**Handoff Communications: Heeding the Call to Change**

“The problem with communication... is the illusion that it has been accomplished.”

George Bernard Shaw

Anyone who has ever played the child’s game “telephone” knows how easily communications can fail. By the time the game is over, “Mommy said no” has become “Donny said go.” This same premise often holds true during handoffs in health care facilities, where the stakes for miscommunication are far greater.

From unit to unit, shift to shift, hospital to acute care facility, poor handoff communications prove hazardous to a patient’s health. From 1995 to 2004, the Joint Commission listed communication problems as the root cause for more than 65% of all preventable medical errors (sentinel events); a number that climbed to nearly 70% in 2005. Some common scenarios cited by the Joint Commission include:  

- A patient loses IV access; the covering physician orders a central line insertion, never told that the patient is due for release the next morning.  
- Following heart surgery, a young patient arrives in the Pediatric ICU but due to miscommunications, the vital equipment needed to treat the patient has not been set up.  
- During multiple shift sign-outs, a patient’s postoperative leg and chest pain are overlooked; he dies from a resulting pulmonary embolism.

A Pervasive Problem  
Handoff mishaps and serious miscommunications continue to be pervasive and difficult to eradicate. Some sources point to our highly specialized health care system, citing its increasingly complex medical procedures and equipment, and an ever-growing team of practitioners as a possible culprit. Others blame long hours and worker fatigue, noting the critical nursing shortage and increased presence of temporary nurses who may be unfamiliar with institutional procedures.

Regardless of when the error occurs, handoff miscommunications often result from a lack of protocols. Since the release of the Joint Commission’s 2006 National Patient Safety Goals (NPSGs), health care organizations have been under increasing pressure to improve handoff procedures to minimize communication gaps. Goal 2E directly calls on providers to, “implement a standardized approach to handoff communications, including an opportunity (for providers) to ask and respond to questions.”

Implementation expectations for Goal 2E emphasize the need for:  
- interactive communications between multiple caregivers;  
- complete, up-to-date information on the patient’s care, treatment, services, condition and any anticipated changes;  
- procedures such as read-back or repeat-back to verify handoff information;  
- time for oncoming providers to review the handoff information and relevant patient treatment history; and  
- minimal interruptions to reduce the chance of errors during the handoff process.

A two-year study by the World Health Organization (WHO) identifies nine areas that impact patient safety, and communication during patient “hand-overs” is prominent on the list. The WHO...
A Defensive Strategy for Perioperative Settings

The Association of Perioperative Registered Nurses (AORN) and the U.S. Department of Defense Patient Safety Program (DoD PSP) have developed a web-based, Perioperative Patient ‘Hand-Off’ Tool Kit (www.aorn.org/PracticeResources/ToolKits/Patient-HandOffToolKit/), with extensive resources to help caregivers standardize handoff communications in perioperative settings. The kit is based on the DoD PSP’s TeamSTEPPS™ or Team Strategies and Tools to Enhance Performance and Patient Safety, standards developed to reduce errors and improve outcomes in military hospitals. AORN customized the TeamSTEPPS approach to provide guidance specific to perioperative nurses.

Collaborating Centre recommends that all health care facilities establish protocols for imparting critical patient information, give practitioners opportunities to ask/resolve questions during the process and involve patients and their families as part of handoff procedures.6

Know Thyself

Health care facilities can turn to several sources of information for help in improving handoff communications. A recent comprehensive study appearing in AHRQ Advances in Patient Safety examined shift changes in the Emergency Departments (ED) at five hospitals across the US.7 This study confirmed that shift changes are problematic largely due to a lack of adequate information and a limited time for decision-making. To improve handoff communications, the authors urge health care institutions to:

- conduct a thorough self-examination of all types of “turnovers” that occur and highlight the basic tasks associated with patient handoffs;
- focus on the intent and desired outcome of care and tailor protocols for units and other settings of care, while allowing for patient/condition variables;
- identify opportunities for miscommunications (root cause analyses). Encourage health care personnel to share good and bad examples from their handoff experiences; and
- select one type of handoff for pilot testing, develop and implement a standardized checklist and monitor and refine the approach for optimum effectiveness.

Throughout the process, the study stresses the need to use clear and concise language with interactive dialogue and standard reporting methods. For best results, the authors recommend keeping forms simple, transferring only vital information and avoiding onerous documentation that is readily available in a patient’s chart. To encourage staff buy-in, the study encourages handoff discussions to discuss outcomes, share feedback and make adjustments accordingly.

Conducting this human factors-type assessment is a critical first step towards handoff improvement. The next step is finding an effective solution that helps personnel standardize handoffs across the institution. Both the ASHRM study and the Joint Commission note that finding a one-size-fits-all handoff solution is not always possible. Often, it is necessary to select and customize different strategies based on specific handoff types, services or unit/department requirements. But once particular protocols are defined, the key is to be consistent so that everyone in a unit knows exactly what to do.

Handoff Standardization: Three Levels

The first level of standardization is most often utilized for cross-unit handoffs. A basic solution is cross-unit transport forms. St. Joseph’s Health System in California uses Ticket to Ride, a quick checklist of questions that must be answered (patient’s identification, medications, vitals, infections, etc.) and sent along with a patient being transferred between units. Stony Brook University Medical Center in New York calls them Trip Slips. Mimicking the precision of a relay team, personnel at Trinity Medical Center in Illinois Pass the Baton during handoff, literally, passing along a plastic baton that contains pertinent patient summaries. The VHA of Oklahoma/Arkansas issues a Hall Pass with checkboxes to confirm a patient’s specific conditions as well as a list of the personnel involved in transport to another unit or outside facility.8

The next level of standardization uses more ambitious methods, such as SBAR, TeamSTEPPS™ and ANTIC-ipte. Of these, SBAR (Situation-Background-Assessment-Recommendation) or SBAR-R (adds Repeat Back) are the most widely known. The SBAR approach, originally developed to streamline the change of command on nuclear submarines, provides a straightforward framework for efficiently communicating written and oral patient handoff information between and among health care provider teams. During handoff SBAR/SBAR-R tracks:

- **Situation:** brief patient information (vitals, code status, the “punch line” delivered in 5–10 seconds)
- **Background:** context, brief history, relevant condition
- **Assessment:** problem and conclusions
- **Recommendation:** action that needs to be taken, follow-up actions and time frame

Repeating Back: handoff team verbally confirms information

Many health care facilities customize SBAR/SBAR-R reporting forms for different personnel and handoff types. For example, an SBAR form covering surgical services transfer can require far more information than SBAR reporting for nursing sign-outs (scrub relief).9

The SBAR/SBAR-R approach is not for everyone. Some hospitals put their own spin on the methodology. Blount Memorial Hospital in Tennessee initiated a four step hand off system known as Just Go NUTS (Name Unique issues Tubes Safety) that
adds patient tubing recants and safety issues such as fall risks to the list of handoff concerns.\textsuperscript{10}

\textbf{ANTIC-igate,} developed at the University of San Francisco and the University of Chicago, offers a concise format to streamline sign-outs between residents. AN\textbf{TIC-igate} stands for: Administrative information, New information (clinical update), Tasks in an if/then format, Is the patient sick (illness severity assessment) and Contingency planning (what if scenarios).\textsuperscript{11}

Institutions from the University of California, San Francisco (UCSF) Medical Center to Brigham and Women's Hospital (BWH) in Boston have embraced a third level of standardization by taking a technology-based approach. The UCSF Medical Center uses Synopsis, a program within its Electronic Medical Records (EMR) that pre-populates key patient data (administrative, lab results, vital signs, code status and medications) enabling caregivers to enter diagnoses and problems online and create printed handoff forms.\textsuperscript{12} BWH's computerized sign-out system has been helping to ensure safe handoffs with standardized information for several years. In 2004, Kaiser Permanente in California rolled out a program for nurses in more than 30 member hospitals. The Nurse Knowledge Exchange (NKE) combines a software handoff template with face-to-face exchange and overlapping rounds to improve sign-outs for nursing shifts.\textsuperscript{13}

\textbf{Are Standards Working?}

It took less than twelve weeks for the IT department at Memorial Sloan-Kettering Cancer Center (MSKCC) in New York to customize its automated clinical information system to include a new handoff application and launch the program in its Department of Medicine. Within the EMR system, the IT staff created a tab that displayed lists of patients and all of the information that residents need as they do rounds and as physicians treat their patients. Patient information is populated automatically from within the system and includes the patient's name, age, length of stay, diet, symptoms, medications, etc. The handoff tabs also have text fields for long-term historical patient information that is retrievable during subsequent patient visits and short-term notes and to-do lists that are relevant only to the current visit and kept within the system temporarily. Physicians access and update information throughout the day, using the tab to manage task lists for themselves and documenting information that will aid physicians arriving for subsequent shifts.\textsuperscript{14} In use for more than a year, this electronic approach has increased safety, prompting more units at the center to request the handoff application.

Other health care institutions have experienced similar successes in reducing handoff communications incidents. In 2004, Order of Saint Francis Healthcare System (OSF) in Illinois implemented SBAR across multiple facilities. Within two years adverse events dropped from 98/1000 patient days in 2004 to 35/1000 in 2006. OSF credits SBAR, in part, for these dramatic patient safety improvements.\textsuperscript{15}

After implementing the NKE system at Kaiser Permanente facilities in Hawaii and California (Baldwin Park and South Sacramento), shift change briefings that once took 30 minutes and left a skeleton crew

\textbf{From NASA to Formula One: Surprising Strategies}

What do NASA launch teams and Formula One pit crews have in common? They both follow formal procedures for handoffs, which are practiced again and again to gain proficiency and reduce mistakes. Imagine the chaos if Mission Control wasn’t explicit in its handoff to the shuttle astronauts or if the pit team forgot a lug nut on a tire? In health care, handoffs between units can pose similar risks to patients. Perhaps that’s why health care institutions have taken to borrowing strategies from some surprising sources.

The Wall Street Journal recently reported on a collaboration between Great Ormond Street Hospital, Britain’s largest children’s hospital and Italy’s Formula One Ferrari racing team. The hospital asked Ferrari to examine its often precarious patient handover processes. The Ferrari response included a variety of strategies such as establishing leadership and specific roles and responsibilities, contingency planning and addressing little mistakes before they became bigger problems. Those suggestions, in conjunction with human-factors analysis, became the impetus for the hospital’s comprehensive protocol for handover procedures. A two-year follow-up study of the new procedures found impressive results as technical errors dropped by 42% and information omissions decreased by nearly 50%. (Naik, G. “New Formula: A Hospital Races to Learn Lessons of Ferrari Pit Stop.” WSJ: November, 14, 2006. http://club.healthcare2007.com/articles/wsjs_f.pdf.)
on the floor, have been replaced by a more efficient transition. Now, nurses remain on the floor during a 30-minute shift overlap to communicate patient handoff information via shared rounds, a database of patient information dubbed “My Brain,” and white boards at patients’ bedsides. This has reduced the time for nurses to see their first patients from 35–43 minutes to 11–12 minutes. With these results, Kaiser plans to institute the NKE throughout its extensive network of health care facilities.\(^1\)

Like their peers, hospitals around New York are actively examining the issue of handoff communications. Maimonides Medical Center is taking a somewhat different view towards reforming handoffs. According to Marc Leff, Vice President of Human Resources at Maimonides, “We are following a rather unique approach to this problem, examining issues from a labor management perspective with complete cooperation from doctors, nurses, patient care technicians, union representatives, residents, services personnel and everyone else. We are still in the talking stages, working toward developing a plan of action to address handoff and shift change processes.”

**Staff Buy-in is Essential**

To be effective, the entire staff must internalize standardized procedures. Training and buy-in for new handoff techniques is imperative for the entire medical team. This often precipitates an institutional culture change, as handoff standards often require clinicians to repeat back information, questioning physicians and other team members for clarification. Many residency programs are exploring methods for teaching students about the handoff communications process and the issue of standardization.

**Other Schools of Thought**

Some experts suggest institutions regularly overlap shifts, to reduce handoffs and provide an environment more conducive to face-to-face communication and continuity of patient care. The Institute for Health Improvement (IHI) suggests that health care institutions examine their organizational structure and redesign workflows, such as patient transfer processes, to reduce multiple layers of management. For example, patient backlog can be reduced by instituting bedside admitting and allowing ED staff to admit patients directly to the general medical unit, bypassing multiple handoffs to consultants and in-patient admissions.\(^17\)
Federal and state LEP legislation have statistics on LEP patients’ sub-standard quality of care and family interpreter miscommunication. Mandates and case studies aside, physicians need practical guidance on the most efficient and cost-effective ways to implement language access services into their practices. Learning from example is a good start and there are a number of helpful resources to guide private practices, clinics and other small health care providers in these efforts. (See “Resources for Building LEP-friendly Practices” on page 7.)

Getting Started
One member of the practice or clinic should be responsible for the planning efforts. The “language leader” is responsible for:

- analyzing patient population and language needs;
- identifying language resources available;
- implementing services to suit practice and patient needs;
- creating and updating language access policies and procedures; and
- training staff and notifying LEP patients of language services.

Know Your Patients
According to the most current US Census Bureau statistics (2000), nearly 21 million people in the United States reported speaking English less than “very well.” In other words, some patients may speak some English, but are more comfortable communicating in their native tongue. In New York State, nearly 40% of the 7.7 million adults speak a language other than English. The largest group (nearly 14%) speaks Spanish. The other most commonly spoken languages are Chinese, French, Italian and Russian.

Assess your current and anticipated patient population. Staff can track language preferences to ensure that patients receive the interpretation services they need by making notations in charts or electronic medical records. Doing so can help you formulate a language access strategy that is both patient friendly and cost-effective. For example, practices in growing Hispanic areas might be better served by hiring bilingual staff rather than using contracted interpreters.

Know Your Options and Implement Available Language Resources
Finding the right interpretation service will remove communications barriers to LEP patient care. Each option has pros and cons so the key is matching the services to your particular practice and patient population. Many practices find that a combination of language resources works best. The chart on pages 6 and 8 provides an introduction to interpretation choices along with some general guidelines to help with your selection process.

Finding the right interpretation service will remove communications barriers to LEP patient care.

One option omitted from the chart is the use of friends and family members as interpreters for the LEP patient. Countless studies show that while convenient, using untrained interpreters carries huge risks, and is not appropriate.

The Need for Ongoing Policies and Procedures
A significant part of establishing a language access program is the development of policies and procedures. It is critical that staff understand when, why and how the practice delivers interpretive services.

I Speak, Yo hablo, Je parle...
## Improving Communications with Better Interpretation Choices

<table>
<thead>
<tr>
<th>Option/Description</th>
<th>Pros/Cons</th>
<th>Top Choice for Offices Where:</th>
</tr>
</thead>
</table>
| **Bilingual Physician** | Pro:  
- Direct communications between patient and physician  
Con:  
- Could be semi-fluent  
- Not all languages spoken  
- Additional training/assessment costs | - The vast majority of your patient population speaks one non-English language  
- A large percentage of patients are walk-ins  
- Bilingual staff provides support |
| **Dedicated Staff Interpreters** | Pro:  
- On-site  
- Available, well-trained and experienced  
- Develops relationships with patients and office staff  
Con:  
- Usually only bilingual  
- Employee salary cost | - A large number of your patients speak one non-English language |
| **Contract Interpreters** | Pro:  
- Choice of interpreters and languages  
- Paid hourly only for time needed  
Con:  
- Costs time to screen interpreters  
- Must schedule interpreters in advance; not effective for walk-in patients | - Practice needs translation services in a moderate number of non-English languages  
- Most patients are seen in pre-scheduled appointments |
| **Agency Interpreters** | Pro:  
- Choice of many interpreters and languages for better availability  
- Agency pre-screens and schedules interpreters  
Con:  
- Pay agency plus hourly interpreter fees  
- Time to screen agency for quality  
- A different interpreter can be sent each time; no relationship with your practice and patients | - Patients speak a wide variety of non-English languages  
- Most patients are seen in pre-scheduled appointments or can wait at least an hour to be seen |

*Based on “Addressing Language Access Issues in Your Practice: A Toolkit for Physicians and Their Staff Members.” California Academy of Family Physicians. (2005)*
nces to LEP patients. Such procedures include: determining if a patient requires language assistance; identifying the patient’s language; or requesting an interpreter for walk-ins. Policy statements might cover the practice’s position on: legal LEP requirements; the use of family or friends as interpreters; and circumstances requiring translation. Once established, these policies and procedures should be regularly assessed and updated.

Staff Training and Patient Communications
Once ready to implement a language access program, staff must be trained and patients notified of these new language access capabilities. For patients, the widely available “I Speak…” cards and multilingual posters are helpful for establishing a language-friendly front desk. Practice forms, instructions, brochures and other informational materials will need to be made available in multiple languages. (See “Interpretation versus Translation” below.)

Practices relying on bilingual staff as interpreters need to ensure that staff personnel are sufficiently fluent and properly trained in medical interpretation. There are many training and testing programs now available that practices can access. (See “Interpreters in the Know” insert on page 9.) In offices without a bilingual staff, having “cheat sheets” with certain key phrases in multiple languages can be extremely helpful in assisting LEP patients.

Staff also must be trained to work with interpreters. While many of these techniques may seem basic, they make a big difference in outcomes. For example, with on-site interpreters, the physician should always speak directly to the patient, not the interpreter; with telephone services, the physician must describe any visual charts or verbalize any actions as the interpreter cannot see them. Language access providers can often instruct the staff on using these training techniques. (See “Working with Trained Interpreters On-site insert on page 9.”)

Language Access — A Process Worth Pursuing
Implementing language access and interpretive services into your practice is a daunting process. While practices and clinics across the country have proven it can be done, the process can be a challenge for even large health care institutions with many resources. (See “Language Barriers in the Big Apple” insert on page 9.) But it is a process worth pursuing as it will improve the quality of care you provide your patients and reduce potential risks from miscommunications.

Resources for Building LEP-friendly Practices
“Addressing Language Access Issues in Your Practice: A Toolkit for Physicians and Their Staff Members” (www.familydocs.org/communications/toolkits.php) is a free, 42-page guide that takes you through the process of creating an “LEP-friendly” practice. It includes how-to’s on determining patient populations, language access needs and interpretation options. It includes practical advice on working with interpreter services and extensive resources and links.

The Commonwealth Fund’s “Providing Language Services in Small Health Care Provider Settings: Examples from the Field” can be found at www.cmwf.org/usr_doc/810_Youdelman_providing_language_services.pdf. This site assesses current programs in the field and provides a step-by-step process for helping small health care providers develop language access services.


Interpretation versus Translation
Interpretation is verbal, translation is printed and LEP patients need both. From the signs on the wall to the forms your office uses, printed materials must be translated for patients to read and understand. There is an extensive amount of translated materials readily available from reputable sources such as federal and state governments and local health departments. Most of these translated forms and signs are available free, via web-based download or mail. One example is the “I Speak” card, used by the US Census Bureau, which shows the phrase, “Mark this box if you read or speak (language)” printed in 38 different languages. (www.usdoj.gov/crt/cor/Pubs/ISpeakCards.pdf).

More than Meets the Ear
LEP patients aren't the only patient population facing communication barriers. Patients who are deaf or hearing impaired are equally challenged and may require special services for top quality care. The Americans with Disabilities Act (ADA) requires health care facilities to provide “auxiliary aids and services” and ensure that aurally delivered information can be accessed by hearing disabled patients.

Hearing impaired patients may require interpreters fluent in American Sign Language or Signed English; others may not know sign language and require cued speech (visual cues) or oral interpreters to assist with lip reading. However, health care providers have the flexibility to choose alternatives to interpreters if it does not impact communication quality and the patient agrees. For example, they might use a pencil and paper for a simple Q&A session, reserving interpreters for more complex medical scenarios. For phone communications, providers often need to purchase a TTY, a device that can send and receive written messages over the phone. Note that practices can earn up to $5,000 in tax credits for eligible access expenses (interpreters, TTYs, etc.), i.e., up to 50% on costs between $250 and $10,000. (Omnibus Budget Reconciliation Act of 1990, P.L. 101-508, § 44).
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<th>Option/Description</th>
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<th>Top Choice for Offices Where:</th>
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| **Telephonic Services**  
Conference call connecting interpreter with patient and physician via speaker phone | **Pro:**  
• 24/7 access anywhere a phone is available  
**Con:**  
• Higher cost per minute  
• Cost for speaker phone per exam room  
• Must schedule call  
• Lack of in-person contact | • Patients speak a wide variety of non-English languages  
• Most patients are seen in pre-scheduled appointments or can wait at least an hour to be seen |
| **Video Interpretation**  
Video conferencing connects interpreter with patient and physician via webcam/video cast | **Pro:**  
• Convenient audio/visual access  
**Con:**  
• Designate specially equipped examrooms  
• Costs of webcam, software, connections and service | • Patients speak a wide variety of non-English languages  
• Most patients are seen in pre-scheduled appointments or can wait at least an hour to be seen  
• Technology is used, available and cost-justified |
| **Shared Resources**  
Share interpreter services by partnering with local hospital or consortium of non-competing practices | **Pro:**  
• Sharing costs enables hiring of dedicated quality interpreters  
• Higher volume of appointments for discounted costs  
**Con:**  
• Coordinating interpreter schedules with other groups | • Patients speak a moderate to wide variety of non-English languages  
• Most patients are seen in pre-scheduled appointments  
• Incentive exists for sharing resources |
| **Volunteer Interpreters**  
Community-based groups of interpreters (the Red Cross, academic organizations or religious or ethnic groups) | **Pro:**  
• Free  
**Con:**  
• Variable interpreter skill  
• Quality of translation, particularly with medical terminology  
• Availability and reliability | • Other language resources are not available or are cost-prohibitive |
| **Remote Simultaneous Medical Interpretation (RSMI)**  
Highly trained medical interpreters connected via wireless headsets to simultaneously interpret as patient and physician speak | **Pro:**  
• Near real-time communication similar to process used in conferences at the United Nations  
**Con:**  
• Service and equipment cost  
• Lack of extensively trained interpreters  
• Advanced appointment scheduling necessary | • At the current price, this technology is more cost-suitable for larger health care facilities |
Interpreters in the Know

Effective interpreters are not just fluent in a language. They need to understand cultural characteristics, medical-related terminology and proper interpretive techniques. If you are a physician or staff member who is considering acting as a LEP interpreter, there are services available to help assess your skills and provide additional training. For more information see:

- Language Line University (www.languageline.com/page/llu_tests/);
- the Kaiser Permanente Health Care Certificate Program (http://kphci.org/curriculum/index.html);
- the Hablamos Juantos group for Hispanic populations (hablamosjuntos.org/is/training/default.training.asp); and
- New York University School of Medicine (www.med.nyu.edu/cih/language/interpretation.html).

For more on the national standards of practice for health care interpreters (released in 2005), see www.ncihc.org/sop.php.

Language Barriers in the Big Apple

It is not surprising that private practice physicians face problems accommodating LEP patients. In fact, our major health care facilities are struggling to meet their needs. In New York City, at least 12% of the more than 2.9 million immigrants are LEP. The Big Apple is home to a population that speaks more than 100 distinct languages.

A report, “Getting in the Door: Language Barriers to Health Services at New York City’s Hospitals,” released January 2005 by the City of New York reveals that hospitals have focused efforts on providing interpretation services while overlooking language barriers in basic areas, such as bilingual phone services, appointment scheduling, billing and staff support. In fact, the study found that nearly 75% of the city’s hospitals performed poorly in one or more areas of basic language access.

These findings were confirmed in a study released by the Division of Health Policy, the New York Forum for Child Health and the New York Academy. This study, “Language as a Barrier to Health Care for New York City Children in Immigrant Families: Haitian, Russian and Latino Perspectives,” (May 2006) reports that more than half the respondents (most foreign-born and LEP) encountered at least one occurrence when the quality of their care was impacted by miscommunication and language issues.

Working with Trained Interpreters On-site

Reprinted from www.familydocs.org/communications/toolkits.php

- Greet the patient first, not the interpreter.
- During the medical interview, speak directly to the patient, not to the interpreter; “Tell me why you came in today” instead of “Ask her why she came in today.”
- A professional interpreter will use the first person in interpreting, reflecting exactly what the patient said e.g., “My stomach hurts” instead of “She says her stomach hurts.” This allows you to hear the patient’s “voice” most accurately and deal with the patient directly.
- Speak at an even pace in relatively short segments; pause often to allow the interpreter to interpret.
- You do not need to speak especially slow; this actually makes a competent interpreter’s job more difficult.
- Don’t say anything that you don’t want interpreted; it is the interpreter’s job to interpret everything.
- If you must address the interpreter about an issue of communication or culture, let the patient know first what you are going to be discussing with the interpreter.
- Speak in standard English (avoid slang), layman’s terms (avoid medical terminology and jargon), straightforward sentence structure and complete sentences and ideas.
- Ask one question at a time.
- Ask the interpreter to point out potential cultural misunderstandings that may arise. Respect an interpreter’s judgment that a particular question is culturally inappropriate and either rephrase the question or ask the interpreter’s help in eliciting the information in a more appropriate way.
- Do not hold the interpreter responsible for what the patient says or doesn’t say. The interpreter is the medium, not the source, of the message.
- Avoid interrupting the interpretation. Many concepts you express have no linguistic, or conceptual equivalent in other languages. The interpreter may have to paint word pictures of many terms you use. This may take longer than your original speech.
- Don’t make assumptions about the patient’s education level. An inability to speak English does not indicate a lack of education.
- Acknowledge the interpreter as a professional in communication. Respect his or her role.
D
isparities in the safety and quality of patient care exist in all areas of treatment—from diabetes to cancer to mental health. In addition to wealth and location, disparities are linked to the race and ethnicity of patients.

This fact was confirmed in the 2002 Institute of Medicine (IOM) report, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care (Smedley, Stith and Nelson) and again in the 2003 National Healthcare Disparities Report issued by the Agency for Healthcare Research and Quality (AHRQ). General findings concluded that patients in minority populations experience lower quality care and poorer health outcomes. These patients are less apt to receive clinically necessary procedures and routine treatment for common health problems. In particular, the 2003 report notes, “Minorities are more likely to be diagnosed with late-stage breast cancer and colorectal cancer.” In its follow-up 2005 National Healthcare Disparities Report, the AHRQ cites some progress in narrowing the health care gap yet significant disparities continue to exist. This is especially true for Hispanics, where health care disparities are widening for nearly 60% of core quality of care measurements.

One source for these disparities in patient care focuses on cultural and linguistic barriers. Despite the many forums and studies that have examined this subject, providing what the US Department of Health and Human Services Office of Minority Health (OMH) defines as culturally and linguistically appropriate services (CLAS), it is still an issue in health care organizations.

Sources for disparity in patient care include communication, stereotypes and biases, as well as distrust and uncertainty among both clinicians and patients. This situation can be exacerbated when family members, rather than trained medical interpreters, are used as translators. These barriers will continue to grow as 19% (52 million people) of the US population speaks a language other than English at home, according to the US Census Bureau.

In a study in Health Affairs (March–April 2005), experts in cultural competency from managed care, academia and government concurred that the push for cultural competence helps health care institutions effectively address inequities in quality of care for racial and ethnic groups. These experts noted that as of 2004, more than half of the medical education programs nationwide have some form of cultural competency training. But they also emphasized the need for better program uniformity and standards.

While approaches vary by institution, most programs focus on racial, ethnic and cultural diversity among staff, providers and patients. Maimonides Medical Center conducts programs using staff and outside speakers to address the unique issues of ethics, culture, rituals, values and belief systems.

“We developed a training session to help staff appreciate the cultural needs of the Orthodox Jewish community including Jewish law, customs, medical ethics, end-of-life/dignity and male/female issues, among others,” said Marcel Bieberfeld, Vice President of Psychiatry at Maimonides. “We also host a program covering the special cultural needs of Latinos and are looking at creating sessions for our growing Asian and Muslim populations.

In the broadest cultural sense, Maimonides is extremely language conscious, with signs in seven different languages and a staff that is fluent in 30 or more languages,” said Dr. Bieberfeld. “We should never get caught in a situation where clinician and patient are unable to communicate, thereby putting the patient at medical risk. We’ve even introduced a program that integrates our Russian populations with English-speaking patients to help them acculturate.”
Like many health care organizations, Maimonides requires every new employee to go through cultural sensitivity training as part of orientation. The hospital also runs specialized clinics catering to specific cultural and ethnic communities. These clinics provide multilingual staff well-versed in various cultural practices. These staff members understand how religious beliefs, dietary customs and family values can influence health care decisions about everything from immunizations and preventive care to medical procedures and end-of-life issues.

At Mount Sinai School of Medicine (MSSM), the Center for Multicultural and Community Affairs (CMCA) Department (www.mssm.edu/omca) is committed to supporting racial, ethnic and cultural diversity and excellence in minority health. In 2000, the CMCA spearheaded a multiyear Cultural Competencies project to effectively integrate cultural competency into the medical school curriculum and the residency and postgraduate programs.

According to Gary C. Butts, MD, director of the CMCA, “That project served as the seed for developing a number of valuable initiatives in cultural competency education and training, including a mandatory course, ‘Culture, Illness and Community Health,’ our Observing Cultural Behaviors in Settings (OCBIS) assessment system and a 40-member Culture and Health Working Group that is in the process of completing a six-year curriculum for medical school and residency training in cultural competence.

“Our integrated elements of cultural competency through our first two years of medical school,” said Dr. Butts. “When second-year students are evaluated for standard clinical competency, they will also be assessed for cultural elicitation in the clinical encounter based on various patient scenarios.”

OCBIS is designed to measure students’ cultural competency based on their education within nine cultural curriculum domains: beliefs, values and biases; bridging differences; control factors; environmental constraints; health care networks; health disparities; language and literacy; self and other; and similarities and differences. As part of this assessment, students are asked to use what they have learned to respond to examples of clinical situations involving different types of cultural conflict.

Today cultural competency is increasingly intertwined with assessing data on culturally prevalent health risks, identifying the impact of related attitudes and beliefs and creating suitable screening and awareness programs to improve patient care and outcomes. By cultivating this cultural knowledge and experience, health care practitioners are better equipped to provide patients with effective, appropriate, high-quality care. In a related move, The Joint Commission is currently conducting a field review to determine the value of asking health care facilities to collect information from patients’ medical records regarding race, ethnicity and primary language. Widespread adoption of CLAS and culturally competent care by today’s health care institutions continues in the wake of various initiatives from the OMH, the National Committee for Quality Assurance (NCQA), The Joint Commission’s Hospitals, Language, and Culture project and more. For ongoing updates on this important issue, visit the OMH Web site at www.omhrc.gov.

The increasing focus on cultural competency in health care is not without ethical implications. Within this emphasis on cross-culturalism, practitioners must acknowledge that cultural beliefs and practices are ever changing and must be wary of stereotyping care decisions for particular ethnic groups. As the DiversityRx Web site (www.diversityrx.org) advises, “All health care personnel should learn to regard the patient and his or her family as unique and aim to develop skills to assess the role of culture in any given situation.”

Follow-Up Failure

When test results fall through the cracks, physicians are liable.

Case Details
A 62-year-old male was hospitalized for a deep vein thrombosis. He responded well to anticoagulant therapy, and the primary physician’s plan was to discharge the patient on daily Coumadin and weekly home monitoring of his international normalized ratio (INR) coagulation time. At the time of discharge on June 12th, his INR was at 2.9, within the therapeutic range of 2.5–3. The primary physician was on vacation, leaving his covering office partner (ordering physician) to write the discharge prescription for home monitoring of INR levels. The covering physician did not see the patient again.

Two days after discharge, the patient’s INR was 2.96. On June 24th, the primary physician saw the patient in his office and drew blood. The blood test revealed that the patient’s INR was 3.23. The primary physician advised the patient to skip his Friday Coumadin dose.

On July 1st, when blood was drawn at home, the patient’s INR was 4.13. That same day, the laboratory faxed the results to the physician’s office addressed to the ordering physician. Neither the ordering physician nor the primary physician reviewed the fax, because the report was received after the primary physician had left for the day. The office had no routine in place to ensure a covering physician reviewed all results. The office also lacked a system to ensure that physicians were alerted to abnormal results. The office staff simply placed the report in the patient’s record. On July 8th, blood drawn at the patient’s home revealed that his INR was 7.55. On Friday, July 9th, the primary physician read the results of the July 8th test, telephoned the patient and advised him to stop taking Coumadin.

The patient fell on July 9th and was taken to the hospital. There, a head CT scan revealed an intracranial bleed. The patient’s INR was 6.2. A physician recorded that the bleed was secondary to Coumadin toxicity. Despite extensive therapy, the patient sustained significant neurological deficits and now resides in a long-term care facility.
Allegations
The plaintiff alleged inadequate monitoring of anticoagulant therapy, failure to discontinue the Coumadin in response to his elevated INR of 4.13 and failure to order aggressive treatment for his INR of 7.55.

Investigation and Case Development
The experts called in to review the case all agreed that the physician’s liability was clear. The physician either should have decreased or discontinued the Coumadin in response to the July 1st INR of 4.13 and repeated the INR test earlier than July 8th. The defendant primary physician concurred that he would have undertaken that treatment had he been aware of the INR of 4.13. Nonetheless, his lack of awareness was no defense in this case. The experts emphasized the defendant physician’s responsibility to be aware of pending test reports and to pursue receipt of test results. The experts believed that the plaintiff’s intracranial bleed was caused by his fall and that, had his INR been in the therapeutic range, the bleed would have been far less extensive.

Resolution
The case settled for $1,750,000.

5 Risk Reduction Strategies
In this case, one of the reasons the INR was not promptly reviewed was that the office had no procedure for tracking pending laboratory results. Office practices should include a system to track and log reports and their results. Information logged should include:

- patient’s name and identifying number;
- study name, date ordered and name of ordering physician;
- laboratory or facility used for the study;
- date results received and reviewed, with signature of reviewing physician;
- date patient is notified of result and by whom; and
- action taken, if any.

The log can be handwritten or electronic. Multiple commercial medical record systems that feature test logging and tracking software are available. An office can use standard software such as Microsoft Excel and Outlook. A standard approach decreases the risk of losing information when multiple people are involved in a patient’s care, especially when there is intraoffice coverage by physicians and their staff.

A member of the office staff should be designated to review the tracking log at determined intervals to ensure pending results have been received, reviewed by the ordering or covering physician and relayed to the patient. The physician should specify deadlines for pending results, and if reports are not received by then, a designated individual should follow up with the laboratory or take other such appropriate action. If the laboratory reports that the patient did not present as expected, then the physician should follow up with the patient.

A procedure for tracking laboratory results also should establish a list of “high alert” test results to trigger the staff’s notifying him or her promptly. Part of the alert method should include a specified time frame within which to contact the primary physician before contacting predesignated covering physician(s).

Patients should be notified of all test results, including normal findings that require no change in treatment. Physicians should inform their patients to expect notification within a specified time frame, and if not contacted within that time frame, to call the office. Such notification does not absolve the physician of the responsibility to ensure that results are received and acted upon timely, but patients can serve as failsafe in the process of ensuring their own safety.

All test results should have evidence of a physician review before being filed. Physicians can initial or write notes on the report to indicate that they have reviewed the results. Further documentation in the medical record should include the physician’s evaluation of abnormal or “high alert” results, interventions and patient notification.
Access Can Mean Everything

According to Robert Kolodner, acting National Health IT Coordinator, in an article in the February 2007 Government Health IT, about one-fifth of medical errors can be attributed to a lack of immediate access to information about patients. That statistic can make Health IT systems an attractive tool in remedying the information gap. When assessing the benefits of health IT, “safer is just the tip of the iceberg,” Kolodner said.

Between May 2005 and December 2006, Beth Israel Medical Center (BIMC), a member of the Continuum Health Partners, Inc. hospital and health services network, implemented Patient Real-time Information Systems Management (PRISM) at its 1,162-bed Petrie Division in Manhattan.

PRISM automates and streamlines many clinical processes, from reporting and viewing clinical laboratory and radiology results to documenting patient assessments and vital signs. The system is also used to update the Medication Administration Record and manage the entire pharmacy order process. And personnel can place medication, diagnostic, treatment and care orders through PRISM’s Computerized Provider Order Entry (CPOE). Standardized order sets—groupings of orders for specific diagnoses or problems—can introduce best medical practices into clinicians’ daily work. Although data on care improvement at BIMC are not yet available, similar CPOE systems elsewhere have reduced confusion of look-alike/sound-alike medications and other prescribing errors.

For nurses, the installation of a wireless computer network has enabled them to enter data into PRISM at a patient’s bedside or in hallways, using computers on wheels (dubbed “COWs”). The wireless network also allows hospital personnel to use laptops or other portable computing devices.

“Making orders, medication history and other clinical data immediately accessible at the point of care helps health care professionals to work more efficiently and effectively, make better informed decisions and spend more time with patients instead of at the nurses’ station completing paperwork,” says Tom H. Karson, MD, Chief Medical Information Officer at Continuum Health Partners.

Today, Continuum is testing remote access to PRISM that will permit medical staff to use it anywhere, anytime—whether to place a medication order from home or check lab results from their private practice.

According to Dr. Karson, “PRISM is a work in progress. We will never be ‘done’—medical knowledge and information technology change continually, and our system will develop accordingly. Different work groups are constantly addressing issues as they arise and enhancing the system based on user feedback, which has been tremendous.”

From its institution-wide decision to go electronic to its early adoption of such capabilities as picture archiving and communications systems (PACS) for online sharing of radiographic images, Maimonides Medical Center has long been at the forefront of the health information technology (HIT) movement. In a 2005 Hospitals and Health Networks survey of 44 U.S. cities, the center was recognized as one of the most tech-savvy, “wired” hospitals in the country.

Today, Maimonides continues to look for new and innovative technology as a means to improve clinical care of its patients while it increases the efficiency and satisfaction of its staff. One example is Maimonides’s plans for its emergency department.

Physicians are much more IT savvy today than when we first started implementation.

Two years after FOJP’s 21st Annual Conference, Achieving Quality—Integration of Technology in Health Care—our participating hospitals have taken significant strides toward some of the technology goals it presented.
Making orders, medication history and other clinical data immediately accessible at the point of care helps health care professionals to work more efficiently and effectively, make better informed decisions and spend more time with patients instead of at the nurses’ station completing paperwork.

“We are planning to incorporate bedside physiological monitoring equipment that directly interfaces with our current electronic medical record (EMR) system. This will allow for vital clinical information such as blood pressure and heart rate to be automatically captured and transmitted to the electronic medical record, thereby avoiding the manual labor previously required by both nursing and other support staff. The end result is more efficiency, better access to real-time vital patient information and, ultimately, enhanced patient care,” says Kenneth N. Sable, MD, director of medical informatics at Maimonides.

Like Beth Israel, Maimonides is broadening its use of health information technology through greater access to its EMR system. Maimonides worked with Verizon Business to connect the center’s main facility with 24 remote providers around Brooklyn to give physicians and other affiliated groups secure access to patients’ EMRs. This provides a secure connection enabling physicians and other affiliated groups to access patients’ EMRs.

In an effort to share health information technology outside its own facilities, Maimonides became part of the Brooklyn Health Information Exchange, an emerging regional health care information organization. The recipient of a $4 million HEAL-NY grant, Maimonides is working with other Brooklyn-based health care providers (including another hospital and several nursing homes and home care agencies) to establish the secure exchange of patients’ health information across the continuum of care. The first exchange of patient data through the Brooklyn Health Information Exchange is expected by mid-2008.

At Montefiore Medical Center, the success of its HIT implementation spawned a wholly owned subsidiary designed to enable other health care institutions to effect a similar clinical transformation. The subsidiary, Emerging Health Information Technology, works with international HIT system providers to help health care institutions implement advanced IT-based solutions that optimize patient care and operational efficiency while improving financial performance.

“When patients see their doctor and nurses accessing their information from the computer, it gives them a sense of security. Patients really feel we’re doing things in a more streamlined and automated fashion, and it has had a very positive reflection on patient satisfaction,” according to a quote on the company’s Web site from Matthew Berger, MD, Director, Medical Service, Einstein Division, Montefiore.

Montefiore’s comprehensive EMR system operates on a wireless network that connects the center’s three acute care hospitals and 25 ambulatory care centers. Since it has been using CPOE, according to Dorrie Napoleone, Montefiore’s director of information systems, the center has reduced its prescribing error rate by more than 75%. She says that Montefiore plans to integrate multiple forms of electronic patient information and other clinical data into the system to further enhance patient care and operational efficiency.

In an effort to share health information technology outside its own facilities, Montefiore Medical Center formed a subsidiary, Emerging Health Information Technology, designed to enable other health care institutions to effect a similar clinical transformation. The subsidiary, Emerging Health Information Technology, works with international HIT system providers to help health care institutions implement advanced IT-based solutions that optimize patient care and operational efficiency while improving financial performance.

As of 2006, only about 5% of hospitals nationwide had adopted a CPOE system. In New York City, HIT implementation is a case of extremes, from high-tech to no tech. According to a Department of Health and Mental Hygiene (DOHMH) study of community health centers, most city hospitals use IT in administrative and business applications but fewer use it in clinical applications. For example, only 20% use HIT in administrative and business applications but fewer use it in clinical applications. For example, only 20% use HIT in exam rooms, 15% record medical complaints electronically and 10% support electronic access to lab and radiology records.
mation into a single record, such as merging patients’ digitized PACS images with their EMRs.

More recent projects at Montefiore have focused on ambulatory functionality, including e-prescribing, automated result tracking and using structured notes to improve medical documentation. “Our physicians are much more IT savvy today than when we first started implementation. In the past, we had to push them to adopt this technology; now, they are guiding the effort,” says Dr. Berger.

Both Montefiore and Emerging Health Information Technology are part of a health coalition formed to create a system that links providers throughout the Bronx: the Bronx Regional Health Information Organization (Bronx RHIO), established with a $4.1 million New York State grant, includes a majority of the borough’s health care providers, from hospitals and long-term care institutions to physician practices and pharmacies. The coalition is implementing the first phase of data sharing in its effort to improve patient care by integrating myriad clinical systems and databases to provide any health care provider in the Bronx with instant access to a patient’s EMR.

Mount Sinai Medical Center (MSMC) is building a complete health care delivery system in East Harlem; its cornerstone is the center’s EpicCare Ambulatory EMR, which can capture all clinical information about an outpatient’s health care. In developing this system, the Epic team and Medical Informatics personnel reviewed literature and EMR experiences at multiple ambulatory sites and deployed a user-centric selection process to assess clinical workflow, in-house needs, vendor capabilities and total cost of ownership.

In a 2006 article published in HIMSS: The Digital Office, Kristin Myers, senior director of strategic projects-clinicals at MSMC, said, “Implementing an EMR is not about deploying technology; the key is to understand the workflow.”

Recently, MSMC embarked on a $23 million effort to extend EMR access to its Faculty Practice, and three primary care practices have already been connected. The plans are to extend EMR access to every specialty in both hospital-based and faculty outpatient practices, so that clinical information from more than 800,000 annual visits can be entered into the EMR.

“Implementing an EMR highlights both good and bad in your existing processes. It’s like a cardiac stress test that identifies the healthy vessels as well as the pathology. If a practice has poor billing processes, an EMR will highlight the deficiencies, enabling you to fix them,” says Joseph Kannry, MD, Director, Center for Informatics, lead Physician EpicCare Ambulatory EMR. The most notable benefits of MSMC’s EMR implementation are continuity of care and improved communication through use of a single chart. Access to a single chart reduces paper handoffs and centralizes clinical communication, making it easier for providers to rapidly access the clinical information they need.

MSMC also is enhancing its Web-based SignOut and Discharge Summary system. During a patient’s hospitalization, this system maintains information and generates a fully compliant discharge summary that is electronically edited and signed in the medical record. More than 700 users, mostly house staff, use SignOut to create discharge summaries, which are immediately available through the hospital’s clinical repository. In a recent unpublished analysis, clinical information is recorded in the SignOut system for 75% of discharged patients.

The efforts underway at these four area hospitals will bring EMR to a network of health care providers throughout the local community, creating a continuum of care and health care communications for today’s patients.
EMR Incentives Pay off

Despite a track record of improving health care quality, clinics and private practices find it difficult to cost-justify Electronic Medical Record (EMR) system implementation. In an effort to help, New York City’s Department of Health launched the Primary Care Information Project (PCIP), part of a $27 million safety and efficiency improvement initiative in the city. The goal of PCIP is to bring EMRs to providers who serve the city’s poorest communities.

This fall, 1,300 qualifying private practices across the city will launch new EMR systems, thanks to the PCIP. The initial group of primary care providers will receive eClinicalWorks’ Electronic Medical Records/Practice Management (EMR/PM) software and two years of technical support for $4,000, a savings of more than 65%. According to a release from eClinicalWorks, New York City Mayor Michael Bloomberg endorsed EMRs stating “…the essence of preventive care is information—information that patients, doctors, and other health care workers need to make the right decisions, at the right times.”

National EMR programs are also underway. According to Health IT Strategist, the U.S. House of Representatives recently introduced a bill that would grant tax and financial incentives to small physician-practices to help offset the costs of purchasing Health IT (HIT) systems. These incentives, paid for through Medicare, would cover EMRs, evidence-based clinical decision support tools and secure e-mail.

In May 2007, the IRS gave permission to non-profit hospitals to give EMR software and support services to their staff doctors to use in their private practices. Hospitals doing so will not lose their tax-exempt status and would be granted exemptions from Federal anti-kickback and Stark laws. Since the cost of adding physicians to a hospital’s existing EMR network is relatively low, this tax clarification is expected to encourage hospitals to assist physician-practices with HIT implementation.

It Takes More than Technology

While a step in the right direction, EMRs are not the panacea for patient quality and safety. A study published this July in Archives of Internal Medicine, “Electronic Health Record Use and the Quality of Ambulatory Care in the United States,” concluded use of EMRs does not necessarily improve the quality of ambulatory care. In this joint venture, HIT experts from Stanford University and Harvard Medical School surveyed physicians who do and do not use EMRs, examined records of more than 50,000 patient visits and compared the results on 17 quality indicators. They found that physicians who use EMRs scored better in two areas—avoiding benzodiazepine use in patients with depression and avoiding routine urinalysis during general medical exams. The EMR group scored the same on 14 indicators, included medical management of common diseases, recommended antibiotic prescribing, preventive counseling, screening tests and avoiding potentially inappropriate medication prescribing in elderly patients. They fared worse in one area—statin prescribing to patients with hypercholesterolemia. These surprising results conflict with the claims of HIT supporters.

Still this study may not paint the most accurate picture of EMR’s impact on patient safety. The relevance of the results can be challenged by the fact that this study was based on EMR data from 2003–2004. A rebuttal article, “Vendors Dispute EHR, Ambulatory-care Report” on Modern Healthcare Online on July 18, 2007, highlighted many examples of earlier EMR systems simply replacing the paper chart with an electronic format without addressing the underlying processes. The article states, “…[it] just help[s] you make the same mistakes faster and more efficiently.” As a result, health care providers are analyzing and correcting the processes in conjunction with EMR implementation. Today, physicians and health care organizations are recognizing that it takes more than technology by itself to effect change.

Protecting Your EMRs

In December 2006, the Federal Rules of Civil Procedures released new e-discovery rules regarding the content in EMR and health information systems as well as all other electronic data including e-mail, attachments and instant messages. The guidelines currently apply to US district court; however, states are expected to follow suit with their own legislation.

According to the Healthcare Information and Management Systems Society, there are three basic issues concerning keeping a “legal” health record. First, there needs to be a clear definition of what constitutes your legal EMR and how that data is “mined” from the system. Second, rules must be established and enforced to maintain the integrity of the legal EMR. This includes policies regarding updates, retention and destruction during e-discovery. While both paper and electronic records document when an event took place, EMRs document the time an entry was made, when a document was accessed, who looked at it and what if anything was altered. Finally procedures for the legal disclosure of EMR information must be developed.

As the technology of EMRs grows more sophisticated, so must physician’s record keeping policies. For further information on this topic visit the Healthcare Information and Management Systems Society (HIMSS) web site (www.himss.org).
Dr. Groopman’s insights transcend the adage, “Treat the patient, not the disease.” By way of practicing what he preaches, he describes the appearance, culture, personalities and families of each patient and physician in the book. The descriptions serve to remind readers that patients are not data for a clinical study and physicians are not diagnostic robots.

Dr. Groopman links communication to both quality of care and misdiagnosis. In the book, he writes, “How a doctor thinks can first be discerned by how he speaks and how he listens.” He notes, “You need information to get at a diagnosis, and the best way to get that information is by establishing rapport with the patient. Competency is not separable from communication skills.”

We spoke with Dr. Groopman about misdiagnosis and the correlation between doctors’ communication skills and patient safety.

INFOCUS: What has been your experience with evidence-based medicine and misdiagnosis?

GROOPMAN: I’m a person who has generated evidence for evidence-based medicine. Over the last 30 years, I’ve done all sorts of clinical trials, tested drugs for different types of patients and so on. I believe every physician should refer to information from research, but too many physicians don’t appreciate or too quickly endorse what’s called evidence-based medicine.

When you do a clinical trial, which is what produces the evidence, you cherry pick the patients for the studies. They often don’t have other illnesses that are active, other confounding variables. The results speak to what may or may not be the effects of a drug in this subset of patients on average but don’t necessarily encompass the full spectrum of response or lack of response of all the individuals.

My caveat, my caution, is that there are times when there is no evidence. You refer to what evidence exists but you also try to see how the patient sitting in front of you does or does not correspond to the database.

Also, evidence changes. For example, for decades the evidence supported the conclusion that estrogens protected postmenopausal women from heart disease. All that evidence was wrong.

INFOCUS: In the book, you discuss the tendency of physicians to act on their first response to a patient’s illness and not question their initial diagnosis. How does this effect quality of care?

GROOPMAN: I interviewed an emergency department doctor who worked on a Navaho reservation...
in the middle of a flu epidemic. He’d seen dozens of cases of the flu when one woman came in saying she felt a little feverish and had the sniffles. She took aspirin and was breathing quickly. Immediately, he thought it was flu. Even though there was data in her evaluation that didn’t fit into a picture of flu, he discounted them.

He made two thinking errors. One of them is called availability—you tend to recall and weigh heavily on what is most available in your mind. For this doctor, it was flu in the middle of a flu epidemic. The second thinking error is called confirmation bias. Once you come to a conclusion in your head, you tend to cherry pick information that confirms your assumptions and discount things that contradict it.

In the case of the Navaho patient, her chest x-ray didn’t show any evidence of early pneumonia; her electrolytes and her blood count were not consistent with the doctor’s diagnosis. The patient was breathing heavily but the physician didn’t consider she could be aspirin toxic. And this guy knows a lot about aspirin toxicity, which is the irony of it.

**INFOCUS: Do you think today’s health care environment contributes to these thinking errors?**

**GROOPMAN:** It is a major contributor. All of us as clinicians are working under tremendous pressure. Increasingly we are seeing patients at shorter and shorter intervals, which means that there is more pressure on us to make snap judgments.

Another factor is that we are working with templates and electronic medical records, which on the one hand is beneficial because they help organize and provide ready access to data. On the other hand, there is a seductive aspect to the electronic medical records because you simply check in the boxes. So, instead of having an open-ended conversation with a patient, you immediately take the symptom or assumption and fill out the computer screen.

The other major issue is reimbursement. You are not paid to think. You are not paid to spend considerable time with patients. You are paid to act; to do procedures and interventions. Physicians such as pediatricians, family medicine physicians, internists and gynecologists, people who really sit down and take full histories, are paid poorly for doing so. Therefore, they need to move quickly in order to see a sufficient number of patients to sustain their revenues. It is very lopsided.

**INFOCUS: How does a physician’s communication with his or her patient relate to misdiagnosis?**

**GROOPMAN:** Whatever the patient is saying, he or she is telling you something. One way physicians can overcome the tendency to make snap judgments is to understand that people are coming to them because as physicians they have experience, knowledge and expertise. What patients want, and what they deserve, is a cogent explanation for their symptoms. When we’re working in haste under time pressure, communication suffers. Basically, it is important to spend the minutes to explain to someone in understandable language what you, as the physician, think is the physical problem. If you think there is no physical problem, explain why they are having the symptom. Don’t use a curt dismissive statement like, "nothing is wrong with you." The patient wouldn’t be in your office unless they felt something was wrong. Learning to use language in a more effective way is tremendously important.

**INFOCUS: Who is the book written for—patients or physicians?**

**GROOPMAN:** The book is written for both. Much to my gratification, I’ve gotten a hugely positive response from physicians. And I didn’t expect that because the issue of misdiagnosis is a serious and frankly, charged issue. I think misdiagnosis is the elephant in the living room. This is a reality of medical practice and there has never been a vocabulary or a strategy to understand why it occurs.

The book is written for a lay audience, but the information in it is new to doctors. It is also written for physicians because it is so hard to constantly think about your own thinking, especially when you have to see a lot of patients under time pressure. The idea that a patient or family member or friend can help us think better, that is a relief rather than a threat.
FOJP thanks the sponsors of the 23rd Annual Conference.