A Q & A with noted health care futurist Jeff Goldsmith, PhD, provides insight into the specialty's looming challenges and vast opportunities.

By Cheryl Proval

A conversation with Jeff Goldsmith, PhD, is, by definition, unpredictable and always provocative. Currently associate professor of Public Health Sciences at the University of Virginia, Goldsmith began his career in the Illinois governor's office as a fiscal and policy analyst. He served as director of planning and government affairs at the University of Chicago Medical Center and special assistant to the dean of the Pritzker School of Medicine. During a 12-year stint as national advisor for health care for Ernst and Young, Goldsmith lectured on health services management and policy at University of Chicago. He also has lectured at the Harvard Business School, the Wharton School of Finance, Johns Hopkins, Washington University, and the University of California at Berkeley.

His latest book, The Long Baby Boom: An Optimistic Vision for a Graying Generation, will be published this month by Johns Hopkins University Press. He currently is working on a book about imaging and the future of medical practice with Bruce Hillman, MD, a founder and former chair of the ACR Imaging Network and professor of radiology, Health Evaluation Sciences, the University of Virginia, Charlottesville. Goldsmith graciously agreed to share his thoughts on the current challenges in radiology, as well as the future of the profession, with the readers of Radiology Business Journal.

RBJ: By spearheading the adoption of information technology, some radiology groups have vastly increased both efficiency and productivity. There have been concerns, though, that the portability of imaging will turn the service into a commodity. How can radiologists
Goldsmith: I don’t think it’s the ease of access or IT that is to blame for this commoditization so much as the fact that we have had a tremendous expansion in capacity in people and equipment in this industry in the past 15 years. If the expertise to interpret images and the technology to create those images were scarce, that commoditization wouldn’t happen. Since there is a global market for image interpretation, the way you determine scarcity isn’t just by looking at the number of practitioners in the continental United States. The way you avoid commoditization is to create new value—new technology and new expertise in exploiting that technology—to answer new diagnostic questions.

RBJ: With the emergence of the distributed reading model and enhanced electronic communications, do you envision new models of imaging delivery in the future?

Goldsmith: I think we are already seeing them. I think the question isn’t imaging delivery; it is the question of what role the imaging professional plays in both the consultative and treatment processes.

Just because you can get an interpretation done from anywhere doesn’t mean that the job is done. There’s a cycle of interaction between the imaging professional and the people who ordered the test. That cycle relies on strong feedback loops and good communication. Not all of that communication is going to be electronic communication. Imaging professionals are part of a professional community, and it is how they participate in that community that really defines their role, not where they are when they read the scan.

The other thing to say is that one of the key changes in imaging technology has been its enabling the radiologist to morph into a curative as well as a diagnostic professional by connecting imaging to the treatment process. I see that curative role continuing to widen.

One example is the idea that you will have imaging in the operating room—not that you will scan somebody outside the operating room or remove tissue and send it out—but that you will have imaging take place in real time, intraoperatively, in the operating suite. We’ve had this for years with transesophageal echo but that was just the beginning. The role of the imaging professional is becoming central in the provision of critical care services. It isn’t just the interventional radiologist; the idea is that you are going to have, with the emergence and improvement of functional imaging, the radiologist inside the critical care team, not just a remote consultative resource.

RBJ: You have suggested that consumers’ share of high-discretion areas of health care should be increased, and you is going to play all that much role in a decision about whether an MRI is employed to evaluate the damage done by a catastrophic head injury. That’s not appropriate.

For what it’s worth, I haven’t seen a lot of aggression on pushing up the cost share on complex radiologic studies. We’re seeing other approaches: radiology benefits-management (RBM) firms, utilization review of medical necessity of the complex scans, and cutbacks in unit payments, but I haven’t seen people selectively raising cost share for imaging studies, as yet.

RBJ: While many insurers are hiring RBM companies with call centers to control imaging use, the information tech-

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included radiology along with laboratory tests, surgery, and prescription drugs. With physicians today using radiology as the 21st-century stethoscope, how discretionary is radiology, from the consumer perspective?

Goldsmith: I know a lot of imaging professionals who are uncomfortable and push back when a patient or primary care physician requests an MRI for a headache or something similar. There is tremendous patient pressure, particularly because patients are aware of the power of these technologies, to use them in settings where they may be neither cost effective nor clinically appropriate. When very complicated imaging studies that cost somebody $2,000, $3,000, or $4,000 have a marginal cost to the patient of near zero, this lowers the reluctance of the patient to demand the test to zero, even in situations where it’s clinically inappropriate. I think that’s the concern.

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If we do see deep discounting as these RMB firms become more aggressive, I think the fact that an imaging center or a hospital imaging center can demonstrate persuasively that it has screened out inappropriate referrals to the technology may indeed let it lay claim to higher payment rates, or prevent its payments from being reduced.

**RBJ:** In November 2001, Harvard Business Review published an article I wrote that placed the blame for rising corporate health care costs on corporate leaders, essentially because they failed to take an active role in managing the expense. How are they doing today, and would you still say they aren’t using their leverage enough?

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**Goldsmith:** You’ve seen a dramatic reduction in the past five years in the private health-insurance cost trend. It’s down into the mid single digits now, from nearly 15% a year in 2003. I believe the major reason for that was that employers did insist on having their associates bear more of the cost of care. Some people view that as simply shifting the cost onto employees. I do not, because when someone perceives a service or product to be free, it’s freely used. My problem is that a lot of those increases in cost sharing were implemented without regard to the associates’ income levels, so that lower-income employees had huge increases in their out-of-pocket exposure under these health plans, while higher-paid workers felt almost no significant cost pressure.

I also think that, for every employer that had a substantive dialogue with its associates about what actually generates health insurance means is that someone else pays for it instead of them; that the government pays for it instead of them. You add to that the fact that a lot of consumer households are just flat out of cash, and the amount of health care cost exposure has risen to the point that if there is a major medical episode in the family, it’s potentially a very serious problem.

**RBJ:** In the same article, you also maintained that high-quality care costs less. In the interim, quality has been much discussed, and many insurer and government programs have been implemented (including Medicare’s Physician Quality Reporting Initiative program), not always to good reviews from physicians. Are they on the right track?

**Goldsmith:** That’s a great question, and I think the answer is no. What’s happened here is that we’ve taken a fundamentally obsolete payment system that really hasn’t changed in its fundamental structure in 2,000 years and simply doubled or tripled the amount of information required in order to get paid in exchange for a 5% or 8% bump in the unit payment rate.

I think very little consideration has been given to the costs that are being imposed upon the health care system by dozens of different pay-for-performance schemes. I see, particularly in large, complex places like university physician practice plans, that no additional resources are provided to staff to generate the tens of thousands of lines of additional code required so that their faculty physicians can get paid.

The question that is begged is whether we want to continue paying for care under a microscopic per-incident-of-service payment model and simply rely on information technology to increase the volume of the data required for someone to get paid. We need to change how we pay for care. We need to reduce the number of transactions dramatically; some estimates suggest there are 30 billion of them a year.

Look at the half-dozen hurdles to be surmounted to generate even a small payment. It’s just absurd. If that process is interrupted somehow, and you have to go to manual processing, you’re talking about a $50 cost to the insurer for processing a dirty claim—forget about what the provider has to do, to be on the phone, to dig up the record, and to provide the information that was missing.

We have reached the point of no return in administrative complexity. We’re maybe 40% of the way toward automating health care payment, and we need to automate it completely, but I don’t think you want to automate what we are doing now.
beaten back with a stick, but I think that it is going to be an emerging theme of Medicare payment reform; we are going to go back through bundling to something resembling capitulation. When somebody comes in with a head injury, the payment that goes to the hospital—notice I didn’t use the term reimbursement—is going to include imaging services. It isn’t going to be a separate line item.

Then, the question becomes how to pay for something now treated as two separate things, the technical and the professional components of imaging services incident to an inpatient admission. How does that negotiation take place? That is something the federal government will not get involved in, that is going to happen within provider systems. The radiologist would get a piece of the global payment.

I don’t think we are going all the way to global capitation, even with the new digital record technology that enables you to identify completely all of the costs incurred in treating somebody. I do think we are going to see the federal government move aggressively to broaden the envelope of Medicare payment to pay for an episode of illness. To the extent that imaging is required to resolve uncertainty in that episode of illness, imaging payment will take place inside that envelope. I think this is going to be the big policy fight for the field in the next five years.

**RBJ:** How do you suggest that quality be defined in radiology, and what should and shouldn’t radiology be doing to help frame that definition?

**Goldsmith:** That’s a complex question. I am sure that the professionals who study this talk about how you reduce false-positive and false-negative readings. It’s a health services research issue, not a payment issue. The other approach payors are taking, besides the movement toward RBM, is certification. You have the mini panic that is going on right now about what United Healthcare is doing. Clearly, that is the opening wedge to having payors ask some of these questions and demand the documentation that would require imaging professionals actually to push on into patient encounter data to find out whether the consultative advice they provided was accurate or simply generated additional expense. The false positive generates a lot of additional testing or intervention; the false negative generates lawsuits and delays in receiving needed care, so they both generate costs.

What we are dealing with in Medicare right now is holding providers accountable for errors of commission: an infected central line, wrong site surgery, or leaving the sponge or a surgical instrument inside the patient. That’s a whole lot more clear cut than an inappropriate reading of an image. I don’t see that same kind of logic being applied to imaging interpretation. I think they are going to take other approaches to dealing with it: negotiating on the rates and trying somehow to screen out the obviously inappropriate requests for imaging studies in the first place.

I heard an RBM presentation a few weeks ago in which the person said there was a huge variation in the denial rates, depending on which physicians were ordering the tests. The double-digit denial rates, in the mid teens, were from family practitioners and internists. What that suggests is that the feedback loop between imaging professionals and their colleagues who request consultations needs strengthening, and a dialogue needs to take place within physician communities about what the appropriate uses of these technologies are.

**RBJ:** Many radiologists would prefer not to risk alienating their referrers.

**Goldsmith:** Sure; again, that’s one of the not-so-little things that is going to happen if we see bundling. Unnecessary imaging studies simply drain the pool of money available to everyone. The dialogue gets forced by chief medical officers and clinical leaders inside provider systems.

**RBJ:** As a proponent of consumer-directed health plans and, in general, empowering the consumer in the management of health care, why do you think that employers, payors, hospitals, and physicians aren’t doing more to make this happen?

**Goldsmith:** There are a lot of conspiracy theories as to why adoption hasn’t been more rapid. Regina Herzlinger’s recent book, *Who Killed Healthcare* (McGraw-Hill, 2007), is a summary of those arguments. I don’t agree with her thesis. I think the main driving force that has slowed the adoption of consumer-driven health plans has been the declining rate of growth in health-insurance premiums that we’ve seen over the past five years: 6.5%- and 7%-a-year renewal quotes may seem like a lot, relative to the rate of inflation, but they are less than half of the renewal quotes we were seeing just four years ago. I think it has dampened employers’ enthusiasm for trying something new.

The last time employers tried something new—managed care—there was a huge backlash, so the benefits-management or human-resources community is fairly cautious. The last things they want to do is in an environment where the market for skilled labor is still really tight: are to pick a fight with their associates over health costs or to try to teach their associates a brand-new coverage paradigm (in which, by the way, associates bear a lot more economic risk).

If we see health-insurance premiums going back up, I think we are going to see a lot of players say, “Ah, now it’s time for us really to do something about this.” I think the sense of urgency has really drained away, anywhere else in the economy, a 6.5%-to-7% increase is viewed as a problem. In health care, it’s a victory.

**RBJ:** Health care reform is back on the political agenda. What recommendations/caveats would you make to any president who would attempt to revisit the managed-competition model, and health care reform in general?

**Goldsmith:** I think there is a big reality gap here. I don’t think most of the Republican candidates understand that it isn’t the 1980s anymore—that there isn’t a lot of slack capacity or competition between providers (except in imaging), nor is there a lot of competition between health plans. Most of the hospitals in a medium-sized or large city are owned by two or three actors who have no interest...
in cannibalizing each other's rate structures to gain market share. Many hospitals lack the bed capacity to take additional patients.

Two or three health plans may control as many as 80% of the covered lives, and have no interest in their stocks going down because they've tried to grab an extra 10,000 or 20,000 lives with lower rates. The idea that there is this enormous competitive force to be unleashed in health care is just absurd. Competition in most health care markets is over. It never existed in most of our nation's rural areas or inner cities in the first place. The parallel delusion, that you can reform health care with tax cuts, you just listen to and walk away shaking your head.

You can't delegate the difficult tasks to Mikey and expect Mikey to do any better job than you can, and the health plans were Mikey. Health plans went out there and tried to rearrange the risk associated with health care costs in the 1990s, and they got their tails kicked politically. The idea that you can postpone making the
genation is going to crater our economy and drown our society under entitlement costs are just dead wrong, and I make that case in the book.

**Goldsmith:** I'm almost 60 years old and still skiing bumps, so maybe I've got a sampling problem. The point I've made in the book is that baby boomers have basically torn up every script that society has handed them and written a new one, in every stage of their lives, and they're going to do that for the next 20 years, as well. Only about 15% of my generation plans on ceasing to work at age 65.

For every person who is planning on putting their feet up at 65, there are four or five others for whom retirement means ceasing to do something that is boring and uninspiring to them and beginning to do something for themselves. In a surprising number of instances, it involves starting a new business or new enterprise. Boomers are going to have the capital-resource position and knowledge to do those things, which simply weren't there 20, 30, or 50 years ago. By 2015, boomers will control close to 60% of all of society's hard assets.

**RBJ:** You have been an opinion leader with regard to the role of technology in bringing the field of medical imaging to the center of the health care delivery system. Can you comment on the emerging role for tomorrow's imaging professionals (radiologists and executives alike) in harnessing these sophisticated technologies in a way that can transform these practitioners into true leaders?

**Goldsmith:** I think it is a mistake for imaging professionals to cling to a broken economic model or to milking mature technologies and not creating additional value. The way the imaging community wins in the next 20 years is to continue disrupting medicine and generating new tools and knowledge that enable their clinical colleagues to make better and safer decisions.

We're on the threshold of image-guided focused ultrasound, which is going to be enormously exciting. We are on the threshold of a whole array of intraoperative imaging tools that will dramatically improve the effectiveness of surgical oncology. We're seeing miniaturization and attendant cost reductions in ultrasound and other modalities that are going to make an enormous difference. We're going to have a whole new toolset brought to us by molecular imaging that may eliminate the need to take tissue samples and remove them from the site of care in order to find pathology. You need to think strategically about all of these things: radiology is moving at lightning speed compared to the rest of medicine. Keep moving.

The other thing that is happening is that the health status of older Americans is improving at an accelerating rate. The disability rate of older people is falling, the percentage of people institutionalized even after age 85 has plummeted, and those trends are likely to continue, in spite of the concerns about obesity. Not only are boomers motivated to continue working and contributing to society for much longer than any recent generation of older Americans, but they are going to have the resource position and the health status to be able do so. I think a lot of the catastrophic forecasts that this

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**Reference**