Physician–Organization Collaboration Reduces Physician Burnout and Promotes Engagement: The Mayo Clinic Experience

Stephen Swensen, MD, medical director, Office of Leadership and Organization Development, and professor of radiology, Mayo Medical School, Rochester, Minnesota; Andrea Kabcenell, RN, vice president, Institute for Healthcare Improvement, Cambridge, Massachusetts; and Tait Shanafelt, MD, director, Program on Physician Well-being, professor of medicine, Mayo Medical School, and president, Mayo Clinic Staff, Rochester

EXECUTIVE SUMMARY

The process of creating healthy organization–physician relationships is critical to organizational success. Partnerships in process improvement can nurture these relationships and mitigate burnout by meeting physicians' psychological needs. To flourish, physicians need some degree of choice (control over their lives), camaraderie (social connectedness), and an opportunity for excellence (being part of something meaningful). Organizations can provide these opportunities by establishing constructive organization–physician relationships and developing physician leaders. We present a case study from the Mayo Clinic that supports the foundational principles of a physician-engagement model.

We developed the Listen-Act-Develop model as an integrated strategy to reduce burnout and engage physicians in the mission of the organization. The intent of the model is to maximize physician wellness by fostering engagement and mitigating the drivers of burnout. This model provides a path to increase physician satisfaction and meaning in work and to improve organizational effectiveness.

For more information about the concepts in this article, contact Dr. Swensen at swensen.stephen@mayo.edu.

INTRODUCTION

Physician Burnout: The Challenge

Burnout is a pervasive international problem affecting the healthcare workforce. It is a syndrome of depersonalization, emotional exhaustion, and a sense of low personal accomplishment leading to decreased effectiveness at work (Maslach, Jackson, & Leiter, 1996). In other words, a burned-out physician is cynical and exhausted and feels ineffective in his or her work (Leiter, Hakanen, Toppinen-Tanner, Koskinen, & Vaananen, 2013; Leiter, Laschinger, Day, & Oore, 2011; Maslach & Leiter, 2008). The syndrome primarily affects those in the "helping" professions, with recent studies suggesting that physicians are at particular risk (Shanafelt, Boone, et al., 2012).

The high prevalence of burnout among physicians results in loss of engagement and commitment (Dewa, Jacobs, Thanh, & Loong, 2014; Dewa, Loong, Bonato, Thanh, & Jacobs, 2014; Prins et al., 2010; Shanafelt, Balch, et al., 2009; Shanafelt, Boone, et al., 2012; Shanafelt, Raymond, et al., 2014; Shanafelt, Sloan, Satele, & Balch; Williams et al., 2001). The 5 out of every 10 physicians affected by burnout are unable to optimally care for their patients, much less engage in the development and sustenance of the systems in medical organizations that foster the best patient care (Dewa et al., 2014; Firth-Cozens & Greenhalgh, 1997; Prins et al., 2009; Shanafelt et al., 2010; Shanafelt, Hasan, et al., 2015; Wallace, Lemaire, & Ghali, 2009; Williams, Manwell, Konrad, & Linzer, 2007).

Addressing this threat to quality of care is a shared responsibility of physicians and their organizations. Accordingly, organizational efforts to deal with burnout are an essential step to enhance physician engagement and improve safety and teamwork (Dewa et al., 2014; Firth-Cozens & Greenhalgh, 1997; Prins et al., 2009; Profit et al., 2014; Shanafelt et al., 2010; Wallace et al., 2009; Williams et al., 2007). Many factors contribute to burnout, including high workloads; an inefficient environment; problems with work–life integration; lack of flexibility, autonomy, and control; and loss of meaning in work. Other factors, such as medical specialty, practice setting, and personality type, also play a role, as do sleep deprivation, exposure to patient suffering and death, experience with medical errors, and malpractice suits (Balch et al., 2011; Meier, Back, & Morrison, 2001; Shanafelt, Boone, et al., 2012; Shanafelt, Sloan, & Habermann, 2003). Physicians who suffer from burnout are impaired (Shanafelt et al., 2010), and they and their organizations are at risk of having higher rates of medical errors (Dyrbye et al., 2010; Shanafelt et al., 2010; West et al., 2006; West, Tan, Habermann, Sloan, & Shanafelt, 2009), less professionalism (Dyrbye et al., 2010; Shanafelt, Bradley, Wipf, & Back, 2002; Shanafelt et al., 2010; West, Shanafelt, & Kolars, 2011), lower patient satisfaction (DiMatteo et al., 1993), and lower productivity (Dewa et al., 2014), as well as more turnover (Shanafelt, Raymond, et al., 2014; Shanafelt, Sloan, et al., 2011) and suicidal ideation (Dyrbye et al., 2008; Shanafelt, Balch, et al., 2011).

Burnout also erodes pride, idealism, and dedication (Leiter et al., 2011; Leiter et al., 2013; Maslach & Leiter, 2008). A strong connection exists between higher

rates of provider burnout and a poorer safety culture (Profit et al., 2014). When physicians are burned out, healthcare systems' performance is suboptimal. Thus, stronger partnerships and wellness benefit the individual physician, as well as facilitate the organization's ability to deliver high-value care (Wallace et al., 2009).

Physician Burnout: The Opportunity

The effort to eliminate burnout is motivated by a genuine interest in the well-being of patients and providers. Reducing burnout results in improved quality, safety, and efficiency and lower turnover rates (Epstein & Krasner, 2013; Shanafelt, Kaups, et al., 2014; Shanafelt, Sloan, et al., 2011). In addition, optimal organizational effectiveness has as its foundation an engaged workforce. High-quality leadership is critical to employee engagement, as well as to the financial performance of the institution (Day & Lord, 1988). Organizations that make investments in leadership development experience substantially higher returns than those that do not (Bassi & McMurrer, 2007).

The process of addressing the drivers of physician burnout will also deliver business results (Swensen, Dilling, Mc Carty, Bolton, & Harper, 2013). Clinician engagement is empirically linked to more effective organizations, with outcomes including lower turnover rates, superior clinical outcomes, better patient experience, and superior financial performance (Jessee & Rowlee, 2013).

Staff engagement is related to the practice of participative management, social support, and team interaction. Engaged staff members exhibit more organizational citizenship behavior (i.e., behavior that goes beyond the basic job description), which benefits the organization (Koys, 2001; Lee & Allen, 2002; Posdakoff & MacKenzie, 1994; Schaufeli & Bakker, 2004).

Engagement also is associated with superior performance (West & Dawson, 2012). Physicians experience highest levels of engagement when they have a degree of control over their work environment. Engaged physicians tend to receive higher patient satisfaction ratings (Bezrukova, Thatcher, Jehn, & Spell, 2012; Dixon-Woods et al., 2013; Ham, 2014; Plsek, 2013).

Evidence also suggests that organizations with high staff morale outperform those with low morale (Griffith, 2004; Griffeth, Hom, & Gaertner, 2000; Leveck & Jones, 1996; Ostroff, 1992; Ryan, Schmit, & Johnson, 1996). A meta-analysis of nearly 8,000 business units examined the relationship of staff satisfaction and engagement with the outcomes of productivity, customer satisfaction, profit margin, employee turnover, and on-the-job injuries. Employee satisfaction and engagement were strongly related to these outcomes (Harter, Schmidt, & Hayes, 2002). Low morale is expensive in many ways (Schlesinger & Heskett, 1991).

ORGANIZATIONAL DESCRIPTION

In 2015, the Mayo Clinic celebrated its 150th anniversary. It is the first and largest physician-led, integrated, multispecialty medical group practice in the world (Berry & Seltman, 2008) and is near the top of all major published quality indexes (Olsen & Dacy, 2014)

despite having costs that are far below average (Wennberg, Fisher, Goodman, & Skinner, 2008). Although burnout rates at Mayo Clinic are currently approximately two thirds the national average, burnout still affects a substantial number of physicians, which leadership takes seriously (Shanafelt, Hasan, et al., 2015). The institution performs well on quality measures such as readmissions, complications, infections, resource use, and survival rates (*Consumer Reports*, 2013; Leapfrog Group, 2012). Patient satisfaction is high, with more than 90% voluntarily sharing favorable word-of-mouth feedback. Mayo Clinic has 4,100 physicians and scientists on staff, more than 61,000 employees overall, medical practices in 77 communities, 24 hospitals, $10 billion in gross revenue, and the highest brand preference among academic medical centers (Berry & Seltman, 2008).

All Mayo Clinic physicians at the group practices in Minnesota, Arizona, and Florida are employed and work in an entirely salaried system. The Mayo Clinic Health System (a family of clinics, hospitals, and healthcare facilities serving more than 60 communities in Iowa, Georgia, Wisconsin, and Minnesota) maintains a hybrid model in which a majority of physicians are employed under different compensation models (Mayo Clinic, 2013; Viggiano, Pawlina, Lindor, Olsen, & Cortese, 2007). The recruitment and hiring philosophy at Mayo Clinic is "we are hiring you for a career, not just a job." As a result, the organization has some of the lowest attrition rates in the country; only 2.2% of physicians and 4.5% of nurses leave the institution per year (Berry & Seltman, 2014). In addition, for 11 consecutive years, *Fortune* (2016) has named the Mayo Clinic one of the 100 best companies to work for.

Distinctive organizational design features may influence staff engagement. The Mayo Clinic Model of Care is essentially one of patient-centered participative management (Berry & Seltman, 2014). The Listen-Act-Develop model is, at its core, a vehicle of participative management (Kim, 2002). These long-standing practices have contributed to staff engagement and organizational durability.

Organizational improvements measured at the clinical unit level may improve or help maintain credibility, respect, fairness, pride, camaraderie, and low staff turnover. Research supports a relationship between satisfaction and engagement and turnover and organizational effectiveness (Griffeth, Hom, & Gaertner, 2000; Koys, 2001; Posdakoff & MacKenzie, 1994).

THE LISTEN-ACT-DEVELOP MODEL FOR PHYSICIAN ENGAGEMENT

The Listen-Act-Develop model for physician engagement is empirically validated with decades of experience at our institution.

Addressing burnout involves mitigating the environmental drivers of burnout and bolstering individual resiliency. Partnership in improving the practice environment transforms the physician's role from "carpenter" to "architect" and engages physicians in improving care for their patients and the sustenance of the organization. The Listen-Act-Develop model draws from

teachings from the fields of organizational psychology and social science and has been refined through the Mayo Clinic experience with the Quality Academy, Commitment to Safety Team-Based Engagement Model, and Institutional Burnout–Engagement Initiative. It is intended to do the following:

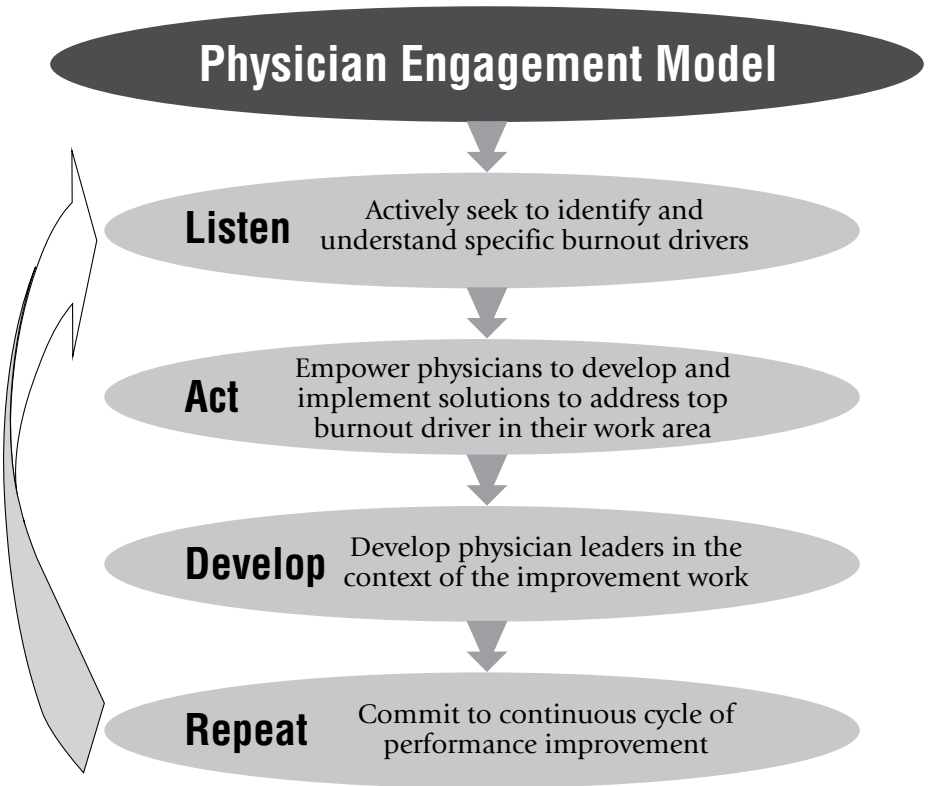
- Nurture the psychological needs of choice, camaraderie, and excellence
- Foster healthy physician–organization relationships
- Identify drivers of burnout
- Alleviate burnout by improving processes and systems of care
- Facilitate teamwork
- Support development of physician leadership
- Increase physician engagement in the shared organization mission

The four steps in the process are as follows (Figure 1):

Listen

- Actively seek to identify and understand specific burnout drivers
- Convene focus groups of frontline physicians to discuss and identify unique local opportunities to improve care of patients and mitigate the drivers of burnout
- Listen to physicians' concerns

FIGURE 1
Listen-Act-Develop Model



- Create a single, meaningful, and actionable burnout mitigation plan focused on the driver of greatest concern identified in focus group sessions

Act

- Empower physicians to develop and implement solutions to address their prioritized burnout driver in the work area defined in step 1.
- Identify physician champions and work in partnership with them on the prioritized initiative.
- Assemble a multidisciplinary, fully resourced team with ample funded time for all members.
- Find a solution or refine the process. Facilitate implementation.
- Monitor outcomes, safety, service, and/or cost improvements.
- Recognize accomplishments.
- Communicate results (successes and failures) to all staff members.

Develop

- Select and develop physician leaders in the context of the improvement work.
- Use the Listen-Act-Develop model as part of the leadership development process.
- Support physician leadership development with action learning, coaching, mentoring, assessment, assignments, and thoughtful planning of goals.
- Provide feedback to frontline leaders from the colleagues with whom they work.
- Provide resources to help them continue to develop as a leader, primarily on the burnout mitigation improvement teams.
- Provide support including executive coaching and other offerings specifically designed to enhance a leader's ability to engage staff and mitigate burnout.

Repeat

- Commit to a continuous cycle of performance improvement.
- Revisit findings from focus groups to identify the next round of improvement work related to burnout drivers.

The foundation of the model is based on organization-sponsored practice improvement initiatives conceived, developed, and implemented by staff members (Dilling & Swensen, 2013; Morgenthaler et al., 2012; Swensen, Dilling, Harper, & Noseworthy, 2012; Swensen et al., 2009; Swensen, Dilling, et al., 2013; Swensen, Pugh, et al., 2013). The experience is exemplified by four development programs designed to improve the quality of patient care, enhance the culture of safety, and reduce physician burnout: (1) The Quality Academy, (2) Commitment to Safety Team-based Engagement Model, (3) Institutional Burnout-Engagement Initiative, and (4) Office of Leadership and Organization Development (OLOD).

The Quality Academy

Our organization and leadership development experience with the Quality Academy forms part of the basis and rationale for the Listen-Act-Develop model. The Quality Academy was established in July 2006 to provide time and resources for education of Mayo Clinic staff members in quality

improvement methods. Individuals and teams learn ways to work together more effectively and efficiently to reduce waste and improve outcomes.

The Mayo Quality Fellows program is one of several offerings that provides quality improvement education and certification for individuals and teams who successfully complete improvement projects. Participants learn to identify and measure healthcare quality, collect and analyze local data, and pinpoint waste. Subsequently, the program helps participants examine and identify ways to improve workflow, identify cost savings, and improve patient care. To date, 37,168 (≈62%) of the approximately 60,000 Mayo Clinic employees have been certified as bronze, silver, gold, or diamond quality fellows.

This leadership and organization development program has catalyzed more than 6,000 team-based quality improvement projects. Almost every improvement project consists of a multidisciplinary team with frontline provider involvement and is sponsored by an institutional leader. The vast majority of the improvement projects have focused on provider-identified opportunities to address process inefficiencies (Swensen et al., 2009).

Commitment to Safety: Team-Based Engagement Model

In 2009, the Mayo Clinic board of governors began an in-depth organization-wide culture of safety initiative. This initiative began with a survey of all employees, of whom 72% responded. More than 200 clinical unit teams and 10,000 staff members have participated in this initiative to improve leadership, patient safety culture, workplace morale, information handoffs between clinicians, and teamwork scores. Organization leaders have monitored results and supported the complete rollout to more than 800 clinical unit teams involving 61,000 staff members. The clinical units engaged have improved leadership, patient safety, and teamwork measures. The local culture has been positively affected by daily huddles and early senior leadership engagement. Results include improvement in workplace morale (an increase of 17%), teamwork (12%), and satisfaction with information handoffs (11%).

Each project in this initiative has been led by a physician–nurse–administrator leadership triad supported by systems engineers and organization development professionals. These teams have subsequently engaged the physician and nurse leaders of each unit. The process involves preintervention and postintervention culture-of-safety surveys, focus groups, and rapid-cycle Plan-Do-Study-Act process improvement efforts to address the opportunities identified by the multidisciplinary members of the units. Similar work with positive results at other institutions has also been reported (Leonard & Frankel, 2015; Sexton et al., 2014).

Institutional Burnout–Engagement Initiative

Since 2013, the Mayo Clinic board of governors has sponsored an in-depth burnout-engagement initiative with physicians from seven high-opportunity clinical departments identified in our 2013 staff survey as having above-average burnout and below-average satisfaction.

A team of two physicians and one administrator first met with the division or department chair to obtain his or her insights into local challenges and issues. They then conducted multiple confidential focus groups with members of the division or department (each composed of six to eight physicians). The intent of the focus group is to identify the distinctive local and institutional drivers of burnout, as well as potential solutions. Department leaders are expected to take steps to mitigate the local drivers of burnout with physician-led multidisciplinary teams. The three-person team then met with the division or department chair to summarize the areas of greatest concern to staff and encourage him or her to conduct a follow-up forum with staff members to develop meaningful and actionable burnout mitigation activities in the work unit. In essence, this is the Listen-Act-Develop model for physician engagement.

The institutional drivers of burnout identified through this process are communicated to the appropriate governance or management groups and addressed by means of a department–organization partnership (Sexton et al., 2014). The other 130 or so divisions and departments are expected to follow the same process of identifying and addressing local drivers of burnout, but without institutional facilitators. A *Burnout Mitigation Process Playbook* was developed for division and department chairs to facilitate the burnout mitigation process (Dilling & Swensen, 2013). Follow-up surveys of physicians (59% response rate) in these seven divisions and departments showed a median burnout reduction of 11 percentage points.

In addition to these efforts focused on physicians, a concerted effort was undertaken for allied health staff. After administration of the 2013 all-staff survey, work units were identified on the basis of lower scores for engagement and overall satisfaction (< 75% on overall satisfaction and < 78% on engagement). Targeted low-scoring units were expected to develop and implement action plans that responded to opportunities identified in the all-staff survey results. Fifty percent (158 of 316) of the targeted units experienced an increase in satisfaction, engagement, or both. Units in which the majority of staff members indicated that action planning was a joint effort between management and staff exhibited the most significant gains in engagement and overall satisfaction scores. Thus, developing collaborative action plans is key to improvement. Mayo Clinic's experience with the institutional burnout engagement initiative and participative management serves as the foundation for the Listen-Act-Develop model.

Office of Leadership and Organization Development

Our organization has extensive experience with leadership development, the third element of our Listen-Act-Develop model. Our approach to leadership and organization development is holistic, involving assessments, development programs, challenging management assignments, institutional projects, and coaching for physician leaders.

Successful teamwork requires leaders to engage colleagues in ways that create shared meaning and purpose. Our

team-based development system creates an environment conducive to developing leaders capable of leading staff in a consensus-driven organization that aspires to have a highly engaged workforce. Team-based collaboration drives the establishment and expansion of best practices, as well as holding oneself and others accountable to metrics for patients and colleagues.

Both the culture of safety and physician–staff burnout initiative embody the principles and practices of our leadership and organization development programs. Specifically, these programs develop leaders through action learning (de Haan & de Ridder, 2005; Dillworth & Willis, 2003; Hill, Leonard, & Sokol, 2006; Marquardt, Leonard, Freedman, & Hill, 2009). Both entail the support of leaders with institutional and departmental resources, including improvement experts, administrative leaders, physician leaders, and organization development leaders, as well as measurement and survey resources (Swensen et al., 2012).

The OLOD actively monitors, rates, and manages the succession pools of 232 physician and scientist leadership positions in our pipeline. Each pool is scored for leadership readiness, ethnic diversity, and gender diversity. The leadership development programs are overwhelmingly based on team-based experiences consistent with the Listen-Act-Develop model. The OLOD also supports the organization by providing development and performance opportunities for leaders in the context of staff engagement and burnout. The department chair's annual performance review includes three metrics: (1) assessment of leadership behavior in 12 dimensions (Shanafelt, Gorringe, et al., 2015), (2) staff satisfaction, and (3) staff burnout. OLOD also supports leaders with executive coaching, leader assessments, and action-learning programs.

THE FOUNDATIONAL PRINCIPLES

Combating physician burnout is a twofold process that involves (1) mitigating the structural and functional drivers of burnout (Linzer et al., 2005; Linzer et al., 2014; Shanafelt et al., 2003; Shanafelt et al., 2008; Shanafelt, Hasan, et al., 2015; Shanafelt, West, et al., 2009; Sinsky et al., 2013) and (2) bolstering individual resiliency (Beckman et al., 2012; Clever, 2001; Dyrbye, Satele, Sloan, & Shanafelt, 2013; Fortney, Luchterhand, Zakletskaia, Zgierska, & Rakel, 2013; Krasner et al., 2009; Quill & Williamson, 1990; Shanafelt, Chung, White, & Lyckholm, 2006; Shanafelt et al., 2003; Shanafelt, Oreskovich, et al., 2012; Shanafelt, Kaups, et al., 2014; Southwick & Charney, 2012; Zwack & Schweitzer, 2013).

Resiliency depends on many factors, some of which include social support, exercise and health, moral compass, mindfulness, optimism, cognitive flexibility, enjoyment, resilient role models, religion and spirituality, purpose, and growth (Clark et al., 2014; Ruotsalainen, Verbeek, Marine, & Serra, 2014; Sood, 2013; Southwick & Charney, 2012). Bolstering resiliency is a key to enhancing quality of care and sustainability of the healthcare workforce. The Listen-Act-Develop model is designed to address the institutional drivers of burnout and foster resiliency.

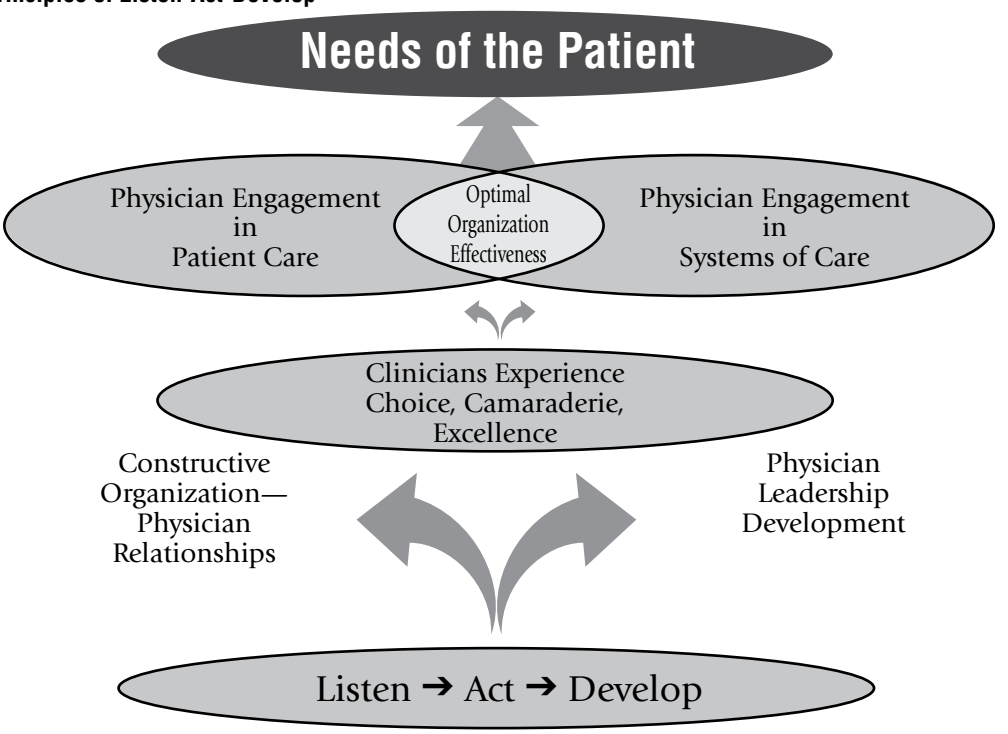
The principles of this approach are based on established teachings from the fields of organizational psychology and social science, which show a direct relationship between physician engagement and clinical and organizational performance (Ham, 2014; Lee & Allen, 2002).

While the drivers of burnout are somewhat universal (i.e., workload problems; inefficiency; lack of autonomy, flexibility, and control; loss of meaning; problems with work–life integration), the dominant factors and the way they manifest in each work unit are distinctive. Engaging colleagues by means of the Listen-Act-Develop model is critical to understanding and addressing the distinctive issues contributing to burnout in the work unit. Three principles support our strategy:

1. Addressing the psychological needs of people
2. Developing constructive organization–physician relationships
3. Sponsoring physician leadership development

Collectively, these elements raise organizational effectiveness and meet patients' needs (Figure 2) (Viggiano, Pawlina, Lindor, Olsen, & Cortese, 2007). We propose that the process of developing constructive organization–physician relationships and sponsoring leadership development via partnership

FIGURE 2
Principles of Listen-Act-Develop



with improvement work mitigates burnout by meeting the psychological needs of people. This, in turn, supports clinicians in their work with patients and the optimal functioning of the systems of care.

Addressing the Psychological Needs of People

To deliver highly reliable care, an organization needs some degree of workforce collectivism, including standardization of selected processes and systems. However, this standardization must be balanced by physicians' need for some control over their lives (Baard, Deci, & Ryan, 2004). The need for choice, camaraderie, and excellence can be facilitated by an organization that is in a position to supply meaningful work, a context for collegiality and teamwork, and sufficient flexibility. When multidisciplinary teams function well, staff engagement is higher and absenteeism and turnover are lower. Clinicians must work collaboratively across boundaries to provide reliable care for patients (D'Innocenzo, Mathieu, & Kukenberger, 2014; West & Lyubovnikova, 2013).

The organization also needs standard systems and processes for stability and improvement, and this requires clinician partnership. Performance and well-being at work are influenced by satisfaction of an individual's psychological needs, and an organization can provide opportunities to meet these needs (Schein, 2013). The organizational characteristics rated most highly by physicians are respect for competency and skills, feeling that opinions and ideas are valued, good relationships with physician colleagues, good work–life integration, and a voice in how time is structured and used (Vital Worklife, 2013).

Choice

Choice has been defined as experiencing some flexibility and control over one's life (deCharms, 1968; Deci, 1975). Achieving this has become more challenging now that approximately 75% of physicians work for hospitals, large practice groups, health maintenance organizations, or academic medical centers (Merritt Hawkins, 2012). A Kaiser Permanente study found that 58% of physicians experienced emotional exhaustion, a feature of burnout (Freeborn, 1998). The author found that physicians' sense of control over their practice environment (i.e., choice) was the most powerful predictor of well-being, satisfaction, and commitment to the organization. Optimal physician involvement includes participation in decision making, flexibility, and a role in managing the calendar (Freeborn, 1998). Some degree of choice also has implications for physical health. Marmot et al. (1991) found that employees with less control at work had higher blood pressure, burnout, back pain, clinical depression, absenteeism, and mortality.

Providing physicians control over their professional lives is an inherent trait of productive physician–organization partnerships that confers benefits on both individuals and their organizations (Sinsky et al., 2013). In a large study of small businesses, organizations that managed by means of greater self-determination and autonomy for staff grew at substantially

higher rates than command and control–oriented institutions. Their turnover rates were also severalfold lower (Baard et al., 2004).

The primary mitigation strategy for burnout is the development of a functional partnership between physicians and the medical center leadership that allows for physician input and creates a sense of choice for the clinicians. In other words, a sense of choice for physicians comes when they are approached as architects, not as carpenters.

Camaraderie

The need for *camaraderie* is defined as recognition from and connectedness to colleagues (Baumeister & Leary, 1995; Harlow & Suomi, 1970). Spending time with physician colleagues alleviates symptoms of burnout (Sinsky et al., 2013; West et al., 2014). Creating a culture of mutual respect is fundamental for camaraderie and functional organization–physician relationships. Success necessitates supporting clinical staff with behaviors that bolster a sense of appreciation, fairness, transparency, collaboration, and individual responsibility. Respect is the foundation of all of these behaviors. Mutual respect, teamwork, and collaboration are at the core of effective improvement efforts. Creating this type of climate leads to a supportive workplace that empowers colleagues to co-design meaningful improvement work (Leape et al., 2012).

Camaraderie and engagement are intertwined. Engagement is a mutual relationship in which the organization values the clinician and the clinician respects the organization (MacLeod & Clarke; Milliken, 2014; Rowling, 2012). Engagement is "an energetic state of involvement with personally fulfilling activities that enhance one's sense of professional efficacy" (Maslach & Leiter, 2008, p. 498).

Excellence

The need for *excellence* is defined as finding purpose and meaning at work stemming from success at delivering superlative patient-centered healthcare (Skinner, 1995; White, 1959). Research in prosocial motivation of healthcare providers supports the merit of an individual's need for purpose (Grant, 2008; Grant & Hofmann, 2011).

Common ground also exists between physicians and medical centers in the pursuit of excellence. Both care deeply about patient outcomes (quality, safety, satisfaction), wasted resources, and efficiency (Reinertsen, 2008). Many physicians may only be interested in the organization's processes and systems in the abstract. Leaders create the alignment, ensuring that the work is rewarding with links to results, impact, efficiency, and learning (Lindgren, Baathe, & Dellve, 2013). Work must facilitate the pursuit of excellence.

Medical center approaches to engage physicians in improving systems that support optimal care include using data to identify areas needing improvement, providing visible support through leadership of improvement work, identifying and developing physician champions to help engage peers, and communicating the value of clinicians' contributions (Liebhaber, Draper, & Cohen, 2009).

The balance of evidence indicates that satisfying human needs for *choice,*

camaraderie, and *excellence* will lead to lower burnout rates and greater clinician engagement in organizational goals. These same environmental factors that help reduce burnout also promote a culture of safety (Leape et al., 2012).

Developing Constructive Organization–Physician Relationships

Constructive physician–organization partnerships are relationships that evoke trust and have attributes of commitment and sincerity. They entail behaviors such as asking questions, sharing concerns, and engaging in problem solving and improvement projects. Physician–organization partnerships involve transparency. A leader at the front line of care helps motivate multidisciplinary teams, especially in the context of generating and implementing improvements. Administrators need physicians as much as physicians need administrators. When the relationship fails, the organization and the patient lose (Bohmer, 2011; Schwendimann et al., 2013; Swensen, Pugh, McMullan, & Kabcenell, 2013).

Constructive organization–physician relationships are indispensable to achieving optimal organizational effectiveness. Such relationships are also the key to nurturing an ecosystem conducive to choice, camaraderie and excellence. Physicians and organizations must work together to develop and nurture a synergistic relationship. They can be developed despite the conventional paradigm that assumes a tension between physicians' and organizational needs. There is a clear line of sight between burnout alleviation and purposeful organization–physician partnerships.

Physicians tend to be highly engaged with their work. However, they are often not engaged in the mission of their organization. Approximately two thirds of physicians rated a high degree of engagement with their work, but less than half scored similarly when asked to rate their degree of engagement with the medical center (Vital Worklife, 2013). Addressing this discrepancy by improving physician–organization partnerships begets greater volunteerism and teamwork, more involvement in process improvement, and lower burnout rates. When physicians are engaged, better communication, improved safety, and superior patient satisfaction result (DiMatteo et al., 1993; Dyrbye et al., 2010; Shanafelt, Bradley, Wipf, & Back, 2002; Shanafelt et al., 2010; West et al., 2006; West, Shanafelt, & Kolars, 2011; West, Tan, Habermann, Sloan, & Shanafelt, 2009). If performance improvement is to occur spontaneously, the clinicians in the system must feel connected to the organization's goals. And they must understand how they align with their own goals, which often center on providing excellent care to patients.

Limited physician participation in organizational improvement is a widespread issue despite recognition that physician participation is requisite for effectiveness (Greening, 2012; Guthrie, 2005; Liebhaber, Draper, & Cohen, 2009; Rundall, Davies, & Hodges, 2004; Walsh, Ettinger, & Klugman, 2009). To achieve optimal results for patients, physician involvement in healthcare improvement work is necessary (Berwick & Nolan, 1998). Working together to improve organization and physician

wellness will create and maintain a durable performance improvement culture. Change in medical centers depends on partnership with both independent and employed clinicians. (Hroscikoski et al., 2006; Kreindler et al., 2014; Nutting et al., 2010). Partnering on organizational work to improve performance is an indispensable precondition to providing safe and high-quality care (Gosfield & Reinertsen, 2008).

Participative management among clinicians and administrators facilitates physician engagement. Constructive partnerships are multidisciplinary, collaborative, and cooperative teamwork involving frontline providers and organization leaders engaged in process improvement. Working partnerships also mitigate burnout (Dunn, Arnetz, Christensen, & Homer, 2007; Sinsky et al., 2013). In essence, organizations should relate to physicians in the same manner that physicians partner with patients: "don't do to, don't do for, do with."

Organization leaders must solicit ideas for improvement from physicians and then act on these ideas. The leadership of one multisite primary care clinic promoted physician well-being by cultivating efficiency, autonomy, and meaning through a continuous improvement process. A longitudinal analysis showed that these efforts resulted in increased physician satisfaction with reduced burnout (Dunn et al., 2007).

Organizations can deploy several effective tactics to enhance clinician involvement in organizational improvements: (1) remove barriers to engagement, (2) commit to administrative support, and (3) prioritize efficiency and effectiveness work that is mutually beneficial (Baathe & Norback, 2013). These features are woven into our model.

Two high-impact engagement tactics have been closely linked to burnout eradication (Advisory Board Company, 2013). They are reflected in these survey responses from physicians (both are embedded in the model we propose):

- My ideas and suggestions are valued by my organization.
- My organization helps me deal with stress and burnout.

Physicians and administrators must work together with shared ownership. Without intention, the partnership does not evolve naturally, as the languages, cultures, and rules of the game differ for both groups (Kaissi, 2005).

Two major cultural changes need to be reconciled for physicians to engage fully in the organizational quality agenda:

- Organizational leaders must stop treating physicians as employees.
- Clinicians need to be embraced as partners in the delivery of care.

Physicians need to understand that their patient care responsibilities include sustaining the performance of the medical center as an integrated system that is necessary to perpetuate good patient care (Reinertsen, Gosfield, Rupp, & Whittington, 2007). Organizations need physician partners to design optimal care delivery systems. Collaborative engagement between medical and administrative staff is a prerequisite for consistently delivering improved results (Atkinson, Spurgeon, Clark, & Armit, 2011; Milliken, 2014; Rowling,

2012). These results, in turn, increase physician satisfaction, which raises quality of care, patient experience, and the appropriate use of institutional resources (Eisenberg, 1986). Augmenting clinician engagement in value creation work should be recognized as essential for the organization (Bakker, Albrecht, & Leiter, 2011).

Developing Physician Leaders

An integral part of constructive organization–physician relationships is sponsoring leadership development. Physician leaders working as equals with administrative leaders signals collaboration and partnership. Developing physician leaders ensures that clinicians gain a sense of choice, camaraderie, and performance excellence.

The effectiveness of frontline physician leadership is one of the most critical ingredients for success. For example, poor leader communication and lack of workplace fairness are primary drivers of dissatisfaction and burnout (Leiter et al., 2011; Leiter et al., 2013; Maslach & Leiter, 2008). The leadership performance of department chairs affects not only the productivity of each department but also the well-being of those they supervise. In a study of 2,813 physicians at Mayo Clinic, we evaluated leadership behavior in 12 dimensions. Chairs who were rated as more effective leaders had units with higher satisfaction and lower burnout. For every 1-point increase in a department chair's composite leadership score, there was a 9.0% increase in staff satisfaction and a 3.3% decrease in physician burnout ($p < .001$) (Shanafelt, Gorringe, et al., 2015).

Eradication of burnout is the job of our leaders. Healthcare systems operate more effectively and efficiently when physicians are satisfied with their professional environment (Beckley, 2003). Physicians' satisfaction with leaders is closely associated with the frequency with which leaders are perceived as exhibiting specific transformational behavior (i.e., idealized attributes, idealized behavior, inspirational motivation, intellectual stimulation, and individual consideration) (Menaker & Bahn, 2008).

The act of responding to identified improvement opportunities offers leadership development experience for physicians. An institution's offer of time to high-potential physician leaders to participate in improvement work is a genuine relationship builder. It also is an effective strategy for connecting with frontline staff who may be inclined to view administration as *them* instead of *us*.

Physicians receive little training in how to be effective leaders (Clark, Spurgeon, & Hamilton, 2008; Goldstein et al., 2009; Mountford & Webb, 2008). Consequently, medical centers need to develop physician leaders who can foster excellence, choice, and camaraderie. Leadership development programs send a message that organization–physician partnership is valued. In addition, social capital is the economic benefit to organizations accrued from the trust, cooperation, and connectedness of individuals and groups. There should be positive ramifications for social capital from the interdisciplinary improvement and leadership development programs grounded in action learning (Lester,

2013; Nahapiet & Ghoshal, 1998). Leaders matter (Bassi & McMurrer, 2007).

A primary driver of discontent is poor leadership. People don't leave organizations. They leave managers. Engaged physicians are personally motivated to help their organization succeed, willing to go beyond their job description and inspired to do their best work. Leaders cannot start talking about engaging physicians until they address the fact that 5 of 10 physicians are burned out (Shanafelt, Hasan, et al., 2015).

CONCLUSION

We describe a Listen-Act-Develop model for improving quality and safety, developing leaders, reducing burnout, and promoting physician engagement. This model incorporates a strategy for creating healthy physician–organization relationships to help achieve the organization's mission. We believe that developing effective relationships through process improvement efforts that recognize physicians' concerns and empower them to develop solutions mitigates physician burnout by addressing psychological needs for choice, camaraderie, and excellence.

REFERENCES

Advisory Board Company. (2013). The Advisory Board survey solutions: Employee engagement national database. Washington, DC: Advisory Board Company.

Atkinson, S., Spurgeon, P., Clark, J., & Armit, K. (2011). *Engaging doctors: What can we learn from trusts with high levels of medical engagement?* Coventry, UK: NHS Institute for Innovation and Improvement and Academy of Medical Royal Colleges.

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Psychology, 34*(10), 2045–2068.

Baathe, E., & Norback, L. E. (2013). Engaging physicians in organisational improvement work. *Journal of Health Organization and Management, 27*(4), 479–497.

Bakker, A., Albrecht, S., & Leiter, M. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology, 20*(1), 4–28.

Balch, C. M., Oreskovich, M. R., Dyrbye, L. N., Colaiano, J. M., Satele, D. V., Sloan, J. A., & Shanafelt, T. D. (2011). Personal consequences of malpractice lawsuits on American surgeons. *Journal of the American College of Surgeons, 213*(5), 657–667.

Bassi, L., & McMurrer, D. (2007). Maximizing your return through people. *Harvard Business Review, 85*(3), 115–123.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychol Bulletin, 117*(3), 497–529.

Beckley, E. T. (2003). Physician satisfaction tied to autonomy: What's news and what's next. *Mod Physician, 7*(2), 2.

Beckman, H. B., Wendland, M., Mooney, C., Krasner, M. S., Quill, T. E., Suchman, A. L., & Epstein, R. M. (2012). The impact of a program in mindful communication on primary care physicians. *Academic Medicine: Journal of the Association of American Medical Colleges, 87*(6), 815–819.

Berry, L. L., & Seltman, K. D. (2008). *Management lessons from Mayo Clinic: Inside one of the world's most admired service organizations*: New York: McGraw-Hill.

Berry, L. L., & Seltman, K. D. (2014). The enduring culture of Mayo Clinic. *Mayo Clinic Proceedings, 89*(2), 144–147.

Berwick, D. M., & Nolan, T. W. (1998). Physicians as leaders in improving health care: A new series in Annals of Internal Medicine. *Annals of Internal Medicine, 128*(4), 289–292.

Bezrukova, K., Thatcher, S. M., Jehn, K. A., & Spell, C. S. (2012). The effects of alignments: Examining group faultlines, organizational cultures, and performance. *The Journal of Applied Psychology, 97*(1), 77–92.

Bohmer, R. M. J. (2011). The four habits of high-value health care organizations. *New England Journal of Medicine, 365*(22), 2045–2047.

Clark, J. (2012). Medical leadership and engagement: No longer an optional extra. *Journal of Health Organization and Management, 26*(4–5), 437–443.

Clark, J., Spurgeon, P., & Hamilton, P. (2008). Medical professionalism: leadership competency: An essential ingredient. *International Journal of Clinical Leadership, 16*(1), 3–9.

Clark, M., Bradley, K., Jenkins, S., Mettler, E., Larson, B., Preston, H., . . . Vickers D. K. (2014). The effectiveness of wellness coaching for improving quality of life. *Mayo Clinic Proceedings, 89*(11), 1537–1544.

Clever, L. H. (2001). A checklist for making good choices in trying or tranquil-times. *Western Journal of Medicine, 174*(1), 41–43.

Consumer Reports. (2013). U.S. hospitals still not safe enough. *Consumer Reports, 78*(5), 11.

D'Innocenzo, L., Mathieu, J. E., & Kukenberger, M. R. (2014). A meta-analysis of different forms of shared leadership–team performance relations. *Journal of Management*. Advance online publication. Retrieved from http://jom.sagepub.com/content/early/2014/03/06/0149206314525205.abstract

Day, D. V., & Lord, R. G. (1988). Executive leadership and organizational performance: Suggestions for a new theory and methodology. *Journal of Management, 14*(3), 453–464.

de Haan, E., & de Ridder, I. (2005, March). Action learning in practice: How do participants learn? *Consulting Psychology Journal: Practice & Research, 58*(4), 216–231.

deCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. Hillsdale, NJ: Lawrence Erlbraum Associates.

Deci, E. L. (1975). *Intrinsic motivation.* New York: Plenum Publishing.

Dewa, C. S., Jacobs, P., Thanh, N. X., & Loong, D. (2014). An estimate of the cost of burnout on early retirement and reduction in clinical hours of practicing physicians in Canada. *BMC Health Services Research, 14*(254). Retrieved from http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-14-254

Dewa, C. S., Loong, D., Bonato, S., Thanh, N. X., & Jacobs, P. (2014). How does burnout affect physician productivity? A systematic literature review. *BMC Health Services Research, 14*(325). Retrieved from http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-14-325

Dilling, J. A., & Swensen, S. J. (2013). Accelerating the use of best practices: The Mayo Clinic model of diffusion. *The Joint Commission Journal on Quality and Patient Safety 39*(4), 167–176.

Dillworth, R. L., & Willis, V. J. (2003). *Action learning: Images and pathways. Professional practices in adult education and lifelong learning series*. Melbourne, FL: Kreiger Publishing.

DiMatteo, M. R., Sherbourne, C. D., Hays, R. D., Ordway, L., Kravitz, R. L., McGlynn, E. A., . . . Rogers, W. H. (1993). Physicians' characteristics influence patients' adherence to medical treatment: results from the Medical Outcomes Study. *Health Psychology, 12*(2), 93–102.

Dixon-Woods, M., Baker, R., Charles, K., Dawson, J., Jerzembek, G., Martin, G., . . . West, M. (2013). Culture and behaviour in the English National Health Service: Overview of lessons from a large multimethod study. *BMJ Quality & Safety*. Retrieved from http://qualitysafety.bmj.com/content/early/2013/08/28/bmjqs-2013-001947.abstract

Dunn, P. M., Arnetz, B. B., Christensen, J. F., & Homer, L. (2007). Meeting the imperative to improve physician well-being: Assessment of an innovative program. *Journal of General Internal Medicine, 22*(11), 1544–1552.

Dyrbye, L. N., Massie, F., Eacker, A., Harper, W., Power, D., Durning, S. J., . . . Sloan, J. (2010). Relationship between burnout and professional conduct and attitudes among us medical students. *Journal of the American Medical Association, 304*(11), 1173–1180.

Dyrbye, L. N., Satele, D., Sloan, J., & Shanafelt, T. D. (2013). Utility of a brief screening tool to identify physicians in distress. *Journal of General Internal Medicine, 28*(3), 421–427.

Dyrbye, L. N., Thomas, M. R., Massie, F. S., Power, D. V., Eacker, A., Harper, W., . . . Shanafelt, T. D. (2008). Burnout and suicidal ideation among U.S. medical students. *Annals of Internal Medicine, 149*(5), 334–341.

Eisenberg, J. M. (1986). *Doctors' decisions and the cost of medical care.* Chicago: Health Administration Press.

Epstein, R. M., & Krasner, M. S. (2013). Physician resilience: What it means, why it matters, and how to promote it. *Academic Medicine, 88*(3), 301–303.

Firth-Cozens, J., & Greenhalgh, J. (1997). Doctors' perceptions of the links between stress and lowered clinical care. *Social Science & Medicine, 44*(7), 1017–1022.

Fortney, L., Luchterhand, C., Zakletskaia, L., Zgierska, A., & Rakel, D. (2013). Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: a pilot study. *Annals of Family Medicine, 11*(5), 412–420.

Fortune. (2016). 100 best companies to work for. Retrieved from http://fortune.com/best-companies/mayo-clinic-73/

Freeborn, D. K. (1998). Satisfaction, commitment, and psychological well-being among HMO physicians. *Permanente Journal, 2*(2), 22–30.

Goldstein, A. O., Calleson, D., Bearman, R., Steiner, B. D., Frasier, P. Y., & Slatt, L. (2009). Teaching advanced leadership skills in community service (ALSCS) to medical students. *Academic Medicine, 84*(6), 754–764.

Gosfield, A. G., & Reinertsen, J. L. (2008). Finding common cause in quality: confronting the physician engagement challenge. *Physician Executive, 34*(2), 26–28, 30–31.

Grant, A. M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology, 93*(1), 108–124.

Grant, A. M., & Hofmann, D. A. (2011). It's not all about me: Motivating hand hygiene among health care professionals by focusing on patients. *Psychological Science, 22*(12), 1494–1499.

Greening, J. (2012). How can we improve the effective engagement of doctors in clinical leadership? The view of a consultant psychiatrist. *Leadership Health Services, 25*(1), 20–26.

Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*(3), 463–488.

Griffith, J. (2004). Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance. *Journal of Educational Administration, 42*(3), 333–356.

Guthrie, M. (2005). Engaging physicians in performance improvement. *American Journal of Medical Quality, 20*(5), 235–238.

Ham, C. (2014, July). *Improving NHS care by engaging staff and devolving decision-making: Report of the review of staff engagement and empowerment in the NHS*. London, UK: King's Fund. Retrieved from www.kingsfund.org.uk/publications/articles/improving-nhs-care-engaging-staff-and-devolving-decision-making

Harlow, H. F., & Suomi, S. J. (1970). Nature of love-simplified. *American Psychologist, 25*(2), 161–168.

Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement and business outcomes: a meta-analysis. *Journal of Applied Psychology, 87*(2), 268–279.

Hill, C. C., Leonard, H. S., & Sokol, M. B. (2006). *Action learning guide: Real learning, real results.* Minneapolis, MN: *Personnel Decisions International*.

Hroscikoski, M. C., Solberg, L. I., Sperl-Hillen, J. M., Harper, P. G., McGrail, M. P., & Crabtree, B. F. (2006). Challenges of change: A qualitative study of chronic care model implementation. *Annals of Family Medicine, 4*(4), 317–326.

Jessee, W. F., & Rowlee, D. D. (2013). *Organizational culture, clinician engagement and physician integration: Keys to success*. American Hospital Association's Center for Healthcare Governance. Retrieved from http://www.americangovernance.com/resources/advances-in-healthcare-governance/12-organizational-culture.shtml

Kaissi, A. (2005). Manager-physician relationships: An organizational theory perspective. *Health Care Manager (Frederick), 24*(2), 165–176.

Kim, S. (2002). Participative management and job satisfaction: Lessons for management leadership. *Public Administration Review, 62*, 231–241.

Koys, D. J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal

study. *Personnel Psychology, 54*(1), 101-114.

Krasner, M. S., Epstein, R. M., Beckman, H., Suchman, A. L., Chapman, B., Mooney, C. J., & Quill, T. E. (2009). Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *Journal of the American Medical Association, 302*(12), 1284–1293.

Kreindler, S. A., Larson, B. K., Wu, F. M., Gbemudu, J. N., Carluzzo, K. L., Struthers, A., . . . Fisher, E. S. (2014). The rules of engagement: Physician engagement strategies in intergroup contexts. *Journal of Health Organization and Management*, 28(1), 41–61.

Leape, L. L., Shore, M. F., Dienstag, J. l., Mayer, R. J., Edgman-Levitan, S., Meyer, G. S., & Healy, G. B. (2012). Perspective: A culture of respect, part 2—creating a culture of respect. *Academic Medicine, 87*(7), 853–858.

Leapfrog Group. (2012, December). Leapfrog announces 2012 top hospitals. *The Leapfrog Group*. Retrieved from http://www.leapfroggroup.org/policy_leadership/leapfrog_news/4971411

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology, 87*(1), 131–142.

Leiter, M. P., Hakanen, J. J., K, A., Toppinen-Tanner, S., Koskinen, A., & Vaananen, A. (2013). Organizational predictors and health consequences of changes in burnout: A 12-year cohort study. *Journal of Organizational Behavior, 34*(7), 959–973.

Leiter, M. P., Laschinger, H. K. S., Day, A., & Oore, D. G. (2011). The impact of civility interventions on employee social behavior, distress, and attitudes. *Journal of Applied Psychology, 96*(6), 1258–1274.

Leonard, M., & Frankel, A. S. (2015). *The role of leadership in safe and reliable pediatric care*. New York: McGraw Hill.

Lester, M. (2013). Social capital and value creation: A replication of 'the role of intrafirm networks' by Wenpin Tsai and Sumantra Ghoshal. *American Journal of Business and Management, 2*(2), 106–113.

Leveck, M. L., & Jones, C. B. (1996). The nursing practice environment, staff retention, and quality of care. *Research in Nursing & Health, 19*(4), 331–343.

Liebhaber, A., Draper, D. A., & Cohen, G. R. (2009, October). Hospital strategies to engage physicians in quality improvement. *Issue Brief No. 127*.

Lindgren, A., Baathe, F., & Dellve, L. (2013). Why risk professional fulfillment: A grounded theory of physician engagement in healthcare development. *International Journal of Health Planning and Management, 28*(2), e138–e157.

Linzer, M., Levine, R., Meltzer, D., Poplau, S., Warde, C., & West, C. P. (2014). 10 bold steps to prevent burnout in general internal medicine. [Editorial]. *Journal of General Internal Medicine, 29*(1), 18–20.

Linzer, M., Manwell, L. B., Mundt, M., Williams, E., Maguire, A., McMurray, J., & Plane, M. B. (2005). Organizational climate, stress, and error in primary care: The MEMO Study. In K. Henriksen, J. B. Battles, E. S. Marks & D. I. Lewin (Eds.), *Advances in patient safety: From research to implementation. Volume 1: Research findings*. Rockville, MD: Agency for Healthcare Research and Quality.

MacLeod, D., & Clarke, N. (2009). *Engaging for success: Enhancing performance through employee engagement. A report to Government*. London, UK: Department of Business, Innovation and Skills.

Marmot, M. G., Smith, G. D., Stansfeld, S., Patel, C., North, F., Head, J., . . . Feeney, A. (1991). Health inequalities among British civil servants: The Whitehall II study. *Lancet, 337*(8754), 1387–1393.

Marquardt, M. J., Leonard, H. S., Freedman, A. M., & Hill, C. C. (2009). *Action learning for developing leaders and organizations: Principles, strategies and cases*. Washington, DC: American Psychological Association.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology, 93*(3), 498–512.

Mayo Clinic. (2013). *Transformative power: Mayo Clinic 2012 annual report*. Retrieved from http://www.mayoclinic.org/documents/mc0710-2012-pdf/DOC-20078780

Meier, D. E., Back, A. L., & Morrison, R. S. (2001). The inner life of physicians and care of the seriously ill. *Journal of the American Medical Association, 286*(23), 3007–3014.

Menaker, R., & Bahn, R. S. (2008). How perceived physician leadership behavior affects physician satisfaction. *Mayo Clinic Proceedings, 83*(9), 983–988.

Merritt Hawkins. (2012). *2012 review of physician recruiting incentives*. Retrieved from http://www.merritthawkins.com/uploadedFiles/MerrittHawkins/Pdf/mha2012survpreview.pdf

Milliken, A. D. (2014). Physician engagement: A necessary but reciprocal process. *Canadian Medical Association Journal, 186*(4), 244–245.

Morgenthaler, T. I., Lovely, J. K., Cima, R. R., Berardinelli, C. F., Fedraw, L. A., Wallerich, T. J., . . . Varkey, P. (2012). Using a framework for spread of best practices to implement successful venous thromboembolism prophylaxis throughout a large hospital system. *American Journal of Medical Quality, 27*(1), 30–38.

Mountford, J., & Webb, C. (2008). *Clinical leadership: Unlocking high performance in healthcare.* London, UK: McKinsey Global Institute.

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review, 23*(2), 242–266.

Nutting, P. A., Crabtree, B. F., Miller, W. L., Stewart, E. E., Stange, K. C., & Jaen, C. R. (2010). Journey to the patient-centered medical home: A qualitative analysis of the experiences of practices in the National Demonstration Project. *Annals of Family Medicine, 8*(Suppl 1), S45–S56, S92.

Olsen, K. D., & Dacy, M. D. (2014, January). Mayo Clinic: 150 years of serving humanity through hope and healing. *Mayo Clinic Proceedings, 89*(1), 8–15.

Ostroff, C. (1992). The relationship between satisfaction, attitudes and performance: An organizational level analysis. *Journal of Applied Psychology, 77*(6), 963–974.

Plsek, P. E. (2013). *Accelerating health care transformation with lean and innovation: The Virginia Mason experience*. Boca Raton, FL: CRC Press.

Posdakoff, P. M., & MacKenzie, S. B. (1994). Organizational citizenship behaviors and sales unit effectiveness. *Journal of Marketing Research, 31*(3), 351–363.

Prins, J. T., Hoekstra-Weebers, J. E., Gazendam-Donofrio, S. M., Dillingh, G. S., Bakker, A. B., Huisman, M., . . . van der Heijden, F. M. (2010). Burnout and engagement among resident doctors in the Netherlands: A national study. *Medical Education, 44*(3), 236–247.

Prins, J. T., van der Heijden, F. M., Hoekstra-Weebers, J. E., Bakker, A. B., van de Wiel, H. B., Jacobs, B., & Gazendam-Donofrio, S. M. (2009). Burnout, engagement and resident physicians' self-reported errors. *Psychology Health & Medicine, 14*(6), 654–666.

Profit, J., Sharek, P. J., Amspoker, A. B., Kowalkowski, M. A., Nisbet, C. C., Thomas, E. J., . . . Sexton, J. B. (2014). Burnout in the NICU setting and its relation to safety culture. *BMJ Quality & Safety, 23*(10), 806–813.

Quill, T. E., & Williamson, P. R. (1990). Healthy approaches to physician stress. *Archives of Internal Medicine, 150*(9), 1857–1861.

Reinertsen, J. L. (2008). Engaging physicians. How the team can incorporate quality and safety. *Healthcare Executive, 23*(3), 78, 80–81.

Reinertsen, J. L., Gosfield, A. G., Rupp, W., & Whittington, J. W. (2007). *Engaging physicians in a shared quality agenda*. Cambridge, MA: Institute for Healthcare Improvement.

Rowling, E. (2012). *Leadership and engagement for improvement in the NHS: Together we can. Report from the King's Fund Leadership Review.* London, UK: The King's Fund.

Rundall, T. G., Davies, H. T., & Hodges, C. L. (2004). Doctor-manager relationships in the United States and the United Kingdom. *Journal of Healthcare Management, 49*(4), 251–268; discussion 268–270.

Ruotsalainen, J. H., Verbeek, J. H., Marine, A., & Serra, C. (2014). Preventing occupational stress in healthcare workers. *Cochrane Database of Systematic Reviews, 12*, CD002892.

Ryan, A., Schmit, M., & Johnson, R. (1996). Attitudes and effectiveness: Examining relations at an organizational level. *Personnel Psychology, 49*(4), 853–882.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their

relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293–315.

Schein, E. H. (2013). *Humble inquiry: The gentle art of asking instead of telling.* San Francisco: Berrett-Koehler Publishers.

Schlesinger, L. A., & Heskett, J. L. (1991). Breaking the cycle of failure in services. *Sloan Management Review, 32*(3), 17–28.

Schwendimann, R., Milne, J., Frush, K., Ausserhofer, D., Frankel, A., & Sexton, J. B. (2013). A closer look at associations between hospital leadership walkrounds and patient safety climate and risk reduction: a cross-sectional study. *American Journal of Medical Quality, 28*(5), 414–421.

Sexton J. B., Sharek, P. J., Thomas, E. J., Gould J. B., Nisbet C. C., Amspoker, A. B., . . . Profit, J. (2014). Exposure to Leadership walkrounds in neonatal intensive care units is associated with a better patient safety culture and less caregiver burnout. *BMJ Quality & Safety, 23*(10), 814–822.

Shanafelt, T. D., Balch, C. M., Bechamps, G. J., Russell, T., Dyrbye, L., Satele, D., . . . Freischlag, J. A. (2009). Burnout and career satisfaction among American surgeons. *Annals of Surgery, 250*(3), 463–471.

Shanafelt, T. D., Balch, C. M., Bechamps, G., Russell, T., Dyrbye, L., Satele, D., . . . Freischlag, J. (2010). Burnout and medical errors among American surgeons. *Annals of Surgery, 251*(6), 995–1000.

Shanafelt, T. D., Balch, C. M., Dyrbye, L., Bechamps, G., Russell, T., Satele, D., . . . Oreskovich, M. R. (2011). Special report: Suicidal ideation among American surgeons. *Archives of Surgery, 146*(1), 54–62.

Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., Satele, D., . . . Oreskovich, M. R. (2012). Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *JAMA Internal Medicine, 172*(18), 1377–1385.

Shanafelt, T. D., Bradley, K. A., Wipf, J. E., & Back, A. L. (2002). Burnout and self-reported patient care in an internal medicine residency program. *Annals of Internal Medicine, 136*(5), 358–367.

Shanafelt, T., Chung, H., White, H., & Lyckholm, L. J. (2006). Shaping your career to maximize personal satisfaction in the practice of oncology. *Journal of Clinical Oncology. 24*(24), 4020–4026.

Shanafelt, T. D., Gorringe, G., Menaker, R., Storz, K. A., Buskirk, S., & Swensen, S. J. (2015). The impact of organizational leadership on physician burnout and satisfaction. *Mayo Clinic Proceedings, 90*(4), 432–440.

Shanafelt, T. D., Hasan, O., Dyrbye, L. N., Sinsky, C., Satele, D., Sloan, J., & West, C. P. (2015). Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clinic Proceedings, 90*(12), 1600–1613.

Shanafelt, T. D., Kaups, K. L., Nelson, H., Satele, D. V., Sloan, J. A., Oreskovich, M. R., & Dyrbye, L. N. (2014). An interactive individualized intervention to promote behavioral change to increase personal well-being in US surgeons. *Annals of Surgery, 259*(1), 82–88.

Shanafelt, T. D., Oreskovich, M. R., Dyrbye, L. N., Satele, D. V., Hanks, J. B., Sloan, J. A., & Balch, C. M. (2012). Avoiding burnout: The personal health habits and wellness practices of US surgeons. *Annals of Surgery, 255*(4), 625–633.

Shanafelt, T., Raymond, M., Kosty, M., Satele, D., Horn, L., Pippen, J., . . . Gradishar, W. (2014). Satisfaction with work-life balance and the career and retirement plans of US oncologists. *Journal of Clinical Oncology, 32*(11), 1127–1135.

Shanafelt, T., Sloan, J., & Habermann, T. (2003). The well-being of physicians. *American Journal of Medicine, 114*(6), 513–519.

Shanafelt, T. D., Sloan, J., Satele, D., & Balch, C. M. (2011). Why do surgeons consider leaving practice? *Journal of the American College of Surgeons, 212*(3), 421–422.

Shanafelt, T. D., West, C. P., Poland, G. A., LaRusso, N. F., Menaker, R., & Bahn, R. S. (2008). Principles to promote physician satisfaction and work-life balance. *Minnesota Medicine, 91*(12), 41–43.

Shanafelt, T. D., West, C. P., Sloan, J. A., Novotny, P. J., Poland, G. A., Menaker, R., . . . Dyrbye, L. N. (2009). Career fit and burnout among academic faculty. *Archives of Internal Medicine, 169*(10), 990–995.

Sinsky, C. A., Willard-Grace, R., Schutzbank, A. M., Sinsky, T. A., Margolius, D., & Bodenheimer, T. (2013). In search of joy in practice: A report of 23 high-functioning primary care practices. *Annals of Family Medicine, 11*(3), 272–278.

Skinner, E. A. (1995). *Perceived control, motivation, & coping (individual differences and development)*. Thousand Oaks, CA: SAGE Publications.

Sood, A. (2013). *The Mayo Clinic guide to stress-free living*. Boston: Da Capo Press.

Southwick, S. M., & Charney, D. S. (2012). *Resilience: The science of mastering life's greatest challenges*. New York: Cambridge University Press.

Swensen, S. J., Dilling, J. A., Harper, C. M., Jr., & Noseworthy, J. H. (2012). The Mayo Clinic value creation system. *American Journal of Medical Quality, 27*(1), 58–65.

Swensen, S. J., Dilling, J. A., Mc Carty, P. M., Bolton, J. W., & Harper, C. M., Jr. (2013). The business case for health-care quality improvement. *Journal of Patient Safety, 9*(1), 44–52.

Swensen, S. J., Dilling, J. A., Milliner, D. S., Zimmerman, R. S., Maples, W. J., Lindsay, M. E., & Bartley, G. B. (2009). Quality: The Mayo Clinic approach. *American Journal of Medical Quality, 24*(5), 428–440.

Swensen, S., Pugh, M., McMullan, C., & Kabcenell, A. (2013). High-impact leadership: Improve care, improve the health of populations, and reduce costs. *IHI white paper.* Cambridge, MA: Institute for Healthcare Improvement.

Viggiano, T. R., Pawlina, W., Lindor, K. D., Olsen, K. D., & Cortese, D. A. (2007). Putting the needs of the patient first: Mayo Clinic's core value, institutional culture, and professionalism covenant. *Academic Medicine, 82*(11), 1089–1093.

Vital Worklife. (2013). *Vital Worklife and Cejka Search physician engagement survey.* Retrieved from http://www.physicianwellnessservices.com/news/engagementsurvey.php

Wallace, J. E., Lemaire, J. B., & Ghali, W. A. (2009). Physician wellness: A missing quality indicator. *Lancet, 374*(9702), 1714–1721.

Walsh, K. E., Ettinger, W. H., & Klugman, R. A. (2009). Physician quality officer: A new model for engaging physicians in quality improvement. *American Journal of Medical Quality, 24*(4), 295–301.

Wennberg, J. E., Fisher, E. S., Goodman, D. C., & Skinner, J. S. (2008). Tracking the care of patients with severe chronic illness. *Dartmouth Atlas of Health Care*. Retrieved from http://www.amcp.org/WorkArea/DownloadAsset.aspx?id=12853

West, C. P., Dyrbye, L. N., Rabatin, J. T., Call, T. G., Davidson, J. H., Multari, A., . . . Shanafelt, T. D. (2014). Intervention to promote physician well-being, job satisfaction, and professionalsim: A randomized clinical trial. *JAMA Internal Medicine, 174*(4), 527–533.

West, C. P., Huschka, M. M., Novotny, P. J., Sloan, J. A., Kolars, J. C., Habermann, T. M., & Shanafelt, T. D. (2006). Association of perceived medical errors with resident distress and empathy: A prospective longitudinal study. *Journal of the American Medical Association, 296*(9), 1071–1078.

West, C. P., Shanafelt, T. D., & Kolars, J. C. (2011). Quality of life, burnout, educational debt, and medical knowledge among internal medicine residents. *Journal of the American Medical Association, 306*(9), 952–960.

West, C. P., Tan, A. D., Habermann, T. M., Sloan, J. A., & Shanafelt, T. D. (2009). Association of resident fatigue and distress with perceived medical errors. *Journal of the American Medical Association, 302*(12), 1294–1300.

West, M., & Dawson, J. (2012). Employee engagement and NHS performance. *The King's Fund*. Retrieved from http://www.kingsfund.org.uk/sites/files/kf/employee-engagement-nhs-performance-west-dawson-leadership-review2012-paper.pdf

West, M., & Lyubovnikova, J. (2013). Why teamwork matters: Enabling health care team effectiveness for the delivery of high quality patient care. In *E. Salas, S. Tannenbaum, D. Cohen, & G. Latham (Eds.), Developing and enhancing teamwork in organizations: Developing and enhancing teamwork in organizations* Hoboken, NJ: Jossey-Bass; 331–372.

White, R. W. (1959). Motivation reconsidered: the concept of competence. *Psychological Review, 66*(5), 297–333.

Williams, E. S., Konrad, T. R., Scheckler, W. E., Pathman, D. E., Linzer, M., McMurray, J. E., & Schwartz, M. (2001). Understanding physicians' intentions to withdraw from practice: The role of job satisfaction, job stress, mental and

physical health. *Health Care Management Review, 26*(1), 7–19.

Williams, E. S., Manwell, L. B., Konrad, T. R., & Linzer, M. (2007). The relationship of organizational culture, stress, satisfaction, and burnout with physician-reported error and suboptimal patient care: Results from the MEMO study. *Health Care Management Review, 32*(3), 203–212.

Zwack, J., & Schweitzer, J. (2013). If every fifth physician is affected by burnout, what about the other four? Resilience strategies of experienced physicians. *Academic Medicine, 88*(3), 382–389.

PRACTITIONER APPLICATION

Sunil Sinha, MD, FACHE, director, Clinical Quality and Patient Safety, ChenMed/JenCare Neighborhood Medical Centers, Miami, Florida

The patient–physician relationship has been identified as the single most important ingredient for achieving consistently high-quality, safe, and cost-effective healthcare outcomes. In support of this relationship, it is no less important that physicians have the time and ability to practice their craft, without intrusion and distractions. With the increasing complexity of the U.S. healthcare system, time and autonomy have become scarce commodities, contributing to physician burnout.

Having served in various leadership capacities in the Department of Veterans Affairs, a large integrated health system, and now with a national ambulatory practice group managing the care of patients enrolled in Medicare Advantage, I find the common challenge has been to provide physicians with the right tools, time, and autonomy to succeed. With the rapidly changing healthcare landscape and associated demands from payers, providers, and consumers, physicians are finding themselves increasingly marginalized and constantly being told to provide higher-quality care with fewer resources and in less time. Healthcare systems universally are in search of methodologies to align and engage physicians in ways that are mutually beneficial. Many scholarly articles, several of which are referenced in the study by Swensen et al., validate the importance of physician–institutional relationships for clinical and financial success. This article is particularly relevant and timely in light of the increasing number of physicians who are employed or in some type of contractual relationship with hospitals and health systems.

The Institutional Burnout–Engagement Initiative, rooted in the Listen-Act-Develop model, was conceived, developed, and implemented by staff members as an outcome of several other organizational development and training programs in the Mayo Clinic Health System. Health systems and practices nationally expend much in terms of time and money to develop physician capabilities so they may lead and assist in process and quality improvements, with the longer-term goal that some of these engaged partners will be future leaders. Many of these efforts are driven by internal experts or external consultants brought in to assess and address barriers

while implementing one-size-fits-all solutions. However, many initiatives fall short because one-size-fits-all approaches do not necessarily take into account factors that may be contributing to an already stressed physician environment.

What I appreciate about the approach put forward by the authors is that it relies on input from multiple sources, including focus groups and surveys, to identify contributors to physician burnout unique to specific departments and practice environments. Improvement action plans are, in turn, driven by a leadership that includes physicians and an administrator. Hands-on assessments, projects, and coaching allow for concurrent improvement strategies to address the root causes of physician burnout while identifying physicians with the aptitude and interest to move into leadership tracks. Extending participation to allied health staff helps to build team camaraderie and institutional culture.

Although the study focus is primarily on an employed physician base, the size and scope of the Mayo Clinic Health System allow for a broader reach from the perspectives of geography, specialties, ethnicity, and local cultural variances that may affect physician burnout. Yet to be determined is whether the early positive results will be sustainable over time, but the local-solutions-for-local-problems approach certainly holds promise.