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Mission: The Blue Ridge Academic
Health Group seeks to take a societal
view of health and health care needs and
to identify recommendations for academic
health centers (AHCs) to help create
greater value for society. The Blue Ridge
Group also recommends public policies to
enable AHCs to accomplish these ends.

The Blue Ridge Academic Health Group

GETTING THE PHYSICIAN RIGHT:

Exceptional Health Professionalism for a New Era

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Contents

Report 9: Getting the Physician Right
Introduction
Part I. The Internal Challenge
Moving in the right direction 11
Teams as Microsystems 12
Health Systems Professionalism 12
Models of Innovation 13 I. Innovation in Team Medicine and Patient-Centered Care II. Adoption
Barriers to Change 14 The Health care Financing/Payment/Reimbursement System Inertia and Ingrained Practices
Conclusion, Part 1 15
Part I – Recommendations
Part II – The External Challenge
What is the Value of Medical Professionalism? 13
Societal Context 13 The "Exceptional" American Physician 13 Exceptional Economic Expansion 13
Physicians: Professionals or Simply Experts? 22
The Need to reassert Medical Professionalism and Leadership 23
Exceptional Efforts 24 Leadership is Key
The Need for "Exceptional Medical Professionalism" 25
Part II – Recommendations
Appendix 1. Medical Professionalism in the New Millennium: A Physician Charter
References

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GETTING THE PHYSICIAN RIGHT: EXCEPTIONAL HEALTH PROFESSIONALISM FOR A NEW ERA is ninth in a series of reports produced by the Blue Ridge Academic Health Group. The recommendations and opinions expressed in this report represent those of the Blue Ridge Academic Health Group and are not official positions of Emory University. This report is not intended to be relied on as a substitute for specific legal and business advice. Copyright 2005 by Emory University.

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The Blue Ridge Academic Health Group Report 9



The Blue Ridge Academic Health Group (Blue Ridge Group) studies and reports on issues of fundamental importance to improve our health care system and enhance the ability of the academic health center (AHC) to sustain optimal progress in health and health care through sound research—both basic and applied—and health professional education. Eight previous reports have described opportunities to improve AHC performance in a changed health care environment and to leverage AHC resources in achieving threshold improvements in health system access, quality, and cost. The Blue Ridge Group has sought to provide guidance to AHCs that can enhance leadership and knowledge management capabilities; aid in the adoption and development of Internet-based capabilities; contribute to the development of a more rational, comprehensive, and affordable health care system; improve management, including financial performance; and address the cultural and organizational barriers to professional, staff, institutional success in a value-driven health system, the need to reassess and improve the education of physicians and other health professionals, and the need for comprehensive health care reform (Blue Ridge Academic Health Group 1998a, 1998b, 2000a, 2000b, 2001a, 2001b, 2003, 2004).

In this, our 9th report, the Blue Ridge Group reviews and recommends changes required to revive medical professionalism and to get the physician of the future right.

For more information, visit our web site: http://www.blueridgegroup.org.

- We describe changes required to revive medical professionalism and to get the physician of the future right.
- We present policy recommendations that AHCs and the health professions can pursue to lead our nation to an era of "exceptional" health professionalism.

Introduction

The Blue Ridge Group believes that, at the dawn of the 21st Century, given the pace of change and the increasing complexity of systems of clinical care and health care technology, medical competency and medical professionalism in the United States require renewed definitions. These definitions need to recognize population approaches in addition to the traditional focus on the individual patient. While physicians and other health workers have become increasingly sophisticated "knowledge workers," the future of medicine as a profession may be at risk. To some commentators and policy makers the demise of medicine as a profession or "privileged occupation" would be a positive development (Reich 2000). We hold the opposite view. We believe that medical professionalism is critical to the values, quality and future of health care and to the research, education and training upon which it is founded.

The medical profession, like other health care-related occupational groups, has for several decades experienced rapid change both internally to the profession and in the external environment for practice. This rapid change has created major stresses throughout the profession and the health occupations – as well as in the health care system as a whole. The pace of change continues unabated and more change is a certainty.

Physicians are key in organizing and delivering care in every health system. Their competence and performance, on the one hand, and their overall commitment to professionalism, on the other, in large measure define the values of the health care system and how clinical outcomes will be achieved. The changes and stresses that have affected the medical profession create new challenges for physician performance and competence. They also test the commitment of the profession to its larger social responsibilities.

The primary focus of national policy and debate has been on addressing growing health care-related costs, improving measurable health care quality, and getting America's health care system right. The Blue Ridge Group believes that an equally urgent priority is the work to be done

in "Getting the Physician Right" for the evolving health care system.

What is Medical Professionalism?

To frame discussion of "getting the physician right," it is important to understand what is medical professionalism. We start with a definition of professions drawn from a wide review of the literature:

"A profession . . . is an occupation that regulates itself through systematic, required training and collegial discipline; that has a base in technical, specialized knowledge; and that has a service rather than a profit orientation, enshrined in its code of ethics" (Starr 1982, 15).

This definition captures essential characteristics identified by most scholars, including that a profession is:

- based on required intellectual training in specialized knowledge;
- oriented towards public service;
- rooted in a code of ethics;
- not strictly profit-oriented;
- infused with common, collegial norms;
- authorized by society to operate as a relatively autonomous, largely self-regulating occupation.

While variations on these elements of a profession have been offered, almost all discussions of the nature of professions describe an essential symbiotic relationship between the status and authority conferred by society on the occupation, and the occupation's commitment to maintaining high standards of qualification, ethics and service (Sullivan 2005). Through this "social compact," professions have evolved as guarantors of the integrity of the particular sphere of activity within which they are engaged. For the law profession, this has meant commitment to maintaining the integrity of the laws, legal system and courts. For the accounting profession, this has meant assuring the integrity of financial accounting systems and stan-

dards vital to public and private institutions. For medicine, this has meant assuring the integrity of the health sciences, and the appropriateness of health care practices and the protection and promotion of overall population health (Starr 1982).

A profession, therefore, has a two-part challenge in securing its legitimacy and authority within the larger society. The first challenge is **internal:** the group must achieve cohesion and near-consensus on its shared internal standards for training, qualification, and licensure and on the group's role as the keeper of highly valued "public goods." The second challenge is **external:** to win and to maintain societal recognition of the group's sphere of professional authority and social responsibility.

Two key questions for medicine (as for the other professions) are:

- 1. What is the status of medicine's **internal** cohesion as a profession? Is the medical profession characterized by appropriate, shared standards of professional training, qualification and competence? And,
- 2. Has the medical profession maintained its **external** obligations to carry out key responsibilities on behalf of the integrity of its sphere of professional oversight, sufficient to maintain societal recognition of its sphere of authority?

First, What is a Medical Professional?

Perhaps the most elegant definition of the medical profession was offered by William Osler, who suggested that medicine was characterized by four great features:

- 1. Its noble ancestry, which includes the critical sense and skeptical attitude of the Hippocratic School that laid the foundation for a modern medicine:
- 2. Medicine's remarkable solidarity;
- 3. Its progressive, scientifically-based and forward looking character; and

4. Its singular beneficence and basis in charity. (Silverman 2003)

Osler roots his definition of medical professionalism in a "noble" history and equally noble values. But his definition is particularly notable for how it rests on the profession's "singular beneficence and as one based in charity" (emphasis added).

Osler's early 20th Century conception of the profession seems at the same time both quaint and profound by today's standards and is likely an idealized version. But Osler manages to identify essential characteristics of medical professionalism that most would continue to acknowledge today: The first speaks to the internal standards of the profession, "the critical sense and skeptical attitude of the Hippocratic School;" and by "[I]ts progressive, scientifically-based and forward looking character." The second speaks to the character, integrity and commitment of the profession: that it is animated by a "remarkable solidarity;" and "Its singular beneficence and basis in charity."

But there is no doubt that a century has made a difference in how the medical professional is viewed and experienced.

For some time, the decline of medicine as a profession has been the subject of widespread commentary, analysis and proposed remedies, both within the profession and without. Within the profession, the American Board of Internal Medicine and its Foundation (ABIM) and the Institute of Medicine (IOM) have been at the forefront of identifying and addressing the challenge of maintaining professional values. The ABIM has made particularly strong contributions defining the nature of the profession's societal obligations. The IOM has made especially strong contributions in defining the core competencies needed for health care professionals (IOM 2003). Together, they point the way towards the renewal and redefinition of medical professionalism in the 21st century.

Part I. The Internal Challenge

"Today, the medical profession stands at a crossroads. The direction it takes depends largely on its collective willingness to abide by a standard of excellence and behavior that requires a commitment to self-improvement and peer review." — ABIM, Project Professionalism Report, 2001 (1995)

In 1992, the ABIM established "Project Professionalism," with a mission to enhance the teaching and evaluation of professionalism as a component of clinical competence within internal medicine. The Project conducted an extensive evaluation and found serious deficiencies:

"The medical profession has long enjoyed a special position in society. In the last few decades, however, accelerating advances in medical knowledge and technology have placed greater pressures on physicians to absorb and communicate information to patients and other health professionals. In the wake of these changes, demands and expectations of the public and the medical community have altered the perception of what being a physician really means. <u>Unprofessional behavior and attitudes on the part of some physicians have eroded medicine's historically respected position."</u> (ABIM 2001, 1) (emphasis added)

It is important to note that, while acknowledging changes in the external environment had created new difficulties for physicians, the ABIM Project directly implicates "unprofessional" physician behavior and attitudes in the erosion of "medicine's historically respected position." What exactly have been these "unprofessional behaviors and attitudes?"

The short answer can be found in the ABIM's prescription for renewing medical professionalism:

"Professionalism in medicine requires the physician to serve the interests of the patient above his or her self interest. Professionalism aspires to altruism, accountability, excellence, duty, service, honor, integrity and respect for others." (ABIM 2001, 5)

Exhibit 1 provides a fuller description of the elements of professionalism required of candidates seeking certification and recertification from the ABIM.

Overall, the ABIM Project revealed a profession whose members had become more "self-interested" and less characterized by "altruism, accountability, excellence, duty, service, honor, integrity and respect for others." It proposed important curricular and evaluative tools to be employed in preparing and evaluating outcomes of professionalism programming in GME training programs.

Along a parallel but even more comprehensive track, starting in 1998, the IOM undertook a wide-ranging series of studies of America's health system. Together, these reports have painstakingly (and sometimes painfully) documented the "quality chasm:" the extent to which our health care systems and health professions under-perform on their missions and capabilities (IOM 1999, 2001, 2002, 2002(a), 2003, 2003(a), 2003(b), 2004, 2005). With perhaps unprecedented clarity, the IOM called for replacing current systems of care with new systems that can meet six aims that are not now being met. Health care should be: safe, timely, efficient, effective, equitable and patientcentered (IOM 2001, 6). The Blue Ridge Group and others now refer to these as the "STEEEP" goals, and the Blue Ridge Group embraces them.

The IOM's 2001 report, Crossing the Quality Chasm, reviewed and proposed new approaches to health care training and practice. These are reproduced in Table 1.

Table 1 captures the extent to which traditional training and practice have been built around the prerogatives of physicians and the organization of health care services largely according to academic and practice specialties rather than according to conditions. Likewise, professional performance expectations have been built around physician autonomy, responsibility and accomplishment within hierarchical operating systems, rather than around team performance and accountability. Historically, accountability for outcomes and quality has been low and not systematically measured.

Exhibit 1: ABIM: Project Professionalism

The elements of professionalism required of candidates seeking certification and recertification from the ABIM encompass:

- A commitment to the highest standards of excellence in the practice of medicine and in the generation and dissemination of knowledge.
- 2. A commitment to sustain the interests and welfare of patients.
- 3. A commitment to be responsive to the health needs of society.

These elements are further defined as:

Altruism

is the essence of professionalism. The best interest of patients, not self-interest, is the rule.

Accountability

is required at many levels — individual patients, society and the profession. Physicians are accountable to their patients for fulfilling the implied contract governing the patient/physician relationship. They are also accountable to society for addressing the health needs of the public and to their profession for adhering to medicine's time-honored ethical precepts.

Excellence

entails a conscientious effort to exceed ordinary expectations and to make a commitment to lifelong learning. Commitment to excellence is an acknowledged goal for all physicians.

Duty

is the free acceptance of a commitment to service. This commitment entails being available and responsive when "on call," accepting inconvenience to meet the needs of one's patients, enduring unavoidable risks to oneself when a patient's welfare is at stake, advocating the best possible care regardless of ability to pay, seeking active roles in professional organizations, and volunteering one's skills and expertise for the welfare of the community.

Honor and integrity

are the consistent regard for the highest standards of behavior and the refusal to violate one's personal and professional codes. Honor and integrity imply being fair, being truthful, keeping one's word, meeting commitments, and being straightforward. They also require recognition of the possibility of conflict of interest and avoidance of relationships that allow personal gain to supersede the best interest of the patient.

Respect

for others (patients and their families, other physicians and professional colleagues such as nurses, medical students, residents, and subspecialty fellows) is the essence of humanism, and humanism is both central to professionalism, and fundamental to enhancing collegiality among physicians. (ABIM 2001)

Table 1. Simple Rules for the 21st Century Health Care System -IOM 2001

Current Approach

- 1. Care is based on visits.
- 2. Professional autonomy drives variability.
- 3. Professionals control care.
- 4. Information is a record.
- Decision-making is based on training and experience.
- 6. Do no harm is an individual responsibility.
- 7. Secrecy is necessary.
- 8. The system reacts to needs.
- 9. Cost reduction is sought.
- 10. Preference is given to professional roles over the system.

New Rule

- 1. Care is based on continuous healing relationships.
- 2. Care is customized according to patient needs and values.
- 3. The patient is the source of control.
- 4. Knowledge is shared and information flows freely.
- 5. Decision-making is evidence-based.
- 6. Safety is a system priority.
- 7. Transparency is necessary.
- 8. Needs are anticipated.
- 9. Waste is continuously decreased.
- 10. Cooperation among clinicians is a priority.

Table 2: Inter-Professional Value Set -Geheb, et al.

Five value domains that integrate and incorporate professionalism as described by nursing, medicine, dentistry, pharmacy, and social work in the State of Oregon:

- Knowledge Acquisition and Application: Each discipline is distinguished by the accumulation and application of the knowledge base that defines it as a discipline. Embedded in each discipline's knowledge base is the commitment of professionals within the discipline to pursue self-directed and life-long learning and the responsibility to inform and teach others.
- Responsibility to the primacy of the patient and also the larger social system: The second domain acknowledges that health-care providers are charged with these dual and sometimes conflicting responsibilities. The social system can be conceptualized as having three levels: Micro (patients, families, and teams), mezzo (the hospital and community), and macro (local, national, and world). Responsible management of resources includes people, money, time, equipment, and other resources.
- Access to Equitable Care: The duty to advocate for access to equitable health care is fundamental to our value of fairness and respect for all human beings. Healthcare profession-

- als must provide the best care possible irrespective of race, cultural background, gender, and economic social class, recognizing that the resources available to any given patient vary considerably given the inequities of the American social system.
- Intrapersonal and Interpersonal
 Communication:
 It is imperative that healthcare professionals learn to utilize respect, integrity, and compassion in self-reflection, self-management, and relationship management in regards to interdisciplinary team functioning as well as caring for the individual patient. Professional behavior must be responsible and sensitive to the needs of individuals and social contexts in patient care and training environments.
- Ethical Reasoning and Behavior: Healthcare professionals must be able to recognize, analyze, and manage ethical conflicts arising in clinical, teaching, and research settings. Familiarity with ethical principles can aid understanding of conflicting values and priorities. Decisions and behaviors in these settings should reflect ethical reasoning. Ethical principles need to guide difficult decision making especially in circumstances in which resources available to an individual patient are constrained.

The IOM has estimated that only between 30% and 50% of the time do patients get treatment known to be effective (IOM 2001). It has described the embracing of systems and accountability for quality, "... the last best hope of the medical profession" (IOM 2001).

The IOM has challenged the professions to develop a commonality of interest and values that would fully enable new systems of care necessary to a STEEP health care system. As a first step, Geheb and colleagues have set out to define a "common inter-professional value set" (Geheb

2004). Such alignment could then enable what is described as the development of inter-professional "systems competence" or "systems professionalism" (ibid).

Geheb and colleagues discovered in their research that the professions lack a common grammar with which they can categorize and communicate values and competencies. The lack of such a common grammar vastly complicates the goal of putting common values and competencies into practice, not to mention the goal of developing team approaches to practice.

Table 2 reproduces the five professional value domains that Geheb and colleagues found common to the health professions. The constructs and vocabulary utilized in Table 2 is a first attempt to develop an inter-professional grammar.

Related to this, as part of the effort to identify and catalyze new systems of care, in 2002, the IOM convened a summit on health professions education. This resulted in a report that sets a consensus standard for professional competency. In *Health Professions Education: A Bridge to Quality*), the IOM recommends,

"All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics" (IOM 2003, 3).

Out of this summit, five essential competencies were identified. "Competencies are defined here as the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice" such that all clinicians (and not just physicians) can:

- 1. Provide patient-centered care
- 2. Work in interdisciplinary teams
- 3. Employ evidence-based practice
- 4. Apply quality improvement
- 5. Utilize informatics (IOM 2003, 3-4)

The competencies identified and recommended here respond to very much the same deficiencies in professional behavior and attitudes identified by the ABIMF. They represent new directions in physician training. It is now widely accepted that such new direction is required in order to address much of the inefficiency, underperformance, error and sub-optimal quality that persists throughout the health care system (Wennberg 1982).

To this end, most often proposed is the concept of the team player, the professional who learns and works as part of a interdisciplinary team. Ideally in such teams, each individual brings important expertise that is leveraged within the operation of the team on behalf of patients. Leadership is taken and shared by those team member(s) with the best information and/or skills in the particular case or part of the case. An interdisciplinary team refers to a group of professionals and support personnel working together in a coordinated fashion to address an individual patient's needs at a specific time and clinical circumstance.

Understanding, Forming and Leveraging Teams

A large number of models, along with a burgeoning scholarly literature, are exploring and developing a variety of innovative team approaches to clinical practice and to professional training for such practice.

Care is redesigned to use open access, group visits, and modern information and communication systems, like electronic medical records, electronic prescriptions, and email.

Our nation's aging demographic, for example has created broad interest in the increasing challenge of treating and managing chronic disease. Edward Wagner and colleagues (Wagner 1999, 2000) have offered compelling working models for the development and success of team medicine and new ideas for better practice and learning environments. They have described the essential ele-

ments of an ideal "Chronic Care Model" of coordinated care to manage chronic diseases (Wagner 2000). Ideally, this involves a prepared practice team using available health information, and working with an informed, activated patient. The patient is supported in self-management. Care is redesigned to use open access, group visits, and modern information and communication systems, like electronic medical records, electronic prescriptions, and email. Inter-professional care is systematic and seamless, evidence-based decision support is available and community resources are

leveraged (www.improvingchroniccare.org).

A related initiative is centered in the Association of American Medical Colleges' (AAMC) Institute to Improve Clinical Care (IICC), directed by David P. Stevens. The aim of the IICC is to "unleash the full potential of the nation's medical schools and teaching hospitals for promoting the continuous improvement of clinical care" (www.aamc.org/patientcare/iicc/ about.htm). A major aim is to find strategies by which to seed and empower early adopters who can pioneer new models of training and practice that others can adopt. One strategy being employed to reach such a "tipping point" is to create programs that support medical students and residents as agents of change and innovation within teaching hospital and other academic health center learning and care sites. The rationale is that, while more senior clinicians are proficient in their particular skill sets and within traditional clinical systems, younger physicians, or even trainees, may be more "expert" in understanding and adopting newer approaches to the organization of work. This initiative is being piloted in 12 teaching hospitals.

Moving in the Right Direction

The IOM and ABIM descriptions of professional competencies and characteristics are designed to lead to the development of systems of care that explicitly recognize the interdependence of the skills and competencies of each of the health disciplines and support personnel. The AAMC's IICC also leads in this direction when it describes how traditional principles that have guided clinical learning must give way to new principles to underpin redesign of care where students and residents learn:

- "Care and Curriculum as separate silos" must give way to "Patient care and medical education are tightly coupled."
- "Patient safety is on the radar screen" must give way to "Patient safety is a key characteristic."

"Students and residents work around the patient care system" must give way to "All members of the care team are part of a high performance clinical microsystem" (Stevens 2004).

The Society of General Internal Medicine (SGIM) is another professional association that is actively exploring the types of new training and competencies required of medical professionals. Its Task Force of the Domain of Internal Medicine (Domain Task Force) has developed recommendations for the training and practice of general internists, a specialty with one of the most daunting challenges in defining competency.

General internists must be capable of practice that is both broad and deep, encompassing care of people with common conditions, including conditions that are acute, complex, and/or chron-

The Society of General Internal Medicine (SGIM) is another professional association that is actively exploring the types of new training and competencies required of medical professionals. ic, as well as across the fields of health promotion and disease prevention. Accordingly, the Domain Task Force recommends, "Wherever they practice, general internists should be able to lead teams and be responsible for the care given by their teams, embrace changes in information systems, and aim to provide most of the care required by their patients" (Larson 2004, 639).

In keeping with current thinking, the Domain Task Force also recommends that general internists develop and be trained to particular expertise in team and systems practice, and in the capacity to integrate this knowledge and practice with the best of personalized and "high touch" medicine.

"General internal medicine residency training should provide both broad and deep medical knowledge as well as mastery of informatics, management, and team leadership. . . . Research should expand to include practice and operations management, developing more effective shared decision making and transparent medical records

and promoting the close personal connection that both doctors and patients want" (ibid).

Teams as Microsystems

At a more fundamental level, a great deal of research is being conducted to understand what makes good teams and how they can approach optimal functioning in a clinical setting. Pioneering here is the work of Weick, Reason, Batalden, Nelson, Mohr, and others in the fields of systems theory, error and risk analysis, high reliability and high complexity organizations, complex adaptive systems and microsystems.

Most health care is provided within clinical microsystems. These are "small organized groups of providers and staff caring for a defined population of patients" that work within larger complex adaptive organizations (macro-systems) (Mohr and Batalden 2002, 45). This work is derived, in significant part, from the experience of the military and other high reliability organizations (HROs) in organizing an extraordinary array of expert performance systems to a near-zero failure rate.

In understanding the characteristics of optimal systems and teams, much has been learned about the importance of training and orientation of team members. The operative principle for HROs is: "The most important person at any given moment in a high-risk organization is the person with the most valuable information, regardless of rank" (Weick 1995, Batalden 2002, Nelson 2003 and Mohr 2003).

Applying microsystems research and experience to the health care setting, Mohr and Batalden have described eight characteristics of optimal clinical microsystems. These include:

- Integration of information
- Measurement
- Interdependence of the care team
- Supportiveness of the larger system
- Constancy of purpose
- Connection to the community
- Investment in improvement
- Alignment of role and training (Mohr and Batalden 2002, 47)

We might well ask whether many medical education and training programs or health care settings model these characteristics of the optimal microsystem?

Throughout the literature on microsystems and HROs is a strong emphasis on what might best be described as the requirement for a proper culture within, and personal attitude towards participation in, the system. "Mindfulness" is a term of art often employed to describe this culture and attitude. Mindfulness means "Awareness of one's work unit as a system is a matter of iden-

Pioneering here is the work of Weick, Reason, Batalden, Nelson, Mohr, and others in the fields of systems theory, error and risk analysis, high reliability and high complexity organizations, and microsystems.

tity and is connected to purpose.... Mindfulness implies "a radical presentness"... and a connection to the actual requirements of the current situation along with a chronic sense of unease that something catastrophic might occur at any moment" (Mohr and Batalden 2002, 46). This frame of mind is not self-referential, in the way that traditional medical training would

dispose one to approach practice, but is instead team- and system-referential. It comprises a personal and professional orientation that disposes one to participate and collaborate in developing approaches and systems of optimal reliability, safety, and effectiveness. Important for all team members is deference to knowledge and flexibility in sharing leadership with the person(s) best trained or equipped for the particular activity, whether on aircraft carriers, in air traffic control, in nuclear power plants or in clinical settings (Weick 1995).

Health Systems Professionalism

One way of characterizing these new competencies has been offered by Geheb and colleagues (Geheb, et al. 2004). The attributes are listed in Table 3.

The concept of building a new "health systems professionalism" captures well many of the dimensions of the new professionalism that is evolving in both the literature and in practice. Whether with respect to clinical teams or microsystems, to high-reliability organizations, or to clinical or information systems, health professionals must now acquire a broad-ranging "systems" competence. And the physician of the future must be more than just a participant in health systems. He or she must also develop the skills and leadership capabilities to shape, manage and mentor others within these systems. As leaders, physicians will need to have a common language to communicate with other interdisciplinary team members. This language will need to be based on the STEEEP aims of the IOM. Additionally, an explicit understanding of how the skills and competencies of each member of the team contribute to good patient outcomes will be required. A commitment to performance improvement will be necessary, measured at both individual and population levels. Absent these characteristics, physicians will not be able operate and effectively lead interdisciplinary teams.

Models of Innovation

Many current efforts in practice model innovation are being made possible only with the help of philanthropic or other specially designated grants of financial support or through special efforts with third-party payors willing to experiment with new forms of reimbursement support. We offer two examples of clinical innovation and leadership. The first represents an innovation within the confines of existing reimbursement policies and the second represents an effort in combination with a third-party payor. Efforts such as these are vital to the more complete adoption of team approaches to health care and deserve the broadest possible replication.

I. Innovation in Team Medicine and Patient-Centered Care

In team medicine and patient-centered care, the Mayo Clinic has long been a leading innovator. It

has recently innovated again in creating new care teams that are responsive to current trends and pressures in hospitals. Many teaching hospitals face tremendous pressure to reduce costs and find new efficiencies in the wake of reduced hospital payments and new limitations on medical residencies and work hours, among many other factors.

Starting in two subspecialty services, inpatient cardiology and vascular medicine, Mayo designed new care teams utilizing "midlevel" health care providers (Cooper 1997). Instead of using medical residents and their supervising physicians, these services were staffed by physician assistants, nurse practitioners, and internal medicine hospitalists. Outcomes for these new service teams were comparable to those of traditional teams (Costopoulos, et al. 2002).

II. Adoption of Innovative Approach to Utilization of Information Technologies -UTMB

The University of Texas Medical Branch (UTMB) in Galveston, Texas, provides a model of the adoption and application of new information technologies to the clinical setting. In 1996, UTMB won the contract to care for approximately 106,000 prisoners of the State of Texas, under a capitated payment model. Faced with prisoners spread over a large geographic area and in multiple settings, UTMB developed a telemedicine approach. The components of the UTMB Telehealth Delivery System include:

- Telecommunication with multiple attachments
- Pharmacy management
- Electronic medical record—HIPPA compliant
- Voice activated dictation
- Disease management/practice guidelines

Team medicine is practiced, with on-site nurses and staff who facilitate prisoner access to on-site and portable diagnostic and communications modules, which are employed by other members of the health care team at remote locations. Using this method, UTMB physicians make an average of over 3000 patient visits per month with prisoners. With telemedicine, tremendous efficiencies

and savings are realized in everything from travel time to conducting and communicating a variety of diagnostic tests. Far more patients are seen and with access to more technologies than would be possible without the telemedicine capabilities.

Prisoners themselves report high satisfaction with this type and level of access to health care and a variety of indices demonstrate that the system is working well.

- Prison treatment compliance under the telemedicine system has risen dramatically, from 40% in 1995 to 96% in 2003;
- Inmate deaths are down;
- Asthma cases are down;
- Overall average clinical endpoints have improved, resulting in lower blood pressures, blood glucose, and LDL levels;
- Drug costs are down 18.4% in four years.

Overall costs have been dramatically reduced: it now costs approximately \$2000 per year per prisoner, well below average for health care

Telemedicine started at UTMB as an innovative program designed to meet the needs of prisoners who traditionally have had significant difficulties achieving access and responsiveness for health care concerns.

services per person nationwide.

Telemedicine started at UTMB as an innovative program designed to meet the needs of prisoners who traditionally have had significant difficulties achieving access and responsiveness for health care concerns. The model has proven effective in improving

health and health care and in controlling costs and telemedicine is being rolled-out for other populations, both within and beyond the United States. Yet, state medical practice restrictions have inhibited multiple adjoining states from benefiting from the UTMB initiative (Stobo 2004).

Along with such early-adopter innovations, the status quo is being challenged in other ways as well. Patients' expectations have changed. Patients and families have come to expect better "customer service" from health care systems and they often come to the clinical encounter with web-mined information concerning their conditions and treatment options. Often this material is branded by leading provider organizations, like Harvard Medical School (through InteliHealth. com) or, often, by the provider's own organization. Physicians and providers of all types must now anticipate interacting with patients and families with a far more equitable orientation than the traditional paternalistic approach (See PatientSite.com).

Young professionals and trainees are challenging the traditional models in other ways. There is a trend, recently abetted by regulatory change, towards trainees and younger physicians seeking and expecting less demanding work hours, more time off, greater flexibility to accommodate family responsibilities and other priorities. They also seem more willing to exchange higher salaries for more satisfying personal lives with their spouses, children, and/or friends. Traditional training programs and practices struggle to accommodate these new developments.

Barriers to Change

The Health Care Financing/Payment/ Reimbursement System

Many obstacles stand in the way of fuller adoption of better systems and team medicine. Probably the most daunting obstacle is the health care payment system. Fee-for-service and most other third-party hospital and physician reimbursement practices are designed to pay for traditional medical practice that is focused around individual medical practitioners. Even in settings where leaders and innovators would like to pursue team approaches to health care services, it can be very difficult to devise methods or to find sources from which to pay for the efforts of many team members. Many, if noy most, reimbursement policies do not recognize or pay for other than physician efforts. With the intense ratcheting-down of reimbursement levels for all health care services over the past two decades, what flexibility there might have been at one time to cover

some of these costs has largely been squeezed out of the system. Payment systems continue to be inappropriate and inflexible, making change to team care models financially challenging. This is an ongoing and major impediment to reform and change. Pay for performance appears to be a step in the right direction but payments must be sufficient to change behavior. The reform of health care financing remains an urgent priority as a precondition for fuller adoption of needed innovations in medical practice and training.

Inertia and Ingrained Practices

Many practitioners, professional societies, regulatory organizations, provider organizations, and the professions themselves, remain rooted in traditional autonomous training and practice models. Many are reticent to change and to adapt to the requirements of cross-disciplinary and team efforts. In academic medicine, and in other settings, such fundamental decisions as promotion and tenure continue to be characterized by a widespread incapacity to develop standards to properly evaluate or value collaborative efforts, unconventional or part-time time commitments or other deviations from long-accepted norms, whether they be in research, education or care.

While there are many impediments to cite when considering the possibilities for change, it is also possible to protest too much. Without a profession-wide near-consensus to adopt the new standards for training and practice, training for the new team and systems competencies will not be formalized, and existing care systems and organizations will have neither the guidance nor incentive to change. Without professional, regulatory and organizational buy-in, individual learners and practitioners will continue to find it difficult, if not impossible, to embrace these required competencies and sustain effective teams and microsystems. And, without professional near-consensus on appropriate care systems and models, payors can ignore pleas for innovation and experimentation beyond those that benefit their own financial models or market interests.

Conclusion, Part 1

Our first question has concerned the status of medicine's **internal** cohesion as a profession. To maintain its professional status, a profession must be characterized by the active maintenance and promotion of appropriate, shared standards of professional training, qualification and competence. Do physicians practice according to appropriate, shared standards of professional training, qualification and competence? What are

Professional associations are increasingly realizing that they must set new standards and also work across specialties and disciplines to achieve the shared and complimentary values, standards and competencies necessary to collaborative care.

those standards? What should they be if we are to get the physician of the future "right?"

Our answers, drawn from both experience and an extensive review of the literature, are that physicians are currently struggling within an environment that perhaps is best described as "creative chaos" (Robinson, 1999). Traditional models of training and practice are being

variously reformed and recast within a health care environment that demands better systems and more collaborative approaches to care for individuals and populations. Physicians are learning that they must learn and practice seamless, interdisciplinary "collaborative care" (Cohen 2002). Professional associations are increasingly realizing that they must set new standards and also work across specialties and disciplines to achieve the shared and complementary values, standards and competencies necessary to collaborative care.

Taken together, the efforts we have described, and many others besides, are identifying and redefining the basic competencies that are required of the health care professional, and in particular, the physician.

New competencies that must be embraced and further elaborated not just by individual professionals, but by health professional organizations and regulatory bodies more formally, include:

- Dedication to patient-centeredness,
- Systems competence, including change management, and
- "Mindfulness" or vigilance in achieving systems reliability and safety

Whereas several medical societies and professional organizations have made significant progress in identifying these competencies and promulgating revised standards for training and competent practice, the medical profession as a whole has yet to fully appreciate or embrace these new competencies. Early adopters are modeling new team training and practice, but the vast middle majority has yet to do so.

In Table 3, we further characterize and compare current/traditional models of professionalism and competence with what would characterize a new patient-based, health systems/team professionalism. Getting the physician right depends upon how aggressively, how well, and how extensively physicians, organized medicine, and its training infrastructure adopt the mission that the IOM has perhaps best summarized:

"All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics." (IOM 2003, 3)

"Make everything as simple as possible—but not simpler." —A. Einstein

Table 3 Defining Health Systems Professionalism and Competence				
	Current State	Future State		
Professional values	"Noble Values" defined independently for each health discipline, although compatible with each other.	"Noble values" align, with a common value set that incorporates the language of the IOM aims. (Table 2)		
Disciplinary competencies	Multiple organizations in multiple jurisdictions define competencies independently. Little common language or understanding of interrelationships of skill and competency among disciplines. No reference to or definition of "interdisciplinary care." Competencies are "disharmonious." Individual professional models are "siloed." Teaching models are "additive" as knowledge grows—taught within rigid time constraints. Rigid "regulatory models" of education.	A common language embracing IOM aims and competencies is used to define interdisciplinary competencies. Explicit understanding of how individual discipline competencies complement each other (synergistic competencies). Clear definition of "interdisciplinary care." Competencies are "harmonious." Interdisciplinary education occurs—within a "learning" community of professional disciplines. As knowledge grows and changes, it is substituted within educational time frames, with skills for life-long learning being taught. Educational time frames (undergraduate, graduate, and continuing education) are viewed as a flexible continuum. "Just-in-time certification" would be available making mid-career transitions easier. Crew management techniques with clear communication standards are used centering around clinical episodes. Flexible "learning models" are oriented toward the maintenance and improvement of knowledge and skills.		

	Current State	Future State
Patient-centered care	Health systems organized around needs and wishes of providers. Providers are the "center of control." Autonomy highly valued. Institutional and individual interests override community interests. Focus on incidents of care and acute clinical intervention.	Health systems organized around the clinical needs and wishes of patients. Patients are the center of control. Autonomy is diminished. Institutional interests align with community and patient interests. Health and prevention focus while maintaining competence in incidents of care and acute clinical intervention.
Interdisciplinary teams	Work "culture" defined by individual discipline with rigid work-rules for support personnel. Communication channels are very hierarchical with frequent misses for critical information exchange. "Handoff" risk is high. The physician gives the orders and others presumably follow Team members work as individuals. "Working harder makes it better." Marked by high burnout rates and unbalanced lifestyles. Individuals are available "24/7" to meet clinical demands.	"Culture of quality" recognizes the unique contribution of each discipline and the importance of support personnel in continuously improving the patient experience and clinical outcomes. Critical information is exchanged easily recognizing the "the most important team person at any given moment in a high performance high risk organization is the person with the most valuable information regardless of rank." "Handoff risk" is eliminated. The physician develops a care plan with an interdisciplinary team that monitors its performance. Each team member knows "when to lead and when to follow." Interdisciplinary teams build on individual responsibility with clear role definitions for each member. The team focuses on improving results. There is high individual and team satisfaction. Team members have balanced lifestyles. The health system and its teams are available "24/7" to meet clinical demands.
Operations	Disparate human resources systems are "siloed" for physicians, nurses and other professionals, trainees, and other personnel. Poor provider, employee, and patient satisfaction. Great variability in clinical outcomes, resource use and costs—nationally, regionally, and institutionally. Continuous adding of "layers" of people and process to provide care (i.e. 80 hour work week for residents). Rigidity in team structure with chaotic work hours – increasing possibility for error with complex hand-offs of responsibility for care. "Work arounds" abound.	Clearly articulated and aligned human resources systems with clear definition of roles, responsibilities, and evaluation systems for interdisciplinary care, applying to all personnel who work in systems that "touch the patient" in any way. Continuously improving provider, employee, and patient experience. Continuously improving clinical outcomes, resource use and cost—nationally, regionally, institutionally. Defining team structure and flexibility in team organization based on the task, IT aids for "getting the right information, to the right people, at the right place and the right time." Continuous reduction in errors. "Work arounds" are eliminated.

[16]

	Current State	Future State
	Erratic and slow adoption of evidence based clinical practices by discipline. Erratic team learning with inconsistent use of internal and external benchmarks. Commitment to Quality Assurance	Rapid adoption of evidence based clinical practices on an interdisciplinary team basis. Use of valid internal and external benchmarks of quality to encourage team learning. Quality assurance transitioning to Qual-
	and regulatory model for Quality. Financial indicators are the "lead" indicators for performance. Information technology (IT) not de-	ity Improvement. All professionals have some working knowledge of quality improvement tools and their appropriate application—when do you use what tool (focus/PDCA, lean, six sigma, etc.)—and where does one find the help.
	ployed strategically.	Leading with integrated patient-centered, clinical and operating indicators of performance with improving financial indicators following.
		IT deployed to improve patient centered business processes, information flow, decision support and patient centered clinical quality. Outcomes measure would include error reduction, improved experience and patient and employee satisfaction metrics, improved clinical outcomes, and reduced cost/unit work.
Finances	Continuous increases in healthcare costs—outstripping inflation and growth in GDP.	Health care costs in line with growth of GDP and inflation.
	Medicare (& other) payers punishes "best performers."	Pay for performance rewards "best performers" and recognizes infrastucture costs.
	Financial incentives generally align to contribute to increasing costs by: Promoting over utilization. No incentives for health and prevention. Individually patient based and not population based reimbursement. Violating principles of equitability with uneven access to clinical care. Promoting variability in outcomes at a national, regional and institutional level. Proliferating regulatory burden and costs due to concern over "quality" and "escalating costs" Variable quality associated with uneven, often precarious operating and long-term capital position.	Patient and providers are incentivized to appropriate (avoidance of over and under) use of resources: Providers rewarded for outstanding and measurable patient centered clinical outcomes. Providers are rewarded and have disincentives for variability in clinical outcomes. Health and prevention on a population basis are paid for. Access to essential preventive and acute services are guaranteed. Incentives for rapid adoption of evidence based clinical care and best practices using benchmarking. Decreasing regulatory burden and costs linked to improving patient centered clinical outcome metrics. Improving measurable quality associated with improving operating margins and long-term capital position.
[18]		

With respect to the first challenge for professionalism, that of the integrity and quality of internal professional standards, we are convinced that medicine desperately needs increased leadership and stronger championing of the new patient-centered, systems competencies. The decline of medical professionalism is well documented. To reverse this trend, the medical profession must summon the internal leadership necessary to advance itself to the "tipping point" where professional standing, and, crucially, each professional's identity, is rooted in the embrace of the new team and systems value and competencies, and patient-centered care models both in training and in practice.

Part I. Recommendations

Concerning medicine's internal professional challenge:

 Embrace, develop and promote the new interdisciplinary team and systems professionalism in health care, as described above and as summarized by the IOM:

"All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics." (IOM 2003, 3)

- Review and revise job descriptions, performance reviews and reward systems to embrace quality and outcomes accountability and reward team/systems professionalism.
- 3. By the year 2010, understand and commit to defining and developing the practice models and systems needed for care to approach near-zero failure tolerance.
- 4. Reform training programs to meet the goals of team and systems professionalism.
- 5. Develop evaluation tools that assess and recognize high functioning interdisciplinary teams and the performance of individuals in these teams.
- 6. Develop common training curricula built around interdisciplinary values and competencies.
- Assure that the relevant accrediting and certifying agencies by discipline engage and formalize these reforms.

8. Invest in information and record systems that are accessible to all key players and proven to be effective in enhancing communications, including across cultures and continents.

Part II. The External Challenge

The second challenge for medicine is the **external challenge:** to maintain societal recognition of medicine's sphere of professional authority and responsibility. In this regard, the renowned social scientist, Karl Polanyi observed that the strength of status groups depends "upon their ability to win support from outside their own membership, which again will depend upon their fulfillment of tasks set by interests wider than their own" (Polanyi 1957, 152).

With respect to this second challenge, the key question for medicine is: Has the medical profession maintained its external obligations to carry out key responsibilities on behalf of the integrity of its sphere of fiduciary oversight, sufficient to maintain societal recognition of its sphere of professional authority?

What is the Value of Medical Professionalism?

Decades of accumulating evidence and commentary on the decline of the professions and the proliferation of "unprofessional behaviors and attitudes" suggests that this is not a narrow or medicine-specific issue, but a broader sociological problem, and a long-standing one. There is a growing body of scholarship that suggests that the value of professionalism is no longer clear and that the risks to medical professionalism, may be increasing (Sullivan 2005).

Societal Context

The medical profession is an example of the tumultuous development of professionalism in American society over more than two centuries. Given an almost innate national suspicion of class or other forms of social privilege, most historians agree that the development of professions in America was by no means inevitable. Historians also agree that the

privileges afforded professions are neither writ in stone nor guaranteed for all time.

By virtue of a variety of particular historical factors, professional standing has been achieved for several fields of expertise, such as law, accounting, education, engineering, and medicine. However, professional standing does not maintain itself. History provides many examples of periods where a profession may thrive and others where its survival is put at risk (Perkin 1996).

A Case Study in the Eclipse of Professionalism: Arthur Anderson and the Accounting Profession

The clearest and most dramatic example of the neglect and abandonment of professionalism occurred recently in the accounting profession. In 2002, Arthur Anderson, the world's largest accounting firm, was found guilty of obstructing justice in association with the "Enron Scandal." Riding a tide of corporate greed and fraud, Arthur Anderson ignored its higher obligations to society. The firm's shocking loss of focus on the role of accounting in safe-guarding the integrity of the business and finance processes for the public good, caused the firm to lose virtually all of its clients. The firm was effectively dissolved. But even more significantly, the entire accounting profession has been transformed. With the Sarbanes-Oxley Act of 2003, Congress acted to largely strip the accounting profession of its capacity to regulate itself and placed such regulation in the government's hands. Accounting as a self-regulating profession is on the verge of extinction (Beltran, et al 2002).

By virtue of a variety of particular historical factors, professional standing has been achieved for several fields of expertise, such as law, accounting, education, engineering, and medicine.

Until early in the 20th Century, medicine had been a virtually unregulated field of practice, where formally trained practitioners shared the field with self-proclaimed healers, apothecaries, and surgeons. Most care was provided by family members according to local or family tradition, or "common sense." Eighteenth and 19th century attempts to create and enforce minimum standards of medical practice and state licensure were regularly repulsed in the Jeffersonian spirit as an unjust check on the freedom of both occupational and "consumer" choice (Starr 1982, Duffy 1993).

Nevertheless, the need for something like a medical profession continued to be raised by reformers as the American society and economy evolved into larger-scale commerce. The occupations of law, medicine, teaching and accounting grew increasingly important to the establishment and maintenance of rules and moral boundaries within the spheres of law, care, learning and in the marketplace.

The assertion of a professional ethos and standards in medicine gained ground with the advent of the foundations of modern biology, especially with the germ theory of disease. Medical practice became rooted in science, formal education and training, responsibility to patients, and service to society. Medicine achieved internal consensus on universal standards for training and practice. Important new public health measures were enacted. Society came to realize that properly trained and credentialed practitioners could be trusted with your health and life.

In this context, medicine grew as an esteemed practiced and "calling." Equally important during this time is that hospitals were transformed from "... places of dreaded impurity and exiled human wreckage into awesome citadels of science and bureaucratic order..." (Starr p. 145).

The "Exceptional" American Physician

While the value of medical science and professionalism was eventually established during the 20th Century, it is important to understand the extent to which its value came to rest on a set of particularly American characteristics.

It has often been observed that there is a socalled "American exceptionalism" that results in unique American approaches to all manner of life choices and public policy. This exceptionalism is attributed in large part to the legacy of America as a refuge from rigid "old world" political, class and religious systems resulting in the American independence movement. This exceptionalism has been variously described, but certainly contains strong doses of the "rugged individual" and "entrepreneurial" character (Hoover 1928).

The development of American medical professionalism must be viewed through this lens. Unlike in most of Europe, American medicine did not take root first as an occupation of the socially elite, homogeneous and well-schooled. Furthermore, America did not develop a form of nationalized, universal health care as a basic element of a larger social welfare system. In Great Britain and in most European countries, national health systems evolved. These largely public systems employed the majority of physicians as salaried professionals. Professionalism became rooted in a traditional class-based "noblesse oblige." Professional medical societies were essentially fraternal branches of the larger privileged social class system. An elite group identity and connection to a charitable and beneficent heritage and societal mission were not difficult to establish or maintain.

American physicians, by contrast, evolved primarily as self-employed solo practitioners. They were far less homogeneous as a group and more likely to associate and refer to one another for consults according to local or training ties. From the start, American physicians operated more like traditional guild tradesmen than did their British and European counterparts.

While often idealistic and oriented towards service, American physicians largely evolved as small businessmen. Like other small businessmen, they were rooted in their communities and served a relatively local clientele. They had suppliers and staff to pay and budgets to make; and they had to adapt their businesses to changes in the economy and society. As a result, the American version of medical professionalism developed less out of a social class system or any overall planning than out of the activities of solo and small-group practitioners/tradesmen and independent hospitals within an evolving health care market place.

Exceptional Economic Expansion

As the 20th Century progressed, increasingly, the trusted solo practitioner and local hospital were being changed by the new national investments in biomedical research and health care, by third-party payment systems, new technologies, new training opportunities, and new patient expectations. In the post-World War II era, billions of new dollars flowed into health care and the health sciences. Many large employers began offering health care insurance as an employee benefit. Medicare and Medicaid were enacted in the mid-1960s -- the first truly government-sponsored health programs (outside of the military and Veterans Affairs system). The establishment of the National Institutes of Health (NIH) and the National Science Foundation (NSF), as well as new interest in health care and biological warfare in the Department of Defense (DoD), drove unprecedented increases in government-sponsored funding for biomedical research.

By the 1980's, physicians were less connected in the traditional ways to their communities and to the patients they served. "Physician extenders" appeared. Time and staff devoted to managing the growing regulatory burden grew. Physicians trained longer and became more specialized in their practice. Their incomes, particularly in some fields and sub-specialties, grew rapidly. Health care costs grew at rates that were increasingly costly to individuals, families, governments, and corporations alike. Overall, physicians reported being less happy and less satisfied in their work (Blumenthal 2001).

In the early 1990's, the Clinton Administration (like others before it) attempted, but failed, to craft a major reform of the U.S. health care system. Public policy instead encouraged the rise of the nascent "managed care" industry as the agency of health care reform and cost containment. A new "health care marketplace" drove significant and rapid change both in the organization of patient services and in the culture of medical practice (Glied 1997). Providers of all types adopted market-driven strategies. These included the re-engineering and consolidation of health systems, practices and services to achieve

increased efficiency and productivity that could drive patient throughput and revenue growth (Herzlinger 2001).

These changes in both the medical profession and the external environment contributed to a growing sense that medical professionals, like others (in particular, lawyers), were becoming more market-driven and self-centered – and less beneficent (Linowitz 1994). The decline of medicine as a favored and revered profession was the subject of widespread commentary and analysis, as discussed in Part I of this report.

Physicians: Professionals or Simply Experts?

Helpful "sociological" perspective on the interplay of society and the professions is provided by Peter Drucker, who has authored some of the most accessible discussion of complex issues in the development, organization, and management of work in modern society (Drucker, 1989).

According to Drucker, in the decline of professionalism, we are seeing the effects of the emergence of a new type of workforce. In modern, post-industrial society, great value is placed on the acquisition, organization and application of knowledge. New types of knowledge industries, services and organizations have spawned a new type of worker, the "knowledge worker." Knowledge workers are distinct from manual laborers and other skilled and non-skilled workers. They are relatively independent, adaptable and self-directed. They are highly educated and often highly skilled and their work is based in specialized knowledge. Knowledge workers are mobile, often entrepreneurial, and tend to be continuing learners so that they can adapt to new knowledge and to new employment and economic markets. They are motivated in large part by being "expert": effective in applying their specialized knowledge. (ibid).

Using Drucker's framework, it is important to understand that a professional is a knowledge worker, but a knowledge worker is not necessarily a professional. The professional shares the traits of the knowledge worker, but he or she also has one other overarching characteristic: The professional is a member of a guild or common

association that is in large measure self-regulated through values and principles incorporated in training and articulated and enforced in a code of ethics or conduct. While the knowledge worker is responsible primarily to him- or herself and/or to an employer or client, the professional is connected through the professional association to broader societal obligations and expectations. The professional is responsible to his or her peers and their common associative professional standards. Professional values and standards are explicit and are explicitly recognized and sanctioned by society. The professional, by education, social compact, and calling, is a socially conscious actor. The knowledge worker, where not also a professional, may be accountable only to a client and/or informal peer groups, and is only accidentally, incidentally, or episodically an actor or fiduciary on behalf of larger societal values or social goods.

Within Drucker's framework, the knowledge worker is a natural adaptation and vital contributor to the modern information society. Unlike the socially conscious professional, the non-professional knowledge worker functions as a relatively unencumbered agent of Adam Smith's "unseen hand" of the marketplace. This gives the nonprofessional knowledge worker an advantage in a highly market-driven environment. Organizations and corporations striving for maximum productivity, market-effectiveness and flexibility greatly value such un-encumbered knowledge workers. It is easy to see how the professions, and individual professionals themselves might tend to act or perform in such ways as to accentuate their knowledge-worker attributes and minimize their professional obligations in order to be as competitive and highly valued as possible in such a marketplace.

It should not be surprising, then, that physicians would increasingly behave like other, non-profession knowledge workers. More and more physicians are taking employment as salaried workers within group practices and in larger hospital or managed care organizations. This began in a big way in the early 1990's when hospitals and health systems of all types began to hire primary care physicians and to acquire and assemble larger

group practices. The newest trend is now for health systems to hire increasing numbers of specialists, particularly in the specialties that support their most profitable inpatient and outpatient services. This includes especially cardiologists, cardiothoracic surgeons, neurosurgeons, orthopedic surgeons and general surgeons, and hospitalists (Beckham 2005).

Other physicians are engaged in a wide variety of entrepreneurial and business schemes designed in large measure to increase or maximize their incomes.

- New "surgicenters" and other specialty centers have proliferated as physicians, especially surgeons and "proceduralists" in high-margin specialties, have left hospital-affiliated practices to form new practices and centers that compete directly with hospitals for patients (Casalino 2003).
- Many physicians and practices of all sizes have brought into their practices scanning and other specialized technologies. While having such capabilities in-house can be more convenient for patients, a further benefit is additional income to the practice. A troubling recent study shows that practices with such in-house capacities utilize them with patients at a rate 10 times the rate of practices that do not have these technologies in-house (Pham, et al. 2004). Yet, other studies show that, because of the irrationality of the payment system, without the revenue generating capabilities of such technologies, many practices would not be economically viable (Pear 1991).
- Physicians are leaving or avoiding specialties that are lower-paying, require call duty, or that have relatively high expenses for malpractice insurance (Berenson 2003).

In short, physicians continue to exist and to practice as they traditionally have in America: as members of a privileged occupation who must also be entrepreneurial and business-savvy. However, in our increasingly market-driven environment, this behavior appears to have become more intensive, entrepreneurial and profit-seeking

 and potentially or actually rife with conflicts of interest that have troubling implications for standards of professionalism.

We have said that the second challenge for medicine as a profession is the external challenge of maintaining societal recognition of medicine's sphere of professional authority and responsibility. To meet this challenge, the medical profession must uphold its end of its social compact in exercising society-wide responsibility in the sphere of health care and the health sciences. Absent active vigilance in its societal responsibilities, the justification for professional status and privilege disappears. As the example of the accounting profession has shown, there are public and private entities that can be empowered to take jurisdiction away from a profession that fails to live up to its societal responsibilities.

The Need to Reassert Medical Professionalism and Leadership

The recent resurgence of public policy in support of free enterprise and unbridled competition is not unlike the type of policy that served in the 19th Century to catalyze and justify the establishment of professions in the first place. However, today, American professions, including medicine, have largely failed to publicly articulate or champion values or standards that would distinguish professionals from other knowledge workers.

From a societal perspective, organized medicine has become another "special interest." It has, in significant measure, ceded its moral authority as guardian of the common goods that medicine, as a profession, exists to protect. In turn, and despite some initial resistance to strictures imposed under managed care, society has become quite receptive to public and private regulation of the medical professional's scope of authority and prerogatives (Friedson 1994; Stevens 2001).

Nevertheless, as described earlier, there are organizations within medicine that work valiantly to define and energize professionalism. The American Medical Association, for example, has promulgated principles of medical ethics and promotes professionalism through a range of programs. All professional specialty societies

promote standards and maintain codes of ethics. The American College of Surgeons (ACS), for instance, has a long history of attention to developing professionalism and professional standards. It founded the Joint Commission on Accreditation of Hospitals and the Trauma certification program in 1928, and the Residency Review Committees in 1952 (Sheldon 2002). The Association of American Medical Colleges (AAMC) is a strong advocate of ethics and professionalism in training and of establishing the highest standards in hospital practice and management. Many medical societies have supported public efforts to expand access to affordable health care for all (Sheldon 2005). In every state, medical licensing boards and medical societies monitor and enforce professional ethics and standards. All of these efforts, and more, continue to develop and enforce professional standards in medicine. Yet, the overall impact of these efforts is not enough to dispel the impression that the profession as a whole is more self-interested than public interested; and that it is more concerned with protecting its prerogatives than in protecting the common, health-related goods that medicine, as a profession, exists to protect.

Exceptional Efforts

Over the last several years, the Institute of Medicine and the ABIM and its Foundation stand out as organizations that are successfully devising programs and approaches that address the public obligations of medical professionals. The IOM's recent series of reports on quality, safety, training and other important public policy aspects of health care and professionalism have helped to create a renewed public dialogue about the role of health care and health professionals in society (IOM reports).

The ABIM Foundation, too, has had a significant impact on the public debate. The ABIM's Professionalism Project, discussed earlier, was just a first step in its ongoing focus on re-defining and reviving professionalism. One of the most impressive recent achievements in redefining professionalism has been the ABIM Foundation's initiative, in concert with the ACP Foundation and

the European Federation of Internal Medicine, to create and promulgate a new physician charter. Their joint statement, "Medical Professionalism in the New Millennium: A Physician Charter" is an extraordinary two-page document describing the principles and responsibilities to which physicians should strive as professionals (ABIM 2004). The Physician Charter is a solid foundation upon which to build a new medical professionalism.

The Physician Charter begins:

"Professionalism is the basis of medicine's contract with society. It demands placing the interests of patients above those of the physician, setting and maintaining standards of competence and integrity, and providing expert advice to society on matters of health. The principles and responsibilities of medical professionalism must be clearly understood by both the profession and society. Essential to this contract is public trust in physicians, which depends on the integrity of both individual physicians and the whole profession" (ABIM 2004). (The Physician Charter is reproduced in full in Appendix 1.)

It would be hard to state the external challenge for medicine more clearly or forcefully.

Then the document articulates and annotates three fundamental principles. The first two are rooted in the profession's traditional commitment to the primacy of the interests of the patient. The third refers to the profession's larger social obligations, centered, in this rendering, on the principle of distributive justice in the health care system.

The principle of primacy of patient welfare.

The principle is based on a dedication to serving the interest of the patient. Altruism contributes to the trust that is central to the physician-patient relationship. Market forces, societal pressures, and administrative exigencies must not compromise this principle.

The principle of patient autonomy. Physicians must have respect for patient autonomy. Physicians must be honest with their patients and empower them to make informed decisions about their treatment. Patients' decisions about their care must be

paramount, as long as those decisions are in keeping with ethical practice and do not lead to demands for inappropriate care.

The principle of social justice. The medical profession must promote justice in the health care system, including the fair distribution of health care resources. Physicians should work actively to eliminate discrimination in health care, whether based on race, gender, socioeconomic status, ethnicity, religion, or any other social category (ibid).

The Physician Charter then describes ten fundamental professional commitments:

- To professional competence.
- To honesty with patients.
- To patient confidentiality.
- To maintaining appropriate relations with patients.
- To improving quality of care.
- To improving access to care.
- To a just distribution of finite resources.
- To scientific knowledge.
- To maintaining trust by managing conflicts of interest.
- To professional responsibilities (ibid).

The Charter ends with the following admonition:

To maintain the fidelity of medicine's social contract during this turbulent time, we believe that physicians must reaffirm their active dedication to the principles of professionalism, which entails not only their personal commitment to the welfare of their patients but also collective efforts to improve the health care system for the welfare of society (ibid).

Altogether, the Physician Charter is a remarkable document – an international manifesto – that captures and promotes the highest ideals of physician competence, practice and professional responsibility. It is composed in such a way as to be virtually universal in scope and applicability. It is not just an American document, but resonates with international, cross-professional and cross-cultural experience and values.

Nevertheless, it has to be admitted that the Physician Charter has had only limited impact within the United States. As with many other recent attempts to gain the attention and enthusiastic embrace of reform by professionals nationwide, the Physician Charter has yet to have an obvious impact on the overall behavior of the medical profession or its public profile. It is to be hoped that this is young document and its message will likely acquire more influence in the near term.

Leadership is Key

Neither the IOM reports, the Physician Charter statement nor any other policy statements alone can effect significant change in the professional standing of medicine. Driving change requires not just inspired vision but relentless leadership. And one of the unfortunate and not well understood characteristics of the recent, tumultuous era in health care is the relative dearth of identifiable or bold leadership in medicine on behalf of what Osler more than a century ago described as medicine's "progressive, scientifically-based and forward looking character, and "Its singular beneficence and basis in charity."

The Blue Ridge Group believes that good and broad-based leadership from academic health centers is key to salvaging the future of medical professionalism.

The Need for "Exceptional Medical Professionalism"

"In a well arranged community a citizen should feel that he can at any time command the services of a man who has received a fair training in the science and art of medicine, into whose hands he may commit with safety the lives of those near and dear to him."

> –William Osler (The Growth of a Profession. Can Med Surg J 1885-86;14:129-55)

As previously described, American medical professionalism did not develop within a pre-existing class and status regime or within an emerging social welfare consensus. American medicine developed within a far less well-defined societal

commitment to social welfare supports and one largely based on the primacy of private, market-based initiative. To this day, publicly sponsored social welfare policies and programs in the United States remain the focus of tremendous conflict and controversy.

It is in this context that the role of professionals in the United States must be defined and championed. Without the European-style overlay of historical commitment to publicly sponsored social welfare, American professionalism requires an "exceptional" commitment to the integrity of the common goods within the fiduciary purview of a profession. For professions composed not primarily of career public servants, but of entrepreneurial salary workers and small business-people, the commitment to performance on the implied social contract of fiduciary responsibility for "common goods" must be made very publicly explicit. And the ability of individual professionals to perform or "make good" on that social contract must also be made easy to fit the circumstances of their work and lives.

American medicine has displayed an "exceptional" entrepreneurialism and business acumen that most distinguishes it from the professionalism found in other nations. American medicine must embrace and leverage that well-developed exceptionalism in the cause of renewing the performance of its societal professional responsibilities. The renewal of medical professionalism requires a newly proactive professional posture: an "exceptional" professionalism.

Medicine and all of the health professions must have concrete and highly public programs that publicly and explicitly address their societal obligations. In the legal profession, for example, the American Bar Association and virtually all state Bar associations have well-publicized public policies either requiring or strongly recommending participation in and support of pro-bono programs by both organizations and individual members of the bar. These policies are reinforced with Bar-sponsored programs that raise money from lawyers and law firms, run programs that enable lawyers to easily volunteer their time for such pro-bono work, and publicize such efforts. This

program and policy underscores the legal profession's commitment to promoting fair access to the courts and the legal system for all and to the larger cause of upholding our nation's justice system.

The Blue Ridge Group believes that American medical professionalism must develop similar and even more robust programs in support of its societal roles. Medicine must engage its larger social obligations not with just inspiring principles but with inspiring actions. And these must be shared in the public sphere where they can be understood and appreciated.

Part II. Recommendations

The Blue Ridge Group recommends that Medicine, and all of the health professions, adopt a robust and public "Exceptional Professionalism" that would address, with proactive, relentless and entrepreneurial vigor, well-known problems that threaten the integrity of our nation's health system and that inhibit the provision of the best possible care to all who need it.

At a minimum, we recommend that the following society-wide issues should be addressed:

1. The Uninsured

Exceptional Professionalism would address the crisis of the uninsured with entrepreneurial vigor. It should entail a nationwide, professions-wide effort targeting the creation of new hospital services, new programs and interventions in communities and populations, and a high profile public effort to solve the problem of uninsurance.

2. Health Care Payment Systems

Exceptional Professionalism would address the irrationality of current payment systems. Academic and non-academic health centers should model new forms of team and systems-integrated medicine with government and private payors, insisting on standards of care driving payment rather than payment driving the organization of care.

3. Health Care Costs

Exceptional Professionalism would address what

are generally considered unsustainable rates of growth of health-related costs. Hospitals, health systems, group practices, and individual practitioners should work aggressively to organize care delivery so that it is cost effective. The health professions should also work with health care industry, including drug, device, and medical equipment manufacturers and suppliers and with federal and state governments, to deliver evidence-based, cost-effective health care.

4. Health Care Training

Exceptional Professionalism would address the well-documented shortcomings of professional education and training. The health professions must undertake systematic re-evaluation and reform of education and training programs that fail to prepare the health care workforce for interdisciplinary team and systems-integrated health care.

5. Health Care Services

Exceptional Professionalism would address the poor organization of health care services. All providers and provider organizations should work to achieve the IOM's STEEEP aims, adopting these publicly and adopting public measures for accountability for achieving specific milestones.

6. Heath Care Conflicts of Interest

Exceptional Professionalism would address the growing issue of conflict of interest in the health care industry. With the current societal emphasis on technology transfer, and in the current environment for maximizing competitive and market advantage, there are extremely important and sensitive issues of conflict of interest that must be addressed and clarified throughout the health professions and in the public and private health sectors.

Appendix 1

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Preamble

Professionalism is the basis of medicine's contract with society. It demands placing the interests of patients above those of the physician, setting and maintaining standards of competence and integrity, and providing expert advice to society on matters of health. The principles and responsibilities of medical professionalism must be clearly understood by both the profession and society. Essential to this contract is public trust in physicians, which depends on the integrity of both individual physicians and the whole profession.

At present, the medical profession is confronted by an explosion of technology, changing market forces, problems in health care delivery, bioterrorism, and globalization. As a result, physicians find it increasingly difficult to meet their responsibilities to patients and society. In these circumstances, reaffirming the fundamental and universal principles and values of medical professionalism, which remain ideals to be pursued by all physicians, becomes all the more important.

The medical profession everywhere is embedded in diverse cultures and national traditions, but its members share the role of the healer, which has roots extending back to Hippocrates. Indeed, the medical profession must contend with complicated political, legal, and market forces. Moreover, there are wide variations in medical delivery and practice through which any gen-

eral principles may be expressed in both complex and subtle ways. Despite these differences, common themes emerge and form the basis of this charter in the form of three fundamental principles and as a set of definitive professional responsibilities.

Fundamental Principles

Principle of primacy of patient welfare. The principle is based on a dedication to serving the interest of the patient. Altruism contributes to the trust that is central to the physician-patient relationship. Market forces, societal pressures, and administrative exigencies must not compromise this principle.

Principle of patient autonomy. Physicians must have respect for patient autonomy. Physicians must be honest with their patients and empower them to make informed decisions about their treatment. Patients' decisions about their care must be paramount, as long as those decisions are in keeping with ethical practice and do not lead to demands for inappropriate care.

Principle of social justice. The medical profession must promote justice in the health care system, including the fair distribution of health care resources. Physicians should work actively to eliminate discrimination in health care, whether based on race, gender, socio-

economic status, ethnicity, religion, or any other social category.

A Set of Professional Responsibilities

Commitment to professional competence. Physicians must be committed to lifelong learning and be responsible for maintaining the medical knowledge and clinical and team skills necessary for the provision of quality care. More broadly, the profession as a whole must strive to see that all of its members are competent and must ensure that appropriate mechanisms are available for physicians to accomplish this goal.

Commitment to honesty with patients. Physicians must ensure that patients are completely and honestly informed before the patient has consented to treatment and after treatment has occurred. This expectation does not mean that patients should be involved in every minute decision about medical care; rather, they must be empowered to decide on the course of therapy. Physicians should also acknowledge that in health care, medical errors that injure patients do sometimes occur. Whenever patients are injured as a consequence of medical care, patients should be informed promptly because failure to do so seriously compromises patient and societal trust. Reporting and analyzing medical mistakes provide the basis for appropriate prevention and improvement strategies and for appropriate compensation to injured parties.

Commitment to patient confidentiality. Earning the trust and confidence of patients requires that appropriate confidentiality safeguards be applied to disclosure of patient information. This commitment extends to discussions with persons acting on a patient's behalf when obtaining the patient's own consent is not feasible. Fulfilling the commitment to confidentiality is more pressing now than ever before, given the widespread use of electronic information systems for compiling patient data and an increasing availability of genetic information. Physicians recognize, however, that their commitment to patient confidentiality must occasionally yield to overriding considerations in the public interest (for example, when patients endanger others).

Commitment to maintaining appropriate relations with patients. Given the inherent vulnerability and dependency of patients, certain relationships between physicians and patients must be avoided. In particular, physicians should never exploit patients for any sexual advantage, personal financial gain, or other private purpose.

Commitment to improving quality of care. Physicians must be dedicated to continuous improvement in the quality of health care. This commitment entails not only maintaining clinical competence but also working collaboratively with other professionals to reduce medical error, increase patient safety, minimize overuse of health

care resources, and optimize the outcomes of care. Physicians must actively participate in the development of better measures of quality of care and the application of quality measures to assess routinely the performance of all individuals, institutions, and systems responsible for health care delivery. Physicians, both individually and through their professional associations, must take responsibility for assisting in the creation and implementation of mechanisms designed to encourage continuous improvement in the quality of care.

Commitment to improving access to care. Medical professionalism demands that the objective of all health care systems be the availability of a uniform and adequate standard of care. Physicians must individually and collectively strive to reduce barriers to equitable health care. Within each system, the physician should work to eliminate barriers to access based on education, laws, finances, geography, and social discrimination. A commitment to equity entails the promotion of public health and preventive medicine, as well as public advocacy on the part of each physician, without concern for the self-interest of the physician or the profession.

Commitment to a just distribution of finite resources.

While meeting the needs of individual patients, physicians are required to provide health care that is based on the wise and cost-effective management of limited clinical resources. They should be committed to working with other physicians, hospitals, and payers to develop guidelines for cost effective care. The physician's professional responsibility for appropriate allocation of resources requires scrupulous avoidance of superfluous tests and procedures. The provision of unnecessary services not only exposes one's patients to avoidable harm and expense but also diminishes the resources available for others.

Commitment to scientific knowledge. Much of medicine's contract with society is based on the integrity and appropriate use of scientific knowledge and technology. Physicians have a duty to uphold scientific standards, to promote research, and to create new knowledge and ensure its appropriate use. The profession is responsible for the integrity of this knowledge, which is based on scientific evidence and physician experience.

Commitment to maintaining trust by managing conflicts of interest. Medical professionals and their organizations have many opportunities to compromise their professional responsibilities by pursuing private gain or personal advantage. Such compromises are especially threatening in the pursuit of personal or organizational interactions with for-profit industries, including medical equipment manufacturers, insurance companies, and pharmaceutical firms. Physicians have an obligation to recognize, disclose to the general public, and deal with conflicts of interest that arise in the course of their pro-

fessional duties and activities. Relationships between industry and opinion leaders should be disclosed, especially when the latter determine the criteria for conducting and reporting clinical trials, writing editorials or therapeutic guidelines, or serving as editors of scientific journals.

Commitment to professional responsibilities. As members of a profession, physicians are expected to work collaboratively to maximize patient care, be respectful of one another, and participate in the processes of self-regulation, including remediation and discipline of members who have failed to meet professional standards. The profession should also define and organize the educational and standard-setting process for current and future members. Physicians have both individual and collective obligations to participate in these processes. These obligations include engaging in internal assessment and accepting external scrutiny of all aspects of their professional performance.

Summary

The practice of medicine in the modern era is beset with unprecedented challenges in virtually all cultures and societies. These challenges center on increasing disparities among the legitimate needs of patients, the available resources to meet those needs, the increasing dependence on market forces to transform health care systems, and the temptation for physicians to forsake their traditional commitment to the primacy of patients' interests. To maintain the fidelity of medicine's social contract during this turbulent time, we believe that physicians must reaffirm their active dedication to the principles of professionalism, which entails not only their personal commitment to the welfare of their patients but also collective efforts to improve the health care system for the welfare of society. This Charter on Medical Professionalism is intended to encourage such dedication and to promote an action agenda for the profession of medicine that is universal in scope and purpose.

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31

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