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FORUM

Consults and Patient Safety

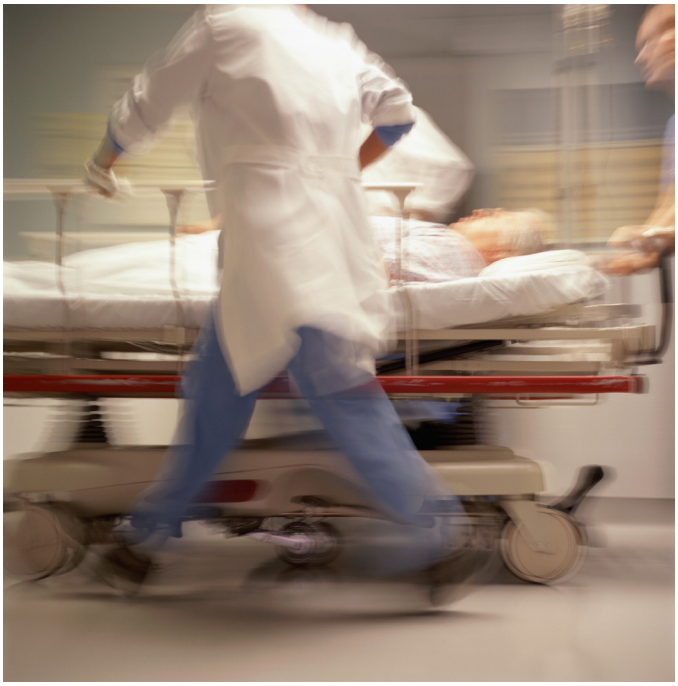
Issue Editor: Deborah LaValley, BSN, RN, CPHQ

Missing the Forest for the Trees

by Debbie LaValley, BSN, RN, CPHQ

Ms. LaValley is a Program Director in the Loss Prevention and Patient Safety Department at CRICO/RMF and issue editor for Forum.

CASE STUDY



Key Lessons

- Definitively address a patient's abnormal test results to reduce the risk of missing or delaying a patient's primary diagnosis.
- Assuming that the previous diagnosis was correct can impair the diagnostic process for patients with unresolved symptoms.
- Vigilant follow-up of a documented recommendation for testing protects both patients and clinicians.

Clinical Sequence

A 53-year-old male, married with two children, was brought to his community hospital ED after an episode of rigidity, syncope, and incontinence, during which he had been unconscious for several minutes. The patient's medical background was significant for a distant history of alcohol and cocaine use, Hepatitis C, and a traumatic brain injury (TBI) after falling off a ladder (eight years prior). He was an avid triathlete, did not smoke, and had no known history of elevated cholesterol. His (recorded) family history was significant in that his father died at age 42 of a sudden cardiac arrest.

Vital signs: blood pressure, 140/80; pulse, 64; temperature 99°, O_2 sat 98 percent on RA; chest X-ray, normal; brain CT, no acute intracranial processes noted.

Serial EKGs and cardiac isoenzymes were done.

- EKG 1: sinus bradycardia with 1° AV block and troponin level of 0.1;
- EKG 2: junctional rhythm with retrograde P wave conduction;
- EKG 3: sinus rhythm with primary AV block and LVH; his troponin level peaked at 0.26.

During this time, the patient experienced another episode of stiffness and unresponsiveness. He was treated with Ativan and Dilantin and admitted with a diagnosis of new onset seizures.

The following day, as per family request, the patient was transferred to a tertiary hospital. The transfer summary indicated the diagnosis of new onset seizures, but stated that it was highly unlikely that they were due to the patient's prior TBI and that a new intracranial process needed to be ruled out. It also recommended an outpatient stress test and fasting lipid profile, as his troponin level was elevated, suggesting underlying coronary artery disease.

Two days later, the patient was discharged with instructions to continue the Dilantin and aspirin; there was no record of a cardiac work-up being done or ordered.

One year after his discharge, the patient was admitted to the same tertiary hospital for a fever. He underwent a battery of tests, including an EKG, revealing non-specific T wave abnormalities, suggestive of ischemia. A second-year resident reviewed the results with his senior resident and they concurred that a cardiac consult was not indicated. Four days later, the patient was discharged. His fever was thought to be due to an allergic reaction to his Dilantin, which was changed to Keppra.

Over the next 10 months, the patient noted that he was stuttering more frequently (a symptom of his seizures) and, eventually, was admitted to the hospital for video monitoring of his seizure activity. An EKG showed 1° AV conduction delay and new T wave inversion. Serial isoenzymes were ordered. Early one morning, the nurse noted that the patient's SAO2 dropped to 74 percent and that he was unresponsive. Upon assessment, the resident determined the patient needed intubation, during which the patient lost his pulse and a code blue was called. After a prolonged effort, the patient was resuscitated, then transferred to the ICU.

Cardiology determined that the patient had suffered an AMI and that, in retrospect, many of his suspected seizures may have been breakthrough episodes of ventricular tachycardia (VT). Cardiac catheterization revealed 95 percent stenosis in the proximal left anterior descending artery. He responded well to percutaneous coronary intervention, but has severe neurological deficits and was diagnosed with an anoxic brain injury. He required a tracheostomy, a feeding tube, and a dual chamber Medtronic ICD. He was eventually transferred to a local rehabilitation center.

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Improving Referral Communication

by Melanie Cassamas, MHA candidate; Ronald F. Dixon, MD, MA; and Claus Hamann, MD, MS

Ms. Cassamas is Project Manager for Service Improvement; Dr. Dixon practices primary care internal medicine; and Dr. Hamann practices primary care geriatric medicine—all at Massachusetts General Hospital.

For patients, the referral experience is often disjointed and unsettling; for providers, it is often frustrating and anxiety-provoking. Practice staff are caught in the middle with often insufficient answers to questions from patients and providers.

Accurate, timely, and efficient referral communication in the ambulatory setting is a cornerstone of safe, high-quality care coordination. The Joint Commission's patient safety goals for 2009 include improving the effectiveness of communication among caregivers by implementing standardized approaches to hand-off communications, such as communication among referring providers and specialists.[1]

Ensuring that a patient's referrals (often to multiple specialists) are scheduled, the patient is seen, and reports are returned and viewed by the referring provider is a challenging series of tasks.[2] Variable systems for tracking and monitoring (phone and fax are the current norm) are resource-intensive and fallible. Problematic access to specialists, misaligned patient and provider expectations for timely referral and report, and lack of shared referral processes due to non-communicating information systems amplify the challenges. At Partners HealthCare, we are hoping that our electronic medical record-based referral module—which more efficiently delivers referral information to the specialist (and specialists' reports to the referring provider)—can be adopted in other settings.[3]

Challenges posed by the referral process

Consider the example of a primary care physician (PCP) referring her patient to three different specialists (within) her system: a cardiologist for recurrent palpitations, a gastroenterologist for a screening colonoscopy, and a dermatologist for an unusual rash. The PCP has several options:

1. a referral module in the electronic medical record (EMR), linked to her staff's work queue;
2. a PCP checkout form that the patient will bring to the front-desk at the end of the visit;
3. a referral form required by the specialist;
4. a verbal request to a designated staff member in her office; or
5. a verbal request to the patient to schedule his/her own appointment with the specialist.

Staff in the practice receive the request and connect with each of the specialty practices on behalf of the patient, or offer assistance for option #5 if it is requested by the patient. The practice referral staff then determines which process (phone call, fax, web-based form, etc.) is required by each specialty.

In our example, the cardiologist's office wants a phone call, the gastroenterology practice utilizes a web-based form, and the dermatology practice requires that a paper form be completed and faxed to its office. The phone call to the cardiologist's office results in a voicemail request for a return call. The gastroenterology practice receives the web-based request, but it is unclear to the staff person sending the request what will happen next. The dermatology practice receives the request via fax, but has trouble reading it due to poor quality and will have to call back the sending practice for clarification. Meanwhile, the patient is anxious about the status of the cardiology appointment because the provider indicated it should be scheduled within two weeks. She has forgotten all about the referral for the colonoscopy.

Clearly, the process of simply *getting ready* to schedule referral appointments is complicated, time-consuming, and inefficient.

A Single Source Solution

The Massachusetts General Physicians' Organization (MGPO) has undertaken a project to develop an information-technology (IT) application that provides a single source for requesting, tracking, and monitoring all internal referral requests. The goals of the project are to 1) standardize the referral process, providing a consistent experience for patients and providers, and 2) increase efficiency and transparency, enhancing staff's access to referral information.

Our first step is to develop agreement on standards for:

- responsibilities: e.g., the receiving practice calls the patient to schedule;
- service-level expectations: e.g., appointments are scheduled within two weeks of the request; and
- operational guidelines: e.g., practices are monitored for adherence to scheduling best practices.

The second step is to build an IT application that enables a user-friendly, efficient, and flexible referral process that fits into various workflows.

MGPO is developing a standalone, web-based application that interfaces with both Partners' longitudinal medical record and the MGH Laboratory of Computer Sciences' OnCall system, as well as the hospital's IDX outpatient scheduling system. Referring and specialty physicians using different EMRs will be able to easily move from patient's medical records to the referral IT application. Integration with the EMRs will promote appropriate physician participation in the referral process, adding clinical value by removing physicians from administrative steps of the process, and link visit notes relevant to the referral request.

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Generating and scheduling the referral

Patient demographic information will be pre-filled, leaving the provider with only the specialty and referral reason/diagnosis to complete. Practice staffs will have the ability to initiate a new request on behalf of the provider or complete a request already in progress. In either case, the staff person will be able to track the request, supported by an interface with the scheduling system for real-time access to the status of the request (initiated, scheduled, cancelled, no-show, arrived at the specialist's office). The system will generate alerts at important points in the process, such as when an appointment has been cancelled or not kept. These alerts will help staff manage requests and bring providers into the loop when needed, ensuring patient adherence to the referral.

Receiving, tracking, and reporting the referral

The web-based application will make EMR notes available with referral requests. Receiving providers will have all the information they need to effectively answer the concerns or questions of the referring provider. Staff in receiving offices will have all requests in one central repository. This will facilitate tracking the referral from the time of the specialty appointment to generation of the specialist's report and notification of the referring provider. The application should progressively replace paper and fax, reduce phone call volume, and minimize "hunting" for information.

The project team has worked for more than a year with end-users to determine system requirements. Programmers are actively developing the application, and pilot-testing is expected to begin in early 2010. ■

The authors would like to acknowledge the support of Nancy Gagliano, MD, MGPO Vice President.

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Note: Two weeks after the patient's cardiac arrest, the family requested to view the video of the patient during the event. The video showed that it had taken 10 minutes from the onset of the patient's VT to the arrival of the code team, and another seven minutes until the first shock was given.

Allegation

The plaintiff alleged that the standard of care was breached by a failure to obtain a cardiology consult, and argued that the patient's underlying CAD was evident when he first presented to the ED.

Disposition

The case was settled in excess of $1 million against the two neurology residents and the attending neurologist.

Analysis

1. The patient did not present with classic symptoms of cardiac disease and had no known cardiac risk factors, except his family history. Subtle EKG changes and his elevated troponin (0.26) were discounted. Subsequently, the tertiary hospital's providers assumed that the previous diagnosis was correct.

   Unresolved symptoms raise a flag over a presumptive diagnosis, and call for broadening the diagnostic process. Abnormal test results should trump a presumptive diagnosis. Likewise, avoid being lulled into complacency by the absence of other significant abnormal findings in a particular circumstance. In this case, a cardiac referral and workup were clearly indicated, and may have altered the outcome for this patient.

2. The stress test and fasting lipid profile recommended by the community hospital ED were never ordered at the receiving hospital.

   Communication between the transferring and the accepting care providers impacts subsequent care. All providers who hand off or receive a patient (or information about a patient) have an obligation to do so carefully—so that important facts or recommendations are not missed or ignored.

3. The patient may not have been made adequately aware of the need for the follow-up stress test and fasting lipid profile.

   Patients, and family members, when made aware of abnormal findings, can help ensure follow-up.

4. The patient's care team failed to immediately recognize when the patient required CPR, to promptly notify the code team, and to immediately begin ventilation.

   Residents may also be unaware of their limitations (in skills, knowledge, and expertise) and may not know when to ask for help. Making clear that they cannot ask too much—only ask too little—is empowering for residents and ought to be the culture of every teaching institution.[1]

Reference

1 David Blumenthal, MD, quoted in *The Boston Globe:* Doctors were unsure of roles as boy died at Children's, September 19, 2003.

Risks Associated with Specialty Consultation in the ED

by Jeremiah Schuur, MD and Carrie Tibbles, MD

Dr. Schuur is Director of Quality and Patient Safety for the Emergency Department at Boston's Brigham and Women's Hospital. Dr. Tibbles is the Associate Director of Graduate Medical Education and Associate Emergency Medicine Program Director at Beth Israel Deaconess Medical Center, also in Boston.

Why focus on specialty consultation in the emergency department (ED)? Listen in on a typical sign-out rounds.

The patient in Bed 1 has a new facial droop and difficulty speaking. In conjunction with the stroke team, we have given thrombolytics. The patient in Bed 2 has a severe sore throat with a fever and has been diagnosed with epiglottitis after a fiberoptic nasopharyngoscope exam. We've called ENT, and they will admit and observe the patient in the ICU overnight. The patient in Bed 3 came in with a week of on-and-off chest pain. His ECG is unchanged, and a six hour troponin is normal. Having discussed the case with his cardiologist by phone, we will discharge him to get a stress test later this week…

Although board certified Emergency Medicine (EM) physicians are highly trained specialists in emergency care, the safe practice of emergency medicine involves collaboration with almost every other medical specialist. Approximately 25 percent of patients in an academic ED, and 10–25 percent of community ED patients, will receive some kind of consultation.[1] Such patients are often at high risk or critically ill, and frequently need time-sensitive interventions.

A recently published review of ED malpractice closed claims from CRICO and several other insurers identified failure to consult as one of the top five themes.[2] "Failure to consult" included failure of trainees to consult with more senior physicians and failure to order either an immediate consultation in the ED or an appropriate outpatient referral. Yet, the process of specialty consultation in the ED has been largely unexamined in the literature and remains unstructured in many hospitals.

Early in 2008, the leadership of the Harvard Medical School Division of Emergency Medicine identified standardization of ED consultation processes, particularly communication and documentation, as an important area for improving patient safety. Soon after, a year-long consultation improvement project was begun at seven CRICO-insured acute care hospitals. The project was designed to identify essential elements of an "ideal" consultation, characterize current performance, and identify improvement strategies. Methodology included a structured medical record review, a survey of EM physicians and consultants, and meetings at each hospital to better understand providers' perspectives and potential barriers to effective consultation. Data from the prior six months were the basis of monthly performance reports for key services at each hospital. Throughout the project, these reports have served to facilitate discussions about developing standardized policies for consultation as well as strategies to improve consultation at each hospital.

Several important themes have emerged from the CRICO-sponsored project. First, it is important to have clearly defined communication at the beginning and end of a consultation. This includes an initial question for the consultant and two-way communication (verbal or in-person) between the EM physician and the consultant at the completion of the consult.

Second, recording the time of consult initiation and completion, and establishing standards for response timeliness, is important to patient safety. Prolonged stays in crowded EDs adversely affect the quality of care for patients requiring consultation and also for those who are in the ED reception area, waiting for an available bed. Finally, in academic centers, providing reliable, high quality consultation requires appropriate supervision of trainees.

Two-Way Communication

Two-way communication is the best way to reduce interpretation errors, as it allows both the EM physician and the consultant to ask questions. During the CRICO/RMF project, two key aspects of such communications were identified:

1. The EM physician should clearly state the reason for consultation, either in the form of a question (Did Ms. J have a stroke?), or as a specific task for the consultant (Assist with reduction of unstable elbow fracture.), and the consultant should clearly communicate recommendations back to the EM physician.
2. The EM physician and the consultant should communicate verbally at the completion of the consultant's evaluation. This allows both parties to ask follow-up questions and can reduce delays associated with composing, transcribing, and finding a written note.

A potential mechanism of facilitating two-way communication is to standardize consult notes to include prompts for communication. A prompt for the explicit "reason for consultation" at the top of a paper or electronic form would encourage the EM physician to state the reason. A check box at the bottom of the note indicating discussion between the EM physician and the consultant with a line for the consultant to write the name of the EM physician with whom he or she discussed the case would prompt two-way communication at consultation completion. An IT system that links paging to clinical notes could seamlessly integrate these prompts into the physician's workflow. For example, it could import the clinical question into the consultant's note and generate a prompt to speak with the EM physician at the completion of a consult.

Timeliness

In the context of heavy workloads, both in the ED and among the various consulting services, timeliness matters. Unfortunately, consultation notes often lack significant information about the times at which events occur. Consult request, consultant acknowledgement, and evaluation completion (closed-loop communication between the EM physician and the consultant) are critical time stamps for ED operations. The most effective means of ensuring that times are recorded is to use an electronic consult request-and-response mechanism that pages the consultant, records when the consultant responds, and notes the time when the consultant signs off the consult as complete. If an ED does not have such a system, handwritten documentation in the medical record is acceptable.

Supervision

At academic sites, a resident or fellow is often the initial person to perform the consultation. Supervision of the trainee during the consult varies from in-person evaluation by an attending, to a phone call between the trainee and the attending, to no supervision. Supervision policies establish standards for trainee-attending communication about each consultation, (ideally) ensuring that the trainee has the appropriate backup for the case, and the EM physician requesting the consultation can have confidence in the consulting service's decision making.

A common practice is for consulting service attending physicians to rely on trainees to make independent assessments and decisions, and to call only for "difficult" cases. Unfortunately, in some circumstances, the trainee may lack the experience to recognize when he or she needs assistance or may be less likely to call for backup (if this is considered optional), as doing so might be perceived as a sign of weakness or lack of independence. Institutional policies should clearly establish a consistent and objective standard for trainee-attending communication that accounts for patient and ED needs, as well as trainee experience and education level. One way of achieving this is to use a consultation note template that includes a field for "discussed with consultant attending," a blank for the attending consultant's name, and the date and time of the discussion.

Informal Consults

Informal or "curbside" consultation frequency varies from 17-30 percent across the seven CRICO-insured EDs.[3] These informal events are not routinely documented in a standard fashion either by EM physicians or consultants. When they are documented, it is often the EM physician who documents a conversation in the chart, and the consultant is frequently unaware that he or she is cited. This practice poses significant medico-legal risk to both parties. Informal consults may affect quality of care because consultants perform a less comprehensive assessment during informal consults than they do for standard consults and may feel little, if any, responsibility for the quality and thoroughness of their assessment or recommendations.

Regardless of these obvious defects, EM physicians often act upon these "informal" recommendations. Despite their established practice, informal consults are better avoided, as they have the potential to jeopardize patient safety and carry significant liability risk due to the lack of supporting documentation. Appropriate communication between the EM physician and the consultant includes whether the EM physician will document the discussion in the patient's medical record irrespective of whether it is a full or limited consultation (for example, a telephone call regarding the decision to admit a patient or arrange discharge with outpatient follow-up).

Hospitals enhance patient safety by defining standards for when informal consults are acceptable (e.g., discussion about a specific ECG finding with respect to the need for urgent catheterization, or personal review of an imaging study with an attending radiologist). Effective standards address documentation protocols for informal consults. For example, standards could specify that consults should either be documented by both parties or should only address information that is not specific to a patient (e.g., "what is the best way to get early follow-up care for a patient with a foot fracture?")…and not be documented.

Variable/Unclear Standards

Many hospitals lack clear standards for any consultations, lack standards for ED-based consultations, or have standards that are unenforced. Clear standards, particularly around the above principles of two-way communication, supervision, timeliness, and informal consultation are essential. The most effective standards are those developed locally to account for the unique issues of different consultant services while prioritizing the care of the ED patient. ■

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Knowing When to Seek ED Consults... and When Not To

by Richard Wolfe, MD

Dr. Wolfe is Chief of Emergency Medicine at Beth Israel Deaconess Medical Center in Boston

The need to consult specialists in the emergency department (ED) represents a lesser known high risk area for patients and providers. In many ED cases with bad outcomes, the failure to consult is portrayed as negligent.

Some consultants, however, have little understanding of the constraints of delivering care in the ED. In that stressful setting, patients are far less tolerant of long waits than they are in other health care settings, and are easily upset when physicians spend too little time explaining their concerns and care plan. Communications between the busy emergency medicine (EM) physician and consultant may also be less than ideal, creating the potential for gaps in care or delays in management. Consultation can, paradoxically, increase the risk of poor patient satisfaction, harm, and a subsequent lawsuit.

Thus, knowing when *not* to consult in the ED is as much a part of risk management as knowing when to consult.

The mission of the ED comprises two key roles: stabilize patients with acute medical problems and determine the correct disposition of those patients. By federal law (EMTALA), hospitals must provide an appropriate medical-screening examination to any person who comes to the ED seeking treatment or an examination for a medical condition.[1] If the examination reveals an emergency medical condition, then the hospital must stabilize the patient or transfer him or her to another medical facility.

On-call consultants support the mission to stabilize ED patients by providing the procedural skills that are beyond the scope and privileges of the EM physician (e.g., surgery to remove an appendix, craniotomy to evaluate an epidural hematoma, reimplantation of an amputated finger, or surgical management of an open fracture). The vast majority of consultations in the ED relate to this procedural support; cognitive specialties are less frequently consulted (Internal Medicine hardly ever *consults* in the ED).

Fewer specialists opting to take emergency call, along with changes in EMTALA in 2003 that allows consultants to cover multiple hospitals, have had an adverse effect on response times. Consequently, delays in patient management resulting from delays in consultation for procedural purposes can result in patient harm. Consultation also adds significantly to the *cost* of emergency care. The variety of specialists available lowers the EM physicians' threshold to seek help. Thus, the rising cost of health care is most marked in areas with a high density of specialists. For all of these reasons, emergency consultation needs to be restricted to cases where it truly improves care. Unfortunately, the lack of clinical guidelines, inconsistent interpretation of the standard of care, and turf issues have led to far more consultation in the ED than is necessary.

The perception of legal risk is also a factor that leads EM physicians to consult specialists. By sharing responsibility, the EM physician hopes to decrease his or her liability. Such "defensive" consults are unnecessary and may actually increase the risk of harm and litigation. Understandably, physicians who previously have been sued may tend to increase their use of consultants. Lowering the threshold to consult may also occur individually or departmentally following a sentinel event, even though no actual evidence has shown that consultation would improve outcome with future presentations of a similar nature.

Occasionally, an EM physician who knows that it will be weeks before the patient can obtain an appointment to see a needed specialist in an outpatient clinic will consult to ensure the patient gets the necessary care in a timely manner. This practice is a classic workaround to compensate for a poorly structured outpatient network and generates unnecessary cost with less reliable quality and continuity of care.

Lack of inpatient access, limits of capital expenditures, and prioritization of elective admissions over emergency cases has resulted in chronic ED crowding. ED patients waiting for a decision by a specialist may do so in far more adverse conditions than they would experience at a clinic or in an inpatient bed. Despite requirements by hospitals to have policies defining consultant response times, performance is rarely monitored or enforced. Consultation in the ED routinely adds hours to patients' length of stay and is a major factor in poor patient satisfaction scores. Consultation creates an added risk by blurring patient ownership in the ED when both the EM physician and the consultant assumes that the other is primarily managing the patient.

The solutions to excessive consultation lie in the root causes. Clinical guidelines defining the indications for appropriate consultation can help diminish the amount of "defensive" consultation. Ensuring that outpatient clinics can provide access to appointments in reasonable timeframes that can be scheduled from the EDs can alleviate consultation that is more part of the outpatient management than the emergency care. By decreasing the number of consultations, more time efficient consultation should be the expectation (this may require tracking response times by consultants and requiring investigation of egregious performance). Team training for EM physicians and consultants, or a process improvement methodology (e.g., Lean) can help improve inter-provider communication, thereby clarifying patient ownership and avoiding delays. ■

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Pitfalls in ED Consultation

by Everett Lyn, MD

Dr. Lyn is the Chair of Emergency Medicine at North Shore Medical Center (Massachusetts) and Assistant Professor at Harvard Medical School.

Consultation between Emergency Medicine (EM) physicians and other health care providers carries significant risk. Seventy percent of malpractice claims and 65 percent of sited safety errors are linked to ineffective communication.[1] Because the Emergency Department (ED) is a high-risk practice environment (high patient volume, increased acuity, multitasking), ED consultation becomes a high-risk endeavor. Over the years "failure to consult" has been cited as a major risk for EM physicians, which can lead to a delayed or missed diagnosis. Given the complexity and acuity of patients presenting to EDs, and often a lack of up-to-date information about tests and interventional procedures, EM physicians must recognize when to consult with a specialist, and when to touch base with the patient's longitudinal care provider.

One of the most important factors impacting patient care in the ED is timeliness of consultation: acknowledgement of the need for a consult, early contact with the consultant by EM physicians, response time of the consultant, and effective communication between parties. Past studies suggest wide variation in individual patterns of response depending on the urgency of the patient's condition and individual behavior patterns.[2-3]

Consultants' behavior is also affected by time of day. For example, EM physicians usually encounter more resistance from offsite consultants at night both in their response times and in persuading them to come to the hospital. Another barrier is that some consultants are not alert enough to comprehend the depth and detail of conversations during certain times at night, especially if they were already asleep. In such cases it is imperative that the EM physician be precise, explicit in the question(s) being asked, and be persistent if there is a need to see the patient immediately.

Delay in timeliness of consults may also occur depending on the level of responder. One study of 30 California EDs during a six month period evaluated response times of on-call specialists and found significant variation: one in ten specialists did not even respond.[4]

Supervision

Trainees are an integral part of the consultation process in teaching institutions. Because they possess varied skills and knowledge—and require supervision by specialists—consultation layering (and lag time) occurs. House officers who serve as the first responders have to consult with their attending specialists as to the correct recommendations and or interventions. Since consultation is a billable service, most often requiring personal evaluation followed by interventions or recommendations by an expert physician, the final framework of management needs to be dictated by the most experienced individual.

Infrequently, consultants may make a recommendation that doesn't seem appropriate, in which case the EM physician must clarify and seek another opinion. If a consultant's recommendations deviate from the standard of care when their treatment plans are instituted, the EM physician may be held responsible and share the liability after an adverse patient outcome. Therefore, supervision of the consultant must be done both by the EM physician and the supervising attending. EM physicians must also document in detail why a consultant's recommendation was not followed. When disagreement exists between the consultant and requesting physician during telephone conversations, it is usually prudent for the consultant to come in and personally evaluate the patient.

Effective communication is one of the most important and well-documented factors of consultation within the ED.[1] Frequent interruptions and multitasking are typical of all EDs and may serve as impediments to effective and structured communication. Lack of communication is seen as a problem in 14–24 percent of inpatient consultation and the Joint Commission has indicated that poor communication is the root cause of most sentinel events, medical mistakes, and "near misses."[5-6]

Consultations, when done correctly, serve the best interest of patients and result in better quality of care. Variability can sometimes prove challenging. Time of day, level of training, supervision of consultants, timely response, documentation, and communication are all important aspects of the process. Such a process may result in patient safety issues and serious medico-legal risks if not done properly. More standardization and research about the process are needed to decrease risk and adverse outcomes, resulting in better quality of care for the patient. ■

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Improving the Surgical Resident's ED Experience

by John Schuler, MD

Dr. Schuler is a general surgeon, and Director of Surgical Education, at Mount Auburn Hospital, in Cambridge, Massachusetts.

The teaching hospital emergency department (ED) should be an ideal setting in which general surgical residents can develop skills they will use throughout their careers. In the ED, trainees can learn independent evaluation and management of the kinds of patients they will be expected to treat in their practices. They also can learn how to conduct themselves as consultants.

However, ED staffs have their own mission: to triage, evaluate, treat, and move patients through the system. An ED's physical facilities and personnel are often overwhelmed with patients waiting to be seen, lying on gurneys in hallways, and awaiting imagings (especially CT scans). And now that diversion to other hospitals is no longer permitted (in Massachusetts), the only way to alleviate the crowding is to become more efficient. The pressure is intense to decrease waiting times and manage patients faster.

Unfortunately, training residents slows the flow of patients. Even at teaching hospitals, some Emergency Medicine (EM) physicians would prefer to work up the patients and call the admitting staff surgeon or resident and say "I have a patient with acute cholecystitis for you to admit; antibiotics are in." This path is much more efficient than waiting for a resident to be paged, come to the ED, examine the patient, and then discuss which tests to order with the EM physician. While the latter course encourages the resident to think about the patient's problem and how to begin solving it, it consumes precious time.

But surgical residents need opportunities to develop their ability for inductive logic and to improve their clinical sense through repeated exposure to undifferentiated, ill patients. With this experience, the surgical trainee sees a variety of clinical problems and patients, learns to think critically while under stress, practices his or her skills, learns from mistakes, and ultimately develops confidence in his or her decision-making and clinical judgment.

To maximize this phase of his or her professional development, a surgical resident must learn how to assume the role of consultant to the EM physician who requested the evaluation. This role requires his or her ability to create a differential diagnosis, formulate a cogent work up, and defend it to surgical and EM physicians. This builds essential communication skills with senior staff, peers, and other hospital personnel. This path of learning, however, may complicate the job of the EM physician; it takes time, patience, commitment, and a willingness to partner with the surgical resident while at the same time safeguard the patient (such commitment is no less required on the part of the attending surgeon).

Opportunities for Improvement

EDs and the attending physicians and surgeons who staff them can take a number of steps to allow the resident to fulfill the consultant role more effectively, and to help expedite patient flow.

Establish an emergency service rotation at the PGY1 or PGY2 level. This would introduce the resident to the ED staff and acclimate him or her to the pace of the work. During this introductory rotation, the resident would learn how one feels when on the receiving end of consultations. The resident would also deal with the issue of pain management without sedating patients to the point where physical examination is compromised. He or she would learn how to deal with frightened families and with seriously ill patients. He or she would learn to work under stress and see the ABCs of trauma management put into practice. And, the resident would participate in caring for patients in shock and in preparing patients for urgent surgery under supervision.

Designate a mid-level (PGY3) resident as the surgical consult. These residents should have enough experience to work efficiently and to provide meaningful help to the EM physician. Most PGY3s can comfortably evaluate patients with abdominal pain and trauma and are familiar with the algorithms of management. Likewise, they will be familiar with the ED staff, making working together much easier. In some hospitals, PGY2 trainees fill this role, but often lack the experience to offer value-added input. In all hospitals, the availability of these residents is diminished due to work hours restrictions, someone is always absent from the hospital, post call.

Improve communication. Text messaging the name of the EM physician requesting the surgical consult and the question posed immediately gives the resident important information. If the resident is unable to come promptly to the ED, he or she can discuss the case with another resident who might be available or directly with the EM physician to begin instituting the work-up.

Follow up. After completing the consult, the trainee can review his or her findings and management plan with the EM attending to "close the loop." The resident concurrently reports to the attending surgeon and chief resident. If there is disagreement, the surgical resident involves these senior staff to resolve the differences with the EM attending.

We are fortunate that the EM physicians at Mount Auburn Hospital continue to support the resident role as surgical consultant, despite the inevitable inefficiencies that may occur. As do we, they realize, that this training is essential to developing competent general surgeons, skilled in their ability to care for emergency and critically ill patients. ■

Dr. Joe Jacobson: The Consultation Process Through the Eyes of an Internist

Interview by Debbie LaValley, BSN, RN, CPHQ

Ms. LaValley is a Program Director in the Loss Prevention and Patient Safety Department at CRICO/RMF and is the issue editor for Forum.

Joseph Jacobson, MD, trained as a hematologist/oncologist, serves as a practicing clinician, administrator, and in various quality-related roles at North Shore Medical Center (Massachusetts), Partners HealthCare, and with the American Society of Clinical Oncology. Since 2003, Dr. Jacobson has served as Chairman of the Department of Medicine for North Shore Medical Center.

Forum: What is the primary role of consults?

Dr. Jacobson: Medical consultation is the embodiment of the spirit among physicians to share their knowledge and experience with their peers, whether it is undertaken as a formal process or as an informal dialogue. To guarantee safe patient care and preempt medical legal consequences, it is important to be thoughtful and deliberate, and always to be aware of the limitations and flaws of human communication.

A "curbside" consult is an informal recommendation for managing an individual patient, based on a limited data set. It is completed without access to the patient and, usually, without access to the medical record.

Have you noticed a change in the volume of curbside consults?

Physicians are under greater time constraints now and consequently have less opportunity to interact as peers, so the face-to-face curbside consult occurs less often. But what has increased, I think substantially, are e-mail curbside consultations.

Has your hospital taken any kind of a stand on the timing or nature of consults?

A Partners HealthCare initiative focuses on improving the quality of consultations provided in emergency departments. Through a CRICO-sponsored project, we have begun to address the problems associated with obtaining high quality consultations. Basic elements of emergency department consultations are now being collected, with the results provided regularly to departmental and subspecialty leaders.

What do you see that concerns you?

We could all do a better job communicating. For instance, requesting physicians should always be explicit about defining the indications for, and the goals of, the consultation. Likewise, the consultant's note should reflect the indication for the consultation and should include clear-cut and explicit recommendations. Some or all of these elements are often lacking.

Since few of us receive formal training in how to perform a consultation, styles and content vary enormously. That lack of standardization limits the value of consultations. Some physicians consistently create consultations that are explicit; others write in a more meandering or narrative style which often lacks a well-defined assessment and clear-cut recommendations.

Are hospitalists being asked to provide more consultations for surgical and ED patients, knowing that a surgeon will be asked to evaluate them in the morning?

Early on in the five-year history of hospitalist medicine at NSMC, the hospitalists were routinely asked to admit patients with conditions that were outside of their comfort zone. It was not uncommon for orthopedic surgeons to ask them to admit patients following a fall with a fracture. It was also common for surgeons to ask for patients who had unexplained (potentially surgical) abdominal pain to be admitted to the medical service, or for them to request the ED physicians to admit other patients with injuries, including head trauma, to the hospitalist service.

By accepting such patients, it turns out we were doing them a disservice—we put them at risk for poor care and exposed the hospitalists to legal risk. To overcome that problem, NSMC established clear-cut guidelines to be used to assist the ED physician to assign the patient to the correct service. Guidelines now direct the assignment of ED patients to various services including hematology/oncology, cardiology, general surgery, orthopedics, urology, and trauma. Since the adoption of these guidelines, NSMC has perceived a marked improvement in the proper assignment of admissions to subspecialty services. That is not to say that hospitalists are not put under pressure now and then to admit an inappropriate patient; the guidelines, though, have empowered them to decline a patient when the admission is in conflict with established policy.

Do you think physicians are requesting more formal consults these days just as a means of protecting themselves from being named in a medical malpractice claim or suit?

It is the perception of many subspecialists that the number of inpatient consultations has grown markedly along with the hospitalist program over the past five years. This perception may be due more to the young age and in experience of many of our hospitalists rather than a conscious concern about malpractice risk.

Is help on the way for physicians trying to coordinate patient care among multiple providers?

Yes. Most of our PCPs and more than 50 percent of our specialists and subspecialists now share a common (Partners) electronic health record. It is an extraordinary advance for us, creating a common medical platform so that subspecialist notes appear side-by-side with that of the PCP. There is a joint responsibility to maintain a common problem list and participate in medication reconciliation. ■

An Attorney's Take on Curbside Consults

Interview by Debbie LaValley, BSN, RN, CPHQ

Ms. LaValley is a Program Director in the Loss Prevention and Patient Safety Department at CRICO/RMF and is the issue editor for Forum.

Ellen Epstein Cohen, Esq. is a partner in the Boston-based law firm, Adler, Cohen, Harvey, Wakeman & Guekguezian. Attorney Cohen frequently serves as defense counsel in malpractice suits naming CRICO-insured defendants.

Forum: What is a curbside consult?

Attorney Cohen: It is an informal interaction in which one physician asks another for advice or input on how to handle a particular patient issue, during which the person to whom the physician is speaking 1) is not in the presence of the patient, and 2) doesn't necessarily know or has never met the patient. It's an informal exchange between colleagues who are trying to make treatment decisions.

What if Dr. X sends Dr. C an e-mail about a patient's diagnosis or care?

If Dr. C receives an e-mail that asks her a specific medical question, she should make it clear that her answer is a general answer—not intended to apply to any particular patient. She has a limited amount of information being presented to her and she's providing a general answer without meeting, seeing, or examining the patient. She doesn't have the necessary medical history or additional information about that patient to render a medical opinion specific to that patient.

When Dr. C chooses to answer a general question with a general answer, and she qualifies it that way, she will be much better off than if she just gave an answer to a question, especially if Dr. X then makes the decision to write in the patient's medical record that he or she consulted with Dr. C. Once her name gets into a particular patient's chart as someone who provided advice about the treatment decisions involved in the care, then Dr. C is on the invitation list for any ensuing litigation.

If Dr. X documents the contents of a curbside consult (including Dr. C's name) in a patient's record, and a medical malpractice suit is later filed, is there anything that Dr. X can do to protect Dr. C?

No. Once Dr. X makes the ill-advised decision to put Dr. C's name in the chart, he can't un-ring that bell. But the plaintiff in a medical negligence claim *does* have to prove that there was a physician/patient relationship established. So the defense for Dr. C would be: "I never met this patient, saw this patient, or examined this patient. Nor did I ever make a note in this patient's chart. I never had any information about who this patient even was. I didn't know this patient's name. I just remember Dr. X called me and asked me a question about this issue." The legal argument of Dr. C's defense would be that there was no physician/patient relationship and, therefore, no duty ran from the consultant (Dr. C) to the patient. But that doesn't mean Dr. C won't have to stay in the lawsuit and fight to prove her position.

What if Dr. X asks Dr. C to take a look at one of his patient's test results or imagings?

This is the next layer of establishing a physician/patient relationship. Now Dr. C knows who the patient is and something specific about him or her. That's the danger zone. Dr. C would be well-advised to include a standard, boilerplate statement (to use either in conversation or in her e-mail responses) that clarifies the limit of her consult. For example she could say: "I've looked at this [result], but it's not enough for me to render specific medical advice. At your request or the patient's request, I would be happy to become involved in evaluating [him/her] and get involved in [his/her] care," or "this image suggests [the following things] and should be followed up by the patient's treating team."

If Dr. C doesn't qualify her answer and just answers the question about Dr. X's patient based on that patient's test results, she has gone a lot further in creating what can be seen as a physician/patient relationship.

Would it be prudent for Dr. C, while giving a curbside consult to Dr. X, to document what she actually told him? Would that reduce confusion or misinterpretation if it should come to court?

That's probably not feasible for busy practitioners who want to be communicating freely with their colleagues. The concept of asking for curbside consults is that patients receive the best quality of care by skilled physicians who have considered and thought about their issues the most. If we begin telling physicians that they need to document every curbside consult, they may simply avoid doing them. Further, it is very difficult to think of a way that these informal consults could be maintained, as Dr. C has no chart for this patient because she has never seen her for any formal encounter.

Does the fear of being sued render some physicians more reluctant now to give curbside consults?

I do think that plays into people's minds…especially once you hear about someone who has been "burned." When you hear about how Dr. C's name got into the chart of a patient whom she never met or saw, and she ended up as a defendant in a lawsuit, it's memorable. But curbside consults are such an important aspect of communication between physicians, so deeply ingrained in their practice, that I hope we're not going to lose that as an essential element of high quality patient care. ■

The Top Ten Ways to Ensure Frustration, Miscommunication, and Poor Patient Care the Next Time You Provide (or Request) a Consult

by Michael D. Howell, MD, MPH

Dr. Howell is Director, Critical Care Quality, Silverman Institute for Healthcare Quality and Safety, Beth Israel Deaconess Medical Center

Consultation is a cornerstone of modern inpatient care. As the pace and complexity of medical care have escalated, the sheer volume of patients' needs for both cognitive and procedural expertise have outpaced the abilities of any single physician.[1] Recent studies show that—even among patients admitted to a general medicine service—almost half will receive a subspecialty consult.[2] In my own medical center last year, more than 1,000 inpatients had four or more specialties involved in their care during a single admission.

As those of us who admit complex, acutely ill patients know, the quality of a particular consult can make or break a case. We know that there are good consults … and bad ones. Unfortunately, there is a startling lack of research into what differentiates a good consult from a bad one. Many studies have evaluated whether patients who receive a particular specialty's consultation or management have better or worse outcomes, higher or lower costs, or more or less efficient resource utilization.[3-11] Most of these studies, however, treat the exposure to one consult as identical to exposure to every other consult, implicitly asserting that—like a tablet of aspirin—the quality of consultation does not vary from dose to dose. Experience would argue that that is far from the case.

My own clinical practice is pulmonary medicine and critical care. Since my ICU is a closed unit, I serve as the attending physician for our critically ill patients and, therefore, am in the position of calling for many consults. I also *provide* consultation for patients with incipient critical illness and with pulmonary problems. Thus, I have had the opportunity to both perpetrate and witness some spectacularly bad consultative episodes... and have learned to strive for better experiences.

Five Ways to Call a Bad Consult

1. *Be vague about why you're asking for the consult.*

   Consultants are challenged to answer a question you didn't ask, and a vague question engenders a vague response. To get the help you are looking for, ask a specific question. Lee's seminal 1983 work showed that the consultant and the requesting team had totally different perceptions of the primary reason for consultation in more than 20 percent of cases.[12] When this occurred, requesting physicians were significantly more likely to perceive lower value from the consult. This does not appear to have improved over the subsequent 25 years: a 2009 study found that more than one in four consult requests did not contain a clear question.[13]

2. *Be unclear about the level at which you want a consultant involved in the case.*

   As a consultant, I need to know: Is your request for input about a particular clinical question? Do you want me to perform a procedure? Are we going to co-manage a problem? Should I write my orders in the chart? Shall I transfer the patient to my service? All of these levels of consultation occur fairly frequently.[14-16]

3. *Neither implement a consultant's recommendations nor discuss with them why you're doing something else.*

   If my consultation is clear but you don't agree, talk to me; if it's unclear, contact me.

   The patient's attending physician is obligated to integrate incoming data, *including consultants' recommendations,* into a coherent whole. A consultant's job is to provide you with their best advice about the right way to proceed. If a consultant's recommendations do not make any sense: 1) he or she may not have understood the question you wanted answered; 2) his or her note is inadequate; or 3) he or she may have missed some salient feature of the case. Most often, a simple phone call can clear up the confusion. With the confusion cleared up, the consultant may have something meaningful to say that will change the course of therapy.

4. *Call for non-urgent consults at the end of the day.*

   Inconsideration, or bad timing, can be a barrier to good patient care. If possible, avoid introducing unnecessary delays into the process: if you know you need help from nephrology at 9:00 a.m., call before 9:00 a.m. Give the consulting team time to talk with your team members (and factor in that trainees have to leave by a certain time and the consultants may be unable to talk to the physician who admitted the patient). Finally, if the consultant is likely to recommend additional labs or imaging, a recommendation received after 5:00 p.m. may mean delaying these recommended tests until the next day.

5. *Ask for a curbside, but write the consultant's name in the chart and say that you consulted him or her.*

   Professional dialogue about individual clinical cases is ubiquitous, well-regarded, and—when handled appropriately—helpful.[17-19] If mishandled, informal consultation can be medico-legally complex.[20]

   If you seek a curbside consult, be clear to the consultant that a) your goal is to confirm your pre-existing clinical impression and, b) the consultation will not be part of the

record. Consider, also, that those who are asked to provide curbside consultation often feel that there are important gaps in this type of communication that do not occur with formal consultation.[16,18] For example, in one study, researchers found that 80 percent of specialists felt that information communicated in curbside consultations was insufficient, and 77 percent felt that important clinical detail was not described.[19]

The American College of Obstetrics and Gynecology (ACOG) professional statement on consultation sums it up very well:

> *Often… relationships among clinicians lead to professional dialogue. In professional dialogue, clinicians share their opinions and knowledge with the aim of improving their ability to provide the best care to their patients … In professional dialogue, a second clinician is typically asked a simple question and he or she does not talk with or examine the patient… The second clinician does not make an entry in the patient's medical record or charge a fee, and* ***the first clinician should not attribute an opinion to the second clinician.***[17] [emphasis added]

Five Ways to Provide a Bad Consult

1. *Tell me that the consult is inappropriate and that I shouldn't be calling you.*

   Although the specifics may be obscured, a physician calling for a consult is, primarily, asking for one thing: help. Either I am calling an appropriate consult that legitimately needs your specialty expertise, or I am in over my head and don't know what to do. In either case, both my patient and I need your help. Don't disregard a consult request just because it's poorly articulated. Over the phone, a request may, at first, seem to have no relationship to your specialty—particularly when it comes from a cross-covering physician. On further investigation, however, most of these requests turn out to be quite reasonable.

2. *Don't see the patient when I ask you to.*

   Heed the second of the *Ten Commandments for Effective Consultations:* "establish urgency."[21] If another physician is on the phone asking for your help *right now,* assume there is a good reason; accept that I truly am asking for help (even if you think I don't need it). Better to see a few cases early that could have waited than to delay seeing a time-sensitive disease too late to improve the patient's outcome. Embedded here is Goldman's third commandment: "look for yourself." Good consultants see the patient and review the data themselves.[21]

3. *Don't answer the question I asked.*

   Although you will undoubtedly have other recommendations, please also address the specific reason we called. If we are really on the ball, we will have written this question in our note for the day ("Consult cardiology: would they recommend left heart catheterization in this patient who is unable to wean from the ventilator because of recurrent acute pulmonary edema?"). Good consultants always address the specific question asked, in addition to other issues that they uncover.

4. *Do things to the patient without talking to me first.*

   Because it is my responsibility, as the patient's attending physician, to integrate all incoming data, including your recommendations, into a coherent whole—and to review this with the patient and his/her family—we need to talk before you act (excluding a few truly emergent procedures when a few minutes' delay might be life-threatening). The ethics committees of the American College of Physicians and ACOG use similar language to describe this facet of consultation.[17, 22] ACOG's statement:

   > *A complex clinical situation may call for multiple consultations. Unless authority has been transferred elsewhere, the responsibility for the patient's care should rest with the referring practitioner. This practitioner should remain in charge of communication with the patient and coordinate the overall care on the basis of information derived from the consultants. This will ensure a coordinated effort that remains in the patient's best interest.*

   Similarly, transfer of the patient from my service to yours should happen only after we have spoken directly.

5. *Communicate poorly.*

   The need for "better communication" is ubiquitous; in consultation more is better. If it is urgent or important, call me. Nothing is a substitute for direct, verbal communication between the consultant and the requesting physician.[16,21,23] Also, please write legibly, sign your name so that I can read it, and leave clear and specific recommendations in your note. All of these things improve the chances that I will follow your recommendations.[24]

Inpatient consultative care is a complex clinical endeavor, both in the afferent and efferent limbs of the consultative episode. In spite of research about the virtues of consultation by particular specialties, little research has focused on what differentiates a good consult from a bad one. Clinical experience, though, argues strongly that attention to a few details—in both requesting and providing the consult-—can enhance the experience for the requesting physician, the consultant, and the patient… and help ensure that your next consult contributes to the best possible patient outcomes. ■

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CRICO/RMF
101 Main Street
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E-mail: Forum@rmf.harvard.edu

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STAFF

A Resident's Simple Suggestions to Improve Consultation

by Jennifer P. Stevens, MD, MS

Dr. Stevens a third-year resident in the Brigham and Women's Hospital Internal Medicine Residency program with plans to pursue further training in pulmonary and critical care medicine.

Subspecialty consultants are ubiquitous in tertiary care centers. One study reported nearly half of all admitted patients received at least one consultation.[1] Delays in subspecialty involvement can increase mortality, increase the length of stay, and delay evidence-based treatments.[2-4]

As a medicine resident, I have been on both ends of many inpatient consults. High-quality consultations are memorable and change the course of care. Despite knowing a good consult when we see it, however, the elements of an elegant consult have only rarely been deconstructed.[5-6]

For context, consider how consults are commonly requested in teaching hospitals. On morning rounds, the attending or resident decides that a consult should be called, but the intern must make the call—the clinical question is second hand by the time it is posed to the fellow. The fellow may provide a written note at some point and, due to time constraints, may not communicate directly with the team. In a worst case scenario, this process creates additional work for the consult service and provides limited utility to the primary team and the patient.

Such a system is ripe for change.

Need for Improvement

From the consultants' perspective, what is asked of them is often vague and poorly communicated. Conley et al noted that consultants received clear clinical questions only two thirds of the time; 25 percent of the time the primary team did not contact the consulting team directly.[7] In 20 percent of urgent consults, the two parties never spoke to each other.

Many consultants also feel that their recommendations fall on deaf ears. For example, Lo and colleagues examined adherence to an infectious disease team's recommendations they found greater enthusiasm for therapeutic rather than diagnostic recommendations (92 vs. 53%), for insights pertinent to the initial question (56 vs. 44%) and for notes communicated in legible handwriting (81 vs. 59%).[8]

Perhaps the role of the consultant falls more into the category of the art than the science of medicine, relationships rather than adherence to guidelines. Thirty years ago, Goldman et al outlined 10 recommendations ("commandments") for effective consultations in an attempt to provide guidance for a high quality consultation. The authors recommended clarifying the question; establishing the timeliness of the request; encouraging brevity, clarity and contingency plans; encouraging verbal as well as written communication; and following up.[5] In 2007, Salerno and colleagues further updated these recommendations, encouraging consultants to understand the needs and expectations of the primary service, including their interest in co-management and additional teaching on the question.[6]

Opportunities for Improvement

More consults are not necessarily better. Better consults are better. Despite efforts to identify a high quality consult, little ground has been gained. As a trainee, I would highlight two areas of needed improvement.

Ask a clear and timely question: The primary team must be responsible for requesting the consult in a timely way and clearly identifying the urgency of the consult. When possible, ask a specific question. If the purpose of the consult is to gain access to a specialized procedure (e.g., cardiac catheterization, renal replacement therapy), then the primary team must be clear about this intent.

Respond in an equally clear and timely way: Contact the primary team directly with recommendations and make these clear in the chart. Inform the primary team if the consult is unable to be completed quickly. Communicate all recommendations both verbally and in writing.

Improving consults hinges on clear communication and involvement of senior physicians without exception. The intern should never be calling a consult without understanding the question. Nor should the consultant float in under the cover of darkness, without the attending, to provide their expertise without discussing their recommendations to the primary team. ■

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Additional Reading

by Judith Jaffe, MSLIS
Ms. Jaffe is Knowledge Manager for CRICO/RMF.

The following additional resources related to consultations are selected from the PubMed (Medline) database of indexed biomedical literature published from 2000 through March 2009. Links are provided to abstracts and full text, where available..

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