

# The Impact of CHG Bathing on Healthcare Associated Infections Across a Rural Hospital System

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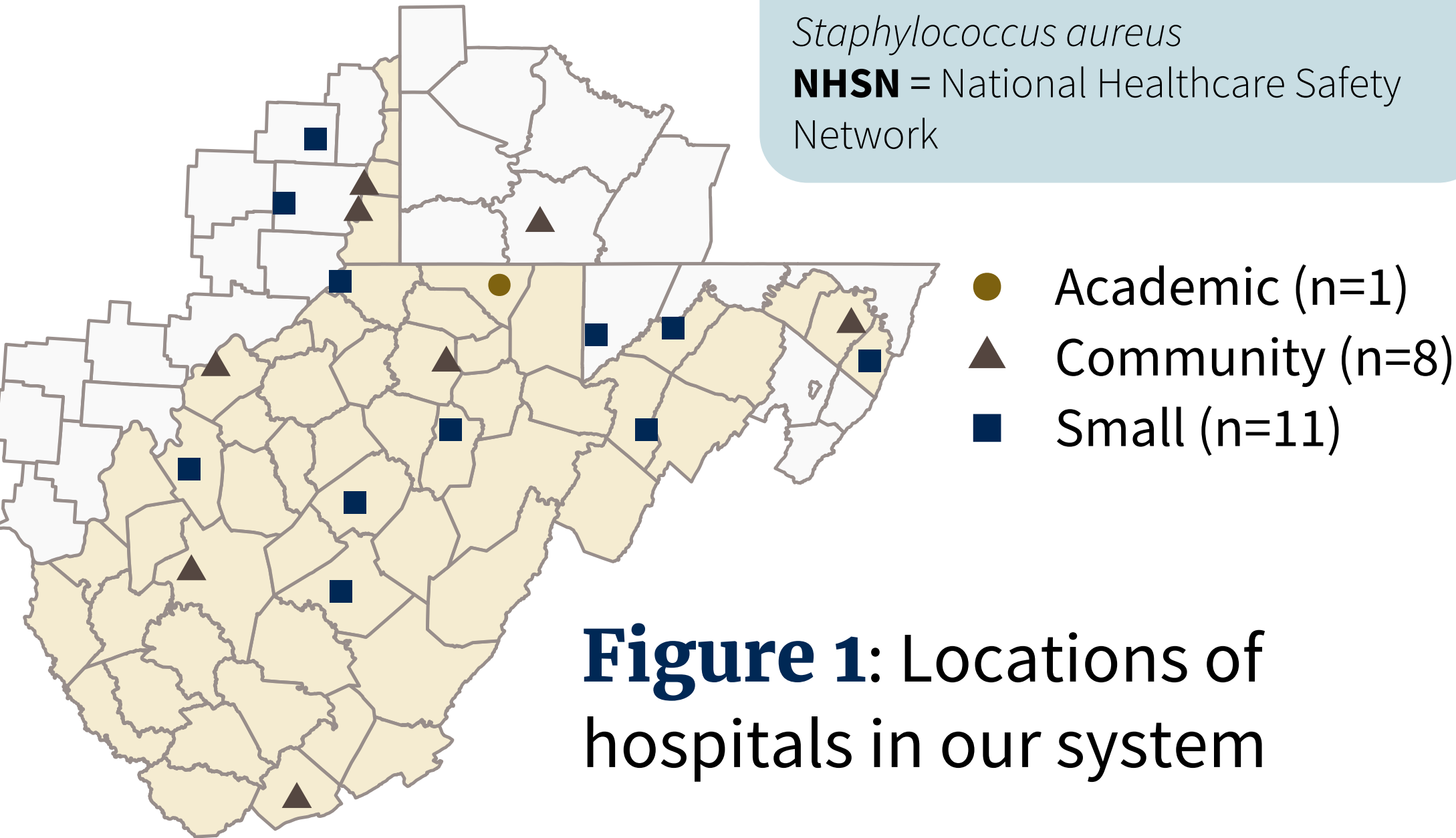
**Background**

In August of 2023, our hospital system (**Figure 1**) implemented daily CHG bathing for all patients who:

- Had central lines – or –
- Were admitted to the ICU

**Abbreviations**

**CHG** = Chlorhexidine gluconate  
**HAI** = Healthcare associated infections  
**CLABSI** = Central line associated bloodstream infections  
**CAUTI** = Catheter associated urinary tract infections  
**LabID MRSA** = Bloodstream infections with methicillin-resistant *Staphylococcus aureus*  
**NHSN** = National Healthcare Safety Network



**Figure 1:** Locations of hospitals in our system

**Methods**

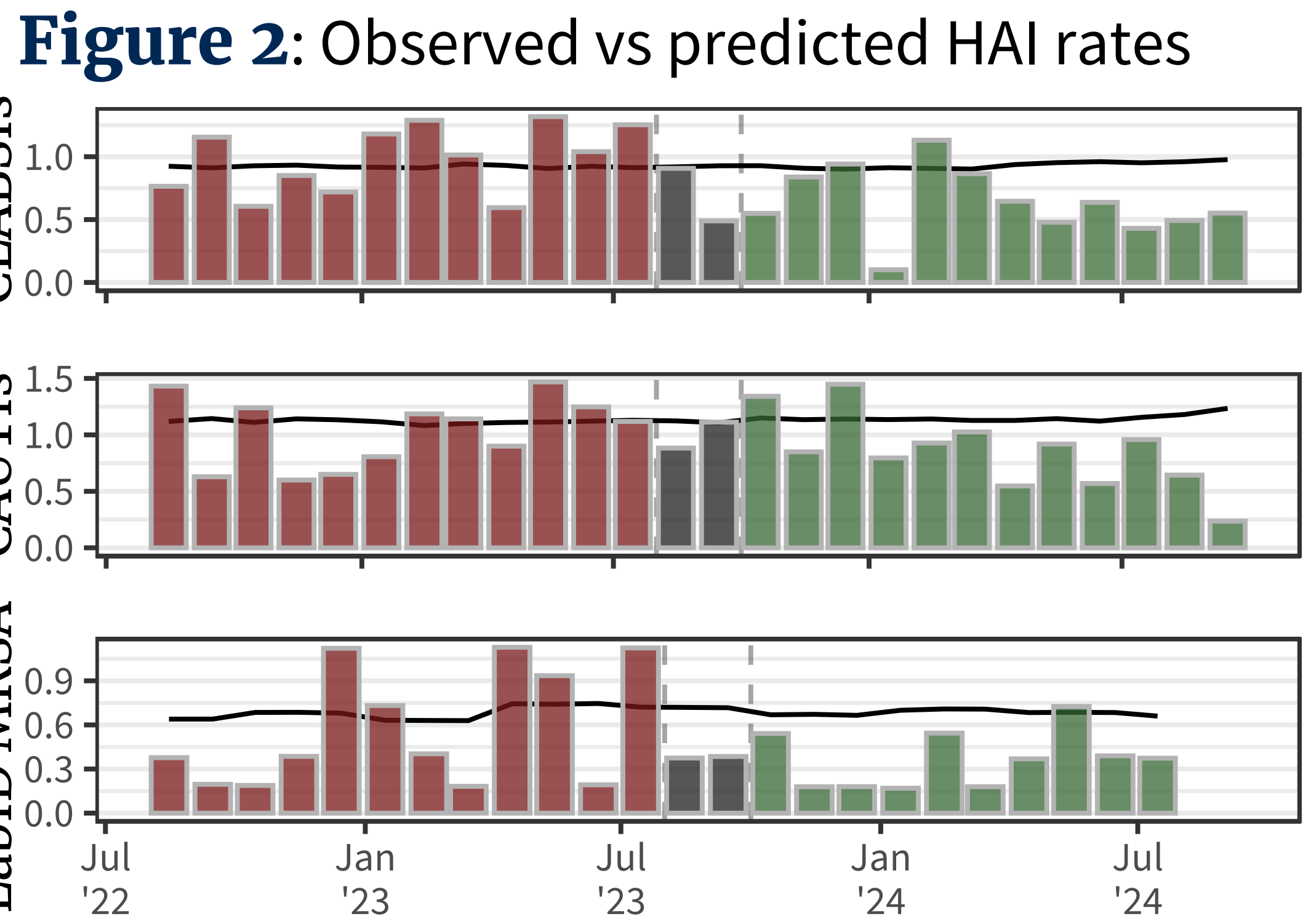
- Compared hospital-wide **monthly incidence** of HAIs in the year before & after CHG implementation, with a 2-month washout
  - **Before Era:** August 2022 to July 2023 (12 months)
  - **After Era:** October 2023 to September 2024 (12 months)
- We used **negative binomial regressions** to compare infections between both eras (**Figure 3**)
- Used the NHSN’s predicted numbers of HAIs to adjust for confounding among hospitals

**KEY FINDINGS**

Hospital wide HAIs substantially decreased after implementation of daily CHG bathing (**Figure 3**)

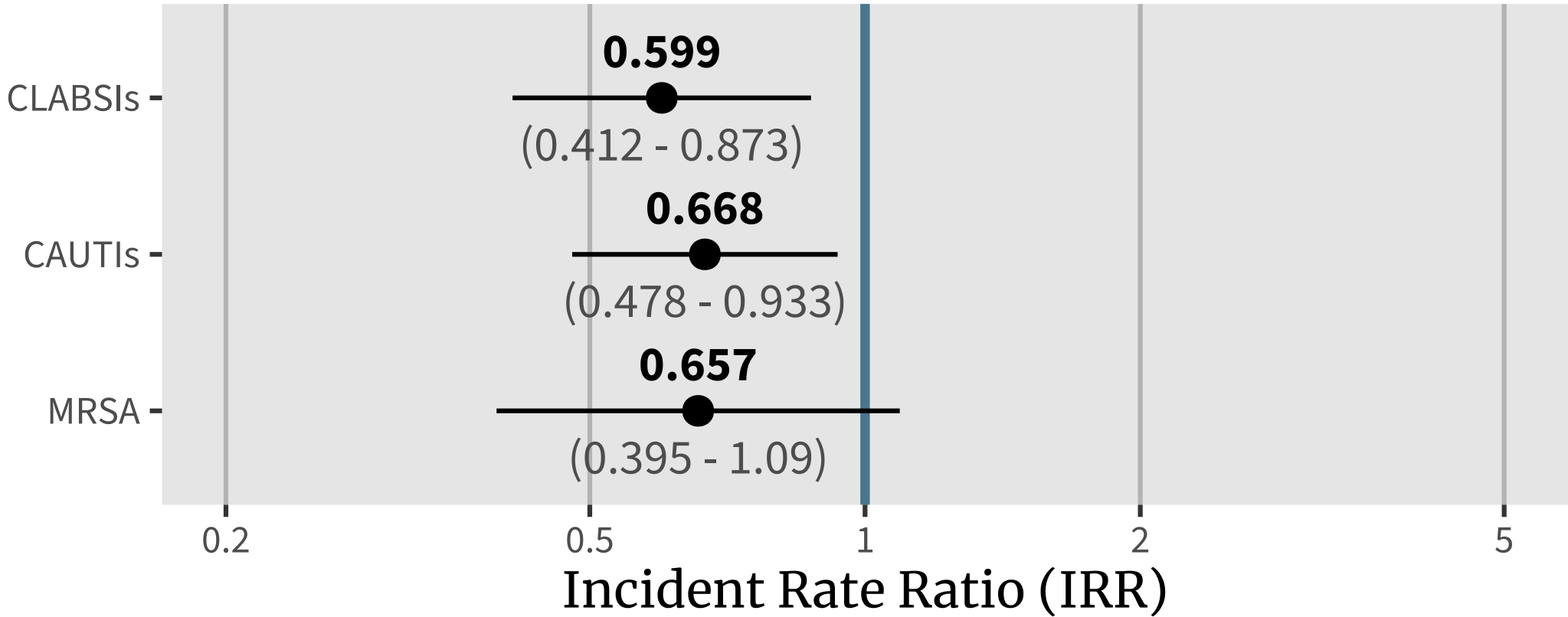
- **CLABSIs** had a **40.1% reduction** (p=0.008)
- **CAUTIs** had a **33.2% reduction** (p=0.018)
- **LabID MRSA** had a **34.3% reduction** (p=0.105)

**Results**

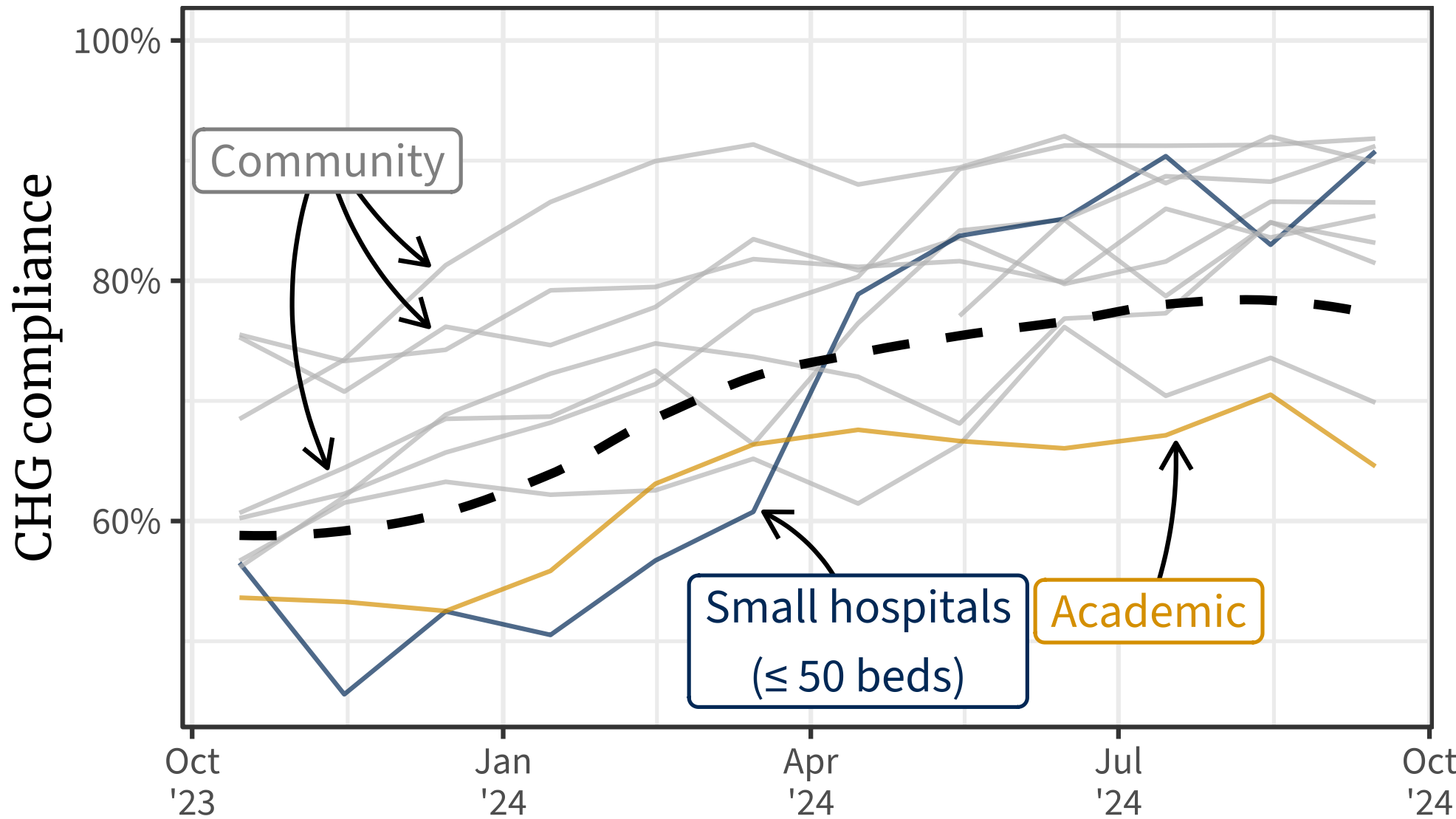


Rates of CLABSIs (per 1,000 central line days), CAUTIs (per 1,000 foley days), and LabID MRSA (per 10,000 patient days), stratified by the **Before** and **After** eras. The black solid line is the predicted number of infections from NHSN

**Figure 3:** Adjusted IRR for various HAIs



**Figure 4:** Systemwide CHG compliance



The black dashed line is systemwide average compliance

**Future directions**

- Ongoing promotion of daily CHG bathing to ensure **optimal compliance**
- Consideration of implementing daily **CHG bathing for all admitted patients**