2025 ANNUAL REPORT

Executive Summary

In 2025, the Clark County Office of the Medical Program Director helped to advance the quality, safety, and reliability of care across a system responding to over 71,000 EMS calls, up from 65,000 in 2024.

Key achievement: Targeted quality improvement drove major gains in high-risk airway management, with first-pass success in airway management without low oxygen or low blood pressure increasing from 12% to 49%.

Cardiac arrest performance remains strong
Fifty-three patients of 337 patients (16%) survived cardiac arrest in 2025, with Clark County continuing to achieve high rates of neurologically intact survival compared to national benchmarks.

Sustained high performance across multiple clinical areas
System-wide improvement extended beyond cardiac arrest and airway care, including:

- **Safe operations:** high rates of transport without lights and sirens.
- **Time-sensitive care:** solid performance in screening for heart attacks, notifying hospitals about heart attacks, and screening for stroke.
- **Clinical quality:** reliable performance on key clinical quality measures, including vital signs, pain control, and guideline-based assessments for trauma and syncope.

Care better aligned to patient needs
Expanded nurse navigation, behavioral health triage, and BLS ambulance use improved matching of patients to the right resource while preserving capacity to respond quickly to the sickest patients.

Investment in infrastructure and leadership
The OMPD expanded physician staffing, centralized operations, and strengthened integration across agencies and hospitals—supporting system-wide reliability and coordination.

Looking ahead

In 2026, priorities include enhancing safety with high-risk medications, expanding appropriate care pathways, and strengthening transparent, system-wide performance reporting.

Clark County EMS Agencies

911 EMS:

- American Medical Response
- Camas-Washougal Fire Department
- Clark-Cowlitz Fire Rescue
- Clark County Fire District #10 (Amboy)
- Clark County Fire District #13 (Yacolt)
- Clark County Fire District #3 (Brush Prairie, Battle Ground, Hockinson)
- Clark County Fire District #6 (Salmon Creek, Felida, Hazel Dell)
- East County Fire and Rescue
- North Country EMS
- Vancouver Fire Department

Non-emergency EMS:

Metro West Ambulance

DISPATCH:

Clark Regional Emergency Services Agency (CRESA)

ANNUAL REPORT

1

Mission, Vision, and Core Values

Mission and Vision

1.1

Mission:
We provide consistent high-quality emergency care to our patients where and when they need it most.

Vision:
Through continuous quality improvement in providing evidence-based and compassionate care, we are committed to setting a regional standard for excellent emergency medical services.

Core Values 1.2

PROVIDING HIGH-QUALITY CARE – CENTRAL OBJECTIVE

We prioritize care of patients with time-sensitive life-threatening conditions.
We believe the foundation for high-quality care is high-quality basic life support.
We evaluate outcomes that matter to the patient.
We provide care that is evidence-based, practical, and cost-effective.
We provide empathetic and equitable care for our entire community.

DELIVERING ONGOING EDUCATION

We continuously look for opportunities to improve.
We proactively identify needs for education.
We strive to teach in an engaging and useful way for adult learners and evaluate the education's effectiveness.

SUPPORTING CREW HEALTH AND SAFETY

We look for every opportunity to improve crew safety.
We support the professional development of the EMS workforce.
We promote a just culture as an integral part of quality improvement.
We recognize the physical and mental toll of EMS work and support the workforce.

PROMOTING EFFECTIVE TEAMWORK

We promote a unified system from dispatch to disposition.
In our EMS role, we have different uniforms but a common purpose.
We use best practices for crew resource management.
We communicate effectively with our patients and collaborators.
We recognize that for most of the agencies in the county, EMS is only one of the responsibilities they have.

Why Quality as an Organizational Strategy? 1.3

Continuous learning and improvement is how we execute our strategy. By repeatedly using the Model for Improvement, we get incrementally better at carrying out our mission week over week.

Managing quality is a cycle that begins with planning, and then leads into improvement, control, and then assurance.

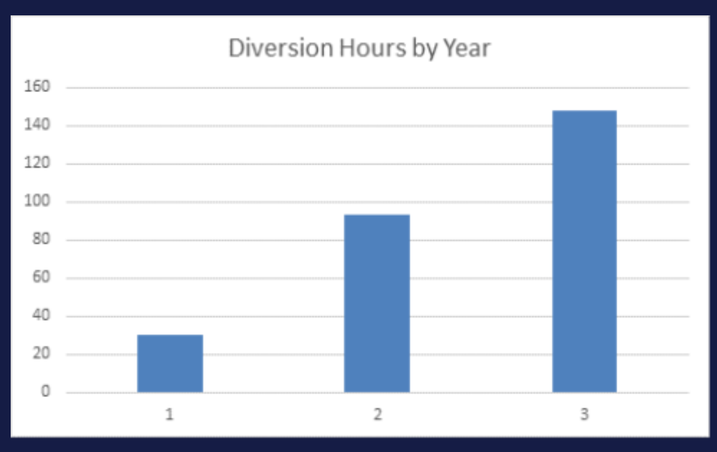
By placing our focus on quality improvement, we shift as much as possible in the direction of the good.

If we were to leave our focus solely on quality assurance, we would spend most of our time focusing on rare negative outcomes, rather than moving care for all patients in towards better quality. (That said, we want to use any unexpected negative outcome as an opportunity to learn and to improve care for all) .

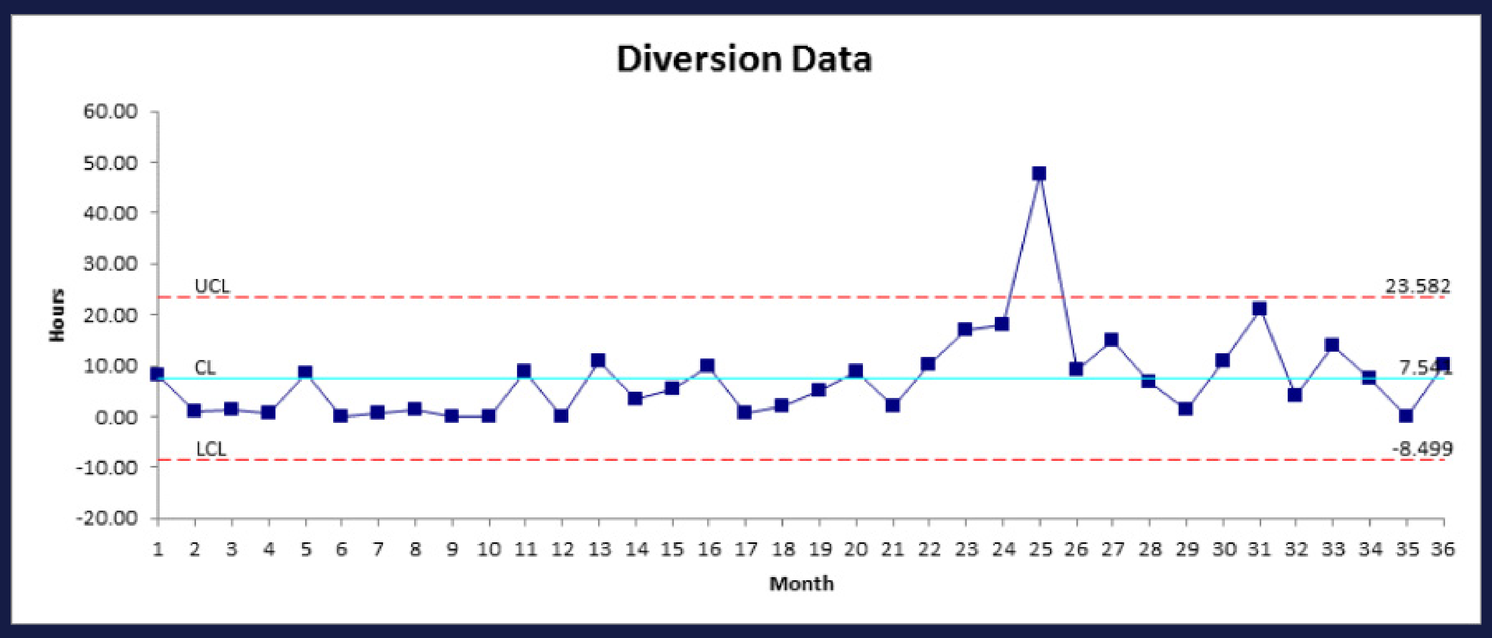
Why Use Control Charts? 1.4

Control charts allow data to be presented in their naturally occurring time order so random variation can be observed, non-random variation (special cause) can be identified, and we can understand the typical state of the process.

If you were to present a 3-year series of diversion data in a bar graph format, year by year, it would look like this...



It’s natural to look at that chart, see an increasing trend in diversion, and assume that Year 4 will be even higher. What may follow is policy changes, new rules, increased scrutiny, and pressure on a facility. This could involve a lot of effort.

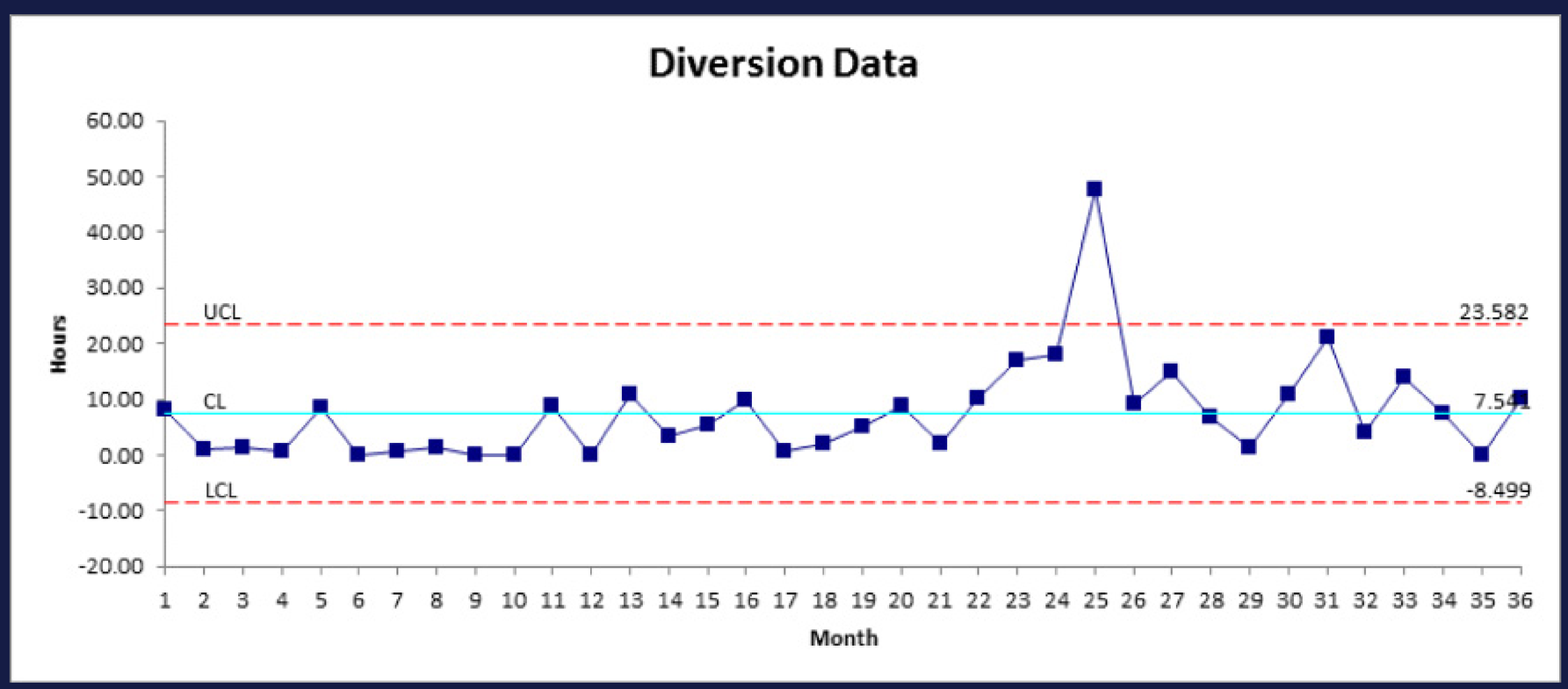


However, when the data is placed in a control chart. It turns out the random variation in the system was steady over the previous three years, and was low and within tolerable limits. There was one month at the start of Year 3 that had non-random variation. There is no trend, and no need to assume we are on a trajectory for an unacceptable Year 4. You could decide there is too much variation and want to make the process more stable and consistent, or you could decide the baseline is too high and work to reduce the overall level. But those are different conversations than the one about a “4-year trend” that doesn’t exist in the data.

Elements of a Control Chart

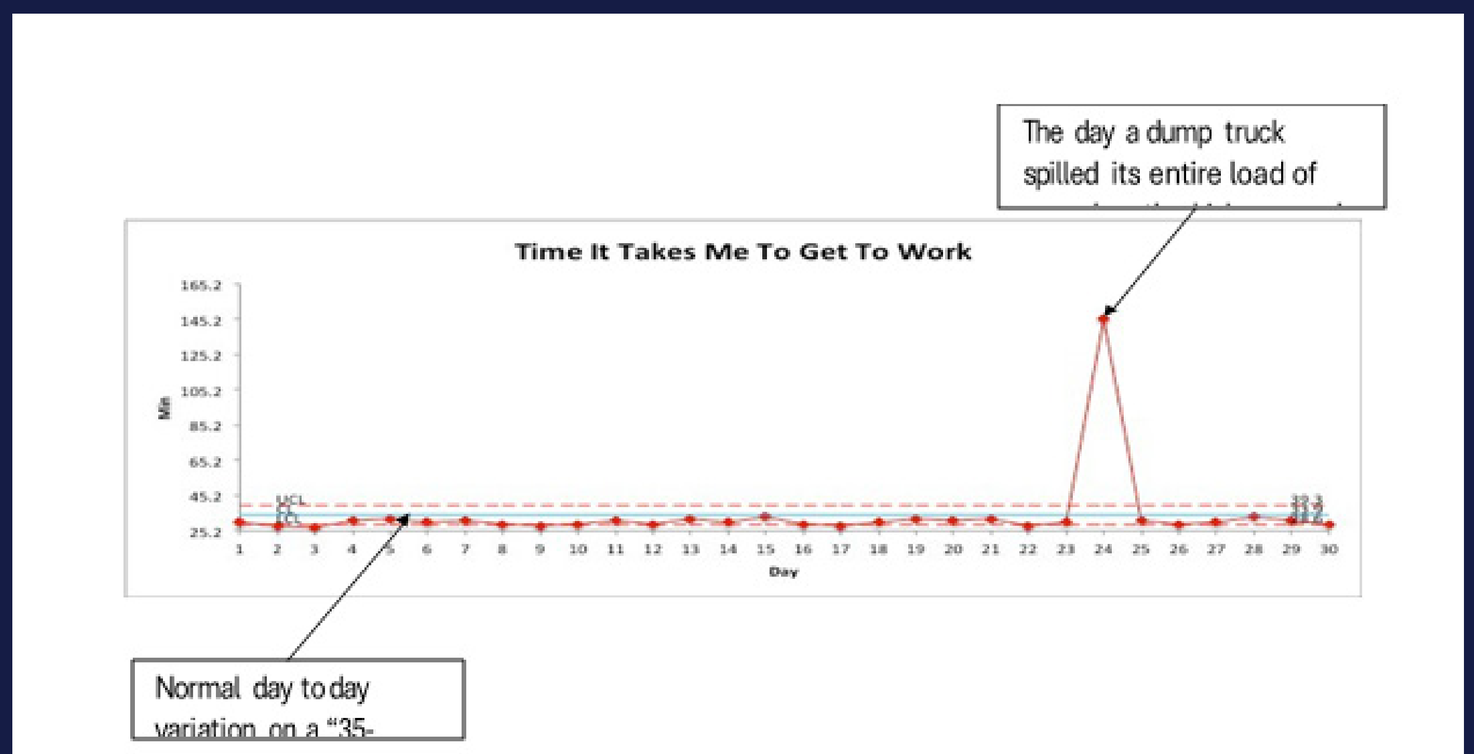
1.5

X-axis: Time—daily, weekly, sometimes monthly.
Y-axis: Value being measured; can be a count (like minutes or hours for diversion data) or a percentage.
Median: Light blue line showing the center point of the data. Median is used over average because it is less sensitive to a single large data point.



UCL/LCL: The Upper and Lower Control Limits. Any number contained within the dashed UCL and LCL lines is considered normal variation in the process.

Example from outside of EMS:



2

System Performance

System Performance

2.1

What we do

The big picture: Clark County has an active and complex EMS system, serving over 500,000 residents across 656 square miles.

The numbers.

In 2025, Clark County EMS responded to **71,073 dispatched calls,** resulting in **67,438 patient contacts** and **55,211 patients transported** to definitive care.

Behind every one of those calls is a patient in need. Behind every response is a system of clinical protocols, trained providers, and physician oversight ensuring the right care is delivered at the right time.

The highest-stakes moments.

Some calls demand everything the system has:

- 337 cardiac arrests with active resuscitation — patients in full cardiac arrest, whose survival depends on timely high-quality care
- 164 STEMIs — heart attacks requiring rapid identification, notification, and transport to definitive care
- 1,921 stroke alerts — time-sensitive emergencies where quick identification and triage can save lives and abilities
- 468 trauma alerts — the most severely injured patients, requiring coordinated prehospital and hospital response.

Together, these represent over **3,000 of the highest-acuity calls in prehospital medicine** — each one governed by protocols developed, approved, and continuously refined by the Office of the Medical Program Director.

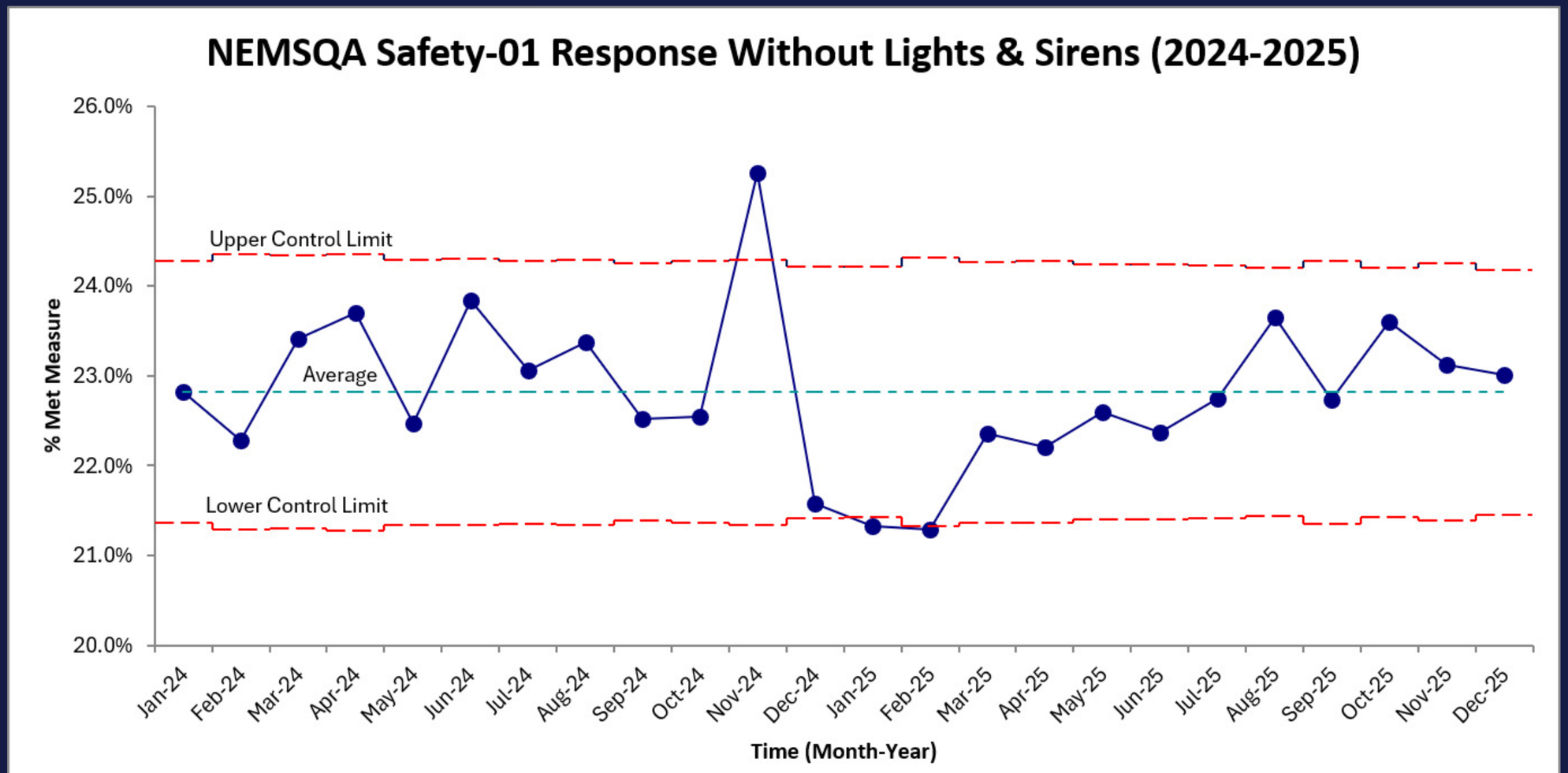
Why This Matters: Behind each of these numbers is a person who called for help. The Office of the Medical Program Director is accountable for ensuring that every one of them receives high-quality prehospital care — every time.

2.2

Response and Transport

Responding Safely

2.2



Why This Matters

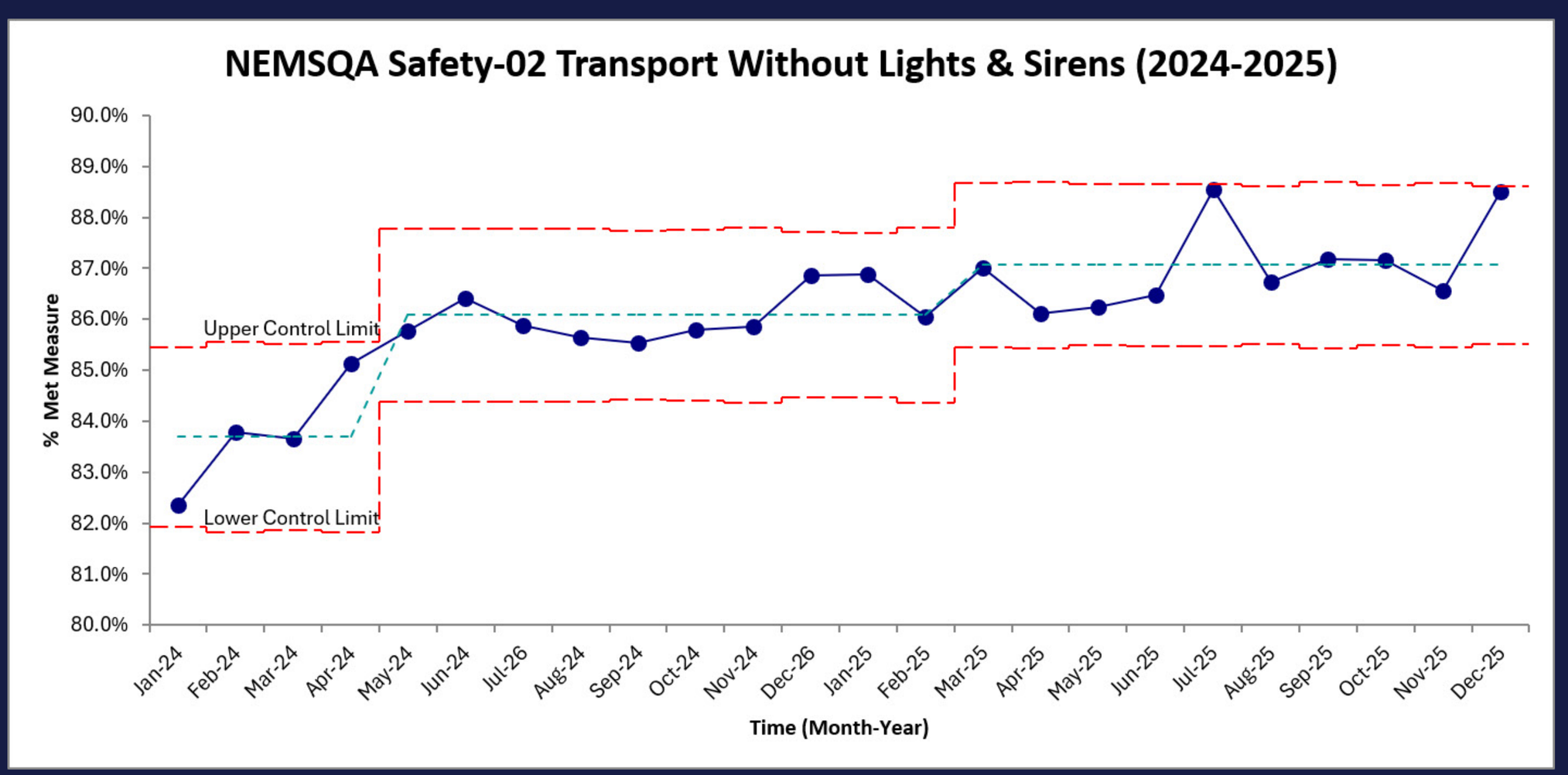
A small percentage of 911 calls require time-sensitive interventions. Responding with lights and sirens does have risk. A high-performing EMS system balances the benefit to the patient against the risks of responding with lights and sirens.

What We're Doing

In 2025, we shifted response plans to safely increase the number of responses without lights and sirens

Where Does This Measure Come From? The National EMS Quality Alliance
Where Does the National Data Come From? NEMSIS Public Performance Dashboard.

Transporting Safely 2.2



Why This Matters

A modern ambulance can provide the majority of interventions that emergency patients need in the first 30 minutes of their care. Transporting with lights and sirens more than doubles the risk of a crash. A high-performing EMS system only uses lights and sirens when the small amount of time saved justifies the risk.

What We're Doing

This measure was our quality focus in 2025. We made sustained improvement, for which the EMS system was recognized with the Quality & Safety Award from the National Association of EMS Physicians.

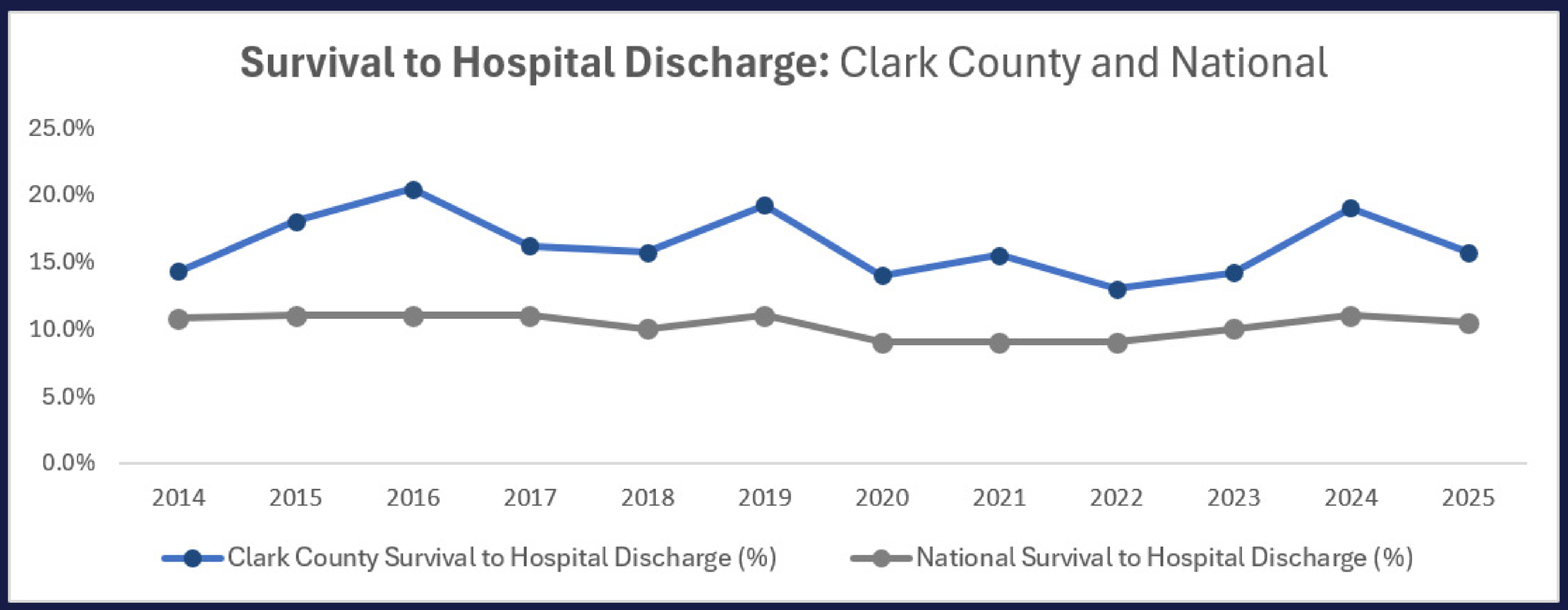
Where Does This Measure Come From? The National EMS Quality Alliance Where Does the National Data Come From? NEMSIS Public Performance Dashboard.

2.3

Cardiac Emergencies

Treating Cardiac Arrest

2.3



We continue to perform above state and national levels in each measure of cardiac arrest care. This reflects a continued commitment to the basics of resuscitation.

Why This Matters

When someone's heart stops outside of the hospital, EMS is a crucial link in the chain of survival. EMS saves lives by gaining return of spontaneous circulation (getting a pulse back) and oxygenating the brain and heart; if we do this well, patients survive to leave the hospital. We are consistently performing above the national average in getting pulses back and getting patients out of the hospital alive.

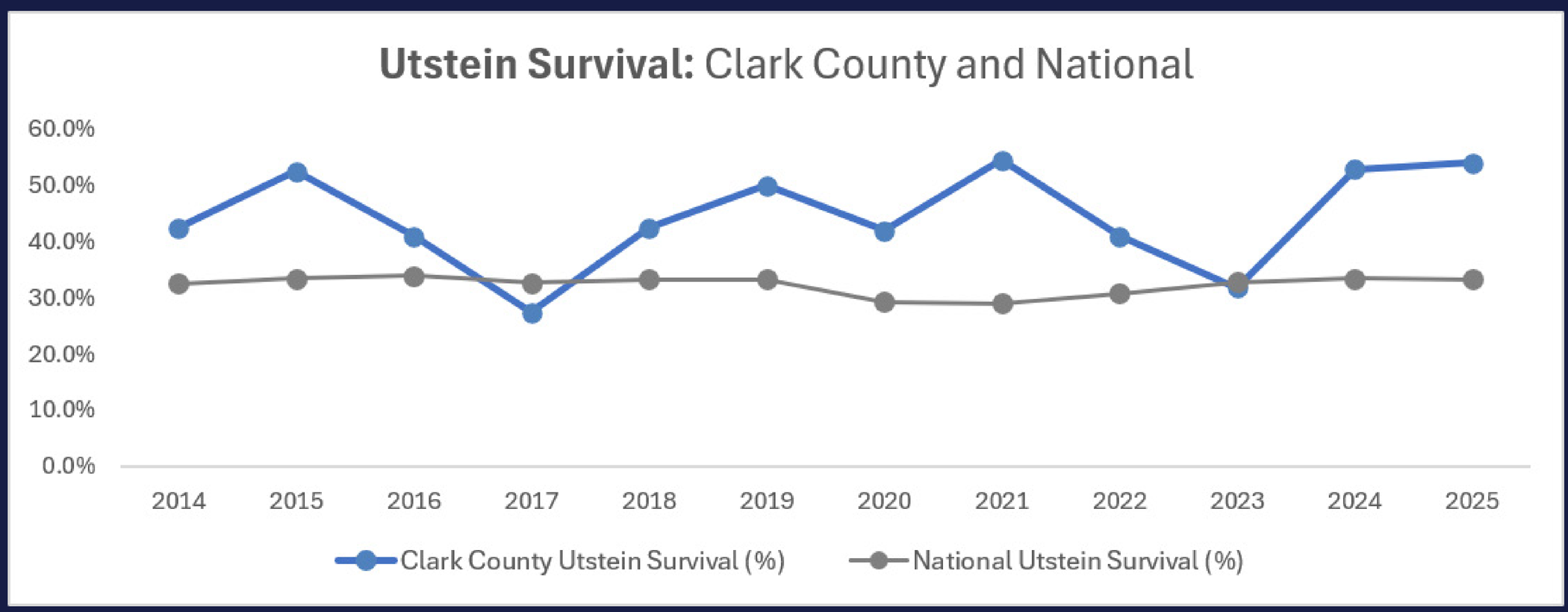
What We're Doing

We continue our emphasis on high-quality CPR and early administration of medications

Where Does This Measure Come From? Cardiac Arrest Registry to Enhance Survival

Saving Shockable Lives

2.3



Why This Matters

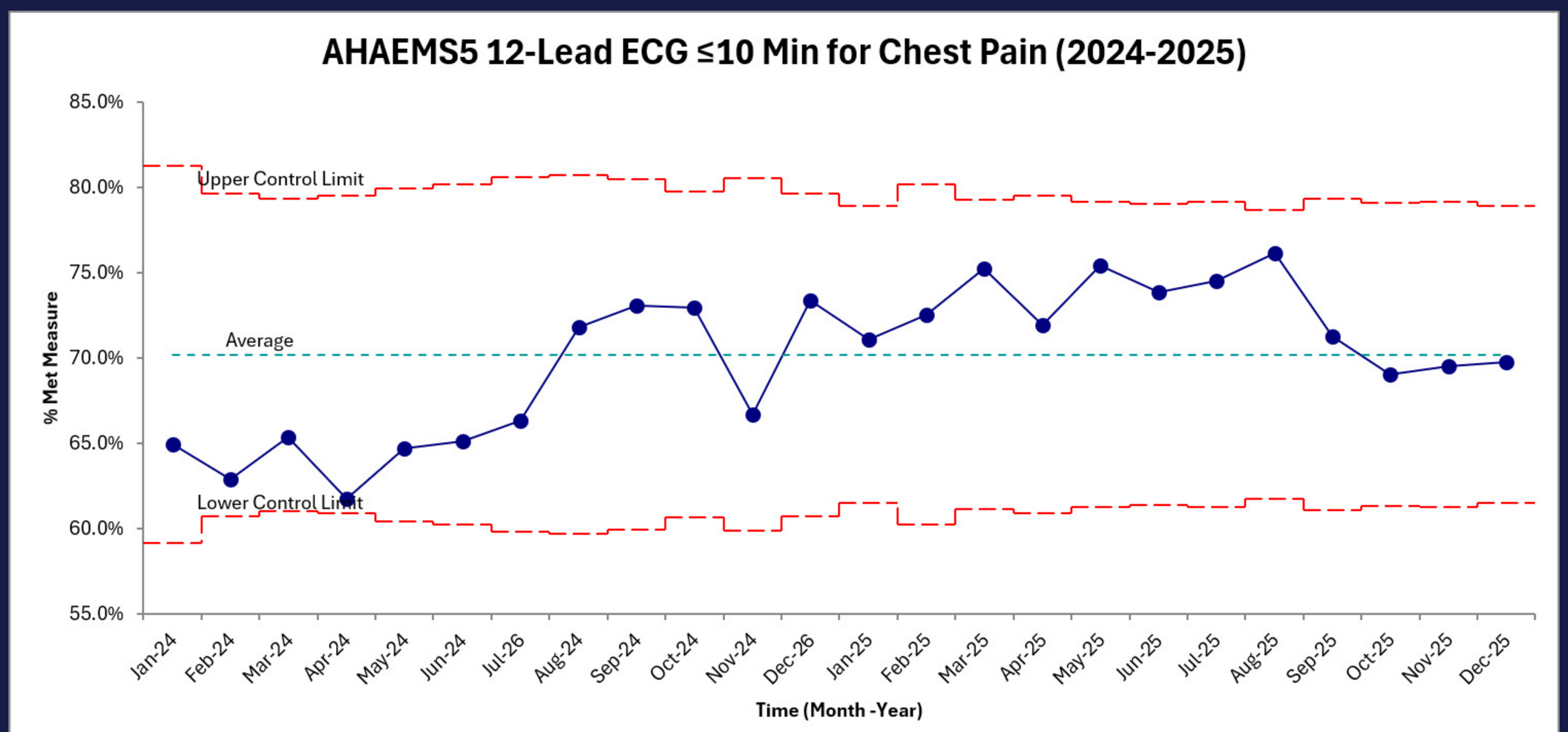
Amongst cardiac arrests, the patients with the greatest chance for survival are those that can be defibrillated. By emphasizing bystander CPR and defibrillation, early EMS defibrillation, and early administration of anti-arrythmic drugs, we save lives.

What We're Doing

We continue our focus on high-quality manual CPR and minimizing pauses around shocks.

Where Does This Measure Come From? Cardiac Arrest Registry to Enhance Survival

Finding Heart Attacks Early 2.3



Why This Matters

EMS screens for heart attacks by performing and interpreting 12-lead ECGs. By performing 12-lead ECG within 10 minutes of patient contact for patients over 18, we can identify and treat heart attack early.

What We're Doing

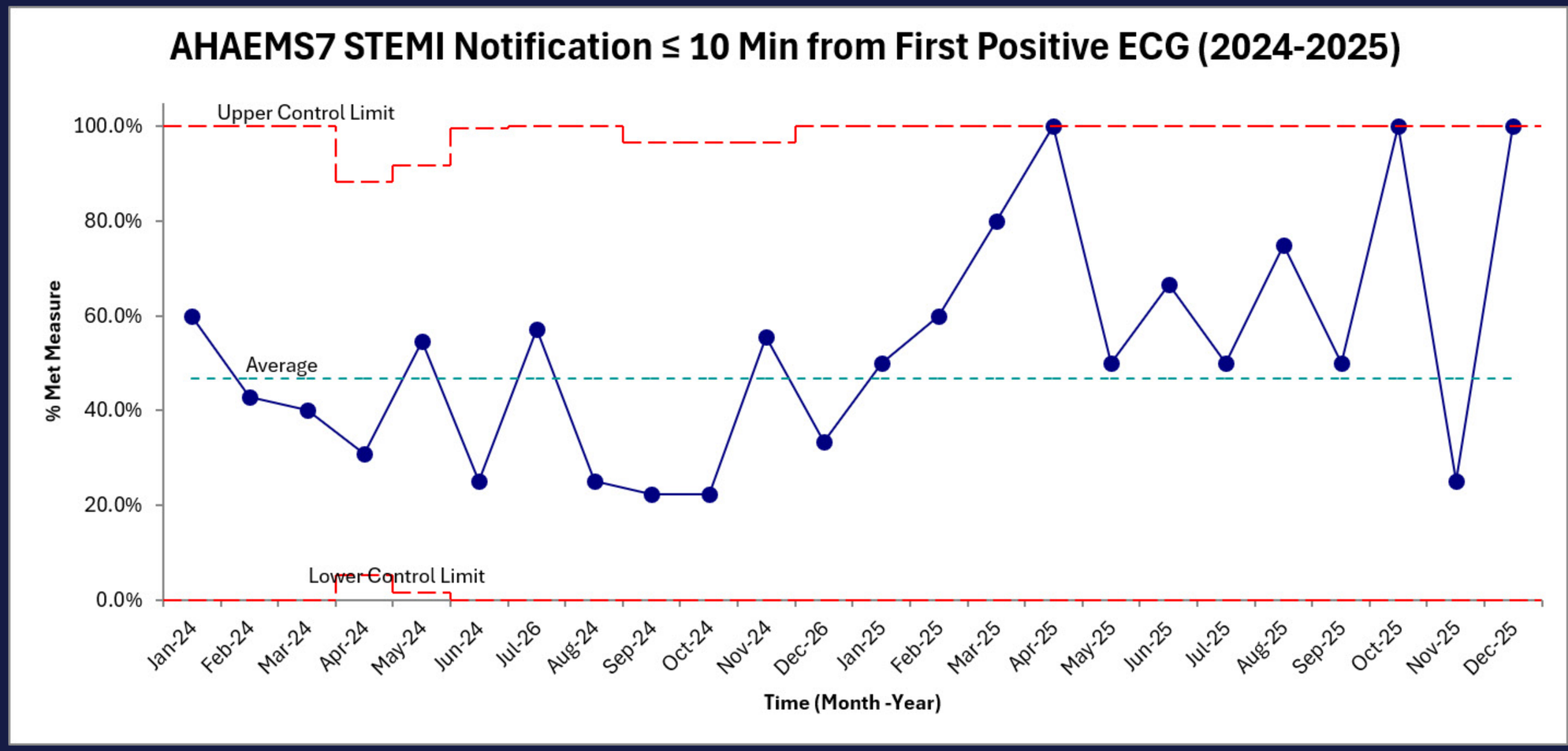
We are recognizing crews who lead the way in screening for heart attacks and have improved performance throughout the year. We are committed to continuous improvement to meet the AHA target.

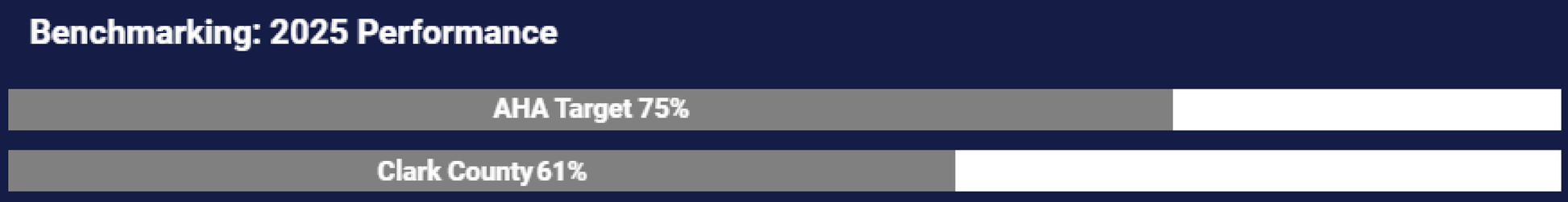
Where Does This Measure Come From?

American Heart Association, Mission: Lifeline EMS

(AHAEMS5 12-lead ECG Performed ≤10 Minutes for Suspected Heart Attack)

Rapid Hospital 2.3 Alerting





Why This Matters

When paramedics identify a heart attack, they activate the hospital team that treats heart attacks. This early notification decreases the time to get blood flowing to the heart again, saving heart muscle.

What We're Doing

We are working to identify barriers to performing and documenting hospital notification within 10 minutes of the first positive ECG. This is one of the areas in which we do not yet meet the AHA target.

Where Does This Measure Come From?

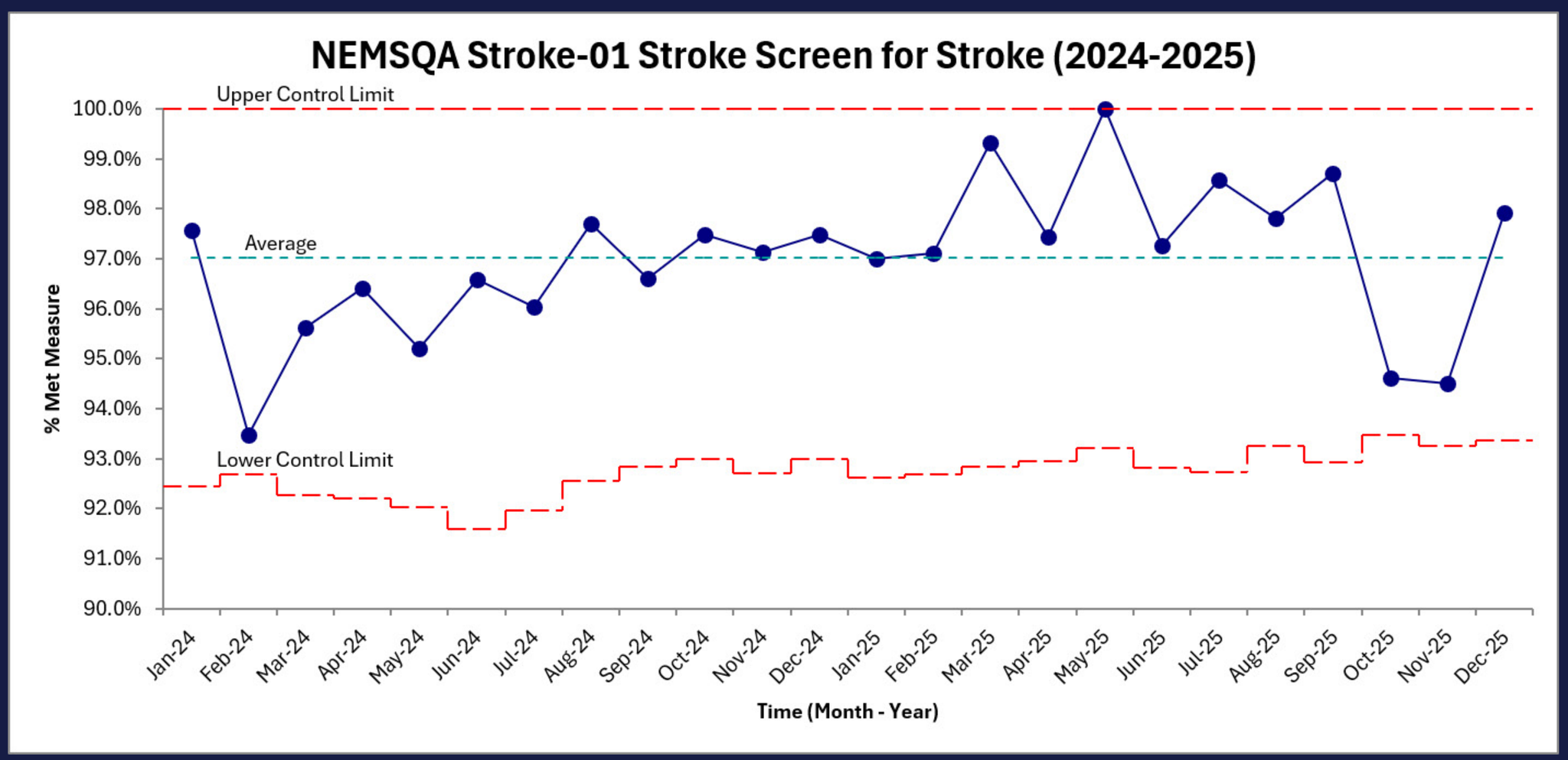
American Heart Association, Mission: Lifeline EMS

(AHAEMS7 Prearrival notification ≤10 Minutes for STEMI positive ECG)

2.4

Neurologic Emergencies

Finding Strokes 2.4



Why This Matters

EMS screens for stroke. By identifying stroke early, we can identify patients that can benefit from clot-busting drugs and/or advanced procedures to restore blood flow. This measures the percentage of patients > 18 who are transported with a suspected stroke who receive a stroke screen.

What We're Doing

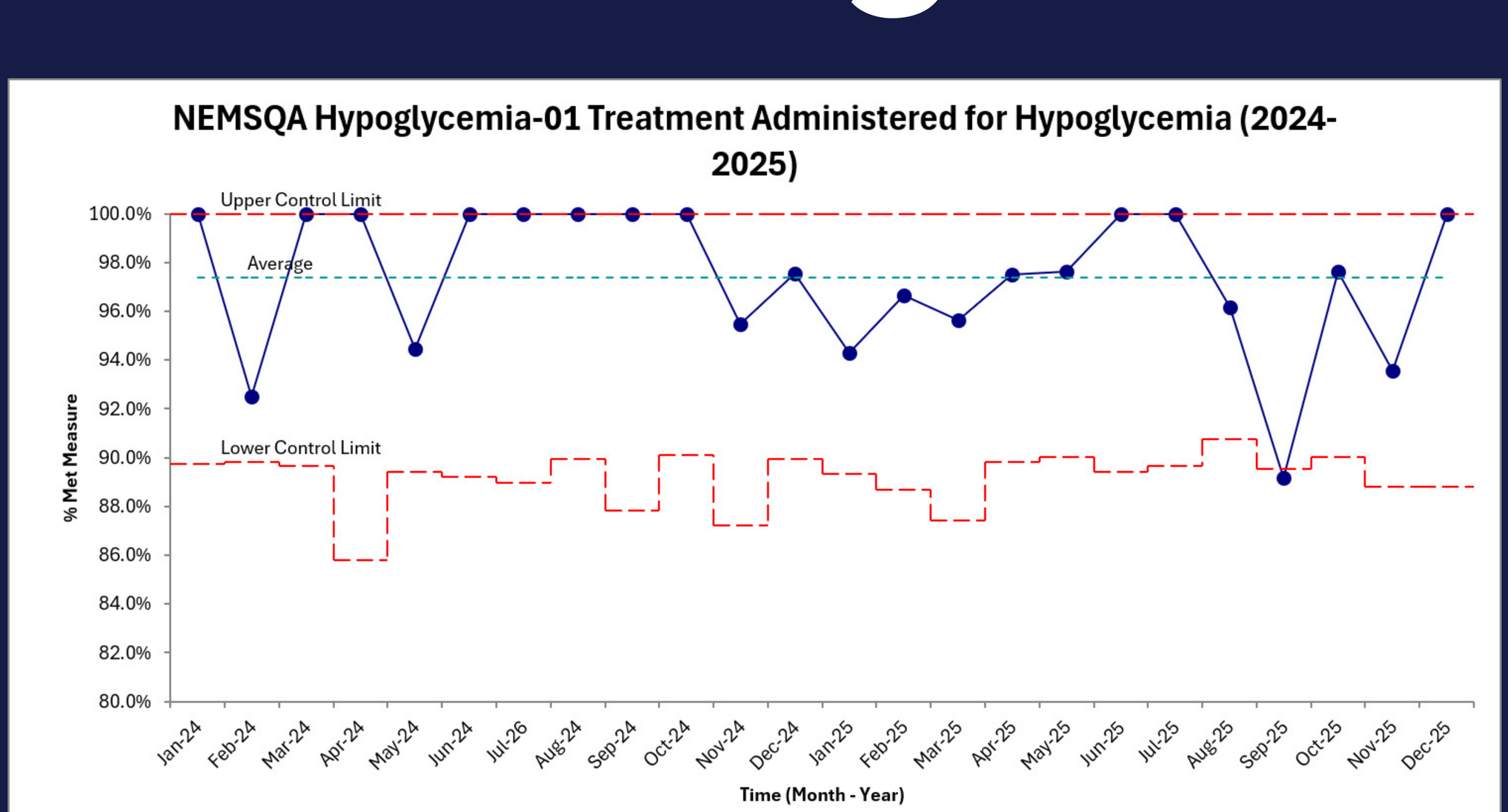
We continually monitor performance on this metric.

Where Does This Measure Come From?

American Heart Association, Mission: Lifeline EMS
(AHAEMS4 Stroke Screen Performed and Documented)
National performance from NEMSIS Public Performance Dashboard

Treating Low Blood Sugar

2.4



Why This Matters

The brain can only survive for minutes when it is starved of blood sugar. By treating low blood sugar, paramedics prevent death and disability.

What We're Doing

We continually monitor performance on this metric.

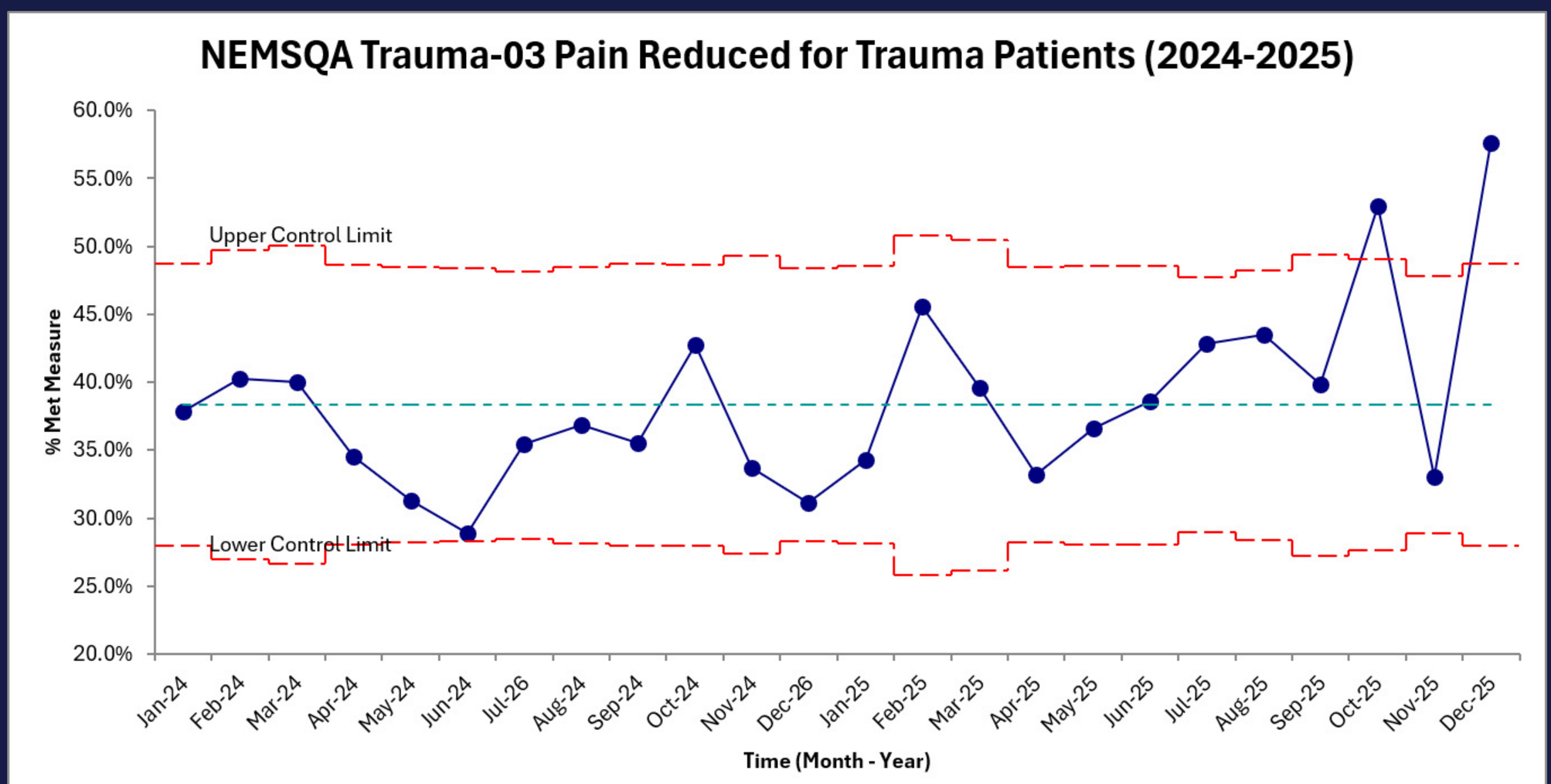
Where Does This Measure Come From?

National EMS Quality Alliance (Hypoglycemia-01)
National performance from NEMSIS Public Performance Dashboard

2.5

Treating Trauma

Reducing Pain 2.5



Why This Matters

Few things matter more to an injured patient than reducing their pain during the time they are with EMS.

What We're Doing

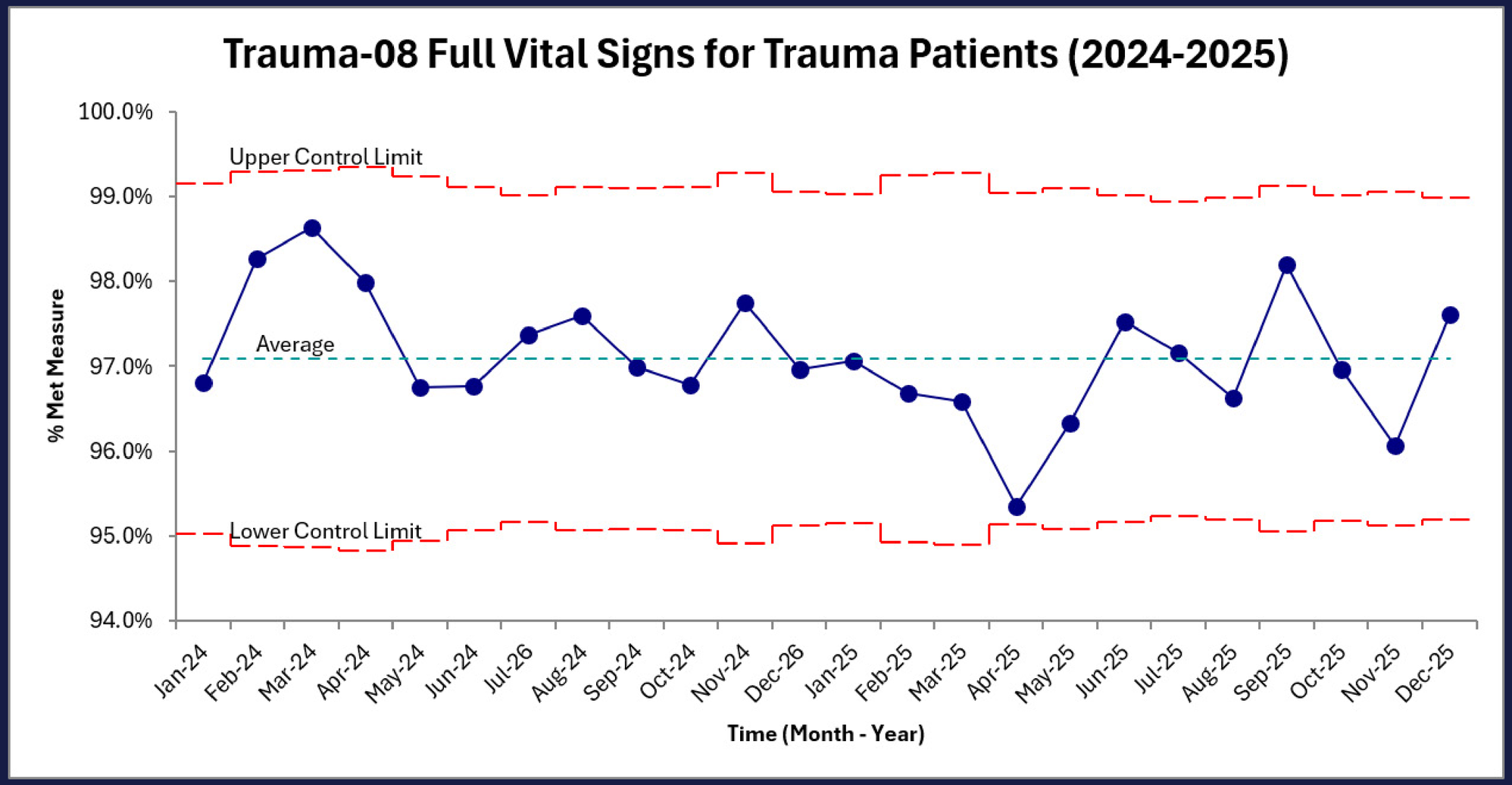
We are adding new non-narcotic methods to treat pain, like IV acetaminophen.

Where Does This Measure Come From?

National EMS Quality Alliance (Trauma-03)

National performance from NEMSIS Public Performance Dashboard

Full Vital Signs in 2.5 Injured Patients



Why This Matters
The foundation of trauma assessment is vital signs over time. By picking up patterns, we can recognize patients who are getting worse and communicate with the hospitals.

What We're Doing
We continually monitor performance on this metric.

Where Does This Measure Come From?
National EMS Quality Alliance (Trauma-08)
National performance from NEMSIS Public Performance Dashboard

Matching Patients to the Right Resource 2.6

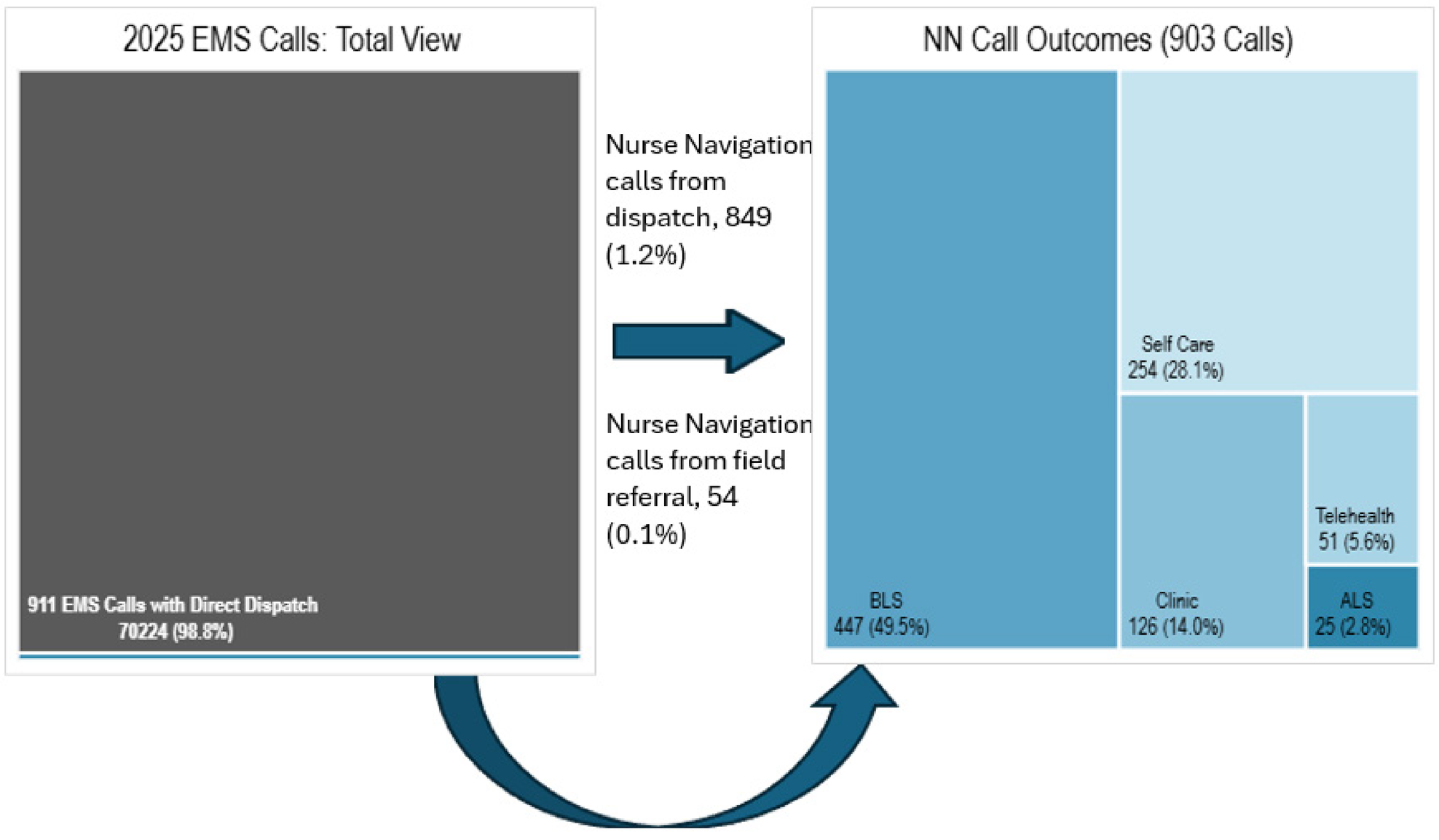
Why This Matters: Some 911 calls require all the resources of the EMS system, as fast as possible; some do not. By carefully matching patients with the resource they need, we can provide high quality care to patients at lower cost and preserve emergency resources for the patients that need it most urgently.

Telephone Response
We added Crisis Connections as an option for callers with concerns about mental health and expanded the use of nurse navigation. We have partnered with the 988 system to receive calls that require 911 response. We have also added an in-person response to 988 calls that require it.

BLS Response to 911 Calls
For many cases, EMTs can respond and preserve paramedics for the calls that require their advanced training. Nationally, approximately 40% of 911 calls are handled by a BLS ambulance. We have increased our use of BLS ambulances, while monitoring how many of those calls ultimately require paramedics.

Nurse Navigation

2.6



Why This Matters

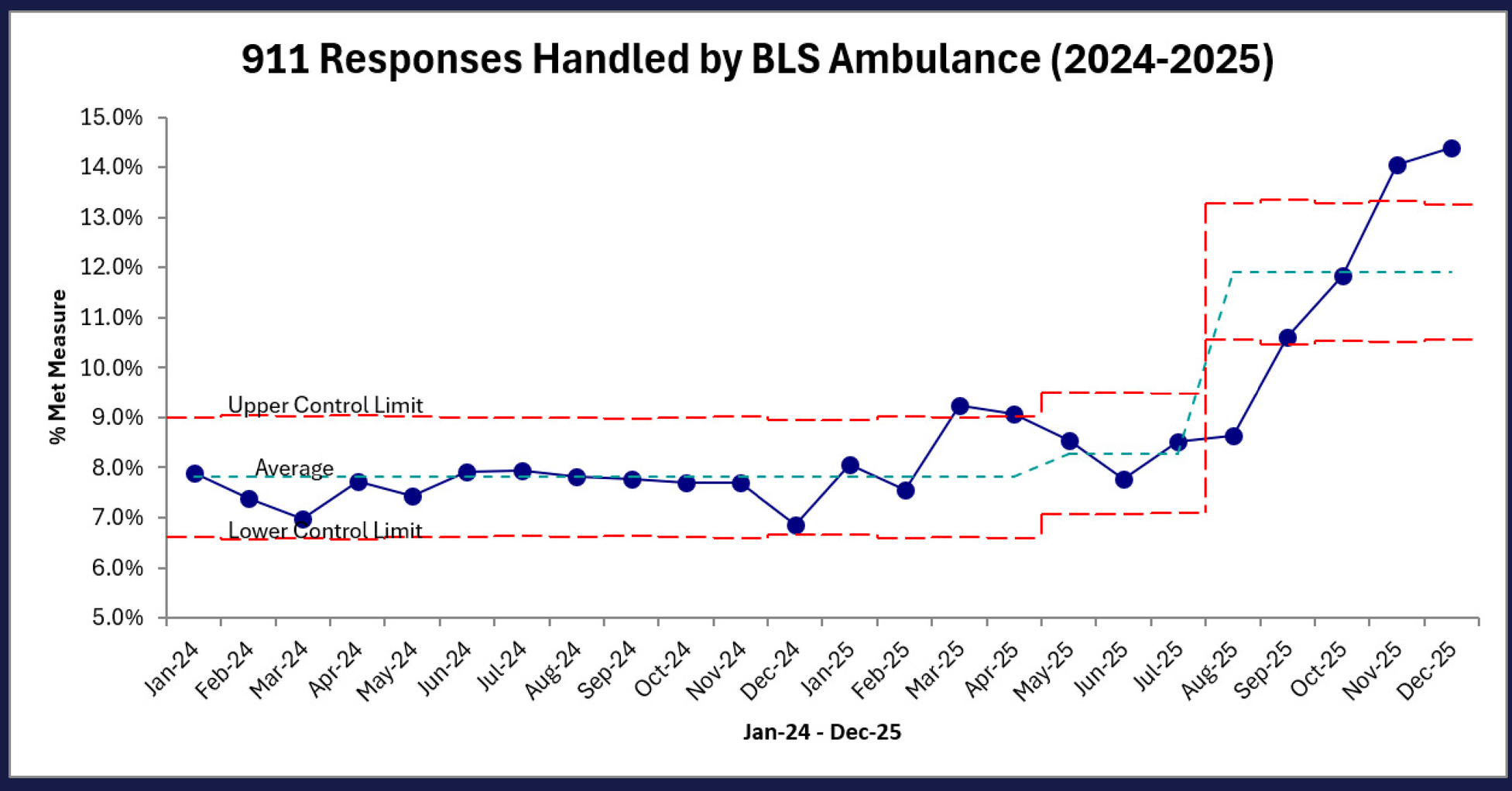
In our health care system, it can be difficult to know where to turn. The nurse navigation program directs willing patients with low-acuity complaints to the most efficient way to get the care they need, while preserving resources to handle time-sensitive emergencies.

What We're Doing

We began letting EMTs and paramedics in the field refer patients to nurse navigation, and added additional call types as candidates for nurse navigation.

Basic Life Support 911

2.6



Why This Matters

Paramedics are the most highly trained prehospital responders. Many 911 calls that do require transport can be handled by EMTs, freeing paramedics to handle more critical calls, and providing service more efficiently. Nationally, 40% of EMS calls are handled by a BLS ambulance.

What We're Doing

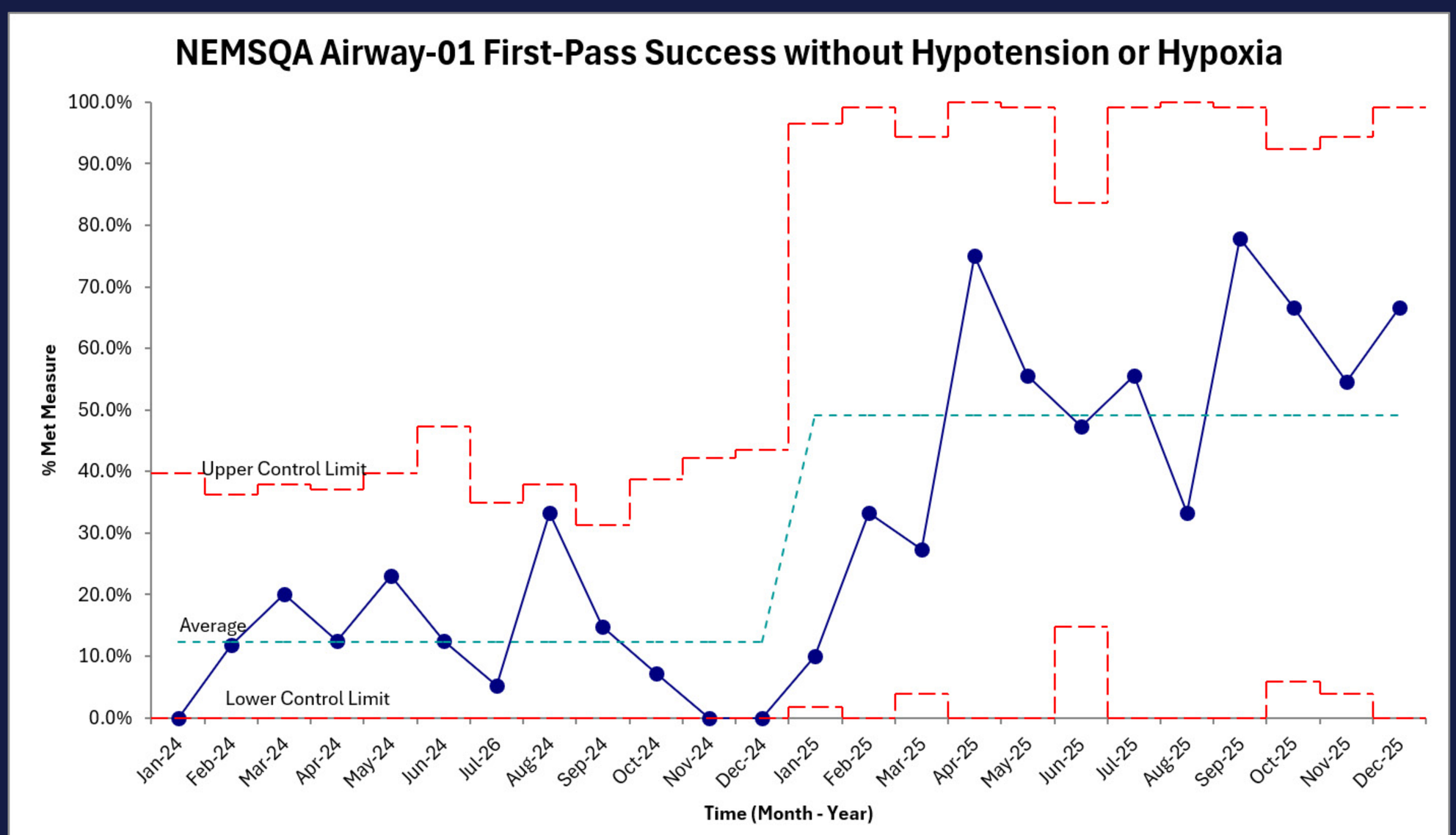
We continued to monitor for safety. Of the 5662 calls sent to BLS, 254 (4%) involved calling a paramedic to assist. Based on the safety of the program, we expanded to include additional call types.

3

Quality Improvement Initiatives

First-Pass Success without Hypotension or Hypoxia

3.1



We made life-saving airway care safer for patients.

Why This Matters: When someone can't breathe, EMS crews may need to place a breathing tube to save their life. This is a lifesaving intervention, but it carries real risks. If oxygen levels drop or blood pressure falls during the procedure, the risk of dying increases.

Across the United States, this procedure does not consistently meet the most rigorous safety standards. Early data for Clark County showed the same risk locally. Improving airway safety means fewer preventable complications during emergency care—and better outcomes for our patients during their most vulnerable moments.

First-Pass Success without Hypotension or Hypoxia 3.1

This work focuses on **making the safest approach the easiest approach,** so patients receive reliable, high-quality care.

Go Deeper:

What we did

- Participated in a national Airway Collaborative; our process was used as a case study in the final report.
- Standardized how EMS teams prepare patients before placing a breathing tube, prioritizing oxygen levels and blood pressure.
- Simplified airway checklists and protocols to reduce stress and cognitive overload during critical calls.

How we improved

- Used a quality improvement approach to test changes, measure results, and adapt quickly.
- Tracked performance using national safety measures.

What Changed

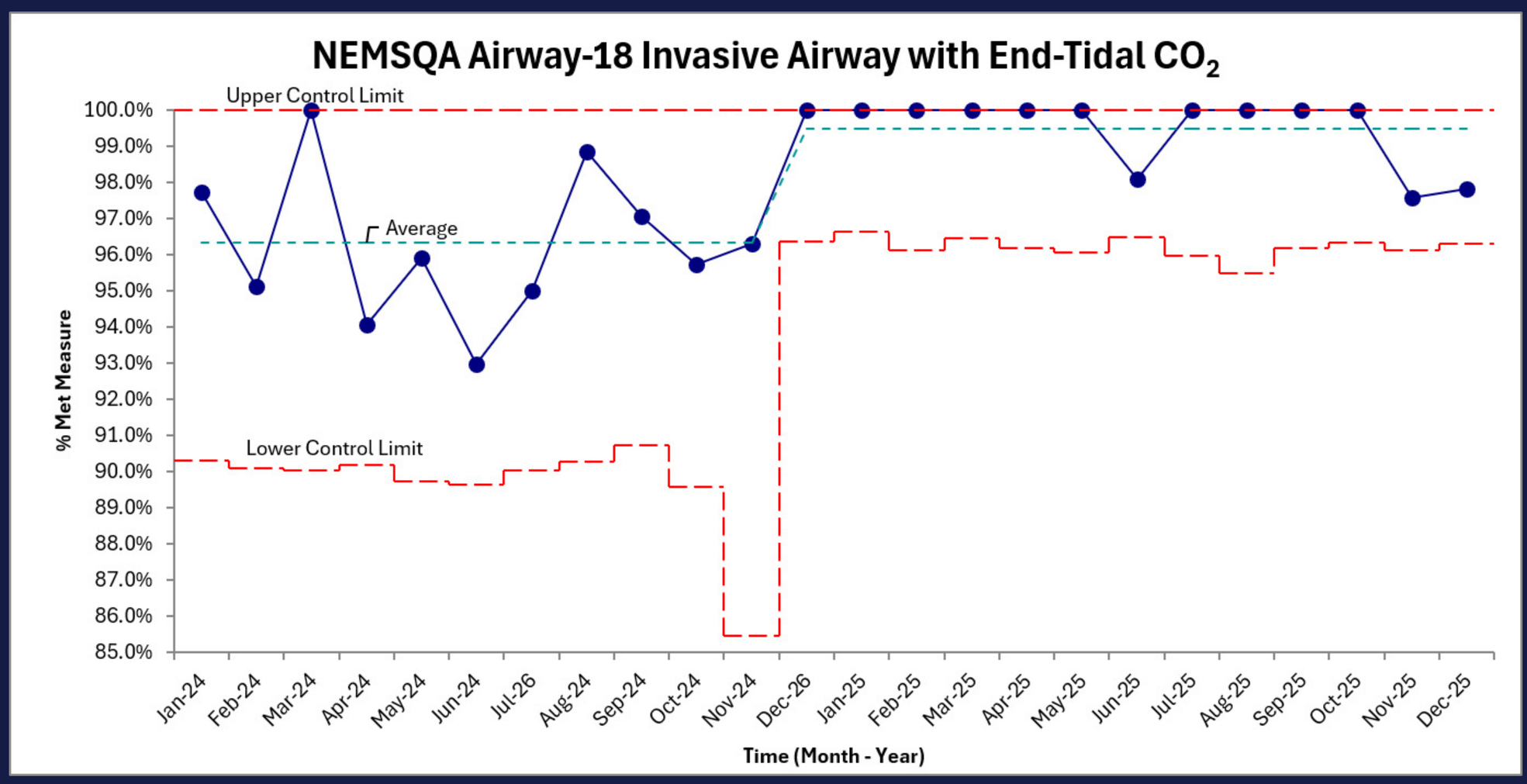
- The percentage of airway procedures meeting the national safety standard increased substantially—from 12% to 49%—without added cost.

What's Next

- Continue refining skills and monitoring to make safe airway care even more reliable.

Confirmation of Invasive Airway with End-Tidal CO_2

3.1



We made life-saving airway confirmation more reliable.
We improved patient safety by ensuring EMS crews reliably confirm breathing tube placement using the national gold standard.

Why This Matters: When a breathing tube is placed, it must be in the right position. If it isn't, oxygen can't get to the lungs, and carbon dioxide can't get out.

The safest and most reliable way to confirm correct tube placement is by measuring carbon dioxide in exhaled air ($EtCO_2$). This is the national standard and a critical patient safety check.

By focusing on this step, we ensured that life-saving airways were not only placed correctly—but verified.

Note: National performance on this measure is not reported.

Go Deeper:
What we did
- Reinforced $EtCO_2$ confirmation as a required step after every invasive airway.
- Simplified documentation and checklists so confirmation was easy to perform and record.
- Used the $EtCO_2$ value in the chart to verify placement, rather than checkboxes.

How we improved
- Used a quality-improvement framework to identify missed confirmations and address barriers.
- Monitored performance using a validated national safety measure.

What Changed
- Airway confirmation performance consistently reached high reliability, exceeding national benchmarks.

What's next
- Continue monitoring and rapid follow-up to ensure no missed confirmations.

3.2

OMPD Initiatives

Strengthening the Office of the Medical Program Director

3.2

The big picture: The Office of the Medical Program Director invested in people and presence in 2025.

Staffing:

- **Marc Muhr** retired after 31 years of service as Program Manager. His career spanned the evolution of modern EMS in Clark County, and his institutional knowledge shaped the system we operate today.
- Marc was succeeded by **Chris Hamper**, **BS, NRP**, a Clark County native with deep roots in local EMS and experience leading EMS education at Oregon Health and Sciences University / Oregon Tech (OIT).
- **Tim Fields, MD** joined as Assistant Medical Program Director. Fellowship-trained in EMS, he brings a background as an EMT, with a personal interest in search and rescue. He also practices emergency medicine at Legacy Salmon Creek Medical Center.
- **Jennifer Gibson Chambers, DO** joined as Assistant Medical Program Director. Fellowship-trained in EMS, she brings broad experience in EMS medical direction and response and continues to practice emergency medicine at PeaceHealth Southwest Medical Center.

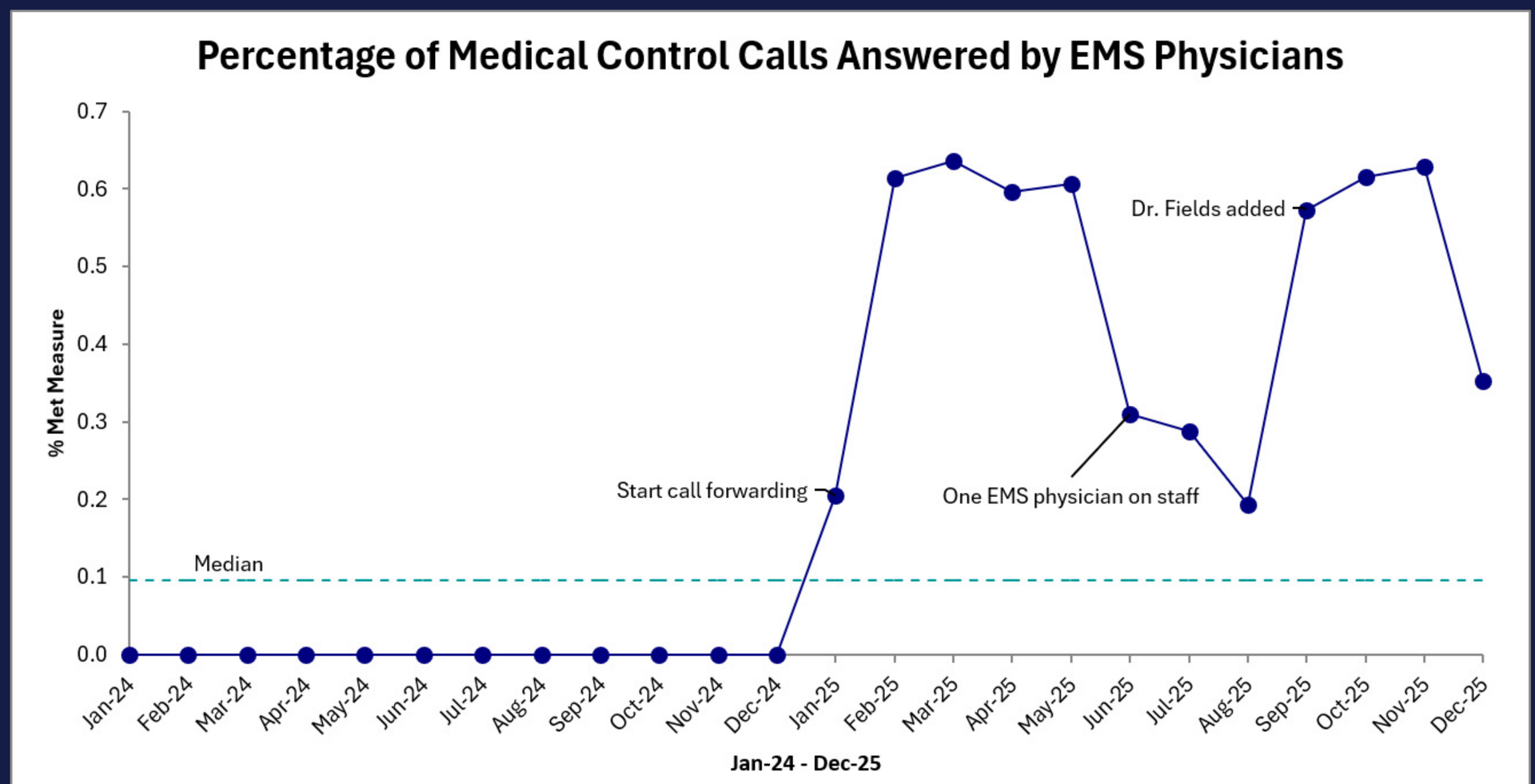
Physical Presence:

- The Office of the Medical Program Director established a dedicated physical office, leasing space from Fire District 6 at Station 61 — providing a centrally-located home base for the team and improving accessibility for agency partners and crew members across the county.

Why This Matters: These changes reflect a maturing office — with experienced local leadership, fellowship-trained physician oversight, and a physical presence positioned to serve the system more effectively. Having assistant medical program directors at each hospital strengthens hospital relationships, helps to cover online medical control calls, and develops future resiliency for the Office of the Medical Program Director.

Medical Control Calls Answered by EMS Physicians

3.2



We increased reliability for crews calling online medical control
We improved patient safety and crew support by adding board-certified EMS physicians to answer online medical control calls. Before January 2025, all calls were handled by general emergency physicians on duty in the emergency department.

Why This Matters: When an EMS crew calls for online medical control they are seeking advice and support for a unique or challenging case. EMS physicians are most familiar with EMS protocols, scope of practice, and operational realities.

By increasing staffing of EMS physicians, we were able to stabilize and increase the percentage of calls answered by board-certified EMS physicians.

What's Next:
Dr. Gibson Chambers joined the team in January 2026, allowing us to further increase the percentage of calls answered by board-certified EMS physicians.

Financial Performance 3.2

The big picture: The Office of the Medical Program Director is sharing its financial structure publicly — a reflection of our commitment to transparency and accountability.

How the Office is funded.
Clark EMS Physicians, PLLC is a physician-owned professional limited liability company providing medical direction Clark County EMS agencies. The Office is funded entirely through contracted service agreements.

In 2025, ten agencies contributed a combined **$422,320** in contracted revenue. Costs are divided based on transport status, number of paramedics, and number of calls.

Where the money goes.
- Every dollar is reinvested in the system:
- **Personnel:** the Program Manager and Data & Operations Specialist account for **41.6% of revenue.**
- **Professional Contractors:** Assistant MPDs and pharmacist account for **11.5%,** supporting clinical oversight, protocol development, and online medical control.
- **Technology & Data Infrastructure:** 17% of revenue supports data systems powering quality improvement and multi-agency reporting.

Structure of MPD physician compensation.
MPD physician compensation — the net operating balance after all operational costs are met — totaled **$96,796** in 2025. As a physician-owned PLLC, physician incentives are directly aligned with office efficiency; every dollar spent on operations is a dollar that does not reach the physician.

Median compensation for emergency physicians in the US in 2025 was $330,000. Most EMS physicians practice emergency medicine as their primary specialty and so have a financial disincentive to practice EMS if the compensation is not competitive with emergency medicine compensation.

Why This Matters.
The Medical Program Director holds statutory authority under Washington State law for clinical oversight, protocol governance, provider certification, and quality management across all EMS agencies in Clark County — a system responding to **71,073 dispatched calls annually**. A high-performing EMS system should be able to show its work — financially as well as clinically.

Financial Performance

3.2

Clark EMS Physicians, PLLC — 2025 Financial Summary

Office of the Medical Program Director

AGENCY CONTRIBUTIONS (INCOME)

Agency	Amount	% of Total
AMR (City of Vancouver & EMS District 2)	$223,074	52.8%
Vancouver Fire Department	$84,318	20.0%
Camas/Washougal Fire Department	$25,852	6.1%
Clark County Fire District 6	$19,136	4.5%
Clark County Fire District 3	$18,842	4.5%
Clark-Cowlitz Fire and Rescue	$12,112	2.9%
Metro West Ambulance	$8,620	2.0%
North Country EMS/Fire District 13	$8,145	1.9%
CRESA	$6,865	1.6%
Fire District 10	$1,256	0.3%
Other (Washington State Dept. of Health, WSU School of Medicine)	$14,100	3.3%
TOTAL INCOME	**$422,320**	**100.0%**

OPERATING EXPENSES

Category	Positions / Services Supported	Amount	% of Income
Personnel (Wages, Payroll Taxes, Pension)	Program Managers; Data & Operations Specialist	$175,825	41.6%
Professional Contractors	Assistant MPDs; Pharmacist	$48,612	11.5%
Technical & Operational Contractors	Data Analyst & IT Security	$36,062	8.5%
Technology & Computing Costs	—	$36,026	8.5%
Taxes (B&O, L&I)	—	$6,769	1.6%
Insurance	MPD & Assistant MPD Coverage	$5,662	1.3%
Professional Services	Accounting	$5,120	1.2%
Office & Communications	Offices Space, Telephone services	$8,640	2.0%
Education, Dues & Other	—	$2,808	0.7%
TOTAL EXPENSES		**$325,524**	**77.1%**

MPD PHYSICIAN COMPENSATION

As a physician-owned PLLC, MPD compensation represents net income after all costs are met, aligning physician incentives with operational efficiency.

MPD Net Compensation (Net Operating Balance)	**$96,796**	**22.9%**

Note: Figures represent gross income from contracted services. Insurance reflects accrual-basis allocation of 2025 policy premiums ($4,051 prepaid in 2024 included).

Other Initiatives in 2025

3.2

Increasing OLMC handled by EMS physicians
We improved access to expert EMS physicians when seconds matter.
We increased access to board-certified EMS physicians for online medical control calls, improving real-time medical decision-making during time-sensitive emergencies.

Why This Matters: When EMS crews call for online medical control, they are often facing urgent decisions—such as whether a patient can safely refuse care, needs special treatment, or should be taken to a specific hospital.

In these moments, **time and expertise matter.** Board-certified EMS physicians are fellowship-trained in prehospital care. Improving access to these physicians helps ensure faster, clearer guidance for crews—and safer decisions for patients—when every second counts.

This work focused on **making expert help easier to reach**, while maintaining a reliable backup system using board-certified emergency physicians who have received training in taking EMS calls when EMS physicians are unavailable.

Fighting the opioid epidemic
We saved lives in the moment—and worked to prevent the next overdose.
We strengthened our response to the opioid crisis by saving lives during overdoses and taking concrete steps to reduce the risk of future harm.

Why This Matters: Opioid overdoses can be fatal—but many are survivable if treated quickly. EMS plays a critical role in reversing overdoses, restoring breathing, and stabilizing patients in their most vulnerable moments.

But survival doesn’t end when the ambulance leaves. People who experience an overdose face a high risk of another one, especially in the hours and days that follow. Addressing that risk requires more than emergency reversal alone.

This work focused on **both rescue and prevention**: saving lives during the emergency, offering treatment when appropriate, and leaving tools behind so patients, families, and bystanders can respond if another overdose occurs.

3.3

Focus for 2026

Clark County EMS is building on a strong foundation — and pushing forward. We perform at or above national benchmarks across most key measures. In 2026, we're channeling that momentum into three areas that matter most right now.

Enhancing Patient Safety
The big picture: We meet patients in uncontrolled environments at times when they are most vulnerable. We hold that duty sacred.
What We're Doing: We're targeting the highest-risk moments in patient care and working to make our system even more highly reliable.

Matching Patients to the Right Resource
The big picture: In a fragmented health system, people reach out to 911 for help in navigation. Sometimes an ambulance ride to the emergency department is the right answer; sometimes it’s not.
What We're Doing: We're expanding our capacity to handle calls by the most appropriate means — including expanded telephone response, EMT-staffed ambulances where appropriate, and referral to Nurse Navigation. Our aim is to ensure patients efficiently get the care they need.

Increasing Transparency
The big picture: A high-performing EMS system should be able to show its work.
What We're Doing: We're committed to more frequent and more widespread reporting of clinical performance data — to clinicians, agencies, and the public. In 2026, we're expanding who sees that data and how often.

Why This Matters: These three priorities aren't separate initiatives — they're connected. Safer care, smarter resource use, and open data reporting all reinforce each other and make Clark County EMS stronger for every patient we serve.


OFFICE OF THE MEDICAL PROGRAM DIRECTOR
CLARK COUNTY EMS