What I Learned From 10 Years as a Contributing Writer for JAMA

Allan Detsky
The Future

Questions I ask myself as a physician, patient, teacher, mentor, researcher, writer, former administrator
Themes

1. Continuity of Care

Teaching Physicians to Care Amid Chaos

Allan S. Detsky, MD, PhD
Donald M. Berwick, MD

For physicians who were residents in the 1970s (like we were), it was a simpler era for care. A relatively small number of medications were available often 1 or 2 weeks. For good reasons, resident work schedules have fewer total and consecutive hours. A large proportion of the patients cared for by a primary team are admitted by other residents, handed off to them as “holdovers.” Team schedules seem less synchronized, and turnover of members seems more frequent. As a consequence of these scheduling changes, a hospitalized patient is now...

Prioritizing continuity in Canadian clinical teaching units

The general internal medicine inpatient teaching service, frequently called the clinical teaching unit (CTU) in Canada, is one of the themselves with a new roster of patients every day. They understand the thread of clinical thinking underlying their patients’ care plan because they initiated it.
Understanding the Value of Continuity in the 21st Century

S. Ryan Greysen, MD, MHS; Allan S. Detsky, MD, PhD

For most of the 20th century, patients commonly received care from a small number of physicians over a long period of time. Both generalists and specialists followed a large panel of patients in both the ambulatory and hospital setting for many years. In the United States, physicians’ first real experience with associated with increased overuse for 3 procedures (including CT scans of the thorax) and had no apparent effect on 7 others. The signal for decreased use of the 9 potentially overused procedures was very strong. The lack of association or reverse association, however, for the other 10 procedures should
2. Communication

Instant Mobile Communication, Efficiency, and Quality of Life

Jamie Spiegelman, MD
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Human beings have existed for thousands of years, yet the vast majority of technological advances that have improved daily life have taken place in the last 100 years. Why is this so? The stimulus for these advances has largely been from progress in transportation and communication, allowing innovation and ideas to be transmitted from place to place and person to person with increasing ease and decreasing time.

not respond to external stimuli (eg, other moving objects) or perform the manual tasks required to give the device direction. There is abundant evidence that the use of mobile telephones in vehicles causes distraction and increases the risk of crashes.1 Technologies that allow for hands-free, voice-activated communication produce less distraction, but inevitably divert some attention away from the task at hand.

Antisocial Behavior
The use of cellular phones has led to the observation that individuals have become impulsive, impolite, and disrespectful.

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Physician Communication in the 21st Century
To Talk or to Text?

Leora I. Horwitz, MD
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In the 20th century, physicians traditionally communicated with each other using handwritten notes in medical charts, consultant letters, telephone calls, and face-to-face conversations.7 Technological advances in the past two decades have altered the way physicians communicate.

Ask for clarification. Asynchronous communication takes place at different times and originally took the form of a handwritten letter. Currently, e-mail, text messaging, voicemail, chart notes, and whiteboards constitute the principal examples of asynchronous communication in medicine.

Synchronous communication has several advantages. It allows for interaction to clarify confusion, elicit information, and question assumptions. It allows the communications

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2. Communication cont.

Pitfalls with Smartphones in Medicine

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John Lennon’s Elbow

The electronic medical record (EMR) has transformed the nature and purpose of hospital progress notes. While copy-and-paste has played a dominant role in this transformation, other less conspicuous elements have also contributed. These elements are characterized by George Harrison’s “Long, Long, Long.” Student/resident EMR notes are long. The time required to write them is long. Most important, the time span between note initiation and note signature is long. Note time span is a new phenomenon, and unreadable. Unreadability is a problem only if readability is a goal. But these notes are not constructed to be read. They are constructed to warehouse data. All the key information is contained within but as hard to find as a radial pulse beneath multiple color-coded wristbands.

Residents and students expend a great deal of time and energy constructing EMR progress notes. Indeed, residents spend more time each day writing notes than they do seeing patients. A resident’s daily progress is measured by
Reimagining Electronic Clinical Communication in the Post-Pager, Smartphone Era

Communication is the lifeblood of clinical medicine, yet most health care practitioners still use pagers, communication tools developed a half-century ago. Recently, there is increased interest in shifting to smartphone-based communication modalities. Many clinicians use short message service texts directly from their cell phones,1 often in innovative ways,2 and others have supported using secure text messaging applications to avoid violations to the Health Insurance Portability and Accountability Act.3,4

In 1993, Brynjolfsson5 described the "productivity paradox," citing several examples of industries in which digitization failed to improve workplace efficiency until a new generation of leaders, workers, and technologists re-thought the nature of the work. Some of the current concerns and dissatisfaction with electronic health records (EHRs) may represent an example of the productivity paradox in health care, and the simple migration of paging functionality to the smartphone could be yet another example.

It is time to reimagine electronic clinical communication. In the process of retiring pagers, clinical medicine should move to a model that supports a team-based culture of care through more effective, interoperable, and intelligent collaboration. Along a collaborative approach, wherein exchanges about a patient's care, even if primarily conducted between 2 clinicians, could be known and contributed to by all members of the care team.

Under such a collaborative model, the SPA could allow all clinicians, potentially including the patient and his or her family members, to use the tool as a patient's wall (to use a social media metaphor) for discussing issues ranging from preparations for surgery to plans for home agencies to provide postdischarge care.6 Such informal electronic conversations could contain succinct, up-to-the-minute live exchanges between physicians, nurses, consultants, and primary teams, conveying the flow of clinical action in ways that today's documentation simply cannot. This wall could be a module of the EHR built by the EHR vendor, or it could be a standalone application that interacts with, yet remains distinct from, the EHR. One example of such a wall is shown in the Figure.

Leveraging Smartphone Advantages

This reimagining of communications using an SPA-based platform creates an opportunity for substantial innovation in the management of routine tasks. Today, for example, nurses routinely page physicians asking them to order physical therapy, an inefficient process.
3. Restraint

A New Model for Medical Education
Celebrating Restraint

Allan S. Detsky, MD, PhD
Anmol V. Verna, MD, MPH

Health care expenditures are a major concern of governments in Canada and the United States. Over the past 40 years, a variety of approaches have been used to control costs, including global budgeting, managed competition, cost sharing, and pay for performance. Policy makers recognize that physicians play a central role, with some estimates suggesting that physicians control 80% of health expenditures.

Most policy recommendations therefore acknowledge the importance of physicians in implementing changes to health care organization. Fundholding and various managed care organizational structures are examples of policy mechanisms that seek to control physician-driven health expenditures.

Physicians overinvestigate patients’ complaints for many reasons: financial incentives, “defensive” medicine, duplicating tests because of poor system-wide information sharing, or pressure from patients and families. Medical trainees work in an environment that especially promotes the over-use of medical investigation. The majority of medical training occurs in tertiary academic centers with easy access to advanced health care technologies and subspecialists. Unlike experienced physicians, junior trainees may have less confidence in their clinical acumen and therefore order more tests. Perhaps most important, the tradition of medical education, as reflected in examinations and clinical evaluation, emphasizes and rewards thoroughness and penalizes restraint. Multiple-choice examinations reward students who are capable of memorizing facts and rules.
4. Changing Incentives and Payment Systems: From Volume Based to Value Based

Medicare’s Vision for Delivery-System Reform — The Role of ACOs

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Harnessing the Right Combination of Extrinsic and Intrinsic Motivation to Change Physician Behavior

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During the last 50 years, technological progress in health care has been achieved primarily through spectacular discoveries in medications and imaging. More recently, policy makers have focused on changing the behavior of physicians as a way to improve efficiency in the production of health. One approach has been to shift incentives from the quantity of services to a mixture of quantity and quality, known as "value based reimbursement." The Department of Health and Human Services aims to have 50% of all Medicare payments tied to quality or value by the end of 2018.1 As health care financing evolves toward reimbursement schemes in which physicians assume risk, there are important questions to consider regarding the balance of extrinsic motivators (eg, financial reimbursement or other forms of recognition such as awards) and intrinsic motivators (eg, personal satisfaction derived from doing good work, or internal desire to achieve a particular objective). This Viewpoint discusses the complexities involved in determining the amount of income they generated for the group, to a system in which income depended substantially on fee-for-service revenue from patient care.2 Whereas faculty members previously declined clinical assignments, were careless in their billing practices, and sometimes avoided seeing patients, once the system was fully established, division heads had little difficulty getting faculty to perform clinical work, and billing practices improved.

2. Extrinsic motivation "overpowered" by intrinsic motivation: To increase attendance from faculty members at medical grand rounds, the chief of medicine instituted a year-end bonus of $1000 for those who attended at least 50% of the rounds. One mid-career physician stopped attending these conferences because he felt insulted to be paid for behavior that he deemed part of his professional responsibilities. He stated that if the quality of the rounds was not good enough to attract his attendance without financial reward, the rounds likely were
5. Clinical Skills

The Evolution of the Master Diagnostician

Patients seek answers to 3 basic questions. What (if anything) is wrong with me? Is there any treatment that might make me better? Will I recover? A physician’s ability to answer these questions requires skills as a diagnostician, therapist, and prognosticator. Excellent performance across all 3 domains separates great physicians from good ones, but among the triad, diagnosis is foundational. Without the correct diagnosis, proper therapy and accurate prognosis are rarely possible.

The crucible of cost-conscious, quality-oriented, and evidence-based care lies in the mind of the diagnostician who collects clinical data, orders tests, and interprets results. If educators overlook the central role that diagnostic expertise plays in making physicians choose wisely, there is a real risk that diagnostic accuracy may be affected. By the latter part of the 20th century, many infrequently encountered diseases such as hemophagocytic syndrome. She finds the current literature on heuristics and biases interesting and recognizes these patterns of thought in other physicians and her trainees, but she does not identify these pitfalls in her own thinking.

The Diagnostican of the Future

This mid-career physician works in the emergency department of an urban hospital. Like the master diagnostician of the past, he has extensive experience and attuned pattern recognition. Like the skilled diagnostician of today, he is adept at quickly searching for information and understanding probabilistic data. However, unlike his predecessors, he has the ability to use electronic health records (EHR) to rapidly develop diagnostic hypotheses.
Snakes on a Dock

For the past decade, I have been thinking about the way our minds make judgments. It started with research on how financial and other conflicts of interest affect published conclusions and recommendations. My focus then moved onto diagnostic reasoning and metacognition (thinking about thinking). In the last 2 years, I have begun to think about how to teach cognitive processes to medical students, residents, and practicing physicians. These efforts involve explaining theoretical constructs like prospect theory and common biases that introduce error (anchoring, early closure, availability, ego, etc.). But frankly, when I discuss these topics with trainees, I can see their eyes glaze over and their attention wander back to the pressing patient care issues of the day. These concepts are simply too abstract to resonate with most physicians.

Last year we purchased a large floating Styrofoam pad, enabling us to lie on the water during hot summer days. The pad was a big hit; even our grandchildren sat on it (clad in their life preservers, of course). Noticing that many of our neighbors who left their pads on the water continuously had problems with bird droppings, we decided to place our pad on the dock when we left.
Reducing the Trauma of Hospitalization

US health policy analysts and payers are currently focused on the high rate of hospital readmission for patients who have been recently discharged. This issue is a particular concern for people older than 65 years and thus has become a focus of Medicare, which has implemented incentives to reduce 30-day readmission rates. Hospitals that fail to meet targets will be financially penalized.¹ Acting on common sense, rather than evidence and a firm understanding of the causes of readmission, many suggest that rates could be reduced if hospitals only increased efforts to ensure that patients receive enough rest and nourishment. Hospitals should prioritize ensuring that patients have an environment conducive to sleep, with efforts to maintain their circadian rhythm and reduce needless nighttime disruptions and pervasive sounds of monitor alarms. They should also pay close attention to nutri-
Other Favourite Essays
Do Nice Patients Receive Better Care?

Allan S. Detsky, MD, PhD
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Health care professionals provide services to patients. They elicit a description of patients’ problems (the chief complaint and history), examine patients for physical findings, make decisions, involve humanism and encouragement to consider the patient in his/her entirety (including the characteristics described above), variation in care is inevitable resulting from the inherent biases arising from human nature.

Such bias may be so deeply entrenched that it is all but impossible to remove from the human mind. Unintentional bias, which is far more common than intentional corruption, is particularly worrisome because humans are fac-
LESS IS MORE

Hiding in Plain Sight—Resurrecting the Power of Inspecting the Patient

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In the not so distant past, physicians learned their patients’ stories through the history and physical examination, with key findings supplemented by test results and information from the paper medical records or “chart.” In the current era, the order is reversed. Physicians often begin by searching the electronic medical record and then supplement this information by talking to and examining the patient.¹ A properly designed electronic medical record allows for an efficient search of the patient’s medical and social history, physical findings, test results and clinicians’ opinions and plans. An unintended consequence of deriving information from the electronic medical record instead of the patient, however, has been an atrophy of the powers of clinical observation. Inspection is a diagnostic, prognostic, and humanistic tool, as we have learned from our patients and teachers over the last 4 decades. In the spirit of old-fashioned clinical teaching, we seek to pass on (hopefully) valuable lessons from one generation to the next.

The clinical encounter always has a beginning—the time the clinician first meets the patient. This first instant...
It’s a Beautiful Thing

It is more important to have beauty in one’s equations than to have them fit experiment.

Paul Dirac

Nobel Prize-winning physicist Paul Dirac is perhaps best remembered for his preoccupation with “pretty mathematics.” To the amusement of others, he would spend hours tinkering with equations to make them as aesthetically pleasing as possible—even if this meant rewriting the entire proof from scratch. When forced to choose between beauty and other technical considerations, he would almost always choose beauty, which he saw as an inviolable tenet of physics and the ultimate tendency of nature. Today, his quotes ample, patients, their families, and other physicians are always impressed when an internist connects a few seemingly unrelated findings into one unifying diagnosis. Surgeons value grace and finesse in an operation, leading to fewer wasted knife strokes and shorter procedure times. Discoveries of simple yet elegant solutions to vexing problems, like the finding that Helicobacter pylori causes a significant amount of peptic ulcer disease, are hailed as breakthroughs.

Pragmatists may argue that the search for beauty does not fulfill any useful purpose and moreover that it may even be a distraction. They may ask: if the proof is valid, the game is won, the patient recovers; why should we care about beauty? The simple answer is that el-

Underestimating the Value of Reassurance

Birthdays that end in zero provoke reflection on past achievements and future plans. And as the decades advance, one’s health and mortality come into focus. When I turned 50, I wrote about my personal experience with screening colonoscopy. This year, as I turned 60, the Canadian news was dominated by the death of a high-profile politician who had previously revealed that he had prostate cancer, ran a vigorous national election campaign, and then discovered a metachronous lesion of the lung. This case is one of many among those identified by a computerized surveillance system that is used to generate quality indicators for payment. Other studies have reported on the effect of screening mammography on women who are at very low risk of breast cancer. Overall survival. An accompanying editorial pointed out that this result may be generalizable to low-risk early-stage prostate cancers identified by physical examination but not through routine PSA screening. Of the prostate cancers, 88% were palpable tumors, and only 5.2% had been diagnosed by PSA screening tests.

In light of all these “facts,” I finally decided it was time to discuss the issue with my urologist. I intended to consent...
Filling Buckets

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A PIECE OF MY MIND

Systems awareness and systems design are important for health professionals but are not enough. They are enabling mechanisms only. It is the ethical dimension of individuals that is essential to a system's success. Ultimately, the secret of quality is love. You have to love your patient, you have to love your profession, you have to love your God. If you have love, you can then work backward to monitor and improve the system.

Avedis Donabedian

The idea that love is the “secret of quality” in health care, which might be viewed skeptically were it not proposed by the revered health care quality pioneer Avedis Donabedian, conjures a lesson from a children’s book, entitled Fill A Bucket. The book discusses how everyone is born with an “invisible bucket,” which represents a person’s mental and emotional self. People’s buckets are filled by acts of kindness and love and are depleted by negativity and disrespect. Having a full bucket makes us feel

On reviewing his records from the other hospitals, I made two discoveries: first, his symptoms had been recurrent for ten years, and second, a recent echocardiogram, performed by a cardiologist whose opinion I trusted, was normal. When I entered the room, I found a thin man with significant leg edema, and ear lobes that were rhythmically pulsating. His very anxious daughter was with him. The physical exam was remarkable for a very high jugular venous pressure, Kussmaul’s sign, cardiac knock, and pulsatile liver—all leading me to a diagnosis of constrictive pericarditis. I told both the patient and his daughter that I might know the cause of his problem, and more importantly, if I was right we could make him better. She started to cry. We asked the cardiologist on call to arrange a simultaneous right and left heart catheterization, which was performed the next day, confirming the diagnosis. He underwent pericardial stripping a few days thereafter. Six weeks later, he returned to our ambulatory group practice and reported that his

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The Other Generation

What are we going to do about the other generation? How will we ever communicate without communication? “The Other Generation” from Flower Drum Song (music by Richard Rodgers; lyrics by Oscar Hammerstein II)

Improvements in human living conditions occur inevitably over time. The unprecedented rate of change that has occurred in the last 150 years resulted from accelerated technological progress and social changes that allow us to live with more freedoms and at a higher standard than ever before. Simultaneously, the passing of time evokes tension between older and younger generations, each bemoaning their problems with the other. As life gets technologically easier, common generational caricatures emerge: older people feel that next generation lacks work ethic, discipline, and courtesy; young people think the world began the day they were born.

In medicine, generational conflict occurs in a much shorter cycle of time. Senior residents look at the work habits of first-year trainees, who are only 3 or 4 years behind them, with disdain. And this phenomenon pre-dates the recent decade of changes in work hours. The words “lazy,” “entitled,” and “uncommitted” have been used to describe those who followed in the training pathway for as long as any of us can remember.

In an “Open Letter to My Elders,”1 Eric Biondi, an assistant professor of medicine at the University of Minnesota, called for respect among generations. “We need to empower each other, not to undermine or belittle those situations. So let us make difficult decisions on our own first, then teach us if you think we are wrong.

Teach Me How to Manage Uncertainty and Failure Residents are not accustomed to uncertainty or failure; in fact, many got to medical school by “being perfect.” However, in our training and careers, we will make mistakes, some of which will harm our patients. These experiences have the potential to erode our confidence. We need reminders that even our attending physicians don’t always know the answer and that sometimes even when we do our best we won’t succeed.

Help Me Identify What Is, and Is Not, Important as I Make Choices That Shape My Future Career Income, duration of training, competitiveness of fellowships, lifestyle, location, and availability of jobs are some of the factors that influence residents’ decisions about career choices. We need our mentors to help us identify which factors are short-sighted and which will be important in the future. Tell us how you made those choices: when you were right and when you were wrong.

I Look to You for Inspiration Medicine is a long road. But when attending physicians with whom we connect love their work, we know it is possible to find joy in the journey as well. In the early days of residency training, I remember being awe-struck by how much I could learn from my attending physicians. This is a lesson I have never forgotten, and I hope to pass on the same thing to those who follow in my footsteps.
What Patients Really Want From Health Care

Allan S. Detsky, MD, PhD

In 2012, perhaps the most widely scrutinized sector of the economy in North America will be the health care industry. Politicians, policy analysts, academics, and the public share concerns about the state of health care in both the United States and Canada. However, each of these
What Will Stay the Same

• Biology of disease
• People will get sick and eventually die
• They will ask for help
• Someone (hopefully we) will help them
• Health will improve