



2025 HPOR

THE STATE OF HOSPITAL PHARMACY OPERATIONS

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Introduction

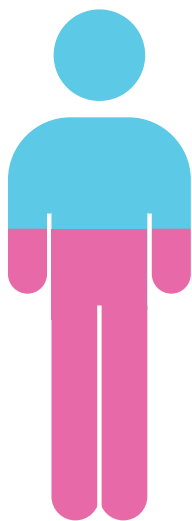
The 11th annual Hospital Pharmacy Operations Report (HPOR) provides critical insights into the evolving landscape of hospital pharmacy operations. From drug diversion and procurement challenges, to technology priorities and medication shortage management, the insights gathered highlight the operational complexities hospitals face and strategies for resolution, offering a snapshot of the current challenges, priorities, and trends shaping hospital pharmacies nationwide.

Methodology

The findings in this report are based on data from a survey of 258 hospital pharmacy professionals conducted between February 3rd to March 31st 2025. We asked all respondents universal questions about their professional experience, top priorities, and pressing challenges. We then asked respondents questions specifically related to their position in the hospital pharmacy, resulting in a varied number of responses per section indicated throughout the report.

Survey Respondent Demographics

- 130 hospitals across 36 states are represented by the 62% of those who chose to share the hospital/health systems they work at.
- 53.5% of respondents have 11+ years of hospital pharmacy experience.
- Respondents represent multiple disciplines like pharmacy management (20%), diversion specialists (13%), pharmacy buyers (13%), and more.



OVER 53%
of respondents
boasted a decade or
more of industry
experience

Hospital Pharmacies Turn to New Technology & Software to Solve Their Most Pressing Issues (n=258)

Hospital pharmacies face many challenges that impact their efficiency, compliance, and ability to deliver optimal care. According to the HPOR survey, drug shortages came out on top as the most pressing concern again for the sixth year in a row, with 75% of survey respondents selecting it as one of their top three challenges. Staffing shortages surfaced as the second most significant challenge by 55% of those surveyed. Both kinds of shortages represent a significant barrier for the majority of hospitals, creating difficulties in maintaining operational efficiency and patient safety. Additionally, the pressure to reduce drug spend (29%) remains a critical concern, alongside challenges related to drug diversion (21%) and high-cost inventory management (19%), rounding out the top five challenges highlighted by the survey.

Top 3 Challenges for Hospital Pharmacies



To address these hurdles, hospital pharmacies are increasingly turning to technology, with 77% of respondents indicating they are likely or very likely to implement new technology within the next 12 months (a 4% increase from the previous year). This response demonstrates a strong commitment to using technology to overcome operational obstacles. The top three technology initiatives in 2025 are smart pumps (28%), IV prep tracking/clean room automation (28%), and automated dispensing cabinets (ADCs) (27%). Smart pumps dethroned controlled substance monitoring as the top technology initiative from last year, IV prep tracking/clean room automation ranked second again for the third consecutive year, and ADCs slightly edged out shortage management software for the third spot. Prioritizing these technologies could help pharmacies cope with resource constraints and ensure medication safety in the face of staffing shortages and a strained workforce.

Shortage management software (25%) is also a key priority as hospital pharmacies seek a solution to their top challenge. The market is responding to this need by releasing new, innovative software that relies on predictive models to help users mitigate and respond to shortages more efficiently.

Perpetual inventory management also ranked high at 24%. This technology enables real-time data tracking, which can help hospitals reduce waste, respond to recalls, and control costs, directly addressing the challenges of reducing drug spend and responding to staff shortages. Through these technology investments, hospital pharmacies aim to enhance operational efficiency and patient safety while addressing the key issues they continue to face.

Top 5 Technology Initiatives for 2025

- 1 Smart Pumps**
- 2 IV Prep Tracking/Clean Room Automation**
- 3 Automated Dispensing Cabinets**
- 4 Shortage Management Software**
- 5 Perpetual Inventory Management**

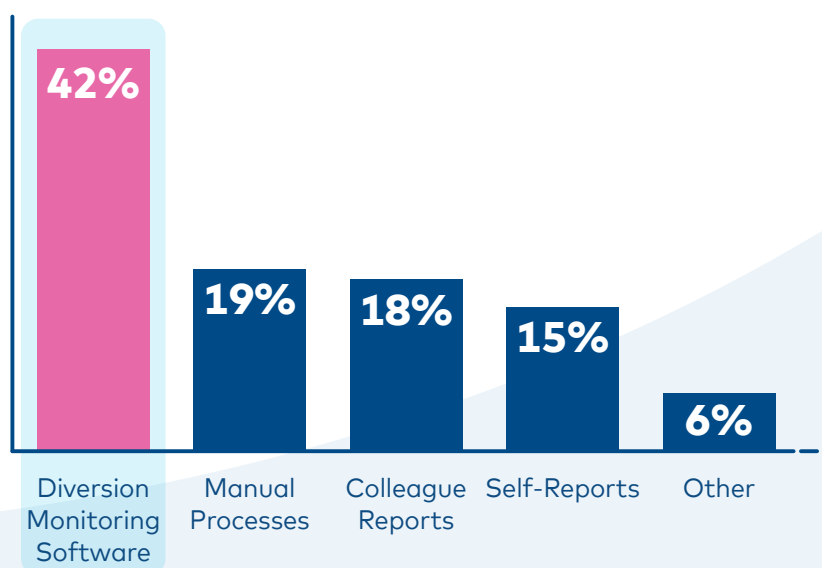
Most Sites Had Diversion in the Last Year; Diversion Monitoring Software Identified Nearly Half of Events (n=100)

Drug diversion continues to rank as a top issue for hospital pharmacies, with 66% of respondents reporting a diversion event within the past year. Diversion monitoring software discovered 42% of these events - more than any other discovery method. This result, coupled with diversion detection software ranking as the most likely diversion prevention strategy to be implemented in the next 24 months, shows that hospitals continue to rely on software solutions to maintain compliance and prevent diversion. Other key diversion prevention strategies likely to be implemented include establishing multidisciplinary task forces, 100% audits between EMR and waste documentation, and employee education programs.

With the further consolidation of the drug diversion monitoring market after Bluesight acquired Protenus in 2024, hospitals are choosing among a handful of key vendors in the space. Diversion specialists are particularly focused on three key features when evaluating solutions: strong integration with Automated Dispensing Cabinets (ADC) and Electronic Medical Records (EMR), intuitive investigation workflows, and proactive alerting systems.

Process improvements to drive compliance are now the most common metric to measure diversion prevention success. Additionally, 72% of survey respondents selected improving system-level reporting as a top priority of their controlled substance work group/diversion committees.

Reported
methods for
recent diversion
detection




Hospitals Seek to Streamline Drug Purchasing in the Face of a Complicated, Unreliable Supply Chain (n=78)

Hospital pharmacies increasingly turn to technology to address their top procurement challenges, with a clear focus on streamlining operations and tackling issues like drug shortages, cost containment, and 340B compliance. 95% of survey respondents highlighted streamlining purchasing operations as an important or very important priority for their teams - a stark increase from last year's 71%. 75% of respondents reported purchasing drugs from up to nine different sources, further highlighting the need for streamlined purchasing workflows. In response, purchasing optimization technology adoption has grown from 25% last year, as 44% of respondents utilize purchasing analytics software to gain more significant insights and efficiencies - a 76% increase from the previous report.

Reducing drug spending remains the top priority for hospital pharmacies, with 77% of respondents focused on cutting costs and leveraging operational improvements to achieve savings; 65% are tasked with meeting specific savings goals this year.

Despite these pressures, medication shortages continue to challenge pharmacies, with the average facility dealing with 10 or more shortages at any given time and the plurality spending over 11 hours weekly managing shortages. Respondents emphasize the need for shortage software that can predict disruptions before they happen, using machine learning to address shortages proactively.

76% 
Increase in the
adoption of purchasing
analytics software
since HPOR 2023-24



340B Program Specialists Expect Regulatory Oversight to Increase in 2025 (n=46)

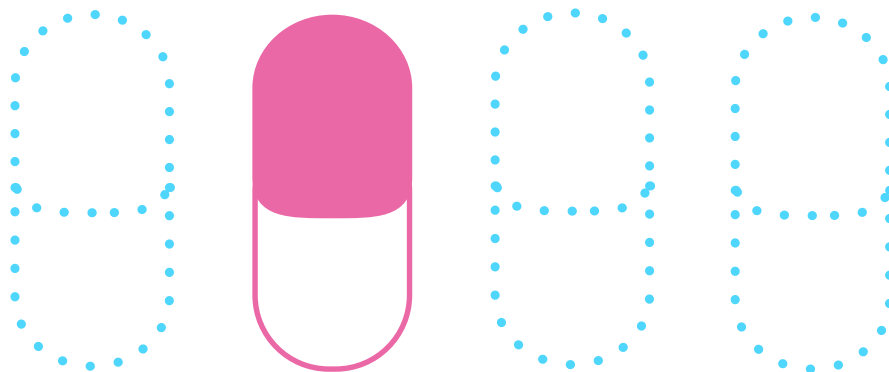
76% of respondents managing 340B compliance at their facilities expect an increase in regulatory oversight in the next 2-3 years, with the remaining 24% expecting oversight levels to stay about the same. No one predicted a decrease in regulatory oversight in the next 2-3 years. Increased oversight might require hospitals and health systems to be more consistently and thoroughly prepared for audits by organizations like HRSA.

Despite this predicted increase in oversight, half of the survey respondents reported only auditing claims monthly, with 13% only completing audits quarterly. Additionally, hospitals typically audit less than 25% of transactions. While regulatory compliance remains a significant challenge, other top concerns include increasing restrictions on contract pharmacy arrangements, shifting toward manufacturer rebate models, and decreasing financial margins due to changing reimbursement models.

The typical hospital audits just

<25%

of 340B transactions



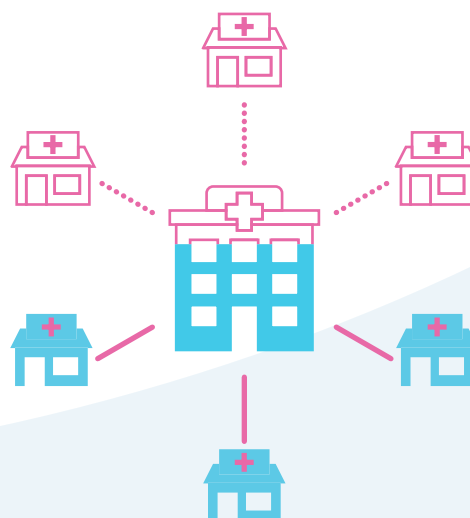
Hospitals Turn to Centralized Distribution & Standardization as They Support More, Low-Visibility Remote Locations (n=84)

More health systems are moving to a centralized distribution model for fulfilling drug needs for their hospital pharmacies, infusion clinics, ambulatory surgical centers, and more. 44% of survey participants said their hospital is part of a system that leverages a centralized pharmacy model, up from 33% the previous year. As more health systems adopt these centralized distribution models, 68% of respondents plan to standardize their kit and tray templates within the following year.

However, regardless of whether their system leverages a centralized distribution, 87% of respondents reported that their pharmacies support remote locations, and 41% expect this number to grow in the next two years. For example, nearly 50% of respondents procure medications for infusion centers. There is a clear need for better visibility in these clinics, as they ranked 9th place out of 12 areas for drug inventory visibility (this could be because inventory at these sites is refrigerated and historically harder to track with medication tracking technology.)

Lack of visibility into remote locations is further emphasized by the 41% of respondents reporting no visibility into oncology inventory in remote locations. Despite this, only 38% have capital expenditures allocated to improve inventory visibility, highlighting a gap between the need for enhanced visibility and the limited financial resources to implement necessary solutions.

41%
of respondents
reported having no
visibility into remote
oncology inventory



Navigating Challenges & Embracing Innovation: The Future of Hospital Pharmacy Operations

HPOR 2025 underscores the ongoing challenges hospital pharmacies face, particularly around drug shortages, staffing issues, and compliance with regulations. To address these hurdles, hospital pharmacies increasingly turn to new technologies to improve operational efficiency and patient safety. Specifically, 340B compliance management and drug shortage management are the key areas where innovation will make a significant impact on compliance and procurement workflows. As hospitals continue to navigate an unpredictable supply chain and regulatory pressures, the need for improved visibility, streamlined procurement, and advanced technology adoption remains critical to ensuring long-term sustainability and efficiency in pharmacy operations.

Looking for more data about hospital operations and compliance?
Check out more research published by Bluesight this year: _____

The Breach Barometer

The 2025 Breach Barometer Report highlights the critical challenges and escalating risks faced by the healthcare sector in securing patient data. With a record-breaking 305 million patient records breached in 2024, largely driven by the largest healthcare breach in history, the report underscores the urgent need for comprehensive cybersecurity measures.

Diversion Quarterly, Q4 2024

The Diversion Quarterly is a publicly available resource that provides a snapshot of the industry based on aggregated data from over 1,000 ControlCheck customers to help hospitals benchmark their efforts. Those same customers can then benchmark themselves against data from similar-sized hospitals without even leaving the application.

Pharmacy Purchasing Quarterly, Q4 2024

The Pharmacy Purchasing Quarterly Q4 highlights savings results from recommended NDC changes, contract management, and 340B optimizations executed by over 180 hospitals leveraging Bluesight's drug purchasing optimization software CostCheck.

About Bluesight

Bluesight powers hospital and pharmacy operations with intelligence that simplifies inventory management, procurement, and compliance.

Through its suite of industry-leading solutions, Bluesight ensures that health systems protect every patient and optimize every dollar. Over 2,400 United States and Canadian hospitals rely on Bluesight every day to have efficient and safe operations.

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