

# REPORT

FINAL

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## **Team-Based Care Initiative Interim Report**

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September 28, 2017

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## EXECUTIVE SUMMARY

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In February 2015, the Colorado Health Foundation (the Foundation) initiated the Team-Based Care Initiative (TBCI) to strengthen the delivery of comprehensive, person-centered primary care, by improving the delivery of team-based care within primary care practices across Colorado. For the initiative, the Foundation adopted the five principles of high quality team-based care identified by the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine: (1) shared goals, (2) clear roles, (3) mutual trust, (4) effective communication, and (5) measurable processes and outcomes (Figure ES.1). To make improvements in these areas, the TBCI provides practices with financial assistance (grants or loans) and technical assistance (including practice coaching, online resources, and in-person learning opportunities). This second annual report describes practices' progress in making changes that align with the five principles of team-based care; facilitators of and barriers to this progress; and the effects of these changes on patients, clinicians, staff, and care delivery approaches.

**Figure ES.1. Principles of team-based care**



The TBCI uses a two-phased approach to help practices make improvements across each of the five team-based care principles. In Phase 1, the technical assistance partner (TAP) supported 30 primary care practices in developing a proposed work plan and budget for expanding team-based care. Based on recommendations from the TAP, 20 of the Phase 1 practices were selected to participate in Phase 2 starting in June 2015. One of the selected practices withdrew from participation. Over the past two years, the 19 remaining Phase 2 practices have received grants or loans from the Foundation along with coaching and other implementation supports from the TAP.

Our findings on the effects of the TBCI on practices, patients, clinicians and staff, and care delivery approaches through April 2017 are promising. We found broad-based improvements across all areas of practices' self-reported care delivery approaches, with particularly strong improvements in risk-stratified care management and the organization of care teams. However, only a small minority of the participating practices reported making all the changes needed in any one of the care delivery areas, indicating that work remains to be done in the initiative's final year. Patients continued to report high levels of satisfaction with their care and feeling respected by members of the care team. Although many clinicians and staff remained satisfied with their jobs, burnout appeared to be an increasing problem affecting a minority of the practices.

### **A. How have practices transformed care?**

Our in-depth study of 10 TBCI practices, along with survey data collected across all of the participating practices, suggests that many of the Phase 2 practices have made substantial changes across each of the five team-based care principles. Our findings suggest that progress has been uneven across these five areas and across practices. We found the most extensive

practice changes related to two of the five principles of team-based care (shared goals and clear roles) and limited efforts relating to developing mutual trust among team members. Specifically, practices reported the following efforts across each of the five principles:

- Establishing **shared goals** by increasing patients' involvement in making decisions about their health and practice improvement, engaging the whole team in patient-centered goal setting, and educating patients on team-based care changes taking place in the practice
- Setting **clear role** expectations by empaneling patients to care teams, using standing orders to delegate care tasks, providing staff training in new responsibilities, and integrating new services into the practice
- Building **mutual trust** by making sure that care teams are responsible for their empaneled patients and have stable membership over time
- Ensuring **effective communication** across the practice, within care teams, and with patients through staff retreats, team meetings, team huddles to plan care, and patient portals
- Developing **measurable processes and outcomes** to gain feedback on team and practice functioning by building or expanding quality improvement efforts, engaging patients and family members in those efforts, and using health information technology (health IT) to report and monitor care quality

Across these areas we found the following:

- Technical assistance provided by the TAP, including coaching supports and practical guidance on empanelment, supported practice change.
- Programs such as the Colorado State Innovation Model, the Comprehensive Primary Care (CPC) and CPC+ initiatives, and federally qualified health center accreditation helped create a supportive environment for team-based care.
- Uneven availability of health IT support, reliance on part-time clinicians and staff, uneven staff training opportunities, limited leadership engagement, and clinician and staff burnout posed barriers to implementing team-based care changes in some practices.
- Clinicians' support for and participation in new team-based care activities such as team huddles supported practice change across nearly all areas on which practices worked.

## **B. Conclusions and recommendations**

Building on the progress to date requires (1) renewed efforts to address concerns about leaders' engagement with and support for team-based care in some practices, (2) ensuring more consistent staff training opportunities across the practices, and (3) identifying ways of addressing the growing problem of staff burnout. In the final year of the TBCI, we will continue to monitor practice progress on implementing team-based care and assess the TBCI's effects on patients, clinicians and staff, and care delivery. Our final report will discuss these issues and focus on practice plans for sustaining the changes they have made through their participation in the TBCI.

## **I. INTRODUCTION**

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### **A. Background**

In alignment with the mission of the Colorado Health Foundation (the Foundation), the overall aim of the Team-Based Care Initiative (TBCI) is to support practices in transforming primary care to improve the health and health care of Coloradans. This three-and-a-half-year funding opportunity supports primary care practices' efforts to optimize existing care teams to deliver high quality, coordinated care and to increase the number of Coloradans who receive comprehensive, patient-centered care.

Team-based models of care, such as those supported through the TBCI, have shown promise in promoting more efficient and effective primary care delivery and have been shown to have positive effects on both providers' and patients' satisfaction (Casalino et al. 2003; Coleman and Reid 2013; Mickan 2005; Mitchell et al. 2012; O'Malley et al. 2015; Shipman and Sinsky 2013; Shojania et al. 2006; Sinsky et al. 2013; Wagner 2000). In addition, a recent white paper commissioned by the Agency for Healthcare Research and Quality (Schottenfeld et al. 2016) reviewed the literature on team-based care in primary care and identified the following potential benefits:

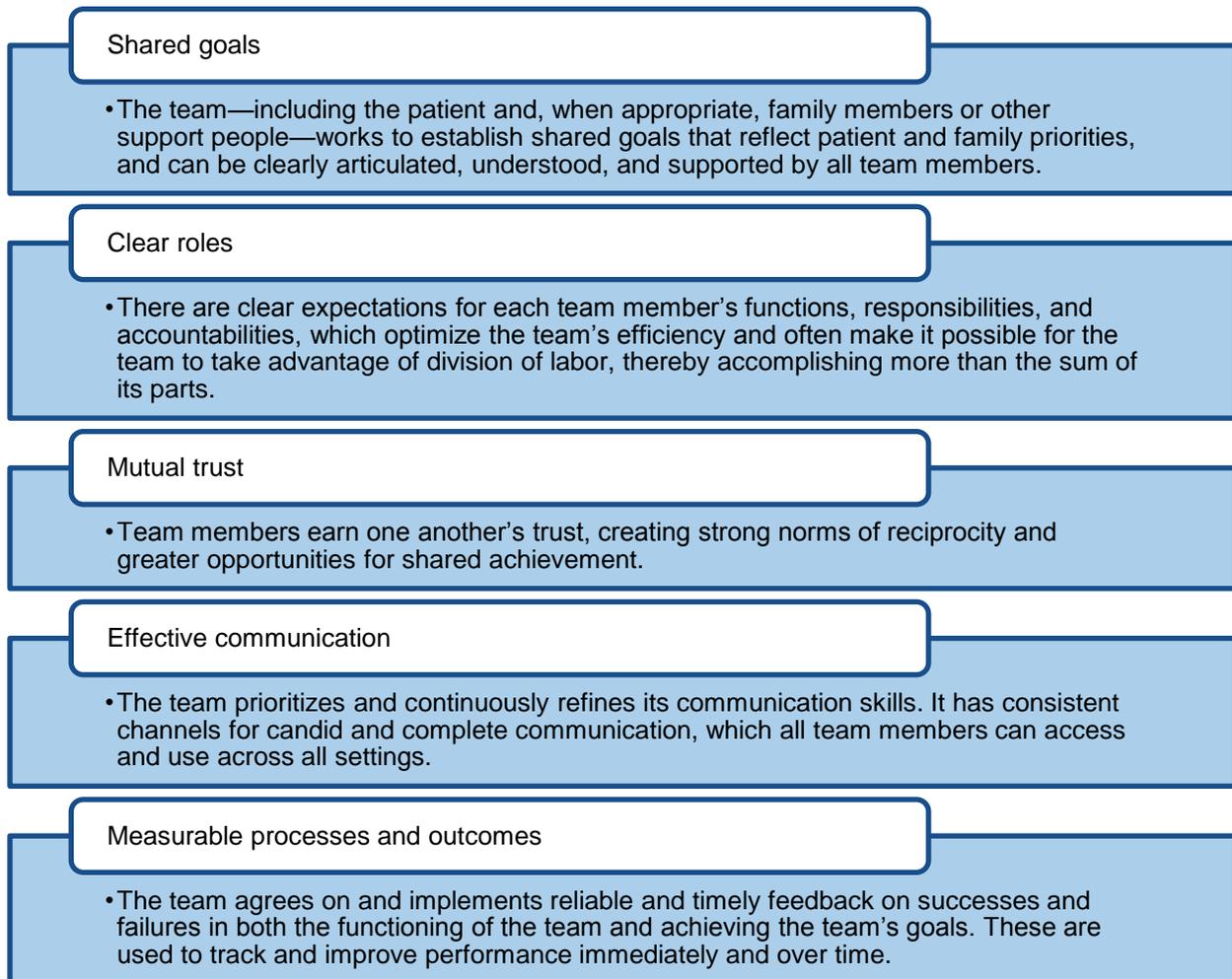
- Expanded access to care through more efficient delivery of services (Campbell et al. 2001; Peikes et al. 2014)
- More effective delivery of additional services, such as patient education, behavioral health, self-management support, care coordination, and care management (Aiken 2003; Bodenheimer 2007; Gilbody et al. 2006; Shojania et al. 2006; Wagner 2000; Walsh et al. 2006)
- Increased job satisfaction for providers and primary care staff members by creating an environment in which all can perform work matched to their abilities (Sevin et al. 2009; Sinsky et al. 2013)
- More effective engagement of practice members and patients in continuous quality improvement (Taylor et al. 2013)

#### **1. Rationale for the TBCI**

In 2015, the Foundation determined that, although improved teamwork in primary care could have significant positive effects on both individual and population health, inter-professional team-based care is not a routine part of primary care in the United States or in Colorado. In a series of key informant interviews commissioned by the Foundation, Colorado practices cited lack of experience and expertise in team-based care, cultural silos within practices, insufficient infrastructure to support team-based care approaches, and inadequate or absent reimbursement for some services as key barriers to expanding team-based care. In response to these challenges, the Foundation sought to build on previous investments in practice transformation and integrated care to help primary care practices develop the team-based care capacity needed to succeed in future care delivery transformation and new payment models.

In the overall design of the TBCI, the Foundation adopted the five principles of team-based care identified by the National Academies of Sciences, Engineering, and Medicine (NAM) (Mitchell et al. 2012). These five principles are shared goals, clear roles, mutual trust, effective communication, and measurable processes and outcomes (Figure I.1 defines each principle).

**Figure I.1. Definitions of principles of team-based care**



Source: "Core Principles and Values of Effective Team-Based Health Care" (Mitchell et al. 2012).

## 2. Overview of the TBCI

The TBCI initially provided technical assistance and coaching to 30 Colorado primary care practices to develop work plans for enhancing team-based care (Phase 1) and then the Foundation selected 20 of these practices in June 2015 for funding and additional technical support (Phase 2).<sup>1</sup> The 20 selected practices received grants (or interest-free loans) of up to

<sup>1</sup> For initial selection, practices had to (1) be primary care clinics in Colorado serving a significant population of underserved patients, (2) have at least one existing primary care team, (3) use an Office of the National Coordinator

\$150,000 to implement team-based models of care based on their approved work plans. One of these selected practices subsequently withdrew from the initiative, leaving 19 participating practices across Colorado. The participating practices varied in terms of the number of patients served across both rural and urban practice locations and included federally qualified health centers (FQHCs) and other primary care practice types.

In addition to the grant or loan funding provided by the TBCI, Phase 2 practices receive ongoing technical assistance and feedback through the following:

- An interactive online training program called the “Primary Care Team Guide” (<http://improvingprimarycare.org/>) developed by experts at the MacColl Center for Health Care Innovation at Kaiser Permanente Washington Health Research Institute
- In-person learning forum collaboratives, providing detailed information on implementing team-based care and opportunities to share approaches with members of other participating practices, led by a technical assistance partner (TAP) composed of experts from the John Snow Research & Training Institute, Leibig-Shepherd, LLC, Kaiser Permanente Washington Health Research Institute, and the Colorado Community Health Network
- In-person and telephone-based support, provided by TAP coaches with expertise in practice change and team-based care, guided by a detailed TAP-developed change package based on the building blocks of high-performing primary care (Bodenheimer et al. 2014)<sup>2</sup>
- Annual feedback on patients’ satisfaction from Mathematica Policy Research

The practices selected by the Foundation for funding and support through the TBCI first worked with practice coaches to identify team-based care-related goals tailored to local practice objectives. Our baseline evaluation report (Crosson et al. 2016) provided detailed information about these initial goals set by participating practices. Briefly, these goals are well aligned with the TAP-developed change package and focus on six broad change categories:

1. Improving care coordination, care management, or patient self-management support
2. Clarifying team members’ roles and responsibilities and providing training in team-based care
3. Empaneling patients to specific clinicians or care teams
4. Engaging leaders and staff in change processes
5. Developing and implementing new processes and workflows to support efficient team-based care delivery

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for Health Information Technology-certified electronic health record system, and (4) commit to participating in the technical assistance and evaluation components of the initiative.

<sup>2</sup> The change package ([http://www.jsi.com/JSIInternet/Inc/Common/download\\_pub.cfm?id=18234&lid=3](http://www.jsi.com/JSIInternet/Inc/Common/download_pub.cfm?id=18234&lid=3)) is based on the “Primary Care Team Guide.” Formal sequencing of the change package was developed following feedback provided by Mathematica to the TAP in February 2016 on early progress documented through calls conducted in November and December 2015 with practice leaders responsible for practice-level TBCI implementation. A detailed description of these findings is available in our baseline report.

## 6. Developing and using quality improvement teams

### **B. Evaluation design**

Mathematica's evaluation of the TBCI has three main objectives: (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 team-based care. We designed our three-year, mixed-methods implementation evaluation to provide the Foundation, participating practices, and technical assistance providers with formative and summative feedback on the following evaluation questions:

1. Which practices participated in the initiative? What did they hope to achieve through this participation? (covered in the baseline evaluation report)
2. What financial support, technical assistance, and coaching was provided to practices? How did practice members use these supports? What was successful about this approach? What was disappointing? (final report)
3. What have we learned about what it takes to successfully implement team-based care? What factors led to successful or disappointing results? (interim and final reports)
4. What facilitated or impeded these efforts? (interim and final reports)
5. What effects did the practice-level changes have on patients' experiences and clinicians' and practice staff's experiences? (interim and final reports)
6. What have we learned about how practices can structure team-based care in a way that is more sustainable, particularly in the context of a payment model based on fee-for-service? (final report)

To assess the overall success of the TBCI, Foundation staff developed a success rubric in partnership with the Mathematica evaluation team and the TAP describing the desired outcomes of the initiative across five domains in which improvement is expected due to implementing team-based care: patient engagement, patient experience, team member experience, practice change, and sustainability (Table I.1).<sup>3</sup>

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<sup>3</sup> For additional detail on the success rubric and how we determined levels of success for each domain, see our baseline report (Crosson et al. 2016).

**Table I.1. TBCI success rubric**

Domain	Expected outcome
<b>Patient engagement</b>	Patients receive care from their team that is highly consistent with their goals.
<b>Patient experience</b>	Patients perceive that changes in the practice have improved their experience of care.
<b>Team member experience</b>	Team members have the knowledge and collaborative skills to work in a team-based care model.
<b>Practice change</b>	Workflow changes enable all team members to provide team-based care.
<b>Sustainability</b>	Practices use effective change management to establish a system for providing sustained team-based care.

## 1. Evaluation methods

For this report, we comprehensively assessed practice-level team-based care implementation experiences and the effects of these changes on patients, clinicians, practice staff, and care delivery. Our multimethod approach relied on data collected through site visits, in-depth interviews with practice members, surveys of patients and practice members, and the practice-level primary care team guide assessment (PCTGA). Given the wide diversity of the types of practices participating in the initiative, we determined that it would not be possible to select common measures to examine effects of the initiative on specific processes of care or patient health outcomes (Table I.2).

**Site visits and in-depth interviews.** The TBCI-participating practices vary in terms of the number of patients served across both rural and urban practice locations and include FQHCs, pediatric practices, school-based health centers, and other primary care practice types. We selected 10 of these practices with a range of characteristics reflecting the overall sample of the 19 practices participating in the initiative for in-depth assessment of practice-level implementation experiences, including barriers to and facilitators of implementation and feedback on technical assistance and learning activities (Table I.2). We conducted in-person site visits in these selected practices in September and October 2016. During these one- to two-day site visits, researchers toured the office space; observed practice operations (including huddles and other team-based care meetings, when possible); and interviewed practice clinicians and other staff. In a few cases, due to scheduling conflicts, we conducted additional telephone interviews with key staff. Interview participants included practice directors, physicians, nurse practitioners, nurses, quality improvement (QI) leads, health information technology (health IT) directors, medical assistants, health coaches and patient navigators, behavioral health staff, and front-desk staff. We interviewed 70 people in total, an average of seven interviews per practice. We audio-recorded the interviews and had them professionally transcribed.

We coded and analyzed interview transcripts using a template-organizing approach (Miller and Crabtree 1999). We used the Consolidated Framework for Implementation Research to identify barriers to and facilitators of practice-level changes relating to each of the five principles of team-based care detailed across five key domains (Damschroder et al. 2009; Keith et al. 2017). Specifically, we identified implementation barriers and facilitators relating to the following:

- **Characteristics of the team-based care intervention**, including the overall quality of the TBCI design, the effectiveness of the technical assistance, and the adaptability of required changes to specific practice settings
- **Outer setting or context for the practice**, including participation in other initiatives designed to improve care delivery
- **Inner setting of the practice**, including the availability of staff and other resources to implement team-based care
- **Characteristics of individuals in the practice**, including their level of confidence in their abilities to change their roles and responsibilities for team-based care
- **Process by which change occurs in the practices**, including the role of champions in catalyzing support for team-based care and how practices made change

**Table I.2. Characteristics of TBCI practices selected for site visits (percentages)**

TBCI practice characteristics	Practices selected for site visits (n = 10)	TBCI practices (n = 19)
<b>Practice setting</b>		
Urban	60	58
Rural	40	42
<b>Practice size</b>		
Small (fewer than 3,000 patients)	30	26
Medium (3,000 to 6,000 patients)	40	37
Large (6,001 or more patients)	30	37
<b>Practice type</b>		
Federally qualified health center	30	42
Rural health center	0	5
School-based health center	10	11
Pediatric practice	10	11
Community mental health center	0	5
Other primary care or family medicine	50	26
<b>Team-based care funding type</b>		
Loan (for-profit practice)	20	11
Grant (not-for-profit practice)	80	89
<b>Location</b>		
Denver area	40	42
Western Colorado	30	26
Southern Colorado	30	32

Source: Background information on practices provided by the technical assistance providers and baseline interview findings.

Note: Numbers might not sum to 100 percent due to rounding.

**Surveys of patients and practice members.** Our baseline evaluation report described the patient and staff survey content and data collection processes in detail.

Briefly, the patient survey used previously validated items to track patients' demographics, as well as perceptions and experiences on key domains of interest to the TBCI; the survey was available in both English and Spanish at a 6th-grade reading level. In each practice, staff members invited patients who visited the practice during the fielding period to participate in the survey. We report here on surveys completed by patients in April 2016 and 2017. Across 18 practices, 1,326 patients in 2016 and 1,691 patients in 2017 completed the surveys. In 2016, 33 percent of the surveys were completed in Spanish and 34 percent in 2017.

The staff survey was conducted online by the Kaiser Permanente Washington Health Research Institute and assessed practice transformation, leadership and teamwork, and job satisfaction and burnout. We report here on surveys administered to practice staff members in August 2015 and May 2017. In 2017, 339 staff members across all 19 practices completed the survey for a response rate of 81 percent (individual practice range from 35 to 100 percent). In 2015, the response rate was 74 percent.

**Primary care team guide assessment (PCTGA).** The PCTGA is a self-reported practice-level measure of practice team functioning and practice transformation across key domains relating to team-based care: continuity, access, planned care for chronic conditions and preventive care, risk-stratified care management, patient and caregiver engagement, coordination across the medical neighborhood, continuous improvement, and team-based care organization. The baseline evaluation report describes our process for calculating scores for each of these domains. We report here on PCTGA responses from May 2015 and February 2017 collected across all 19 participating practices.

### **C. Guide to this report**

In this interim report, we identify how practices are achieving their goals relating to team-based care; what has facilitated or impeded these efforts; and how practices' efforts affect the experiences of patients, clinicians, and staff and their delivery of care. We present our findings in the following chapters:

- **What have we learned about the successful implementation of team-based care?** In Chapter II, we focus on practice implementation of team-based care related to each of the five principles of team-based care and their self-reported care delivery approaches.
- **How has implementation of team-based care affected patients, clinicians, and staff?** In Chapter III, we describe the effects of implementing team-based care on patients, clinicians, and staff.
- **Conclusions and recommendations.** In Chapter IV, we identify key findings, recommend support improvements for participating practices going forward, and describe the next steps for the evaluation.

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## II. WHAT HAVE WE LEARNED ABOUT THE SUCCESSFUL IMPLEMENTATION OF TEAM-BASED CARE?

With one year left in the initiative, practices varied in their approaches to and progress with team-based care implementation. In this section, we first provide an assessment of change across the participating practices thus far, as measured by the PCTGA overall score results and individual domain results since the start of the initiative. We then describe progress that practices have made on implementing changes relating to each of the five team-based care principles, as well as the key barriers to and facilitators of practice work in each of these areas. Finally, we summarize the barriers to and facilitators of practice change that cut across these five areas.

### A. Changes in TBCI practices' approaches to primary care over time

Practice team self-ratings on the PCTGA indicate broad improvement since the start of Phase 2 of the TBCI in 2015. Specifically, average PCTGA scores improved from 6.9 in May 2015 to 8.0 in February 2017 (Table II.1). Practice approaches to care improved across all domains of the instrument, with average levels in each domain in the 7- to 9-point range (Level B). These results indicate that, on average, the TBCI practices have implemented many of the basic changes needed to improve primary care functioning. Practice improvements in risk-stratified care management were the most substantial.

**Table II.1. TBCI practices' self-reported care delivery approaches, 2015–2017**

Domain	TBCI practices in May 2015	TBCI practices in February 2017	Difference 2015–2017
<b>PCTGA scale (1 = lowest functioning, 12 = highest functioning)<sup>a</sup></b>			
Continuity of care	7.3	8.8	1.5
Access to care	7.4	8.5	1.2
Planned care for chronic conditions and preventive care	6.5	7.8	1.3
Risk-stratified care management	6.3	7.9	1.6 <sup>b</sup>
Patient and caregiver engagement	7.7	8.2	0.5
Coordination of care across the medical neighborhood	8.4	8.7	0.3
Overall PCTGA average score	6.9	8.0	1.1

Source: Mathematica analysis of the PCTGA practice survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in both 2015 and 2017. For survey question wording, see Appendix A of our baseline report.

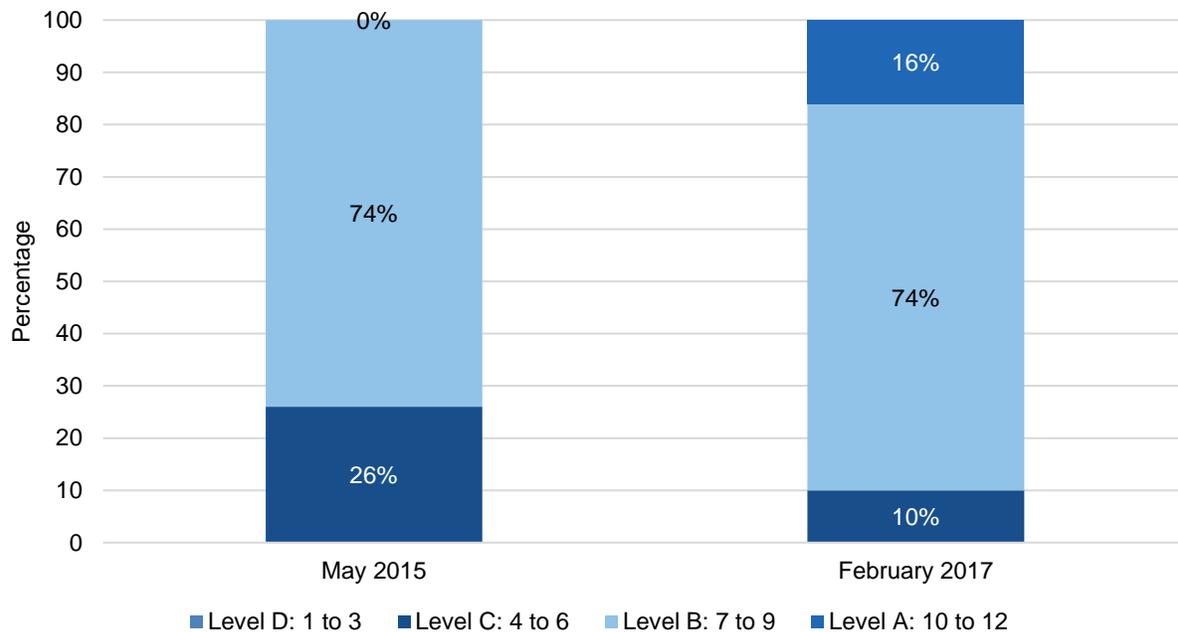
<sup>a</sup> Absolute changes in the PCTGA score and domain scores; the range for each score is 1–12 (lowest- to highest-functioning). Composite scores were calculated using an average of each practice's response to all questions in a given area. Overall score is an average across all PCTGA questions.

<sup>b</sup> Indicates a change in levels between baseline and follow-up. Levels are defined as follows: 1–3 = D, practice is just getting started and might want to review the resources page in that section of the guide to prepare for the key changes described there; 4–6 = C, practice is in the early stages of change and can benefit from the action steps and resources in that section of the guide; 7–9 = B, practice has implemented basic changes and can build upon success with the action steps and resources in that section of the guide; 10–12 = A, practice has achieved most or all of the important changes required.

PCTGA = primary care team guide assessment; TBCI = Team-Based Care Initiative.

The proportion of practices reporting overall functioning in the top two performance levels increased from 74 percent in 2015 to 90 percent in 2017 (Figure II.1). Notably, none of the TBCI practices reported performance in the lowest PCTGA level in either 2015 or 2017, indicating that the Foundation effectively selected Phase 2 practices that were already making team-based care changes prior to participation. In 2017, three of the TBCI practices reported overall care delivery in the highest performance level (compared to none in 2015) and only two practices remained in the early stages of change level.

**Figure II.1. Distribution of practice PCTGA scores, 2015–2017 (n = 19)**



Source: Mathematica’s analysis of the PCTGA practice survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in both 2015 and 2017.

PCTGA = primary care team guide assessment; TBCI = Team-Based Care Initiative.

## **B. Progress in implementing team-based care principles**

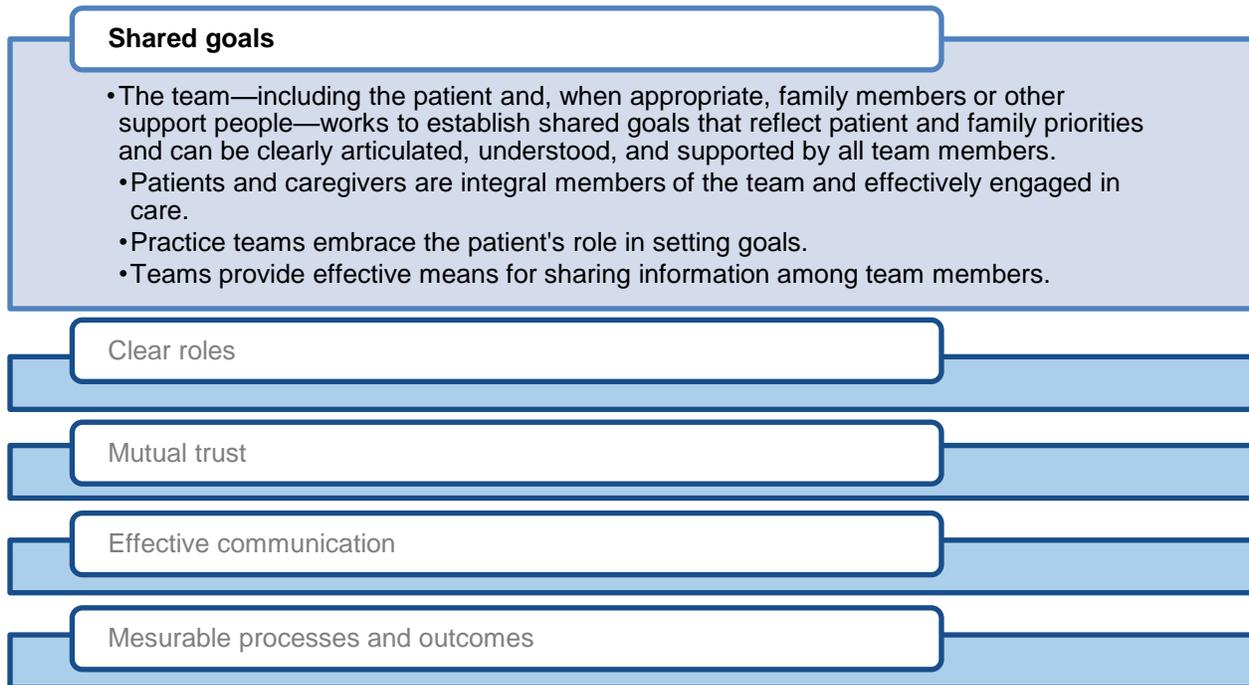
This section describes the progress made by the TBCI practices on practice changes relating to each of the five team-based care principles identified by NAM (Figure I.1). NAM presented these five principles of team-based care as interrelated, with success in each area ultimately contingent on success across the other areas of team-based care. For this report, we consider each of the five principles separately in order to describe the extent to which practices are developing team-based care capacities related to each principle. We draw on various data sources to describe practices’ progress in developing each of the team-based care principles and to describe the barriers to and facilitators of these efforts.

### **1. Shared goals**

NAM has identified the “active adoption of a clearly articulated set of shared goals” for both the care of each patient and the work that the primary care team does to provide this care as the foundation of successful team-based care. Developing and using shared goals requires that

practices effectively engage patients and caregivers in their care, that goals reflect a patient’s priorities, and that all members of the team (including patients and practice staff members) understand these goals (Figure II.2). These shared goals then guide the work of the team and the success of that work depends on team members having clear roles, mutual trust, and effective communication.

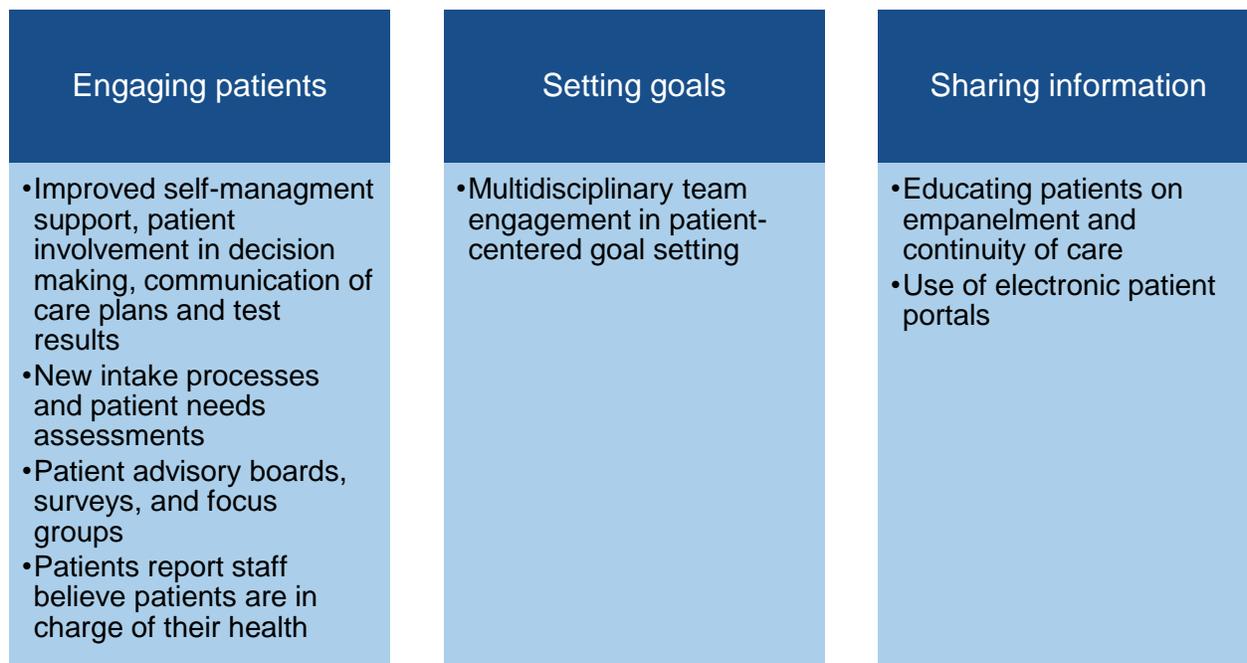
**Figure II.2. Definition of shared goals**



Source: “Core Principles and Values of Effective Team-Based Health Care” (Mitchell et al. 2012).

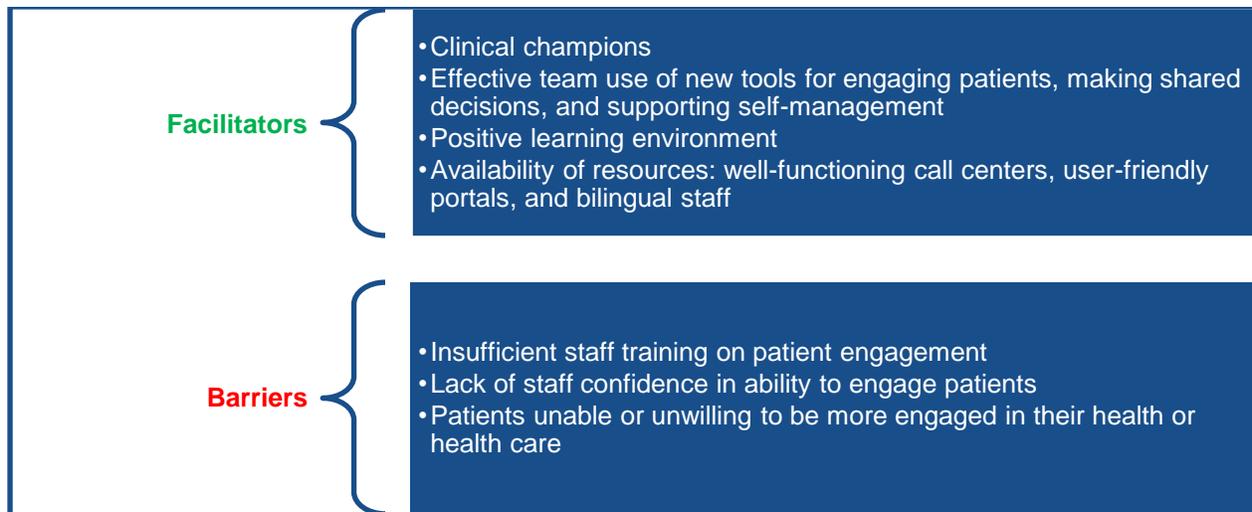
**Overview of key findings, facilitators, and barriers related to shared goals.** Practices reported working to establish shared goals with their patients through efforts to engage patients in self-management and making decisions about their care, gather patients’ feedback and input on practice operations, expand care team members’ engagement in setting patient-centered goals, and educate patients on key practice changes related to team-based care (Figure II.3). These activities built on the relatively high levels of patient engagement reported by practices at the start of Phase 2 and align with patients’ survey responses that staff see patients as in charge of their own health. The support and engagement of key staff members and leaders and the availability of organizational and staff resources facilitated practice changes in this area. Gaps in staff training relating to patient engagement techniques in some practices and the unwillingness or inability of some patients to be more engaged in health care decisions presented barriers to establishing shared goals (Figure II.4).

**Figure II.3. Key findings on shared goals**



Sources: PCTGA survey responses, site visit data, patient survey data.  
 PCTGA = primary care team guide assessment.

**Figure II.4. Facilitators of and barriers to establishing shared goals**



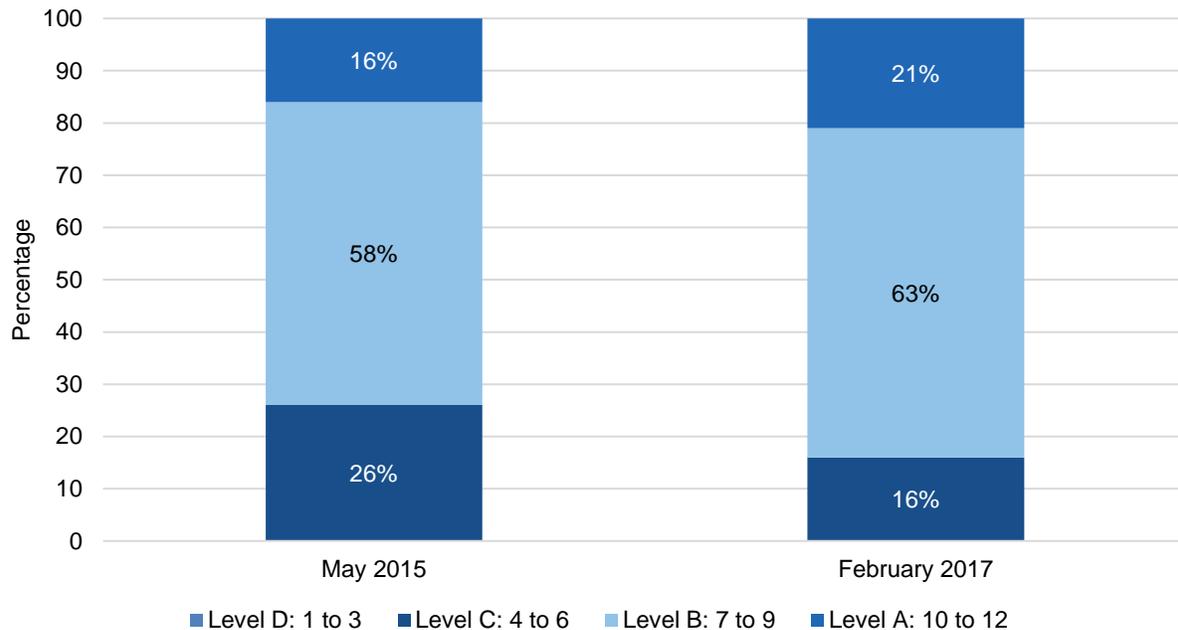
Source: Site visit data.

**Practices’ self-reported patient and caregiver engagement performance over time**

We found that the TBCI practices initially reported high levels of patient and caregiver engagement and modestly improved in these efforts over the course of the initiative. In 2015, 16 percent of practices reported that they had achieved most or all of the key changes in their practice required for providing patients’ self-management support, involving patients in decision making, and communicating test results and care plans with their patients. By 2017, 21 percent

of practices reported performance at this high level and a further 63 percent reported that they had made basic changes to increase patients' and caregivers' engagement. Only three practices reported in 2017 that they were still in the early stages of making changes to improve patient and caregiver engagement (Figure II.5).

**Figure II.5. Distribution of practices' patient and caregiver engagement scores, 2015–2017 (n = 19)**



Source: Mathematica analysis of the PCTGA practice survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in both 2015 and 2017. PCTGA = primary care team guide assessment; TBCI = Team-Based Care Initiative.

### Practices' activities, facilitators, and barriers related to shared goals

**Engaging patients.** Across many practices, midlevel staff (such as medical assistants, front-desk staff, and health coaches) reported implementing new approaches for administering needs assessments and surveys to patients, collecting patients' histories, documenting needed services, and educating patients on services at the practice or in the community (such as dentists and specialists). Staff from these practices typically perceived these changes as leading to more coordinated care and reported patients appreciated that the team could better identify their needs and connect them to resources. For example, at one practice, the family outreach coordinator now administers a one-page intake assessment that covers medical, behavioral, and dental care needs. The coordinator then encourages patients who are overdue for services to schedule them and asks patients who are not yet due if they would like a reminder when services are due. Staff at the practice reported that this new intake process has greatly increased receipt of needed services for patients. Some practices reported engaging patients in care using patient-oriented technologies or meetings with patient navigators or educators. For example, one practice is pilot-testing the use of self-check-in kiosks so patients can review and update their medical histories before their appointments. Effective use of these new tools and patient engagement techniques

relies on sufficient staff training and a general learning environment within the practice that supports and encourages this type of training. In several of the practices, this training was in the early stages of development or available informally through observation of more experienced clinicians. For example, at one practice, staff reportedly observed and learned new skills from a clinician champion who was particularly skilled at engaging patients and enthusiastic about setting goals with them.

Despite these efforts to improve patient engagement and care coordination, staff from a few practices—particularly rural practices and FQHCs—reported that Medicaid and self-pay patients often experienced high out-of-pocket costs or had to travel long distances to access affordable care with limited access to transportation. These barriers made it difficult to engage patients in their care. Moreover, in several practices, staff reported that they did not feel confident in their skills to engage patients in care. In one practice, clinicians noted that midlevel staff, such as medical assistants, needed more training on how to motivate patients to take on more active roles in their care, but the practice had provided only an initial training in motivational interviewing.

“X-rays and all the other things are hugely expensive. We have a huge list of orthopedists in the area. No one will see patients who have typical Medicaid. We have to send them to [nearby larger towns] ... and they have to be on a waiting list for several weeks to get seen, so it’s really an issue.”  
–Nurse practitioner

Beyond engaging patients in their personal healthcare, staff from many practices also described efforts to engage patients in newly established or recently revived patient advisory boards, and a few reported the use of (or plans for using) surveys or focus groups to obtain patients’ feedback. Staff from practices with patient advisory boards described trying to engage patients on a regular basis (with varying success) to solicit feedback on practice activities, which sometimes include team-based care. However, some practices reported challenges finding patients who could regularly attend meetings. Staff in several practices attributed these barriers to many patients’ reliance on shift work, which makes it difficult to consistently attend meetings. Addressing these barriers to patient engagement by holding patient advisory board meetings at accessible times and frequencies, providing incentives (such as gift cards or food) to participants, and building relationships with patients over time helped ensure successful engagement.

“Having [advisory board meetings] at a time of day that’s accessible for our patient population is really important, and offering dinner ... makes them way more willing to come and spend a couple hours with you. I’ve actually had ... the same people that keep coming and keep coming, and it’s nice because we’ve established a community ... Just making people feel that their opinion actually matters to you goes a long way.”  
–QI lead

**Goal setting.** Staff from all of the practices we visited described strategies that teams are using to engage patients in their care and establish patient-centered goals. Many reported that medical assistants and nurses, as well as behavioral health and primary care clinicians, used motivational interviewing techniques, provided self-management support, and set long- and short-term goals with patients. At one practice, a behavioral health clinician and nurse practitioner described working together to set simple goals using a behavioral prescription such as “walk outside three times a week for 30 minutes with my dog” to help patients reach their health-related goals. Availability of resources, such as well-functioning call centers, user-

friendly patient portals, and staff resources, facilitates establishing shared goals with patients. For example, practices with Spanish-speaking staff used these staff to lead Spanish-speaking patient advisory boards and communicate with Spanish-speaking patients in their care. Practices that lack such staff face difficulties consistently engaging Spanish-speaking patients.

**Sharing information.** Practice staff reported working to improve team communication with patients by enrolling them in electronic portals and encouraging patients to communicate with teams through them, streamlining the return of lab results, and improving processes for responding to patients' messages. For example, staff at one practice described changing their communication processes so that each patient message goes to the appropriate team inbox, and identified staff on each team to respond to messages. Such improvements to communication with patients have reportedly enhanced engagement because they have helped patients know their team, interact with them, and feel accountable to them. However, some team members reported that many patients lack the technological knowledge or skills needed to make good use of patient portals.

Staff from most practices reported using educational materials and campaigns to inform patients about practice changes related to team-based care. For example, a few practices used posters, brochures, or letters to explain the concept of a care team and introduce team members. Others trained front-desk staff to use scripts when scheduling appointments with patients to explain empanelment and team-based care. One practice began a clinician-led campaign to inform patients about the importance of clinician-level continuity of care. Finally, staff in many practices reported that the TBCI work related to establishing teams and empaneling patients strengthened their relationships with patients and promoted establishment of shared goals.

"[Patients] have some idea that we have a team because I have it posted in my rooms ... [the posting says] team green, your medical provider, your medical assistants, and our contact numbers.... So I think they [have] some sense of teams, but not to a full extent."  
—Lead MA

### **Patients' perceptions of shared goals**

Across the TBCI practices, most patients responding to the survey (in each participating practice and across the TBCI) in both 2016 and 2017 agreed that clinical staff in the practice always explained things in a way that patients could understand and respected patients' stated concerns (Table II.2). A smaller number of patients reported that staff demonstrated their belief that patients were in charge of their own health. These results indicate that patients agreed that the TBCI practices' had made consistent efforts to engage them in their care but showed room for improvement in demonstrating a more patient-centered approach to care.

**Table II.2. Patients reporting clinical or practice staff always do the following, 2016–2017**

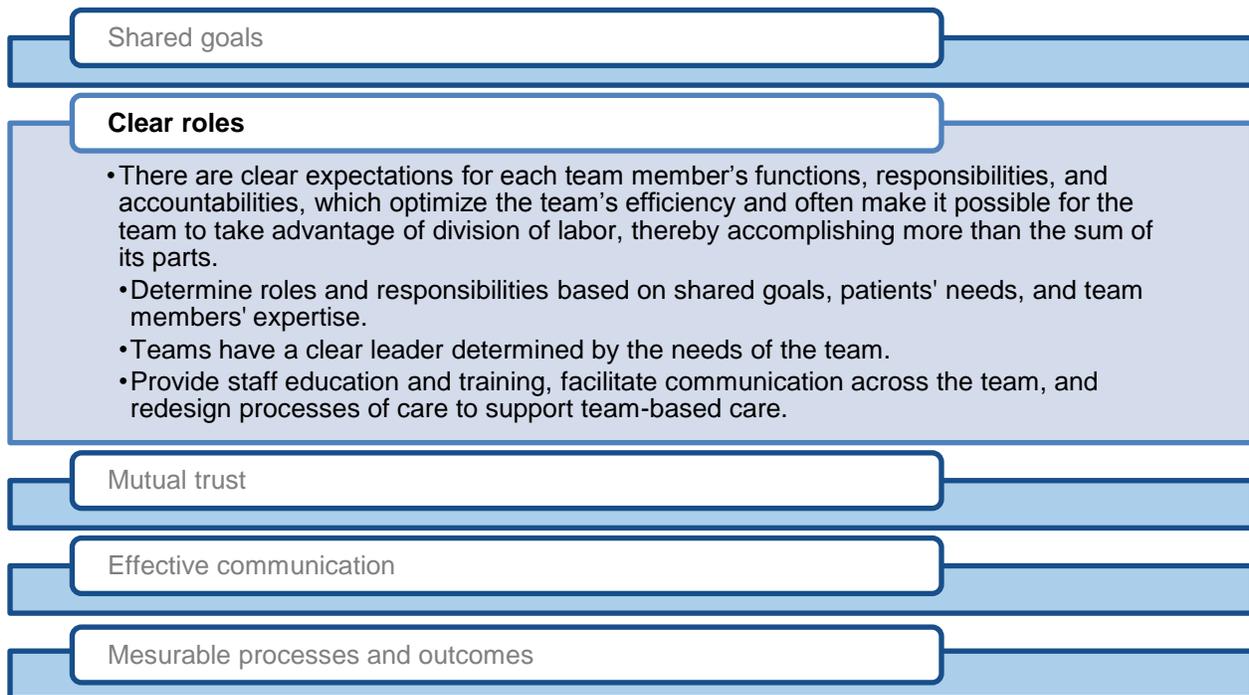
	2016 N = 1,326	2017 N = 1,691
The doctors and nurses who treat me explain things in a way that is easy to understand.	75%	73%
The doctors and nurses who treat me show respect for what I have to say.	80%	77%
The staff at this clinic believe I am in charge of my health.	53%	55%

Source: Patient survey. For 2016 and 2017 survey, patient surveys were collected in 18 practices.

**2. Clear roles**

NAM found that practices need to “develop a deep understanding of and respect for how discipline-specific roles and responsibilities” support the achievement of shared goals. This requires that practices tailor team composition to the needs of patients, identify team member skills, and then assign responsibilities. Effective teams need clear leaders to ensure that team members are appropriately trained and that teams have good communication processes. Finally, practices need to redesign processes of care to support team-based care approaches (Figure II.6).

**Figure II.6. Definition of clear roles**



Source: “Core Principles and Values of Effective Team-Based Health Care” (Mitchell et al. 2012).

**Overview of key findings, facilitators, and barriers related to clear roles.** Practices reported efforts to establish clear roles across the care team by clearly defining new roles and responsibilities by creating care teams and empanelling patients to these teams, integrating new team members such as behavioral health providers, designating a clear leader for team-based

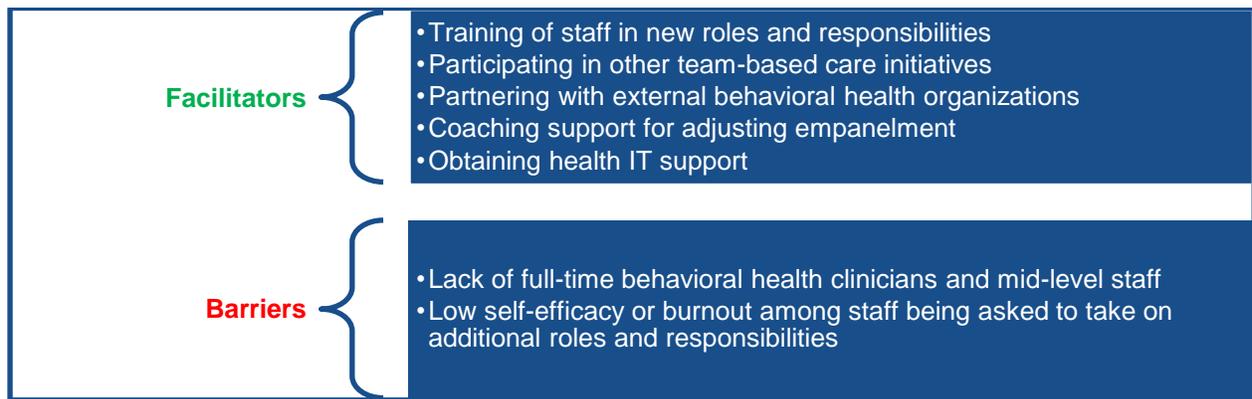
care change efforts, gaining the support of practice leaders, training staff for new responsibilities, and developing standing orders to facilitate the appropriate delegation of clinical work to support staff (Figure II.7). Staff training opportunities, participating in related practice-change projects, IT support, and the ability to integrate services provided by external organizations into the work of the care team facilitated practice changes. In some cases, lack of sufficient staff resources and key staff members feeling overwhelmed by new responsibilities presented barriers to optimizing team efficiency (Figure II.8).

**Figure II.7. Key findings on clear roles**



Sources: PCTGA survey responses, clinician and staff survey, and site visit data.  
 MA = medical assistant.

**Figure II.8. Facilitators of and barriers to establishing clear roles**

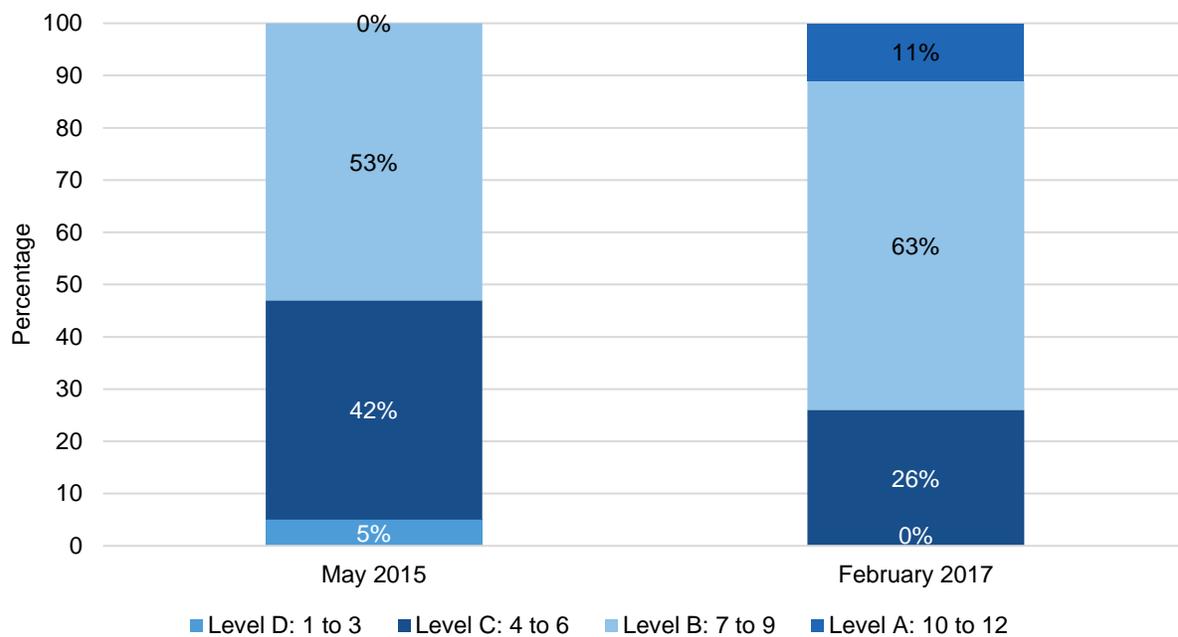


Source: Site visit data.  
 IT = information technology.

**Practices’ self-reported organization of team-based care over time.** In 2015, nearly half of the TBCI practices reported that they were either just getting started or were in the early initial stages (levels D and C of the PCTGA) of making changes to improve the organization of team-based care. By 2017, all of the practices reported that changes in this area were underway and two practices reported that they had achieved most or all of the changes needed in this area (level A) (Figure II.9). Changes in the organization of team-based care included developing new

workflows, developing and using standing orders, and ensuring the effective integration of new and existing members of the care team into patient care.

**Figure II.9. Distribution of practices' organization of team-based care scores, 2015–2017 (n = 19)**



Source: Mathematica's analysis of the PCTGA practice survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in both 2015 and 2017. PCTGA = primary care team guide assessment; TBCI = Team-Based Care Initiative.

Practice team self-ratings on the PCTGA items related to the organization of team-based care show consistent improvement since May 2015 (Table II.3). Improvements in five of the areas assessed by these questions were large enough to indicate a change in level of functioning on average across the practices. Specifically, improvements in these areas meant that on average across the practices clinical support staff consistently worked with the same provider; workflows for clinical teams were documented and used to standardize practice; Registered Nurses managed transitions across settings of care and provided care coordination and management to the highest-risk patients; medication management included a pharmacist, nurse, or coach/educator who worked directly with patients individually or in groups; and a member of the care team provided oral health services or managed referrals to organizations with which the practice had formal agreements. Integrating behavioral health services and using laypeople as members of care teams remained areas of higher performance for these practices from baseline.

**Table II.3. TBCI practices' self-reported organization of team-based care, 2015–2017**

PCTGA question	TBCI practices in May 2015	TBCI practices in February 2017	Difference 2015–2017
Clinical support staff as regular team members	8.6	9.9	1.3 <sup>a</sup>
Workflows for clinical teams documented	5.5	6.7	1.2 <sup>a</sup>
Standing orders that can be acted on under protocol	6.9	7.3	0.4
Medical assistant work roles	7.5	8.5	1.0
Registered nurse work roles	5.8	6.7	0.9 <sup>a</sup>
Use of laypeople in care teams	7.8	9.1	1.3
Pharmacist roles	3.8	5.3	1.5
Medication management by clinical care team	6.0	7.0	1.0 <sup>a</sup>
Behavioral health services integration	9.7	9.6	-0.1
Oral health services integration	5.5	6.5	1.0 <sup>a</sup>
Overall team-based care score	6.4	7.4	1.0 <sup>a</sup>

Source: Mathematica's analysis of the PCTGA practice survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in both 2015 and 2017.

Notes: Absolute changes in the PCTGA score; the range for each score is 1–12 (lowest- to highest-functioning). Overall score is an average across all of the PCTGA questions listed.

<sup>a</sup> Indicates a change in levels between baseline and follow-up. Levels are defined as follows: 1–3 = D, practice is just getting started and might want to review the resources page in that section of the guide to help prepare for the key changes described there; 4–6 = C, practice is in the early stages of change and can benefit from the action steps and resources in that section of the guide; 7–9 = B, practice has implemented basic changes and can build upon success with the action steps and resources in that section of the guide; 10–12 = A, practice has achieved most or all of the important changes required.

PCTGA = primary care team guide assessment; TBCI = Team-Based Care Initiative.

### Practices' activities, facilitators, and barriers related to clear roles

**Determine roles and responsibilities.** Each of the practices we visited reported working to assign clear roles to practice staff and develop stable clinical care teams; however, particular roles and team composition varied widely across practices, reflecting differences in practice type, setting, size, goals, and resources.

Most of these practices reported eliminating floating medical assistants in favor of assigning medical assistants to specific clinical care teams where they regularly work with the same clinicians. Medical assistants in these new teams noted an increased ability to perceive and anticipate the needs of both clinicians and patients, thereby delivering care more efficiently. When combined with the team-level empanelment of patients, this approach has provided for a longitudinal relationship between teams and their patients.

Staff from nearly every practice we visited described efforts to incorporate behavioral health services into medical care, with some reporting substantial progress since the start of TBCI. Practices reported using a variety of approaches:

- Using medical assistants and other support staff to screen patients for depression, anxiety, and substance abuse and then linking patients to services by offering a same-day appointment with an on-site behavioral health care clinician or by notifying off-site behavioral health staff to follow up with the patient
- Facilitating so-called warm handoffs from medical clinicians to on-site behavioral health care resources for patients with unmet needs identified during the clinical encounter
- Involving behavioral health providers in team huddles in which they help to proactively identify patients with unmet behavioral health needs and plan care for them that day

“Behavioral health now [participate] in huddles with the providers and medical assistants so they can establish who is supposed to be seen by them. And also [the behavioral health clinician] goes through the schedules and opens each one up and writes them on her list or puts them on her schedule, so she can remind herself to go in and meet that patient.”  
—Medical assistant

Existing partnerships with behavioral health organizations and the focus of the Colorado State Innovation Model (SIM) on helping practices integrate behavioral health and primary care have been key facilitators of efforts to integrate these services.

Staff from many practices reported implementing new population health management strategies that focused on particular chronic conditions, enabling practices to identify high-risk patients, follow up with them, and provide higher quality proactive care. In these practices, responsibility for developing and maintaining patient registries for population health management typically was assigned to specific team members, including IT leads, health coaches and educators, nurses, or medical assistants. Practices created disease registries and outreach activities to improve management of asthma, diabetes, and hypertension. At one practice, for

“We have an IT coordinator, and she generates quarterly reports of patients that are due for these types of tests. She sends it to me. Then we send reminders out to our patients letting them know that they are due for diabetes check-up, breast screening, colorectal, those types of things.”  
—Patient support role

example, the pediatrician enlisted the practice’s IT director to create a list of all pediatric asthma patients who had not visited the practice in the past three to six months. Then, a medical assistant contacted these patients and scheduled appointments during which the pediatrician addressed medication needs and educated patients on the importance of regular asthma check-ins to manage medications and reduce exacerbations and hospitalizations. In addition, many practices tracked preventive care—such as immunizations, depression

screening, and cancer screenings—and then sent reminders to patients to get the services at the practice or referred patients to other care providers.

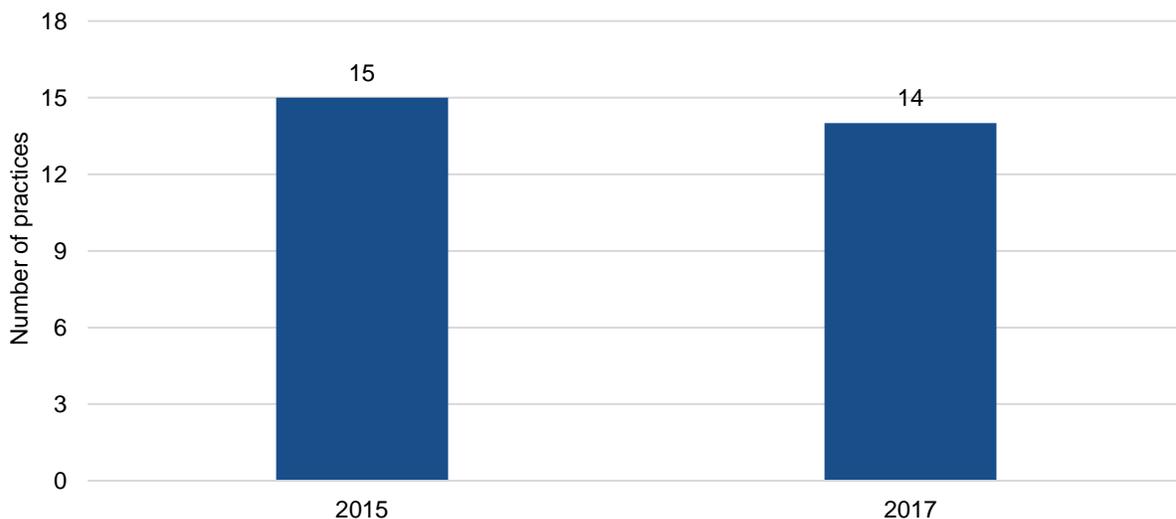
At some practices, involvement in other initiatives helped to establish clear roles and develop and maintain consistent teams. TBCI practices have participated (or are currently participating) in numerous other initiatives, such as Colorado’s SIM, incentives for Meaningful Use of health information technology, the Comprehensive Primary Care (CPC) and CPC+ initiatives, FQHC accreditation, and patient-centered medical home certification standards, among others. Staff in these practices reported that participating in these programs enabled them to focus on maintaining consistent teams to meet the goals of complementary initiatives. At these

practices, synergies across initiatives helped staff gain familiarity with various types of practice changes and create efficiencies in staff efforts to enact changes.

**Clear leadership.** All of the practices we visited reported having at least one person who oversaw work and guided changes related to TBCI. In addition, many practices had QI leaders with clinical and staff management experience to help engage staff in the practice changes associated with implementing team-based care. Staff in some practices reported having particularly active TBCI leaders who served as champions of the initiative by tracking team-based care work, involving a broad range of staff, and making sure that team members were more prepared for and supportive of changes. Some of these leaders were reportedly particularly skilled in communicating the importance of team-based care and engaging staff in meetings and team-based care trainings. This leadership played an important role in ensuring team members bought in to the initiative and developed confidence in performing new tasks. According to staff, the most effective TBCI leaders communicated performance expectations, celebrated staff successes, and took feedback seriously. In two of the practices we visited, limited engagement from key leaders reportedly hindered efforts to improve care continuity because staff received conflicting guidance about the importance of implementing empanelment.

In 14 of the TBCI practices, more than half of the clinicians and staff responding to the 2017 survey agreed or strongly agreed that their practices had supportive leadership. This represents a decrease from 2015. These findings indicate that effectively engaging leaders in the TBCI remains a concern in a significant (and growing) minority of practices.

**Figure II.10. Practices with more than 50 percent of clinicians and staff reporting supportive leadership, 2015–2017 (n = 19)**



Source: Mathematica’s analysis of clinician and staff survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in 2015 and 2017.

TBCI = Team-Based Care Initiative.

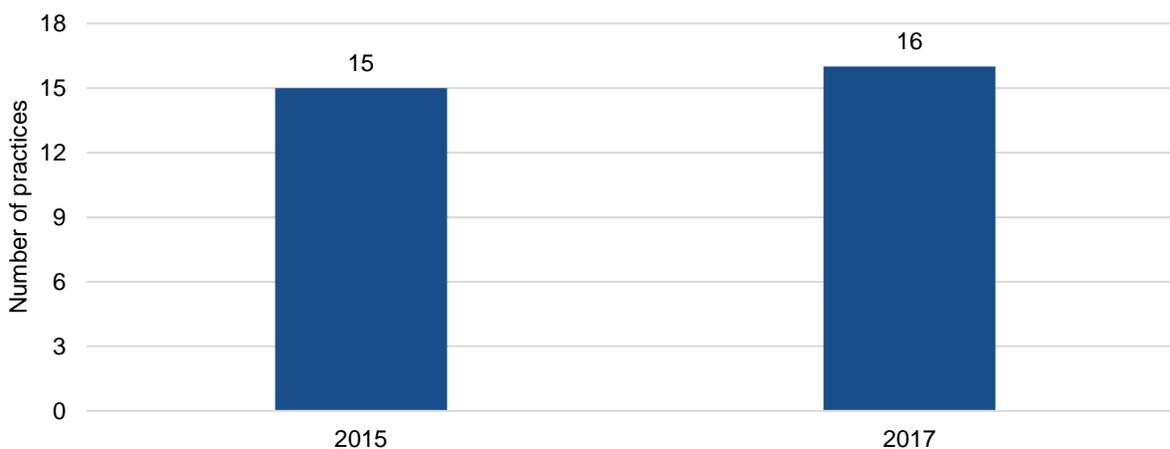
**Organizational factors: staff training.** Practices’ capacity to provide training and support to staff taking on new roles was an important facilitator of establishing clear roles, because this helped staff feel confident and competent with their new responsibilities. Staff who believed they had the necessary skills to succeed in changing their roles positively affected the team as a whole, but many practices struggled to prioritize training.

Staff reported engaging in trainings on a range of topics for team-based care, including the use of electronic health records (EHRs), motivational interviewing, new workflows and responsibilities (including cross-training), and scheduling processes for empanelment. The specific nature of practices’ training efforts varied across practices due to differences in their needs and team-based care goals. Some practices added trainings to staff meetings or team huddles. These practices found that incorporating training into existing meetings helped staff receive adequate support and information, while avoiding the common challenge of finding time for training. However, at some practices, medical assistants reported lacking the time and training to take on expanded responsibilities. In these cases, staff frustration and discomfort limited the ability of the practice team to establish clear roles that enabled all staff to work at the highest level of their training.

“They throw them at it and expect them to just go for it on day 1 or day 2 and don’t really realize that it takes several days of doing the same task to really get it down.... I just don’t think there was proper training.... I think some people just get frustrated [or] find other jobs.”  
 –Practice administrator

Reflecting broad organizational support for training, most staff in 16 of the TBCI practices reported having the necessary training to do their jobs in 2017. In a few practices, the need for staff training to support expanded roles and responsibilities associated with team-based care remained.

**Figure II.11. Practices with more than 50 percent of clinicians and staff reporting practice provided training needed to do their jobs, 2015–2017 (n = 19)**



Source: Mathematica’s analysis of clinician and staff survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in 2015 and 2017.

TBCI = Team-Based Care Initiative.

**Organizational factors: empaneling patients.** Before TBCI, most of the practices we visited scheduled patients with the first available clinician; however, at this stage in the initiative, most practices have empaneled patients to help teams improve efficiency and care continuity, with varying levels of success. At the time of our visits, many had empaneled all or nearly all of their patients, and a few had empaneled smaller subsets of their populations, such as their pediatric patients. Support from coaches has been important for adjusting empanelment strategies to accommodate part-time clinicians and other practice features.

Practices reported assigning patients to care teams using various strategies, such as the 4-cut method,<sup>4</sup> balancing panels across clinicians or teams, and considering patients' preferences. Within most practices, clinical leaders designed the empanelment process and mid-level staff carried out the work. Front-desk staff and medical assistants were often responsible for reviewing charts to identify the clinician likely to be most appropriate for each patient and assigning patients to that clinician. In practices with clinicians who focused on particular populations or conditions (such as adolescents or obstetrics), patients were assigned based on these areas of expertise. In addition, staff reported using formulas to determine panel sizes and risk stratification to even out patient acuity across clinicians. Lastly, staff mentioned trying to accommodate patients' preferences for particular clinicians, which sometimes required switching patients to a clinician other than the one to whom they were originally assigned.

Staff used data to track progress with empanelment and made adjustments as needed to optimize the efficiency of their teams. In many practices, staff generated EHR reports measuring the percentage of patients assigned to or seen by empaneled clinicians. In addition, staff reported adapting their processes to account for clinicians' characteristics. For example, in practices with volunteer or part-time clinicians, patients were often assigned to teams with multiple clinicians representing a mix of types and schedules to ensure appropriate coverage and consistency.

**Organizational factors: standing orders.** Most of the practices we visited reported establishing defined workflows and implementing standing orders to ensure that front-desk and clinical support staff had clear roles in patient care. In some practices, coaches supported this work by observing and assessing new workflows and drawing on examples from other practices to guide efforts to reassign responsibilities and change procedures to increase efficiency. To establish clear roles for staff, practices engaged in several activities:

- Establishing EHR reminders to prompt front-desk staff to remind patients to schedule follow-up appointments for asthma or high blood pressure and developing standing orders for distributing mental health screeners
- Implementing standing orders for medical assistants to administer influenza and other immunizations
- Assigning responsibility for self-management support, medication reconciliation, follow-up after hospitalizations, emergency department visits, or specialist appointments to dedicated staff including nurses, case managers, medical assistants, and health coaches

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<sup>4</sup> The 4-cut method is a four-step process for empaneling patients to clinicians or teams (Murray et al. 2007).

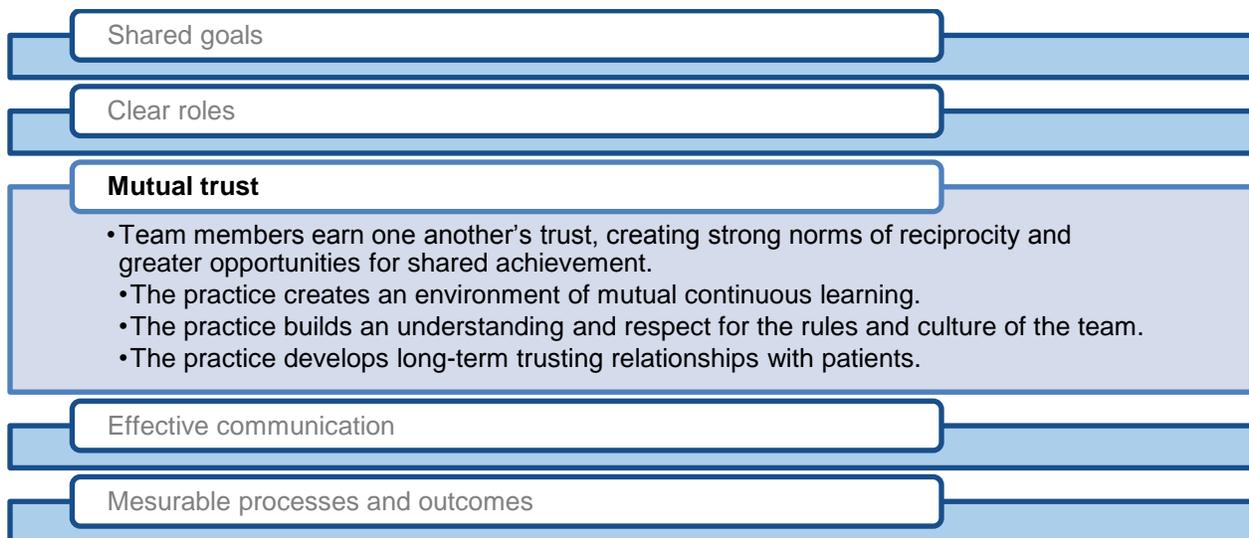
- Shifting efforts to track and monitor referrals and follow-up from front-desk to clinical support staff or having a designated medical assistant handle these tasks

Because of these changes, clinicians reported having less burden and being able to engage in longer discussions with patients; mid-level staff noted increased efficiency of patients' visits. At a few practices, some clinicians had not delegated tasks to mid-level staff, or had done so inconsistently, due to concerns about giving up control or lack of trust in other members of the team.

### 3. Mutual trust

A well-functioning care team requires that team members trust one another to work together to provide high quality patient care based on shared goals established between the team and the patients it serves. The NAM report on team-based care identified three key factors in building mutual trust: (1) having a practice environment that encourages and builds the capacity for organizational learning, (2) establishing care teams with long-term established relationships, and (3) having these teams establish longitudinal trusting relationships with patients (Figure II.12).

**Figure II.12. Definition of mutual trust**



Source: "Core Principles and Values of Effective Team-Based Health Care" (Mitchell et al. 2012).

**Overview of key findings related to mutual trust.** Practices' efforts to encourage mutual trust and reciprocity across the care team (including patients) were reflected in clinician and staff survey results related to practices' capacity for organizational learning and encouragement of teamwork. Practices' work to build mutual trust included creating clinical care teams with consistent membership over time and empaneling patients to these teams (Figure II.13).

**Figure II.13. Key findings on mutual trust**

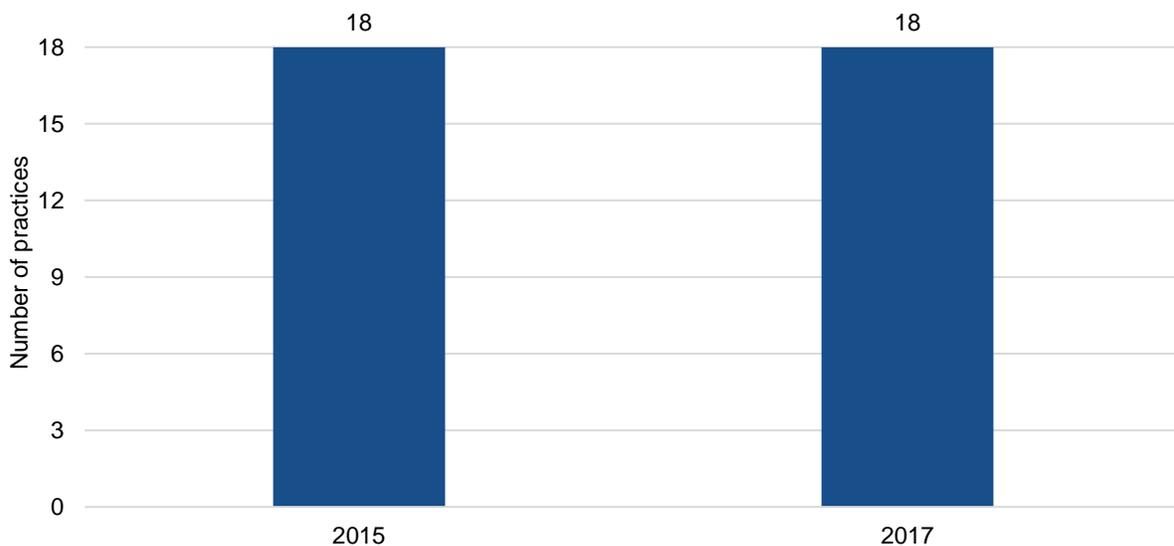


Sources: Clinician and staff surveys and site visit data.

**Practices’ activities and findings related to mutual trust**

**Learning environment.** In all but one of the TBCI practices, most staff reported that their practice had an effective capacity for organizational learning that supported learning from other team members. This capacity is an important part of an environment of mutual and continuous learning.

**Figure II.14. Practices with more than 50 percent of clinicians and staff reporting practice had capacity for organizational learning, 2015–2017 (n = 19)**



Source: Mathematica’s analysis of clinician and staff survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in 2015 and 2017.

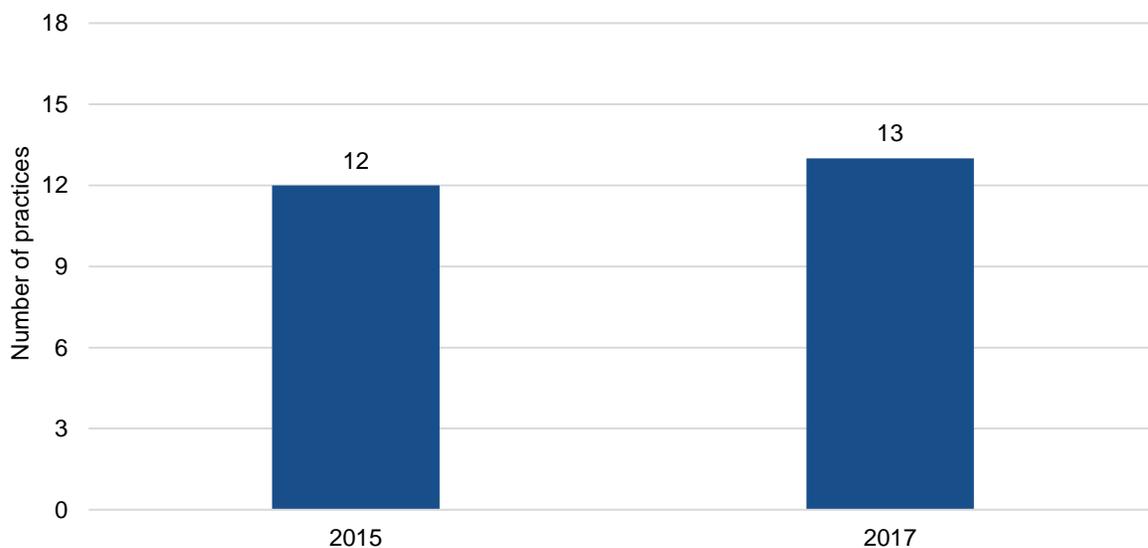
TBCI = Team-Based Care Initiative.

**Team culture.** Staff in the practices we visited reported that working within consistent clinical care teams and getting to know one another led to increased trust within the teams. The clinicians’ enhanced trust in team members’ abilities, developed through these teams, enabled them to more comfortably delegate responsibilities to staff. Staff from many practices reported that this empowered mid-level staff (such as nurses, medical assistants, and patient support staff) to work at the top of their skills. Delegating tasks reportedly reduced clinician burden and created more efficient patient visits; however, some staff noted that it took time for clinicians to become comfortable with changing the status quo and giving mid-level staff more responsibility, so this remains a work in progress.

“The biggest change we’ve made is we used to have a MA every day who was designated as the float.... Now we have two MAs per team.... When I look at messages I send out [to the MAs], I personally feel much more confidence now, like I’m sending it to these people who I work with all the time as opposed to putting it out there into the ether.”  
 –Team-based care lead

In 13 of the TBCI practices, most staff in 2017 reported that their practice environment encouraged teamwork. In these practices, staff members reportedly trust and rely on their fellow team members and collaborate on important practice decisions and patient care. These findings indicate that increased efforts in this area are needed in a substantial minority of the TBCI practices (Figure II.15).

**Figure II.15. Practices with more than 50 percent of clinicians and staff reporting practice encourages teamwork, 2015–2017 (n = 19)**



Source: Mathematica’s analysis of clinician and staff survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in 2015 and 19 in 2017.

TBCI = Team-Based Care Initiative.

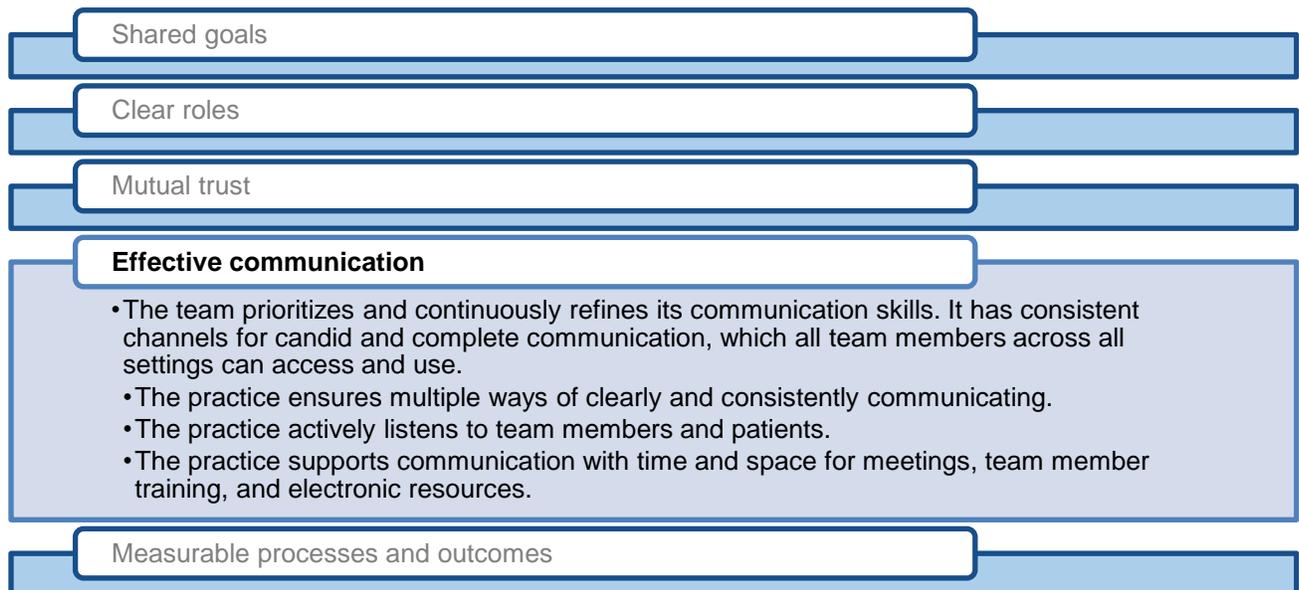
**Empanelment.** In our baseline report, we identified empaneling patients to clinicians or care teams as a common practice-level objective. Since then, many of the practices we visited have worked to empanel patients to clinical care teams with stable membership. Having consistent teams not only allows for clear delineation of roles and responsibilities, but also engenders mutual trust within the team and allows longitudinal relationships with specific patients to develop. Staff in these practices reported that empanelment has boosted familiarity between patients and teams and enabled staff to anticipate patients' needs, thereby encouraging a more trusting relationship between patients and clinicians.

“What I've heard from patients is that they feel that they're more involved with their doctor, the relationship between them has gotten closer, more trusting because they're more in-depth with them.... The relationship is just different.”  
–Medical assistant

#### 4. Effective communication

Team-based care requires effective communication across team members from multiple disciplines and training backgrounds to ensure a coordinated effort to address patients' needs and shared goals. This requires that teams have multiple ways of communicating, clear communication expectations, and actively listen to all of the members of the team (including patients). Practices can support effective communication by providing teams with the time, space, and technologies for communication (Figure II.16).

**Figure II.16. Definition of effective communication**



Source: “Core Principles and Values of Effective Team-Based Health Care” (Mitchell et al. 2012).

**Overview of key findings related to effective communication.** Practices have worked to ensure effective communication by establishing team huddles, incorporating content and training related to team-based care into regular staff meetings, and establishing new mechanisms to document and relay information about changes related to team-based care across the staff and to patients (Figure II.17). Widespread use of team huddles, leaders who effectively communicated the goals of team-based care, and shared work spaces for clinical teams facilitated practices' efforts to improve communications. Unclear leadership directives, limitations in EHR

technology, and the presence of part-time clinicians were barriers to effective communication within and across practice teams (Figure II.18).

**Figure II.17. Key findings on effective communication**

Multiple communication methods	Active listening	Organizational factors
<ul style="list-style-type: none"> <li>• Use of team huddles and regular staff meetings to share team-based care information</li> <li>• Staff retreats and newsletters to communicate team-based care changes</li> <li>• Patient portals</li> </ul>	<ul style="list-style-type: none"> <li>• Staff surveys and bulleting boards to facilitate input</li> </ul>	<ul style="list-style-type: none"> <li>• Regularly scheduled meeting times</li> <li>• Support for staff retreats</li> </ul>

Source: Site visit data.

**Figure II.18. Facilitators of and barriers to effective communication**

<p><b>Facilitators</b></p>	<ul style="list-style-type: none"> <li>• Team huddles and incorporation of team-based care information into regular staff meetings</li> <li>• Leaders communicate team-based care goals and actively engage staff</li> <li>• Shared work spaces</li> </ul>
<p><b>Barriers</b></p>	<ul style="list-style-type: none"> <li>• Coordinating with part-time or volunteer clinicians</li> <li>• Unclear communication from leaders on team-based care goals</li> <li>• Health IT lacks key capabilities</li> </ul>

Source: Site visit data.

IT = information technology.

### Practices' activities, facilitators, and barriers related to effective communication

**Multiple communication methods.** Practices we visited reported using huddles, electronic communication, shared workspaces, and documentation of new policies and procedures to enhance team-based care. Typically conducted at the start of a clinical session before patients arrive at the practice, huddles convene the care team (such as clinician–medical assistant dyads, or the clinician, medical assistant, and extended care team members) to prepare for the day's patients by reviewing patients' records to identify and plan for their health needs, such as overdue preventive services, needed lab work for monitoring chronic illnesses, follow-up care required after hospitalizations or emergency department visits, behavioral health care, and referrals to other specialists. The team then develops a plan to address each patient's needs. Staff from nearly all practices reported that the use of team huddles improved communication among

the team and helped to build mutual trust among team members. In addition, some staff observed that appointments took less time and were more comprehensive because of the previsit planning in huddles.

Staff at many practices described using instant message systems, team-specific inboxes, and EHR features to foster team communication. However, staff at a few practices reported that they lacked the training to use their EHRs effectively to communicate with team members or that their EHRs lacked crucial communication capabilities or the ability to document work from huddles and previsit planning.

In some (particularly smaller) practices, shared workspaces enabled staff to communicate more frequently to coordinate care. In some of the larger TBCI practices, teams created shared workspaces by rearranging desks or offices such that each team or pod had its own area.

Some staff reported documenting policies to help inform and remind team members about their changing responsibilities. Staff from a few practices, for example, reported using a manual of policies and procedures to ensure accountability and adherence to policies. Staff in most practices reported supportive and communicative team-based care leadership. However, staff at a few practices perceived that leaders did not effectively communicate changes to roles or consider others' opinions, leading to less enthusiasm among the staff for team-based care work and taking on new responsibilities.

“Once we’ve said, ‘OK, the PDSA (plan-do-study act) worked.... We want to implement it clinic-wide,’ then that policy and procedure is written. It’s shared with all the folks that are responsible for it.... We talk about it in the clinic meeting... That’s something we felt was really necessary because ... with so many people being here and not being here ... someone can get left out.”  
–QI lead

**Active listening.** Although most practices used regular meetings to engage staff in TBCI

“We do a lot of just open discussion ... where you’re really ensuring that when you are having these conversations about these changes, that you are getting the buy-in of everyone in the room, and that someone’s not walking out of the room having not said a word, and you’re saying, ‘Well, they were there ... therefore they know what’s going on.’”  
–QI lead

work, some used other strategies. For example, a few practices held all-staff retreats to communicate team-based care changes and obtain staff feedback; however, staff noted that it could be difficult to plan such retreats. In addition, a few practices used emails or newsletters to communicate about team-based care. Lastly, a few practices used (or plan to use) staff surveys to solicit staff feedback, and some created bulletin boards that display staff responsibilities and upcoming meeting information.

**Organizational support for effective communication.** Regular weekly, biweekly, or monthly meetings enabled practices to engage staff in discussions that extended beyond daily operations and focused on TBCI activities and other initiatives. Tailored to each practice’s needs, these meetings informed staff of team-based care changes, gave staff the opportunity to provide feedback, and ensured compliance with new workflows. Many practices also used meetings to present information from TBCI learning forums. Some (especially smaller) practices included all staff in these meetings. However, all-staff meetings were less feasible in larger practices, which often adjusted by convening smaller meetings with practice leaders, QI leads, administrators, and

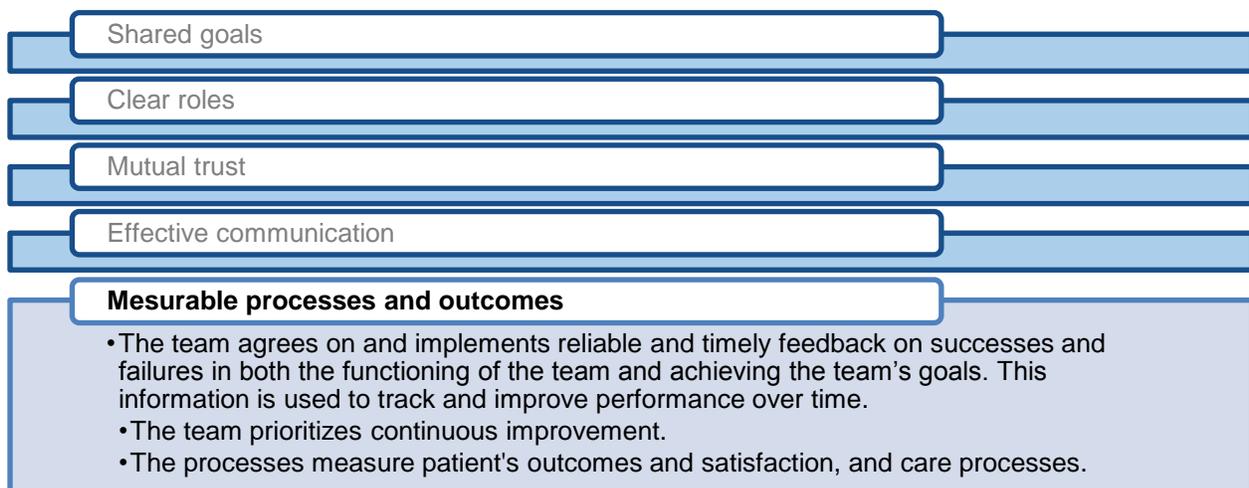
representatives from various clinical roles such as medical assistants, nurses, and clinicians, who then shared updates with their respective teams.

Practices with volunteer clinicians or other part-time staff reported increased challenges with effective communication, due to the team composition changing on different days and the need to find ways to remember to pass along new information to staff members who were not consistently present in the practice.

## 5. Measurable processes and outcomes

For practices to successfully implement team-based care, they have to measure the effects of changes in the practice on the functioning of care teams and on outcomes that matter to the patients they serve. To measure the processes and outcomes of team-based care, practices must have continuous improvement processes in place that focus on assessing and monitoring quality of care, tracking and monitoring patients' satisfaction, and ensuring patients' input into practice improvement efforts (Figure II.19).

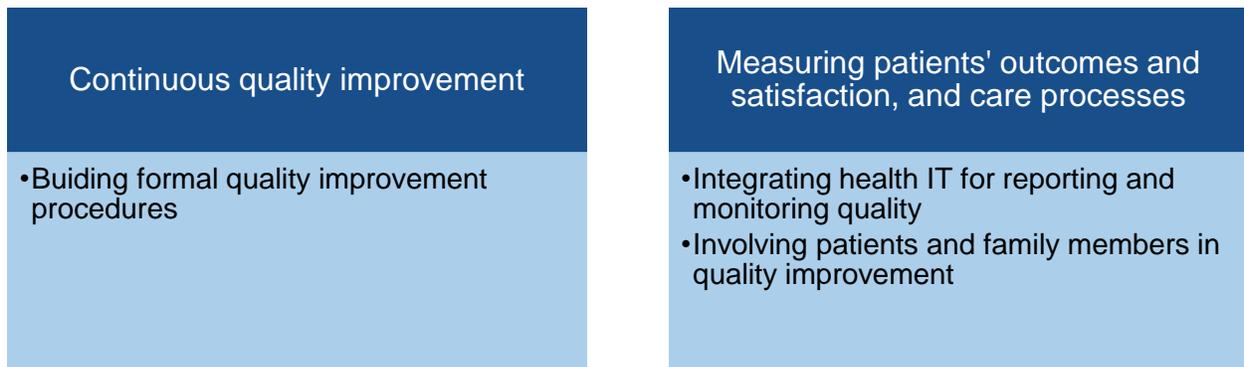
**Figure II.19. Definition of measurable processes and outcomes**



Source: "Core Principles and Values of Effective Team-Based Health Care" (Mitchell et al. 2012).

**Overview of key findings related to measurable processes and outcomes.** Practices reported using formal QI processes to identify processes and outcomes for potential improvement; EHRs to track and monitor patients' care quality; and advisory boards, surveys, and focus groups to monitor patients' satisfaction with team-based care changes and with the practice more generally (Figure II.20). Having formally-designated QI leaders and technical support staff for enhancing EHR use supported efforts to measure and improve performance. In addition, practices reported building QI capacity through participating in other initiatives with similar objectives to TBCI and by relying on the coaching supports provided through the TBCI. Lack of a formal QI leader, team-based care changes that conflicted with other practice priorities, and insufficient staffing for new activities were barriers to prioritizing continuous improvement and the measurement of outcomes and satisfaction (Figure II.21).

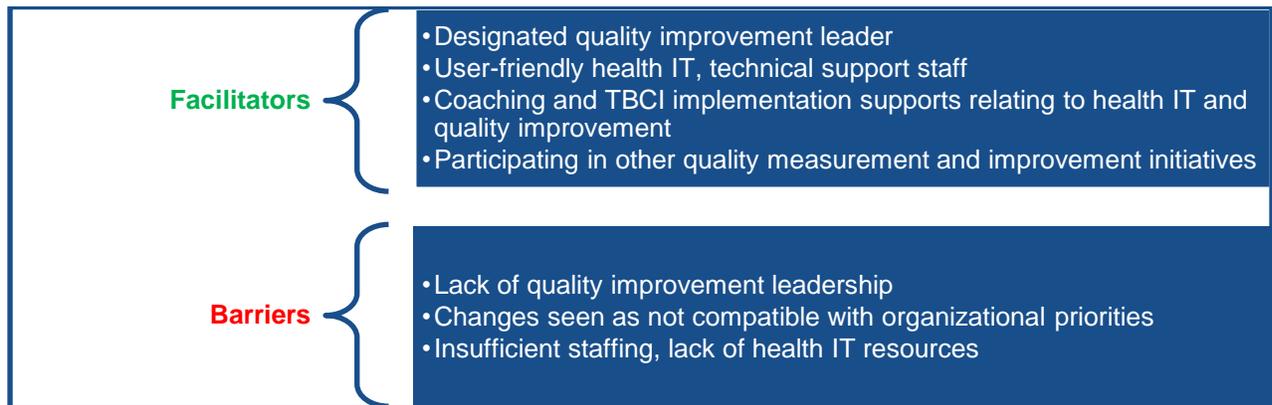
**Figure II.20. Key findings on measurable processes and outcomes**



Sources: PCTGA practice survey and site visit data.

IT = information technology; PCTGA = primary care team guide assessment.

**Figure II.21. Facilitators of and barriers to developing measurable processes and outcomes**

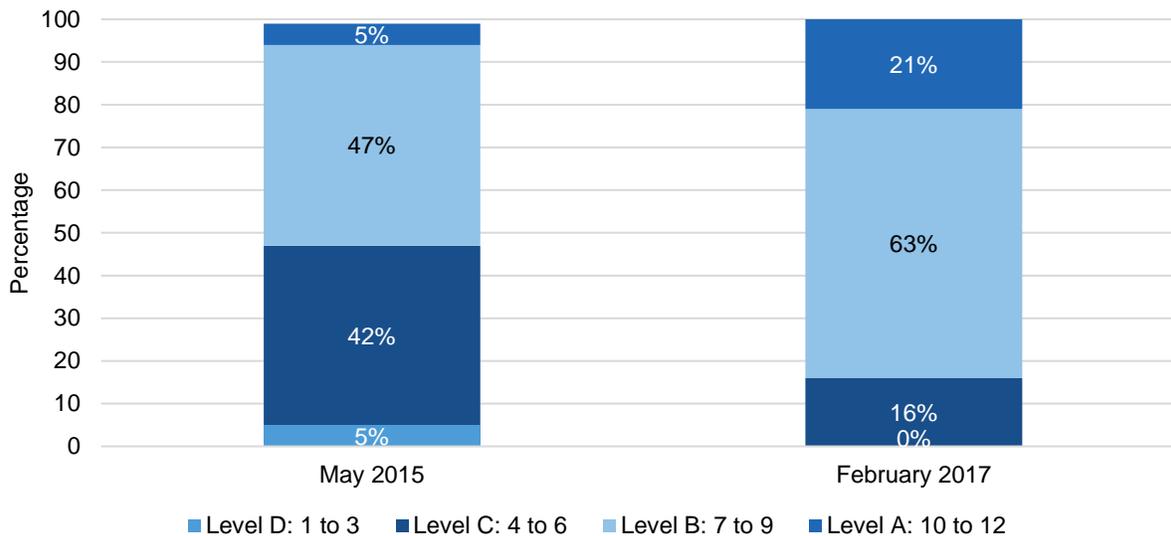


Source: Site visit data.

IT = information technology; TBCI = Team-Based Care Initiative.

**Practices’ self-reported development of QI over time.** In 2015, nine TBCI practices reported that they had either just started or were in the early initial stages (levels D and C of the PCTGA) of making changes to develop processes for continuous improvement driven by data. By 2017, all of the practices reported that changes in this area were underway and four practices reported that they had achieved most or all of the changes needed in this area (level A) (Figure II.22). The highest levels of performance on this measure indicate that clinical leaders consistently engaged teams in improving care and provided the resources to support these efforts, practices had a quality improvement infrastructure that involved patients and families, and the training needs of staff were regularly assessed (Table II.4).

**Figure II.22. Distribution of practices' continuous improvement driven by data scores, 2015–2017 (n = 19)**



Source: Mathematica’s analysis of the PCTGA practice survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in both 2015 and 2017. PCTGA = primary care team guide assessment; TBCI = Team-Based Care Initiative.

**Table II.4. TBCI practices' self-reported organization of continuous improvement driven by data, 2015–2017**

PCTGA question	TBCI practices in May 2015	TBCI practices in February 2017	Difference 2015–2017
Clinical leaders committed to quality improvement process	8.3	8.7	0.4
Quality improvement conducted by practice teams with infrastructure support	6.0	7.8	1.8
The practice routinely assesses training needs and ensures appropriate training to meet patient needs	5.2	8.0	2.8 <sup>a</sup>
Overall Continuous improvement score	6.5	8.2	1.7

Source: Mathematica’s analysis of the PCTGA practice survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in both 2015 and 2017.

Notes: Absolute changes in the PCTGA score; the range for each score is 1–12 (lowest- to highest-functioning). Overall score is an average across all of the PCTGA questions listed.

<sup>a</sup> Indicates a change in levels between baseline and follow-up. Levels are defined as follows: 1–3 = D, practice is just getting started and might want to review the resources page in that section of the guide to help prepare for the key changes described there; 4–6 = C, practice is in the early stages of change and can benefit from the action steps and resources in that section of the guide; 7–9 = B, practice has implemented basic changes and can build upon success with the action steps and resources in that section of the guide; 10–12 = A, practice has achieved most or all of the important changes required.

PCTGA = primary care team guide assessment; TBCI = Team-Based Care Initiative.

## Practices' activities, facilitators, and barriers related to measurable processes and outcomes

**Continuous QI.** Staff at all the practices we visited described implementing a range of QI strategies to improve practice operations and patients' care. Practices' advances in QI aligned with the team-based care principle of measurable processes and outcomes by focusing on implementing timely and reliable processes to track and improve performance for both the short and long terms.

Staff at many practices reported using formal leads, such as QI directors, to coordinate QI activities across the practice. In these practices, QI leads typically performed this role before team-based care. Now, they oversee QI for TBCI in addition to other initiatives, and in some cases, serve as the main point of contact for TBCI activities. The two practices we visited without formal QI leads relied on clinicians to serve as informal QI leads. These clinicians oversaw QI activities in addition to their primary responsibility of treating patients. In addition, a few practices used a team of people, or formal QI committees, to help oversee QI through weekly or monthly meetings in which the group developed and discussed goals, communication plans, written QI strategies, and Plan-Do-Study-Act (PDSA) templates. Although the composition of these committees varied, they usually included a diverse group of staff, such as clinicians, practice managers, and IT staff.

Many practices used PDSA cycles to test practice changes for TBCI, with several practices working on multiple PDSAs at once. One practice developed a tracking tool to monitor ongoing PDSAs. The focus areas of PDSAs varied considerably across practices, but commonly focused on improving workflows and communication. With regard to workflows, for example, some practices used PDSAs to improve processes for identifying high-risk patients, administering patient intake assessments and screenings, and referring patients to behavioral health. Other practices used PDSAs to improve communication with behavioral health staff, notify patients about lab results, and patient outreach for population health management. Such work has helped practices establish clear roles and responsibilities, while increasing efficiency. Short and simple PDSAs such as these reportedly helped practices establish best practices for teams and standardize them across the practice.

"We have pretty well-defined PDSA cycles around a lot of the changes in terms of trying to evaluate each change we're making and being sure that whatever next step we took was appropriate based on what we learned from the prior PDSA. So [the QI manager] has a lot of documentation around the PDSA for when we had the front desk person acting as medical assistant.... If we wanted specifics around why we decided not to continue that, we would remember all of that."  
–Team-based care lead

Practices with effective and communicative QI leaders, whether that was their singular role in the practice or they assumed the role in addition to other clinical or administrative responsibilities, reported more support and enthusiasm for QI activities related to team-based care. Staff reported that the most effective QI leaders demonstrated to staff not only how to implement PDSAs and other QI techniques, but also explained why those techniques were important and effective and how they related to improved patient care and outcomes. QI leads with multiple roles had more difficulty serving as champions of QI work because they split their time across their various responsibilities. In addition, some practices lacked a QI lead altogether,

which, as practices reported, led to lower engagement in QI activities. Staff in these practices were less likely to understand the importance of using data to guide improvements, and how best to undertake this work.

“[The coach] is starting to understand our clinic more just based on that fact that she has been with us for more time. Then, she will understand more of the specific challenges or success based on our specific situation.... It is the job of the coach to really understand how care is provided at each of their specific sites. [The coach] is getting there.”  
–Team-based care lead

Many practices also reported that tailored coaching has supported implementing measurable processes and outcomes. In particular, staff reported that coaches have helped practices identify and design appropriate and useful QI activities, shadowed staff and provided feedback on workflows, and shared helpful templates for QI.

Finally, staff from a few practices described how participating in local, state, and federal practice transformation efforts with QI components facilitated QI efforts related to TBCI. As one practice leader reported, work for other initiatives involves “Everything we’re doing for team-based care: PDSAs, quality improvement, integration of behavioral health.”

Staff from a few practices noted that integrating QI into existing workflows was disruptive because new processes sometimes lacked compatibility with current operations. For example, at one practice working to improve population health management, it was difficult for nurses to fit use of the patient registry into their current workflow; therefore, nurses did not consistently enter patients’ information in the registry.

Lastly, staff from several practices reported that a lack of available resources hindered practice changes related to measurable processes and outcomes. Such factors included limited staff to enact population health strategies and lead QI efforts, and limited technological capabilities to develop patient registries and generate useful reports to guide care delivery and QI work.

“One of the biggest struggles has been helping some of the support staff and the MAs and the nurses understand ... there has to be some data that tells you if this was an improvement or not. The whole concept of creating a PDSA, but more specifically, finding a measurable outcome has been one of the biggest challenges for the group”  
–Team-based care lead

**Using health IT for quality monitoring and reporting.** User-friendly health IT (and ideally, knowledgeable staff who support its use) was another facilitator of implementing measurable processes and outcomes to support practice changes. Some TBCI practices had purchased new EHR systems, made enhancements, or customized their reports to facilitate work related to team-based care. At one practice, for example, the EHR specialist developed a customized report on patients with high risk-stratification scores so that health educators could reach out to them and develop care plans. Other practices enhanced their EHRs to create readily accessible snapshots of patients’ issues, goals, and plans, which team members used to track and manage patients’ medical and behavioral health care needs. These customizations also enabled practices to gather reliable and timely data on their progress with various practice changes. In addition, staff from a few practices noted that having a user-friendly EHR enabled staff to easily access and view population-level data and generate reports that they used to manage specific populations.

### **C. Facilitators of and barriers to implementing change across team-based care principles**

In this section, we identify facilitators of and barriers to implementation across the five team-based care principles. We organize our discussion of these facilitators and barriers into the five Consolidated Framework for Implementation Research domains: (1) characteristics of the TBCI intervention, (2) factors external to the TBCI practices, (3) the TBCI practices' internal structures, (4) characteristics of the clinicians and staff in the TBCI practices, and (5) practices' strategies to implement team-based care. Table II.5 provides an overview of the facilitators and barriers associated with each of the team-based care principles targeted by the TBCI intervention.

#### **Characteristics of the TBCI intervention**

Across the practices that we visited, practice staff reported that the high quality of the coaching, learning collaboratives, and resources on care-related topics provided by the TAP supported their efforts to (1) empanel patients to teams and adjust empanelment to meet local needs and (2) develop and enhance QI efforts. These efforts helped practice teams build trust with patients and among care team members and provided practice leaders with clear information to share with practice team members about the changes the practices implemented as part of the TBCI. Practice members commonly reported that these resources and the efforts they supported helped them improve care continuity, care management, and care coordination.

#### **Factors external to the TBCI practices**

Participating in other practice change or improvement initiatives supported the implementation of team-based care. For example, participating in the Colorado SIM supported efforts to integrate behavioral health providers into clinical care teams and Meaningful Use of health IT incentives supported the development of patient portals to enhance communication with patients and aid in developing shared goals for care. In addition, participating in these and other practice change programs led many of the practices we visited to develop their internal capacities for measuring and reporting on clinical care quality and gave QI teams prior experience with making changes and monitoring the effects of those changes. Specifically, staff in these practices reported that participating in these complementary initiatives enabled them to focus on maintaining consistent improvement teams, thereby creating staffing efficiencies.

#### **TBCI practices' structure**

The presence of a supportive learning environment, in which experimentation and change are expected, enabled practices to develop new work processes related to self-management support, communicating with patients, and empanelment. In several of the practices, staff training was available informally through observation of more experienced clinicians. For example, at one practice, staff reportedly observed and learned new skills from a clinician champion who was particularly skilled at engaging patients and enthusiastic about setting goals with them. Staff across nearly all of the practices reported that their practices had sufficient support for organizational learning, but opportunities for more formal staff training were unevenly developed across the practices.

Although the availability of health IT support services helped customize technological solutions to local practice needs, these services were inconsistently available to support measuring the outcomes of practice improvement efforts. For example, staff in some practices reported that their EHRs lacked crucial communication capabilities or the ability to document work from huddles and previsit planning

### **Clinician and staff characteristics**

Staff concerns about their preparation for and ability to take on new roles and responsibilities were a barrier to implementing team-based care in some practices. For example, staff in several practices reported that, despite some training opportunities, they did not feel confident in their skills to take on new roles related to team-based care, such as engaging patients in care. In some practices, job-related burnout was widespread and significant.

### **Practices' strategies to implement team-based care**

Practice strategies that supported team-based care implementation included providing training for staff on new roles and responsibilities and the use of huddles by clinical care teams to plan and coordinate care efforts. For example, huddles reportedly improved communication and helped build mutual trust among team members, effectively integrated behavioral health providers, and reportedly led to shorter and more comprehensive visits.

**Table II.5. Barriers and facilitators across five principles of team-based care**

	Shared goals	Clear roles	Mutual trust	Effective communication	Measurable processes and outcomes
<b>Characteristics of the team-based care intervention</b>					
Coaching support		✓			✓
Learning collaborative					✓
Focus on empanelment			✓	✓	
<b>Outer setting and context</b>					
Patients unable or unwilling to be more engaged in their health or health care	X				
Participation in other initiatives		✓			✓
Partnerships with behavioral health providers		✓			
<b>Inner setting and practice structure</b>					
Shared work spaces				✓	
Clear communication of TBC goals to staff				✓	
Supportive learning environment provides time and space for implementation	✓		✓		
Alignment of improvement objectives with organizational priorities					X
Practice leader's engagement in TBC goal setting and implementation				✓/X	
Availability of health IT support services, call centers, portals, and bilingual staff	✓	✓		X	✓/X
Part-time clinicians, behavioral health staff, mid-level clinical staff		X		X	
<b>Characteristics of individuals</b>					
Staff concerns about capabilities to take on new roles	X	X			
Staff burnout		X			
<b>Team-based care implementation process within the practice</b>					
Staff training for new roles and responsibilities	X	✓			
Incorporating TBC information into existing meetings				✓	
Clinicians champion TBC and new staff roles	✓				

	Shared goals	Clear roles	Mutual trust	Effective communication	Measurable processes and outcomes
QI leadership available					✓/X
Use of team huddles			✓	✓	
Integrating new tools to support patient engagement	✓				

✓ = facilitator; X = barrier; ✓/X = barrier and facilitator.

IT = information technology; TBC = team-based care; QI = quality improvement.

### III. HOW HAS IMPLEMENTATION OF TEAM-BASED CARE AFFECTED PATIENTS, CLINICIANS, AND STAFF?

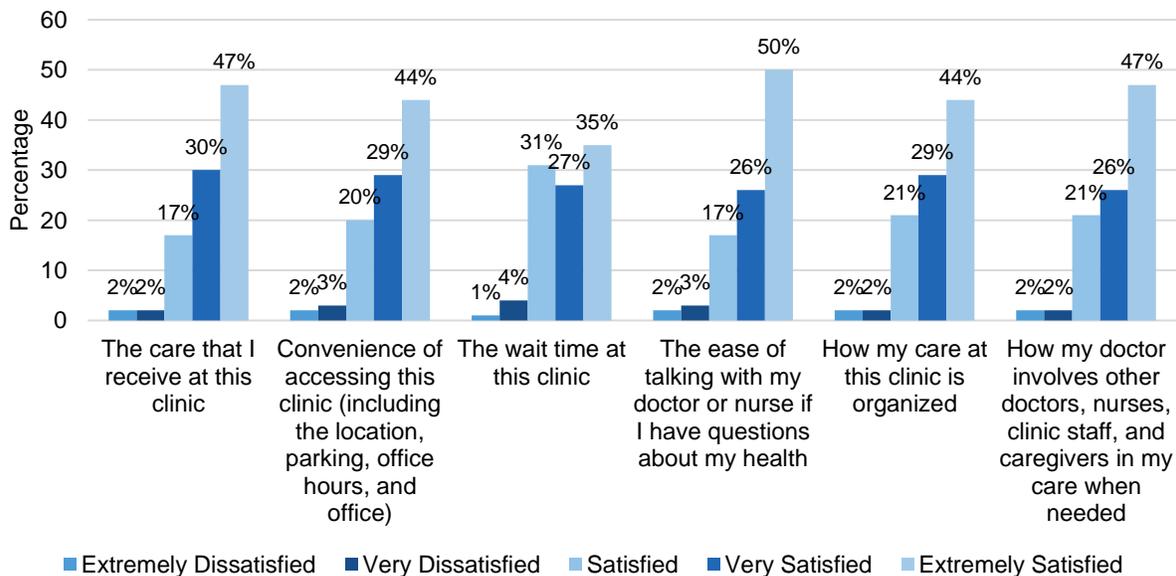
As we detailed in Chapter II, practices participating in Phase 2 of the TBCI have implemented multiple changes in care delivery and overall practice organization. These changes have the potential to disrupt the patients’ experience of care in the practices and could lead, at least temporarily, to increased workloads and burdens on staff and clinicians. In this chapter, we describe the effects of the TBCI on the experiences of patients, clinicians, and practice staff.

#### A. Patients’ experience

Across the practices participating in the TBCI, patients who completed satisfaction surveys in both 2016 and 2017 reported high levels of satisfaction with the care they received, indicating that the initiative is not having a detrimental effect on their satisfaction with care. In four of the practices, most patients reported that the care provided by the practice was much better than that provided in the previous year (2016 data not shown). In 15 additional practices, patients reported that care was the same as before. In no participating practices did a majority of patients report that care was worse than before.

Overall, patients across the practices consistently reported positive experiences across key areas related to their access to care and the quality of care they received. Specifically, 77 percent of patients reported they were very or extremely satisfied with the care they received, 73 percent reported similar levels of satisfaction with the convenience of access to the practice, 62 percent with wait times, 77 percent with the ease of getting questions about their health answered, and 73 percent with the organization of care and with how care team members collaborated (Figure III.1). In both 2016 and 2017, the lowest relative levels of patient satisfaction were reported around “the wait time at this clinic.”

**Figure III.1. Patients’ satisfaction, 2017 (n = 1691)**

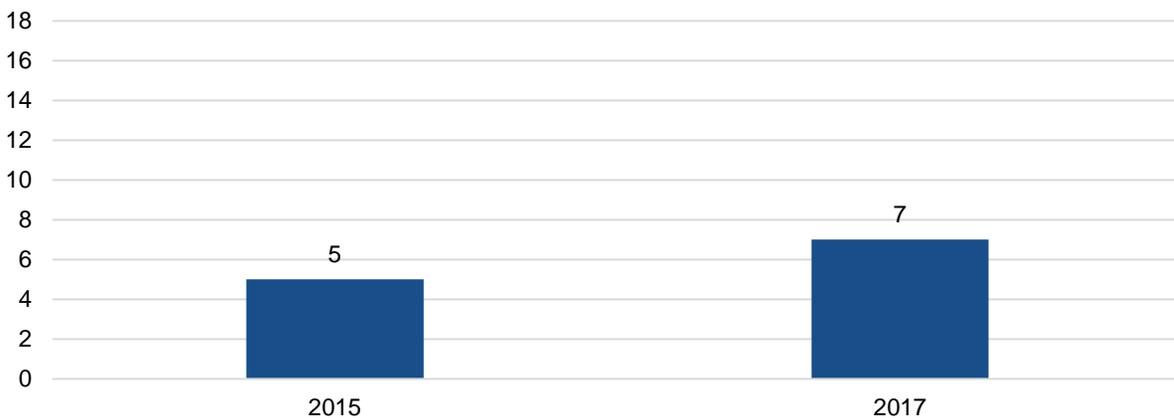


Source: April 2017 patient survey data from 18 practices.

## B. Clinician and staff experience

The implementation of team-based care through participating in the TBCI appears to have had limited effect on the clinicians and staff of the participating practices in terms of work satisfaction and levels of burnout. In both 2015 and 2017, most clinicians and staff in each of the TBCI practices reported that they were either satisfied or highly satisfied with their jobs (data not shown). However, in a small but increasing number of practices, clinician and staff burnout is a significant issue. In 2017, most clinicians and staff in seven of the 19 TBCI practices reported at least moderate levels of burnout on the Burnout Self-Test adaptation of the Maslach Burnout Inventory (Figure III.2). Increasingly widespread clinician and staff burnout could negatively affect the ability of practices to sustain team-based care practice changes after the end of the initiative.

**Figure III.2. Practices with more than 50 percent of clinicians and staff reporting at least moderate job-related burnout, 2015–2017 (n = 19)**



Source: Mathematica’s analysis of clinician and staff survey results, fielded by Kaiser Permanente Washington Health Research Institute, using the 19 TBCI practices that responded in 2015 and 19 in 2017. TBCI = Team-Based Care Initiative.

## **IV. CONCLUSIONS AND RECOMMENDATIONS**

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With one year to go in the initiative, practices have made consistent changes in the ways they organize and deliver care across all of the areas measured by the PCTGA and substantial changes in terms of risk-stratified care management and the organization of practice teams. In making these changes, practices have addressed each of the five principles of team-based care identified by NAM. Perceived alignment of the TBCI goals with those of other practice transformation programs in Colorado (for example, SIM, CPC, CPC+, and FQHC accreditation) and the resources provided by the TAP have effectively supported practice change efforts to date. Uneven access to health IT support services, variation in leadership engagement in the TBCI, and staff concerns about taking on new roles and additional responsibilities present challenges for implementation going forward.

The TBCI seeks to provide support to primary care practices with a significant population of underserved Coloradans as the practices develop and expand their capacity for team-based care. This expansion of team-based care should have positive effects on patients' experience of and satisfaction with their care while improving the work experience of clinicians and staff. At this point in the initiative, patients continue to report consistently high levels of satisfaction with their care across all areas except wait times. Substantial majorities of patients report that their experience of care is respectful and a growing majority report a more patient-centered attitude from practice staff. The multiple changes in care delivery undertaken by practices have not affected clinicians' and staff members' overall job satisfaction. However, most staff in seven practices reported moderately high levels of job-related burnout.

### **A. Recommendations**

Practice members have consistently described the implementation supports provided by the TAP as valuable resources for their practice change efforts. These resources will be of continued importance in the final year of the TBCI as practices work to achieve high levels of performance across the PCTGA domains. Identifying ways that practices can successfully navigate these changes while improving patients' satisfaction (especially related to wait times) and increasing their patient-centeredness will be essential for ensuring the overall success of the initiative. In addition, renewed efforts to ensure more consistent leadership engagement across the participating practices are needed. Ensuring staff engagement in and support for team-based care expansion will require identifying ways to support and encourage practices provision of effective training opportunities. Increasing opportunities for staff to engage in the learning collaboratives and developing shared training resources could be effective ways of addressing the growing problem of staff burnout. However, this could also have the opposite effect of increasing burnout by requiring more staff time for team-based care activities and will require successfully managing competing demands on clinicians' and staff time. Finally, given the objective of the TBCI and Foundation of reaching underserved Coloradans, targeted support for practices with high levels of Medicaid and self-pay patients is warranted to ensure the adoption of successful care coordination models in an environment where access to specialty care is challenging.

Practices participating in the TBCI have made numerous changes so far, but opportunities for continued improvement remain. Key challenges in the final year of the initiative are likely to

be (1) ensuring the spread of high-performing care delivery approaches across all of the participating practices, (2) helping practices plan for and implement efforts to sustain after the end of the initiative the changes they have made, and (3) avoiding additional clinician and staff burnout.

## **B. Next steps**

We will continue to monitor practice implementation progress and the effects of the TBCI on patients, clinicians, and staff in the final year of the initiative to determine whether the mostly positive effects on practices documented in this report continue as expected. In April 2018, we will conduct final site visits with the 10 selected practices to document progress implementing team-based care. To assess effects on patients, clinicians, and staff, we will conduct patient surveys in April and clinician and staff surveys in May 2018, near the end of the initiative. We will conduct a final PCTGA in August 2018 to collect data on practice transformation across all participating practices.

In our final report, we will provide an overall assessment of the TBCI. We will determine how successful participating practices were in enacting each of the five team-based care principles and any effects of this work on patients, clinicians, and practice staff. In addition, we will provide an overall assessment of the extent to which the TBCI succeeded in improving patient engagement, the overall experience of care for patients, and practice team members' experience. We will determine the extent to which the TBCI supported effective practice change and the role of the technical assistance provided to practices in facilitating these changes. Finally, we will describe efforts of participating practices to ensure that changes supported by the TBCI are sustainable beyond the end of the program.

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