Building Quality Improvement Capacity in Primary Care: Supports and Resources

Erin Fries Taylor, Janice Genevro, Deborah Peikes, Kristin Geonnotti, Winnie Wang, and David Meyers

Primary care is the cornerstone of health care that is effective and efficient and meets the needs of patients and families. To strengthen primary care, and thereby strengthen the larger health care system, the orientation and commitment of primary care practices to quality and safety must be enhanced and supported. Some practitioners, purchasers, and quality improvement organizations are focused on improving quality and safety in primary care. Promising models, such as the patient-centered medical home (PCMH), have been developed to transform the delivery of primary care and achieve the triple aim of improved patient experience, improved population health, and reduced costs.

A critical component of the PCMH, as defined by the Agency for Healthcare Research and Quality (AHRQ),[i] is a systematic focus on quality improvement (QI) and safety. But a broader, explicit commitment to ongoing improvement in primary care is needed and more primary care practices need help in developing their QI capacity. This paper and a preceding companion piece make the case for building systematic, enduring, external supports for QI to assist primary care practices in the United States in achieving the triple aim.

In the first paper, we identify the need for external QI infrastructure to help practices acquire the knowledge and develop the skills integral to carrying out ongoing QI work (see Taylor, et al., 2013). As defined in that paper:

> QI infrastructure is essential to helping primary care practices develop QI capacity. It provides the staff, resources, and supports needed to help practices identify QI needs, develop skills, and engage in continuous QI. QI infrastructure can be thought of as a type of "self-management support" for practices in the area of quality improvement—providing similar types of assessment, information, coaching, and skilled intervention to help primary care practices achieve the improvement goals that practices offer to patients to help them achieve their health and quality-of-life goals. This type of support is intended to foster, to the extent possible, the development of autonomous capabilities that practices can apply to new challenges over time.

[i] See pcmh.ahrq.gov for AHRQ's definition of a patient-centered medical home.

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In this paper, we describe the approaches and supports that an external infrastructure could provide to build improvement capacity in practices and a strong QI orientation in primary care. These approaches and supports, coupled with other building blocks, such as data and financial incentives, can be effective in supporting practice improvement. But efforts to date have been limited in the number of practices with which they have interacted, leaving the vast majority of practices with no ongoing, organized external QI resources available to them. This type of robust external support is needed to establish a strong and systematic approach to improvement in primary care practices throughout the Nation.

This paper begins by defining QI capacity and discussing why practices need help to develop it. We next discuss how an organized system of external support would help primary care practices engage in QI and develop QI capacity. We then describe four types of activities that can assist practices in pursuing specific improvement projects and developing capacity for ongoing QI work. We direct the reader to detailed case studies of initiatives that are developing QI capacity in selected primary care practices and provide information about resources for the QI approaches described here.

What Is QI Capacity and Why Do Primary Care Practices Need Help Developing It?

What does it mean to develop a practice's QI capacity? QI capacity involves a deep understanding of and commitment to improvement to undertake ongoing, continuous QI work beyond any particular project. For a practice, this requires (1) knowledge and understanding of QI approaches, and how to use data and feedback for QI; and (2) commitment of practice leadership and staff to dedicate time and resources to QI activities. This allows a practice to systematically track and assess performance over time and regularly make changes in practice processes to improve performance.

A primary care practice has "QI capacity" when it knows and understands QI approaches and how to use data and feedback to improve. QI capacity also depends on the commitment of practice leadership and staff to QI activities.

Despite the promise of QI capacity to help improve primary care delivery, the financing and structure of primary care in the United States makes it difficult for primary care practices to build QI capacity on their own. Most primary care practices do not have the time, resources, or expertise needed to focus on practice improvement. Most practices are small—more than half of primary care physicians practice in settings of five or fewer physicians[ii]—and many operate on thin profit margins. Given the undersupply of primary care clinicians, most practices have large patient panels, leading them to focus on the daily demands of patient care rather than continuously improving the way they provide care.

[ii] Based on national estimates from the 2008 Community Tracking Study Physician Survey (personal communication with Ann O'Malley, Center for Studying Health System Change, on November 2, 2012).

For practices to make QI an integral part of their daily operating processes, the financing of primary care needs to change so that teams and practices are incentivized to improve. But while changes in the financing of primary care may give practices the resources to devote to QI, practices will still need QI skills, expertise, and tools to engage in improvement activities. Organized external support—an external QI infrastructure—can provide practices with multifaceted, ongoing resources and supports for QI and help practices make QI a part of their culture.

How External Infrastructure Can Help Practices Pursue QI and Develop Capacity

An external QI infrastructure can assist practices in two main ways: (1) building general QI capacity within the practice, and (2) providing expertise and supports for specific QI projects (see Figure 1). These are mutually supportive and reinforcing. Building general QI capacity provides a general framework for a practice's improvement work, allowing it to better target specific areas for improvement and make practice change in more systematic ways. In a complementary way, every specific QI project is an opportunity to build culture and capacity.

Specific QI projects allow practices to build hands-on knowledge of how to go about improvement work, while often highlighting the need for broader QI work and providing some context for the importance of building general QI capacity. For practices that are just beginning to take on improvement work, a few narrowly focused improvement projects can help familiarize them with QI, provide "early wins," and build momentum for more transformative improvement work.

A practice needs to become a learning organization, which actively seeks to respond and adapt to external feedback and changing context, to ensure that important QI work does not end when a specific QI project ends.

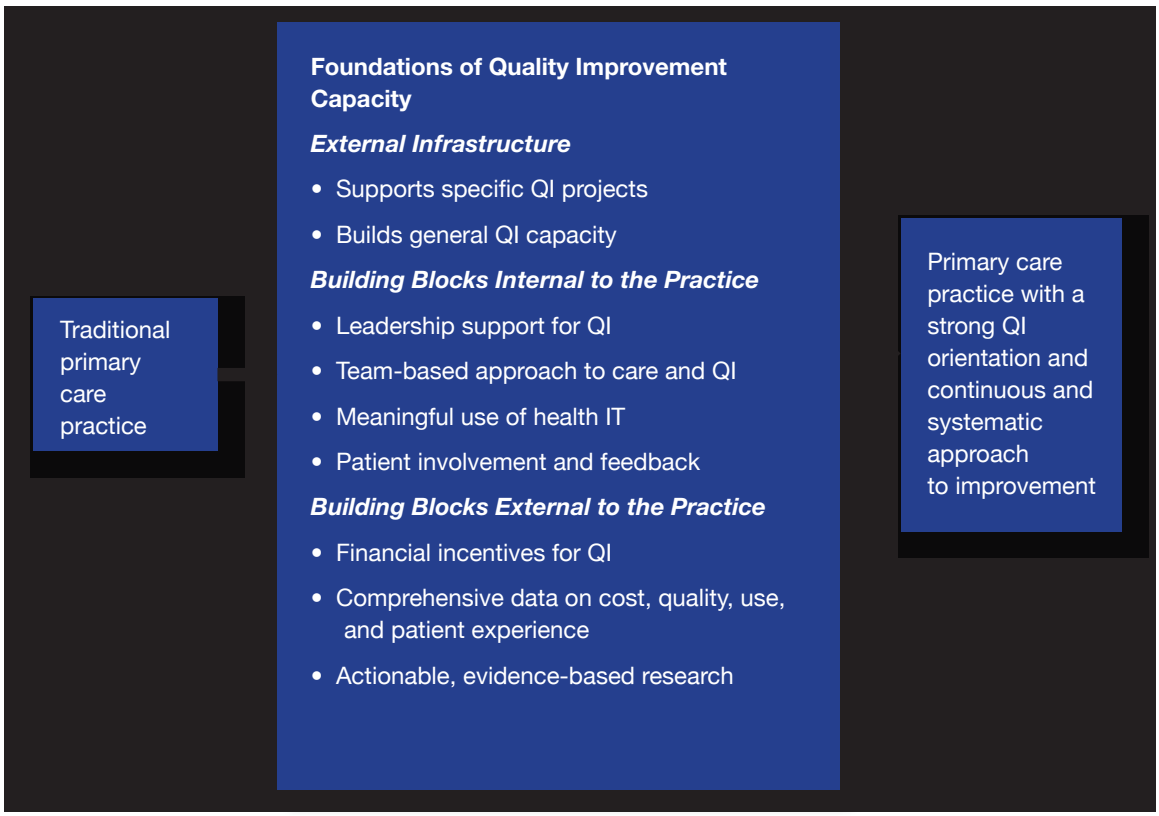
In building QI capacity, the ultimate goal is for the primary care practice to become a learning organization that has a strong QI orientation and engages in continuous and systematic improvement activities to address specific quality concerns. As Figure 1 suggests, systematic external support can assist a practice in specific QI projects and general capacity building but needs to be augmented by other building blocks. Leadership support for QI—a QI "champion"—within a practice, for example, plays a crucial role in stewarding resources and maintaining a focus on QI. Development of a QI team (with both clinical and administrative representation) can reinforce the importance of improvement within the practice, while also vesting responsibility with specific staff. Financial incentives for QI and the availability of data for assessing performance and monitoring it over time are also key supports.

These building blocks help shape and reinforce QI work and, in many cases, may bolster the effectiveness of external supports. For example, external supports may help to garner leadership support for QI and build a team-based approach to care in the practice. This leadership and team orientation in turn enables a practice to more fully engage in QI projects and to build more general capacity for QI.

Similarly, meaningful use of health information technology (IT) allows practices to gather data about performance and monitor the effects on new processes aimed at improving performance. Patient feedback, through patient surveys and inclusion on advisory panels, allows practices to fully understand where they are meeting patients' needs and where they are falling short.

> "The quality improvement concept is integral to a practice that is transformed…and you need a practice to gain some knowledge in methodology before it can even try to transform and make changes in the practice. [You need to] make sure the practice has capacity to embark on QI."
>
> ***—Marie Mann, Health Resources and Services Administration, U.S. Department of Health and Human Services***

Figure 1. Developing Quality Improvement Capacity in a Primary Care Practice



External Supports and Approaches to Building QI Capacity Within a Practice

Four broad categories of external supports can be effective in assisting practices in their QI work and helping them develop robust QI capacity (Table 1). These types of supports, which can be used alone or in combination, include the following:

- **Data feedback and benchmarking**, which provide practices with information on their performance and help target areas for improvement.

- **Practice facilitation (or coaching)**, which is oriented toward skill development and assists practices in organizing their approach to improvement, provides QI tools and expertise, and helps troubleshoot challenges or barriers.
- **Academic detailing and expert consultation**, which provide specific evidence-based knowledge to practices when needed.
- **Shared learning or learning collaboratives**, which provide a community in which practices can share challenges, lessons learned, and best practices and draw motivation and inspiration.

There is growing interest in these four types of external supports and approaches as ways to improve primary care and increasing recognition that primary care practices need such external assistance to fully engage in the difficult work of practice redesign and transformation.[iii] While all four of these approaches to QI have been used in primary care, to date only a small proportion of primary care practices have had access to these supports.

Below, we further describe each of these approaches and how they can be used to support primary care practice improvement.

Data Feedback and Benchmarking use data to direct and motivate practice change and to help practices determine "where they are" before they can determine "where they are heading." Data can come from within the practice—from its registries, electronic health records (EHRs), or medical chart audit—or from health information exchanges or payers that use comprehensive claims data.

Data feedback gives practices and teams information on key process and outcome indicators, which are tracked over time to assess improvement. Data from health care settings beyond the practice can be particularly valuable to a practice. These data can reflect health care utilization by the practice's patients that the practice otherwise could not access, such as emergency department use or hospitalizations. Such data can identify opportunities for improvement both across the entire panel of patients and with specific patients.

Often, a practice may think it is performing better in a particular area than the data show, and this realization can motivate practice change. Conversely, practice staff occasionally may overestimate the magnitude of a quality issue, based on anecdotal experience. In either case, data feedback helps a practice more fully and accurately understand its performance and more effectively target its improvement efforts.

Benchmarking entails comparing a practice's performance on selected measures to accepted standards (such as 90 percent compliance on a given measure) or the performance of other practices or providers. By allowing practices, and teams of clinicians within practices, to gauge their performance relative to other similar practices and teams, benchmarking can have a greater effect than data feedback alone (Hysong, 2009). Benchmarking can be a powerful approach for motivating and tracking practice change.

[iii] For more information on the challenges associated with transformation efforts, see Crabtree, Nutting, Miller, et al. (2011) and Nutting, Miller, Crabtree, et al. (2009).

Practice Facilitation (also called practice coaching) involves an external facilitator who works with the practice to develop an ongoing, trusting relationship both through working on specific QI initiatives and developing more systematic and continuous internal QI capacity. Through this process, practices decide which areas to target for improvement. Facilitators help them build capacity to achieve these goals and sustain improvements by initiating new QI projects and "maintaining the gains."

It is important that the facilitator not be viewed as another practice staff member who can assume day-to-day clinical or administrative responsibilities for the team or practice; rather, they must facilitate the QI process for the practice so the practice builds its own internal capacity. Facilitators often use the other three approaches described here in their work with practices, and many emphasize the importance of combining multiple approaches to help practices engage in QI and build capacity (see Knox, et al., 2011).

Academic Detailing and Expert Consultation use short-term communication and education from experts to provide targeted knowledge that can help a practice achieve its QI goals. For example, academic detailing often uses communication between clinicians and has been used to reduce inappropriate prescribing and to help physicians adopt evidence-based practices (see AHRQ, 2012). Typically, academic detailing involves peer-to-peer contact. A physician might act as an educator, providing information and motivation to a lead physician at the practice seeking assistance. Other detailers might include a pharmacist or nurse, usually working with team members from the same professional background.

While academic detailing originally was developed for marketing pharmaceuticals, it has been adapted for improving other aspects of care. It is generally considered effective and typically does not require an intensive investment of time by the practice, as it usually entails only one or two visits from a detailer about a targeted topic, rather than sustained contact. Expert consultation is used to provide specialized, indepth knowledge or technical assistance on a short-term basis.

Shared Learning/Learning Collaboratives facilitate continuous learning among a consortium of practices that have similar experiences to share. Typically, clinical and nonclinical staff from the practice attend learning collaboratives focused on QI, but sometimes other stakeholders, such as payers and policymakers, also attend. This type of external support is attractive because it relies heavily on providers sharing their knowledge and learning with one another and also creates a sense of "positive peer pressure" that helps practices work toward and maintain practice improvements.

Such learning communities may include in-person or virtual gatherings to exchange best practices and brainstorm about common challenges. Collaboratives often focus on a particular area for QI, such as improving diabetes care, but sometimes focus on broader issues. For some collaboratives, the focus goes beyond the specifics of a given QI project to support the development of general QI capacity through encouraging practices to share best practices in QI approaches, common experiences, challenges, and lessons learned in making practice improvements.

> "There's a value to having some standardized processes and shared goals across practices that may not occur if you just have [QI efforts] completely practice driven one by one."
>
> ***—Darren DeWalt, University of North Carolina School of Medicine***

Table 1. External Supports for Engaging in QI Work and Developing QI Capacity in Primary Care

QI Support	Description	How Activity Supports QI Work and/or Builds QI Capacity
Data Feedback and Benchmarking	Several types of feedback give information to practices or teams on their performance and help them shape improvement goals: • Data feedback gives practices and teams information on key process and outcome (patient quality of care, service use, cost, and experience) indicators, which are tracked over time (often in dashboards) to assess improvement. • Benchmarking allows practices and teams to compare their performance on selected measures to the performance of other practices and providers or national targets (e.g., 90 percent compliance with standard).	Provide motivation and direction for QI goals. Help identify gaps in services or overuse of services and potential areas for improvement. Allow practices and teams to track changes in performance over time.
Practice Facilitation/ Coaching	Supportive services are provided to a primary care practice by an external facilitator or coach, with the goal of building internal capacity for QI activities and, ultimately, primary care redesign and transformation. Facilitators help practices identify ways to implement an innovation or improvement activity in that particular practice's context.	Helps a practice learn how to improve by providing training in how to use data, helping develop QI skills among practice staff, sharing tools and resources, and lending QI expertise. Works one on one with practices to provide a customized approach. Supports a practice in identifying and achieving its improvement goals; helps a practice prioritize and sequence QI activities and approaches (including use of data feedback and benchmarking, academic detailing/expert consultation, and learning collaboratives, as needed).
Academic Detailing/Expert Consultation	Evidence-based knowledge is provided to the practice team (often clinicians) by an external clinician or other expert, with the aim of changing behaviors through sharing best practices.	Provides evidence and education through a credible external source and relates that evidence to the practice context. Can help develop a practice's interest in QI work, often by relating peer to peer.
Shared Learning/Learning Collaboratives	Practice staff come together, either in person or virtually, to receive training, share lessons and best practices, evaluate performance, and work individually and collaboratively to implement practice changes over time.	Provides motivation and inspiration by creating a community for sharing challenges and successes, and learning how others approach change and improvement. Creates positive peer pressure to spur change across participating practices; an efficient way of reaching many practices at once. Promotes culture of continuous QI (to the extent that learning is ongoing and broad based).

Combined Approaches. In many cases, these strategies are used in combination. For example, practice facilitators regularly use data feedback and benchmarking in their work with practices. In addition, facilitators often arrange for one or two sessions with an expert consultant when a practice is at the point of needing deep knowledge in a specific area (for example, implementing and using the data from a patient experience survey). Similarly, a learning collaborative might devote one of its meetings to a didactic learning session conducted by an academic detailer or use benchmarking as a joint learning activity.

Role of Practice Culture in Developing QI Capacity

These four external approaches can support practices in both conducting individual QI projects and developing deeper QI capacity. But for practices to transform fully into learning organizations with well-developed QI capacity, most will require a substantial shift in existing culture and structure.

A practice culture that promotes change involves hands-on, continuous work to assess areas for improvement and to undertake new and varied initiatives to improve outcomes. Often, a practice must first engage in opportunities that produce "small wins" that build confidence and promote positive reinforcement for QI work. As a practice increases its belief in capacity for change, promoting a culture of practice change will follow.

While all of the QI approaches described above can help a practice pursue improvement activities, only practice facilitation and, in some cases, learning collaboratives—which are typically intensive and ongoing—are likely to go deep enough to promote culture change within a practice. Data feedback and benchmarking and academic detailing/consultation are not enough on their own to build improvement capacity.

Existing Efforts To Support QI in Primary Care

All four types of QI external supports described here are being selectively deployed to promote practice improvement. In many locales across the country, area health education centers (AHECs), health IT regional extension centers (RECs), quality improvement organizations (QIOs), and practice-based research networks (PBRNs), among others, provide at least some of these supports to primary care practices. These supports are financed by Federal grants and contracts, State programs, multipayer initiatives, and foundations.

Detailed case studies of four exemplar programs that offer practice improvement supports have been developed by AHRQ. The case studies, with an overview and summary of lessons learned, are available at www.pcmh.ahrq.gov/portal/server.pt/community/pcmh__home/1483/pcmh_implementing_the_pcmh__practice_facilitation_updates_v2. The programs described there focus on the provision of practice facilitation services but use all four types of QI supports and approaches detailed here. Currently these supports reach only a small proportion of primary care practices and are limited in scope. Any effort to provide these supports to practices in a broader and more comprehensive way can build on these existing actors but will require considerable external infrastructure.

Conclusions

Primary care practices of all types and sizes require external supports in developing QI capacity. But small and medium independent practices may require the most help; in fact, development of QI capacity is unlikely to happen in these practices without outside support. Successful and diverse approaches to infuse QI in primary care already exist, including data feedback/benchmarking, practice facilitation/coaching, academic detailing, and shared learning. Combining these approaches may help strengthen their effects. An organized, concerted approach to providing these supports to primary care practices in a regular and systematic way is critical to making a QI orientation integral to primary care across the country.

AHRQ defines the PCMH as a model of care that focuses on providing patient-centered, comprehensive, coordinated, and accessible care, with a systematic focus on quality and safety. While building QI capacity most closely fits under the component of a systematic focus on quality and safety, there is a mutually supportive relationship between this QI function and the other components of the PCMH. For example, team-based care is integral to providing coordinated and comprehensive care but it also supports a practice's ability to conduct QI work because staff are reorganized to allow adequate time to engage in such work outside of regular clinical duties. In this way, resources that develop QI capacity also support other aspects of primary care improvement aligned with the PCMH model of care delivery.

Much work lies ahead in funding and developing an infrastructure to provide such QI supports to practices. However, systematic, organized, ongoing support of this nature holds considerable potential for helping redesign primary care in the United States and ensuring the provision of high-quality primary care to all Americans.

Resources

Academic Detailing/Expert Consultation

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