MEDICAL-LEGAL EDUCATION SERIES

Critical Failures in the ED:

How Sepsis, Stroke, and MI Get Missed

Understanding the Diagnostic Failures, Documentation Gaps, and System Breakdowns That Drive Emergency Department Malpractice

Presentation link: Passcode: zkab@j5n

https://justice-org.zoom.us/rec/share/FbkiAe13nbVRuLWLd-5c5JTExZ8W2_pZXtFymfLo11oJAxtfrAjyF-e-fXGwpdrG.143TCzeWXCIH78Yo

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LEARNING OBJECTIVES

01 Identify the clinical red flags and decision points where ED providers most commonly miss sepsis, stroke, and MI.

02 Analyze documentation patterns, workflow failures, and system issues that create liability exposure.

03 Review strategies to evaluate breach and causation using comparative timelines.

THE SCOPE OF THE PROBLEM

Why ED Missed Diagnoses Are So Heavily Litigated

40%

of all medical malpractice lawsuits involve misdiagnosis

$4B

in ER misdiagnosis payouts annually

30%

of strokes are misdiagnosed at initial presentation

$500K

median settlement for missed MI

Sources: Gitnux Market Data Report 2026; The Doctors Company Claims Review 2026; Systematic review of malpractice litigation in the diagnosis and treatment of acute stroke. Stroke. 2019

WHY MISDIAGNOSIS HAPPENS: COGNITIVE BIASES

ANCHORING

Adhering to a first impression without adequately considering alternatives — even as new evidence accumulates.

PREMATURE CLOSURE

Accepting a diagnosis before it is fully verified and stopping further diagnostic inquiry prematurely.

DIAGNOSIS MOMENTUM

Accepting a previous provider's diagnosis without re-evaluating.

CONFIRMATION BIAS

Seeking and favoring information that confirms the initial diagnosis, discounting contradictory findings.

These four biases are among the most frequently identified in ED diagnostic error cases.

Critical Documentation Gaps

Missing Decision Process

Documentation records only final conclusions, neglecting the reasoning behind clinical decisions and alternative considerations.

Lack of Evidence for Alternatives

There is no written record that dangerous or alternative diagnoses were considered and prioritized by likelihood.

No Indication of Diagnostic Uncertainty

Uncertainty in diagnosis is frequently undocumented, leaving ambiguity about how certain clinicians were and impacting legal clarity.

Legal and Compliance Implications

If critical decision steps are missing in documentation, it is assumed they were not addressed

THE DOCUMENTATION GAP

What the Chart Shows

- Chest pain: labs normal, d/c home
- Work-up unremarkable
- Simple differential diagnosis without explanation
- No time-stamping of discussions/therapies
- Physical exam: RRR no m/r/g (vitals show tachycardia)
- MD aware
- Non-focal neuro exam; strength and sensation intact
- Return precautions discussed

"The gap between what was thought and what was documented becomes the battleground." If it's not in the chart, it's treated as if it was never considered.

THREE HIGH-RISK CONDITIONS-Clinical Red Flags and Common ED Failures

SEPSIS

"Time is Life"

- Subtle early signs: tachycardia, hypotension, altered LOC
- Triage underestimation — labeled 'flu-like symptoms'
- Delayed antibiotics (>1 hour) and incomplete sepsis bundle
- Missing lactate, cultures, and reassessment documentation

STROKE

"Time is Brain"

- Atypical presentation: dizziness, confusion, 'not feeling right'
- Posterior circulation misclassified as benign vertigo
- Delayed CT/CTA and failure to activate stroke alert
- Missing NIH Stroke Scale, last-known-well time

MYOCARDIAL INFARCTION

"Time is Muscle"

- Atypical: epigastric pain, fatigue, jaw/back pain
- Women, diabetics, elderly — non-classic presentations
- No repeat EKG; failure to repeat troponins
- Anchoring on GERD, anxiety, or musculoskeletal pain

SEPSIS | CASE STUDY

Busy Urban ED — Middle of the Night

THE CASE

25 y/o male, no prior medical history, presents with acute mental status changes. EMS reports he left the house normal, returned altered. Marijuana use confirmed; girlfriend denied other substances.

Vitals: mildly hypertensive, tachycardic — not hypoxic or febrile. Working diagnosis: tampered marijuana.

WBC elevated — attributed to recent URI. No CXR ordered. CT head and MRI negative. Lactate NOT obtained. BP remained 160s/100s; patient remained tachycardic, then tachypneic.

At shift change (~16 hrs after arrival): girlfriend provides fuller history. Patient becomes febrile. Hospitalist notified; patient boarded due to overcrowding. Antibiotics ordered but not administered until hours later in ICU.

Final: Spontaneous pneumothorax with overlying pneumonia → sepsis → death.

BREACH OF DUTY

- Anchoring on tampered marijuana; no alternative dx documented
- No chest X-ray despite elevated WBC and URI history
- Lactate never obtained
- No differential documented beyond AMS
- Delayed hospitalist notification
- ED boarding: unclear 'ownership' of the patient
- Antibiotics ordered but not administered for hours

SEPSIS | ATTORNEY TAKEAWAYS

01

Build an Hour-by-Hour Timeline

Map vitals, labs, imaging, provider contacts, and antibiotic administration against Surviving Sepsis Campaign benchmarks.

02

Use the Vitals to Tell the Story

Note the pattern and trajectory of clinical signs. The argument: 'You had the pieces — the chart shows you never put them together.'

03

Identify the Critical Decision Point

When did the miss occur? Here: no chest X-ray in the setting of recent URI and elevated WBC. No lactate ordered.

04

Examine Workflow Failures

ED boarding, delay in hospitalist evaluation, confusion over who 'owned' the patient — all contribute to liability.

05

Look for Decision Support Trail

What was the provider considering? What did they rule out? What tools did they use to make their decisions?

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STROKE | CASE STUDY

"When Minutes Equal Brain"

THE CASE

Patient presents to ED via EMS for 'possible stroke' — left side weakness, diffuse body pain, unable to ambulate without assistance. EMS noted he could move the left side but let his arm fall.

ED documentation: chief complaint listed as 'generalized weakness.' Workup: labs, UA, CXR, EKG. Patient was able to answer questions appropriately.

ED physician documents: 'presentation and urinalysis consistent with acute cystitis.' Patient discharged with antibiotics.

Outcome: Thalamic stroke was later diagnosed.

Key discrepancy: EMS reported left arm weakness — unclear if this reached the physician. Nurse documented left arm weakness. Physician exam did not reflect this finding.

Breach of Duty

- Failed to identify significant stroke risk factors
- Failed to document left arm and leg weakness
- Did not recognize sudden onset arm weakness as classic stroke sign
- NIH Stroke Scale never completed
- No noncontrast CT brain within 45 min of triage
- No antithrombotic or tPA protocol initiated
- Classic anchoring: workup stopped at UTI diagnosis

STROKE | Key Documentation Samples

"When Minutes Equal Brain"

Nursing Narrative Note : 09/29/24 18:30:00 Charted By : [redacted]

Pt brought from friends house by South Bend EMS for c/o generalized weakness since Thursday. Pt states that the weakness is slightly worse on the L side. Reports "pain all over". Denies N/V/D, cough/congestion/sore throat, CP, SOB, fever. Hx DM and HTN. EMS report glucose 303.

NEUROLOGIC: Alert, oriented to situation, facial features symmetric, no gross neurologic deficits, cerebellar function intact. Normal 5 out of 5 strength in all extremities. Sensation appears grossly intact.

Medical Decision Making

ED Course:

squamous epithelial cell. Chest x-ray negative for acute cardiopulmonary pathology on my read. Patient's presentation and urinalysis consistent with acute cystitis. Patient given a dose of IV ciprofloxacin.

Differential diagnosis includes but not limited to: ACS, PE, DKA

STROKE | ATTORNEY TAKEAWAYS

01

Compare to AHA/ASA Guidelines

Door-to-CT target: 45 min. Door-to-needle (tPA): 60 min. Build the timeline and map every gap.

02

Nursing vs. Provider Documentation

Look for inconsistencies. The nurse documented left arm weakness. The physician's exam did not reflect it — this is a gaping hole.

03

Identify the Communication Breakdown

Did the MD receive the EMS report of left arm weakness? Did the nurse relay it? System failure or individual failure?

04

Bad Data + No Explanation = Liability

'Bad outcome + abnormal data + no explanation = a gaping hole of potential liability.' Build around what was documented and what was absent.

05

Timestamp Review

When were labs/imaging resulted vs. when were they reviewed by the provider? Gaps in review times are powerful evidence.

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MYOCARDIAL INFARCTION | CASE STUDY

"Time is Muscle"

THE CASE

37 year-old previously healthy female presents with epigastric pain (hours of onset), mild shortness of breath. No prior medical history. Vitals near normal; BP mildly elevated.
EKG obtained — read as normal by ED physician. Repeat EKG at 15 minutes also read as normal. Initial troponin: normal.
Patient taken to X-ray; upon return, not placed back on cardiac monitor. Minutes later, husband runs out screaming for help — patient unresponsive, not breathing. Rhythm: ventricular fibrillation.
TNK administered; repeat EKG showed STEMI. Cardiology called. Patient reached cath lab — near 100% LAD occlusion.
The patient died in the ICU.

Critical fact: The next day, the cardiologist who overread EKGs identified her initial EKG as a STEMI.

BREACH OF DUTY

- Nurse failed to replace patient on monitor per standard of care
- Delayed identification of VF — monitor not in use
- Physician EKG misread (later identified as STEMI by cardiologist)
- Delayed escalation to cardiology and cath lab activation
- Occluded LAD can cause immediate, catastrophic events — time is critical
- Discoverable: cardiologist's next-day overread identified STEMI on initial EKG

MYOCARDIAL INFARCTION | ATTORNEY TAKEAWAYS

01

Build the Comparison Timeline

ACC/AHA Chest Pain Center standards require: EKG within 10 min of arrival; troponin at 0 and 3 hours; continuous cardiac monitoring for all chest pain patients.

02

Proximate Cause

The failure to monitor did not cause the STEMI. But it may have caused a delay in recognizing VF, delayed defibrillation, and delayed cath lab activation

03

Discoverable Policies

Cardiologist overread and nursing chest pain monitoring policy/protocol.

04

The Heart Score

Look for whether the physician documented a HEART Score or equivalent chest pain risk stratification.

05

CROSS-CONDITION THEMES

Triage Underestimation

Acuity level set too low at initial presentation, delaying workup and intervention.

Failure to Reassess

No repeat vitals, no repeat neuro checks — pattern of deterioration becomes invisible in the chart.

Communication Breakdowns

Nurse-to-provider delays, failure to relay EMS findings, delayed review of test results.

Cognitive Bias

Anchoring, tunnel vision, 'frequent flyer' assumptions — all reduce the differential.

System Issues

Understaffing, overcrowding, delayed labs/imaging, on-call team availability, pharmacy delays in medication administration.

Documentation Gaps

If it's not in the chart, it's treated as if it never happened. Thinking must appear on the page.

KEY TAKEAWAYS

The Battlefield Is in the Gap

- The chart shows conclusions — not clinical reasoning. That gap is where liability lives.
- Cognitive biases (anchoring, premature closure) are identifiable, documentable, and defensible.
- Compare every action to a national guideline. The timeline tells the story more powerfully than any narrative.
- Start with vitals, timestamps, and nursing notes — the most objective evidence of what actually happened.
- Bad outcome + abnormal data + no documented explanation = a case worth building.

SUPPLEMENTAL RESOURCES FOR ATTORNEYS

EMERGENCY DEPARTMENT CARE TIMELINE WORKSHEET

Purpose: Use this worksheet to reconstruct the chronological sequence of emergency care events and assess adherence to clinical standards of care. Cross-reference Supplement A (Acute Care Guidelines) for applicable benchmarks.

Case / Docket No.:	Treating Facility:	Alleged Condition:	Record Source

PROVIDER	TIME	CLINICAL EVENTS	STANDARD OF CARE	DEVIATION / NOTES
Name / Role / Specialty	**Documented Time**	**Observations, Orders, Interventions, Results**	**Guideline Benchmark (see Supplement A)**	**Delay, Omission, or Deviation & Justification**
PHASE 1 — ARRIVAL & TRIAGE				
Triage Nurse	Arrival time	Describe event	Applicable standard	Notes / deviation
Triage Nurse	HH:MM	Describe event	Applicable standard	Notes / deviation
Charge RN / Attending	HH:MM	Describe event	Applicable standard	Notes / deviation
PHASE 2 — INITIAL ASSESSMENT & WORKUP				
ED Attending / Resident	HH:MM	Describe event	Applicable standard	Notes / deviation
ED Attending / Resident	HH:MM	Describe event	Applicable standard	Notes / deviation
RN / Tech	HH:MM	Describe event	Applicable standard	Notes / deviation
ED Attending	HH:MM	Describe event	Applicable standard	Notes / deviation
PHASE 3 — DIAGNOSTIC STUDIES (Labs, Imaging, ECG)				
Radiologist / Tech	HH:MM	Describe event	Applicable standard	Notes / deviation
Lab Tech	HH:MM	Describe event	Applicable standard	Notes / deviation
ED Attending	HH:MM	Describe event	Applicable standard	Notes / deviation
Consulting Specialist	HH:MM	Describe event	Applicable standard	Notes / deviation
PHASE 4 — TREATMENT & INTERVENTION				
ED Attending / RN	HH:MM	Describe event	Applicable standard	Notes / deviation
ED Attending	HH:MM	Describe event	Applicable standard	Notes / deviation
ED Attending / Surgeon / Cardiologist	HH:MM	Describe event	Applicable standard	Notes / deviation
RN / Pharmacist	HH:MM	Describe event	Applicable standard	Notes / deviation

Case: _____ Patient: _____ Date of Visit: _____ Prepared by: _____

SUPPLEMENT A — ACUTE CARE GUIDELINES: STANDARD OF CARE REFERENCE

Purpose: Reference this table when completing the Standard of Care column on the Timeline Worksheet. Each row identifies established clinical benchmarks for the three highest-acuity ED presentations in malpractice litigation.

CONDITION	KEY CLINICAL ACTIONS	TIMING / GUIDELINE BENCHMARK	DOCUMENTATION FOCUS
STROKE (Acute Ischemic)	• Rapid triage & vital assessment • Neurologic exam (NIH Stroke Scale) • Non-contrast CT brain • Determine tPA eligibility • Consider thrombectomy if indicated	• Triage & neuro exam: within 10 min of arrival • CT scan: within 20 min of arrival • CT interpretation: ≤45 min • Door-to-needle (tPA): ≤60 min • Door-to-intervention (thrombectomy): ≤90 min	• Symptom onset time / last known well time • Time of neurologic exam and NIH score • CT scan order and result timestamps • tPA decision documentation (eligibility, contraindications) • Thrombectomy referral and timing
MYOCARDIAL INFARCTION (MI / STEMI)	• Rapid triage & vitals • 12-lead ECG • Cardiac biomarkers (troponin) • Initiate aspirin & IV access • Cardiology consult • Percutaneous coronary intervention (PCI) / cardiac cath. lab if STEMI	• ECG: within 10 min of arrival • Door-to-balloon (cardiac cath lab): ≤90 min • Antiplatelet therapy: immediate upon STEMI recognition • Cardiology consult: without delay upon STEMI identification	• Door-to-EKG timestamp • Time to ECG interpretation and STEMI recognition • Aspirin administration time • Cardiology consult request and response times • Documentation of decision-making and cath lab activation • Cardiac cath lab arrival and balloon inflation times
SEPSIS	• Rapid triage & vitals • Assess for infection source • Labs: CBC, lactate, blood cultures • Initiate IV fluids • Early broad-spectrum antibiotics • Continuous monitoring	• Initial assessment: immediate upon presentation • Lactate draw: ASAP (guideline ≤3 hr) • Blood cultures: before antibiotics if possible • Antibiotics: within 1 hr of sepsis recognition • IV fluid bolus: within 3 hrs if septic shock	• Abnormal vital signs and time recorded • Lactate result and order timestamp • Blood culture collection times • Antibiotic order and first-dose administration times • Fluid resuscitation volume and timing • Rationale for clinical decisions • Reassessment documentation and response to treatment • Escalation of care notations

Literature References:

- American Heart Association/American Stroke Association. *Guidelines for the Early Management of Patients With Acute Ischemic Stroke: 2019 Update to the 2018 Guidelines for the Early Management of Acute Ischemic Stroke*. American Stroke Association; 2020
- American Heart Association. Target: Stroke Clinical Tools and Resources. American Heart Association; 2025. https://www.heart.org/en/professional/quality-improvement/target-stroke/clinical-tools-and-resources
- Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock 2021