Opportunities and Obstacles for Good Work in Medicine

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Since 1995, three teams of investigators, under the direction of Howard Gardner, of Harvard University, Mihaly Csikszentmihalyi of Claremont Graduate University, and William Damon of Stanford University, have been researching the ways in which leading professionals in a variety of domains carry out good work. “Good work” is used in a dual sense: 1) work that is deemed to be of high quality and 2) work that is socially responsible. Through intensive, face-to-face interviews, the researchers have investigated several domains, including journalism, genetics, business, jazz music, theater, philanthropy, and higher education. Pilot studies have been conducted of medicine and the rapidly emerging domain of “cyberlaw”, with plans to explore these areas more fully in the future.

In addition to this central line of study, several other related lines of investigation have been launched:

1. The Origins of Good Work project is an examination of teenagers who excel in extracurricular activities.

2. The Dedicated Young Professionals Study focuses on those who have just begun (or will soon begin) promising professional careers.

3. Good Work in Interdisciplinary Contexts. Pilot studies of new arts/ science media and of the Massachusetts Institute of Technology’s Media Lab have been completed. Plans are underway to study interdisciplinary work at the pre-collegiate, college, and research institution level.

4. The Role of Contemplative Practices investigates the ways in which contemplation/meditation influence how professionals carry out work.

5. Encouraging Good Work in Journalism. This project, carried out in conjunction with the Committee of Concerned Journalists, is currently developing a "traveling curriculum" for use in newsrooms around the country.

6. Good Work as Transmitted through Lineages examines how the principle of doing good work is passed down through continuous generations of teachers to students or from mentors to less experienced professionals.

7. Good Work in Other Societies is a project spearheaded by colleagues at Denmark’s Royal Danish School of Education that investigates good work in Denmark and Latvia. In the future, additional international components will be added.

The Project expects to issue a variety of books, reports, and related documentation. The present series, launched in early 2001, includes reports on several of the lines of research mentioned above. For further information on the Good Work Project, contact Professor Howard Gardner’s office at 617-496-4929, via email at hgasst@harvard.edu or through regular mail at 201 Larsen Hall, Harvard Graduate School of Education, Cambridge, MA, 02138.
Papers On Good Work  
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1. The Project on Good Work: A Description (April, 2000), Howard Gardner, Mihaly Csikzentmihalyi, and William Damon.

2. The Ethical Responsibilities of Professionals (July, 1998), Howard Gardner


5. Good Work Among Dedicated Young Professionals (July, 2000), Becca Solomon, Greg Feldman, and Marcy LeLacheur.


8. Opportunities and Obstacles for Good Work in Medicine (August, 2000), Jeff Solomon, Jennifer DiBara, Sara Simeone, and Dan Dillon.

9. New Media Art: A New Frontier or Continued Tradition? (January, 2001), Kaley Middlebrooks.


13. Interdisciplinary Research and Education: Preliminary Perspectives from the MIT Media Laboratory (January, 2001), Dan Dillon.


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I. Introduction

Medicine has been in the news a great deal recently. In distinction to earlier times there has been relatively less attention to health-related advances than to a nexus of problems that is pushing the domain into uncharted, and, in the minds of some, ethically suspect, territory. Few seem happy with the state of medicine. Among other problems, physicians complain about the constraints of managed care on their ability to provide quality care, patients lament their loss of autonomy in choosing physicians, and managed care insurance companies resent government proposals for regulating their work. Many hospitals and insurance companies are struggling to stay afloat.

As part of a larger study of the professions in contemporary America, we have conducted a pilot study of the domain of medicine. We asked subjects—primarily well established, prominent physicians in academic medical centers—to comment on trends and developments impacting the domain on a broad scale. Some of what our subjects told us is known to the well-informed general public. But our subjects also identified a cluster of issues that are not headline-grabbing and yet are reshaping—and may continue to reshape—the provision of patient care for the foreseeable future.

The overarching question that frames our study is this: How do practicing physicians adhere to the fundamental principles of the profession at a time when a variety of external pressures make it increasingly difficult to do so? Our analysis of the interviews we conducted sheds light on how physicians are thinking about defining their professional domain at a time of rapid change.

II. Background and Context of the Medicine Pilot Study

A. Initial Findings from Studies of Genetics and Journalism

The first phase of the Good Work project began with a study of the domains of journalism and genetics, both of which are noted for regulating information that is of
critical importance to people’s lives (journalism discovers and mediates information about the world around us; genetics discovers and mediates information about our biological destinies).

In interviews with 80 journalists and 76 geneticists we have found significant differences between journalism and genetics in terms of their alignment or misalignment. Geneticists are experiencing a time of alignment: the goals and values of individual practitioners are in substantial agreement with the tenets of the larger domain of science, the institutions in which they carry out their work, and public stakeholders. Journalists, on the other hand, find that their personal goals and values, and the stated goals of the profession, are at odds with an increased focus by decision makers in the domain on generating profit for shareholders by, for example, increasingly emphasizing entertainment over traditional news. This “mismatch” in perceived professional goals represents a sense of misalignment for journalists.

Geneticists speak positively about their work, describing an era of rapid growth, possibility, and opportunity. There is much excitement in the domain about technological advances and discoveries, as well as potential applications that will serve the greater good. Journalists, on the other hand, display a dissatisfaction with the current state of their profession. They feel immense pressure to tailor their work to market concerns, which in turn leads them to worry that quality is suffering.

Our study of these contrasting professions has given us the opportunity to explore both a domain that is thriving and one that is at risk of serious atrophy. Both journalism and genetics contribute to our understanding of the effect of market pressures on the professions today. The domain of medicine is currently under stresses and pressures similar to those in journalism. The need for cost-saving measures has brought many changes to the domain and the profession. An investigation into the beliefs and values of the physicians that continue to strive to do Good Work under these pressures is a useful and important comparative endeavor.
Our findings, which will be discussed further in this report, suggest that the state of medicine may not be as clear-cut as genetics or journalism. Our analysis suggests that the domain of medicine shares aspects of both genetics and journalism. As in genetics, the rapid advancement of medical technologies and the potential for specific and more efficient treatments (in part due to the Human Genome Project) is an exciting prospect that brings much hope to medicine. Some specialties, such as radiology, are experiencing a time of rapid growth and excitement. The increase of telemedicine and better imaging techniques have transformed the practice of medicine of many radiologists, making it possible for them to make better, faster diagnoses while continuing to do the work they love.

Yet, not all specialties in medicine are experiencing the same joy. There are also many sources of conflict and misalignment within the domain. The core values of medicine—to provide the best care possible to those in need—clash with the market model that has an increasing hold on the domain. The profession of medicine is currently at a crossroads between the private, autonomous, personal practitioners of the past and future physicians, whose role is not yet clear. There is a fear that being a physician in this day and age is qualitatively different than in the past, and that the profession itself is changing from one of a calling to that of a job.

III. Pilot Study of Medicine

A. The Sample and Methodology

We interviewed 20 prominent physicians, conveniently located in the Boston area. Most of our subjects work in academic medical centers affiliated with Harvard University Medical School. Their clinical expertise covers a wide range from psychiatry to cardiology. Because we sought the perspectives of mostly senior level physicians, most of whom are devoting their time to administration and research at this stage in their careers (even though many did practice medicine more actively earlier in their
careers), only three of our subjects spend a majority of their work days seeing patients. While most of our subjects were older, we did interview a 35 year-old. Our oldest subject was 70. We recognize that because our findings are based on a small sample we cannot generalize to the profession as a whole. Yet our subjects do provide key insights into the domain that form a solid foundation for probing further in an expanded study.

Interviews took one and a half to two hours to complete, and included questions about subjects’ backgrounds, training, opinions and perspectives on the state of the domain, as well as personal goals, values, concerns and hopes for the future. The interviews were tape recorded and transcribed.

While in most cases our subjects spoke of the negative changes affecting medicine, we do recognize that there are rays of hope for ameliorating some of the most egregious problems confronting the domain. For example, in addition to, or perhaps because of, proposed legislation on the federal and state levels to give patients and doctors more autonomy, at least one large managed care company announced last year that it would allow doctors a greater degree of authority to schedule follow-up visits for patients. Perhaps because fundamental resolution of certain key problems has yet to occur throughout the domain, our subjects commented mostly on the current issues plaguing medicine.

We now turn to a discussion of the issues which our subjects identified as reshaping the domain of medicine and physicians’ identities. These include technology (Internet, Human Genome Project), the commodification of medicine, and changes in the doctor-patient relationship. We will also review our subjects’ comments about medical education because of our interest in understanding how well students are trained to practice in a rapidly changing domain.
B. Findings
1. Technology

Western medicine is no stranger to complex technology; in fact, it owes much of its success over the past century to technological advances. Because medicine is now dealing with technological changes at an unprecedented rate, we asked our subjects to discuss the implications of new technologies on delivering quality patient care. Although most of our subjects did not have a great deal of personal experience with the most recent technological advances, they were still able to discuss the implications of three types of “cutting edge” technologies: the Internet, the Human Genome Project, and other general medical technologies, such as imaging techniques (used for radiological/diagnostic and surgery purposes). While subjects did identify aspects of these technologies that they believe hold promise for providing high quality patient care, they also expressed concerns about their roles and professional identities vis-à-vis technology.

The Internet

The Internet was the most common type of technology our subjects addressed: they view it as the entity that could change medicine most dramatically in the near future. Some subjects view the Internet as a positive force and noted that:

- patients are being more proactive about their diseases than before because of access to medicine sites on the Internet, which in turn can lead to more efficient, productive interactions with physicians;

- more informed, more proactive patients may incur lower medical costs (presumably because they behave in a more health-promoting manner);

- because of the Internet, it is now easier than ever for physicians to be up-to-date on changes in medicine;

- it is possible to have faster and more fluid communication between physicians and patients through the Internet. One subject summed up his thoughts on this matter as follows:
I did see a major future in the way communication would go between doctor and patient, and between doctor and doctor. And, the point is that with the Internet and with the incredible accessibility of information and people through the Internet, there was an opportunity to change the way a lot of medicine is practiced, and that would include a patient getting in touch with her doctor or his doctor . . . [and] A non specialist doctor getting in touch with a specialist doctor. And, in particular, a non specialist doctor getting in touch with the expert in the field (DR016, 13).

- the Internet has improved the practice of "distance medicine"; radiology reports, for example, can be transmitted across great distances very easily via the Internet.

The underlying assumption for the subjects who made these points is that the Internet can be adapted to existing physicians’ roles. In other words, these subjects do not necessarily view the Internet as a threat to their professional identities, and, in some cases, see the Internet as a vehicle to support their traditional roles as healers.

However, a number of subjects expressed concerns about the Internet’s impact on quality patient care. In particular, our subjects identified two phenomena that have the potential to undermine traditional physician roles. First, the accuracy of medical information on the Internet is at times questionable, what one subject referred to as “a lot of garbage and a lot of misinformation” (DR012, p. 19). Prior to the explosion of information on the Internet, physicians were the primary mediators of medical information. At best, patients could consult more than one physician to get second or multiple opinions. Now physicians must compete with web sites, many of them of dubious authenticity, for the dispensation of information.

Second, our subjects fear that physicians will become mere "order-takers/ order-fillers" for Internet-informed patients who have already diagnosed themselves via their
computers. Serving as vehicles for patient wishes in this manner clearly contradicts the traditional physician roles of evaluating, problem solving, and prognosticating.

Subjects also touched on two other drawbacks of the Internet:

- potential violations of confidentiality. More specifically, if the commodification of medicine continues apace and medical reports go online, discrimination against sick people will be easy and more common than it is now;

- a possible widening of the gap between the "haves" and the "have-nots": those who have Internet access will be at an advantage over those who do not. While, as we have noted, some of our subjects are concerned about the quality of information on the Internet, some Internet sites do offer quality information, meaning those without access will not be able to benefit from more reputable sites.

Interestingly, even though our subjects have views on the role of the Internet in patient care, few of them have taken an active, much less a leadership, role in this realm of medicine. This fact, in conjunction with our subjects’ tendency to comment on the Internet in a speculative fashion, may indicate that this technology has been somewhat slow to effect real change in the daily practice of medicine. Although there are indications that the Internet will have a dramatic effect on the practice of medicine in the near future, we may be visiting the domain at a time when widespread or innovative Internet use has not yet become common.

**Human Genome Project**

The physicians we interviewed have mixed feelings about the implications of the Human Genome project, the purpose of which is to use highly sophisticated technology to "map" the entire landscape of the human genome. In terms of patient care, subjects are worried that genetic information could be used by insurance companies (or other bodies) to discriminate against patients with potentially costly conditions. Subjects also fear that genetic information could lead to increased misdiagnoses (having a genetic susceptibility to a disease does not necessarily mean that a patient will ever develop the
disease nor does lack of susceptibility ensure immunity from the disease). These two concerns are about matters that have traditionally been controlled by physicians and are now being taken over by other parties, a fact that poses yet another threat to the role of the physician.

Some of our subjects emphasized important benefits that the mapping of the genome could provide to patients. These include:

- there will be a potential greater focus on preventive medicine;
- pharmaceuticals will be made with greater specificity (because side-effects with a genetic origin can be detected in advance);
- gene therapy, and greater genetic knowledge in general, will eventually lead to improved patient care.
- medications might be developed or identified to target various genomes associated with particular illnesses

Other Effects of Technologies

Many of our subjects raised the concern that as medical technology continues to make advances, there probably will be less time and opportunity for meaningful doctor-patient relationships. Given that the doctor-patient relationship is the cornerstone of most medical specialties, and a strong motivating factor for entering the domain, it is not surprising that our subjects were worried about the impact of technology on this realm.

2. The Commodification of Medicine

While we are certainly not under the illusion that medicine once basked in the glow of an all-harmonious “golden age” (after all, what profession does?), it is certainly true that the advent of new market-driven economic and structural forces—primarily in the form of managed care—have drastically changed the face of the profession and what it means to be a physician. Under pre-managed care fee-for-service models,
physicians had a great deal of professional and financial autonomy regarding provision of care. Although fees were indeed spiraling out of control, physicians were in the position of determining themselves the extent and quality of care to provide patients. And while quality of care varied from doctor to doctor, as it still does today, there was a general feeling among physicians and the general public that patients came first.

Managed care, in one form or another, has altered medicine because physicians must often defer to insurance officials when it comes to providing patient care. The combination of restrictions on numbers of office visits per patient, and the total amount of money to be spent per patient, with often intense pressure to meet quotas for total numbers of patients seen daily, has made it less possible for physicians to have extended consultations with patients and to provide thorough follow-through treatment. Consequently, physicians often feel that it is increasingly difficult to carry out the core values of the profession, and that their autonomy has been stripped from them. Patients believe that physicians are less available than they used to be and that they do not provide the same level of care as they did under pre-managed care systems.

The underlying ideas of managed care are in stark contrast to the philosophy our more seasoned subjects were exposed to during their training. Not surprisingly, many of our subjects expressed great discomfort with managed care and its underlying philosophy of the “distributive ethic.” Although a few believe this approach is fairer and more practical, most subjects expressed deep ambivalence or outright hostility to the belief that their commitment to their patients should be mediated by anyone or anything, including cost.

Our subjects note that both for-profit and non-profit health care sectors have become subject to market forces and more “commodified.” More specifically, subjects point to two main changes that are challenging the integrity of their traditional roles:

A system of payment called capitation, which pays physicians a fixed amount of money
per patient regardless of the number of visits that patients make. While the important benefit of capitation is that it allows health care for a large population (as opposed to a privileged few), it can be seen by some as a disincentive to providing care, since physicians are paid the same amount of money, regardless of the amount of care they provide. As such, this system may discriminate against people needing chronic care, since physicians are not reimbursed for each patient visit, only for each patient.

- Shorter patient visits. In order to see the number of patients required by their insurance contracts, physicians often must limit visits to 15 minutes. Physicians complain that this time limit does not provide them with an opportunity to get to know their patients, and that personal knowledge and a personal connection with patients is vital for quality patient care.

In these cases, which emphasize money and time constraints over doing whatever it takes to provide quality care, subjects are concerned that there is potential for patient interests to be overlooked. The notion of physician as trusted healer becomes more difficult than ever to realize in such a framework.

Our subjects voiced particular concern that a distributive ethic mentality is related to lack of access to health care. As one subject says, “I think the number one issue is access; I think there is still just an incredible number of people who don’t have access to care.” She later explains that she fears “we will get to the point where we will have even more significant differences in terms of different tiers of care for different kinds of patients.” The idea that the American system of health care might become more unevenly distributed is a nightmarish scenario for almost all of our subjects. Most of our subjects hope for universal health care, although a vocal but very small minority (concerned about government interference) disagreed.
3. The Doctor-Patient Relationship

As we mentioned earlier, our subjects view a trusting doctor-patient relationship (DPR) as a cornerstone value of the domain and of their sense of professional identity. We also noted that as a result of the economic and structural changes brought about by managed care, the integrity of the doctor-patient relationship is being threatened. There are other reasons, however, that the DPR is undergoing changes. Many of our subjects express sorrow, anger, and feelings of resignation over this situation, again, because it threatens to alter their traditional roles and what they believe is the very purpose of the profession. In addition to pressures from the commodification of medicine, subjects point to the following causes of the erosion of the doctor-patient relationship:

- Care is increasingly fragmented. Our subjects note that not only are patients switching physicians more frequently (thus disrupting continuity of care), but several new players in the medical field are splitting up medical services. For example, pharmaceutical and disease management companies are encroaching on territory that used to be physicians'. Care is even being divided up in the hospital, with "hospitalists" (physicians who practice solely in the hospital, full-time) taking care of some patients and "intensivists" (full-time ICU physicians) responsible for others.

- Several "acute" diseases have become treatable and therefore "chronic" in nature, which calls for a change in physicians' attitudes and behavior. Diabetes is an example of such a disease; now that it can be controlled with insulin treatments, physicians can develop long-term relationships with diabetic patients.

- The "biologization" of medicine causes some physicians to believe that if an
illness is not obviously biological, it is not "real". This puts a stress on the DPR, because in this model human interactions, upon which the DPR is based, are not considered important to the treatment of disease.

Despite the misgivings of many of our subjects, however, some mentioned three recent positive changes with regard to the DPR. First, a few physicians note that the DPR has become more of a focus of medical training than it was in recent past years, perhaps as a result of the threats to it generated by managed care and technology. For instance, one of our subjects, speaking about a course he teaches, said:

I think that now, there’s a little more attention to thinking about what you bring to the patient-doctor interaction, as well as what the patient brings. As a result, there’s a little more attention to learning about the patient. More than just their symptoms and what their laboratory values are or their heart sounds are, but the rest of them, and also learning more about yourself and that that would be important in taking best care of the patient (DR013, p. 2).

Second, some of our subjects think that the Genome project will likely lead to an increase in preventive medicine. Genomic analysis may lead to identification of health-related risk factors early in individuals' lives; hopefully, this will result in physicians spending more time counseling patients on how to avoid certain specific diseases.

Third, a few subjects mention that there is already a general push to educate patients on healthy behaviors. Perhaps this is occurring as a result of the new structure of American medicine, with its emphasis on lowering costs; when patients reduce obvious, known health risks (by not smoking, for example) they incur fewer medical costs.
4. Medical Education
Most of our interviews focused on the perspectives of the subjects themselves. We asked them to comment, based on their experience and positions, on trends and their implications in medicine. But we also were interested in hearing our subjects’ views on how well medical education is training future physicians to work in a world of managed care.

Most subjects cited a discontinuity between how students are trained and what it really takes to be a physician. Interestingly, although subjects cited the importance of equipping students with technical skills, most of them expressed concerns about how medical education deals with ethical, behavioral and socialization issues. More specifically, subjects said there is:

- too little preparation for dealing with patients who are proactive and seek out information about medical issues on their own (via the Internet, for example);
- a lack of focus on the business dimensions of practicing medicine;
- too much emphasis on training in hospitals, when in reality many physicians end up working in other types of settings;
- an over-emphasis on caring for the individual over the community;
- too much focus on being trained to rattle off lists of possible diagnoses, rather than learning how to determine specific diagnoses;
- a lack of attention to the workings of health care systems and those who do not have access to them;
- too much stress on being an independent practitioner, when, in fact, it is often necessary to learn to function in larger institutional contexts;
- there is too much training spent in inpatient settings (because managed care limits the amount of time patients can stay in in-patient settings), and this does not allow students to follow the course of disease;
- not enough emphasis on non-critical cases
- too little time students and house officers can spend providing care to patients and learning from “attending physicians”, due to the economics of health care
It is perhaps not surprising that our subjects touched upon such a range of points, given that 1) most of them have been working in the domain for a long time (and therefore have seen managed care changes), and 2) most of them work in academic medical centers, which means they have been involved in medical education and, to a certain extent, the practice of medicine, and are therefore in a position to gauge the relationship between education and practice.

A subset of our subjects commented that medical education does not prepare students adequately to communicate with, nor relate in a humane manner to, patients. These subjects stated that there is an emphasis on acquiring technical skills at the expense of learning how to become care-givers in the more enduring sense of the term: engaging in authentic personal relationships with patients as part of the healing process. For example, one subject (DR15) notes that medical education has

never succeeded in...building counseling, psychotherapy, clinical management [into the curriculum]. If you’re lucky, you get an internist who is good at it and exemplifies it and insists on it for the students and the residents. There’s no formal--there’s a little bit of it in a psychiatry course, but it’s a trivial part of a medical education in relationship to the magnitude of the role it plays....the education is so preempted with the technical details of the new marvels that there’s still insufficient attention to the heart of the care.

This sentiment gets to the core of some of the most fundamental tensions in the domain of medicine today. Because the doctor-patient relationship is a central, and some might even say sacred, component of practicing medicine, many people argue that physicians should have good communication skills (listening well, allowing patients time to ask questions, and so on). However, because managed care rewards physicians for spending as little time possible with patients, many physicians have found the need to keep communication to a minimum. For physicians who practiced before the advent of managed care, there is indeed a sense of mourning over the loss of extended doctor-patient interactions, as well as reduced opportunity to communicate with patients in a fully supportive manner.
Despite the institutional shortcomings discussed by many of our subjects, a ray of hope for infusing medical education with some of the more positive aspects of "traditional" doctoring can be found in establishing good relationships with mentors while in medical school. As an example, DR001 illustrates this point with a story from his own medical education:

I was with a former student of mine, now a medical professor, who was making rounds at Beth Israel Hospital a few years ago, and I came on to the floor. He was with a group of students and he was going in to see a patient. He asked me to come along. So I accompanied him into the room. I stood in the back. And, he sat on the edge of the bed and he took the patient's hand -- a middle-aged woman, who apparently that morning had been told that she had Hodgkin's Disease. And, he asked her questions—what are some of the issues that have come up today? what can I do that would be helpful?— in a very, really warm and giving and receiving fashion.

And, when he left the room, he said to the students: “what struck you about that situation?” And one of the students said, “Well, I noticed that you sat on the edge of that patient’s bed and you took her hand.” And, he said to that student, “I learned that from [Subject’s Name] when I was a student here.” Well, I learned it from Dr. Blumgart when I was a student there. I mean, you know, that’s an important part of medical education.

This story illustrates that positive role models—those who place top priority on humane interactions with patients—are an important component of one’s education, especially at a time when the domain of medicine is shifting so rapidly.

IV. Conclusion

The physicians we interviewed suggest that medicine is at a crossroads. Accomplishing good work in this domain is a complex task, and one that must take into account a variety of forces that are beyond one’s immediate control (such as technological and policy developments). What our subjects make clear, however, is that doing good work can and does occur at the micro-level of every day practice: working to ensure quality doctor-patient interactions, using and assessing technological
innovations judiciously, and mentoring junior practitioners. In future studies of medicine we hope to study those practitioners in the “trenches” who carry out good work in such a manner.