

Upstate New York Hospital Quality Initiative (UNYHQI)

Background

Hospital-acquired infections (HAI) affect more than 100,000 people across New York State, resulting in an estimated 4,862 deaths. While the human cost of HAIs is incalculable, these events increase the overall financial healthcare costs for all New Yorkers by a conservative estimate of \$1.5 billion¹.

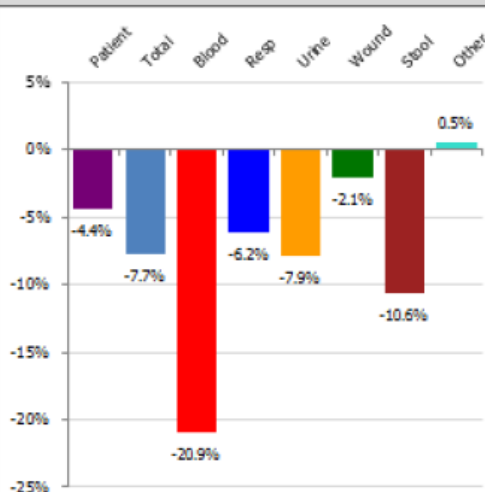
Many HAIs are preventable. One of the keys to reducing infections is the use of technology for rapid identification of process improvement opportunities. Without electronic surveillance, Infection Prevention Professionals must manually wade through volumes of data to identify a few pieces of critical information. This burdensome process leaves too little time for process observations, education, interventions, and objective measurement; **actions that are proven to prevent HAIs.**

Launched in 2005, with operational support and funding from Excellus, UNYHQI provides Upstate New York hospitals with **electronic surveillance to detect infections more efficiently through CareFusion MedMined® services technology and customer support.**

"MedMined® is like having a second IP, a safety net to help make sure I don't miss anything. The timeliness is also impressive."

**Adirondack Medical Center, Saranac Lake
Quality Award Winner 2013**

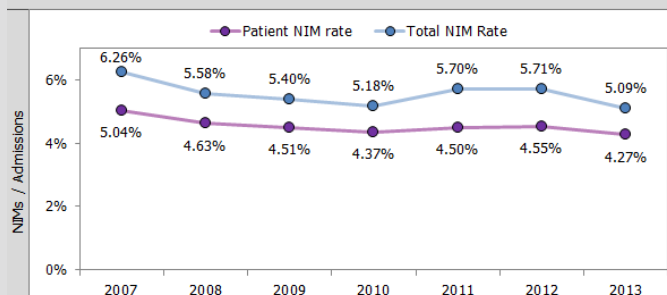
NIM Rate % Change (CY2013 vs CY2012)



* This graph highlights the decreasing trend in markers of HAIs across all major source categories.

Impact

Overall NIM Rate Trends (Calendar Year)



UNYHQI is a collaborative effort with Excellus BCBS, CareFusion MedMined® services and 11 hospitals across upstate New York. The UNYHQI comprehensive model continues to **achieve the project goal of reducing HAIs across all participating hospitals.**

UNYHQI's success can be measured through CareFusion MedMined® services proprietary technology, an objective marker for hospital acquired infections called the Nosocomial Infection Marker (NIM). The NIM represents a potential hospital acquired infection and is used for identifying process improvement opportunities across hospitals. **Through the end of 2013, the rate of patients acquiring these HAI markers have decreased by more than 20% since the inception of the initiative.**

Year over year the improvements continue. Data analyzed across 9 hospitals in 2013 showed these hospitals **prevented 77 Upstate New York patients from potentially acquiring HAI markers and subsequently avoided 710 additional days in patient stays and reduced costs by more than \$800,000.**

UNYHQI

- grants financial incentive for participating hospitals
- automates infection identification, tracking, and reporting
- utilizes data mining to identify potential issues
- provides clinical consulting for process improvement & accreditation readiness
- hosts quarterly best practice meetings
- executive level clinical and financial insights quarterly and annually

"MedMined® services has streamlined the surveillance process of the Infection Prevention (IP) Department at UHS Hospitals. MedMined® services provides the UHS IP team with a great amount of data that aids in identifying trends, potential concerns, and shares recommended practices to prevent the spread of infection.

**UHS Hospitals
Binghamton Quality Award Winner 2013**

¹ http://www.cdc.gov/HAI/pdfs/hai/Scott_CostPaper.pdf

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Focus on Education

Each year, at least 4 best practice learning opportunities are provided to UNYHQI participants at no additional cost. These meetings occur both in person and online. One area of focus for education and collaboration for UNYHQI in 2013 was preventing deadly *Clostridium difficile* infections or *C diff*.

Through the meetings participants gained a broader understanding of *C diff* prevention from experts and left with ideas and evidence based interventions to implement in their hospitals. The result:

UNYHQI hospitals recognized almost an 11% reduction in *C diff* infections in 2013 compared to the year prior.

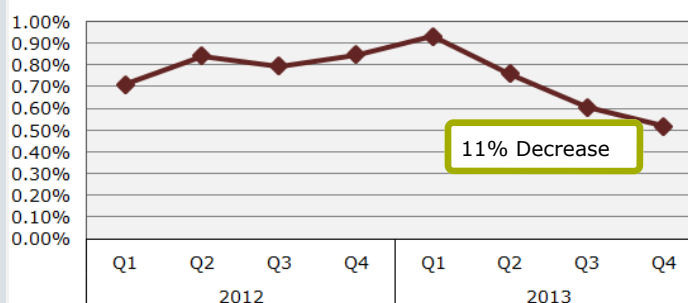
"The electronic surveillance software complements the staff's critical thinking skills and contributes to efficient surveillance practices by presenting all suspect and potential infections. It has also streamlined the reporting process to regulatory agencies. The use of MedMined® services has increased awareness across the hospital system by helping the Infection Preventionist team present data in a meaningful manner."

**UHS Hospitals, Binghamton:
Quality Award Winner 2013**

"The education piece for users is one of the greatest benefits. We have access to all types of instruction related to program operation, as well as timely and well-executed webinars and the *Bug du Jour* teaching tools, which help extend our goal of providing meaningful education to prevent infections."

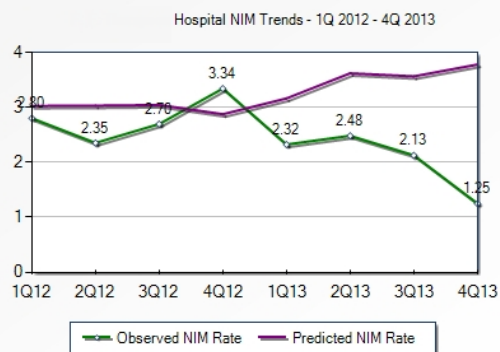
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UNYHQI C diff Marker Rate



Quality Leaders Program

MedMined® Benchmarking



In addition to subsidizing much of the cost of MedMined® services during the first three years of UNYHQI participation, **Excellus Health Plan** offers participating hospitals an opportunity to receive financial recognition for their efforts in superior infection prevention performance as measured by MedMined® services, through the **Quality Leaders Program**.

To be recognized as a **Quality Leader**, a Hospital's observed HAI marker rate must be statistically significantly better than the Hospital's own risk-adjusted predicted rate for specific time frame. If the hospital's performance meets the criteria, they will receive the **Quality Leader** award at the UNYHQI Fall Best Practice Meeting and a financial incentive is delivered to the hospital.

MedMined® Benchmarking provides objective, risk-adjusted unit and facility infection prevention data at the, health system, state, and national level. The combination of a patient-centric risk-adjustment and an objective measure (NIM) enable clinicians and administrators to identify and address the opportunities for positive reinforcement and strategic improvement.

"Hospitals are faced with even more extensive reporting requirements each year, and using MedMined® to help with data collection and reporting has been extremely beneficial. We are able to quickly look at what we need to focus on each day by using the Sentinel alert feature. Also, the advantage of being able to track patients' locations for surveillance accuracy is one of the most appreciated aspects. By using the reports and graphs for tracking NIMs, we are able to display data in a meaningful way for our associates and leadership groups."

FF Thompson, Canandaigua: Quality Award Winner 2013

2013 UNYHQI Quality Leaders Award Recipients

- **Adirondack Medical Center, Saranac Lake**
- **FF Thompson, Canandaigua**
- **UHS Hospitals, Binghamton**