

Impact of Hospital-Wide Prevention and  
Reduction of *Clostridium difficile*, an ECUH North's  
multidisciplinary collaborative: An evaluation on  
reduction in Hospital Acquired Infection (HAI)

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# Disclosures

ECU Health Nursing Professional Development is approved as a provider of nursing continuing professional development by the North Carolina Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

**No one in the position to control content of this activity have any relevant financial relationship to disclose.**

# Background



Clostridium difficile (C. diff) is a bacterium that produces toxins that lead to diarrhea and colitis. Healthcare-associated C. diff infection (CDI) **increases morbidity and mortality of hospitalized patients**, prolongs hospital stays, and increases healthcare costs.



A **multidisciplinary team** consisting of infection prevention, nursing leadership, quality assurance, physician leadership, pharmacy, and laboratory leadership was developed to evaluate C. diff rates.



The collaborative initiative focused on developing a process map to determine **opportunities for reducing and mitigating the rate of C. diff** within the inpatient setting.

# Collaborative Team Members

**Aparesh Balla, IP IIII**  
Team Lead  
Project Development

**Krista Clary, RN, IP III**  
Team lead  
Project Development

**Amy Bennett**  
PharmD  
Pharmacy Director

**Marion Hudson**  
Microbiology Section Supervisor

**Casey Pierce**  
RN Manager  
Medical Stepdown Unit (MSDU)

**Jennifer Pilgreen**  
RN Manager  
Medical-Surgical Unit/Orthopedics

**Wanda Neathery**  
RN Manager  
ICU/CCU

**Akaninyene Joseph, MD** Hospitalist  
Medical Director / Chief of Staff

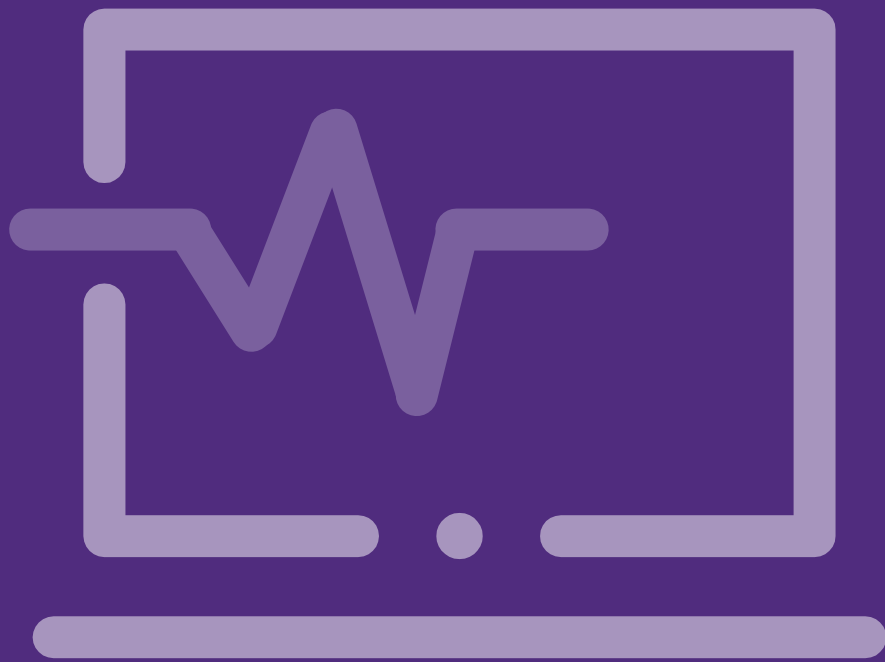
**Sheree Pilgreen**  
Quality Director



## PROJECT GOAL (AIM)

The aim of this project was to reduce *C. diff* rates by at least 25% on the inpatient units (ICU, Medical Step-down Unit, Medical Surgical Unit), by January 31, 2023 (FY2023)

# How will we know this change is an improvement?



## OUTCOME MEASURES

- Increased Infection Preventionist (IP) utilization-notifying IP on call prior to testing a patient for *C. diff*
- Increased staff utilization of *C. diff* evidence-based testing algorithm
- Reductions of CDI via facility healthcare-associated infection prevention program—in association with the multidisciplinary workgroup

## PROCESS MEASURES

- Compliance with hand hygiene and special enteric isolation precautions
- Patient-testing according to evidence-based guidelines
- Educate and train healthcare personnel on prevention practices for CDI
- Utilization of Infection Preventionist (IP) on call

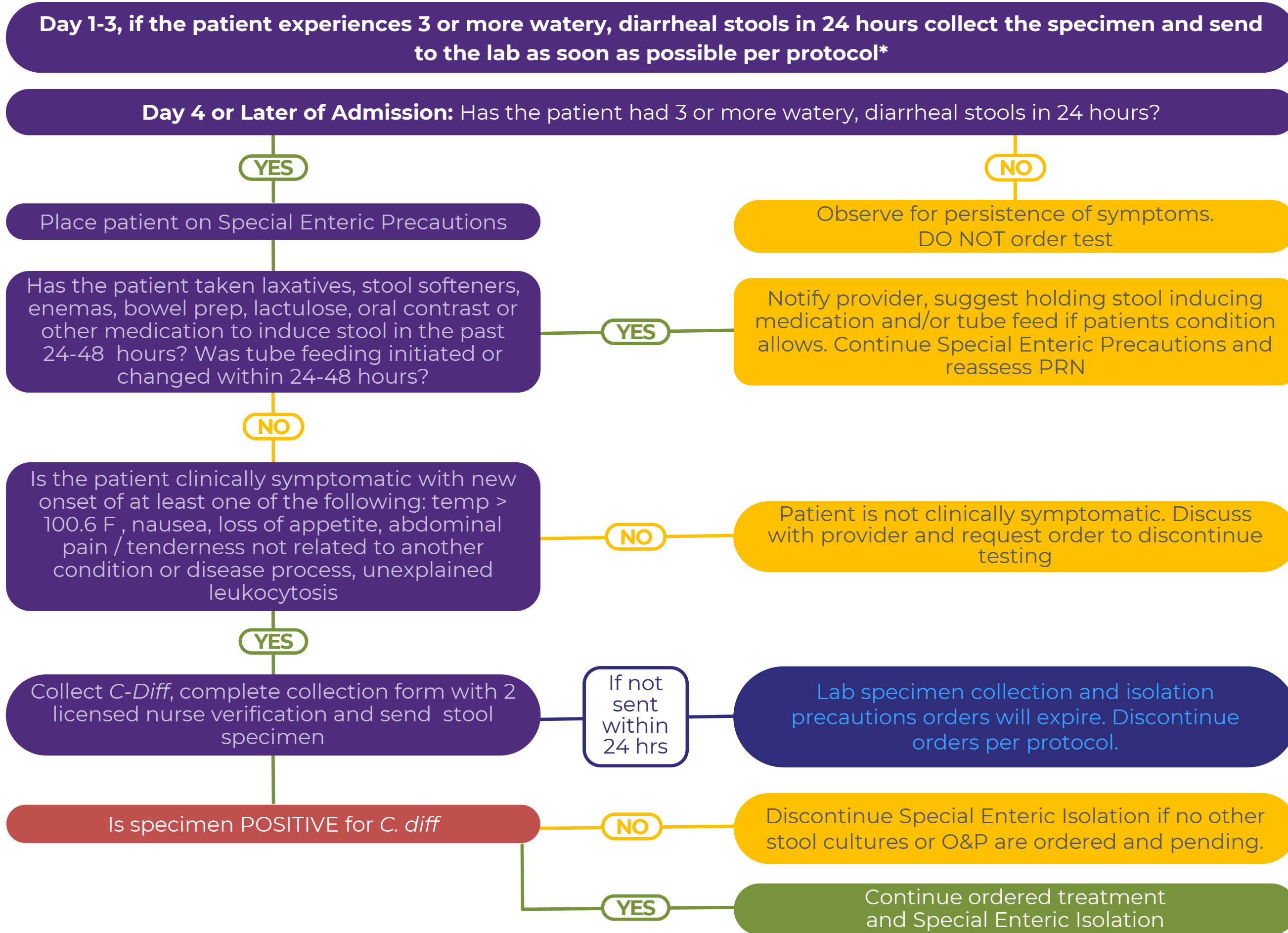
## BALANCING MEASURES

Increased lab rejections of stools not meeting criteria for testing (e.g., Bristol Stool Chart not meeting criteria 6 or 7)

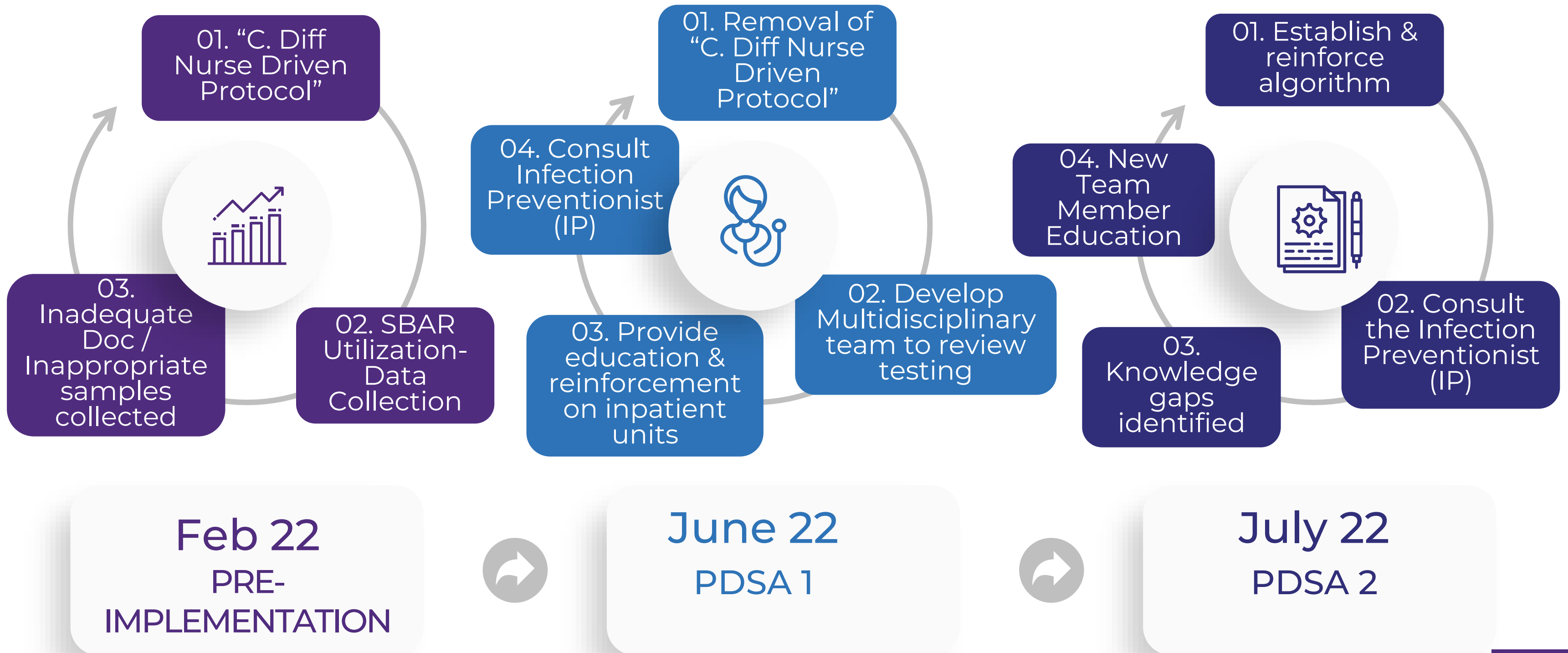


# Algorithm

## ECU Health North *C. diff* Stool Collection Algorithm

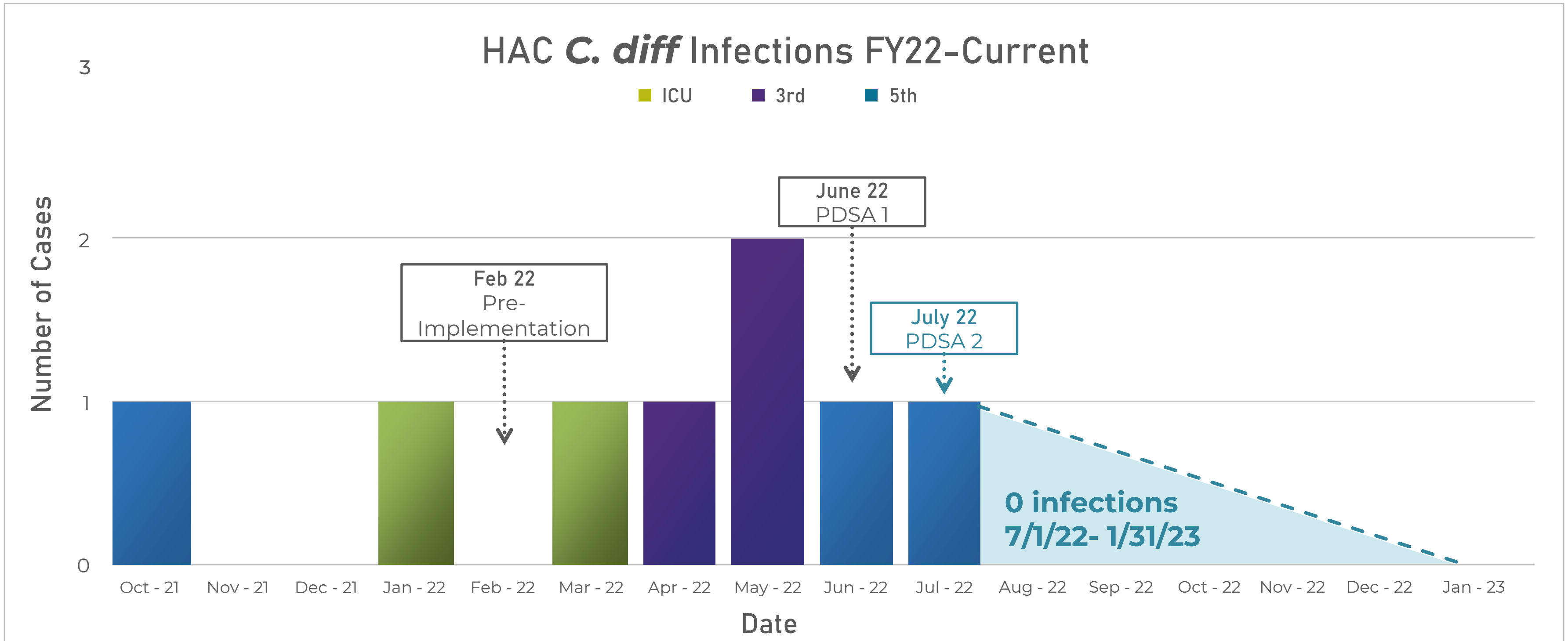


# Improvement Strategies Employed

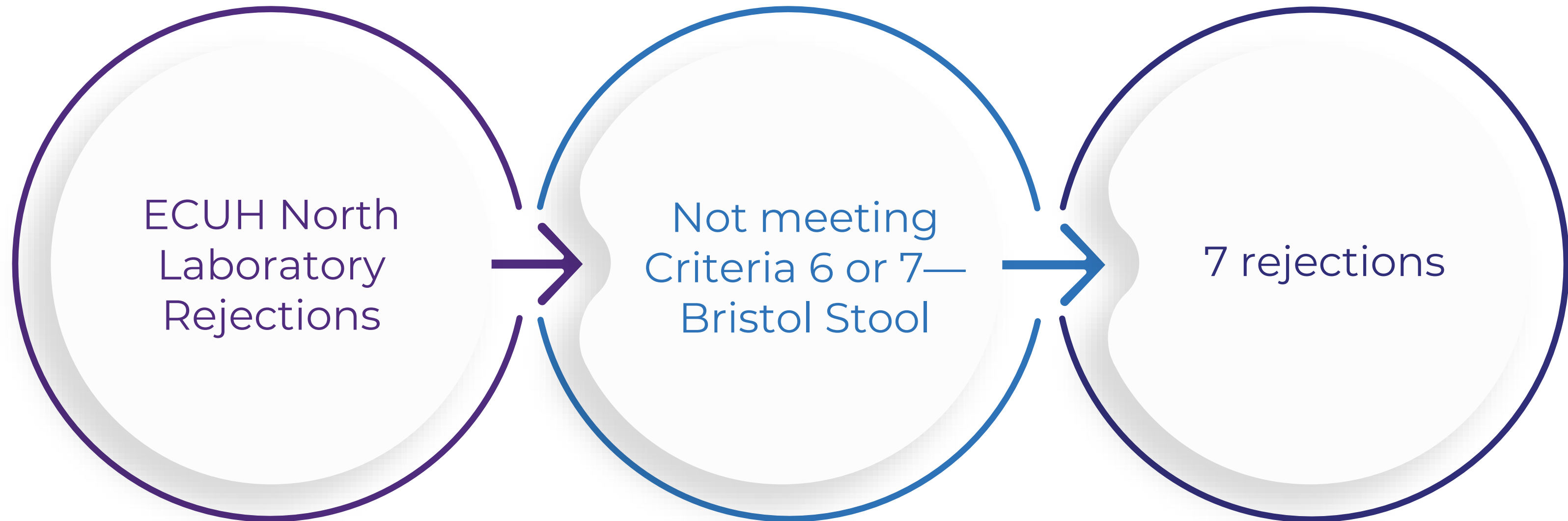




# Outcomes



# Balancing Measures



# Challenges Encountered in QI Process

## High Turn-over of Team Members- Unaware of *C. Diff* testing Algorithm & Utilizing On-Call Infection Preventionist (IP)

- Bi-Monthly education & reinforcement to New team members on *C. Diff* testing Algorithm
- Reinforcement and reminders to Department Managers & Nurses to utilize On-Call IP

## Team Members Unaware of *C. Diff* Preventative Measures

- Laminate Special Enteric Precautions Signs on units/departments
- Daily Rounding
- Mandatory Annual Competency Evaluation (ACE) Day to Team Members- Appropriate signage, Proper PPE, and HH

## Providers ordering *C. Diff* testing >3 Days not meeting criteria

IP Consulting with providers to d/c order not meeting criteria

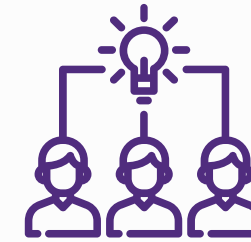
# Lessons Learned



**Constant re-education** needed for all Health Care Team Members due to high turn over



**Daily rounding** needed for patients & visitors on *C. Diff* prevention measures (Special Enteric Precaution signs & Improper Hand Hygiene)



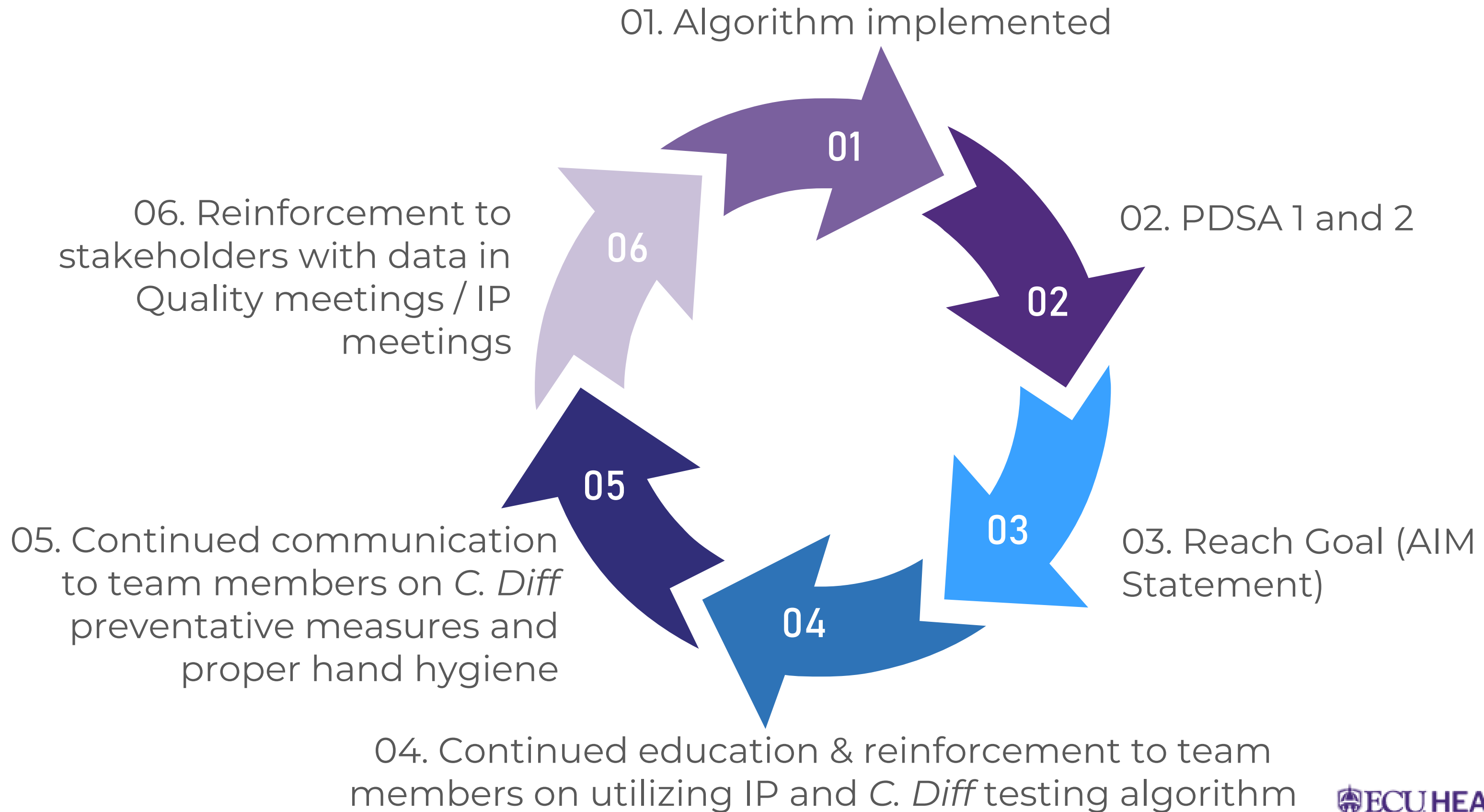
**Key:** Include **ALL team members** in dealing with patients with potential or confirmed *C. Diff* cases with **communication** and **consistent message**



Reinforce team members to continuously utilize the on-call IP and evidence-based *C. diff* testing algorithm



# Next Steps



# Questions