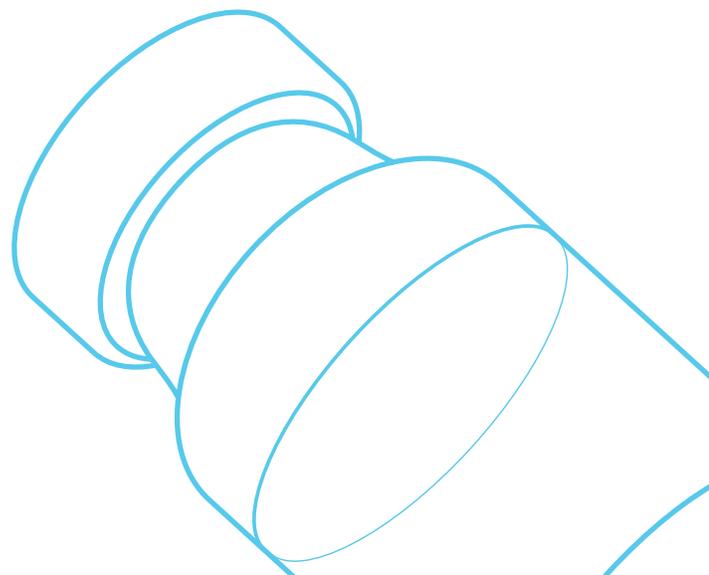


Hospital Pharmacy Operations Report 2018

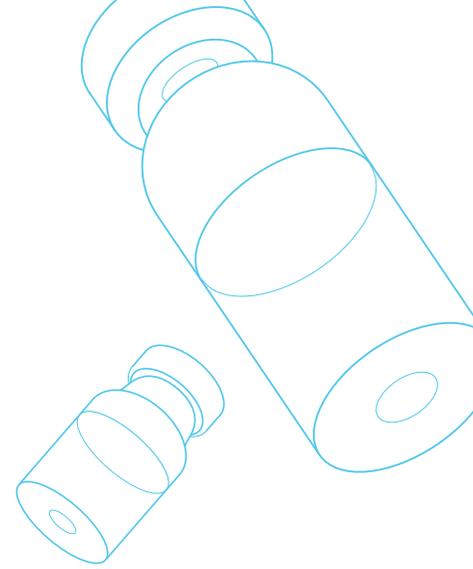
The State of Hospital Pharmacy Operations

Survey Results from Pharmacy Leaders



Introduction

Drug shortages dominated priority lists for Directors of Hospital Pharmacy (DoP) in Kit Check's annual survey of pharmacy leaders. The Hospital Pharmacy Operations Report 2018 captured sentiment, expectations, and circumstances from DoPs that collectively reflect the current state of pharmacy operations in over 1,000 U.S. hospitals.



Hospital Pharmacies Show Biggest Headcount Gain in 5-years, but is it Enough?

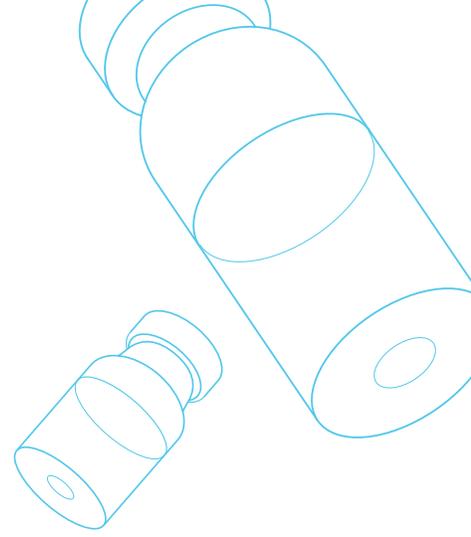
Directors of hospital pharmacy said rising requirements without adequate budget increases was the second biggest challenge. This is despite the fact that 42.5% of DoPs expect their personnel budget to expand in 2019. This is a significant rise over previous years when no more than 30% have expected a rise, including only 25% in for 2018. The challenge may be after a several years dominated by flat budgets, two-thirds of those hospital pharmacies are expecting staffing expansion of 5% or less.

Rising requirements and flat budgets has been a common theme over the five years of the annual survey, never falling lower than third among DoP's top stated challenges. Personnel increases in 2019 may alleviate these concerns somewhat but it may be that a small rise in capacity cannot make up for several years of increasing workload spread across a staff that wasn't growing.

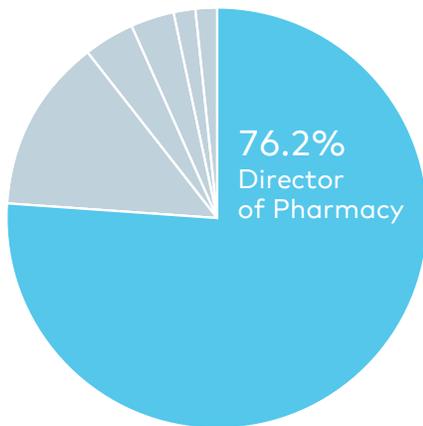


Key Takeaways from Experienced Pharmacy Leaders

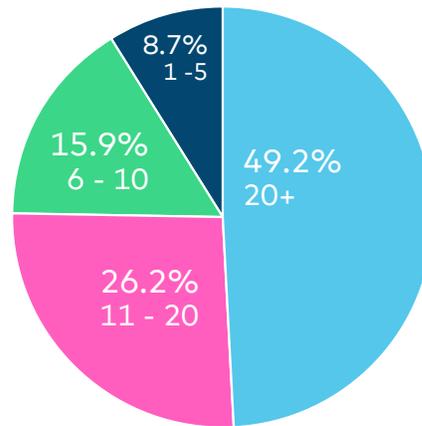
The 2018 Hospital Pharmacy Operations survey collected insights from hospital pharmacy leaders across the U.S. Three-quarters of survey respondents had more than 10 years of pharmacy experience, and almost half had greater than 20 years. The vast majority of survey respondents (75%) were Directors of Pharmacy (DoP). The remaining respondents were comprised of managers, associate directors, senior directors or held more senior roles.



What designation most closely represents your current title?



How many years have you worked in hospital pharmacy?



1. Top Challenges for Hospital Pharmacies

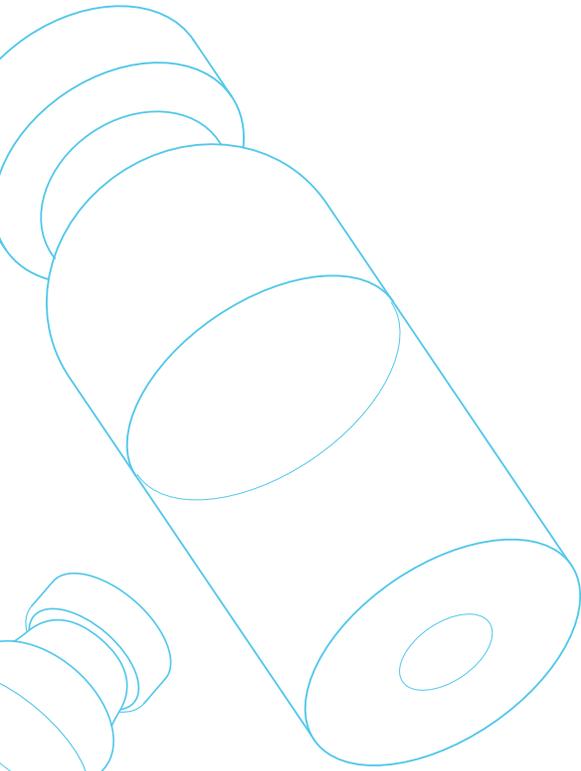
- Drug price increases fell from the top challenge in 2016 to second in 2017 and fourth in 2018. This remains a big issue, but hospital pharmacies are not feeling this problem as acutely as in previous years.
- Of course, the drug pricing blues have been replaced by drug shortages. Drug shortages fell to a low of the fourth biggest challenge for hospital pharmacies in 2016, but returned to the top spot in 2018 for the first time since 2015.
- Diversion held steady as a top 5 challenge for hospital pharmacies matching results from the previous two years.

2. Personnel, Budgets and Staffings

- The stress that increasing requirements place on pharmacies without increasing budgets is a perennial top three challenge and came in the second spot for 2018. A factor impacting this may be that fewer hospitals expect to increase pharmacist headcount for 2019. Since 2015, flat headcount has been the norm with only about one quarter of hospitals opting to increase pharmacist staffing. This year, there will be pharmacy staffing budget increases at 4 out of 10 hospitals, but headcount is not expected to rise.

3. Funding Technology Implementations

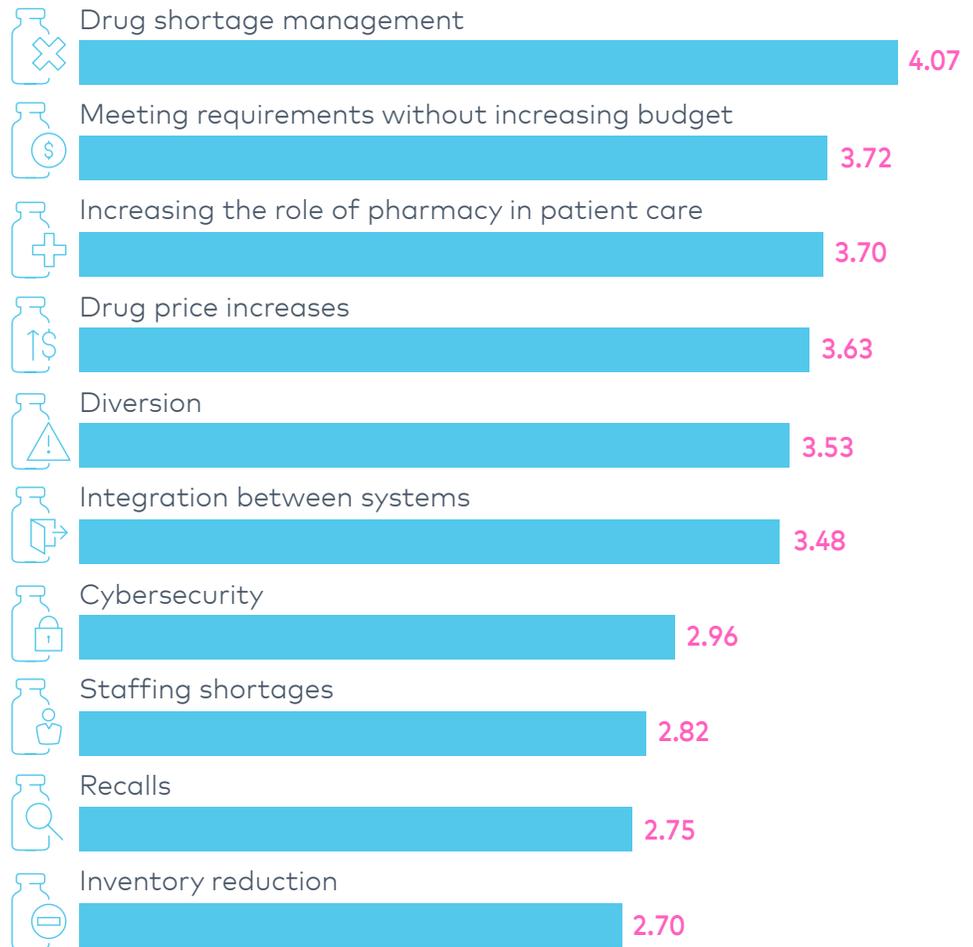
- Everyone is using automated dispensing cabinets (ADC) and they all plan to keep them. We found 92% say they are installed today and will be maintained while another 5% say they expect to install ADCs at some point. Only 2.5% of DoPs are either uninstalling ADCs or never plan to use them.
- Automated anesthesia workstations, a close cousin to ADCs, seem to be headed in the same direction for adoption. Forty-eight percent have them today and another 25% expect to install them this year or in future years. Another 25% have no current plans to adopt them, but at some point these may be viewed as a standard of care solution.
- IV Prep software and clean room automation is the most popular new technology for adoption with 17% of DoPs expecting to install a solution this year and 28% in future years. This will be in addition to 25% that have them today.
- On the software front, Computerized Physician Order Entry (CPOE) has risen to a standard of care similar to ADCs. Eighty-nine percent of DoPs report having a system in place with another 8.5% planning to implement.
- Popular software for implementation projects are led by controlled substance tracking software (50% installed base; 37% expect to add a solution) and perpetual inventory management (42% installed base; 33% expect to add a solution).
- Also of note, pharmacy kit and code cart replenishment automation solutions are in 26% of hospitals today and that is expected to nearly double to over 50% in the coming years.



1.0 Top Challenges for Hospital Pharmacies

As we mentioned in the introduction, drug shortages are the top challenge DoPs say they face today. That is followed by increasing requirements and increasing the role of pharmacy in patient care. Those topics are followed by drug price increases and diversion.

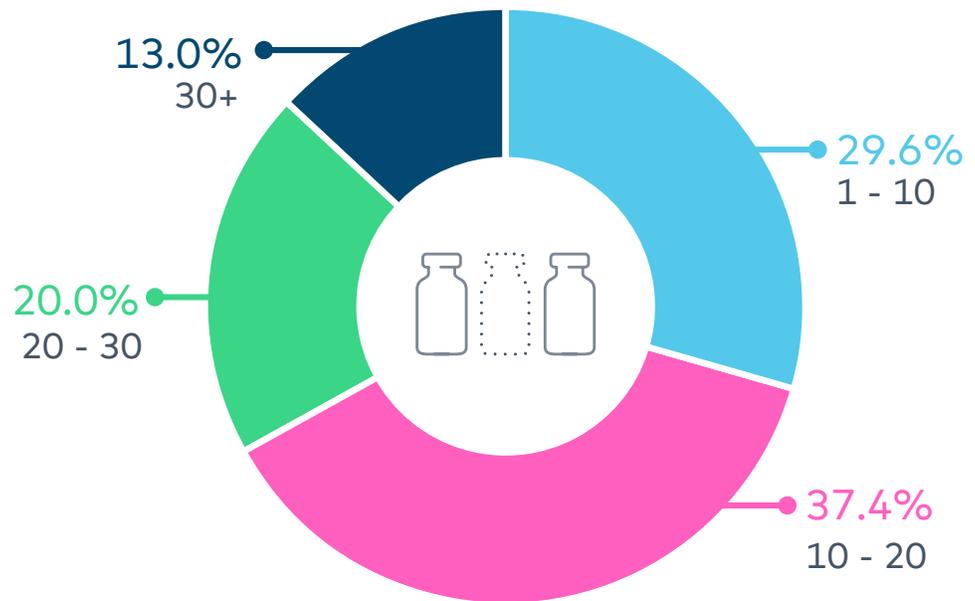
What are your biggest challenges today?



1.1 Drug Shortages are a Growing Problem

A key driver of drug shortages topping the list is the fact that over 70% of DoPs report that 10 or more medications are currently on shortage. No hospitals reported zero medications on shortage and one-third have more that 20 individual drugs on their list.

How many shortaged medications are currently impacting your pharmacy?



Shortages are a particular problem for hospital pharmacies from an operational perspective. They consume considerable time in simply communicating to staff what is available and how it will be allocated along with what is unavailable and what alternates are preferred. Then these practices need to be monitored, changed as availability returns, and there is continual activity designed to identify new sources of supply. Shortages steal staff time that could be applied to clinical activities which represents the third major challenge for hospital pharmacies today.

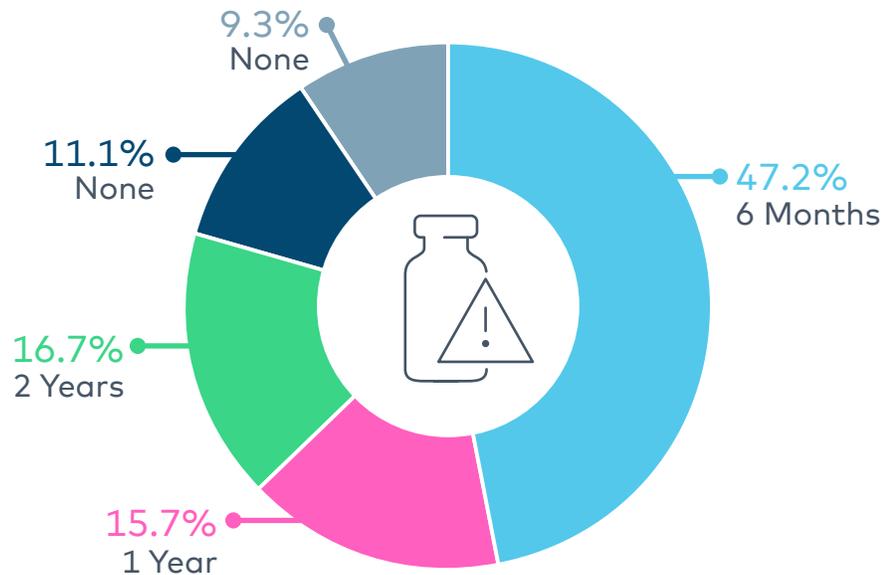
1.2 Recalls Also Consume Time

Recalls are also unplanned events that consume pharmacist and technician time and they remained high in 2018. The average recall consumes 10.36 hours of staff time according to hospital DoPs. In 2018, recalls were down to 6.55 from 6.91 the previous year. However, this is still considerably higher than 2016 when the figure was 5.93. The impact today is just under 70 hours per hospital annually. Most pharmacies can absorb this extra work, but recalls are one of many unplanned events similar to drug shortages that chip away at staff time and make it harder to balance the need for both dispensing activities and clinical support.

1.3 Diversion is a Near and Present Problem

Diversion rose to a top five challenge starting in 2016's survey and has held that position through 2018. A key reason is that hospitals are experiencing diversion events and not just the threat of them. Forty-seven percent report having a confirmed diversion event in the past six months while 80% say at least one has occurred in the past two years.

When was your most recent diversion event?



1.4 Staffing Issues Not High on DoP Priority Lists

An area that is not a big concern is staffing shortages. This may seem to run counter to the finding that increasing responsibilities without increasing budgets is ranked as a top two challenge. However, this is consistent with previous studies. DoPs appear to be making do with existing staff or small increases despite the many challenges faced.

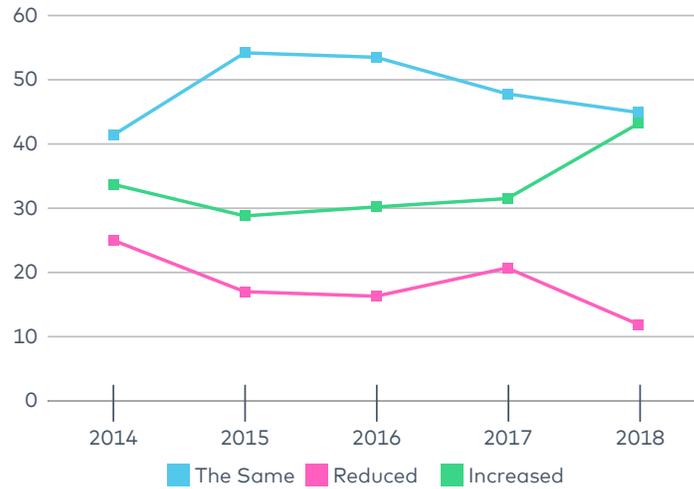
1.5 Top Challenges are Consistent

With five years of DoP surveys in the books, a key finding around challenges is their remarkable consistency. Diversion moved up into the top five position two years ago. Complying with the Affordable Care Act was a significant concern in 2014-15 but fell off the list for obvious reasons in recent years. The conclusion may be that individual challenges faced by hospital pharmacies aren't likely to retreat, but are the result of structural features of healthcare delivery today that require persistent attention along with new investment in technology and processes to mitigate negative consequences.

2.0 Personnel, Budgets and Staffing

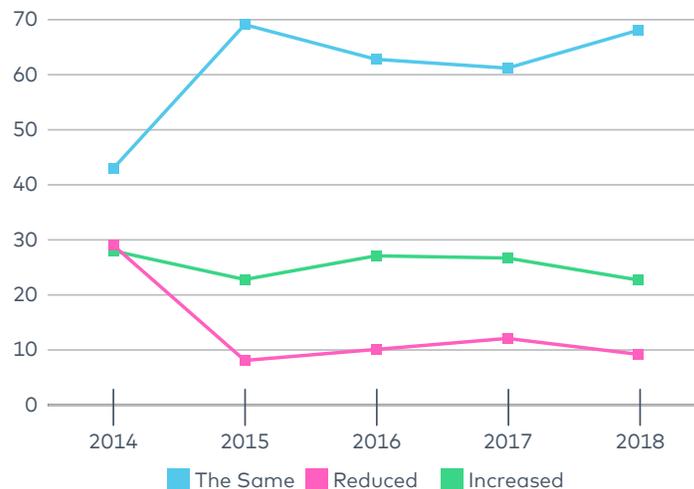
Staffing budgets are a bright spot for DoPs coming into 2019. The number of hospitals that expect to have some staffing budget increase exceeded 40% for the first time in five years. In fact, last year the figure was only 25% and the previous three years ranged from 27% - 33%. It is a material increase.

Hospital Pharmacy Staffing Budgets

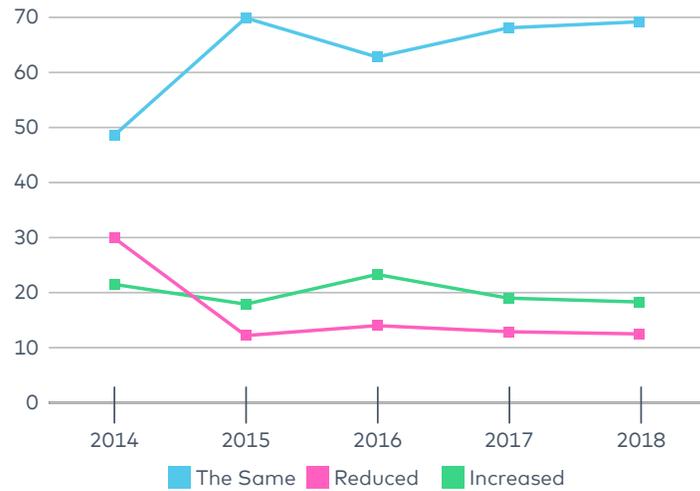


This might seem like an answer to all of the increased workload foisted upon pharmacies in recent years. However, something curious shows up in the data. Staffing budgets look healthier, but headcount is not rising compared to previous years. In fact, at best it is flat and it may even be falling slightly. This story is revealed in DoP expectations about pharmacist and pharmacy technician headcount expectations.

Pharmacist Headcount Expectations



Pharmacy Technician Headcount Expectations



So, how can you have the largest rise in five years for hospital pharmacy staffing budgets expected for 2019, but flat or maybe even declining headcount. The logical conclusion is that it is going into salaries.

Salary.com data suggests pharmacist salaries rose about 2.4% between early 2018 and early 2019. Given that most DoPs identified flat staffing budgets or less than a 5% increase, it appears that hospital pharmacies are just barely keeping up with rising wage rates for the profession. Low unemployment in the U.S. may impact this even further in 2019. For there to be a significant increase in pharmacy headcount, we would likely need to see budgets expand well beyond 5%.

3.0 Funding Technology Initiatives

It has never been easy to secure funding for technology to support the hospital pharmacy. However, DoPs are continually making progress with automation that implements controls and enhances patient care. Sometimes, funding is also secured for technology that drives more operational efficiency. We can see these outcomes clearly in the types of technologies that DoPs report in use at their hospitals.

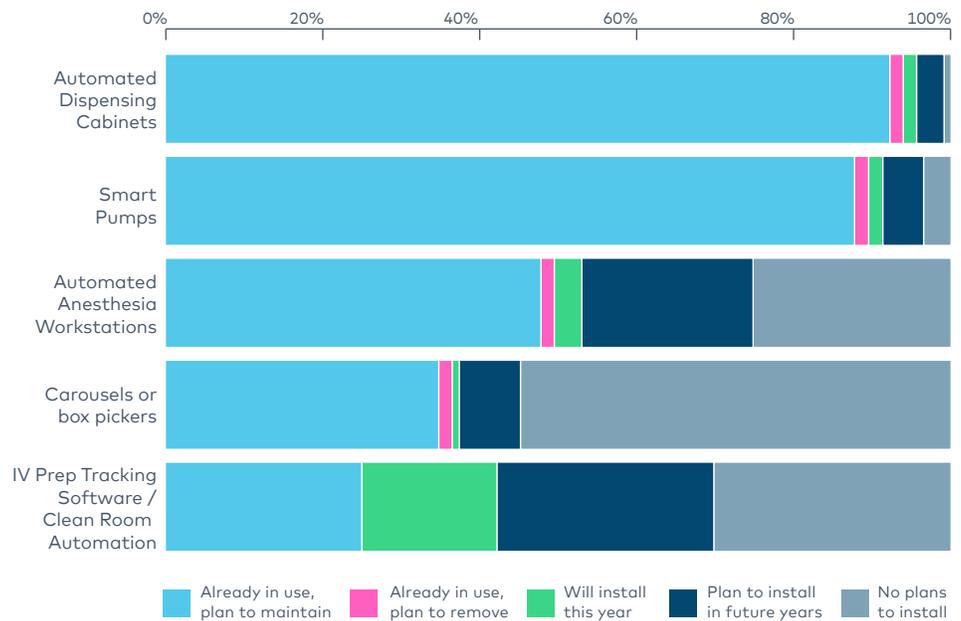
3.1 Hardware and Equipment

Automated dispensing cabinets (ADC) have clearly become a standard tool in hospitals for controlling medication access. Over 92% of DoPs said these are in use in their facilities. Smart pumps are another popular type of dispensing technology that have found their way into 87% of hospitals.

Anesthesia Workstations are well behind at only 47.8%, but these are newer capabilities and nearly 22% of hospitals plan to add them in the future. This may indicate that seven-in-ten hospitals will have anesthesia workstations in the next few years.

IV clean room automation also has some adoption momentum. One in four hospitals have adopted the capability and 17% say they expect to add the solution this year while another 28% plan to install in future years.

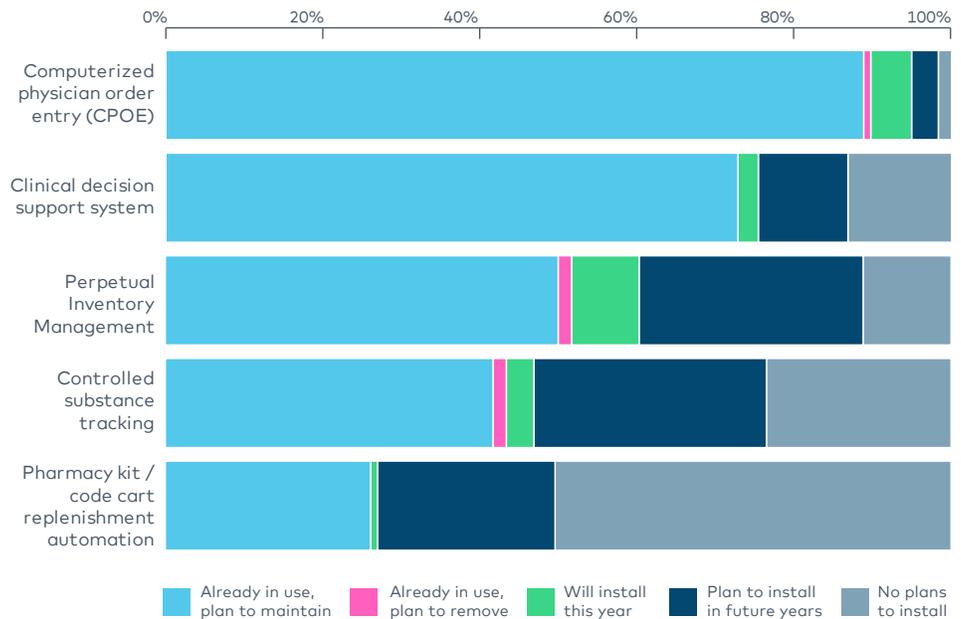
What are your plans for the following technologies?



3.2 Software

Computerized Physician Order Entry (CPOE) has risen to a standard of care similar to ADCs. Eighty-nine percent of DoPs report having a system in place with another 8.5% planning to implement. Clinical Decision Support Systems (CDSS) seem to be heading in the same direction. About 73% of hospital pharmacies report using them today with another 2.6% expecting to implement a system this year and 11.4% more in future years. Adoption is expected to exceed 86% of all hospitals.

What are your plans for the following software?



In the next tier of solutions are controlled substance tracking software and perpetual inventory management systems. For controlled substances, the installed base is about 50% of hospitals and another 37% plan to add a solution. But it's not just hospitals that are adopting controlled substance monitoring solutions for the first time that will be active in this category. A full 60% of hospitals plan to either install or augment their controlled substance tracking in 2019. This is not all that surprising when you realize that nearly 50% say they had a confirmed diversion event in the past six months.

Perpetual inventory management systems are used in 42% of hospitals today and 33% expect to add a solution in this category. This is forecasted to rise to over 75% of hospitals in a next few years. Following new inventory management solutions are pharmacy kit and code cart replenishment solutions like Kit Check. These are now in use by 26% of hospitals and DoPs indicate the adoption of this solution category is likely to double in 2-3 years. Kit Check is the choice of over 70% of hospitals that have implemented a solution in the medication tracking and tray management category according to Pharmacy Purchasing and Products.

4.0 Conclusion

When it comes to hospital pharmacy operations there is a concentration of forces that are driving up workload. However, hospital pharmacies are not absorbing these new and expanded tasks with more staff hours, but largely by looking to automation. Pharmacy staffing budgets have remained relatively flat and often just barely match inflation. So, there is not funding available for increased headcount. That has led to IT automation initiatives for everything from prescribing to tracking and restocking inventory. If you can't secure more manpower, automate tasks so that your current headcount can accomplish more in the same amount of time.

Above all of this is drug shortages. This trend is a top and rising concern among DoPs because it impacts operations and also has the potential for a big impact on patient care.

5.0 Additional Resources

If you have any feedback or questions about this report, please email info@kitcheck.com with your inquiry. Additional research and resources from Kit Check can be found below.

CASE STUDY

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Daughters Closes Gap in
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RESEARCH

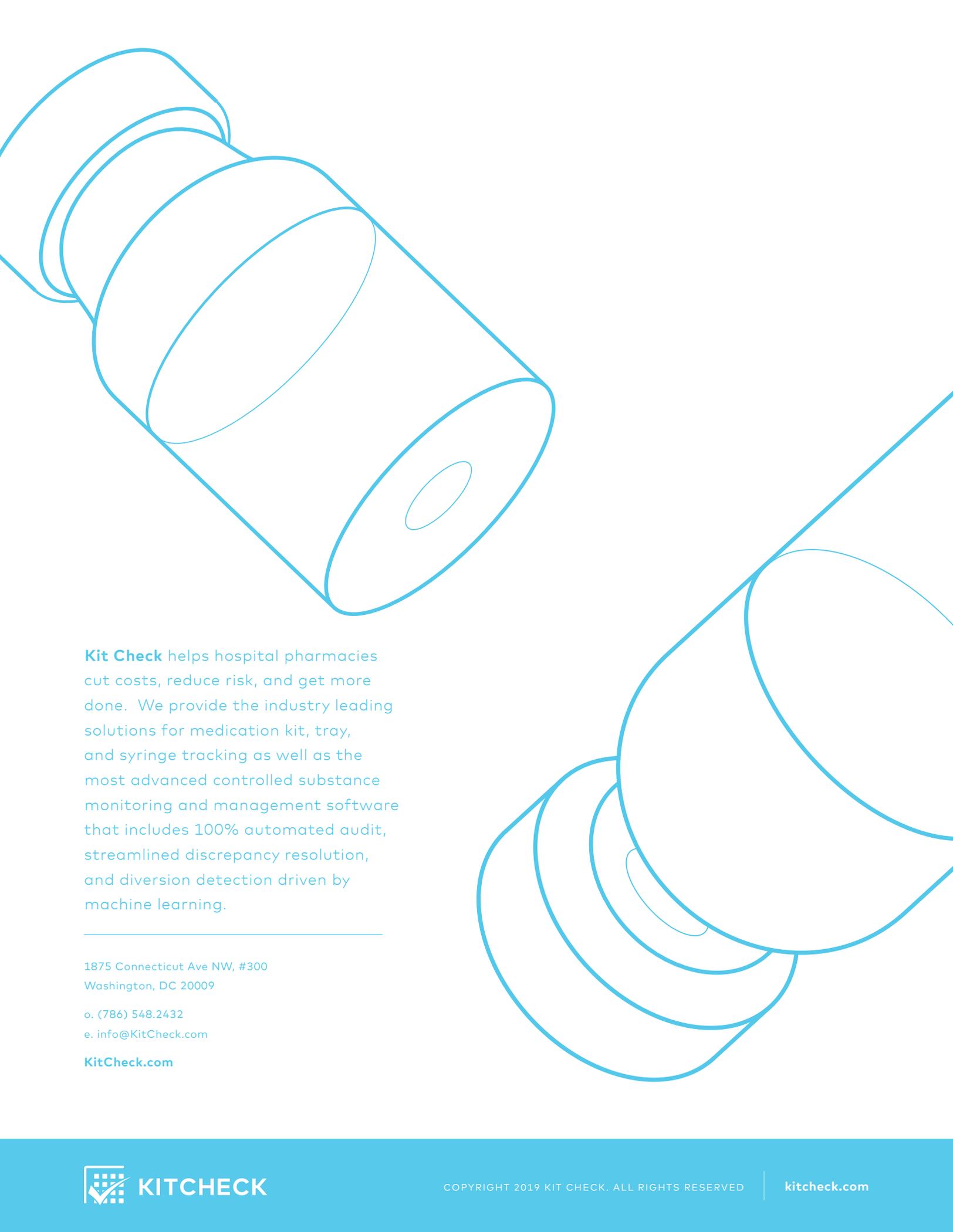
Hospital Pharmacy
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CASE STUDY

UNC Health Care Standardizes
and Centralizes Pharmacy
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Kit Check helps hospital pharmacies cut costs, reduce risk, and get more done. We provide the industry leading solutions for medication kit, tray, and syringe tracking as well as the most advanced controlled substance monitoring and management software that includes 100% automated audit, streamlined discrepancy resolution, and diversion detection driven by machine learning.

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