

CASE STUDY

d2i Performance Insights for Emergency Medicine™

Improved Door-to-Discharge and Door-to-Admit Performance Through Data Transparency

Annual ED Visits: 310,000

EHR System: Epic

How EM Specialists uncovered operational bottlenecks, aligned stakeholders, and improved patient flow across multiple emergency departments.



CHALLENGES

- Inconsistent definitions for throughput metrics made it difficult to measure performance and identify improvement opportunities.
- Large volumes of EMR data provided limited visibility into the root causes of patient flow delays.
- Leaders needed objective data to communicate bottlenecks and performance challenges across departments and with hospital administrators.



OUTCOMES

- Improved door-to-discharge and door-to-admit performance by identifying and addressing operational bottlenecks.
- Increased physician and APP engagement through transparent performance dashboards and peer benchmarking.
- Created a shared source of truth that strengthened decision-making, cross-department collaboration, and ongoing performance improvement.

Background

[Emergency Medicine Specialists \(EM Specialists\)](#) is a democratic, physician-owned emergency medicine group based in Dayton, Ohio. Serving the greater Dayton area, the group staffs a range of emergency departments, including a major tertiary referral center, community hospitals, and small freestanding EDs in rural areas.

As a physician-led organization, EM Specialists is committed to [improving emergency care](#) while protecting physician autonomy. The company's leadership wanted a clearer picture of performance across sites: What was working, what was causing delays, and how to replicate best practices across the system.

Challenges

Like many groups, EM Specialists wrestled with the volume and complexity of data in its EMR. The system generated endless timestamps and metrics, but no one agreed on how to define them.

"Everybody had their own definition," said Dr. William Brady, president of Emergency Medicine Specialists. "Everybody used a definition that benefited them or made them look good. Having consistent definitions was critical if we wanted to smooth out our throughput."

Without a shared data language, it was difficult to pinpoint bottlenecks or discuss performance objectively. EM Specialists needed to:

- Establish consistent definitions for throughput metrics across sites.
- Identify bottlenecks created by ancillary departments like radiology or lab.
- Benchmark performance in a way that motivated improvement without finger-pointing.
- Communicate with hospital administrators using data that clearly told the operational story.

They also needed to strengthen [MIPS reporting](#), connecting regulatory measures to clinical practice so frontline physicians and APPs could see how those metrics affected real-world care.

Solution: EM Performance Analytics and Custom MIPS Reporting

EM Specialists partnered with d2i, leveraging its [Performance Insights for Emergency Medicine™](#) platform to turn raw EMR data into insights they could trust and act on.

Dr. Brady said, “d2i provided a great boilerplate, but we could tailor it to exactly what we needed. We leaned on their experience with other emergency departments, but it was customized for us.”

Here’s what changed:

- **Shared definitions and aligned metrics:** d2i helped EM Specialists establish standardized definitions for timestamps and performance metrics across all facilities. Physicians, radiology personnel, and hospitalists can now use the same data.
- **Physician and APP dashboards:** Each physician and APP can now see their own data within each site and compare it anonymously across peers, encouraging self-assessment and learning without judgment.
- **Throughput and bottleneck analysis:** With clear visualizations, EM Specialists identifies specific bottlenecks in patient flow. One major discovery involved CT delays during times when radiology was performing outpatient procedures. Using d2i data, the group collaborated with radiology to stagger schedules and smooth throughput.
- **Data-driven conversations with leadership:** d2i’s concise graphs and bell curves allow EM Specialists leaders to show hospital administrators exactly where and why bottlenecks occur.
- **Improved MIPS reporting:** d2i’s MIPS reporting solution makes it easier for EM Specialists to interpret quality reporting requirements and communicate their purpose to frontline staff. Physicians better understand why certain metrics matter and how documentation and prescribing behaviors impact performance.

Results

The partnership with d2i helped EM Specialists transform messy data into meaningful feedback. Improvements include:

- **Better throughput and efficiency:** EM Specialists has reduced door-to-discharge and door-to-admit times by identifying and addressing root causes of delays.
- **Empowered physicians:** Providers have gained transparency and ownership of their performance data, fostering accountability and healthy competition.
- **Greater insight into quality reporting:** Physicians and APPs now understand what MIPS measures really mean and why they matter.
- **Sustainable system improvement:** EM Specialists now uses d2i’s data to guide staffing, scheduling, and interdepartmental coordination, driving ongoing performance gains.

It’s Your Data. We Make It Matter.

For EM Specialists, d2i turned raw EMR data into a shared source of truth. With consistent definitions, transparent dashboards, and actionable analytics, EM Specialists has gained the clarity needed to improve flow, strengthen communication, and improve patient care across their healthcare system.

Interested in learning more about how d2i can make your data matter more for your organization?

[Start the Conversation](#)

About d2i, now a part of ESO

d2i partners with healthcare organizations to make data matter—turning complexity into trusted, meaningful insights. [Learn more at d2ihc.com.](#)

