

• INDUSTRY TRANSFORMATION

Reinventing healthcare performance management in the AI era

AI can extend healthcare's proven command-center model from patient flow to enterprise performance - helping CEOs and CFOs detect value leakage earlier, assign accountability faster, and act before variation becomes a gap.

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Why health systems created command centers

Command centers were created because hospitals became too complex to manage through fragmented routines alone.

A patient waiting in the emergency department is rarely just an emergency department issue. The delay may depend on bed availability, discharge readiness, staffing, diagnostics, transport, clinical decisions, and downstream capacity. When those signals sit in different systems and are managed by different teams, leaders struggle to act fast enough.

Healthcare command centers emerged to solve that coordination problem. By bringing real-time data and cross-functional teams together, they helped hospitals manage patient throughput, bed capacity, transfers, safety, quality, and related operational constraints.

The model has proved useful. A benchmarking survey of U.S. hospital capacity command centers found that reducing emergency department boarding was the most com-

mon reason for implementation, while bed management and interhospital transfers were among the most common embedded functions. The same study reported that some organizations tracking financial return on investment saw positive returns.

A broader scoping review reached a similar conclusion about why the model emerged: healthcare systems created control centers to manage patient flow, minimize delays, improve safety, improve quality, and reduce costs. But the review also emphasized that these centers are difficult to design and operate because they must communicate system status while managing the different goals and perspectives of stakeholders across the health system.

That history points to the next question. Command centers can coordinate complex operations. But can they coordinate enterprise performance?

Why domain-specific command centers are no longer enough

The limitation of healthcare command centers is not that they failed. It is that most were designed to solve one operational problem at a time.

Some focus on patient throughput. Others focus on bed capacity, transfers, quality surveillance, safety events, or patient experience. Those use cases matter and should continue to mature. But provider performance is rarely created or lost inside one domain. It moves across the healthcare value chain.

A weak elective surgery calendar may start as an access, referral, or scheduling issue. Soon, it becomes a revenue gap, an operating-room utilization problem, a staffing productivity challenge, a physician-engagement concern, and a contribution-margin issue.

Rising direct costs may first appear in finance. But the root cause may sit in case mix, clinical variation, supply utilization, length of stay, payor rules, physician practice patterns, or unit-level operating discipline. A quality-standard gap may begin clinically, but its effects can quickly show up in cost, risk, reputation, patient experience, and capacity.

One NHS study offers a useful caution. A command center package did not produce consistent improvement across the patient-flow and data-quality indicators studied. The lesson is not that command centers do not work. It is that the model does not create value by itself. It must be connected to better data, redesigned workflows, clear accountability, and management routines that turn signals into action.

In other words, health system performance gaps are not usually born as gaps. They begin as variation across the value chain.

By the time that variation appears in a monthly financial review, much of the opportunity to intervene has already passed. Leaders can explain what happened, debate root causes, and assign follow-up actions. But the organization has already spent days or weeks operating below potential.

The prize is not real-time reporting. It is real-time management response.

The next command center is a performance management capability

Command centers were created to help hospitals manage real-time operational complexity. The same logic now needs to be applied to enterprise performance.

For CEOs and CFOs, the challenge is no longer only to coordinate beds, transfers, and patient flow. It is to coordinate the signals that shape financial and operational performance: access, volume, staffing, quality, clinical variation, denials, revenue, direct costs, and margin.

The pressure to do so is rising. U.S. hospitals and health systems continue to face elevated expenses, labor constraints, underpayment, denials, and operating complexity. The American Hospital Association reported in 2025 that care-team costs accounted for 56 percent of total hospital costs in 2024, underscoring how tightly workforce, operations, and financial resilience are linked.

Traditional performance management was built for a slower

environment. Finance closes the month. Reports are generated. Variances are reviewed. Leaders ask why performance moved. Teams investigate. Corrective actions are assigned. The cycle repeats.

That cycle still has value, but it is too slow for performance gaps that emerge daily or weekly. In health systems shaped by acquisitions, regional expansion, service-line growth, and complex payor relationships, no single function owns all the signals. No single dashboard explains all of them. And no monthly review can reliably prevent a gap that is already forming.

For CFOs, the issue is value leakage. A weak elective surgery calendar, a payor-mix shift, a spike in denials, or direct-cost variation in one specialty may be visible operationally before it appears as margin deterioration. The longer those signals remain disconnected from action, the more the monthly review becomes an explanation of value already lost.

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For CEOs, the issue is integration and leadership capacity. Systems built through acquisition often inherit different cultures, data definitions, standards, and management cadences. Integration does not come from structure alone. It requires a shared performance language, common accountability, and a faster way to see when units, services, or specialties are drifting from expectations.

This is especially important for organizations moving toward accountable care. CMS (Center for Medicare & Medicaid Services) describes ACO (Accountable Care Organizations) operations as requiring strategic partnerships, a clear understanding of beneficiary needs and preferences, and the ability to harness data to improve performance and support quality reporting. Evidence from the Medicare Shared Savings Program also suggests that accountable care capabilities compound over time.

Managing variation is central to that discipline. Some variation is warranted because patients differ. But variation becomes a performance problem when it cannot be explained by patient needs, clinical complexity, or informed preferences. The next step is not simply to visualize variation, but to understand its causes and create target points for improvement.

An AI-driven performance command center is therefore not a room, a dashboard, or a technology layer. It is a distributed, role-oriented management capability that combines trusted data, AI-enabled insights, leadership routines, and clear accountability to detect variation, understand its causes, and coordinate action across the healthcare value chain.

Shift	What changes for leaders
Early detection	Identify performance variation before it hardens into a gap.
Real-time insight	Help leaders understand what may be driving the variation and why it matters.
Distributed accountability	Give each role the information and action logic it needs, from C-level executives to unit directors, service managers, and clinical leaders.
Centralized coordination	Help senior leadership prioritize attention, support local action, and coordinate cross-functional intervention.

The opportunity is not to introduce command centers to healthcare. It is to expand a proven model from real-time operational coordination to real-time enterprise performance management.

Hospital Care: building the management system before the gap

Hospital Care, a for-profit health system in Brazil, offers a useful example.

The system grew through acquisitions and now operates over 30 units – hospitals, ambulatory centers, infusion center, diagnostics and walk-in clinics. Integration became a must-win battle. Hospital Care’s long-term ambition is to become an accountable care organization, but care variation, cost inefficiency, inconsistent quality standards, and persistent performance volatility were putting pressure on margins and consuming leadership capacity.

The CEO and COO recognized that data was not simply a reporting issue. It was the foundation for changing the performance management model.

Quantum Rise has been helping Hospital Care redesign that capability around a simple principle: performance variation should be detected, understood, and acted upon before it becomes a performance gap.

The first domain delivered focused on enterprise performance: revenue, direct costs, and contribution margin. But the real value from granular and actionable measurements. Leaders could understand performance by unit, service, medical specialty, DRG (Diagnosis-Related Group), payor, and physician or surgeon.

That granularity made it possible to move beyond enterprise averages and ask sharper questions:

- Where is revenue underperforming?
 - Which service line is driving direct-cost variation?
 - Which DRGs are creating margin pressure?
 - Which payors are changing the economics of a unit?
 - Where does physician-level or surgeon-level variation require a management conversation?
- Which hospital is diverging from the system’s expected pattern?

The point is not to slice the data more ways. It is to reveal where performance is being created or lost, who is best positioned to act, and which variation deserves leadership attention.

From financial review to operating intervention

The command center’s next value comes from connecting financial performance to operating signals that appear earlier.

Take the elective surgery calendar. For many providers, elective volume is a major driver of revenue, contribution margin, physician engagement, and capacity planning. But in many performance systems, a weak calendar becomes a financial conversation only after the gap is visible.

An AI-era performance command center should identify that signal earlier and convert it into a management response: which unit is exposed, which specialty is affected, which surgeons or referral sources require engagement, what capacity needs to be adjusted, and what senior support is required.

Quality variation should be connected to capacity, experience, risk, and cost. Payor variation should be connected to access, utilization, denials, service mix, and contractual economics.

The same logic applies to cost and quality. Direct-cost variation should trigger a structured review of supplies, length of stay, case mix, clinical pathway adherence, and operating discipline. Quality variation should be connected to capacity, experience, risk, and cost. Payor variation should be connected to access, utilization, denials, service mix, and contractual economics.

This is where the command center becomes more than a monitoring tool. It becomes the operating backbone for earlier management intervention across the healthcare value chain.

Where AI creates value

AI matters because it can compress the time between variation and action.

In a performance command center, AI’s role is practical. It should help leaders sense what is changing, explain what may be driving the change, prioritize which signals deserve attention, route accountability to the right roles, and learn which interventions work over time.

Shift	What changes for leaders
Sense	Detect abnormal variation earlier than traditional reporting cycles.
Explain	Suggest likely drivers by comparing units, services, specialties, DRGs, payors, physicians, and operating patterns.
Prioritize	Separate noise from value-relevant signals so leadership attention is focused where it matters.
Route	Send the signal to the role best positioned to act, with the context needed for a management conversation.
Learn	Capture which interventions worked and reuse that knowledge in comparable situations.

But healthcare leaders should be careful not to confuse AI with accountability. AI can prioritize attention, generate hypotheses, accelerate analysis, and help leaders ask better questions sooner. The organization still needs clear ownership, thresholds, escalation routines, and governance.

That governance matters because AI-enabled healthcare systems must be safe, transparent, equitable, and responsibly managed. The National Academy of Medicine's AI Code of Conduct for Health and Medicine emphasizes aligned action across the AI lifecycle and real-world applications.

The same principle is visible in the learning health system concept: data, analytics, quality improvement, workforce development, and governance must come together for health systems to continuously improve. A performance command center can make that idea operational by turning data into signals, signals into management conversations, and management conversations into action.

How CEOs and CFOs should start

Health systems do not need to redesign the entire performance management model at once. A more practical starting point is to choose a small number of recurring variations that often become enterprise gaps, then build the command-center capability around them.

Five no-regret moves can help leaders begin without boiling the ocean.

1. Pick three variations that repeatedly create value leakage.

Examples include weak elective surgery calendar, direct-cost variation in a specialty, payor-margin deterioration, avoidable length-of-stay variation, denials growth, or unit-level margin volatility. Start where the pain is recurring and economically meaningful.

2. Map the value chain behind each variation.

For each one, identify the clinical, operational, financial, quality, experience, and payor signals that interact. The goal is to understand how a local variation becomes an enterprise gap.

3. Define the signal-to-action routine.

Clarify the threshold, owner, escalation path, meeting cadence, expected action, and follow-up mechanism. An alert is not an action until the management routine is designed.

4. Build role-based views before broad AI automation.

C-level executives, unit directors, service managers, and clinical leaders do not need the same view. Each role needs the information, context, and action logic that matches its decisions.

5. Measure management speed, not only outcomes.

Track time to detect, time to assign ownership, time to act, and time to close the loop. These are leading indicators that the command center is becoming a management capability rather than another reporting layer.

Five questions CEOs and CFOs should ask

1. Which variations are repeatedly becoming margin, quality, or access gaps?

Start with the recurring management problem, not the data platform.

2. How long does it take us to move from signal to action?

The hidden cost is not only the gap. It is the delay before intervention.

3. Where does accountability actually sit?

Enterprise averages do not act. Units, services, specialties, payors, physicians, and operating teams do.

4. Which signals need centralized coordination versus local action?

Not every issue belongs at the top. But cross-functional value leakage often requires senior coordination.

5. What must be true for leaders to trust and use AI-generated signals?

Data quality, transparency, escalation rules, and governance determine adoption.

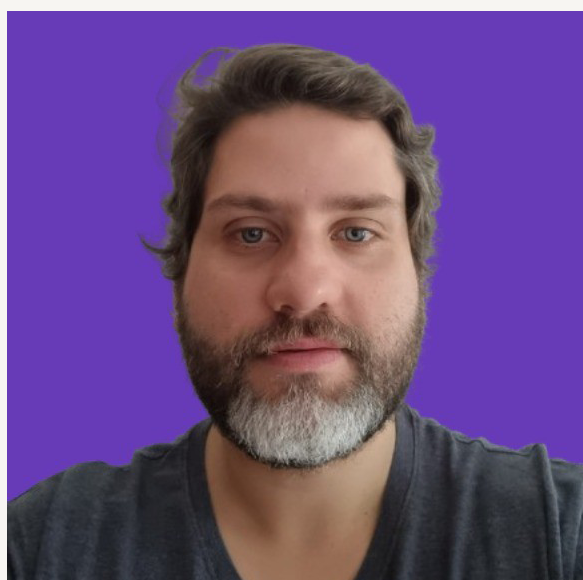
The new management backbone

Health systems that outperform in the AI era will not be those with the most dashboards. They will be those that can detect variation earlier, understand what is driving it, and mobilize the right leaders before performance gaps harden into financial, operational, or clinical consequences.

Command centers have already shown their value in patient throughput, capacity, quality, and safety. Their next frontier is to extend that model into enterprise performance management, connecting revenue, cost, margin, operations, safety, quality, and experience into one coordinated capability.

For CEOs, that means a stronger integration mechanism. For CFOs, it means earlier margin protection and fewer surprises after the close. For operators and clinical leaders, it means clearer accountability at the level where action happens.

That is the reinvention now underway: from command centers that explain system status to AI-enabled performance engines that help leaders protect the future.



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Caio is a business and technology leader with more than 15 years of experience transforming operations, services, and business models through the practical application of data, analytics, and AI. He currently serves as Director of Sales and Delivery at Dhauz, a Quantum Rise company. Previously, he led strategic programs and digital transformation initiatives at Hospital Israelita Albert Einstein and was a Senior Manager in Accenture's Health Data Science practice.

Throughout his career, Caio has sold, led, and delivered technology, strategy, and advanced analytics engagements for organizations including Cielo, Rede, Oi, LATAM Airlines, Unilever, CNH Industrial, Fleury, Einstein, and the São Paulo State Health Department. He holds a degree in Business Administration and a postgraduate qualification in Applied Statistics.



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Fabio is a seasoned data and analytics leader with 20+ years of experience helping companies solve complex problems and improve performance. He holds a Master's in Logistics Systems Engineering and a BA in Construction Engineering from the University of São Paulo, plus a Lead Analytics & AI certification from Northwestern. He spent most of his career at Accenture Latin America, where he helped build the Analytics Group and led teams across Advanced Analytics and Supply Chain. He is one of the founders of Dhauz, a Quantum Rise company, a Data and AI solutions company based in Brazil. Since February 2026, Fabio is the COO of Quantum Rise.

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