The Pittsburgh Regional Health Initiative (PRHI) has a long-standing relationship with the U. S. Department of Health & Human Services (HHS). In 2007, then-Secretary Michael Leavitt designated PRHI as a Community Leader and later a Chartered Value Exchange (CVE). A CVE is a multi-stakeholder collaborative that has taken clear action in its community to convene community purchasers, health plans, providers, and consumers to advance value-driven health care.

As a CVE, PRHI applied in 2009 to participate in a new Centers for Medicare and Medicaid Services (CMS) Electronic Health Records (EHR) demonstration project. Pittsburgh — PRHI — was selected as one of only four “Community Partners” for the demonstration. This demonstration was most accurately described as a quality of care initiative, focused on chronic disease prevention. In the role as a CMS Community Partner, PRHI helped to recruit 280 small primary care practices for participation in the demonstration. But PRHI wanted to do more. How could they support these practices as they transitioned to electronic health records, and ultimately “Meaningful Use,” which would result in performance-based payments?

In mid-2009, PRHI partnered with Highmark and began a pilot project to transform this network of providers into high-performing primary care practices. Highmark contributed health information technology (HIT) grants of up to $7,000 per practice to underwrite upfront EHR costs and additional funding for training and coaching support. Successful implementation of EHRs is one step toward improving the outcomes of the chronic disease patient population.

The partnership of PRHI and Highmark became known as the Transforming Care in Provider Practice (TCPP) Initiative. This paved the way for Highmark’s Medical Management Consultants (MMCs) and PRHI’s coaches to engage a large cohort of practices to work towards becoming Patient-Centered Medical Homes and the potential to create Accountable Care Networks among these practices and their community hospitals. The vast majority of these practices had an existing relationship with Highmark through the Quality Blue program and other initiatives.
Team Collaboration at the Outset

One of the most significant accomplishments of the TCPP Initiative was the collaboration among Highmark MMCs, PRHI practice coaching teams, and leadership from both organizations. The value of combining the experience of the MMCs in supporting a wide range of primary care practices, and the expertise of the PRHI team in lean healthcare methodology, curriculum development and training was recognized from the outset. It resulted in the creation of a solid curriculum, enhanced coaching services on the part of both organizations, and the development of relationships upon which future collaboration can be built.

The collaboration began first with a meeting of the Highmark MMCs and the PRHI coaching team to share approaches to quality improvement and coaching. In October 2009, PRHI hosted a four-day Perfecting Patient Care℠ (PPC) training session for Highmark MMC teams. The PPC training, which is PRHI’s lean healthcare quality improvement methodology, enhanced the MMC team’s knowledge and skills in lean healthcare, and established relationships between the coaching and MMC teams.

Curriculum development followed, with Highmark and PRHI teaming to produce content for seven educational training modules. The approach involved pairing 2-3 PRHI coaching team members with 2-3 Highmark MMCs to create the presentation, interactive activities, handouts, tools and resources for each module.

Highmark and PRHI teams also worked together to provide on-site support to practices. For example, when the PPC tools of observation, process mapping, and value stream mapping were initially being used by the MMCs in practices, a PRHI coach assisted with the observation, mapping, and report out to the practice team. This approach allowed the MMCs to become more familiar with using the tools in the practice setting, and the PRHI coaches gained a deeper understanding of the primary care practice environment.

Curriculum Development

At the outset of the TCPP Initiative, the teams determined the best approach to engage practices in EHR implementation, optimization, and ultimately practice transformation.

They created several training models that had the latest research, information, and examples relevant to primary care, and they added further tools and resources to support practice redesign. Adult learning theory shaped much of the curriculum — interactive activities, videos, and other formats that engage learners were all incorporated in the modules.

The modules were initially designed to be delivered in face-to-face training sessions for practice managers, providers, nurses, support staff, and administrators, and they were later adapted for other modalities, including webinars. This flexible learning approach better accommodated the demanding schedules of primary care providers and staff.

<table>
<thead>
<tr>
<th>Module</th>
<th>Content Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Health Records: An Introduction to Purchasing and Implementation Planning</td>
<td>EHR and its role in patient care; Purchasing an EHR; Planning for implementation; Financial incentives for using EHRs</td>
</tr>
<tr>
<td>Quality Improvement in Primary Care: An Introduction to Lean Health Care</td>
<td>How Lean applies to primary care; Basic principles of Lean</td>
</tr>
<tr>
<td>Building a Transformational Team in Primary Care</td>
<td>Transformational change in primary care; Habits of effective teams; Tools to support team-based care delivery systems</td>
</tr>
<tr>
<td>Optimizing the Use of Your Electronic Health Record</td>
<td>Meaningful Use standards; Barriers to optimization</td>
</tr>
<tr>
<td>Chronic Disease Management and Electronic Patient Registries</td>
<td>Chronic Care Model: Implementing and managing patient registries; Using registries to enhance chronic disease management</td>
</tr>
<tr>
<td>Transforming Your Practice to a Patient-Centered Medical Home</td>
<td>Joint principles of the Patient-Centered Medical Home (PCMH); PCMH implementation tools; PCMH recognition through the National Committee for Quality Assurance</td>
</tr>
<tr>
<td>Primary Care Business Administration</td>
<td>Personnel costs and comparing to state and national benchmarks; Capturing revenue and calculating drivers and indicators; Financing the purchase and maintenance of an EHR</td>
</tr>
</tbody>
</table>
Marketing

The TCPP team's marketing outreach also benefited from an adaptable approach. As the team quickly learned, engaging busy primary care providers and staff required leveraging multiple modes of communication.

The initial goal was to target practices participating in the CMS EHR demonstration. Mass mailings were sent to all participants for all modules. Direct mail made for a fairly cumbersome undertaking, but it was necessary given the relatively low use of email communication among primary care practices in the region. For practices that could provide an email contact, the team communicated via group email and also leveraged the PRHI website for further engagement.

At the end of 2009, the team's marketing efforts got an additional boost by Highmark’s Navinet system. Navinet, Highmark’s informational portal for healthcare providers, reached a wider audience than the list of CMS demonstration participants alone. After outreach through Navinet began, there was a marked increase in attendance at training sessions.

A significant challenge the team faced was engaging practices that did not respond to any outreach efforts. The lack of response potentially reflects a missing sense of urgency for engaging in practice redesign and EHR implementation and optimization. Plus the hectic pace of primary care likely restricts the time available for professional development.

Overall, the marketing was effective in attracting a core cohort of participants who attended either a majority or all of the modules of the TCPP Initiative. Once participants attended one module, they were likely to attend others, suggesting that they perceived value in the training.

Training Delivery

The training modules that were co-developed by Highmark and PRHI were delivered collaboratively via face-to-face and webinar sessions. Modules were offered multiple times in various locations throughout the Pittsburgh area. Face-to-face sessions began with a welcome and opening remarks by a senior staff member of the PRHI and/or Highmark team. The sessions included interactive activities, group discussion, and shared learning among the participants.

This training delivery method was largely well received and highly evaluated, with participants noting that the content was organized, valuable and relevant to their work. Participants especially appreciated the chance to network with their peers and share what they learned. The group discussions also added value to the training and curriculum development as key leanings were incorporated into future enhancements to the modules.

The most significant challenge for training was the attendance at certain face-to-face modules, particularly those offered during the summer months. Regardless of when the sessions were offered — during work hours or in the evening — attendance at summer sessions was markedly lower than other times of the year. This trend likely reflects the busy summer vacation season and its effect on staffing at already thinly-resourced primary care practices. During the latter half of the summer of 2010, the team adjusted the schedule and primarily offered webinar training sessions.

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Training Delivery (continued)

By the Numbers:

  - 14 face-to-face sessions
  - 16 webinars
- 528 attendees from more than 245 primary care practices in southwestern Pennsylvania
- Quality Improvement in Primary Care: An Introduction to Lean Healthcare was the most well-attended module with 140 participants, closely followed by Transforming Your Practice to a Patient-Centered Medical Home with 102 participants
- 1 out of every 4 participants attended multiple training sessions

Some Comments on the Training Sessions:

“It was very nice to hear what other practices are doing and that we are not the only ones going crazy!”

“This module was beyond helpful to me and what my job responsibilities currently demand.”

Continuing Education for Healthcare Providers

Through a partnership with the University of Pittsburgh and the Pennsylvania State Nursing Association, the team was pleased to offer both Continuing Medical and Continuing Nursing Education credits for eligible participants.

Special Event: HIT Quality Forum

In 2010, Highmark and PRHI presented the Health Information Technology (HIT) Quality Forum. The event highlighted how the partnership of the two organizations helped deliver relevant education and support to the region’s primary care community as they transitioned to electronic health records, and ultimately “Meaningful Use,” which would result in performance-based financial incentives.

The forum featured a keynote address by Dr. Charles Friedman, then-chief scientific officer for the Office of the National Coordinator for Health Information Technology (ONCHIT). The keynote address was followed by a panel discussion of regional leaders in HIT implementation, including Dr. Friedman; Dr. Frank Civitarese, president of Preferred Primary Care Physicians; Janice Devine, president of Devine Medical Consulting; and Jim Witenske, chief information officer for Jefferson Regional Medical Center. The panel was moderated by PRHI’s Chief Medical Officer, Dr. Keith Kanel. This panel gave participants the opportunity to ask questions and draw upon the expertise of impressive local and national leaders in HIT. Dr. Friedman’s keynote address, “Meaningful Use and Beyond: The Transformational Potential of Health Information Technology,” offered an inspiring vision of what HIT could be in the future, with the U.S. leading the world in creative HIT solutions.

From leveraging the SMART phone platform as a tool for patients to access care anytime, anywhere, to nurse robots that have the potential to enhance home-based care, Dr. Friedman presented a variety of technological solutions currently under development that have the potential to greatly accelerate the quality and safety of care delivery.

He acknowledged, however, that moving from the current condition of HIT adoption to a future state of high-quality care supported by advanced technological solutions may be an arduous journey, and one that is complicated by the lack of truly usable, robust EHR solutions to support primary care.

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HIT Quality Forum (continued)

Dr. Friedman outlined the efforts of the federal government to advance HIT adoption, including the HITECH Act, meaningful use regulations and associated incentive payments through Medicare and Medicaid, and the role of Regional Extension Centers to provide technical assistance to practices as they implement EHRs.

The panel spurred discussion among participants on topics such as challenges encountered during EHR implementation, work redesign, health information exchange, use of EHRs in specialty practices, the significant burden of implementation and meaningful use on small practices, and where to start with EHR adoption. The complement of panelists from the primary care practice setting, the hospital environment, and the national perspective, offered an array of expertise.

EHR Outreach

During the spring of 2010, significant effort was made to reach out to the CMS EHR demonstration treatment group practices to emphasize the importance of completing the Office Systems Survey (OSS) and to assess training and coaching needs. The OSS is the CMS tool used to assess the level of adoption of EHRs. In order to receive a Year 1 incentive payment of up to $5,000 per provider (maximum of $25,000 per practice), a practice needed to have been using a certified EHR system for minimal functionality, including documenting of visits, recording of lab and diagnostic test orders and results, and recording of prescriptions. While these were the minimum requirements to qualify for an incentive payment, the OSS assesses the use of EHR systems in a variety of domains and functionalities. Consistent use of the EHR system across a practice’s patient population, along with the use of advanced functionalities, yields higher OSS scores.

A provider’s incentive payment was determined both by the OSS score and the number of eligible fee-for-service Medicare beneficiaries. The incentive payment formula was as follows:

\[ \text{# eligible beneficiaries} \times \text{OSS score} \times \$45 = \text{incentive payment} \]

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The main purpose of the Year 1 incentive payments was to encourage the adoption of EHRs by primary care providers. Incentive payments in subsequent years were designed to be more substantial and based not only upon the level of adoption of EHR, but also performance on 26 measures related to four disease categories (diabetes, congestive heart failure, coronary artery disease, and preventive services). The following chart summarizes the number of treatment group practices, by region, that had implemented an EHR as of June 2010.

Pennsylvania has clearly realized accelerated rates of EHR adoption in primary care practices compared to the other participating regions. This is especially impressive when considering the average practice size for Pennsylvania (1.3 providers) is smaller than that of Louisiana (2.1 providers), Maryland (2.3 providers) and South Dakota (4.3 providers). The literature, as well as Highmark and PRHI experience, suggests that smaller practices have more difficulty implementing EHRs. This is not surprising, considering that smaller practices tend to have fewer financial and personnel resources to dedicate to EHR implementation and overall quality improvement efforts.

The relatively small size of Pennsylvania practices may also explain, in part, the lower average incentive payments. Not only is implementation in small practices challenging, optimizing functionality is too. Another factor likely contributing to the lower incentive payments is the relatively low penetration of fee-for-service Medicare.
### Year 1 Incentive Payments

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Active Practices</th>
<th># Earning Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>126</td>
<td>72 (57%)</td>
</tr>
<tr>
<td>Louisiana</td>
<td>86</td>
<td>37 (43%)</td>
</tr>
<tr>
<td>Maryland/DC</td>
<td>114</td>
<td>68 (60%)</td>
</tr>
<tr>
<td>South Dakota</td>
<td>37</td>
<td>21 (57%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>363</strong></td>
<td><strong>198 (55%)</strong></td>
</tr>
</tbody>
</table>

Although we lack sufficient data to determine causality for higher adoption rates in Pennsylvania vs. the other regions, Pennsylvania is the only region in which the community partner and the largest commercial insurer have come together to deliver a range of training and support services to practices. Highmark and PRHI’s longstanding commitment to supporting primary care practices in their quality improvement efforts, both through this partnership and other lines of service, has likely had a significant impact on the region.

### Web-enabled Learning and Management Tools

To make the training modules and related tools and resources accessible to a wide audience, the team recognized early on that it needed to web-enable curriculum. The curriculum is available on PRHI’s website at [prhi.org/TransformingCareProviderPracticeChampions.html](http://prhi.org/TransformingCareProviderPracticeChampions.html). In addition to existing content, upcoming enhancements to the website will allow for access to recordings of webinar sessions and additional resources related to primary care redesign. PRHI used its Tomorrow’s HealthCare (THC) quality improvement platform to advance the curriculum, tools, and resources offered in training sessions and on-site coaching support. A learning community was developed specifically for participants of the CMS EHR demonstration that provided a variety of educational materials, including the presentations for all seven TCPP modules, tools and resources related to each module, and recordings of module webinars.

### Overcoming Challenges

Perhaps the greatest challenge — and possibly the greatest opportunity — to the original implementation plan relates to the rapidly changing national healthcare reform landscape that has begun to have a significant impact upon our region’s primary care practices. The TCPP team faced the challenge of helping practices make sense of the various opportunities, such as CMS EHR demo incentives, meaningful use EHR incentives, Quality Blue and other payer incentives, and additional initiatives to support primary care transformation.

It is an exciting time for the primary care community in terms of the attention and resources being dedicated at the regional, state and national levels, but making sense of the various incentives, reporting requirements, and practice redesign needed to achieve goals may be incredibly overwhelming for primary care providers and staff who, in some instances, are barely managing to meet day-to-day patient demands.

By sending a consistent message to practices, the Highmark and PRHI partnership aimed to mitigate some of the confusion that likely overwhelms providers and staff. Their challenge has been to remain abreast of regional and national developments and distill and disseminate information in ways that are meaningful and digestible to the primary care community via updating educational materials and coaching resources.