Are You Safe?

PATIENT SAFETY RISKS FOR OFFICE-BASED PRACTICE

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Overview

More and more, health care is delivered at an office-based setting. For patients, clinicians, and non-clinical staff, the safety culture and systems underlying office-based care varies significantly from inpatient care—and from one practice to another. Through its Office Practice Evaluation (OPE) program and analysis of medical malpractice case data, CRICO and its primary care community identified six key safety principles in primary care. In concert with clinical experts and experienced office-based providers, CRICO produces *Are You Safe?* to help practices understand and address potential risks to patient safety via malpractice data and case examples.

The *Are You Safe?* case studies are designed to help all members of the team reduce the risk of patient harm in the course of diagnosis and treatment. Office-based events that trigger malpractice cases present valuable opportunities to identify vulnerabilities in communication, clinical judgment, and patient care systems. *Are You Safe?* is designed to meet the following objectives:

- Highlight common office-based malpractice risks
- Explore areas of improvement in your practice

FOCUS

Are You Safe? case studies are being developed for specific risks organized under a broader outline of six key safety principles in primary care:

- Establish and sustain a culture of safety
- Build and support effective teams
- Partner with patients and families in their care
- Ensure closed-loop processes for referrals and tests
- Develop systems for reliable diagnosis and delivery of evidence-based care
- Standardize communication among all care providers

Each *Are You Safe?* case study focuses on a single area of risk, but addresses issues that arise across a range of patient presentations, diagnoses, and clinical scenarios.

USING THE *ARE YOU SAFE?* CASE STUDIES

Download a PowerPoint

In addition to the two-page worksheet, CRICO has produced PowerPoint presentations for use by providers and practice staff interested in sharing one (or more) of the *Are You Safe?* case studies with colleagues. The PowerPoint presentations include additional data and complementary information. *Are You Safe?* presentations can be downloaded from the CRICO website.

Additional Resources

For each *Are You Safe?* case study, additional related materials developed by CRICO and other leaders in patient safety are made available on our website: www.rmf.harvard.edu/areyousafe. These include:

- CME bundles
- Podcasts
- Clinical decision support tools
- Patient safety alerts
- Additional case studies

Earn Category 2 Risk Management Credits

Each *Are You Safe?* case study is suitable for 0.25 Category 2 risk management credit for MA physicians. Practices may be able to earn additional CME credits by developing education sessions that employ multiple cases along with pre- and post-course testing.

Participation and Feedback

CRICO hopes the *Are You Safe?* case studies will help raise awareness about the patient safety issues that most commonly put patients and providers at risk. We know that you are our best source for what does and does not work in everyday practice, and we encourage you to share your ideas, concerns, and innovations with us and your peers across the CRICO-insured community.

Email comments, resources, or questions to areyousafe@rmf.harvard.edu.

Overview, continued

CASE STUDY COMPONENTS

Closed Malpractice Cases

The *Are You Safe?* case examples are drawn from actual events. Every case in the CRICO database is coded to catalogue what happened, and why. The provider-based and systems-based factors that led to the allegation of malpractice are the underpinning of CRICO's patient safety initiatives, and drive the case selection process.

Patient Safety Vulnerabilities

For each malpractice case presented, the *Are You Safe?* case studies identifies two or three key vulnerabilities exposed by the event. For each, Safer Care recommendations are included. These vulnerabilities and recommendations are designed to guide the risk assessment process for individuals or teams reviewing each module.

Data

Our goal is to present data and case examples that help caregivers anchor the underlying issues that pose risk to patients and providers. The data are drawn from malpractice cases filed against CRICO-insured providers as well as from our national comparative benchmarking system (CBS) repository of more than 350,000 claims and suits.

Quick Assessment: Could it Happen Here?

Each *Are You Safe?* case study features a quick assessment: 4–5 questions related to the closed malpractice case and the underlying patient safety issues. While each features topic-specific questions, all begin with "Has this type of event happened at our practice?" Providers and practice staff can complete the quick assessment either individually or, ideally, as a team.

Improvement Opportunities

Each *Are You Safe?* case study offers members of a practice or care team the opportunity to assess how their systems and protocols align with recommended practices. For those instances where there is a worrisome gap between the current state and a recommended practice, this exercise provides a chance to discuss how to close that gap.

Improvement Opportunities Matrix

Each *Are You Safe?* case study includes a list of recommended practices related to the patient safety vulnerabilities identified in malpractice data and case examples. Practices are encouraged to compare their current practice to the recommended practice and, if necessary, explore possible improvements.

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
Most often, the "recommended practice" is a general concept rather than a specific tool or methodology. This enables providers and practices to focus on the intended result rather than the approach. While the CRICO Are You Safe? modules offer suggestions for assessing and addressing patient safety, they should not be construed as a standard of care.	For the gap analysis to be productive, the current state ("how we do things now") should be compared to the identified recommended practices. To be most dynamic, this should be explored from a variety of perspectives—either by soliciting input from a cross-section of clinical and non-clinical staff, or via group discussion.	While some improvements may lend themselves to a quick fix, practices are likely to identify issues that require more time and thought. Addressing one issue at a time might be more productive than taking on too many improvements at once.

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Should I use a decision support tool?

RISK: FAILURE TO DIAGNOSE

Inadequate management of a patient-detected breast lump

Closed Malpractice Case

During an appointment for a self-detected breast lump, a 34-year-old's physical exam was noted as normal. The gynecologist ordered a mammogram, but did not indicate the patient's breast complaint on the order. Four months later, a *screening* mammogram was done and reported as "normal," with a note of "very dense stromal pattern," which reduces sensitivity for cancer detection. The radiologist did not recommend an ultrasound; the gynecologist received the report with no recommendation for further testing.

Nine months later, the patient returned to her gynecologist complaining of the same breast lump. The physician palpated the lump on exam and ordered a *diagnostic* mammogram and a surgical consult. Subsequent work up revealed breast cancer. The patient underwent a radical mastectomy and axillary node dissection, and was found to have metastases to the spine. The patient's positive family history of breast cancer was not recorded until after her diagnosis.

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

Inadequate patient assessment is a contributing factor in 35% of CRICO (31% of CBS) ambulatory cases alleging a missed or delayed diagnosis.

	PERCENT OF CASES**	
STEP	CRICO (N=175)	CBS† (N=2,919)
1. Patient notes problem and seeks care	1%	1%
2. History and physical	10%	8%
3. Patient assessment/evaluation of symptoms	35%	31%
4. Diagnostic processing	43%	35%
5. Order of diagnostic/lab test	40%	31%
6. Performance of tests	5%	3%
7. Interpretation of tests	37%	23%
8. Receipt/transmittal of test results to provider	4%	5%
9. Physician follow up with patient	21%	18%
10. Referral management	13%	21%
11. Provider-to-provider communication	12%	12%
12. Patient compliance with follow-up plan	14%	17%

* Cases with claim made date 1/1/11–8/31/16

** A case will often have multiple factors identified

† CBS is CRICO's Comparative Benchmarking System

Patient Safety Vulnerabilities

1. Failure or delay in ordering (appropriate) diagnostic tests, consults, or referrals can lead to missed or delayed diagnosis.

   SAFER CARE: Prioritize efforts to decrease diagnosis-related harm through use of decision support tools such as the *CRICO Breast Care Management Algorithm*.

2. Failure to regularly update pertinent family history can lead to missed identification of patients for increased risk related to that history.

   SAFER CARE: Consider using a checklist or templates for details that are often overlooked (i.e., family history) but can be relevant for improving diagnostic reasoning.

Should I use a decision support tool? (continued)

Quick Assessment

1. Has this type of event happen at our practice?
2. Does our clinical team use disease-specific recommended guidelines? Which ones? (e.g., *CRICO Breast Care Management Algorithm)*
3. Are the guidelines readily accessible?
4. How do we incorporate recommended guidelines into our provider education and practice?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. Identify clinical guidelines for all practice providers		
2. Educate staff regarding implementation of practice guidelines		
3. Periodic audits to measure compliance with guidelines		
4. A systems-based process to identify that patients undergo recommended tests per guidelines		

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AYS 001

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Am I sure my patient got the test I ordered?

RISK: MISFILED RESULTS

Multiple providers fail to reconcile an outstanding imaging study due to inadequate test result management system

Closed Malpractice Case

A 62-year-old-male with a 40-year 1-2ppd smoking history was seen in his primary care office for complaints of chest pain after hearing a rib crack. A chest X-ray was ordered; the radiologist's report noted a 3 x 1.5cm mass (left lung) and recommended a CT for further evaluation. The PCP's office system included placing the medical record in a "pile" for outstanding test results. The patient's medical record was filed prior to the office receiving/reviewing the X-ray report (the CT scan was never ordered).

One year later, the patient returned with complaint of cough, chest pain, and congestion for the past month. A repeat chest X-ray identified enlargement of the mass seen in the previous image. Upon further evaluation, the patient was diagnosed with stage IV adenocarcinoma with metastasis to the brain. He died within one year.

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

A mismanaged test result is a contributing factor in 4% of CRICO (5% of CBS) ambulatory cases alleging a missed or delayed diagnosis.

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STEP	CRICO (N=175)	CBS† (N=2,919)
1. Patient notes problem and seeks care	1%	1%
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Patient Safety Vulnerabilities

1. If imaging/diagnostic test results fail to reach you or your patients, or the information is not integrated into the care plan, patients may be at risk.

   SAFER CARE: Assure that concerning test results are brought to the attention of the primary care team. Validation that the result has been received is a critical step to ensure that results have been reviewed by the correct parties. Designated staff may help manage the process.

2. An unreliable system to ensure receipt of all incoming test results can lead to delay in timely assessment and diagnosis.

   SAFER CARE: Providers are responsible for overseeing office-based processes. Designated staff may help manage the process in order to ensure that all relevant tests are reviewed, however, no one can act on unseen results. Establish criteria for successful closure of normal and abnormal results, and audit compliance.

Am I sure my patient got the test I ordered? (continued)

Quick Assessment

1. Has this type of event happened at our practice?
2. Where did communication breakdown in this case? How could the information transfer have been improved?
3. What is our practice's system to ensure patients complete recommended testing?
4. How is the ordering provider's review/acknowledgment of outstanding imaging studies and other tests reconciled?
5. How do we communicate results (normal and abnormal) to the patient/family?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. An alert system for test results requiring review		
2. A redundant-based system to identify that patient had recommended test		
3. A system to monitor receipt of all test results		
4. Confirm provider review of critical test results and critical specialist reports before filing		
5. A process to notify the patient of all results, normal and abnormal		

AYS 002

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Is my specimen handling process reliable?

RISK: MISMANAGED SPECIMEN

Patient suffers unnecessarily due to improper management of lab specimen obtained during a physician office visit

Closed Malpractice Case

A 27-year-old female was seen in the office for complaints of frequency and burning on urination. A urine culture and sensitivity (C&S) was ordered. The patient was prescribed Bactrim and instructed to follow up with any ongoing issues. The urine specimen was never sent to the lab. Two weeks later, the patient called the office with complaints of excruciating back pain, and was referred to the emergency department. In the ED, urinalysis confirmed 3+ bacteria. Urine C&S was sent, the patient's Bactrim prescription was renewed, and she was discharged.

Two days later, the patient was admitted to the hospital through the ED with fever, nausea, and vomiting. The urine C&S obtained in the ED confirmed E-coli (not sensitive to Bactrim), and a new antibiotic was ordered. After a four-day inpatient admission, the patient was discharged home with a peripherally inserted central catheter line for prolonged antibiotic treatment. A disclosure and apology to the patient revealed that her urine C&S had never been sent from the initial office visit.

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

Test performance is a contributing factor in 5% of CRICO (3% of CBS) ambulatory cases alleging a missed or delayed diagnosis.

	PERCENT OF CASES**	
STEP	CRICO (N=175)	CBS† (N=2,919)
1. Patient notes problem and seeks care	1%	1%
2. History and physical	10%	8%
3. Patient assessment/evaluation of symptoms	35%	31%
4. Diagnostic processing	43%	35%
5. Order of diagnostic/lab test	40%	31%
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Patient Safety Vulnerabilities

1. A lack of reliable systems for specimen handling can lead to missed opportunities for earlier treatment.

   SAFER CARE: Maintain a chain of custody to track specimens from collection to final disposition. Implement a quality monitoring system (e.g., specimen log). Investigate discrepancies to close potential gaps in test result processing and communication. Incorporate patient huddles and include specimens in a patient care checklist.

2. Imaging, diagnostic, or lab results that fail to reach you or your patients—or if the information is not integrated into the care plan—exposes patients to unnecessary risk.

   SAFER CARE: Implement systems that assist in reconciliation of all results, including confirmation of provider receipt, review, and transmission of results and recommendations to the patient. When possible use electronic health record (EHR) reminders in this effort.

 The CRICO *Are You Safe?* case studies offer suggestions for assessing and addressing patient safety and should not be construed as a standard of care.

Is my specimen handling process reliable? (continued)

Quick Assessment

1. Has this type of event happened at our practice?
2. How does our practice reconcile that requested labs are completed and reviewed by a clinician?
3. Does our practice have a process to track that collected specimens are sent to the lab?
4. Do we have a standardized process for specimen handling that *all* team members follow? How do we ensure the process is being followed?
5. What other processes, similar to specimen handling, pose major risks to our patients?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. A standard process for appropriate specimen collection and management		
2. A responsible person is identified as accountable for specimen processing		
3. Specimen handling is included during staff orientation and annual competencies review		

AYS 003

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Is my patient's history up to date?

RISK: MISSING/DISMISSING INFORMATION

Failure to appreciate history, signs, and symptoms of a patient's critical illness

Closed Malpractice Case

A 57-year-old male with a history of two MIs, sleep apnea, and hypertension was seen for complaints of jaw pain (8/10 severity) and chest "tightness." Vital signs at visit reported as normal; exam revealed good range of motion in jaw. Provider felt jaw pain may be related to CPAP mask patient used for sleep apnea and diagnosed temporomandibular joint (TMJ) disorder. This patient had two previous EKGs showing myocardial damage, however, the provider did not retrieve them at the time of the visit and no cardiac workup was performed. Five days later, the patient presented to the ED with nausea and vomiting. Upon evaluation, he was diagnosed with an MI, then progressed into cardiogenic shock. Further testing revealed a lateral wall myocardial rupture, requiring surgery. The patient's condition worsened, he suffered kidney and liver failure, and subsequently expired from advanced system failure.

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

Diagnostic processing, including narrow diagnostic focus, is the most common contributing factor in ambulatory cases alleging a missed or delayed diagnosis.

	PERCENT OF CASES**	
STEP	CRICO (N=175)	CBS† (N=2,919)
1. Patient notes problem and seeks care	1%	1%
2. History and physical	10%	8%
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Patient Safety Vulnerabilities

1. Fixation on a patient complaint without full assessment of the patient's symptoms and history, or unresponsiveness to the repetition of a complaint, may lead to a narrow diagnostic focus and missed diagnosis.

   SAFER CARE: Increase clinician awareness regarding the tendency toward cognitive fixation. Techniques to avoid this include expanding the differential diagnosis, seeking additional information from the patient and the medical record, and engaging a peer consult for patients with continued, unresolved symptoms.

2. Lack of a complete patient history may result in a missed diagnosis.

   SAFER CARE: Establish a process to retrieve and update pertinent patient medical records. Use trigger tools to ensure critical information is not missed.

Is my patient's history up to date? (continued)

Quick Assessment

1. Has this type of event happened at our practice?
2. What type of triggers or templates does our practice use to obtain and update patient history that may be missed (e.g., family history, previous testing or procedures)? Whose responsibility is it to update this information?
3. Do we cut and paste information in medical records (without reviewing it)?
4. Do we have a process to retrieve and update pertinent patient medical records?
5. Does our culture support/encourage providers to ask for peer help when the patient situation is confounding?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. To avoid narrow diagnostic focus, broaden the list of diagnostic possibilities via H&P		
2. Seek a consult for patients who return repeatedly for the same symptoms		
3. Use checklists for triggering questions related to patient history that may be missed (e.g., family history, previous testing)		
4. Embed decision support tools in electronic health record to assist in maintenance of patient's medical and family history		

AYS 004

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Who is responsible for follow up?

RISK: UNRECONCILED SPECIALIST OPINION/RECOMMENDATION

Lack of follow up with patient due to inadequate office practice system to reconcile record from specialist visits

Closed Malpractice Case

A 74-year-old male was advised, during a hospital stay, to see a pulmonologist for a specific opacity in his right upper lobe suspicious for carcinoma seen on a CT scan. The patient was seen shortly thereafter by his PCP, who made a referral to a pulmonologist. The PCP saw the patient for regular visits for the next four years, but was not aware of the pulmonologist's recommendation for additional follow up regarding the lung concern. At age 78, the patient was diagnosed with stage IV lung cancer and died three months later.

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

A mismanaged referral is a contributing factor in 13% of CRICO (21% of CBS) ambulatory cases alleging a missed or delayed diagnosis.

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1. Patient notes problem and seeks care	1%	1%
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Patient Safety Vulnerabilities

1. If referrals fail to reach the office, patients, or specialists, or if the information is not integrated into the care plan, patients may be at risk.

   SAFER CARE: To avoid "person specific" referral management, develop reliable processes to ensure 1) patients are referred to specialists in a consistent manner, 2) outstanding visits are followed up, and 3) specialist reports are brought to the attention of the patient and the care team.

2. Communicate clearly with patients your clinical reasons for referrals and their urgency. Breakdowns in communication with the patient regarding test results, change in medical status, and when to return for unresolved concerns can lead to poor patient outcomes.

   SAFER CARE: When all parties are involved in referral transactions they reduce the opportunities for patients (or reports) to fall through the cracks. Inadequate systems for closed-loop communications of referrals can lead to gaps in patient care. Build a redundant system incorporating all members of the care team, including the patient.

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Who is responsible for follow up? (continued)

Quick Assessment

1. Has this type of event happened at our practice?
2. What did the providers in this case do well? Where did communication breakdown (or where did things go wrong)?
3. What is our system for referral management? What role does each team member (including the patient) play?
4. How do we communicate high-priority referrals to the clinical team and patient?
5. Do we document all patient communication in the medical record?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. Referrals are ordered and documented in the EHR		
2. The reason and urgency for the referral is communicated to the patient and specialist, and an appointment is made for the patient prior to leaving the office		
3. A procedure to identify which referrals are outstanding		
4. A system to track and log completed referrals		
5. Provider review of all incoming referrals is tracked		

AYS 005

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Did the specialist change the treatment plan?

RISK: MISCOMMUNICATION ABOUT ANTICOAGULATION

PCP was unaware the patient's cardiologist had discontinued her Coumadin

Closed Malpractice Case

A 62-year-old female with a history of atrial fibrillation had her Coumadin managed by both Cardiology and her primary care physician (PCP). In March, she was evaluated by her cardiologist with complaint of bleeding. An EKG showed normal sinus rhythm (NSR). Since the patient had been in NSR for several years, a decision was made to stop her Coumadin and start aspirin.

Seven months later, while being evaluated by her PCP, an EKG revealed atrial fibrillation. When asked if she was on Coumadin, the patient responded "yes." No discussion of her atrial fibrillation or management of her Coumadin during the office visit was noted in her record. Three months later, the patient was admitted to the hospital with complaints of lightheadedness and dizziness. She subsequently suffered a stroke and sustained permanent injuries.

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

Inadequate provider-to-provider communication is a contributing factor in 12% of CRICO (12% of CBS) ambulatory cases alleging a missed or delayed diagnosis.

	PERCENT OF CASES**	
STEP	CRICO (N=175)	CBS† (N=2,919)
1. Patient notes problem and seeks care	1%	1%
2. History and physical	10%	8%
3. Patient assessment/evaluation of symptoms	35%	31%
4. Diagnostic processing	43%	35%
5. Order of diagnostic/lab test	40%	31%
6. Performance of tests	5%	3%
7. Interpretation of tests	37%	23%
8. Receipt/transmittal of test results to provider	4%	5%
9. Physician follow up with patient	21%	18%
10. Referral management	13%	21%
11. Provider-to-provider communication	12%	12%
12. Patient compliance with follow-up plan	14%	17%

* Cases with claim made date 1/1/11–8/31/16

** A case will often have multiple factors identified

† CBS is CRICO's Comparative Benchmarking System

Patient Safety Vulnerabilities

1. Unclear communication between provider and patient can lead to incomplete or inaccurate information compromising decision making and treatment decisions.

   SAFER CARE: Ensuring patient understanding is critical to garner the most accurate and complete information. Some patients talk often and extensively while others may only respond with a nod of the head. Consider each patient's communication style in order to communicate in a manner that will solicit the most information and allow for assessment of patient understanding.

2. Inadequate review of patient medications and reliance on patient memory can lead to misunderstanding resulting in needed medications/treatment not being provided.

   SAFER CARE: Standardize medication reconciliation. Updating and reconciling the patient medication list at every visit and providing education regarding purpose, risks, and benefits of each medication can decrease the likelihood of misunderstanding current medications (and their use) and increase compliance with recommended treatment.

Did the specialist change the treatment plan? (continued)

Quick Assessment

1. Has this type of event happened at our practice?
2. Does our clinical team review and reconcile patient medications at each encounter?
3. What practices do we have to assess patient understanding of their medications and care plan?
4. Are anticoagulation guidelines and patient education materials readily available?
5. Does our practice have a clinical guidelines and standard process to identify and manage patients on anticoagulation?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. Obtain a medication history for each patient including prescription, over-the-counter, and alternative medications (and update at every visit)		
2. For each medication, educate patients re: purpose, how to take it, and symptoms to report, e.g., "teach back"		
3. Include the whole care team (pharmacy, nursing) in medication management and safety to ensure critical information is not lost		
4. When multiple providers are involved in a single patient's care ensure that each knows who is responsible/ accountable for medication management		
5. Follow evidence-based guidelines and pathways		
6. Document your discussions re: medications with the patient and recommended treatment plan.		

AYS 007

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Does my patient understand why I ordered this test?

RISK: FAILURE TO FOLLOW UP ON A NEW FINDING

Patient skipped a recommended echocardiogram, then died suddenly of heart failure

Closed Malpractice Case

A 17-year-old male with no prior medical history asked his primary care practitioner (PCP) to complete a high school physical exam form. The form, which was documented in the medical record, noted a complete and normal physical exam.

Eight months later, the patient asked his PCP to complete a college physical exam form. This form notes all systems are normal, except a question of a slight systolic murmur. An echocardiogram was scheduled. The PCP's office was notified that the patient did not keep the appointment; there was no outreach to the patient in follow up to the missed appointment or new clinical finding. Neither the patient encounter nor the missed echocardiogram appointment was documented in the patient's medical record.

Over the next two years, the patient was seen by his PCP, with no documented discussion or follow up regarding the murmur or the recommended echocardiogram. At age 20, while playing football, the patient died. Autopsy revealed hypertrophic cardiac myopathy.

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

Inadequate or incomplete assessment/evaluation of symptoms is a contributing factor in 35% of CRICO (31% of CBS) ambulatory cases alleging a missed or delayed diagnosis.

	PERCENT OF CASES**	
STEP	CRICO (N=175)	CBS† (N=2,919)
1. Patient notes problem and seeks care	1%	1%
2. History and physical	10%	8%
3. Patient assessment/evaluation of symptoms	35%	31%
4. Diagnostic processing	43%	35%
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* Cases with claim made date 1/1/11–8/31/16

** A case will often have multiple factors identified

† CBS is CRICO's Comparative Benchmarking System

Patient Safety Vulnerabilities

1. Reliance on memory, and failure to document all patient encounters in the medical record, creates missed opportunities for follow up on new findings or recommended tests.

   SAFER CARE: Contemporaneous documentation of the office visit provides the best opportunity to record all pertinent clinical findings, your clinical rationale, and any patient communication that may otherwise be forgotten. Include your differential diagnosis and clinical rationale for recommended treatment and follow up.

2. Silence about potential consequences of an incidental finding may mask the importance of follow up.

   SAFER CARE: Explaining your concerns (and any uncertainty) and the risks of potential new findings and rationale for needed follow up is important to ensure patient/family understanding and reinforce the importance of your recommendeds.

 The CRICO *Are You Safe?* case studies offer suggestions for assessing and addressing patient safety and should not be construed as a standard of care.

Does my patient understand why I ordered this test? (continued)

Quick Assessment

1. Has this type of event happened at our practice?
2. Does our practice communicate missed appointments to the ordering provider?
3. Does our practice have a tickler system to track that ordered tests/images are completed?
4. How confident are we that patients receive recommended tests?
5. What resources are available in our practice to help patients navigate the system, e.g., patient navigators?
6. How do we engage the patient around a potential life threatening condition?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. Document all patient encounters in the medical record		
2. Add new findings to patient problem lists		
3. Set up a tickler system to track ordered tests/images		
4. Develop processes on how missed appointments will be communicated to the ordering provider		
5. Establish a prioritization matrix for high-risk tests and imaging studies		
6. Engage patients in shared decision making, explain purpose of tests/images to patients/family and document your conversation in the medical record		

AYS 008

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Are we prepared to triage this patient call?

RISK: PATIENT IS IN NEED OF MORE IMMEDIATE CARE THAN IS CONVEYED OVER THE PHONE

What seemed like the flu was much more serious

Closed Malpractice Case

On a Saturday (8:00 p.m.), a father called his son's pediatrician's office and told the nurse practitioner (NP) that his 9-year-old had not felt well for three days: nausea, vomiting, decreased oral intake, weakness, and lethargy (sleeping 24 hours straight).

Suspecting the flu, the NP asked if the boy was alert (yes), had passed any urine (yes), or had a fever or rash (no). When the NP asked if he felt if his son would be "okay" that night or should be seen right away, the father replied, that he didn't think his son needed to be seen right away, but was concerned that he hadn't eaten. The NP advised pushing ginger ale and making sure he was urinating.

When checked on at 4:00 a.m., the boy was sleeping and his breathing was more rapid. At 8:30 a.m., however, the father found his son was not breathing, called 911, and started CPR… but the boy could not be revived. Autopsy revealed diabetic ketoacidosis (the child had undiagnosed diabetes mellitus). His blood sugar was 1,165 (nl 50–80) and his HgA1c was 15.3% (nl 4–5.9%).

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

Inadequate patient assessment is a contributing factor in 35% of CRICO (31% of CBS) ambulatory cases alleging a missed or delayed diagnosis.

	PERCENT OF CASES**	
STEP	CRICO (N=175)	CBS† (N=2,919)
1. Patient notes problem and seeks care	1%	1%
2. History and physical	10%	8%
3. Patient assessment/evaluation of symptoms	35%	31%
4. Diagnostic processing	43%	35%
5. Order of diagnostic/lab test	40%	31%
6. Performance of tests	5%	3%
7. Interpretation of tests	37%	23%
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** A case will often have multiple factors identified

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Patient Safety Vulnerabilities

1. Once the child's symptoms were ascribed to the flu, the history-taking was cut short and the NP jumped to a conclusion (i.e., fixation error) and prematurely moved on to the plan.

   SAFER CARE: An evaluation of symptoms over the telephone requires the same focused and relevant history-taking as in an office visit. Asking more open-ended questions may improve the quality of the information collected, resulting in a more reliable diagnosis.

2. The NP relied on the patient's father to decide whether the problem was emergent enough to require immediate attention.

   SAFER CARE: Patients (or parents) should not be doing their own triage. Calling a patient/family back after a few hours to check on progress of a symptom can be reassuring as a way to check the initial triage decision and an opportunity if necessary to revise the plan.

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Are we prepared to triage this patient call? (continued)

3. The NP did not ask any questions to hone in on the seriousness of the situation.

   SAFER CARE: Effective use of telephone triage protocols may lead to a more disciplined approach and improved safety. Always err on the side of caution. Instructions that the patient be evaluated right away must be clear, repeated twice, and documented.

Quick Assessment

1. Has this type of event happened at our practice?
2. What is our practice/policy for telephone triage for patients calling-in after hour?
3. Have we implemented best practices for telephone triage? Can we leverage decision-support tools?
4. Can we integrate triage call notes into the EHR?
5. How do we close the loop with the primary care physician related to the after-hours care?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. Make an extra effort to talk directly with the patient when possible.		
2. Avoid premature closure in your decision-making.		
3. Adopt telephone triage protocols, especially for ruling out serious problems.		
4. All after-hours calls must be documented in the medical record.		
5. Close the loop with the primary care provider.		

AYS 009

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Are we properly tracking tests and referrals?

RISK: DELAYED DIAGNOSIS

Three years after being tested for celiac disease, a delayed diagnosis is uncovered

Closed Malpractice Case

An 8-year-old with a history of forearm fractures and osteopenia was referred to an endocrinologist, who made an interim diagnosis of idiopathic juvenile osteoporosis (IJO). The girl was referred to a gastroenterologist to rule out celiac disease. An upper endoscopy, performed by a different physician, indicated all structures appeared normal. Five days later, the pathology report was positive for celiac disease.

Over the next three years, the child was treated by her gastroenterologist, endocrinologist, and orthopedic surgeon for IJO. When she developed abdominal pain and constipation, her PCP (different from three years prior) conducted a celiac test, which was positive. When asked by the endocrinologist if a patient could become celiac positive three years after a negative test, the gastroenterologist saw the previous (positive) results in the patient's chart. (Neither the endocrinologist nor the referring gastroenterologist had ever reviewed them.)

When notified, the girl's parents said they had been told the initial test results were negative, but couldn't recall by whom. A gluten-free diet gradually improved the girl's condition.

Diagnostic Process of Care in Ambulatory Diagnosis Cases*

Inadequate management of test results is a contributing factor in 4% of CRICO (5% of CBS) ambulatory cases alleging a missed or delayed diagnosis.

	PERCENT OF CASES**	
STEP	CRICO (N=175)	CBS† (N=2,919)
1. Patient notes problem and seeks care	1%	1%
2. History and physical	10%	8%
3. Patient assessment/evaluation of symptoms	35%	31%
4. Diagnostic processing	43%	35%
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Patient Safety Vulnerabilities

1. The pathologist routed the celiac test results to the gastroenterologist who performed the endoscopy, but not to any of the patient's other caregivers.

   SAFER CARE: Patients undergoing a test/procedure expect coordination among all of the providers involved. A system that allows abnormal results to be go unnoticed by subsequent providers needs to be assessed and fixed.

2. Several caregivers proceeded with a misguided treatment plan for three years after the celiac test results were reported.

   SAFER CARE: The decision to order a test must include a commitment to close the loop all the way through reviewing and sharing the results with subsequent providers and the patient.

Are we properly tracking tests and referrals? (continued)

Quick Assessment

1. Has this type of event happened at our practice?
2. What is our process for closing the loop on test results/consult reports?
3. Do we document an expected turnaround time for test results/consults?
4. What is our turnaround time goal for reporting results to a patient?

Improvement Opportunities

RECOMMENDED PRACTICE	CURRENT STATE	HOW TO IMPROVE (IF NECESSARY)
1. Obtain a baseline assessment by performing a random audit of normal and abnormal result notifications		
2. Ensure that all providers involved in a single patient's care know who is responsible/ accountable for reporting test results to the provider and the patient, and the expected timing		
3. Develop written procedures for managing the critical results of tests and diagnostic procedures		
4. Rely on a system, rather than memory, to close the loop on the receipt of results for all ordered tests		
5. Encourage patients to inquire about test results if they haven't been notified		

AYS 010

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