# RISK MANAGEMENT PERSPECTIVES



# Don't Fumble the Hand-off



### **CASE ONE**

Physician Hand-offs of Admitted Patients



### CASE TWO

Hand-off between Obstetrician and On-Call Obstetrician during Labor



### **CASE THREE**

Hand-offs of Patients from the ED to an Inpatient Unit with ED Boarding of Admitted Patients



### **CASE FOUR**





### CASE FIVE

**Outpatient Hand-offs** 



### **CASE SIX**

Hand-off from a Skilled Nursing Facility to a Hospital





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## Don't Fumble the Hand-off

### **INTRODUCTION**

"Failed hand-offs are a longstanding, common problem in health care."<sup>1</sup> A hand-off is a complex process that can happen thousands of times a day in a busy hospital. Hand-offs occur all along the continuum of patient care, between many different members of a healthcare team. In essence, a hand-off occurs any time the patient moves from one place to another and any time a different person assumes responsibility for the patient. Examples of transitions of patients during hand-offs include:

- From emergency department (ED) physician to an inpatient unit physician
- · From hospitalist to hospitalist at shift change
- From hospitalist to specialist during hospitalization
- From attending physician to primary care physician (PCP) at discharge
- From PCP to specialist and back
- From nurse to nurse during shift change and temporary relief of coverage during shifts
- From skilled nursing and rehabilitation facilities to hospitals and back

### **Elements of an Effective Hand-off Process**

Hand-offs are known by various names, including transitions of care, signouts, and handovers. For the purposes of this article "hand-off" will refer to the processes of both transferring responsibility for care and transmitting information about the patient. Further, a "sending" clinician or staff member (or "sender") communicates patient information and transfers authority and responsibility to a "receiving" clinician or staff member (or "receiver").<sup>1</sup>

Patient safety and liability risk management depend on a combination of accurate information transfer and clear establishment of patient responsibility and authority at each hand-off. In addition to leadership's demonstrated commitment to successful hand-offs, and a workplace culture in which members of the healthcare team respect each other and value teamwork, an effective hand-off process includes:<sup>1,2</sup>

- Involvement of end-users in the development and evaluation of hand-off processes and forms
- Consistency (e.g., information is updated in the same way at every hand-off)
- Face-to-face hand-off communication whenever possible, but in every case two-way communication in which the receiving provider can ask questions and have them addressed
  - Studies indicate that face-to-face communication and nonverbal cues, including gestures, tone of voice, facial expressions and eye contact, are important during hand-off, particularly when the patient's situation is complex.<sup>3</sup>
- · Adequate time for meaningful engagement in a location free from interruptions
- Multidisciplinary input, including bedside hand-off with active patient and family involvement
- Standardized communication techniques, such as Situation, Background, Assessment, Recommendation (SBAR) or Introduction, Patient, Assessment, Situation, Safety, Background, Actions, Timing, Ownership, Next (IPASStheBATON)
- · Verification methods to ensure that information is received and understood (e.g., repeat-back)
- · A clear transfer point of patient responsibility from one provider to another
- Integration in the electronic health record (EHR)
- Standardized training
- Ongoing monitoring and evaluation of the effectiveness of the process

Any member of the healthcare team can make a difference in increasing hand-off safety. The primary goal of the hand-off should be to accurately transfer patient information in a way that allows for an oncoming provider to offer appropriate care. Any member of the healthcare team can make a difference in increasing hand-off safety, even in environments without formal hand-off protocols. The key is a willingness to communicate.

### **Root Causes of Hand-Off Communication Failures**

The Joint Commission identified top root causes associated with hand-off communication failures. According to The Joint Commission, the top root causes associated with hand-off failures include:<sup>4</sup>

- The communication method (e.g., voicemail) is ineffective.
- The hand-off and physical transfer of the patient occur at different times.
- Inadequate time is spent engaging in communication.
- Hand-off communications are interrupted.
- Standardized communication procedures (e.g., SBAR) are not used.
- The patient is not included in the discussion.
- Inaccurate or incomplete information is provided to the receiver.
- The sender hands off the patient before adequately familiarizing him or herself with the patient's issues.
- The sender is unable to provide current information because of outstanding studies.
- The sender is unable to contact the receiver to engage in hand-off communication or is unable to contact the receiver when additional information comes to the sender following hand-off.
- The receiver is focused on other priorities during hand-off.
- The receiver is unaware that a patient has been handed off to him or her.
- The receiver is unable to contact the sender for additional information following hand-off.

The Joint Commission emphasizes the importance of healthcare organizations using a process to identify causes of hand-off communication failures and improvement barriers, and then identifying, implementing, and validating solutions to the failures and barriers.<sup>1</sup> Substandard, disorganized hand-offs, even if they do not result in patient injury, can add to patient dissatisfaction. As studies have shown, it is not necessarily substandard care that leads patients to file a malpractice lawsuit. In many cases, patients are simply angry about the way they have been treated,<sup>5</sup> or they have unrealistic expectations.

"For anyone who has watched children playing "Telephone" a game in which a message whispered in succession is, by the time it reaches the end of the line, nearly always distorted to something completely different—the inherent potential for error due to sign-outs is obvious. Unfortunately, the process of sign-out usually fails to account for the inevitability of human error."<sup>6</sup>

Not surprisingly, many of the root causes discovered by The Joint Commission are found in this article's case studies, which are based on closed malpractice claims. Utilizing the risk management strategies presented can improve hand-off communications, which can lead to fewer patient injuries, fewer malpractice lawsuits, and greater patient satisfaction.



### **Physician Hand-offs of Admitted Patients**

Each transition during a hospitalization can increase the risk of patient injury. The author of a widely cited patient safety article estimated the frequency of hand-offs at his teaching hospital was 4,000 per day (1.6 million per year).<sup>7</sup> That presents a staggering number of opportunities for error. Cases One and Two describe hospitalized patient injuries that could be traced back to confusion about responsibility and inadequate information exchange during hand-off.

### Hand-off from Hospitalist to Specialist

Any hand-off process should ensure an unambiguous transfer of responsibility. It should be easy for the hand-off team to determine who is responsible for which duties at any stage of patient care. Consider how the outcome in the following case could have been different if the two physicians had mutually determined who was responsible for the patient, and when that responsibility began and ended.



### **CASE ONE**

**Issue:** The patient suffered an ischemic event in his right leg, which went undiagnosed, resulting in amputation.

The patient presented to the ED. He reported a one-day history of right leg numbness and a severe burning, pin-prick sensation radiating from his right hip to his toes. His history was significant for nausea, vomiting, and poor appetite for the past month, and long-term diabetes. The ED physician ordered venous ultrasound of the patient's right leg, which was negative for venous clots; a CT scan of the brain; x-rays of the lumbar spine and hip; and an EKG. All were essentially normal.

The patient was admitted to the hospital. The admitting hospitalist would later testify that he had no independent memory of the patient. According to the medical records, he performed an admission exam at the beginning of his shift. Suspecting the leg pain was neuropathic, he ordered an MRI. He also ordered an abdominal ultrasound for suspected pancreatitis. After examining the patient, the admitting hospitalist would have left a voicemail report about the patient for a rounding hospitalist, who would take over care the next day. (This was the admitting hospitalist's hand-off to the rounding hospitalist.) The examination was the only contact the admitting hospitalist had with the patient, which was usual, as he was responsible for 100-120 patients during his shift. Following the admitting hospitalist's examination of the patient, a nurse documented that the patient's right leg was cooler than the left, and the right pedal pulse was weak. Because it was not the admitting hospitalist's practice to review nursing notes, and because he had already completed his hand-off, this information was not passed on to the receiving hospitalist (Rounding Hospitalist 1). **FUMBLE** 



**EXAMPLE** Rounding Hospitalist 1 ordered a neurology consultation, believing the cause of the patient's leg pain and numbness was radicular. This was her only entry in the patient's record. During her shifts on Days 2 and 3 of the patient's hospitalization, nurses consistently noted the patient's right foot was cooler than his left, and his right dorsalis pedal pulse was weak. Rounding Hospitalist 1 would later testify that she generally did not review nursing notes and relied on nurses to bring this type of patient information to her attention. Because she would not have known about them, she would not have reported the leg symptoms to the neurologist. **FUMBLE** 

**DAY3** The neurologist assessed the patient. He believed the patient's symptoms indicated an acute complex regional pain syndrome. He diagnosed the patient with multifocal neuropathy and ordered Neurontin<sup>®</sup>. Before and after the consultation, two different nurses documented the patient's right foot was cooler than his left, and his right dorsalis pedal pulse was weak. The neurologist would later testify

that it was his practice to review the physician progress notes, but he did not review nursing notes. Therefore, he would not have considered the symptoms recorded by the nursing staff in his diagnosis and treatment.

Rounding Hospitalist 2 assumed care, then continued following the patient until he was discharged three days later. She would later testify in her deposition that she had no independent recollection of the patient other than a faint memory that one of the nurses at some point informed her that a pulse in the patient's right leg was decreased. Her sparse medical record documentation did not help refresh her memory about what occurred. Therefore, she testified based on her standard practice. In her opinion, since this patient was being followed by a neurologist for his leg symptoms, she was relieved of any duty to act on information associated with the patient's leg. **FUMBLE** 

Because the patient had already been diagnosed with multifocal neuropathy, she would not have attempted to further investigate the cause of the patient's leg symptoms. Thus, she would not have ordered an arterial doppler to assess for an arterial occlusion in the patient's right leg. Her focus was the patient's possible pancreatitis.

The patient was discharged, but readmitted and diagnosed with extensive atherosclerotic disease with multiple filling defects from the common iliac artery down to the femoral artery and no flow in the lower right extremity, below the popliteal artery. Embolectomy and infusion of TPA were ineffective in relieving the blockage, and the patient's lower extremity was amputated. He filed a malpractice lawsuit against all members of his treatment team and the hospital.

### DISCUSSION

Rounding Hospitalist 2 had the last real opportunity to make a correct diagnosis that could have saved the patient's leg, but she deferred to the neurologist, who had never assumed responsibility. If she had contacted the neurologist to relay the nurse's observations, the neurologist could have reconsidered his diagnosis. If she had realized that the neurologist had not assumed responsibility, she might have more fully considered the nurse's report and made a correct diagnosis. The absence of responsibility due to confusion over hand-off protocol was an underlying cause

of the patient's ultimate injury.

If this case went to trial, it would be difficult for the hospitalist and neurologist to mount successful defenses without casting blame on each other. The hospitalist had testified in deposition that she relied on the neurologist once a diagnosis was made. The neurologist testified he believed the hospitalists had an independent continuing obligation to review the patient's care and assess whether there was an arterial cause of the symptoms. Experts opined that all the physicians who saw the patient in the hospital had an independent obligation to assess the patient clinically and consider an arterial cause for his symptoms.

An underlying benefit of handoffs is that the receiver brings a "fresh pair of eyes" to the patient's circumstances.

An underlying benefit of hand-offs is that the receiver brings a "fresh pair of eyes" to the patient's circumstances, providing the ongoing possibility of discovering an unrecognized problem. Although expert opinion was mixed on whether the physicians had a duty to review the nursing notes, this lawsuit suggests that physicians should review the nursing notes and that nurses should bring relevant information to the attention of physicians. Patient safety relies on a certain amount of redundancy. Regardless of nurse-physician communication duties, the failure to realize the patient had symptoms of arterial occlusion negatively affected each physician hand-off. At their depositions, the plaintiff's attorney asked the defendant physicians what they would have done if they had been aware of the information available in the nursing notes. Each admitted they would have ordered testing to determine whether the patient's symptoms were caused by arterial occlusion. At trial, the physicians would have to defend their willful ignorance of the information in the nursing notes by suggesting the nurses' duty to communicate that information directly to them excused their inaction. This line of defense was not expected to resonate with jury members.

### Hand-off between Obstetrician and On-Call Obstetrician during Labor

In the following case, an obstetrician (OB) failed to mention to her colleague assuming care during labor and delivery that she suspected macrosomia could complicate the delivery. The failure to communicate the potential complication was compounded by the incomplete prenatal records at the hospital. Consider how better hand-off communication could have impacted the outcomes.



**CASE TWO** 

**Issue:** Shoulder dystocia risk factors were not communicated to the OB who delivered the infant.

In her 41st week of pregnancy, a patient presented to the hospital in active labor. She was 5'2" and weighed 225 pounds. In the 37th week of pregnancy, she had an ultrasound that indicated:

- Estimated fetal weight of 4350g fetal size estimates had gone from the 47th percentile to the 99th in the prior two weeks
- Head circumference/abdomen circumference ratio of .790

Her first pregnancy had been complicated by gestational diabetes. She had given birth to a 4700g infant who was delivered via C-section due to suspected macrosomia. During this pregnancy, she gained 80 pounds, and was borderline diabetic.

OB 1, who had managed the patient's prenatal care, was at the hospital when the patient arrived in active labor. Although she suspected the infant would be large and that there were other risk factors for shoulder dystocia, she did not document it in the hospital patient history form. The OB's office had sent the patient's records when she was 36 weeks pregnant, pursuant to standard practice as part of the pre-registration process. The records did not indicate shoulder dystocia risk and did not include the ultrasound report. Before she was able to examine the patient, OB 1 left the hospital for a family emergency. There was no hand-off discussion. **FUMBLE** 

After OB 1 left the hospital, the on-call OB assumed care of the patient. OB 2 had not been involved in the patient's prenatal care. He only reviewed the records that had been forwarded to the hospital. The patient's labor progressed normally until shoulder dystocia was encountered. The infant, who was ultimately delivered by emergency C-section, sustained severe brain injuries. A lawsuit followed. The plaintiffs alleged that OB 1 abandoned the patient during labor and that she did not properly inform OB 2 about the patient's risk factors for shoulder dystocia.

### DISCUSSION

OB 1 testified that there was no hand-off discussion with OB 2 because she had left so quickly. She had assumed the ultrasound and later-stage prenatal records would be available to OB 2, who would reach his own conclusions about shoulder dystocia risk and would take the necessary precautions.

Experts agreed that it is impossible to predict shoulder dystocia accurately in every case, even when there are several risk factors present, as there were in this case. However, the patient's significant weight gain, borderline diabetes, prior gestational diabetes, and prior delivery of a macrocosmic infant, combined with borderline fetal macrosomia and disproportionate abdomen-to-head ratio, presented a recognizable risk that the delivery could be complicated by shoulder dystocia. Experts believed OB 1 should have documented the risk factors in the patient history and communicated the risk factors to OB 2.

Becoming passive and relying only on information that is pushed forward can result in important elements in the diagnostic process being missed.

### **RISK MANAGEMENT STRATEGIES**

Consistently safe and effective hand-offs require a concerted effort by the healthcare team members, leadership, and administrators. Ideally, all important patient information is passed from one member of the healthcare team to another during hand-off. Sometimes the circumstances require the person receiving the patient to research further when the hand-off communication is lacking. Becoming passive and relying only on information that is pushed forward can result in important elements in the diagnostic process being missed.

### **Clinicians and Staff**

Consider the following strategies:<sup>1,8,9</sup>

- Be familiar with hand-off protocols that apply to your patients, keeping in mind that other units and facilities may have different protocols.
- Actively engage in the hand-off process by encouraging questions and discussion.
- Before handing off a patient, critically assess the record to detect inaccuracies and identify key issues that need to be clarified for the next period of care.
  - Check the nursing record, or talk to the patient's nurse, to ensure you report an accurate patient status.
- Communicate a succinct overview of the patient's course while he or she was in your care. This may require an additional personal assessment of the patient if it has not been done recently.
  - ► To organize reporting, use a hand-off tool (e.g. mnemonic, checklist).
  - Have laboratory and imaging studies and the patient's progress notes available for review with the person receiving the patient.
    - > Highlight pending studies and consultations.
- Anticipate results and present contingency plans if the results are not as expected.
  - Draw attention to and have plans for patients with potential management issues that could arise shortly after handoff (e.g., if an MRI has been ordered to rule out serious spinal pathology, identify a responsible physician for the receipt of the MRI report, confirm the physician is ready and available, and discuss the treatment plan).
- Establish who will take primary responsibility for the patient after hand-off (e.g., if the neurology service will determine patient disposition based on an outstanding MRI, inform the receiving neurologist, and document the neurologist's agreement to the hand-off).
- If a hand-off discussion with the receiving clinician/staff member is not possible, supplement the hand-off documentation in the medical record to the degree necessary to highlight important issues.
- If you are not provided with adequate hand-off information, either in a written report or in person, pursue complete information from the sender.
- Independently review the patient's records after the patient has been handed off to you.
- Document hand-off discussion in the record.

### **Operations**

Consider the following strategies:4,8,9

- Prioritize successful hand-offs and make them a performance expectation.
- Consider the system and workflows, not just the people who will be exchanging information.
- Research the various hand-off tools available (e.g., mnemonics, checklists, and patient transport and transfer tools), adapt them to fit your needs, and use them consistently.
- Ensure specialists and generalists have the same understanding of the breadth and duration of responsibility for the patient's care, when and how a specialist's responsibility for a particular aspect of care concludes, and how sending and receiving physicians can confirm successful hand-off.
- Strive for consistency in all hand-off protocols across units.
  - Bring contracting physician hand-off protocols into alignment with hospital protocols.
- Ensure attending/consultant co-management responsibilities are described in protocols.
- Ensure there is a permanent record of hand-off documentation.

- Provide standardized training to all members of the healthcare team who are involved in hand-offs.
  - Define and provide examples of what constitutes a successful hand-off.
  - Use simulation-based training, which can illustrate the efficacy of various hand-off tools, particularly compared to relying entirely on memory to communicate patient information and document transactions.
- Evaluate the hand-off process and adjust policies and protocols.
- Establish workspace that is conducive for hand-offs.
- Establish a process that identifies causes for hand-off communication failures and barriers to improvement.
- Identify, implement, and validate solutions to address the failures and barriers.

#### ADDITIONAL RESOURCE

Patient Safety Movement: <u>Actionable Patient Safety Solution APSS #6: Hand-Off Communications</u><sup>2</sup> Hand-off checklists for hand-off communication between individuals in various hospital units (e.g., ED to inpatient); at shift change, discharge, and transfer

### Hand-offs of Patients from the ED to an Inpatient Unit with ED Boarding of Admitted Patients

Boarding of admitted patients in the ED can further complicate the hand-off process. In the following case, after the patient was admitted, the ED physician remained peripherally involved. For example, he ordered Tylenol® hours after handing off the patient, and the ED nurses continued to report the patient's condition to the ED physician. However, he believed ultimate medical decision-making was the responsibility of the inpatient team. The admitting hospitalist, on the other hand, performed an admission examination, but then appeared to have little further involvement with the patient. Again, the vacuum left by confusion over patient responsibility following hand-off had devastating consequences. Consider which strategies could have been used to ensure this patient was diagnosed and treated in a timely manner.



### **CASE THREE**

**Issue:** Delayed diagnosis and treatment of sepsis resulted in the patient's death.

**6:30 p.m.** A 75-year-old patient presented to the ED. She reported chills, abdominal pain, fatigue, muscle aches, weakness, severe nausea, and vomiting. She suggested she might have the stomach flu, which had been going around in her family. She also reported that she had recently finished antibiotics for cellulitis on her inner thigh. Her vital signs were heart rate (HR) 55, respirations (RR) 18, temperature (T) 98.6°, and blood pressure (BP) 164/87. Her physical exam was unremarkable except for a 6 x 8 cm dried up and scabbed rash on her inner thigh that had no drainage or discharge. Lab results were normal. Mental status was normal. An x-ray showed the patient had a significant amount of stool in the large bowel. The ED physician diagnosed viral gastroenteritis and constipation. He ordered anti-nausea medications and IV fluids.

The vacuum left by confusion over patient responsibility following handoff had devastating consequences. **9:00 p.m.** The ED nurse documented T 100.4°, HR 80, RR 20, BP 109/85, and agitation. She asked the ED physician for sepsis orders. The ED physician did not believe the patient was septic. He wanted to wait and see if resolution of the patient's constipation would relieve her nausea, vomiting, and abdominal pain. He ordered more IV fluids, anti-nausea medications, and an enema. The fluid infusion brought the patient's BP up and HR down, but not quite into normal range. The enema produced a small amount of stool. Her vomiting and stomach pain continued. The ED physician's plan was to admit the patient.

**DAY 2 2:40 a.m.** The ED nurse informed the ED physician of the patient's abnormal vital signs (T 101.7, HR 156, RR 20, and BP 120/82), agitation, and no reduction in nausea or vomiting despite treatment.

**3:00 a.m.** The ED physician handed off the patient to Hospitalist 1 for admission. During his deposition, the hospitalist testified that he did not recall whether the ED physician mentioned sepsis during hand-off. The hospitalist rarely asked the ED physicians many questions during handoffs because of time constraints. Before examining the patient, he would have reviewed the ED record; however, he typically did not review the ED nursing notes. The physician notes did not mention the nurse's suspicion of sepsis. **FUMBLE** 



The hospitalist admitted the patient to the Med-Surg Unit. However, because the Med-Surg Unit was full, the patient would be boarded in the ED until a bed became available. The hospitalist ordered blood tests, which showed the patient had elevated lactic acid levels: 4.01 mmol/L (0.5 to 2.2 is normal). He believed the elevated lactic acid levels were caused by the patient's vomiting. He also suspected the patient had an infection, but he was unsure of the source. He did not register as a potential source of infection the patient's recent cellulitis, which was recorded in the nursing notes at triage but was never documented in the ED physician progress notes and never communicated to Hospitalist 1. He ordered Rocephin<sup>®</sup> for the potential infection and a gastroenterology consult.

**6:00 a.m.** The ED physician's replacement came on. ED Physician 1 would later testify that he would not have signed out the patient to the oncoming ED physician, as she was no longer an ED patient—he had handed off to Hospitalist 1.

**7:00 a.m.** Hospitalist 1 handed off the patient to Hospitalist 2 via email. His hand-off email noted the patient's abdominal pain, vomiting, and the likely connection of her symptoms to constipation and/or gastroenteritis. The email did not note the abnormal vital signs and lactic acid results, the recent treatment for cellulitis, or the ED nurse's observation of patient agitation. There was no mention of sepsis. **FUMBLE** 

**12:16 p.m.** The patient went into cardiac arrest. She was revived and was moved from the ED to a bed in the intensive care unit (ICU). A critical care physician diagnosed sepsis, with cellulitis as the likely source. Shortly thereafter, she became unresponsive and could not be revived.

The patient's family sued the hospital and every individual on the patient's healthcare team.

### DISCUSSION

Experts believed the patient had sepsis by 9:00 p.m. on Day 1. Her recent history of cellulitis, abnormal vital signs, and symptoms should have prompted an investigation into whether the cellulitis was a source of infection, and antibiotics should have been started. They believe she had developed severe sepsis by 2:40 a.m. on Day 2. The delay in treatment most likely contributed to the patient's death. The defense team and plaintiffs' experts identified the hand-off protocols (or lack of them for admitted patients boarding in the ED) as a major contributor to the healthcare team's failure to diagnose and treat the patient's sepsis in a timely manner.

The ED physician described the hand-off protocol for admitted patients boarding in the ED as follows: Once a hospitalist examined an admitted patient boarding in the ED, the patient became the hospitalist's responsibility. In this case, the hospitalist did the admission examination at 3:30 a.m., but it appeared from the progress notes that this was his only contact with the patient. The ED physicians typically would not independently check on boarded patients. However,

the ED physicians would respond to patient issues reported to them by the ED nurses. If it was a simple problem, the ED team would handle it. Otherwise, ED physicians would refer the nurse to the attending hospitalist. It appeared from the medical records, that the ED physicians and staff were more involved with the patient's care than were the hospitalists and inpatient staff.

Sepsis was on the bottom of the ED physician's and hospitalist's differentials, but experts believed it should have been at the top, and that they should have attempted to rule out infection by ordering blood cultures. Experts also believed the hospitalist should have paid more attention to the patient's recent treatment for cellulitis and should have suspected cellulitis as a possible source of infection that had affected the patient's BP, HR, and lactate level. The fact that the patient had worsening symptoms should have alerted the ED physician and hospitalist of a potentially more serious etiology for her symptoms than constipation, particularly since the patient never complained of constipation. Experts

suspected the hospitalist adopted the prior ED physician's diagnosis of constipation, and then found a way to adapt the significantly abnormal BP, HR, and lactate levels to a constipation diagnosis. An underlying benefit of hand-offs is that provider acceptance of a patient brings a "fresh pair of eyes" to the patient's circumstances, providing the ongoing possibility of discovering an unrecognized problem. If the receiving physician does not review the patient record following an inadequate hand-off, this advantage is lost, as it was in this case.

Experts were also critical of the first hospitalist's hand-off email to the second hospitalist, which primarily repeated the diagnosis from the ED. Furthermore, when the hospitalist handed off by email, there was limited opportunity for the oncoming hospitalist to ask questions or fill in the gaps caused by the first hospitalist's inadequate report. Had the physicians on the patient's healthcare team carefully reviewed the complete medical record at each hand-off and reconsidered the patient's clinical signs and symptoms, they might have made the sepsis diagnosis in a timely manner.

When the hospitalist handed off by email, there was limited opportunity for the oncoming hospitalist to ask questions or fill in the gaps caused by the first hospitalist's inadequate report.

### **RISK MANAGEMENT STRATEGIES**

When a patient is boarding in the ED, the sending and receiving physicians and nursing staffs should coordinate communication about the patient. In addition to the risk management strategies introduced following Case Two, consider the following strategies:

### **Clinicians and Staff**

- Understand the protocols for handing off and receiving admitted patients boarded in the ED.
- When hospital policy shifts responsibility from ED physicians to you, do not rely on the ED physicians to provide continuity of care.
- If primary responsibility for a patient boarded in the ED is unclear in hospital policy, discuss the issue with the other physician involved in the hand-off and determine patient care responsibilities.
  - Let patient safety drive decision-making.
    - If the decision about primary responsibility conflicts with hospital policy, document support for the arrangement.
  - Document patient responsibility determinations.
  - > Until primary responsibility for the patient can be established, keep each other informed of the patient's progress.
- If your patient is boarding in the ED, stay informed of nursing staff observations, particularly when the patient is being followed by the ED nurses, either by requesting updates or reviewing the nursing records.

### **Operations**

- Ensure hospital policies and procedures make it clear to staff and physicians who is responsible for boarded patients.
- If admitted patients must be boarded in the ED, provide supplemental nursing staff, and ensure nurses caring for the patient in the ED communicate with the physician who has primary decision-making responsibility.

### ADDITIONAL RESOURCES

American College of Emergency Physicians: <u>Boarding of Admitted and Intensive Care Patients in the Emergency Department</u><sup>9</sup> ACEP policy statement on boarding admitted patients in the ED with recommendations for hospital administrators

NORCAL Group: Think Sepsis: Risk Management Strategies for Early Sepsis Recognition<sup>10</sup>

CME activity using case studies based on NORCAL Group closed claims to introduce strategies for decreasing sepsis morbidity and mortality through early detection, focusing on emergency department, hospital inpatient, and primary care environments

### Hand-off between Nurses during Temporary Relief of Coverage

One challenge of implementing an effective hand-off process is ensuring that all members of the healthcare team know when a hand-off is occurring. To some members of the healthcare team, a "hand-off" only occurs when the patient is physically transferred from one setting to another (e.g., from the ED to the medical unit or from the medical unit to the ICU).<sup>7</sup> The following case indicates that lack of hand-off communication, even for the short period of a lunch break, can result in patient injury.



### **CASE FOUR**

**Issue:** Failure to advise the relief nurse or patient of an imminent admission resulted in the patient leaving the hospital and subsequently dying.

A patient presented to a hospital-based dialysis unit for his regularly scheduled dialysis. During dialysis, he became nauseated, short of breath, and his blood pressure dropped. His nurse reported the patient's response to the clinic supervisor, who later informed the nurse that the patient was going to be admitted to the hospital for an echocardiogram and consultation with an invasive cardiologist. After talking to her supervisor, the nurse took her lunch break; however, she failed to advise the covering nurse of the fact that the patient was going to be admitted. **FUMBLE** 

The patient, who was feeling better and had not been advised that he was going to be admitted, left the hospital. The relief nurse thought nothing of it, assuming the dialysis had gone as planned. No one followed up with the patient to get him back to the hospital. Later that evening, the patient experienced epigastric pain and was brought to the ED via ambulance. His condition deteriorated through the night, and he died. His family filed a malpractice claim against the hospital, claiming his healthcare team failed to recognize and treat his cardiac tamponade, which resulted in his death. There was no indication that the patient would have left against medical advice if someone had told him about the plan to admit him.

### DISCUSSION

There was no indication that the patient would have left against medical advice if someone had told him about the plan to admit him. The patient's exit from the dialysis unit was never questioned by the relief nurse because she was not told about the admission plan. Had the nurse who went on her lunch break advised the relief nurse of the plans to admit the patient, it is likely that the relief nurse would have intervened when the patient prepared to leave, and the patient would have been admitted as planned and treated for the condition that ultimately caused his death.

### **RISK MANAGEMENT STRATEGIES**

Transfer of information and accountability is ideally the same whether the care is being permanently transitioned to another person, or temporarily transferred for a break during a shift. Consider the following strategies:

### **Clinicians and Staff**

- Engage in hand-off communication when being relieved for breaks during the day.
  - Stand in the shoes of the individual to whom you are handing off the patient and cover the issues (using standardized communication tools) you would need to know to provide quality care.
- When relieving someone, prompt the exchange of information by asking the individual handing off patients if there is anything important you should know during the time you are responsible.
- When a patient is handed off to you, review the patient's medical record, particularly when hand-off communication is inadequate.

### **Operations**

- Review hand-off protocols and procedures to ensure they create an expectation that relief during a shift requires hand-off communications.
- Ensure that clinicians and staff can properly identify a hand-off and then apply communication protocols and procedures appropriate to the circumstances.



### **Outpatient Hand-offs**

Hand-offs are frequently viewed as a hospital risk issue, but many lawsuits are filed because a specialist assumed the patient's primary care physician would take responsibility for some aspect of follow-up, and the primary care physician assumed the specialist would handle it. The following case involved an unusual medical condition called "Lady Windermere Syndrome," which involves right middle lobe and/or lingular segment bronchiectasis due to mycobacterium avium complex (MAC) infection in otherwise healthy, but frail, older women. Deliberate cough suppression has been the suggested cause of this syndrome, which is why it was named after a character in the Oscar Wilde play, Lady Windermere's Fan.<sup>11</sup> As the patient was handed off among specialists and her family practice physician (FP), no one assumed responsibility of test results that contained the information they needed for a diagnosis.



### **CASE FIVE**

**Issue:** Failure to follow up on a positive bronchoscopy culture resulted in a delayed diagnosis, respiratory failure, and death.

On March 10, a thin, 75-year-old woman presented to her FP complaining of a persistent cough, dyspnea, night sweats and weight loss for approximately one year, that had worsened over the past month. The FP ordered a chest x-ray, which showed a right middle lobe infiltrate and a right pleural effusion. He also took a sputum sample for culturing. The FP suspected pneumonia, and the patient was started on antibiotics. When the patient's symptoms did not improve, the FP handed off the patient to an infectious disease (ID) specialist.

The ID specialist started the patient on several broad-spectrum antibiotics (none of which would treat MAC). He also ordered blood cultures, serum antibody tests and antigen tests to determine the pathogen causing the patient's pneumonia. None of these tests yielded definitive results. When the patient's dyspnea continued to worsen, the ID specialist handed off the patient to a pulmonologist for a bronchoscopy.

On April 3, the pulmonologist obtained specimens for multiple tests, including acid-fast bacilli stain and culture (AFB). (An AFB culture will show MAC; however, it can take up to six weeks to culture it.) The rest of the tests were essentially normal.

On April 7, the FP received the results of the sputum culture from the specimen he had taken on March 10, which indicated MAC. The FP believed he had handed off the patient to the ID specialist, and filed the report without alerting the ID specialist to the results. **FUMBLE** 

On May 1, the pulmonologist handed off the patient back to the ID specialist, advising him of the negative study results he had received. He did not mention the outstanding AFB results. **FUMBLE** 

On May 8, the pulmonologist received the AFB results from the bronchoscopy, which showed growth of MAC. The lab did not inform any other physicians of the results. The pulmonologist assumed the ID specialist received the results, and because he handed off the patient back to the ID specialist, it was the ID specialist's responsibility to follow up on the bronchoscopy culture results. **FUMBLE** 

In October, the patient started to develop low-grade fevers. The ID specialist referred the patient back to the pulmonologist on two separate occasions, but test results were normal. In December, the patient was admitted to the hospital for respiratory failure, from which she expired within the week. The family filed a wrongful death lawsuit against the FP, pulmonologist, and ID specialist, alleging failure to diagnose and treat MAC.

### DISCUSSION

Experts disagreed about whether the FP or the ID specialist should have taken primary responsibility for the patient's diagnosis and treatment. All of the defendant physicians shared responsibility for the poor outcome in this case.

### **ID Specialist**

Experts were generally critical of the ID specialist for failing to follow up on the AFB culture results from the bronchoscopy. By the first or second post-operative visit, when the completed lab slips were not in the file, the ID specialist should have done something to obtain those results. Failure to obtain the results was especially problematic when the patient was not recovering, and the physician did not have an etiology for the patient's problem. Experts also believed the ID specialist had a responsibility to obtain the culture results from the FP. Finally, they believed the ID specialist was responsible for coordinating the patient's care. He should have been the repository for all the patient's information.

### **Pulmonologist**

Experts were critical of the pulmonologist for failing to contact the ID specialist with the bronchoscopy results, particularly when he treated the patient an additional two times following his receipt of the results. Because the pulmonologist received the results from the lab, it was incumbent on him to ensure appropriate follow-up. Experts further believed he should have made it clear in writing if he wanted to completely sign off on the case and delegate responsibility to someone else for following up on the results of the bronchoscopy.

### **Family Physician**

Experts' opinions were mixed regarding the FP's treatment of the patient. His main area of exposure related to failing to bring the earliest sputum culture results to the attention of the ID specialist, particularly when the etiology of his patient's continuing problems could not be diagnosed.

### **RISK MANAGEMENT STRATEGIES**

Consider the following recommendations:<sup>12</sup>

### **Referring Clinicians**

- Hand off patients to specialists with the same care, precision, and professionalism that you would like if you were the receiving physician.
- Have an office protocol in place to ensure consultants' reports are reviewed.
  - Educate staff on reporting, routing, and filing; follow training with quality checks.
- When in receipt of reports containing significant healthcare issues that demand follow-up and treatment, determine whether you, the consultant, or a different physician will coordinate the follow-up and treatment, and ensure agreement.
- Document hand-off communications in the medical record.



### Consultants

- When a sending clinician handles hand-off responsibilities poorly, independently obtain the information necessary to provide the best care possible.
- Call the sending clinician directly to discuss the patient.
  - ▶ In addition to the report, discuss pertinent tests and results, your impressions, and follow-up recommendations.
- Tell patients about their diagnoses and about who will be coordinating future care.
- Before referring a patient back to the sending clinician, determine whether there are any outstanding test results or other reports that have not been discussed with the patient; obtain them before the patient's last appointment; and then discuss them with the patient.

# Hand-off from a Skilled Nursing Facility to a Hospital

*Care transitions between and among nursing facilities and hospitals are a known risk factor for patient safety problems.*<sup>13</sup> Tools, such as transfer forms and checklists, that improve communication between settings of care help improve patient safety and quality of care. In the following case, the only thing that arrived with a patient from her nursing facility was a Medication Administration Record (MAR), which made it difficult to determine whether the information in the MAR was accurate. Consider what steps could have been taken at transfer to better ensure the nursing home resident's safety.



**CASE SIX** 

**Issue:** Failure to confirm the accuracy of the MAR of a patient at hand-off from a nursing home resulted in an inadvertent prescription of baclofen, which contributed to her death.

An 83-year-old nursing home resident suffering from dementia, renal insufficiency, and recent increases in serum creatinine and blood urea nitrogen (BUN) levels was transferred to the hospital after suffering a seizure. The nursing home sent her with a MAR but no other part of her medical record. The on-call physician at the receiving hospital stabilized the patient and ordered that the medication regime in the MAR be continued until her PCP could follow up the next day. Unfortunately, the MAR transferred with the patient belonged to a different person. The patient was consequently administered baclofen, which is contraindicated in patients with renal insufficiency. The PCP saw the patient the next day and immediately discontinued the baclofen, but not before damage had been done. The patient died a few days later.

### DISCUSSION

Reviewers of this case thought that even though the patient presented with the wrong MAR, her new signs and symptoms should have caused the admitting physician to consider discontinuing the medications. The experts all agreed that giving this patient baclofen was below the standard of care and was the direct cause of her death.

### **RISK MANAGEMENT STRATEGIES**

Consider the following strategies:<sup>14</sup>

- Conduct a "time-out" at transfer to allow members of the patient's nursing home team to complete transfer tasks and documentation, including confirming patient identification.
- Ensure at transfer from the nursing home to hospital that the patient is accompanied by a transfer checklist or other document that includes information such as: code status, current medications, discontinued medications and why and when they were discontinued, last vitals, allergies, medical history, surgical history, mental status, diet, history of falling, activity level, date of last bowel movement, and skin breakdown status.
- When adequate documentation does not arrive with the patient, call the nursing home to request it, and speak to the sender for a spoken hand-off.
- Coordinate among nursing home, emergency medical services, and emergency room administrators to develop consistent hand-off language and protocols during patient transfers.

### ADDITIONAL RESOURCE

Hospital Quality Institute: Nursing Home to Hospital Transfer Form<sup>14</sup>

Nursing home to hospital and hospital to nursing home transfer forms, and a transfer checklist that lists all the documents that should be sent with a nursing home resident when being transferred to a hospital

### Don't Fumble the Hand-off

### CONCLUSION

Sending clinician hand-off practices can undermine a receiving clinician's ability to provide quality care and expose patients to unnecessary risk. Many of the healthcare team members involved in the foregoing case studies had no idea their hand-off practices were inadequate. Developing and implementing hand-off protocols and procedures can be a dynamic process that results in ongoing opportunities to decrease medical liability risk and improve patient safety, satisfaction, and continuity of care. The strategies discussed in this publication can provide the basis for creating safe and effective hand-off processes that are methodical and flexible enough to accommodate the unique circumstances that arise in each healthcare setting. Taking time to regularly evaluate hand-off practices and make necessary adjustments is an important part of ensuring patient safety and reducing liability risk.







### **ENDNOTES**

The NORCAL documents referenced in this article, along with many other Risk Management Resource documents and past editions of *Claims Rx*, are available in the Risk Solutions area of *MyACCOUNT*, or by policyholder request at 855.882.3412.

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