DOPs SPEAK OUT
The State of Hospital Pharmacy Operations

Survey Results from over 600 Hospitals
Do more with the same by streamlining and automating

Get ready to do more work with the same amount of staff and budget. That appears to be the current trend in hospital pharmacy. While pharmacies have been surprisingly resilient in retaining staff over the past five years in spite of widespread hospital personnel cutbacks, the work keeps increasing while staffing remains flat.

If your workload is increasing and your staff is not, how do you close the gap? By their own account, hospital pharmacy directors are embracing Lean Management Principles to streamline some processes and implementing automation technology to eliminate others. However, before you can implement technology you must get it funded. The formula for securing funding seems clear: justify the project by cost reduction, compliance or safety. Before that, make sure hospital administrators recognize the value of clinical pharmacy in delivering better patient outcomes.

These are just some of the findings from Kit Check’s survey of hospital pharmacy directors representing over 600 hospitals across the United States. Pharmacy’s contribution to patient care and hospital operations has often been overshadowed by the OR suite, patient wings and high priced technology ranging from surgical robots to MRI. As a result, it has often been a challenge for pharmacy directors to get the attention and funding necessary to move the profession forward. Thankfully, that is changing. the Hospital Pharmacy Operations Report 2014 reveals both the current status of the profession, as well as peer insights into where hospital pharmacy is headed.

We have broken down the findings into seven areas in this report:

1. External Forces Creating Challenges
2. Organizational Status
3. Embracing Process Efficiency
4. Leveraging Technology for Automation
5. Funding Pharmacy Initiatives
6. The Future of Hospital Pharmacy Operations
7. About the Survey

We look forward to your feedback on the findings and suggestions for future research.
1 External Forces Creating Challenges

It is widely recognized that operating a hospital pharmacy is becoming more complex each year. All of this complexity is coming at a time of budget restraint across the healthcare industry. While the implementation of the Affordable Care Act and development of Accountable Care Organizations receive most of the media coverage, it is the lack of budgetary funding to meet new requirements that is top of mind for hospital pharmacy leadership. Ninety-five percent of respondents listed this as important, very important or their top priority.

Figure 1 What are your Biggest Challenges Today [on a scale of 1 (lowest) to 5 (highest)]?

Coming in a close second at 90% for top challenges was drug shortages. Other industry data supports this contention. A recent analysis by the University of Utah Drug Information Center revealed that the 305 active drug shortages in the first three months of 2014 represented an all-time high. Few people outside of the pharmacy profession recognize how much time is consumed by managing substitutes and accommodating process changes driven by shortages. Based on the data, you should expect this factor to continue to be a top priority.

At 77% and 75% respectively, Electronic Medical Records Integration and Affordable Care Act preparations are also top challenges for hospital pharmacies today. These industry-wide initiatives are also likely to be a lingering challenge for some time.

It is also notable that over 50% of survey responses listed diversion, inventory reduction and recalls as important challenges faced today. The list of challenges facing the hospital pharmacy is long and
external forces seem to be the leading causes of discomfort. These forces of change are also combining to create an atmosphere of increasing requirements at a time when hospital budgets are tight.

2 Organizational Status

When it comes to the hospital pharmacy department’s status within the hospital, there are more challenges, but also some good news.

2.1 Personnel Budget Challenges

The core challenges are staffing related. Sixty-five percent of hospital pharmacies indicate that budgets for the upcoming year will be flat or declining. This will leave little room for adding staff to meet expanding responsibilities for drug compounding, clinical support or even modest staff raises.

Figure 2 Your Expectation for Personnel Budget for the Upcoming Year...

More striking is the fact that 29% of hospitals surveyed have been forced to reduce pharmacist staff in the past year and 30% have cut pharmacy technician staff.
2.2 More Likely to Expand Staff Through New Pharmacist Hires

Another significant result pertains to new hiring. Staff increases are 13% more likely to be for additional pharmacists as opposed to technicians. While close to 50% of hospital pharmacies reported that they will maintain a consistent pharmacy technician staffing level, fewer foresaw increases for these roles. While there is significant discussion in pharmacy trade publications about expanding the role of technicians, this may not be accompanied by greater hiring today. The focus for pharmacy leadership is clearly biased toward adding clinical pharmacist staff to better meet the growing workload.

2.3 Increased Workload is Being Addressed Through Overtime

Not surprisingly, the increased workload must still be completed even when you have reduced staff size or it remained flat. One release valve for this staff capacity challenge is overtime. This imbalance between workload and staff is the likely driver behind the 84% of hospitals that are seeing overtime as a substantive issue today, with over half characterizing it as a moderate or big issue.
2.4 Organizational Reputation

The way to combat the steady erosion of work capacity in the face of increasing workload is to reverse the personnel constraint trend or focus on technology based efficiency gains. Both of these approaches require additional funding to implement. Thankfully, pharmacy directors seem to be well positioned in their organizations to protect further personnel cuts and secure funding for new technology projects.

Directors of Pharmacy believe they have been very successful in recent years in getting senior leadership to understand the value that clinical pharmacy provides to their institutions. Seventy-one percent consider themselves successful or very successful in this argument while over 94% rank themselves as at least somewhat successful.
This growing reputation of hospital pharmacy may help explain how 70% of pharmacies were able to keep or even grow staff slightly during hospital staff reduction programs in the last five years.

These results spotlight an obvious question. If pharmacy has been able to largely maintain or expand clinical workforce, why are overtime and staffing considered to be top issues? The answer goes back to the earlier statistics that the top issue among pharmacy directors is increasing requirements. In a time when budgets are flat or growing marginally, the increase in requirements effecting hospital pharmacies is outpacing resource availability. This is why so many pharmacy directors feel like they are on a treadmill that keeps moving faster.

3 Embracing Process Efficiency

All of that treadmill walking will make your organization lean whether you like it or not. Interestingly enough, the profession has taken a proactive approach in this regard by adopting lean management
principles (LMP) to an extent not previously recognized. Thirty-seven percent of responses indicated that Lean Management was a part of their core operating philosophy.

**Figure 6 Do You Currently Use Lean Management Principles in Your Hospital?**

Another 41% of hospital pharmacies will not designate Lean Management as a core philosophy but readily admit to using it in select areas. That is 78% of hospital pharmacies using Lean Management Principles in some capacity. With all of the media coverage about healthcare inefficiencies there may be good arguments that hospital pharmacies stand out as an efficiency example for the industry.

Some of the comments in this section are illuminating in response to the question: Do you believe Lean Management Principles can help hospital pharmacies improve operational efficiency? Why or why not?

“No.  It can help reduce turnaround time, improve patient safety and employee satisfaction."

“Yes, implemented [Lean Management] two years ago. It has already proven its worth through standardization.”

“Yes. Being able to standardize operations is key to save money and improve efficiency.”

“Yes. Identify and focus on specific areas of improvement with the goal of reducing waste (time, money, materials...).”

“Yes – our medical center has embraced Lean this year and will continue.”
The responses to this question were overwhelmingly positive. Of the 71 detailed comments only five expressed a negative sentiment about Lean Management and six were neutral. When you consider the repetitive nature of the pharmacy’s dispensing tasks, you can see why Lean Management Principles have such resonance. This is particularly true when we are considering a population that is expected by management to do more with less.

Whether the catalyst is “lean by choice” or “lean by circumstance,” the good news is that pharmacies are embracing process improvement. Lean Management may also be contributing to the strong organizational reputation pharmacy directors are experiencing.

### 3.1 PPMI Influence

This move to Lean Management by the profession is less surprising when you consider the widespread impact of the Pharmacy Practice Model Initiative (PPMI). In order to drive the profession forward and focus more attention on top of license clinical work, PPMI focuses a great deal on planning and measuring impact. These same principles are embodied in Lean Management. In case you had any doubt about the penetration of PPMI in hospital pharmacies we can put them to rest – 82% of respondents are either actively or partially employing PPMI.

![Figure 7 Are you Using ASHP's Pharmacy Practice Model Initiative in Your Planning and Operations](image)

### 4 Leveraging Technology for Automation

Another key element of PPMI is technology adoption. PPMI Objective #3 states, “Identify the available technologies to support implementation of the practice model, and identify emerging technologies that could impact the practice model.” When it comes to technology, our survey sample was representative of the larger market: 24% considered themselves typically in the first 25% of organizations to adopt new technology, 54% listed themselves as falling into the middle 50% of technology adopters, and 21% considered their organizations laggards with 1% unsure.
From the representative sample, the detailed responses offered insight into the perspective of pharmacy directors about their past technology implementations. Despite the focus of PPMI on measurability only 10.3% of our sample was able to put hard numbers behind their most successful implementations.

### 4.1 New Technology Projects are Plentiful

With or without hard numbers on results, there is no shortage of technology implementations in past years or scheduled for the coming year. The respondents identified 99 new projects scheduled for the 2014-15 fiscal year. Of these, 18% focused on installing, upgrading or replacing Automated Dispensing Cabinets (ADC) and 15% were related to electronic medical records while 9% were focused on computerized physician order entry (CPOE) and 8% on bedside medication administration tracking.

The ADC number being near 20% was no surprise. Most hospitals are on five-year ADC leases and we would expect about one in five to be reviewing their commitment each year. If this number were north of 20% you might be able to assume renewals along with some growth. However, a figure below 20% suggests the ADC market is flat or slightly declining. Since 82% of respondents indicated that they were currently using ADCs, we can consider this a no or slow growth sector today.
When we consider that 8% of hospitals responding are planning for some form of in-hospital medication tracking project in the coming year, the data illustrates that ADC’s do not fully address drug visibility and control needs. In addition, in the OR suite, 54% of hospitals indicate they are using pharmacy kits for anesthesia medication dispensing. By parsing the numbers we can see that at least 44% of ADC users also utilize pharmacy kits for OR anesthesia medications. We can conclude from the data that many hospitals consider pharmacy kits as complementary to ADCs, likely filling a process efficiency gap in the same manner as bedside medication tracking.

### 5 Funding Pharmacy Initiatives

All of these technology implementation initiatives require funding. For pharmacy directors looking to champion new technology projects, there are some insights on what may work best when seeking funding. From the data, we can immediately draw two conclusions. First, regulatory compliance initiatives are the most likely to receive funding. Second, there appear to be two tiers of technology projects in the minds of funding committees. Tier 1 includes projects focused upon regulatory
compliance, safety or efficiency and cost savings. Less likely to receive funding are Tier 2 projects promising to deliver clinical data integration, process consistency or inventory reduction.

**Figure 10 How Likely is Budget Approval for a Technology Project Focused on...**

The bottom line for pharmacy directors is that regulatory compliance, safety and cost savings projects have the highest likelihood of funding approval. By contrast, other project types are 32% less likely to receive funding. The lesson here is to emphasize your project's impact on the top tier of technology project types.

### 6 The Future of Hospital Pharmacy Operations

Hospital pharmacy is changing quickly in both its role and its scope of responsibility. Hospital administrators are recognizing that while medication dispensing is a necessity, clinical pharmacy can have a strong impact on patient outcomes as well as cost containment. As reimbursement practices shift in the coming decade, it is clear that pharmacists will be asked to focus more attention on clinical activities.

At the same time, physicians are recognizing that the proliferation of pharmaceutical therapies and the shift to customized patient regimens is making pharmacy consultation more important than ever. At Kit Check, we see these trends as both clearly evident and accelerating. At the same time, we recognize the constraints faced by hospital pharmacies. There is need for more clinical consultation, but there is still a crush of manual dispensing activities that must be completed.
The implication here is counterintuitive. If there is more need for clinical support, you must focus more attention now on operational efficiency to free up pharmacist time that today is devoted to manual tasks and checking. Streamlining today’s dispensing activities will deliver more time for pharmacists to devote to clinical care. When you need to do more with less, automating processes to increase efficiency is an effective way to free up capacity. The clear need in today’s hospital pharmacy is finding ways for pharmacists to focus more work time on top of license activities.

7 About the Survey

The Hospital Pharmacy Operations Survey was conducted in April 2014 over a two-week period in the United States. Complete responses were received from 107 Pharmacy Executives of which 92% self-reported titles as Directors or above and the balance were designated as Associate Directors or Pharmacy Managers. The survey responses came from executives that oversee more than 600 hospital pharmacies and 65% reported to have over 20 years of experience. The mix of small, midsized and large hospitals, as well as hospital systems was consistent with the composition of health care facilities in the United States today.

The survey and analysis were conducted by Kit Check staff in conjunction with external research consultants. If you have additional questions about the survey results or contents of this report, please contact info@kitcheck.com.

About Kit Check

Kit Check™ is the leader in automated hospital pharmacy kit processing and medication tracking software. Since 2012, Kit Check has focused on replacing time consuming and error prone manual processes in the hospital pharmacy with faster and safer automation technologies driven by a scalable cloud software platform and RFID. Kit Check is headquartered in Washington, DC and serves hospitals throughout the United States.

To contact Kit Check and learn more about automating pharmacy kit processing, please email hello@kitcheck.com or 786-KIT-CHECK | 786-548-2432.