In the realm of patient safety, much attention is placed on preventable harm such as medication errors and other obvious risks, largely due to two important Institute of Medicine studies.\(^1\,\,2\) But while medication errors certainly affect many patients and are thus worthy of emphasis, I believe the effects of diagnostic errors deserve equal, if not more, attention.

That's why MMIC and UMIA have invested significant resources into harvesting and analyzing claim data and researching tools that help reduce the incidence of missed or delayed diagnoses.

We now have the first crop of data on this important topic — resulting from our partnership with Harvard-based CRICO Strategies\(^3\) — which we share in this issue of Brink. We are also evaluating clinical decision support tools that we believe will make a difference in improving diagnostic accuracy, because we think that once these technologies are embraced and integrated into the work-flow, they can be of significant value to physicians and other health care providers. For example, we now offer a tool called PeriCALM\(^4\), designed to predict and reduce the incidence of shoulder dystocia and brachial plexus injuries during labor and delivery. And we are evaluating VisualDx\(^5\), a visual diagnostic aid, and Isabel, a diagnosis checklist tool that can be integrated with electronic health records.

Providers — and ultimately patients — may benefit greatly from these and other sorts of artificial intelligence tools in diagnosing thousands of conditions, especially in patients presenting with nonspecific or complex symptoms. Other factors which contribute to diagnostic challenges include the increasingly limited time a physician spends with his or her patients, incomplete or nonexistent medical histories, lack of continuity of care, and co-morbidities that may contribute to a patient’s risk profile.

As always, we appreciate the loyalty and support you give us. Please know that we work diligently every day to earn your trust. If you have ideas or insights into ways we can help you further, please drop us a line or give us a call.

All our best,
Bill McDonough, President and CEO, MMIC and UMIA

---

1. To Err is Human: Building a Safer Health System. Institute of Medicine website. www.tinyurl.com/oxuwtk5
3. CRICO Strategies website. www.rmf.harvard.edu
SUPPORT AVAILABLE FOR YOUR STRUGGLES WITH TECH ISSUES

From EHR work flows to network security to HIPAA Compliance, help is as close as the partner you count on for professional liability protection. As an MMIC or UMIA client, you are entitled to a Health IT Checkup at no cost. The checkup helps identify vulnerabilities and gets you on the road to solutions.

Why get a Health IT Checkup? It’s the best way to make sure the technology that helps you deliver high-quality care is accessible, protected and operating at peak efficiency. It can also help you better manage your business, including technology planning, troubleshooting, security and compliance management, electronic documentation, even staff management.

A Health IT Checkup is quick and easy, yet it reviews your entire IT environment for places you could be at risk. The assessment helps you:

- Uncover IT risks
- Review current hardware and software platforms
- Determine your HIPAA and overall compliance status
- Prioritize technology projects
- You’ll receive an at-a-glance view of your operation that enables you to identify and take action on your most pressing technology risks.

HIPAA SECURITY CONSULTING SERVICES

We can help organizations manage HIPAA security compliance with our Managed Security Services:

- Risk analysis for Meaningful Use attestation
- HIPAA security assessment
- Policy development and management
- Managed risk services
- Awareness training
- Risk remediation
- Breach or incident response

MMIC DIVIDENDS, UMIA DISBURSEMENTS DELIVERED

UMIA policyholders received the second of five annual payments resulting from the sale of UMIA to MMIC in 2013. Checks were delivered in May for those who were UMIA policyholders at the time of the transaction. Questions? Contact Stewart Pierce, UMIA, at SPierce@UMIA.com.

MMIC policyholders received their annual dividend checks in March. The total dividend returned to policyholders in 2014 was $6 million. For more information, contact Jay Koepsell at Jay.Koepsell@MMICgroup.com.

HAVE YOU TAKEN YOUR PULSE LATELY?

The pulse of your organization, that is. The PULSE 360 survey engages physicians in a process of self-reflection, based on anonymous feedback from colleagues. The aim is to improve behaviors that encourage open, respectful, effective communications and teamwork. In one study, teamwork improved by 217 percent in 1,134 physicians after Pulse 360 feedback, from 23,617 ratings submitted. Learn more about PULSE 360 in the Winter 2014 edition of Brink at MMICgroup.com, or contact Beth Schultz at Beth.Schultz@MMICgroup.com for more information.

EHR ADOPTION IS INCREASING. IS YOUR STATE KEEPING UP?

A survey conducted by the National Center for Health Statistics shows that adoption of electronic health record systems has varied widely from state to state. In 2013, the percentage of physicians who had an EHR meeting the criteria for a basic system ranged from 21 to 83 percent (see chart below). And the percentage of physicians using any type of EHR system ranged from 66 to 94 percent.

Does your organization need help achieving Meaningful Use with your EHR? Contact 877.838.6869 and we’ll show you how we can help. Or visit MMICgroup.com > Health IT for more information.

Office-based physicians with a basic EHR system (%), 2013

<table>
<thead>
<tr>
<th>State</th>
<th>Basic EHR System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>47.2</td>
</tr>
<tr>
<td>Alaska</td>
<td>50.4</td>
</tr>
<tr>
<td>Arizona</td>
<td>51.7</td>
</tr>
<tr>
<td>Arkansas</td>
<td>45.4</td>
</tr>
<tr>
<td>California</td>
<td>53.8</td>
</tr>
<tr>
<td>Colorado</td>
<td>46.8</td>
</tr>
<tr>
<td>Connecticut</td>
<td>41.5</td>
</tr>
<tr>
<td>Delaware</td>
<td>47.2</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>46.0</td>
</tr>
<tr>
<td>Florida</td>
<td>49.6</td>
</tr>
<tr>
<td>Georgia</td>
<td>42.6</td>
</tr>
<tr>
<td>Hawaii</td>
<td>52.1</td>
</tr>
<tr>
<td>Idaho</td>
<td>42.3</td>
</tr>
<tr>
<td>Illinois</td>
<td>41.9</td>
</tr>
<tr>
<td>Indiana</td>
<td>43.4</td>
</tr>
<tr>
<td>Iowa</td>
<td>50.5</td>
</tr>
<tr>
<td>Kansas</td>
<td>45.5</td>
</tr>
<tr>
<td>Kentucky</td>
<td>41.5</td>
</tr>
<tr>
<td>Louisiana</td>
<td>39.4</td>
</tr>
<tr>
<td>Maine</td>
<td>45.3</td>
</tr>
<tr>
<td>Maryland</td>
<td>47.1</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>47.2</td>
</tr>
<tr>
<td>Michigan</td>
<td>50.4</td>
</tr>
<tr>
<td>Minnesota</td>
<td>48.4</td>
</tr>
<tr>
<td>Mississippi</td>
<td>45.5</td>
</tr>
<tr>
<td>Missouri</td>
<td>41.5</td>
</tr>
<tr>
<td>Montana</td>
<td>40.6</td>
</tr>
<tr>
<td>Nebraska</td>
<td>50.4</td>
</tr>
<tr>
<td>Nevada</td>
<td>33.0</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>32.4</td>
</tr>
<tr>
<td>New Jersey</td>
<td>31.3</td>
</tr>
<tr>
<td>New Mexico</td>
<td>39.6</td>
</tr>
<tr>
<td>New York</td>
<td>30.6</td>
</tr>
<tr>
<td>North Carolina</td>
<td>51.1</td>
</tr>
<tr>
<td>North Dakota</td>
<td>39.4</td>
</tr>
<tr>
<td>Ohio</td>
<td>52.1</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>45.5</td>
</tr>
<tr>
<td>Oregon</td>
<td>64.9</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>41.8</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>41.0</td>
</tr>
<tr>
<td>South Carolina</td>
<td>39.9</td>
</tr>
<tr>
<td>South Dakota</td>
<td>58.1</td>
</tr>
<tr>
<td>Tennessee</td>
<td>41.5</td>
</tr>
<tr>
<td>Texas</td>
<td>46.4</td>
</tr>
<tr>
<td>Utah</td>
<td>65.5</td>
</tr>
<tr>
<td>Virginia</td>
<td>51.2</td>
</tr>
<tr>
<td>Washington</td>
<td>50.5</td>
</tr>
<tr>
<td>West Virginia</td>
<td>26.9</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>67.9</td>
</tr>
<tr>
<td>Wyoming</td>
<td>37.1</td>
</tr>
<tr>
<td>National average</td>
<td>48%</td>
</tr>
</tbody>
</table>

Does your organization need help achieving Meaningful Use with your EHR? Contact 877.838.6869 and we’ll show you how we can help. Or visit MMICgroup.com > Health IT for more information.

New & Notable

MMIC TO LAUNCH NEW WEBSITE

MMIC’s new website is coming soon. It will feature a blog, clinician well-being resources, twice as much content to use in your practice, webinars on demand, and a bold new look.

Find us at MMICgroup.com

2 / Brink / Summer 2014
Why we like it

What it does

Who can benefit

July 30

THE EVOLVING ROLE OF THE POST-ACUTE MEDICAL DIRECTOR

Presenter: Paul Sanders, M.D.

Dramatic shifts in the care of seniors from long-term care to assisted living, home-based services and post-acute care have significantly changed the roles of physicians working with senior patients. This presentation will describe the continuously changing and evolving role of the post-acute or transitional care medical director.

August 27

TRANSFORMING BEHAVIOR AND CULTURE AT WORK: WHO HEALS THE HEALER?

Presenters: Kari Olson-Finnegan, Jennifer Gyle, Laura Drif-Moakum, M.P.H.

This is the fourth in a series of special webinars aimed at health care professionals that explores how to improve health care workplace culture by increasing healthy behaviors and eliminating harmful behaviors. There is an epidemic of stress and burnout in the U.S. medical provider population. This is an issue that has far-reaching impact. It affects health care safety and patient care, in addition to employee satisfaction. The underlying contributors to this epidemic will be reviewed, as well as a variety of techniques, programs and resources to promote healing among our clinicians.

November 5

DISPELLING THE MYTH: CYBER RISK IS NOT A TECHNOLOGY PROBLEM

Presenter: Trish Lugtu, B.S., CHIPS, CAP, CHCS

No doubt about it — HIPAA has grown teeth. Within the last year, a 12-physician dermatology group settled a $150,000 resolution agreement with the Office for Civil Rights for potential HIPAA violations. Do you know what your organization can do to avoid the same scrutiny? The first step is to dispel the myth that cyber risk is a technology problem. Most breaches are caused by people, processes and behavior. This is why protecting patient health information begins with leadership and ends with solid risk management practices.

The recent ON-DEMAND WEBINAR: DIAGNOSIS ERRORS CONTRIBUTING FACTORS AND INTERVENTIONS: SYSTEM ISSUES

Presenter: Gordon Schiff, M.D.

According to the Society to Improve Diagnosis in Medicine, diagnostic error is the leading cause of medical malpractice claims in the U.S., and is estimated to cause 40,000–80,000 deaths annually. One in every 10 diagnoses is wrong, and one in every 1,000 ambulatory diagnostic encounters results in harm.

This webinar series, developed through a partnership of MMIC, Pathway Health and LeadingAge Iowa, will provide information and tools to help LTC organizations engage in quality assurance and continuous performance improvement.

Topics for the webinar series include:

GETTING TO GREAT... AND GREATER: AN INTRODUCTION TO QAPI

(August 6)

START WHERE YOU ARE: FACILITY SELF-ASSESSMENT

(September 3)

FOLLOW YOUR DATA: PERFORMANCE IMPROVEMENT PLANS THAT WORK

(October 8)

DON’T STOP NOW! MONITORING FOR MOMENTUM

(November 12)

DIAGNOSTIC TOOLS FOR THE MEDICINE BAG

It wasn’t so long ago when physicians carried a medicine bag equipped with the tools of the trade. But now, through the transformative impact of high-speed Internet, the proverbial medicine bag has turned virtual in nature. The commoditization of broadband speeds, coupled with clinician adoption of new technologies, has enabled vendors to successfully introduce technology-based tools that enhance the quality and safety of care. In support of this common goal, MMIC and UMIA have made a commitment to seek, discover and raise awareness of solid solutions that reduce the risk inherent to the delivery of health care.

Technology will never replace the physician. I know that I can get carried away with my unbridled excitement for innovative technology. So I think it is important to begin by stating this fundamental belief: Technology will never replace the physician. No matter how well-programmed a machine, cognitive ability tempered by empathy, intuition and the intangible human connection cannot be replaced by bits and bytes. Artificial intelligence will never replace the human experience. Yet, because physicians are human and therefore prone to error, information-enhancing tools can aid in uncovering potential diagnostic pitfalls that might lead to patient injury or death.

Powering diagnosis through technology

Because cases of diagnosis-related events comprise a significant percentage of all malpractice claims, we have set out to seek solutions that strengthen the diagnostic process. Below are a few of the tools that we have evaluated so far.

Do you use technology-based tools that you would recommend to your peers? If so, let us know! Contact Trish.Lugtu@MMICgroup.com.

TRISH LUGTU, B.S., CHIPS, CAP, CHSS
R&D Manager, Health Informatics, MMIC
Trish.Lugtu@MMICgroup.com

<table>
<thead>
<tr>
<th>The tool</th>
<th>What it does</th>
<th>Why we like it</th>
<th>Who can benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PeriCALM® Shoulder Screen™</td>
<td>Perigen.com</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isabel</td>
<td>IsabellHealthCare.com</td>
<td>Isabel is a diagnostic checklist tool that helps clinicians broaden their differential diagnosis and recognize a disease at the point of care.</td>
<td>Clinicians involved with prenatals care, OB/GYN practices, hospital clinics and triage settings.</td>
</tr>
<tr>
<td>VisualDx®</td>
<td>VisualDx.com</td>
<td>This web-based tool helps clinicians identify women whose babies are at increased risk for shoulder dystocia and brachial plexus injury.</td>
<td>Should dystocia remains one of the top causes of birth-related injury and medical malpractice claims in the U.S. This tool creates an estimate of that risk in order to facilitate informed communication between the physician and patient.</td>
</tr>
<tr>
<td>Powering diagnosis through technology Because cases of diagnosis-related events comprise a significant percentage of all malpractice claims, we have set out to seek solutions that strengthen the diagnostic process. Below are a few of the tools that we have evaluated so far. Do you use technology-based tools that you would recommend to your peers? If so, let us know! Contact <a href="mailto:Trish.Lugtu@MMICgroup.com">Trish.Lugtu@MMICgroup.com</a>.</td>
<td>TRISH LUGTU, B.S., CHIPS, CAP, CHSS R&amp;D Manager, Health Informatics, MMIC <a href="mailto:Trish.Lugtu@MMICgroup.com">Trish.Lugtu@MMICgroup.com</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Physicians generally do not feel comfortable discussing their mistakes — let alone the all-too-human cognitive biases that might lead to mistakes. But that's exactly why *How Doctors Think* by Jerome Groopman, M.D. is such a valuable text for both doctors and patients.

I first read this book when it was published in 2007 after hearing it reviewed on NPR. I wanted to know what my patients were reading, and now I believe that the book should reside in every physician’s library.

In *How Doctors Think*, Dr. Groopman talks with physicians in many specialties, and he examines both when they made key diagnoses and when they missed diagnoses. He also reflects on his own experiences as a patient; over the years, Dr. Groopman saw multiple hand specialists to obtain an accurate diagnosis and treatment for chronic wrist pain.

Dr. Groopman’s ultimate goal in *How Doctors Think* is to recommend a more thoughtful process in those cases where the diagnosis is unclear, or where the patient does not respond as expected to the initial treatment. He accomplishes this by examining several important cognitive errors that come into play in the clinical setting. For example, he discusses the case of “representativeness error” — when a physician’s thinking is guided by a prototype (e.g., a young, healthy, fit patient with chest pain) causing the physician to ignore possibilities that contradict that prototype, thus missing a diagnosis.

In a similar vein is “attribution error,” where the patient is assigned a designation (e.g., alcoholic, smoker, noncompliant) which then affects the diagnostic and therapeutic process, potentially leading to errors. Dr. Groopman also describes “affective error,” where a provider cares so much about a patient that it is hard for him or her to order difficult tests or procedures, causing a diagnosis to be missed.

Throughout the book, Dr. Groopman reminds physicians to explain what the patient’s history, physical findings, lab results and X-ray results lead him or her to believe about the cause of the patient’s symptoms. He also reminds physicians to explain — in clear language — to the patient why a certain treatment is indicated, and why the physician picked that particular therapy.

When I recently reread this book, I saw it from a new perspective. I realized that Dr. Groopman’s intent was to educate the layperson in how doctors think and how errors can occur — and that this could ultimately help the care team as well. Essentially, Dr. Groopman’s book is a tool for improving patient engagement: if a patient understands cognitive biases and how errors might occur, then the patient or family can ask thoughtful questions to assist the physician in looking further and reaching the correct diagnosis or therapy.

Whether this book assists physicians in identifying and avoiding their own biases, or it aids patients in engaging and asking thoughtful questions, Dr. Groopman’s analysis is a valuable tool in improving patient care and safety.

**PATRICE F. HIRNING, M.D.**
Medical Director, UMIA phirning@umia.com

---

ESSENTIALLY, DR. GROOPMAN’S BOOK IS A TOOL FOR IMPROVING PATIENT ENGAGEMENT: IF A PATIENT UNDERSTANDS COGNITIVE BIASES AND HOW ERRORS MIGHT OCCUR, THEN THE PATIENT OR FAMILY CAN ASK THOUGHTFUL QUESTIONS TO ASSIST THE PHYSICIAN IN LOOKING FURTHER AND REACHING THE CORRECT DIAGNOSIS OR THERAPY.

What’s the leading cause of malpractice claims in the U.S.? Not surgical mistakes. Not negligence. Not even medication errors. It’s missed or delayed diagnoses, which cause 40,000–80,000 deaths every year. Despite their thorough understanding of medicine and the assistance of technology, physicians can still make mistakes in their reasoning. In this issue of *Brink*, we help you recognize common errors in diagnosis that can have a profound effect on patient safety.
Why we sometimes fail to accurately diagnose our patients — and how we can improve.

Laurie C. Dill-Mellum

WHAT’S WRONG?

The subject of diagnostic failure is not one I recall being discussed in medical school. Only recently has it gained attention as a topic ripe for research and improvement efforts.

Since the publication of the Institute of Medicine’s report “To Err is Human” in 1999, which stated that there were 44,000–98,000 preventable deaths each year in the U.S. due to medical errors, the patient safety movement has made progress in addressing many types of medical errors, including wrong-site surgery, medication errors, falls, pressure ulcers and hospital-acquired infections.

How diagnostic errors occur
One reason diagnostic failure has largely escaped attention is that, frankly, it is difficult to define and measure. Its causes are multiple.

Additionally, solutions seem highly complex given that clinical decision-making involves addressing how doctors think and are trained.

Traditional teaching holds that more than 80 percent of diagnoses are made on patient history alone, a further 5–10 percent on investigations such as lab tests and imaging studies. All of these components are informed, of course, by the individual physician’s cognitive processes.

What traditionally has not been taught are the various types of cognitive errors to which we can all fall prey in the course of making a diagnosis. And when we do recognize cognitive errors, we are likelier to see them in others than in ourselves. In a study of 563 reported diagnostic errors in which 173 physicians were involved, 30 percent of physicians admitted to committing errors, whereas 68 percent reported witnessing others commit errors.

The book How Doctors Think by Jerome Groopman, M.D. (see book review on pg. 6) artfully brings the study of cognitive bias in medical decision-making to the attention of both the public and the medical profession. Many practicing physicians are unaware of how cognitive biases affect their day-to-day clinical decision-making, and they often consider themselves less vulnerable to such errors than their peers.

Common biases include “anchoring,” which is holding fast to a first diagnosis; “crowding,” which is fitting a constellation of symptoms into whatever medical condition is being seen most frequently at the time (e.g., seeing all cases of gastroenteritis on a cruise ship as being caused by the norovirus); and “premature closure,” which is jumping to the first diagnosis that makes sense and not considering other possibilities.

According to Dr. Gordon Schiff, a national expert in delayed diagnosis and misdiagnosis, one-third of people in the U.S. report that they or a family member have experienced a medical error, with 50 percent of those errors being diagnosis-related. In ambulatory settings, diagnosis-related errors are twice as frequent as the second and third leading causes of error (medical and surgical treatment, respectively) combined. It is because of this prevalence that we have dedicated this issue of Brink, and much of our work in our Patient Safety Solutions programs, to the topic of delayed or missed diagnoses.

Diagnostic errors are influenced by many factors, including a patient’s access to medical care and the setting in which it is obtained; the quality of the history and physical exam; the appropriateness of tests ordered; the assessment, which includes hypothesis generation; the urgency attached to the complaint; and lastly, whether appropriate referral and timely follow-up are advised.

What we can do
How can we impact diagnostic error? First, we must go upstream to see them in others than in ourselves.

Especially when we miss something; how else are we to learn? What we can do is helpful when there are diagnostic dilemmas, or when there is dissent among the care team regarding a patient’s condition. Reliable follow-up and feedback from patients and from colleagues, especially when we miss something; how else are we to learn? Also, we need “just in time” knowledge and consultations; computer-assisted clinical knowledge and decision-making tools help, but the ease with which real-time consultations can be obtained varies widely. I’ve recently heard many complaints about the lack of timely response to colleagues requesting consults, which is a result, I believe, of the loss of professional community and the intense production pressures felt by many physicians today.

process and consider whether other explanations exist for a patient’s complaints or condition. Similarly, conducting diagnostic rounds or huddles in settings such as ICUs and emergency departments — where input from the care team, and sometimes from the patient’s family, can be gathered — is helpful when there are diagnostic dilemmas, or when there is dissent among the care team regarding a patient’s condition. Many opportunities for improvement exist in the arena of delayed diagnosis and misdiagnosis. For example, we need reliable systems for test follow-up, including determining whether a test that is ordered is the right test for the right patient, and whether test results are being delivered to the right people. We also need more reliable follow-up and feedback from patients and from colleagues, especially when we miss something; how else are we to learn? Also, we need “just in time” knowledge and consultations; computer-assisted clinical knowledge and decision-making tools help, but the ease with which real-time consultations can be obtained varies widely. I’ve recently heard many complaints about the lack of timely response to colleagues requesting consults, which is a result, I believe, of the loss of professional community and the intense production pressures felt by many physicians today.
Diagnosis and the EHR
Another factor that can reduce the rates of delayed diagnosis and missed diagnosis is a well-engineered electronic health record (EHR). A good EHR can help with filtering, organizing, and providing access to information. It can make old records accessible, reveal data trends, and improve clinical documentation. EHRs should be programmed to highlight and emphasize markedly abnormal data, and inconsequential alerts should be eliminated. EHRs are being used by some large systems to track patients who require follow-up due to abnormal test results and the need for referrals. Both Kaiser Permanente and researchers at the Houston VA have developed "trigger" queries to electronically identify patients who have had abnormal test results without documented follow-up.

Digital clinical decision support tools are also useful adjuncts for the diagnostic process, and health care systems are incorporating such tools into their EHRs or using them as standalone resources to improve diagnostic accuracy. Examples include PeriGen’s PeriCALM®, Shoulder Screen™, which helps predict the risk of shoulder dystocia; VisualDX®, which provides a differential diagnosis based on visual characteristics of an illness; and Isabel, a computer program that generates and ranks possible diagnoses based on history, symptoms, signs and lab findings. With time, we will see the development of more such clinical decision-making tools.

Steps physicians can take to avoid diagnostic errors
- Be reflective. Take a diagnostic "time out."
- Listen, really listen, to your patients and their caregivers.
- Learn the causes of cognitive error and how to avoid pitfalls.
- Don't trust your intuition. Always construct a differential diagnosis.
- Take advantage of second opinions.
- Use diagnosis-specific decision support resources.
- Make your patient your partner in diagnosis. Ensure they know how to get back to you if symptoms change or persist.
- Ensure all ordered diagnostic tests and consults are completed and that you know the results. Designate a surrogate to review the test results if you plan to be away.
- Speak directly to the staff providing you with diagnostic test results.
- Engage your colleagues to let you know if they become aware that a diagnosis you made has changed.

Go online to find out more about PeriCALM® Shoulder Screen™, the only screening tool for shoulder dystocia. PeriCALM uses a unique approach to detect women at greatest risk.

References
3. Quarterman, Preventing Diagnostic Error Series.

Laurie C. Drill- Mellum, M.D., MPH
Chief Medical Officer, MMIC and UMIA
Laurie.Drill-Mellum@MMICgroup.com

PeriCALM® Shoulder Screen™

A new tool helps obstetricians predict the risk of shoulder dystocia.

Obstetricians have long known — and feared — the dangers of a serious medical complication called shoulder dystocia, an emergency that can arise during delivery when a baby’s shoulder becomes lodged behind the mother’s pubic bone. In such cases, a major risk is that the baby will suffer a permanent brachial plexus injury — a trauma to the network of nerves that sends signals from the spine to the shoulder, arm and hand. While such injuries are rare, they frequently result in malpractice claims, and jury awards in the millions are not infrequent.

It may seem obvious that the solution is not to let this situation arise in the first place. But the ability to predict which pregnancies are likely to result in shoulder dystocia has been notoriously difficult, leaving the profession to focus mainly on the development of techniques to deal with this high-risk, high-stress situation once it is underway.

Data to the rescue
Since most brachial plexus injuries are associated with shoulder dystocia, recognizing risk factors for shoulder dystocia is the best way to reduce injury. We have partnered with PeriGen, creator of the

PeriCALM® Shoulder Screen™, the only screening tool for shoulder dystocia. PeriCALM uses a unique approach to detect women at greatest risk.

According to Kathryn Townshend, R.N., J.D., ARM, CPHRM, and director of client insurance programs at PeriGen, risk factors for shoulder dystocia identified by the American Congress of Obstetricians and Gynecologists (ACOG) are present in more than 90 percent of all births, yet ACOG’s intervention criteria will miss more than 80 percent of cases of shoulder dystocia with persistent brachial plexus injury. The PeriCALM Shoulder Screen attends to this gap by looking at multiple factors in addition to those specified by ACOG, and by using the interaction of fetal and maternal factors to estimate a patient’s individual risk of shoulder dystocia with injury. PeriCALM’s patented approach has shown impressive results, including a 56 percent reduction in shoulder dystocia rates. Importantly, these results have been obtained without an increase in rates of cesarean births. The PeriCALM screening application consists of four simple steps:

  1. A brief checklist is completed with the pregnant patient at 36 weeks to identify whether she is recommended for further screening.
  2. If additional screening is recommended, the clinician completes the PeriCALM Shoulder Screen with the patient via the program’s secure website.
Common cognitive biases

There are many reasons we make mistakes in our thought processes, even when we have the knowledge and ability to think correctly. These biases include:

- **ANCHORING BIAS**: Locking onto a diagnosis too early and failing to adjust to new information.
- **OVERCONFIDENCE BIAS**: Thinking that a similar recent presentation is happening in the present situation.
- **PREMATURE CLOSURE**: Jumping to a conclusion; similar to “confirmation bias”.
- **SEARCH SATISFYING BIAS**: The “eureka” moment that stops all further analysis.
- **AFFECTION BIAS**: When one’s emotional state adversely affects one’s decision-making.
- **REPRESENTATIVE BIAS**: Over-reliance on one’s own ability, intuition and judgment.
- **FRAME-BASED DECISION-MAKING**: Drawing different conclusions from the same information, depending on how that information is presented and who presents it.
- **FUNDAMENTAL ATTRIBUTION ERROR**: The tendency to over-emphasize personality-based explanations for behaviors observed in others, while under-emphasizing the role and power of situational influences on the same behavior.

Some experts believe that teaching physicians to be wary of the pitfalls of these cognitive biases could help them use metacognition — i.e., thinking about their thinking — to reduce the chances of harmful diagnostic errors. Intuitive thinking vs. analytic thinking

Much of the thinking about how to improve decision-making uses a framework that distinguishes between System 1 thinking and System 2 thinking. System 1 refers to our intuitive, automatic, effortless, implicit and emotional. System 2 refers to reasoning that is slower, conscious, effortful, explicit and logical. Experts say we spend about 95 percent of our time in System 1. We are most likely to rely on it when we are missing information important to decision-making, when we’re pressed for time, when we’re preoccupied — in other words, when we’re going about our normal business and need the shortcuts that intuitive thinking affords us.

The problem is that System 1 thinking, while it works well much of the time, is also vulnerable to error — to cognitive biases like those described previously. So the challenge is to recognize when we are prone to using System 1 (intuitive thinking) and making a conscious effort to use System 2 (analytical thinking).

Cognitive debiasing strategies

In addition to increasing awareness of cognitive biases, experts recommend several strategies to combat them in the diagnostic setting, including:

- Encourage decision-makers to get more information.
- Encourage metacognition and reflection.
- Think the opposite — seek evidence to support a decision opposite to your initial impression as a way to force yourself to consider other options.
- Maintain a healthy skepticism — question everything.
- Involve others — group decision-making can be smarter.

When might our thinking be compromised?

Dr. Croskerry calls out a number of high-risk situations when clinicians need to be especially vigilant about cognitive errors:

<table>
<thead>
<tr>
<th>HIGH-RISK SITUATIONS</th>
<th>BIASES TO WATCH FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is this patient handed off to me from a previous shift?</td>
<td>Diagnosis momentum, framing</td>
</tr>
<tr>
<td>Did I just accept the first diagnosis that came to mind?</td>
<td>Anchoring, availability, search satisfying, premature closure</td>
</tr>
<tr>
<td>Did I consider other organ systems besides the obvious one?</td>
<td>Anchoring, search satisfying, premature closure</td>
</tr>
<tr>
<td>Is this a patient I don’t like for some reason?</td>
<td>Affective bias</td>
</tr>
<tr>
<td>Did I interrupt/distract while evaluating this patient?</td>
<td>All biases</td>
</tr>
<tr>
<td>Am I feeling fatigued right now?</td>
<td>All biases</td>
</tr>
<tr>
<td>Am I cognitively overloaded or over-extended?</td>
<td>All biases</td>
</tr>
<tr>
<td>Am I stereotyping this patient?</td>
<td>Representative bias, affective bias, anchoring, fundamental attribution error</td>
</tr>
<tr>
<td>Have I effectively ruled out “must not miss” diagnoses?</td>
<td>Anchoring, overconfidence, confirmation bias</td>
</tr>
</tbody>
</table>

References:

Croskerry P. The importance of cognitive errors in diagnosis and strategies to minimize them. Acad Med 2002; 78: 775-780.
Communication failures are identified as a key factor in more than 80 percent of health care malpractice claims. Well short of this extreme, but still hugely important, the negative consequences of uncom-passionate communication can threaten the effectiveness of health care interactions for patients and their families, and can create significant problems for clinicians and their organizations. Empathic communication, on the other hand, is associated with better outcomes, greater patient safety and fewer malpractice claims.

One intriguing question persists: Can empathy be taught?

Groundbreaking research conducted at Massachusetts General Hospital has shown that empathy training can indeed improve the quality of human interactions. In a randomized, controlled trial, physicians resident participants were divided into two groups. One group received standard post-graduate medical education. The other received that education and, in addition, engaged in three 60-minute empathy training modules. The training modules are the brainchild of Helen Riess, M.D., director of the Empathy and Relational Science Program in the Department of Psychiatry at Mass General. The modules offer participants an opportunity to observe, for example, videotaped doctor-patient interactions in a technologically enhanced way accompanied by a graphic overlay that shows the electrical skin conductance of both doctor and patient. Viewers see startling evidence of how well — or poorly — the spikes and dips of the two tracking lines mirror each other — how “in synch” they are — as their conversation proceeds.

In the study, the group that received the empathy training showed greater changes in patient-rated empathy measures. They also showed greater changes in knowledge of the neurobiology of empathy, and in their ability to decode expressions of emotion.

Enter Empathetics Dr. Riess cofounded Empathetics as a way to share the demonstrated benefits of empathy training with a broader audience. This web-based training program consists of three 60-minute interactive training modules, making it easy and convenient for physicians and nurses to participate as their schedules allow. The courses include:

- **Introduction to the neuroscience of empathy**
- **Managing difficult medical interactions**
- **Delivering bad news**

Learn more For more information on how Empathetics training can help you develop the skills to connect more meaningfully and effectively with your patients, contact your Risk and Patient Safety Consultant, or email Beth Schultz at Beth.Schultz@MMICgroup.com.

Also, see Dr. Riess’s engaging TEDx talk, “The Power of Empathy,” and learn more about Empathetics at www.empathetics.com.

LYNN WELCH Senior Communications Consultant, MMC Lynn.Welch@MMICgroup.com

How Empathy Helps Empathetics training helps doctors and nurses more accurately interpret and translate emotional communications, and it can lead to greater trust, safety and satisfaction for patients and medical professionals. The benefits enjoyed by clinicians who have improved their ability to communicate with empathy include:

- **Improved quality of interactions with patients, families and colleagues**
- **Greater patient adherence to treatment and better medical outcomes**
- **Enhanced clinician well-being**
- **Increased job satisfaction and reduced burnout**
- **Lower risk of malpractice claims**

All courses are delivered via a learning management system that helps organizations make the experience both positive and productive. Highlights include:

- All learner feedback on the courses is summarized graphically and available to the authorized administrator(s).
- All learner access, completions and quiz results are available to the authorized customer administrator.
- Each learner can bookmark their spot in a course and return to that spot automatically.
- Physician and nurse learners who successfully complete the quiz at the end of each course automatically receive continuing education credit.

Empathetics courses are licensed on a per-learner basis. Economical institutional licenses (for 20+ individual learners) are also available.

Communication failures are identified as a key factor in more than 80 percent of health care malpractice claims. Well short of this extreme, but still hugely important, the negative consequences of uncom-
Patient safety and risk management perspective

The experts who reviewed this case could not support the ED physician’s failure to consider intracranial bleeding and to order a CT, considering this patient was on aspirin therapy and fell, striking her head. They were also critical that the ED physician failed to note and address the elevated BP’s while the patient was in the ED.

The nursing staff documented two late entries after the patient had been discharged. In the first late entry, the nurse documented that the patient complained of a headache, but could not rate her pain, and had a BP of 196/100. In the second late entry, the nurse documented that the ED physician was notified of the headache and elevated BP, but further orders were not received. The ED physician did not recall being notified of the patient’s complaint of headache, nor of the elevated BP.

Diagnostic errors

According to the Society to Improve Diagnosis in Medicine, diagnostic error is the leading cause of medical malpractice claims in the U.S., and it is estimated to cause 40,000–80,000 deaths annually. In reviewing 25 years of U.S. malpractice claim payouts, researchers found that diagnostic errors — not surgical mistakes or medication overdoses — accounted for the largest portion of claims, the most severe patient harm, and the highest total of payouts.

There are multiple identified causes of diagnostic error. Many diagnostic errors are caused by system-related factors, such as the failure to respond to abnormal test results. Another frequent cause is communication failures (1) with patients and (2) among the health care team. However, general checklists provide reminders for the routine steps in the diagnostic process; differential diagnosis checklists force consideration of “must-not-miss” diagnoses; and cognitive forcing checklists highlight the unique criteria for specific diseases.

The use of health information technology and diagnostic decision support systems (CDSS) has also been identified as another potential solution to diagnostic error. Researchers have found that practitioners showed diagnostic improvement using CDSS tools in 64 percent of studies reviewed.

Patient safety and risk management tips

- Utilize general and symptom-based checklists to help in the diagnostic process, and to rule in/rule out potentially serious conditions
- Employ CDSS tools to help avoid cognitive errors and to provide assistance with atypical presentations of diseases
- Implement fail-safe follow-up systems to ensure that all ordered test results are received and reviewed, that patients are notified, and that follow-up care occurs
- Use standardized communication tools such as SBAR (situation, background, assessment and recommendation) to improve real-time communication among the health care team

Multiple research studies indicate that the majority of diagnostic errors are related to how physicians think and involve the process of working up a patient’s diagnosis.

Multiple research studies indicate that the majority of diagnostic errors are related to how physicians think and involve the process of working up a patient’s diagnosis. Using checklists to decrease the potential for diagnostic error is one possible solution. Ely, Graber and Crooksey describe three types of checklists that could potentially reduce diagnostic errors in hospitals, clinics and emergency rooms. General checklists provide reminders for the routine steps in the diagnostic process; differential diagnosis checklists force consideration of “must-not-miss” diagnoses; and cognitive forcing checklists highlight the unique criteria for specific diseases.

The use of health information technology and diagnostic decision support systems (CDSS) has also been identified as another potential solution to diagnostic error. Researchers have found that practitioners showed diagnostic improvement using CDSS tools in 64 percent of studies reviewed.

Patient safety and risk management tips

- Utilize general and symptom-based checklists to help in the diagnostic process, and to rule in/rule out potentially serious conditions
- Employ CDSS tools to help avoid cognitive errors and to provide assistance with atypical presentations of diseases
- Implement fail-safe follow-up systems to ensure that all ordered test results are received and reviewed, that patients are notified, and that follow-up care occurs
- Use standardized communication tools such as SBAR (situation, background, assessment and recommendation) to improve real-time communication among the health care team

References


Resources

The Society to Improve Diagnosis in Medicine www.improvedagnosis.org

Society to Improve Diagnosis in Medicine — Clinical Reasoning Toolkit www.improvedagnosis.org/10ClinicalReasoning/

The Patient’s Toolkit for Diagnosis cymcdc.com/sites/improvedagnosis-sites-yhnt/filesresource/resmgr/10ClinicalReasoning/ThePatient’sToolkitforDiagnosis_for_dia.pdf

Working with Patients and Families to Get the Right Diagnosis cymcdc.com/sites/improvedagnosis-sites-yhnt/filesresource/resmgr/10ClinicalReasoning/working_with_patients_and_families.pdf


LORI ATKINSON, R.N., BSN, CPHRM Research, Development & Education Manager, MMIC Lori.Atkinson@MMICgroup.com
A resident with a history of advanced multiple sclerosis, type 2 diabetes, hypertension, osteoarthritis and pressure ulcers lived in a long-term care (LTC) facility due to immobility and other significant chronic medical conditions. The 57-year-old woman required assistance for dressing, eating, toileting and personal hygiene needs. In addition, a Hoyer lift with a full body sling was needed to transfer her from her wheelchair to chair or her bed.

One morning, while being transferred from her wheelchair to her bed with the Hoyer lift, the resident felt a “pop” and some discomfort when the direct care team member removed the sling from underneath her. She immediately complained of left hip discomfort. The direct care team member told her that a nurse would be in to assess the pain. Later that morning, a nurse assessed the resident and recommended pain medication and an X-ray.

Later that afternoon, the nurse received the X-ray report. The radiologist noted a left spiral subtrochanteric femur fracture. The nurse called the resident’s physician, who ordered immediate transfer by ambulance to the emergency department (ED) of the local hospital. An orthopedic surgeon examined the woman in the ED and ordered her to be admitted to the hospital for skeletal traction, to be followed the next day with operative fixation of the fracture with insertion of titanium implants.

The family filed a malpractice claim against the nursing facility and staff, alleging failure to respond immediately and to notify the physician regarding an acute change of condition, resulting in diagnosis delay and further pain and suffering.

The following day, the resident felt increasing hip pain when being transferred from the bed to her wheelchair, and she told another direct care team member about the incident that had occurred the previous morning. The team member offered the resident pain medication. The resident continued to complain of slight pain throughout the day and requested not to be moved very often.

The next morning, the resident complained that she was in severe pain when being transferred to her wheelchair for breakfast. A direct care team member told her that a nurse would be in to assess the pain. Later that morning, a nurse assessed the resident and recommended pain medication and an X-ray.

Later that afternoon, the nurse received the X-ray report. The radiologist noted a left spiral subtrochanteric femur fracture. The nurse called the resident’s physician, who ordered immediate transfer by ambulance to the emergency department (ED) of the local hospital. An orthopedic surgeon examined the woman in the ED and ordered her to be admitted to the hospital for skeletal traction, to be followed the next day with operative fixation of the fracture with insertion of titanium implants.

The family filed a malpractice claim against the nursing facility and staff, alleging failure to respond immediately and to notify the physician regarding an acute change of condition, resulting in diagnosis delay and further pain and suffering.

The guidelines recommend immediate communication with the resident’s physician for any symptom that is sudden in onset, that is a marked change in relation to the usual signs and symptoms, and that is unrelieved by measures already prescribed. As the case at the beginning of this article illustrates, an acute change of condition without intervention can result in further pain, complications or death.

**Effective communication and teamwork**

Effective and clear communication on the part of the nursing facility team with the resident’s physician is paramount. For years, research has indicated that ineffective communication among the health care team is one of the leading causes of resident injury. Studies reveal that the tools that have proven to enhance communication and teamwork are the SBAR format (situation, background, assessment and recommendation), situational briefings, appropriate assertion, critical language and awareness of differing communication styles.1

**Patient/resident safety strategies**

1. Educate staff about the importance of ACOC recognition and timely response.
2. Implement decision tools to help staff triage resident symptoms.
3. Utilize standard communication and documentation tools for reporting ACOCs to physicians.
4. Train staff in the use of communication tools and techniques, such as situational briefings, critical language and assertion.
5. Perform a Root Cause Analysis of adverse events involving ACOC for organizational performance improvement.

**References**


**Resources**

1. AMDA — Clinical Practice Guidelines in the Long Term Care Setting www.amda.com/tools/guidelines.cfm
2. INTERACT — Interventions to Reduce Acute Care Transfers — Change in Condition File Cards, Stop and Watch Early Warning Tools, SBAR Communication Tools www.interrupt2.net/
3. Advancing Excellence in America’s Nursing Homes — Consistent Assignment www.nhqualitycampaign.org/goalDetail.aspx?g=CA
Claims Review

A hospital is sued for failing to prevent a patient's fall.

Facts of the case

An 81-year-old woman living in an assisted living senior apartment became dizzy, lost her balance, and fell. Her daughter called her after the fall complaining that she was still dizzy and had a headache. Her daughter brought her to the local hospital emergency department (ED) for evaluation. The ED physician examined her and noted a laceration in the room behind a wall to give her and noted a laceration in the room behind a wall to give

Disposition of case

The case was settled against the hospital and nurses.

Patient safety and risk management perspective

This woman was brought to the hospital because of a fall at her senior living apartment and was noted to be dizzy and unstable while still in the ED. The expert reviewers criticized the radiology tech for leaving this high-risk patient unattended on a bedpan on a radiology table.

Evaluation in the emergency department

Assessment of potential injury, investigation into the cause(s)

of a fall, and assessment of future fall risk should all begin in the ED. Unfortunately, fall investigation and fall risk assessments can be time-consuming and often difficult to complete in a busy ED, and few fall risk assessments are initiated appropriately in the ED. A patient’s fall risk should be communicated to the next care provider at transitions of care or handoff to another unit. Guidelines recently released by the American College of Emergency Physicians (ACEP), the American Geriatrics Society (AGS), the Emergency Nurses Association (ENA), and the Society for Academic Emergency Medicine (SAEM) aim to improve the care of the geriatric population in the ED, and include sample policy language for ED geriatric fall risk assessment and communication.

Falls in hospitals, assisted living communities and nursing facilities

According to the Agency for Healthcare Research and Quality (AHRQ), somewhere between 700,000 and 1 million people fall in U.S. hospitals each year. Residents in assisted living facilities have similar fall risk to older adults living in the community, while falls among nursing home (NF) residents occur more frequently and repeatedly. The CDC states that about 1,800 older adults in NFs die each year from injuries sustained in falls and those who survive frequently sustain injuries that result in permanent disability and reduced quality of life.

The CDC notes that falls frequently occur in elderly people in NFs because they are generally frailer than older adults living in the community. They are usually older, have more chronic conditions, and have more difficulty walking. They also tend to have thought or memory problems, difficulty with activities of daily living, and need help getting around or taking care of themselves. All of these factors are linked to falling.4

Common fall risk factors

Falls are usually the consequence of a combination of risk factors, both intrinsic and extrinsic.5

INTRINSIC FALL RISK FACTORS:

- Effects of aging on gait, balance and strength
- Acute medical conditions
- Chronic diseases
- Deconditioning from inactivity
- Behavioral symptoms and unsafe behaviors
- Medication side effects

EXTRINSIC FALL RISK FACTORS:

- Environmental hazards
- Unsafe equipment
- Unsafe personal care items

Fall prevention

Many falls are identified as preventable. A proactive approach is desirable and involves fall assessment in our communities and primary care clinics. The CDC’s Injury Control, and Prevention Center has created the STEADI (Stopping Elderly Accidents, Deaths and Injuries) Tool Kit for health care providers seeking older adults who are at risk of falling or who may have fallen in the past. The STEADI Tool Kit gives health care providers the information and tools they need to make fall prevention an integral part of their daily clinical practice. Once a fall has occurred, appropriate investigation into the underlying cause(s) of a fall and assessment of future fall risk are the keys to preventing future injury. Fall prevention involves identifying and mitigating the underlying fall risk factors, as well as managing the environment. A multidisciplinary approach is needed, including medicine, nursing, pharmacy, physical therapy, occupational therapy, social workers, the patient/resident themselves and family caregivers. According to AHRQ, some parts of a fall prevention program are routine, while other aspects should be tailored to the patient/resident’s individual risk profile.

Not all falls are preventable, but risk factors can be managed. According to Taylor, Parmelee and Ouslander, all risk factors such as age-related changes and chronic diseases cannot be eliminated, but they can be managed in a way that ultimately reduces a person’s risk of falling.6 Medical management of both acute and chronic conditions can be improved through appropriate evaluation and treatment. And extrinsic risk factors, such as environment and equipment, can also be manipulated to improve safety.

References


Resources

Centers for Disease Control and Prevention – Falls Among Older Adults. www.cdc.gov/homeandrecreation/safety/adultfalls.html

CDC Injury Center – STEADI Tool Kit (Stopping Elderly Accidents, Deaths and Injuries) Tool Kit for health care providers seeking older adults who are at risk of falling or who may have fallen in the past. The STEADI Tool Kit gives health care providers the information and tools they need to make fall prevention an integral part of their daily clinical practice. Once a fall has occurred, appropriate investigation into the underlying cause(s) of a fall and assessment of future fall risk are the keys to preventing future injury. Fall prevention involves identifying and mitigating the underlying fall risk factors, as well as managing the environment. A multidisciplinary approach is needed, including medicine, nursing, pharmacy, physical therapy, occupational therapy, social workers, the patient/resident themselves and family caregivers. According to AHRQ, some parts of a fall prevention program are routine, while other aspects should be tailored to the patient/resident’s individual risk profile.

Not all falls are preventable, but risk factors can be managed. According to Taylor, Parmelee and Ouslander, all risk factors such as age-related changes and chronic diseases cannot be eliminated, but they can be managed in a way that ultimately reduces a person’s risk of falling. Medical management of both acute and chronic conditions can be improved through appropriate evaluation and treatment. And extrinsic risk factors, such as environment and equipment, can also be manipulated to improve safety.

References


Improving care and reducing harm:


Advancing Excellence in America’s Nursing Homes – Mobilizing Goal 2010 www.cdc.gov/nhsn/pdfs/nhsn/nhsnحفاكلوحته/GoalDetail.aspx?g=mob


Nursing Home Quality Campaign – Falls Prevention Programs for Older Adults www.cdc.gov/nhsn/pdfs/nhsn/fallspxtoolkit/fallpxtoolkit.pdf


LORI ATKINSON, R.N., BSN, CPHRM
Manager, Research, Development & Education, MMG
Lori Atkinson@MMG.com

GRAVITY

A hospital is sued for failing to prevent a patient’s fall.
Follow evidence-based guidelines for the prevention of retained surgical items.

Understand human factors involved in surgical instrument and sponge counts and employ measures to reduce the chance of counting errors.

Employ technology-based sponge counting and identification systems.

Implement a follow-up system to manage radiology over-reads and tests pending after discharge.

Enlist a multidisciplinary team to perform a root cause analysis of adverse patient outcomes to develop comprehensive solutions.

Facts of the case

A 32-year-old man presented to an orthopedic surgeon after a fall, sustaining a fracture of the humerus. The ED physician consulted an orthopedic surgeon who ordered an X-ray of the arm. The X-ray revealed a metallic opacity consistent with a curved needle, as well as radiopaque material within the soft tissues of the medial proximal arm, consistent with a retained sponge. The orthopedist took the patient to surgery and removed a 4x4-inch radiopaque sponge from the location of the pectoralis major. The patient felt he would have been more insistent about having his wound explored when he developed the incision infection and the sponge would have been found sooner. The patient was also frustrated that the hospital did not notify him about the radiopaque wire that was observed on his chest X-ray five weeks after the surgery. He felt this finding could have saved him months of pain and suffering from multiple procedures trying to cure his incisional infection.

A chain of mistakes

This case illustrates how many patient injuries are the result of a chain or cascade of events. The orthopedic surgeon left a sponge in the patient, the OR nurses inaccurately counted the surgical sponges, the ED physician missed the incidental finding of the sponge on the chest X-ray, the hospital did not have a system for reviewing radiology reports received after a patient’s discharge, and the orthopedic surgeon didn’t fully investigate the patient’s wound infection. Efforts to promote patient safety must take into consideration human factors, as well as system factors, when implementing solutions to prevent adverse outcomes and patient injuries.
Personal reflections on misdiagnosis

They say you’ll never forget the name of a patient whom you sent home from the office, emergency department or hospital, only to find out later that he or she died unexpectedly.

This has happened to me twice in my 25-year career in emergency medicine, and it was certainly not something I was prepared for emotionally or otherwise. Both instances involved patients seeking help for chest pain, and I believed that I “did right by them,” only to discover later that I had made cognitive errors resulting in devastating outcomes.

It is my hope that by sharing this information, as well as my subsequent thoughts on delayed and missed diagnoses, I can be of service to my physician peers who may have experienced something similar. It can help to know that you’re not alone in experiencing one of the worst failures a doctor can imagine — missing or delaying a crucial diagnosis, resulting in a death or a clinically significant delay in treatment.

Because devastating outcomes happen to too many of our patients, and because this also adversely impacts us as clinicians, MMIC and UMIA are focusing on ways to help us all improve our diagnostics and embrace practices that promote patient safety.

“Remember that patient you saw?” Those are the five words we ER docs hate to hear when coming on to a shift, because we know that the question will inevitably be followed by details of something we missed, and how a patient for whom we cared returned sicker or worse, died. Getting a call from one of your partners to let you know about an unexpected patient outcome or death is similarly distressing. These are the sorts of gut-sinking messages for which we were never prepared in medical school or residency, and for which there is little guidance or support. That’s unfortunate since, we were never prepared in medical school or residency, and for the meantime, we will continue to support you, our physicians, the best way we can when you commit a diagnostic error. That is a core part of our mission.

We often believe that we are smarter and more careful than our peers and, therefore, immune to diagnostic errors. However, studies have shown that as a profession, we are over-confident and make mistakes in diagnosis at much higher rates than we realize.

Then there’s our training and, frankly, our lack of awareness of how cognitive biases affect our diagnostic processes and clinical decision-making skills. Add to this the vast array of clinical data to sift through, and the complexity of working with discordant systems of all types and sizes, and one can start to grasp how diagnoses can be missed or delayed, even by the most talented physicians.

It is our hope that by addressing the very complex and emotion-laden topic of delayed diagnosis, misdiagnosis and missed diagnosis, we can decrease the frequency with which it occurs. In the meantime, we will continue to support you, our physicians, the best way we can when you commit a diagnostic error. That is a core part of our mission.

References

Laurie C. Drill-Mellum, M.D., MPH
Chief Medical Officer, MMIC and UMIA
Laurie.Drill-Mellum@MMICgroup.com
What’s the leading cause of malpractice claims in the U.S.? Not surgical mistakes. Not negligence. Not even medication errors. It’s missed or delayed diagnoses, which cause 40,000–80,000 deaths every year. Despite their thorough understanding of medicine and the assistance of technology, physicians can still make mistakes in their reasoning. In this issue of Brink, we help you recognize common errors in diagnosis that can have a profound effect on patient safety.