

Effective Teamwork and Quality of Care

Author(s): Edward H. Wagner

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Effective Teamwork and Quality of Care

Edward H. Wagner, MD, MPH

Not too many years ago, one of medicine's favorite images was the much reproduced painting of the solitary family physician—concerned, vigilant, thoughtful—seated at the bedside of a desperately ill child. It hung on the walls of many waiting rooms, communicating to the public the romanticized image of medical care as the lonely struggle of one doctor against disease. This image bears little resemblance to modern medicine, and not just because house calls are a thing of the past. Modern medical care involves complex, rapidly changing interventions and treatment plans, and the activities of multiple people, disciplines, and institutions. Good medical care requires effective systems, and systems need continual assessment and redesign to optimize care.¹ This pertains not only to the desperately sick, but to healthy people in need of cancer screening or help with smoking or obesity, or the large segment of the population living with one or more chronic illnesses. Despite the growing complexity of modern medical care and the urgency of better communication and coordination, “the current system shows too little cooperation and teamwork.”²

Effective care does not happen by chance or by simply working harder. It requires the concerted and coordinated activities of multiple people and disciplines, and a delivery system reconfigured to facilitate its execution. Both the delivery of high-quality care and the evolution of practice systems to support it require teams that can effectively blend diverse skills and perspectives toward a common aim. Effective teams and teamwork feature prominently in prescriptions for a better healthcare system.^{1,3–6} However, what is an effective team? What helps or hinders its formation and functioning? How would you recognize one? How might you measure its success? To answer these critical questions, we need a science of teamwork with relevant theories and valid and reliable measures of key constructs and outcomes.

The article by Shortell and colleagues in this issue⁷ illustrates the potential contribution of rigorous thinking and methods in this critical area. They studied the perceived effectiveness and outcomes of quality improvement teams participating in Breakthrough Series (BTS) collaboratives focused on improving care for 1 of 4 major chronic conditions.^{8,9} In these BTSs, participating teams are encouraged and coached over the course of a year in the use of rapid-cycle change methods to improve their systems and approaches to care for a pilot group of chronically ill patients in accordance with the Chronic Care Model.¹⁰ The organizations participating in the BTS collaboratives not only volunteered, but also paid for the opportunity to participate. Thus, they are clearly more motivated and perhaps more sophisticated about quality improvement than most practice organizations. However, even among this biased set of quality-oriented organizations, variations in the parent organization's goals, culture, and leadership, and team character-

From the MacColl Institute for Healthcare Innovation, Center for Health Studies, Group Health Cooperative, Seattle, Washington. This manuscript was supported under grant no. 0347984 to Group Health Cooperative from The Robert Wood Johnson Foundation. Reprints: Edward H. Wagner, MD, MPH, Center for Health Studies, 1730 Minor Avenue, Suite 1600, Seattle, WA 98101-1448. E-mail: wagner.e@ghc.org. Copyright © 2004 by Lippincott Williams & Wilkins
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istics were associated with the perceived effectiveness of their teams and their success in making meaningful system changes.

The Chronic Care Model describes an integrated set of system changes to the delivery system. The changes recommended are changes in clinical management (eg, increased use of controller therapy in patients with persistent asthma), changes in care delivery (eg, use group visits), or administrative changes (eg, redeploy staff, establish a patient care registry). As a result, BTS teams generally comprise clinical staff, including members of the clinical team that care for the patients involved, and administrative staff. So they are both a clinical team and a quality improvement team.

Shortell and colleagues examined: the associations between characteristics of the organization in which the team works; the characteristics of the team itself, especially its perceived effectiveness; and the number and depth (degree of expected impact) of changes made to improve the quality of care. Their variables are derived from the organizational sociology and management literature, and may be a bit mysterious to readers unfamiliar, as am I, with that jargon. As faculty in all of the studied BTS collaboratives, my colleagues and I worked closely with these teams over the course of a year. This gives us a different perspective on the issues and relationships. Nonetheless, our experience and observations are very consistent with the research findings.

It became obvious in our first collaboratives that the enthusiastic support of a team's organization, as manifest in the visibility and involvement of the organization's leaders, was critical to its success. Although we were unaware of the more subtle aspects of organizational culture measured by Shortell and colleagues, the most effective teams came from organizations whose leadership put a premium on patient outcomes and visibly supported the work of the team. Our observations then corroborate the findings that patient-centered organizations committed to improving quality will have more effective teams.

Shortell and colleagues found that effective teams included physicians and a team champion—a physician or nurse who facilitates change. As BTS faculty, we spent more time with struggling teams. Making system changes in accord with the Chronic Care Model using multiple plan-do-study-act (PDSA) cycles involves nearly continuous team activity and test cycles. Many of these involve clinicians and patients. Many unsuccessful teams did not include clinicians and, as a result, were less able to make the fundamental changes in patient care required to improve outcomes. Unsuccessful teams often did not have a clear convener who assured the continuous stream of test cycles necessary to implement the Chronic Care Model. In our experience, many successful teams included both an enthusiastic physician (or other clinician) and a nurse (or other nonphysician professional) who

“made the trains run on time,” either or both of whom might be recognized as a champion.

Shortell and colleagues suggest that the measurement of perceived team effectiveness at the end of the BTS is a limitation of their analysis because it obscures the causal direction of the strong association between team effectiveness and the number and depth of system changes. Do effective teams perform better or does the successful completion of PDSA cycles enhance the perception of effectiveness? This is certainly an interesting question from a theoretical perspective. However, practically, their association may be important regardless of direction. Most likely, perceived team effectiveness and system change covary, ie, planning and performing PDSA cycles that improve care builds confidence and cohesion in a team, which increases the team's skill and ability to garner resources to make further improvements. Earlier randomized trials of applications of industrial quality improvement approaches to health care often demonstrated no change in the quality of care.^{11,12} One possible explanation is that these approaches emphasized careful analysis of processes and problems, rather than rapid cycle pilot testing, and the absence of early action and evidence of success limited team effectiveness.

Although most of what is written in the medical literature about teams and teamwork is political, focusing on issues of equality and respect, evidence is mounting in support of the central role of teamwork in delivering better health care and outcomes.¹³ In their analysis of the literature on clinical teams, Grumbach and Bodenheimer argue that 5 key elements contribute to the development of effective clinical teams. These elements describe how a team actually goes about its work rather than how it is structured or its disciplines relate to one another. Effective teams establish clear goals, enhance clinical systems to facilitate getting the work done, define and assign tasks and roles, train individuals to perform roles, and develop clear structures and processes for communication.¹³ These same elements describe the work of the successful teams in these BTS collaboratives. However, the work of Shortell and colleagues extends our understanding of teamwork in medical care by demonstrating that, even with the right work plan, effective teamwork requires a properly configured and led team supported by an organization invested in its success.

Whether involved in clinical practice or quality improvement, all in health care, especially clinicians, must understand the critical role of teamwork and their involvement in teams. Clinical training has until recently reinforced the old notion of the solitary physician. Hopefully, the 6 core competencies mandated by the Accreditation Council on Graduate Medical Education (ACGME)¹⁴ will increase the interest in systems and teamwork. One of the 6—competency in systems-based practice—is defined as “know[ing] how to partner with health care managers and health care

providers to assess, coordinate, and improve health care.”¹⁵ With better understanding of the determinants of effective teamwork in health care and more supportive training, perhaps the picture on waiting room walls will be a group portrait.

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