Developing a Policy-relevant Research Agenda for the Patient-centered Medical Home

Bruce E. Landon, MD, MBA; James M. Gill, MD, MPH (STFM); Richard Antonelli, MD (APA); and Eugene C. Rich, MD

Dr. Landon is an associate professor of health care policy at Harvard Medical School and chair of the SGIM Research Committee; Dr. Gill is president of Delaware Valley Outcomes Research; Dr. Antonelli is medical director of Children's Hospital Integrated Care Organization in Boston, MA; and Dr. Rich is a scholar in residence at the AAMC and a past president of SGIM.

Amidst the debate about health care reform, a clear consensus has developed around the notion that primary care needs to be at the center of a reformed US health care system. The Patient-centered Medical Home (PCMH) has emerged as the leading strategy around which primary care will be redesigned. The core principles of the PCMH model build upon the core concepts of primary care that include accessible, coordinated, comprehensive, and continuous care in a healing physician-patient relationship over time. Added to these basic primary care concepts are features that improve quality of care, improve patient centeredness, organize care across teams, and reform the payment system to support the delivery of enhanced primary care services under this model.

Although the core principles of the PCMH were adopted by the major primary care associations in 2007 and endorsed by more than 500 other organizations since then, questions remain about how to cross the gap between the current primary care system and that envisioned under the PCMH. The core principles of the PCMH serve as a general guide but do not necessarily specify the required capabilities of PCMH practices, the optimal reimbursement strategy, or the ideal methods for facilitating the transformation of current practices to meet the ideals of the PCMH model of care. Thus, although the implementation of the PCMH should be grounded in an evidence base supported by scientific research, new research must accompany policy development so as to inform the optimal implementation of the PCMH and track the effects of the PCMH on care delivery.

Recently, SGIM led a collaborative effort with the two other major academic primary care physician societies—the Society of Teachers in Family Medicine (STFM) and the Academic Pediatric Association (APA)—in a continued on page 10
ETHICS CHALLENGE

With flu season rapidly approaching (although it never really left) and public health experts reporting that up to 50% of the US population will contract H1N1, hospitals and clinics are planning for a marked increase in patient volume—a new kind of “disaster.” Fundamental to the implementation of appropriate contingency plans will be frank discussions of the bioethical issues involved. The threat of chaos and panic in the face of pandemic infections mandates that we develop explicit plans and policies based on a number of important questions: How will limited prophylactic treatments be distributed? How will limited resources (medications, ventilators, beds) to treat established disease be distributed? How will we balance public health needs with individual rights in enforcing a humanitarian obligation to avoid infecting others? What is a health-care worker’s (HCW) duty to treat in the face of an as-yet unknown mortality/morbidity risk? If there is a duty to treat, does the same duty extend to all HCWs? How does a HCW balance professional duties to treat with equally important family duties to care for loved ones and rear children?

These are just a few of the many uncomfortable and often unspoken key issues that will come into play in the event of a true pandemic. The consequences of not addressing them with advanced public input and transparent reasoning could themselves be disastrous.

At first glance, some responses may seem obvious. Of course providers will come to work; of course we will treat everyone according to their need; and of course we will provide the highest standard of care to everyone at all times. These are idealistic and naïve reactions. In recent history, there has been a trend among physicians to refuse to provide care at a risk to themselves. There were physicians in the 1980s who refused to care for HIV patients, and in the SARS epidemic some health care providers in Canada were unwilling to assume the risk of coming to the hospital, especially when it became clear that some providers were being infected while providing care. In one survey study, as many as 20% of physicians would be reluctant to provide care that might put themselves at risk. Almost half of public health workers in a 2005 survey indicated that they “would not report for duty during a pandemic.” Add to these numbers an estimated 15% infected HCW workforce, and the potential shortage of providers becomes frighteningly obvious.

Clearly the principle of nonmaleficence (the duty to do no harm) dictates that sick HCWs stay home so as to not infect others. But what of healthy providers who might choose not to come to work to avoid personal risk? Are there grounds to imply a duty to treat? What about providers who are immunocompromised and at more risk for contracting illness? Do the same rules apply to them? What if the HCW has sick children at home? In a thorough investigation of five defenses commonly put forth to support the concept of physicians’ “special duty to treat that obliges them to take greater risks in their efforts to aid others than would be required of

continued on page 11
The opportunity to watch these patients live active and generally fulfilling lives into the late decades inspires me and gives me hope that my future might look like that, too.

Little by little I learned more about her during our visits. She was one of nine living siblings in a close family of second-generation Italian immigrants. A widow, she lived in a “triple decker” home in a working-class Boston suburb with a sister and a son downstairs. About a decade after we met, she used the few extra moments at the end of a visit to tell me this story.

She married just before her husband was drafted during World War II. He returned from the war a changed man. He was violent, drank, and beat her. This went on for years, and she told no one. Eventually, in a drunken rage, he threw one of their children down the stairs. That motivated her to leave him, but she had no resources of her own. She ended up on Medicaid, helped out by her family. Even after they divorced, her husband stalked her. She remained in fear of him even when she went to places like the grocery store. She described the day he died as “the happiest day of my life.”

I was dumbfounded. I asked, “Why didn’t you tell your family about this?” Her answer was matter-of-fact. “What good would that have done? My brothers would have killed him, and they would have ended up in jail. Who would have taken care of me then?” So she endured.

It was hard to imagine this strong woman as a victim of domestic violence. It was even harder to understand how she survived her ordeal without bitterness, depression, or descent into substance abuse, as many others do. I was inspired by her lesson about the strength and resilience of the human spirit.

Hearing Mrs. C’s story also put a human face on a problem that I had only understood in the abstract. It taught me an unforgettable lesson. Of course, I had been taught to screen every patient for safety, but it had never occurred to me to ask Mrs. C that question. Arguably, it would have made little difference to uncover the domestic violence since her husband was already dead, but there might have been threats from others. More important, asking the question might have given her the opening to share her secret sooner. I question might have given her the opening to share her secret sooner. I was inspired by her lessons with you.

Mrs. C, as I’ll call her, died last February at the age of 97. I became her doctor during my internship when I inherited her from a departing resident. When we met, she was 65 years old and was blessed to be largely free of chronic disease. She rarely complained of symptoms, had a warm manner, and was generally optimistic about life. In short, she was pretty much an ideal patient for an inexperienced resident. Just seeing her name on my schedule brightened my day, even if it was post-call.

At the end of our visits, Mrs. C always wanted to give me a big hug. Initially, this made me uncomfortable, and I wasn’t sure what to do. I didn’t think that this type of physical contact was appropriate professional behavior. Secretly, I worried that maybe she didn’t take me seriously as a doctor because of my youth and gender. Over time, I relaxed about it and decided that it was better to enjoy her affection than to try to set limits or discourage it. It didn’t feel that any important doctor-patient boundaries were being breached, it made her feel more cared for, and frankly it made me feel appreciated, too.
**Guide 2 Twitter 4 #SGIM Members: Common Misconceptions & Tips 2 Get Started**

Vineet Arora, MD, MAPP (aka @futuredocs)

*Dr. Arora is assistant professor of medicine at the University of Chicago.*

What is all the fuss about Twitter? Why would anyone even do it? How do you do it? If you have asked one of these questions, here are some common misconceptions and handy tips to help SGIMers approach the fastest growing social media platform in the world.

**Common Misconceptions**


2. *No one is interested in what I had for breakfast.* While some millennials use Twitter to report the intimate details of their life to the “what are you doing?” prompt, this is not the norm. Twitter is a way to educate, connect, learn, promote, advocate, and engage with a community of people that you would not otherwise know (unlike Facebook which is usually reserved for “friends” or “friends of friends”). There are also many health uses for Twitter. Check out: [http://tinyurl.com/140uses](http://tinyurl.com/140uses)

3. *I don’t have time to tweet.* You don’t need a lot of time to type 140 characters. It’s actually quite liberating since it’s not impolite to be brief. You can integrate tweets into your day. When reading interesting online articles, you can use the “share it” or Twitter icon to immediately tweet the article with ease. Even without a smartphone app, you can tweet from your phone via text. Do not feel compelled to “read” all the tweets you missed or to tweet everything that comes to mind. You may want to disable emails when someone is following you or sending you a tweet. That could be very time-consuming. Twitter is a big cocktail party that you are dropping in on from time to time to listen to what people are saying and join in. Do set limits to the amount of time you will spend on it. Certain programs (Tweetdeck) make it easier to tweet and follow people.

4. *I will not get anything out of it.* Like all things, you get what you put in. I am connected to a rich network of real people ranging from medical trainees to media and business leaders all over the world. Health care reform, social media, and the Iranian revolution are just a few of the areas I have used Twitter to learn about. If you are following someone and they are following you, you can “Direct Message” them privately, which is a nice resource. By tailoring who you follow, you can decide what you will learn on Twitter. For example, researchers may want to follow funding agencies—@RWJFNews, @AHRQNews, and @NIHforFunding.

5. *No one will follow me.* Some people will definitely follow you if you follow them. People will also follow you if you start tweeting and “retweet” them—or repeat what they are saying. You have to start somewhere.

6. *People will think I’m weird.* The only people who will think that are not on Twitter. The Twitter crowd is very friendly to new “Tweeple.” Just ask @medrants or me. The key is to be social and start talking!

**Getting Started**

1. **Get a Twitter account.** You will not be able to understand what Twitter is without one. Don’t worry so much about what you will do with it. Your goal is to just get familiar with the website.

2. **Select followers.** Go to the Twitter directory [http://wefollow.com](http://wefollow.com) and search for categories like doctors, medicine, or other random categories (news, etc.) you would like to learn about, and select some people to follow so you can see what they are saying.

3. **Lurk for a bit.** You may want to lie dormant or lurk before you start tweeting. I actually lurked at @vinnymarora awhile before starting a new account—@futuredocs. As a lurker, your goal is to get more familiar with how tweets are posted, what a “retweet” is, and how messages are kept under 140 characters.

4. **Decide what you want to tweet about.** Health care reform? GIM? Disparities? Quality of care? These are just a few topics SGIMers may be into. After you’ve seen what’s out there, you will get ideas. Ideally, you are tweeting about something you know quite a bit about (so it’s easy!) and is appealing to someone out there.

5. **Decide what you don’t want to tweet about.** My general rule is not to tweet about anything that could get me in trouble with my employer or at home. Remember that disclosing protected health information in a public medium is a HIPAA violation. In the words of @Doctor_V, “Remember what happens on Twitter stays on Twitter.” Check out his tips [http://tinyurl.com/lno7pu](http://tinyurl.com/lno7pu)

6. **Get a “twentor,”** also known as a Twitter mentor. Mine is @anitasamarth, my former college roommate. She helped me get started and overcome my...
Microblogging in Medicine
Bradley H. Crotty, MD; Arash Mostaghimi, MD, MPA; and Andrew Schutzbank, MD, MPH

Drs. Crotty, Mostaghimi, and Schutzbank are internal medicine residents, Beth Israel Deaconess Medical Center, in Boston, MA.

Twitter, as described in Dr. Arora’s article, is a microblogging service that allows users to broadcast “tweets” of up to 140 characters in length to a group of self-selected followers. While much has been made of Twitter’s rapid growth and adoption in the lay press, it is unclear whether Twitter itself will be a passing fad or here to stay. Whatever comes of Twitter’s fate, it is clear that brief uncensored broadcasts from users will take their place next to e-mail, mobile phones, and text messaging as the latest in a series of electronic communication breakthroughs. The unique nature of microblogging may enable a form of augmented communication that will enable physicians to share and use information as never before.

The 140-character limit is the defining feature of Twitter. A discrete limit on length creates a culture where brevity is encouraged, thereby limiting the depth and complexity of any given broadcast. Because of this characteristic, Twitter can serve as an adjunct asynchronous communication tool that may fill gaps that are regrettably commonplace in the hospital. Many discussions held in the hospital are conducted directly from one person to another, and it is often difficult to bring all members of a multidisciplinary team together at once. While chart notes provide a snapshot of decision-making at one point in time, Twitter offers a one-to-many approach that could do away with redundancy or lapses in communication while providing a chronologic flow to the patient’s care.

Given their brevity, Twitter updates are unlikely to capture many of the nuances of our patients. However limiting in some regards, Twitter’s concision is also uniquely enabling and reduces the barrier of entry to communication. While one may not be willing or able to call multiple friends simultaneously about a discount at the supermarket, it is easy enough to tweet “buy one get one free cookies—yum.” We can expand this concept to the hospital, where a steady stream of events that may not warrant a phone call or page—a slightly low blood pressure, a missed or delayed medication, or a delayed imaging study—may instead warrant a tweet.

Thinking broadly, what happens if we expand tweeting such that actions in the electronic record automatically generate a tweet? The very thought of automated tweeting, allowing a physician to know whether a patient is on the floor or off at a study, would surely make the day of any consulting physician. Would a tweet informing you that an elderly patient did not fill his prescription for antibiotics change how you would follow up with him?

But if microblogs are to cut through the “noise” of modern communication, what happens if we are inundated with irrelevant or innumerable updates? Just as Google enables us to extract information from the Internet when we need it, sophisticated search and filter technologies are already in development that will allow us to mine information from tweets on demand. Tweets can simultaneously be stored as a searchable database and delivered through any array of filters to a physician dashboard. Patients can make use of this as well. Your 4:30 clinic cancellation may not matter to your entire panel, but that one woman who has been putting off having her shortness of breath evaluated and who happens to be in the area might be motivated to give your office a call.

Liability, responsibility, privacy, and reimbursement are components of professionalism in a digital era that often lag behind new technology. Cautious not to hinder innovation, these must be carefully considered prior to any true demonstration of use. A third-party company is not the place for sensitive patient information, and as such Twitter the company represents more of a concept rather than a solution.

The combination of an easy-to-use interface and the powerful potential of back-end technologies to search for data and signals is the true potential of microblogs such as Twitter. Given the intrinsic limitations of the medium, technologies such as Twitter are less likely to replace current forms of communication than they are to provide us with technology to augment communication.

Rather than overloading us with information, we can share and access this information in a logical fashion that adds value to patient care, research, and quality improvement. Microblogging services such as Twitter are in their infancy, but the robust potential for this form of communication should encourage physicians to experiment in their own practices to determine potential implementations of this new forum.

Thinking broadly, what happens if we expand tweeting such that actions in the electronic record automatically generate a tweet?
So how did a previously politically apathetic resident with minimal income suddenly develop the audacity to think that he could actually change things by spending a few hundred dollars and flying to Washington, DC?

Well, I can’t pinpoint any one “Aha!” moment, but there have been a series of frustrations with the system I was thrown into as a medicine intern that spurred me to learn more. First, I got tired of admitting the same uninsured patients without primary care to the hospital again and again and again. Second, there were the preventable complications of diseases. (I have sadly lost count of how many diabetics without primary care doctors I have sent for amputations.) Third, and perhaps most important, I realized that the subspecialist practice of saying, “You should see your primary care doctor about that” was more of an avoidance mechanism than a solution.

Looking for an outlet for my frustrations, I happened upon a session about advocacy at the SGIM Midwest Regional Conference. The speaker suggested I speak with my Congressmen, and I did not really believe it would help. But the idea stuck, and I booked a ticket to DC before I could chicken out. (If you are so inclined, I suggest you stop reading and go buy your tickets now.)

I was more than a little nervous about spending some of my minimal savings to go to Capitol Hill. I was in no position to be speaking intelligently with congressmen or their aides.

Looking back on it, the feelings were very similar to the beginning of internship. For internship, I read a lot and relied on the support of my resident and attending—preparing for Hill Day was no different. The SGIM website has excellent reading materials.

On the night of my arrival, we had an informative dinner meeting. I met people from around the country—some novices like me, others well versed in advocacy who had played a very active role in specific legislation. Everyone was supportive and welcoming. At a roundtable discussion, I learned more about RVUs, CER, and Title VII. Much like internship, all of these concepts and ideas suddenly took on added meaning because I was going to actually use my knowledge.

I walked past the tourists the next morning with a sense of purpose. Normally, you meet with elected officials along with the others from your state. However, as the lone Illinois constituent, I was to meet with the Congressmen alone. (I don’t want to do this again, Illinois. We are a populous state; consider this a challenge.)

As I reviewed my schedule, my nerves must have been showing, because a Hill Day veteran volunteered to accompany me. Again I was reminded of the beginning of internship. Back then, I was the “doctor,” but I actually had a whole team behind me. I felt the same way on Hill Day, and I knew I had backup in that Congressional office.

I successfully arrived at the first meeting, and the senior staffer welcomed me to Washington by saying, “I only have ten minutes due to an emergency meeting.” Despite the added pressure, I was very well prepared. I ran through the important points (already laid out for me by the Health Policy Committee), told some relevant personal stories (as advised by the Health Policy Committee), and suggested they do something about it by giving them a few specific actionable items.

I left that office feeling like my voice had been heard for the first time. I had never known how to frame my discussion before. My frustrations had been aired, and I was able to suggest meaningful actions that Congressmen could take to try to correct them. I continue to advocate using the techniques I learned on Hill Day when I e-mail the staffers I met with last year about important issues as they arise. I have a voice in the current health care reform discussion because I went to Hill Day 2009.

SGIM does not have millions of dollars to spend on lobbying. They instead rely on all general internists to volunteer their time to come to DC and share their experiences. They will give you the means to make your voice heard, the resources to hone that voice, and the chorus to back it up with evidence and expertise. Please take all your passions and frustrations about general internal medicine and the health care system and join me at Hill Day 2010. It will be well worth the trip.
Well, How Did We Get Here? A Brief History of Government Involvement in Physician Reimbursements
Patricia Harris, MD, MS

When Congress created Medicare in 1965, it specifically did not involve itself in regulating physician reimbursements. Congress did not want physicians to have a disincentive to treat Medicare patients, and Medicare allowed for locally determined, “reasonable” charges. Without any constraints, fees rose. Those heady days ended in 1976 when Congress implemented the Medicare Economic Index (MEI, established in 1972).

The MEI limited fee increases by tying them to inflation rates, and in 1986 Congress responded to budgetary constraints by freezing fees. Physicians, the groups that represent them, and government have been sparring ever since, adding layers of bureaucracy in an attempt to fix the system when it goes awry and putting all players on the defensive as we work on health care reform.

These layers of bureaucracy have led to the creation of an alphabet soup of panels, formulas, and legislation. For the not-faint-of-heart, here is a sampling (with commentary):

- **Physician Payment Review Commission (1986):** Congress wanted independent advice (plus some oversight) regarding Medicare spending, separate from the Health Care Financing Administration’s (HCFA) influence. It continues today as MedPAC, although it has no oversight role.
- **CMS (2001):** Combined Medicare and Medicaid Services is a name change from HCFA, which oversees these entitlements.
- **MedPAC (1997):** Medicare Payment Advisory Commission is an independent federal body, mandated in the Balanced Budget Act. Its 17 members (including physicians, non-physician stakeholders, and experts) are appointed by the Comptroller General and serve rotating three-year terms (subject to renewal). Their latest report is available online.1
- **OBRA (1989):** The Omnibus Budget Reconciliation Act provided for the implementation, in 1992, of a new system for physician services—the MVPS.
- **MVPS (1989):** Medicare Volume Performance Standard is a fee schedule payment system that replaced the previous “reasonable charge” system. The new system addressed two major issues. The first issue was to dampen the rapid escalation in payments. Medicare spending for physicians’ services had increased at an average annual rate of 11.7%, far faster than inflation or Medicare enrollment predicted. Second, it addressed the issue of “reasonable charges” and the possibility that they were not reflective of actual resources used.
- **RBRVS (1989):** Resource-Based Relative Value Scale was created by OBRA to streamline physician fee scales and reduce disparities in reimbursements. It assigned relative value units (RVUs) to various aspects of physician activities, including work, practice expenses, and liability, while adding geographic adjustments. The RBRVS currently determines Medicare reimbursements.
- **CPT (1965):** Current Procedural Terminology was developed and licensed by the AMA to codify every medical service and procedure. CPT codes are currently tied to the RBRVS and determine Medicare reimbursements. Private insurance companies use Medicare rates as guidelines, enhancing the influence of CPT codes (and hence the AMA) on physician pay.
- **RUC (1991):** The Relative Value Scale Update Committee was the AMA-created panel to advise Congress on “refining” the RBRVS. When Congress conducts its mandatory five-year review of the RBRVS, the RUC submits its reimbursement recommendations. The AMA appoints the 29 voting members of the RUC, including the 23 from “designated specialty societies.” Given total Medicare billings, primary care groups are underrepresented, while groups with proportionally smaller total billing (e.g. spinal surgery) are overrepresented. RUC meetings are not secret—anyone can request an invitation—but one cannot report on the meeting’s content. RUC members are volunteers, but they are often supported by well-funded physician groups with strong voices. Of note, the AMA boasts that “CMS has recognized the expertise of the RUC by adopting 95% of its work relative value recommendations.”2
- **SGR (1997):** The Sustainable Growth Rate was created by the Balanced Budget Act to supplant the MVPS. The SGR makes up part of the formula that CMS must use to calculate Medicare reimbursements. It is tied to the GDP and must maintain budget neutrality. When Medicare expenditures exceed targets, CMS enacts payment cuts, and only Congress can alter this. Despite physician advocacy, reimbursements were cut by 4.6% in 2002. Since that time, Congress has had to intervene yearly to halt SGR-mandated cuts.

Where are we going?
Physician responses to cuts in Medicare reimbursements have not been to accept lower salaries but rather to increase their volume of Medicare services.1 Actual payments influence recommendations for the following year, thus maintaining the increased reimbursements. The result continued on page 10
A 42-year-old man presents with dysarthria. It started five months ago with mild slurring of his speech. As the symptoms were mild and not progressive, he did not seek medical attention. Over the last month, however, he notes a slight progression of the slurred speech and the development of a lisp. His friends also now notice it, so he decided to see his PCP for evaluation.

Dysarthrias, which generally manifest as a lack of understandable speech, have many etiologies. While neurovascular disorders would be most common, his gradual progression over five months would be an atypical presentation of a stroke. The insidious onset would suggest a process that is subacute and progressive. A differential diagnosis might include degenerative disorders, chronic infections, demyelinating or infiltrative processes, metabolic disorders, or malignancy. Further information would be helpful to narrow down our differential, including a history of any associated neurologic or constitutional symptoms, a detailed family history, and a social history.

The patient denies other neurologic symptoms, including no focal weakness or numbness, dysphagia, memory loss, confusion, seizures, headaches, or loss of consciousness. On review of systems, he denied weight loss, fevers, chills, or night sweats.

He has no significant medical history and no prior surgeries. He does not smoke, drink, or do illicit drugs. He works as an accountant. He is a homosexual male, monogamous with one partner for the last six years. Family history is unremarkable.

As most genetic neurodegenerative disorders likely have some immediate or distant family history, so the unremarkable family history in this case makes these unlikely. Most malignancies and chronic infections present with associated symptoms like headache, seizures, or constitutional symptoms. Thus, the lack of this history decreases the likelihood of these etiologies as well. Finally, metabolic disorders stemming from alcohol or drug abuse or endocrine abnormalities like hypothyroidism also appear unlikely due to the lack of this social history or associated symptoms. Demyelinating or infiltrative processes seem to rise on the list of differential diagnoses, however, and this continues to be a category with multiple etiologies, including infectious and inflammatory disorders. A good neurologic exam is essential at this point.

On physical exam, he is well appearing but has dysarthria. Vital signs are as follows: afebrile, blood pressure 117/71, pulse 64, respiratory rate 12. The remainder of his general exam is normal. His neurologic exam demonstrates dysarthria, especially with the “m,” “l,” and “r” sounds. Cranial nerve exam is otherwise normal, including no facial droop, a symmetric smile, a symmetric palate rise, and no significant facial muscle or tongue weakness. His motor strength is 5/5 with normal DTRs. Sensation is intact to light touch, proprioception, and pain. Gait and finger-to-nose and heel-to-shin maneuvers are normal. There is no dysdiadochokinesia or evidence of meningismus.

We can attempt to determine the anatomic lesion(s) with the physical exam. The isolation of specific consonant sounds that are difficult for our patient may be initially classified as either a flaccid dysarthria or mixed dysarthria. Flaccid dysarthrias generally are related to lower motor neuron deficits in the medulla and lower pons, making it difficult to use the lips to enunciate words that begin with “b,” “m,” or “p.” Additionally, some vibrative letters like “r” are difficult. This is usually accompanied by other neurologic deficits. Of note, the detailed neurologic exam, including the cranial nerve exam, appears otherwise normal. Without a clear single anatomic lesion pinpointed on neurologic exam, the possibility of a demyelinating or infiltrative process, like multiple sclerosis, should be suspected. An imaging study would be helpful, and I would recommend an MRI. An HIV test should also be considered as this test may alter our differential and management. He indeed has HIV risk factors.

Initial labs return with a normal basic metabolic panel, liver function tests, and CBC. An HIV test is pending. An MRI done the following day shows several small white matter lesions scattered throughout the brain, including the splenium of the corpus callosum. Radiology suggests a diagnosis of multiple sclerosis given involvement of splenium of corpus callosum.

The finding of scattered white matter lesions may implicate infectious etiologies (e.g., progressive multifocal leukoencephalopathy (PML), Lyme disease, syphilis, HTLV-1, Toxoplasma, or neurocysticercosis) and non-infectious etiologies (e.g., multiple sclerosis, vasculitic syndromes, or rarely inflammatory bowel disease). A consultation with the radiologist may be helpful to try to characterize the lesions. For example, unlike white matter lesions caused by multiple sclerosis, PML lesions usually do not show mass effect, edema, or gadolinium enhancement. Some etiologies may have a predilection to different areas of the brain. Additionally, further neurologic consultation may be useful to help determine which tests may be most helpful when obtaining cerebral spinal fluid for diagnostic testing.

Neurology is consulted and performs a lumbar puncture, which shows 3 WBCs (100% lymphocytes). continued on page 13
Eliciting Effective Resident-to-Attending Feedback
Molly Emott, MD, in conversation with Stuart Cohen, MD

Dr. Cohen is associate professor of medicine, Division of General Internal Medicine, at the University of Alabama at Birmingham.

Don’t you just hate those evaluation forms with 50 questions, each with a 1 through 5 response option—no, not really, kinda, probably, and definitely? Or if you’re lucky, sometimes you’ll come across a 1 through-9 dilemma: Hell No, Purgatory No, Just No, Whatever, I Think So, Sounds Pretty Good, Oh Yeah, Score, Nirvana. For the love of Hippocrates, I just can’t decide. Enough already. In this era of MyEvaluations.com, where everyone is required to evaluate everyone else and sometimes inanimate objects, I fear the end result is often not as useful as it might be. “I got a 7.9.” “The mean for my colleagues was 8.1.” Now what? What am I supposed to do with 50 numeric scores and a group mean to improve myself? Especially knowing that such scoring systems are generally subject to inflation (the “halo” effect) and lack of sensitivity (the “ceiling” effect).

In my last “How Do You Do That?” essay, I asked a few teaching-award-winning interns to share with us some tips on how to teach effectively but efficiently during a busy rounding day. In an ongoing quest to find out what “makes” a successful clinician-educator, I want to examine the topic of resident-to-attending feedback. In a fascinating recent review article, Sutkin et al. recently examined papers all the way back to 1909 in search of the specific qualities that make a good clinical teacher in medicine. Interestingly, outside of essays, the majority of the final themed characteristics came from student and resident surveys. The authors discuss the validity of such means to identify a competent teacher: “data relating student performance to distinguishable and measurable teaching behaviors” is lacking and “what makes a good teacher is likely different to different students.” Equally fascinating was the finding that two thirds of the characteristics identified were in what Sutkin referred to as non-cognitive domains: enthusiasm, rapport, and communication skills to name a few examples. Nevertheless, the ACGME Program Requirements for Resident Education in Internal Medicine states the following:

• “Faculty members should participate in faculty development programs designed to enhance the effectiveness of their teaching.”
• “Residents must have the opportunity to provide confidential written evaluations of each teaching attending at the end of a rotation,” and
• “These evaluations must be reviewed annually with the attending.”

No guidelines accompany or further detail these requirements. So, given the infant state that is our current scientific understanding of medical teaching and the obvious common-sense idea to turn to trainees for feedback on “what works,” we are left with the question of how to elicit the most helpful evaluations. In the first study of its kind, Dr. Stuart Cohen and his colleagues, notably Richard J. Shewchuk, PhD, and Thomas K. Houston, MD, looked at the ability of the Nominal Group Technique (NGT) to identify particular physician behaviors that warranted both positive and negative feedback to attendings after a teaching rotation. The pilot study has been previously reported and, while focusing more on the evaluation of attending rounds as a whole rather than on the attending alone, it displayed the power of oral feedback elicited by NGT. Developed in the 1970s, NGT is a structured method of facilitated group decision-making in which each member of a small group responds (in this study via round-robin format) to a carefully crafted, direct question in order to generate a heterogeneous list of ideas. The ideas are then discussed so as to clarify their meaning, group redundant responses, and potentially generate more thoughts. Care is given by the moderator to avoid judgment or criticism. The final step involves individual prioritization of the ideas with numerical ranks that can ultimately be tallied to generate weighted results. Although the technique is labor intensive and can only tackle one question at a time, it tends to generate a larger number of ideas than conventional group discussion and allows for equality of opinion among group members.

Thus, in applying the technique to the goal of eliciting helpful resident-to-attending feedback, Dr. Cohen and his colleagues had NGT-trained leaders ask the following question to a total of 17 groups of ward teams (120 resident/student participants, 42 total attending evaluations, 13 with two or more) at the end of their rotations: “What are the specific teaching behaviors of attendings that foster learning by adding to the knowledge, attitudes, or skills that define competency as a physician?” As described, a round-robin format ensued in which a list of particular behaviors was generated and recorded, such as "asks questions..."
lost weight and grew frail. Then she began to fall at home. Fiercely independent, for a long time she resisted my entreaties to accept even a visiting nurse to do a safety check. I made sure to treat her osteoporosis but knew that this would not be enough if she continued to fall. I sensed the approach of disaster that I felt helpless to prevent.

Finally, it happened. She fell and could not get up. She wasn’t wearing her Lifeline to call for help. A day later, she was discovered and taken to the closest hospital, where she was found to have fractured ribs and a lacerated spleen. She died in the ICU several days after surgery. It was one of those horrible endings that nobody wants or deserves. To this day, I regret that I couldn’t have done something to avoid that outcome, and the events stimulated me to learn more about fall prevention strategies.

Despite her tragic ending, Mrs. C spent most of her years after the age of 65 living a happy and independent life. This was her final lesson to me. When I met her, I was in my late 20s and I thought she was really old, much older than I could ever imagine myself being. She was one of a remarkable number of patients, now in their 80s and 90s, whom I have followed since residency. Many of them still live independently. They enjoy their lives with their cognitive capacities largely intact, though with bodies of varying frailty. Not surprisingly, most of the survivors are women, reflecting that generation’s gender gap in chronic disease burden. Together, they have redefined for me what is possible and might even be likely for the elder years. The opportunity to watch these patients live active and generally fulfilling lives into the late decades inspires me and gives me hope that my future might look like that, too.

This Thanksgiving, I am thankful to all of my patients for their lessons. My greatest thanks go to Mrs. C. I was honored to know her and to learn from her. She will live on in my thoughts and my heart.

SGIM

**EDITORIAL continued from page 7**

is no reduction in expenditures and no curtailment of the use of resources. If the SGR does not penalize physicians who perform unnecessary services and does nothing to reward those who practice with cost containment in mind, then perhaps it is time to eliminate the SGR.

Technologic advances have reduced the work and time involved in many procedures, yet reimbursements have not fallen. The RUC has no incentive to recommend these reductions. For example, a colonoscopy is “estimated” to require 75 minutes, but they generally only require 30. To repeat, RVUs are not measured. Currently (as of September 2009), there are legislative proposals that would allow CMS to gather these data and base RVUs on actual work performed. These reports could allow other groups to report to CMS useful measurements of physician work, thus diluting the influence of the RUC.

Since 2002, Congress has become increasingly involved in Medicare reimbursements, repeatedly enacting legislation to halt physician payment cuts. Physician reimbursements are therefore more vulnerable to the whims of Congress. If we want to determine where we are going, we must take initiative. SGIM cannot stand up to the RUC alone. We must continue to form alignments with other advocates and stress to Congress that the RUC and the AMA do not speak for most physicians, that cost containment will not be effective unless it is based on actual evidence regarding physician practices, and that measurements of work performed must replace estimates.

**References**


**SIGN OF THE TIMES continued from page 1**

process to help move this research agenda forward. The centerpiece of this effort was a research agenda-setting meeting that took place in Washington, DC, on July 28-29, 2009, with funding from the Agency for Healthcare Research and Quality (AHRQ), the American Board of Internal Medicine (ABIM) Foundation, and the Commonwealth Fund. It brought together more than 150 invited experts in primary care, health services and implementation research, health systems and health insurance, and health policy to develop a policy-relevant research agenda for the PCMH.

The project was notable for several reasons. First, it represents what we hope will be the first of many substantive collaborations with our counterpart organizations in academic family practice and pediatrics. Each of these organizations represents academically oriented primary care physicians who share many of the same goals of SGIM members and experience many of the same challenges in the current practice environment. Such collaborations can leverage the strength of the three organizations to increase the voice of academic primary care in policy discussions at the national level.

Second, through a series of six commissioned papers exploring implementation challenges to various aspects of the PCMH model and small group sessions, the conference served to identify key gaps in our understanding that will need to be filled as we move forward promoting and implementing the PCMH. These papers included the following topics (listed with their first authors and co-authors if limited to two):

**continued on page 11**
SIGN OF THE TIMES
continued from page 2

1. Current Landscape of PCMH Demonstrations (Asaf Bitton, MD, and Bruce Landon, MD, MBA)
2. Defining and Measuring the PCMH (Kurt Stange, MD, PhD)
3. Clinical, Quality of Care, and Satisfaction Outcomes of the PCMH (Diane Rittenhouse, MD, MPH)
4. Financing and Payment Models for the PCMH (Robert Berenson, MD, and Eugene Rich, MD)
5. Transforming Practice (Charles Horner, MD, MPH, and Richard Baron, MD)
6. The Medical Neighborhood (Mai Pham, MD, MPH)

These papers were presented by their first authors, followed by reactor presentations (including SGIM members Marshall Chin, Greg Pawlson, Dana Safran, and Steve Schoenbaum). Small-group discussions were used to develop a list of prioritized research questions around each topic. This list of questions was discussed by a panel of expert policy makers to help make the questions most relevant to health policy and health care reform. This panel, moderated by Paul Ginsburg from the Center for Studying Health Systems Change, included SGIM member Carolyn Clancy (AHRQ) and economist Gail Wilensky as well as Congressional staff representatives and the Medicare Payment Advisory Commission (MedPAC).

The primary goal of the conference was to develop a research agenda around the PCMH. More than 40 important questions were identified that could be important to informing policy and promoting the transformation of struggling generalist practices into high-performing patient-centered primary care. Our authors are still working on synthesizing the feedback and prioritizing the questions. But a few examples include the following:

- What are the effects of using different definitions of the PCMH?
- What are the best measures that will be...reflective of impact at the level of the practice and the community?
- What form should PCMH-based reimbursement incentives take, and how should these incentives be used for small practice settings?
- What form of support is most effective in promoting and sustaining practice transformation?
- How does the PCMH fit into the rest of the health care system?

The six key papers outlining the research agenda will be published in a special section of an upcoming issue of the Journal of General Internal Medicine. We anticipate that the sponsors of this process will be considering these findings as they establish future research priorities.

This conference represents one important component of SGIM’s involvement in developing and setting both the research agenda and the policy agenda regarding the PCMH. As these agendas are developed, it is essential for GIM in general and academic GIM in particular to continue to lead this process. This will require continued engagement of SGIM leadership as well as its core committees in the areas of Research, Clinical Practice, and Education. Of course the work of advancing the PCMH research and policy agendas will require input from all members of SGIM. Many of these efforts are being coordinated through the SGIM PCMH Working Group, led by Greg Rouan, MD. (Please see http://www.sgim.org/index.cfm?pageId=860 for more information on the working group.)

In the meantime, SGIM will continue to work with AHRQ and others on developing and refining this research agenda. In addition, SGIM leadership is actively pursuing ideas for continuing the working collaboration we have developed through this project with our colleagues in pediatrics and family practice.

ETHICS CHALLENGE
continued from page 2

persons in general,” Malm et al. disclose many ambiguities, discrepancies, and holes in reasoning. Using clear, concise examples, they review the concepts of explicit consent, implied consent, special training, reciprocity, and oath taking/code compliance. They directly challenge many of the common analogies given in other ethical articles to support a physician’s carte blanche duty to treat and point out the inappropriate deductions: the analogy of firefighter to fire is not necessarily the same as retinal specialist to infectious pandemic. Very few physicians have explicit contracts detailing their duties and expected compensation in the event of such disasters. Invoking the idea of special training would obligate retired physicians, imprisoned physicians, or physicians who have lost their licenses to also treat. Reciprocity, the basis of a social contract, is fraught with a complete lack of agreed-upon definitions or degrees of obligation. And spoken oaths and codes of ethics suffer from a lack of uniformity across specialties, small group membership numbers, competing ideas and the interpretation thereof (e.g. physician autonomy versus duty to treat in emergencies (and the consequent definition of emergency)), and a reputation (for at least some physicians) for being simply symbolic rather than practical. Our goal in writing this column is to point out counter-arguments to a duty to treat now so that work forces can be clearly defined and relied upon at the time of a true disaster. There cannot be questions about who is obligated; to reiterate, reasoning must be transparent and agreed upon ahead of time. Among other options, we suggest an increased use of explicit contract-based consent as the best way to identify a mandated group of treating providers.

But providers are not the only resource that will be scarce during an infectious disaster. If the H1N1 flu is as widespread and long-lasting as some projections have suggested,
with no change in seasonal influenza rates and no reason to suspect that there will be a decrease in the incidence of other illnesses, we will likely face a scarcity of resources to an extent that we are not accustomed in the United States.

Overwhelmed EDs, clinics, and hospitals; anticipated inadequate supplies of vaccines, antivirals, and other medications; and a limited supply of ventilators will mandate a change in physician and public expectation of care delivery. We may not have enough for everyone who needs it—not exactly the “American way.” How will we decide who gets the last ventilator or the last ICU bed?

In an effort to prevent shortages, we must minimize unnecessary use. This burden falls in a large part on providers. The urge to write prophylactic prescriptions for antivirals for colleagues and friends could result in inequitable availability of treatments for groups without easy access to them. We must also limit antiviral use to groups with a valid clinical reason: the immunosuppressed, those with significant co-morbid illnesses, or those otherwise at high risk for severe disease. Such restraint will require potentially uncomfortable but necessary discussions with symptomatic but otherwise low-risk patients, advising them to “ride out the illness”—often at home. Patients who might otherwise have gotten admitted due to multiple external pressures and physician time constraints will have to be more stringently triaged.

We will not be able to fully prevent shortages, however. Some studies suggest the possible need for more than 700,000 ventilators during a pandemic—a number that not only dwarfs current availability (110,000) but also adds to the shortage of therapists to manage the machines.3 If we get to the point of triaging ventilators, we will be in a brave new world for US medicine. Genuine scarcity rarely factors into our thinking paradigm; the only system that vaguely prepares us for this is that of organ transplant allocation. Giving a limited life-saving measure to one person means denying it to another identifiable individual. There are well-written and sophisticated discussions on ventilator and ICU-bed rationing during epidemics/pandemics that are beyond the scope of this article.4 But the upshot is that we will have to have pre-defined decision trees and criteria for who will be vented, when they can be weaned, and when support should be withdrawn due to futility.5 These are decisions that challenge the very nature of “being an American,” where everyone has equal rights and can practice autonomy in end-of-life decisions.

Such a change in standards of care will likely be felt throughout the health care system. Ongoing significant long-term stress will undoubtedly change the way routine practice is carried out. It may be subtle, and it may be something that we can easily absorb without much guilt or angst. Most likely there will be days when clinics call their patients and tell them that unless they need immediate care it is recommended that they stay home. Such a request might reflect a need to prevent spread within care sites, but it might reflect the scarcity of providers and resources. A clinic seeing a high volume of patients with 80% of their regular staff is going to have to alter the way it appoints patients and the timeliness of follow up. Likewise, if anesthesia machines are adopted for use in ICU care, elective or minor surgeries—and even major surgeries—will be cancelled. Bernstein refers to these occurrences as “collateral damage.” How much is permissible before it encroaches on other ethical principles such as justice, equality, and autonomy? It will be a crisis that challenges the US expectation of immediate high-quality care, and that also raises issues of liability should physicians be unable to perform otherwise necessary procedures. A clear publicly reasoned mechanism for dealing with these issues should alleviate the unavoidable compromises it will entail for many. (Reassuringly, in an interesting review of departures from usual care during the recent SAR epidemic in Canada, it was noted that—despite many delays (often by months) in otherwise “urgent” patient care—very few adverse events were seen.3)

After reviewing these problems it may seem like an insurmountable quagmire. As repeatedly alluded to, the one thing that we think can help more than any other action is to maintain transparency. We should be open about what we are doing and why. The population should be told of escalating scarcity of resources and asked to be a part of addressing the strain on the system—something they have shown the ability to do already. For example, there was a huge surge in blood donations after 9/11, and the year that the flu vaccine was in shortage many of the people who needed the vaccination didn’t get it. We do pull together when we need to. Being transparent about what needs to happen when and why makes the necessary challenges tolerable and is the only method of maintaining social trust in a population that must forgo its beloved individual freedoms in order to protect the public health at large.

References
OUTPATIENT MORNING REPORT  
continued from page 8

cytes), 0 RBCs, protein 47 (normal <45), glucose 50 (normal range), and a normal gram stain. His HIV test returns positive.

HIV infection could certainly explain many of the symptoms, depending on how immunocompromised the patient is as a result of this infection. One should also keep in mind that multiple opportunistic infections can be present at diagnosis as well. Opportunistic infections like JC virus, which causes PML, and Epstein Barr virus, which can cause primary CNS lymphoma, should be considered. HIV encephalitis, which should be a diagnosis of exclusion, can also present with white matter lesions in severely immunocompromised patients. Further evaluation of the CSF should include an evaluation for JC virus by PCR and Epstein Barr Virus by PCR. An absolute CD4 cell count, HIV viral load, and HIV genotype should be ordered as well.

The following day, EBV DNA PCR comes back negative, and the CD4 count is 155. JC viral PCR returns as positive.

Progressive multifocal leukoencephalopathy is a demyelinating disease of the brain caused by JC virus in patients with deficiencies of cell mediated immunity. The classic triad of symptoms includes cognitive deficits, motor dysfunction, and visual field deficits. Generally, the cognitive deficits, which include mental slowness, confusion, and behavioral changes, may be the first symptoms of PML. Motor dysfunction may include ataxia or hemiparesis. Visual field defects such as hemianopsia are also common. While we associate this devastating infection with AIDS, the prevalence of this disease has significantly declined with the advent of highly active antiretroviral therapy. More recent reports have implicated PML association with immuno-modulatory therapies such as natalizumab, efalizumab, and rituximab. The cornerstone of treatment continues to be restoring immune function, which appears to have a significant impact on one-year mortality.

Summary
1. Dysarthria is a symptom of a variety of underlying pathologic diseases, which should be evaluated with a detailed history, neurologic exam, neuroimaging, and CSF studies.
2. PML can present with a variety of symptoms, including cognitive deficits, motor dysfunction, and visual field defects.
3. Immune restoration is the cornerstone of PML treatment and should be initiated as soon as possible.

References

CURBSIDE CONSULT  
continued from page 8

fears. Reaching outside of academia can be helpful. You can also give back. Some people I have provided guidance to: @sreddy42, @dmundy, @nedalai, and @medrants. Your twentor can recommend who to follow and also help retweet your tweets.

Other Common FAQ After You Join
1. How do you shorten a link on Twitter? Tinyurl.com will shorten your links. Also Tweetdeck and other Twitter apps have embedded shorteners that make it easier.
2. What is a #? Hashtags are a way to index your tweets so that they are more easily found. For example #healthreform tweets are about health care reform etc. You can also search using the hashtag for other related tweets and select followers that are tweeting about what you want to hear about.

Tweeters for SGIMers to check out
• @medrants: Dr. Bob Centor, former SGIM president and current SGIM Forum editor
• @nedalai: General medicine fellow and Midwest SGIM Regional Council member
• @pcore: The Physician’s Core, the doctoring course at UMDNJ-New Jersey Medical School
• @drval: Internist blogger and cartoonist, CEO of Better Health
• @kevinmd: Primary care doctor and well known blogger
• @consultdoc: Physician executive and consultant

• @Doctor_V: Pediatric gastroenterologist and blogger
• @ACPInternist: American College of Physicians
• @SHMLive: Society of Hospital Medicine
• @SocietyGIM: And new on Twitter, the Society of General Internal Medicine

There are other links on Twitter for docs wanting more information.

• ACP Internist http://acpinternist.org/archives/2009/04/twitter.htm

SGIM
regarding clinical reasoning, engages entire team during rounds, promotes ownership of clinical decisions.” Discussion followed, and then each member was instructed to prioritize on paper the top three behaviors that they felt were most relevant or best described their recent ward attending. The papers were collected, and a weighted graphic representation was generated illustrating each team’s perception of that particular attending’s best teaching attributes. The prioritization process was then repeated for the top three behaviors that needed improvement. The final tabulated results were ultimately sent to the attending. It should be noted that the teams also filled out standard evaluation forms already in use.

The attending response to the process was universally positive, as one might imagine. They received feedback that was not only insightful, unique, and immediate but descriptive of positive and negative attributes. The requirement for participants to identify negative behaviors avoided the halo and ceiling effects inherent in traditional numeric scoring. The very nature of the process prevented depersonalization, regression to the mean, or inflation of praise just to finish the evaluation, and there was no contrived need to conform to pre-fabricated, rote questions that may or may not get to the fundamental teaching issues pertinent to the attending in question. In addition, the study design included the distribution of articles that addressed identified areas of deficiency and that were based on the curriculum used at the Stanford Faculty Development Program on Clinical Teaching (i.e., the feedback was not isolated but couched in a way that allowed for individual development). The overall assessment of the process from the perspective of the group participants remained supportive but identified the time requirement as a large barrier to its ongoing utility. Other limitations were the need for a trained facilitator, a small group setting, and the fact that the process did not render a summary score of the attending’s overall teaching ability.

Unfortunately, the study numbers did not allow for a comparison of the most commonly identified positive teaching behaviors with a global teaching effectiveness score (obtained from a standard evaluation form) or with the receipt of teaching awards. In addition, time and numbers prevented the ongoing evaluation of attendings over time to assess for improvement in identified areas of weakness. A few attendings were evaluated more than once, however, and in the process it was noted that the forced identification of negative attributes over several NGT sessions may be a potential drawback. It is likely that different attributes will be highlighted by different groups, making an otherwise superb teacher feel as if he/she just can’t get it right.

Dr. Cohen’s novel attending evaluation process generates both excitement and more questions. Can the NGT somehow be automated to reduce the time and geographic space commitment necessarily involved? Can we identify from simpler evaluation techniques certain attendings who may benefit from this process more than others? Do the behaviors identified necessarily correlate with an attending’s ability to instill clinical competence, and how do we scientifically study this issue? Lastly, how can we improve upon, or even initiate, institutional systems to facilitate changes in teaching styles or behaviors in response to evaluations?

By the way, I personally give this evaluation format a “Definitely” “Score.” Many thanks to Dr. Cohen for his time.

References
**Research and Leadership Position Availability**

**Associate Director of Health Services Research**

**Minneapolis VA Center for Chronic Disease Outcomes Research and the University of Minnesota**

The nationally and internationally recognized Health Services Research and Development Center of Excellence at the Minneapolis VA Medical Center seeks a mid-career scientist to serve as Associate Director. The successful candidate for this exciting opportunity will have an independent research program at our Center, collaborate with other Center and University investigators, manage scientific staff, and implement our Center’s strategic plan. We welcome applicants in the areas of clinical, public health, outcomes and/or implementation research. Requirements include a MD; PhD or DrPH in nursing, public health, management, social or behavioral science; effective leadership skills, and a record of high-quality research evidenced by peer-reviewed publications and independent funding. Additionally, we value strong communication skills, a commitment to collaboration, and an ability to work effectively across disciplines. The Associate Director will also hold a faculty position in the Department of Medicine at the University of Minnesota. Salary is dependent upon qualifications. Please mail, email or fax cover letter, curriculum vitae, publications list, and names of three references to:

Jill Mahal-Lichty, VA Medical Center (152), One Veterans Drive, Minneapolis, MN 55417.

Email: jill.mahal-lichty@va.gov.

Phone: (612)-467-1979
Fax: (612) 727-5699.

The Department of Veterans Affairs is an Equal Opportunity employer. For more information about our Center, see: http://www.hsrd.minneapolis.med.va.gov.

---

**Mental Health Services Research Investigator**

**University of Pittsburgh School of Medicine**

The Division of General Internal Medicine invites applications for full-time tenure-track investigator positions (Assistant or Associate Professor rank) to join a successful community of health services investigators with opportunities to collaborate with faculty across the University of Pittsburgh (e.g., Psychiatry, Cardiology, Public Health), RAND Health Pittsburgh, and the VA. Candidates should have MD (board-certified) and/or PhD degree with strong research training and background in mental health services research. Investigators with interests in translational research, comparative-effectiveness trials, and with a demonstrated record of creativity and writing ability are highly encouraged to apply. Applicants should submit a statement of interest and a CV to:

Bruce L. Rollman, MD, MPH, Suite 600, 230 McKee Place, Pittsburgh, PA 15213
(412 692-4825) or e-mail noskoka@upmc.edu.

The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer.

---

**Clinician Researcher**

Division of General Internal Medicine, University of Texas Southwestern Medical Center, Dallas, TX is seeking fellowship-trained clinician Researchers at Assistant/Associate Professor level. Research opportunities in university and safety net health systems, existing CTSA, K12/KL2, EMR, data warehouse, biostatistics/social science cores. Areas of interest include: clinical epidemiology, outcomes, health services research, quality of care, disparities, chronic disease management, adherence, patient safety, hospital medicine, geriatrics, palliative care.

Salary and rank commensurate with experience. Send letter/cv to:

Ethan Halm, MD, MPH, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd, Dallas, TX 75390-8889 or email: Ethan.Halm@utsouthwestern.edu

Equal opportunity/affirmative action employer.
SGIM 33rd Annual Meeting

Value(s)-Based Generalism: The Time is Now!
Wednesday through Saturday, April 28–May 1, 2010
Minneapolis, Minnesota

January 11, 2010 Deadline for Submissions of
• Scientific Abstracts
• Clinical Vignettes
• Innovations in Medical Education
• Innovations in Practice Management and
• Web-Based Innovations in Medical Education

www.sgim.org/go/am10
the online home of the 2010 annual meeting