crico | Protecting Providers. Promoting Safety.

Are You Safe?

Patient safety risks for office-based practices

Reliable Diagnoses:
Should I use a decision support tool?

Opportunities for Improving Patient Safety

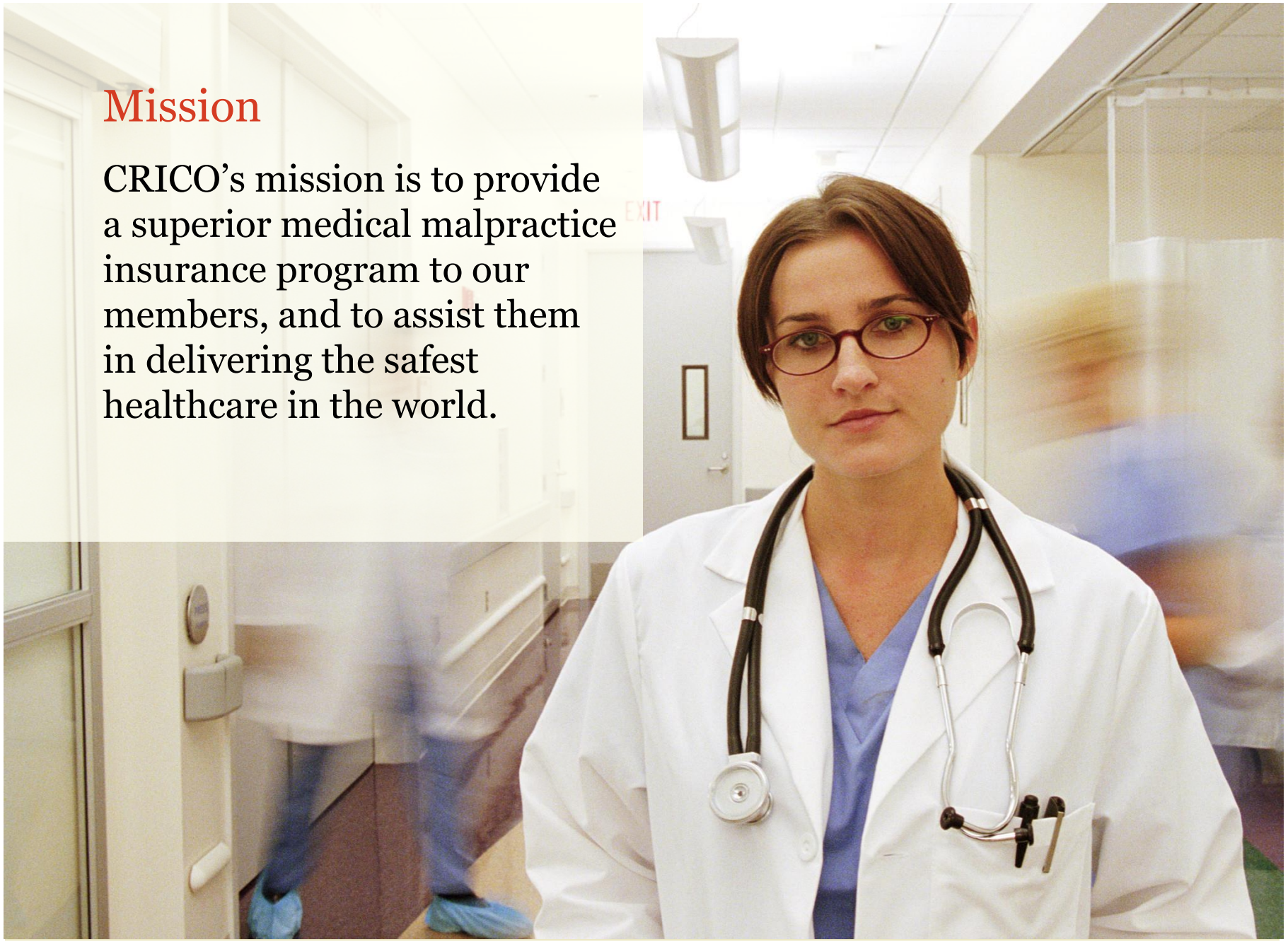
- **Identified through** CRICO's Office Practice Evaluation program and analysis of medical malpractice case data
- **Based on** real events that have triggered malpractice cases
- **Valuable lessons** in communication, clinical judgment, and patient care systems

Purpose

- Help all members of office-based teams reduce the risk of patient harm in the course of diagnosis and treatment.
- Raise awareness and begin discussions about the patient safety issues that most commonly put ambulatory care patients and providers at risk.

Mission

CRICO's mission is to provide a superior medical malpractice insurance program to our members, and to assist them in delivering the safest healthcare in the world.



Controlled Risk Insurance Company (CRICO)

- Captive insurer of the Harvard medical institutions
- Provides member organizations medical professional liability, general liability and other insurance coverage for:
  - Nearly 13,000 physicians *(including 3,500 residents and fellows)*
  - 25 hospitals
  - 100,000+ employees (nurses, technicians, etc.)
- Services include underwriting, claims management, and patient safety improvement
- CRICO has been analyzing medical malpractice data to drive risk mitigation for more than 30 years

CRICO Member Organizations

- Atrius Health
  - Dedham Medical
  - Granite
  - HVMA
- Boston Children's Hospital
- Cambridge Health Alliance
- CareGroup
  - Beth Israel Deaconess Medical Center
  - Beth Israel Deaconess Needham
  - Beth Israel Deaconess Milton
  - Mount Auburn Hospital
  - New England Baptist Hospital
- Dana-Farber Cancer Institute
- Harvard Pilgrim Health Care
- Presidents and Fellows of Harvard College
  - Harvard Medical School
  - Harvard School of Dental Medicine
  - Harvard T. H. Chan School of Public Health
  - Harvard University Health Services
- Joslin Diabetes Center
- Judge Baker Children's Center
- Massachusetts Eye and Ear Infirmary
- Massachusetts Institute of Technology
- Partners HealthCare System
  - Brigham and Women's Hospital
  - Brigham and Women's Faulkner Hospital
  - Massachusetts General Hospital
  - McLean Hospital
  - North Shore Medical Center
  - Newton-Wellesley Hospital
  - Spaulding Rehabilitation Hospital

Malpractice Data Overview

Focus: Ambulatory Diagnosis-related Allegations

crico | are you safe?

46% of CRICO malpractice cases occur in the ambulatory setting.

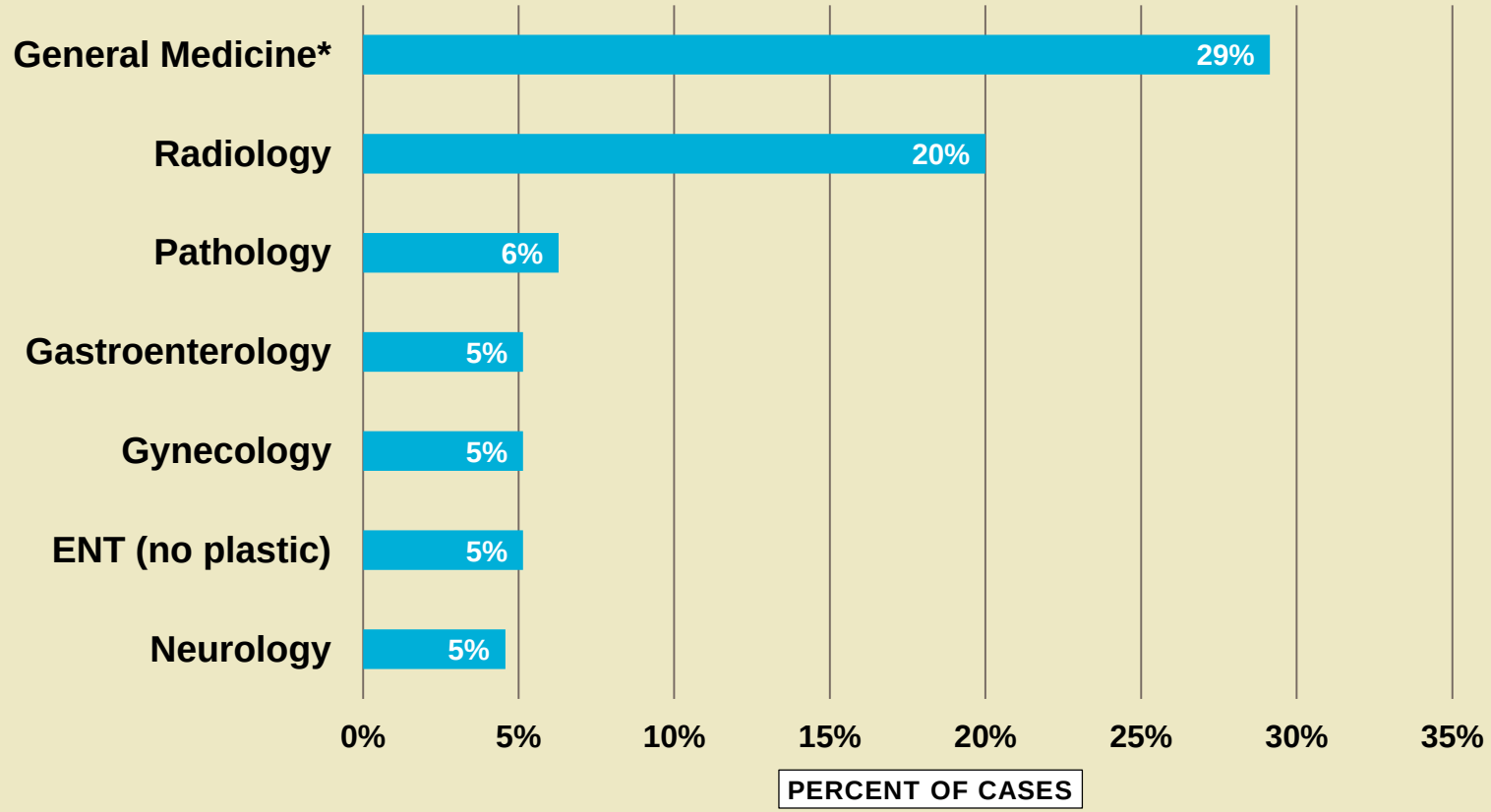
38% of ambulatory cases allege a wrong or delayed diagnosis.

*Losses are “total incurred losses,” which includes reserves on open and payments on closed cases.

**Ambulatory care cases involve an outpatient but exclude cases occurring in Emergency departments. CRICO N=175 MPL cases with claims made date1/1/11 – 8/31/16.

General Medicine and Radiology are most frequently involved.

The Clinical Service Responsible for the Patient's Care at the Time of the Event

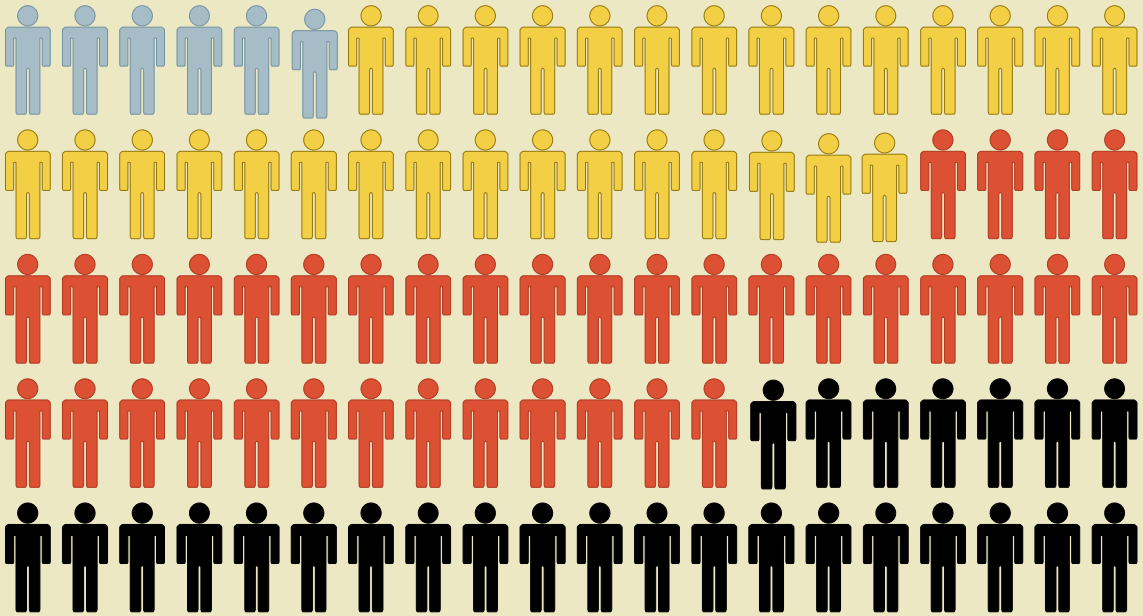


CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

*General Medicine includes Internal Medicine and Family Practice.

Two-thirds of cases involve permanent injury or death.

Injury Severity in Ambulatory Diagnosis Cases



6% low

30% medium

64% high

including death

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Severity Scale: High=Death, Permanent Grave, Permanent Major, or Permanent Significant
Medium=Permanent Minor, Temporary Major, or Temporary Minor
Low= Temporary Insignificant, Emotional Only, or Legal Issue Only

60% of 175 ambulatory diagnosis-related cases involve a missed/delayed cancer diagnosis

- The top ambulatory diagnosis-related allegations in CRICO ambulatory malpractice cases are:
  - Cancers (top three: breast, lung, colorectal)
  - Diseases of the heart
  - Fractures

Case Study: Reliable Diagnoses

Should I use a decision support tool?

The following example is from a closed malpractice case.

crico | are you safe?

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Malpractice case study focus: Patient Assessment

35%
of cases

had an error in patient assessment identified as a contributing factor, i.e., the patient's complaints or symptoms were not thoroughly addressed

CRICO N=175 MPL cases asserted 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Case Study

Patient

Gina, 34-year-old female

Day 1

Gina is seen in her gynecologist's office for a self-detected breast lump. Her physical exam is noted as normal. The gynecologist orders a mammogram, but does not indicate Gina's complaint (lump) on the order.

Case Study

Gina, 34-year-old female

Four months later

- Gina undergoes a screening mammogram, which is reported as “normal” with a “very dense stromal pattern” noted.
- The gynecologist receives the Radiology report, which does not recommend an ultrasound.

Case Study

Gina, 34-year-old female

Nine months later

Gina returns to her gynecologist, complaining of the same breast lump. The gynecologist palpates the lump and orders a diagnostic mammogram and surgical consult. The workup reveals breast cancer.

Case Study

Gina, 34-year-old female

Outcome

- Gina undergoes a radical mastectomy and axillary node dissection; she has metastases to her spine.
- *After* her diagnosis, Gina's medical record was updated to reflect that her family history included a relative with breast cancer.

Case Study

Gina, 34-year-old female w/fh of breast cancer

Vulnerability

Failure to order the appropriate test and consult led to a delayed diagnosis.

Safer Care Recommendation

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

Case Study

Gina, 34-year-old female w/fh of breast cancer

Vulnerability

Failure to update Gina's family history led to a missed opportunity to identify her as at increased risk for breast cancer.

Safer Care Recommendation

Consider using a checklist or template for details that are often overlooked (e.g., family history) but can be relevant for improving diagnostic reasoning.

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Reliable Diagnoses

Does our clinical team use disease-specific recommended guidelines?

Recommended Practice

Identify relevant clinical guidelines (e.g., *CRICO Breast Care Management Algorithm*) for all practice providers.

Practice Assessment

Reliable Diagnoses

How do we incorporate recommended guidelines into our provider education and practice?

Recommended Practices

- Educate staff regarding implementation of practice guidelines and periodically audit compliance.
- Establish a systems-based process to identify that patients undergo recommended tests per guidelines.

Practice Assessment

Reliable Diagnoses

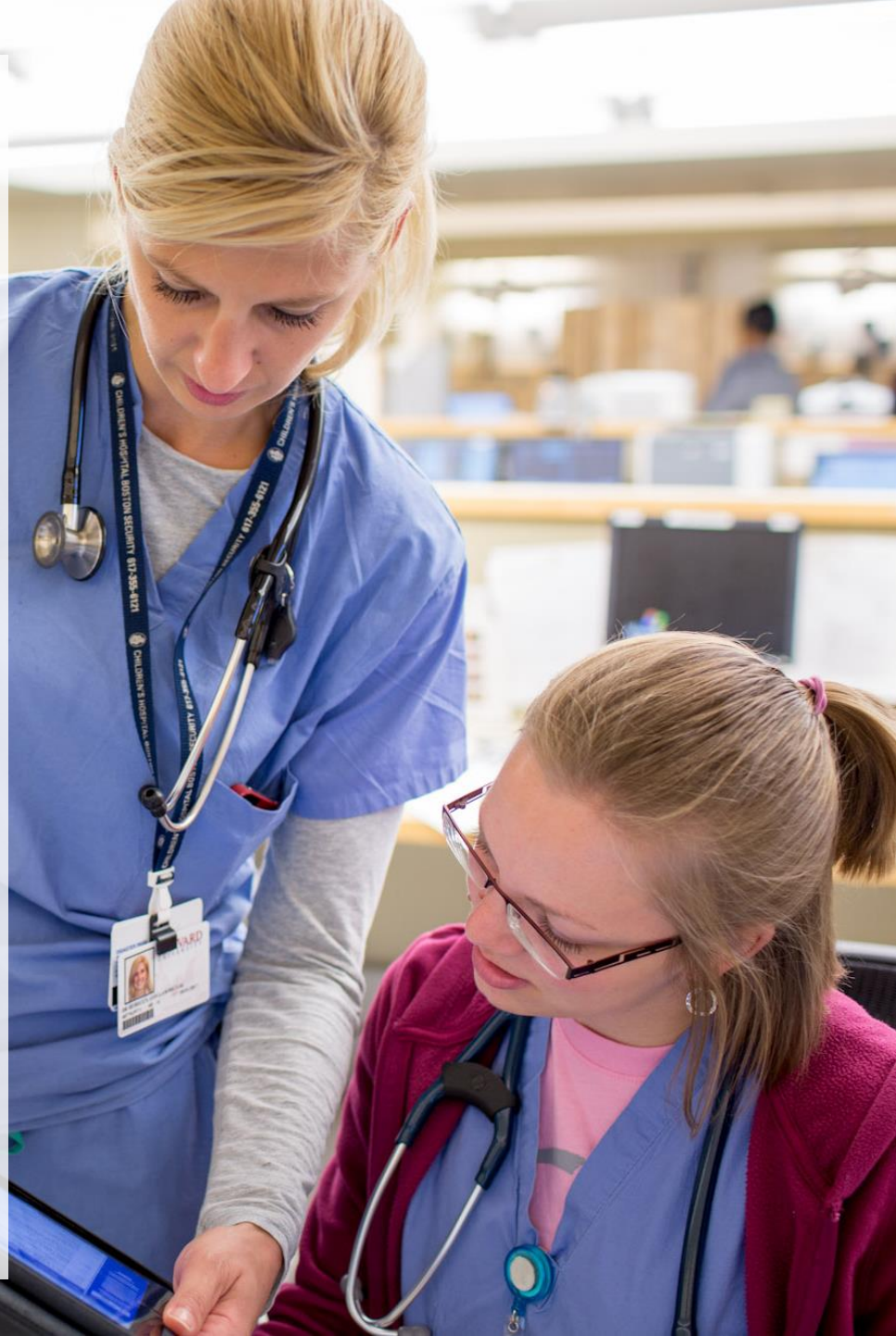
What else can we do to avoid a similar event?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



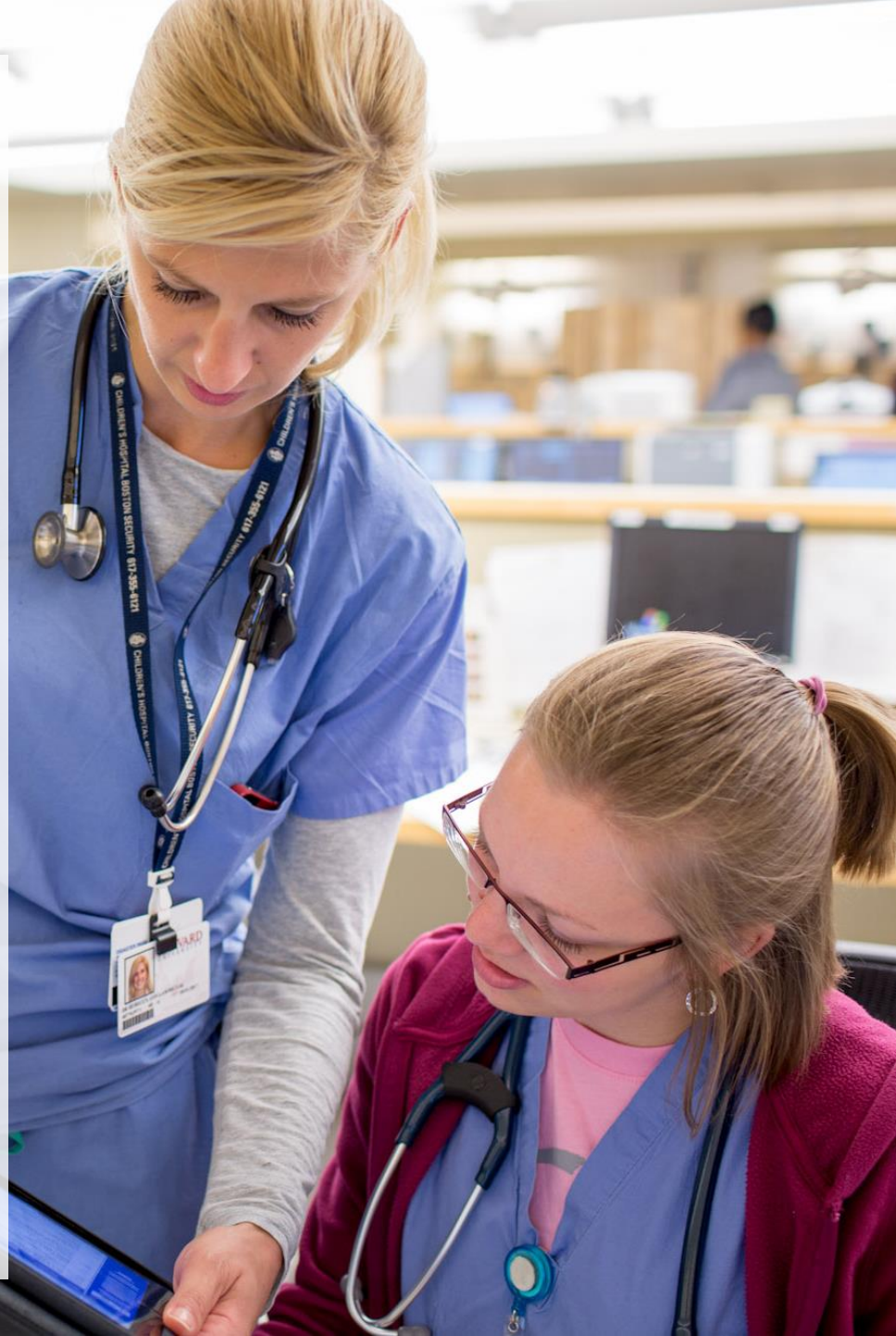
Additional Resources

Reliable Diagnoses:
Should I use decision support?

Are You Safe? extras

For more information

Email
areyousafe@rmf.harvard.edu



Case Study: Closing the Loop

Am I sure my patient got the test I ordered?

The following example is from a closed malpractice case.

crico | are you safe?

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Malpractice case study focus: Test Result Management

4%
of cases

had a test result management error identified as a contributing factor, i.e., receipt/review of test result by ordering physician is not completed or is significantly delayed

CRICO N=175 MPL cases asserted 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Case Study

Patient

Henry, 62-year-old male w/40-year history of smoking (1-2ppd)

Day 1

Henry is seen in his PCP's office for a complaint of chest pain after hearing his rib "crack." His physician orders a chest X-ray.

Case Study

Henry, 62-year-old smoker

Day 1 (continued)

- The radiologist's report notes a 3 x 1.5cm mass on Henry's left lung, and recommends CT for further evaluation.
- The PCP's office test-tracking system requires that Henry's medical record be placed in a "pile" for outstanding results.
- Henry's chart is filed without review of the X-ray results. No CT scan is ordered.

Case Study

Henry, 62-year-old smoker

One year later

Henry returns to his PCP with complaint of cough, chest pain, congestion (for the past month). An X-ray identifies enlargement of the mass seen in the previous image.

Case Study

Henry, 62-year-old smoker

Outcome

Henry is diagnosed with Stage IV adenocarcinoma with metastasis to his brain. A year later, he dies.

Case Study

Henry, 62-year-old smoker

Vulnerability

Communication with the radiologist to ensure follow up of a concerning finding did not occur.

Safer Care Recommendation

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.

Case Study

Henry, 62-year-old smoker

Vulnerability

The PCP's test-tracking system failed.

Safer Care Recommendation

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.

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Closing the Loop

Where did communication break down in this case? How can we improve information transfer?

Recommended Practice

An alert system for test results requiring review.

Practice Assessment

Closing the Loop

What is our system to ensure patients complete recommended testing?

Recommended Practice

A redundant system to identify that patient had recommended test.

Practice Assessment

Closing the Loop

How is the ordering provider's review/ acknowledgement of outstanding imaging studies and other tests reconciled?

Recommended Practices

- A system to monitor receipt of all test results.
- Confirm physician review of critical test results and critical specialist reports before filing.

Practice Assessment

Closing the Loop

How do we communicate results (normal and abnormal) to the patient/family?

Recommended Practice

A process to notify the patient of all results, normal and abnormal.

Practice Assessment

Closing the Loop

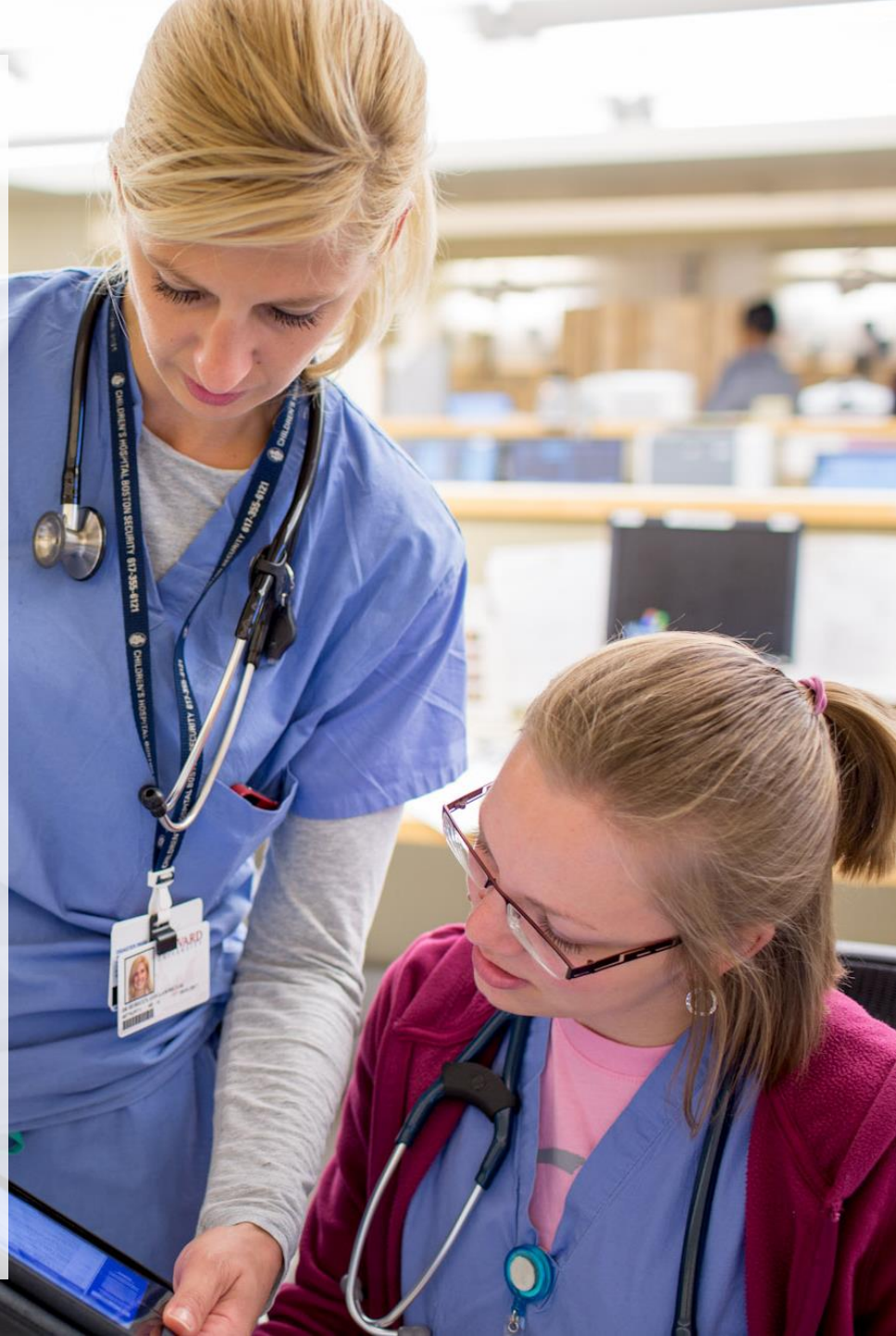
What else can we do to avoid a similar event?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



Additional Resources

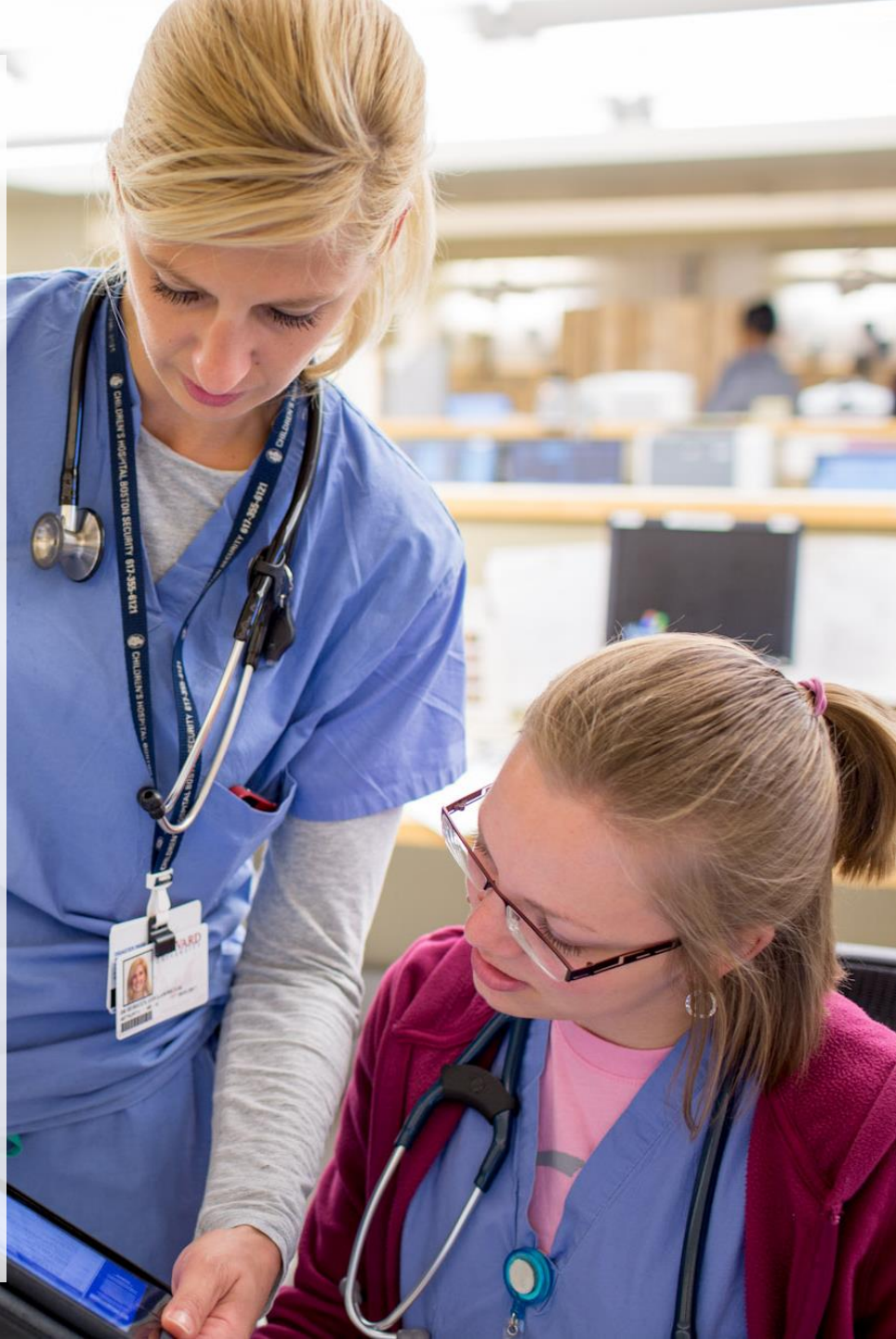
Closing the Loop:
Am I sure my patient got the test I ordered?

Are You Safe? extras

For more information

Email

areyousafe@rmf.harvard.edu



Case Study: Closing the Loop

Is my specimen handling process reliable?

The following example is from a closed malpractice case.

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

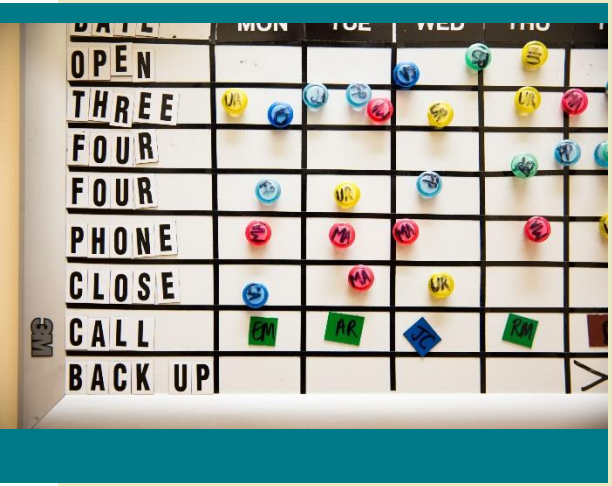
Malpractice case study focus: Internal Office Function

5%
of cases

had an error in the management of an ordered test identified as a contributing factor, i.e., ordered test/imaging is not performed, performed incorrectly, or specimen is mislabeled or mishandled

CRICO N=194 MPL cases asserted 1/1/09–12/31/13 involving ambulatory care and alleging diagnostic failure.

Case Study



Patient

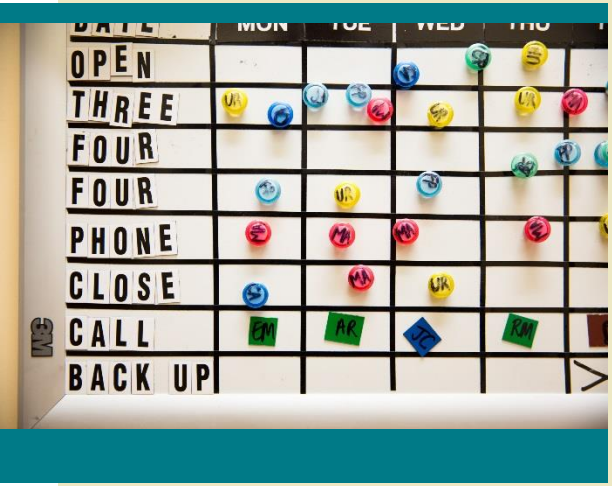
Lorraine, 27-year-old female

Day 1

- Lorraine visits her PCP with c/o frequent and burning urination. Her PCP orders a urine culture and sensitivity (C&S), and prescribes Bactrim.
- Inadvertently, the urine specimen is not sent to the lab.

Case Study

Lorraine, 27-year-old female

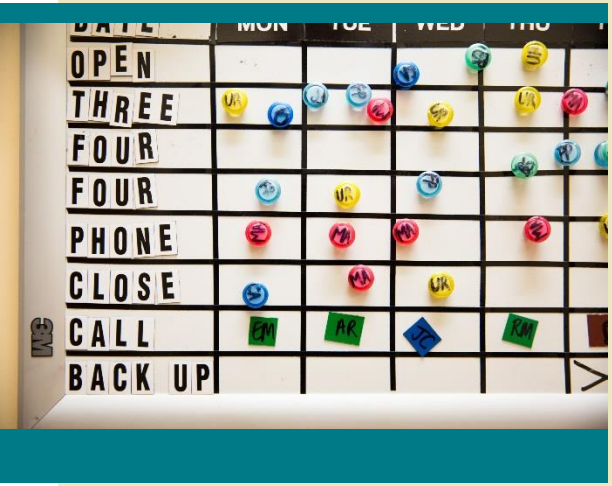


Day 14

- Lorraine calls her PCP with c/o excruciating back pain. She is referred to an ED.
- In the ED, urinalysis confirms 3+ bacteria and a urine C&S is sent to the lab.
- Lorraine is discharged with a renewed Bactrim prescription.

Case Study

Lorraine, 27-year-old female

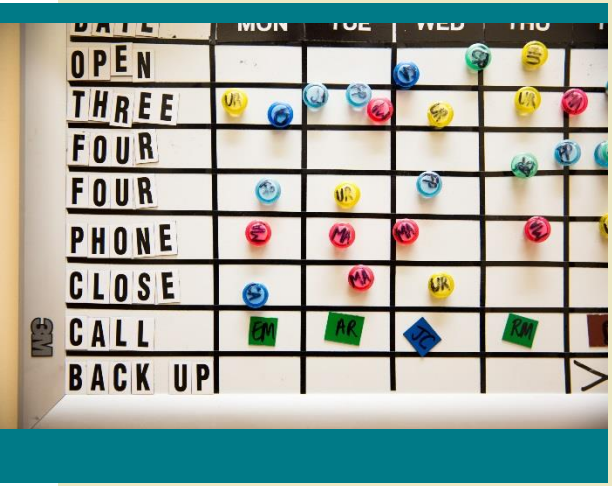


Day 16

- Lorraine returns to the ED with fever, nausea, and vomiting, and is admitted to the hospital.
- The urine C&S ordered during her previous ED visit confirms E. coli, which is not sensitive to Bactrim.
- A new antibiotic is ordered.

Case Study

Lorraine, 27-year-old female

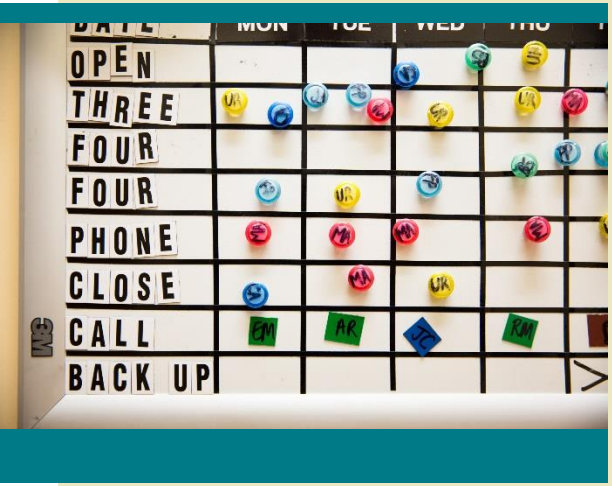


Outcome

- Four days later, Lorraine is discharged home with a peripherally inserted catheter line for prolonged antibiotic treatment.
- Lorraine's PCP discloses and apologizes for the fact that her initial urine C&S was never sent to the lab.

Case Study

Lorraine, 27-year-old female



Vulnerability

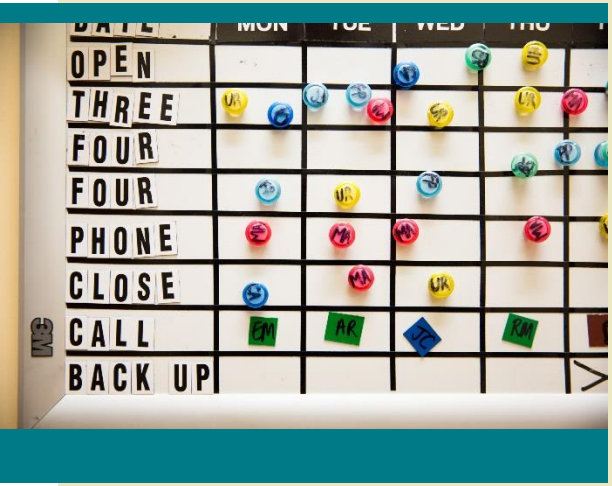
An unreliable system for specimen handling led to a delayed diagnosis and treatment.

Safer Care Recommendation

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.

Case Study

Lorraine, 27-year-old female



Vulnerability

A lab result that failed to reach the PCP (or Lorraine) also failed to raise an alarm—and exposed her to unnecessary risk.

Safer Care Recommendation

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

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Closing the Loop

Do we have a process to track that collected specimens are sent to the lab?

Recommended Practice

A standard process for appropriate specimen collection and management.

Practice Assessment

Closing the Loop

Do we have a standard process for specimen handling that all team members follow? How do we ensure the process is being followed?

Recommended Practice

A redundant system to identify that patient had recommended test.

Practice Assessment

Closing the Loop

How is the ordering provider's review/ acknowledgement of outstanding imaging studies and other tests reconciled?

Recommended Practices

- A responsible person(s) is identified as accountable for specimen processing.
- Specimen handling is included during staff orientation and annual competencies review.

Practice Assessment

Closing the Loop

What other processes, similar to specimen handling, pose major risks to our patients?

Recommended Practice

Analyze similar events (including near misses) for patient safety improvement opportunities.

Practice Assessment

Closing the Loop

What policy or training do we have for conducting a disclosure and apology?

Recommended Practice

Standard protocol and training for disclosure errors to patients/family members.

Practice Assessment

Closing the Loop

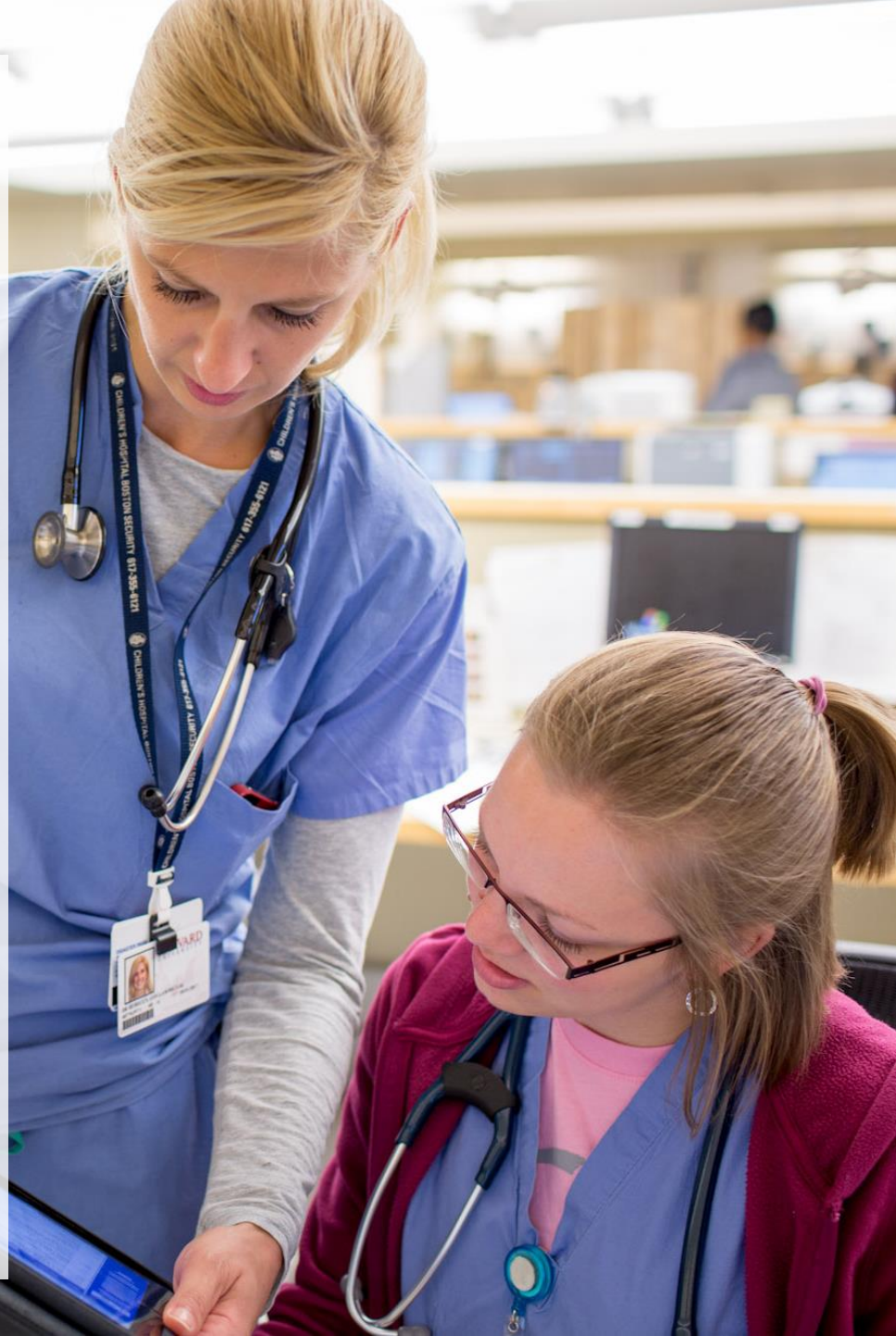
What else can we do to avoid a similar event?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



Additional Resources

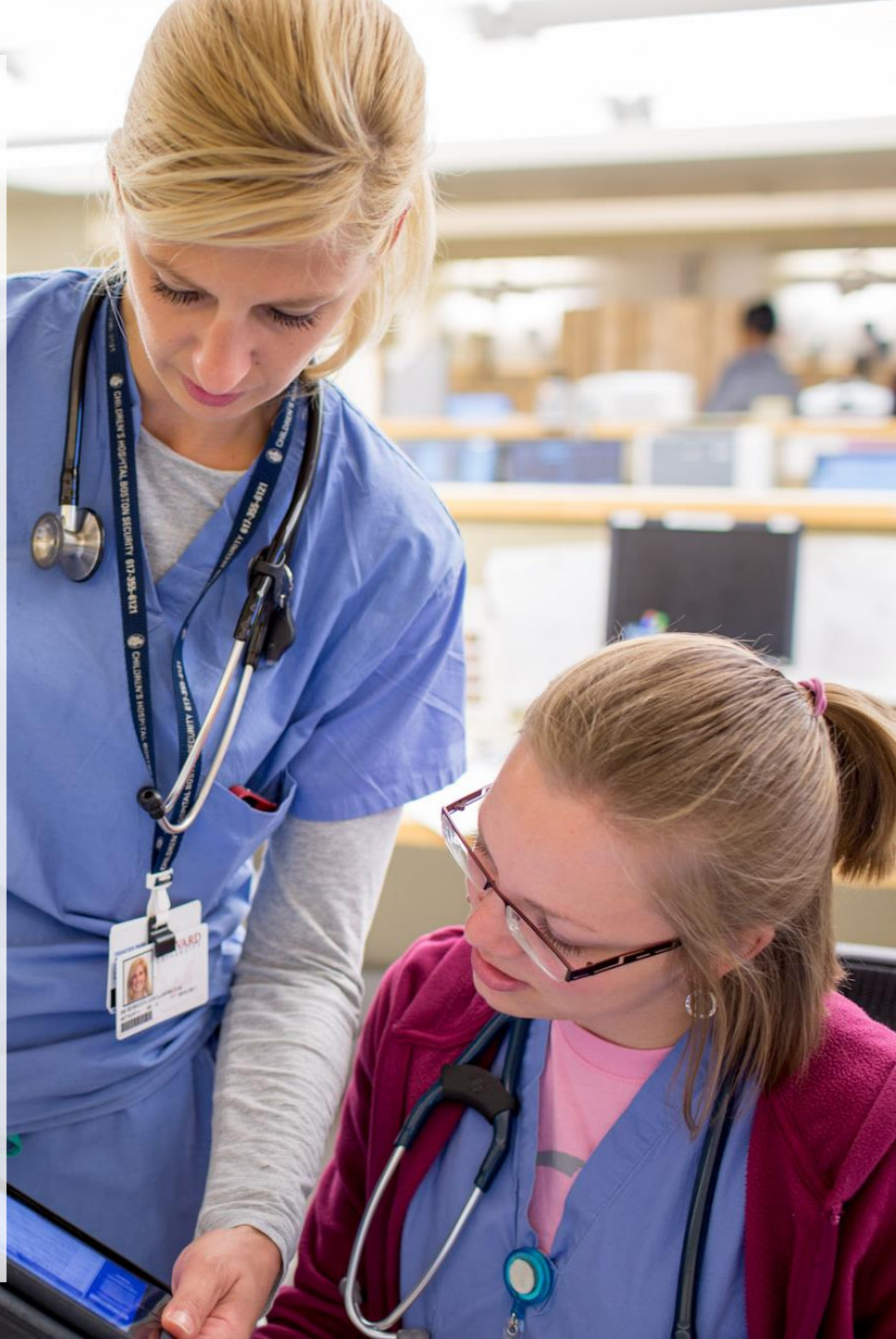
Closing the Loop:
Is my specimen handling process reliable?

Are You Safe? extras

For more information

Email

areyousafe@rmf.harvard.edu



Case Study: Partnering with Patients

Is my patient's history up to date?

The following example is from a closed malpractice case.

crico | are you safe?

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Malpractice case study focus: Assessment and Diagnosis

43%
of cases

had an error in diagnostic processing identified as a contributing factor, i.e., a narrow diagnostic focus, failure to establish a differential diagnosis, or reliance on a chronic condition or previous diagnosis

CRICO N=175 MPL cases asserted 1/1/1–8/31/16 involving ambulatory care and alleging diagnostic failure.

Case Study

Patient

Ted, 57-year-old male w/history of two MIs, sleep apnea, and hypertension

Day 1

Ted is seen in his PCP's office for complaints of jaw pain (8/10 severity) and chest tightness. Vital signs are reported as normal; exam reveals good range of motion in jaw.

Case Study

Ted, 57-year-old male

Day 1 (continued)

Ted's PCP believes his jaw pain may be related to the CPAP mask Ted uses for sleep apnea. He diagnoses temporomandibular joint (TMJ) disorder.

Case Study

Ted, 57-year-old male

Day 1 (continued)

Ted had two previous EKGs showing myocardial damage, however, the provider does not retrieve them at the time of the visit and no cardiac workup is performed.

Case Study

Ted, 57-year-old male

Day 5

Ted presents to the ED with nausea and vomiting. Upon further evaluation, he is diagnosed with an MI, then progresses into cardiogenic shock.

Case Study

Ted, 57-year-old male

Outcome

- Further testing reveals a lateral wall myocardial rupture, requiring surgery.
- Ted's condition worsens, he suffers kidney and liver failure, and subsequently dies from advanced system failure.

Case Study

Ted, 57-year-old male

Vulnerability

Fixation on Ted's complaint without full assessment of his symptoms and history led to a narrow focus and a missed diagnosis.

Safer Care Recommendation

Be aware of any tendency toward cognitive fixation. Techniques to avoid this include:

- Expanding differential diagnoses
- Seeking additional information from the patient and the medical record
- Engaging a peer consult for patients with continued, unresolved symptoms

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Partnering with Patients

What type of trigger or templates do we 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?

Recommended Practice

To avoid narrow diagnostic focus, broaden the list of diagnostic possibilities via history and physical.

Practice Assessment

Partnering with Patients

Do we cut and paste information in medical records (without reviewing it)?

Recommended Practice

Review all content that is not originated in an individual patient's record for appropriateness and accuracy.

Practice Assessment

Partnering with Patients

Do we have a process to retrieve and update pertinent patient medical records?

Recommended Practices

- Use checklists for triggering questions related to patient history that may be missed (e.g., family history, previous testing)
- Embed decision support tools in EHR to assist in maintenance of patients histories.

Practice Assessment

Partnering with Patients

Does our culture support/encourage providers to ask for peer help when the patient situation is confounding?

Recommended Practice

Seek a consult for patients who return repeatedly for the same symptoms.

Practice Assessment

Partnering with Patients

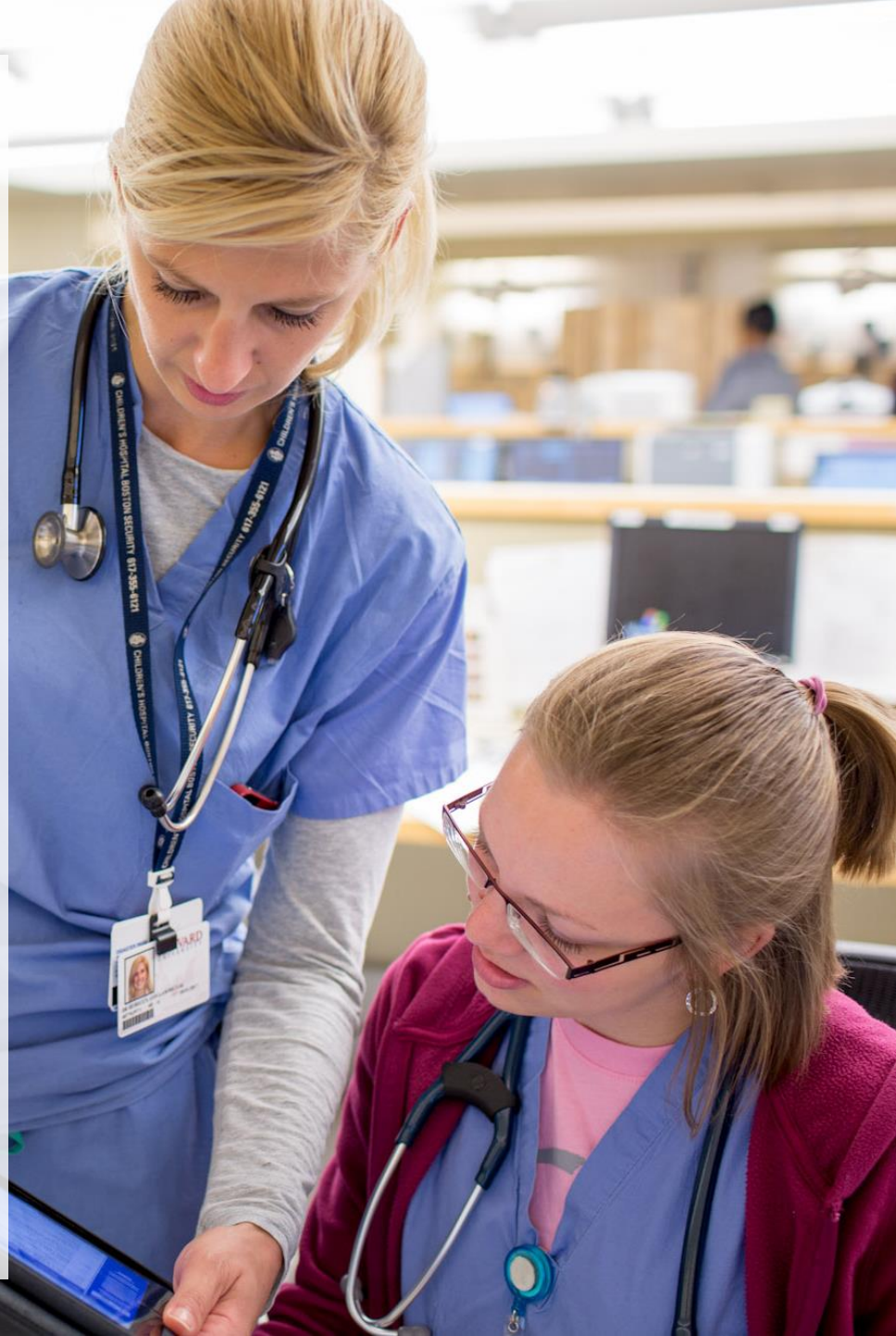
What else can we do to avoid a similar event?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



Additional Resources

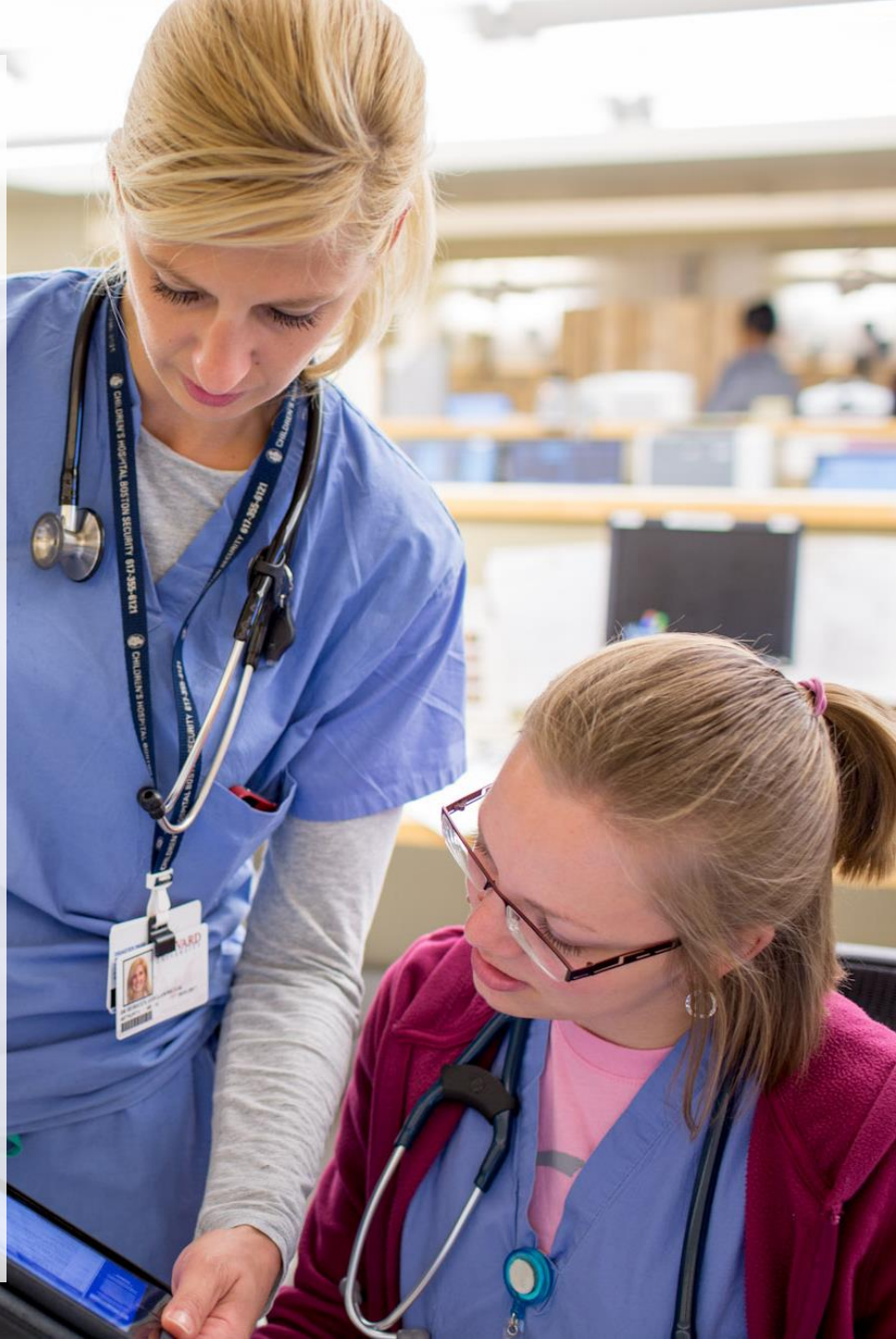
Partnering with Patients:
Is my patient's history up to date?

Are You Safe? extras

For more information

Email

areyousafe@rmf.harvard.edu



Case Study: Closing the Loop

Who is responsible for follow up?

The following example is from a closed malpractice case.

crico | are you safe?

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

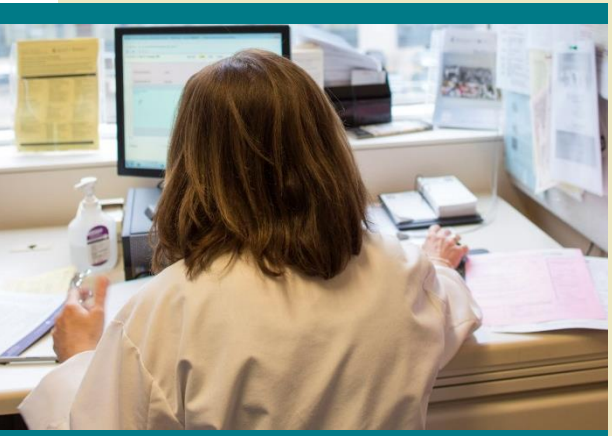
Malpractice case study focus: Referral Management

13%
of cases

had an error in referral management identified as a contributing factor, i.e., appropriate referrals to specialists (or consults) are not made or adequately managed, or identification of the physician responsible for ongoing care is unclear.

CRICO N=194 MPL cases asserted 1/1/09–12/31/13 involving ambulatory care and alleging diagnostic failure.

Case Study



Patient

Anjelo, 74-year-old male

Day 1

During a hospital stay for encephalitis, Anjelo is advised to see a pulmonologist for a specific opacity in his right upper lobe (suspicious for carcinoma) seen on a CT scan.

Case Study

Anjelo, 74-year-old male w/upper R lobe opacity

Day 11

Anjelo sees his PCP, who refers him to a pulmonologist.

Case Study

Anjelo, 74-year-old male w/upper R lobe opacity

Day 28

Anjelo sees the pulmonologist, who notes a spot on the lung and advises additional follow up.

Case Study

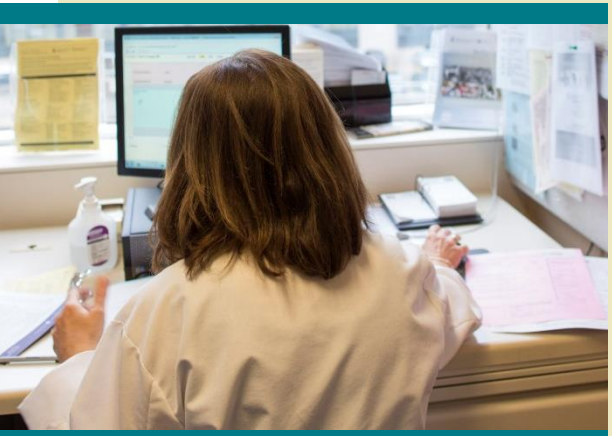
Anjelo, 74-year-old male w/upper R lobe opacity

Next four years

Over four years, Anjelo has regular visits with his PCP, who is unaware of the pulmonologist's recommendation for additional follow up regarding the initial lung concern.

Case Study

Anjelo, 74-year-old male w/upper R lobe opacity



Outcome

At age 78, Anjelo is diagnosed with Stage IV lung cancer. He dies three months later.

Case Study

Anjelo, 74-year-old male w/upper R lobe opacity

Vulnerability

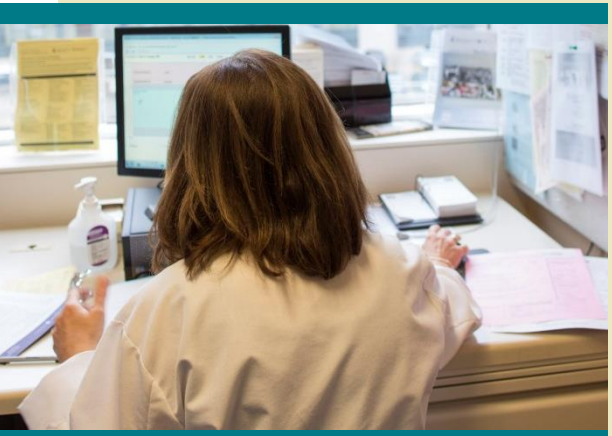
Anjelo's PCP was not notified by the pulmonologist and the PCP did not pursue any information regarding the referral visit.

Safer Care Recommendation

To avoid a "person specific" referral management process, 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 care team and patient.

Case Study

Anjelo, 74-year-old male w/upper R lobe opacity



Vulnerability

Anjelo failed to appreciate the importance of his pulmonology referral and, thus, did not alert his PCP to the pulmonologist's recommendation for follow up.

Safer Care Recommendation

Having all parties involved in referral trans-action reduces the risk of patients or reports falling through the cracks. Referral systems without closed-loop communication create gaps in patient care. Build a redundant system for the entire care team and patient.

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Closing the Loop

What is our system for referral management? What role does each of us (including the patient) play?

Recommended Practices

- Referrals are ordered and documented/scanned in the EHR.
- A process to identify which referrals are outstanding and which are completed.

Practice Assessment

Closing the Loop

How do we communicate high priority referrals to the clinical team and patient?

Recommended Practices

- The reason/urgency for the referral is communicated to the patient and specialist, and an appointment is made for the patient prior to him/her leaving the office.
- Embed decision support tools in electronic health record to assist in maintenance of patient's personal and family medical history.

Practice Assessment

Closing the Loop

Do we document all patient communication in the medical record?

Recommended Practice

Provider review of all incoming referrals is tracked.

Practice Assessment

Closing the Loop

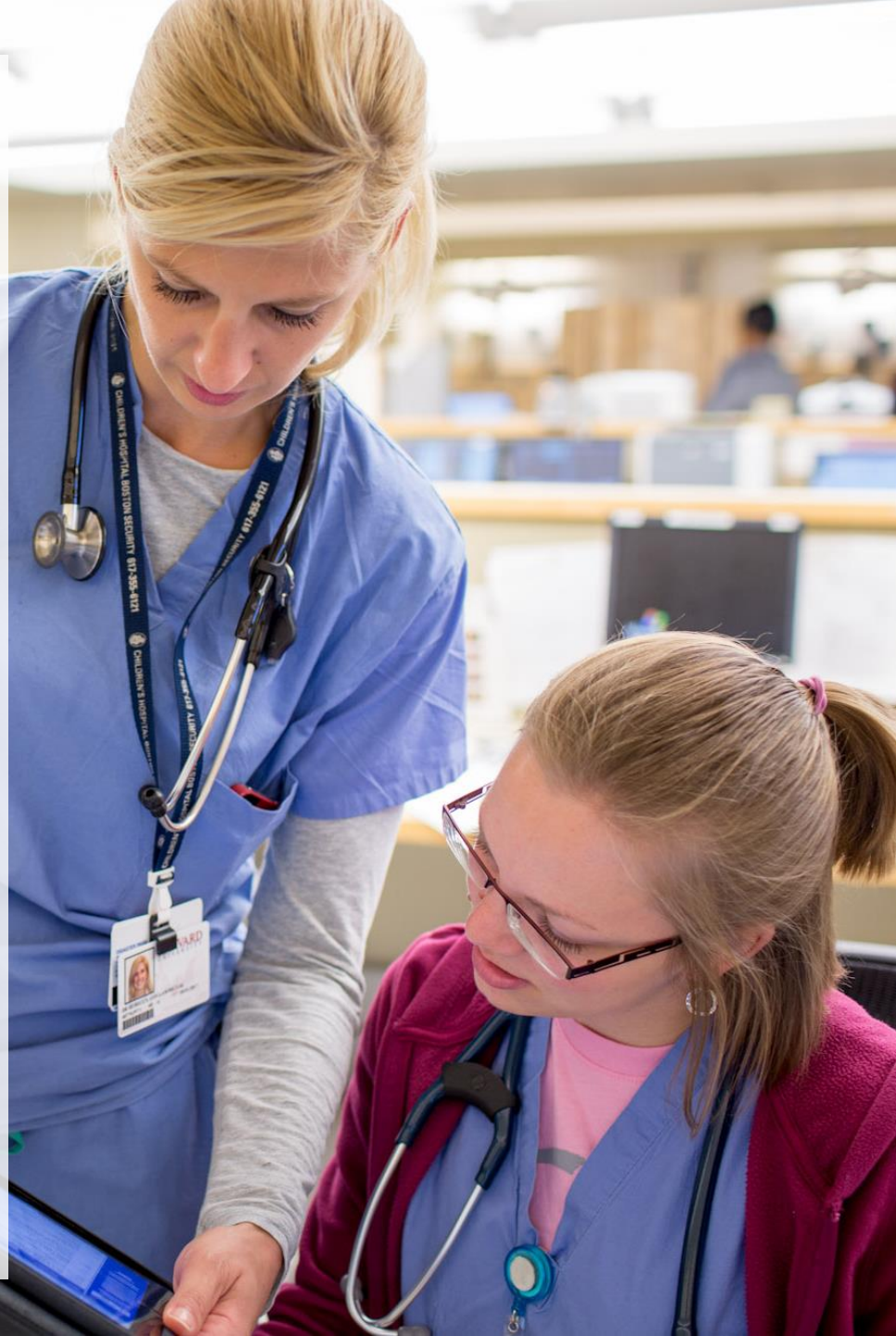
What else can we do to avoid a similar event?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



Additional Resources

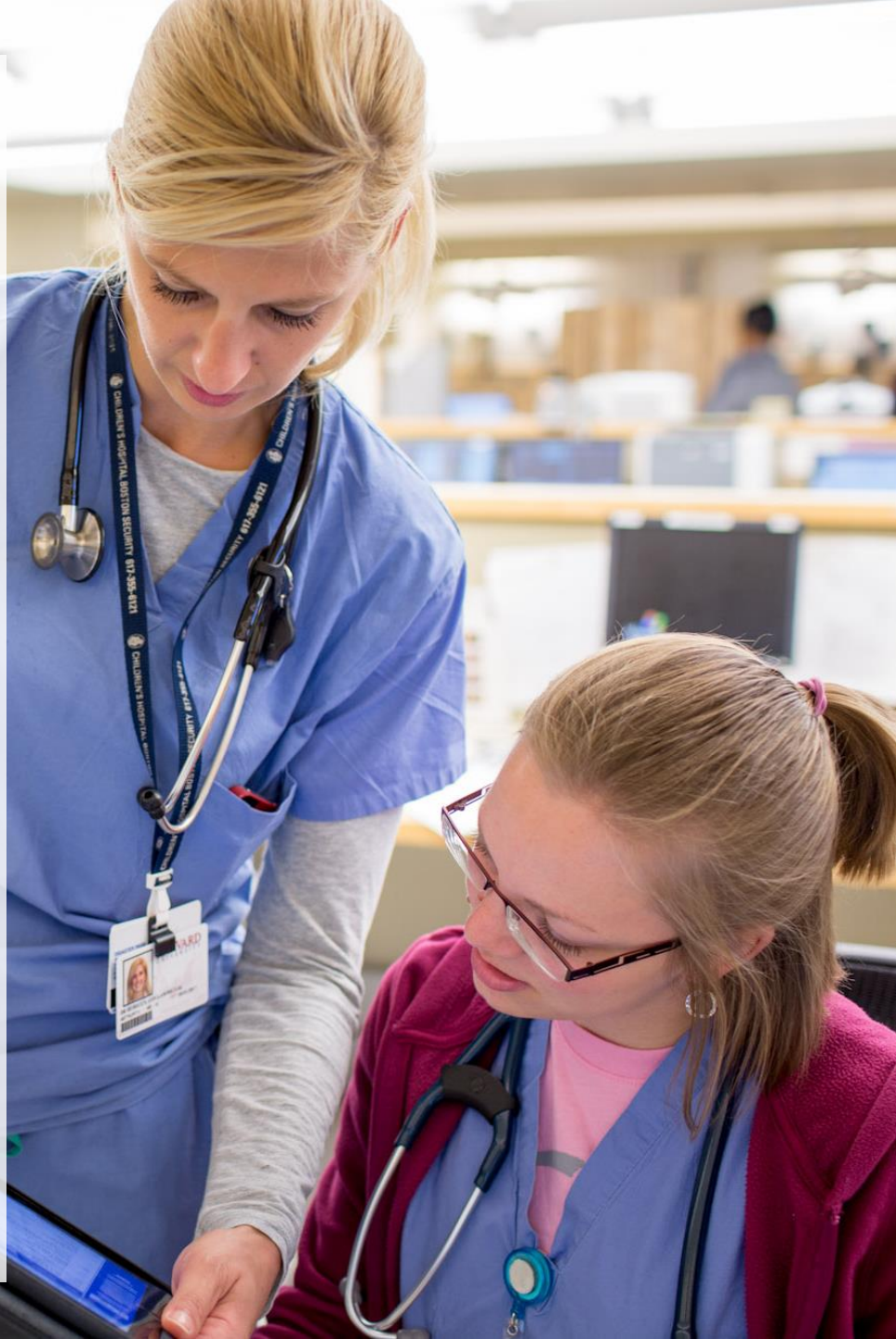
Closing the Loop:
Who is responsible about follow up?

Are You Safe? extras

For more information

Email

areyousafe@rmf.harvard.edu



Case Study: Standardized Communication

Did the specialist change the treatment plan?

The following example is from a closed malpractice case.

crico | are you safe?

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Malpractice case study focus: Referral Management

13%
of cases

had an error in communication identified as a contributing factor, i.e., ----

CRICO N=194 MPL cases asserted 1/1/09–12/31/13 involving ambulatory care and alleging diagnostic failure.

Case Study

Patient

Susan, 62-year-old female with history of atrial fibrillation

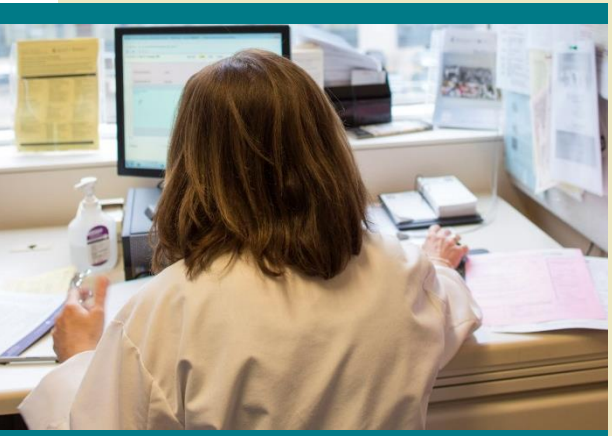
March

Patient has a history of atrial fibrillation treated with Coumadin. She was evaluated by her cardiologist and complained of bleeding.

An EKG was done which showed NSR. The patient had been in NSR for several years. Her Coumadin was stopped and she was started on Aspirin.

Case Study

Susan, 62-year-old w/history of atrial fibrillation



7 months later

Susan sees her primary care physician. An EKG completed during the visit revealed atrial fibrillation.

The PCP asked if the patient was on Coumadin, she responded yes.

Case Study

Susan, 62-year-old w/history of atrial fibrillation

3 months later

Susan was admitted to the hospital with complaints of lightheadedness and dizziness.

Case Study

Susan, 62-year-old w/history of atrial fibrillation

Outcome

She was diagnosed with and treated for a stroke. She sustained permanent injuries due to the stroke.

Case Study

Susan, 62-year-old w/history of atrial fibrillation

Vulnerability

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

Safer Care Recommendation

Ensuring patient understanding is critical to garner the most accurate and complete information. Consider each patient's communication style to solicit the most information and enable assessment of patient understanding.

Case Study

Susan, 62-year-old w/history of atrial fibrillation

Vulnerability

Inadequate review of patient medications and reliance on patient memory can lead to medications/treatment not being provided

Safer Care Recommendation

Reconciling the patient medication list at every visit and providing education regarding purpose, risks, and benefits of each medication can decrease the likelihood of misunder-standing and increase compliance with recommended treatment

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Standardized Communication

Does our clinical team review and reconcile patient medications at each encounter?

Recommended Practices

- Obtain a medication history for each patient (including over-the-counter and alternative medications), and update at every visit
- Include the whole care team (pharmacy, nursing) in medication management and safety to ensure critical information is not lost

Practice Assessment

Standardized Communication

What practices do we have to assess patient understanding of their medications and care plan?

Recommended Practice

For each medication, educate patients re: purpose, how to take it, and symptoms to report e.g., “teach back”

Practice Assessment

Standardized Communication

Does we have clinical guidelines and a standard process to identify and manage patients on anticoagulation?

Recommended Practice

When multiple providers are involved in a single patient's care ensure that each knows who is responsible/ accountable for medication management

Practice Assessment

Standardized Communication

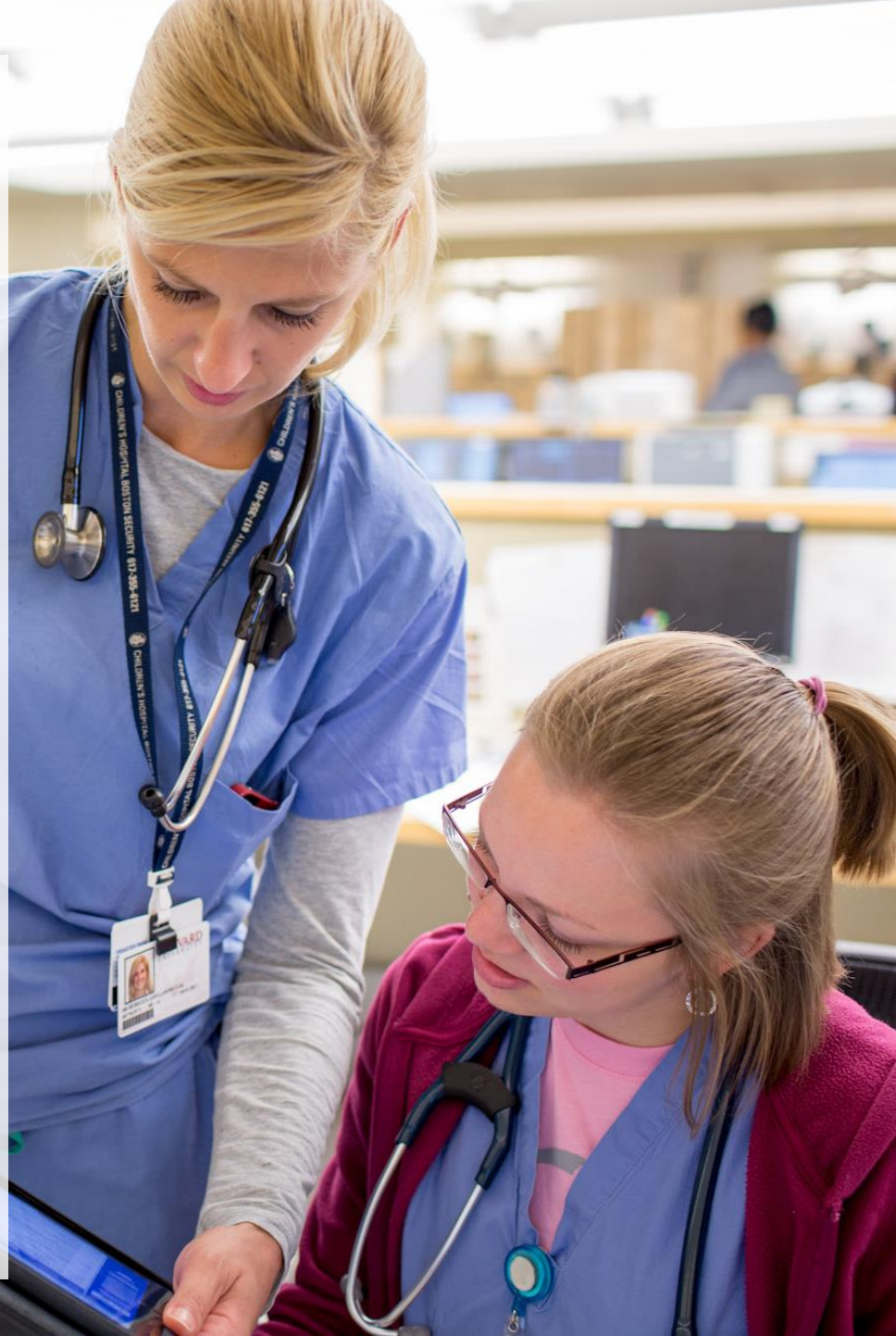
What else can we do to avoid a similar event?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



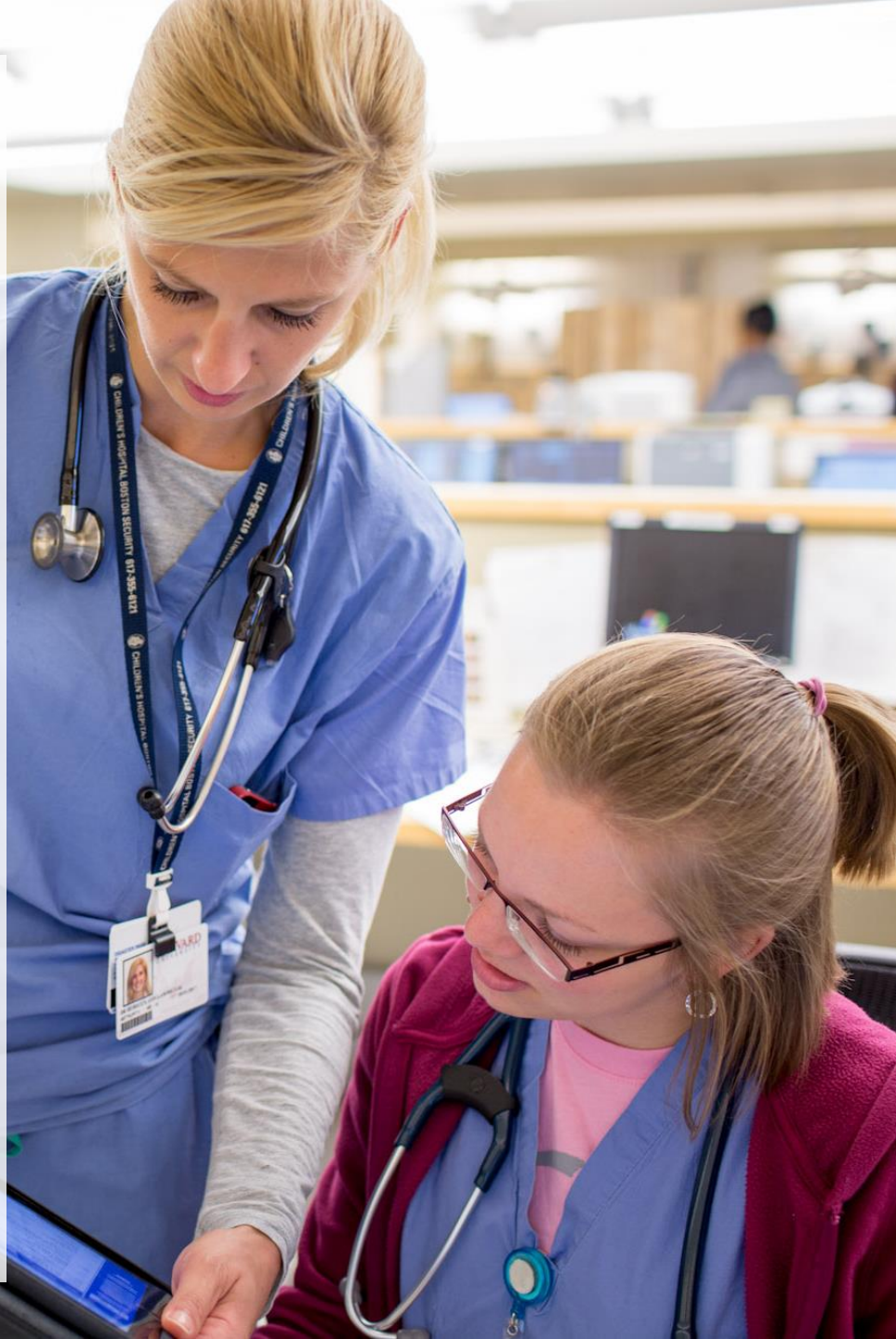
Additional Resources

Standardized Communication:
Did the specialist change the treatment plan?

Are You Safe? extras

For more information

Email
areyousafe@rmf.harvard.edu



Case Study: Partnering with Patients

Does my patient know why I ordered this test?

The following example is from a closed malpractice case.

crico | are you safe?

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Malpractice case study focus: Patient Assessment

35%
of cases

had an error in patient assessment identified as a contributing factor, i.e., the patient's complaints or symptoms were not thoroughly addressed

CRICO N=175 MPL cases asserted 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Case Study

Patient

Francis, 17-year-old male, no prior medical history

Month 1

He is seen by his family medicine physician office with a request to complete a high school physical exam form.

A note was provided for school and documentation in the medical record noted a complete and normal physical exam.

Case Study

Francis, 17-year-old with no prior medical history

8 months later

Francis sees his physician to complete a college physical examination form.

On this form, it notes all systems are normal except the MD did not check normal in the box beside the heart. Notation in the description section “? Slight systolic murmur”

There was no documentation in the office record regarding this office visit.

Case Study

Francis, 17-year-old with no prior medical history

One month later

An echocardiogram was scheduled for the patient. However, the patient did not keep the appointment.

The physician's office was notified but there was no outreach to the patient in follow up to the missed appointment.

Case Study

Francis, 17-year-old with no prior medical history

Next two years

Over two years, Francis was seen at his family practice physician's office

During this time, there is no discussion or follow up of the murmur nor recommended echocardiogram.

Case Study

Francis, 17-year-old with no prior medical history

Outcome

At age 20 while playing football, Francis fell to the ground. Despite aggressive medical treatment he could not be resuscitated and died.

On autopsy, the patient was diagnosed with hypertrophic cardiac myopathy.

Case Study

Francis, 17-year-old with no prior medical history

Vulnerability

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 Recommendation

Contemporaneously document 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.

Case Study

Francis, 17-year-old with no prior medical history

Vulnerability

Sharing uncertainty with patients and family members about potential consequences of an incidental finding implies a need for follow up.

Safer Care Recommendation

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.

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Partnering with Patients

Does our practice communicate missed appointments to the ordering provider?

Recommended Practices

- Set up a tickler system to track ordered tests/images
- Develop processes on how missed appointments will be communicated to the ordering provider

Practice Assessment

Partnering with Patients

How confident are we that patients receive recommended tests?

Recommended Practices

- Establish a prioritization matrix for high-risk tests and imaging studies
- Engage patients in shared decision making, explain purpose of tests/images to patients/family and document your conversation in the medical record

Practice Assessment

Partnering with Patients

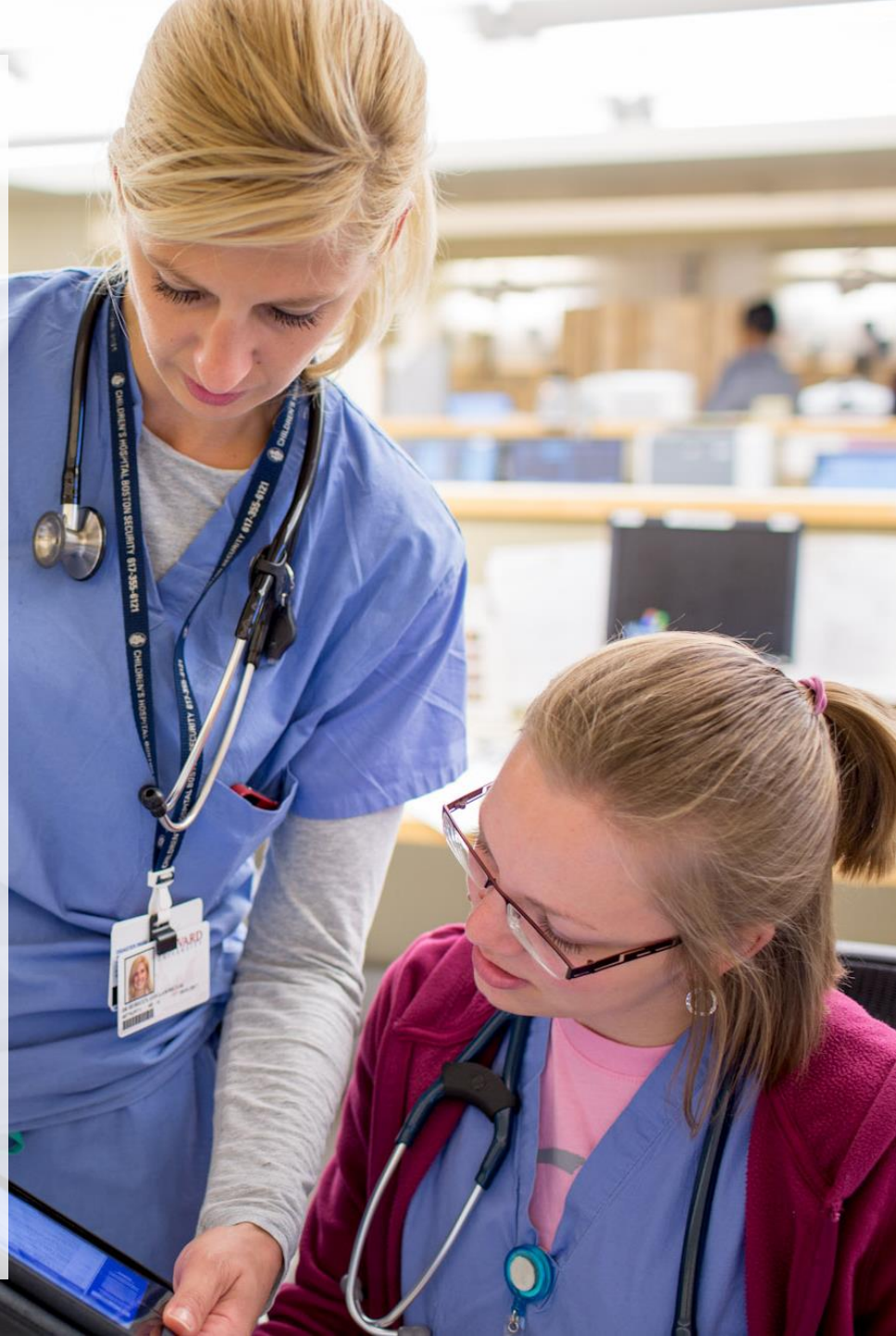
Does my patient understand why I ordered this test?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



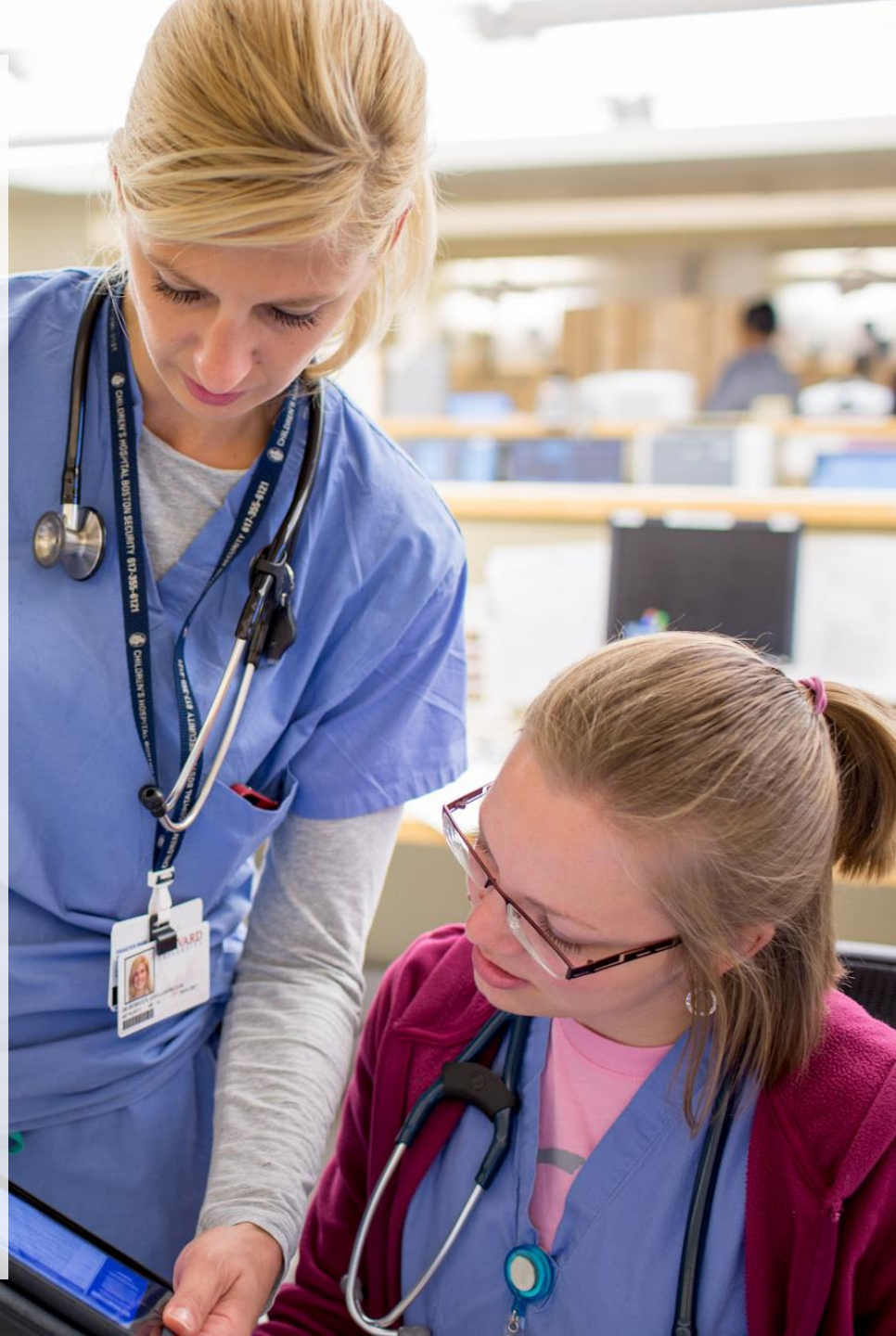
Additional Resources

Partnering with Patients:
Does my patient understand why I ordered this test?

Are You Safe? extras

For more information

Email
areyousafe@rmf.harvard.edu



Case Study: Reliable Diagnoses

Are we prepared to triage this patient call?

The following example is from a closed malpractice case.

crico | are you safe?

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Malpractice case study focus: Patient Assessment

35%
of cases

had an error in patient assessment identified as a contributing factor, i.e., the patient's complaints or symptoms were not thoroughly addressed

CRICO N=175 MPL cases asserted 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Case Study

Patient

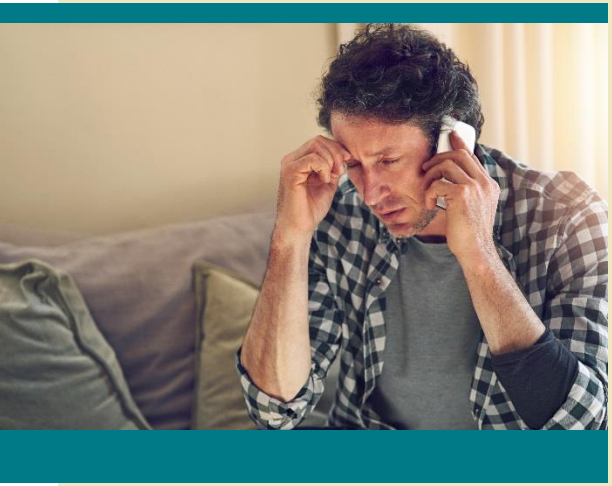
Willy, 9-year-old male

Saturday, 8:00 p.m.

Father calls his son's pediatrician's office and tells the nurse practitioner (NP) that his 9-year-old has not felt well for three days: nausea, vomiting, decreased oral intake, weakness, and lethargy (sleeping 24 hours straight).

Case Study

Willy, 9-year-old



Saturday, 8:00 p.m.

- Suspecting the flu, the NP asks if the boy is alert (yes), has passed urine (yes), or has a fever or rash (no).
- When asked if his son should be seen right away, the father says he doesn't think so, but is concerned that the boy hasn't eaten.
- The NP advises pushing ginger ale and making sure he is urinating.

Case Study

Willy, 9-year-old

Sunday morning, 4:00 a.m.

Upon checking, the boy is sleeping and his breathing was more rapid

Sunday morning, 8:30 a.m.

The father finds his son is not breathing, calls 911, and starts CPR…but the boy can not be revived

Case Study

Willy, 9-year-old

Outcome

Autopsy reveals 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%).

Case Study

Willy, 9-year-old

Vulnerability

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 Recommendation

Evaluating symptoms over the telephone requires focused and relevant history-taking. Open-ended questions may improve the quality of the information collected, resulting in a more reliable diagnosis.

Case Study

Willy, 9-year-old

Vulnerability

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

Safer Care Recommendation

Patients (or parents) should not be doing their own triage. Calling back after an established timeframe can be reassuring as a way to check the initial triage decision and an opportunity, if necessary, to revise the plan.

Case Study

Willy, 9-year-old

Vulnerability

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

Safer Care Recommendation

- Effective use of telephone triage protocols may lead to a more disciplined approach and improved safety
- Instructions that the patient be evaluated right away must be clear, repeated twice, and documented

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Reliable Diagnoses

What is our practice/policy for telephone triage for patients calling-in after hour?

Recommended Practice

- Make an extra effort to talk directly with the patient when possible
- Avoid premature closure in your decision-making

Practice Assessment

Reliable Diagnoses

Have we implemented best practices for telephone triage? Can we leverage decision-support tools?

Recommended Practices

Adopt telephone triage protocols, especially for ruling out serious problems

Practice Assessment

Reliable Diagnoses

Can we integrate triage call notes into the EHR?

Recommended Practices

Document all after-hours calls in the medical record

Practice Assessment

Reliable Diagnoses

How do we close the loop with the primary care physician related to the after-hours care?

Recommended Practices

Close the loop with the primary care provider

Practice Assessment

Reliable Diagnoses

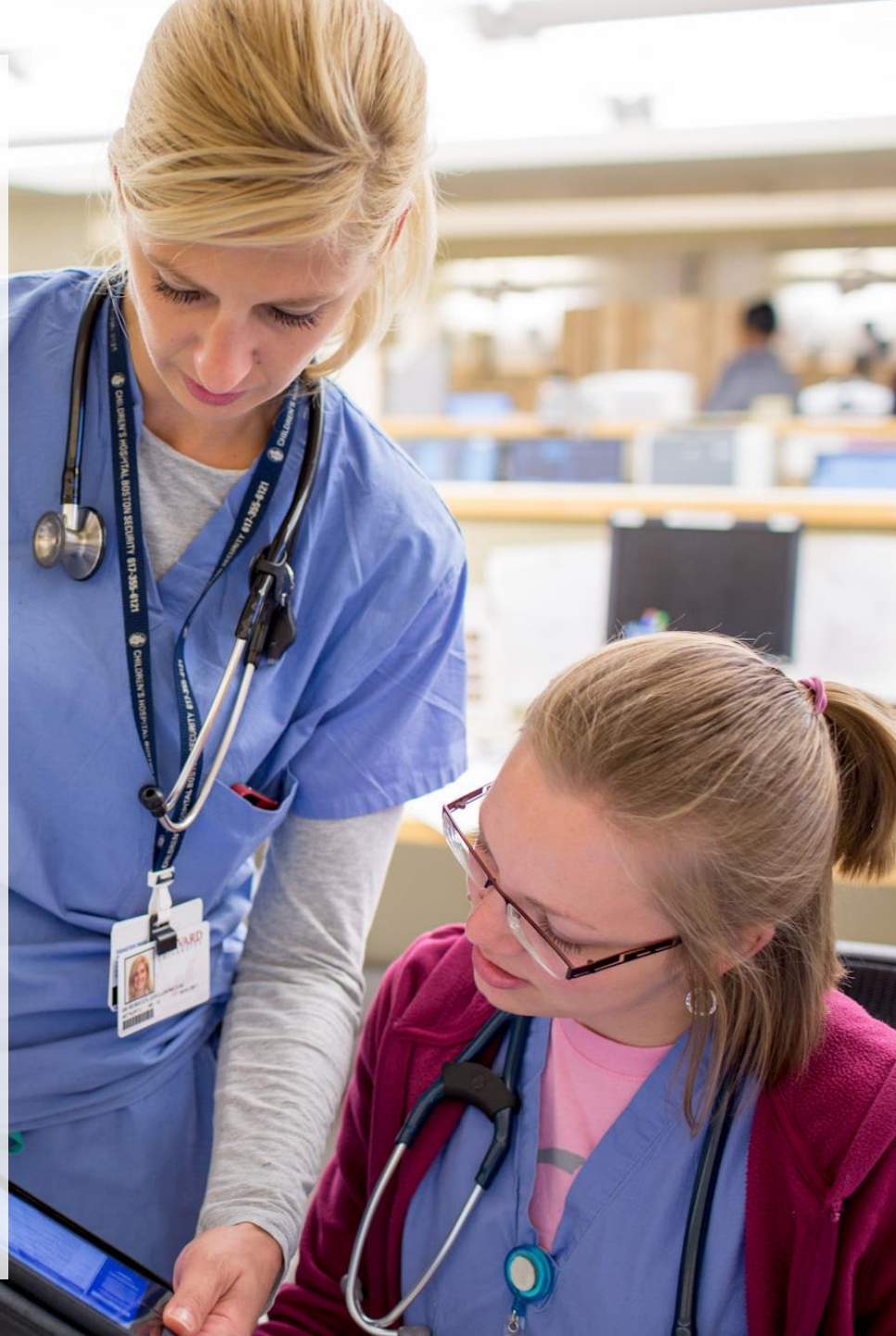
What else can we do to avoid a similar event?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



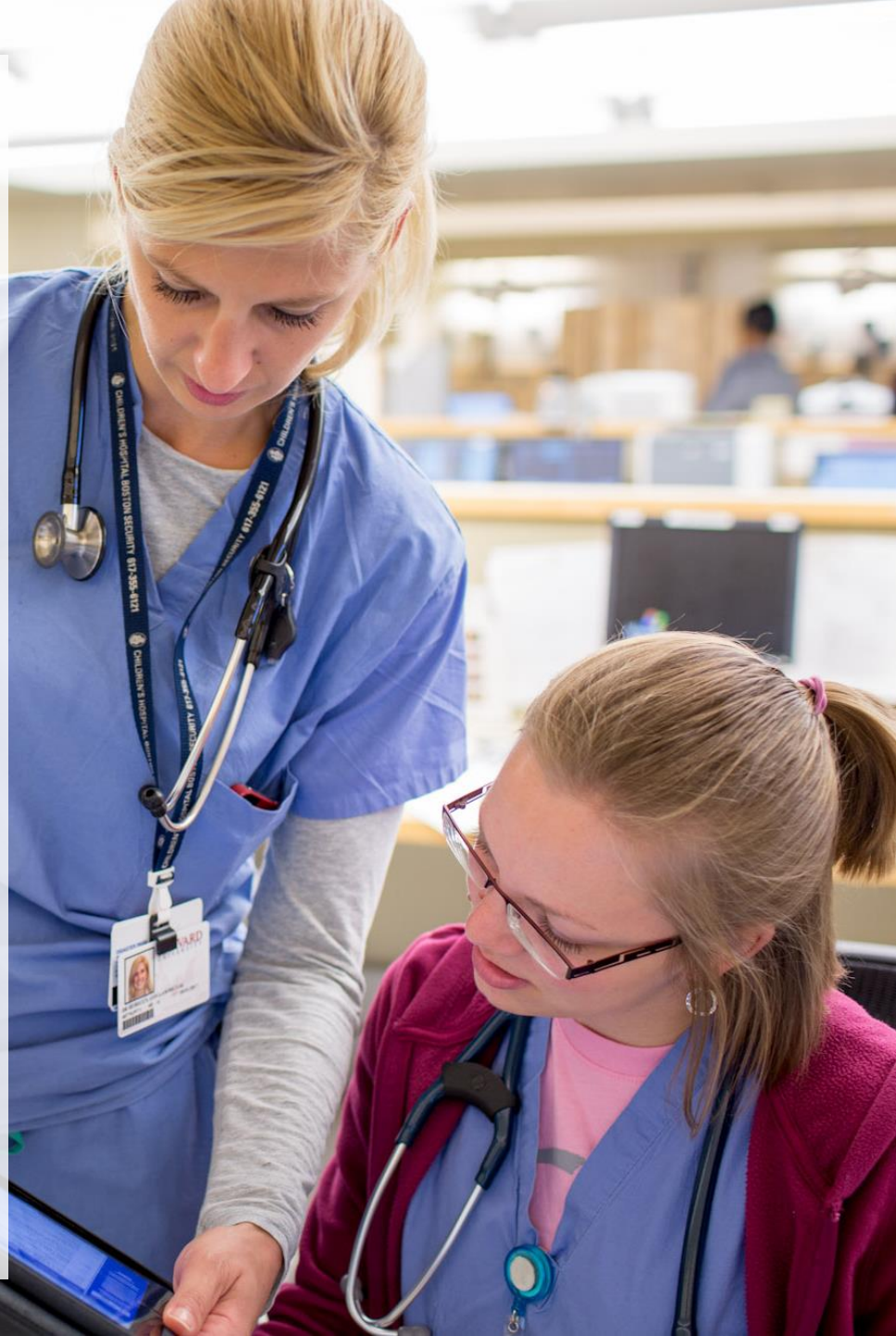
Additional Resources

Reliable Diagnoses:
Are we prepared to triage this patient call?

Are You Safe? extras

For more information

Email
areyousafe@rmf.harvard.edu



Case Study: Closing the Loop

Are we properly tracking test results and referrals?

The following example is from a closed malpractice case.

crico | are you safe?

CRICO maps contributing factors to the way care is experienced by the patient.

CRICO Diagnostic Process of Care

STEP	CRICO % CASES	CBS % CASES
1. Patient notes problem and seeks care	1%	1%
2. History/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%

*A case will often have multiple factors identified.

CRICO N=175 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

CBS (Comparative Benchmarking System) includes >300,000 medical malpractice cases across the nation

CBS N=2,919 MPL cases with claim made date 1/1/11–8/31/16 involving ambulatory care and alleging diagnostic failure.

Case Study

Patient

Leslie, 8-year-old female

Day 1

- Leslie, who has a history of forearm fractures and osteopenia, is referred to an endocrinologist, whose interim diagnosis is idiopathic juvenile osteoporosis (IJO)
- Leslie is referred to a gastroenterologist to rule out celiac disease as the underlying cause

Case Study

Leslie, 8-year-old female w/history of fractures and osteopenia

Days 5-10

- An upper endoscopy is performed by a physician different from the GI to whom Leslie was referred
- The endoscopy indicates all structures appear normal. Five days later, the pathology report is positive for celiac disease.

Case Study

Leslie, 8-year-old female w/history of fractures and osteopenia

Three years later

- Over the next three years, Leslie is treated by her GI, endocrinologist, and orthopedic surgeon for IJO
- When Leslie develops abdominal pain and constipation, her PCP (different from three years prior) conducts a celiac test, which is positive
- The endocrinologist asks the GI if a patient can become celiac positive three years after a negative test

Case Study

Leslie, 8-year-old female w/history of fractures and osteopenia

Three years later (continued)

- Upon review, the GI sees the celiac-positive results from three years prior in the patient's chart
- Neither the endocrinologist nor the referring gastroenterologist had ever reviewed them

Case Study

Leslie, 8-year-old female w/history of fractures and osteopenia

Outcome

- When notified, the girl's parents say that they had been told the initial test results were negative, but cannot recall by whom
- With a gluten-free diet, the girl's condition gradually improves

Case Study

Leslie, 8-year-old female w/history of fractures and osteopenia

Vulnerability

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

Safer Care Recommendation

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.

Case Study

Lamesha, 8-year-old female w/history of fractures and osteopenia

Vulnerability

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

Safer Care Recommendation

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

Practice Assessment

Has this type of event ever happened here?

Practice Assessment

Closing the Loop

What is our process for closing the loop on test results/consult reports?

Recommended Practice

Obtain a baseline assessment by performing a random audit of normal and abnormal result notifications

Practice Assessment

Closing the Loop

Do we document an expected turnaround time for test results/consults?

Recommended Practices

Develop written procedures for managing the critical results of tests and diagnostic procedures

Practice Assessment

Closing the Loop

What is our turnaround time goal for reporting results to a patient?

Recommended Practices

- 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
- Encourage patients to inquire about test results if they haven't been notified

Practice Assessment

Closing the Loop

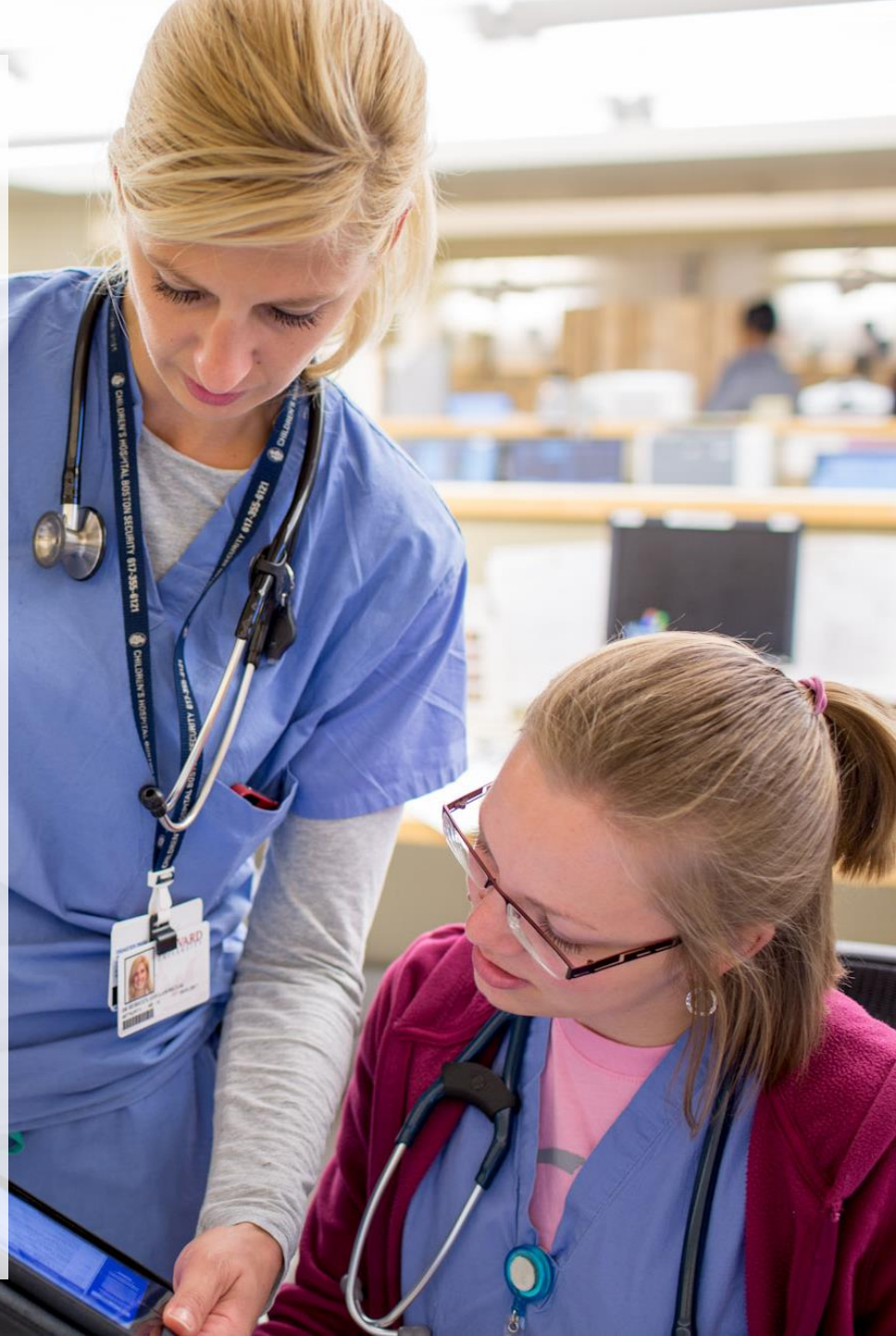
What else can we do to avoid a similar event?

How to Earn Category 2 Risk Management Credits

This *Are You Safe?* case study is suitable for 0.25 *AMA PRA Category 2 Credit*™.

This activity has been designed to be suitable for 0.25 hours of Risk Management Study in Massachusetts.

Risk Management Study is self-claimed; print and retain this page for your recordkeeping.



Additional Resources

Closing the Loop:
Are we properly tracking test results and referrals?

Are You Safe? extras

For more information

Email
areyousafe@rmf.harvard.edu