The American Hospital Association/Health Research & Educational Trust Hospital Engagement Network 2.0

FINAL PROJECT REPORT



20 percent reduction in readmissions

1,500+ hospitals

Over 34,000 harms prevented

Nearly 300,000,000 estimated cost savings







PARTNERSHIP FOR PATIENTS (PfP) HOSPITAL ENGAGEMENT NETWORK (HEN) 2.0 FINAL REPORT

September 24, 2015 — September 23, 2016 Solicitation # CSQ-393-2015-0450 Contract # HHSM-500-2015-00297C September 19, 2016

American Hospital Association/Health Research & Educational Trust (AHA/HRET) HEN

155 N. Wacker Dr., Ste. 400 | (312) 448-7989

Ken Anderson, D.O., M.S., C.P.E. Chief Operating Officer and Acting President, HRET | Acting Senior Executive for Health Improvement, AHA (312) 422-2687 | kanderson@aha.org

Charisse Coulombe, M.S., M.B.A. Vice President, Clinical Quality, HRET

PROJECT IMPACT SUMMARY

Since September 2015, the American Hospital Association (AHA)/Health Research & Educational Trust (HRET) Hospital Engagement Network (HEN) 2.0 project, a part of the Partnership for Patients (PfP) campaign, has been in action to reduce hospital acquired conditions (HACs) by 40 percent and readmissions by 20 percent by September 23, 2016. Throughout the course of this one-year project, AHA/HRET HEN 2.0 hospitals have prevented over 34,000 harms and have saved nearly \$300 million in health care costs.

The AHA/HRET HEN 2.0 team has supported a network of over 1,500 hospitals across 34 states through hosting virtual and inperson educational events, maintaining a website with hundreds of resources and tools, providing intensive training to over 900 hospital staff who participated in our Action Leader Fellowship and maintaining a database of nearly 400,000 data points collected to track and trend the improvement of patient care of all applicable topics for all hospitals.

Collectively, the hospitals engaged in the AHA/HRET HEN 2.0 network have contributed to the harms prevented and cost savings summarized in Table 1.

TABLE 1: FINAL AHA/HRET HEN 2.0 ESTIMATED TOTAL HARMS PREVENTED AND COST SAVINGS

TOPIC	HARMS PREVENTED	COST/HARM	COST SAVINGS
ADE ¹	15,611	\$5,000 ¹	\$78,054,063
CAUTI	505	\$1,000	\$505,078
CLABSI	439	\$17,000	\$7,469,333
EED	1,151	\$9,732	\$11,240,529
Falls	1,409	\$12,965	\$18,265,363
OB Harm ²	4,336	\$114 (with instrument) \$197 (without instrument)	\$753,627
Pressure Ulcers	1,122	\$17,000	\$19,077,915
Readmissions	8,040	\$15,477	\$124,440,097
SSI ³	792	\$21,000	\$16,630,883
VAE	278	\$21,000	\$5,832,649
VTE	738	\$8,000	\$5,901,515
TOTAL	34,422		\$288,171,052

^{*} Totals may not match sum of individual topics due to rounding.

- 1. Represents total harms and cost savings for all events reported (hypoglycemia, anticoagulation, and opioid adverse drug events)
- 2. Represents total harms and cost savings for obstetrical trauma for vaginal deliveries with instrument, and obstetrical trauma for vaginal deliveries without instrument
- 3. Represents total harms and cost savings for all procedures reported (colon surgeries, abdominal hysterectomies, total hip replacement, and total knee replacement)

Data Source: Data submitted as of 09/01/2016, for October 2015 through May 2016. Costs per harm were provided by the HEN 2.0 Evaluation Contractor, July 20 2016, "PfPPEC_Cost Savings_ROI_Summary_PDF"

PROJECT IMPACT SUMMARY (continued)

Throughout the project, the national AHA/HRET HEN 2.0 team, the 34 state hospital association (SHA) teams and the hospitals engaged in the network contributed to the outcomes listed in Table 2.

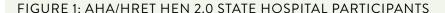
TABLE 2: AHA/HRET HEN 2.0 BY THE NUMBERS

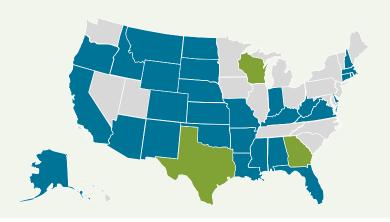
Over 400,000 data points in CDS	The Comprehensive Data System (CDS) was the data repository for hospitals participating in the AHA/HRET HEN 2.0. Hospitals submitted both baseline and monthly monitoring data for each of the harm areas of focus in HEN 2.0. Diligent data entry into the CDS allowed the AHA/HRET HEN to track reductions in patient harm to both celebrate success, when applicable, and readily identify areas for continued focus and improvement.
Almost 1,000 tools and resources available on the AHA/HRET HEN 2.0 website	The AHA/HRET HEN 2.0 website includes information, tools and resources related to quality improvement, patient safety, change management, topic-specific interventions, leadership engagement and much more. All participating hospitals have access to these resources via our comprehensive and searchable resource library.
Over 66,000 downloads of tools and resources from the AHA/HRET HEN 2.0 website: www.hret-hen.org	The AHA/HRET website houses a wealth of tools and resources to support hospitals in eliminating harm, including but not limited to: topic-specific change packages, top-ten checklists, best practice presentations, case studies videos and peer-shared resources. This website includes both topic landing pages with topic-specific resources and a comprehensive, searchable resource library.
Almost 24,000 participants engaged in webinars	The AHA/HRET HEN 2.0 team hosted 60 topic-specific webinars that included 1) evidence-based strategies to reduce harm 2) hospital best practice stories and 3) improvement science tips for implementation.
Almost 5,000 LISTSERV® subscribers	The AHA/HRET HEN 2.0 team hosted 10 topic-specific LISTSERV®s where hospitals can share questions, ideas, barriers and solutions with a network of peers. Throughout HEN 2.0, over 940 queries and responses were posted to these forums.
Over 950 participants in the Action Leader Fellowship (ALF)	The ALF was designed to build and enhance improvement capacity within participating hospitals. Many of these participants engaged in either a foundational or advanced-level curriculum and completed an improvement project within their facility over the past year.
Over 400 state-level educational offerings	The state hospital associations (SHAs) are key partners in the AHA/HRET HEN 2.0 network. They serve as leads, coaches, resources and advocates for the hospitals in their states. SHAs in the AHA/HRET HEN hosted over 400 state-level events throughout the project.
Over 1,300 unique hospital site visits	During site visits, experts from both the national and state level have a chance to interact with leaders and frontline staff at the hospitals implementing the HEN 2.0 work. During these visits, suggestions, ideas and solutions to support the project goals are offered. Throughout HEN 2.0, all participating hospitals received at least one site visit to kick off the project, and many received additional visits to provide technical assistance and support.

This final report provides information on the AHA/HRET HEN 2.0, our approach to achieving the goals of the PfP campaign, the results of the project, and our plans to sustain the work.

OVERVIEW: WHO WE ARE

The American Hospital Association (AHA)/Health Research & Educational Trust (HRET) Hospital Engagement Network (HEN) 2.0 project, a part of the Partnership for Patients (PfP) Campaign, has been in action since September 2015 pursuing the goals of reducing hospital acquired conditions (HACs) by 40 percent and readmissions by 20 percent by September 23, 2016. Throughout the course of this one-year project, the AHA/HRET HEN 2.0 hospitals have prevented over 34,000 harms and have saved nearly \$300 million in associated costs. The AHA/HRET HEN 2.0 team has supported a network of over 1,500 hospitals across 34 states through hosting virtual and in-person educational events, maintaining a website with hundreds of resources and tools, providing intensive training to over 900 hospital staff who participated in our Action Leader Fellowship and maintaining a database of over 340,000 data points collected to track and trend the improvement of patient care of all applicable topics for all hospitals.





Over 1,500 hospitals across 34 states/territories/regions participated in the AHA/HRET HEN 2.0 initiative. Cohort 1 (blue) includes states and territories submitted with our July 2015 HEN 2.0 proposal and are considered full participants in the project. Cohort 2 (green) includes states and regions that joined the project in October 2015 (after the contract award) and were subject to less stringent data submission requirements. Gray indicates states, territories and regions participating through a different HEN or not participating in the HEN initiative.

AHA/HRET HEN 2.0 hospitals comprise 30 percent of all U.S. general acute hospitals. Our HEN has a higher proportion of critical access hospitals (CAH) and rural hospitals compared to all other HENs, as well as compared to all U.S. hospitals, as shown in Table 3. Despite many differences, all AHA/HRET HEN 2.0 hospitals partnered together over the past year to achieve the common goal of making patient care safer. The diversity within our network creates unique opportunities to share best practices across the country.

TABLE 3: AHA/HRET HEN, ALL OTHER HENS AND U.S. HOSPITAL CHARACTERISTICS

	AHA/HRET HEN All Hospitals ¹	AHA/HRET HEN Cohort 1 Hospitals ²	All Other HENs ³	All HENs Total	U.S. ⁴
Total Acute Care Hospitals	1,514	1,286	2,021	3,538	4,983
САН	35% (536)	35% (457)	20% (401)	26% (937)	26% (1,317)
Rural Hospitals	41% (613)	40% (516)	31% (627)	25% (1,242)	39% (1,928)

Active, acute care hospitals in Cohort 1 and Cohort 2 states as of September 1, 2016.

^{2.} Active, acute care hospitals in Cohort 1 states as of September 1, 2016.

^{3.} Acute care hospitals in all other HENs, as of May 2016.

^{4.} AHA Annual Survey of Hospitals, 2014.

OVERVIEW: GOALS

The goals of the AHA/HRET HEN 2.0 initiative are threefold:

- >> Reduce preventable patient harm by 40 percent by September 23, 2016
- >>> Reduce preventable readmissions by 20 percent by September 23, 2016
- >> Improve patient safety and quality of care

As a part of the PfP campaign, the AHA/HRET HEN 2.0 has worked to prevent harm in 11 adverse event areas:

- + Adverse Drug Events (ADE)
- + Catheter Associated Urinary Tract Infections (CAUTI)
- + Central Line Associated Bloodstream Infections (CLABSI)
- + Falls With Injury
- + Pressure Ulcers (PrU)
- + OB Harm
- + Early Elective Delivery (EED)
- + Surgical Site Infections (SSI)
- + Readmissions
- + Venous Thromboembolisms (VTE)
- + Ventilator Associated Events (VAE)

Additionally, the AHA/HRET HEN 2.0 hospitals focused on reducing the following additional topics, with a particular emphasis on sepsis and *C. difficile*:

- + Airway Safety
- + C. difficile (C. diff or CDI)
- + Culture of Safety
- + Failure to Rescue
- + latrogenic Delirium
- + Undue Exposure to Radiation
- + Severe Sepsis and Septic Shock

OUR APPROACH

As the prime contractor, AHA/HRET's role is to translate the vision of the PfP into reality by supporting large-scale improvement efforts through equipping our partner organizations and over 1,500 hospitals with the tools and resources needed to support patient safety and transform delivery of care in their organizations. AHA/HRET representatives worked closely with contract office representative Shelly Coyle as well as PfP Co-Directors Dennis Wagner and Paul McGann, MD from the Centers for Medicare and Medicaid Services to understand project goals and to support the education, training and technical assistance for participating hospitals to meet these goals. Additionally, AHA/HRET partnered with other national experts at the National Content Developer (NCD), the Person and Family Engagement Contractor and the Program Evaluation Contractor (PEC) in support of the PfP HEN 2.0 campaign.

The AHA/HRET national HEN 2.0 team works closely with numerous partners to achieve the program goals. Specifically, AHA/HRET partnered with the 34 state hospital associations to deploy our strategies to provide education, training and technical support to hospitals. The AHA/HRET HEN 2.0 overall approach includes the strategies described in Figure 2.

Disseminating the latest evidence, tools and best practices to the field **Deploying cross-cutting** strategies to support all hospitals including: **Providing coaching** supporting data and technical assistance, particularly to support collection and use of data in improvement, implementation challenges patient and family tailored to each engagement, leadership facility's unique engagement and challenges and needs focusing on health care disparities **Building increased** Promoting peer-to-peer capacity and capability in quality improvement and sharing and learning patient safety within each networks participating facility

FIGURE 2: AHA/HRET HEN 2.0 IMPROVEMENT STRATEGIES

Below are the specific tactics used to deploy each of these strategies.

STRATEGY 1 > Disseminating the latest evidence, tools and best practices to the field.

For all HEN 2.0 core topics, strong evidence exists on how to reduce harm, whether through implementing bundles, instituting new policies (i.e., hard-stop policy) or creating new protocols. The AHA/HRET HEN 2.0 created a hub (www.hret-hen.org) to collate the latest science and evidence related to reducing harm in each of the topic areas. However, disseminating the evidence is only a first step. Hospitals also need support with implementation, with overcoming barriers and resistance from staff in their facilities, as well as with tailoring interventions to fit their specific workflows. To support hospitals in this area, the AHA/HRET HEN 2.0 website also includes implementation tools, videos, change packages and peer-shared resources.

Website — Resource Library and Beyond

A new addition to the website since HEN 1.0, the AHA/HRET HEN 2.0 resource library includes nearly 1,000 journal articles, change packages, tools, videos, guides and more. These resources are catalogued by both harm topic and resources type to enable easy searching by filtering the database. The database can also be searched by key words. Table 4 shows the top ten most downloaded resources throughout the HEN 2.0 project.

TABLE 4: TOP 10 RESOURCE DOWNLOADS

Top 10 Resource Downloads	Total Downloads
Improvement Calculator	3,213
Encyclopedia of Measures: Program Evaluation Measures	3,018
Comprehensive Data System Quick Start Guide	1,568
Encyclopedia of Measures: Additional Topics	1,468
Encyclopedia of Measures: Core Process Measures	1,096
ADE Change Package	767
Sepsis Fact Sheet	738
Rural CAH Data Collection Tool	710
Falls Change Package	708
Sepsis Change Package	694

Our website also includes landing pages for each topic where project participants can easily access a clinical summary, the data/measurement information related to that topic, the change package and checklist for that topic, the latest webinar focused on the topic and a list of resources organized by target audience. Throughout the HEN 2.0 project, www.hret-hen.org was visited almost 300,000 times by 38,000 unique users over 12 months.

Change Packages and Checklists

In the original HEN project, AHA/HRET developed change packages and top ten checklists to summarize the evidence for reducing each harm area and to provide change ideas for how to begin implementing that evidence in any given facility. In HEN 2.0, the change packages and top ten checklists were updated by clinical experts at Cynosure Health, and new change packages and checklists were created for all additional topics (i.e., airway safety, *C.diff*, culture of safety, failure to rescue, iatrogenic delirium, undue exposure to radiation, sepsis). The change packages provide a roadmap for an organization that is beginning to analyze and work on a specific topic. Over the course of the project, users downloaded the change packages and checklists over 10,829 times.

Virtual Events — Webinars and Office Hours

Throughout HEN 2.0, HRET staff hosted webinars and open office hours on all the harm topics. Each webinar featured either a subject matter expert (SME), hospital speaker, or both; and on each webinar or office hour session, participants were encouraged to ask questions to the experts, share success stories and strategies. The following topics were addressed on webinars and office hours over the course of the project: data, CAUTI, readmissions, sepsis, VTE, VAE, rural/CAH, fellowship and quality improvement, OB, EED, CLABSI, C. diff, ADE, pressure ulcers

and SSI. HRET was proud to feature several SMEs, including CEOs, quality leaders and medical directors from health systems, hospitals small and large, pharmacists, researchers and data experts. Throughout the project, nearly 24,000 individuals participated in 60 topic-specific HRET webinars.

UP Campaign

Hospitals participating in the HEN 2.0 work often express how overwhelmed, busy and understaffed they are, resulting in an inability to effectively address each of the topics separately. To address this common challenge, AHA/HRET partnered with Cynosure Health to develop the UP Campaign, a series of cross-cutting interventions that target six or more of the HEN 2.0 HACs. The UP Campaign interventions are:

+ SOAP UP

> to promote hand hygiene to reduce CAUTI, CLABSI, C. diff, sepsis, SSI and VAE

+ GET UP

> to promote early progressive mobility to reduce VAE, VTE, pressure ulcers, falls, readmissions and delirium

+ WAKE UP

> to promote sedation management to reduce ADE, falls, iatrogenic delirium, airway safety harms, VTE, failure to rescue and VAE

The UP Campaign is a new way to view the HEN 2.0 topics and provides hospitals with tools and ideas to implement cross-cutting interventions that will maximize impact. With successful implementation, not only will harm be reduced across the board, but hospital staff will feel less overwhelmed and will be able to focus more attention on providing safe, high quality care. In this way, the UP Campaign focuses on integrating the improvement interventions into daily workflows, a strategy that is key for success and sustainability.

STRATEGY 2 > Coaching and Technical Assistance

Hospital Site Visits

The AHA/HRET HEN 2.0 initiative launched with a strong focus on hospital-level coaching and technical assistance. Participating SHAs were required to conduct site visits at all of their hospitals within the first 90 days of the project. The purpose of these visits was three fold: 1) introduce the hospital to the project, the timeline and the goals, 2) introduce the hospital to the resources available through the project (e.g., CDS, www.hret-hen.org, LISTSERVs) and 3) work with the hospital to identify their priority areas for improvement and to develop a plan for the next year to achieve the project goals.

We believe the focus on site visits has been a key factor of success for the AHA/HRET HEN 2.0 initiative. Beyond disseminating evidence and resources, hospitals require support, coaching and expertise to help with implementation challenges such as encountering a non-supportive staff, facing many resource constraints, or general support in change management. Through site visits, both state-level and national experts are able to support the front-line staff who are driving change in their organizations.

Deploying Experts to the Field — Supporting Subject Matter Experts to Visits States/Hospitals

The vast majority of AHA/HRET's national education is virtual, via webinars. Though this is a cost-effective strategy where we can reach a broad audience, we continue to receive feedback from program participants on the value of in-person meetings. In-person meetings and events not only provide an opportunity for face-to-face communication with experts, but also provide opportunities for peer-to-peer networking. Many times program participants are able to build relationships in person that lead to on-going sharing about project progress and challenges.

We leveraged our relationships with numerous nationally-acclaimed SMEs to sponsor those individuals' travel to state level-events. Throughout the project, these SMEs participated in in-person state-based events, participated in hospital site visits, and facilitated both national and state-level webinars. Access to these individuals and their expertise was a key value-add of participating in the AHA/HRET HEN.

State-Level Events

State hospital associations host a variety of events for their hospitals to provide resources to meet goals and deliverables. Examples of these events are state-wide in-person meetings, regional in-person meetings, webinars, coaching calls and state-level fellowship programs. There have been over 400 events hosted by the state hospital associations. During these events, SHAs organized education, content and resources about the highest priority HEN 2.0 topics in their state. Many also hosted ongoing fellowship programs, such as a patient/family engagement collaborative, and a lean collaborative which provided hospital participants with ongoing opportunities to learn and engage throughout the project. State-level meetings and events are particularly important as they provide a space, often-times in-person, for individuals across the state to network and share best practices.

STRATEGY 3 > Peer-to-Peer Sharing and Identifying Best Practices

As mentioned above, disseminating the latest evidence and scientific knowledge is only the first step in enabling adoption and change. Beyond knowing what to do, hospitals need to know how to do it. A key element of that is seeing how other hospitals have made these changes. The power of a collaborative — like the HEN 2.0 network — is in its participants; peer-to-peer sharing is a powerful enabler of change. AHA/HRET supported peer-to-peer sharing in a number of ways.

LISTSERVs

A powerful tool in the original HEN work, the LISTSERVs continued to be a robust community for sharing and disseminating information in HEN 2.0. AHA/HRET hosted 10 LISTSERVs. Table 5 shows the number of subscribers for each. On this platform, the AHA/HRET team communicated project updates and experts, such as the Cynosure Health improvement advisors, communicated updates to the evidence, new developments in the field and the release of new tools or resources. Additionally, hospitals were able to post questions or challenges to their peers. Other subscribers on the list would then respond with suggestions, insights, tools and resources.

TABLE 5: LISTSERV SUBSCRIBERS

Topic LISTSERV	Number of Subscribers
ADE	536
CAH/Rural	393
Data Analytics	470
EED/OB	378
Infections	595
PFE/Healthcare Disparities	484
Pressure Ulcers/Falls	535
Readmissions	580
Sepsis	491
All Other Harm	514

Case Studies, Storyboards and Videos

Throughout the project, the HRET team has developed 30 case studies across 14 topics. The case studies featured topic-specific best practice strategies as well as pearls of wisdom for other facilities attempting to emulate similar interventions. These case studies are posted on the AHA/HRET HEN 2.0 website and disseminated via our LISTSERVs, among other communication channels.

Additionally, HRET has selected the following 11 hospitals for video case studies because of their innovative strategy to provide better patient care and reduce adverse events, successful data-verified outcomes and a collaborative approach which included leadership buy-in. These videos illustrate why the facility chose to focus on the specific topic, their strategy as well as the outcomes of the initiative and pearls of wisdom for others.

+ Labette Health, Kansas

Topic: ADE

+ Howard Memorial Hospital, Arkansas

Topic: CAUTI

+ Asante Rogue Regional Medical Center, Oregon

Topic: C. diff

+ Wentworth-Douglass, New Hampshire

Topic: Culture of Safety

+ Madison Memorial Hospital, Idaho

Topic: Culture of Safety

+ Natchitoches Regional Medical Center, Louisiana

Topic: Falls

+ Stonewall Jackson Memorial Hospital, West Virginia

Topic: Pressure Ulcers

+ Fort Healthcare, Wisconsin

Topic: Readmissions

+ Wesley Medical Center, Kansas

Topic: Sepsis

+ Jefferson Regional Medical Center, Arkansas

Topic: SSI

+ St. Jude, California

Topic: VAE

+ Our Lady of Lourdes, Louisiana

Topic: VAE

These video case studies were released in early September and are posted on the AHA/HRET HEN 2.0 website. Additionally, we disseminated these via our LISTSERVs and other communication channels to share best practices, provide insight for hospitals that are struggling with the same challenges and allow peers to connect with each other.

In mid-July, HRET hosted a Spread and Sustainability Summit (S3) in conjunction with the Health Forum/AHA Leadership Summit in San Diego, CA. The two-day session featured best practices related to spread and sustainability. During a storyboard session, participants viewed the work of thirty-one high-performing hospitals. HRET produced video vignettes featuring representatives from each of these organizations to highlight

innovative and successful approaches to improvement. These vignettes are posted on the AHA/HRET HEN 2.0 website as well as disseminated via our LISTSERVs and other communication channels to share best practices, provide insight for hospitals that are struggling with the same challenges and allow peers to connect with each other.

STRATEGY 4 > Building Improvement Capacity

From the onset of the project, the AHA/HRET team has been focused on building sustainability into all of our work. A key requirement of sustainability is building both capability and capacity for quality improvement and patient safety work in each of our hospitals. The Action Leader Fellowship, a year-long program developed and facilitated in partnership with the Institute for Healthcare Improvement (IHI), supported hospitals in developing their knowledge and skills related to quality improvement.

Action Leader Fellowship

The Action Leader Fellowship is a keystone of the AHA/HRET HEN. Following the initial HEN project, an internal analysis showed a correlation between hospitals with fellows and improved outcomes. Recognizing the importance of this initiative and the potential to accelerate improvement, HRET heavily promoted engagement in the HEN 2.0 ALF. AHA/HRET contracted with IHI to design and facilitate the ALF. IHI led webinars, held office hours and provided fellows free access to the IHI Open School quality improvement courses. Throughout the fellowship, participants learned about quality improvement methods and how to apply them to the HEN 2.0 topics. Fellows participated in one of two tracks based on their knowledge of quality improvement in health care: the Foundational track or the Experienced track. Concurrent to the classes, fellows implemented a quality improvement project in their own health care setting that centered on patient safety. At the conclusion of the HEN 2.0 fellowship, over 100 fellows submitted final projects documenting their progress towards their patient safety goals. The most common project topics were sepsis, falls, readmissions, CAUTI and *C. difficile*.

STRATEY 5 > Cross-Cutting Interventions

Although tailored support is a critical element for success, there are also numerous cross-cutting interventions that are crucial for success, regardless of the location, size or patient population of any given hospital. The AHA/HRET HEN supported these elements for all hospitals: data (collection and use), patient and family engagement, health care disparities and leadership engagement.

Data

The AHA/HRET team supported both SHAs and participating HEN 2.0 hospitals in data collection, data submission and data reporting by the creation of tools and resources and through consistent data education throughout the project. The Comprehensive Data System (CDS) was the centralized data collection portal, serving as both a data collection platform, as well as an on-demand data reporting system which allowed hospitals to continuously track their improvement. Additional tools were developed including the CAH/Rural Data Collection Tool, which aided in data collection efforts in rural and critical access hospitals with small patient populations and the Improvement Calculator, which provided hospitals with the ability to track progress across all harm topics and to aggregate a "total harm" rate. Monthly data webinars and interactive data office hours webinars were held to educate hospitals on the usage of these tools, along with other data topics that are pertinent to quality improvement (e.g., statistics, data validation, utilizing run charts). These educational events incorporated various strategies to educate and engage participants, including live polling questions, presentations by data experts, live demonstrations of data tools, interactive peer-to-peer discussion, question and answer sessions and the sharing of data stories by hospitals.

Patient/Family Engagement (PFE)

Patients and families are necessary and important partners in the quality and safety of health care. For all topics, HRET emphasized opportunities to engage patients and families in reducing harm.

The AHA/HRET team promoted PFE in three primary ways throughout the project. At the onset of the project, the AHA/HRET team formed a PFE advisory group that consisted of two PFE consultants and SHA leads with a special interest in PFE. The advisory committee held monthly calls to support PFE efforts at the hospital.

Tanya Lord, MPH, PhD served as a primary PFE consultant and provided direct support to hospitals through in-person meetings, webinars and calls. During these events, Tanya talked about specific tactics for initiating patient/family engagement practices such as hourly rounding, visitation policies and creating patient/family advisory councils. Whereas in the initial project much of HRET's education and support related to making the case for patient and family engagement, in HEN 2.0 more time was spent providing tactical and implementation support to organizations who are beginning to set up systems and processes to promote patient and family engagement.

Finally, the AHA/HRET team promoted events and resources, including those from American Institutes for Research (AIR), on the LISTSERVs and website. The HRET website includes a section dedicated to PFE with resources on how to build patient/family advisory councils, how to

recruit patient advisors, how to engage patient/family advisors in quality improvement projects and specific strategies for how patients and families can be engaged in reducing each harm topic.

Health Care Disparities

Health disparities are well-documented, and a large contributor to adverse health outcomes. Reducing disparities is essential to improve safety and patient care in hospitals. Throughout the project, the AHA/HRET team promoted the #123forEquity Pledge to Act. The focus of the pledge is to: 1) increase the collection and use of race, ethnicity and language preference data; 2) increase cultural competency training; and 3) increase diversity in governance and leadership. The AHA/HRET encouraged SHAs and hospitals to take the pledge. As of 9/13/2016 1,278 organizations and 48 state hospital associations pledged. In addition to promoting this pledge, resources to decrease health care disparities were distributed via the LISTSERV and HEN website. Figure 3 highlights the hospitals and states that have pledged to act.



Leadership Engagement

Anecdotal evidence from the HRET HEN 2.0 project and numerous other HRET projects has demonstrated the importance of leadership engagement in ensuring successful quality improvement initiatives. During the launch of the project, the AHA/HRET team immediately engaged hospital leaders through requiring participating hospitals to submit a commitment letter signed by both the facility's project lead and their CEO or CMO.

Throughout the project, the AHA/HRET team has supported leadership engagement in two primary ways: 1) development and promotion of CEO Snapshot reports and 2) promotion of the Trustee Guide. CEO Snapshots are easy-to-interpret, color-coded reports that can be used to show hospital leaders their organization's progress in the HEN project. The Trustee Guides, developed during the original HEN project, include both a booklet and series of online video modules that instruct hospital boards in how to support quality and patient safety. The modules provide examples of structures to create (e.g., a board quality committee), questions to ask and measures to track. These guides have been used by boards across the country to increase their understanding of and engagement in supporting quality and patient safety efforts in their organizations.

HIGHLIGHTS AND ACCOMPLISHMENTS

Since the project launch in September 2015, AHA/HRET and participating SHAs have provided hospitals with education, tools, resources, technical assistance and supporting to drive improvement in the 11 PfP clinical topic areas, as well as the additional topics of sepsis and *C. difficile*.

Beyond disseminating best practices and clinical knowledge, the AHA/HRET HEN 2.0 has had a pivotal role in creating a network in which hospitals can engage with peer organizations to share their challenges, solutions, questions and best practices. A sense of belonging in such a network motivates and re-energizes participating organizations. By building a sense of community (will), providing hospitals with the knowledge and tools needed to make change (ideas) and supporting the implementation and testing of these ideas (execution), the AHA/HRET HEN 2.0 has achieved impressive quantitative and qualitative results. Since September 2015, AHA/HRET HEN 2.0 hospitals have prevented over 34,000 patient harms and have saved nearly \$300 million. Countless hospitals in the network have shared their stories of success and value derived from the HEN 2.0 initiative and how the work has translated into lives saved in their communities.

TABLE 6: AHA/HRET HEN 2.0 ACCOMPLISHMENTS

AEA	At least 60% reporting	At least 70% reporting	At least 80% reporting	At least 17.6% change from baseline (12% readm) AND at least 60% reporting	At least 40% change from baseline (20% readm) AND at least 60% reporting	Met HEN 2.0 High Performance Benchmark	Achievement of Target
ADE	✓	1005 (78% reporting)				NA	
CAUTI	√	✓	1260 (98% reporting)				
CLABSI	√	✓	1007 (98% reporting)				
OB-EED	√	✓	√ 722 (94% reporting)	✓	√ 45% reduction		✓
OB-Other	√	✓	√ 719 (94% reporting)	✓	√ 49% reduction	NA	√
Falls	✓	✓	1230 (96% reporting)				
PrU	√	✓	1137 (88% reporting)	✓	√ 43% reduction	√	✓
SSI	✓	✓	907 (93% reporting)	√ 21% reduction		NA	
VAE	√	✓	√ 776 (92% reporting)			NA	
VTE	✓	✓	√ 911 (93% reporting)	√ 34% reduction		NA	
READ	✓	✓	1225 (95% reporting)			NA	
TOTAL	11	11	10	5	3	1	3

ADVERSE DRUG EVENTS (ADE)



of Eligible Acute/CAH/ Children's Hospital Reporting Data **70/0**Reduction in ADE Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?

15,611
ADE HARMS
PREVENTED

\$78,054,000 TOTAL PROJECT ESTIMATED COST SAVINGS 9 states
MEETING THE 40%
REDUCTION IN PREVENTABLE
HARM GOAL



Reaching Our Audience

536
LISTSERV(R) SUBSCRIBERS

LIGIOLITY (III) GODGOTTIDLITO

1,227
PARTICIPANTS ENGAGED IN EDUCATION

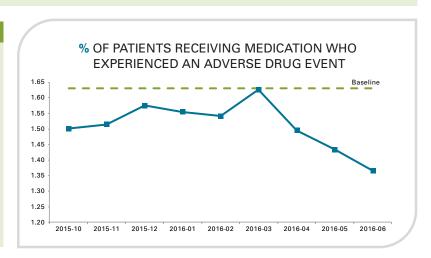
4,719

NUMBER OF VISITS TO THE ADE TOPIC WEBSITE

Nhich is enough money to purchase...

1,325,425
GLUCOMETERS

Source:
www.walgreens.com/store/c/accu-chek-aviva-plus-diabetes-monitoring-kit/ID=prod1557269-product/









CATHETER-ASSOCIATED URINARY TRACT INFECTIONS (CAUTI)



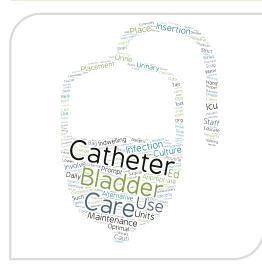
of Eligible Acute/CAH/ Children's Hospital Reporting Data 40/0
Reduction in CAUTI Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?

505 CAUTI HARMS PREVENTED \$505,000 TOTAL PROJECT ESTIMATED CAUTI COST SAVINGS 10 states 40%
MEETING THE 40%
REDUCTION IN PREVENTABLE HARM GOAL



Reaching Our Audience

595

LISTSERV(R) SUBSCRIBERS

850

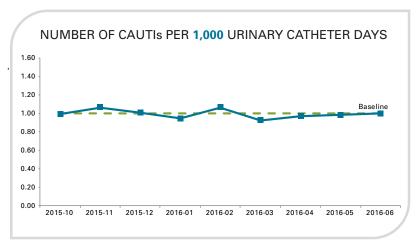
PARTICIPANTS ENGAGED IN EDUCATION

1,887

NUMBER OF VISITS TO THE CAUTI TOPIC ON THE HRET HEN 2.0 WEBSITE.

APPROXIMATELY
9 PORTABLE
ULTRASOUND
MACHINES

Source:
www.costowl.com/healthcare/healthcare-ultrasound-machine-costs.html









CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS (CLABSI) —



of Eligible Acute/CAH/ Children's Hospital Reporting Data 11% Reduction in CLABSI Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?



7,469,000
TOTAL PROJECT ESTIMATED CLABSI COST SAVINGS

15 states 40%
MEETING THE REDUCTION IN PREVENTABLE HARM GOAL



Reaching Our Audience

595

LISTSERV(R) SUBSCRIBERS

206



PARTICIPANTS ENGAGED IN EDUCATION

1,427

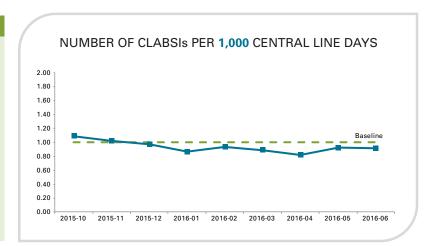
NUMBER OF VISITS TO THE CLABSI TOPIC ON THE HRET HEN 2.0 WEBSITE.

Which is equivalent to...

600+ BLOOD TRANSFUSIONS

Source:

Used Mean Cost from Shander A Hofmann A, Ozawa S, et al. Activity-based costs of blood transfusions in surgical patients at four hospitals. Transfusion. 2010,50(4): 753-65









C. DIFFICILE



of Eligible Acute/CAH/ Children's Hospital **Reporting Data**

Increase in C. Difficile Infection



Percent of participants that stated information provided will promote higher quality work

What does that mean?

4 states
MEETING THE 40% REDUCTION IN PREVENTABLE HARM GOAL

Reaching Our Audience

595

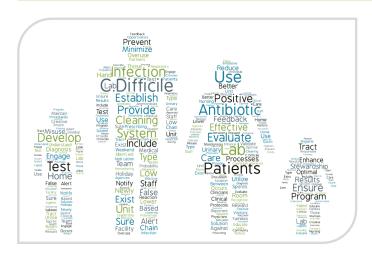
LISTSERV(R) SUBSCRIBERS

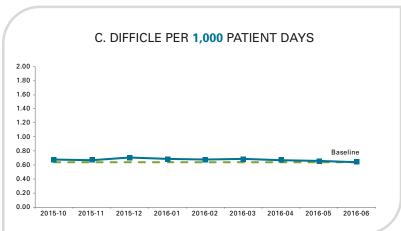
987

PARTICIPANTS ENGAGED IN EDUCATION

2,059

NUMBER OF VISITS TO THE C. DIFFICILE TOPIC ON THE HRET HEN 2.0 WEBSITE.











EARLY ELECTIVE DELIVERY (EED)



of Eligible Acute/CAH/ Children's Hospital Reporting Data 44% Reduction in EED Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?



\$11,241,000 TOTAL PROJECT ESTIMATED EED COST SAVINGS 26 states 40%
MEETING THE REDUCTION IN PREVENTABLE HARM GOAL

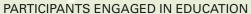


Reaching Our Audience

378 ><

LISTSERV(R) SUBSCRIBERS

164

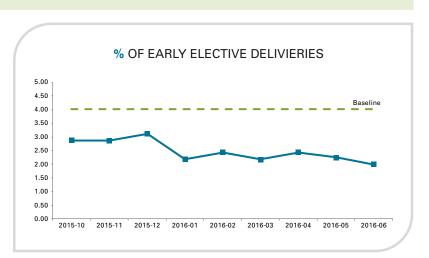


488

NUMBER OF VISITS TO THE EED TOPIC ON THE HRET HEN 2.0 WEBSITE.

17,423,300
DIAPERS

Source:
www.consumerreports.org/cro/diapers/buying-guide.htm



Met the Partnership for Patients goal of 40% REDUCTION IN PREVENTABLE HARM.









FALLS WITH INJURY



of Eligible Acute/CAH/ Children's Hospital Reporting Data 3%
Reduction in Fall Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?

1,409
FALLS WITH INJURY
PREVENTED

\$18,265,000 TOTAL PROJECT ESTIMATED FALL COST SAVINGS 8 states
MEETING THE 40%
REDUCTION IN PREVENTABLE
HARM GOAL



Reaching Our Audience

535

LISTSERV(R) SUBSCRIBERS

1,332



PARTICIPANTS ENGAGED IN EDUCATION

3,273

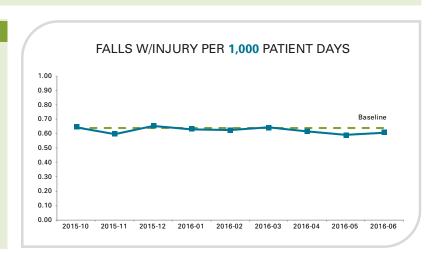
NUMBER OF VISITS TO THE FALLS PREVENTION TOPIC ON THE HRET HEN 2.0 WEBSITE.

Which is enough money to purchase...

88,695
FALL PREVENTION MATS

Source:

www.alimed.com/fabsafe-fall-mat.html









PRESSURE ULCERS (PrU)



of Eligible Acute/CAH/ Children's Hospital Reporting Data 49% Reduction in Pru Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?

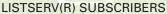
1,122
PrUs PREVENTED

\$19,078,000 TOTAL PROJECT ESTIMATED PrU COST SAVINGS 11 states 40%
MEETING THE REDUCTION IN PREVENTABLE HARM GOAL



Reaching Our Audience

535



660

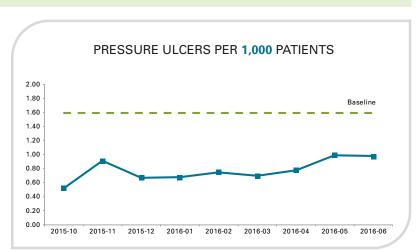
PARTICIPANTS ENGAGED IN EDUCATION

1,957

NUMBER OF VISITS TO THE PRU TOPIC ON THE HRET HEN 2.0 WEBSITE.

283,048
SEAT CUSHIONS

Source: www.ehob.com/store/seating/waffle-seat-cushion



Met the Partnership for Patients goal of 17.6% REDUCTION IN ALL CAUSE HARM.









READMISSIONS



of Eligible Acute/CAH/ Children's Hospital Reporting Data 3%
Reduction in Preventable Readmissions



Percent of participants that stated information provided will promote higher quality work

What does that mean?



\$124,440,000 TOTAL PROJECT ESTIMATED READMISSIONS COST SAVINGS 5 states MEETING THE 20% REDUCTION IN PREVENTABLE HARM GOAL



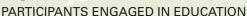
Reaching Our Audience

580



LISTSERV(R) SUBSCRIBERS

1,263



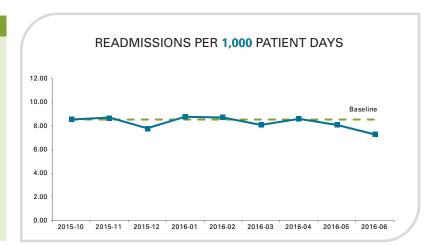
3,151

NUMBER OF VISITS TO THE READMISSIONS TOPIC WEBSITE

Which is enough money to purchase..

2,533
INDIVIDUALS
FOR ONE YEAR

Source: www.ltcfeds.com/start/aboutltc cost.html









OB ADVERSE EVENTS



of Eligible Acute/CAH/ Children's Hospital Reporting Data 49% Reduction in OB Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?

4,336
OB HARMS
PREVENTED

\$754,000 TOTAL PROJECT ESTIMATED OB COST SAVINGS

25 states 40%
MEETING THE 40%
REDUCTION IN PREVENTABLE HARM GOAL



Reaching Our Audience

378

LISTSERV(R) SUBSCRIBERS

288

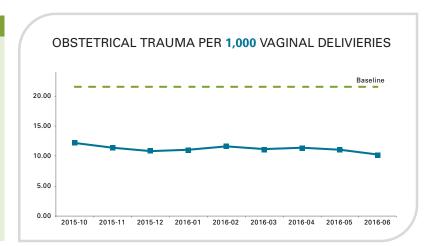
PARTICIPANTS ENGAGED IN EDUCATION

977

NUMBER OF VISITS TO THE OB HARM TOPIC ON THE HRET HEN 2.0 WEBSITE.

3,909
INFANT CAR SEATS

Source:
http://www.thesimpledollar.com/how-much-money-does-breastfeeding-really-save/



Met the Partnership for Patients goal of 40% REDUCTION IN PREVENTABLE HARM.









SEPSIS



of Eligible Acute/CAH/ Children's Hospital Reporting Data



of participants that stated info provided will promote higher quality work

Reaching Our Audience

491

LISTSERV(R) SUBSCRIBERS

612

PARTICIPANTS ENGAGED IN EDUCATION

4,157

NUMBER OF VISITS TO THE SEPSIS TOPIC WEBSITE



Within Collect **DURING THE PROGRAM PERIOD,**

TOO FEW HOSPITALS REPORTED SEPSIS DATA TO PROVIDE VALID RESULTS.







SURGICAL SITE INFECTIONS (SSI)



of Eligible Acute/CAH/ Children's Hospital Reporting Data 18% Reduction in SSI Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?

792 SSI PREVENTED \$16,631,000 TOTAL PROJECT ESTIMATED SSI COST SAVINGS 16 states 40%
MEETING THE REDUCTION IN PREVENTABLE HARM GOAL



Reaching Our Audience

595

LISTSERV(R) SUBSCRIBERS

961

PARTICIPANTS ENGAGED IN EDUCATION

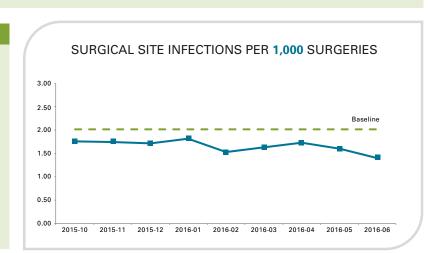
1,386

NUMBER OF VISITS TO THE SSI TOPIC ON THE HRET HEN 2.0 WEBSITE.

Which is enough money to purchase...

12 GERM ZAPPING
ROBOTS THAT CAN RID
A HOSPITAL ROOM OF
GERMS IN FIVE MINUTES

Source: www.cbsnews.com/news/germ-zapping-robot-combats-hospital-infections/



Met the Partnership for Patients goal of 17.6% REDUCTION IN ALL CAUSE HARM.









VENOUS THROMBOEMBOLISM (VTE)



of Eligible Acute/CAH/ Children's Hospital Reporting Data 33% Reduction in VTE Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?



55,902,000 TOTAL PROJECT ESTIMATED VTE COST SAVINGS 16 states 40%
MEETING THE 40%
REDUCTION IN PREVENTABLE HARM GOAL



Reaching Our Audience

514
LISTSERV(R) SUBSCRIBERS

PARTICIPANTS ENGAGED IN EDUCATION

966

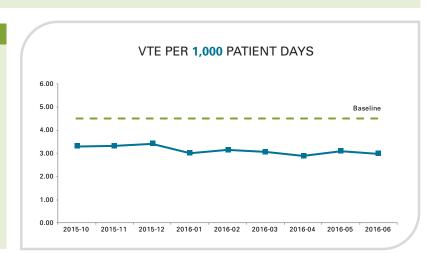
NUMBER OF VISITS TO THE VTE TOPIC ON THE HRET HEN 2.0 WEBSITE.

Which is enough money to purchase...

2,880+ PORTABLE COMPRESSION DEVICE FOR VTE

Source:

www.njha.com/media/41054/vte_1_techflash.pdf



Met the Partnership for Patients goal of 17.6% REDUCTION IN ALL CAUSE HARM









VENTILATOR ASSOCIATED EVENTS (VAE)



of Eligible Acute/CAH/ Children's Hospital Reporting Data 18% Reduction in VAE Measures



Percent of participants that stated information provided will promote higher quality work

What does that mean?



55,833,000 TOTAL PROJECT ESTIMATED VAE COST SAVINGS 8 states
MEETING THE 40%
REDUCTION IN PREVENTABLE
HARM GOAL



Reaching Our Audience

595

LISTSERV(R) SUBSCRIBERS

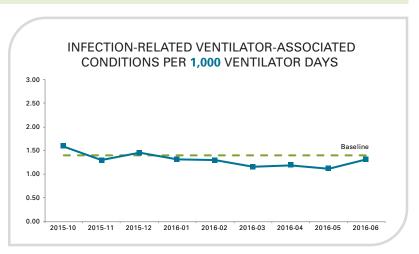
730

PARTICIPANTS ENGAGED IN EDUCATION

718

NUMBER OF VISITS TO THE VAE TOPIC ON THE HRET HEN 2.0 WEBSITE.











PARTNERSHIPS AND NETWORKING

The AHA/HRET HEN 2.0 effort was truly one of partnerships. As is the nature of a collaborative, the work and results are a collective effort of many diverse partners. Below we describe four ways in which we partnered with other organizations throughout HEN 2.0.

Partnerships with National Experts

As the prime contractor, one of AHA/HRET's roles was to assemble a team of experts. Specifically, HRET contracted with organizations and individuals with clinical and improvement science expertise, including Cynosure Health Solutions, the Institute for Healthcare Improvement and over a dozen topic-specific subject matter experts. HRET worked closely with faculty from these organizations to compile and disseminate clinical best practices, develop educational content and programming to support hospitals in both in-person and virtual environments, and to provide individual coaching for improvement.

Leveraging AHA/HRET

AHA/HRET is uniquely positioned to lead national patient safety collaboratives due to the many other projects internally with which we can easily partner. Throughout the HEN 2.0 project, AHA/HRET promoted these other AHA-led quality improvement/patient safety projects facilitated by HRET teams:

- CDC STRIVE project. Funded by the Centers for Disease Control and Prevention and launched in early 2016, this program aims to recruit 300 hospitals identified as having high *C. difficile* rates, as well as elevated rates of CAUTI, CLABSI, and/or MRSA. CDC partners are principally responsible for recruitment, supported by the SHAs and monitored by HRET. HRET is committed to ensuring this program is complementary to, and not in conflict with, the PfP efforts as well as efforts with state health departments, SHAs and QINs/QIOs. As of September 15, 2016, 56 hospitals have been recruited, 19 of which are in the AHA/HRET HEN.
- AHRQ HAI project. Funded by the Agency for Healthcare Research & Quality and launched in early 2016, this program aims to recruit 250 ICUs with persistently elevated CLABSI and CAUTI infection rates. AHRQ partners are principally responsible for recruitment, supported by the SHAs and monitored by HRET. HRET is committed to ensuring this program is complementary to, and not in conflict with, the PfP efforts as well as efforts with state health departments, SHAs and QINs/QIOs. As of June 1, 2016, 210 ICUs in 132 hospitals were participating. As of September 15, 2016, 262 ICUs in 118 hospitals were participating. Of these 118, 54 are in the AHA/HRET HEN. Recruitment for the next cohort is underway.
- TeamSTEPPS. HRET receives AHRQ funding to support the national TeamSTEPPS training. Before and during HEN 2.0, many HEN hospitals
 participated in this training, as it provides a core foundation for building strong, transparent and successful teams that communicate effectively
 and efficiently. This cross cutting strategy of teamwork and communication is critical for success in all quality and patient safety initiatives.
- Equity of Care. To address health care disparities, the AHA/HRET HEN promotes the AHA's #123forEquity Campaign in conjunction with the Equity of Care (EOC) team. This initiative implores hospitals to:
 - 1. **Take the pledge.** Pledge to achieve the three areas of the Call to Action.
 - 2. **Take action.** Implement strategies that are reflected in your strategic plan and supported by your board and leadership. Provide quarterly updates on progress to AHA and your board in order to track progress nationally.
 - 3. **Tell others.** Achieve the goals and be recognized. Tell your story and share your learnings with others in conference calls and other educational venues including social media to accelerate progress collectively.

The #123forEquity Campaign aims to accelerate progress toward the group's Call to Action which focuses on three areas:

- + Increasing the collection and use of race, ethnicity and language preference data;
- + Increasing cultural competency training; and
- + Increasing diversity in governance and leadership.

Through partnership with the EOC team, the AHA/HRET HEN has supported hospitals throughout the project in achieving these goals. HRET hosts a number of resources related to eliminating disparities on our website and, throughout the project, promoted webinars hosted by the EOC

Active Collaborator in the PfP Campaign

AHA/HRET is one of 17 HEN 2.0 networks. Networking and sharing across the HENs is another unique and crucial aspect of the project model. AHA/HRET was an active participant in regularly scheduled HEN House calls and also supported the efforts of the NCD and PEC. Throughout the project, the AHA/HRET team shared our approaches and success stories on multiple NCD webinars and recruited both SHAs and hospitals to do the same. AHA/HRET also led the development of the all-HENs hospital list as well as the orphan list, which aided in continued recruitment and understanding which hospitals across the country are not participating in any HEN. AHA/HRET also partnered on a continuing basis with the Evaluation Contractor to provide data and feedback for program evaluation.

Synergy with Other National Initiatives

Finally, the HEN work is a part of a national strategy for quality improvement led by CMS and implemented throughout the country by many different organizations. Throughout the project, AHA/HRET was attentive to avoiding duplication of effort, but more importantly, found numerous ways to promote synergy across complementary organizations, projects and initiatives. Specifically, the AHA/HRET HEN and the SHAs partnered with QIN-QIOs, state health departments, offices of rural health, the March of Dimes, state-level quality programs and private payer quality programs across the country to promote the PfP goals. Many of these partnerships occurred at the state level, where SHAs partnered with their QIN-QIO to host events, to develop curriculum, to conduct site visits and to plan for the future. As the hospitals in each state are unique, so are the partnerships. Each SHA took a unique approach to partnerships, but all focused on maximizing impact through leveraging relationships with others.

LESSONS LEARNED

The opportunity to facilitate a second large-scale national improvement collaborative, building on the achievements of the original HEN project, have resulted in lessons learned to be considered and applied when planning future initiatives.

- 1. PATIENT AND FAMILIES MUST BE AT THE CENTER. This is the cornerstone of our project; patients and families are why we do this work. Patient and family engagement must be embedded in all approaches and interventions to reducing harm. We know that patients and families are critical partners at the bedside and in organizational improvement activities and have a unique perspective and insight to offer. Leveraging their expertise and perspectives accelerates improvement efforts.
- 2. PARTNERSHIPS ARE CRUCIAL. Hospitals are faced with many competing priorities, including numerous often disjointed improvement efforts. Through collaboration and partnership, the HEN team, at both the national and state level, demonstrated alignment and synergy with other projects, which reduces duplication of efforts and enhances the outcomes. This work requires expertise in countless clinical and operational areas. Identifying, engaging and leveraging experts in each of those areas creates a strong and successful team.
- 3. ALIGNMENT ON MEASURES. As noted above, hospitals are engaged in countless improvement efforts at the state, national and local level. Often, though these initiatives may target the same topics, the project measures may not align. This creates duplication of effort, confusion and initiative fatigue. In HEN 2.0, AHA/HRET worked closely with CMS, other HENs and our SHA partners to create measure alignment where possible. This continues to be an area for improvement, but the HEN 2.0 measurement experience was vastly improved from the initial project. When data requirements and clear and consistent, it frees time for participants to focus on improvement work.
- 4. PROMOTE WAYS TO DISSEMINATE BEST PRACTICES AND SUPPORT ADOPTION AT THE LOCAL LEVEL. The national HRET team promotes nationally-recognized, evidence-based best practices. However, the implementation of that evidence and those processes must be customized at each facility to integrate with the organization's culture and work flows. The HRET team supports this customized implementation and adaptation of best practices through deploying experts to the states and hospitals. The LISTSERVs also provide a forum for hospitals to discuss implementation barriers and challenges and to hear solutions from peer organizations.
- 5. SITE VISITS ARE CRUCIAL. Through site visits, the support team of SHA leads, improvement advisors and other subject matter experts are able to better understand the unique culture of each organization, their internal capacity and their challenges and barriers. Site visits provide a face-to-face opportunity for SHA leads to show participating hospitals the many resources offered by the AHA/HRET HEN. It is also an opportunity for the SHA lead and hospital HEN lead to examine current data, identify opportunities for focus and improvement, and strategize action plans to accelerate improvement. Though calls and virtual interactions are most time and resource efficient, HRET found that face-to-face site visits are a best practice for truly understanding and tailoring support for each hospital.
- 6. DATA IS THE FOUNDATION. Data collection, reporting and monitoring underlies all improvement efforts. Without accurate and timely data, improvement teams are unable to understand if their interventions are making an impact. Across the AHA/HRET HEN 2.0 hospitals, there is variation in knowledge, capacity and capabilities related to using data for improvement. The AHA/HRET HEN 2.0 team supported hospitals throughout the project in this area through data webinars, office hours, CDS guides and the fellowship program. However, this remains an important area for focus and support in quality improvement initiatives moving forward.
- 7. MANAGING COMPETING PRIORITIES AND COMBATING INITIATIVE FATIGUE. Hospitals have many competing priorities, including numerous quality improvement initiatives. The AHA/HRET HEN has found that the following strategies help mitigate improvement fatigue: 1) celebrating and recognizing incremental success; 2) utilizing patient and provider stories to remind the improvement teams of their impact; 3) demonstrating alignment and synergy with other initiatives; 4) continuously looking for opportunities to streamline and improve requirements and project processes so that project teams are freed up to focus on the improvement work.

8. LEADERSHIP IS A KEY INDICATOR OF SUCCESS. High performing hospitals share a common theme of highly engaged and supportive executive leadership. When leaders are engaged, they are able to create and promote structures of accountability related to quality and safety metrics, dedicate adequate resources to support improvement teams and work diligently to remove barriers for improvement teams. Future large scale improvement efforts should focus both on educating leadership teams on the importance of quality and safety and how they can be effective champions to support the work, and on supporting quality departments in creating the reports, business case or patient story that will help them engage their leaders in supporting their work.

Forward Look - Goals and Strategies in 2016 and Beyond

HRET's mission, transforming health care through research and education, is strategically aligned with the Partnership for Patients' goals of reducing harm. In addition to the HEN, HRET and the AHA are leading multiple, diverse initiatives that support the aims of the Partnership and that will continue beyond September 2016. For example:

- AHRQ-Funded Projects. HRET leads and participates in a number of AHRQ-funded projects to reduce hospital-acquired conditions. In 2016,
 HRET launched a project to work with low-performing ICUs to reduce hospital-acquired infections. This program aims to recruit 250 ICUs with
 persistently elevated CLABSI and CAUTI infection rates. The ICUs in the project are limited to those who care for adult patients. CDC partners
 are principally responsible for identification of ICUs and initial reach out to the hospital NHSN administrators. HRET monitors the recruitment
 efforts with support by the SHAs. HRET is committed to ensuring this program is complementary to, and not in conflict with, the PfP efforts as
 well as efforts with state health departments, SHAs and QINs/QIOs.
- TeamSTEPPS. Additionally, HRET has led the TeamSTEPPS contract, an initiative to promote teamwork and communication in pursuit of
 safety culture and safety across the board. HRET supports master training courses, the annual national conference, community support and
 engagement through an on-line portal and any necessary updates to the TeamSTEPPS curriculum. There were almost 600 attendees at the 2016
 national conference. Over 950 TeamSTEPPS master trainers were trained this year in the basic methodology. HRET also created Advanced
 TeamSTEPPS and the second of two pilot phases completed in 2016.
- CDC-Funded Project STRIVE. Also in 2016, HRET also launched an initiative funded by the CDC, the States Targeting Reduction in
 Infections via Engagement (STRIVE) initiative, to promote coordination by multiple entities to improve infection control practices in hospitals.
 This program aims to recruit 300 hospitals identified as having higher than desired *C. difficile* rates, as well as elevated rates of CAUTI, CLABSI, and/or MRSA. CDC partners are principally responsible for recruitment, supported by the SHAs and monitored by HRET. HRET is committed to ensuring this program is complementary to, and not in conflict with, the PfP efforts as well as efforts with state health departments, SHAs and QINs/QIOs.
- Huddle for Care. In 2015, HRET launched huddleforcare.org, a peer-sharing and collaborative website focused on improving care transitions to
 reduce readmissions and improve quality of care. This has been funded by the Gordon and Betty Moore Foundation. Many HEN hospitals have
 contributed to the stories and have been encouraged to utilize this site to research ideas for care continuum stories. To date, hundreds of hospitals
 have shared care coordination and readmissions success stories.
- HPOE. The AHA maintains Hospitals in Pursuit of Excellence (HPOE), a center for resources related to care transformation, improving quality and safety and accelerating performance improvement. HPOE develops guides, reports and case studies and offers webinar series devoted to improving care delivery. The HEN hospitals have contributed to the case studies for high performing results in specific HEN related topics.
- Institute for Diversity in Health Management/Equity of Care. As described above, the Institute for Diversity in Health Management/Equity
 of Care initiative promotes diversity, inclusion and identifying and eliminating health care disparities. Their resources, guides and educational
 programming support hospitals in these aims.

Following the end of the HEN 2.0 contract, HRET will continue to support states and hospitals in their efforts to improve quality and safety through the initiatives noted above, as well as through bidding on and participating in new projects. HRET is actively pursuing a contract for the Hospital Improvement Innovation Network (HIIN) project, in support of CMS' two new bold aims – 20 percent reduction in overall hospital-acquired conditions and 12 percent reduction in 30 day readmissions. We recognize this project has great potential to build upon the work in the HEN and HEN 2.0 projects and continue to support the reduction in harm for patients and their families.

As a part of the final report development, SHAs also reported on their plans for sustainability beyond the HEN 2.0 initiative. Summary themes are included below.

- Integrating sustainability planning into HEN 2.0 programming. Many SHAs have integrated sustainability planning into their HEN 2.0
 programming since the beginning of the project. This may include both an explicit focus on sustainability in topic-specific presentations as
 well as a focus on cross-cutting strategies, such as safety culture, leadership engagement and governance accountability.
- Leverage state-level partnerships. The SHAs are committed to leveraging state-level partnerships (e.g., with their QIN-QIO or Department of Health) to continue programming focused on quality and patient safety. As part of this alignment, the SHAs noted their intention to partner with their QIN/QIO to sustain the quality improvement work.
- Commitment to maintaining infrastructure. Some SHAs have committed to sustaining the HEN goals through building infrastructure within their organizations (e.g., staff members focused on quality/safety, a quality/safety department, quality/safety board-level committee, state-level data repository). Several SHAs indicate their commitment to maintain that infrastructure beyond HEN 2.0 funding.
- Training for sustainability, self-sufficiency. Some SHAs emphasize their approach to training hospitals on tools and resources that will serve
 them beyond the scope of the HEN project. For example, the SHAs are emphasizing the CAH/Rural data collection tool, training on basic
 quality improvement tools such as Plan-Do-Study-Act (PDSA), and focusing on engaging leadership.
- Continuing educational offerings. Many SHAs noted their intent to continue educational offerings, including through webinars and other collaboratives. Many plan to leverage other funding opportunities (e.g., TeamSTEPPS or other AHRQ programs) to achieve this goal.

Conclusion

The AHA/HRET HEN has achieved a 40 percent reduction for three topics (OB Harm, Pressure Ulcers and Early Elective Delivery); achieved the 17.6 percent reduction in overall harm for two topics (VTE at 34 percent reduction and SSI at 21 percent reduction); and will continue to prioritize those topics that have not yet met the reduction goal: ADE, readmissions, CAUTI, CLABSI and falls and VAE.

Throughout the HEN 2.0 project, AHA/HRET and our partners have hosted learning sessions, developed tools and promoted networking opportunities for participating hospitals to build their skills and capacity to continue improvement work beyond the end of the HEN 2.0 project. The individual hospital coaching from the site visits have provided invaluable opportunities for sharing ideas and removing barriers. We continue to support leadership engagement and data transparency in allowing for improvement to occur both short term and long term. The resources that have been created, updated and/or shared with the hospitals will continue to help support and sustain the improvement work.

AHA/HRET will continue to support the work and efforts of the hospitals across the nation to eliminate harm by building on the many achievements over the past year. We will continue to encourage the hospitals to pursue the bold aims to prevent harm across the board to support their patients and their families. We will encourage hospitals to continue to build, sustain and spread their work to other units, to other hospitals throughout the state and across the country. In 2016 and beyond, AHA/HRET looks forward to the opportunity to leverage its collective efforts and continue with the same drive, focus and passion of the PfP campaign.

AHA/HRET intends to continue to promote quality improvement and patient safety in support of patients and their families. HRET is aware and will assist the hospitals to focus on CMS' two new bold aims — 20 percent reduction in overall hospital acquired conditions and a 12 percent reduction in 30 day readmissions. We know the work for reducing harm is never complete and because of that, HRET will work in partnership with others to support the new 2019 CMS goal of 97 harms per 1,000 discharges (compared to 145 harms per 1,000 discharges in 2010). HRET will continue to encourage and support the numerous other projects and initiatives listed above. We look forward to additional opportunities to continue and expand upon this work.