

2021 HPOR

THE STATE OF HOSPITAL PHARMACY OPERATIONS

INTRODUCTION

At Bluesight[®], we believe that tomorrow's innovations come from thoroughly understanding the challenges of today. This solution-oriented model has helped our network of more than 500 hospitals achieve success through operational efficiency, patient safety, and medication visibility.

We weren't satisfied with turning to our own experiences and perspectives for answers, so we developed our proprietary annual survey to derive key insights and intelligence from pharmacy decision makers. We think of the Hospital Pharmacy Operations Report survey as our road map forward—shedding light on the state of the industry to inform and equip leaders for what's to come.

Now entering its 8th consecutive year, the 2021 Hospital Pharmacy Operations Report (HPOR) once again takes us inside the minds of Hospital Pharmacy leaders. We'll hear firsthand from those on the front lines of a global pandemic about how they experienced another unprecedented and unexpected year. We'll learn how COVID-19 continues to challenge workflows, shift priorities, and reshape the future of the hospital pharmacy industry. In another year that stress-tested the entire drug supply chain, we'll understand why pharmacy leaders are turning to new technologies to future-proof their operations.

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KEY THEMES

THEME 1

ENDURING THE PANDEMIC

Nearly two years into a global pandemic, the widespread challenges created by COVID-19 have not eased up for Hospital Pharmacists.

THEME 2

MANAGING DRUG SHORTAGES

For the 4th straight year, drug shortages remain the #1 challenge faced by hospital pharmacies.

THEME 3

REDUCING OPERATING COSTS

To generate costs savings amidst tightening budgets and limited staff hours, pharmacy leaders are focused on improving operational efficiency.

THEME 4

INVESTING IN TECHNOLOGY

Pharmacy leaders are turning to new technologies to help address their most difficult challenges.

METHODOLOGY

The 2021 HPOR is based on survey input from 118 hospital pharmacy leaders. Consistent with prior years, our survey data represents a diverse group of respondents across the US. 44% of our experienced participants have worked in hospital pharmacy for 20+ years and most have supervisory roles, such as pharmacy directors, managers, and buyers. The respondents also represent a range of institutions, including single hospitals and those with 20+ hospitals in their network. Collectively, the survey respondents offer a wide, balanced, and intimate perspective of the hospital pharmacy industry.

44%

of our participants have worked in hospital pharmacy for 20+ years

FOR THE 4th CONSECUTIVE YEAR, DRUG SHORTAGES ARE THE #1 CHALLENGE FACING HOSPITAL PHARMACIES

For the past four years, Hospital Pharmacists have reported drug shortages as the top issue to address in their pharmacies. While shortages have been a longstanding problem for the industry, nearly all Hospital Pharmacy Leaders (91%) believe that shortages are happening *even more often* now due to COVID-19. In 2021, the percent of hospital pharmacies experiencing 10 or more shortages increased to 76%, a notable uptick from 62% the year prior.

As many Hospital Pharmacies are facing tightening budgets, drug shortages present a serious threat to operational efficiency. 57% of Hospital Pharmacists reported that each medication shortage typically consumes 3 or more staff hours. Given the growing frequency of shortages, addressing them can quickly add up to a costly exercise.

When it comes to managing shortages, many Hospital Pharmacists are hopeful that technology can help. When evaluating inventory management software, 71% of Hospital Pharmacists consider the ability to set par levels for managing shortages a very important capability.

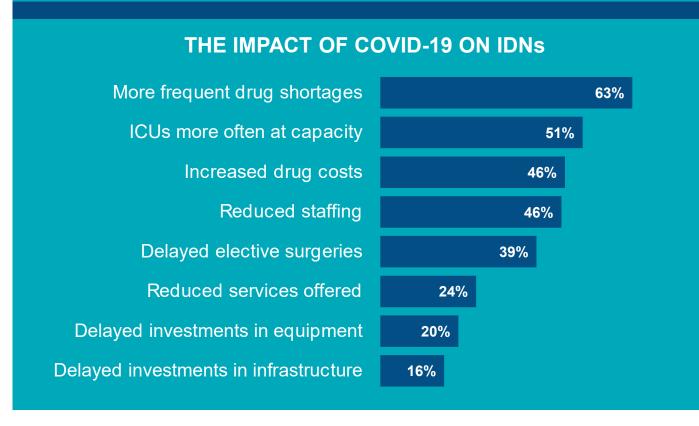
91%

of Hospital Pharmacists are experiencing drug shortages more often due to COVID-19

ALMOST TWO YEARS INTO THE PANDEMIC, COVID-19's IMPACT ON IDNs REMAINS WIDESPREAD

In this year's survey, for the first time, we expanded the breadth of our subject matter slightly beyond hospital pharmacies. We asked our Hospital Pharmacists more broadly about the impact of COVID-19 on their health system's integrated delivery network (IDN).

Hospital Pharmacists indicated that the implications of COVID-19 are severe and far-reaching. Roughly half of IDNs are experiencing more frequent drug shortages, higher drug costs, reduced staffing, and ICUs that are more often at capacity. Due to COVID-19, nearly 1 in 4 IDNs have reduced the services that they offer.



FACING ONGOING STAFFING CHALLENGES, MANY HOSPITAL PHARMACIES ARE FOCUSED ON OPERATIONAL EFFICIENCY

In our 2020 Hospital Pharmacy Operations Report, we learned that staffing issues were the fastest growing challenge during the pandemic. This year, staffing shortages remained a top challenge, as 70% of Hospital Pharmacists consider staffing shortages a "very important" issue that needs to be addressed.

As Hospital Pharmacists continue to navigate staffing shortages, many are turning their focus to operational efficiency. While reducing drug spend was the top cost savings initiative in last year's survey, improving operational efficiency became the #1 initiative this year.





INVESTMENTS IN NEW

TECHNOLOGY ARE OFTEN DRIVEN BY THE PROMISE OF IMPROVED OPERATIONAL EFFICIENCY

When it comes to implementing new technologies, demonstrating a positive ROI can be critical for driving budget approval. In many cases, a valuable return can come in the form of increased operational efficiency. For 84% of Hospital Pharmacists, reduced operating costs are an important factor in gaining budget approval for new technology. For 83%, driving staff efficiencies is considered an important factor.

While the ROI for new technology is often expected to come primarily from reduced operating costs, 68% of Hospital Pharmacists are turning to technology for driving additional revenue. It should also be stated that, above all else and consistent with prior years, patient safety remains the #1 factor when securing budget for new technology.

84%

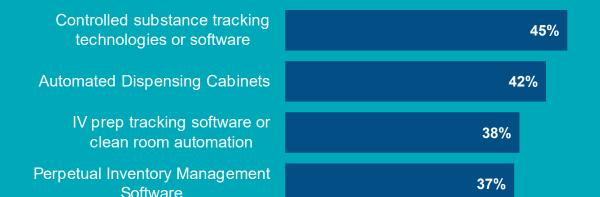
of Hospital Pharmacists consider reduced operating costs an important factor in driving budget approval for new technology

CONTROLLED SUBSTANCE TRACKING BECAME THE #1 TECHNOLOGY INITIATIVE

As Hospital Pharmacists look ahead to 2022, their top technology initiatives are largely consistent with last year. The most notable exception is the increase for controlled substance tracking software, which became the #1 initiative this year, displacing automated dispensing cabinets.

For nearly one third of Hospital Pharmacists, the pandemic has made it *less likely* that they'll implement their top technology initiatives within the next 12 months. This group most often cited limited budgets and limited staff hours as the primary barriers.

Interestingly, another third of Hospital Pharmacists reported that COVID-19 has made it *more likely* that they'll implement new technologies. For this group, perhaps the stress-test of navigating the pandemic has exposed new areas for improvement.



32%

TOP 5 TECHNOLOGY INITIATIVES FOR 2022-2023

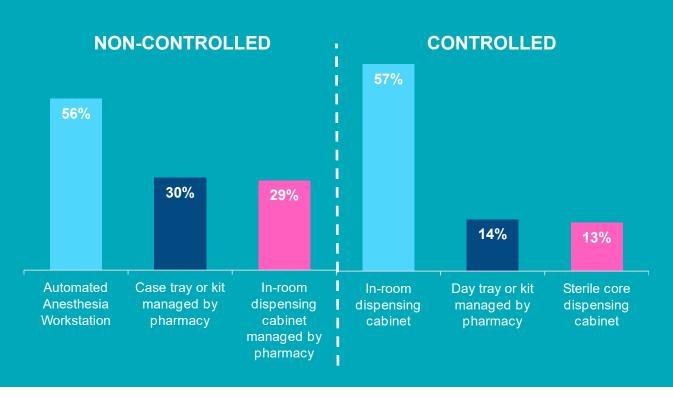
Automated Anesthesia

Workstations

FOR MEDS GOING TO THE OR, DISPENSING APPROACHES REMAINED CONSISTENT WITH LAST YEAR

When it comes to dispense approaches for medications going to the operating rooms, the most common practices for both non-controlled and controlled medications remained consistent with last year. Interestingly, more than any other technology initiative, Hospital Pharmacists reported that implementing automated dispensing cabinets has become more important due to COVID-19.

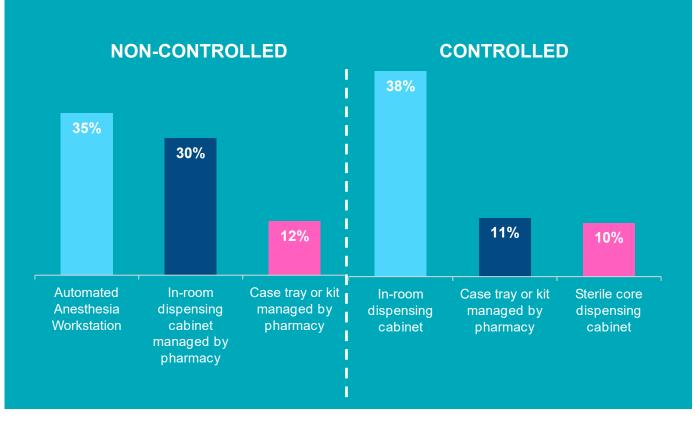




FOR ASCs, TOP DISPENSE APPROACHES ARE CONSISTENT WITH ORs

As a new addition to this year's survey, we also asked Hospital Pharmacists about dispense approaches for medications going to ambulatory surgical centers (ASCs). 63% of Hospital Pharmacists indicated that they have an ASC in their hospital. Among this group, dispense approaches are consistent with those used in operating rooms. For non-controlled medications, automated anesthesia workstations are most common, while for controlled medications, in-room dispensing cabinets are used most often.

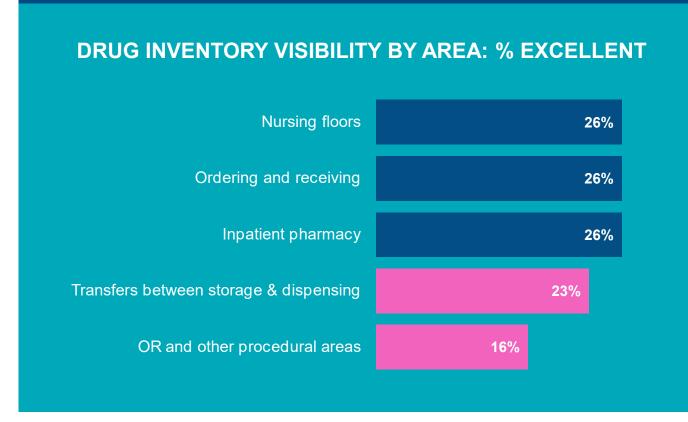




INVENTORY VISIBILITY IS PROBLEMATIC, ESPECIALLY AS MEDS MOVE TO PROCECEDURAL AREAS

As medications move throughout hospitals, inventory visibility varies significantly for Hospital Pharmacists. Across all areas, only a small percentage of Hospital Pharmacists consider their visibility to be "excellent." Consistent with prior years, the most problematic areas are operating rooms and procedural areas, as well as transfers between storage and dispensing.

Without full visibility, pharmacies are more susceptible to drug diversion and less prepared to manage drug shortages.



HOSPITAL PHARMACISTS ARE STRIVING FOR FULL SUPPLY CHAIN VISIBILITY

Hospital Pharmacists recognize full supply chain visibility as an ideal state, especially as they focus their efforts on improved operational efficiency. To achieve full visibility, many are turning to advanced inventory management software for help. For 68% of Hospital Pharmacists, a software solution that can provide full visibility would be "very" or "extremely" helpful to their operations.

While full supply chain visibility is often discussed as a future state, many pharmacy leaders are prioritizing technology solutions that can deliver it now. When evaluating inventory management software, more than half of Hospital Pharmacists indicated that full supply chain visibility is a very important capability.

68%

of Hospital Pharmacists believe that a software solution that can provide full visibility would be "very" or "extremely" helpful to operations

MANY HOSPITAL LEADERS ARE SEEKING INVENTORY MANAGEMENT SOLUTIONS WITH AN ECOMMERCE CAPABILITY

As pharmacy leaders face tightening budgets and limited staffing, many are seeking new ways to streamline their operating processes. As one emerging example, many leaders are recognizing an opportunity to combine their inventory management with their drug purchasing practices. In doing so, hospital pharmacies see potential to create operational efficiencies and reduce drug spend by optimizing their existing and incoming inventory across a broader spectrum of the supply chain.

63% of Hospital Pharmacists reported that an inventory management system with an eCommerce capability would be "very" or "extremely" helpful for their operations. This represents a significant opportunity for hospital pharmacies to better equip themselves to handle the challenges of today. As many pharmacy leaders look to upgrade their inventory management software, nearly half consider the ability to place drug orders a very important capability.

63%

of Hospital Pharmacists reported that an inventory management system with an eCommerce capability would be "very" or "extremely" helpful for their operations.

DRUG DIVERSIONS PRESENT A SERIOUS THREAT TO PATIENT SAFETY AND OPERATIONAL EFFICIENCY

As we saw earlier in this report, controlled substance monitoring software became the top technology initiative for Hospital Pharmacists this year. This is very likely due to the frequency of diversions that they're experiencing, the time required to identify and resolve them, and the serious threat they pose to patient and staff safety.

The prevalence of drug diversions and many of the reasons that they're so problematic were reflected in many statistics from our research:

57%

of Hospital Pharmacists reported that it would be "easy" or only "somewhat difficult" to divert opioids from their organization, which is up +30% vs. last year

2/3

of Hospital Pharmacists indicated that their team spends 3+ hours per week identifying and resolving discrepancies related to controlled substances.

1 in 4

Hospital Pharmacists are aware of a colleague who has diverted opioids.

INVESTMENTS IN DIVERSON MONITORING SOLUTIONS IS EXPECTED TO INCREASE

As Hospital Pharmacists look to improve their drug diversion monitoring solutions, many find themselves unprepared to effectively prevent and identify diversion events. Consistent with last year, manual investigation efforts remain the most common method for identifying drug diversions. Less than half of Hospital Pharmacists have a post-diversion response plan in place and nearly 40% have no staff dedicated to diversion.

Within the next two years, 61% of Hospital Pharmacists plan on investing more resources to improve controlled substance tracking and diversion analytics. While diversion events can cascade into several serious problems, patient safety is the #1 reason that pharmacy leaders are seeking a diversion monitoring solution. This finding, and the general prioritization of patient safety, is consistent across the last several years of our research.

When selecting a drug diversion monitoring solution, ADC/EMR integration is the top feature that Hospital Pharmacists are looking for, which is consistent with last year. Given the complexity and importance of the issue, 58% of Hospital Pharmacists are interested in having a 3rd party manage their diversion prevention program.

61%

of Hospital Pharmacists plan on investing more resources to improve controlled substance tracking and diversion analytics

SUMMARY

Bluesight's Hospital Pharmacy Operations Report, now concluding its eighth year, remains an invaluable cornerstone of our operation. In order to gain a comprehensive, longitudinal understanding of the state of the industry, we aim to capture sentiment, expectations and circumstances that collectively reflect the state of pharmacy operations in more than 1,000 U.S. hospitals. The annual survey is selectively distributed to hospital pharmacy leaders and represents a wide variety of perspectives on trend forecasting, operational efficiency, inventory visibility, and system integration. Once we've collected results from participants, we release our findings on the top issues facing hospital pharmacists, helping build community and problem-solve together.

The 2021 survey questions were tailored to address current events (COVID-19), and the report sheds light on the state of the industry regarding the demographics of hospitals, diversion, IDNs, supply chain management, analytics, and more. We've discovered where priorities lie, and what will be falling by the wayside in 2022. In addition, the survey addresses Bluesight's latest innovations, including CostCheck^C, a fully automated software tool that optimizes pharmacy purchasing and supply chain management.

As hospitals are projected to lose billions due to pandemicrelated stressors, CostCheck provides actionable insights into supply chains to optimize spending, maximize compliance, and enhance pharmacy management with real-time market insights.

ABOUT BLUESIGHT

Bluesight is the leading provider of automated medication tracking and diversion detection solutions for hospital pharmacies in the U.S., bringing visibility, simplicity, and predictability to the complex world of medication supply management. Our groundbreaking Medication Intelligence platforms provide item level visibility, workflow simplicity and actionable analytics, empowering stakeholders to deliver the right medicine to the right patient at the right time, every time.

To date, our more than 700 U.S. and Canadian hospital partners have tracked more than 140 million medications using Bluesight's RFID product. ControlCheck^C software is currently in use in more than 250 hospitals including full health system implementations, with nearly 20 million cases tracked, and was ranked #1 in the Drug Diversion Monitoring category in the 2020 Best in KLAS report. More information about Bluesight and our software solutions can be found at bluesight.com.

What's been clearer than ever to us is the immense benefit of Bluesight to its clients, as we continue to bring medication intelligence across systems and unify communities around the world.

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