Editors’ Comments

High Tech—High Touch: Dilemma or Solution
Tom Janisse, Editor-in-Chief

Within this issue the perspective of several authors converge on the concept of “high touch”—the personal—in medicine. In a future issue we will focus on the rapidly expanding potential of “high tech”—the material—in medicine. To acknowledge the importance of high touch medicine, I would like to comment in this editorial on how this complements new high technology.

In “The Medicine Wheel,” Dr. Louis Montour, a Native American family practice physician with Colorado Permanente Medical Group, speaks about the importance of recognizing that “imbalance within the Wheel causes disorder and unsettles a person’s life; causes unwellness and ill health; and causes symptoms.” These imbalances appear usually in the emotional area, inpatients with chronic pain. He then helps them to restore their balance using the precepts of the Medicine Wheel. Dr Philip Tuso, Assistant Chief of Internal Medicine with the Southern California Medical Group, writes about a successful approach to chronic pain treatment that is based on the “expression of empathy to improve outcome.” Dr Oliver Goldsmith, Medical Director of the Southern California Permanente Medical Group, as he writes about “Culturally Competent Health Care,” notes that this “care requires a commitment from doctors and other caregivers to understand and be responsive to the different attitudes, values, verbal cues, and body language that people look for in a doctor’s office by virtue of their heritage.” In “Out of the Closet,” Dr. Michael Horberg, co-chair of The Permanente Medical Group’s HIV Provider and Therapeutic sub-committee, states that, “My gay and lesbian friends were finally getting the care and attention that they desperately yearned for but didn’t think they had gotten. And I in turn became increasingly attuned to their unique health needs and concerns.” Dr. Terri Stein, Director of Clinician-Patient Communication for The Permanente Medical Group, notes research that “patient satisfaction correlates significantly with patient perceptions about the provider’s humanism.”

As the practice of medicine becomes even more technologic, physicians will increasingly need to discover and use high touch to create balance in their approach to and treatment of their patients. Several examples of high touch and high tech are listed in Tables 1 and 2.

Belief-Based Medicine

Essential to appreciating the value of high touch in medicine is to understand that people—patients and physicians—act and behave based on their beliefs. These could be beliefs based on ancient wisdom, or they could be beliefs based on the conclusions of a randomized control trial (which we call science). Science does not always prevail in the mind of the patient. Is the high rate of patient “non-adherence” commonly reported in the medical literature actually due to non-congruence of belief systems? Physicians may not strongly consider patients’ personal or cultural beliefs because they are not scientifically verified, and thus consider them ineffectual and unimportant. It also may be that some physicians avoid these beliefs because it is personally threatening to leave the safety of training experiences and have to personally invoke their own life skills.

Furthermore, some physicians themselves may not believe medical science, or incorporate it, because it doesn’t fit their experience, practice, clinical judgment or clinical belief system. Here is a clinical example. Using the Acute Myocardial Infarction (AMI) guideline, thrombolytics are underused in eligible patients because of physicians’ perceptions about the risk of a cerebrovascular accident. Also, beta blockers are underutilized in the first 24 hours post AMI at least partially related to physicians’ belief that beta blockers are contraindicated in patients with CHF.

Future Physician Roles

Futurist Dr Ian Morrison cites new roles for physicians in the future in his recently published article in Annals of Internal Medicine called, “The Future of Physicians’ Time.” The eight roles he predicts are: 1. proceduralist, 2. knowledge navigator, 3. clinical data collector, 4. shaman, 5. health advisor, 6. diagnostician, 7. physician manager, and 8. quality assurance specialist. For the purpose of this high touch discussion I would like to excerpt quotes from his article about five of these roles and then expand and comment from my personal beliefs and experience.

In his new book, Health Care in the New Millennium, in a section about how the “old hard core”
managed care pioneers will still have something new to offer in the future, Dr Morrison says: “Kaiser Permanente is trying to prove a point rather than simply make money. And the point is that medicine can be organized, that systems of care can be coordinated, that investment in organization can yield systematic improvement in the way in which patients are managed, and that all this can be combined with compassion and high quality of physician-patient relationships. Coordination of care, integration of services, and compassion for the community have been the hallmarks of these organizations in the past.”

**Proceduralist**

Dr Morrison notes that, “The new proceduralists will be nanosurgeons, digital radiologists, invasive geneticists, and xenotransplant surgeons.” High tech will grow larger in our future, in some cases supplanting the procedures physicians perform now. With some procedures, invasive genetics for example, the personal, behavioral, emotional, and social dilemmas created by the availability of genome alteration will be extraordinary in complexity and consequence. Because of this, it will be necessary to implement more high touch processes like genetic and ethics counseling by the physician.

**Knowledge Navigator**

“Everyone will have access to all of the data that experts have,” Dr. Morrison notes. However, they may not understand it or how to apply it. As people have expanded choice through information, they will be confused about what to choose. People will increasingly need physicians to interpret for and advise them. The important difference for physicians is that they will less often be the source of the knowledge. From the other perspective, physicians will need to listen more attentively to patients’ advice on their personal, familial and community-related beliefs and preferences. The best decisions will come from this advisory relationship. This will require a higher touch—a relationship-based medicine.

**Clinical Data Collector**

Some of the clinical data that physicians now collect and interpret, for example auscultation and “the patient’s appearance and reported symptoms,” will be “replaced by diagnostic probes and sensors.” In any case, physicians will want to and need to collect more clinical data about the environmental conditions, psychological and behavioral patterns, and cultural beliefs and practices that patients express through their appearance and symptoms. These social, mind and spirit considerations can be key etiologic factors in medical conditions. This will require high touch skills and sensibilities.

**Shaman**

Many physicians would consider their role as a shaman far-fetched or inconceivable. Yet there is a long history of the “medicine man” fulfilling this function in the setting of a tribe or a small group or a small town. As Dr Morrison says, “Modern physicians often underestimate the power of their ancient role as a healer.” A lay person’s perspective here is highly valuable because physicians may not recognize how other people perceive and experience their practice of medicine. It may be easier to

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**Table 1. New High Tech**

- E-based medicine
- Internet consumer-clinician communication
- Electronic decision-support smart systems
- Sensor technology
- Telemedicine
- Robotics
- Pharmacogenomics
- Defective gene substitution
- Minimally invasive surgery
- Semi-synthetic organ transplant
- In utero fetal surgery
- Positron Emission Tomography for cancer treatment
- Synthesis of population-based data customized for the individual

**Table 2. New High Touch**

- Service quality with heart
- A view “Through the Patient’s Eyes”^3
- Patient empowerment
- Patient-physician shared decision-making
- Patient education as a powerful new medicine
- Culturally competent care
- Placebo effect as mind control of physiology
- Caring behaviors (comfort, reassure, empathy)
- Mind-directed genetic alteration
- Group clinic patient communities
- Patient to patient education
- Involved multidisciplinary teams that include patients
- Intuition as telepathy
- Intention and human touch to heal
appreciate this future role if physicians consider, as part of their treatment, a continuum from providing information and knowledge, to explaining and educating, to advising during shared decision-making, to counseling for grief, life change, or personal crisis, to praying or deep intention to heal. What is remarkable and hopeful is the extent to which this already occurs in the practice of physicians, though often unrecognized.

**Health Advisor and Wellness Coach**

The fifth future role is the health advisor and wellness coach. Dr. Morrison predicts that “the worried well could be soothed electronically through convenient and timely electronic information exchange with their physician.” While this may occur, I see the continued vital place for a physician’s soothing in person-to-person interactions when the physician listens attentively, carefully, and empathetically. Although this essential human connection happens now, it occurs in a “physical medicine” context, so that physicians view this activity from annoying and ineffective to threatening and personally overwhelming rather than of high value. In a “personal medicine” context this high touch interpersonal approach is “the value” many seek and regard as medical care. As Internet use produces healthcare at a distance, this further disconnection of patient from doctor may leave people at a personal or emotional distance too great to sustain the relationship necessary for advice, medical decisions, and caring behaviors.

**Conclusion**

New high technology is making an increasingly important contribution to the future of medicine. To counterbalance and complement its physical and emotional effects on patients and physicians, new high touch appears to be a solution to this dilemma, and one that rediscovers the person in the doctor and the patient.

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**References**


**Bibliography**


