## 7 keys to unlock medication inventory optimization



### **OPTIMIZE NOW**

### Be Prepared for What's Next

As healthcare professionals dedicated to the relentless pursuit of patient care, you have no doubt experienced the minute-by-minute unpredictability of a hospital environment. You need a medication inventory management solution that enables you to be prepared for whatever comes your way.

The BD solution provides a source for connected, automated medication inventory management—giving clinicians the precious time they need to make decisions for vulnerable patients.

In this eBook, we'll give you the keys you need to unlock the knowledge to make the most of your medication inventory management practice and help you achieve these goals:

- Manage costs
- Save time
- Enhance patient care

Each key will help you attain medication inventory optimization today to gain visibility and create efficient workflows for a more successful tomorrow.



## "

Instead of extracting data from multiple sources, we want to have one source for managing the inventory adjustments, and that's really this optimization tool.

David Webster, RPh, MSBA

Associate Director of Pharmacy Operations, Assistant Professor of Clinical Community and Preventive Medicine, University of Rochester, Strong Memorial Hospital, discussing the benefits of HSIO<sup>1</sup> CONTENTS

# 7 keys to unlock medication inventory optimization

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- 6 **Customize** Adapt to your needs
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**KEY 1: ASSESS** 

## Take a closer look

Regardless of how your organization is operating, there is always space for safer and smarter medication inventory management.



## Does your current medication inventory management solution have you prepared for what's next?

### Consider this:

### 1

Do you have full visibility into medication availability?

### 2

Are you able to manage medication inventory costs?

### 3

Can you optimize workflows to help remove roadblocks for your staff?

Public health crises can put unexpected pressure and strain on healthcare systems. These situations can expose and highlight major gaps in the inventory management system, leaving patients at risk of not receiving crucial therapies.

A critical step in achieving medication inventory optimization is to uncover the gaps in central pharmacy and overall drug distribution, to help ensure that the right medications are ready for patients. With a platform that organizes and tracks a multitude of drug products, you can experience scalable inventory management in ways you've never been able to visualize before. And that can better prepare you for whatever the future might hold.

**KEY 2: AUTOMATE** 

## Better connectivity, putting you in control

Once you've assessed your current practices, you can think about managing inventory through automated workflows. These processes efficiently and accurately procure, pick, prepare, check and track medications with little manual input—making it easy and effortless to see where medications are and where they need to be.

### Automated benefits



#### Save time

Automate reorders based on par levels and reduce total inventory management time by 89%.<sup>2</sup>

### Gain visibility

Reduce medication expiration waste by 58%.<sup>2</sup>



### Improve availability

Decrease stockout rates by 47% on average, without overbuying.<sup>3</sup>

## Automated recommendations can help:

- Adjust par levels
- Minimize stockout rates
- Reduce overstock
- Positively impact expiration waste
- Promote distribution accuracy

Which can give your team the power to react faster to changing patient demands.

### **Pharmacy buyers can spend up to four hours a day** on the medication procurement process, including checking inventory shelves and visually inspecting medication bins.<sup>4</sup>

A connected medication inventory management process automatically creates a holistic view that helps you and your staff work more effectively. Inventory optimization solutions from BD work together to create automated recommendations that can help mitigate manual procurement processes and inspections.

### **BD PYXIS™ MEDSTATION™ ES**

Helps clinicians efficiently dispense the right medications, for the right patients, at the right time.<sup>5</sup>

### **BD PYXIS<sup>™</sup> LOGISTICS**

Enables more efficient central pharmacy operations with the goal of inventory reduction and improved inventory turns.

Employs barcode-assisted technology to facilitate accuracy, helping to alleviate employee stress associated with variation and uncertainty.

### BD HEALTHSIGHT<sup>™</sup> INVENTORY OPTIMIZATION

Improves visibility into your inventory, offering automated data aggregation that leads to actionable insights.

Provides medication alerts through an integrated, web-based dashboard which helps with cost avoidance.

Combining the power of BD HealthSight<sup>™</sup> Inventory Optimization with BD Pyxis<sup>™</sup> Logistics can even help you analyze usage patterns to better determine refill frequencies and make recommendations on moving stock from low-use to high-use areas. Optimizing inventory management at the health-system level enables a clear line of sight to track and manage all your inventory—across every location. This can free up your clinical staff to direct their energy toward patient care.

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**KEY 3: STREAMLINE** 

### Less is more efficient

Automated workflows help eliminate inefficiencies and streamline processes. This allows your pharmacists, nurses and techs to focus on providing the best care possible at the lowest cost. Your medication inventory management solution can help standardize processes, facilitate regulatory compliance and save time.

Because of the streamlined interoperability of BD, nurses in one case study spent:

30% removed by the second seco

less time removing medications<sup>6</sup>

less time on morning medication passes per patient<sup>6</sup>



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A single medication management source that exchanges information with existing systems and a unified formulary allows your team to focus on their strengths and accelerate the speed of patient care.



**CLINICIANS** can engage with patients.



**PHÁRMACY AND IT** can work to improve efficiencies and mitigate costs. This transparency often leads to fewer staff frustrations.

Our solutions can analyze usage data on stockouts and refills during set time periods to determine optimal refill times. This reduces tech workflow conflicts with care teams—when a nurse needs to get a medication to a patient, it can be restocked before they get to that cabinet.

Advanced analytics can also help make refill trips more efficient, working toward one major replenishment per day—saving time and alleviating stress associated with misplaced meds.

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**KEY 4: ENHANCE CARE** 

## Empower people to focus on patients

Your medication management system should ultimately benefit patients. That's only possible when staff are able to provide focused care—especially during critical times of uncertainty. A disconnected system means disruptions and delays—connected BD solutions help ensure medications are where they need to be, allowing staff to regain focus on patient care.



STREAMLINE

## Common barriers impacting care:

<sup>Up to</sup> 38%

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of a nurse's time is spent on non-value-added activities: searching for medications that are unavailable, delayed documentation and unnecessary or redundant communication.<sup>7</sup>

**50**%

of nurses witnessed a medical error resulting from a lack of coordination among medical devices in a hospital setting.<sup>8</sup>

## **93**<sup>%</sup>

of nurses surveyed agree that medical errors could be reduced if medical devices were connected to share data with each other automatically.<sup>9</sup>

You spend countless hours just making sure that all formularies in all of your systems match up, but when you make this system automatic with BD Pyxis<sup>™</sup> Logistics, you get more time for attending to patients, the people that need your time the most.

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Finding efficiencies for pharmacists and nurses to locate medications, know what is readily available and get what they need can result in better care, more confidence and increased job satisfaction. A unified system is effective in removing some of the management burden on pharmacists so that they are able to spend more time in a clinical role, taking care of patients.

With inventory optimization from BD, it's possible to achieve better care solutions. With BD inventory management solutions, like BD Pyxis<sup>™</sup> MedStation<sup>™</sup> ES, nurses can:

Assign patients to themselves for the day

1

2 Access patients' medications and schedules

3 Create daily care plans for patients

4 Automatically track and record patient medication use

When nurses have unhampered access to the medications they need at the right times, they can provide trusted patient care and are better able to jump in to provide additional support when help is needed.

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#### **KEY 5: ACCELERATE**

## The data you need, when you need it

Effective data, analysis and reporting are key to continually optimizing workflows and controlling costs. With BD HealthSight<sup>™</sup> Inventory Optimization, not only can you access comprehensive data and actionable insights, but you can easily drill down to target the data you need in the moment. Having the right data and analyses at the right time accelerates smarter decision-making and boosts performance.



### Data management goals

AUTOMATE

When you have the right data, organized effectively with one single management source, your data does more for you and your patients.



Usage Pattern Reporting

Establish benchmarks to better understand stockouts, refills, days unused and expirations.



Automated procurement

Highlight and procure all medications and maintain min/max levels, automatically.



Pharmacy preparedness

Automate par levels and monitor critical medication requirements and priorities.

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Your technicians are walking the shelves daily, manually counting stock to see what needs to be ordered—leaving ample room for human error and inaccuracies.

You should have one source for inventory management. BD HealthSight<sup>™</sup> Inventory Optimization can holistically analyze data and make recommendations for optimization.

### With BD HealthSight<sup>™</sup> Inventory Optimization you can:

- Effortlessly check inventory levels
- Track medication usage
- Benchmark par levels and automate inventory management
- Prepare for new medications out on the market
- Accept recommendations and make changes within the system that automatically update both the servers and BD Pyxis<sup>™</sup> MedStation<sup>™</sup> ES

With this optimization in place, manual time spent on multiple machine trips to update stock movement can be greatly reduced, improving day-to-day workflows.

The system also allows you to easily look back and see how your changes have improved over time, in order to plan ahead. A singular standardized system for data management and medication inventory results in thousands of hours saved on manual management.

### **KEY 6: CUSTOMIZE**

## Adapt to your needs

Your system should create a positive impact without disrupting the productive processes your organization already has in place. If a system is easily adaptable from the start—and leverages your existing IT solutions—it makes follow-through all the more effortless. You need a flexible and scalable system that can be customized to your ever-evolving needs.



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### We make implementation easy



### Streamlined Integration

Utilizes your current interface and data to create a smarter cohesive system



Painless tech

Does not require significant IT to install or maintain



## Accessible to everyone

Can be implemented by frontline staff and easily adopted in daily workflow

Whether your current medication management system is working sufficiently or requires improvement, it's probably not doing everything everyone needs.

- Does IT spend considerable time maintaining your systems?
- Do newly acquired hospital facilities have a difficult time adopting your existing technology?

It is possible to implement a system across all locations that has the flexibility and modularity to integrate with your current system.

### **KEY 7: CUT COSTS**

### Boost returns

AUTOMATE

Implementing a single-source inventory management solution can help you realize cost savings while boosting returns. Use the power of technology, analytics and expert services to mitigate carrying costs, avoid expired or wasted inventory and save on labor costs.

BD systems' near real-time connectivity helped achieve an

80%

decrease in stockouts.<sup>10</sup>



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## **We're here to help** you get the right medication to the right patient, at the right time.<sup>5</sup>

### BD can be your partner in:

Improving inventory carrying costs	Avoiding wasted medications by recommending automatic changes to medication inventory levels	<b>Shifting</b> potentially unnecessary medications you currently have in stock to other areas where they are needed most
Alerting you to move soon-to-expire medications	<b>Cutting</b> back on unplanned trips to automated dispensing cabinets	<b>Improving</b> stockout rates and medication availability through automated recommendations

How often do technicians need to run a single medication order up to the floor? How often do pharmacists exit their workflow to address a repeated order that was stocked out? Leverage and build upon your existing BD Pyxis<sup>™</sup> dispensing cabinet investment to implement an integrated medication inventory management approach and achieve increased workflow efficiency for pharmacy and nursing.

### **TAKE ACTION**

# We're happy to give you the keys to optimization.

At BD, we're committed to partnering with you to help solve your medication inventory optimization challenges, so you can focus on delivering quality care.

### Remember our seven keys to unlock success:

- 1. Assess
- 5. Accelerate
- 2. Automate
- Customize
  Cut Costs
- 3. Streamline
- 4. Enhance Care

Talk to a solutions expert about how inventory optimization from BD can streamline your operations.

### **Get Started**

bd.com/optimizemedinventory

#### References

<sup>1</sup>Webinar. From Big Data to Results: Accelerating and Sustaining Medication Optimization. The University of Rochester Medical Center; 2020

- <sup>2</sup>Case study. A new approach to eliminating waste in the hospital pharmacy. CareFusion study conducted with PIH Health. 2015.
- <sup>3</sup>Case study. Evaluation of stockouts after utilization of inventory optimization predictive analytics: a multisite retrospective data analysis. Ahmed Naguib, MS; Aryana Sepassi, PharmD
- <sup>4</sup>C—0664 Temple J, Ludwig B. Implementation and evaluation of carousel dispensing technology in a university medical center pharmacy. Am J Health Syst Pharm. 2010:67(10):821-829.
- <sup>5</sup>Malone, Daniel; Romero, Andrew. Accuracy of adverse-drug-event reports collected using an automated dispensing system. Am J Health Syst Pharm. 62(13):1375-80.
- <sup>6</sup>Cerner Corporation. Cerner and CareFusion case study: The clinical benefits of CareAware enhanced dispensing. Hershey, PA: Pennsylvania State University, Milton S. Hershey Medical Center; 2014.
- <sup>7</sup>C—0679. Allen, Stephanie PhD, RN. (2015.) The Connection Between Nurses Working at Top of Licensure and Patient Care. Infor Healthcare.

<sup>a</sup>C—0652. Nurses Survey on Interoperability and Improved Patient Care. Harris Poll and West Health. March 2015.

- °C—0966. Nurses Survey on Interoperability and Improved Patient Care. Harris Poll and West Health. March 2015.
- <sup>10</sup>BD Pyxis<sup>™</sup> Pharmogistics<sup>™</sup>. Third-party questionnaire. October 2015. Near real-time connectivity between the BD Pyxis<sup>™</sup> Dispensing System and BD Pyxis<sup>™</sup> Logistics software helped decrease the number of stockouts by 80% at a local community hospital.

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