Improving Care Teams' Functioning: Recommendations from Team Science

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Background: Team science has been applied to many sectors including health care. Yet there has been relatively little attention paid to the application of team science to developing and sustaining primary care teams. Application of team science to primary care requires adaptation of core team elements to different types of primary care teams.

Core Team Elements: Six elements of teams are particularly relevant to primary care: practice *conditions* that support or hinder effective teamwork; team *cognition*, including shared understanding of team goals, roles, and how members will work together as a team; *leadership and coaching*, including mutual feedback among members that promotes teamwork and moves the team closer to achieving its goals; *cooperation* supported by an emotionally safe climate that supports expression and resolution of conflict and builds team trust and cohesion; *coordination*, including adoption of processes that optimize efficient performance of interdependent activities among team members; and *communication*, particularly regular, recursive team cycles involving planning, action, and debriefing. These six core elements are adapted to three prototypical primary care teams: teamlets, health coaching, and complex care coordination.

Conclusion: Implementation of effective team-based models in primary care requires adaptation of core team science elements coupled with relevant, practical training and organizational support, including adequate time to train, plan, and debrief. Training should be based on assessment of needs and tasks and the use of simulations and feedback, and it should extend to live action. Teamlets represent a potential launch point for team development and diffusion of teamwork principles within primary care practices.

Primary care has become too complex to depend primarily on clinician-driven visits for care.[1] The success of new value-based payment models depends on high-functioning teams.[2,3] Teams are the foundation for transformation of primary care.[4] They are needed to perform coordinated tasks that achieve value-based goals aligned with the triple aim: optimal patient experience, population health, and reduced costs.[5] Teams are needed to improve efficiency by allowing each team member to operate at the top of his or her license to improve primary care's capacity to serve more patients.[6,7] Teams are needed to reduce primary care clinician burnout.[8,9]

Successful teams involve "an adaptive, dynamic, and episodic process that encompasses the thoughts, feelings, and behaviors among team members while they interact toward a common goal."[10(p. 600)] Several decades of research offers guidance on key considerations for improving teamwork. With the notable exception of the TeamSTEPPS training program, which now includes a primary care version,[11] there has been relatively little consideration of how team science can be practically applied to primary care.

In this article, we apply team science to primary care teams. We define a team as "a distinguishable set of two or more people who interact, dynamically, interdependently, and adaptively toward a common and valued goal/objective/mission."[12(p. 4)] We consider factors that support effective teamwork that have both empirical and theoretical support and apply these factors to primary care. We discuss the role of training in developing primary teams. We conclude with a discussion of steps to implement high-performing teams in primary care.

APPLYING TEAM SCIENCE TO PRIMARY CARE

Salas et al. have identified foundational elements for effective teamwork drawn from a review of the research on teamwork, including meta-analyses.[10] These elements include conditions/context, cognition, leadership/coaching, cooperation, coordination, and communication.[10] These elements are found in successful primary care teams and are associated with practice capacity for team development and functioning.[13,14] Table 1 provides examples for each of the elements.

Conditions

Conditions, including context, are perhaps the most critical element for effective teams. Macro conditions, particularly the shift from visit to value-based payments, make teams a necessity. Teams are needed to perform these complex functions. Local conditions, particularly practice context, affect team success. Ghorob and Bodenheimer, in observing high-performing primary teams, identified the following characteristics: stable team structure, colocation, team culture, defined roles with training and skill checks to reinforce those

Table 1. Examples from Primary Care Practices of Teamwork Elements

Element	Example
Conditions	A federally qualified health center (FQHC) in California created a team structure with one registered nurse (RN) and one medical assistant (MA) supporting each clinician. The health center had sufficient adaptive reserve (that is, time and cognitive energy), to succeed, and the teams are now high-functioning. The adaptive reserve had two main features: First, leadership committed itself to this team structure and created a business case for having a 1:1 RN-to-clinician ratio despite California having the highest RN salaries in the nation. Using the RNs in co-visits with clinicians (clinicians would join at the end of the visit) so that the visits could be billed and using the RNs as complex care managers for the high-utilizing patients on their team allowed the health center to receive shared savings from the health plan covering most of the health center's patients. The health center invested substantial time and resources in training the RNs to greatly expand their roles so that they could care for some patients without the need to use much clinician time. Thus, leadership motivation and capacity (related to investment in training) facilitated success.
Cognition	Physicians, nurses, schedulers, and practice manager met monthly with a practice improvement facilitator to establish a shared vision for practice transformation and consensus regarding steps to implementation.
Leadership and Coaching	A new medical director created teamlets. She learned that all clinicians refused to work with a particular MA; none of the MAs wanted to work with a stressed physician. The medical director paired the best MA with the stressed physician and paired herself with the least popular MA. The physician's satisfaction improved dramatically. The unpopular MA improved her performance. Everyone in the clinic agreed that creating stable teamlets was the best thing that had happened to the clinic.
Cooperation	In team trainings, one organization strongly advocates ground rules for team functioning (for example, determining when it is OK to interrupt the clinician—much easier with colocation—arriving late, and, most importantly, giving and receiving feedback). If a clinician is not listening to patients or not empathetic, can the MA say something? How should the MA say it so the clinician does not react defensively? When should feedback be given (soon after the event took place, but never in front of patients)? If an MA does not do his or her job well or treats patients brusquely, how does the clinician give feedback? If these ground rules are agreed upon by all parties, then a culture of respectful feedback may develop.
Coordination	A health center in Rochester, New York, launched team-based care. A redesign team of clinicians, licensed practical nurses (LPNs), practice manager, and practice consultants met weekly. The group began by summarizing existing LPN tasks, then determined which tasks performed by clinicians could be delegated. Following detailed assessment of work flow and tasks, the team agreed to delegate nonclinician tasks and piloted, refined, and implemented redesigned patient work flows.
Communication	One practice agreed to multiple processes for communication. The LPN previews the electronic health record and leads a 10-minute huddle. The clinician will pre-order (that is, will enter tentative orders for immunizations and other preventive care). The care coordinator will flag patients who need to be seen. At the end of the session, the teamlet debriefs by discussing what went well, what didn't, and what can be done to improve. Communication is viewed in 3 parts: (1) weekly 1-hour team meetings to discuss performance metrics drilled down to the team level, any changes in work flow, overall how things are going; (2) huddles; and (3) minute-to-minute communication during the clinic session, which is fundamentally facilitated by colocation.

roles, standing orders and protocols, defined work flows and work-flow mapping, adequate staffing ratios for new roles, ground rules, and modes of communication, including team meetings, huddles, and minute-to-minute interaction.[13]

Cognition

Team cognition refers to mental models that are shared among team members for how and why teams work together. We cannot overstate the importance of a fundamental shift from a mental model involving clinician-driven visits to care involving teams. Physician-centric mental models and culture represent key barriers to team care.[13,15] Patient-centered care requires shift in a mental model among all teams members

from "I provide care" to "We provide care." A shared vision ensures that team members, including patients, are using the same "playbook" and fosters team identity based on a shared belief that the team can accomplish its goals.[16] Clear goals for the teams represent a key element of team cognition and unity in purpose. A version of "the quadruple aim" represents an overarching goal for primary care teams (that is, optimal patient experience, including a focus on patients' values, preferences, and informed decision making; improved population health; improved care efficiency and decreased cost; and well-being among all team members).[8] Depending on the type of team, (for example, care teams, scheduling teams), subgoals will differ.