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PERSPECTIVES

Reinventing your primary care practice: becoming an MDCEO™

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Abstract: Primary care medicine in the United States is undergoing a revolutionary shift. Primary care providers and their staff have an extraordinary chance to create and participate in exciting new approaches to care. New strategies will require courage, flexibility, and openness to change by every member of the practice team, especially the lead clinician who is most often the physician, but can also be the nurse practitioner or physician's assistant. Providers must first recognize their need to alter their fundamental identity to incorporate a new kind of leadership role—that of the MDCEO™ (i.e., the individual clinician who leads the practice to ensure that quality, service, and financial systems are developed and effectively managed). This paper provides a practical vision and rationale for the required transition in primary care, pointing the way for how to achieve new practice effectiveness through new leadership roles. It also provides a model to evaluate the status of a primary care practice. The authors have extensive experience in working with primary care providers to radically evolve their clinical practices to become MDCEOs™. The MDCEO™ will articulate the vision and strategy for the practice, define and foster the practice culture, and create and facilitate team development and overall high level functioning. Each member of the team can then begin to lead their part of the practice: a 21st century population-oriented, purpose-based practice resulting in increased quality of care, improved patient outcomes, greater financial success, and enhanced peace of mind.

Keywords: primary health care organization and administration, health care reform, leadership, patient-centered care

Introduction

Primary care is in crisis. Thousands of primary care clinicians are finding themselves in an unsustainable and frightening situation as practice operations become increasingly untenable and financially challenging. Navigating out of this difficult situation can be fraught with peril. Joining larger medical groups, hospitals, and/or corporations practicing medicine means the loss of autonomy and freedom that attracted many to the profession. Yet, continuing on a hamster wheel, running faster and faster to stay in the same place has become unmanageable.

What are the next steps? How do primary care medical clinicians rediscover the reasons that they chose this profession? How do they get back to making a significant difference in patients' lives, creating financial security, and sustaining a good quality of life for themselves and their families?

To accomplish this, it is time to rethink the current primary care model, to reassess and redesign primary care practice, and for the clinician to acquire new leadership skills to become an MDCEO™ (Medical Director–Chief Executive Officer) and learn

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to facilitate new roles for other team members and new practice operations.

This will require a dramatic change in the fundamentals of the clinician's role. This article reviews the transition from the current practice of primary care to a new model of primary care medicine. It provides an overview of the vision and leadership strategies required for a successful future and is based on the experience of the authors in assisting the transition of over 150 primary care practices. The intent of this article is to assist and encourage the many outstanding caring primary care providers to make the necessary changes to empower themselves, their staff, and their patients. Together, they will successfully navigate new challenges and enhance the personal and professional quality they seek in their professional careers.

Primary care practices today

Being responsible for the comprehensive care of a person's health is a complicated business. Today's primary care practices include a wide range of unique functions all occurring in the same location at the same time. These consist of prevention/early recognition of disease, acute care, and chronic care. The challenge is that, to be optimized, each of these functions requires different, focused, and well designed processes. Effective strategies for prevention and chronic disease care are different from those for patients with acute care problems.

The design of most primary care practices has long been built around acute care, ie, a 15-minute appointment, little or no preparatory work for a visit, and reaction to episodic patient need instead of proactive clinical care. It is no surprise then that outcomes for prevention and chronic care suffer. Clinicians trying to combine and successfully manage all these processes within a single practice will require a mastery of management, clinical care design, and clinical skills far beyond those present in the majority of primary care practices.

Lacking formal training in management and care process design, most primary care providers strive to find pragmatic ways to solve their practice challenges. In addition, if one adds the constant changes in medicine (ie, a doubling of knowledge every 18–24 months), and the increasingly strong desire of the public to receive timely service and quality care, it is little wonder that the average primary care provider finds it a considerable challenge to keep current, much less to innovate or create new programs. It is common also for providers to feel torn between personal and professional commitments, such as maintaining and improving clinical expertise, balancing a personal life, and confronting the operational challenges of running an office. An additional common burden is an ineffective or uninformed management style in which problems are not addressed appropriately at an early stage, but are allowed to become full-blown and, thus, require significantly more energy and time to correct.

Additionally, attempts to delegate some clinical issues to the staff can be difficult because the systems to handle important medically-related, possibly life-threatening issues, are usually underdeveloped. The skills required to develop and manage these systems far exceed the expertise of the vast majority of employees in the primary care office. For example, when the provider does delegate expanded responsibility to a staff member, clinical operations may be satisfactory for a period. The staff member then misses something, a patient's health is threatened, and the provider's confidence in safe delegation wanes. Thus, the provider reverts back to micromanagement and makes all clinical decisions, with the associated stress of untenable working hours and personal neglect. After years of this cycle, it is common to find primary care providers standing alone and feeling frustrated, exhausted, and hopeless.

New primary care opportunities

There can be little question that the US primary care system must evolve and transform. The question is, evolve to what and how? What are the options available to primary care providers today to navigate out of old-style or 20th-century primary care?

The literature contains several ideas and models for new approaches to primary care. Bodenheimer and Pham emphasize the need for health care teams to improve primary care practice.[2] Many organizations promote the patient-centered medical home as a more comprehensive approach to primary care.[3] However, these models do not clearly address the key elements necessary to support the new models of primary care.

Two major changes provide hope for success in this primary care transformation. First is the improved understanding of how chronic diseases like hypertension, high cholesterol, overweight/obesity, and metabolic syndrome can be effectively managed with tailored empirical protocols. Second is the increasing availability of low-cost effective technology to primary care providers.

How does our improved understanding of medicine and managing chronic disease empower primary care providers? The answer lies in understanding the evolution of the physician's role in medicine over the last 75 years (Table 1). During the 20th century, a physician took a careful history, performed a physical, generated a differential diagnosis, and followed the patient through the process of care. This intuitive

Table 1 Three-stage framework for medicine continuum[1]

Key clinical features	Intuitive medicine	Empirical medicine	Precision medicine
Type of condition	Diagnosed only by symptoms and treated with therapies of uncertain efficacy	Clear pattern recognition of condition with outcomes predicted with known probabilities	Can be precisely diagnosed, causes are known, and treated with rules-based therapies with predictable effectiveness
Role of physician	Depends on skill and judgment of highly trained physicians	Uses knowledge of well documented, easily available research in clinical guidelines	Oversees effective clinical outcomes
Example	Undiagnosed celiac disease Chronic fatigue syndrome Fever undetermined origin	Congestive heart failure Pneumonia Heart attack Type 2 diabetes mellitus	Otitis media Streptococcal pharyngitis Bone fracture

and highly specialized process required years of training and experience to determine both the differential diagnosis and the best course of action. This practice, known as "intuitive medicine",[1] is expensive, time-consuming, and requires highly specialized and trained physicians to ensure a successful outcome. However, as our understanding of disease and diagnostic testing has improved, the certainty of diagnosis and the appropriate course of care have become more clearly identified and predictable. In contrast with intuitive medicine, a precisely diagnosed, well understood, and clearly treated condition can be managed with protocol-driven, rules-based therapies that are predictably effective. This is known as "precision medicine"[1] and modern technology increasingly makes this approach possible. Between these two ends of the medical practice continuum is evidence-based, pattern recognition that can be described as "empirical medicine"[1]. Over time, as medicine has progressed, significantly more of what the primary care physician does has migrated from intuitive, to empirical, and then to precision medicine (Table 1). With this new understanding of medical decision-making, the physician's role and the need for physician involvement has changed dramatically even though the daily practice of medicine for most physicians has not.

This evolution of clinical care creates tremendous opportunity for the primary care practitioner. No longer does excellence in medicine require the involvement of the physician at every step. Systems of care for highly empirical, guideline-based medicine and precision medicine can be effectively delegated to less expensive, less highly trained individuals without compromising quality and safety. One well known example of an effective, safe, empiric medicine protocol that has been effectively delegated is the Coumadin clinic that is overseen by primary care medical directors using protocols managed by nurses. Should a problem occur, the nurse can call for assistance but otherwise manages this aspect of care without the need for direct involvement of the physician.

Another prominent trend that supports transformation of primary care and the role of the physician is the presence of nurse practitioners and physician assistants. These clinicians often practice independently in primary care or in team models with physician colleagues. Many nurse practitioners and physician assistants are or will increasingly be the MDCEO in a practice, learning to develop teams and delegate selected clinical functions to team members.

Thus, the future of primary care will become bifurcated to some degree. On one hand, the skill and experience of the primary care provider is necessary for those challenging and ill-defined cases that require the intuitive clinician to evaluate and arrive at the best diagnosis and course of action. On the other hand, much of what used to have to be done by the physician can now be delegated to staff who are less highly trained and less expensive. This allows for more flexibility, lower cost, more time for the physician to focus on intuitive medicine and personal well-being, and the possibility of better adherence to national and specialty evidence-based guidelines.

The role of the patient, too, can evolve as the next steps in therapy and expected outcomes become more clearly defined. Patients can take on a more significant and active role in their care.

Concurrent with the use of evidence-based protocols has been the dramatic improvement in the functioning and cost of technology. Inexpensive and highly effective tools are now available to automate much of the process of promoting prevention and health promotion as well as following and managing chronic disease. Automated protocols can be set up to monitor a patient's health status data and recommend action when a visit or laboratory test is indicated. The result can be interpreted and the next steps determined, often without significant time required from the physician or other provider. Armed with these tools, the staff can now become more proactive and involved in managing care. They are no

longer stifled by the requirement for the physician's direct involvement in every aspect of care. The primary care practice can then provide more comprehensive, less expensive, and more timely effective care.

The physician is able to create a highly functioning impactful team that both improves the patient experience and the quality of care. At the same time, as reimbursement patterns and policies evolve, the team members can assist directly to generate additional income, relieving a significant burden and reducing the financial dependence and risk for the physician.

Overview of primary care practice tiers

Based on futuristic thinking about primary care, we have defined medical practices in three tiers (Table 2). An overview of the tiers shows that the tier 1 practice can be described best as being mired in the "tyranny of the urgent". Based largely on 20th-century methods and technology, a tier 1 practice has daily operations that can no longer meet today's requirements. Physicians in a tier 1 practice are in danger of becoming extinct in the evolving health care system. In contrast, a tier 2 practice has begun to evolve into a more effective and less physician-dependent system. In it, new systems and technology are installed and staff members are beginning to expand their skills, roles, and responsibilities. The patients are beginning to notice a more proactive and empowerment-based office. The practice is now involved in beginning to manage the health of the clinic population it serves, rather than reacting to individual patients seen one-by-one when they choose to present for care. By the time the practice has evolved into a tier 3 practice, significant systems and consistency have begun to ensure that patients are well educated about their health and encouraged to engage and achieve personal health goals. The health care paradigm has shifted from "come see me when you feel bad" to "let us help you be well and age well". Staff and patient empowerment are firmly embedded in the practice and the physician has moved from being a bottleneck and mandatory minute-to-minute decision-maker to being a CEO, assuring excellence and optimum system functioning. Medical leadership from the MDCEO has created and will sustain the new system. This represents a dramatic role shift from chief or singular actor to system facilitator, ie, the CEO. The principles of "working to the top of a license" and "never doing anything that someone else who is less expensive or less highly trained can do just as well" have become operational. Moreover, staff turnover and satisfaction are significantly improved.

Important questions for providers to consider in examining their practices include:

- Where is your practice on this tier continuum?
- What do you want for yourself, your patients, and your staff?
- Does the idea of leading a team instead of doing it all yourself appeal to you?
- What skills do you possess now and what new learning would have to occur to move to a higher level of function?
- How would your income and that of your practice change during and at the conclusion of this transition?

On the next few pages, these questions are addressed and resources identified to assist the provider take the next steps in making these changes. This transformation to a higher level of practice is vital for the sake of the practice, the patients, and the health care system. The speed of this transformation will determine whether primary care will serve as the foundation for health care and support patient-centered comprehensive care, thus leading effective change in the health care system, or become irrelevant. Will primary care remain mired in the status quo that results in poor patient outcomes and the most expensive health care system in the developed world?[4] The choices ahead are becoming clearer. What is not clear is which path primary care in the US will follow. Each practice tier is described in detail below.

Tier 1 practice

Based on historical precedent and the current reimbursement system, the majority of primary care has a distinctly 20th-century feel. The patient experience allows for 5–15 minutes with a doctor after having checked in and waited for 10–60 minutes for the "appointment" (see Table 2). Preparation for the visit and follow-up afterwards are inconsistent and often absent, resulting in very low adherence to the recommendations that the physician makes during the appointment. Prevention guidelines are often ignored or neglected, resulting in screening and immunization rates far below those of other developed countries.

The patient's role has a distinctly passive nature as the process of describing the signs and symptoms leads to a diagnosis, a prescription, and, often, curt and hard to understand instructions. The general mood of the office is often hectic. The choice for the physician is to reduce the patient volume, resulting in lower compensation, or to continue to push through the challenges and maintain an often ineffective, hectic pace.

Table 2 Performance in practice tiers

	Tier 1	Tier 2	Tier 3
Patient experience			
Preparation	Little to none	Minimal – labs before visits	Team meeting before visit to prepare
Time with physician	5–15 minutes	5–15 minutes	Variable depending on individual/group/teaching
Continuity	Inconsistent	Variable	Managed carefully
Follow up	Inconsistent	Variable	Managed carefully
Patient's role			
Role in health care	Generally passive	Variable	Patient-centered care; chronic health care depends on active, engaged patient. Given advice and tools to manage
Adherence/compliance	Unknown	Variable	Managed carefully
Patient satisfaction	Unknown	Variable	High
Information management			
Notes/records	Often paper	Increasingly paperless	Paperless
Office organization	Frenetic and stressed, very reactive, stacks of charts/papers to be processed/filed	Variable	Highly organized with redundant system to insure all functions occur
Online portals for clinical and financial information	Rarely	Variable	Consistently
Automated protocols to review patient information and identify patients "at risk"	Rarely	Variable	Consistently
Point of care information on preventive or chronic care recommendations for patient	Rarely	Variable	Consistently
Automated outreach preventive, chronic, and other messaging	Rarely	Variable	Consistently
Provider's perspective			
General attitude	Frustrated, exhausted, often burned out	Variable	Empowered and engaged in practice
Orientation	Often "victim" of the system – hospital, insurance, pharmaceutical industries	Variable	"Creator" of the system working with other stakeholders to find ways to succeed
Focus	Working "in" the clinic	In transition	Working "on" the clinic
Level of management	"Tyranny of the urgent"	In transition	Population management
Staff roles and perspectives			
Role	Specific front office/back office, doctor runs the show, medical assistants often blood pressure checkers	Variable	Cross trained, responsible for key aspects of patient experience/care, empowered to act at the "top of license" and general attitude "never do anything that someone else, less educated/expensive can do just as well"
Management	Fewer staff, often with lower level practice manager	Variable	Highly trained staff, high level of engagement and management. Often strong practice manager
Staff attitude	Undervalued and frustrated, disempowered	Variable	Empowered and proactive, not waiting on provider for vital roles and functions
Turnover	High	Variable	Low
Revenue			
General trend	Working harder for same take home pay	Variable	Stable or increasing
Source of revenue	Working more hours; earlier, later, and/or weekends	Increased delegation and reliance on revenue from staff	Involved in fewer hours of direct patient care, influencing the care of more patients, adding revenue from staff efforts

Note: The authors have developed a survey to assist a practice to determine in which tier it currently functions, and to identify key areas for growth. This evaluation can be a first step toward practice evolution and is available from the second author.

(*Continued*)

Table 2 (*Continued*)

	Tier 1	Tier 2	Tier 3
Payment methodology	Fee for service	Variable	Exploring risk and/or gain share methodologies, looking for innovative ways to get paid for performance by insurance companies, employers, and others
Presence of "mailbox $"	Rarely	Variable	Consistently
Financial risk	High, dependent on physician	Less dependent on physician	Significantly lower with multiple revenue streams
Community involvement			
Primary involvement	Physician may be in social or service groups	Variable	Entire staff involved and representing office
Corporate outreach	Rarely	Variable	Consistently involved in education and/or service of local corporation/organizations
Patient outcomes			
Quality care metrics	Limited data	Variable	Measured, reported, and reviewed
Quality improvement	Inconsistent focus	Variable	Targeted and ongoing accountability, use of clinical guidelines
Population management	Individual patient focus only	Variable	Targeted groups and goals, proactive outreach
Empowered patients	Limited education	Variable	Knowledge, ability, and action for self-management
Team approach			
Coordinated	Low level	Variable	Planned strategies, evaluation of practice/team effectiveness Meeting responsibilities/accountability
Empowered members	Little support	Variable	Top of license Energized Innovative
Appropriate roles	Rigid/narrow roles	Variable	New member roles Shared resources

Information technology in the form of an electronic medical record may be used, helping with the organization and flow of information. This relieves the frustration and confusion somewhat, but at the cost of having added expense for computers, software, and maintenance fees. Many physicians have chosen not to make this commitment, either because of the significant change that it would require, or a distrust of the cost, complexity, and computer skill level they and/or their staff possess.

Physicians in a tier 1 practice often wonder what happened to the dream of being a "Marcus Welby" to those whose lives they have been entrusted. Those having practiced for over 30 years will recall a time when all of the services offered by a primary care practice, including laboratory tests, X-rays, and physical therapy, were paid for. The ability to generate income from services outside of evaluation and management (basic visit) codes led to financial reward and often a more realistic practice pace. However, over the last 10 years, the ability to perform these services has been limited or eliminated and the stress to increase patient volume has accelerated. The unrelenting need to move from one examination room to the next, without slowing, to cover the practice overheads has resulted in a high level of fatigue and burnout.

Primary practice staff are faring little better as the stress of the pace and complexity of the office often falls to them to work out and operate. Very dependent upon the guidance of the physician, staff find themselves constantly caught between accomplishing tasks and waiting for the physician to review results, return calls, and see patients. This physician bottleneck leads to a hurry up and wait period, followed by a rush to keep up, followed by hurrying up to wait again.

Financial tension in a practice often results in a need to keep salaries at a minimum, so trained, experienced staff members often leave for other offices, for a few dollars more per hour pay, when they become able to function at a higher level. Some staff members remain out of loyalty to the physician and patients. However, this situation can eventually wear thin, when a staff member's personal, financial, or family needs increase. In most instances, these situations lead to high staff turnover, resulting in further challenges in terms of continuity and quality of care.

From a revenue perspective, the medical director and staff have to work harder to take home the same pay. Increases in reimbursement are uncommon, and rarely keep up or exceed the ever-increasing cost of living. Opening earlier, staying later, and opening on weekends become necessary, further adding to the frustration that things cannot continue for the long run in the same way.

The financial risks to physicians in primary care are huge. One large mistake or misstep could spell financial ruin and lead the practice to shut its doors. Buying a $50,000 per provider computer system, paying the staff what they command in the marketplace, or taking a loan to prop up cash flow for the short run can precipitate a crisis months to years later, requiring restructuring, joining a hospital or clinic, or occasionally bankruptcy. In any case, the consequences to the physician can be traumatic during a time when significant effort has not paid off, leading to physical and emotional exhaustion. In conclusion, while the tier 1 practice is the most common, it is no longer a viable alternative for the future. With increasing pressure over the next decade, the solo practitioner hanging out a shingle and making a living will be seen only in rural communities or with those urban practitioners just trying to hang on until they are ready to retire.

Tier 2 practice

Perhaps the most challenging practice is one that has seen a new future and is migrating its operations from a tier 1 to the tier 3 practice (see Table 2). The significant challenge is to evolve the roles of the staff and the physician leader, and to incorporate new technological tools to rebuild and change everyday methods of practicing medicine. During this transition, it is common to see vacillation from the old way, to the new way, and back to the old way again, several times per day. This inconsistency leads to frustration, both for the person trying to build the new habits and for the coworkers. Initially, everyone tries to function in the new way. However, when the clinic becomes very busy, inevitably things default to the old familiar operational styles. Shifting to re-embrace the new way of thinking and performing is the true challenge. Some have equated this experience to a pilot, flying a plane at 40,000 feet with a limited crew, trying to bring on new technologies, operating procedures, and re-engineering everyone's roles, in a very tight financial environment, all while continuing to fly! Little wonder many fail in making the transition.

The keys to success at this point in the journey of transforming the practice are patience and continually refocusing on the vision that all are committed to achieving. Continuing to take "baby steps"[5] is essential. It is in the small steps that resistance is overcome and progress is made.

In developing any new skill, a journey is involved. This includes moving from "unconscious incompetence" ("I did not even know I had a problem"), to "conscious incompetence" (wherein one now recognizes the problem, but has not figured out the solution), to "conscious competence" (which is reached when solutions are figured out but significant energy is expended to prevent falling back into conscious incompetence), and finally to "unconscious competence" (mastery, where one functions without effort).[6]

Most clinicians have long mastered unconscious competence with their tier 1 practice habits. In fact, almost every habit has been rehearsed and mastered to the degree that it seems almost effortless. Learning new processes and practice methods can represent extreme challenges even to the most committed medical director, but change is possible and, indeed, many clinicians have been successful. As many practices are purchased by larger networks and hospitals, more practices will begin operating at tier 2 on the way to tier 3.

Tier 3 practice

A tier 3 practice is an early 21st century example of the best in primary care (see Table 2). Many of the new approaches will be accelerated by anticipated and much needed changes in health care reimbursement. However, maximizing practice revenue in the current system in a tier 3 practice is feasible and has been achieved by the first author in consultation with other practices. The tier 3 practice has developed to empower patients and staff who use technology and new strategies to achieve desired outcomes. Patients will have their clinical needs managed by their team in new ways. Patients can be involved in face-to-face visits, group visits, and/or electronic visits. Much of their care will be managed via technology to promote quick access, user-friendly interactions, and convenience. The old days will be gone in which every patient will need a request processed only through the physician for a decision. If the nation's current challenge concerning the availability of registered nurses is addressed successfully, they will assume major new roles in primary care, assisting the team to manage the health needs of the population served. Health educators, health coaches, medical assistants, and other team members will also become integral to the tier 3 practice. Population management will result in prevention and chronic care outcomes being achieved regularly as creative strategies to educate and support patients to achieve health goals become commonplace. Computer dashboards will provide staff with up-to-date summaries of the overall patient population and subgroup health status indicators. It will be possible to drill down into the data to identify specific patients in need of contact and support.

High-risk patients will be monitored in their homes via telephone to determine their status. For example, patients with congestive heart failure can be followed daily through

self-report phone keypad input to identify early signs of worsening and to institute early intervention protocols.

Patient outcomes will reflect higher quality as clinical status is assessed and monitored, permitting earlier intervention. Clinical guidelines will be consistently implemented to improve care and prevent inadvertent omissions. Sicker patients will receive more intensive care because they will have longer visits or more frequent follow-up by appropriate staff members. Low-risk patients with minor illnesses, such as upper respiratory infections or urinary tract infections, will have many needs managed electronically.

Staff will be supported in teams to assume more active roles in helping patients. They will be more fulfilled as they become accountable for new ideas and help to design new, creative strategies to improve care. Nurse practitioners and physician assistants will provide special leadership in the practice and will institute and accomplish practice goals in population management, quality, and practice financials. Indeed, many practitioners and physician assistants will lead practices as MDCEOs, and others will be present in the majority of primary care practices.

In time, the MDCEO will have successfully altered the vision and strategy of the practice, created an empowering and collegial culture, developed and supported effective teams, and begun to practice 21st century medicine. The result will be maximizing the "triple bottom line" of increased quality of care, improved patient outcomes, and greater financial success.

Summary

In summary, the MDCEO is a system of thinking, leadership, and specific practice strategies designed to empower and create a proactive, highly efficient way of practicing primary care that includes and empowers the entire staff. It requires fundamental change in the physician's traditional role and style of practice. Based on the authors' experiences with over 150 practices, including 350 primary care physicians and 150 practitioners and physician assistants, the ability to transform a practice using vision, technology, and new approaches can transform a stressful and often negative situation to one of higher quality and better compensation, with genuine excitement and enjoyment.

Disclosure

The authors report no conflicts of interest in this work.

References

1. Christensen C, Grossman J, Hwang J. *The Innovator's Prescription: A Disruptive Solution for Health Care*. New York, NY: McGraw-Hill; 2009.
2. Bodenheimer T, Pham HH. Primary care: current problems and proposed solutions. *Health Aff (Millwood)*. 2010;29:5799–5805.
3. Barr M. The need to test the patient-centered medical home. *JAMA*. 2008;300:834–835.
4. Schoen C, Osborn R, Huynh PT, Doty M, Peugh J, Zapert K. On the front lines of care: primary care doctors' office systems, experiences, and views in seven countries. *Health Aff (Millwood)*. 2006;25:w555–w571.
5. Emerald D. *The Power of TED*. Los Angeles, CA: Polaris Publishing; 2005.
6. In: Mindtools TM. Available from: http://www.Mindtools.com/pages/article/newISS_96.htm. Accessed October 1, 2011.