



CONVENING LEADERS FOR EMERGENCY AND RESPONSE

FIELD INSIGHTS BRIEF

Strengthening Supply Chain Resilience for Emergency Preparedness and Response

Insights from AHRMM and CLEAR Supply Chain Readiness Discussions held March, May and June 2026

Healthcare supply chain disruptions – whether driven by manufacturing interruptions, natural disasters, market concentration, infectious disease outbreaks or other operational shocks – can significantly affect hospitals' and health systems' ability to deliver patient care. These disruptions often expose vulnerabilities:

-  **Where are our vendors located?**
-  **Do we have a plan for this circumstance?**
-  **Who are our partners?**

Even well-resourced organizations can face challenges when critical products become scarce, reliable information is limited or response processes cannot accommodate rapidly evolving supply constraints.

This field insights brief examines opportunities to strengthen healthcare supply chain readiness and resilience as part of emergency preparedness and response efforts. It draws on structured discussions convened by the American Hospital Association's Health Research & Educational Trust through the Convening Leaders for Emergency and Response (CLEAR) initiative, in collaboration with the Association for Health Care Resource & Materials Management (AHRMM), during spring 2026. Participants were supply chain leaders, group purchasing organizations, distributors, public health officials, emergency management professionals and other stakeholders from across the field. This synthesis reflects participants' shared experiences and does not attribute specific comments to individuals or organizations.

Throughout the discussions, six recurring opportunities for strengthening supply chain resilience emerged:

- 1. Define the emergency threshold and build shared visibility.**
- 2. Formalize supply chain's seat at the table.**
- 3. Account for structural and geographic vulnerabilities.**
- 4. Build the field's shared resources.**
- 5. Strengthen post-event continuity and organizational learning.**
- 6. Measure stabilization and workforce impact.**

Across these areas, participants emphasized the importance of stronger cross-sector collaboration, improved data-sharing and risk assessment practices, proactive planning for critical product shortages and practical resources that support continuity of care during disruptions. The sections that follow examine each opportunity, their associated challenges and field-tested strategies hospitals, health systems, public health agencies and supply chain partners can apply to strengthen readiness and resilience.

Opportunity 1: Define the Emergency Threshold and Build Shared Visibility

When does supply chain instability become an emergency? There is no universally agreed-upon threshold; emergency declarations are fundamentally jurisdictional, and federal frameworks require documented, measurable impact that a supply shortage alone often does not meet. Health systems can experience genuine operational crises that never meet the legal threshold for a declared emergency, leaving them to respond without the additional resources a formal declaration makes accessible. Market concentration widens this gap: A single disruption at a dominant manufacturer can escalate into a field-wide emergency almost overnight, yet organizations often lack the specific data needed to gauge true severity in the moment. And whose data counts as the authoritative source of truth during a disruption? Hospitals, states and federal agencies may operate from different assumptions and inconsistent reporting.

Field-Tested Strategies

- **Build a shared healthcare supply chain risk framework.** Such a framework should be collaboratively developed across health systems, group purchasing organizations, distributors and public health partners. Rather than standardizing triggers across jurisdictions, this framework would establish common definitions, risk categories and assessment criteria that individual organizations can then adapt to their own environment.
- **Track a consistent set of core data for every disruption.** Establish baseline inventory tracking for critical supplies across the supply chain, including hospital days on hand, distributor stock levels, and manufacturer capacity to ensure visibility into supply availability.
- **Establish early agreement on the source of truth.** Decide in advance whose data is treated as authoritative during a disruption, and make sure hospital and state executives, who are less immersed in supply chain terminology day to day, are equipped to act on it.
- **Validate assumptions before they become planning factors.** Confirm actual on-hand inventory and margin directly with front-line staff rather than relying on assumed figures, as even small unvalidated gaps compound significantly over time.

Opportunity 2: Formalize Supply Chain's Seat at the Table

Supply chain and emergency management have historically operated in silos, with limited shared planning, vocabulary or ownership of outcomes, despite their clear interdependence. A guiding principle from emergency management practice — that organizations should execute in gray-sky days what they planned for in blue-sky days — remains underapplied in healthcare, where pre-event investment still faces organizational resistance. This gap shows up concretely: In large-scale regional disaster exercises, focus group participants noted nearly every operational function is typically represented except supply chain, even when real supply needs surface over the course of the drill.

Field-Tested Strategies

- **Establish a dedicated supply chain point of contact within incident command.** Ensure logistics leadership has a clear, defined role the moment a response is activated, rather than being looped in informally or after the fact.
- **Hold regular cross-functional planning during stable periods.** Bring supply chain, emergency management, risk management and clinical operations to the same table before a crisis, not during one.

- **Run supply-disruption tabletop exercises.** Extend drills beyond mass casualty and cyber scenarios to test supply chain escalation pathways and decision protocols directly.
- **Develop a tiered maturity model.** Define basic, intermediate and advanced levels of readiness with observable criteria at each tier and make sure the model is accessible to hospitals and health systems.
- **Publish practical guidance as a first step.** A guidance document identifying which internal partnerships and external stakeholders to establish, and what foundational planning should be in place before escalation is needed, gives organizations a clear baseline to build from.

Opportunity 3: Account for Structural and Geographic Vulnerabilities

Many supply chain risks are structural, meaning they stem from how the healthcare supply chain itself is organized, not just from isolated, one-off events. A small number of manufacturers produce a substantial share of critical healthcare products, such as intravenous (IV) fluids, medications and essential disposable products. Any triggering event — a hurricane, cyberattack or equipment failure — at one manufacturing site can lead to widespread downstream impact. The 2024 IV fluid shortages that followed hurricane damage to a key manufacturing facility illustrate this: The storm was the immediate trigger, but the shortage was severe and widespread because so much domestic production was concentrated in that single location.

Field-Tested Strategies

- **Map the full logistics pathway for critical products.** Understanding where a product originates, how it moves and where geographic concentration exists allows organizations to anticipate and plan for disruption rather than discover it after the fact.
- **Incorporate geographic and disaster-risk exposure into sourcing decisions.** Factor natural disaster risk in manufacturing regions into contingency sourcing and inventory reserve strategies. Do not rely on a single source or location for critical products.
- **Build burn rate assessment into standard readiness practice.** Understanding actual consumption under surge conditions, not just typical conditions, allows organizations to project how long inventory will last and where conservation and utilization review is needed earliest.

Opportunity 4: Build the Field's Shared Resources

One clear opportunity is evolving static critical-product mapping work into a living, continuously updated dashboard accessible to hospitals and health systems across the field. Point-in-time reports can become outdated within months as supply conditions shift, so specific access and data-governance provisions will need to be defined as the dashboard is developed.

Field-Tested Strategies

- **Start with a lean dashboard tracking critical products.** The first version of the dashboard may include only the highest-value data: disruption impact and alternate manufacturer capacity, paired with a clinical relevance flag indicating whether a disruption requires equipment substitution or a broader clinical practice change. Deeper integration that connects the dashboard directly into each health system's own product and inventory database — so it can automatically flag the specific items affected by a disruption — and live, multisource data aggregation are appropriate longer-term goals, not phase one requirements.

- **Develop a vetted, clinically endorsed substitution list.** Build clinical agreement on product equivalencies in advance so front-line teams are not left improvising substitutions under pressure during an actual shortage.
- **Create formulary-based planning tools calibrated by facility type and hazard.** Create facility-based planning tools calibrated by facility type and hazard (e.g., wildfires, hurricanes, mass casualty incidents). Help facilities determine appropriate inventory and equipment levels based on facility size, patient population and hazard type, with event-specific formularies tied to known hazard profiles.
- **Frame supply chain readiness as a business case.** Recognize that supply chain readiness directly supports organizational priorities including patient care delivery, surgical case continuity and operational sustainability. Leadership engagement strengthens when supply chain resilience is positioned within the broader context of organizational risk management and continuity planning, emphasizing how readiness protects both care delivery and financial stability during disruptions.
- **Draft a short decision-making playbook for escalation.** Define clear triggers, decision authority at each level and communication steps so disruptions are treated as operational risks with defined protocols to be followed, not ad hoc procurement problems.

Opportunity 5: Strengthen Post-Event Continuity and Organizational Learning

Major disruptions put standard cooperative processes to the test as individual organizations focus on securing continuity of care for their own patients. Smaller organizations face constraints, such as difficulty meeting minimum order quantities or accessing allocations, that larger systems are often better positioned to navigate. Protecting time for organizational learning after a disruption is also a recurring challenge: After-action activities that could improve the next response are often displaced by the pressure to return to normal operations, and gaps in organizational memory can limit the ability to draw on past experience when building response plans.

Field-Tested Strategies

- **Build the emergency response infrastructure before a crisis, not during one.** Establish shared information channels, mutual aid agreements and coordinated distribution protocols in advance of emergencies.
- **Protect dedicated time for structured after-action review.** Build formal review into standard practice following any significant disruption, rather than treating it as optional once operations return to pre-event conditions.
- **Create deliberate channels for organizational knowledge transfer.** Developing formal playbooks and engaging with experienced or recently retired subject matter experts help preserve hard-won lessons that would otherwise be lost with staff turnover.

Opportunity 6: Measure Stabilization and Workforce Impact

Given how much supply conditions have continued to fluctuate in recent years, a literal return to normal may be the wrong benchmark for the field to track. Workforce fatigue, staff turnover and decision quality under sustained pressure are meaningful but largely unmeasured costs of ongoing disruption and are only partially understood. These issues warrant continued attention as the field builds out its next generation of readiness tools.

Field-tested Strategies

- **Track stabilization, not a return to “normal.”** Monitor staffing, supply and patient volume as three consistent data points over time to build a historical baseline, allowing organizations to recognize meaningful stabilization even without a fixed prior condition to measure against.
- **Carry workforce fatigue forward as a dedicated line of inquiry.** Pursue targeted follow-ups such as focused surveys, recognizing that a return to normal operations does not necessarily eliminate the underlying factors that contributed to workforce fatigue. Sustained attention to staff well-being and burnout prevention may be needed beyond the initial disruption response, rather than treating overwork as a closed discussion item.

Looking Ahead

These insights complete the CLEAR initiative’s year 5 supply chain resilience focus group series and will inform the development of future practical, field-facing resources for hospitals and health systems. Ahead of that work, [AHRMM’s Strategic Mapping of Critical Products](#) offers a heat map of supply chain concentration and geographic risk directly relevant to the vulnerabilities described above, and its [Supply Chain Disaster Preparedness Manual](#) provides practical guidance organizations can apply today while these newer tools are developed. Explore the full library of CLEAR field resources at aha.org/aha-clear.

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