Governor John R. Kasich  
Riffe Center, 30th Floor  
77 South High Street  
Columbus, OH 43215-6117  

Dear Governor Kasich:

In the 129th General Assembly, H.B. 198 was passed to establish the Ohio Patient Centered Medical Home (PCMH) Education Pilot Project. H.B. 487 further defined and changed the oversight of the project. The Ohio Department of Health (ODH) is pleased to provide you with an update regarding the Patient-Centered Medical Home (PCMH) Education Pilot Project, established under H.B. 198. The three components of this project were practice transformation, PCMH curriculum reform, and primary care scholarships.

The practice transformation component of the PCMH Education Pilot Project has concluded, with 42 primary care practices in Ohio participating in the transformation process and completing the project. The number of PCMHs in Ohio has grown to over 500 sites and the pilot has served as a catalyst for change, especially in the east central, northwest, southeast, and west central regions of the state, in which there was not already significant PCMH activity.

The pilot sites accomplished much during the two-year project and continue to transform their practices. As of February 20, 2015, nineteen of the pilot sites have achieved PCMH recognition through the National Committee for Quality Assurance (NCQA), Accreditation Association for Ambulatory Healthcare, Inc. (AAAHC), and Joint Commission. Additionally, six more sites have submitted applications and are awaiting decisions and numerous additional sites are in the process of preparing applications to submit to NCQA for recognition. Several sites have served as a catalyst for change within their health systems, which will result in an additional estimated 43 sites becoming recognized PCMHs. For example, two practices in the Adena Health System were pilot sites, but now nine Adena primary care practices have become recognized PCMHs.

The number of sites achieving recognition, alone, is not accurately reflective of the many accomplishments of participating practices. The attached report from TransforMED highlights many dimensions of the progress made by project participants. For example, 90 percent of practices increased availability of same-day appointments and 97 percent of practices began a risk stratification process, in order to better provide appropriate levels of care management for patients. The progress of sites was remarkable, given that practices received no resources, beyond the transformation assistance contracted through TransforMED, and received no enhanced payments. Pilot sites participated in three learning collaborative meetings throughout the project and shared valuable information and lessons learned on many PCMH transformation topics, including risk stratification methods, using data to guide improvement, including medical and nursing students in the transformation process, and initiating patient and family advisory councils. Much positive feedback was
received from pilot sites regarding the value of the learning collaborative meetings and some interest was expressed in continuing these meetings beyond the end of the project period.

Some challenges were encountered during the project, which can provide valuable information for potential future projects. Not surprisingly, various levels of commitment and competency were experienced amongst participating sites. This prompted TransForMED to better tailor coaching strategies for practices during the second half of the project. Some pilot sites did drop out of the project, for various reasons, despite efforts from ODH and TransForMED to retain sites. When the project began, performance metrics were selected for pilot site reporting: three prevention measures, three chronic disease measures, and one patient experience measure. Practices were encouraged to prepare for metrics data reporting during the first year of the project and then asked to provide four quarterly data submissions during the second year of the project. Submission of quarterly metrics data proved to be difficult for many sites, primarily due to challenges with generating needed reports from electronic medical record (EMR) systems and lack of adequate staffing to manually compile data from patient records. The challenges encountered in this project should enable better planning for future projects, although problems with retention of sites and extracting data from EMRs will likely arise in any PCMH project. Staffing challenges experienced by sites, especially in the absence of enhanced payments or payment reform efforts, should be expected in PCMH transformation projects.

Work continues in regards to the primary care scholarship and curriculum reform components of the project. The Ohio Board of Regents continues to administer the primary care scholarships for medical and graduate nursing students through the Choose Ohio First Scholarship program. The Board of Regents worked with scholarship committees at the campuses to award scholarships to 50 medical students and 30 graduate nursing students who have agreed to serve in primary care in Ohio for at least three years. The Ohio Department of Health and members of the PCMH Education Advisory Group (EAG) led curriculum reform efforts. EAG members designed an interprofessional PCMH curriculum for campuses and curriculum reform was encouraged through matching dollars for curriculum implementation from the Board of Regents. Members of the EAG provided a poster presentation of the PCMH curriculum efforts at the Society of Teachers of Family Medicine national annual conference in San Antonio on May 4-6, 2014. Meetings to discuss progress of curriculum implementation were held on July 11, 2013 for medical schools and October 10, 2013 for graduate nursing programs. An interprofessional curriculum event was on June 4, 2014, with 80 participants including physicians, nurses, physician assistants, social workers, pharmacists, psychologists, physical therapists, audiologists, dieticians, sports medicine, radiologic technologists, occupational therapists, special education professional, public health, and practice coaches.

The EAG met and advised ODH regarding various aspects of the pilot project throughout the project period and last met on October 29, 2014. The EAG plans to continue to meet to work on furthering the curriculum and scholarship aspects of the project.

H.B. 487 required that a report be submitted to the General Assembly at the conclusion of the project. Please see attached for the final report on the project, which was prepared by TransForMED. The report details the progress of transitioning the pilot practices to the PCMH model of care. Additionally, we expect to soon receive a report from Jennifer Lehman, a graduate student at The Ohio State University, who served as an independent evaluator for the project, as part of her coursework. Ms. Lehman’s report will include an analysis of data associated with the project (e.g., metrics data, practice survey data). We will make this report available on our website, but could also provide a hard copy once it is available.
Thank you for your support of the PCMH Education Pilot Project. Please contact me at 466-2253 with any questions regarding the report or the pilot project.

Sincerely,

[Signature]
Richard Hodges
Director of Health

cc: Greg Moody, Director
    Governor's Office of Health Transformation
Ohio HB 198
Patient-Centered Medical Home Education Pilot Project
Capstone Brief for the Ohio Department of Health

Authors:

Caroline Carter, Ohio Practice Enhancement Facilitator
Deborah Prochnow, Project Manager
Amanda Ceicior, Quality Improvement Advisor
Alexander Ramsey, Quality Improvement Advisor
Gerald “Jay” Fetter, Project Sponsor

Contents

Executive Summary ...................................................................................................................................... 3
Background and Objectives .......................................................................................................................... 4
Methods......................................................................................................................................................... 4
Analysis......................................................................................................................................................... 6
Discussion................................................................................................................................................... 16
Executive Summary

BACKGROUND AND OBJECTIVES: The Patient Centered Medical Home (PCMH) Education Pilot Project was created by statute to transform 44 Ohio physician and APN led primary care practice sites where medical students, residents and nurses can experience transdisciplinary interactions in high performing primary care practice, enhance the quality and experience of care for citizens of Ohio, and learn about the enabling supports necessary to expand advanced models of primary care to all regions of Ohio.1 To oversee the effort the state formed the Education Advisory Group, led by Dr. Pat Ecklar, M.D., as chair and Jeri Milstead, Ph.D., R.N. and Rick Snow, D.O. M.P.H as vice-cochairs. The Ohio Department of Health provided staff leadership that was operationally spearheaded by Heather Reed, Amy Bashforth and Ted Wymyslo, M.D.

METHODS: In June 2012, TransforMED, LLC, an affiliate of the American Academy of Family Physicians (AAFP) dedicated to supporting primary care practice transformation, was selected to provide focused learning and diffusion support to 51 carefully selected primary care practices with educational affiliations to rural and urban health professions/medical schools in Ohio.

TransforMED began in-practice coaching in June of 2012 with an assessment of 51 practices, employing 385 physicians/nurse practitioners and physician assistants. Using an androgogical, mixed method approach of collaborative learning sessions, webinars, and in-practice, virtual, and just-in-time practice coaching, TransforMED practice enhancement facilitators provided curriculum and tailored coaching support addressing fundamental tenants of contemporary primary care. (i.e. PCMH and the five comprehensive primary care functions). This change package included tools and information to optimize access and continuity, planned care for chronic conditions and preventive care, risk stratified care management, patient and caregiver engagement, coordination of care, continuous improvement driven by data, culture of improvement, adoption and continuous improvement of health information technology. Supplementing these tenants were curriculum and support for PCMH recognition, organizational development, maintaining resiliency in times of change, developing a transprofessional learning environment in practice. TransforMED concluded in practice coaching in July 2014.

RESULTS: Forty-two (42) of the fifty (51) or eighty-two percent (82%) of the participating practices engaged in practice transformation until the pilot end date of June 30, 2014. Practices that left the program cited change fatigue, lack of financial incentive, low value to investment, participation in alternative PCMH initiatives, low functioning health information technology and changes in leadership priorities as primary reasons. As of this writing, sixteen (16) practices, representing thirty-one percent (31%) of practices had submitted and received PCMH recognition and two had submitted and were awaiting decisions. Application assistance continued through September 2014 for the balance of the participating practices. At the conclusion of the pilot ninety percent (90%) of practices reported to TransforMED practice enhancement facilitators that they are engaged in concurrent efforts to build and refine competencies for population health, perform care coordination of vulnerable patients, utilize internally derived registry data to guide care of high risk patients, perform quality improvement, and engage patients. People in these practices have largely embraced a contemporary, twenty-first century attitude for delivering primary care2 including that care is based on continuous healing relationships, care

---

is customized according to patient needs and values, the patient is the source of control, decision making
is shared and is evidence-based, needs are anticipated, and cooperating among clinicians is a priority.

CONCLUSIONS AND POLICY CONSIDERATIONS: Physician and advanced practice nurse led
practices in Ohio have a demonstrated commitment, even when incentives are not aligned, to adopt
advanced primary care approaches to support better health, lower per capita costs and improved
experience of care. In spite of intimidating barriers such as, low functioning health information technology
(HIT) and misaligned payment models, people in these 51 practices welcome practical, functional
resources and coaching to help them build and test approaches that create expanded hours, delivering
patient services outside of office visits and quality improvement (QI) skill building of the practice staff.

In spite of learning and diffusion support, practice capacity to do transprofessional, team based learning
with medical and APN students remains immature. The bolus of effort necessary to engage in practice
transformation may inhibit desire to expose medical students and APN students to a practice “under
construction.” Practices that are more closely embedded/aligned to the medical/nursing school have
partnered with students to adopt new competencies such as shared decision making and patient and
family advisory councils. Students in these experiences also have reported, during Ohio House Bill198
learning sessions, the ability to compare and contrast practices with/without PCMH competencies,
contextualize opportunities for quality improvement and practice transformation, and feel more confident
in collaborating with their preceptors.

Background and Objectives

Medical, nursing and public health leaders in Ohio have long agitated for a new vision of creating high
functioning primary care learning laboratories, at community-based practice sites across Ohio, to serve
and support the needs of Ohio citizens and the primary care workforce. The House Bill (HB) 198 PCMH
Education Pilot Project was established as a blueprinting pilot to provoke and test the notions envisioned
by a motivated group of public and private stakeholders. A key to initiating and supporting the vision of
the initiative was to provide learning and diffusion assistance to the practices and to build an active
learning community that includes physicians, advanced practice nurses, care management nurses, allied
health professionals, practice administrators, students, policy makers, quality improvement advisors,
health informatics specialists and professional societies. In June 2012, TransforMED, LLC, an affiliate of
the American Academy of Family Physicians dedicated to supporting primary care practice
transformation, was selected to provide focused learning and diffusion support to 51 carefully selected
primary care practices with educational affiliations to rural and urban health professions/medical schools
in Ohio. Key measures included: practice participation in the learning community, the collection of quality
and performance metrics, progress toward applying and achieving PCMH recognition, and inviting
students to participate in precepted learning.

Methods

The HB 198 technical assistance contract stipulated that learning and diffusion support include at a
minimum the following: initial gap assessment, intermediate assessment, development of a
comprehensive transformation plan, dedicated advisors to provide guidance and feedback to all 51
practice sites and assistance in applying for PCMH recognition.

Initial practice assessments measured each practice’s level of planning/implementation in key domains of
advanced primary care including: risk stratification and care management, extended and non-visit access,
ability to use utilization, population and practice based data to guide improvement, support transitions of care, shared decision making, staff satisfaction and resiliency. Practice assessment started in June 2012 to identify variation amongst the practices as well as priorities to inform the initial curriculum and coaching opportunities. Practice assessment included a web-based instrument completed by the practice team followed by onsite and telephonic individual practice interviews by a TransforMED practice enhancement facilitator. Common practice strengths identified by the initial assessment included: use of the practice management system and medication management. Areas identified for focused attention included: extended and non-visit based access, ability to collect performance metrics, use of electronic registry, reducing waste and variability in care processes. Adoption was impacted by other challenges identified in the assessment phase including: limited financial incentives to provide capital for adoption, the primarily fee for service reimbursement model in rural Ohio, some practices not using an electronic health record, and limited subscription to utilization reports from community payers and/or hospitals.

A kickoff event was held in all four regions of Ohio in September 2012. Following the event, practices received practice transformation plans to enable structured learning. Monthly, web-based group calls were conducted from December 2012 through June, 2014 and served to teach new PCMH concepts and reinforce organizational development principles of teamwork, leadership and communication. Also, during the first year, each practice received two (2) visits from a Leawood, KS based TransforMED practice enhancement facilitator and monthly coaching calls. The first learning collaborative meeting was held on April 13, 2013 with faculty addressing the principles and vernacular for emerging payment models, PCMH recognition, patient and family engagement, care coordination, risk stratified care management and patient centered access. The second learning collaborative meeting was held for all 51 practices on September 7, 2013, and focused on deeper understanding and adoption of risk stratified care management, coordinating patients in care transitions, using evidence based guidelines and data to guide improvement. It also included a deep dive into PCMH recognition process and project management principles for preparing to apply for recognition. Between learning sessions, practices were invited to engage in self-directed and guided learning to catalyze the concepts into actionable activities in the practice. Using the TransforMED Delta Exchange web learning/social media platform practices were asked to record their efforts, successes, challenges as well as seek just-in-time support from TransforMED practice coaches and collaborate with other HB 198 practices.

At the conclusion of year one, TransforMED reassessed the HB 198 practices using a framework that measured adoption maturity and level of commitment as well as progress toward engaging in PCMH recognition. Thirty five (35) 69% of the practices measured at a low level of competency for key elements of PCMH adoption such as risk stratified care management while 14 (27%) had already applied and received PCMH recognition from a recognizing organization such as the National Committee for Quality Assurance (NCQA). Twenty-four (47%) practices had started the PCMH recognition process.

As practices differentiated in their pace, maturity and competencies for the work, TransforMED shifted the intensity, focus and style of its learning and diffusion support. TransforMED embedded and dedicated one practice coach based in Cleveland, Ohio and supplemented her with a Director and Senior Project Manager in Kansas City. This enhanced continuity and supported deeper engagement. Intensive in–practice coaching was assigned for practices with low levels of competency, “required consumption” of group webinars was eliminated in favor of learning community selected topics and “office hours” with faculty. The faculty also replaced didactic learning with collaborative dialogue utilizing a modified World Café approach for in person events. The third learning collaborative meeting was held on April 26, 2014. This learning day was driven by the practices sharing details how they have adopted and tailored risk stratified care management, care coordination, patient experience, patient self-management support and enhancing student’s PCMH experience in their unique practice settings. Concurrently, an all day peer to
peer workshop, supported by local and national subject matter experts, was held for practices needing assistance with the NCQA application.

Analysis

At the conclusion of the initiative, TransforMED practice enhancement facilitators, from their line of sight into the practices, observed and recorded the progress of the practices in their journey of adopting components of PCMH and advanced models of primary care. The following are observations noted July 2014.

Of the practices remaining in the HB 198 project:

- 90% of practices have increased their same day appointments - matching supply with demand.
- Nearly 50% of the practices provided additional access by lengthening their operational hours – either opening earlier or closing later and/or by adding hours on an additional day (usually adding Saturday morning hours.)
- Slightly over 80% of practices have agreements within their medical neighborhood to provide health care for patients outside of the practices’ hours of operation. Some of these agreements incurred a financial cost to the practice i.e. subscribing to an answering service.
- In 90% of the practices providers have 24/7 access to the electronic health record.

<table>
<thead>
<tr>
<th>The practice has optimized access by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Increasing same day appointments (matching supply with demand)</td>
</tr>
<tr>
<td>B. Expanding hours/days</td>
</tr>
<tr>
<td>C. After hours access</td>
</tr>
<tr>
<td>D. Provider has 24/7 access to the clinical record</td>
</tr>
</tbody>
</table>

Risk stratification of patients was a new concept to the vast majority of the practices participating in HB 198 project. At the conclusion of the project, all but one practice has at least begun the process of risk stratification, with:

- 97% of the HB198 participating practices are engaged in risk stratification process.
- 60% have fully implemented risk stratification.
  - They have an established criterion and have successfully implemented a process.
  - Some practices implemented the six tier AAFP risk stratification methodology as designed.
  - The remaining practices adapted the AAFP risk stratification methodology to a 4 tier stratus to better meet the needs and resource capacity of the practice.
• 27% of the practices are currently in risk stratification implementation stage.
  o They have identified a methodology and a process and are testing its utility.
• 10% of the practices are currently in planning stages.
  o They are working on identifying their risk stratification method, the risk level criteria and how to implement utilizing the electronic health record (EHR) and considering workflow implications.
• 2% of practices (1) have not yet started the risk stratification process.

Ideally all empanelled patients would be allocated a risk score and provided with the appropriate level of care management support. Practices are working towards this goal. However, risk stratification was a new concept to many of the HB 198 practices. Their unique approaches were reflective of resource capacity and EHR functionality and user competence. Practices selected high-risk criteria from a profile of resource use and risk in the practice population. Some practices chose to risk stratify all patients simultaneously. Others took a stepwise approach and began assigning a risk stratification score to the patients with complex or high-risk medical conditions first. The most oft cited challenges to implementing risk stratification have been EHR related (functionality and user capability) and building the risk stratification process into the workflow. Many practices struggled with learning how to apply a risk stratus in the EHR, particularly with regards to making the risk stratus visible to all care team members, including the front office staff. Practices designed their processes differently. Some practices designed their process to allow all care team members the flexibility of assigning and adjusting the risk stratus. Others only allowed allocation and adjustments to be made by the physician or advanced practice nurse.

Delivering high quality, cost effective care to patients is a critical component of PCMH.
• 43% of practices provide proactive care management to all their patients.
  o This would include pre-visit planning, daily huddles, reminder systems, panel support tools to identify services due etc.
• 46% provide additional targeted proactive care management to their high-risk patients including:
  o Outreach services
  o Referrals to the medical neighborhood, i.e., educational group visits
  o Developing self-management goals with patients
8% provide proactive care management to their high and medium risk patients.
10% have not started to provide proactive care management.

(Totals more than 100% because practices may perform mixed methods of risk stratification)

A concern to the practices was how they would manage their patients with complex or high-risk medical conditions in the absence of additional resources, i.e., an assigned/dedicated care manager. For many practices, care management support was provided as an add-on to existing positions, i.e. the services expanded but staffing levels did not. Other practices entered into agreements with payers (primarily Anthem and Care Source) to provide dedicated care managers or financial incentives such as per member/per month payment agreements. A relatively persistent barrier to providing proactive care management was when it was done inconsistently across the practice. This occurred in multiple practices and was evidenced by provider preference dictating process. Providers selected unique sub-populations and unique workflow processes for care management services.

A relatively persistent barrier to providing proactive care management was when it was done inconsistently across the practice. This occurred in multiple practices and was evidenced by provider preference dictating process. Providers selected unique sub-populations and unique workflow processes for care management services.
Care Management is provided according to practice resource capacity. For some practices care management activities were incorporated into practice operations without added resources. For others incorporating care management into daily operations came at a financial cost to the practice, i.e., hiring a care manager. Some practices were able to secure funding or other resources from a variety of avenues. Naturally, resource allocation impacted the variation of services provided and the volume of patients able to access care management. Other impacting entities included:

I. The EHR (functionality, user dilemmas, and lack of interoperability etc.)
II. The level of practice member buy-in (recognizing the need and the value for certain care management activities) and
III. The level of demonstrated leadership support.

Most practices recognized the value of laboratory tests and referral tracking with the vast majority of practices utilizing the EHR to track laboratory results and referrals. However, tracking to conclusion (practice receives and documents results in the patients chart) was not routinely deployed. This dramatically improved across the HB 198 community throughout the project.

Pre-visit planning remains in different stages of maturity across the HB 198 community. Some early stage practices utilize pre-visit planning to anticipate, and prepare for the needs of the patients scheduled that day. Practices that have reached a more mature stage of pre-visit planning proactively address missing laboratory results or incomplete referrals etc. days or weeks prior to the patients scheduled appointment. Typically these practices have higher resource capacity. Practices that engage in effective pre-visit planning report increased provider and care team collaboration and resiliency.

There is variation across the HB 198 community in the status of attending to transitions of care. As expected, practices affiliated with a health system with shared EHR have robust communication protocols for emergency department (ED) visits and hospital admission and discharges. The follow-up process is efficient and effective (scheduling follow up appointments after discharge). Some practices have established communication agreements with local hospitals. Other practices are in the process of developing written agreements. A few practices still rely on the patient to inform the practice of emergency department (ED) visits or hospital admissions. Lack of EHR interoperability and the lack of professional relationships across the medical neighborhood are impediments to this work.
• 35% of practices have secured a dedicated care manager (often referred to by Ohio practices as a nurse navigator or care coordinator.)
  o Practices secured care managers through a variety of sources – funded by the practice or health system, grants, payers either providing a per member/per month (PM/PM) payment or embedding a care manager in the practice.
• 50% of practices deliver team-based care management.
  o Care management is being provided utilizing existing employees. Care management services are shared across the care team members.
• 52% of practices provide proactive outreach to patients.
• 97% of practices do pre-visit planning.
  o Pre-visit planning consists of reviewing the patient schedule and preparing accordingly. However, some practices have expanded the scope and do pre-visit planning a week out and involves calling the patient to close information gaps.
• 70% of practices now provide care plans to patients.
• EHR generated, plans of care that includes patient self management goals, is often immature in even the most current EHRs. Practices often struggle to manipulate EHR generated after visit summary formats to fit the usability and health literacy needs of their patients.
• 17% of practices provide non-visit based care management. While the most frequent method being utilized is telephonic outreach. Some practices conduct home visits for high risk patients.

Thirty-three (33) practices engaged in PCMH transformation without any additional resources, tangible or intangible. PCMH transformation incurred a financial cost to most practices. One practice funded a care manager; another funded a temporary employee only while the regular staff member wrote the NCQA application; and for most practices the time spent on pulling metrics; dedicated PCMH meeting time; attending group calls and learning sessions all equated to increased costs.

Twenty-two (22) practices secured resources to support the transformation. Some of these sources were:
  I. Payer incentives such as PM/PM payments
  II. Embedding a care manager within the practice and providing data reports
III. Grants
IV. Funds from participating the Centers for Medicare and Medicaid Comprehensive Primary Care (CPC) Initiative
V. Medicare accountable care organization (ACO) Advanced Payment Model

The practice can use data to guide improvement using the following (check all that apply)

- A. Can run meaningful clinical quality measures from the EHR - Yes
- B. Can run meaningful clinical quality measures from the EHR - No
- C. Uses external data from payers, hospitals, patients, community to inform improvement strategies
- D. Has demonstrated at least one test of change focused on gaps in care

HB 198 practices have a range of support for running quality and other type of clinical and operational metric reports. Some practices have an external IT department within the health system; others have an on-site ‘EHR superuser’ able to run reports, while the remaining practices rely on the practice manager or other designated staff member to run the reports. While 85% of practices were able to run meaningful clinical quality reports from the EHR it was not without challenges. Challenges or frustrations experienced were attributed to a number of factors including:

I. Inadequate resources – namely time and personnel. This was the most commonly cited frustration.
II. Parameters inconsistent from routinely accessed metrics
III. Competing priorities – not aligned with the system priorities
IV. Changes in EHR
V. Mistrust of the data

Six (6) practices were unable to run meaningful clinical data from their EHR. Data had to be pulled manually adding an inordinate burden of time and money.

Twenty-four (24) practices use the data provided by external resources, primarily payers, to guide their improvement focus. Much of this data focused on acute care utilization (ED and hospital admissions.)

At least thirty (30) practices use the data to address gaps in care. The most frequent change methodology utilized is the Plan, Do, Study, Act cycle. Many of these practices do continual improvement cycles. The practices are at varied levels of competency. Sophisticated practices conduct continuous improvements and are able to demonstrate effectiveness through run charts. They have established processes for sharing actionable data and progress. Other practices have less sophisticated ways of illustrating progress, yet they have found ways to make progress visual to practice team members. Practice improvement initiatives were often “system defined” initiatives so did not always align with HB 198 metrics.
Wright State Physicians Family Medicine shared how they provide students with the opportunity to complete an improvement project as part of their learning. This was a novel idea to many practices and garnered a high level of interest. Many practices are working on replicating this process.

Thirty nine (39) of the forty two (42) practices conduct patient experience surveys. A few additional practices still intend to incorporate this into their workflow. Thirty-six (36) practices use their patient survey results to guide improvement initiatives. The most frequent issues routinely identified are access and wait time.

Eight (8) practices currently have Patient Advisory Councils. There has been an increased level of expressed interest in developing Patient Advisory Councils particularly by practices that attended a session dedicated to this topic at the April 2014 HB 198 learning session.
The most significant barrier to providing metrics for the HB 198 project was resource constraints. Time was the biggest barrier most commonly cited. This was often work added on to the usual workload with dedicated time not often available.

Competing priorities was another frequent concern. Practices that are a part of a larger health system frequently struggled, particularly when the practice relied on system staff (external to practice but internal to the system) to run reports. There were also times when the health system initiated improvement foci which didn’t match the HB 198 selected metrics, which aligned with CPC Ohio Clinical Quality Measures. This resulted in limited resources being made available for improvements focused on the HB 198 metrics.

In some instances the practice EHR has the capability but the specific functions haven’t been activated. Activating the new functions requires financial and planning resources that can be beyond the financial means of the practice. The practices’ competencies for registry and reporting functionality of the EHR was a material barrier that inhibit the concept of using population based quality data to guide systematic improvement. These and other dilemmas stymied many practices from reporting on clinical quality and utilization metrics.

### Recognition Activity

<table>
<thead>
<tr>
<th>Recognition Activity</th>
<th>Number of Practices</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCQA Level 3</td>
<td>8</td>
<td>19%</td>
</tr>
<tr>
<td>NCQA Level 2</td>
<td>6</td>
<td>14%</td>
</tr>
<tr>
<td>Other: Joint Commission or AAAHC</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Submitted for NCQA Recognition</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>On target to submit for recognition by end of 2014</td>
<td>16</td>
<td>38%</td>
</tr>
<tr>
<td>Not on target to submit for recognition</td>
<td>8</td>
<td>19%</td>
</tr>
</tbody>
</table>
One of the commitments of participating practices was to become PCMH Recognized, increasing the number of PCMH's in Ohio by 51. This potential was reduced to 42 due to attrition. However, seven (7) HB 198 participating practices have expanded the scope and are submitting corporate applications to include additional practices beyond the HB 198 participating practice. The estimated number of additional practices is forty-three (43).

There are two distinct components to becoming a PCMH. One is to operationalize PCMH competencies i.e., implement efficient and effective workflow processes that include documentation and tracking. The second element is to complete the written PCMH recognition application. Each of these elements created its own set of challenges. Operationalizing challenges were focused around resource capacity, knowledge base, buy-in, and adequate leadership support. The written application challenges were focused around lack of project management skills, limited resource capacity (described as a second job), knowledge base, and lack of clinic influence and/or power from the person allocated to the documentation.

The practices that appeared to minimize the frustration levels were the ones that took a team approach to each component. They also dedicated time socializing PCMH with team members and other stakeholders, describing the big picture, and engaging everyone in the process. Time and cost once again presented as a major challenge. One solo physician practice, made the financial investment of hiring a PRN while the staff member dedicated a week to writing the application.

<table>
<thead>
<tr>
<th>Please indicate whether your practice experienced the following barriers to PCMH implementation. (Select all that apply.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative past experiences</td>
</tr>
<tr>
<td>Unprepared practice leaders</td>
</tr>
<tr>
<td>Resistance to change &amp; unproductive team</td>
</tr>
<tr>
<td>Lack of knowledge &amp; implementation of electronic</td>
</tr>
<tr>
<td>Staffing rules &amp; differing</td>
</tr>
<tr>
<td>Lack of staff participation</td>
</tr>
<tr>
<td>Poor communication</td>
</tr>
<tr>
<td>Lack of time</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>
All students are exposed to PCMH by virtue of being a student in the practice transforming to PCMH. However, the students experience is dependent upon the practice. All students are oriented to the concept of PCMH. For some practices this includes providing the student with the PCMH literature available to patients and observing PCMH activities that the practice is engaged in, others additionally provide the students with an online link to an interactive PCMH module.
Over half the practices engage students in Quality Improvement. For some students this entails being on a quality improvement team; for others it means leading a team based QI initiative including reporting the process and results to the practice at the end of their six week rotation. Engaging students in QI was an unexplored idea to some practices. Many have expressed interest in incorporating this into their respective practices. Other practices include students in PCMH by assigning them to a care team; they are expected to participate in huddles, attend PCMH meetings and operate under the PCMH model of care.

**Discussion**

The Patient Centered Medical Home (PCMH) Education Pilot Project showcases how a diverse assembly of Ohio practices engaged in facilitated, collaborative learning can create the seeds that support primary care and educational innovation. We identified specific organizational competencies, which are known to correlate to decreased cost, increased patient experience and better care; and the practices’ corresponding rates of adoption. Our efforts and transformation approach affirms the notion that one change strategy is not as favorable to achievement as a concurrent, multifaceted strategy that accounts for the context in which the practice operates. 3

The learning and diffusion approach adapted often to better take advantage of strengths of the Ohio learning community. In year two, practices were afforded more opportunity to engage as adult learners with shared wisdom. Our approach sought to empower people in the practices by leveraging individual practice champions, particularly those that demonstrated a commitment to reduce unnecessary care, support patients as partners in care and be attentive to the health outcomes of their patients. Our efforts demonstrated that learning and diffusion support is most effective when using multiple strategies that take account of multiple characteristics of the practice organization and external environment, particularly when the goals are intimidating. Many practices were motivated to achieve some form of recognition for their efforts. Only time will tell whether medical home recognition will buoy practice gains during times practice crisis such as staff changes, high patient volume, and EHR upgrade.

A few Ohio H.B.198 practices showed particular ingenuity in engaging student learners in the process of practice transformation. Those that did seemed to have some of the strongest cultures with a commitment to making the change to a medical home. Those that did not engage in any substantial attempts to precept students were stymied by a distant and often rudimentary relationship with an affiliated academic program and/or a low satisfaction among clinician and staff during the process of change.

A new phase of work could emerge from this initiative that might focus on faculty development for preceptors and their clinical team members. There seems to be reciprocal interest among school faculty, and preceptors in designing experiences, beyond exposure, in these new patient centered medical home that reflect new care models such as using HIT to support non-visit based care, proactive clinical health coaching and population health management.

---