 1 MB]

*Note: The CLABSI TAP Facility Assessment Tool was updated in March 2018 and is now available in Version 3.0. For the updated **TAP Excel Spreadsheet** (which compiles and summarizes Assessment responses to create the TAP Feedback Report) please email HAIPrevention@cdc.gov. The Assessment and Excel Spreadsheet versions must match (either both v2.0 or both v3.0). Partners are encouraged to use the updated Version 3.0 tool, as the previous Version 2.0 will only be available on the TAP website for a limited time.

In addition, CDC has developed a **SurveyMonkey** template for the CLABSI TAP Facility Assessment Tool v3.0. Please email HAIPrevention@cdc.gov if your program would like to utilize this template.

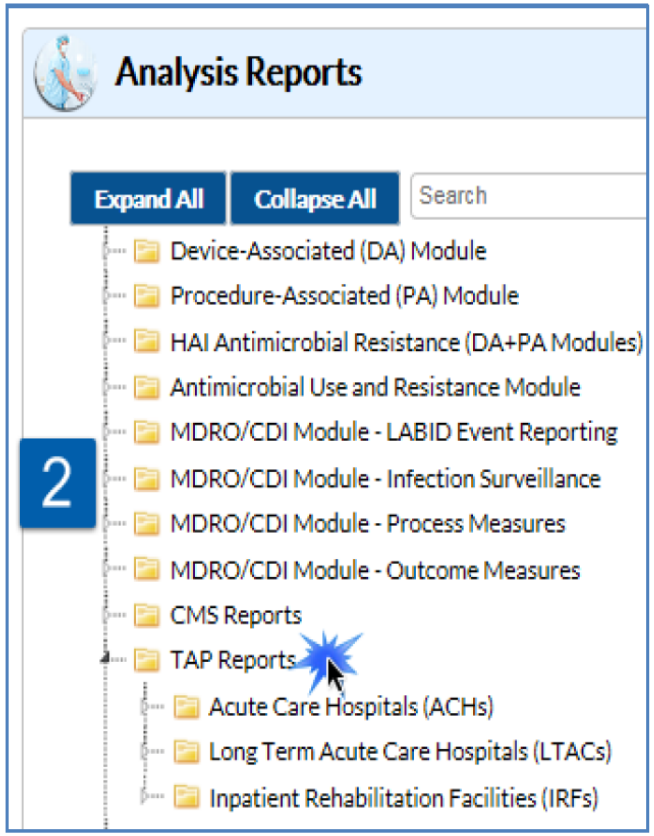
Prevent

- TAP CAUTI Toolkit Implementation Guide: Links to Example Resources
- TAP CDI Implementation Guide: Links to Example Resources
- TAP CLABSI Implementation Guide: Links to Example Resources

For questions pertaining to the TAP Strategy and the accompanying TAP tools, please contact: HAIPrevention@cdc.gov

Running your TAP report in NHSN

1. Select Analysis on the NHSN home screen. Then select "Reports" (formerly known as Output Options) from the dropdown menu that opens. Expand the "TAP Reports" folder. The TAP reports are organized by facility type. Expand the folder for the facility type relevant to your analysis to see the available TAP Report options.



National Healthcare Safety Network

TAP Report for FACWIDEIN CDI LabID data for Acute Care and Critical Access Hospitals (2015 Baseline)

Facilities Ranked by CAD 'Cumulative Attributable Difference'

SIR Goal: HHS Goal = 0.7

As of February 16, 2017 at 2:00 PM

Date Range: BS2_CDI_TAP summaryYr2016 to 2016

Facility Org ID	Facility Name	State	Type of Facility	Type of Affiliation	Number of Beds	Patient Days	COHCFA Prevalence	CDIF Facility Incident HO LabID Event Count	CDIF Facility Incident HO LabID Number Expected	Facility CAD	SIR	SIR Test
10000	DHQP Memorial Hospital	GA	HOSP-GEN	M	354	60059	0.14	61	55.034	22.48	1.108	

SIR is set to '.' when expected number of events is <1.0.

Facility Rank = Priority ranking for Targeted Assessment of Prevention by CAD in descending order

COHCFA PREVALENCE RATE = Community-onset healthcare facility-associated CDI prevalence rate per 100 admissions

CAD = Observed - Expected*SELECTED CAD MULTIPLIER

SIR TEST = 'SIG' means SIR > SIR Goal significantly

Data contained in this report were last generated on February 16, 2017 at 12:22 PM.

Click variable name to be directed to more information in this guide.

The unit-specific TAP Report output displays facility units ranked by their CADs.

CDI data are reported to NHSN on a facility-wide basis. Thus, TAP Reports for CDI will only display facility-wide CADs and will not provide unit-level rankings or unit-level CADs.

The surgical intensive care unit (SICU) at DHQP Memorial reported 5 CAUTI events and 5 pathogens during this reporting period. Shown here, 3 pathogens were yeast. This information can help facilities understand the events reported and implement the most appropriate prevention strategies.

No. of pathogens outside the parentheses represents total no. of pathogens reported. Only most common pathogen types are presented in parentheses, and some events may have > one type of pathogen.

Individual Facility, Unit-Specific Report - CAUTI example

Date Range: CAU_TAP summary Yr 2013 to 2013

Facility				Location								
Facility Org ID	Facility Name	Facility CAD	Location Rank	Location	CDC Location	Events	Urinary Catherter Days	DUR %	CAD	SIR	Sir Test	No. Pathogens (EC, YS, PA, KS, PM, ES
1000	DHQP Memorial	5.73	1	SICU	IN:ACUTE:CC:S	5	502	81	3.38	2.31	SIG	5 (0, 3, 1, 1, 0, 0)
			2	NEURO	IN:ACUTE:CC:N	3	257	77	1.58	1.58		3 (0, 0, 1, 0, 2, 0)
			3	BURN	IN:ACUTE:CC:B	2	162	61	1.10	1.67		2 (1, 0, 0, 0, 0, 0)
			4	REHAB	IN:ACUTE:WARD:REHAB	1	76	11	0.18	0.91		1 (0, 0, 0, 0, 1, 0)
			5	2N	IN:ACUTE:WARD:M	1	239	20	-0.20	0.63		1 (0, 0, 0, 0, 0, 0)
			6	6S	IN:ACUTE:WARD:M	1	261	20	-0.31	0.57		1 (0, 0, 0, 0, 0, 0)

If location-level CADs are the same in a given facility, their ranks are tie

(EC, YS, PA, KS, PM, ES) = No. of E. coli, yeast (both candida and non-candida species), *P. aeruginosa*, *K. pneumoniae/K. oxytoca*, *Proteus Mirabilis*, *Enterococcus* species

SIR is set to '.' when expected number of events is < 1.0

LOCATION CAD = (OBSERVED_LOCATION - EXPECTED_LOCATION*0.75)

Rounding the CAD up to a whole number when explaining the data to leadership ensures that they understand how many infections they would have needed to prevent to reach the SIRgoal.

The SIR will display as missing when the predicted number of events is less than 1.0.

If nothing is listed under SIRtest, the SIR is not significantly higher than the SIRgoal. 'SIG' will be displayed if the SIR is significantly higher than the SIRgoal.

DHQP Memorial overall needed to prevent 6 infections (round up 5.7) to have met their SIR goal (0.75 for CAUTI) during this time period selected (Yr 2013). The SICU is the major contributor to the facility CAD, followed by the Neuro and Burn critical care units. DHQP Memorial should focus their CAUTI Prevention efforts on these units.

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NHSN - National Healthcare Safety Network

- NHSN Home
- Alerts
- Dashboard
- Reporting Plan
- Patient
- Event
- Procedure
- Summary Data
- Import/Export
- Surveys
- Analysis
- Users
- Facility
- Group
- Logout

Analysis Reports

Expand All | Collapse All | Search

- Device-Associated (DA) Module
- Procedure-Associated (PA) Module
- HAI Antimicrobial Resistance (DA+PA Modules)
- Antimicrobial Use and Resistance Module
- MDRO/CDI Module - LABID Event Reporting
  - All LabID Events
  - All MRSA LabID Events
  - All MSSA LabID Events
  - All C. difficile LabID Events
    - Line Listing for All CDIF LabID Events
    - Frequency Table for All CDIF LabID Events
    - Bar Chart for All CDIF LabID Events
    - Pie Chart for All CDIF LabID Events
    - Rate Tables for CDIF LabID Data
    - SIR - ACH CDI FacwideIN LabID Data
    - SIR - CAH CDI FacwideIN LabID Data
    - SIR - IRF CDI LabID Data
    - SIR - LTAC CDI FacwideIN LabID Data
  - All VRE LabID Events

Date Range: LABID_EVENTS specimenDate 01/01/2015 to 12/31/2015

orgID	patID	eventID	spcOrgTy	locati	outpatie	prevP	onset	cdiAssa	admitDat	locationAdmitDa	specimenSour	specimenDa	FWCD
18064	8006777	17893462	CDIF	ICU	N	Y	HO	Recurrent	2/20/2015	2/28/2015	STOOL	2/28/2015	
18064	8192467	17893532	CDIF	ICU	N	N	HO	Incident	3/22/2015	3/22/2015	STOOL	3/26/2015	
18064	8306253	19772979	CDIF	ICU	N	Y	HO	Incident	7/30/2015	8/2/2015	STOOL	8/5/2015	
18064	8307144	19772977	CDIF	ICU	N	N	HO	Recurrent	8/16/2015	8/19/2015	STOOL	8/21/2015	
18064	8318521	18687325	CDIF	ICU	N	N	HO	Incident	4/22/2015	4/23/2015	STOOL	4/25/2015	
18064	8318521	18957832	CDIF	ICU	N	Y	HO	Recurrent	6/9/2015	6/9/2015	STOOL	6/12/2015	
18064	8221462	17893465	CDIF	MEDS	N	N	HO	Incident	2/2/2015	2/2/2015	STOOL	2/5/2015	
18064	8316802	19410033	CDIF	MEDS	N	N	HO	Incident	7/20/2015	7/20/2015	STOOL	7/23/2015	
18064	8008319	20375248	CDIF	PROG	N	N	HO	Incident	9/16/2015	10/2/2015	STOOL	10/2/2015	
18064	8154771	17893534	CDIF	PROG	N	Y	HO	Incident	3/13/2015	3/14/2015	STOOL	3/17/2015	
18064	8239108	20000687	CDIF	PROG	N	Y	HO	Incident	9/11/2015	9/16/2015	STOOL	9/23/2015	
18064	8258384	18687326	CDIF	PROG	N	N	HO	Incident	3/25/2015	3/25/2015	STOOL	4/1/2015	
18064	8272457	17893448	CDIF	PROG	N	N	HO	Incident	2/15/2015	2/16/2015	STOOL	2/18/2015	
18064	8276170	20000689	CDIF	PROG	N	N	HO	Incident	8/29/2015	9/4/2015	STOOL	9/5/2015	
18064	8284731	18957834	CDIF	PROG	N	N	HO	Incident	5/25/2015	5/30/2015	STOOL	6/1/2015	
18064	8318521	18957833	CDIF	PROG	N	Y	HO		6/9/2015	6/12/2015	STOOL	6/18/2015	
18064	8323443	19772965	CDIF	PROG	N	N	HO	Incident	8/6/2015	8/7/2015	STOOL	8/9/2015	
18064	8056010	17893512	CDIF	ED	Y	N	CO-HCFA	Incident	2/12/2015	2/12/2015	STOOL	2/13/2015	
18064	8237397	17893449	CDIF	ICU	N	Y	CO-HCFA	Incident	2/26/2015	2/26/2015	STOOL	2/27/2015	
18064	8018825	17893451	CDIF	MEDS	N	N	CO-HCFA	Incident	2/13/2015	2/13/2015	STOOL	2/14/2015	
18064	8079185	19772981	CDIF	MEDS	N	Y	CO-HCFA	Recurrent	8/9/2015	8/9/2015	STOOL	8/9/2015	
18064	8311746	17893515	CDIF	PROG	N	N	CO-HCFA	Incident	3/16/2015	3/16/2015	STOOL	3/16/2015	
18064	8311746	18687311	CDIF	PROG	N	Y	CO-HCFA	Recurrent	4/14/2015	4/14/2015	STOOL	4/15/2015	
18064	8185287	20000690	CDIF	CVU	N	N	CO	Incident	9/15/2015	9/15/2015	STOOL	9/16/2015	

LineListingforAllCDIFLabIDEvent

National Healthcare Safety Network

TAP Report for FACWIDEIN CDI LabID data for Acute Care and Critical Access Hospitals (2015 Baseline)

Facilities Ranked by CAD 'Cumulative Attributable Difference'

SIR Goal: HHS Goal = 0.7

As of February 16, 2017 at 2:00 PM

Date Range: BS2_CDI_TAP summaryYr2016 to 2016

Facility Org ID	Facility Name	State	Type of Facility	Type of Affiliation	Number of Beds	Patient Days	COHCFA Prevalence	CDIF Facility Incident HO LabID Event Count	CDIF Facility Incident HO LabID Number Expected	Facility CAD	SIR	SIR Test
10000	DHQP Memorial Hospital	GA	HOSP-GEN	M	354	60059	0.14	61	55.034	22.48	1.108	

SIR is set to '.' when expected number of events is <1.0.

Facility Rank = Priority ranking for Targeted Assessment of Prevention by CAD in descending order

COHCFA PREVALENCE RATE = Community-onset healthcare facility-associated CDI prevalence rate per 100 admissions

CAD = Observed - Expected*SELECTED CAD MULTIPLIER

SIR TEST = 'SIG' means SIR > SIR Goal significantly

Data contained in this report were last generated on February 16, 2017 at 12:22 PM.

TAP Resources

Target

- Individual Facility User – TAP 'How To' Guide [PDF – 1.41 MB]
- Group User – TAP 'How To' Guide [PDF – 1.35 MB]
- Targeted Assessment for Prevention of Healthcare-Associated Infections: A New Prioritization Metric – Journal article by Soe et al. published in *Infection Control & Hospital Epidemiology* describing the cumulative attributable difference (CAD) metric.
- Example Letter [DOC – 172 KB] – From a State Health Department to a Healthcare Facility, encouraging participation in state and regional prevention collaboratives.
- TAP Strategy Reports – NHSN Guidance on Generating a TAP Report
- TAP Glossary of Terms March 2015 [PDF – 127 KB]
- TAP Training – NHSN Data Entry and Analysis

Assess

- CAUTI TAP Facility Assessment Tool v2.0 – May 2016 [PDF – 2 MB]
- CDI Facility Assessment Tool – Instructions [PDF – 383 KB]
- CDI Facility Assessment Tool [PDF – 1,024 KB]
- CDI Facility Assessment Tool – Lab section [PDF – 277 KB]
- CDI Facility Assessment Tool – Stewardship section [PDF – 313 KB]
- CLABSI TAP Facility Assessment Tool v2.0* – August 2016 [PDF – 924 KB]
- CLABSI TAP Facility Assessment Tool v3.0* – March 2018 [PDF – 1 MB]

*Note: The CLABSI TAP Facility Assessment Tool was updated in March 2018 and is now available in Version 3.0. For the updated **TAP Excel Spreadsheet** (which compiles and summarizes Assessment responses to create the TAP Feedback Report) please email HAIPrevention@cdc.gov. The Assessment and Excel Spreadsheet versions must match (either both v2.0 or both v3.0). Partners are encouraged to use the updated Version 3.0 tool, as the previous Version 2.0 will only be available on the TAP website for a limited time.

In addition, CDC has developed a **SurveyMonkey** template for the CLABSI TAP Facility Assessment Tool v3.0. Please email HAIPrevention@cdc.gov if your program would like to utilize this template.

Prevent

- TAP CAUTI Toolkit Implementation Guide: Links to Example Resources
- TAP CDI Implementation Guide: Links to Example Resources
- TAP CLABSI Implementation Guide: Links to Example Resources

For questions pertaining to the TAP Strategy and the accompanying TAP tools, please contact: HAIPrevention@cdc.gov

Summary of Mercy St. Anne's *Clostridium difficile* Infection (CDI) Review May 2016 Site Visit

No.	Item Reviewed	Identified Issue	Recommendation
14	Communication between caregivers regarding isolation needs	Communication methods varied between assessed departments with a combination of bedside and telephonic reports. Isolation needs appeared to only be communicated consistently when a patient had a history of multi-drug resistant organisms (MDRO), or previously assessed isolation needs, and a flag was present in the EPIC system. Symptoms requiring isolation based on current admission only appeared if an order for isolation was entered, which was not routinely occurring.	Promote awareness of symptom-based isolation requirements, and educate staff regarding the process surrounding order entry and subsequent communication between inpatient, outpatient, bed placement, and ancillary departments. Full utilization of the Awarix bed placement system is an unrealized opportunity (this issue was discussed at length with the facility IP).
15	Isolation signage	Signage placement was an issue between departments. The sign was intended to be placed via a magnet on the door frame in such way that the sign could be seen when traveling down the hall. Signs were not placed consistently, and as previously mentioned, the Awarix bed placement system was not fully utilized. Lack of standardization could lead to confusion and compliance concerns.	Standardized signage placement between departments. An example trifold design was discussed with the facility IP that attaches to the door frame via magnets. Additional detail can be provided if requested.
16	Isolation Compliance	Mercy St. Anne is not routinely monitoring isolation compliance.	Department managers and staff are responsible for following the policy within their units. Empower staff to stop one another when they identify a compliance issue. Note: Isolation compliance was an identified IP concern. During the surveyor's assessment of Mercy St. Anne, all staff were compliant with isolation precautions.

Summary of Mercy St. Anne's *Clostridium difficile* Infection (CDI) Review May 2016 Site Visit

No.	Item Reviewed	Identified Issue	Recommendation
9	Are patients being appropriately tested for CDI	1. Physicians are ordering tests based on one episode of diarrhea or diarrhea after laxative use (see facility IP case summary). 2. Staff are ordering CDI testing when screen is positive, but the current screen is very sensitive and the patient may not have a documented bowel movement for several days after admission. If a sample is sent on day 4 or after, and it is positive, the CDI is now considered HO, even if the test was ordered at admission.	1. After multidisciplinary discussion with physician and administrative involvement, determine the criteria for CDI-related diarrhea. Once defined, update CDI screen and educate staff and providers regarding expectations. When inappropriate tests are ordered, bring this to the attention of administration and medical staff for correction. 2. CDI stool testing should be self-limited. If a patient is unable to produce a sample after 48 hours, they are unlikely to be a true CDI case. In the event the patient becomes symptomatic, the test could be reordered. IP at Mercy St. Anne is performing a manual review to identify these orders and cancel them. This is a problem-prone process and is not occurring on weekends or after hours.
10	Lab testing	Lab staff were interviewed. A policy is in place regarding the testing of formed stools and repeat testing. However, all labs are batch sent to another facility for testing and the group was unsure of the rejection rate for formed samples, or the number of samples that were retests.	Develop a communication process between the laboratory processing the CDI samples and the lab/IP staff at Mercy St. Anne. This communication would facilitate the IP's ability to educate and provide feedback to physicians and staff who may be inappropriately sending stool for testing.
11	Duration of CDI isolation precautions	During Mercy St. Anne's assessment, the IP identified that contact isolation adherence was an area of concern, especially in the ED where patients are not routinely being isolated based on symptoms. Please note that the policy for this area states that patients should be isolated. Due to the acuity of patients and availability of staff, the ED was not evaluated on the day of the CDI assessment.	Review current policy and procedure for isolation precautions for CDI patients with administrative and physician support. Consider adapting a policy for the ED with consideration that this department is an outpatient area of the hospital. Once the policy is reviewed and/or updated, re-educate staff regarding expectations with specific focus on the importance of symptom-based isolation precautions (this issue was discussed at length with the facility IP).
12	Is there a system in place for patients to perform hand	Multiple staff members were interviewed. There is not a process in place to promote patient hand hygiene. Dietary had discontinued providing moist	Recommend reviewing current practices to determine the most viable option for the facility. Many products are available that could be provided to

Infections (HAI)

- Data and Statistics +
- Types of Infections +
- Diseases and Organisms +
- Preventing HAIs −
  - Targeted Assess for Prevention (TAP −
    - TAP CAUTI Implementation Guide
    - **TAP CDI Implementation Guide**
    - TAP CLABSI Implementation Guide
- Toolkits +
- Basic Infection Control and Prevention Plan for Outpatient Oncology Settings +
- Outpatient Care Guide
- Tools for Protecting Healthcare Personnel +
- Infection Control Assessment Tools
- Water Management Programs

TAP Clostridium difficile infection (CDI) Implementation Guide: Links to Example Resources

Disclaimer: The links in the domains below are not mutually exclusive nor do they represent an exhaustive list of all the possible resources available. Furthermore, the links presented do not constitute an endorsement of these organizations or their programs by the Centers for Disease Control and Prevention (CDC) or the federal government, and none should be inferred.

Also refer to the following guidelines:

Strategies to Prevent *Clostridium difficile* Infections in Acute Care Hospitals: 2014 Update

Clinical Practice Guidelines for *Clostridium difficile* Infection in Adults: 2010 Update by the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA) [PDF – 25 pages]

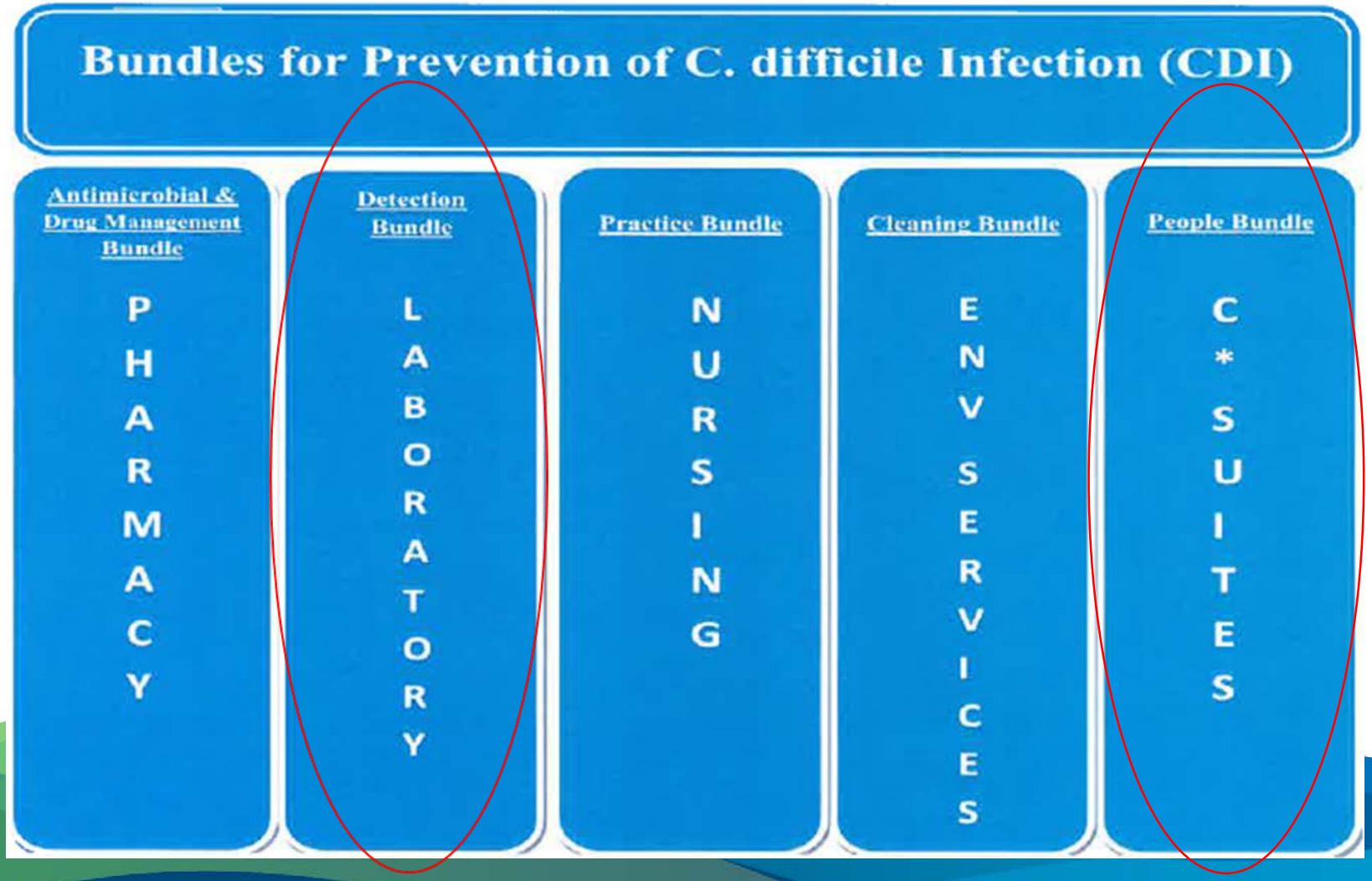
Other relevant CDC guidelines.

CDI Prevention Primer Slide Set [PPT – 7.3 MB]

- **I. General Infrastructure, Capacity, and Processes**
- **II. Antibiotic Stewardship**
- **III. Early Detection and Isolation, Appropriate Testing**
- **IV. Contact Precautions/Hand Hygiene**
- **V. Environmental Cleaning**
- **VI. Laboratory Practices**

Turns out we needed more than 3

This is an *interdepartmental bundle*



Practice Bundle

C-Difficile SCREENING and PROTOCOL

New Reading

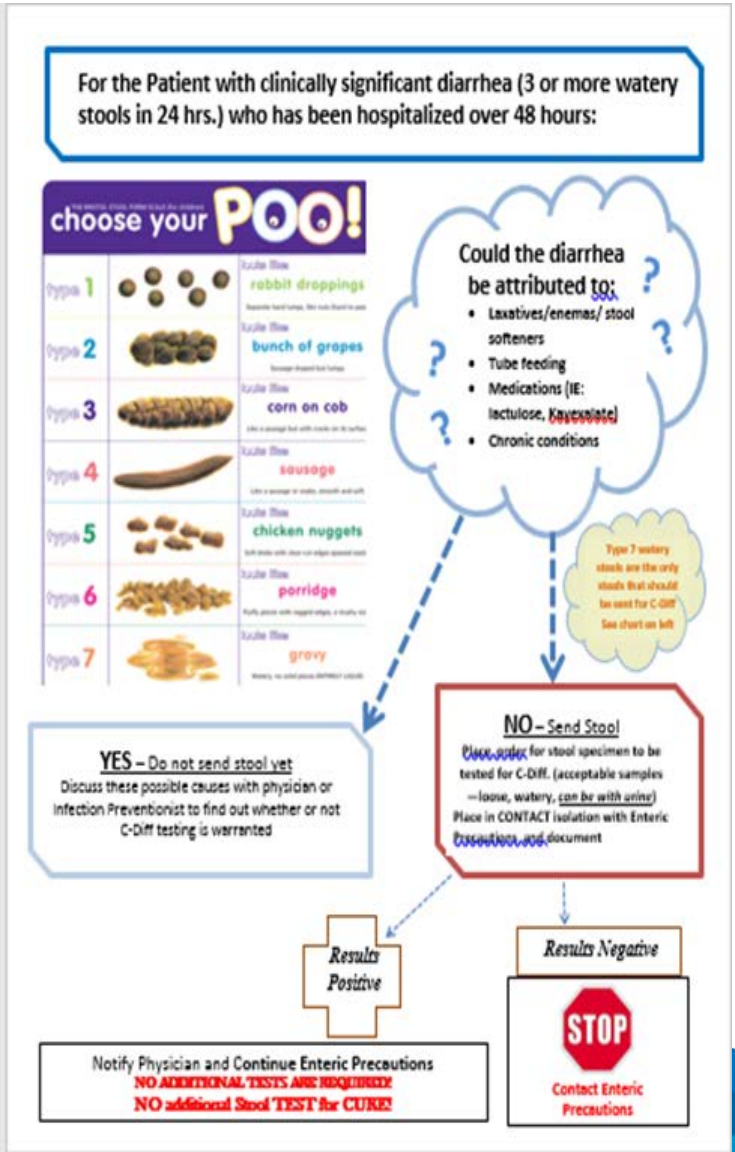
	ED to Hosp-Admission (Discharged) from 1/1 01/17/16 0400
C-Difficile Admission Screening and Protocol	
Admitted with diarrhea?	No
Prior history of C-Difficile in last 3 months	No
Antibiotic use in the past 6-8 weeks?	No
Prior hospitalization or nursing home in the last month?	Yes

Values By | Create Note

C-Difficile Admission Screening and Protocol

Admitted with diarrhea?	Yes	No
Had at least 3 unformed stools in the past 24 hours?	Yes	No
Have you had an unformed stool that conforms to the shape of the container?	Yes	No
Is this an abnormal bowel pattern for you?	Yes	No
Prior history of C-Difficile in last 3 months	Yes	No
Antibiotic use in the past 6-8 weeks?	Yes	No
Prior hospitalization or nursing home in the last month?	Yes	No

Restore | Close F9 | Cancel



MERCYHEALTH

Patient Label

C-DIFF COLLECTION FORM

Completion **REQUIRED** prior to sending **EVERY** specimen

Room #: _____ Admit Date: _____Date C-Diff Toxin PCR collected and sent to lab: _____

Number of days since admission (with admission date being day 1): _____

Initial C-Diff screening completed within 24 hours of admission?	Yes	**NO**
Initial C-Diff screening positive for diarrhea and 3 unformed stools in the last 24 hours? (If **Yes= send immediately with first stool on the day of OR day after admit)**	Yes	**NO**
Has C-Diff contact isolation been ordered? (If no, order Per Protocol)	Yes	**NO**
Has a Providers order been placed for C-Diff Toxin PCR (**Per Protocol ONLY when attached to BPA**)	Yes	**NO**

Day 1-3 → Stop here (Present on Admission=Community Onset)

Day 4 and after → Continue and Complete form (Hospital Onset)

Must circle appropriate answer to all 4 questions:

Is stool liquid and/or watery?	Yes	**NO**	If **NO** - CRITERIA NOT MET
Are 3 liquid/watery stools documented in the I/O section within the last 24 hours?	Yes	**NO**	If **NO** - CRITERIA NOT MET
Any other factors contributing to diarrhea: such as stool softeners, laxatives, lactulose, medications, tube feeds, bowel prep, etc.?	**YES**	No	If **YES** - CRITERIA NOT MET
Is the patient clinically symptomatic?	**YES**	No	If **YES** -**Circle S/S**: Temp > 38.1, Abdominal pain, N/V

If specimen **CRITERIA NOT MET**, discuss criteria with provider to obtain an order to Discontinue C-Diff Toxin PCR (**Not a Per Protocol order**)

If C-Diff Toxin PCR order has been discontinued or ruled out (negative result) → Discontinue C-Diff Contact Isolation Per Protocol

Any questions or concerns → *****

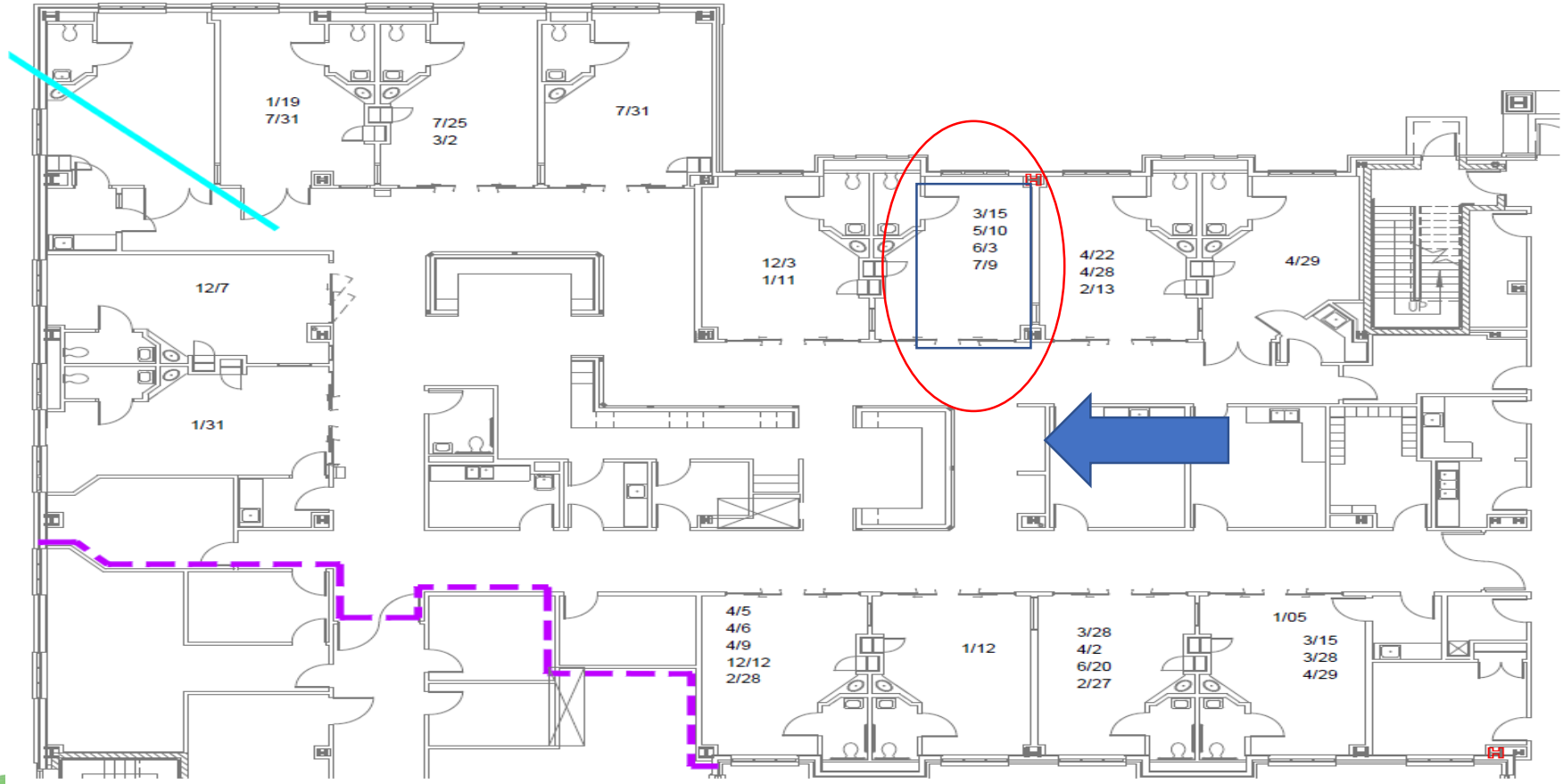
1st RN (**PRINT NAME**) _____

2nd RN (**PRINT NAME**) _____ (2nd RN verification **REQUIRED**)

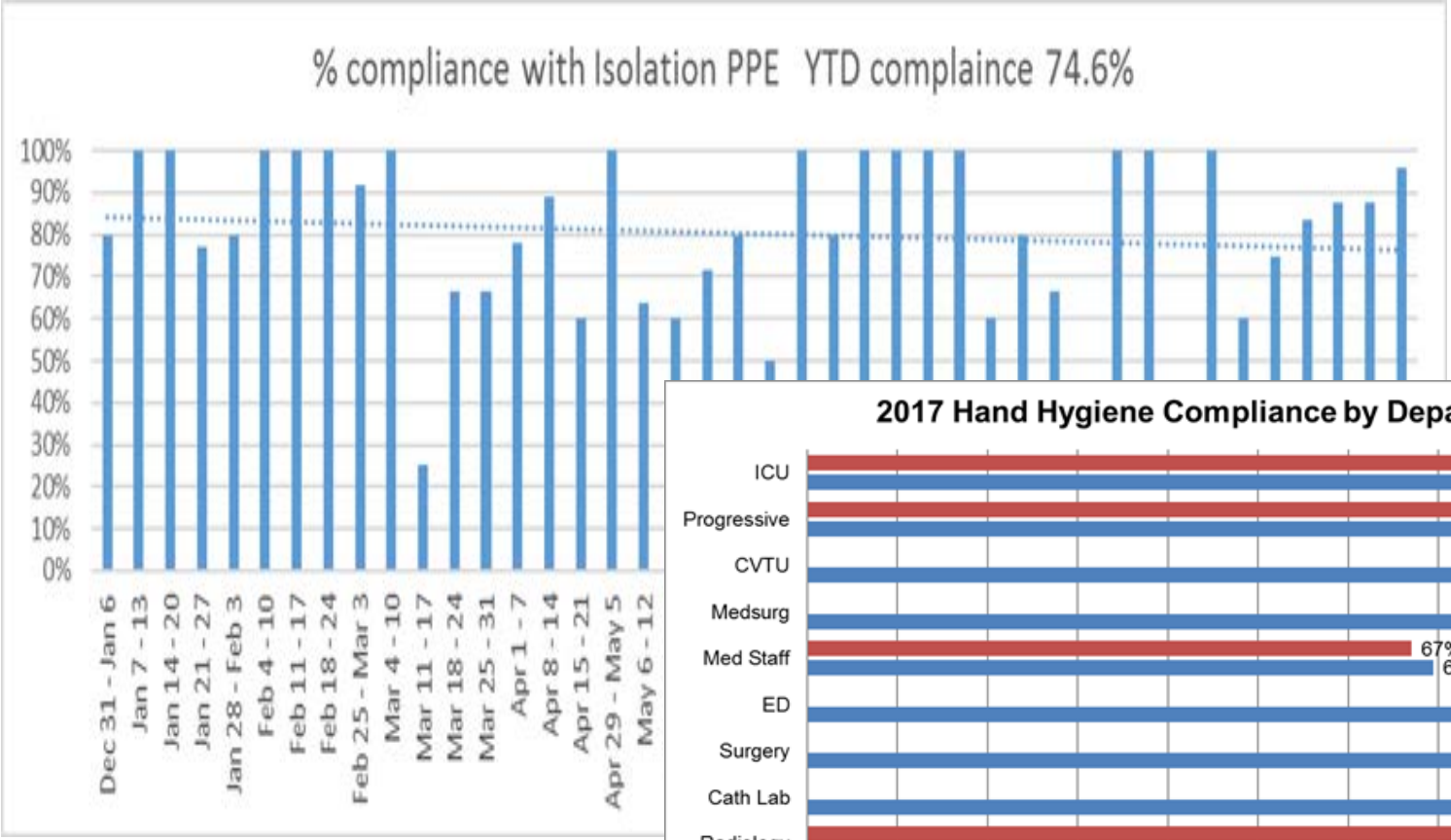
Fax completed form to Infection Prevention @ **** **AND turn into unit manager**

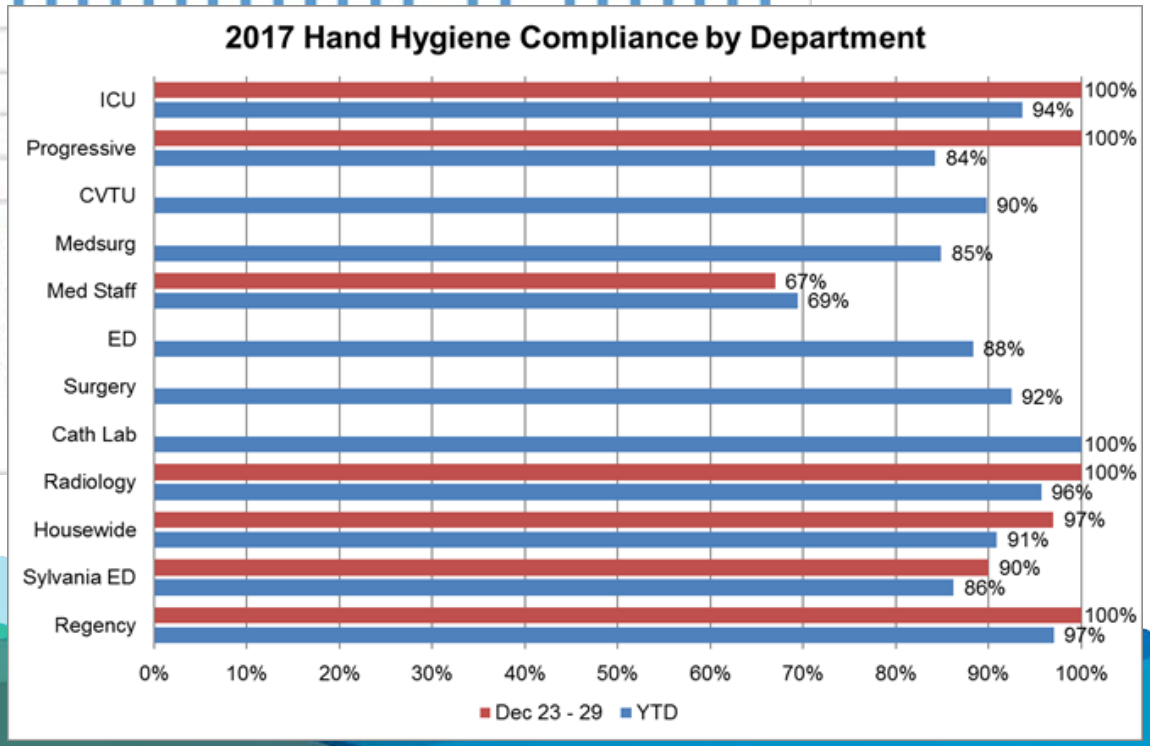
MERCYHEALTH

Environment Bundle



People Bundle





"Success is the sum of small efforts, repeated day-in and day-out."

Robert Collier

Quarter-YR	SIR	
3Q - 2015	1.516	Planning
3Q - 2016	0.544	Implementation continued but still inconsistent
4Q - 2016 – 2Q 2017	0.00	Auditing and reinforcement of practice
2nd half 2017	0.594	SIR for all 2017 = 0.303

MERCYHEALTH

Thank you.

Questions???

Questions?

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