



Team-Based Primary Care

Opportunities and Challenges



STARFIELD SUMMIT
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ABOUT THIS WORK

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Team-Based Primary Care: Challenges and Opportunities

INTRODUCTION

The concept of expanded support roles for more comprehensive primary care services is not new^{1,2}. However, broad-scale implementation of teams in primary care is expanding and increasingly viewed as an important strategy to enhance the primary care functions—first contact, continuity, coordination, and comprehensiveness—as outlined by Barbara Starfield. Team-based care has been defined as the “provision of comprehensive health services to individuals, families, and/or their communities by at least two health professionals who work collaboratively along with patients, family caregivers, and community service providers on shared goals within and across settings to achieve care that is safe, effective, patient-centered, timely, efficient, and equitable.”³. In models such as Wagner’s Chronic Care Model, all team members, including patients, share the work, the accountability, and core relationships of creating and supporting healthy lives.

Over the past five years, efforts to implement team-based primary care have grown—particularly in the context of the Patient-Centered Medical Home and its core standard to “engage all practice team members... and offer team-based care.”⁴. PCMH initiatives increased four-fold from 2009 to 2013⁵. Several large-scale Centers for Medicare & Medicaid Services (CMS)-funded projects, such as the Multi-Payer Advanced Primary Care Practice Demonstration (MAPCP)⁶ and the Comprehensive Primary Care Initiative (CPCI)⁷, have sought to promote PCMH principles and implementation in several states. To further expand this work, CMS is rolling out the Transforming Clinical Practice Initiative, which will bring primary care practice transformation, including team-based primary care, to 140,000 clinician practices over the next four years⁸. These initiatives, as well as many more, are making team-based care an integral part of healthcare delivery in the United States.

OUTCOMES OF TEAM-BASED PRIMARY CARE

Team-based primary care is not an end in and of itself; rather, teams are a potential solution that can allow increased access to primary care services, increased comprehensiveness in the services provided and additional support for primary care physicians with large and complicated patient panels for lower cost than additional physicians. Studies of team-based interventions in primary care have shown improved patient satisfaction and disease-specific outcomes⁹⁻³⁶ in conditions ranging from diabetes to depression to dementia, as well as improved provider satisfaction and retention^{12, 21, 37-39}. These positive effects are even greater as primary care teams embody team values and exhibit behaviors consistent with high-functioning teams^{40, 41}. This will become increasingly more important as the Medicare Access and CHIP Reauthorization Act begins to transition federal payments for healthcare to more value-based payment and reimbursements for population health⁹.

However, any innovation in healthcare delivery will only be sustainable if these positive patient and provider outcomes are associated with lower overall healthcare service utilization and cost. So far, outcomes of team-based primary care in healthcare systems have showed mixed results in terms of clinic and emergency room use^{12, 20, 23, 42-45}, or inpatient admission rates^{10, 12, 30, 42, 45, 46}. On a larger scale, the aforementioned CPCI demonstrated nearly enough cost savings over its first twelve months to cover the care management fees, but not enough to generate net savings in a blended payment system; the decrease in service utilization rates in the studied regions of the CPCI are unclear at this time⁷. Similarly, in the MAPCP (which supplemented private-payer fee-for-service with a per-

member-per-month payment for Medicare beneficiaries to support advanced primary care transformation and community health team implementation), only two of the eight demonstration states decreased expenditures, and there was unclear evidence of reduced utilization rates among demonstration beneficiaries⁶.

ADAPTABILITY: WHAT MAKES TEAMS DIFFERENT IN PRIMARY CARE

Implementing and measuring the impact of team-based care in primary care has been challenging, largely because the definition and composition of primary care teams does not fall under any particular construct. Unlike, for example, surgical teams, in which all roles are well-described and function synchronously in a clearly defined physical time and space of a surgery in an operating room, primary care teams are less well-defined. Team members in primary care can be separated by time and space with regards to their interactions with the patient and with each other, and the number and type of team members is much less bounded and stable. This is evidenced by the great variety of teams in the primary care setting: studies of teams in primary care describe teams that range in size from two to as many as eight distinct roles and include different combinations of general nurses and specialized nurses, specialized physicians, behavioral health providers, pharmacists, nutritionists, physical and occupational therapists, and non-clinical supports such as case managers, social workers, and clerical associates^{9-22, 24-38, 40, 42-49}.

The variety of teams found in primary care likely derives both from differing needs of patient populations as well as differing geographical distributions of healthcare and supplementary providers. Many have found this variety vexing with regards to comparing outcomes and inconsistencies, and have expressed struggling to define the “optimal” team composition in the primary care setting^{2, 50, 51}. However, we would argue that this flexibility in primary care teams is important to comprehensive yet judicious uses of teams. Many patients, especially those who are older and/or suffer from multiple complex chronic conditions, will likely benefit most from the care of multidisciplinary teams⁵². However, most patients will not ever require the capacities of a fully comprehensive primary care team, and patients will not require certain team members all of the time. Thus, we suggest that the composition of a team for a given patient population will need to match patient needs, be evaluated and re-evaluated with time, and be constrained by the availability of the local workforce of trained providers and support staff⁵³.

OPPORTUNITIES IN AND CHALLENGES OF IMPLEMENTATION OF TEAM-BASED PRIMARY CARE

While the unstable nature of primary care teams has made consistent and equal implementation of team-based primary care more complex, there are several recent developments that have created unique opportunities for the implementation and sustainability of team-based primary care, as well as barriers that will need to be addressed to fully realize the potential of teams.

Electronic Health Records

While electronic health records (EHRs) have existed for decades, the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH) has encouraged the accelerated adoption of EHRs in primary care practices⁵⁴. Currently, over 80% of primary care physicians are using EHRs- more than any medical or surgical specialty⁵⁵. EHRs and their affiliated messaging and patient portal systems provide opportunities for various members of primary care teams to work asynchronously and/or in different physical spaces, as well as providing innovative ways to communicate with and track patients in the community. EHRs have already been shown to facilitate communication and task delegation among primary care team members through functionalities such as

direct messaging, task management software, symptom-specific templates and order sets. This expands the roles of clinical support staff such as nurses and medical assistants^{56, 57}.

There is still, however, much room for improvement. Many EHRs currently lack the functionality and interoperability for optimal population and registry management and care management, which prevents primary care teams from achieving their full potential in interdisciplinary care^{56, 58}. Additionally, many EHRs do not allow multiple team members to view or document in the same patient chart simultaneously, which interferes with real-time observation and communication and can impede clinical workflows⁵⁹. Some clinics have constructed workarounds⁵⁸, which may not be sustainable or replicable for other practices. Additionally, the structure of some EHRs may increase the administrative burden on primary care physicians with tasks such as charting and other related tasks, if they are not optimized to improve patient care and the functionality of the primary care team⁶⁰. In order for EHRs to continue to fulfill their potential to support team-based primary care and excellent panel management, EHR vendors, health policy-makers and clinicians should work together to create more permanent EHR upgrades and functionalities that best facilitate the work of primary care teams^{56, 58, 60}.

Types and Distribution of Healthcare Professionals

The rise of graduating physician assistants and nurse practitioners in the United States in combination with a rising demand for primary care has resulted in a more diverse mix of primary care providers across the United States⁶¹. This diversity in staffing is particularly prevalent in some community health centers, which have incorporated more advanced practice nurses to enhance capacity for treating complex patient populations⁵³. This rising diversity of primary care providers, in combination with the aforementioned expansion and integration of professional roles such as pharmacists, medical assistants, occupational and physical therapists, case workers, and behavioral health professionals have greatly expanded the capacity for diverse, comprehensive and varied teams that can better fit the needs of populations.

Ideally, team composition of these various types of health professionals in primary care practices would be determined by the needs of the patient population. However, the assembly of the ideal ratios of different professionals may be limited by the availability of the workforce. Maldistribution of primary care physicians, particularly in rural and poor communities, has been well-documented in the United States⁷⁷. This uneven distribution also holds true for nurse practitioners, physician assistants, and pharmacists^{78, 79}. Unless sufficient policies and incentives are put in place to encourage more appropriate distribution of all the various members of the primary care workforce, high-functioning team composition will be difficult to achieve⁵².

Payment Reform and New Models

Fee-for-service payment plans continue to constitute the majority of reimbursement for medical services in the United States, which do not account for tasks completed by clinical staff who are not licensed practitioners⁵². The limited exception is the addition of team-based care codes, such as Medicare's chronic care management code. These codes have allowed practices to be reimbursed for telephone calls in additions to face-to-face visits with the physicians, so that practices can consider hiring extra nurses and staff with special skills in chronic disease management to more closely attend to patients with chronic conditions. However, these codes have been limited by bureaucratic requirements and most primary care practices are not utilizing them⁷⁵.

Team-based care has the potential to significantly decrease healthcare costs by providing higher quality care while utilizing lower-cost providers. However, the implementation of a team-based primary care model has up-front costs and maintenance costs that must be accounted for by a payment program in order to be successful. Start-up costs of integrated team-based care have been estimated to average about \$44,000, and monthly

costs of coordination and support of the team have been estimated at about \$40 per patient⁷⁶. These significant costs require prospective investments and maintenance. While we have described models, above, that may be sufficiently flexible to support team-based primary care, not one has explicit funds for implementing and maintaining teams. No current high-level evidence exists to inform which payment model will best support high-functioning teams in primary care⁶²; further research into this area is indispensable for the success of implementation and maintenance of team-based care models.

Payment reform is necessary to support team-based primary care transition and maintenance⁶², particularly since some estimates of staffing needs in team-based primary care models such as the patient-centered medical home (PCMH) require an estimated staffing increase of 59% per physician full-time equivalent⁶³. Innovative payment models can provide the flexibility for paying for teams, such as blended payment models, shared savings plans, and community health teams.

- **Prospective per-member-per-month blended models:** Several large-scale demonstration projects, such as the aforementioned MAPCP Demonstration, utilize prospective per-member-per-month (PMPM) payments in addition to fee-for-service reimbursement in order to account for the complexities and costs of primary care transformation and team-based primary care. This creates a predictable funding stream that could be used to account for the upfront costs of implementation and training of teams and could feasibly be flexibly used to hire and utilize team members in accordance to the needs of the practice and its patient population.
- **Shared savings:** The U.S. Department of Health and Human Services introduced and expanded the delivery model within CMS⁶⁴. Since then, many ACOs have formed to pool risks and rewards among multiple healthcare entities⁶⁵. After cost savings, entities and practices within a given ACO will retrospectively share payment. In theory, this will create a strong incentive to innovate the team structure such that the lowest-paid providers will address certain aspects of a patient's health, and primary care practices will be even more incentivized to keep patients healthy so that they are not admitted to high-cost inpatient facilities. In addition, membership of an ACO will reduce the cost to an individual practice of expanding teams that will provide care to high-risk patients.
- **Community payments:** An interesting model that arose most prominently out of Vermont's Blueprint for Health is the community payment model, in which the salaries and work of community-based teams across practices in a given region with a set patient population were paid for out of a capitated fund from Medicare, Medicaid, and major commercial insurers⁶⁶. The exact number and composition of team members was determined by a needs assessment of the patient population of a region, and the team members would spend their time rotating on an as-needed basis at the different practices that served that population. No individual practice shouldered the burden of the start-up cost of training, which was particularly helpful in rural Vermont. The distribution of community team services across practices also increased efficiency, as each solo practice did not need a full complement of team members all of the time.

Playbooks, Templates, and Facilitation Programs

While the exact structuring, composition, and services provided by a primary care team varies from practice to practice, there nevertheless exist common strategies that can be employed by primary care practices to best facilitate the implementation of team-based primary care. "Playbooks" of important principles and action-based strategies are beginning to be compiled by national-level organizations, such as the Agency for Healthcare Research and Quality's Creating Patient-Centered Team-Based Primary Care⁶⁷, the American Medical Association's STEPS Forward module⁶⁸, and the MacColl Center for Health Care Innovation's Primary Care Team Guide web resource⁶⁹, but these playbooks will require more time and testing to determine their success as resources for

practices nationwide. As of yet, there is very little high-quality evidence for specific interventions that improve team effectiveness in healthcare⁷⁰, and further evidence and evaluation of undergoing PCMH and teaming transformation programs will be vital to identifying best practices in implementation of team-based primary care. Nevertheless, the development of these resources is encouraging for more broad-scale implementation of team-based care.

Standardized Team-Based Metrics

The development of common metrics of team-based care is imperative in order to evaluate the effectiveness of primary care teams, as well as to create and refine payment systems based on quality of team-based performance. As with the playbooks of team implementation, federal agencies, such as the Agency for Healthcare Research and Quality, are offering team-based quality measures as an initial framework⁶⁷ and have begun compiling measures and inventories for primary care practices to use in their own practices⁷¹. Metrics against which to measure team effectiveness are in development⁷², and some validated assessments of teamwork in healthcare exist, but very few of these team assessments have been directly linked to patient outcomes⁷³. It will be vitally important that any standardized metrics for evaluating team-based primary care be tied to actual patient health outcomes, especially if we are to use these metrics for public reporting and financial incentives, in order to truly achieve improved health⁷⁴.

CONCLUSIONS

While team-based primary care has demonstrated value with regards to patient and provider outcomes, more rigorous research on the effects of team-based care on healthcare utilization and costs is still needed. Quality metrics, payment reform and workforce redistribution will be necessary to make the expansion of team-based primary care delivery a reality. So far, fee-for-service payment models have been insufficient to stimulate innovation in implementing and delivering team-based care. Prospective payments with flexibility for use by individual practices or communities will likely stimulate upfront team implementation and delivery more than retrospective payments. Adjustments for patient complexities and needs should be the determining factor for the composition of primary care teams; the flexible and adaptable nature of teams in primary care is valuable for addressing the right issues at the right time, and this should not be undermined by a desire for standardization.

The great strengths of primary care providers, of generalists, are their skills in handling great variety, ambiguity, and unpredictability in clinical practice and in the individual and unique lives of our patients. Regardless of the exact structure or composition, teams that are adaptable and function to further these generalist principles will best serve our patients; measurements and payment should reflect this if they are to support successful, high-functioning primary care teams.

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