

REPORT

FINAL REPORT

Team-based Care Initiative Baseline Evaluation Report

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EXECUTIVE SUMMARY

The Colorado Health Foundation (the Foundation) established a three-and-a-half year funding opportunity, the Team-based Care Initiative (TBCI), to support participating practices in optimizing their existing care teams to deliver high quality, coordinated care. In the planning phase, launched in February 2015, 30 practices received technical assistance to develop work plans and budgets for expanding team-based care (TBC). External coaches provided technical assistance and conducted assessments to support the practices and track progress. In the implementation phase, launched in June 2015, 20 of the 30 practices received funding to implement TBC. Technical assistance providers are delivering support to them through coaching, education, personal consultations, and learning forums.

Mathematica is evaluating participating practices on their progress incorporating the five principles of TBC: shared goals, clear roles, effective communication, mutual trust, and measurable processes and outcomes (Mitchell et al. 2012). These five principles align with the five domains of the TBC success rubric: patient engagement, patient experience, team member experience, practice change, and sustainability. The success rubric and TBC principles informed our evaluation design and research questions, which structure this report.

This is the first of three annual reports that focus on how practice teams plan for and change the ways they deliver care, the barriers and facilitators to change, how technical assistance supports change, and how changes are affecting clinician, staff, and patient satisfaction. This report focuses on practices' initial experiences during the implementation phase of TBCI, including their plans for change. Our analyses rely on data from the baseline survey of clinicians and staff (August 2015), baseline telephone interviews with practice leaders (November and December 2015), baseline and follow-up primary care team guide assessment (PCTGA; May 2015 and February 2016), and the baseline patient survey (May and June 2016). We thank the members of the participating practices, the Technical Assistance Provider team, the practice coaches, and Foundation staff for their contributions to this report.

A. Key findings

Our first-year findings show practices' limited progress toward achieving goals for TBC. We find that early practice efforts have focused on designing and implementing new workflows and work processes to support their TBC goals. Across the areas detailed below, we found that the financial, coaching, and learning forum supports offered to the practices through their participation in the initiative along with prior success with implementing limited team-based care in these practices facilitated efforts to make sustainable change. However, concerns about the financial sustainability of practice improvements due to changes in the local policy environment and concerns about overloading existing staff represent important potential barriers to the long-term success of the initiative.

1. How are practice teams engaging patients in care?

- The majority of patients completing the baseline survey reported that practice staff see the patient as being in charge of his or her health, and stated that doctors and nurses usually or always provide easily understandable explanations.

- Findings from baseline telephone interviews with practice leaders indicated that practice teams are working on involving patients in care through self-management support, shared decision making, patient education, and technological approaches, such as text messaging and patient portals. Findings from the PCTGA show modest improvement across the practices in this area from 2015 to 2016.
 - Practice leaders also reported that patient advisory boards are a common strategy for engaging patients. However, only a handful of practices—mostly those with previously established patient advisory boards—have engaged patients to provide feedback on TBC.
- 2. What are patients’ experiences with the changes taking place in the practices and with care delivery in the practices?**
- Patients completing the baseline survey reported high satisfaction with overall care, access, communication, and care coordination. Patients in poorer physical and mental health, Hispanics, and those who read and write in Spanish often had lower satisfaction. Most of these patients reported that the care they received at the practice was either the same (47 percent) or better (38 percent) over the past 12 months (one year into the implementation).
 - PCTGA responses in 2016 showed that in 11 of 19 (58 percent) practices, patients can easily contact practice teams during business hours, 16 of 19 (84 percent) practice teams reported systematically communicating test results and care plans to patients, and 15 of 19 (79 percent) reported actively linking patients to community resources. These responses were unchanged from the 2015 PCTGA.
 - Practice leaders reported their expectations that patients will notice and respond positively to TBC changes, such as increased ease of scheduling appointments, improved flow through the practice, warmer handoffs, and seeing the same team at every visit.
- 3. What effect is TBC implementation having on practice staff and their perceptions of care?**
- Clinician and staff survey respondents reported moderate levels of agreement that their practices promote sharing knowledge, have supportive leadership, show internal capability for organizational learning, engage staff, and encourage teamwork.
 - Most of these respondents (87 percent) reported being very satisfied or satisfied with their jobs. Average levels of burnout were low in six practices and moderate in 11. Rural practices and FQHCs had higher levels of burnout.
- 4. What change management approaches are practices using to ensure sustainable change?**
- Most practice leaders we interviewed reported communicating with either all staff members or a smaller core team about TBC work via in-person meetings.
 - About half of these leaders reported that most staff were receptive to TBC and ready to implement changes. Other practice leaders described significant challenges with getting staff to understand the need for change and to embrace TBC.

- Most of the practice leaders we interviewed reported plans to make optimal use of the training and expertise of all members of the staff by shifting specific responsibilities from clinicians to front desk staff and medical assistants (MAs) and assigning staff to work in stable teams.
- Practice leaders typically reported strong support from executive leadership.
- Most of the practice leaders we interviewed reported that their practices were in the early phases of quality improvement (QI) work, although a few reported more well- developed QI capacities. PCTGA results showed modest early improvement in this area.
- Practice leaders in half of the practices report that they were still laying the groundwork for empanelment. PCTGA results indicated no progress from 2015 to 2016 on this measure, with eight of 19 practices (42 percent) reporting that patients are assigned to panels used for scheduling at follow-up.
- A few practice leaders reported concerns about the long-term financial viability of the TBC model and are in the early stages of developing sustainability plans.

5. How has coaching and other technical assistance (for example, learning sessions and webinars) supported practices' work on the TBC initiative?

- Most practice leaders reported receiving high quality technical assistance through the initiative, and saw the first learning forum as particularly helpful. Some leaders found their coach knowledgeable, motivating, and responsive to questions, whereas others reported a slower start to working with their coach.
- Practice leaders reported using TBC financial support for training, acquiring health information technology, and offsetting revenue lost during meeting times. A few had not used the funds and reported concerns about restrictions against using them to support staff salaries.

B. Conclusions and recommendations

Practices participating in TBCI are planning efforts to expand TBC; these efforts build on a strong foundation of prior work supporting patient engagement and providing what patients see as high quality care. In most cases, these efforts are supported by engaged leaders. Across these practices, initial TBC-related changes and planning have been supported by funding provided by TBCI and the technical assistance offered through both coaching and participation in the learning forums. As of February 2016, we did not find evidence of widespread improvement on the aspects of team-based care assessed by the PCTGA. Given the early stage of implementation at the time of these assessments, these findings should be considered cautiously. Nonetheless, our analysis of data from multiple sources indicates that practices will likely face ongoing challenges in engaging patients in TBC-related practice decisions, initiating and improving data-driven QI, and securing staff acceptance of TBC changes to workflows and roles. Targeted technical assistance and using future learning forum meetings as an opportunity for practices to share strategies for achieving success in these areas could provide important support for practice- level changes and help ensure the success of the initiative.

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I. INTRODUCTION

A. Background

1. Overview of the Team-based Care Initiative (TBCI)

The Colorado Health Foundation (the Foundation) established a three-and-a-half year funding opportunity, the Team-based Care Initiative (TBCI), to support practices in optimizing their existing care teams to deliver high quality, coordinated care. In the planning phase (phase 1), launched in February 2015, 30 practices received technical assistance to develop work plans and budgets for expanding team-based care (TBC). Phase 1 practices received technical assistance including interactive online and in-person TBC training and in-person coaching. The technical assistance provider assessed each participating practice's baseline level of TBC, helped identify areas for improvement, and began to track progress in adoption of TBC principles over time.

In the three-year implementation phase (phase 2), launched in June 2015, the technical assistance providers helped the Foundation select a diverse group of 20 of the 30 practices to receive grants (or interest-free loans) of up to \$150,000 to implement the team-based models of care developed in phase 1. Among these practices, just under half are federally qualified health centers (FQHCs), just over half are in an urban setting, and nearly all are nonprofit entities (see Table I.1).¹ During phase 2, the technical assistance providers are delivering ongoing training and support through monthly in-person or virtual coaching visits to practices, personal consultations, and educational sessions. As part of this process, the technical assistance providers established a learning forum—comprising participating practices, coaches, Foundation representatives, and primary care associations—to support long-term sustainability of TBC and facilitate shared learning across practices as they implement team-based models of care.

Consistent with the mission of the Foundation, the TBCI aims to support practices in transforming primary care to improve the health and health care of Coloradans. TBC entails two or more health care providers (for example, clinicians such as physicians and nurse practitioners, and support staff such as nurses and medical assistants) working collaboratively with patients to provide coordinated and high quality care. In a study of exemplary primary care practices, Bodenheimer and colleagues (2014) found TBC to be an essential feature of high-performing primary care—that is, primary care that involves a patient-team partnership, population management, continuity of and access to care, and comprehensive and coordinated care. The authors found that TBC along with three other features—engaged leadership, data-driven improvement, and empanelment—are foundational building blocks for high-performing primary care. The 20 phase 2 practices are working on these building blocks to expand and optimize TBC. Additionally, practices are working on related changes to support TBC, such as engaging patients and staff, developing new workflows, clarifying roles and responsibilities, and providing training to teams.

¹ During the first year of phase 2, one of the selected practices withdrew from the initiative after participating in the telephone interviews and the PCTGA but before completing the staff survey. Where possible, we include results from the withdrawn practice here.

Table I.1. Characteristics of practices participating in the TBCI

TBCI Practice Characteristics	Total number of TBCI practices*
Practice setting	
Urban	11
Rural	9
Practice size	
Small (<3,000 patients)	5
Medium (3,000-6,000 patients)	7
Large (6,000 patients)	8
Practice type	
Federally qualified health center	8
Rural health center	2
School-based health center	2
Pediatric practice	2
Community mental health center	1
Other primary care/family medicine	5
TBC funding type	
Loan (for-profit practice)	2
Grant (non-for-profit practice)	18

Notes: The data sources for this table include background information on practices provided by the TAP and baseline interview findings.

*Please note practices can appear in more than one category.

2. Focus of this report

Mathematica's evaluation of TBCI has three main goals, to: (1) provide timely learning opportunities to participating practices, (2) understand the effects of the initiative in the participating practices and how they vary by practice type, and (3) generate knowledge that will advance the field of TBC. This report is the first of three annual reports and focuses on how practices are planning for change and their initial experiences with TBCI participation. Specifically, this report focuses on findings from the initial survey of clinicians and staff, the baseline and follow-up Primary Care Team Guide Assessment (PCTGA), the baseline patient survey, and baseline telephone interviews with practice leaders. We will re-administer the surveys as follows: staff survey in summer 2018 (the first staff survey was administered by MacColl in summer 2016), PCTGA in summer 2017 and summer 2018, and patient surveys in spring 2017 and spring 2018. We will also conduct site visits with a sample of 10 practices to interview practice leaders and staff in fall 2016 and fall 2017.

B. Evaluation framework and research questions

The Foundation initially drafted the TBCI success rubric. We then worked with the Foundation, technical assistance providers, and practice team members at the first learning forum to refine it. We derived our evaluation research questions, which structure this report, from the final TBCI success rubric and the five principles of TBC: shared goals, clear roles, effective communication, mutual trust, and measurable processes and outcomes (Mitchell et al. 2012). The five principles, aligned with the five domains of the TBCI success rubric— patient engagement,

patient experience, team member experience, practice change, and sustainability—guide our data collection, analyses, and reports (see Table I.2).

Our evaluation of practice-level implementation of TBC is further guided by the Consolidated Framework for Implementation Research (CFIR) (Damschroder et al. 2009). CFIR, based on a comprehensive review of implementation studies in health care, is a typology of potential facilitators and barriers to implementation across five domains: (1) the characteristics of the TBC intervention, including the complexity of changes expected of practices and the adaptability of those expectations to specific practice settings; (2) the outer setting, including activities external to the practices, such as participation in other initiatives to improve the delivery of care; (3) the inner setting, including the degree of engagement and commitment of practice leaders to the project; (4) the characteristics of individuals in the practice, including their attitudes toward implementing TBC; and (5) the process by which change is made in the practices, including the role of coaches as change agents. Within each of the success rubric domains, we examine barriers and facilitators across these CFIR domains. This approach ensures that we develop a consistent understanding of the barriers and facilitators to implementing TBC across the phase 2 practices.

Table I.2. Relationships between the TBCI evaluation research questions, success rubric domains, and TBC principles

Research questions	Success rubric domain	TBC principles
1. How are practice teams engaging patients in care?	Patient engagement. Patients receive care from their team that is highly consistent with their goals	Shared goals
2. What are patient experiences with the changes taking place in the practices and with care delivery in the practices?	Patient experience. Patients perceive that changes in the practice have improved their experience of care	Shared goals
3. What effect is TBC implementation having on practice staff and their perceptions of care?	Team member experience. Team members have the knowledge and collaborative skills to work in a TBC model	Mutual trust Clear roles Effective communication
4. What change management approaches are practices using to ensure sustainable change?	Practice change. Workflow changes enable all team members to provide TBC Sustainability. Practices use effective change management to establish a system for sustaining the provision of TBC	Clear roles Mutual trust Measurable processes and outcomes
5. How have coaching and other technical assistance (e.g., learning sessions, webinars) supported practices' work on the TBC initiative?	All*	All*

Notes: *Research question 5 crosses all success rubric domains and TBC principles.

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II. METHODS

We conducted a comprehensive assessment of early TBC activities in the participating practices using data from baseline telephone interviews with practice leaders and from three surveys: the primary care team guide assessment (PCTGA), the staff survey, and the patient survey. In this report, we integrate findings from these surveys and the telephone interviews to answer each of our evaluation research questions (see Table II.1). In this section, we provide detailed information about the collection and analysis of data from these sources.

Table II.1. Data sources used to address each research question

Research question	Data source			
	Qualitative interviews	Patient survey	Staff survey	PCTGA
How are practice teams engaging patients in care?	✓	✓		
What are patient experiences with the changes taking place in the practices and with care delivery in the practices?		✓		
What effect is TBC implementation having on practice staff and their perceptions of care?	✓		✓	
What change management approaches are practices using to ensure sustainable change?	✓			✓
How have coaching and other technical assistance (e.g., learning sessions, webinars) supported practices' work on the TBC initiative?	✓			

A. Baseline telephone interviews

1. Data collection

We conducted 60- to 90-minute telephone interviews in November and early December 2015 with practice-level leaders responsible for the TBC intervention. Interviewees included a mix of executive directors, chief medical officers, chief operating officers, operations directors, data managers, and nurse directors or managers. Most interviews included one respondent, but two or more respondents participated in some interviews. Discussion topics included practice characteristics, TBC goals and strategies, patient engagement, perceptions of patient and team member experiences with TBC, technical assistance, and barriers and facilitators to implementing TBC. Participants provided oral consent for audio-recording and transcription, following a protocol approved by Health Media Lab Institutional Review Board.

2. Data analysis

For interview data, we developed and applied two coding schemes. One comprised codes specific to the TBC intervention, including the practices' goals for TBC and the success rubric domains; the other comprised CFIR constructs. To ensure consistent coding, two team members first reviewed the coding schemes and independently coded two transcripts, then met to resolve discrepancies and clarify application of codes moving forward. The team members then coded the remaining transcripts, communicating regularly to address any questions about the

application of codes to specific data segments to ensure consistency. We used the coded data to identify patterns and themes by research question.

B. Surveys

1. Data collection

Primary Care Team Guide Assessment (PCTGA). The PCTGA measures how well primary care teams are functioning and tracks practice transformation across key domains related to TBC, including empanelment, population management, and behavioral health integration. For each domain, practices are scored along a continuum from level D (just beginning to make changes) to level A (has achieved the most important changes in that domain). To complete the PCTGA, practice teams met with their coach and developed a consensus response to each item. The group response was then entered into an online data collection system in May 2015 and February 2016.

Staff survey. The staff survey tracks individual clinician and staff attitudes over time and is administered through an anonymous online survey system to staff across all TBCI practices. LEAP survey items, compiled by the Group Health Research Institute, assess key areas related to practice transformation, including leadership, staff engagement, and teamwork; additional items added by Mathematica survey staff assess satisfaction, level of control over work, and burnout. In August 2015, the technical assistance contractor distributed the staff survey. A total of 155 staff members from 17 of the 19 remaining phase 2 practices completed the survey in its entirety (74.2 percent response rate).

Patient survey. We selected items for the patient survey from the Consumer Assessment of Healthcare Providers & Systems (CAHPS) survey, American Academy of Family Physicians (AAFP) Patient Survey, Press Ganey Outpatient Patient Satisfaction Survey, and the Multidimensional Health Locus of Control scale. The patient survey tracks patient demographics, as well as perceptions and experiences on key domains of interest to TBCI, and is provided in both English and Spanish at a 6th-grade reading level. The two school-based health practices fielded the paper survey in May 2016 and 16 practices fielded the survey in June 2016. One practice did not field the survey due to delays in getting approval. In each practice, staff members invited patients who visited the practice during the fielding period to participate in the survey anonymously. Patients received a \$5 gift card following completion. Staff ensured that patients received the survey only once during the field period, even if they had multiple visits. A total of 1,326 patients in 18 practices completed the survey in May and June 2016.

2. Data analysis

PCTGA. We entered responses into an Excel database and then calculated domain scores for each practice at baseline (May 2015) and follow-up (February 2016). We averaged individual item responses to calculate scores for each of the following domains: continuity of care, access to care, planned care for chronic conditions and preventive care, risk-stratified care management, patient and caregiver engagement, coordination of care across the medical neighborhood, continuous improvement driven by data, organization of team-based care, and an overall score across these domains. We combined items to create these domains by adapting previous factor analyses of a related survey, the PCMH-A (Dale et al. 2016, supplemental appendix 8). For the

organization of team-based care domain, we averaged responses to the nine items focused on staff organization and new work roles (see Table II.2).

Staff survey. After transferring data from Survey Monkey to Excel, we calculated item and domain scores and summarized them by practice. Analyses did not account for differences in sample sizes across practices.

Patient survey. We conducted preliminary analyses of patient survey data using Excel and Stata software, including Pearson chi-squared tests to examine statistically significant differences in satisfaction and experience measures by population characteristics.

Table II.2. PCTGA domains

Domain	PCTGA Questions*
Continuity of care	1, 13
Access to care	25
Planned care for chronic conditions and preventive care	4, 15-17
Risk-stratified care management	19
Patient and caregiver engagement	14, 20, 26
Coordination of care across the medical neighborhood	18, 22, 23, 27
Continuous improvement driven by data	2, 3, 7
Organization of team-based care	5, 6, 8-12, 21, 24

Notes: *For the wording of each question see the sample PCTGA in Appendix A.

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III. RESULTS

We found that participating practices successfully developed TBC goals addressing each of the five areas of the TBCI success rubric and reported some limited progress in implementing changes relating to these goals. Our interview findings indicate that practice leaders found the financial, coaching, and learning forum supports useful for supporting this early work. In this section, we provide detailed information about practice goals, early progress towards achieving these goals, and the barriers and facilitators of this progress.

A. Overview of practices' TBC goals

In phase 1 of TBCI, practices were required to develop detailed work plans for phase 2. In phase 2, practices worked with coaches to identify specific TBC goals to guide practice changes (see Table III.1). Practices' specific TBC goals fall into six categories, with all practices pursuing goals in three or more categories:

- 1. Improving care coordination, care management, or self-management support.** Seventeen practices developed goals to maximize teamwork to (a) improve care coordination, such as following up with patients after hospital discharges or communicating with other providers about patient care; (b) improve care management, such as identifying and managing high-risk populations or developing protocols for managing specific chronic diseases; and (c) improve self-management support through patient education and engagement.
- 2. Developing the team and providing training.** Fifteen practices developed team-related goals, such as clarifying team member roles and responsibilities. Teams included clinicians (physicians or nurse practitioners) and support staff, such as nurses and medical assistants, with some also including expanded team members, such as behavioral health specialists. These practices also aim to develop and hold trainings for staff to support continuous learning around particular topics, such as using the electronic health record (EHR).
- 3. Empaneling patients to clinicians or teams.** Fourteen practices developed empanelment-related goals, including assigning patients to clinicians or teams and performing related supporting activities (for example, using the EHR for empanelment, reviewing existing panels, managing panels, and balancing panels across clinicians or teams).
- 4. Engaging leadership and staff.** Fourteen practices developed goals to establish regular mechanisms for communication among leaders and staff and build support for TBC.
- 5. Designing new workflows to optimize teamwork.** Thirteen practices identified goals specific to developing and implementing new processes and workflows to support team members in the efficient delivery of care.
- 6. Initiating quality improvement (QI).** Thirteen practices developed goals focused on (a) developing QI teams and identifying metrics or (b) particular QI projects. Some of these practices' goals explicitly reference the use of teamwork to conduct QI.

Collectively, these practice goals align with the initial building blocks of high-performing primary care: engaged leadership, data-driven improvement, empanelment, and team-based care (Bodenheimer et al. 2012). In addition, the goals address each of the five areas of the success rubric and the five team-based care principles identified by the Institute of Medicine (Mitchell et al. 2012). Table III.2 lists the practice goals and how each of these goals addresses the success rubric areas and the building blocks of high performing primary care. For example, the goals practices identified under the category of “improving care,” care management, or self-management support detailed above are primarily focused on making improvements that address the patient engagement, patient experience, and practice change success rubric areas by working on the data-driven improvement and team-based care building blocks of high performing primary care.

Table III.1. TBC goals by practice type

Practice type	Location		TBC goals					
	Urban	Rural	Improving care coordination, care management, or SMS	Developing a team and providing training	Empaneling patients to clinicians or teams	Engaging leadership and staff	Designing new workflows to optimize teamwork	Initiating QI
Federally qualified health center (n = 8)	3	5	7	7	6	6	4	5
Primary care/family medicine (n = 5)	4	1	3	3	3	4	4	3
Rural health center (n = 2)	0	2	2	1	2	2	0	1
School-based health center (n = 2)	1	1	2	1	1	1	2	2
Pediatric practice (n = 2)	2	0	2	2	2	1	2	1
Community mental health center (n = 1)	1	0	1	1	0	0	1	1
Total	11	9	17	15	14	14	13	13

Notes: The data sources for this table include background information on practices provided by the TAP and baseline interview findings. Two practices (one FQHC and one primary care family medicine practice) are also residency practices. SMS = self-management support

Table III.2. TBC goals, the TBCI success rubric, and building blocks of high-performing primary care

Practice Goals	Practices	Success Rubric					Building blocks of high performing primary care			
		Patient Engagement	Patient Experience	Team Member Experience	Practice Change	Sustainability	Engaged Leadership	Data-driven improvement	Empanelment	Team-based care
Improving care	17	X	X		X			X		X
Developing a team	15			X	X			X		X
Empaneling patients	14		X		X	X			X	
Engaging leaders and staff	14			X	X	X	X			
Designing new workflows	13			X	X	X				X
Initiating QI	13		X	X	X	X		X		

Notes: The data sources for this table include background information on practices provided by the TAP and baseline interview findings. X = indicates areas addressed by practice goals in each of the categories.

B. Overview of early progress

Practice team self-ratings on the PCTGA indicated improvement in the early months of the TBCI, as the overall PCTGA score—averaged across all 27 response items—improved .5 points from 6.9 points in May 2015 to 7.4 points in February 2016 (Table III.3). Practice ratings increased across seven of the eight domains of the instrument, with the largest improvements in continuous improvement driven by data (increasing one point), risk-stratified care management (increasing by .9 points), planned care for chronic conditions and preventive care (increasing by .5 points), and organization of team-based care (increasing by .4 points). Responses to individual PCTGA questions and changes from baseline to follow-up are in Appendix B.

Table III.3. TBCI practices' self-reported primary care delivery approaches in May 2015 and February 2016

Domain	TBCI practices in May 2015	TBCI practices in February 2016	Difference 2015-2016
PCTGA Scale (1 = lowest functioning, 12 = highest functioning)¹			
Continuity of care	7.3	7.6	.3
Access to care	7.4	7.3	-.1
Planned care for chronic conditions and preventive care	6.5	7.0	.5
Risk-stratified care management	6.3	7.2	.9 ²
Patient and caregiver engagement	7.7	7.9	.2
Coordination of care across the medical neighborhood	8.4	8.6	.2
Continuous improvement driven by data	6.5	7.5	1.0
Organization of team-based care	6.4	6.8	.4
Overall PCTGA average score	6.9	7.4	.5

Source: Mathematica analysis of the PCTGA practice survey results, fielded by MacColl, using the 19 TBCI practices that responded in both May 2015 (baseline) and February 2016 (follow-up).

Notes: ¹Absolute changes in the PCTGA score and eight domains; the range for each score is 1–12 (lowest- to highest-functioning). Composite scores were calculated using an average of each practice's response to all questions in a given area.

²Indicates a change between levels between baseline and follow-up:

Level D (1-3): Practice is just getting started and may want to review the resources page in that section of the guide to help prepare for the key changes described there.

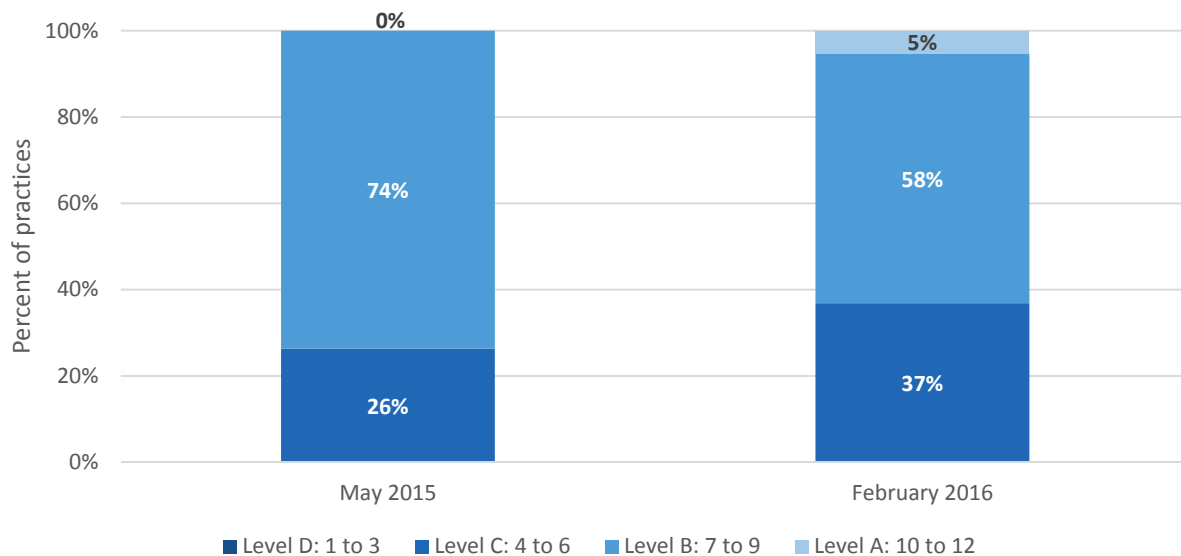
Level C (4-6): Practice is in the early stages of change and can benefit from the action steps and resources in that section of the guide.

Level B (7-9): Practice has implemented basic changes and can build upon success with the action steps and resources in that section of the guide.

Level A (10-12): Practice has achieved most or all of the important changes required.

Figure III.1 shows how practices' overall PCTGA scores changed from May 2015 to February 2016. The proportion of practices with average scores less than 7 (Level C) increased from 26 to 37 percent, perhaps representing better understanding of true practice capacities after attending learning sessions and working with practice coaches to plan improvements. At follow-up, one practice now reports an average PCTGA score over 10 (Level A) indicating that they have achieved most or all of the important changes towards providing more team-based care.

Figure III.1. PCTGA: Overall PCTGA Score for practices, 2015-2016



Source: Mathematica analysis of the PCTGA practice survey results, fielded by MacColl, using the 19 TBCI practices that responded in both May 2015 (baseline) and February 2016 (follow-up).

1. Research question 1: How are practice teams engaging patients in care?

A key element of successful TBC is the involvement of patients in decisions around their own health and health care and in TBC decisions at the practice level, through approaches such as a patient advisory board. We used several data sources to explore these two aspects of patient engagement. First, to understand what practice teams are doing (or planning on doing) to involve patients in their own health and health care, we analyzed data from the baseline interviews and PCTGA. These findings focus on staff training, development of patient education materials, and the extent to which practice teams are supporting patients to become active participants in their care, through activities such as self-management support. Second, we analyzed questions from the patient survey to understand the extent to which patients feel accountable for their health and able to understand information provided by nurses and clinicians. Third, to examine early progress in making planned changes we compared baseline and follow-up PCTGA scores on the patient and caregiver engagement domain. Lastly, we used baseline interview data to understand practice teams' activities or plans to engage patients and incorporate the patient perspective in practice decisions, particularly as they pertain to TBC.

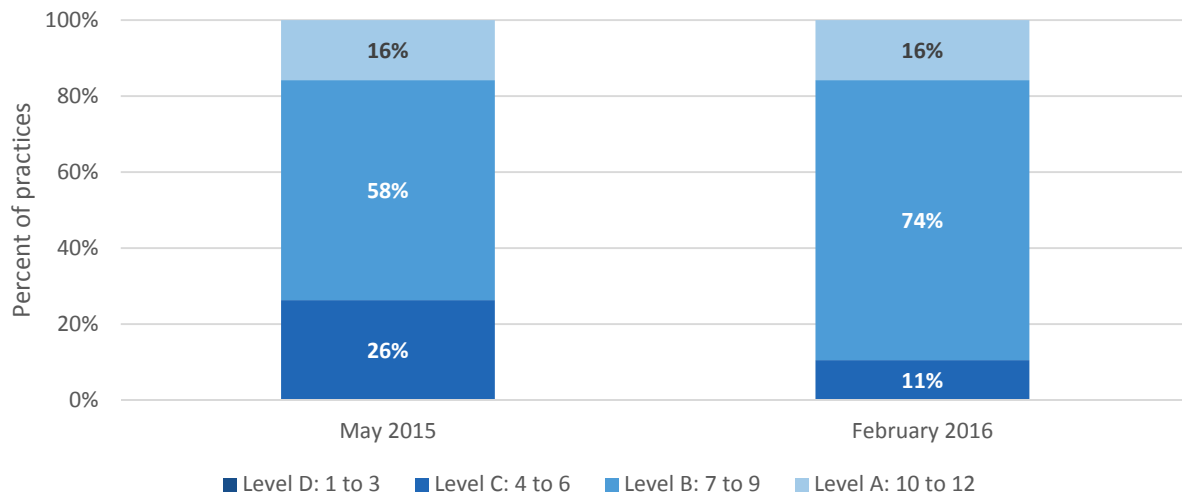
a. Practice activities to engage patients in their own health and health care

Practice teams are focusing on self-management support, patient education, shared decision making, and other activities to support a more active role for patients in their own health and health care. In interviews, some practice leaders reported training staff on motivational interviewing and chronic disease management to facilitate patient engagement in health and health care. One notable example is a practice that plans to send its staff for training in chronic disease health management with a “train the trainer” model: “They will become trainers, and they will come back and train others—other nurses, medical care coordinators, providers, and patients.” Another practice is training MAs to use a questionnaire to ask patients about their care

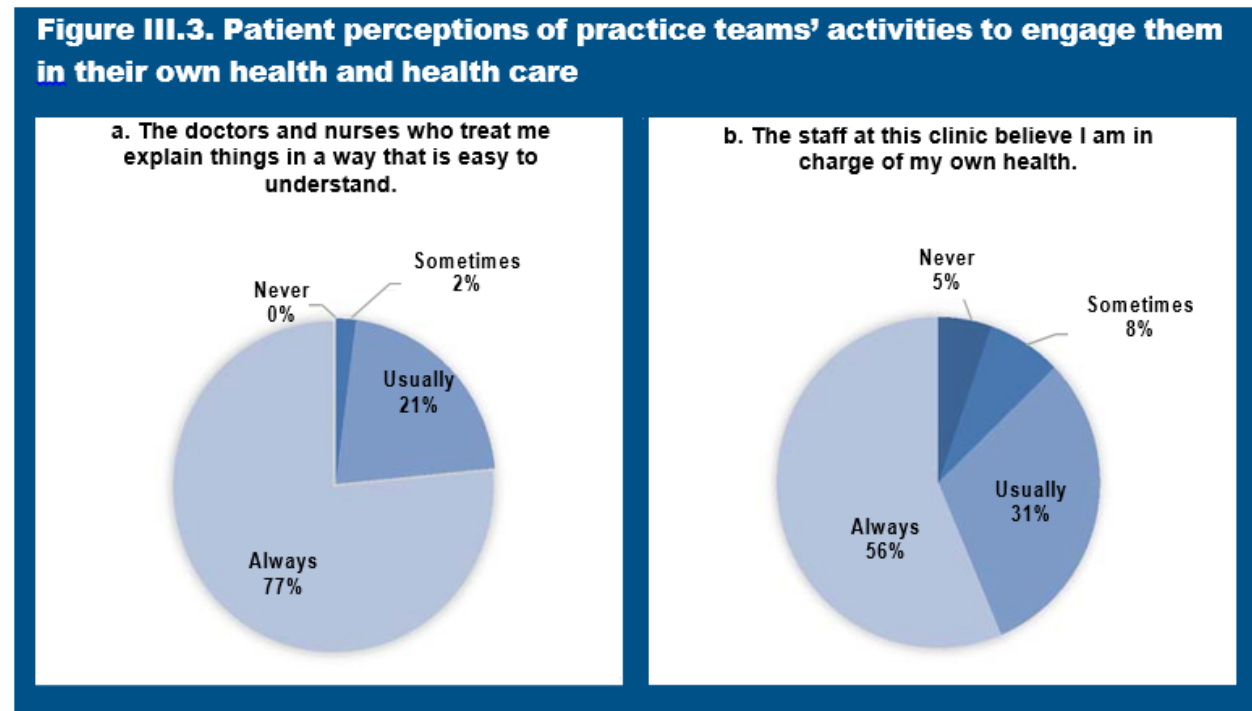
goals. A few practice teams reported plans to use technology to involve patients in their care. Specifically, these practices are exploring the use of text message reminders about appointments or self-management (like reminding diabetic patients to check blood sugar), smart boards for educational presentations to the community, and online patient portals.

Practice teams reported that they had already implemented basic changes designed to improve patient engagement prior to the start of the TBCI and reported some expansion of these efforts in the early months of the initiative. At baseline, 74% of the practices were in one of the top two levels (A or B) of the patient and caregiver engagement domain of the PCTGA and none were in the lowest functioning level (D). At follow-up, 90% of the practices were in the top two levels (Figure III.2). Patient survey results also indicated high levels of patient engagement. Substantial majorities of patient survey respondents reported that practice staff view patients as “in charge of their own health and health care” and that clinicians provide clear and understandable explanations (Figure III.3).

Figure III.2. PCTGA: Patient and Caregiver Engagement



Source: Mathematica analysis of the PCTGA practice survey results, fielded by MacColl, using the 19 TBCI practices that responded in both May 2015 (baseline) and February 2016 (follow-up).



Source: Mathematica analysis of the patient survey results, fielded May-June 2016 in 18 practices.

b. Practice activities to engage patients in practice decisions on TBC

Most practices had not yet developed firm plans for patient engagement in TBC decisions. For those that had, the use of patient advisory boards was the most commonly reported strategy to accomplish this; however, only a handful of practice teams had already engaged their advisory boards for this purpose. Several practice leaders reported plans to either establish a patient advisory board specifically for supporting TBC or to engage an existing advisory board to get patient input on TBC. A few reported plans to survey patients on satisfaction with care and improvement in health to inform practice decisions related to TBC. One leader in a practice that had engaged its patient advisory group early in the initiative reported that the group provided insights on how patients might respond to empanelment and suggested that teams inform patients ahead of time and give them a choice about being reassigned to a new team. One practice leader noted that engaging patients in regular advisory meetings is challenging because it is difficult for some patients to attend meetings at a regular time.

"To this point, we have not engaged [the patient advisory council] specifically around team-based care. We do that indirectly because we always consult with them relative to different policies or operational matters in the clinic... I have to see how we can perhaps, in some respects, integrate them into team-based care initiative."

-Practice Leader

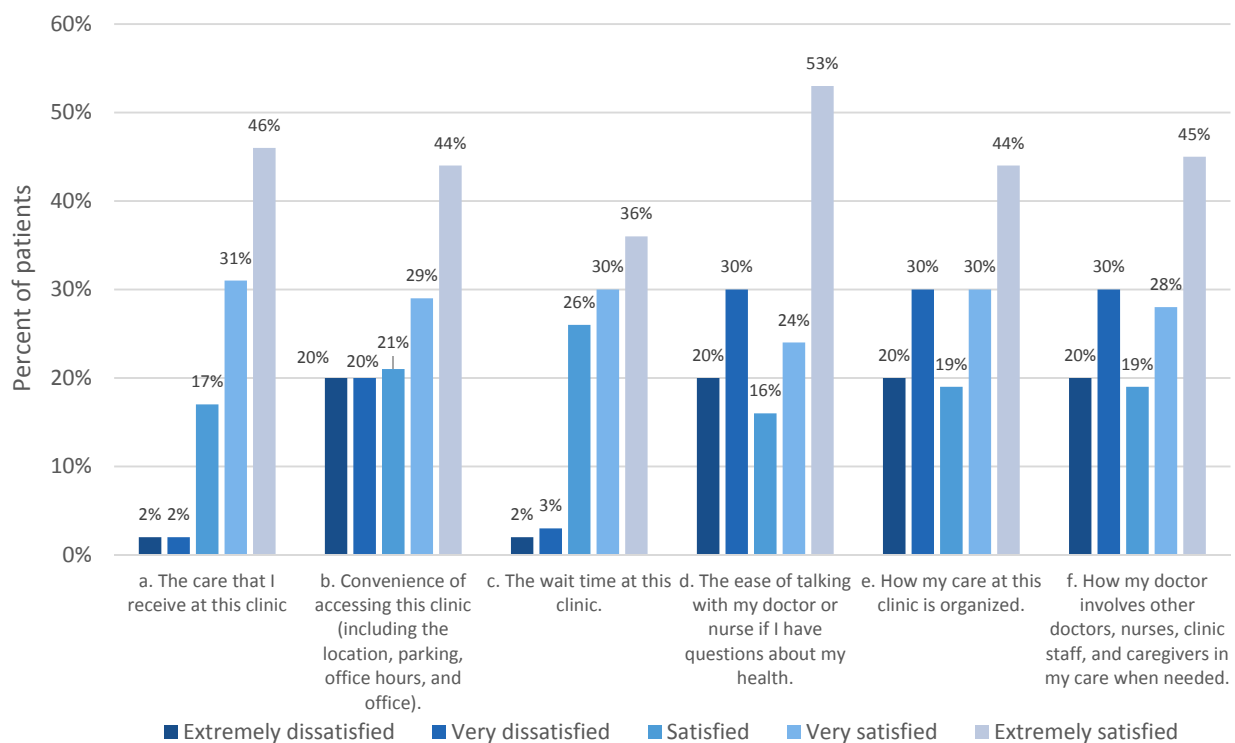
2. Research question 2: What are patient experiences with the changes taking place in the practices and with care delivery in the practices?

Across the TBCI practices, patients responding to the survey reported high levels of satisfaction with the care they received. More than a third reported that this care had improved

over the prior 12 months, which coincided with when initial TBC-related changes were taking place. In addition, substantial majorities of patient respondents reported high levels of satisfaction with access to the practice, wait times, ease of communication with clinical staff, and overall organization of care at the practice (Figure III.4). Notably, only four of the practices reported on the follow-up PCTGA that contacting the practice team during regular business hours was possible using either “email or phone”—the highest possible level of access on the survey. However, only one practice reported at follow-up that such contact “is difficult” (down from three at baseline) and the average score on this access to care item was essentially unchanged from baseline to follow-up (see Table III.3 above).

Patients who completed the patient survey rated the quality of their care as very high (9.07 on a 10-point scale). With regard to TBC more specifically, just under three-fourths of patients reported high levels of satisfaction with how their doctor involves other members of the team in their care (Figure III.4). Moreover, 94 percent of patients reported that staff at their practice usually or always work well together to provide care.

Figure III.4. Findings on patient satisfaction with care, access, communication, and care coordination

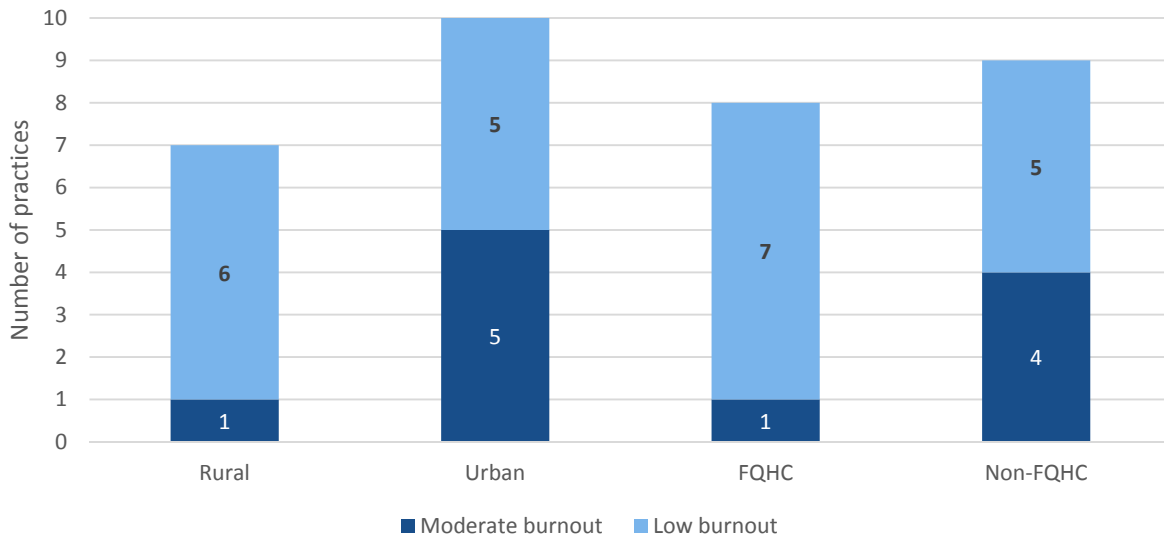


3. Research question 3: What effect is TBC implementation having on practice staff and their perceptions of care?

Across the 17 practices with staff survey respondents, we found that practice staff members reported high levels of job satisfaction, moderate levels of burnout, and substantial room for improvement in key areas of organizational functioning relating to TBC. Across these practices,

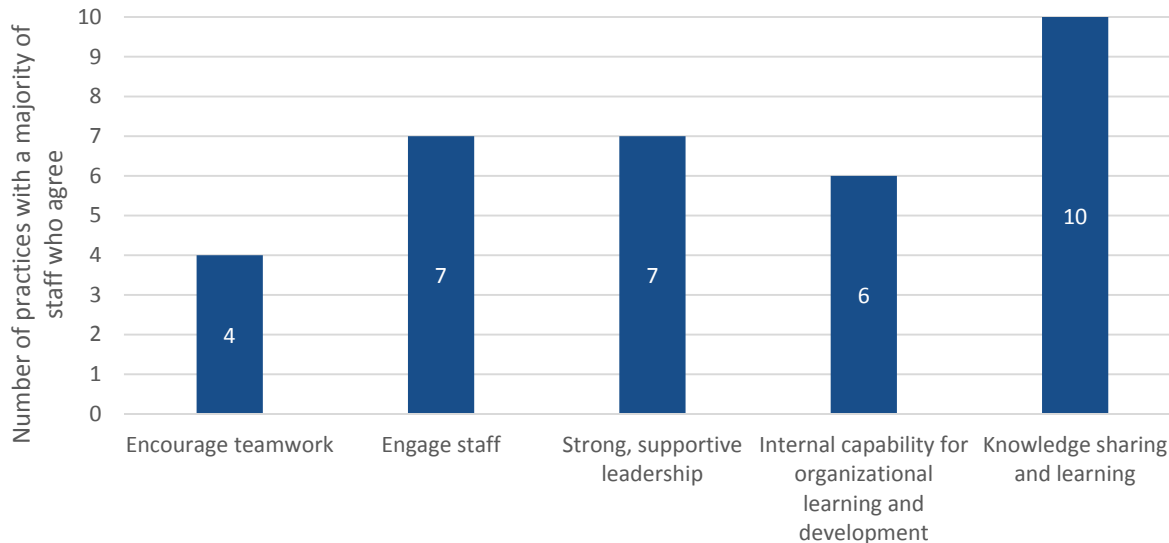
a large majority of staff respondents reported being very satisfied (47 percent) or satisfied (40 percent) with their jobs. Practice-level average responses to the Burnout Self-Test, which measures workplace mental, physical, and emotion stress, indicated that staff in 11 practices were experiencing moderate levels of burnout. Practice-level average burnout scores were higher in rural practices and FQHCs (Figure III.5). These findings are not weighted by practice size.

Figure III.5. Findings on workplace burnout among staff by select practice types



Practice-level averages show that in a majority of the practices staff agreed that their organization supports knowledge sharing and learning. Fewer practices had staff who agreed that their practice had supportive leadership, engaged staff, or had internal capabilities for organizational learning. In only four of the practices did staff responses indicate that the practice encouraged teamwork (Figure III.6).

Figure III.6. Findings on staff experiences with practices supporting learning, leadership, staff engagement, and teamwork (n = 17 practices)



4. Research question 4: What change management approaches are practices using to ensure sustainable change?

In the first year of the initiative, practice teams focused on engaging staff and leadership in practice changes, planning new workflows and changes to team member roles, using data to drive QI at the practice or within teams, and empaneling patients to clinicians or teams. Progress towards establishing these essential elements to TBC varies considerably across each focus area and practice, as described in the subsequent sections. First, we report how practice members are being engaged in practice changes and how widely shared the change imperative is—that is, the extent to which staff are accepting and supportive of the changes taking place. We then present an overview of workflow changes for each team member’s role, including front desk staff, medical assistants, nurses, nurse practitioners, and physicians. These findings show how team members’ roles have shifted from their previous roles. Next, we report findings on the progress of practice teams in engaging leadership to support TBC-related changes. We then present the activities practice teams are implementing for QI, followed by a discussion of their work to empanel patients. Lastly, we present findings on the practice teams’ plans and activities to ensure that the changes are sustainable. In each section, we discuss the barriers and facilitators to these change management approaches.

a. Staff engagement in and support for TBC

Practice leaders reported that they generally communicate regularly with practice staff about TBC work via in-person meetings; however, the frequency and composition of meetings vary by practice. Some hold weekly or monthly meetings dedicated to TBC while others use regular staff meetings. The meetings are used to plan and update staff on TBC work, provide training and education, and solicit feedback on practice changes. Some practices engage all their staff in meetings while others limit meetings to a subset of staff, such as a core team of clinicians, support staff, and leaders who are responsible for the initiative or smaller teams working on specific project goals. In some practices taking the latter approach, the core team meets to plan changes and then presents them to the entire staff; in other cases, only the core team is involved in TBC activities. In addition to meetings, a few practices also use bulletin boards or email newsletters to update staff on TBC.

“The core team that’s involved in any of the innovations going on right now is informed and engaged. ... if we communicate a lot about something that people aren’t going to be a part of for a while, it’s just white noise.”

–Practice Leader

The level of staff support for TBC varies across practices. About half of practice leaders perceived staff as generally accepting of the initiative and ready to implement changes. These leaders described staff as not only understanding the project goals but also cognizant of the need for changes, which, in turn, supports effective implementation. Staff who appreciate why TBC is desirable and can see how the changes will improve their work and patient care facilitate practice changes underway. Practice leaders attributed strong support from staff to particular characteristics of their practice. For example, leaders of newer practices cited the fact that their practices are newly established as a key factor in facilitating staff buy-in because the changes are viewed as foundational rather than transformational, and new staff trained on TBC perceive the model as standard practice. Other leaders attributed strong staff support to having a culture open to change, a foundation of collaboration, or prior experience successfully implementing similar changes.

“We laid out our team-based care model for everybody during our ... all-staff meeting. We’ve put a board together describing these five goals and what they meant and what we were trying to do ... [on] a bulletin board ... to communicate with staff.”

–Practice Leader

Although these practices have supportive staff, practice leaders perceived that staff still feel some anxiety about the changes. Practice leaders perceived that some staff—particularly nonclinical staff such as front desk staff—are uncomfortable with taking on new and unfamiliar tasks (such as having the front desk staff perform patient screenings) perhaps because staff are still learning about the changes. Staff also have concerns about additional stress and work, and clinicians, in particular, have concerns about giving up certain tasks. To address these challenges, practice leaders plan to hold trainings to build staff skills and confidence, and some have already found success through continued communication about the need for changes. For example, one practice leader reported that after discussing with the staff how the changes would ultimately help everyone, the staff became less stressed. Another practice leader described ongoing efforts to help clinicians realize the need to relinquish control of certain tasks and trust that other team members can perform tasks assigned to them.

The other half of practice leaders described significant challenges getting staff to understand the need for practice changes and embrace TBC, which poses a barrier to implementing TBC-related practice changes. Staff from these practices have a range of concerns. First, there are concerns about how the changes will impact staff and their workloads. For example, the clinicians at one practice are resistant to using new technology to enhance team communication and view the changes as adding more complexity to patient care. At another practice, the front desk staff are struggling with empaneling patients because they prefer their old, more ad hoc, method of scheduling patients, despite its problems. Second, some clinicians are concerned about delegating tasks to others because they are used to providing care the way they always have. Third, some staff from practices involved in multiple delivery system reforms have concerns about being overextended. At most of these practices, staff want to improve care delivery and think changes will be valuable in the long term, but they feel they do not have the time to implement changes. Additionally, change fatigue has prompted less flexible staff to leave some practices, which has a rippling effect; not only is staff turnover disruptive to patient care, it also contributes to delays in implementing changes.

Practice leaders discussed ongoing efforts to address staff resistance and concerns. Strategies include using evidence and guidance from coaches to encourage staff buy-in and implement changes gradually, with sufficient time for testing and refining, to avoid overwhelming staff. Practice leaders are emphasizing to staff that previous strategies for care delivery are either untenable or not conducive to high quality patient care and that the practice changes underway are a redistribution of work that will increase everyone's efficiency. In addition, at practices with multiple ongoing initiatives, helping staff to recognize how the various delivery system reforms are harmonious helps them re-conceptualize practice changes as part of an overarching framework rather than as one of many disparate projects. A few practices are moving forward without the support of particular individuals. For example, one practice is excluding a resistant clinician from the initiative until other clinicians can implement the changes. At another practice, leaders hope that support for the changes from other clinicians and staff will eventually influence a resistant clinician. During site visits, we will follow up with practices to identify successful strategies and assess progress towards overcoming staff resistance.

b. Implementing workflow changes

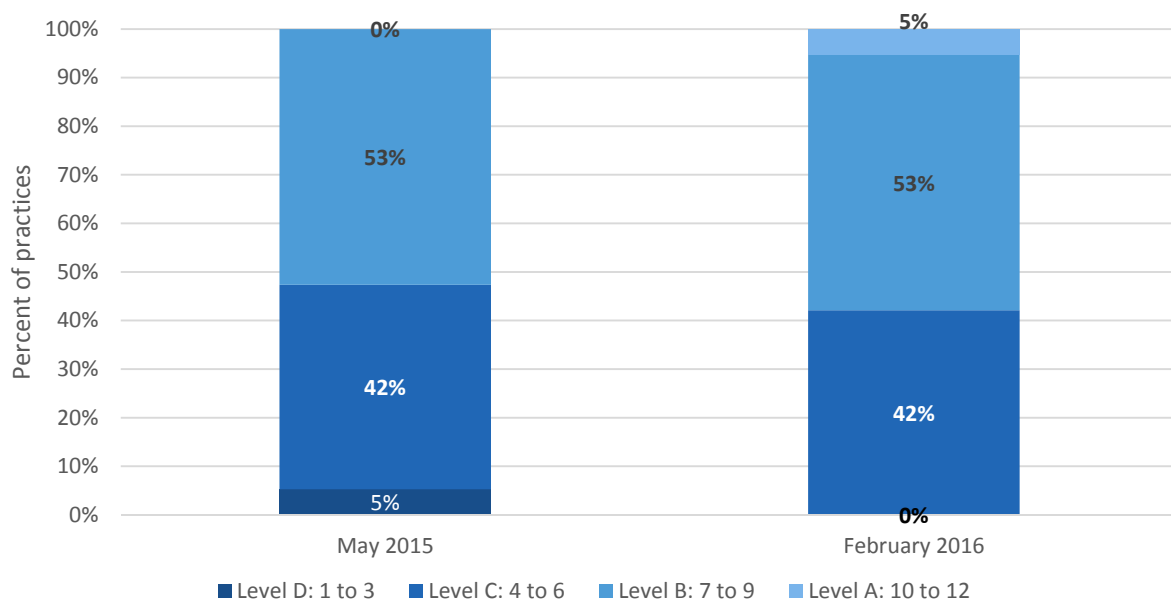
A key step in TBC implementation involves workflow changes across team members. Many medium and large sized practices plan to pilot test changes to workflows and team member roles within a smaller group in the practice (e.g., a single team) in order to learn from the pilot and make adjustments before implementing the changes more broadly. About a third of practices plan to scale new workflows to other practices in their system and are using the TBCI to test and identify changes that can eventually be applied to other practices. Some workflows are already standardized across practices and staff sometimes work at more than one practice in the system and are accustomed to how a particular practice operates, which makes implementing new workflows at another practice particularly challenging. To respond to this challenge, some practices are trying to implement at least some of the changes across the system rather than just in the participating practice simply because it is easier and less disruptive. Other practices are focusing on implementing new workflows at the participating practice only. Some expect that future expansion of TBC changes to other practices in their systems will be challenging because

of different structures, processes, locations, and cultures that influence their ability to undergo practice transformation. A few leaders are preparing for the expansion of new workflows by communicating with other practices in the network about TBC changes. These practices may benefit from dedicated technical assistance to support scalability as the initiative continues.

While the majority of practice teams have yet to fully implement new workflows, findings from the baseline interviews provide insight into their plans to delegate work to alleviate responsibilities for heavily-burdened staff (such as clinicians) and to empower team members to be involved in patient care. Many practice teams are engaging staff in discussions about their roles and seeking input in identifying aspects of their work that could be absorbed by other team members. Using resources from the improvingprimarycare.org website, practice teams are researching team roles and gaining insight into successful models.

Figure III.7 shows how practice teams reported improvement in the organization of team-based care on the PCTGA from May 2015 to February 2016. The proportion of TBCI practices with average scores on the items in this domain in the lowest two levels fell modestly from 47 to 42% and one practice reported that it had achieved most or all of the important changes in this area. Given the relatively low average score in this domain (6.8 at follow-up), practice teams can be expected to continue to focus improvement efforts on implementing the new work roles and workflow changes associated with team-based care.

Figure III.7. PCTGA: Organization of team-based care



Source: Mathematica analysis of the PCTGA practice survey results, fielded by MacColl, using the 19 TBCI practices that responded in both May 2015 (baseline) and February 2016 (follow-up).

i. Front desk staff workflows

Practice teams plan to increase the responsibilities of their front desk staff, who, in some cases, have expressed apprehension about having greater responsibility. Teams plan to increase the front desk staff's involvement in patient care and help them assume responsibilities previously held by MAs and nursing staff. For example, the front desk staff at one practice now collect follow-up information from patients about emergency department visits and update EHRs when they schedule appointments. Front desk staff in other practices are taking patients to exam rooms, collecting health histories, and checking vital signs. As one practice leader explained, "We're going to look at how far the front desk staff can get with the patient until they run into a skill they do not have, [like] drawing blood."

Some practice teams are experiencing barriers to implementing these new workflows due to front desk staff's discomfort with having new and expanded duties. For example, one practice leader reported that the front desk staff did not empanel patients after receiving training to do so because they lacked confidence and feared the consequences of doing this work incorrectly. The practice leader is responding by working to empower all members of the team to feel comfortable speaking openly about their concerns and is encouraging them not to be afraid of failure as it presents an opportunity to learn.

ii. MA workflows

The evolution of the MA role is a main area of focus for many practice teams. In interviews, practice leaders described new workflows that shift additional responsibilities to MAs. For example, some practice teams are planning the transfer of nursing tasks, such as checking blood pressure and adjusting medication doses for specific conditions, to MAs. Other practice teams are blending the MA role with the front desk and health educator roles and providing interdisciplinary staff training to support better coordination. Many practices are focusing on building consistent teams, with MAs linked to clinicians in teams. For example, some practices are changing MA roles from floating between clinicians to working exclusively with the same team or clinician. As one practice leader described, "We're trying to make it be more of team... this is [clinician's] team, this is her MA, this is who checks patients in, and this is who does her blood."

PCTGA findings provide insight into the evolution of the MA role. At the time of the follow-up administration (February 2016), four of the 19 practices reported that MAs currently mostly take vital signs and room patients (the lowest level). Five practices reported significant MA collaboration with the provider in managing the panel, playing a major role in providing preventive services, and services to chronically ill patients (the highest level).

Practice teams face both challenges and successes in changing the MA role. In a few practices, MAs and clinicians have not responded well to being told who they will work with every day because they perceive their personalities as incompatible. In a few cases, workflow changes that increase MAs' responsibilities have prompted staff turnover because the MAs felt overwhelmed. At other practices, teams that involve staff in defining the MA role are more engaged in the process, more open to new workflows, and more committed to enacting them. Additionally, practice teams have an easier time establishing responsibilities for newly hired

MAs compared to changing the responsibilities of current MAs, perhaps because leaders aim to hire staff who are open to a team-based approach, which facilitates TBC implementation.

iii. Nurse workflows

Interviews with practice leaders found that changes to the workflows for nursing staff generally focus on standardization, highlighting the value of having uniform roles to promote consistent teams and care delivery processes. Additionally, standardization enables nurses to support each other's work in the event that other nurses are absent or need extra help. A few practice teams are enacting changes to facilitate nurses in working "at the top of their licenses" to enable them to use their training and expertise to the fullest extent possible. As a result, some nursing responsibilities are shifting to MAs (as noted above), and in a few cases, some clinician responsibilities are being absorbed by nurses including managing problem lists, completing medication reconciliation, and pulling emergency department reports and lab results to support the clinicians.

Findings from the follow-up PCTGA provide insight into nurses' changing role on the team. Specifically, nine practices noted that registered nurses (RNs) are responsible for managing transitions within and across levels of care and providing intensive care coordination and management to the highest risk patients (Level B). Three practices reported that RNs collaborate with clinicians in teaching and managing patients with chronic illness, monitoring responses to treatment, and titrating treatment according to delegated order sets in independent nurse visits (the highest level). Among the remaining 10 practices, four noted that nurses play less active roles by mostly triaging phone calls and performing injections or other procedures (Level C), and six practices noted that nurses are not part of the core practice team.

"A lot of the other providers when they do provider meetings ... they bring ... up: 'You know, you could get your nurse to do congestive heart failure education; you can grab the licensed clinical social worker to talk to patients about their anxiety and their depression.'"

—Practice Leader

A few practice teams are experiencing challenges implementing new nurse workflows. In particular, nurses can be resistant to having additional responsibilities and may view the workflows as "one more extra thing to do." As noted above, a few clinicians—in particular physicians—remain reluctant to shift their responsibilities to nurses.

iv. Clinician workflows

Given the workflow changes noted above, practice teams are generally shifting specific responsibilities of clinicians (that is, physicians and nurse practitioners) who serve as primary care providers (PCPs) to support staff (such as nurses, MAs, and social workers) to facilitate all team members in the optimal use of their training and expertise. Such changes enable teams to share responsibility for clinical services and promote more efficient provision of care.

"Now we've kind of got a good rhythm down where the medical assistant and that provider and health educator can huddle together and identify which patients are going to see [the] health educator first, [and] which ones are going to see the provider first."

—Practice Leader

Results from the follow-up PCTGA show that some practices are utilizing support staff to perform patient management and clinical services. Specifically, five of the 19 practices noted that staff other than PCPs are primarily tasked with managing patient flow and triage. In addition, nine practices noted that staff often provide some clinical services such as assessment or self-management support, while five practices reported that staff other than PCPs perform key clinical service roles that match their abilities and credentials (the highest level).

Practice leaders reported that having clinicians who are willing to share their responsibilities with the team is key to successful implementation of new workflows for all team members. As noted above, however, some practices have clinicians who remain reluctant to redistribute their responsibilities to others. A few practice leaders noted that while similar changes are being made to both the physician and nurse practitioner roles, nurse practitioners seem more willing to “relinquish some control” than physicians. For example, one practice leader reported that the nurse practitioner is more amenable to referring patients to the nursing staff for education, which promotes efficiency. This finding may be a function of nurse practitioners caring for less complex patients. The few practices with a large volunteer clinician base face difficulty changing the role of volunteer clinicians because they do not work consistently enough to invest in the training necessary to support such changes. To address this challenge, these practices are focusing more on training other more permanent team members and plan to add clinicians to the team as they are available.

v. Other staff workflows

In addition to changing workflows for core team members, some practice teams are clarifying roles and responsibilities for other staff such as laypersons and pharmacists. Laypersons refer to individuals without formal clinical training, including community health workers and patient navigators. Results from the follow-up PCTGA show that 15 of 19 practices have laypersons that play an active role by providing self-management coaching, coordinating care, and helping patients to navigate the health care system or access community services. Eight practices include laypersons as key members of the core practice team. Of the remaining four practices, two noted that laypersons mostly provide non-clinical patient-facing roles such as reception or referral management and two practices reported that their laypersons are not involved in care.

With regard to the role of pharmacists, 10 of the 19 practices noted the absence of pharmacists in their practice. Two have a pharmacist responsible for overseeing the dispensary, with little additional involvement in clinical care. Five practices have a pharmacist available to answer medication-related questions from clinicians and staff. The remaining two practices have a pharmacist that works closely with the core team to review prescribing practices and proactively assist patients with medication problems.

c. Executive leadership engagement and perceptions of TBC

Practices mostly reported having executive leaders that are fully engaged in TBC work. Findings from the follow-up PCTGA show that about 95 percent of practices (18 of the 19) have strong practice leadership engagement. In 11 of 19 practices, executive leaders were found to be committed to a QI process, sometimes engaging teams in implementation and problem solving. Additionally, seven of 19 practices reported that executive leaders consistently champion and

engage clinical teams in improving patient experience of care and clinical outcomes, and provide time, training, and resources to accomplish the work.

Findings from interviews match and elaborate on the PCTGA findings. Interview respondents generally perceived strong support from executive leadership, which they viewed as an early success of the initiative. At several practices, those primarily responsible for leading and carrying out the project are also in executive leadership positions at the practices, thus they are considered to be fully engaged. As one interview respondent explained, “I would say having the chief nursing officer and the chief operating officer on this phone [interview], the leadership is behind it 100 percent.” Having those in executive leadership positions also serve as TBC project leaders creates a top-down approach to engagement in TBC and promotes a culture committed to practice change. For practices where other staff are responsible for leading the project, interview respondents reported engaging executive leaders to keep them informed of TBC changes. In some cases, the executive leaders participate in meetings for the project, and in other cases, the staff responsible for the project regularly update executive leaders about project-related changes and issues. Executive leadership involvement in the project through participation in meetings or regular updates signals dedication to TBC. Interview respondents viewed these activities to engage executive leadership as facilitating sustainable practice changes.

There were only a few practices that reported challenges in engaging executive leaders, and these challenges are practice-specific. For one practice, occasional challenges engaging the chief executive officer stem from the fact that she is not a medical provider and so she does not fully understand or appreciate the impact of the changes on patient care. At a few other practices, concerns about the value, cost, and financial sustainability of the project cause executive leaders to be apprehensive or less supportive of the changes.

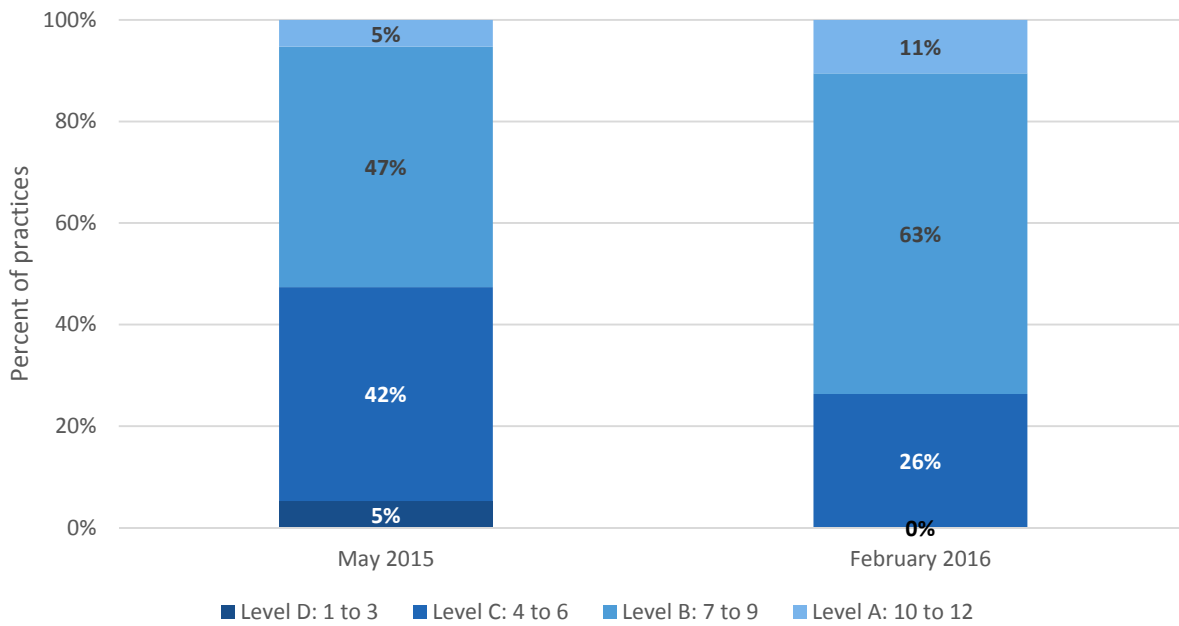
d. Data-driven QI

Although practice leaders reported some early work on expanding QI activities, most practice teams are either delayed or still trying to implement the necessary infrastructure, care processes, and methods for accessing QI data. For example, one practice team is reportedly modifying their existing EHR to support the collection of higher quality data before using such data for QI. Similarly, another practice team is revising the Plan-Do-Study-Act (PDSA) forms that will guide future QI. In another practice, the team reportedly plans to measure staff compliance in using a care plan but is still developing the care plan. Finally, some practice teams are trying to identify data sources to use for QI with some reportedly facing barriers in accessing data. Other practice leaders reported beginning efforts to engage with their EHR vendors to explore how to access data.

A few practice teams are reportedly further along in their QI work and are using PDSAs or other methods to test changes. One practice team, for example, is running PDSA cycles on three separate screening tools and plans to use results to finalize the screening tools before building them into the EHR for use during patient intake. Another practice team is tracking no-shows and testing the effect of different strategies on their no-show rates. One noteworthy example of successful data use to inform QI is a practice team that has addressed their high no-show rate by piloting a walk-in clinic and limiting appointments to no more than two weeks out. After pilot testing these methods, the practice reportedly decreased its no-show rate from 40 percent to 10 percent.

Figure III.8 shows how practice teams reported changes in the “continuous improvement driven by data” domain of the PCTGA from May 2015 to February 2016. Scores in this domain showed the largest average increase from baseline (see Table III.3 above) and the proportion of TBCI practices with average scores on these items in the top two levels increased from 52 to 74%.

Figure III.8. PCTGA: Continuous improvement driven by data



Source: Mathematica analysis of the PCTGA practice survey results, fielded by MacColl, using the 19 TBCI practices that responded in both May 2015 (baseline) and February 2016 (follow-up).

e. Patient empanelment

While all 19 practices reported that patients are encouraged to see the same provider or practice team, the extent to which practice teams worked together to prioritize empanelment varied. Findings from the PCTGA show that 42 percent of practices (eight out of 19) have patients that are assigned to specific practice panels and that the panel assignments are routinely used for scheduling purposes. Of these practices, only three reported that they continuously monitor panels to balance supply and demand. Eleven practices reported that patients are assigned to practice panels but that the assignments are not used for any administrative or other purposes. Additionally, three practices reported that empanelment is not a priority in appointment scheduling, and 10 practices reported that while empanelment is a priority, patients commonly see other clinicians due to limited availability or other issues. Six practices reported that patients typically see their own provider or practice team.

Findings from interviews are consistent with the varied findings from the PCTGA and provide insights on what practice teams at different stages of the empanelment process are doing. About half of practice teams are laying the groundwork for empanelment through several activities. Some practices are meeting with technical assistance providers for additional guidance on the “four cut” method, a four-step process for enacting initial assignments of patients to clinicians or teams (Primary Care Renewal 2009). Some practices are engaging EHR vendors to

determine how to use structured fields and generate reports, and establishing empanelment workgroups and timelines. Some of these practice teams are trying to address challenges particular to their practice such as how to assign patients to part-time clinicians and how to access data.

The remaining half of practice teams are further along in the empanelment process and are using the four cut method to assign patients to clinicians or teams. Additionally, some practice teams are working on improving existing panels by defining panel sizes, reviewing panels, and balancing panels (e.g., risk-adjusting panels). Some practice teams are addressing specific priority areas, like cleaning and accessing EHR data, to improve the empanelment process. For example, one practice leader described modifying the EHR fields to make it easier for staff to enter the primary provider and then training staff on how to use the new fields. Practice leaders viewed their progress on empanelment as a step toward TBC, and in some cases, consider patients to be empaneled to a team rather than a single provider.

f. Perceptions of the long-term viability of TBC changes

A few practice leaders reported having concerns about the long-term financial viability of the TBC model, because care management and care coordination may not be reimbursable under existing payment systems after project funding ends. In anticipation of these challenges, some practice leaders are in the early stages of developing sustainability plans by generating revenue models and exploring other funding opportunities. Additionally, a few practice leaders plan to identify any long-term cost savings that can be realized from the TBC approach to show that the upfront investment is worthwhile. One practice leader, however, described how making these changes now will help the practice to be more prepared for quality and performance-based payment systems in the future.

Practice leaders also noted a few policy issues in Colorado that pose challenges to the long-term viability of their practice changes or to the practices more generally. Specifically, some practice leaders are concerned about the expiration of the enhanced Medicaid payments under the Affordable Care Act, which poses an existential threat to practices predominately serving Medicaid-insured populations. Similarly, one practice leader described how Colorado law prevents regional care collaborative organizations from directly connecting Medicaid-insured people to specific primary care practices, which makes it difficult for the practice to identify Medicaid patients that the practice could serve.

5. Research question 5: How has coaching and other technical assistance (e.g., learning sessions, webinars) supported practices' work on the TBC initiative?

Practice leaders generally perceived coaching and other technical assistance to be high quality and described specific ways in which such support facilitated their TBC activities. This section reports feedback on each dimension of technical assistance being provided to practices: the first learning forum, coaches, website, webinar, and financial support.

a. Feedback on learning forum

Overwhelmingly, practice leaders reported that the first learning forum provided a foundational overview of TBC that prompted them and their colleagues to become excited about the initiative. They perceived this motivational aspect of the forum to be of equal importance to the specific learning that took place. Leaders found the examples and guidance to be useful and they shared instances of how they put what they learned into practice. In addition to learning about best practices for TBC, practice leaders appreciated the opportunity to network. Specifically, leaders found it valuable to connect with other practices to learn from others' experiences, ask questions, and brainstorm ideas, and they looked forward to future opportunities to interact with other participating practices.

"[T]he other things that have happened as a result of the meeting in Denver was some best practice information. No-shows were an issue for us. And taking the advice that was given at those sessions, I came back and implemented two things that have made a very significant impact on our no-show rate."

—Practice Leader

b. Feedback on coaches

Practice leaders described varied experiences with coaching—some viewed their coach's guidance as essential for their work on TBC-related changes and other viewed the coach's guidance as limited and general. Practice leaders with positive experiences described their coach as knowledgeable, motivating, and responsive to the practice's questions. In some cases, the coaches acted as liaisons by connecting practices to each other and to the experts to address practices' specific needs. These leaders reported that their coach directs the team to key resources and examples, provides guidance on their plans, and shares insights to address unexpected challenges. A few practice leaders described a slower start to working with their coaches. At the time of the baseline interviews (late fall 2015), some reported having had only one in-person meeting with their coach, and some described having been reassigned a new coach, which may have contributed to this finding. These leaders reported that the initial meeting with the coach included a discussion about the practice's approach to TBC including the objectives, core team, and roles and responsibilities. While such discussions were helpful, the practice leaders perceived the feedback from the coach as limited, and they gave suggestions on how the role of the coach could be strengthened moving forward. Specifically, they wanted clarity on the role of and expectations for the coach, more specific feedback from the coaches, and more facilitation of connections with other practices to promote shared learning.

"The coach is great... [and] has been extremely useful, and compared to some other grants, not a waste of time. She is literally coaching us through it ... She is as flexible as we need her to be, has good suggestions, [and] backs up her ideas and follows up on helping us."

—Practice Leader

c. Feedback on website

Practice leaders generally found the improvingprimarycare.org website to be helpful and full of valuable information; however, some found the website hard to navigate and time consuming. Leaders that found the website helpful reported using the search function to find relevant information. The helpful resources the leaders found included both those that provided an overview (e.g., what the goals of TBC are) as well as those on specific aspects of TBC (e.g., how

to maximize each team member role, the responsibilities of the team). Some leaders are using the videos, learning tools, and examples from the website to educate the team, shape goals, develop plans, obtain ideas, and spark conversations.

While the content on the website was reported to be helpful, the site itself was difficult to navigate and not user friendly, according to some leaders. These leaders reported that given the volume of content on the site, it could be time-consuming to find relevant information. A small number of practice leaders reported not having had a chance to use the website because of lack of time. A few leaders suggested reorganizing the site to make it a step-by-step process directing users on where to go next and what information to look at when.

d. Feedback on webinars

Because some of the baseline interviews took place before the November 2015 webinar, our ability to assess the helpfulness of the webinars is limited. However, those interviewed after the webinar reported that they liked the opportunity to hear from other practices at various stages of the process and gain insights on lessons learned. When asked about topics of interest for future webinars, practice leaders expressed interest in learning about strategies to engage and get buy-in from staff, communicate as a team, design QI and evaluation, and promote population health.

e. Feedback on financial support

Practice leaders were generally satisfied with the level of financial support they were receiving from the Foundation. Some leaders described using the financial support to conduct staff training on roles and responsibilities, use of new technology, and motivational interviewing. These leaders mentioned that such training opportunities would likely not be available otherwise as the financial support enabled them to offset losses in revenue associated with closing the practice for trainings and meetings. Some practice leaders reported using the financial resources to acquire EHRs, other software (e.g., EHR modules), or hardware (e.g., smart boards, computers). These purchases helped practices improve documentation and reporting to evaluate their models, initiate QI projects, and empanel patients.

At the time of the baseline interviews, a few practice leaders reported that their practice had yet to take advantage of the financial support because they were unsure how best to use the funding. One area of concern among these practice leaders was the limitation on the use of the financial support. Specifically, a few practice leaders wanted to use the financial support to pay staff salaries or hire new staff, which was not permissible. These leaders expected to spend time considering how to use the financial support and were interested in receiving assistance in this area.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Common barriers and facilitators to change across the five areas of the success rubric

As practice teams implement changes, they face various challenges including barriers to engaging patients in TBC-related practice decisions, initiating data-driven QI, and securing staff buy-in and acceptance of TBC changes to workflows and team member roles. These challenges impede practices' ability to achieve successful TBC. At the same time, many of these practices have benefited from key facilitators for practice change including supportive leadership, communication with staff about TBC, and technical assistance and Foundation supports. Practices' strengths in these areas are helping them meet their TBC goals. This section summarizes salient barriers and facilitators described above that have emerged as practice teams work to make progress on each of the success rubric components.

1. **Successful patient engagement: barriers and facilitators**

Our findings suggest that practice teams may need more guidance on how to plan and implement approaches for engaging their patient populations in TBC-related practice decisions. They can also consider alternative methods for engaging patients that may be less burdensome for patients but still enable them to receive patient feedback such as surveys or comment cards.

- Few practices have concrete plans to engage patients in practice decisions related to TBC. Competing priorities and lack of planning for engagement are notable barriers.
- Patient engagement activities that require regular meetings pose challenges because patients may not be able to commit time on a regular basis to participate in meetings.
- Practices have made substantial progress engaging patients in their health and health care through shared decision making, self-management support, and patient education.

2. **Successful patient experience: barriers and facilitators**

Patients reported high satisfaction with overall care, access, communication, and care coordination; however, lower satisfaction among certain subsets of patients highlights the need for practices to develop competencies for engaging these populations and to devote additional programs and outreach resources to these groups.

- Patients in poorer physical and mental health, Hispanics, and those who read and write in Spanish often reported having less positive experiences and less satisfaction with their care.
- Despite demographic differences noted above, patients, in general, were very satisfied with the care that they received. This suggests that practices' continued focus on building and expanding TBC serves patients well.

3. **Successful team member experience: barriers and facilitators**

Practices have had varied success in getting team members to understand TBC approaches and find them acceptable. Given the range of practices' experiences, practices that are making progress in this domain may serve as valuable resources to those that are struggling.

- About half of practices are facing challenges getting staff to understand the need for TBC and embrace changes. Staff resistance stems from concerns about having more work, delegating tasks, having to work with certain staff, and feeling fatigued from the changes.
- Rural practices and FQHCs have higher staff burnout compared to their counterparts.
- Facilitators among practices with greater staff support include having two-way channels of communication about TBC, a culture open to change, prior success enacting similar changes, a preexisting foundation of teamwork, and leadership engagement.

4. Successful practice change: barriers and facilitators

As practices lay the groundwork for future practice changes, they are experiencing specific barriers that impede their QI and empanelment activities while also benefiting from existing supports including technical assistance, financial support, and dedicated teams.

- Some practices lack infrastructure to support changes and are still building teams, forming committees, and planning workflows; others face challenges identifying and accessing data and using EHRs. These issues impede progress on QI and empanelment.
- Facilitators to practice change include technical assistance such as guidance from coaches, website resources, and examples from the learning forum. Financial support enables training and resources that may not be possible otherwise.
- Practices benefit from having a dedicated team in place—a core TBC team, goal-specific teams, or a larger staff team—to work on TBC.

5. Sustainability: barriers and facilitators

Practice leaders are considering the long-term viability of the changes they are making. As the evaluation continues, we will assess the extent to which early planning for sustainability supports the long-term viability of practice changes.

- A barrier to sustainability is that existing payment systems do not reimburse for care management and care coordination. State policies, including the expiration of enhanced Medicaid payments, may exacerbate practices' existing financial challenges.
- A few leaders are working on sustainability plans by, for example, developing revenue models, exploring sources of funding, or identifying long-term cost savings from TBC.

Table IV.1 shows some initial patterns across these success rubric components by CFIR domain. Our initial findings indicate that the characteristics of the TBCI, including the funding provided to practices, technical assistance and coaching, and participation in the learning forums are important facilitators of practice change. Factors external to the practices, including the complex needs of the patients they serve and the policy context in which they work present challenges across multiple areas of the success rubric. Factors internal to the practices, such as prior experience with team-based care and engaged leadership support TBC implementation. Challenges integrating new work processes, EHR technology, and staff burnout in some practices present important barriers to implementation. In addition, initial staff skepticism about the planned TBC changes presents a challenge to effective practice change. At this early stage in the initiative, few practices had clear plans for change but dedicated TBC implementation teams facilitated these early efforts.

Table IV.1. Facilitators and barriers to TBCI implementation by success rubric component

CFIR domains	Success rubric components				
	Patient Engagement	Patient Experience	Team Member Experience	Practice Change	Sustainability
Characteristics of the team-based care intervention					
Financial resources provided from CHF				+	
Tailored assistance from coaches or learning faculty	-			+	
Participation in learning forums				+	
Outer setting and context					
Federal, state, or local policy or payment mechanisms					-
Patient perceptions of care quality		+			
Complexity of health needs in patient population		-			
Language barriers		-			
Patients' availability to participate in regular meetings	-				
Inner setting and practice structure					
Staff burnout levels in rural practices and FQHCs			-	-	
Prior success with similar changes and history of teamwork			+	+	
Integration of new work with existing work processes, change fatigue			-	-	
EHR technology challenges				-	
Supportive and engaged leadership			+	+	
Practice culture of accepting change			+		
Competing TBCI priorities	-				
Characteristics and beliefs of people in the practice					
Clinician and staff skepticism of the value of team-based care			-	-	
Team-based care implementation process within the practice					
Dedicated TBCI implementation team				+	
Difficulties identifying and accessing EHR data				-	
Planning for change	-				
Use of shared decision making, self-management support, and patient education	+				

Note: Facilitators are marked with + and barriers with - . These themes emerged in our baseline telephone interviews with TBCI leaders in all participating practices, but not all themes pertain to all practices.

B. Suggestions for how coaching and technical assistance could address key problem areas

Our findings suggest that additional resources are needed to help practice teams overcome challenges to engaging patients in practice decisions, initiating data-driven QI, and getting staff to buy-in and accept the practice changes underway.

To assist practice teams in engaging patients in TBC-related practice decisions, technical assistance should focus on helping practice teams mitigate barriers to patient engagement and identify engagement methods that are likely to be successful for their patient populations. Specifically, practices without an existing patient advisory board or other mechanisms to engage patients in practice decisions (e.g., surveys, focus groups, comment cards) may need assistance in developing patient engagement strategies. Teams from these practices may benefit from hearing from other practice teams who have successfully engaged patients in TBC planning to learn how they set up their plans and overcame challenges. Additionally, practices that have existing engagement mechanisms in place, but have yet to engage patients in practice decisions may benefit from support in planning meetings and agendas for engaging patients and soliciting feedback on key TBC changes.

Technical assistance for practice teams struggling with QI could focus on helping teams make the most of the data that they have (e.g., by reviewing currently available data sources) while simultaneously supporting teams as they work to resolve data access or quality issues with their EHR vendor. Additionally, practice teams that have faced and overcome similar data access issues and challenges with consistent documentation in the EHR may have lessons learned for those experiencing this challenge. Practice teams that are struggling to initiate QI could benefit from additional support in this area. Some of these practice teams have spent the first year trying to build the infrastructure for QI and have faced specific barriers in doing so. Specifically, practices that have only recently acquired staff dedicated to QI may benefit from resources focused on optimizing the role of QI officers or committees as they begin to ramp of QI projects.

Technical assistance could help practice teams struggling to get staff buy-in by having coaches help identify the main reasons for staff resistance and work with practice leaders to develop targeted strategies addressing underlying causes of concern. For example, some practices have staff that do not appreciate the need for change. These practices may benefit from more staff education on the benefits of TBC for patients, team members, and staff. Other practices face resistance from staff because they are overwhelmed by the practices' participation in multiple service delivery reforms. These practices may need additional support to help staff recognize how practice changes from multiple initiatives fit together under a unified framework to improve quality of care. Lastly, some practices face staff resistance implementing new workflows. Discomfort among nonclinical staff (such as front desk staff) about having greater responsibilities may indicate that new workflows exceed their training or skill set. In such cases, practices may need guidance on providing appropriate training and adjusting workflows to match team members' expertise.

C. Conclusion and next steps

Practice teams have made substantial progress in laying the groundwork for sustainable TBC-related changes through engaging executive leadership, planning new workflows, clarifying team member roles and responsibilities, and involving staff in practice changes. Significant work remains in engaging patients in TBC-related decisions, pursuing data-driven QI, empaneling all patients to clinicians or teams, and moving from planning new workflows to implementing them. Technical assistance addressing the key barriers identified in the first year of the initiative may help struggling practices achieve greater progress in meeting TBC goals. In addition, connecting practices to each other may facilitate shared learning and benefit practices in need of extra support in particular areas.

During the first year of our evaluation, we have begun to develop a comprehensive understanding of practice teams' plans and early experiences with TBC. We have also started to identify and track facilitators and barriers to achieving the goals of TBC. In the second year of the evaluation, we will continue to monitor practice teams' experiences and progress implementing the TBC changes they have planned using the following methods:

1. In fall 2016, we will conduct the first round of site visits with 10 selected practices to examine their experiences with TBC, progress to date, and barriers and facilitators to change.
2. In fall 2017, we will field another round of the PCTGA to collect updated details on practice transformation in participating practices and assess how scores on various subsections have changed from the prior administration of this instrument.
3. In summer 2017, we will field the patient survey to gather follow-up information on patient experiences with TBC transformation and compare findings to baseline data.

V. REFERENCES

- Bodenheimer T., A. Ghorob, R. Willard-Grace, and K. Grumbach. “The 10 Building Blocks of High-Performing Primary Care.” *Annals of Family Medicine*, vol. 12, no. 2, 2014, pp. 166-171. doi:10.1370/afm.1616.
- Dale, S. B., Ghosh, A., Peikes, D. N., Day, T. J., Yoon, F. B., Taylor, E. F., et al. 2016. “Two-Year Costs and Quality in the Comprehensive Primary Care Initiative.” *The New England Journal of Medicine*. <http://doi.org/10.1056/NEJMsa1414953>
- Damschroder, L.J., D.C. Aron, R.E. Keith, S.R. Kirsh, J.A. Alexander, and J.C. Lowery. 2009. “Fostering Implementation of Health Services Research Findings into Practice: A Consolidated Framework for Advancing Implementation Science.” *Implementation Science*, vol. 4, no. 50, 2009.
- MacColl Center for Health Care Innovation, Group Health Research Institute. “Improving Primary Care. Primary Care Team Guide Assessment,” 2016. Available at <http://www.improvingprimarycare.org/assessment/full>. Accessed August 8, 2016.
- Mitchell, P., M. Wynia, R. Golden, B. McNellis, S. Okun, C.E. Webb, V. Rohrbach, and I. Von Kohorn. “Core Principles & Values of Effective Team-Based Health Care.” Discussion Paper, Institute of Medicine, Washington, DC, 2012. Available at www.nationalacademies.org/hmd/~media/75CD7BA7BFB14576931326A22AFCEC36.ashx. Accessed August 8, 2016.
- Primary Care Renewal. “Personal Care Panel.” CareOregon, Portland, OR, 2009. Available at <http://www.improvingchroniccare.org/downloads/empanelment.pdf>. Accessed August 8, 2016.

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ATTACHMENT A

PRIMARY CARE TEAM GUIDE ASSESSMENT

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These questions will help you track how well your practice is implementing team-based care. Your answers will help you identify areas where your practice can continue to improve using the action steps and resources in this guide. You can repeat this assessment later to track your progress over time.

What Do Your Choices Mean?

- If you score in Level D in any area, your practice is just getting started and may want to review the resources page in that section of the guide to help you prepare for the key changes described there.
- If you score in Level C in any area, your practice is in the early stages of change and can benefit from the action steps and resources in that section of the guide.
- If you score in Level B in any area, your practice has implemented basic changes and can build upon your success with the action steps and resources in that section of the guide.
- If you scored in Level A in any area, your practice has achieved most or all of the important changes required. Congratulations! You can still use the actions steps and resources in that section of the guide to find new ways to improve.

This assessment was developed by the MacColl Center for Health Care Innovation at Group Health Research Institute. It is based on the PCMH-A measures created by MacColl in collaboration with Qualis Health for the [Safety Net Medical Home Initiative](#) and supplemented by measures developed by Dr. Tom Bodenheimer related to his [“10 Building Blocks of High-Performing Primary Care.”](#)

Empanelment

	Components	Level D	Level C	Level B	Level A
1	Patients...	are not assigned to specific practice panels. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	are assigned to specific practice panels but panel assignments are not routinely used by the practice for administrative or other purposes. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	are assigned to specific practice panels and panel assignments are routinely used by the practice mainly for scheduling purposes. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	are assigned to specific practice panels and panel assignments are routinely used for scheduling purposes and are continuously monitored to balance supply and demand. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

The Practice Team

	Components	Level D	Level C	Level B	Level A
2	Clinical leaders...	intermittently focus on improving quality. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	have developed a vision for quality improvement, but no consistent process for getting there. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	are committed to a quality improvement process, and sometimes engage teams in implementation and problem solving. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	consistently champion and engage clinical teams in improving patient experience of care and clinical outcomes, and provide time, training, and resources to accomplish the work. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>
3	Quality improvement activities are conducted by...	a centralized committee or department. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	topic specific QI committees. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	all practice teams supported by a QI infrastructure. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	practice teams supported by a QI infrastructure with meaningful involvement of patients and families. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>
4	Staff other than PCPs ...	play a limited role in providing clinical care. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	are primarily tasked with managing patient flow and triage. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	provide some clinical services such as assessment or self-management support. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	perform key clinical service roles that match their abilities and credentials. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>
5	Clinical support staff...	work with different providers every day. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	are linked to providers in teams but are frequently reassigned. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	consistently work with a small group of providers and staff in a team. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	consistently work with the same provider(s) almost every day. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

	Components	Level D	Level C	Level B	Level A
6	Workflows for clinical teams...	have not been documented and/or are different for each person or team. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	have been documented, but are not used to standardize workflows across the practice. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	have been documented and are utilized to standardize practice. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	have been documented, are utilized to standardize workflows, and are evaluated and modified on a regular basis. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>
7	The practice...	does not have an organized approach to identify or meet the training needs for providers and other staff. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	routinely assesses training needs and encourages on-the-job training for staff needing it. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	routinely assesses training needs, and ensures that staff are appropriately trained for their roles and responsibilities. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	routinely assesses training needs, ensures that staff are appropriately trained for their roles and responsibilities, and provides cross training to ensure that patient needs are consistently met. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>
8	Standing orders that can be acted on by non-independent providers under protocol...	do not exist for the practice 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	have been developed for some conditions but are not regularly used. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	have been developed for some conditions and are regularly used. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	have been developed for many conditions and are used extensively. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Medical Assistant (MA)

	Components	Level D	Level C	Level B	Level A
9	MAs in our practice...	mostly take vital signs and room patients. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	perform a few clinical tasks beyond rooming patients such as reviewing medication lists or administering a PHQ-2. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	perform a few clinical tasks and collaborate with the provider in managing the panel (reviewing exception reports, making out-reach calls). 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	Collaborate with the provider in managing the panel, and play a major role providing preventive services, and services to chronically ill patients such as self-management coaching, or follow-up phone calls. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Registered Nurse (RN)

	Components	Level D	Level C	Level B	Level A
10	RNs in our practice...	are not part of the core practice team. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	mostly triage phone calls and do injections or other procedures. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	Manage transitions within and across levels of care (home care, hospital, specialists). Provide specific intensive care coordination and management to highest risk patients. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	Provide care management for high risk patients and collaborate with providers in teaching and managing patients with chronic illness, monitoring response to treatment, and titrating treatment according to delegated order sets in independent nurse visits 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Layperson (Individuals without formal clinical training (e.g. Community Health Workers, Patient Navigators))

	Components	Level D	Level C	Level B	Level A
11	Laypersons in our practice...	are not involved in clinical care.	mostly provide non-clinical patient-facing roles such as reception or referral management.	include individuals who do one or more of the following: provide self-management coaching, coordinate care, help patients navigate the health care system, or access community services.	perform the functions in Level B and are key members of core practice teams.
		1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Pharmacist

	Components	Level D	Level C	Level B	Level A
12	A pharmacist... Article I.	is not involved in our practice.	oversees our dispensary but is not much involved in clinical care.	is available to answer medication-related questions from providers and staff both directly and electronically.	works closely with the core practice team to review prescribing practices and proactively assist patients with medication related problems such as non-adherence, side effects and medication management challenges.
		1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Enhancing Access

	Components	Level D	Level C	Level B	Level A
13	Patients are encouraged to see their paneled provider and practice team ...	only at the patient's request. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	by the practice team, but is not a priority in appointment scheduling.. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	by the practice team and is a priority in appointment scheduling, but patients commonly see other providers because of limited availability or other issues. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	by the practice team, is a priority in appointment scheduling, and patients usually see their own provider or practice team. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Self-Management Support

	Components	Level 1D	Level C	Level B	Level A
14	Self-management support...	is limited to the distribution of information (pamphlets, booklets). 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	is accomplished by referral to self-management classes or educators. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	is provided by goal setting and action planning with members of the practice team. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	is provided by members of the practice team trained in patient empowerment and problem-solving methodologies. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Population Management

	Components	Level D	Level C	Level B	Level A
15	Registry information on individual patients...	is not available to practice teams for pre-visit planning or patient outreach. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	is available to practice teams but is not routinely used for pre-visit planning or patient outreach. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	is available to practice teams and routinely used for pre-visit planning or patient outreach, but only for a limited number of diseases and risk states. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	is available to practice teams and routinely used for pre-visit planning and patient outreach, across a comprehensive set of diseases and risk states. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Planned Care

	Components	Level D	Level C	Level B	Level A
16	Visits...	largely focus on acute problems of patient.	are organized around acute problems but with attention to ongoing illness and prevention needs if time permits.	are organized around acute problems but with attention to ongoing illness and prevention needs if time permits. The practice also uses subpopulation reports to proactively call groups of patients in for planned care visits.	are organized to address both acute and planned care needs. Tailored guideline-based information is used in team huddles to ensure all outstanding patient needs are met at each encounter.
		1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>
17	A patient who comes in for an appointment and is overdue for preventive care (e.g., cancer screenings)...	will only get that care if they request it or their provider notices it.	might be identified as being overdue for needed care through a health maintenance screen or system of alerts, but these tools are inconsistently used.	will be identified as being overdue for care through a health maintenance screen or system of alerts that is used consistently, but clinical assistants may not act on these overdue care items without patient-specific orders from the provider.	will be identified as being overdue for care through a health maintenance screen or system of alerts that is used consistently, and clinical assistants may act on these overdue care items (e.g., administer immunizations or distribute colorectal cancer screening kits) based on standing orders.
		1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Care Management

	Components	Level D	Level C	Level B	Level A
18	Follow-up by the primary care practice with patients seen in the emergency room (ER) or hospital...	generally does not occur because the information is not available to the primary care team. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	occurs only if the ER or hospital alerts the primary care practice. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	occurs because the primary care practice makes proactive efforts to identify patients. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	is done routinely because the primary care practice has arrangements in place with the ER and hospital to both track these patients and ensure that follow-up is completed within a few days. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>
19	Clinical care management services for high-risk patients...	are not available 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	are provided by external care managers with limited connection to practice 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	are provided by external care managers who regularly communicate with the care team 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	are systematically provided by the care manager functioning as a member of the practice team, regardless of location 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Patient-Centered Interactions

	Components	Level D	Level C	Level B	Level A
20	Involving patients in decision-making and care...	is not a priority. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	is accomplished by provision of patient education materials or referrals to classes. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	is supported and documented by practice teams. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	is systematically supported by practice teams trained in decision-making techniques. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Medication Management

	Components	Level D	Level C	Level B	Level A
21	In our practice medication management consists of...	prescribers who order prescriptions and refills as necessary . 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	a MA or another clinical staff member who reviews the EHR drug list at the beginning of a patient's appointment. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	a pharmacist, nurse, or coach/educator who works directly with patients having challenges understanding or taking their medications, individually or in groups. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	In addition to C and B, the practice has a pharmacist and/or nurse who can titrate medications for select groups of patients under standing orders. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Referral Management

	Components	Level D	Level C	Level B	Level A
22	Patients in need of specialty care, hospital care, or supportive community-based resources...	cannot reliably obtain needed referrals to partners with whom the practice has a relationship. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	obtain needed referrals to partners with whom the practice has a relationship. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	obtain needed referrals to partners with whom the practice has a relationship and relevant information is communicated in advance. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	obtain needed referrals to partners with whom the practice has a relationship, relevant information is communicated in advance, and timely follow-up after the visit occurs. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Behavioral Health Integration

	Components	Level D	Level C	Level B	Level A
23	Article II. Behavioral health services...	are difficult to obtain reliably. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	are available from mental health specialists but are neither timely nor convenient. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	are available from community specialists and are generally timely and convenient. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	are readily available from behavior health specialists who are on-site members of the care team or who work in a community organization with which the practice has a referral protocol or agreement. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Oral Health Integration

	Components	Level D	Level C	Level B	Level A
24	Oral health services...	are not provided in our practice. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	are provided by a medical professional on the care team (ex. Cavity Free at Three) with referrals for more treatment needs to a dental professional inside or outside organization (no discussion of patient cases between PCP and dental professionals). 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	are provided by a co-located dental professional on the care team with referrals for more treatment needs to dentists inside or outside of the organization (formal agreements between organizations, but no integrated electronic systems). 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	are provided by a co-located dental professional on the care team and additional treatment needs provided by dentists inside organization (integrated electronic records and operating systems). 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Communication Management

	Components	Level D	Level C	Level B	Level A
25	Contacting the practice team during regular business hours...	is difficult. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	depends on the practice's ability to respond to telephone messages. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	is accomplished by staff responding by telephone within the same day. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	is accomplished by providing a patient a choice between email and phone interaction, utilizing systems which are monitored for timelines. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>
26	Test results and care plans...	are not communicated to patients. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	are communicated to patients based on an ad hoc approach. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	are systematically communicated to patients in a way that is convenient to the practice. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	are systematically communicated to patients in a variety of ways that are convenient to patients. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

Clinic-Community Connections

	Components	Level D	Level C	Level B	Level A
27	Linking patients to supportive community-based resources...	is not done systematically. 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	is limited to providing patients a list of identified community resources in an accessible format. 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	is accomplished through a designated staff person or resource responsible for connecting patients with community resources. 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	is accomplished through active coordination between the health system, community service agencies and patients and accomplished by a designated staff person. 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>

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ATTACHMENT B

PRIMARY CARE TEAM GUIDE
QUESTION / RESPONSES

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Table B.1. TBCI practices' self-reported primary care delivery approaches in May 2015 (baseline-BL) and February 2016 (follow-up-FU)¹

PCTGA question	TBCI practices in May 2015	TBCI practices in February 2016	Difference BL-FU
1. Patients ...	7.0	6.8	-0.2 ²
2. Clinical leaders ...	8.3	8.8	0.5
3. Quality improvement activities are conducted by ...	6.0	6.9	0.9
4. Staff other than PCPs ...	8.8	7.9	-0.9
5. Clinical support staff ...	8.6	9.1	0.5
6. Workflows for clinical teams ...	5.5	5.7	0.2
7. The practice ...	5.2	6.8	1.6 ²
8. Standing orders that can be acted on by non-independent providers under protocol ...	6.9	6.8	-0.1
9. MAs in our practice ...	7.5	7.8	0.3
10. RNs in our practice ...	5.8	5.8	0.0
11. Laypersons in our practice ...	7.8	8.3	0.5
12. A pharmacist ...	3.8	4.7	0.9 ²
13. Patients are encouraged to see their paneled provider and practice team ...	7.6	8.3	0.7
14. Self-management support ...	7.0	8.2	1.2
15. Registry information on individual patients ...	4.4	5.2	0.8
16. Visits ...	7.2	7.2	0.0
17. A patient who comes in for an appointment and is overdue for preventive care (e.g., cancer screenings) ...	5.6	7.8	2.2 ²
18. Follow-up by the primary care practice with patients seen in the emergency room (ER) or the hospital ...	6.6	7.1	0.5 ²
19. Clinical care management services for high-risk patients ...	6.3	7.2	0.9 ²
20. Involving patients in decision-making and care ...	8.0	7.6	-0.4
21. In our practice medication management consists of ...	6.0	6.4	0.4
22. Patients in need of specialty care, hospital care, or supportive community-based resources ...	8.9	9.0	0.1
23. Behavioral health services ...	9.7	9.9	0.2
24. Oral health services ...	5.5	6.6	1.1 ²
25. Contacting the practice team during regular business hours ...	7.4	7.3	-0.1
26. Test results and care plans ...	8.1	8.1	0.0
27. Linking patients to supportive community-based resources ...	8.4	8.4	0.0
Overall PCTGA average score	6.9	7.4	0.5 ²

Source: Mathematica analysis of the PCTGA practice survey results, fielded by MacColl, using the 19 TBCI practices that responded in both May 2015 and February 2016.

Notes: ¹Absolute changes in the PCTGA score and eight domains; the range for each score is 1–12 (lowest- to highest-functioning). Composite scores were calculated using an average of each practice's response to all questions in a given area.

²Indicates a change between levels between baseline and follow-up:

Level D (1-3): Practice is just getting started and may want to review the resources page in that section of the guide to help prepare for the key changes described there.

Level C (4-6): Practice is in the early stages of change and can benefit from the action steps and resources in that section of the guide.

Level B (7-9): Practice has implemented basic changes and can build upon success with the action steps and resources in that section of the guide.

Level A (10-12): Practice has achieved most or all of the important changes required.

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