

CAUTI Prevention

Helps teams recognize, treat, report, and prevent CAUTI—and improve outcomes

Type: Analytics Accelerator

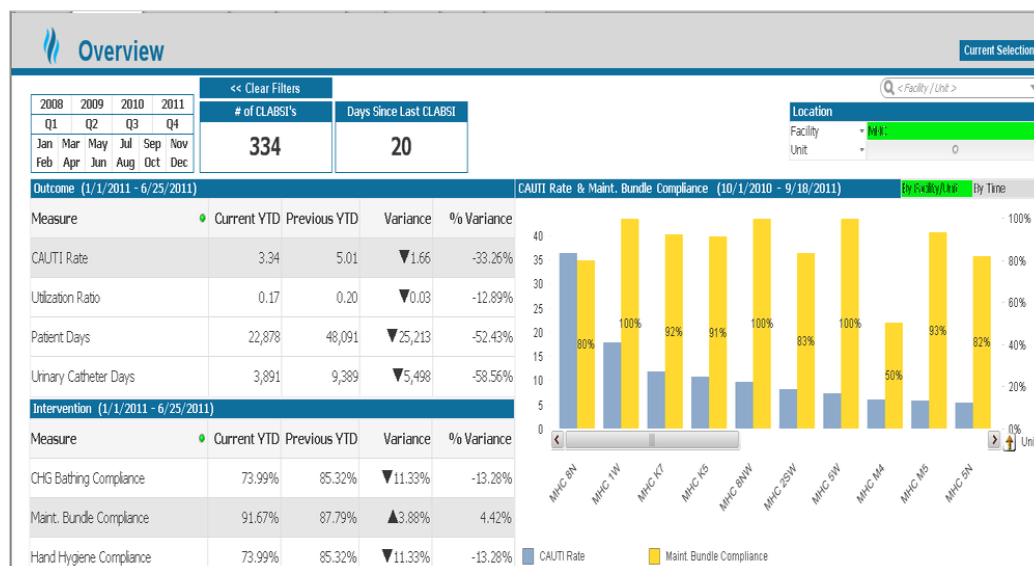
Status: Custom Services

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The **Catheter Associated Urinary Tract Infection (CAUTI) Prevention** analytics accelerator provides data and visualizations to help users review outcomes and identify trends related to CAUTI, efficiently assess and prioritize CAUTI risk, and intervene to prevent and/or treat CAUTI. The application also provides near real-time analysis of internal processes related to CAUTI to support care process improvement for CAUTI prevention.

Note: Like all analytics accelerators, this application is implemented in a custom way. Organizations identify their own areas of focus—and the appearance and functionality of the accelerator may differ from what is presented here.



The CAUTI Prevention application gives insight into clinical outcomes (e.g., CAUTI rate, LOS) and adherence to best-practice care bundles.

The problem

Organizations choose to focus on CAUTI prevention for these reasons:

- **CAUTI is common.** Approximately 450,000 to 560,000 CAUTIs occur annually, making it the most common device-related healthcare-associated infection (HAI).
- **CAUTI has a high cumulative morbidity burden.** CAUTI can lead to catheter obstruction, renal and bladder stone formation, fistula formation, and urosepsis. About 13,000 deaths are attributed to CAUTI annually.
- **Costs and potential penalties can be substantial.** Per patient, CAUTI costs approximately \$1,000, and catheter-related bacteremia can substantially increase this cost. Additionally, this hospital-acquired complication may impact CMS reimbursement and value-based care performance.

Intended users

- Hospital infection prevention teams
- Clinical directors, service-line leadership and teams
- Clinical educators
- Unit-level leadership and teams
- Quality improvement teams

Potential data sources

- EMR - Clinical
- Finance/Costing
- Laboratory data sources
- Event-reporting and surveillance tools such as Vigilanz, TheraDoc, etc.

Key measures

- CAUTI rate
- Catheter utilization (insertion, duration)
- Length of stay
- Cost per case

Our approach

The CAUTI Prevention accelerator supports a disciplined, data-driven approach to efforts to reduce CAUTI rates and thereby improve morbidity, hospital length of stay, and costs. Typical implementations focus on catheter utilization, adherence to best-practice care bundles for catheter insertion and maintenance, and urine culture management—areas where getting it right is especially meaningful.

Benefits and features

- **Access an at-a-glance, near real-time view of clinical outcomes and the care practices that drive them.** The Performance dashboard visualizes outcome metrics (CAUTI rate, urinary catheter utilization, excess cost, etc.) in relation to adherence to catheter insertion and maintenance bundles.
- **Rapidly identify, analyze, and improve.** The Urinary Catheter Risk dashboard enables you to identify the hospital care location where patients are at increased risk of developing CAUTI based on device utilization and bundle compliance. You can also drill down to the facility, unit, service, or patient level to analyze performance further, provide feedback, and support measurement of performance improvement interventions.

Use cases

- An **executive** is concerned: her healthcare system has incurred CMS penalties for each of the previous three years, and their high CAUTI rate is a key driver. The system has already begun improvement work—they implemented standard catheter insertion and maintenance bundles—but now the executive has asked an **Inpatient Nurse Manager** to do more. The manager uses the CAUTI Prevention analytic accelerator to gauge the effectiveness of the provider education on the new bundles and to determine staff compliance with all metrics in the bundle. She is also able to see which bundle elements staff are most/least likely to comply with, and in which departments compliance is best and worst. These insights help her devise a plan for further targeted interventions for improvement.
- An **Infection Preventionist** uses the CAUTI Prevention accelerator every day to review data on patients with indwelling urinary catheters and their number of days of catheterization, number of days since surgery (if applicable), medical service, unit, absolute neutrophil value (ANC) on that day, indication for catheter, and bundle compliance on each of the previous three days (maintenance and insertion). This helps her identify patients at higher risk for CAUTI and work with the **unit nurses** to remove catheters when no longer indicated and improve compliance with bundle elements.

Success stories

For examples of how customers have used Health Catalyst products and services to improve outcomes, visit <https://www.healthcatalyst.com/knowledge-center/success-stories/>

Contact us

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- Reach out to your sales representative
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