ALLIANT HEALTH SOLUTIONS | HQIC Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
iQUALITY IMPROVEMENT & INNOVATION GROUP

HQIC Patient Safety Network: C. diff and MRSA Prevention

Welcome!

- All lines are muted, so please ask your questions in Q&A
- For technical issues, chat to the 'Technical Support' panelist
- Please actively participate in polling questions that pop up on the lower right-hand side of your screen

We will get started shortly!

HQIC Infection Prevention: C. diff and MRSA Prevention

Amy Ward, MS, BSN, RN, CIC

Rhonda Bowen, CIC, CPPS, CPHQ, CPHRM

December 9, 2021

ALLIANT HEALTH SOLUTIONS

HQIC
Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
iQUALITY IMPROVEMENT & INNOVATION GROUP

Making Health Care Better *Together*

COLLABORATORS:

Alabama Hospital Association
Alliant Health Solutions
Comagine Health
Georgia Hospital Association
KFMC Health Improvement Partners
Konza

Hospital Quality Improvement

Welcome from all of us!

ALABAMA HOSPITAL ASSOCIATION

ALLIANT HEALTH SOLUTIONS

Comagine Health

GHA Georgia Hospital Association

kfmc HEALTH IMPROVEMENT PARTNERS

KONZA

HAI Reduction Co-Leads

Amy Ward, MS, BSN, RN, CIC

INFECTION PREVENTION SPECIALIST

Amy is a registered nurse with a diverse background in acute care nursing, microbiology, epidemiology and infection control. She is passionate about leading and mentoring new and future infection preventionists in their career paths.

Contact: Amy.Ward@Allianthealth.org

Rhonda Bowen, BSHS, CIC, CPPS, CPHQ, CPHRM

SENIOR IMPROVEMENT ADVISOR, PATIENT SAFETY

Rhonda has worked in rural and critical access hospitals for over 30 years and has directed patient safety, quality and infection prevention and control for the past 14 years. She is passionate about all aspects of patient safety and infection prevention and control, especially the effects of health literacy and organizational safety culture on patient outcomes.

Contact: RBowen@Comagine.org

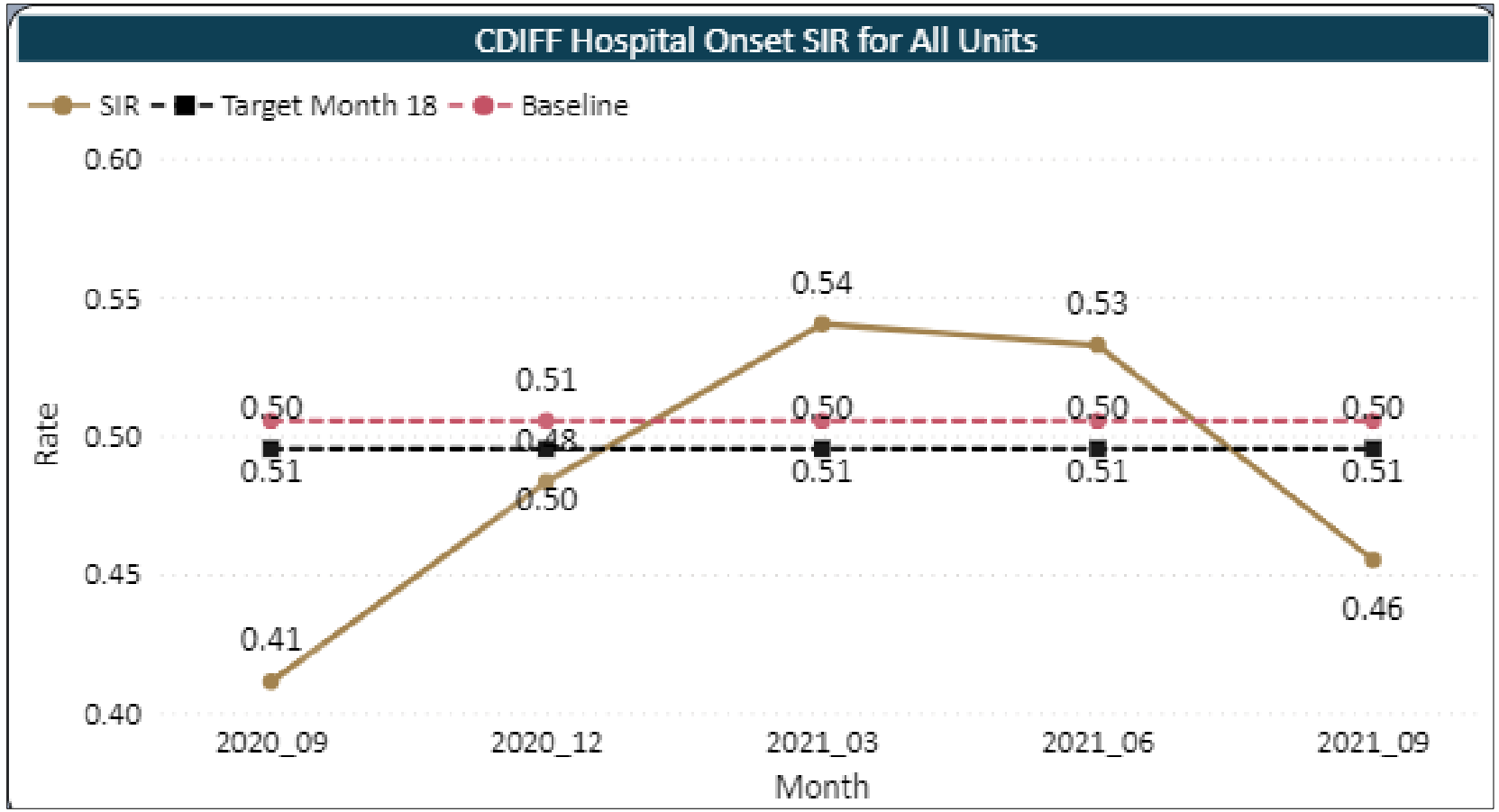
ALLIANT HEALTH SOLUTIONS | HQIC Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP

Learning Objectives

- Learn Today:
  - Review practice guidelines for MRSA and *C. difficile* prevention.
  - Review AHRQ Universal Decolonization Protocol.
  - Review process discovery tool *C. difficile* prevention.

- Use Tomorrow:
  - Review MRSA decolonization protocol with facility leadership and ID physician/champion and propose pilot study.
  - Complete process discovery tool and report findings and action plan to facility leadership.

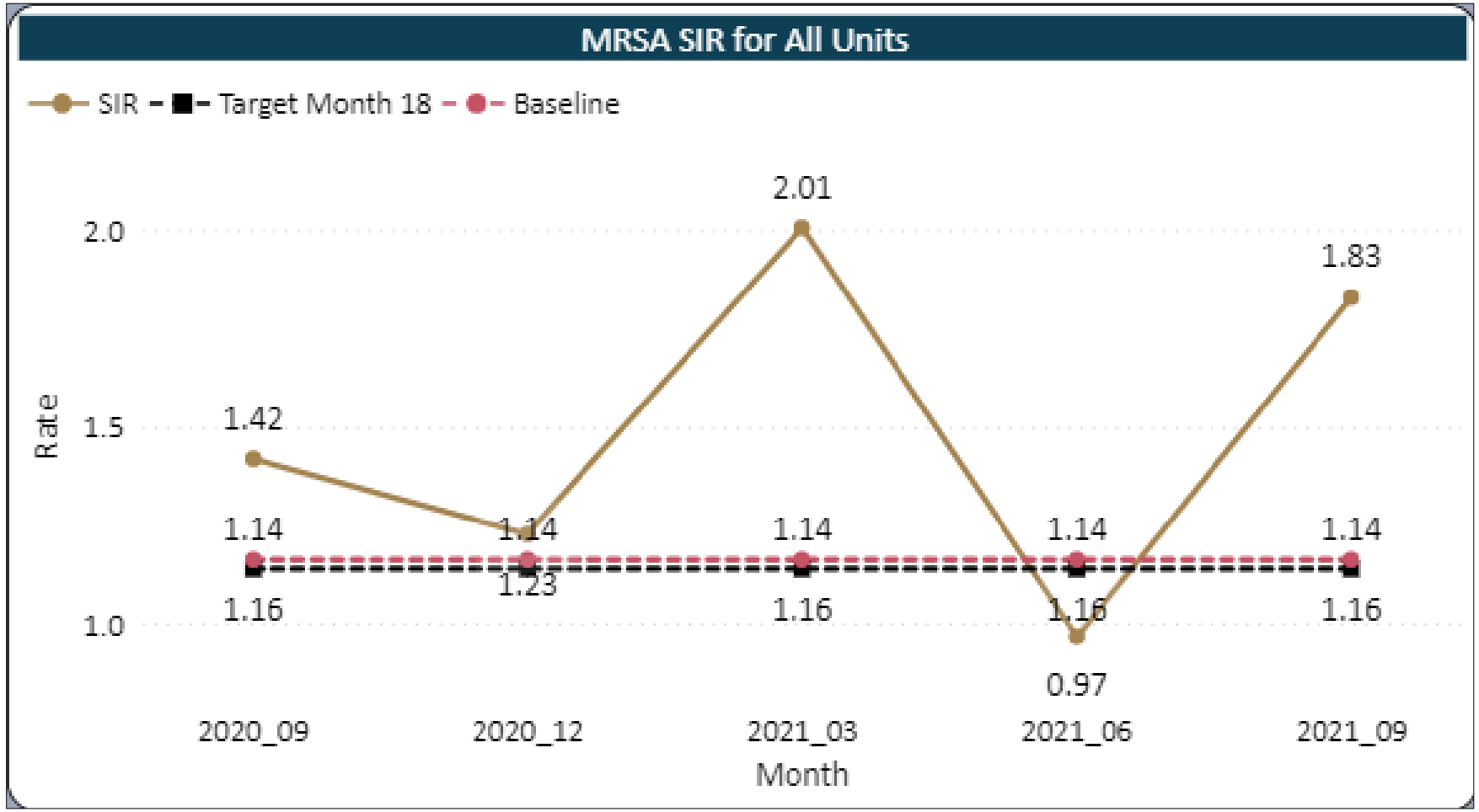
C. diff Lab ID Performance



- C. diff Lab ID Target SIR 0.495
- Average SIR 0.50

ALLIANT HEALTH SOLUTIONS | HQIC Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP

MRSA Lab ID Performance



- Target SIR 1.139
- Average SIR 1.5

Practice Guidelines

MRSA

- Strategies to Prevent S. aureus BSIs in Acute Care Facilities | CDC
- SHEA Compendium of strategies to prevent MRSA
- Universal ICU Decolonization: An Enhanced Protocol | Agency for Healthcare Research and Quality (ahrq.gov)

C. difficile

- Strategies to Prevent Clostridioides difficile Infection in Acute Care Facilities | CDC
- IDSA Clinical Practice Guidelines for Clostridium difficile Infection
- SHEA Compendium of strategies to prevent C. diff

Patient and Family Education

MRSA

FAQs
(frequently asked questions)

about

"MRSA"
(Methicillin-Resistant *Staphylococcus aureus*)

What is MRSA?

Staphylococcus aureus (pronounced staff-ill-oh-KOK-us AW-ree-us), or *"Staph"* is a very common germ that about 1 out of every 3 people have on their skin or in their nose. This germ does not cause any problems for most people who have it on their skin. But sometimes it can cause serious infections such as skin or wound infections, pneumonia, or infections of the blood.

Antibiotics are given to kill Staph germs when they cause infections. Some *Staph* are resistant, meaning they cannot be killed by some antibiotics. *"Methicillin-resistant Staphylococcus aureus"* or "MRSA" is a type of *Staph* that is resistant to some of the antibiotics that are often used to treat *Staph* infections.

Who is most likely to get an MRSA infection?

In the hospital, people who are more likely to get an MRSA infection are people who:

- have other health conditions making them sick
- have been in the hospital or a nursing home
- have been treated with antibiotics.

People who are healthy and who have not been in the hospital or a nursing home can also get MRSA infections. These infections usually involve the skin. More information about this type of MRSA infection, known as "community-associated MRSA" infection, is available from the Centers for Disease Control and Prevention (CDC). http://www.cdc.gov/mrsa

How do I get an MRSA infection?

People who have MRSA germs on their skin or who are infected with MRSA may be able to spread the germ to other people. MRSA can be passed on to bed linens, bed rails, bathroom fixtures, and medical equipment. It can spread to other people on contaminated equipment and on the hands of doctors, nurses, other healthcare providers and visitors.

Can MRSA infections be treated?

Yes, there are antibiotics that can kill MRSA germs. Some patients with MRSA abscesses may need surgery to drain the infection. Your healthcare provider will determine which treatments are best for you.

What are some of the things that hospitals are doing to prevent MRSA infections?

To prevent MRSA infections, doctors, nurses, and other healthcare providers:

- **Clean their hands** with soap and water or an alcohol-based hand rub before and after caring for every patient.
  - Visitors may also be asked to wear a gown and gloves.
  - When leaving the room, hospital providers and visitors remove their gown and gloves and clean their hands.
  - Patients on Contact Precautions are asked to stay in their hospital rooms as much as possible. They should not go to common areas, such as the gift shop or cafeteria. They may go to other areas of the hospital for treatments and tests.
- **May test** some patients to see if they have MRSA on their skin. This test involves rubbing a cotton-tipped swab in the patient's nostrils or on the skin.

What can I do to help prevent MRSA infections?

In the hospital

- Make sure that all doctors, nurses, and other healthcare providers clean their hands with soap and water or an alcohol-based hand rub before and after caring for you.

If you do not see your providers clean their hands, please ask them to do so.

When you go home

- If you have wounds or an intravascular device (such as a catheter or dialysis port) make sure that you know how to take care of them.

Can my friends and family get MRSA when they visit me?

The chance of getting MRSA while visiting a person who has MRSA is very low. To decrease the chance of getting MRSA your family and friends should:

- Clean their hands before they enter your room and when they leave.
- Ask a healthcare provider if they need to wear protective gowns and gloves when they visit you.

What do I need to do when I go home from the hospital?

To prevent another MRSA infection and to prevent spreading MRSA to others:

- Keep taking any antibiotics prescribed by your doctor. Don't take half-doses or stop before you complete your prescribed course.
- Clean your hands often, especially before and after changing your wound dressing or bandage.
- People who live with you should clean their hands often as well.
- Keep any wounds clean and change bandages as instructed until healed.
- Avoid sharing personal items such as towels or razors.

C. diff

Accessible version: https://www.cdc.gov/cdiff/what-is.html

THE PROGRESSION OF A *C. DIFF* INFECTION

C. diff is a bacterium (germ) that causes severe diarrhea and colitis (an inflammation of the colon). *C. diff* infections can be life-threatening.

***C. diff* can infect anyone. Most cases of *C. diff* infection occur while you're taking antibiotics or not long after you've finished taking antibiotics. Other risk factors include:**

- Previous infection with *C. diff* or known exposure to the germs
- Being 65 or older
- Recent stay at a hospital or nursing home
- A weakened immune system, such as people with HIV/AIDS, cancer, or organ transplant patients taking immunosuppressive drugs

If you have signs or symptoms, see a doctor.

- The doctor will review your signs and symptoms and order a lab test.
- If it's positive, you'll take an antibiotic for 10 days.

After you've recovered, you could still be colonized.

- The germs will be in your body, but you won't

***C. diff* develops within a few days or up to several weeks after you take antibiotics and symptoms can include:**

- Severe Diarrhea
- Fever
- Stomach tenderness or pain
- Loss of appetite
- Nausea

You might be admitted to the hospital.

- Your healthcare providers will use precautions such as wearing gloves and gowns to prevent the spread of *C. diff.*

ALLIANT HEALTH SOLUTIONS | HQIC Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP

AHRQ Universal Decolonization Protocol

REDUCE MRSA Trial

- Randomized evaluation of decolonization versus universal clearance to eliminate MRSA.
- Found that universal decolonization was the most effective intervention
- Universal decolonization led to a 37% reduction in MRSA clinical cultures and 44% reduction in all cause BSI.

Protocol Provides:

- Information to help prepare for launch
- Information on decision making and implementation readiness
- Overview and information on universal decolonization in adult ICU's
- A nursing protocol
- Training and educational materials
- Protocol skills assessment
- Product safety information

https://www.ahrq.gov/hai/universal-icu-decolonization/universal-icu-intro.html

MRSA Decolonization Protocol – Scientific Rationale

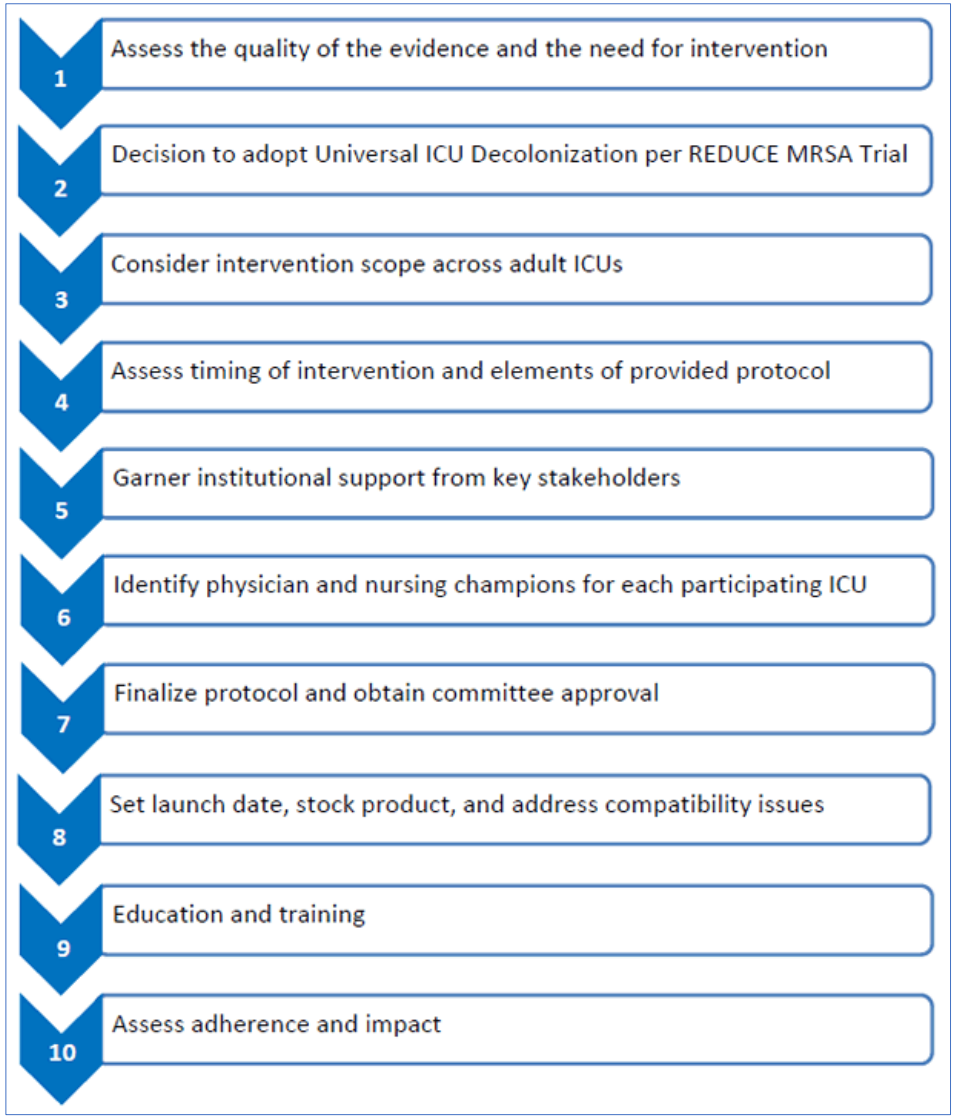
- The burden of healthcare associated infection (HAIs)
- The importance of MRSA
- Pathogenesis and preventability of HAIs
- Rational for decolonization in ICUs
- The REDUCE MRSA Trial – Three-way cluster randomized trial

  (43 hospitals/74 ICUs)
  - Screening and isolation
  - Targeted decolonization
  - Universal decolonization

Mupirocin and Chlorhexidine

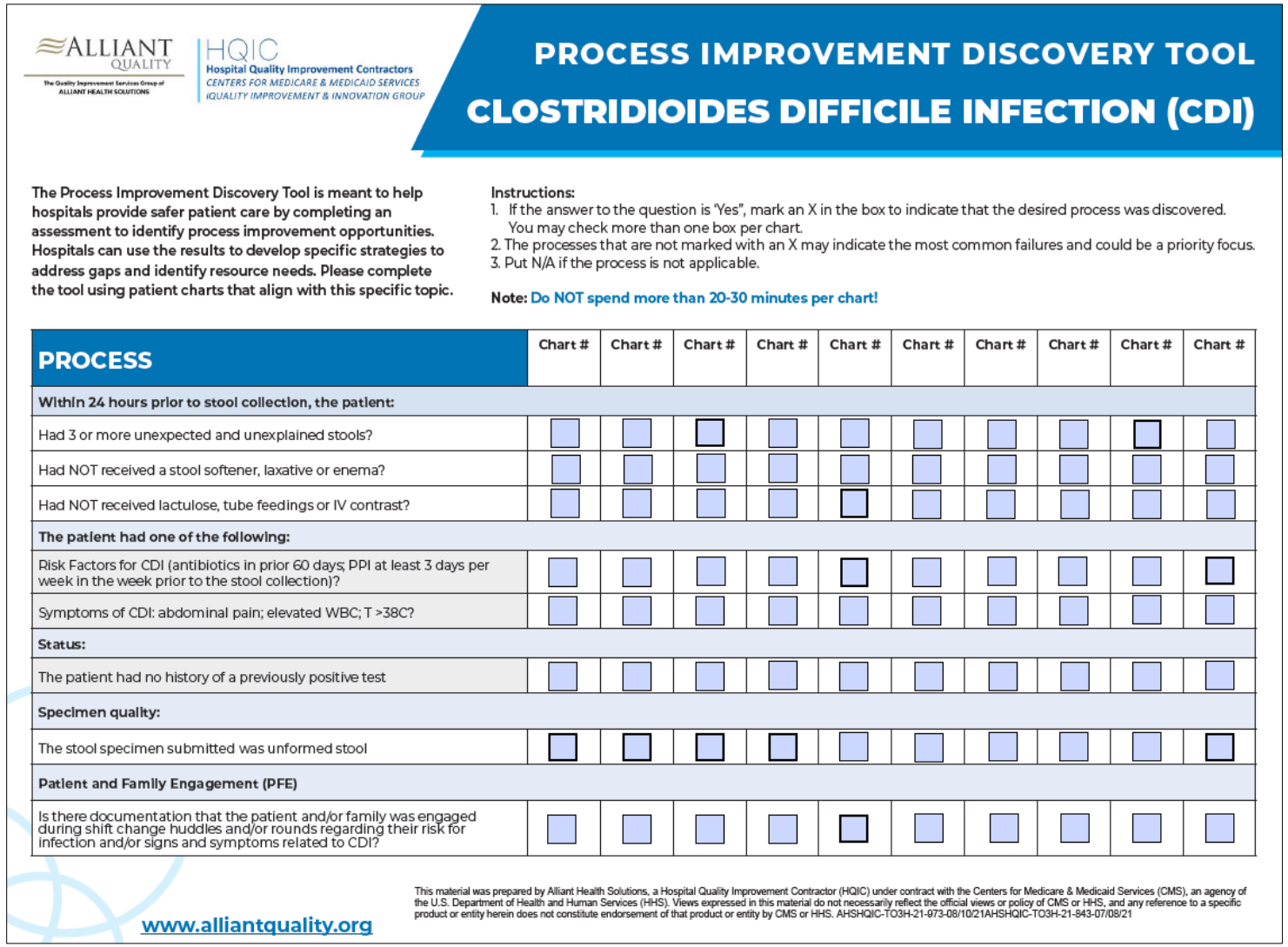
- Effectiveness of Decolonization
  - Mupirocin
    - FDA approved for treatment of wounds due to *S. aureus* and *S. pyogenes*
    - Nasal formulation approved for eradicating nasal carriage of *S. aureus*
    - 90% efficacy within two weeks of a five-day regimen
    - Significantly reduces short term hospital associated transmission and infections by 50%
    - Combination of mupirocin and CHG is better at eradicating MRSA than mupirocin alone
- Safety
  - Both products with excellent safety profiles
  - Systemic absorption is minimal

Implementation Flow Chart



ALLIANT HEALTH SOLUTIONS
HQIC
Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
iQUALITY IMPROVEMENT & INNOVATION GROUP

C. diff Process Discovery Tool



ALLIANT QUALITY
The Quality Improvement Services Group of ALLIANT HEALTH SOLUTIONS

HQIC
Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
iQUALITY IMPROVEMENT & INNOVATION GROUP

PROCESS IMPROVEMENT DISCOVERY TOOL
CLOSTRIDIOIDES DIFFICILE INFECTION (CDI)

The Process Improvement Discovery Tool is meant to help hospitals provide safer patient care by completing an assessment to identify process improvement opportunities. Hospitals can use the results to develop specific strategies to address gaps and identify resource needs. Please complete the tool using patient charts that align with this specific topic.

Instructions:
1. If the answer to the question is "Yes", mark an X in the box to indicate that the desired process was discovered. You may check more than one box per chart.
2. The processes that are not marked with an X may indicate the most common failures and could be a priority focus.
3. Put N/A if the process is not applicable.

Note: Do NOT spend more than 20-30 minutes per chart!

PROCESS	Chart #	Chart #	Chart #	Chart #	Chart #	Chart #	Chart #	Chart #	Chart #	Chart #
Within 24 hours prior to stool collection, the patient:										
Had 3 or more unexpected and unexplained stools?	☐	☐	☒	☐	☐	☐	☐	☐	☒	☐
Had NOT received a stool softener, laxative or enema?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Had NOT received lactulose, tube feedings or IV contrast?	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐
The patient had one of the following:										
Risk Factors for CDI (antibiotics in prior 60 days; PPI at least 3 days per week in the week prior to the stool collection)?	☐	☐	☐	☐	☒	☐	☐	☐	☐	☒
Symptoms of CDI: abdominal pain; elevated WBC; T >38C?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Status:										
The patient had no history of a previously positive test	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Specimen quality:										
The stool specimen submitted was unformed stool	☒	☒	☒	☒	☐	☐	☐	☐	☐	☒
Patient and Family Engagement (PFE)										
Is there documentation that the patient and/or family was engaged during shift change huddles and/or rounds regarding their risk for infection and/or signs and symptoms related to CDI?	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐

www.alliantquality.org

ALLIANT HEALTH SOLUTIONS
HQIC
Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
iQUALITY IMPROVEMENT & INNOVATION GROUP

Alliant Resources

C. diff

- HQIC Coaching Package: Clostridioides Difficile (C. diff) Infection (CDI) - NQIIC (allianthealth.org)
- HQIC C. diff Process Discovery Tool - NQIIC (allianthealth.org)

MRSA

- Universal ICU Decolonization: An Enhanced Protocol | Agency for Healthcare Research and Quality (ahrq.gov)

PSN: Healthcare Associated Infection Series

Session 1: Best Practice Guidelines

Session 2: Surveillance and Data Analysis

Session 3: Back to Basics: Hand Hygiene

Session 4: Back to Basics: Cleaning/Disinfection/Sterilization

Session 5: Process Audit and Continual Improvement

We plan to alternate the focus each month. Odd months will have a CAUTI/CLABSI emphasis, and even months will focus on C. diff/MRSA.

Key Takeaways

- Learn Today:
  - Review practice guidelines for MRSA and *C. difficile* prevention.
  - Review AHRQ Universal Decolonization Protocol.
  - Review process discovery tool *C. difficile* prevention.

- Use Tomorrow:
  - Review MRSA decolonization protocol with facility leadership and ID physician/champion and propose pilot study.
  - Complete process discovery tool and report findings and action plan to facility leadership.

Questions?

Email us at hospitalquality@allianthealth.org or call us at 678-527-3681.

HQIC Goals

Behavioral Health Outcomes & Opioid Misuse

- ✓ Promote opioid best practices
- ✓ Decrease high dose opioid prescribing and opioid adverse events in all settings
- ✓ Increase access to behavioral health services

Patient Safety

- ✓ Reduce risky medication combinations
- ✓ Reduce adverse drug events
- ✓ Reduce *C. diff* in all settings

Quality of Care Transitions

- ✓ Convene community coalitions
- ✓ Identify and promote optical care for super utilizers
- ✓ Reduce community-based adverse drug events

ALLIANT HEALTH SOLUTIONS | HQIC Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP

Upcoming Events

January 13, 2021

(Occurring the 2nd Thursday of each month)

HQIC Patient Safety Network

Infection Prevention – CAUTI, CLABSI, C. diff, and MRSA

Amy Ward and Rhonda Bowen

quality.allianthealth.org

ALLIANT HEALTH SOLUTIONS | HQIC Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP

Making Health Care Better *Together*

COLLABORATORS:

Alabama Hospital Association
Alliant Health Solutions
Comagine Health
Georgia Hospital Association
KFMC Health Improvement Partners
Konza

Hospital Quality Improvement

@alliantqio

Alliant Health Solutions

Thank you for joining us!
How did we do today?

@AlliantQIO

AlliantQIO

This material was prepared by Alliant Health Solutions (AHS), the Hospital Quality Improvement Contractor (HQIC) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this document do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. Publication No. 12SOW-AHS TO3-HQIC--1203-12/01/21

ALLIANT HEALTH SOLUTIONS | HQIC Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP