

PRIDE: A Decade of Improving Health Care Quality and Patient Safety in Southeastern Pennsylvania

An Executive Summary



THE HEALTH CARE IMPROVEMENT FOUNDATION
Building Partnerships For Better Health Care



Message from the President

Since 2006, the Health Care Improvement Foundation has proudly joined forces with Independence Blue Cross and local hospitals in promoting improvement in the quality and safety of care delivered to patients in our region. The Partnership for Patient Care (PPC) has represented a groundbreaking collaborative effort among hospitals and health systems, in what is otherwise a very competitive southeastern Pennsylvania market.

As the tenth year of our collaboration approached, HCIF's board identified our obligation to be accountable to our community for the effectiveness of our work. We engaged the services of our longtime data partner, the Pennsylvania Health Care Quality Alliance, to conduct an independent review of the performance of southeastern Pennsylvania hospitals over the last decade. In a time of sweeping change in quality measurement and public reporting, the report provides important evidence of how hospitals have risen to the challenge of improving care, from preventing infections to reducing hospital readmissions. At the same time, it is clear that gaps in quality and safety persist, and will require renewed commitment by every stakeholder in the system as we begin our next decade.

HCIF supports the value of transparency in undertaking the difficult and complex work of improving healthcare quality. We welcome your review of this report and hope you will gain a better understanding of our region's performance in meeting the healthcare needs of patients and consumers.



Kate J. Flynn, FACHE
President
Health Care Improvement Foundation

The Health Care Improvement Foundation

The Health Care Improvement Foundation (HCIF) is an independent nonprofit that leads health care initiatives aimed at improving the safety, outcomes, and care experiences of all patients, residents, and consumers. Founded in 1980 as an affiliate of the Delaware Valley Healthcare Council of HAP, HCIF has operated since 2003 as an independent 501(c)(3) organization. HCIF has been working together with hospitals and physicians on quality improvement initiatives aimed at meeting and sustaining high levels of performance. In 2006, HCIF launched the Partnership for Patient Care (PPC) with financial support from Independence Blue Cross and local area hospitals. The overarching goal was to accelerate the adoption of evidence-based clinical practices by pooling the resources, knowledge, and improvement efforts of health care providers in Southeastern Pennsylvania (SEPA). This unique collaboration between payer and providers to share successful experiences and to jointly fund quality improvement initiatives has been recognized as a national model and has led to the development of fifteen separate programs in the last ten years.

To celebrate the tenth year of PPC's efforts to transform health care quality in SEPA, HCIF asked the Pennsylvania Health Care Quality Alliance (PHCQA), to assist in the development of a report that summarizes the progress in health care quality and patient safety in SEPA.

PHCQA's Analysis

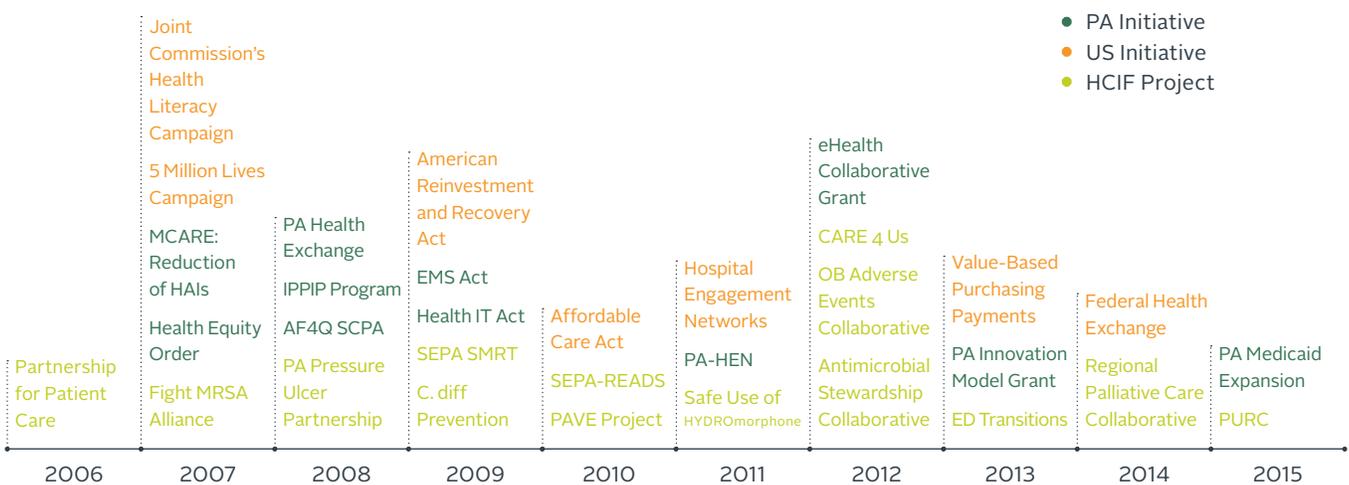
In order to evaluate the extent to which health care quality and patient safety have improved in SEPA, PHCQA extracted, analyzed, and compared data from numerous publicly available sources such as CMS, the Joint Commission, Pennsylvania Health Care Cost Containment Council (PHC4), and the Pennsylvania Department of Health. PHCQA generated benchmarks based on hospitals in the SEPA area, calculated averages of hospitals participating in various HCIF projects, and compared those data to overall Pennsylvania and national averages. Where available, PHCQA also examined internal results from individual HCIF projects. Particularly close attention was paid to hospital performance before, during, and after a relevant HCIF project. Unfortunately, for some quality indicators, the years of available data did not correspond with the timeframe of the projects. In addition, current commonly endorsed measures often relate only to certain components of HCIF projects, and thus, provide only a small glimpse of a given project's net impact. Even when measures perfectly aligned with the timing and focus of the HCIF projects, correlations were difficult to make given the large number of concurrent quality improvement initiatives and other regulatory and reimbursement model changes.

“ Our community's quality of care and patient safety have benefitted from Holy Redeemer Health System's participation in the HCIF and PPC programs over the past ten years. The combination of identification of need, common definitions, shared resources, including best practices, cooperative efforts, and sharing of results have been powerful in bringing about these improvements. ”

– Dr. Charles Wagner
Holy Redeemer Hospital

The Changing Landscape of the Health Care Industry

During the last decade, the health care industry has been characterized by a rapidly changing landscape. Several factors, including federal and state quality improvement campaigns, expanded health insurance coverage, and evolving payment models, such as the implementation of pay-for-performance programs, have shaped the environment in which hospitals operate and physicians practice medicine. Some portion of HCIF's success in quality improvement can be attributed to these external forces. On the other hand, some of these external factors provided HCIF with an opportunity to address a particular issue due to the salience of the targeted topic among providers.



PRIDE

PHCQA identified four common characteristics that HCIF employs across many of its programs that have contributed to their overall success:

Promoting partnerships, **R**educing harm, **I**ncreasing **D**elivery efficiency, and **E**ngaging patients.

Promoting partnerships refers to the need for individuals and organizations from different areas of the health care industry to work together in order to improve the overall quality of health care by promoting better outcomes and reducing costs. **Reducing harm** requires a concerted focus on the reduction and prevention of hospital-acquired infections (HAI) and unintentional injuries by implementing standard protocols and best practices. **Increasing delivery efficiency** is the process of implementing various strategies to deliver high value care. This can be achieved by minimizing unnecessary tests and procedures, providing equitable care to all, and improving coordinated care between caregivers and settings. **Engaging patients** encourages the promotion of health literacy, improves communication between patients and providers, and empowers patients to participate in decisions about their own treatment options. Informed patients are better able to carry out provider recommendations, understand the purpose of their medications, and identify symptoms and signs that may signal a worsening condition.

Promoting Partnerships

Partnerships in today's dynamic health care environment are increasingly important in order to be successful and effectively respond to market changes. PPC is a unique partnership between providers and payers that encourages different providers that often compete for services to work together in ways that would be difficult to do without a neutral convening organization like HCIF. Promoting the effectiveness of regional partnerships has been a hallmark of HCIF's approach to quality improvement. To date, over fifty health care facilities in the SEPA region have participated in at least one HCIF quality improvement project.

CARE 4 Us: Creating a Better Environment for Seriously Ill Patients

In July 2012, HCIF implemented CARE 4 Us, a PPC project designed to raise awareness of palliative care as well as to increase the number and improve the quality of palliative care programs in the SEPA region. In this 18-month collaborative, HCIF partnered with hospitals to develop and enhance their palliative care programs.

CARE 4 Us hospital participants were placed into one of two tracks: Track 1 for hospitals with a developed palliative care program, Track 2 for hospitals with no existing palliative care program. Track 1 hospitals received assistance in obtaining the Joint Commission's Advanced Certification for their palliative care programs. This certification recognizes hospital inpatient programs that demonstrate exceptional care in optimizing the quality of life for adult and pediatric patients suffering from serious illnesses. Three Track 1 hospitals received Joint Commission Certification for their palliative care programs during the collaborative.

Five Track 2 hospitals received assistance in the development of their palliative care programs. All five of these hospitals successfully completed Palliative Care Leadership Center (PCLC) training offered by the Center to Advance Palliative Care. Following the CARE 4 Us collaborative, four hospitals had initiated palliative care services.

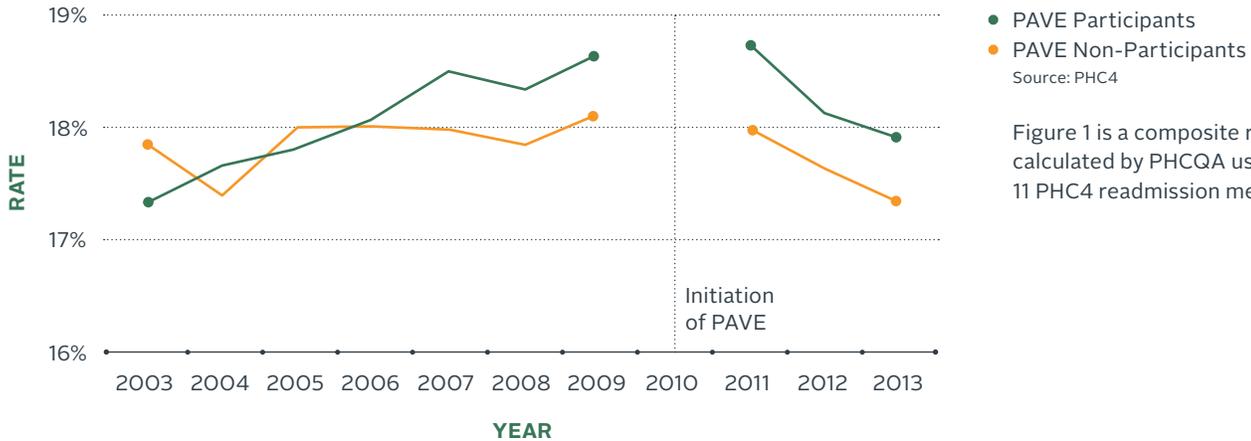
Reducing Readmissions: Keeping Patients Healthy and Out of the Hospital

Through the implementation of readmission prevention initiatives, HCIF and participating hospitals have worked to improve the culture of health in SEPA by avoiding repeat admissions. In May 2010, HCIF launched "Preventing Avoidable Episodes: Smoothing the Way for Better Transitions" (PAVE), a PPC initiative that aimed to reduce readmissions by 10% over 18 months and improve care transitions for patients discharged from hospitals. HCIF brought together over 53 diverse organizations including hospitals, long-term acute care facilities, skilled nursing facilities, and health plans to facilitate webinars and interactive meetings. Participating organizations were encouraged to showcase innovative solutions, such as utilizing a screening tool to target patients considered at high risk for readmission, scheduling follow-up appointments, and calling discharged patients to answer questions and inquire about their health status. Since the implementation of these strategies, readmission rates for several conditions treated at SEPA hospitals have decreased.

Crozer-Chester Medical Center's palliative care team, a Track 2 participant, has grown through participation in CARE 4 Us to include full-time medical director Dr. Cheryl Denick, Palliative Care Practice Administrator Terry Sandman, a full-time physician assistant, and a part-time coding specialist.

HCIF facilitated educational webinars and meetings to provide 53 SEPA organizations with educational support

Figure 1: Pennsylvania Health Care Cost Containment Council Overall Readmission Rate



● PAVE Participants
● PAVE Non-Participants
Source: PHC4

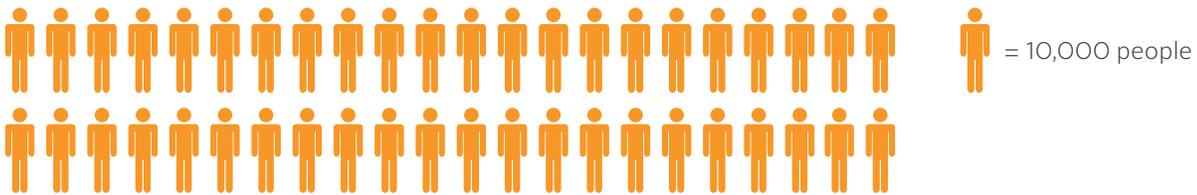
Figure 1 is a composite rate calculated by PHCQA using 11 PHC4 readmission measures.

Reducing Harm

Hospitals nationwide are improving patient safety and implementing strategies to reduce the likelihood of harm during hospital stays. HCIF has developed several projects to reduce the number of HAIs and medical errors to improve safety in SEPA hospitals.

Hospital Safety

A medical error is a complication of care directly resulting from hospital action or an avoidable incident that the hospital failed to prevent. These events include hospital-related injuries, HAIs, medication errors, and wrong-site surgery.



In 2013, hospital mistakes were calculated to be the third leading cause of death, resulting in the death of about 440,000 people annually! **If correct, that would make medical errors the third-leading cause of death in America, behind only heart disease and cancer.** ²

In 2008, the ECRI Institute, with the help of HCIF, implemented a cohesive and strategic PPC program to reduce the number of wrong-site surgeries. After 18 months, hospitals participating in this initiative experienced a 73% reduction in wrong-site surgeries, a rate that exceeds the 32% reduction among non-participating Pennsylvania hospitals.

¹ James, "A New, Evidence-Based Estimate of Patient Harms Associated with Hospital Care."

² "Hospital Errors Are the Third Leading Cause of Death in U.S., and New Hospital Safety Scores Show Improvements Are Too Slow."

Figure 2: Total HAI Rate/1,000 Patient Days

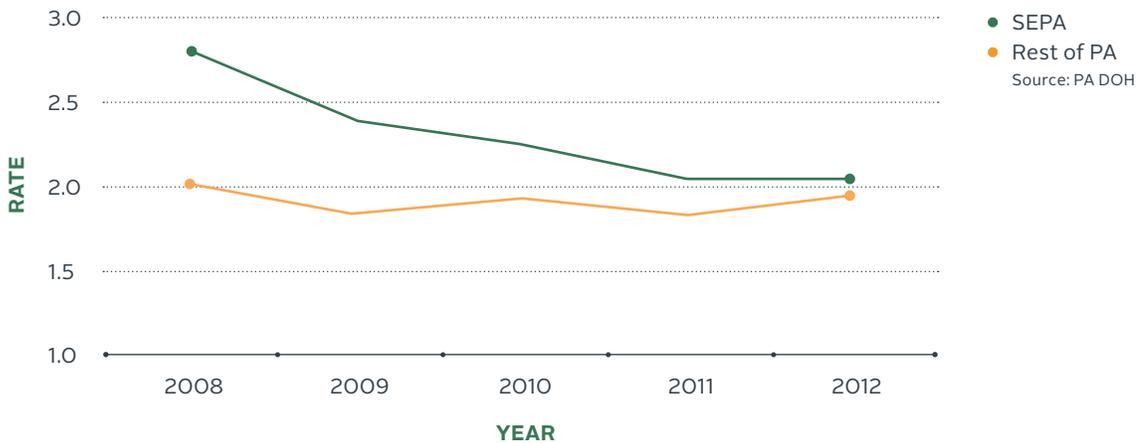
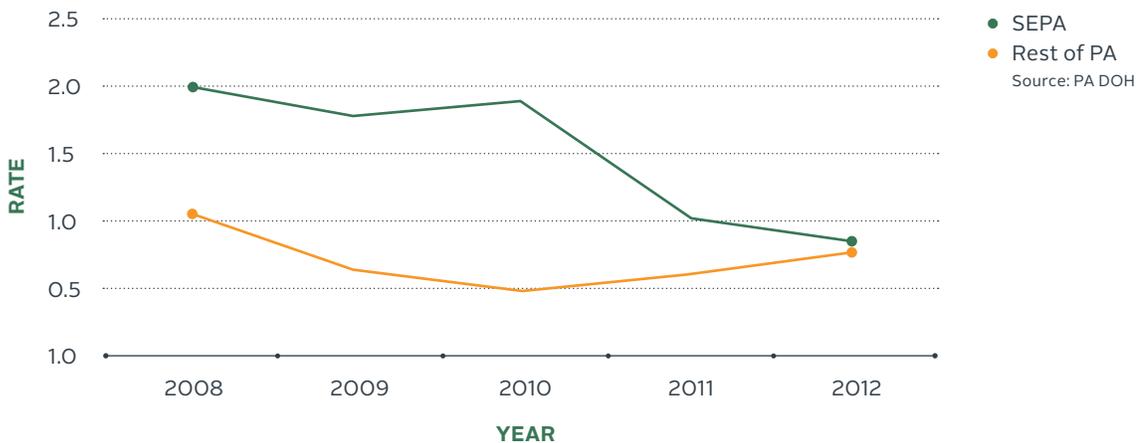


Figure 2 presents the total infection rate per 1,000 patient days for SEPA hospitals and the rest of the state from 2008 to 2012. This measure comprises all HAIs, including Catheter-Associated Urinary Tract Infections (CAUTIs), Central Line-Associated Bloodstream Infections (CLABSIs), and Surgical Site Infections (SSIs). According to Figure 2, SEPA’s total HAI rate per 1,000 patient days has fallen by a percent change of almost 27% since 2008. In comparison, the rest of the state’s performance has remained relatively flat since 2008.

Figure 3: CLABSI Rate/1,000 Central Line Days



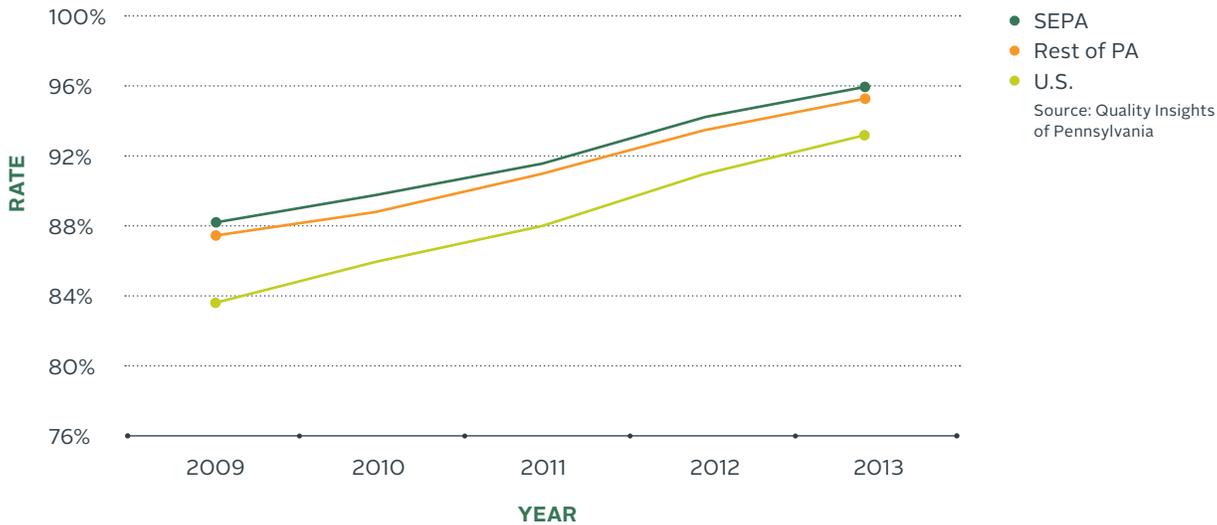
According to Figure 3, SEPA hospitals reduced their CLABSI rate per 1,000 central line days by a change of 57.5%. In 2008, SEPA’s CLABSI rate per 1,000 central line days was nearly double the average rate of all other hospitals in Pennsylvania. By 2012, SEPA hospitals had closed the gap to a nearly identical rate to the rest of the state.

HAI Prevention Efforts

Another PPC initiative, the C. difficile Prevention Collaborative promotes and accelerates the adoption of evidence-based interventions aimed at reducing healthcare-associated C. difficile infections (CDIs). Launched in 2009, this collaborative reduced CDI rates to nearly half the national average of 7 per 10,000 patient days.

Avoiding HAIs requires strict adherence to proper prophylactic protocols. The Surgical Care Improvement Project (SCIP) is a national quality partnership of organizations interested in improving surgical care by significantly reducing surgical complications. Process measures developed by the SCIP program are often examined as an all-or-none composite called the Appropriate Care Measures – SCIP (ACM-SCIP). This composite measure includes all patients who have undergone a surgical procedure at a hospital, such as heart surgery, hip and knee surgery, colon surgery, hysterectomies, etc.

Figure 4: Appropriate Care Measure – SCIP



SEPA hospitals have displayed consistently high ACM-SCIP performance since 2009, indicating that they are taking the appropriate steps to ensure patient safety for surgical procedures.

Ensuring Safety During Pregnancy: The OB Adverse Events Collaborative

According to the Centers for Medicare and Medicaid Services (CMS), approximately 10% to 15% of all births in the United States are performed early without a medical reason, which puts both the mother and child at a higher risk for complications. In late 2011, CMS identified obstetric adverse events as one of its top priorities as part of the national launch of the Partnership for Patients program, a public-private initiative that aims to make hospital care safer, more reliable, and less costly through the achievement of two goals:

- Lower the number of avoidable readmissions by 20%
- Reduce the number of preventable hospital-acquired conditions by 40%

The Partnership for Patients program contracted with 26 organizations across the country to become Hospital Engagement Networks (HENs) in order to assist hospitals with improvement efforts. The Hospital & Health System Association of Pennsylvania (HAP) and its partners — Pennsylvania Patient Safety Authority, Health Care Improvement Foundation, and Quality Insights of Pennsylvania — comprised the Pennsylvania Hospital Engagement Network (PA-HEN). HCIF led the obstetrical adverse events component of the PA-HEN by implementing the OB Adverse Events Collaborative to improve obstetric care in Pennsylvania. The collaborative, which ran from early 2012 to December 2014, included 37 participating hospitals.

Increasing Delivery Efficiency

While it is important to ensure the delivery of high quality care, it is also important to make sure this treatment is administered efficiently. Increasing delivery efficiency in our health care system is beneficial to patients because it reduces their time spent in the hospital and health care related expenditures.

Reduced rate of non-medically indicated EEDs by

94%*

Hospitals in the PA-HEN that offer obstetric services have reduced harm to neonates at delivery by

26%**

29**

Hospitals with obstetric services had no early-term, non-medically indicated deliveries during the third quarter of 2013.

* Final results still being evaluated by CMS.

** HAP Obstetrical Adverse Event Prevention, HAP website.

Getting It Right the First Time

From 2003 to 2009, SEPA hospitals had higher readmission rates than the rest of Pennsylvania and national averages for almost all conditions. Readmission rates are a unique measure in that they relate to a multitude of process, outcome and patient experience measures. Over the past decade, the public has increasingly associated high readmission rates with poor hospital performance. While external factors can influence readmission rates, higher rates are often associated with a lack of post-discharge coordinated care and/or failure to ensure that patients properly understand their discharge instructions or medications.

HCIF's PAVE program which was implemented in 2010 aimed to improve coordinated care by strengthening communication among all health care providers. For example, PAVE leaders encouraged hospitals to send discharge summaries to the patient's primary care physician. Although many hospitals are still implementing a system of more coordinated care, PAVE provided the necessary educational foundation to create a fully coordinated health care system in southeast Pennsylvania.

During the final 3 months of PAVE:

400 PATIENTS AVOIDED
READMISSION, SAVING
\$3.8 MILLION
IN UNNECESSARY HEALTH CARE SPENDING

FURTHERMORE

SEPA HOSPITALS AVOIDED AN ESTIMATED

\$7 MILLION

in Medicare penalties for higher-than-expected readmission rates.

Engaging Patients

Since the passage of the Affordable Care Act, patient satisfaction has become an important variable in health care payment programs. Patients and their families desire to “remove the mystery” from medical care and understand the services they are receiving so that they are empowered to manage and engage in their own care-making decisions. HCIF’s engagement projects have strived to improve provider communication during the hospital stay and at discharge, thereby improving patient engagement in the SEPA region.

Helping Patients Understand Their Cardiovascular Care

Properly educating patients about their conditions improves outcomes and pays dividends for all stakeholders. Funded by a Centers for Disease Control and Prevention grant awarded to the Pennsylvania Department of Health, The Southeastern Pennsylvania Regional Enhancements Addressing Disconnects in Cardiovascular Health Communication (SEPA-READS) project began in 2010 with the goal to further educate patients about their care.

“ The SEPA-READS project was instrumental in the development of the Heart Failure Readmissions program at our hospital. We have developed many valuable initiatives and tools in collaboration with the SEPA-READS team. I am very excited to build on the great work that has already been done here, and I am inspired by the achievements of the SEPA-READS partner organizations. ”

– Readmissions RN
Navigator
Hahnemann Hospital

SEPA-READS specifically targeted improving cardiovascular health literacy and encouraging patient-provider communication. HCIF, with the help of expert professionals from Thomas Jefferson University and Hospital, offered train-the-trainer sessions that focused on topics such as communicating effectively with patients and creating written materials and websites that are easy to understand. These trainings emphasized replacing medical jargon with plain language during interactions between providers and patients. SEPA-READS also educated community members using a peer educator model so that they can get the most out of their visit to the doctor. These trainings encourage patients to ask three key questions developed by the National Patient Safety Foundation:

What is my problem?

What do I need to do?

Why is it important for me to do this?

Health literacy is a stronger predictor of an individual's health status than age, income, employment, education level, or ethnicity.

SINCE THE LAUNCH OF SEPA-READS

OVER **5,000 PROVIDERS**

have been trained either by their peers or at HCIF-sponsored trainings.

OVER **90 PEER EDUCATORS** FROM **10 COMMUNITY ORGANIZATIONS**

have also trained nearly **500** community members

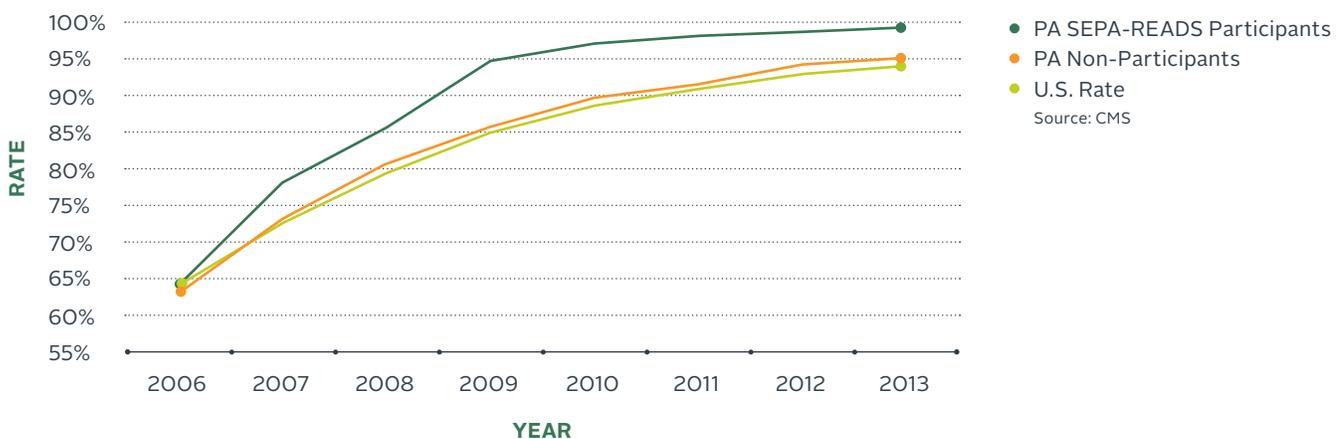
Figure 6: How Often Hospital Staff Explained Medications to Patients



Figure 6 depicts how often patients claimed that staff explained their medications. SEPA hospitals performed worse than both the national and state averages prior to 2010. Between 2011 and 2012, however, SEPA hospitals vastly improved communication performance and actually outperformed the Pennsylvania average.

Ensuring that patients understand their discharge instructions is essential to preventing unnecessary readmissions. SEPA hospitals continued to improve communication at a faster rate than the Pennsylvania and national averages through 2013. From 2010 to 2013, the percentage of SEPA patients responding that they were given discharge instructions increased from 78.6% to 84.5%, a percent change of 7.5%. In contrast, the Pennsylvania and national rates increased by 5% to reach 86% in 2013. While hospitals in Pennsylvania and around the country generally outperform SEPA hospitals, recent trends following the success of the projects suggest that SEPA hospitals will soon surpass the state and national benchmark rates, resulting in fewer readmissions.

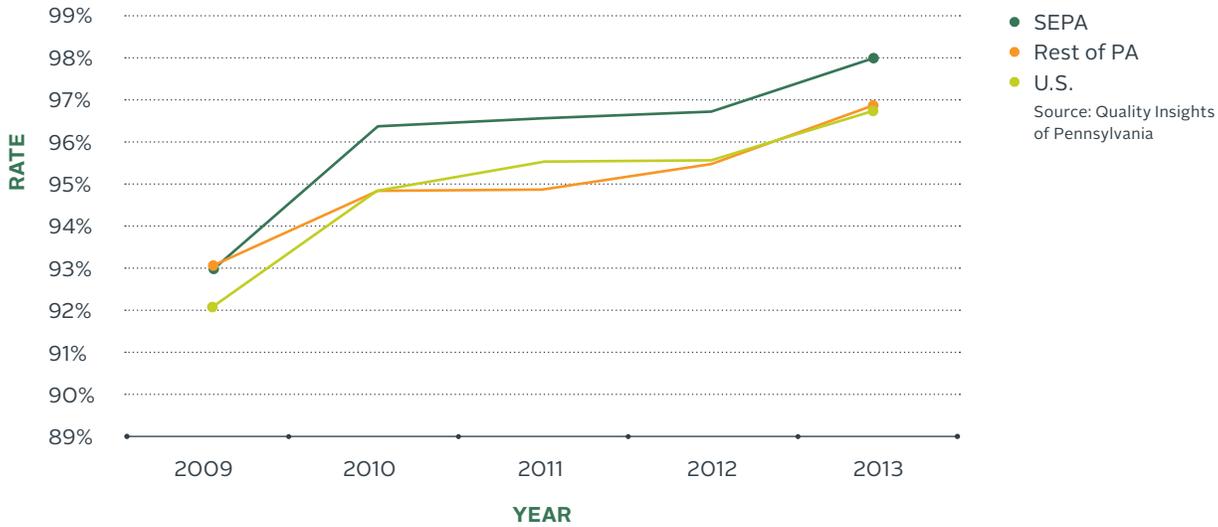
Figure 7: Percentage of Heart Failure Patients Given Discharge Instructions



SEPA-READS participating hospitals have outperformed other hospitals in the state and around the nation in providing discharge instructions to heart failure patients. Figure 7 compares SEPA-READS participating hospitals to the performance of all other Pennsylvania hospitals and the national average for how often comprehensive discharge instructions are provided to patients before they leave the hospital. Since the implementation of the SEPA-READS project in 2010, participating hospitals have improved at a rate of 2.5% to reach 99.2% compliance in 2013. HCIF’s dedication to patient engagement is an important step in making the United States health care system increasingly patient-centered and therefore more effective.

Over the last ten years, cardiovascular care has improved across the country. According to data from CMS, measures of heart attack care have consistently been among the top performing indicators. Strong performance nationwide for heart attack and heart failure measures has resulted in the discontinuation of several measures due to “topping out,” indicating that almost all hospitals have achieved a near 100% rate of adherence to these measures. The retirement of these measures is significant because they provide measureable proof that improved practices have become “hard-wired” into hospital processes such that there is very little opportunity for variation and performance is consistently at or near the highest possible levels.

Figure 8: Appropriate Care Measure — AMI



With the help of improvement programs focused on cardiovascular care, such as SEPA-READS, SEPA hospitals have been outperforming hospitals located in other regions in Pennsylvania and the U.S. for almost every publicly available cardiovascular measure. SEPA hospitals have particularly high scores for the Appropriate Care Measure-Acute Myocardial Infarction (ACM-AMI) — a patient-centered composite score that summarizes whether heart attack patients received all recommended treatments based on their specific conditions.

Figure 9: Appropriate Care Measure — HF



SEPA hospitals have exhibited similar performance trends for the Heart Failure Appropriate Care Measure (ACM-HF). Thus, the data for both ACM-AMI and ACM-HF suggest that SEPA hospitals provide high quality cardiovascular care.

Conclusion

As HCIF looks forward to the next 10 years, it is well positioned to continue developing and leading effective quality improvement programs in SEPA and beyond. Building partnerships for better care has been HCIF's trademark. The inclusive and collaborative nature of its regional improvement efforts has enabled HCIF to transcend a highly competitive provider marketplace and partner with organizations that share a common desire for quality improvement. A high-level review of the regional data show that this approach has had a definitive impact on regional patient experiences and care. HCIF has reason to take PRIDE in their accomplishments and is well positioned to develop and support future quality improvement efforts in SEPA and beyond. The successes of HCIF's projects have proven that through collaboration and the dissemination of best practices all providers can collectively improve their performance.

Contributing Hospitals and Health Systems

In addition to funding from Independence Blue Cross through the Partnership for Patient Care program, HCIF has received generous contributions from the following Delaware Valley healthcare organizations to help advance and sustain our progress in improving healthcare delivery in the region.

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|------------------------------------|--|
| Abington Memorial Hospital | Jeanes Hospital |
| Albert Einstein Healthcare Network | Magee Rehabilitation Hospital |
| Aria Health | Main Line Health System |
| Crozer-Keystone Health System | Mercy Health System of Southeastern Pennsylvania |
| Doylestown Hospital | St. Mary Medical Center |
| Eagleville Hospital | Temple University Hospital |
| Fox Chase Cancer Center | Thomas Jefferson University Hospitals |
| Grand View Hospital | Penn Medicine |
| Hahnemann University Hospital | |
| Holy Redeemer Health System | |

