The American Hospital Association/Health Research & Educational Trust Hospital Engagement Network

Annual Report – December 2013

American Hospital Association

U.S. Department of Health & Human Services
Partnership for Patients
HealthCare.gov

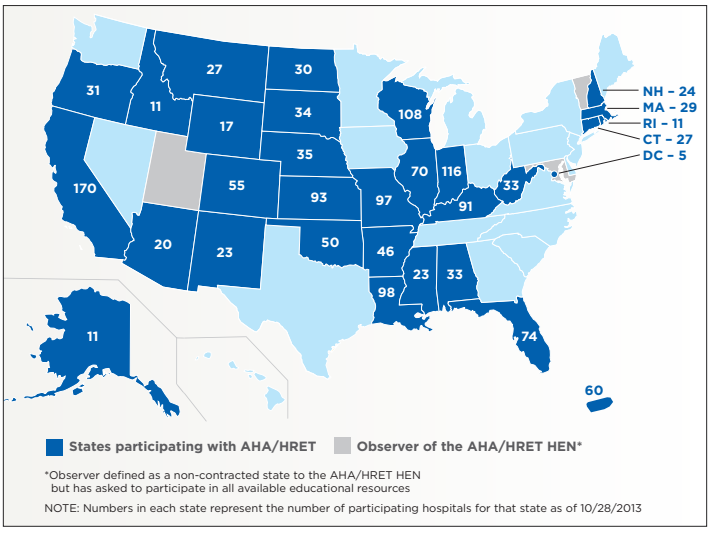
HRET
Health Research & Educational Trust
In Partnership with AHA

Overview

Who We Are?

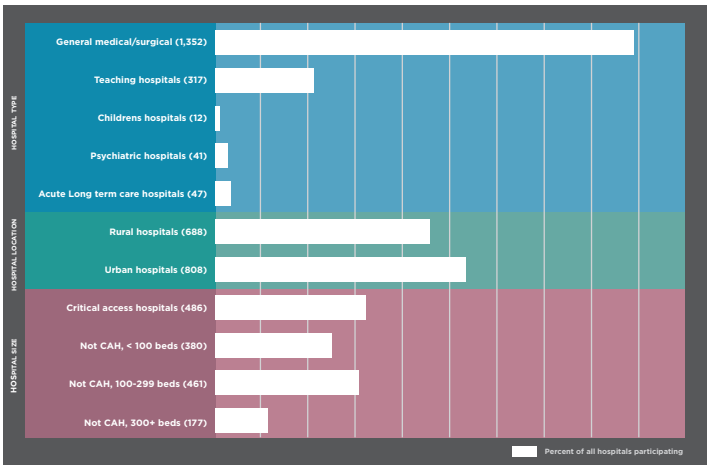
The American Hospital Association (AHA)/Health Research & Educational Trust (HRET) Hospital Engagement Network (HEN) is comprised of 31 participating states and U.S. Territories and over 1,500 hospitals. As part of the Partnership for Patients Campaign to reduce patient harm by 40 percent and readmissions by 20 percent, the AHA/HRET HEN and its partners, including the 31 state hospital associations, have worked with discipline and speed to improve care in ten clinical areas that have resulted in over 69,000 patients who had harm prevented and an estimated cost savings of over $200 million in 2012 and 2013 combined.

AHA/HRET HEN STATE PARTICIPANTS



The diverse group of hospitals participating in our HEN represents a majority of the facilities in the country working towards keeping patients safer and improving overall patient. Forty-six percent of the hospitals in the network are rural hospitals and 33 percent of the hospitals are critical access. This level of diversity offers an opportunity for the AHA/HRET HEN to achieve and share best practices that are relatable and transferable to any hospital across the nation.

CHARACTERISTICS OF PARTICIPATING HOSPITALS



What Is Our Goal?

As a part of the Partnership for Patients Campaign (PfP), the AHA/HRET HEN is working to reduce patient harm by 40 percent and preventable readmissions by 20 percent – thereby keeping patients from getting injured or sicker and to help patients heal without complication. The 10 clinical topics of focus that hospitals are working on achieving and/or sustaining improvement in are: adverse drug events, central line-associated bloodstream infections, central line-associated urinary tract infections, obstetrical adverse events including early elective deliveries, injuries from falls and immobility, pressure ulcers, preventable readmissions, surgical site infections, venous thromboembolisms and ventilator-associated events.

How We Do It?

The AHA/HRET HEN is focused on Theories of Change and key Cross-cutting Drivers to reduce harm and readmissions. In 2012, our Theories of Change focused on:

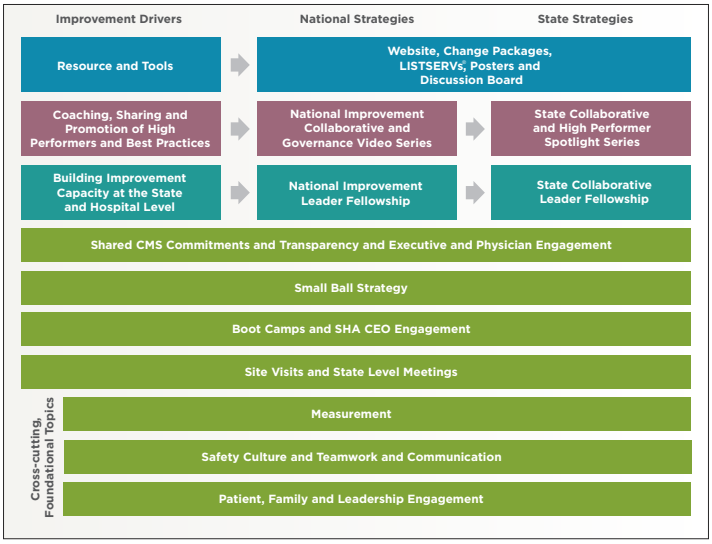
1. **Measurement:** Utilizing internal and partner infrastructure to educate state hospitals associations (SHAs) and their hospitals on the principles of measurement, as they relate to reducing harm and readmissions.
2. **Safety Culture, Teamwork and Communication:** Leveraging existing relationships with the Agency for Healthcare Research & Quality (AHRQ) to provide TeamSTEPPS education and training for SHAs and their hospitals.
3. **Patient, Family and Leadership Engagement:** Incorporating patient, family and leadership stories into peer-to-peer learning for SHAs and their hospitals.

These Theories of Change acted as the building blocks for our network and complimented our key cross-cutting drivers:

1. Building Improvement Capacity
2. Accelerating Peer-to-Peer Learning
3. Providing Coaching to Support Adoption

Overview (CONTINUED)

AHA/HRET HEN OVERALL APPROACH TO ACHIEVING 40/20 GOALS



Small Ball Strategy: To implement the small ball strategy, the AHA/HRET HEN worked with the states to provide improvement coaching at both the state and hospital level. This coaching was delivered through site visits, topic specific boot camps and smaller, focused state level meetings. The AHA/HRET HEN team also focused on engaging the SHA CEO in this strategy by holding more frequent and intense calls to gain and maintain buy-in.

Leadership Commitments, Transparency and Engagement: To foster a transparent environment that would help drive improvement towards the 40/20 goals, the AHA/HRET HEN team released reports and dashboards to share progress at both the HEN, state and hospital level. Based on our progress, the AHA/HRET HEN established commitments to serve as milestones to help us achieve the 40/20 goal. A focus was also placed on engaging hospital executives and physician leadership in an effort to continue to push and accelerate the work.

Building Improvement Capacity at the State and Hospital Level: Through the AHA/HRET HEN Improvement Leader Fellowship, improvement capacity has been built at both the state and hospital level. The curriculum which is led by faculty from the Institute for Healthcare Improvement (IHI) provides beginners and more advanced QI staff with the tools needed to advance their work.

Coaching, Sharing and Promotion of High Performers and Best Practices: The AHA/HRET HEN prides itself empowering the high performers to share their best practices and results. This type of sharing occurs on all of the educational offerings and through our LISTSERVs®.

Resources and Tools: The AHA/HRET HEN hospitals have access to a wealth of resources and tools to help guide their improvement work. The AHA/HRET HEN website contains over 850 tools and resources including a change package for each of the clinical topic areas of which there have been over 50,000 downloads. Another resource is peer-to-peer sharing on our topic-specific LISTSERVs®. To date, we have a total of over 4,000 subscribers to our topic and affinity LISTSERVs®. In 2013, we also launched the Fellowship discussion board which is a platform for our Fellows to discuss key questions, reinforce the components of the curriculum and to share best practices and lessons learned.

COMPONENTS OF THE AHA/HRET HEN APPROACH

Small Ball Strategy
- SHA CEO Engagement
- Boot Camps
- State Meetings

Leadership Commitments, Transparency and Engagement
- Establishing Commitments
- Senior Leadership and Physician Engagement

Building Improvement Capacity at the State and Hospital Level
- Improvement Leader Fellowship

Coaching, Sharing and Promotion of High Performers and Best Practices
- National Improvement Collaborative
- H&HN Video Spotlight
- Goverance Video Series

Resources and Tools
- AHA/HRET HEN Website
- Change Packages
- LISTSERVs®
- Eliminating Harm Across the Board Posters
- Fellowship Discussion Board

Partnerships and Networking

The AHA/HRET HEN team continues to work in collaboration with the Institute for Healthcare Improvement (IHI) and Cynosure Health on the development and implementation of our educational offerings. These organizations bring forward a wealth of knowledge in the form of subject matter experts and improvement advisors that serve to be very beneficial to our state hospital associations (SHAs) and hospitals by providing education and technical assistance. IHI plays an integral role in our virtual Improvement Leader Fellowship events by delivering a curriculum that continues to build improvement capacity at the facility level.

The SHAs continue to strengthen their relationship with Quality Improvement Organizations (QIO) by sharing activities and exploring ways to leverage their respective work to assist hospitals as they work towards the 40/20 goal while eliminating duplication. Some examples of this relationship are from Alabama, where they worked with their QIO to hold a statewide learning collaborative. In addition, they provide each other dates for events, calls, webinars, etc., in order to coordinate efforts. Another example is the collaboration between the Arizona Hospital Association and the QIO working together to implement On the CUSP: Stop CAUTI initiative. The two have weekly conference calls to discuss project implementation and other activities related to the Hospital Acquired Infection (HAI) prevention. In addition, SHAs are initiating and/or continuing discussions with local Community Care Transitions Programs (CCTPs) to develop networks and work together to improve transitions of beneficiaries from the inpatient hospital setting to other care settings. Seventeen states in the AHA/HRET HEN have an established CCTP, of which five states are actively collaborating with the program. For example, the Connecticut Hospital Association is a member of the advisory councils of each CCTP community and participates regularly in all meetings and programs. In addition, Kentucky has continued their collaboration with the Greater Louisville Medical Society's "Community Transitions of Care Workgroup" to reduce readmissions and improve continuity of care in the Louisville area. We expect the number of states collaborating with their CCTP to increase as the SHA works to establish and expand the relationship. Other organizations that the SHAs have been working collaboratively with include the National Patient Safety Foundation, Midwest Business Group on Health, March of Dimes, VHA, Blue Cross Blue Shield and many others. These joint efforts have proven to be very valuable for hospitals as they enrich topic specific conversations and help coordinate information sharing and collaboration.

The AHA/HRET HEN is an active participant in the pacing events sponsored by the National Content Developer (NCD). The national project team and states finds these events to be helpful and an excellent means of learning and sharing information on HEN initiatives. In addition to the AHA/HRET HEN team participation, these events are actively promoted to the SHAs and our hospitals. On average, about 66 percent of the SHAs attend the weekly pacing events. The weekly office hours calls with CMS, NCD and the Evaluation Contractor continue to provide valuable information on project expectations and implementation from the funder perspective. Participating parties have been very responsive, transparent and quick to follow-up if information is not readily available. In addition, the HEN House calls offer an excellent opportunity for HENs to collaborate on work that is being done. These calls serve as a platform for HENs to share and brainstorm ideas. The AHA/HRET HEN team regularly participates in Affinity Group calls and weekly pacing event debriefs, which help to further inform our work towards achieving the 40/20 goal.

Highlights and Accomplishments

Over the past two years, the AHA/HRET HEN and SHAs have worked with the hospitals to provide them with the education, tools and resources to drive improvement in the 10 PfP clinical topic areas.

In addition to equipping the hospitals with these tangible skills, the participants have also gained a network of peers who they can engage with in-person and/or virtually to share best practices, lessons learned and to re-energize and motivate one another to continue the work. By building this sense of community via the network (Will) and providing them with the tools they need to begin to think about how they can make a change (Ideas) and implementing and testing (Execution), the AHA/HRET HEN has been able to achieve many quantitative and qualitative results.

Engaging in this important work for our patients has resulted in an estimated total of 69,072 patients who had a harm prevented and an estimated cost savings of $201,811,600.

HARMS PREVENTED WITH COST SAVINGS – PROJECTIONS THROUGH END OF BASE PERIOD

Topic	Harms Prevented	Cost Savings
CAUTI	2,806 patients who did not have a CAUTI	$ 1,221,600
CLABSI	611 patients who did not have a CLABSI	$ 8,452,600
EED	13,340 babies who were not electively delivered before 39 weeks (640 babies who did not have to go to the NICU)	$ 3,132,200
Readmissions	50,442 All Cause 30-Day Readmissions Prevented	$166,311,600
Pressure Ulcers	96 Stage III/IV Pressure Ulcers Prevented	$ 933,400
SSI	1,337 patients who had a SSI prevented	$ 15,056,000
VAP	368 patients who did not have a VAP	$ 6,430,100
VTE	72 patients who did not have a Post-Operative PE or DVT	$ 210,200
Estimated Total	69,072 patients who had a harm prevented	$201,811,600

Data Source: Comprehensive Data System (10/28/2013)

Our progress towards meeting the goals of a 40 percent reduction in harm and a 20 percent reduction in preventable readmissions in the PfP clinical topic areas is shown below.

AHA/HRET: ACHIEVEMENT OF TARGETS – OCTOBER 2013

AEA	At least 60% Reporting	30% Change from Baseline (15% Readm)	17.6% Change from Baseline (15% Readm)*	Met High Performance Benchmark	Achievement of Target**
ADE					
CAUTI	✓		✓		✓
CLABSI	✓				
Falls	✓				
OB-EED	✓	✓			✓
OB-Other	✓				
PrU					
SSI	✓	✓			✓
Readm	✓				
VAP					
VTE					
Total	7	2	1	0	3

* 17.6 Improvement includes improvement from 17.6% to <30%.

** ✓ Indicates HEN met at least one target: 30% improvement, 17.6% improvement, or high performance benchmark (or 15% improvement for readmissions).

The results section of this report outlines our specific approaches and results for each topic.

Adverse Drug Events (ADE)

Approach

To support the reduction of adverse drug events (ADE), the AHA/HRET HEN hosted webinars; subject matter expert and hospital story presentations at our National Improvement Collaborative; an ADE Boot Camp and a LISTSERV® to engage varied roles within a hospital including senior leadership, physicians, pharmacists, nurses and other front line staff. Topics covered on the webinars and the National Improvement Collaborative track sessions included: how to set up a Coumadin clinic; how to use triggers and alerts to develop simple interventions to prevent ADEs in complex processes; how to reduce distractions during medication administration and lower the risk of medication errors by changing the process to improve medication safety; easy ways to reduce hypoglycemia ADEs including strategies from top performing hospitals.

In September and October 2013, the AHA/HRET HEN hosted the ADE Boot Camp, a series of two virtual sessions approximately a month apart. The first boot camp session focused on data and opioids. Over 350 attendees learned how to trend and track opioid related events including how to analyze conscious sedation procedures, rapid response team calls and transfers to a higher level of care to assess system failures. The second session of ADE boot camp focused on preventing harm from anticoagulants and insulin. Specifically, over 200 attendees heard from subject matter experts and hospital panels on ways to manage Warfarin in both a hospital and community setting by engaging physicians, pharmacist and senior leaders; ways to prevent harm by understanding the do's and don'ts of newer anticoagulants and ways to manage glycemic control in very ill patients by using insulin infusions.

The ADE LISTSERV® continues to be a valuable tool where information, suggestions to overcome barriers and progress reports are shared. The process report illustrates that increased pharmacist involvement in admissions and discharge medication reconciliation processes helps to prevent. Since the launch of the LISTSERV® in May 2012, there have been over 320 posts by 450 subscribers.

Adverse drug events comprise an estimated third of all hospital adverse events, affect approximately 2 million hospital stays annually, and prolong hospital length of stay by approximately 1.7 to 4.6 days.[1]

THE AHA/HRET HEN WILL CONTINUE OUR WORK ON ADE REDUCTION WITH A FOCUS ON ANTI COAGULATION, GLYCEMIC CONTROL AND OPIOID ADE REDUCTION IN THE FUTURE.

[1] National Action Plan for Adverse Drug Event (ADE) Prevention. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Web. 26 November 2013. http://www.hhs.gov/ash/initiatives/ade/

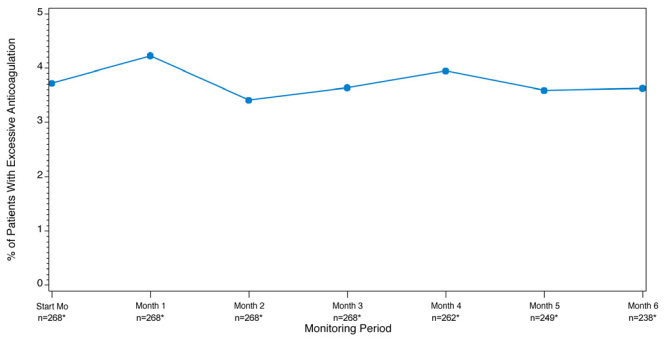
Adverse Drug Events (ADE) (CONTINUED)

Results

Not Meeting the PfP Goal

- **Excessive Anticoagulation with Warfarin – Inpatients:** 268 hospitals (19%) in the analysis cohort submitted data. There has been no percent reduction seen to date.
- **Hypoglycemia in Inpatients Receiving Insulin:** 118 hospitals (8%) in the analysis cohort submitted data. There is a 22.50 percent reduction from the baseline (7.48) to the last three months' rate (5.80).

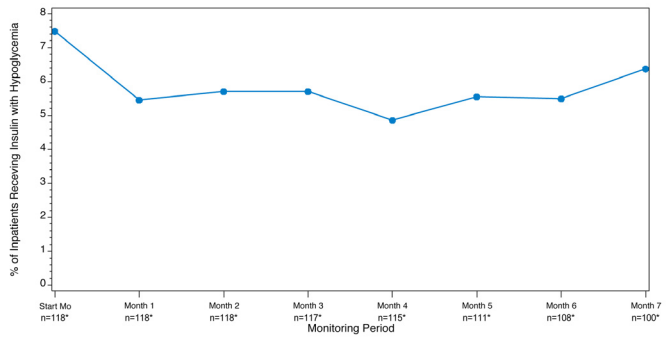
AHA/HRET Excessive anticoagulation with warfarin – Inpatients



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
AHA/HRET	Numerator	497	575	441	503	486	407	388
	Denominator	13380	13605	12947	13808	12301	11331	10675
	Rate	3.72	4.23	3.41	3.64	3.95	3.59	3.63

AHA/HRET Hypoglycemia in inpatients receiving insulin



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
AHA/HRET	Numerator	789	663	666	667	539	613	595	668
	Denominator	10548	12169	11690	11689	11089	11050	10829	10484
	Rate	7.48	5.45	5.7	5.7	4.86	5.55	5.49	6.37

Data displayed reflects aggregated data for all hospitals who have submitted at least four data points into the Comprehensive Data System and at least one data point is current (after July 2012). Run charts are truncated at the last month with at least 60 percent of eligible hospitals reporting and at least 85 percent of baseline hospitals reporting. If less than 60 percent of eligible hospitals are reporting on the measure, the run chart truncates at the last month with at least 85 percent of baseline hospitals reporting.

Catheter-Associated Urinary Tract Infections (CAUTI)

Approach

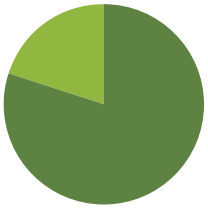
The AHA/HRET HEN is working to reduce CAUTI across the country through the AHRQ On the CUSP: Stop CAUTI project. This data-driven project includes national coaching calls and in-person learning sessions for clinical unit staff. Project participants receive tools that foster improved teamwork and communication as well as best practice clinical protocols. Some Intensive Care Units (ICU) participating in the On the CUSP: CAUTI program have implemented changes to the assumptions that all ICU patients require a urinary catheter through staff education, addition of new and improved condom catheters and female urinals and data feedback to staff about CAUTI rates, days without infection and catheter days. Many ICU participants are working to measure urine output via super absorbing pads to collect output. The pad is weighed to determine the cc's of urine output the patient has had. In addition to the support provided by the AHA/HRET CUSP team, AHA/HRET HEN hospitals working to reduce CAUTI have access to invaluable resources on the AHA/HRET HEN website. These resources include a CAUTI Implementation Guide that provides practical strategies for improving patient safety, a CAUTI prevention poster that lists key strategies to eliminate CAUTIs and case studies.

CAUTI occurs when organisms enter the urinary tract through a foley catheter and cause infection. CAUTI is associated with increased morbidity and mortality and is the second most common cause of secondary bloodstream infections.

COST SAVINGS TO DATE[2]

OVER **600,000** PATIENTS EACH YEAR DEVELOP URINARY TRACT INFECTIONS

80% OF THESE INFECTIONS ARE CATHETER RELATED



AHA/HRET HEN Hospitals have prevented 2,806 CAUTIs which is the equivalent to the number of people it would take to fill sixteen 737-800 Boeing jets and over 900,000 dollars have been saved.

[2] Estimated cost savings based on $750 per CAUTI prevented. Scott RD. *"The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention."* Division of Healthcare Quality Promotion National Center for Preparedness, Detection, and Control of Infectious Diseases Coordinating Center for Infectious Diseases Centers for Disease Control and Prevention. Web. 4 Dec 2012. http://www.cdc.gov/hai/pdfs/hai/scott_costpaper.pdf

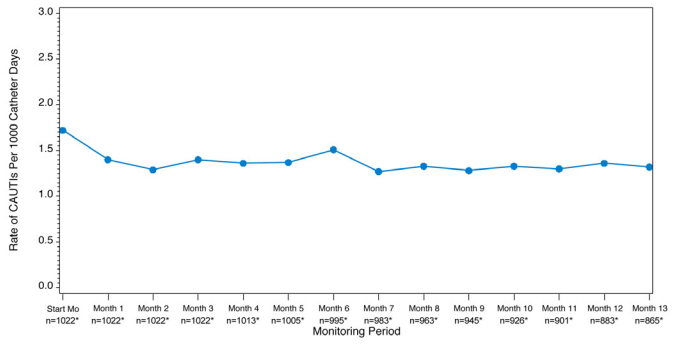
Catheter-Associated Urinary Tract Infections (CAUTI) (CONTINUED)

Results

17.6 Percent Reduction Milestone Met

- **Catheter-Associated Urinary Tract Infections Rate – All Tracked Units (CDC NHSN):** 1,022 hospitals (72%) in the analysis cohort submitted data. There is a 22.92 percent reduction from the baseline (1.72) to the last three months' rate (1.33).
- **Catheter-Associated Urinary Tract Infections Rate in ICU (CDC NHSN):** 751 hospitals (53%) in the analysis cohort submitted data. There has been no percent reduction seen to date.

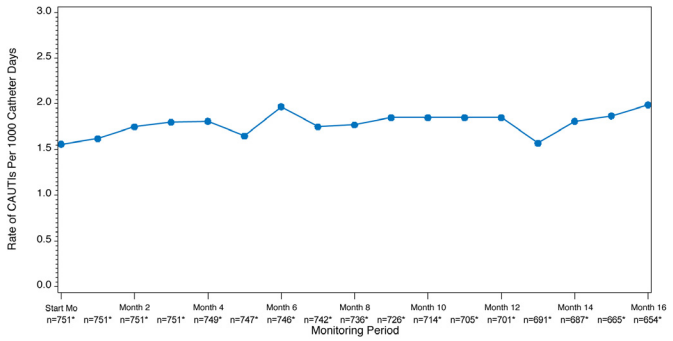
AHA/HRET Catheter-Associated Urinary Tract Infections Rate – All Tracked Units (CDC NHSN)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
AHA/HRET	Numerator	510	472	412	462	421	421	452	387	404	379	412	407	443	462
	Denominator	296988	338066	319330	329499	310335	308386	298686	304229	303450	295882	308728	312447	326222	350948
	Rate	1.72	1.4	1.29	1.4	1.36	1.37	1.51	1.27	1.33	1.28	1.33	1.3	1.36	1.32

AHA/HRET Catheter-Associated Urinary Tract Infections Rate in ICU (CDC NHSN)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16
AHA/HRET	Numerator	270	299	317	329	314	280	321	288	288	299	304	309	326	289	299	304	299
	Denominator	173013	184835	180906	183117	173754	170014	163311	164458	162497	161379	164746	167472	176662	183569	165367	162936	150110
	Rate	1.56	1.62	1.75	1.8	1.81	1.65	1.97	1.75	1.77	1.85	1.85	1.85	1.85	1.57	1.81	1.87	1.99

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Central Line-Associated Blood Stream Infections (CLABSI)

Approach

During the two years of the HEN project, the AHA/HRET HEN has hosted a CLABSI/VAP LISTSERV® to allow hospital staff to share tools and best practices. To date, there have been 192 posts by the 368 subscribers. Hospitals also submit monthly progress reports to the LISTSERV® that highlights interventions tested and lessons learned. Some of the hospital-based intervention strategies include sharing patient stories, holding staff in-services on CLABSI reduction practices, focusing on patient safety and using standard CLABSI insertion procedures. Clinical units have also displayed a "Weeks Without" banner to keep staff motivated to eliminate CLABSIs.

Additional efforts to reduce CLABSI on a national level included face-to-face meetings and coaching webinars. In July 2012, we provided a CLABSI data coaching webinar focused on risk factors and best practices. In February and May 2013, we hosted webinars on evidence-based bathing to impact outcomes and managing central lines during transport.

CLABSIs occur when bacteria or viruses enter the bloodstream through a central line, causing infection. CLABSIs result in thousands of preventable infections and preventable deaths annually.

10,426 – 25,145
Number of preventable CLABSI deaths annually

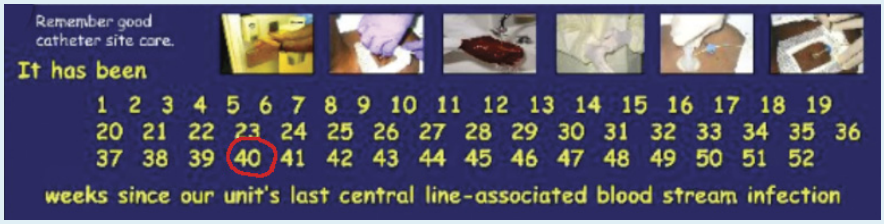
84,551 – 203,916
Number of preventable CLABSI infections each year

The number of CLABSIs (from All Units) prevented to date, 611, is comparable to the number of passengers it takes to fill 5 737-500 Boeing Jets.

611
Number of CLABSIs prevented to date.

$8,452,600
COST SAVINGS TO DATE[3]

Intervention strategies include sharing patient stories and holding staff in-services on CLABSI insertion procedures. Also, using a "Weeks Without" banner (above) has motivated staff to eliminate CLABSIs.



"Weeks Since" CLABSI Banner

[3] Estimated Annualized Cost Savings based on $19,000 per CLABSI. Scott RD. *"The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention, Table 4 (adjusted to 2012 dollars)."* Division of Healthcare Quality Promotion National Center for Preparedness, Detection, and Control of Infectious Diseases Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention. Mar 2009. Web. 5 Dec. 2012. http://www.cdc.gov/hai/pdfs/hai/scott_costpaper.pdf

Central Line-Associated Blood Stream Infections (CLABSI) (CONTINUED)

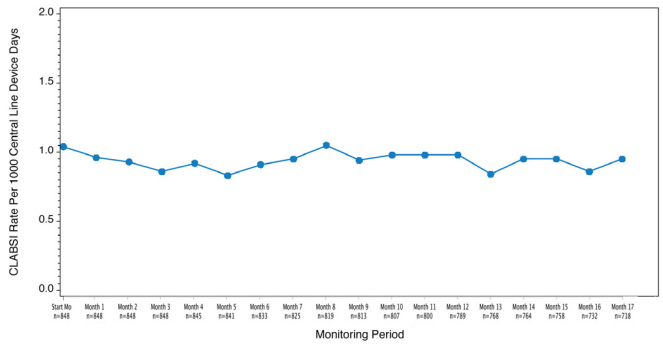
Results

Not Meeting The PfP Goal

- **CLABSI Rate – All Units (by Device Days) (CDC NHSN):** 848 hospitals (72%) in the analysis cohort submitted data. There is an 11.28 percent reduction from the baseline (1.04) to the last three months' rate (0.92).

- **CLABSI Rate — ICU (by Device Days) (CDC NHSN):** 781 hospitals (66%) in the analysis cohort submitted data. There is a 16.61 percent reduction from the baseline (1.22) to the last three months' rate (1.02).

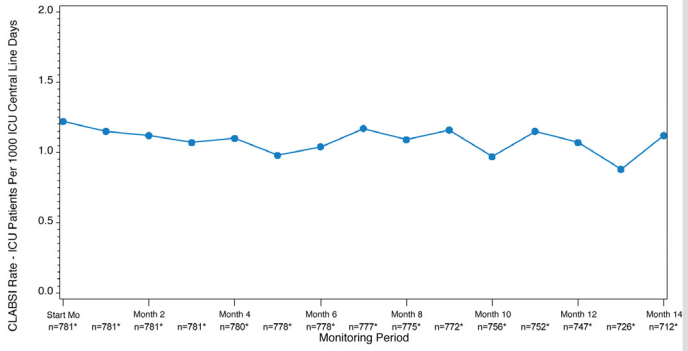
AHA/HRET CLABSI Rate – All Units (by Device Days) (CDC NHSN)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17
AHA/HRET	Numerator	240	239	223	216	220	201	209	222	245	215	234	228	237	218	224	239	189	210
	Denominator	231573	250081	239595	252206	238593	242281	228815	234055	232784	228557	238974	231900	241753	259028	236789	251754	218712	220963
	Rate	1.04	0.96	0.93	0.86	0.92	0.83	0.91	0.95	1.05	0.94	0.98	0.98	0.98	0.84	0.95	0.95	0.86	0.95

AHA/HRET CLABSI Rate – ICU (by Device Days) (CDC NHSN)



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AHA/HRET	Numerator	171	163	152	154	148	132	133	151	141	144	127	149	147	130	145
	Denominator	139629	142280	135816	143906	134272	134251	128290	129009	129011	124217	130776	129334	137059	148120	129630
	Rate	1.22	1.15	1.12	1.07	1.1	0.98	1.04	1.17	1.09	1.16	0.97	1.15	1.07	0.88	1.12

Data displayed reflects aggregated data for all hospitals who have submitted at least four data points into the Comprehensive Data System and at least one data point is current (after July 2012). Run charts are truncated at the last month with at least 60 percent of eligible hospitals reporting and at least 85 percent of baseline hospitals reporting. If less than 60 percent of eligible hospitals are reporting on the measure, the run chart truncates at the last month with at least 85 percent of baseline hospitals reporting.

Injuries from Falls and Immobility (Falls)

Approach

The AHA/HRET HEN has implemented several strategies at the national level to reduce injuries from falls including face-to-face meetings, webinars and an active LISTSERV® peer-to-peer learning environment. Subject matter experts have shared best-practices and hospitals have shared unit-level strategies to reduce the impact of patient falls during our face-to-face meetings such as the National Improvement Collaborative. They have discussed how to create safer environments, best practice interventions such as the identification of specific modifiable risk factors and how to review falls by type. The LISTSERV® for hospital teams working to reduce patient falls is very active. Hospital staff use this platform to pose questions to their peers, inquire about best practices and to highlight their fall prevention strategies. To date, there are more than 600 subscribers and 1,300 messages have been posted to the combined Falls/HAPU LISTSERV®.

In August 2013, we hosted a Falls Mini Boot Camp. This three-hour virtual meeting was attended by 224 participants. The boot camp featured sessions on the role of patients and families in reducing falls, how to overcome challenges with individual intervention plans and fall huddle analysis. Several tools were shared during the boot camp including a bedside flyer to reduce falls, an after action review checklist for post fall huddles and a fall event tool to document patient falls.

Patient falls in hospitals are among the most frequently reported incidents. Many inpatient falls cause little or no harm, but falls can sometimes lead to severe injuries such as hip fractures and head trauma.

Percent of patients with falls resulting in fractures in acute and rehabilitation hospitals

1%–3%

30%–51%

Percent of falls resulting in injury in acute and rehabilitation hospitals

IMMOBILITY

- INCREASES THE CHANCES OF FUNCTIONAL DECLINE
- INCREASES THE LENGTH OF HOSPITALIZATIONS
- INCREASES HOSPITAL READMISSIONS

FALLS

- One of the most frequently reported hospital incidents
- Lead to severe injuries such as hip fractures and head trauma

VISUAL CUES FOR FALL PREVENTION

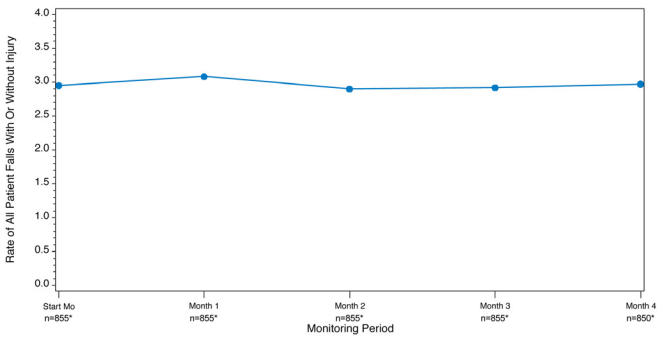
Injuries from Falls and Immobility (Falls) (CONTINUED)

Results

Not Meeting The PfP Goal

- **Falls With or Without Injury (NSC-4):** 855 hospitals (61%) in the analysis cohort submitted data. There is a 0.35 percent reduction from the baseline (2.94) to the last three months' rate (2.89).
- **Falls With Injury (minor or greater) (NSC-5):** 521 hospitals (37%) in the analysis cohort submitted data. There has been no percent reduction demonstrated.

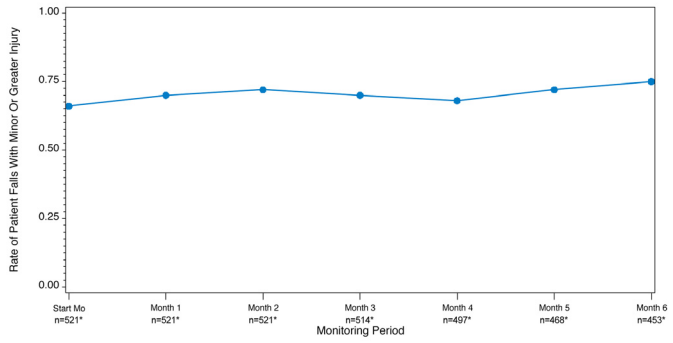
AHA/HRET All Patient Falls With Or Without Injury Per 1,000 Patient Days



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4
AHA/HRET	Numerator	5580	5277	4913	5177	4883
	Denominator	1897582	1758849	1694651	1774364	1641530
	Rate	2.94	3	2.9	2.92	2.97

AHA/HRET Patient Falls With Minor Or Greater Injury Per 1,000 Patient Days



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
AHA/HRET	Numerator	791	768	759	754	672	671	681
	Denominator	1198328	1096045	1049666	1075638	988177	936722	902158
	Rate	0.66	0.7	0.72	0.7	0.68	0.72	0.75

Data displayed reflects aggregated data for all hospitals who have submitted at least four data points into the Comprehensive Data System and at least one data point is current (after July 2012). Run charts are truncated at the last month with at least 60 percent of eligible hospitals reporting and at least 85 percent of baseline hospitals reporting. If less than 60 percent of eligible hospitals are reporting on the measure, the run chart truncates at the last month with at least 85 percent of baseline hospitals reporting.

Obstetrical Adverse Events including Early Elective Deliveries

Approach

To move towards 40 percent reduction on early elective deliveries and obstetrical adverse events, the AHA/HRET HEN educational offerings and a LISTSERV® to engage hospital teams working on this topic. In 2012 and 2013, webinars focused on early elective deliveries including implementing hard stop policies, engaging reluctant physicians and convincing skeptical patients. In 2013, the AHA/HRET HEN began to heavily focus on obstetrical adverse events and offered OB Boot Camp. The AHA/HRET HEN OB Boot Camp was a series of three day-long virtual sessions approximately a month apart, followed by coaching calls two weeks after each session. Each Boot Camp day consisted of up to 10 short burst, highly interactive webinar sessions on a variety of emerging topics in the area of reducing perinatal harm. We invited national leaders from American Congress of Obstetricians and Gynecologists (ACOG), Association of Women's Health, Obstetric and Neonatal Nurse, IHI and panels of hospital quality improvement team members to help hospitals in their journey to reduce harm from maternal hemorrhage, severe hypertension and the prevention of obstetrical venous thromboembolism (VTE). Approximately 400 people attended the three Boot Camp sessions combined.

The OB LISTSERV® continues to be an excellent resource for hospital staff to collaborate, seek suggestions and post progress reports. In 2013, there have been 433 posts by 508 subscribers.

THIS COST SAVINGS REPRESENTS THE 13,340 BABIES WHO WERE NOT ELECTIVELY DELIVERED BEFORE 39 WEEKS.[4]

640

NUMBER OF BABIES WHO DID NOT HAVE TO GO TO THE NEONATAL INTENSIVE CARE UNIT

640 IS COMPARABLE TO THE NUMBER OF KIDS IT WOULD TAKE ON AVERAGE TO FILL ONE KINDERGARTEN CLASS IN EACH OF THE 31 STATES IN THE AHA/HRET HEN.

[4] Dignity Health, CMS email April 18, 2013; 9.4 percent from this article (4.8 percent per Jack Jordan 4/26 email): Clark SL, Miller DD, Belfort MA, et al. Neonatal and maternal outcomes associated with elective term delivery. Am J Obstet Gynecol 2009;200:156.e1-156.e4.; $15,172 from internal Dignity Health history

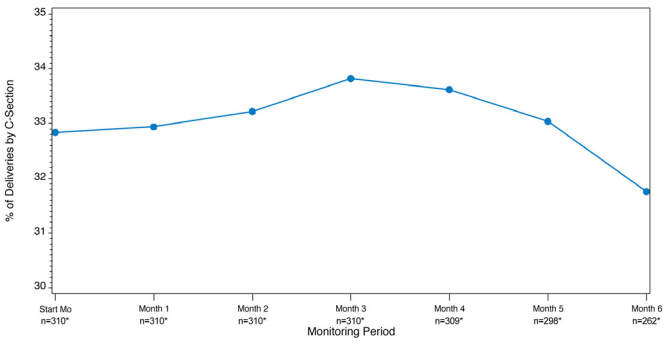
Obstetrical Adverse Events including Early Elective Deliveries (CONTINUED)

Results

Not Meeting the PfP Goal

- **C-Section Delivery Rate (AHRQ IQI-21):** 310 hospitals (35%) in the analysis cohort submitted data. There has been no percent reduction seen to date.

AHA/HRET C-Section Deliveries

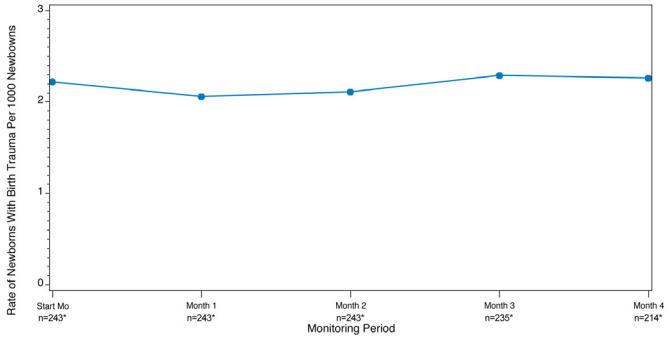


For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
AHA/HRET	Numerator	8298	8228	8081	8118	7813	6866	5227
	Denominator	25266	24977	24327	24004	23242	20783	16454
	Rate	32.84	32.94	33.22	33.82	33.62	33.04	31.76

- **Birth Trauma – Injury to Neonate (AHRQ PSI-17):** 243 hospitals (27%) in the analysis cohort submitted baseline data. There is a 0.19 percent reduction from the baseline (2.22) to the last three months' rate (2.216).

AHA/HRET Newborns With Birth Trauma



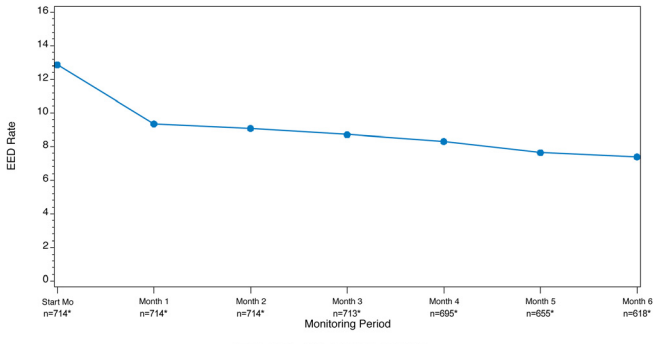
For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4
AHA/HRET	Numerator	62	52	52	52	44
	Denominator	27799	25097	24485	22554	19603
	Rate	2.22	2.06	2.11	2.29	2.26

30 Percent Reduction Milestone Met

- **Elective Deliveries at >=37 Weeks and <39 Weeks (JC-PC-01):** 714 hospitals (81%) in the analysis cohort submitted data. There is a 39.45 percent reduction from the baseline (12.87) to the last three months' rate (7.79).

AHA/HRET Elective Deliveries (Vaginal Or C-Section) (Joint Commission EED Measure)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
AHA/HRET	Numerator	1974	1314	1183	1134	1030	903	834
	Denominator	15335	14061	13023	13013	12388	11822	11290
	Rate	12.87	9.35	9.08	8.71	8.31	7.64	7.39

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Hospital-Acquired Pressure Ulcers (HAPU)

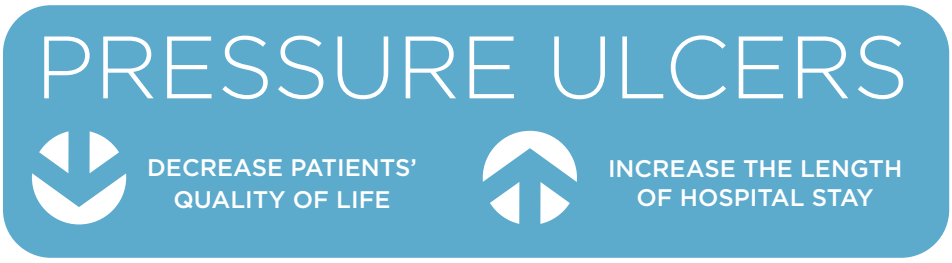
Approach

Efforts at the national level to reduce HAPU include face-to-face meetings and webinars. A number of topics have been addressed during face-to-face meetings and on the HAPU webinars. Both approaches incorporate learning opportunities from subject matter experts and hospital panelists who share their quality improvement stories. Topics covered during these learning opportunities include skin care basics, skin moisture management, wound prevention, incontinence management and strategies to optimize nutrition.

The combined Falls/HAPU LISTSERV® is a web-based, peer-to-peer learning platform where hospitals share their monthly progress reports and questions they may have regarding the implementation of best practices. Intervention strategies shared on progress reports include staff education and the use of visual cues such as "turn clocks" in patient rooms.

In August 2013, we hosted a three-hour HAPU Boot Camp webinar. This webinar was attended by 116 hospital staff seeking information to help them implement and/or sustain their HAPU prevention initiatives. The agenda topics included the role of patients and their families, pressure ulcer huddles, pressure ulcers in the intensive care unit and strategies for managing patients with rapidly changing skin risk.

Pressure ulcers are injuries to the skin or underlying tissue caused by pressure, friction and moisture. They often occur when patients have limited mobility and aren't able to change positions in the bed on their own. More than 2.5 million patients in U.S. acute-care facilities suffer from pressure ulcers and 60,000 die from pressure ulcer complications each year.



$11 billion

ANNUAL ESTIMATED COSTS FOR TREATMENT OF PRESSURE ULCERS IN THE U.S.

HAPU HOSPITAL INTERVENTION STRATEGIES

- Staff education
- Head-to-toe skin and risk assessments
- Minimize pressure and friction
- Turn and reposition patients
- Visual cues such as large "turn clocks" in patient rooms

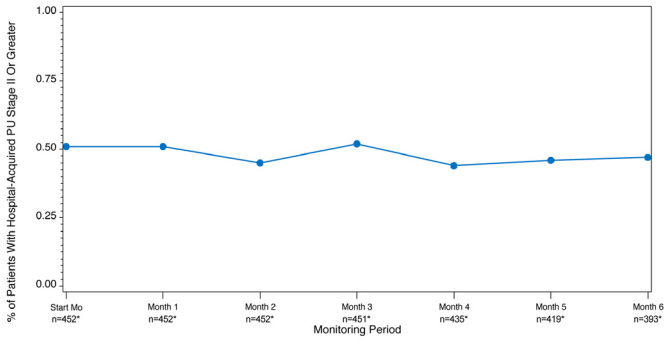
Hospital-Acquired Pressure Ulcers (HAPU) (CONTINUED)

Results

Not Meeting the PfP Goal

- **Patients with at least One Stage II or Greater Nosocomial Pressure Ulcers (NSC-2):** 452 hospitals (32%) in the analysis cohort submitted data. There is a 10.65 percent reduction from the baseline (0.51) to the last three months' rate (0.46).
- **Pressure Ulcer (MCR FFS) (CMS HAC):** 405 hospitals (29%) in the analysis cohort submitted data. There is a 9.78 percent reduction from the baseline (0.51) to the last three months' rate (0.46).

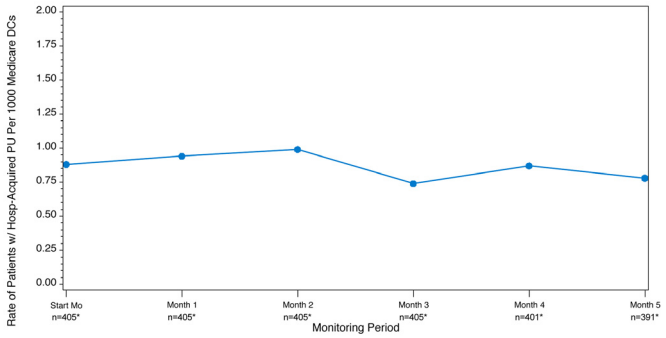
AHA/HRET Patients with at least One Stage II or Greater Nosocomial Pressure Ulcers (NSC-2)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
AHA/HRET	Numerator	498	493	418	492	389	404	410
	Denominator	98134	96181	92225	93858	89308	88338	86342
	Rate	0.51	0.51	0.45	0.52	0.44	0.46	0.47

AHA/HRET Pressure Ulcer (MCR FFS) (CMS HAC)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5
AHA/HRET	Numerator	248	241	244	186	211	183
	Denominator	281618	256064	247003	251292	243134	235666
	Rate	0.88	0.94	0.99	0.74	0.87	0.78

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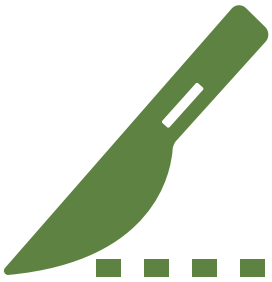
Surgical Site Infections (SSIs)

Approach

The AHA/HRET HEN has supported hospitals in their efforts to reduce hospital acquired surgical site infection prevention by providing educational content and coaching through offerings including the National Improvement Collaborative, the Improvement Leader Fellowship and the SSI LISTSERV®. The National Improvement Collaborative and Improvement Leader Fellowship began as in-person meetings and are now virtual conferences focused on best practices and peer-to-peer learning. In addition to these virtual meetings, AHA/HRET HEN held a series of SSI-focused webinars. Through these offerings, HRET provides hospitals with resources, coaching and facilitated learning as to achieve the mutual goals of reducing the occurrence of SSI. Expert faculty providing education and coaching across the various educational offerings include Dr. William Berry, Dr. Patchen Dellinger, Dr. Charles Edmiston, Constance Cutler and Kathy Duncan. Also included in each educational offering are representatives from hospitals in our HEN who are doing work around SSI prevention at their institutions.

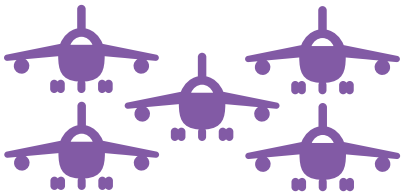


Surgical site infections (SSIs) are associated with significant patient morbidity and mortality. It is estimated that between 750,000 and 1 million SSIs occur in the United States each year, extending hospital stays by 3.7 million extra days and generating more than $1.6 billion in excess hospital charges each year. Surgical site infections are the third most frequently reported health care-associated infection (HAI) based on data derived from the Centers for Disease Control and Prevention's National Healthcare Safety Network. In order for a program to be the most effective in reducing the incidence of SSIs, a program should combine SSI-prevention methods and the World Health Organization (WHO) Surgical Safety Checklist, which promotes teamwork and communication in the operating room.

1,337

Number of SSIs prevented by AHA/HRET HEN Hospitals

ESTIMATED COST SAVINGS AS A RESULT OF PREVENTING 1,337 SURGICAL SITE INFECTIONS[5]



1,337 SURGICAL SITE INFECTIONS PREVENTED IS COMPARABLE TO THE NUMBER OF PASSENGERS IT TAKES TO FILL 5 OF BOEING'S NEWEST LUXURY AIRCRAFT, THE 787-8 DREAMLINER.

[5] Estimated cost savings based on $20,000 per SSI prevented. Scott RD. *"The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention."* Division of Healthcare Quality Promotion National Center for Preparedness, Detection, and Control of Infectious Diseases Coordinating Center for Infectious Diseases Centers for Disease Control and Prevention. Web. 4 Dec 2012. http://www.cdc.gov/hai/pdfs/hai/scott_costpaper.pdf

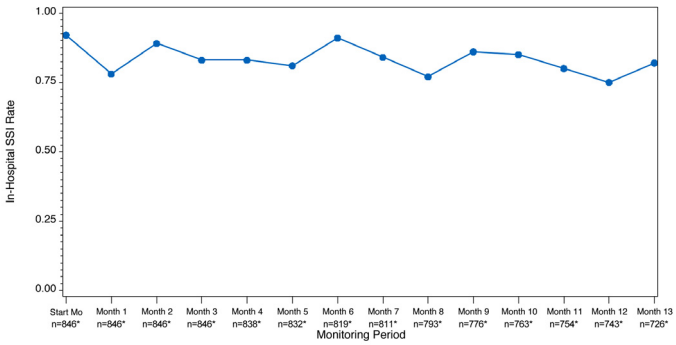
Surgical Site Infections (SSIs) (CONTINUED)

Results

30 Percent Reduction Milestone Met

- **SSI Rate (in-hospital) (CDC NHSN):** 846 hospitals (70%) in the analysis cohort submitted data. There is a 13.88 percent reduction from the baseline (0.92) to the last three months' rate (0.79).
- **SSI Rate (within 30 days after procedure) (CDC NHSN):** 774 hospitals (64%) in the analysis cohort submitted data. There has been no percent reduction seen to date.

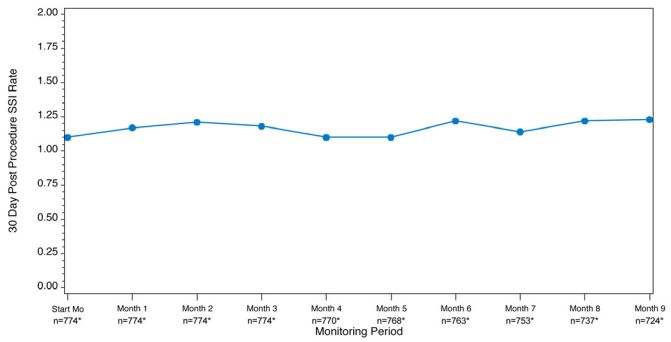
AHA/HRET Surgical Site Infection Rate (in-hospital) (CDC NHSN)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
AHA/HRET	Numerator	541	458	516	508	476	486	527	481	448	462	526	447	409	466
	Denominator	58657	58527	57974	61102	57495	60024	58137	57196	58464	53891	61643	55784	54373	56705
	Rate	0.92	0.78	0.89	0.83	0.83	0.81	0.91	0.84	0.77	0.86	0.85	0.8	0.75	0.82

AHA/HRET Surgical Site Infection Rate (within 30 days after procedure) (CDC NHSN)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
AHA/HRET	Numerator	505	562	563	584	515	541	587	543	581	553
	Denominator	45945	48083	46678	49374	46938	49266	48043	47839	47754	44807
	Rate	1.1	1.17	1.21	1.18	1.1	1.1	1.22	1.14	1.22	1.23

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Venous Thromboembolism (VTE)

Approach

The AHA/HRET HEN initiated a number of methods to reduce rates of venous thromboembolism (VTE) among hospitals within our network. Our approach focused on providing valuable resources, tools and peer to peer sharing through the topic specific LISTSERV®, the track sessions in our National Improvement Collaborative and incorporating the topic into the quality improvement theory discussed in the Improvement Leader Fellowship. Discussion on the LISTSERV® has been initiated on how VTE overlaps with other clinical topics addressed in our HEN. Additionally, subject matter experts discussed VTE prevention, diagnosis and management for the OB population during the OB Boot Camp hosted in July 2013. The importance of assessing and ordering VTE prophylaxis to reduce maternal harm was evident through a panel discussion in the OB Boot Camp.

In June 2013, the AHA/HRET HEN National Improvement Collaborative hosted a session on preventing VTE in special populations, which focused on obesity, renal failure, major trauma, psychiatry and neurosurgery. Additionally, the AHA/HRET HEN incorporated data and methods in the Fall 2013 session of the Improvement Leader Fellowship meetings. VTE run charts, monthly progress reports and pearls of wisdom were presented in relation to quality improvement theory and change concepts. Hospital level data and lessons learned exemplified the application of the change concepts to the field.

375

VTE LISTSERV Subscribers

72

NUMBER OF VTES PREVENTED BY AHA/HRET HEN HOSPITALS

ESTIMATED COST SAVINGS FROM AHA/HRET HEN HOSPITALS WHO PREVENTED A VTE[6]

[6] Estimated cost savings based on $10,000 per VTE prevented. Maynard G and Stein J. *"Preventing Hospital-Acquired Venous Thromboembolism: A Guide for Effective Quality Improvement."* Society of Hospital Medicine, Agency for Healthcare Research and Quality. U.S. Department of Health & Human Services, Web. 5 Dec 2012. http://www.ahrq.gov/qual/vtguide/vtguideapa.htm

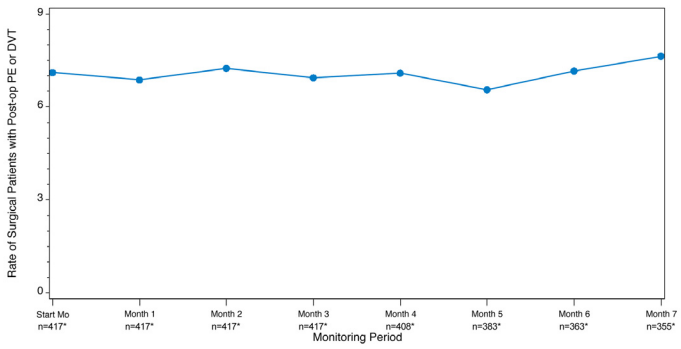
Venous Thromboembolism (VTE) (CONTINUED)

Results

Not Meeting the PfP Goal

- **Post-op PE or DVT (All Adults) (AHRQ PSI-12):** 417 hospitals (30%) in the analysis cohort submitted data. There is a 0.13 percent reduction from the baseline (7.11) to the last three months' rate (7.10).
- **Potentially Preventable VTE (VTE-6):** 461 hospitals (33%) in the analysis cohort submitted data. There is a 22.49 percent reduction from the baseline (5.09) to the last three months' rate (3.95).

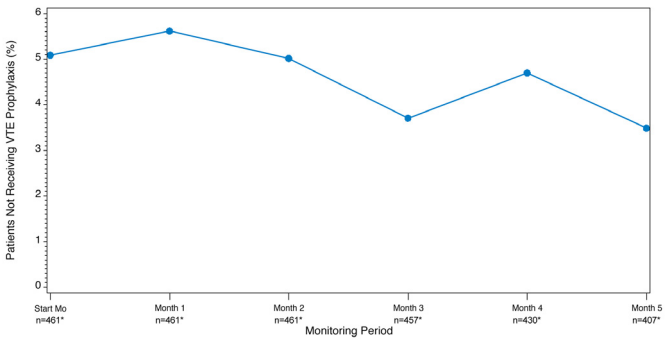
AHA/HRET Surgical Patients with Post-op PE or DVT per 1,000 Surgical Discharges



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
AHA/HRET	Numerator	445	413	442	433	427	392	408	414
	Denominator	62617	60100	61010	62469	60157	59721	57017	54176
	Rate	7.11	6.87	7.25	6.94	7.09	6.56	7.16	7.64

AHA/HRET Patients with Hospital Acquired VTE Not Receiving VTE Prophylaxis



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5
AHA/HRET	Numerator	89	78	61	57	53	37
	Denominator	1751	1393	1208	1546	1128	1069
	Rate	5.09	5.62	5.02	3.71	4.7	3.49

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Ventilator-Associated Pneumonia (VAP)

Approach

The AHA/HRET HEN has used multiple approaches to reduce VAP nationwide. Our approaches include national face-to-face meetings, webinars and a web-based interactive sharing platform. Our face-to-face meetings are designed to provide key improvement strategies to front-line staff. Topics covered during our 2012 and 2013 face-to-face meetings include sessions on the VAP bundle, deep venous thrombosis prophylaxis and how to overcome barriers to implementing improvement initiatives. Webinar topics covered during this same time frame include VAP risk factors and best practices for reducing VAP, early ambulation and delirium and delays – overcoming spontaneous awakening trials and spontaneous breathing trials. Our web-based interactive sharing platform, the CLABSI-VAP LISTSERV® provides an opportunity for hospital staff to share information and best practices. Hospitals submit monthly reports to this LISTSERV® to showcase their improvement strategies. Improvement strategies that have been shared related to chlorhexidine gluconate oral care, standardization of protocols and interdisciplinary rounding in critical areas.

Mechanically ventilated patients are at high risk for ventilator-associated pneumonia (VAP) and other complications. VAP is the leading cause of death among hospital-acquired infections, with attributable mortality rates up to 40 percent. In addition, the costs associated with VAP are staggering.

VAP PROLONGS THE:

- time a patient spends on the ventilator
- length of time a patient stays in the intensive care unit
- length of time a patient stays in the hospital after discharge from the intensive care unit

$1.03 – $1.50 billion

Total amount direct medical costs for ventilator-associated pneumonia

VAP BUNDLE VISUAL CUE POSTED AT THE BEDSIDE

- **H**ead of bed up 30-45 degrees
- **E**nteral feeding and q 2 hour oral care
- **A**ir mattress and turn q 2 hour
- **D**VT prophylaxix
- **S**edation vacation
- **U**lcer prophylaxis
- **P**ain Control

Evidence-based interventions such as ventilator bundles can reduce the occurrence of VAP. Interventions include chlorhexidene gluconate oral care, standardization of protocols and interdisciplinary rounding in critical areas.

125

NUMBER OF VENTILATOR-ASSOCIATED PNEUMONIA CASES PREVENTED

ESTIMATED COST SAVINGS[7]

[7] Estimated Cost Savings based on $43,000 per VAP prevented. Tablan OC, Anderson LJ, Besser R, et al. CDC Healthcare Infection Control Practices Advisory Committee. Guidelines for preventing health care-associated pneumonia, 2003: Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee. MMWR Recomm Rep. 2004 Mar

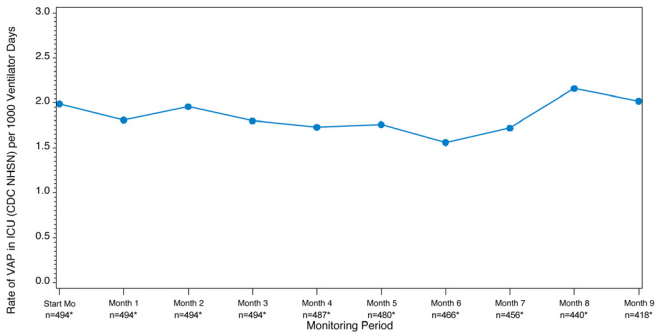
Ventilator-Associated Pneumonia (VAP) (CONTINUED)

Results

Not Meeting the PfP Goal

- **VAP Rate ICU only (CDC NHSN):** 494 hospitals (49%) in the analysis cohort submitted data. There is a 1.26 percent reduction from the baseline (1.99) to the last three months' rate (1.97).
- **VAP Rate All Units (CDC NHSN):** 429 hospitals (42%) in the analysis cohort submitted data. There is an 18.40 percent reduction from the baseline (1.37) to the last three months' rate (1.12).

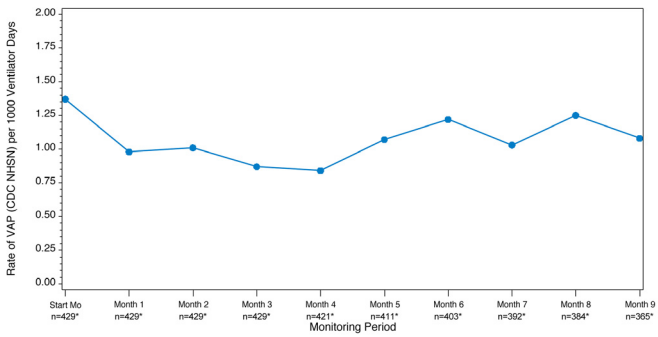
AHA/HRET Ventilator-Associated Pneumonia Rate – ICU only (CDC NHSN)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
AHA/HRET	Numerator	105	98	100	98	88	86	74	79	97	88
	Denominator	52876	54166	51114	54778	51040	48885	47576	46000	44887	43473
	Rate	1.99	1.81	1.96	1.8	1.73	1.76	1.56	1.72	2.16	2.02

AHA/HRET Ventilator-Associated Pneumonia Rate – All Units (CDC NHSN)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
AHA/HRET	Numerator	66	47	46	43	39	49	54	45	54	43
	Denominator	47805	48118	45658	49687	46495	45997	44127	43865	43162	39989
	Rate	1.37	0.98	1.01	0.87	0.84	1.07	1.22	1.03	1.25	1.08

Data displayed reflects aggregated data for all hospitals who have submitted at least four data points into the Comprehensive Data System and at least one data point is current (after July 2012). Run charts are truncated at the last month with at least 60 percent of eligible hospitals reporting and at least 85 percent of baseline hospitals reporting. If less than 60 percent of eligible hospitals are reporting on the measure, the run chart truncates at the last month with at least 85 percent of baseline hospitals reporting.

Preventable Readmissions

Approach

The AHA/HRET HEN has put a substantial focus on preventable readmissions to assist our hospitals in working towards the 20 percent reduction goal. In an effort to meet this goal, the AHA/HRET HEN has over the past two years provided educational content and coaching to our hospitals through offerings including the National Improvement Collaborative, the Improvement Leader Fellowship, the Readmissions Race, in-State Readmissions workshops and the Readmissions LISTSERV®. In these offerings, the AHA/HRET HEN provides hospitals with resources, coaching and facilitated learning so to achieve the mutual goals of reducing preventable readmissions. Expert faculty providing education and coaching across the various educational offerings include Dr. Eric Coleman, Dr. Amy Boutwell, Dr. Mark Williams and Dr. Matt Schreiber. Also included in each educational offering are representatives from hospitals participating in our HEN who are doing work around preventable readmissions at their institutions.

50,442

THE NUMBER OF PATIENTS WHO DID NOT HAVE TO RETURN TO THE HOSPITAL

50,442 PATIENTS WHO DID NOT HAVE TO BE READMITTED IS THE EQUIVALENT OF FILLING YANKEE STADIUM IN NEW YORK CITY.

ESTIMATED COST SAVINGS OF 50,442 ALL CAUSE 30-DAY READMISSIONS PREVENTED[8]

[8] Tiongson J. "Solicitation for Applications Community-based Care Transitions Program." Centers for Medicare & Medicaid Services, Web. 4 Dec 2012. HYPERLINK "http://www.cms.gov/Medicare/Demonstration-Projects/DemoProjectsEvalRpts/downloads/CCTP_Solicitation.pdf"

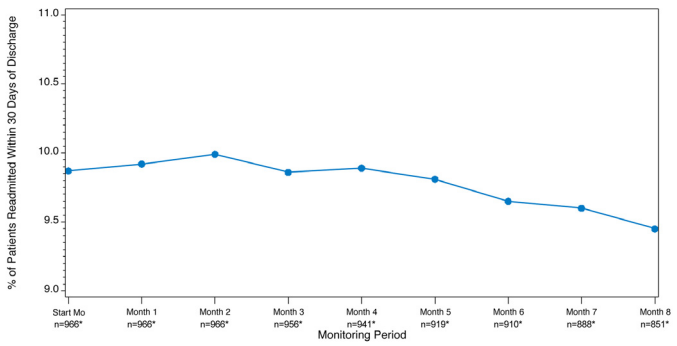
Preventable Readmissions (CONTINUED)

Results

Not Meeting the PfP Goal

- **Readmission within 30 days (All Cause):** 966 hospitals (68%) in the analysis cohort submitted data. There is a 3.09 percent reduction from the baseline (9.87) to the last three months' rate (9.57).
- **Heart Failure (HF) Patients – Readmissions within 30 days (All Cause):** 266 hospitals (19%) in the analysis cohort submitted data. There is a 10.49 percent reduction from the baseline (19.65) to the last three months' rate (17.59).

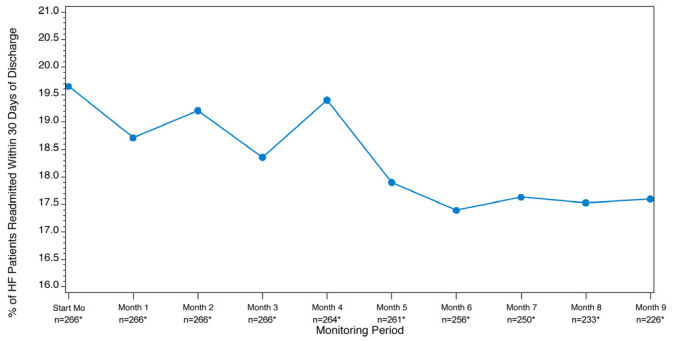
AHA/HRET Readmission within 30 days (All Cause)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
AHA/HRET	Numerator	40536	37009	36455	37479	34878	34246	33141	32350	32097
	Denominator	410534	373203	364802	380159	352548	349225	343553	336939	339723
	Rate	9.87	9.92	9.99	9.86	9.89	9.81	9.65	9.6	9.45

AHA/HRET Heart Failure (HF) Patients – Readmissions within 30 days (All Cause)



For any month with N<4, data is suppressed.

State	Measure	Baseline (Adjusted for # of Months)	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
AHA/HRET	Numerator	1172	1150	1143	1096	1117	1017	947	959	931	882
	Denominator	5962	6147	5947	5970	5756	5684	5445	5439	5311	5010
	Rate	19.65	18.71	19.21	18.36	19.4	17.9	17.39	17.63	17.53	17.6

Data displayed reflects aggregated data for all hospitals who have submitted at least four data points into the Comprehensive Data System and at least one data point is current (after July 2012). Run charts are truncated at the last month with at least 60 percent of eligible hospitals reporting and at least 85 percent of baseline hospitals reporting. If less than 60 percent of eligible hospitals are reporting on the measure, the run chart truncates at the last month with at least 85 percent of baseline hospitals reporting.

Lessons Learned

By engaging in the work of the PfP Campaign, the AHA/HRET HEN has gleaned several lessons learned as we work with our hospitals to achieve the 40/20 goals. Some of our major lessons learned include:

- The nine CMS commitments continue to sharpen the focus of SHAs, their CEOs, hospitals and the AHA/HRET HEN.
- Hospitals have not historically been actively assessing how they are performing or utilizing the tools within the Comprehensive Data System. We have educated the hospitals on a regular basis and assist with data interpretation to ensure they understand the reason improvement is not occurring as quickly as anticipated.
- Data reporting is continuously a challenge even though hospitals are already collecting and tracking data. We have worked to dispel the misconception that data entry has to be time consuming or require vast amounts of human resources. Through one-on-one coaching, hospitals have come to realize that data reporting is neither time consuming or cumbersome but a value-added process.
- It is imperative to engage the organization's Chief Nursing Officer (CNO) to facilitate improvement spread and serve as a conduit between leadership and frontline staff, as the bed side nurses and clinical staff offer innovative process improvement recommendations that are sustainable.
- Site visits are necessary to develop positive relationships with our hospitals and gather outcomes data. Hospitals, both large and small, are challenged by limited resources to work on multiple improvement initiatives simultaneously. Smaller hospitals and single hospitals that are not part of larger systems are also challenged with access to a robust database to successfully capture process and outcome data.
- Showing hospital senior leadership their status and in many cases improvement, via CEO dashboards and improvement calculators, has increased awareness and interest among our hospitals.
- The two most effective ways to increase data entry include monthly one-on-one HEN check-in calls and disseminating the 'CEO snapshots.' Phone calls and emails are necessary in order to get data entry up to date.
- Active and consistent involvement from organizational leadership is essential for HEN-related projects to receive the attention necessary to engage and involve unit managers and bedside.
- Hospital CEOs that are engaged are in full support of the HEN initiative and the collaboration. They see the HEN as a great resource for breaking down barriers to collaboration.
- Each state/hospital has different barriers and challenges which requires a customized strategy to meet goals.
- Monthly check-in calls with all hospital teams has helped to address challenges and to maintain focus between scheduled site visits.

Forward Look – Goals and Strategies in 2014

If the AHA/HRET HEN is awarded the option year, we will continue to diligently pursue the Partnership for Patients goal of 40 percent reduction in harm and 20 percent reduction in readmissions by building on the many achievements of the past two years and making adjustments where needed. As we move into 2014, four overall priorities will guide our work:

1) Continued transparency with CMS, state hospital associations and hospitals;
2) Continued setting of commitments;
3) Continued focus on critical access, small and rural hospitals;
4) Achieving greater alignment of measures across the HEN.

In addition to these guiding priorities, we will continue many of our successful strategies as well as add new strategies for greater impact.

Small Ball. In 2014, HRET and the SHAs will continue the small ball strategy of site visits and one-on-one coaching with hospitals to target the specific areas where they are struggling most. Site visits have been extremely successful for the hospitals, SHAs and AHA/HRET HEN team. Through developing a strong rapport with hospitals, we have increased data collection and helped hospitals improve in even some of the most challenging environments.

Recruitment and Expansion. In 2014 we will increase our impact by recruiting additional hospitals to join our HEN, with the goal of 100 percent participation by acute care, critical access hospitals and children's hospitals. A large part of that strategy will be to identify and engage large health systems, such as Tenet and HCA, in our HEN efforts. Through working with multi-state health systems, we will be able to accelerate and spread the many successful interventions of the HEN to touch more patients and further reduce costs.

Working with "poor performers." As in any improvement effort, there continue to be states and hospitals who struggle to collect data and make meaningful improvements across the 10 HEN topics. In 2014, we will take a new approach to working with these poor performing states through providing new incentives for performance and improvement (i.e., pay-for-value funding), and more targeted, one-on-one coaching. As we have seen in 2013, identifying and targeting poor performers can have a significant impact. We will address the "will" to perform and assist with providing additional resources to these states and hospitals.

Topic specific interventions

In 2014 the AHA/HRET HEN will also adopt revised topic-specific goals and strategies. All topics will have goals for 80 percent reporting.

- **Adverse Drug Events –** focus on a 40 percent reduction in opioid safety, anticoagulation safety and glycemic management.
- **CAUTI –** expand efforts to all hospital settings and focus efforts to avoid placement of catheters in emergency departments. Also track CAUTI utilization ratio.
- **CLABSI –** expand to 40 percent reduction across all hospital settings.
- **EED –** although we have achieved the 40/20 goal for early-elective deliveries, we will continue to work with hospitals to achieve an EED rate below 2 percent.
- **OB Adverse Events –** expand focus to include OB hemorrhage and preeclampsia prevention.
- **Surgical Site Infections –** expand to include measurement and improvement of SSI for multiple classes of surgeries.
- **VTE –** expanded to include all surgical settings.
- **VAE –** expanded to include infection-related ventilator-associated complication (IVAC) and ventilator-associated pneumonia (VAP).
- **Readmissions –** focus on national readmission campaign.

Continuous Improvement. In 2014 we look forward to the opportunity to work with SHAs and hospitals to expand their improvement efforts even beyond the identified 10 topics. We will provide resources and support for hospitals on a variety of topics including sepsis and MRSA. We will also work closely with the AHA's Institute for Diversity, Hospitals in Pursuit of Excellence and Equity of Care initiatives to begin tracking and addressing health care disparities as they relate to the 10 HEN topics.

We will continue the drive toward 40/20 reduction and will reaffirm our commitment to working with hospitals to build a culture of safety and internal capacity for quality improvement. Through these efforts, we will achieve not only the 40/20 Partnership for Patients goals but will empower hospital staff to continue quality improvement and patient safety initiatives long after the HEN draws to a close.