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Leadership's Role in Clinical Competency

A Management Framework for Building Accountability, Psychological Safety, and Continuous Readiness in EMS

Abbreviated Leadership Edition

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1. Executive Summary

Emergency Medical Services clinicians are expected to perform complex, high-risk procedures under conditions of urgency, uncertainty, and intense cognitive demand. Their ability to perform reliably is often described as a matter of individual education, experience, and professional responsibility. Those factors are important, but they do not fully determine whether clinical competency is maintained. Clinicians work within organizations, and organizations shape the conditions under which readiness either develops or declines. Training frequency, clinical exposure, staffing, supervision, feedback, equipment, quality improvement, and medical oversight are all influenced by leadership decisions. Clinical competency must therefore be understood not only as an individual obligation, but also as a leadership and governance responsibility. Traditional approaches to competency frequently place responsibility within the training division. Educators provide continuing education, conduct annual skills evaluations, and arrange periodic simulation exercises. These activities may verify performance at a particular moment, but they cannot independently create the organizational conditions required for continuous readiness. Educators cannot protect practice time if operational leaders do not support it. Quality improvement personnel cannot correct performance trends if leaders do not act on their findings. Medical directors cannot provide meaningful clinical oversight without timely and accurate information. Supervisors cannot reinforce competency expectations if those expectations are unclear or inconsistently applied. A strong training program may contribute substantially to readiness, but training alone cannot compensate for fragmented governance, limited accountability, inadequate resources, or weak leadership follow-through.

Leaders influence clinical readiness through the priorities they establish and the decisions they make. They determine whether competency maintenance receives protected time or is repeatedly displaced by immediate operational demands. They approve policies, allocate resources, authorize

staffing, select equipment, establish reporting relationships, and decide how performance concerns will be addressed. They also shape the culture in which clinicians practice. When leaders visibly support continuous learning, respond to reported barriers, and treat clinical improvement as a normal organizational responsibility, clinicians are more likely to participate meaningfully in practice, feedback, and case review. When leadership attention is inconsistent, even well-designed competency initiatives may gradually become optional, fragmented, or unsustainable. Governance provides the structure through which leadership commitment becomes organizational action. Effective clinical governance defines who establishes competency standards, who monitors performance, who has authority to intervene, and who is accountable for ensuring that identified concerns are resolved. It connects executive leadership, medical direction, operations, education, quality improvement, supervision, and frontline practice. Without this structure, responsibility may be distributed so broadly that no individual or group clearly owns the outcome. Agencies may collect data, conduct training, and review selected cases without creating a coordinated process for sustaining readiness. Governance converts these separate activities into an accountable clinical system.

Accountability is essential, but it must be applied in a manner that supports learning and patient safety. EMS organizations have a legitimate responsibility to establish standards, evaluate performance, and respond when clinicians fail to meet reasonable expectations. However, accountability becomes counterproductive when clinical review is unpredictable, excessively punitive, or focused primarily on assigning blame. Clinicians who fear automatic punishment may become less willing to report uncertainty, disclose near misses, request assistance, or participate openly in case review. The organization then loses access to the very information it needs to identify emerging risk. Psychological safety provides the conditions in which clinicians can speak honestly about performance, recognize limitations, and learn from difficult events. It does not

eliminate professional standards, excuse reckless behavior, or prevent appropriate corrective action. Instead, it allows leaders to distinguish among individual skill deficits, understandable human error, behavioral concerns, and failures created or intensified by organizational systems. A clinician may require coaching or additional practice, but an adverse event may also reveal unclear policies, inconsistent equipment, inadequate staffing, poor communication, insufficient clinical exposure, or weaknesses in supervision. Fair and effective leadership examines both individual actions and the conditions surrounding them (Meadley et al., 2023; Murray et al., 2024). High-reliability EMS organizations must therefore balance psychological safety with just accountability. Psychological safety without accountability can permit performance drift and allow known problems to persist. Accountability without psychological safety can suppress reporting, conceal risk, and weaken organizational learning. Leaders must create review processes that are consistent, evidence-informed, and focused on preventing recurrence. Clinicians should understand what is expected, how performance information will be used, and how the organization will respond to different types of concerns. When this balance is maintained, accountability becomes a mechanism for improvement rather than a source of fear.

Sustainable clinical readiness also depends on integrating competency into everyday operations. High-acuity, low-frequency procedures cannot be preserved through occasional initiatives that receive attention only before annual validation or after an adverse event. Readiness must be reinforced between emergencies through brief and frequent practice, meaningful clinical exposure, timely feedback, structured case review, performance monitoring, and leadership support. These activities should be incorporated into schedules, supervisory expectations, quality processes, medical oversight, and normal operational planning. This integration requires leaders to move competency beyond the boundaries of the education department. Executive leaders must establish organizational priority and accountability. Medical directors must provide active clinical guidance

and participate in interpreting performance. Operations leaders must ensure that staffing and scheduling support participation. Educators must connect training to actual performance needs. Quality improvement personnel must identify meaningful patterns and communicate them clearly. Supervisors must reinforce expectations where daily work occurs. Frontline clinicians must accept professional responsibility for continued development and participate honestly in learning and review. No single role can sustain readiness independently. Leadership does not require an immediate, organization-wide transformation. Agencies can begin by identifying one consequential clinical skill, examining existing governance, assigning clear ownership, and testing a manageable competency process with a limited group of clinicians, stations, or shifts. Early findings can reveal operational barriers, clarify resource needs, and demonstrate where leadership coordination must improve. The objective is not to create another temporary program. It is to develop an organizational capability that can be refined, expanded, and sustained over time.

The central leadership challenge is therefore not simply how to provide more training. It is how to build an organization that continuously prepares clinicians for events that cannot be predicted and procedures that may not occur often enough to sustain proficiency through field experience alone. Policies, staffing, resources, culture, oversight, feedback, and accountability must work together (Institute of Medicine, 2007). When leaders align these elements, competency becomes more than an individual attribute or annual requirement. It becomes an enduring organizational capability.

Central proposition

Clinical readiness reflects what an organization consistently leads, supports, measures, and reinforces.

2. Introduction: Clinical Competency Is a Leadership Responsibility

Emergency Medical Services (EMS) clinicians are expected to perform complex clinical procedures rapidly, accurately, and safely in environments characterized by uncertainty, limited resources, environmental hazards, and intense cognitive demand. Paramedics may be required to manage a difficult airway, perform chest decompression, establish intraosseous access, conduct a complicated delivery, treat a critically ill child, or initiate a specialized infusion with little warning. These procedures can carry immediate consequences for patient survival. For endotracheal intubation specifically, individual and agency exposure varies, and greater exposure has been associated with higher success (Dyson et al., 2017; Thomas et al., 2024; Wang et al., 2024). When performance varies, the individual clinician is often the first and most visible focus of attention. Leaders may ask whether the paramedic was properly trained, followed the protocol, selected the correct equipment, or demonstrated sufficient technical ability. These are reasonable questions, but they provide only a partial explanation. Clinical performance does not occur independently of the organization in which the clinician works. It is influenced by the quality and frequency of practice, recent clinical exposure, equipment availability, protocol design, staffing, supervision, fatigue, feedback, medical oversight, and the culture surrounding performance review. These conditions are created, influenced, or permitted by leadership. A technically capable clinician may struggle when placed within a poorly designed system. A paramedic may have completed the required education and demonstrated competency during certification, yet go months or years without performing a particular procedure on a patient. Another may receive occasional simulation training but no timely feedback following actual clinical events. Equipment may differ among units, stations, or response teams. Clinical expectations may vary according to the supervisor, instructor, or medical director involved. Staffing conditions may prevent participation in scheduled training, while operational

demands repeatedly displace opportunities for brief skill reinforcement. Quality assurance findings may be collected but never communicated to educators or frontline personnel. Under these conditions, inconsistent performance cannot be understood solely as an individual failure.

The distinction is important because organizations frequently attempt to solve system problems through additional training. When a clinical concern emerges, the common response is to assign a continuing education module, schedule a skills laboratory, or require the clinician to repeat an assessment. Education may be appropriate, particularly when a genuine knowledge or skill deficit exists. However, training cannot correct unclear policies, inconsistent equipment, inadequate staffing, limited clinical exposure, weak supervision, or a culture that discourages clinicians from acknowledging uncertainty. If the underlying problem is organizational, an exclusively educational response may create the appearance of action without reducing the conditions that produced the concern. Clinical competency is commonly treated as the responsibility of the training department. Educators are expected to prepare new clinicians, provide continuing education, conduct annual skills verification, and remediate personnel who do not meet established standards. This arrangement assigns important responsibilities to educators, but it can also create an unrealistic expectation that the training division alone can maintain workforce readiness. Training personnel generally do not control staffing levels, deployment practices, scheduling, compensation, equipment purchasing, clinical policies, hospital partnerships, or the amount of time available during the workday for practice. They may identify a need for more frequent simulation but lack the authority to protect participation time. They may recognize that clinicians need additional operating room, cadaver laboratory, or supervised clinical exposure but lack the relationships or resources required to create those opportunities. They may recommend equipment standardization while procurement decisions occur elsewhere. They may develop an effective educational intervention, only to discover that participation varies because supervisors apply different operational priorities.

The same limitations affect other parts of the organization. Quality improvement personnel may identify recurring performance patterns but lack authority to initiate corrective action. Medical directors may establish clinical expectations but receive incomplete information about actual field performance. Supervisors may observe declining confidence or inconsistent practice but have no formal process for communicating those concerns. Executive leaders may support clinical excellence in principle while remaining disconnected from the operational barriers that prevent competency activities from occurring consistently. These examples demonstrate why competency cannot be delegated to one department. Education is essential, but it must operate within a larger leadership system that connects training, operations, quality improvement, medical direction, supervision, and executive governance. Each function contributes something different. Training develops and reinforces knowledge and skills. Quality improvement identifies patterns and learning needs. Medical direction establishes clinical standards and interprets clinical significance. Operations provides the staffing and scheduling conditions that permit participation. Supervisors reinforce expectations during everyday work. Executive leaders assign authority, allocate resources, resolve barriers, and maintain accountability. Clinical readiness becomes sustainable only when these responsibilities are coordinated. Leadership affects clinical competency through decisions that may not initially appear educational. A staffing decision can determine whether clinicians are able to attend simulation or clinical rotations. A purchasing decision can either standardize equipment or introduce unnecessary variation among units. A scheduling decision can provide protected practice time or make participation dependent on call volume and individual initiative. A policy decision can clarify clinical expectations or leave clinicians uncertain about when and how a procedure should be performed. A supervisory decision can encourage reflection following a difficult call or discourage disclosure through blame and humiliation.

Clinical exposure is also influenced by leadership. EMS agencies cannot control the number or type of emergencies that occur, but they can determine how they respond to declining procedural opportunities. Leaders may develop hospital partnerships, regional training collaboratives, supervised clinical rotations, cadaver laboratory experiences, or realistic simulation programs. They may monitor the frequency and recency of exposure and intervene before a clinician experiences substantial skill decay. Alternatively, the organization may assume that certification and prior experience remain adequate despite prolonged periods without meaningful practice. Feedback is similarly dependent on leadership systems. A clinician may complete a complex procedure in the field but receive no information about technique, decision-making, complications, documentation, or patient outcome. Without structured review, the event becomes a missed learning opportunity. Leaders determine whether case review occurs, who participates, how quickly feedback is provided, and whether the process is developmental or punitive. They also determine whether lessons from individual cases are translated into broader improvements in training, protocols, equipment, or supervision. Resources communicate organizational priorities. Leaders may state that competency matters, but clinicians evaluate that commitment through what the organization consistently provides and protects. If practice equipment is unavailable, training is routinely canceled, participation is uncompensated, or quality concerns remain unresolved, formal statements about clinical excellence lose credibility. Visible leadership commitment requires operational follow-through.

This does not mean that leaders must personally manage every training event or review every clinical case. It means they must establish a system in which responsibility is clear, appropriate authority is assigned, resources are available, and important findings lead to action. Leadership is responsible for creating the conditions under which competent practice can be maintained. High-acuity, low-frequency procedures present a particular management challenge. They are clinically

consequential but encountered inconsistently. Clinicians may be expected to perform them without hesitation even after extended periods without meaningful exposure. Initial education and periodic verification can establish a foundation, but psychomotor skill, decision-making, and confidence may decline when they are not regularly reinforced. Annual testing may confirm that a clinician can perform a procedure under controlled conditions on one day, but it cannot ensure readiness throughout the remainder of the year. Airway management illustrates this challenge clearly (Makrides et al., 2023; Vithalani et al., 2022). Endotracheal intubation requires technical skill, anatomical knowledge, equipment familiarity, patient selection, contingency planning, team coordination, and confirmation of successful placement. Field conditions introduce additional demands, including limited space, poor lighting, patient positioning, environmental noise, time pressure, competing clinical priorities, and rapidly changing physiology. At the same time, many paramedics perform relatively few intubations, and the increasing use of supraglottic airways may further reduce opportunities to maintain advanced airway proficiency through clinical experience alone.

The problem is not resolved simply by increasing the number of classroom hours. Simulation can reinforce technique, decision-making, and team performance, but it must be sufficiently frequent, realistic, and connected to actual clinical findings (Bienstock et al., 2022; Nielsen et al., 2021; Turan & Pekmezci, 2026). Operating room experiences may provide valuable procedural exposure, but they occur in a controlled environment and may not reproduce the cognitive and operational demands of prehospital care. Clinical review can identify performance concerns, but only if cases are consistently examined and findings are communicated. Data can reveal trends, but only if leaders act on them. No single activity is sufficient. Active leadership oversight is necessary because high-acuity, low-frequency skills are easy to overlook during routine operations. Their infrequency may create the impression that there is no immediate problem. A clinician can remain

certified and operationally productive while receiving little or no recent exposure to a critical procedure. The weakness may remain invisible until a difficult patient encounter reveals it. Leaders must therefore monitor readiness prospectively rather than waiting for adverse outcomes to demonstrate that competency has declined. High-reliability organizations pay attention to weak signals, anticipate potential failure, and build resilience before a crisis occurs (Weick & Sutcliffe, 2015). Applied to EMS competency, this means examining declining exposure, inconsistent participation, delayed feedback, variation in performance, equipment differences, and unresolved training barriers before they contribute to patient harm. Leadership oversight allows the organization to respond while the concern remains manageable.

Although airway management serves as the primary example throughout this white paper, the same leadership challenge applies to other high-acuity, low-frequency clinical responsibilities. These may include cricothyrotomy, chest decompression, intraosseous access, complicated childbirth, pediatric resuscitation, management of specialized infusions, and treatment of uncommon but life-threatening emergencies. The specific procedure may change, but the organizational requirement remains the same: readiness must be intentionally maintained when clinical frequency is insufficient to preserve it naturally. This white paper examines the leadership and management responsibilities required to sustain clinical competency within EMS organizations. It builds upon the organizational problem described in White Paper No. 1, The Airway Competency Crisis in EMS, and the continuous competency system presented in White Paper No. 2, Building a Continuous Competency System for EMS. The present discussion moves from why competency declines and how a continuous system can be constructed to the leadership conditions required for that system to function. The central question guiding this white paper is:

Answering that question requires more than a discussion of leadership style. It requires consideration of governance, authority, culture, accountability, psychological safety, staffing,

resources, medical oversight, performance information, operational integration, and organizational follow-through. Leadership must be examined not as an abstract quality, but as a set of decisions, structures, and behaviors that influence whether clinicians remain prepared. This white paper therefore addresses the leadership gap in EMS competency, the transition from training oversight to clinical governance, the behaviors that sustain readiness, and the organizational culture required for continuous improvement. It examines how leaders can balance psychological safety with accountability, clarify responsibilities across organizational roles, convert performance information into action, manage change, allocate resources, and prevent common leadership failures. It also presents a practical framework for integrating these responsibilities into normal EMS operations. The purpose is not to transfer responsibility away from individual clinicians. Professional accountability remains fundamental to safe practice. Rather, the purpose is to place individual responsibility within the organizational environment that shapes it. Clinicians must prepare, practice, learn, and perform. Leaders must ensure that the system makes those expectations clear, achievable, measurable, and sustainable.

The leadership gap

Most Emergency Medical Services agencies care deeply about clinical quality. Executives, medical directors, educators, supervisors, and frontline clinicians generally share the desire to provide safe, effective, and evidence-informed patient care. Agencies invest in continuing education, purchase advanced equipment, review selected clinical cases, and require personnel to complete certification and skills validation. Yet sincere commitment does not automatically produce an integrated competency system. In many organizations, the activities intended to support competency remain fragmented. Training occurs, performance data are collected, policies are issued, and clinical cases are reviewed, but these functions may not operate as parts of a coordinated system. Training priorities may not reflect findings from quality improvement. Medical directors may not receive the

information needed to identify emerging performance concerns. Operational supervisors may ensure that units remain staffed and available but may have little responsibility for protecting clinical practice time. Executive leaders may receive summary reports without a defined process for determining what action should follow. The resulting leadership gap is rarely caused by indifference. More often, it develops because clinical competency has not been established as a clearly governed organizational responsibility. Agencies may support competency conceptually while lacking the authority structures, communication pathways, resources, and accountability necessary to maintain it consistently. The problem is not that no one cares. The problem is that caring has not been translated into an integrated management system.

EMS leaders manage organizations in which operational demands are immediate, visible, and persistent. Calls must be answered. Units must be staffed. Vehicles must remain available. Response-time standards must be met. Equipment must be maintained, supplies replenished, schedules filled, and overtime controlled. These responsibilities are essential. Without operational readiness, an EMS agency cannot fulfill its basic public safety mission. Operational performance is also relatively easy to observe. Leaders can review response times, unit-hour utilization, call volume, deployment status, staffing vacancies, overtime expenditures, vehicle downtime, and mutual-aid activity. Many of these measures are automatically captured through dispatch, scheduling, fleet, and electronic patient care reporting systems. When performance falls outside an established target, the deviation becomes visible quickly. A delayed response, uncovered shift, out-of-service ambulance, or excessive overtime expense often generates immediate attention. Clinical readiness is more difficult to observe. A paramedic may report for duty, respond to calls, complete documentation, and remain fully certified while receiving little recent exposure to a critical procedure. A clinician’s ability to manage a difficult airway, perform a cricothyrotomy, treat a

complicated childbirth, or resuscitate a critically ill child may not become apparent during routine operations. The absence of a visible failure can be mistaken for evidence of readiness.

This difference in visibility creates a predictable management imbalance. Operational performance receives sustained leadership attention because its measures are immediate and its failures disrupt the organization. Clinical competency may receive concentrated attention only during annual validation, recertification, a scheduled education cycle, or the review of an adverse event. As a result, agencies can become highly sophisticated in monitoring whether a unit reaches the patient on time while possessing far less information about whether the clinical workforce is prepared to manage the rare and critical condition encountered upon arrival. Operational and clinical readiness should not be treated as competing priorities. Timely response and reliable clinical performance are both necessary. However, when operational concerns repeatedly displace clinical development, the organization may deliver clinicians to the scene efficiently without ensuring that their most consequential skills have been adequately maintained. Leadership must therefore make clinical readiness visible enough to receive consistent attention alongside deployment, staffing, fleet readiness, and response performance. Annual skills validation plays an important role in EMS education and regulatory compliance. It can confirm that clinicians understand current standards and can demonstrate required procedures under defined conditions. However, annual validation can create a false sense of security when it is treated as evidence that readiness has been maintained throughout the year.

Competency demonstrated during a scheduled assessment is a point-in-time observation. It does not reveal how consistently a clinician can perform under stress, how recently the skill has been used, or whether performance will remain reliable months after the evaluation (Legoux et al., 2020). It may also fail to capture decision-making, communication, environmental limitations, equipment variation, or the cognitive demands of an actual emergency. The risk is particularly significant for

high-acuity, low-frequency procedures. A clinician may pass an annual airway assessment and then receive little meaningful practice or clinical exposure before confronting a difficult airway late in the certification cycle. Another may successfully perform a procedure in a quiet training environment but struggle when multiple clinical and operational demands compete for attention. The annual validation was not necessarily inaccurate. It simply answered a narrower question than the organization assumed. Passing an assessment demonstrates that the clinician met the standard at the time and under the conditions of the evaluation. It does not establish that the surrounding organization has continuously supported readiness. When leaders interpret annual completion rates as sufficient evidence of workforce competency, they may overlook declining exposure, inconsistent practice, delayed feedback, or emerging performance variation.

Competency systems often involve shared responsibility. Executive leaders, medical directors, educators, quality improvement personnel, supervisors, and clinicians all contribute to readiness. Shared responsibility is necessary, but it is not the same as clear accountability. When responsibility is distributed without defined ownership, each participant may assume that someone else is addressing the problem. Medical directors may expect educators to respond to clinical findings. Educators may expect supervisors to ensure participation. Supervisors may expect clinicians to practice independently. Clinicians may expect the agency to provide scheduled opportunities. Executive leaders may assume the medical director or training division owns the entire process. This ambiguity becomes most visible when a problem crosses departmental boundaries. For example, quality improvement may identify inconsistent airway performance. Education may determine that additional simulation is needed. Operations may be unable to release personnel because of staffing shortages. Finance may not have budgeted for overtime or backfill. The medical director may recommend a clinical rotation, but no one has authority to negotiate the external

partnership. Unless a leader or governance group is accountable for the overall result, each component can remain unresolved.

Leadership question
What must EMS leaders do to create an organization in which clinical readiness is continuously maintained?

3. The LEAD Framework for Continuous Clinical Readiness

The LEAD Framework is the organizing spine of this white paper. It converts a broad leadership obligation into four memorable responsibilities: **Lead with clear authority; Establish shared accountability; Act on readiness information; and Develop a continuous learning culture.**

The framework does not replace the continuous competency system presented in White Paper No. 2. It governs and sustains that system. Figure 1 shows how the four leadership responsibilities form the governance layer between organizational commitment and continuous clinical readiness.

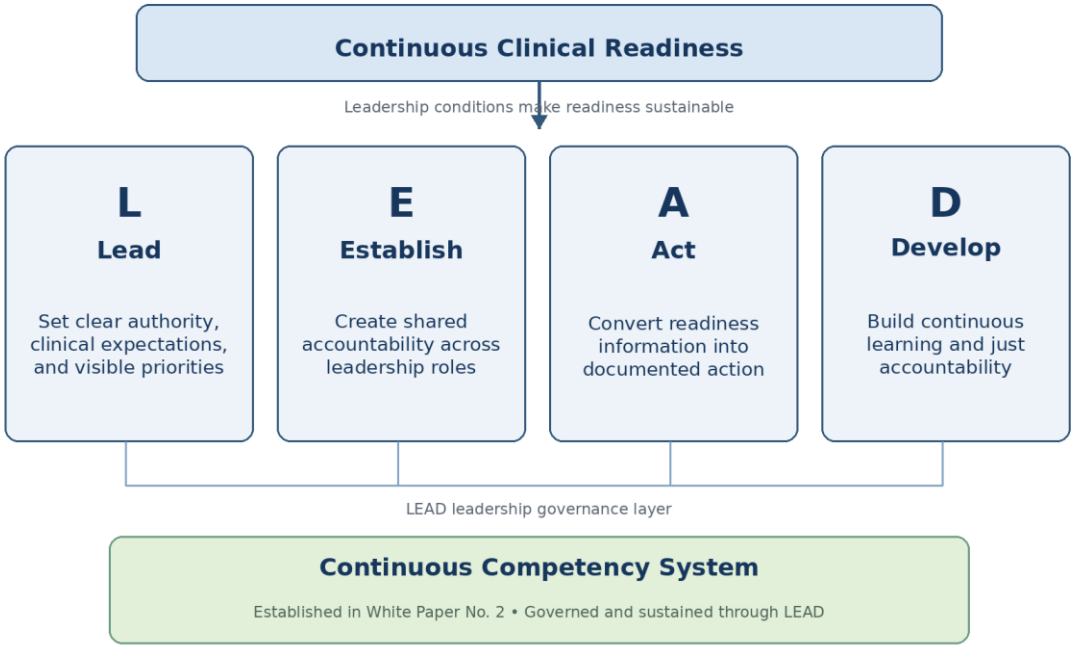

Figure 1. The LEAD Framework for Continuous Clinical Readiness

- Lead with clear authority: establish clinical readiness as an executive and medical priority, define standards, assign decision authority, and make expectations visible.
- Establish shared accountability: connect executive leadership, medical direction, operations, training, quality improvement, supervision, and frontline clinicians through explicit responsibilities and escalation paths.

- Act on readiness information: translate patterns, weak signals, barriers, and case findings into assigned, documented, resourced, and verified action.
- Develop a continuous learning culture: normalize practice and reflection while balancing psychological safety with fair, proportionate accountability.

Although presented as four elements, LEAD should operate as a continuous cycle. Clear expectations guide resource decisions. Resources enable practice and performance. Performance produces information. Information leads to action. Action and fair review strengthen culture. Organizational learning then informs revised expectations and future priorities. The cycle can be expressed as follows:

Lead with clear expectations. Enable clinicians and systems to meet them. Act on the information the system produces.

Develop a culture that supports honest learning and fair accountability. Use what the organization learns to refine expectations and support. If any element is missing, the system becomes unstable.

Lead without Enable: The agency creates expectations that clinicians cannot reasonably meet. Enable without Act: The agency provides activities without determining whether they improve readiness. Act without Develop: Performance management becomes punitive and reduces reporting.

Develop without Lead: The organization supports learning but lacks clear standards and accountability. Continuous clinical readiness requires all four.

4. L: Lead With Clear Authority

From training oversight to clinical governance

Leadership begins by moving competency beyond the boundaries of the training division. Clinical governance provides the structure through which executive authority, medical standards, operational support, education, quality improvement, and frontline practice become one accountable system. As shown in Figure 2, authority flows toward clearly defined governance, while performance feedback and reported barriers flow back to leaders who can act.

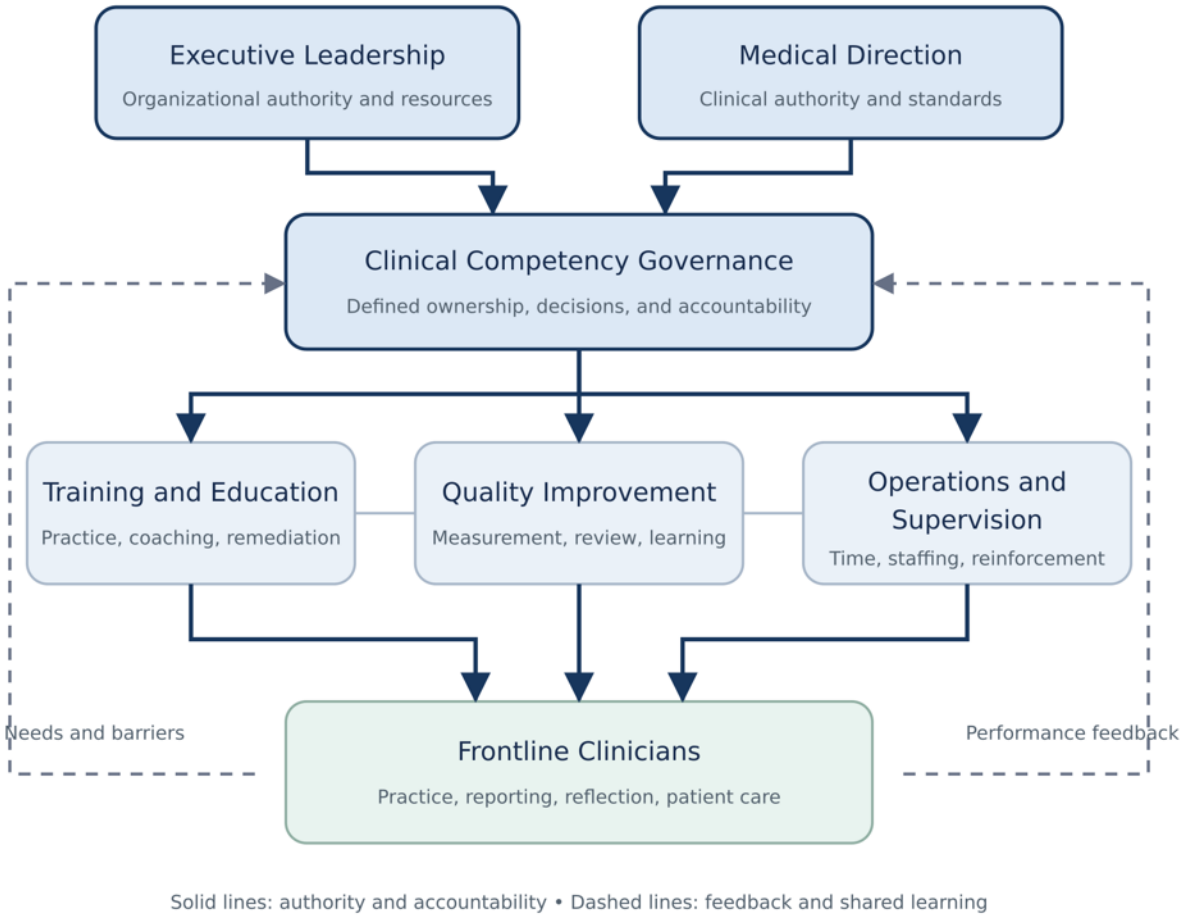

Figure 2. Clinical Competency Governance Structure

A continuous competency system requires more than an effective training program. It requires a formal leadership structure that defines clinical expectations, assigns authority, coordinates

organizational functions, reviews performance, and ensures that identified concerns lead to action. This structure is clinical governance. Clinical governance is the system through which an EMS organization directs, oversees, evaluates, and improves the quality and safety of clinical care. It establishes how clinical decisions are made, who is responsible for maintaining standards, how performance information is reviewed, and what happens when weaknesses are identified. It connects organizational leadership with medical oversight, education, operations, quality improvement, frontline supervision, and clinical practice. In practical terms, clinical governance ensures that competency is not left to informal cooperation among well-intentioned individuals. It creates a defined process for determining what clinicians must be able to do, how readiness will be maintained, how performance will be evaluated, and who must respond when the system does not produce the expected result. Many EMS agencies already perform activities associated with clinical governance. Medical directors approve protocols. Educators conduct training. Quality improvement personnel review clinical documentation. Supervisors monitor field operations. Executive leaders allocate resources and approve organizational policies. However, the presence of these activities does not necessarily mean that an integrated governance system exists. Clinical governance emerges when these responsibilities are formally connected through clear authority, shared standards, established reporting relationships, and accountable decision-making. Implementation barriers are rarely resolved by education alone; they commonly involve leadership support, resources, communication, and coordination (Adelgais et al., 2019; Institute of Medicine, 2007).

Clinical governance places the quality and reliability of patient care within the organization's formal leadership responsibilities (Institute of Medicine, 2007; Vithalani et al., 2022). It recognizes that clinical performance is influenced by more than the knowledge and skill of individual clinicians. It is also shaped by policies, staffing, equipment, education, clinical exposure, supervision, feedback, data systems, medical oversight, and organizational culture. An effective

governance system should allow an EMS agency to answer several fundamental questions: What clinical competencies are required? Who has authority to establish and approve those expectations?

How will competency be maintained after initial certification? What information will be used to evaluate individual and organizational readiness? Who will review that information? What findings require leadership intervention?

Who can authorize changes to training, policy, equipment, staffing, or supervision? How will corrective and developmental actions be monitored? How will the organization determine whether an intervention improved performance? To whom will progress, unresolved risks, and resource needs be reported?

When these questions remain unanswered, clinical responsibilities may be distributed among departments without being governed as a coherent system. Training may occur, but it may not reflect performance needs. Quality review may identify concerns, but no one may have authority to resolve them. Medical direction may establish standards, but operations may not provide the time or resources needed to meet them. Clinical governance closes these gaps by defining how the parts of the organization work together. Governance should be proportional to the size and complexity of the agency. A large metropolitan EMS system may require a formal clinical governance committee, specialized quality personnel, multiple training officers, and structured executive reporting. A smaller fire department, ambulance service, or rural EMS agency may rely on a more compact leadership group. The form may vary, but the essential functions remain the same. Someone must define the standards, oversee implementation, review performance, resolve barriers, and remain accountable for the result. Medical direction is a central component of clinical governance, but the two are not interchangeable. The medical director provides physician oversight, establishes clinical standards, approves protocols, evaluates significant clinical concerns, and helps ensure that patient care reflects current evidence and accepted practice. These responsibilities are indispensable.

However, the medical director generally does not control every organizational condition required to maintain competency.

A medical director may determine that paramedics need more frequent airway practice, but executive and operational leaders control staffing, scheduling, and compensation. The medical director may recommend standardized equipment, but purchasing and budget authority may rest elsewhere. The medical director may identify a need for improved case review, but information technology, quality improvement personnel, and supervisors may control data collection and reporting. The medical director may support hospital clinical rotations, but agency leadership may need to negotiate agreements, manage liability requirements, and authorize participation. Clinical governance therefore combines medical authority with organizational authority. Medical direction establishes the clinical foundation, while executive and operational leadership creates the conditions necessary to implement it. Education translates standards and performance findings into learning. Quality improvement evaluates what is occurring. Supervisors reinforce expectations in everyday operations. Frontline clinicians provide the practical experience and reporting needed to determine whether the system functions as intended. Treating clinical governance as the responsibility of the medical director alone can leave physician leaders accountable for outcomes they do not have the organizational authority to control. Conversely, allowing administrative leaders to make competency decisions without sufficient medical involvement can separate operational priorities from clinical judgment. Effective governance requires both. Competency maintenance also requires quality improvement processes that connect field performance with organizational decisions (Makrides et al., 2023; Rotteau et al., 2022).

Clinical competency crosses organizational boundaries. No single department can independently maintain it, and no single form of expertise is sufficient. Clinical governance must therefore establish an interdependent leadership structure in which each function has a defined role.

Executive leaders establish clinical competency as an organizational priority. They approve the governance structure, assign program ownership, allocate resources, resolve interdepartmental barriers, and hold other leaders accountable for implementation. They ensure that clinical readiness receives attention alongside response performance, staffing, finance, fleet readiness, and other operational priorities. Executive leadership is especially important when a competency concern requires action outside the training division. Changes involving staffing, policy, equipment, technology, contracts, compensation, or external partnerships may require executive approval. Without that support, clinical recommendations can remain unimplemented. Medical directors establish and approve the clinical standards that guide competency. They help determine which procedures require ongoing oversight, what constitutes acceptable performance, and when clinical variation requires intervention. They participate in the interpretation of significant findings and help distinguish appropriate clinical judgment from unsafe practice.

Medical directors should also contribute to remediation decisions, protocol development, case review, and the evaluation of clinical outcomes. Their involvement ensures that organizational responses remain clinically appropriate and focused on patient safety. Operations leaders integrate competency activities into the practical realities of EMS delivery. They determine how training and practice fit within staffing, deployment, station assignments, work schedules, and supervisory responsibilities. They identify operational barriers and help determine whether proposed requirements are feasible. Operations must do more than release personnel when convenient. If competency activities are considered necessary for safe practice, participation must be incorporated into normal operational planning. Operations leaders are therefore responsible for protecting participation time, promoting consistency among shifts and stations, and ensuring that immediate workload pressures do not continually displace readiness. Educators translate competency standards and performance findings into structured learning. They design simulation, skills reinforcement,

coaching, assessments, and remediation. They monitor participation and communicate learning needs to the appropriate leaders.

Training priorities should be informed by clinical data, case review, medical direction, and operational experience. Educators should not be expected to select priorities in isolation or solve problems that originate in policy, equipment, staffing, or supervision. Their role is essential but must remain connected to the broader governance system. Quality improvement personnel provide the analytical connection between clinical practice and organizational action. They gather and interpret information from patient care reports, procedural outcomes, complications, simulation, clinical exposure, case review, and other relevant sources. They identify patterns, variations, and weak signals that may not be visible through individual cases. Quality improvement should communicate findings in a manner that supports decisions. Reports should identify what occurred, why it may matter, what additional information is needed, and which organizational function may need to respond. Quality improvement does not merely document performance. It helps the organization learn from it. Supervisors connect governance decisions to everyday operations. They reinforce participation expectations, support brief practice activities, identify emerging concerns, provide immediate coaching, and escalate barriers that cannot be resolved locally. Their behavior strongly influences whether competency policies are treated as genuine requirements or optional activities.

Frontline supervisors also provide essential context. Data may show that participation is low, but supervisors may explain that unit workload, equipment availability, scheduling conflicts, or unclear instructions prevented completion. Their observations help leaders distinguish between individual noncompliance and organizational barriers. Clinicians are not passive recipients of governance. They are participants in the competency system. They have a professional responsibility to maintain knowledge and skill, participate in required activities, seek feedback, report barriers, and contribute

honestly to case review. Clinicians also possess operational knowledge that senior leaders may not have. They know whether equipment is consistently available, whether protocols are practical, whether training resembles field conditions, and whether local culture supports honest reflection. Governance systems should create formal pathways through which this information reaches decision-makers.

Authority, ownership, and escalation

Clinical governance must clearly identify who has authority to establish, approve, modify, and enforce competency standards. Ambiguity in this area can produce conflicting expectations and inconsistent implementation. Clinical standards should reflect applicable laws, regulations, scope-of-practice requirements, medical direction, evidence-based guidelines, agency protocols, and local operational realities. The medical director should have appropriate authority over the clinical content of those standards. Executive leadership should approve the organizational mechanisms through which the standards will be implemented, resourced, and monitored. Standards should define more than whether a clinician can complete a procedure during an assessment. Depending on the skill, they may address:

- Required knowledge
- Technical performance
- Clinical decision-making
- Equipment selection and preparation
- Communication and team coordination
- Recognition of complications
- Rescue or contingency planning
- Documentation

- Frequency and recency of practice
- Participation in simulation or clinical exposure
- Response to feedback and remediation

The governance structure should also specify how standards are revised. New evidence, protocol changes, equipment updates, performance trends, and operational experience may require modification. Changes should follow an established approval process so clinicians do not receive competing directives from different leaders.

A competency system needs a clearly identified owner. Program ownership does not mean that one person performs every function. It means that a designated leader or governance group remains accountable for coordinating the system and ensuring that required work is completed. The program owner should be able to:

- Coordinate executive leadership, medical direction, operations, training, quality improvement, and supervision
- Track implementation progress
- Identify unresolved barriers
- Escalate decisions requiring higher authority
- Confirm that performance findings receive an appropriate response
- Monitor participation and program consistency
- Prepare reports for leadership and medical oversight
- Maintain continuity during personnel transitions

Ownership should be documented rather than assumed. Policies, job descriptions, committee charters, or formal assignments should identify the responsible individual or group. The owner must also have direct access to the leaders who control staffing, resources, policy, and clinical standards.

Without ownership, responsibility can move repeatedly among departments. Everyone may agree that a problem matters while no one remains accountable for bringing it to resolution.

Program ownership must be supported by defined decision authority. The governance system should specify which decisions can be made at each level and which require escalation. For example:

- Educators may adjust simulation content within approved clinical standards.
- Quality improvement personnel may initiate routine case review according to established criteria.
- Supervisors may protect scheduled practice time and provide coaching.
- Medical directors may determine whether a performance concern has clinical significance.
- Operations leaders may adjust scheduling or deployment procedures.
- Executive leaders may authorize new resources, contracts, staffing models, or organization-wide policy changes.

Clear authority prevents two common problems. The first is delay, in which necessary action waits because no one is certain who can approve it. The second is overreach, in which one department changes expectations without coordinating with the other functions affected.

A decision authority matrix can help agencies define who recommends, approves, implements, supports, and monitors each category of decision. The purpose is not to create unnecessary bureaucracy. It is to ensure that decisions are made at the appropriate level and that accountability remains visible.

Essential governance responsibilities

- Define competency expectations and approve clinical standards.
- Assign a program owner with a clear mandate and access to executive and medical leaders.
- Specify which decisions can be made at the program, operational, medical, and executive levels.

- Protect participation time and ensure that staffing and scheduling support the standard.
- Connect policy, practice, case review, coaching, remediation, and return-to-practice decisions.
- Establish routine and event-based review schedules with explicit escalation thresholds.
- Resolve system barriers and authorize corrective action.
- Evaluate whether interventions worked and report progress to the appropriate oversight body.

Moving from training oversight to clinical governance changes the way an EMS organization understands competency. Training remains essential, but it becomes one component of a broader leadership system. Clinical readiness is no longer treated as an outcome that educators are expected to produce independently. It becomes a shared organizational responsibility supported by defined authority and clear accountability. Clinical governance provides the structure that allows executive leadership, medical direction, operations, education, quality improvement, supervision, and frontline clinicians to work toward the same clinical expectations. It ensures that performance information reaches those who can act, that identified barriers remain visible, and that interventions are evaluated rather than merely completed. The purpose is not to add unnecessary administrative complexity. It is to prevent clinical responsibility from becoming so fragmented that important problems remain unresolved. A well-designed governance structure makes accountability clearer, decisions faster, and organizational learning more reliable. It turns leadership commitment into a repeatable process for sustaining clinical readiness.

5. E: Establish Shared Accountability

Shared responsibility requires clear ownership

A continuous competency system depends on the coordinated work of executive leadership, medical direction, operations, education, quality improvement, frontline supervision, and clinicians. Each participant contributes a different form of authority, knowledge, and operational influence. No single role can sustain readiness independently. White Paper No. 2 introduced these participants and described their place within the continuous competency system. The present section extends that discussion by defining their leadership obligations, decision authority, and interdependence. The objective is not to distribute responsibility so widely that accountability becomes unclear. It is to establish who owns each part of the system, which decisions each role may make, and how those decisions must connect. Shared accountability does not mean equal authority. Executive leaders control organizational priorities and resources. Medical directors hold clinical authority. Operations leaders control deployment and staffing processes. Educators guide learning and skill development. Quality improvement leaders interpret performance information. Supervisors influence daily implementation. Frontline clinicians remain professionally accountable for their practice and participation.

These roles are different, but they are inseparable. Medical directors cannot maintain competency without operational support. Educators cannot protect practice time without leadership authority. Quality improvement personnel cannot correct performance merely by reporting it. Supervisors cannot implement expectations that senior leaders have not clarified. Clinicians cannot meet organizational requirements that the agency has not made achievable. A reliable system therefore requires both individual ownership and coordinated action. EMS executives and chiefs hold ultimate responsibility for establishing clinical competency as an organizational priority. They determine whether readiness is treated as a central component of patient safety or left primarily to

the training division. Their decisions influence governance, staffing, resources, accountability, and the organization's willingness to act when performance concerns emerge.

Table 1 defines the primary responsibility, authority, information needs, required action, and review cadence for each major leadership role. It is intentionally concise: the purpose is to prevent both fragmented responsibility and the equally dangerous condition in which everyone supports readiness but no one owns the result.

Table 1. Leadership Accountability Matrix

Leadership role	Primary responsibility	Authority	Information received	Required action	Review cadence
Executive leadership	Make readiness an organizational priority.	Policy, budget, staffing support, partnerships, escalation.	Aggregate readiness, unresolved barriers, major risks.	Assign ownership, remove barriers, fund priorities, verify completion.	Quarterly and for major risk.
Medical direction	Set clinical standards and interpret findings.	Standards, protocols, remediation, practice restrictions.	Cases, trends, exposure, near misses, remediation progress.	Guide review and interventions; confirm restored competency.	Monthly and after significant events.
Operations leadership	Integrate readiness into normal operations.	Scheduling, staffing, deployment, supervisor expectations.	Participation, operational barriers, shift and station variation.	Protect time, standardize execution, resolve workflow barriers.	Monthly; weekly during pilots.
Training and education	Translate needs into effective learning.	Methods, instructors, coaching, recommended remediation.	Performance trends, exposure gaps, protocol changes, feedback.	Deliver targeted practice and evaluate learning.	Monthly; immediate for urgent needs.
Quality improvement	Convert data and cases into actionable insight.	Review methods, analysis, escalation recommendations.	Clinical records, outcomes, reported concerns, action status.	Identify patterns, facilitate fair review, track follow-through.	Monthly and event-based.
Supervisors and field leaders	Reinforce expectations at the point of work.	Daily scheduling, coaching, participation enforcement, escalation.	Local barriers, observed needs, staff feedback.	Protect practice, coach, document, escalate unresolved issues.	Every shift; report routinely.
Frontline clinicians	Maintain professional readiness and contribute learning.	Request support, report concerns, participate in review.	Standards, feedback, learning opportunities, outcomes.	Practice, seek feedback, disclose barriers, support peers.	Continuous.

How the roles work together

Executive leaders and chiefs

Executive leaders should explicitly identify clinical readiness as part of the agency's mission, strategic plan, and management responsibilities. Competency should receive leadership attention alongside response performance, workforce stability, financial stewardship, fleet readiness, and regulatory compliance. This priority should be reflected in policies, leadership expectations, budgets, meeting agendas, and performance reporting. A general statement supporting clinical excellence is insufficient if leaders do not assign authority or provide the resources needed to maintain it. Executives should also communicate that continuous competency is not a temporary educational initiative. It is an organizational capability that must be sustained for as long as clinicians are authorized to perform high-risk procedures. Executives should authorize the clinical governance structure that oversees competency. Depending on agency size, this may include a formal committee, a clinical leadership council, or a smaller group composed of executive, medical, operational, educational, and quality improvement representatives. The governance structure should have a written mandate, defined membership, reporting expectations, and access to senior decision-makers. Executives should ensure that the group has sufficient authority to review performance, assign actions, escalate barriers, and recommend changes. Executive support becomes meaningful when leaders are held accountable for their assigned responsibilities. Operations leaders should be accountable for participation and scheduling. Educators should be accountable for relevant and effective development. Quality improvement leaders should be accountable for timely and actionable findings. Supervisors should be accountable for reinforcing expectations. Program owners should be accountable for coordination and reporting. Executives must also accept accountability for their own decisions. If inadequate staffing, delayed purchasing, unclear authority, or unresolved interdepartmental conflict interferes with readiness, senior leadership shares responsibility for the result.

Medical directors

Medical directors should define the clinical expectations associated with high-risk procedures. These expectations may address: Patient selection Clinical decision-making Technical performance Equipment use Medication administration These partnerships should have defined educational objectives, participant requirements, supervision, documentation, and evaluation processes. Clinical exposure should complement simulation and field review rather than operate as an isolated experience. Operational performance measures should not pressure clinicians into decisions that conflict with patient care. Medical directors should ensure that response targets, transport expectations, documentation requirements, and procedural metrics do not unintentionally encourage unsafe behavior. They should also guard against using isolated numerical measures without clinical context. The objective is not to maximize procedure volume. It is to support appropriate, timely, and reliable care.

Operations leaders

Operations leaders translate organizational priorities into everyday working conditions. They control many of the factors that determine whether competency activities occur consistently, including staffing, deployment, scheduling, station routines, and supervisory expectations. Competency should be incorporated into operational planning rather than added after schedules and deployment decisions have been made. Operations leaders should determine when and where practice can occur, how equipment will be distributed, and how supervisors will support participation. Brief reinforcement may occur during shifts, while longer simulation, clinical rotations, or formal assessments may require scheduled release. The design should reflect call volume, geographic coverage, workforce agreements, and agency capacity. Staffing shortages can prevent participation even when leaders support the program. Operations leaders should track missed activities and determine whether the problem is occasional or systemic. Possible responses

may include: Operations leaders must balance immediate production demands with long-term readiness. A system that maximizes unit availability while eliminating meaningful practice may appear efficient until a high-risk event reveals the cost.

Training officers and educators

Training priorities should reflect clinical data, case reviews, protocol changes, and observed performance patterns (Makrides et al., 2023; Vithalani et al., 2022). Educators should work with medical directors and quality improvement personnel to identify: The specific behavior requiring improvement Whether the concern involves knowledge, technique, judgment, or teamwork Which clinicians or groups are affected What practice method is most appropriate How improvement will be evaluated Educators should create a learning environment in which questions are welcomed and mistakes during practice are used constructively. At the same time, they must maintain clear standards and report significant concerns through the appropriate channels. Educators should not be expected to compensate for every organizational weakness through additional training. When learning is limited by equipment shortages, staffing, inconsistent policy, or inadequate clinical exposure, educators must report those barriers. They should also communicate when an intervention is not working. Continuing an ineffective educational activity because it is familiar wastes resources and creates false assurance.

Quality improvement leaders

Quality improvement leaders connect clinical performance with organizational learning. They identify patterns, facilitate review, and convert information into findings that leaders can use. Quality improvement should examine both individual cases and aggregate trends (Makrides et al., 2023; Vithalani et al., 2022). The objective is to determine whether variation reflects: An isolated event A recurring individual concern A shared learning need Differences among shifts or stations Quality improvement personnel should compare performance before and after the intervention,

monitor recurrence, and identify unintended effects. If improvement does not occur, the organization should reconsider its explanation of the problem or select a different response. Findings should reach the leaders and educators who can act on them. Quality improvement personnel should maintain regular communication with executive leadership, medical direction, operations, education, and supervision. Communication should also return to frontline personnel when appropriate. Clinicians are more likely to participate honestly when they can see that the organization learns from the information they provide.

Supervisors and field leaders

Supervisors and field leaders operate where organizational expectations meet daily practice. Their behavior often determines whether a competency system functions consistently. Supervisors should communicate and model the organization's clinical expectations. They should treat required practice, feedback, and review as legitimate work rather than optional activities. Their response to questions and mistakes also shapes culture. Respectful coaching encourages disclosure and learning. Ridicule, dismissal, or automatic blame discourages both. Supervisors are often the first leaders asked to balance unit availability with competency activities. They should protect scheduled practice when operationally feasible, reschedule missed activities, and report recurring barriers. Some problems cannot be corrected at the station or shift level. Equipment variation, staffing shortages, unclear policy, insufficient educator capacity, and system-wide inconsistencies require higher authority. Supervisors should report these concerns through a reliable escalation process. Senior leaders, in turn, should respond so supervisors do not learn that escalation is ineffective.

Frontline clinicians

Frontline clinicians are central participants in the competency system. Organizational responsibility does not replace professional responsibility. Clinicians remain accountable for their knowledge, skills, decisions, conduct, and engagement in continued development. Clinicians should approach

competency activities as professional responsibilities rather than administrative requirements. Meaningful participation includes preparing, practicing deliberately, reflecting on performance, and applying feedback. During case review, clinicians should provide accurate information and engage honestly with the learning process. Review cannot succeed when participants withhold relevant facts or treat every discussion as a threat. The organization must provide reasonable support, but clinicians must also recognize when they need assistance. They should remain familiar with protocols and equipment, complete required development, and avoid performing beyond their current ability without appropriate support. Professional responsibility includes preparing before a critical event occurs. Certification alone should not be treated as proof that every skill remains current. Clinicians can strengthen the system by sharing experience, supporting colleagues, participating in simulation, serving as mentors, and contributing to quality improvement. Peer learning should reinforce approved standards rather than informal practices that conflict with policy or evidence. Experienced clinicians have particular influence and should use that influence to normalize questions, practice, and constructive feedback.

These roles become meaningful through their interaction. Consider an agency that identifies declining endotracheal intubation exposure: Quality improvement confirms the trend and identifies the clinicians or groups most affected. The medical director determines the clinical significance and helps define the required competency response.

Educators design realistic reinforcement and assessment. Operations leaders identify how participation can be integrated into staffing and deployment. Supervisors protect practice time and provide local follow-through.

Frontline clinicians participate, seek feedback, and report practical barriers. Executive leadership provides resources, resolves cross-department conflicts, and reviews whether implementation is

occurring. Quality improvement evaluates whether the intervention changes readiness and reports the results.

If any component fails, the system weakens. Data without interpretation do not guide action. Standards without training do not build capability. Training without protected time does not produce consistent participation. Participation without feedback may not improve performance. Leadership support without evaluation cannot demonstrate effectiveness. Interdependence therefore requires defined handoffs. Every function should know what information it must provide, which decisions it may make, when a concern must be escalated, and who is responsible for follow-through. Clinical readiness is a shared organizational outcome, but shared responsibility must not become collective ambiguity. For every major competency function, the organization should identify:

Who owns the outcome Who holds approval authority Who performs the work

Who provides clinical interpretation Who supplies operational support Who receives the findings

Who resolves barriers Who confirms completion Who evaluates effectiveness

One person may hold several responsibilities in a small agency. A larger system may distribute them across departments. Either model can work if authority and accountability remain clear. The purpose of shared accountability is not to dilute responsibility. It is to ensure that every leader and clinician understands how their decisions affect the larger system. Executive leaders provide authority and resources. Medical directors protect clinical standards. Operations leaders create workable conditions. Educators develop capability. Quality improvement leaders produce actionable knowledge. Supervisors convert expectations into daily practice. Clinicians engage professionally and provide the information the system needs to improve.

6. A: Act on Readiness Information

Turning performance information into leadership action

Measurement creates visibility, but it does not create improvement. Figure 3 presents the leadership action cycle: review information, determine its significance, identify contributing conditions, select a response, assign ownership, and follow through until the response is verified.

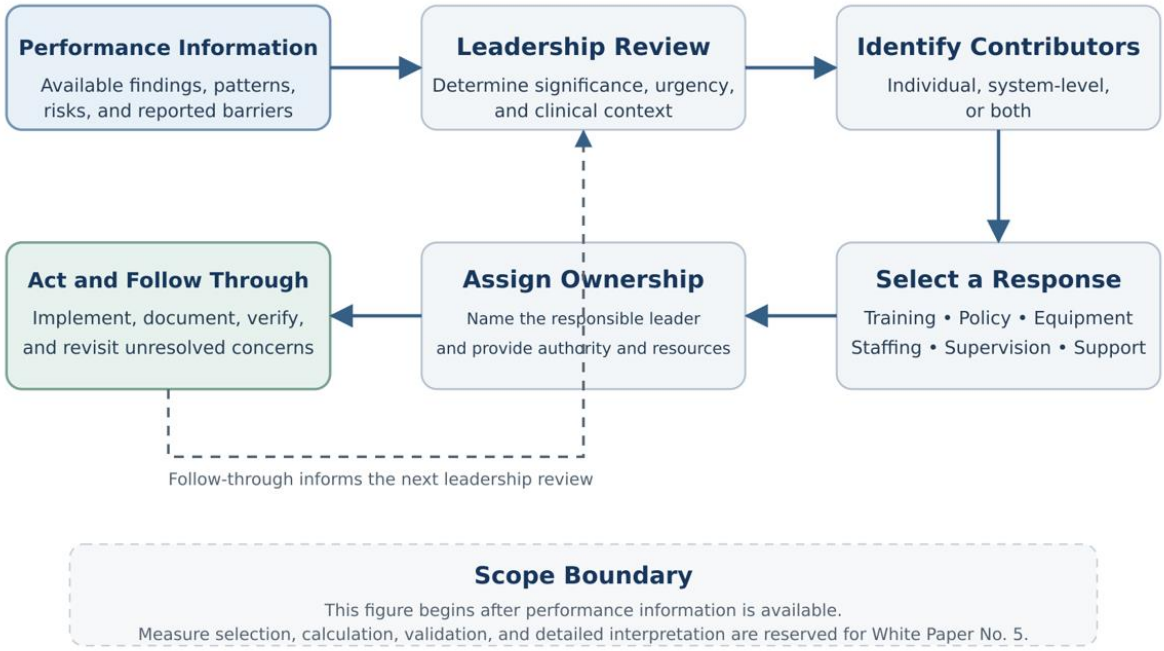

Figure 3. From Performance Information to Organizational Action

Performance information is essential to continuous competency, but information alone does not improve clinical care. Dashboards, reports, scorecards, and databases can reveal activity, variation, and potential risk. They cannot decide what a finding means, determine why it occurred, or ensure that the organization responds. An EMS agency may collect extensive information about procedural success, first-pass performance, complications, clinical exposure, simulation, case review, feedback, and remediation while making few meaningful changes. Reports may be distributed, reviewed briefly, and archived. Leaders may acknowledge a concerning trend without assigning responsibility

or providing the authority and resources required to correct it. In these circumstances, measurement documents the problem but does not reduce it. The leadership responsibility begins where data collection ends. Leaders must determine which findings require attention, place them within clinical and operational context, distinguish individual concerns from system-level patterns, and convert them into action. They must then determine whether the action was implemented and whether it improved performance.

This section focuses on how leaders use performance information. The detailed selection, definition, calculation, validation, and interpretation of competency measures will be addressed in White Paper No. 5, Measuring Clinical Competency. The purpose here is to establish the management process that connects information to decision-making and improvement. Dashboards can make clinical performance more visible. They can help leaders identify changes in procedure frequency, success, participation, feedback, or other indicators. However, a dashboard is a representation of the system. It is not the system itself. A report does not improve competency unless someone: Paramedics' perceptions of system performance vary across service models, which reinforces the need to interpret quality indicators in organizational context (Makrides et al., 2023).

Reviews it Understands its clinical significance Investigates the conditions surrounding the finding

Determines who or what is affected Assigns responsibility Selects an appropriate response

Provides the necessary authority and resources Confirms that the response occurred Evaluates whether performance improved

Without these steps, data collection can create false assurance. Leaders may believe that performance is being managed because it is being measured. The organization may invest in sophisticated technology while leaving the underlying governance and response processes unchanged. A dashboard can show that first-pass airway success varies among clinicians or stations. It cannot explain whether the variation reflects clinical exposure, patient characteristics,

documentation, equipment, decision-making, training, or differences in supervision. A report can show that practice participation has declined. It cannot determine whether clinicians are disengaged or whether staffing makes completion impractical. Performance information should therefore be treated as the beginning of inquiry rather than the conclusion. The first leadership question should not be, "Who is below the target?" It should be, "What is this information telling us, and what additional context do we need before acting?"

More information does not necessarily produce better leadership. Excessive reporting can overwhelm decision-makers, obscure the most important findings, and make action less likely. Leaders need information that is clinically meaningful, operationally relevant, timely, and connected to decisions they are authorized to make. Useful leadership information should help answer several questions: Is clinical readiness being maintained?

Where is performance changing? Which high-risk skills have the lowest exposure? Are clinicians participating consistently?

Are feedback and case review occurring on time? Are differences emerging among individuals, groups, shifts, or stations? Are known barriers being resolved?

Did the approved intervention improve performance? Which concerns require executive or medical attention? Reports should be designed according to the needs of the audience. Medical directors may require detailed clinical context. Educators need information that can guide learning objectives. Operations leaders need to understand participation, staffing, scheduling, and local variation. Executive leaders need aggregate trends, significant risk, unresolved barriers, resource requirements, and intervention outcomes.

A single report may not meet all these needs. The organization should avoid sending every available measure to every leader. Information should be tailored while remaining connected to a common set of clinical priorities. Useful reports should also identify the decision or response that may be

required. A finding presented without relevance or context can become another statistic. A finding that explains why it matters, who is affected, and what leadership attention is needed is more likely to produce action. Performance variation can occur at several levels. A concern may involve one clinician, a group of clinicians, a shift, a station, an operational division, or the entire organization. Leadership responses should reflect the level at which the pattern occurs.

An individual pattern may include: Repeated difficulty with a particular procedure Declining simulation performance

Persistent documentation problems Failure to participate in required development A recurring clinical decision-making concern

Successful performance followed by unexplained deterioration Repeated staffing barriers Differences among supervisors or stations

A recurring problem that persists despite individual remediation The distinction matters because the wrong diagnosis produces the wrong intervention. An agency may repeatedly remediate individuals for a problem created by inconsistent equipment or unclear policy. Alternatively, leaders may describe a recurring individual performance concern as a system issue and avoid necessary accountability. Individual and system factors can also coexist. A clinician may need additional practice, while the organization may need to improve the training process that failed to detect the weakness earlier. A supervisor may apply an expectation inconsistently, while executive leadership may have failed to communicate the standard clearly. A just response considers both.

Leaders should ask whether similarly situated clinicians demonstrate the same pattern. If several people encounter the same difficulty, the likelihood of a system contributor increases. If one individual continues to struggle despite adequate preparation, support, and clear expectations, a focused individual response may be necessary.

Weak signals, thresholds, and action

A continuous competency system should help leaders identify vulnerability before patient harm reveals it. Many significant failures are preceded by smaller indicators that appear unrelated or insufficiently serious when considered individually. Weak signals may include:

- Declining exposure to a high-risk procedure
- Increasing hesitation during simulation
- Repeated requests for clarification
- Growing variation in equipment setup
- Missed practice concentrated on one shift
- Delayed case review
- Incomplete documentation
- Recurring workarounds
- Near misses
- Low confidence reported by clinicians
- Supervisors repeatedly identifying the same operational barrier
- An intervention that produces only temporary improvement

A weak signal does not prove that an adverse event will occur. It indicates that leaders should pay attention. The organization may need additional information, focused observation, or a limited intervention. Near misses deserve particular attention. When harm is prevented through last-minute recognition, improvisation, or good fortune, the event reveals how the system can fail. A successful outcome should not end the inquiry if the process exposed significant vulnerability.

Leaders should create a process for escalating weak signals without treating every deviation as a crisis (Meadley et al., 2023; Weick & Sutcliffe, 2015). The response may begin with clarification, data review, or additional observation. The objective is proportionate attention, not alarm. Early

action is often less disruptive and more supportive than waiting until a serious event requires formal remediation or restriction. Quality improvement findings should influence what clinicians practice. Training priorities selected only according to annual calendars, regulatory requirements, or instructor preference may fail to address the organization's most important needs. When quality review identifies a pattern, educators and medical directors should determine whether an educational response is appropriate. They should consider:

- What behavior or decision requires improvement?
- Is the concern related to knowledge, technical skill, judgment, communication, or teamwork?
- Does it affect one clinician or a larger group?
- What form of practice is most likely to help?
- How realistic must the training be?
- What standard should clinicians demonstrate?
- How will improvement be evaluated?
- Is training sufficient, or must other organizational conditions also change?

A procedural concern may require hands-on practice rather than a lecture (Bienstock et al., 2022; Nielsen et al., 2021). A decision-making problem may require scenarios that include ambiguity, competing demands, and consequences. A communication concern may require team-based simulation. An equipment issue may require standardized setup and familiarization.

Training should be targeted rather than automatic. Assigning education after every unfavorable finding can create the illusion that all clinical problems originate with clinicians. Leaders must first determine whether the problem can reasonably be corrected through learning. The connection should also operate in the opposite direction. Findings from simulation and assessment should return to quality improvement and leadership. Training may reveal weaknesses that have not yet appeared in field data. These findings can serve as early warnings and guide further review. Not

every variation requires the same response. Some findings warrant routine monitoring, while others require immediate medical or executive attention. Governance should define thresholds that help leaders respond consistently. Leadership thresholds may be based on:

- Severity of potential patient harm
- Frequency or recurrence
- Magnitude of deviation
- Involvement of a high-risk procedure
- Evidence of declining performance
- Differences among groups
- Failure of an earlier intervention
- Significant equipment or protocol concerns
- Repeated inability to complete required practice
- Behavior suggesting an immediate safety risk

Thresholds may lead to different levels of response. Performance review should produce a documented decision. The record need not be excessively complex, but it should establish what the organization concluded and what will happen next.

Documentation should identify:

- The finding reviewed
- Relevant clinical and operational context
- Whether the concern is individual, systemic, or both
- The decision made
- The person or group responsible
- Required resources or approvals
- The implementation deadline

- The measure of completion
- The expected outcome
- The follow-up date
- The final disposition

This process prevents important concerns from disappearing after discussion. It also provides continuity when leadership or personnel change. A decision log can help governance groups track open actions. Matters should remain visible until completed, evaluated, and formally closed. An item should not be considered resolved merely because it was assigned. Closing the communication loop is also important. When frontline personnel report barriers or safety concerns, leaders should communicate the outcome when appropriate. Even if the requested solution cannot be implemented, explaining the decision strengthens trust and encourages future reporting. Documentation should serve learning and accountability rather than create unnecessary administrative burden. The objective is to preserve organizational memory and ensure follow-through.

The leadership action cycle

1. Receive performance information and determine whether it is complete enough for responsible review.
2. Interpret the findings in clinical and operational context.
3. Determine whether the concern is individual, system-level, or both.
4. Assign a named owner with the authority to act.
5. Select an intervention matched to the contributing conditions.
6. Provide the time, resources, clinical authority, and operational support required.
7. Monitor implementation rather than assuming that approval produced action.
8. Measure whether the response changed performance or reduced risk.
9. Sustain, revise, or discontinue the intervention based on evidence.

Completing an intervention does not establish that it was effective. A clinician may finish remediation without demonstrating sustained improvement. A revised policy may be published without changing practice. New equipment may be purchased but used inconsistently. Additional training may increase participation without improving performance. Leaders should define the intended result before implementation. Depending on the concern, evaluation may examine: Improved clinical or simulation performance Reduced variation

Increased practice participation Faster feedback Greater protocol consistency Improved equipment availability

Reduced recurrence Increased clinician confidence Better supervisor adherence Resolution of the original barrier

Sustained improvement over time The evaluation period should reflect the nature of the intervention. Some changes can be assessed quickly, while others require several months or sufficient clinical exposure. If improvement does not occur, leaders should avoid automatically blaming implementation or the people involved. The original explanation may have been incomplete. The intervention may have targeted the wrong cause, lacked sufficient resources, or created unintended consequences. Leaders should be willing to revise or discontinue ineffective interventions. Continuing an activity because resources have already been invested does not improve patient safety.

Performance information becomes valuable when it changes what the organization does (Makrides et al., 2023; Rotteau et al., 2022). It should guide training, policy, equipment, staffing, supervision, and leadership priorities. It should help the agency recognize weak signals, support clinicians before failure occurs, and correct systems that make reliable performance unnecessarily difficult. Leaders must resist two common errors. The first is collecting information without acting. The second is

acting before understanding what the information means. Effective leadership requires disciplined interpretation followed by documented and evaluated action.

Scope boundary
This paper explains how leaders act once readiness information is available. Measure selection, calculation, validation, and dashboard design are reserved for White Paper No. 5.

7. D: Develop a Continuous Learning Culture

From compliance culture to continuous readiness

A compliance culture asks whether a requirement was completed. A continuous readiness culture asks whether clinicians and the organization remain prepared to perform. Figure 4 contrasts these orientations.

Figure 4. From Compliance Culture to Continuous Readiness Culture

Clinical competency systems do not operate independently of organizational culture. Policies may require practice, case review, feedback, and performance monitoring, but culture determines how people experience those activities. It influences whether clinicians view practice as professional development or punishment, whether they ask questions or conceal uncertainty, whether supervisors protect learning time or treat it as expendable, and whether leaders respond to reported barriers or allow them to persist. Culture is created through repeated experience. Clinicians observe what

leaders discuss, what supervisors reinforce, how the organization responds to mistakes, and whether reported concerns produce action. They notice whether practice is expected of everyone or assigned only to those with performance problems. They learn whether feedback is intended to support improvement or create a record for discipline. Over time, these experiences establish shared assumptions about what is safe to discuss, what is genuinely valued, and how people are expected to behave. A culture of continuous competency treats clinical readiness as an ongoing professional and organizational responsibility. Practice occurs before performance declines. Questions are considered signs of engagement rather than weakness. Feedback is timely and constructive. Variation is examined for individual and system-level causes. Clinicians remain accountable for meeting standards, but they are not automatically punished for acknowledging uncertainty or requesting assistance. Leaders reinforce the idea that readiness must be maintained between annual assessments and throughout a clinician's career.

Most EMS agencies must satisfy regulatory, credentialing, accreditation, and medical oversight requirements. Compliance is necessary. Clinicians must maintain certifications, complete required education, demonstrate prescribed skills, and follow approved protocols. The problem arises when completion of these requirements becomes the organization's primary definition of competency. A compliance culture asks whether the required activity was completed. A learning culture asks whether the activity improved readiness. In a compliance culture: Annual validation is treated as evidence of year-round competency.

Training is considered complete when attendance is documented. Clinicians practice primarily when an assessment is approaching. Performance concerns trigger remediation, but routine practice receives less attention. Success is measured by completion rates rather than demonstrated improvement.

Feedback may focus on whether the standard was met rather than what can be learned. Leaders assume that the absence of reported problems indicates acceptable performance. In a learning culture: Competency is reinforced throughout the year.

Training priorities reflect clinical performance and emerging risk. Practice is expected even when no deficiency has been identified. Feedback supports development, reflection, and system improvement. Leaders examine whether interventions change performance.

Clinicians are encouraged to identify uncertainty before it contributes to failure. The organization learns from routine cases, near misses, difficult events, and successful performance. A learning culture does not reject compliance. It places compliance within a broader system of professional development and patient safety. Certification, annual validation, and mandatory education become checkpoints rather than the limits of organizational responsibility. This distinction changes how leaders interpret performance. A clinician who passes a skills assessment may still need continued reinforcement because proficiency can decline without practice (Bienstock et al., 2022; Legoux et al., 2020; Turan & Pekmezci, 2026). A training program with a 100 percent completion rate may still be ineffective if the exercise does not address actual performance needs. A case review process may satisfy policy while providing little value if feedback arrives months after the event.

Leaders must therefore look beyond whether an activity occurred and ask whether it contributed to readiness. This shift from completion to learning is central to building a continuous competency culture. Practice is sometimes treated as evidence that a clinician is inexperienced, deficient, or undergoing remediation. This association can create resistance. Experienced clinicians may interpret a request to practice as a challenge to their professional identity. Others may participate only enough to avoid negative attention. Leaders must separate routine practice from corrective action. Practice should be expected of every clinician, regardless of experience, tenure, rank, or prior performance. High-acuity, low-frequency skills require reinforcement precisely because they

are not encountered often enough to remain reliable through field experience alone. When practice is universal, it becomes less stigmatizing. The message is not that a particular clinician is failing. The message is that the organization recognizes the limitations of human memory, psychomotor retention, and infrequent clinical exposure. Continuous practice becomes a normal safety strategy.

Normalization requires consistent leadership language. Leaders should avoid presenting routine practice as remediation or referring to it primarily as a response to poor performance. Instead, they should connect it to professional readiness, patient safety, and high-reliability operations. Supervisors and experienced clinicians play an important role in this process. When respected personnel participate seriously in practice, ask questions, and discuss lessons learned, they demonstrate that continued development is compatible with expertise. When senior clinicians dismiss exercises as unnecessary, newer personnel may adopt the same attitude. Leaders should make clear that experience does not remove the need for reinforcement. Experienced clinicians may possess stronger judgment and a broader base of clinical knowledge, but they remain vulnerable to declining exposure, equipment changes, protocol revisions, and skill decay. Continuous competency applies across the entire workforce. Performance evaluation

Individual development plans Advancement and promotional pathways Instructor and preceptor opportunities Performance evaluation should consider professional engagement with learning, not merely whether a clinician avoided negative events. Clinicians who seek feedback, participate in practice, support peers, and respond constructively to improvement opportunities contribute to organizational readiness.

The language used by leaders also matters. Terms such as “failure,” “deficiency,” and “remediation” may be appropriate in specific circumstances, but they should not define the entire development system. Routine improvement can be described through coaching, reinforcement, practice, readiness, progression, and professional growth. Improvement becomes culturally

sustainable when clinicians understand that development is continuous and expected. The question is no longer whether a capable paramedic needs practice. The question is how the organization will help every paramedic remain capable.

Psychological safety and just accountability

Continuous learning requires clinicians to speak candidly about uncertainty, near misses, barriers, and performance. It also requires leaders to protect patients and uphold professional standards. Figure 5 shows the necessary balance. Psychological safety without accountability can permit drift; accountability without psychological safety can conceal risk.

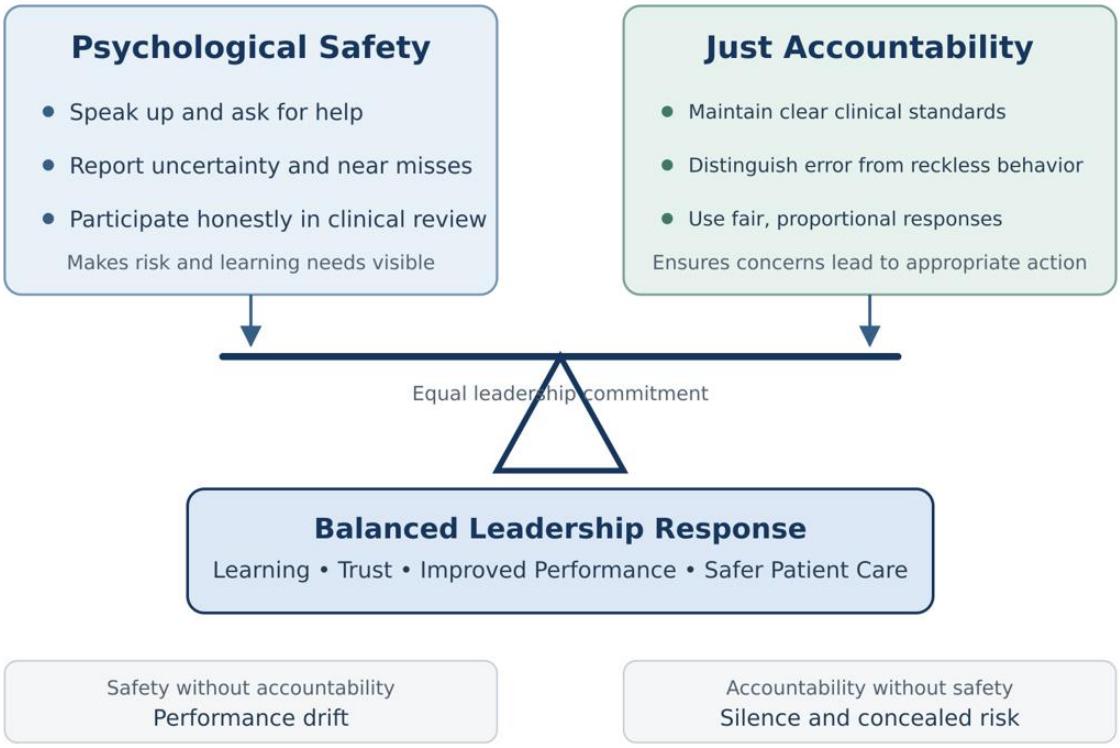

Figure 5. The Psychological Safety and Accountability Balance

A continuous competency system depends on the organization's ability to examine clinical performance honestly (Meadley et al., 2023). Leaders need accurate information about difficult cases, near misses, procedural uncertainty, equipment problems, communication failures, and emerging skill gaps. Clinicians must be willing to participate in review, acknowledge limitations,

and seek support before a concern contributes to patient harm. That level of openness cannot be ordered through policy alone. It depends on whether clinicians believe they will be treated fairly when they provide difficult information. If clinical review is experienced as unpredictable, humiliating, or primarily punitive, personnel may protect themselves by remaining silent. If review avoids accountability entirely, significant performance and behavioral concerns may remain unresolved. Neither approach supports patient safety. Effective leadership must balance psychological safety with just accountability. Psychological safety allows clinicians to speak candidly, ask for help, report concerns, and learn from adverse events without unnecessary fear. Just accountability ensures that standards remain meaningful and that the organization responds appropriately to individual behavior, competency concerns, and system failures. These principles are not opposites. When properly combined, they create the conditions for honest reporting, fair evaluation, professional development, and responsible action.

Psychological safety is the shared belief that people can raise questions, identify uncertainty, report mistakes, discuss near misses, and offer concerns without being automatically humiliated, rejected, or punished (Edmondson, 1999). In an EMS setting, it means that clinicians can speak honestly about factors affecting patient care, even when the information is uncomfortable. Psychological safety may be demonstrated when: A paramedic acknowledges uncertainty about performing a rarely encountered procedure. A clinician requests additional practice before a weakness affects patient care.

A crew reports an equipment configuration that increases the risk of error. A supervisor raises concerns about staffing conditions that interfere with readiness. A clinician describes a mistake or near miss accurately during case review. An educator reports that required training is not producing the expected improvement.

Quality improvement personnel present unfavorable findings without pressure to minimize them. A team member respectfully questions a clinical decision when patient safety may be at risk. A leader acknowledges that an organizational decision contributed to a problem. Psychological safety is particularly important in EMS because clinical care occurs in uncontrolled environments. Clinicians often work with limited information, restricted space, environmental hazards, emotional bystanders, operational distractions, and rapidly changing patient conditions. Outcomes may be affected by factors that are not apparent from the patient care report alone.

Leaders need clinicians to describe these conditions honestly (Meadley et al., 2023; Rotteau et al., 2022). If personnel believe that acknowledging uncertainty or error will automatically damage their employment or reputation, the organization will receive incomplete information. Leaders may then make decisions based on documentation that appears orderly but does not reflect the complexity of what occurred. Psychological safety makes it possible to understand performance in context. It allows the organization to learn not only what clinicians did, but also why their actions appeared reasonable at the time and which conditions made successful performance more difficult. High-reliability organizations do not wait for catastrophic failure before examining risk. They pay attention to weak signals, small inconsistencies, near misses, and situations in which success depended on last-minute recovery or individual improvisation. In EMS, weak signals may include:

A clinician needing repeated prompts during a rare procedure Increasing hesitation during simulation Declining exposure to a high-risk skill Inconsistent equipment arrangements among units

Repeated confusion about a protocol Delayed clinical feedback Variation in practice participation among shifts Frequent workarounds

A near miss involving medication, equipment, or procedural sequencing A successful outcome achieved despite a breakdown in communication Supervisors repeatedly reporting that workload prevents practice These events may not produce immediate patient harm, but they reveal conditions

that can contribute to future failure. A near miss is especially valuable because it shows how the system nearly failed without requiring the organization to learn through injury.

Leaders should avoid dismissing near misses because the outcome was acceptable (Meadley et al., 2023; Weick & Sutcliffe, 2015). A successful rescue can conceal significant vulnerability. If a misplaced device was recognized quickly, the recognition prevented harm, but the original placement and the conditions contributing to it still require examination. If a clinician located missing equipment moments before it was needed, the event remains evidence of an equipment-readiness problem. High-reliability leadership values this information because it allows preventive action. The central question is not simply whether harm occurred. It is whether the same conditions could produce a worse outcome next time.

Distinguishing the source of a performance concern

- Human error: an unintentional action or decision that calls for learning, support, and examination of system defenses.
- Knowledge or skill gap: insufficient preparation or retention that calls for focused development, supervised practice, and reassessment.
- At-risk behavior: a choice that increases risk because the risk is not recognized or has become normalized, calling for coaching and restoration of situational awareness.
- Reckless behavior: a conscious disregard of a substantial and unjustifiable risk, calling for proportionate corrective or disciplinary action.
- System failure: policy, equipment, staffing, supervision, communication, or workflow conditions that make safe performance less reliable and require organizational correction.

Fair accountability requires leaders to distinguish among different types of performance concerns (Boysen, 2013; Meadley et al., 2023). Not every error has the same cause, and not every event warrants the same response. Treating all variation as misconduct is unjust and ineffective. Treating

all variation as a system problem can also avoid necessary individual accountability. Leaders should consider at least five categories: human error, knowledge or skill gaps, at-risk behavior, reckless behavior, and system failure. These categories may overlap, and the facts of a specific event may not fit neatly within one classification. Their purpose is to support disciplined analysis rather than automatic judgment. Human error is an unintended action or decision that differs from what was intended. Examples may include a slip, lapse, miscalculation, memory failure, or momentary loss of attention. A clinician may select the wrong item from a similarly arranged kit, omit a step during an unusually complex event, or misunderstand information communicated in a noisy environment. The action was not intended, and the clinician did not consciously choose to disregard a known risk.

The appropriate response generally focuses on: Supporting the clinician Understanding the conditions surrounding the error Correcting system contributors

Improving equipment design or standardization Reinforcing relevant knowledge or technique Sharing lessons when appropriate Monitoring for recurrence

Human error should not be ignored, particularly when it reveals a serious competency concern. However, punishment alone is unlikely to prevent another unintended error. The organization must examine why the error was possible and how the system can be made more resilient. System failure occurs when organizational conditions create, increase, or fail to control risk. Contributing factors may include: Inadequate or inconsistent equipment Ambiguous policies

Insufficient staffing Poorly designed workflows Conflicting directives Inadequate training

Lack of clinical exposure Delayed feedback Weak supervision Technology failures

Communication breakdowns Excessive workload or fatigue A punitive culture that suppresses reporting System failure does not mean that individual actions are irrelevant. An event may involve both a clinician’s decision and organizational weaknesses. The presence of individual responsibility

should not prevent the organization from correcting system contributors. Likewise, identifying system problems should not be used to avoid appropriate individual accountability.

The central question is not whether the individual or the system caused the event. In many cases, both contributed. The task is to understand their relative influence and select a response that reduces future risk.

A fair review framework

10. What happened?
11. What conditions influenced the event?
12. What did the clinician know at the time?
13. Were the expectations clear?
14. Was the clinician adequately prepared?
15. Did equipment, policy, staffing, supervision, or communication contribute?
16. Is the issue individual, organizational, or both?
17. What response will most effectively reduce future risk?

Fairness is essential to both psychological safety and accountability (Boysen, 2013; Meadley et al., 2023). Clinicians must trust that review decisions are based on facts, established standards, and consistent principles rather than rank, reputation, personal relationships, or the severity of the outcome alone. Fairness requires leaders to consider:

- Whether expectations were clearly communicated
- Whether training and equipment were available
- Whether similar events have been treated similarly
- Whether the clinician had a reasonable opportunity to meet the standard
- Whether the response is proportionate to the behavior and risk
- Whether organizational contributors are also being addressed

- Whether the clinician can provide relevant information
- Whether conflicts of interest are managed
- Whether decisions are documented
- Whether appropriate review or appeal mechanisms exist

Outcome bias presents a particular danger. Two clinicians may make similar decisions under similar circumstances, yet only one patient experiences harm. A fair system examines the decision and behavior, not only the outcome. Harm increases the seriousness of the event, but it should not automatically transform an understandable error into reckless conduct. Consistency does not mean that every event receives the same response. Relevant differences may justify different actions. Consistency means that the organization applies the same reasoning framework and can explain why the responses differ. Leaders must also ensure that accountability applies at every level. Frontline personnel should not bear the entire burden when executive, operational, educational, or supervisory decisions contributed. If leadership failed to provide equipment, resolve a known protocol problem, or protect required practice time, those failures should be acknowledged and corrected. Leaders must guard against two opposing failures. The first is blame, in which the organization attributes an event to the nearest individual and ends the inquiry. The second is avoidance, in which leaders describe every concern as a system problem and fail to address individual responsibility.

Blame is attractive because it offers a simple explanation. Removing, retraining, or disciplining one person creates the appearance that the risk has been controlled. However, if the same equipment, policy, workload, or training conditions remain, another clinician may encounter the same problem. Avoidance is equally dangerous. Leaders may hesitate to address performance because they fear damaging morale, provoking conflict, or appearing punitive. Significant knowledge gaps, repeated at-risk choices, or reckless behavior may then continue without appropriate intervention. Just

accountability requires leaders to resist both extremes. They must ask what the clinician did, why it made sense at the time, what organizational conditions contributed, and what response will most effectively protect future patients. Leaders must also model accountability personally. When a management decision contributed to an event, leadership should acknowledge it. When the organization failed to provide adequate practice, allowed conflicting equipment configurations, or ignored a reported barrier, the response should include correction at the leadership level.

A fair accountability system does not ask only, “Who made the mistake?” It asks, “How did our system allow this risk to develop, what responsibility does each participant carry, and what must change?”

8. A Concise 90-Day Leadership Agenda

The first 90 days should establish a functioning leadership system, not attempt full-scale implementation. Table 2 provides a focused sequence that begins with ownership, moves to pilot design, and ends with early implementation and adjustment.

Three implementation disciplines

- Keep the scope narrow. Select one high-risk clinical priority and a manageable participant group so leaders can test governance, scheduling, review, and follow-through before expanding.
- Make leadership work visible. Name the sponsor, clinical authority, program owner, action owners, review schedule, and escalation path. Clinicians should be able to see who is responsible when they report a barrier.
- Treat the pilot as organizational learning. Track operational burden, participation, reported concerns, leadership response time, and whether assigned actions close. Early findings should improve the model, not become a premature scorecard.

Table 2. The 90-Day Leadership Readiness Agenda

Timeframe	Objective	Priority actions	Lead owners	Deliverables	Evidence of completion
Days 1–30	Establish ownership and understand the current system.	Name the sponsor, medical director, and program owner. Select one high-risk priority. Map current practice, data, roles, barriers, and escalation paths.	Executive, medical, operations, training, quality.	Leadership charter; selected priority; current-state map; meeting schedule.	Owners accept roles; governance meetings are scheduled; gaps are documented.
Days 31–60	Design a focused, feasible pilot.	Define expectations. Choose participants. Establish practice, feedback, review, and action workflows. Identify time, staffing, equipment, and communication needs.	Program owner with medical, operations, training, quality, supervisors.	Approved pilot plan; standards; schedule; resource plan; review process.	Resources are ready; participants understand purpose; supervisors can support the plan.
Days 61–90	Implement, observe, and adjust.	Begin the pilot. Track participation and barriers. Review early information. Respond promptly. Document decisions, action owners, dates, and lessons.	Program owner and operational leads, with executive and medical oversight.	Initial report; action log; barrier summary; clinician and supervisor feedback.	Activities occur; barriers receive responses; actions close; revisions are approved.

Days 1–30: Establish ownership and understand the system

Implementation requires both organizational and clinical authority (Adelgais et al., 2019). The agency should designate:

- An executive sponsor
- A medical director or clinical authority
- A program owner responsible for daily coordination
- Who owns the outcome
- Who approves clinical standards
- Who can authorize operational changes
- Who receives performance information
- Who resolves unresolved barriers
- Who reports progress to executive and medical leadership

The initiative should not proceed until these responsibilities are understood. The agency should begin with one high-acuity, low-frequency clinical priority or a closely related skill group. Selection should reflect clinical risk, evidence of declining exposure, local performance concerns, medical director priorities, and organizational feasibility.

Possible starting areas include: Airway management Cricothyrotomy Chest decompression Intraosseous access. Pediatric resuscitation Complicated childbirth Specialized medication or infusion management the initial priority should be consequential enough to justify leadership attention but manageable enough to test the system. Airway management may provide a strong starting point because it requires technical skill, clinical judgment, equipment familiarity, team communication, contingency planning, and post-procedure management. However, each agency should select the priority most relevant to its clinical environment. Paramedic and agency intubation

exposure varies, and greater exposure has been associated with higher intubation success (Dyson et al., 2017; Thomas et al., 2024; Wang et al., 2024).

“Implementation succeeds when the new system becomes part of how the organization operates, not another program competing for attention.” Leaders should document why the skill was selected and what organizational risk the initiative is intended to address. Before creating a new system, leaders should understand what the organization already does. Many agencies have useful activities that remain disconnected. The review should examine:

- Initial and continuing education
- Annual skills validation
- Simulation activities
- Clinical case review
- Quality improvement
- Medical director involvement
- Practice documentation
- Performance reporting
- Equipment standardization
- Clinical rotation opportunities
- Coaching and remediation
- Supervisor responsibilities
- Existing data systems
- Feedback timelines

The objective is not to criticize existing personnel. It is to determine which components can be integrated, which require improvement, and which activities may be redundant. Leaders should ask whether current processes answer several basic questions:

- What competency standard is expected?
- How is readiness maintained between annual assessments?
- Which cases are reviewed?
- How quickly do clinicians receive feedback?
- Who acts when a concern is identified?
- Are individual and organizational patterns examined?
- Can the agency determine whether an intervention worked?

The answers will reveal the most important implementation gaps. The agency should map existing responsibilities and identify where ownership is unclear. Common gaps include: No one owns the complete competency process. Medical standards are defined, but implementation authority is unclear Quality findings do not reach educators Educators cannot protect participation time Supervisors have no formal clinical-development responsibilities Equipment problems remain between departments.

Performance concerns are reviewed without follow-through Leaders receive reports without assigned actions Each gap should be assigned for clarification. The organization should distinguish between the person responsible for completing a task and the leader accountable for ensuring that it happens. A simple decision authority matrix can identify who recommends, approves, implements, supports, and evaluates each major action. Frontline clinicians and supervisors should be involved before the pilot is fully designed. Their operational experience can identify barriers that senior leaders may not see.

Early discussions should explore:

- Which skills create the greatest concern
- How clinicians currently maintain readiness

- What prevents meaningful practice
- Whether equipment is consistent
- How feedback is experienced
- Whether personnel trust the review process
- What happened to previous initiatives
- When practice could occur
- What level of documentation is reasonable
- What supervisors need to support participation

Leaders should clarify that the discussion is not an investigation of individual competency. It is an assessment of the organizational system. Feedback should be documented and considered during pilot design. When suggestions are not adopted, leaders should explain the reason. A small governance group should oversee implementation. Membership may include: Executive sponsor

Medical director Operations representative Training or education representative Quality improvement representative Frontline supervisor Respected clinician or clinical champion The group should define its purpose, authority, meeting schedule, reporting responsibilities, and decision process. It should be small enough to act but broad enough to address the functions affected. By the end of the first 30 days, the organization should have: Identified executive, clinical, and program ownership Selected one competency priority. Reviewed current processes Identified authority and responsibility gaps Gathered frontline input Established a governance group Created an initial list of barriers and decisions.

Days 31–60: Design the pilot and prepare the organization

The medical director and governance group should define what clinicians are expected to demonstrate. The standard should reflect the complete clinical responsibility rather than isolated procedural technique. Depending on the selected skill, expectations may include:

- Clinical decision-making
- Patient selection
- Preparation
- Equipment use
- Technical execution
- Team communication
- Contingency planning
- Recognition of complications
- Confirmation and reassessment
- Documentation
- Response to feedback
- Required practice frequency
- Participation expectations
- Assessment methods
- Feedback timelines
- Criteria for additional coaching
- Remediation and reassessment processes

Circumstances requiring medical or executive escalation Expectations should be clinically meaningful, operationally feasible, and communicated consistently. The pilot should begin with a limited set of measures that leaders can understand and act upon. It should not attempt to build the complete technical measurement system anticipated for White Paper No. 5. Initial leadership measures may include: Percentage of participants given an opportunity to practice

Participation and completion rates Frequency of canceled or interrupted activities Feedback timeliness Equipment availability Supervisor participation

Number of reported barriers Time required to resolve barriers Coaching or remediation completion Implementation of assigned actions Clinical and performance measures may also be included when appropriate, but they should be interpreted carefully and within context.

Leaders should define why each measure matters, who reviews it, and what level of variation requires attention. If a measure does not support a decision, it may not be necessary during the pilot. Clinicians should understand how information from practice, simulation, clinical cases, and performance review will be used. The process should support learning while preserving appropriate accountability. The governance group should define: Who can access individual information Which findings remain developmental

What concerns require medical review When formal investigation may be necessary How clinicians can provide context How confidentiality will be protected How human error, competency gaps, at-risk behavior, reckless behavior, and system failure will be distinguished

How remediation and reassessment will occur How clinicians can raise concerns about fairness Leaders should avoid promising that information will never have consequences. Serious safety or behavioral concerns may require action. The credible promise is that information will be reviewed fairly, consistently, and within context. The pilot design should identify the resources required for a fair test. Leaders should consider:

- Protected participation time
- Staffing and backfill
- Instructor availability
- Supervisor workload
- Practice and simulation equipment
- Consumable supplies
- Training locations

- Technology and documentation
- Medical director participation
- Quality improvement support
- Clinical partnership requirements

The pilot should use existing resources when appropriate, but it should not be intentionally under-resourced. A failed implementation may reveal inadequate support rather than a flawed model. Leaders should estimate both immediate requirements and potential recurring costs. Detailed financial planning will occur later, but the agency must understand the basic operational commitment. The written pilot plan should specify: The selected clinical priority

- Participant group
- Start and end dates
- Competency expectations
- Practice activities
- Assessment and feedback methods
- Roles and responsibilities
- Required resources
- Leadership measures
- Clinical measures when appropriate
- Review schedule
- Escalation process
- Criteria for success
- Conditions requiring revision or suspension

The participant group should be manageable but sufficiently representative to reveal operational barriers. Selecting only enthusiastic volunteers may produce results that do not reflect broader implementation. Before the pilot begins, leaders should explain:

- Why the initiative is necessary
- Why the selected skill was chosen
- What participants will be asked to do
- How much time will be required
- How information will be used
- What the pilot is intended to test
- What the pilot is not intended to do
- How clinicians can report concerns
- How leadership will review findings
- How decisions about expansion will be made

Communication should emphasize that the objective is to test a continuous readiness system, not to search for personnel to discipline. By the end of day 60, the organization should have: Defined competency expectations Selected initial measures Established a fair review process. Identified scheduling and resource needs Approved a focused pilot plan Prepared participants and supervisors Communicated the initiative's purpose and boundaries.

Days 61–90: Implement, observe, and adjust

The agency should launch the pilot according to the approved plan. Participants should have access to the required equipment, instructions, time, and support. Leaders should confirm that:

- Supervisors understand expectations

- Instructors are prepared
- Equipment is available
- Documentation processes function
- Participants know where to direct questions
- Feedback pathways are active
- Escalation procedures are understood

Implementation should begin as designed so that early results can be interpreted fairly. Unplanned variation should be documented.

Participation should be monitored from the beginning. Leaders should examine:

- Who was given an opportunity to participate
- Who completed the activity
- Which activities were canceled or interrupted
- Whether participation varied by shift or station
- How much time the process required
- Whether equipment was available
- Whether documentation was practical
- Whether supervisors supported participation
- Which barriers clinicians reported

Low participation should not be interpreted automatically as resistance. The organization must determine whether clinicians had a reasonable opportunity to complete the requirement. The governance group should meet frequently enough during the initial implementation to address problems before they become established patterns. Executive, medical, operational, and supervisory leaders should remain visibly engaged. They can demonstrate support by: Attending selected activities Asking participants about their experience

Reviewing early findings Resolving barriers promptly Reinforcing the clinical purpose Supporting supervisors who protect participation time Communicating adjustments

Recognizing constructive participation Visible support should not become interference with instruction or pressure on participants. Its purpose is to demonstrate that the initiative remains an organizational priority. Early implementation will reveal problems. Equipment may be unavailable, schedules may conflict, instructions may be unclear, or documentation may be burdensome. Leaders should distinguish among: Issues requiring immediate correction

- Problems that can be monitored
- Components requiring redesign
- Concerns reflecting misunderstanding
- Resistance after reasonable support has been provided
- Safety concerns requiring medical or executive escalation

Each significant concern should be assigned to a responsible person with a deadline. Participants should receive updates when appropriate. Prompt response builds credibility. If clinicians identify problems and see no action, participation and trust will decline. Initial information should be reviewed carefully. A short pilot period and small participant group may not support firm clinical conclusions. The organization should focus first on whether the system is functioning. Questions may include: Did participants receive meaningful practice?

Were standards applied consistently? Was feedback timely and useful? Did the activity identify learning needs? Were barriers documented and addressed? Did supervisors fulfill their responsibilities?

Were performance findings interpreted fairly? Did assigned actions occur? Did clinicians understand the process? Is the operational burden manageable? Initial clinical findings may guide coaching or further review, but leaders should avoid broad conclusions from small numbers.

The governance group should maintain a record of:

- What worked
- What did not work
- Barriers identified
- Decisions made
- Actions assigned
- Resources used
- Participant feedback
- Supervisor feedback
- Emerging performance findings
- Proposed revisions
- Issues requiring longer evaluation

Documentation creates organizational memory and prepares the agency for the formal pilot evaluation. By the end of day 90, the organization should have: Implemented the initial pilot. Identified participation and operational patterns Resolved urgent barriers Reviewed early implementation information Collected frontline feedback Documented lessons. Identified required adjustments Established the next evaluation point.

What not to do in the first 90 days

- Do not launch every high-risk skill at once.
- Do not purchase a complex technology platform before defining governance and workflow.
- Do not promise protected time without resolving staffing and supervisor expectations.
- Do not use early data as a disciplinary scorecard.
- Do not mistake participation counts for proof that readiness improved.
- Do not expand until leaders have shown that reported barriers receive a response.

9. Leadership Priorities and the Bridge to Financial Strategy

A continuous competency system requires more than leadership endorsement. It requires time, personnel, equipment, instructional capacity, clinical access, technology, and ongoing operational support. These resources do not appear automatically because an agency adopts a policy or identifies a clinical need. Leaders must decide what the organization will provide, which activities will receive priority, and how successful practices will be sustained. Resource stewardship does not mean spending without constraint. EMS leaders operate within limited budgets, staffing shortages, unpredictable call volume, competing initiatives, and numerous regulatory and operational obligations. Responsible stewardship requires leaders to align resources with clinical risk, organizational capacity, and demonstrated value. The central leadership question is not whether unlimited resources are available. They rarely are. The question is whether the agency uses its available resources deliberately enough to support the clinical responsibilities it assigns to its workforce. An agency that authorizes clinicians to perform high-risk procedures accepts a corresponding responsibility to provide reasonable conditions for maintaining competency. This includes more than purchasing equipment or conducting annual training. It requires leaders to consider whether clinicians have sufficient practice opportunities, whether educators can support the program, whether participation is operationally feasible, and whether performance information can be collected and used responsibly.

This section addresses resource allocation as a leadership obligation. It does not provide a complete financial strategy. Funding mechanisms, grants, financial partnerships, and detailed budget planning will be addressed in White Paper No. 4. Time is one of the most important resources in a competency system. Leaders may approve training requirements, purchase simulation equipment, and establish competency standards, but those investments produce little value if clinicians do not have a reasonable opportunity to participate (Hobbs et al., 2021). Protected practice time is a

leadership decision. It reflects whether the organization considers clinical development part of the job or an activity to be completed only when operations happen to permit it. EMS agencies face legitimate coverage obligations. Calls cannot be postponed so clinicians can practice, and unit availability must be maintained. Protected time does not mean that training can never be interrupted. It means the organization has a deliberate process for scheduling participation, managing interruptions, and rescheduling missed activities.

Leaders should determine:

- Which activities can occur during normal shifts
- Which require dedicated release time
- How much time is necessary
- How coverage will be maintained
- How missed activities will be rescheduled
- Who can authorize interruptions
- How participation will be monitored
- Whether expectations are consistent across shifts and stations

Brief, frequent practice may reduce operational burden compared with infrequent, lengthy training events. However, even short activities require leadership protection. If a ten-minute exercise is repeatedly postponed or treated as optional, the problem is not the length of the activity. It is the organization's prioritization. Leaders should also avoid relying on unpaid or off-duty participation as the primary solution. Voluntary development can supplement the system, but essential competency requirements should be incorporated into organizational planning. Staffing directly affects whether a competency system can operate. Agencies with vacancies, mandatory overtime, high call volume, or limited reserve capacity may struggle to release personnel for training, simulation, clinical rotations, or case review.

Leaders should assess staffing implications before establishing participation requirements. This assessment may include:

- Current vacancies
- Minimum coverage levels
- Overtime use
- Call-volume patterns
- Relief or reserve capacity
- Geographic deployment
- Supervisor availability
- Shift schedules
- Collective bargaining obligations
- Anticipated duration of activities

The objective is not to postpone competency work until staffing becomes ideal. That point may never arrive. Leaders should identify a design that is clinically meaningful and operationally feasible.

Possible approaches may include rotating participation, using lower-demand periods, beginning with a smaller pilot group, providing limited backfill, integrating brief practice into station routines, or scheduling longer activities across several cycles. Leaders should monitor whether staffing barriers affect some groups more than others. If one shift or station consistently misses activities, the system may produce unequal access to development and uneven readiness across the workforce. Missed participation should be examined before being treated as clinician noncompliance. Leaders must determine whether the individual had a realistic opportunity to complete the activity. Accountability is weakened when clinicians are held responsible for organizational barriers they cannot control.

Fragmentation creates costs that may not appear in a single budget category. Separate training, quality, credentialing, equipment, and data initiatives can duplicate effort and consume staff time without producing an integrated result. Hidden costs may include:

- Multiple systems containing overlapping information
- Repeated manual data entry
- Inconsistent equipment purchases
- Separate training activities addressing the same concern
- Staff time spent reconciling records
- Delayed feedback
- Unused technology
- Conflicting policies
- Repeated remediation that does not address system causes
- Lost clinical partnership opportunities
- Initiatives that disappear after leadership transitions
- Clinician fatigue and declining participation

Fragmented initiatives can appear less expensive because their costs are distributed among departments. In reality, the organization may spend more while receiving less value. Leaders should review existing resources before adding new ones. The agency may already possess equipment, instructional expertise, quality processes, or partnerships that can be integrated into the competency system. Existing activities should be aligned, simplified, or discontinued when they no longer serve a clear purpose.

Resource stewardship includes deciding what the organization should stop doing. Continuing ineffective activities because they are familiar consumes time that could support more meaningful development. Leaders do not need to fund an organization-wide system before learning whether the

model is feasible. Phased investment allows the agency to align spending with implementation progress and evidence of value. An initial phase may focus on: One high-risk clinical area

- A limited participant group
- Existing equipment
- A small number of practice activities
- Basic performance tracking
- Defined leadership oversight
- A manageable evaluation period

The pilot should be sufficiently supported to provide a fair test. Underfunding the initial implementation may produce failure that reflects inadequate resources rather than weakness in the model. Leaders should define in advance:

- What resources are required to begin
- What resources are temporary
- What recurring costs may emerge
- What results would support expansion
- What barriers would require redesign
- What conditions would justify discontinuation

Expansion should occur only after the organization demonstrates that the process can be implemented consistently. Scaling an unstable pilot magnifies its problems. Phased investment also allows leaders to compare expected and actual operational burden. Assumptions about instructor time, documentation, staffing, equipment use, and supervisor workload should be tested rather than accepted without evidence.

Every competency activity creates some burden. It requires time, attention, coordination, equipment, and documentation. The existence of burden does not mean the activity should be

abandoned. It means leaders must determine whether the burden is reasonable and whether it produces sufficient value. Operational burden may include: Time removed from unit availability Overtime or backfill

Instructor preparation Supervisor workload Data entry Equipment setup and maintenance

Travel Scheduling complexity Administrative coordination Disruption to station routines

Technology support Leaders should ask:

- Is the activity necessary?
- Is it designed efficiently?
- Can it be integrated with existing work?
- Is the documentation proportionate?
- Are some requirements duplicative?
- Does the activity reach the clinicians who need it?
- Is participation consistent?
- Does it improve readiness?
- Are there unintended effects on staffing or morale?
- Can the same objective be achieved more simply?

Clinician and supervisor feedback should inform this evaluation. Personnel should be encouraged to identify unnecessary complexity without assuming that every burden can be removed. Leaders should distinguish between productive effort and administrative waste. Meaningful practice requires time. Duplicate documentation does not necessarily improve competency.

Priority recommendations for EMS leaders

- Establish clinical competency as an executive and medical responsibility.
- Create a formal clinical governance structure with clear ownership and decision authority.

- Protect time for continuous practice, feedback, and case learning.
- Integrate operations, education, quality improvement, medical direction, supervision, and frontline practice.
- Use readiness information to drive assigned, documented, and verified action.
- Evaluate system conditions before attributing performance concerns solely to individuals.
- Build psychologically safe and accountable review processes.
- Begin with a focused pilot, demonstrate value, and expand based on evidence.
- Institutionalize responsibilities so the system survives personnel and leadership transitions.
- Connect every sustained readiness commitment to a realistic resource and financial plan.

10. Conclusion: Leadership Is the Infrastructure of Readiness

Clinical performance does not develop in isolation. Every clinician operates within an organizational system that shapes how knowledge is reinforced, how frequently skills are practiced, what equipment is available, how feedback is provided, and whether emerging weaknesses are identified before they contribute to patient harm. Paramedics remain professionally responsible for maintaining knowledge, participating in development, seeking feedback, and performing within established standards. However, individual responsibility cannot substitute for organizational capability. Even highly committed clinicians may struggle when practice is infrequent and skills are not reinforced (Legoux et al., 2020), or when equipment, policy, feedback, and operational conditions interfere with professional development (Hobbs et al., 2021). These conditions are not accidental features of EMS. They are influenced by leadership decisions. Leaders determine what receives attention, which standards are enforced, how resources are allocated, and whether practice is protected. They decide whether quality findings remain in reports or produce action. They shape whether clinical review supports honest learning or creates fear. They determine whether competency is treated as a continuing responsibility or assumed to remain intact between annual assessments.

Training is essential, but it cannot compensate indefinitely for weak governance, fragmented responsibility, poor feedback, inadequate resources, or inconsistent leadership. Educators can provide technically sound instruction, but they cannot independently correct staffing shortages, conflicting policies, equipment variation, delayed review, or weak supervisory support. These conditions require organizational authority. A continuous competency system therefore begins with governance. Leaders must define expectations, assign ownership, establish decision authority, and connect executive leadership, medical direction, operations, education, quality improvement, supervision, and frontline practice. Each participant has a distinct responsibility, but those

responsibilities must operate as parts of one leadership system. Governance alone is not sufficient. Clinicians observe how leaders behave. They notice whether practice time is protected, whether reported barriers are resolved, and whether performance information is used fairly. Visible follow-through establishes credibility. Repeated inaction establishes cynicism. A high-reliability culture requires both psychological safety and accountability (Meadley et al., 2023; Murray et al., 2024; Rotteau et al., 2022). Clinicians must be able to acknowledge uncertainty, report near misses, and participate honestly in clinical review without automatic punishment. At the same time, patient safety requires meaningful standards and appropriate responses to competency gaps, at-risk choices, and reckless behavior.

These responsibilities are not contradictory. Psychological safety improves the information available to leaders. Just accountability ensures that the organization responds fairly and proportionately. Together, they create a system in which clinicians can disclose concerns early, receive appropriate support, and remain responsible for safe practice. Performance information must also lead to action. Dashboards, reports, and databases can make risk more visible, but they cannot correct it. Leaders must interpret findings, identify individual and organizational contributors, assign responsibility, provide resources, and evaluate the results. A problem repeatedly documented but never resolved is no longer only a clinical concern. It is a leadership failure. The same principle applies to resources. Leaders may not have the ability to fund every improvement immediately, but they remain responsible for prioritizing according to clinical risk and organizational capacity. Protected time, staffing, educator capacity, equipment, clinical partnerships, and technology should be introduced deliberately and evaluated for value. Successful activities must eventually become part of recurring operations rather than remain dependent on temporary funding or individual commitment. These obligations provide a practical leadership foundation for continuous clinical

readiness. They do not require every agency to use identical resources or governance structures. They require every agency to accept that readiness must be actively led.

Leaders cannot eliminate every clinical risk. Emergency care will always involve uncertainty, human limitations, changing patient conditions, environmental hazards, and incomplete information. No training program or performance system can guarantee flawless care. Leadership can, however, make reliable performance more likely. It can ensure that clinicians practice before weaknesses become failures. It can standardize equipment, clarify expectations, provide timely feedback, and identify declining exposure. It can distinguish human error from reckless behavior and system failure. It can create an environment in which questions are welcomed, concerns are examined, and improvement continues throughout the year. The future of high-reliability EMS will depend on leaders who recognize competency as a continuous organizational responsibility. The strongest agencies will not be those that merely employ capable clinicians. They will be those that build systems capable of sustaining those clinicians over time. Such organizations will not wait for an adverse event to reveal declining readiness. They will monitor weak signals, examine near misses, and act on performance information. They will connect training to clinical experience, quality improvement, medical oversight, and operations. They will hold leaders accountable for providing the same support that clinicians are expected to use.

Continuous readiness does not emerge from one annual training event, one medical director, one educator, or one committed champion. It develops through consistent leadership decisions made before the emergency occurs. It is built when the organization protects practice, provides feedback, resolves barriers, and treats learning as part of normal work. When those leadership conditions are present, clinicians are better positioned to perform with confidence, adaptability, and sound judgment during the moments that matter most. When those conditions are absent, the organization leaves readiness to individual effort, infrequent exposure, and chance. Leadership is therefore not an

external source of support for clinical competency. It is the infrastructure that makes sustained competency possible. Every critical procedure ultimately tests the clinician, but long before that moment, it tests the leadership system that prepared the clinician to perform.

10.1 The Future of EMS Leadership

Imagine an EMS organization where leaders know the condition of the clinical workforce with the same clarity that they know unit availability, staffing, call volume, and response performance. They know which high-risk skills are being maintained, where clinical exposure is declining, and which clinicians need additional support. They do not wait for an adverse event to reveal a weakness that could have been identified earlier. Imagine an organization where practice occurs before performance deteriorates. Clinicians reinforce rare and consequential skills throughout the year. Brief, meaningful practice is built into normal operations. Simulation reflects field conditions. Feedback follows clinical events while the experience is still recent. Asking for additional practice is viewed as professional responsibility rather than evidence of failure.

Readiness is no longer assumed because a clinician remains certified. It is deliberately maintained. Imagine medical directors receiving information that allows them to guide clinical care rather than simply approve protocols or review isolated complications. They can see patterns in clinical exposure, procedural performance, decision-making, simulation, feedback, and remediation. They work with executives, educators, quality improvement personnel, and operations leaders to interpret those patterns and determine what the organization should do next. Medical oversight becomes continuous, informed, and connected to organizational action.

Imagine supervisors protecting clinical readiness as seriously as they protect unit readiness. They understand that an ambulance can be staffed, stocked, and available while the clinical workforce still requires reinforcement. They make time for practice, encourage questions, provide immediate coaching, and escalate barriers that cannot be corrected locally. They recognize that preparing

clinicians for the next critical event is part of daily operations. Imagine case review producing learning rather than fear. Clinicians can discuss difficult decisions, mistakes, uncertainty, and near misses without assuming that every disclosure will become punishment. Standards remain firm, patient safety remains central, and reckless behavior still produces appropriate consequences. Yet the organization first seeks to understand what happened, why it happened, and what will reduce the likelihood of recurrence.

Human error leads to learning and system improvement. Knowledge and skill gaps lead to focused development. At-risk behavior leads to coaching and accountability. Reckless behavior leads to appropriate action. Organizational failures are acknowledged rather than transferred entirely to frontline personnel. Imagine quality findings producing visible change. When clinicians report inconsistent equipment, leaders standardize it. When case review identifies protocol ambiguity, medical and operational leaders clarify it. When staffing prevents participation, the barrier is documented and addressed. When simulation reveals a shared weakness, training priorities change. When an intervention fails, leaders revise it rather than defend it. Information no longer ends in a dashboard. It moves through a leadership system that assigns responsibility, provides authority, and verifies action.

This is the future of EMS leadership. It is a future in which leaders understand that clinical excellence cannot depend solely on the dedication of individual clinicians. Commitment matters, but even the most committed workforce needs a reliable system. Leaders must create the conditions in which professional responsibility can succeed. The high-reliability EMS organization of the future will not measure readiness through certification alone. It will build readiness continuously through governance, practice, exposure, feedback, performance information, psychological safety, accountability, and leadership action. Its leaders will know that every policy communicates a

priority, every schedule allocates opportunity, every review shapes culture, and every unresolved barrier affects the workforce's ability to perform.

They will lead before the emergency. Building this future requires vision, but vision alone will not sustain it. Protected time, qualified personnel, appropriate equipment, clinical partnerships, technology, and continuous evaluation require resources. Once leaders accept competency as an organizational responsibility, they must determine how to support it financially without allowing short-term constraints to defeat long-term readiness. That challenge leads directly to White Paper No. 4. Leadership commitment establishes the direction, but a sustainable financial strategy provides the capacity to continue.

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About the Author

Ronald Rivers, DM, MBA, is the founder and president of Sentinel Skills Systems, Inc., a healthcare readiness company dedicated to helping Emergency Medical Services organizations build sustainable systems for maintaining clinical competency. Sentinel's work focuses on high-acuity, low-frequency clinical skills through the integration of continuous practice, clinical exposure, structured feedback, performance measurement, quality improvement, and organizational leadership. Dr. Rivers earned his Doctor of Management in Organizational Leadership from the University of Phoenix. His doctoral research examined the organizational, educational, operational, and leadership factors influencing paramedic endotracheal intubation performance. His qualitative study identified limited clinical exposure, skill decay, cognitive demands, leadership and organizational culture, simulation limitations, feedback systems, and changing airway practices as interconnected influences on paramedic readiness. His subsequent scholarship has expanded this research into practical frameworks for continuous competency, clinical governance, workforce development, and high-reliability EMS operations.

Dr. Rivers is the author of published articles in the Journal of Emergency Medical Services (JEMS) addressing paramedic airway competency, skill decay, training, quality improvement, and the organizational systems needed to sustain clinical performance. He has also developed scholarly manuscripts examining organizational and training factors affecting paramedic intubation performance and proposing a continuous readiness framework for high-acuity, low-frequency clinical skills. These manuscripts are currently undergoing international and academic journal review. His work is informed by 17 years of EMS operational and clinical experience, including service as an emergency medical technician, paramedic, supervisor, 911 dispatcher, skills instructor, and flight paramedic. This background allows him to examine competency from multiple

perspectives, including frontline patient care, field operations, education, supervision, communication, and organizational management.

Through Sentinel Skills Systems, Dr. Rivers translates research into practical implementation strategies for EMS agencies seeking to move beyond episodic training and annual validation. His work advances a central principle: clinical readiness must be continuously led, supported, measured, and reinforced as an organizational responsibility.