

How Leading Health Systems Are Operating Pharmacy at Scale

A practical framework for visibility, resilience and enterprise control

PLAYBOOK



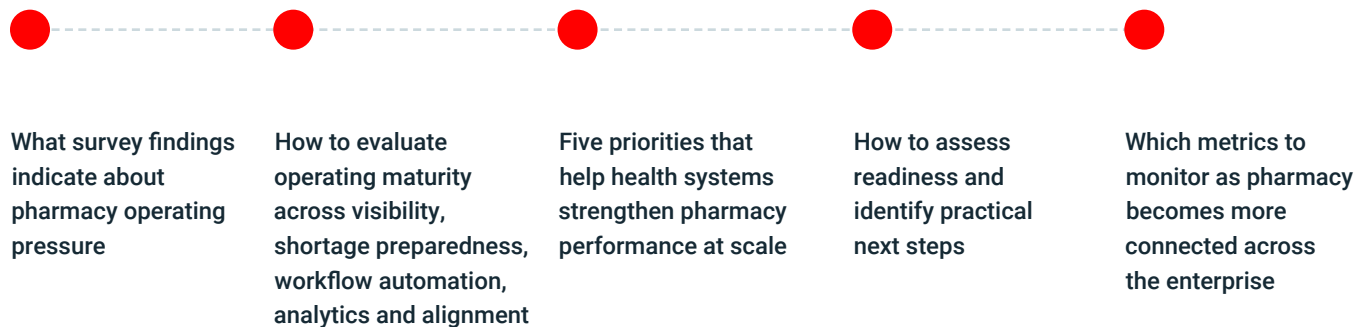


Operating pharmacy at enterprise scale

Medication availability is now an enterprise performance issue. Drug shortages, labor constraints, rising costs and fragmented inventory data increase complexity and financial exposure. Poor visibility into what is available and where it is needed affects patient care, margin and organizational resilience.

Leading health systems are treating pharmacy as a system-wide operating capability, standardizing operations across facilities and connecting pharmacy with supply chain and finance. Software-enabled workflows and shared data reduce manual inventory work while giving leaders clearer visibility, tighter control and greater confidence in decisions affecting medication access and financial performance.

In this playbook, executive leaders will learn



Executive implications

Survey findings from Tecsyes' "The Visibility Crisis in Health System Pharmacies" report reveal a clear operating challenge: pharmacy leaders are being asked to manage enterprise-level risk with incomplete visibility, inconsistent processes and early-stage analytics.

Source: Tecsyes, "The Visibility Crisis in Health System Pharmacies" report.

See report



Key findings

20%

Visibility gaps continue to limit decision-making

Only 20% of organizations report real-time inventory visibility across care settings, while 80% continue to rely on delayed, disparate or manual tracking methods. Without reliable visibility, leaders have less ability to shift inventory, anticipate exposure or make timely decisions across pharmacy operations.

79%

Disruption is now a standard operating condition

79% of respondents identify drug shortages as a major operational disruption. This reinforces the need for stronger mitigation planning, clearer substitution workflows and better coordination across pharmacy, supply chain and clinical teams.

77%

Readiness does not match exposure

77% of health systems report they are not fully prepared to manage major disruptions. The gap points to a need for more proactive operating models, not simply faster reaction when supply issues occur.

15%

Advanced analytics adoption remains early

Only 15% of organizations report fully deploying AI and machine learning capabilities for forecasting, optimization or shortage prediction. Most health systems still have work to do before advanced analytics can reliably support day-to-day pharmacy decisions.

What this means for executive leaders

The findings point to a maturity gap. Pharmacy has become a strategic lever for margin protection, patient access and operational resilience, but many health systems still depend on reactive processes. Closing that gap requires enterprise visibility, standardized workflows, investment in connected technology and better coordination between pharmacy, supply chain, finance and clinical operations.

The pharmacy operating maturity model

Where does your organization fall?

Capability	Foundational	Advancing	Leading
 Inventory visibility	Visibility limited to individual sites, departments or storage areas	Multi-site reporting with periodic reconciliation	Enterprise-wide, real-time visibility across care settings
 Shortage management	Reactive response after shortages create disruption	Coordinated planning for priority medications and alternatives	Predictive monitoring, mitigation workflows and clear escalation and communication paths
 Automation	Inventory work is largely manual, with limited use of software-enabled workflows	Automated triggers, task routing and alerts support selected priority workflows	Workflow automation spans replenishment triggers, cycle count scheduling, expiry monitoring and exception routing
 Data and analytics	Historical reporting and manual analysis	Performance dashboards and periodic trend reviews	Predictive and prescriptive insights that guide operational action
 Cross-functional alignment	Departmental decision-making	Periodic collaboration across pharmacy, supply chain and finance	Shared governance, shared KPIs and coordinated enterprise decisions

Executive insight

Most health systems will not land neatly in one column. Many operate in a mixed maturity state, with advanced capabilities in some areas and foundational gaps in others. The useful question is where the largest risk or performance drag sits today.

The highest-performing organizations build toward a connected, real-time operating model. They use maturity assessment to prioritize the gaps that have the greatest effect on medication availability, financial stewardship and operational resilience.

Five priorities of high-performing pharmacy organizations

The priorities below translate maturity assessment into action. Each one helps pharmacy leaders move from isolated improvement efforts toward a more connected enterprise operating model.

1.

Standardize operations across the enterprise

Executive focus: Variation in item data, replenishment rules, storage practices and inventory workflows makes performance harder to compare and improvement harder to scale.

Actions to consider: Define common policies for inventory ownership, min/max levels, substitutions, cycle counts and expiry management. Normalize data and reporting across facilities so leaders can identify variation and replicate what works.

2.

Create end-to-end inventory visibility

Executive focus: Pharmacy leaders need timely access to inventory data across acute, ambulatory, specialty and procedural settings. Without that visibility, decisions depend on calls, spreadsheets and delayed reconciliation.

Actions to consider: Connect inventory data across locations, make high-risk exceptions visible and give executive teams a consistent view of stockouts, high-cost inventory, controlled substances and critical medications.

3.

Strengthen shortage preparedness

Executive focus: Drug shortages affect clinical workflows, labor planning, substitution decisions and financial performance. A reactive model leaves too much exposure until disruption is already affecting operations.

Actions to consider: Create clear shortage governance, monitor priority medications, maintain approved alternatives and tie allocation decisions to demand, inventory and patient care requirements.

4.

Reduce manual work through workflow automation

Executive focus: Manual counts, replenishment, reconciliation and exception tracking consume workforce capacity and create inconsistent data. Automation should reduce avoidable work while keeping pharmacists and pharmacy teams in control of judgment-based decisions.

Actions to consider: Automate replenishment triggers, cycle count workflows, expiry monitoring and inventory alerts. Start where manual work is highest, risk is greatest or data quality is limiting executive visibility.

5.

Align pharmacy, supply chain and finance

Executive focus: Pharmacy performance now intersects with operating margin, working capital, patient access and enterprise risk. Shared visibility is stronger when leaders also share metrics, governance and accountability.

Actions to consider: Establish a regular review cadence across pharmacy, supply chain and finance. Track the operational, financial and regulatory impact of shortages, expirations, stockouts, inventory turns and labor hours spent on manual inventory management.



Pharmacy operating readiness assessment

Score one point for each checked statement. Use the result as a practical starting point for discussion, not as a definitive maturity rating.

Inventory visibility

- ☐ We can view pharmacy inventory across all facilities and care settings.
- ☐ Inventory decisions are informed by real-time or near real-time data.

Shortage preparedness

- ☐ We can identify at-risk medications before shortages affect patient care.
- ☐ We have a defined process for substitutions, allocations and executive escalation.

Automation

- ☐ Manual inventory counts, replenishment and reconciliation tasks are minimized through rules-based workflows.
- ☐ Alerts help teams act on stockouts, expirations and exceptions before they become larger issues.

Data and analytics

- ☐ Executive leaders have visibility into pharmacy operational and financial performance.
- ☐ Pharmacy leaders can compare performance across sites using a consistent set of metrics.

Enterprise alignment

- ☐ Pharmacy, supply chain and finance review shared performance metrics.
- ☐ We have a roadmap for advancing pharmacy operating maturity.

Scoring	Maturity Level	Interpretation
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0-3	Foundational	Siloed, manual and reactive operations with limited system-wide visibility. Focus first on data quality, inventory visibility and the highest-risk manual workflows.
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4-7	Advancing	Improving coordination and reporting, but still dependent on partial visibility and manual intervention. Focus on standardization, workflow automation and shared executive metrics.
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8-10	Leading	Connected, real-time and increasingly predictive operating model with shared enterprise governance. Focus on sustaining performance, extending workflow automation and improving decision support.
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The next 90 days

Pharmacy operations are approaching a point where disconnected improvement efforts are no longer enough. Leaders need a short list of priorities that reduce risk quickly while building toward a more connected operating model.

Four areas for action

Assess

Establish a baseline across inventory visibility, shortage preparedness, workflow automation, analytics and cross-functional alignment. Identify the highest-risk gaps and the workflows most dependent on manual effort.

Align

Define executive ownership and make pharmacy performance visible across supply chain and finance priorities. Clarify who owns metrics, escalation and decision-making when disruption occurs.

Execute

Prioritize two or three high-impact initiatives that improve visibility, reduce manual work or strengthen shortage resilience. Avoid trying to advance every capability at the same pace.

Measure

Track progress through a consistent executive dashboard. Review both operational signals and financial impact so pharmacy improvement can be connected to enterprise performance.

Key metrics to monitor

- Inventory turns
- Drug expense variance and outliers
- Expired inventory value
- Stockout frequency
- Labor hours spent on inventory management
- Shortage occurrence and mitigation rates
- Days of inventory on hand
- Budget-to-expense comparison
- Non-contract and non-formulary purchases
- 340B, WAC and GPO purchase mix
- Inpatient and outpatient reporting
- Outsourced and insourced purchasing opportunities

The new standard for pharmacy leadership

Pharmacy performance is no longer defined by facility. It is defined by how effectively health systems connect medication availability, cost control and operational resilience across the enterprise.

High-performing organizations are building pharmacy models that give leaders clearer visibility, stronger governance and better control over disruption. For health systems under pressure to protect margin, reduce waste and support uninterrupted patient care, that operating model is becoming a meaningful advantage.

Take control of your pharmacy operations

Tecsys helps health systems connect pharmacy inventory, supply chain execution and operational data, so leaders can reduce manual work, manage inventory risk and make decisions with confidence across complex networks. Built for regulated, high-stakes healthcare environments, Tecsys gives pharmacy teams the visibility and control they need to improve performance without adding complexity.



Talk to a pharmacy supply chain expert



Talk to a Tecsys expert about your pharmacy supply chain priorities and practical next steps for improving visibility, resilience and control at scale.

About **Tecsys**

Tecsys is trusted by mission-critical organizations in healthcare and distribution to power resilient, efficient and secure supply chains. A global provider of cloud-based, AI-driven software with deep domain expertise, Tecsys delivers real-time operational visibility and execution across critical workflows when performance and reliability matter most. Tecsys is publicly traded on the Toronto Stock Exchange (TSX: TCS). For more information, visit www.tecsys.com.



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