



**Loyola  
University  
Medical  
Center**

# Loyola's C diff Journey

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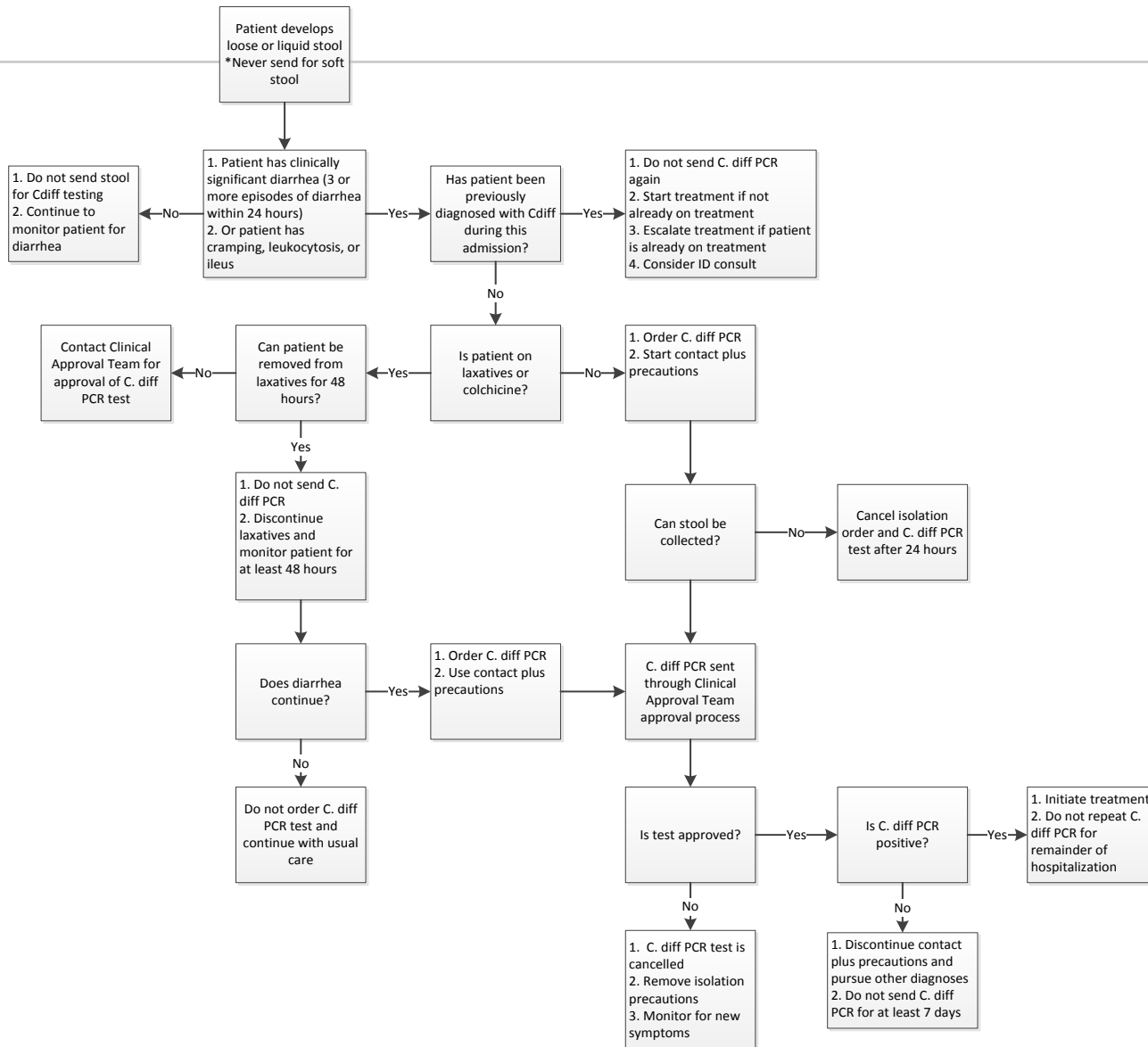
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# Background

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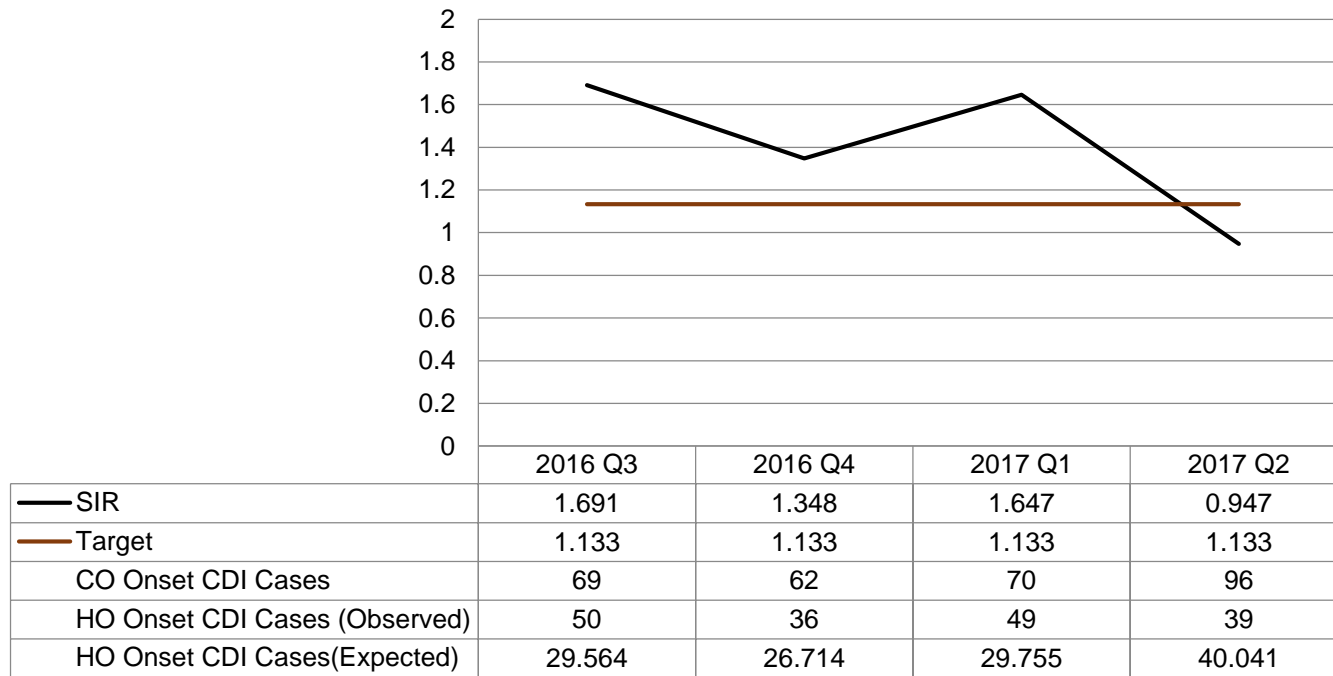
- Loyola Medicine is on a path towards zero harm, including eliminating hospital acquired infections (HAIs)
- When we started our journey, we have a much higher than expected rate of hospital onset Clostridium difficile (C diff) infections
- We recognized that many patients diagnosed with hospital onset C diff actually either presented with infection or likely were colonized with C diff and had loose stools for non-infectious reasons
- Appropriately identifying patients as community onset/C diff colonization versus hospital onset C diff should allow us to:
  - Improve antibiotic stewardship for existing patients
  - Better decide which interventions can prevent the development of C diff colitis for future patients
- Success would require both technical and adaptive solutions

# Technical Solution – C diff Testing Algorithm



# Testing Stewardship Works

## Hospital Onset CDI SIR by Quarter



←  
Dramatic improvement in our rate with this intervention

- Starting in 2017 Q2, one of our infection control practitioners proactively contacted nurses to collect loose stool, and physicians to cancel pending C. diff tests if inappropriate

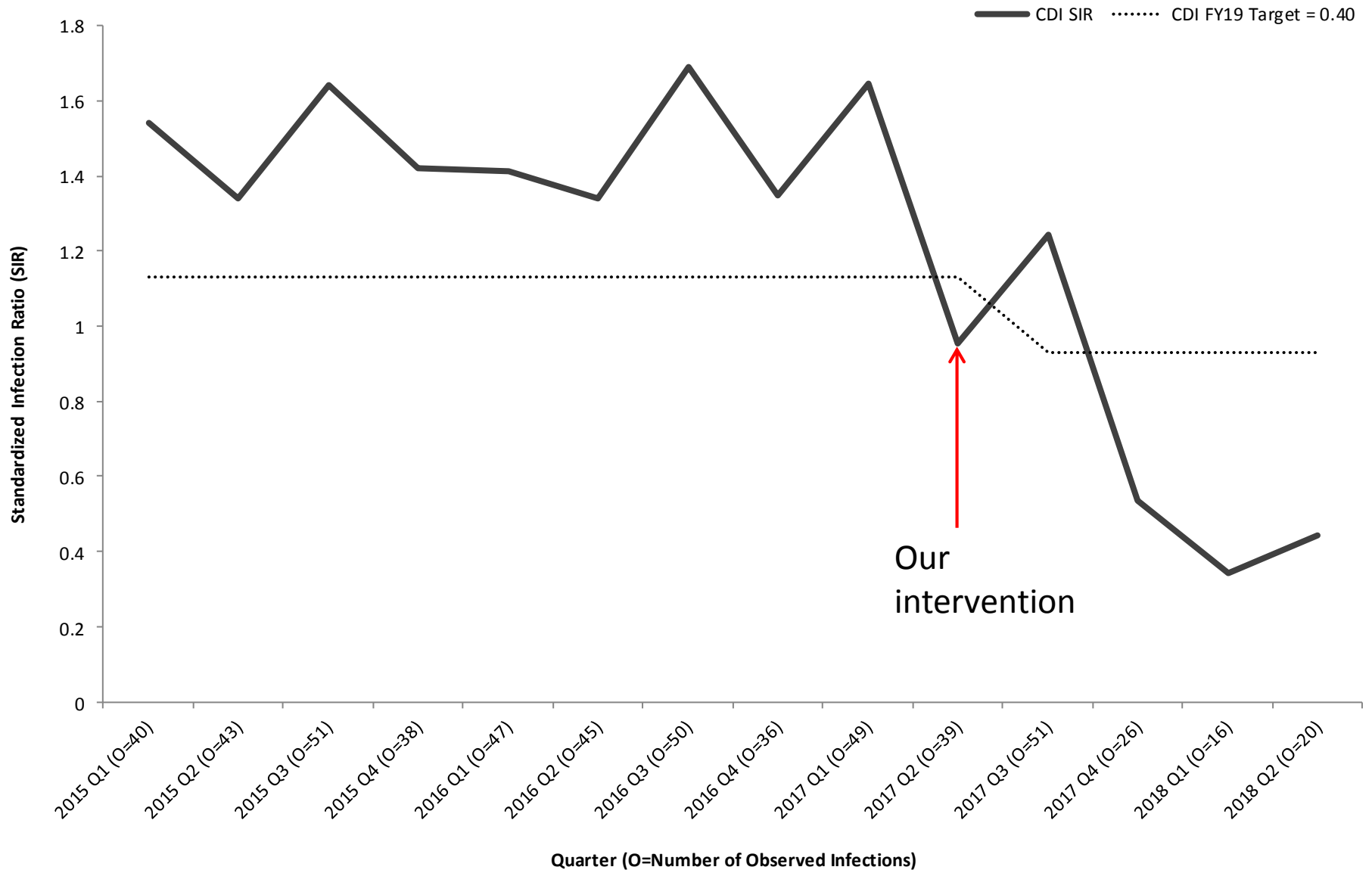
# Adaptive Solution

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- Appropriate C diff testing became a drumbeat that we discussed as often as possible
  - Early testing of loose stool (within the first 3 days)
  - Appropriate testing of C diff (after first 3 days)
- Developed a Clinical Approval Team that reviewed all C diff tests after day 3 of hospitalization to evaluate the appropriateness
  - Also allowed real time education to our physicians
- Emphasizing C diff allowed consistent messaging and also innovation at the local unit level
- Nothing replaces countless hours of conversations, especially with doubters

# Clostridium Difficile Infection (CDI) SIR - Hospital-Wide

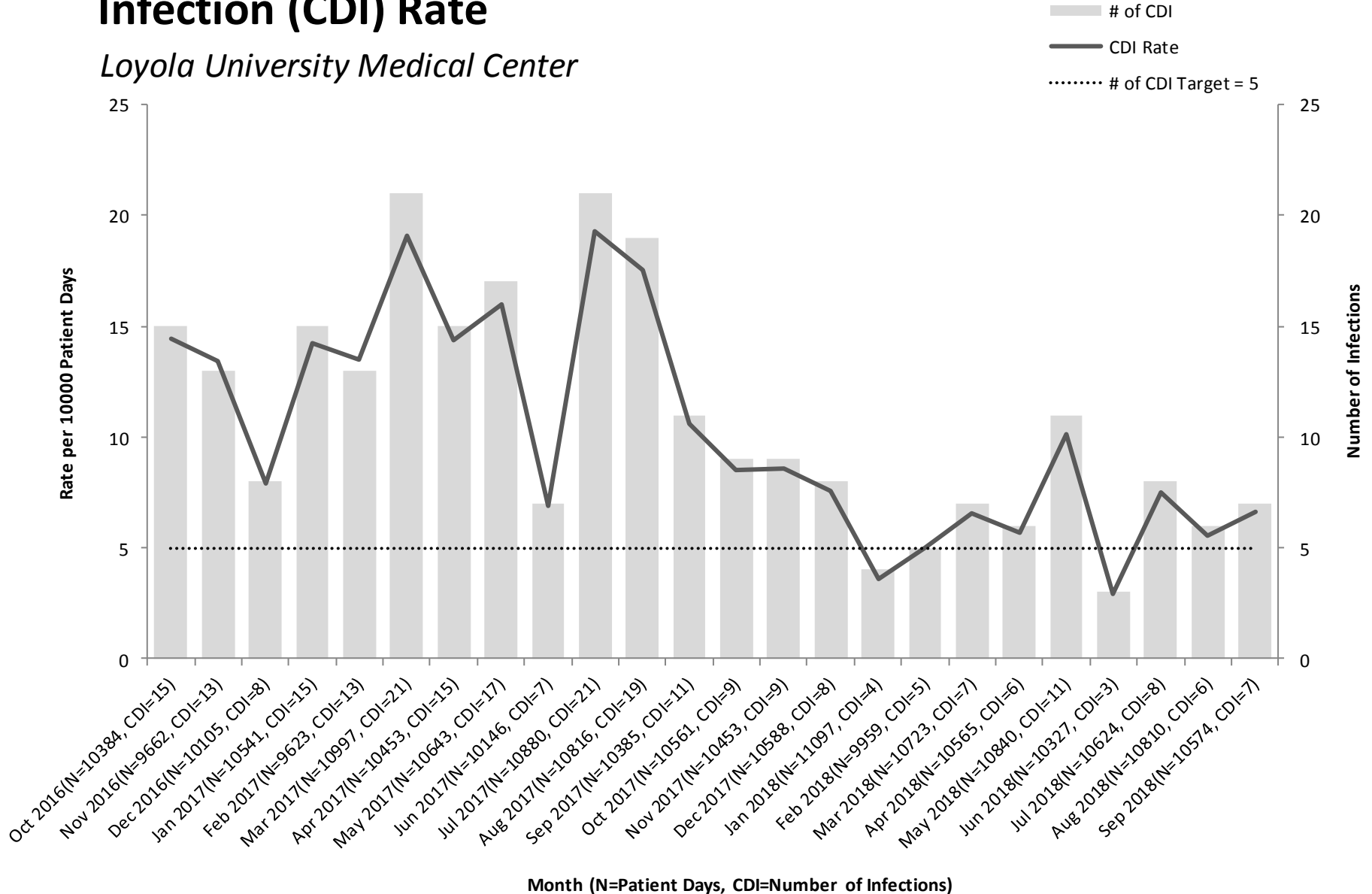
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Definition: Standardized Infection Ratio (SIR) = Number of Observed Infections / Number of Expected Infections

# Hospital-Wide - Healthcare Onset Clostridium Difficile Infection (CDI) Rate

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Definition: Number of patients hospital-wide with healthcare onset (HO) clostridium difficile infections (CDI) per 10,000 patient days.

# Summary

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- Our hospital onset C diff rates Standardized Infection Ratio has decreased from 1.6 to 0.4 due to our interventions
- This improvement has significant implications for the safety of our patients as well as for our reputation and our value based payments
- We are discussing using the lessons we learned for this process to reducing other HAIs