Enhancing Provider Engagement in Practice Improvement: A Conceptual Framework

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Engaging individual members of clinical teams in practice improvement initiatives is a challenge. In this commentary, we first summarize evidence supporting enhanced practitioner engagement through the creation of a work environment that builds on mutually respectful relationships and valued interdependencies. We then propose a phased, collaborative process that employs practice talk, a term that describes naturally occurring, collegial conversations among members of clinical teams. Planned interactions among team members, facilitated by individuals trained in dialogic techniques, enable health care providers and support staff to share their experiences and expertise, agree on what improvements they would like to make, and test the success of these changes. Participants would be encouraged to express their own suggestions for better practice and disclose strategies that are already working. Dissent would be regarded as an opportunity rather than a barrier. Iterative, sense-making conversations would generate a shared vision, enabling team members to engage in the entire process. Given that practice improvement ultimately depends on frontline providers, we encourage the exploration of innovative engagement strategies that will enable entire clinical teams to develop the collaborative learning skills needed to accomplish their goals.

Key Words: *quality improvement/Six Sigma/TQM, continuing medical education, practice improvement*

The objective of this article is to propose an evidence-informed conceptual framework designed to enhance provider engagement in practice improvement in clinical settings. Health care organizations allocate significant resources towards practice improvement initiatives, which only infrequently produce sustained changes in performance.[1–5] Heavy practice and administrative responsibilities contribute to resistance by frontline providers to be fully engaged.[4,6–8] This notable challenge has typically resulted in a strategy that seeks provider *buy-in* to externally developed best practices via quality/value initiatives and continuing education programs. In contrast, reports from private industry[9] and management consultants[10,11] describe methods whereby employees identify improvement opportunities and create their own change projects. The outcome is that employees are both engaged in the process and committed to its implementation.[12] In this article, we define *engagement* as health care provider involvement in the entire improvement process, which includes identifying a performance gap in their practice; learning how best to bridge that gap; planning, executing, and testing the improvement application in practice locally; and consistently revisiting this process to sustain improvement.

Practice improvement initiatives typically do not address factors related to the social milieu; that is, the context and conversations that engage providers and mediate change.[13,14] It is important to recognize that providers and their support staff often form dynamic clinical communities of practice (COPs).[15] Interconnected and self-organized, these COPs respond to externally applied initiatives in ways that are unpredictable.[13,14] Nevertheless, as they work and learn together, members of COPs build trusting relationships. Through sharing practice experiences, clinicians

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engage in the process of improving patient care.[15–17] Theories with a social learning orientation, including situated learning, COPs, and complex adaptive systems, support observations that interactivity between members can enhance individual learning and lead to practice improvement.[18] These theories describe a relational process whereby practitioners exchange experiences, learn from each other, and collectively envision how their practice could be improved.

Accounts from other fields regarding the relationship among interactivity, worker engagement, and performance improvement are increasingly being reported in health care literature.[16–20] But cultivating interactivity is a challenge in many clinical settings because providers and their support staff often work in relative isolation from each other. Sharing clinical experiences is not a priority.[21] One way to overcome this isolation and disinterest is to create opportunities for COPs to form whereby clinical team members regularly meet to discuss issues in their practices that are shared,[22] such as improving care transitions, reducing medical errors, and enhancing coordination of care between providers and hospitals. Ideas for improvement often arise during such discussions, which may take place informally over lunch, for instance, or formally during scheduled educational sessions.[23] However, if team members are not fully engaged interactively in the improvement discussions, very little of consequence may result and very few gains may be sustained.

Literature Review

To develop an evidence-informed conceptual framework that enhances provider engagement in practice improvement in clinical settings, we employed a semistructured, collaborative process that began in November 2011. We agreed to become an online COP interested in designing more effective formats for practice improvement. We chose to start by reviewing corporate approaches and found meaningful reports in publications by private companies and management consultants.[9–11] Driven by a desire to continuously improve in order to remain competitive, corporations described innovative methods to encourage workers to contribute ideas and engage in their organizational improvement efforts. In the absence of a definitive summary of this literature, we selected key publications from recognized leaders in their fields.[9–11,24–28] Using key words related to learner and practitioner engagement, including *learner engagement, organizational learning, quality improvement, communities of practice, practice-based learning and improvement, clinical microsystems, practice facilitation, interprofessional education,* and *complex adaptive systems,* we identified and reviewed 50 additional publications, including books and peer-reviewed articles from the literature. We posted written summaries of pertinent findings on our online site (PBworks), commented, and then discussed at monthly WebEx meetings over a period of 24 months. During these discussions, the authors selected 35 potential engagement strategies that seemed applicable to clinical settings.

We then investigated evidence supporting engagement strategies in healthcare, higher education, knowledge management, and organizational learning. Rather than undertaking a systematic search of databases in such a wide range of disciplines, the authors selected and reviewed literature that described strategies used to engage front-line providers in team performance improvement,[15,29] QI interventions,[30–32] practice reflection,[33] practice facilitation,[34] storytelling,[11,35,36] and sociocultural learning.[37] We then categorized relevant publications via consensus under these 3 theoretical themes:

1. *Learner engagement.* This category focused on (a) how learners' response to new information influences engagement and commitment to behavior change,[38,39] (b) how prior knowledge expressed by learners influences engagement in learning,[40,41] and (c) how exchanging stories about practice experiences contributes to practitioner engagement in learning and behavior change.[11,35,36]
2. *Emergent learning.* We defined emergent learning as that which arises from conversations and other interactions between socially interdependent people, such as members of clinical teams and COPs.[18,42,43] This category described how staff and practitioners who are engaged in conversations at work enthusiastically express feelings of ownership in, and commitment to, improving practice.[16,20,42] We digested reports highlighting how workers in industry and health care learn from interacting during work, referred to as informal or backstage learning.[44,45] We also discussed reports of formal interactive education sessions where dialogic techniques are used to encourage emergent learning and practice improvement.[46–48]
3. *Social learning environments.* This category included articles that describe how group learning and knowledge creation are encouraged through social learning spaces,[49] learning collectives,[50] and virtual learning spaces.[51]

After reading the articles in each category, we created written summaries and then discussed their key findings. We were especially interested in deriving engagement strategies that could be employed within the structural and relational contexts of health care organizations.

Engagement Strategies

The strategies we identified were grouped according to the settings where they might be applied, namely, strategies embedded in culture and context of health care organizations, strategies incorporated into traditional educational activities, strategies that enhance interactivity between members of clinical teams, and strategies that build social learning spaces in clinical settings. In general, health care and non–health

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TABLE 1. Summary of Strategies That Enhance Practitioner Engagement in Practice Improvement in Innovative, Team-Oriented Work Environments

Strategy Types	Strategy Characteristics
Strategies that are embedded in the culture and context of organizations	• Practice improvement is regarded by leaders as an integral component of daily work (practice).[9,52] • Leaders establish suggestion programs and daily work-group meetings to capture workers' ideas for improvement.[9] • Contributions to practice improvement made by workers/practitioners are encouraged and rewarded by leaders.[20–28] • Opportunities for frontline workers to interact informally and exchange ideas for improvement are actively encouraged.[20–28] • Organizations provide physical space close to the workplace and encourage workers to informally talk about their work at coffee and lunch breaks.[23,24]
Strategies that are incorporated into group educational activities	• Roundtable interactive sessions held in proximity to the work environment encourages participation by busy practitioners.[70] • Workers are encouraged to share stories of practice experiences and create visions of a better practice in "how can we do this better" conversations.[9–11] This form of interactivity between socially interdependent practitioners fosters engagement and engenders feelings of ownership in practice improvement.[12,20] • Evidence from research, patient feedback, and internal audits of practice are introduced into discussions after participating practitioners have articulated their vision of better practice.[10]
Strategies that enhance interactivity among team members	• Dialogue is used to encourage practitioners to think together and generate new knowledge and understanding.[48,56] • Learning in practice is a process that is collectively and socially constructed through dialogue. Dialogue helps people to understand differing perspectives.[48,56,70] • Dialogue leads to higher levels of trust, honest exploration of important concepts and challenges, shared understanding, and innovative thinking that raises the collective knowledge of the group.[48,56,69]
Strategies that build social learning spaces	• Ability to express perceptions, emotions, and motivations requires candor, which is dependent on trusted relationships among colleagues.[49] • Social learning spaces enable interactions among participants that lead to genuine engagement and ownership in practice improvement.[49,50] • Social media can provide high-quality opportunities for interaction between practitioners who find it difficult to meet face-to-face.[51]

care organizations that have implemented the strategies we discovered do so within team-oriented environments. This is in contrast to traditional, individualistic environments where members work and learn in relative isolation of each other.[15] References in support of these strategies are cited in the text that follows and summarized in TABLE 1.

Strategies Embedded in Culture and Context of Organizations

Some organizations recognize improvement as integral to work. For instance, John Shook, CEO of Lean Enterprise Institute, states, *"Doing the task and doing the task better becomes one and the same thing. This is what it means to come to work."*[9(p11)] Batalden and Davidoff, leaders in health care improvement, emphasize that *"… everyone in healthcare really has two jobs when they come to work every day: to do their work and to improve it."*[52(p3)] Unfortunately, practice improvement is not always linked with the mission statements of health care organizations, nor is it accepted by health professionals who typically perceive it as separate from, and competing with, daily practice.[6–8]

Organizations use daily work-group meetings and suggestion boxes to capture workers' ideas for product improvement.[9] In our experience, practice improvement in health care organizations is driven by leadership and often triggered by an adverse event or the publication of a new clinical guideline for best practice. These externally applied efforts are perceived by many frontline providers to be "owned" by someone else, not themselves. They therefore find it difficult to engage in externally imposed practice improvement initiatives.[4,8]

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Strategies Incorporated Into Traditional Group Educational Activities

Practice improvement activities typically begin with the identification of a gap (eg, provider performance has fallen short of an expected benchmark) followed by a didactic presentation during which an outside speaker recommends adoption of the latest expert- or literature-based guideline. While this approach informs participants about what should change and why, it provides little guidance regarding *how* to effect change.[20] Consequently, many practitioners express disinterest, nonengagement, and sometimes frank antagonism toward these externally imposed change efforts.[4,6–8]

Studies of how the human brain responds to information have identified facilitators and barriers to learner engagement.[38,39] One researcher suggests that educational meetings that begin with statistics demonstrating deficiencies of local clinicians, paired with descriptions of current best practices, result in "cognitive strain."[38] This strain not only discourages learner engagement, but also triggers mistrust between the presenter and learners.[38] In contrast, discussions of familiar experiences, such as stories of current events in one's practice, are effortlessly received, resulting in "cognitive ease" that promotes learner engagement.[38] Reports from higher education support this premise that shared knowledge and experience increase student participation in learning.[40,41] In addition, observational studies of clinical teams confirm that health care practitioners' interests in improving practice are enhanced by creating opportunities for individuals to exchange stories of current practice.[42,46]

Management consultant Peter Senge argues that encouraging participants to exchange stories of practice events and engage in narrative-based dialogue enhances engagement and interactivity.[10] Enthusiasm builds as workers exchange their own experiences of current practice. A shared vision of an improved practice emerges from these interactions. The conversation engenders *creative tension;* that is, the gap between current and ideal practice,[10,17,18] and fosters ownership of the improvement process.[12,20] It is at this later stage, after practitioners have expressed their own vision of improved practice by incorporating experience, knowledge, and new learning that externally derived information is pulled into the conversation. This triggers a "sense-making" discussion among participants that explores the various ways in which evidence-based practice can be adapted to the local context and culture.[42,46,53]

Strategies to Enhance Interactivity Among Team Members

Discussions among frontline providers and managers about a new practice guideline often devolve into "*We cannot do this because …*" debates. This does not inspire or motivate participants to commit to practice improvements.[54]

Researchers report that conversations among team members that take the form of structured dialogue, also known as reciprocal learning,[47] cooperative learning,[55] and engaged scholarship,[56] create new insights and understanding, and ultimately lead to a commitment to change practice.[47] The term *dialogue* has been defined as a 2-way interchange involving "*questions, inquiry, co-creation, and listening, the uncovering of one's own assumptions and those of others, a suspension of judgment and a collective search for truth."*[57(p10)] Interactions among participants in engaged scholarship are described as:

> … a collaborative form of inquiry in which group members leverage their different perspectives and competencies to co-produce knowledge about a complex problem or phenomenon that exists under conditions of uncertainty found in their world.[56(p803)]

There is a strategic orientation implicit in structured dialogue that advances the knowledge of participants and helps them to become aware of opportunities for action. Differences in perspectives and gaps between best and current practice emerging from these interactions create energy and engagement among participants who, perceiving opportunities for creativity, generate new knowledge.[48] Studies reveal that workers engaged in structured dialogue develop a "collective mind"[58] about practice issues that can lead to measurably enhanced relationships between practitioners in clinical settings. This results in better coordinated team care and enhanced quality of care.[47]

Strategies to Build Social Learning Spaces

Social learning spaces have been defined as "social containers that enable genuine interactions among participants, who can bring to the learning table both their experience of practice and their experience of themselves in that practice."[49(p3)] The ability to freely express one's perceptions, emotions, and motivations while recalling a practice experience requires an environment that is perceived as relationally "safe," one that is enclosed by trusted relationships with colleagues who are understanding of, and sympathetic to, the exigencies that inevitably emerge in stories about practice.[49] We identified several strategies useful in constructing social learning spaces. First, it is important to provide a convenient place where members of clinical teams can learn from one another by either casually interacting or meeting formally. Gathering around a table in a lunchroom is much more conducive to open discussion than sitting in a classroom. Next, the optimal relational milieu within this physical space depends on leaders who are able to facilitate narrative-based dialogue and sense-making conversations from which creative ideas for practice improvement can freely emerge.[18,59]

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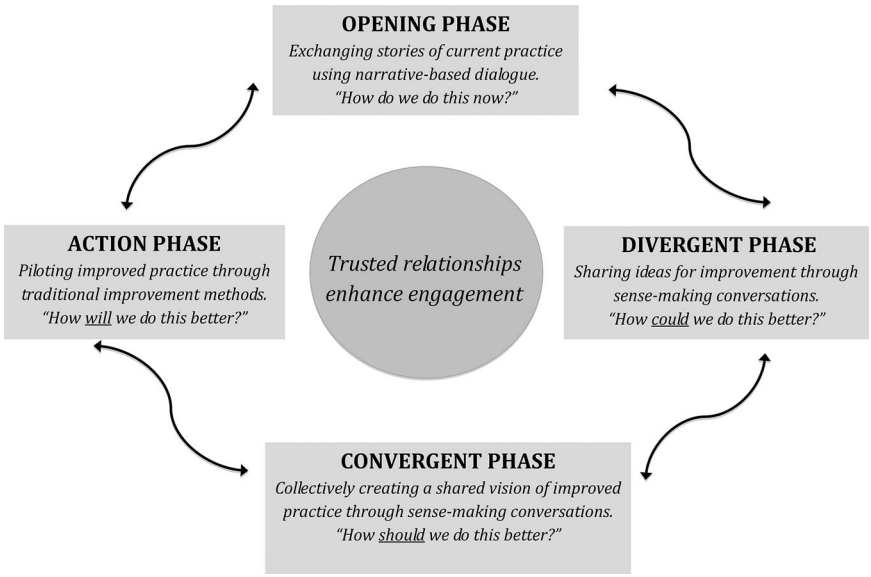

FIGURE 1. The 4 Phases of Practice Talk

Finally, social media can provide virtual opportunities for interaction among practitioners who find it difficult to meet face to face.[51]

A Conceptual Framework: Practice Talk

Our collaborative process of investigating the literature resulted in the development of a conceptual framework through the synthesis of these engagement strategies and social learning principles into a pattern for building a social learning space. This conceptual framework is based on the premise that interdependent health care professionals learn and continuously adjust their practice behaviors as they informally converse with one another.[13–16,18] We refer to this dynamic, social process as *practice talk*. While educational resources such as journals and continuing medical education (CME) programs provide individuals with up-to-date information, the application of this information depends on the ability of providers to engage in their own sense-making conversations.[42,53] The conceptual framework, based on evidence-informed principles and strategies described earlier, is designed to augment naturally occurring practice talk via planned and facilitated interactions among members of clinical teams. We characterize the overarching process as a form of "structured dialogue."[48] FIGURE 1 depicts the 4 interrelated phases of practice talk.

- *Phase 1.* Salient events from actual practice are identified by team members prior to the meeting and brought to the opening phase. Team members narrate these stories of current practice as a prelude to further practice talk, from which various ideas for practice improvement emerge.[10,11,15,16] These stories serve as a starting point from which participants address the question, "How do we do this now?"
- *Phase 2.* As participants share their perceptions and reactions to what they hear, they engage in the "How could we do this better?" conversation that characterizes the divergent phase. Creative tension develops as the gap between their current practice and how it might be improved are jointly explored.[10,17,18] The ensuing dialogue encourages members to share novel solutions that are often based on other practice stories derived from previous experiences, thereby utilizing the positive deviance approach to uncovering innovative best practices.[60] Important, unanswered questions may also arise and induce team members to seek more information from outside sources.
- *Phase 3.* Practice talk continues as the conversation enters a convergent phase. Participants begin to consider answers to the question, "How should we do this better?" They collaboratively fine-tune their vision of a better practice after receiving further ideas for improvement from professional literature, colleagues, educational offerings, patient feedback, and practice reviews.[61] This enables them to conduct the necessary sense-making conversations that explore the consequences of adopting the proposed new practice, including capabilities to make the change, availability of resources, and concerns about social influences and changes in professional roles.[18,62] At the completion of this phase, the retooled vision of improved practice is circulated among all members of the clinical team and support staff. Everyone is encouraged to continue the conversation informally and bring back suggestions for change to a later meeting. Social media or a clinic-based Web site could provide a virtual platform for other team members to contribute to the development of the improved practice and endorse its readiness to be piloted.
- *Phase 4.* Plans to design and resource a pilot project that tests the endorsed practice improvement characterize the action phase of practice talk. Participants answer the question, "How will we do this better?," as they integrate traditional quality improvement methods such as plan-do-study-act cycles. Unlike earlier phases of practice talk in which creative ideas for improvement

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> emerge from dialogic interactivity, the decisions made in the action phase are derived from discussions that are influenced by a recognized leader.[63]

In summary, the opening phase provides an opportunity for clinical team members to identify a relevant, practice-based issue. This leads to the divergent phase, during which they explore strategies that would reduce the gap between current and improved practice. The convergent phase occurs as they discuss what options might work best for them. It is during the action phase that they make specific plans, in consultation with leaders, regarding the implementation of the proposed practice change, including what internal indicators they will use to measure success.

Although the four phases of practice talk are represented as a linear process, in reality team members engage in nonlinear, iterative discourse as they build a shared vision of a better practice. This process requires facilitation by an individual who is skilled in dialogic techniques, including narrative-based dialogue and sense-making conversations.[42,53,59] This person safeguards the social learning space by remaining closely attuned to both the content and the conditions of the discussions, that is, what people are saying and how they are interacting.[64,65]

Determining the right balance between face-to-face meetings and time spent in virtual conversations will be dependent on the complexity of the practice change under consideration. Simple changes, such as "introducing a new way to record glycemic control in the charts of diabetic patients," may be achieved in a 1-hour practice talk. On the other hand, a more complex practice change, such as "when to recommend a patient with type 2 diabetes change from oral to insulin therapy," may take several gatherings, and substantial time and effort in between, to enable team members from different disciplines to express their views and arrive at a collective mind on the issue.

Discussion

There is a great need to design learning infrastructures that will enable health care providers to engage more fully in the process of practice improvement. The current emphasis on externally created programs to correct provider-based performance gaps is limited in effectiveness.[5] The practice talk conceptual framework provides an innovative approach to the planning of clinical practice improvement initiatives, one that builds on the tacit knowledge and wisdom implicit in the practice talk of frontline health care providers. Although the proposed method is untested, our collaborative inquiry used a similar, dialectic process. As a community of frontline health care provider educators, we began this work with a desire to improve our respective practices. Our WebEx meetings often began with stories from our own experiences. Our conversations generated much creative tension as we considered "What are we doing now and how could we do it better?" Our exploration into this territory not only fueled our literature search, but also prompted us to reach out to other educator colleagues in order to learn from them as well. The conceptual framework emerged from our sense-making conversations as we endeavored to answer the question, "How should we do this better?" We are now poised to discover how we will, in fact, improve our ability to facilitate learning and practice improvement.

This commentary has some limitations. We acknowledge that our literature search, while far reaching, was not systematic. Thus, our conclusions are empiric and potentially biased. Nevertheless, we draw on the principles of several well-established learning theories, including Kolb's experiential learning theory,[66] and we provide references that support all the concepts and strategies. Another limitation is our modest inclusion of details about the potential role of practice facilitation as an engagement strategy. We feel that any meaningful discussion of the application of this technique is beyond the scope of our article.

Berwick and Finkelstein (2010) note that:

> … the new social context requires preparation of physicians to thrive in systems of inescapable interdependence; and their comfort in that interdependence is now a precondition to providing high-quality care.[67(pS58)]

Interdependent, collaborative care calls for interprofessional learning among providers who are continuously engaged in practice improvement.[8,15–17] We recommend that the rudiments of our prototype be adapted in a way that respects the local context of clinical settings and allows frontline staff to fully participate in the planning, modifying, and adopting of any proposed changes. Ideally, team members would be encouraged to share strategies that are already working and to express their own suggestions for better practice.[22,60] Dissent among participants with differing perspectives should be regarded as an opportunity rather than a barrier.[56] Iterative, sense-making conversations would generate a shared vision, thereby enabling team members to take ownership in the entire process.[12,20] The expected outcome will be a more vibrant, relationship-centered work environment.[15–17] As emphasized earlier, this approach to practice improvement most likely will succeed in organizations in which trust and interactivity between providers and support staff are fostered, legitimized, and rewarded by its leaders.[16,17,68]

We conclude that engagement in practice improvement can be enhanced. Indeed, the utility of our conceptual framework depends on the observation that health care providers are naturally drawn into conversations regarding their daily work. Informal interactions create affordances for action

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that motivate all members of the clinical team to offer their best patient care. We further conclude that professionalism, teamwork, and leadership can be enriched in social learning environments.[48–50] Ongoing collegial feedback, coaching, and mentoring support each clinician's performance longitudinally. Relationships are strengthened as team members discuss, explain, mull, compare, analyze, transfer, and apply their knowledge to shared cases and situations, as often happens when practitioners "talk shop" informally.[42,44–46] It is the quality of relationships among team members that matters most. As Eraut states:

> … the majority of workers' learning occurs in the workplace itself. Formal learning contributes most when it is both relevant and well-timed, but still needs further workplace learning before it can be used to best effect.[37(p419)]

We therefore encourage the exploration of innovative strategies such as practice talk that will enable entire provider teams to develop the collaborative learning and practice improvement skills needed to accomplish their clinical goals.

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Lessons for Practice

- Engagement is increased via the free exchange of "practice talk."
- The ability to candidly express one's perceptions and motivations requires trusted relationships among colleagues.
- Narrative-based, facilitated dialogue is a proposed means to transform everyday practice talk into a shared vision of better practice.
- Workplace learning and practice improvement dwell in the practice talk of clinical teams.

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