

— DIAGNOSTIC DELAY SERIES · PART 5

Chest Pain Sent Home

The Cardiac Miss

BY MICHELLE CARROLL · FOUNDER AND CHIEF CLINICAL STRATEGIST, LEXCURA SUMMIT

The discharged chest pain patient is the case emergency physicians fear most, and for good reason. The chart often looks defensible. Tests were done. Tests were negative. The patient went home and collapsed two days later.

The record usually shows one of three things.

A single troponin. Troponin takes time to rise after heart muscle damage begins. A draw at 9:15 for a heart attack that started at 7:30 can be negative. The standard is serial troponins, a few hours apart, to see whether the number is moving. One troponin and a discharge is where we start.

An EKG that closed the question. Up to a third of heart attacks have a normal EKG. “EKG normal” should never end the workup. We also read the original tracing, not the summary, and compare the machine interpretation with the physician read. Subtle changes the machine flagged and the physician dismissed are a finding.

A risk score that wasn’t done or was done wrong. Most EDs use a standardized score (history, EKG, age, risk factors, troponin) to sort chest pain into low, moderate, and high risk. A low score supports discharge. No score, or a diabetic smoker scored as having no risk factors, means the discharge rested on a number that didn’t exist.

WHAT ELSE WE LOOK FOR

- ◆ **Triage note versus physician note.** The nurse writes at arrival; the physician often writes later. “Pressure radiating to left arm, diaphoretic” in triage and “atypical, reproducible with palpation” in the physician note are two different patients. The physician note has to account for what the nurse saw.

- ◆ **Risk factors and medications.** Diabetes, hypertension, cholesterol, smoking, family history, prior events. A patient on three cardiac medications has a cardiac history whether or not the note says so.
- ◆ **The gap between troponin result and discharge order.** A result at 10:40 and a discharge order at 10:42 is a two-minute decision on one data point.
- ◆ **Discharge instructions.** A chest pain patient should leave with written return precautions and a near-term follow-up plan, often a stress test within days. “Follow up with primary care as needed” is a gap.
- ◆ **The ED’s chest pain protocol.** It specifies EKG timing (ten minutes from arrival), the troponin schedule, and disposition criteria. Request it.

ON CAUSATION

Cardiac misses are often direct. A treatable blockage, a death within days of discharge, and an admission that would likely have meant a catheterization and a stent. We look at the autopsy, the extent of the blockage, and the ratio of new to old heart damage.

Episode 85 closes our diagnostic delay series. The through-line across stroke, sepsis, cancer, and cardiac is the same: the question is never whether the diagnosis was eventually correct. It’s what the record already knew, when, and who saw it.

This newsletter is for education only and isn’t medical or legal advice.

ABOUT LEXCURA CLINICAL INTELLIGENCE

Lexcura Clinical Intelligence provides integrated clinical and regulatory analysis for attorneys handling healthcare litigation. If you’re deciding whether to take a case like this, the Attorney Case Brief answers that question from the records before you commit.

Michelle Carroll

FOUNDER AND CHIEF CLINICAL STRATEGIST · [LEXCURASUMMIT.COM](https://lexcurasummit.com)

