



# Managing Technological Change in Your Pharmacy

What you need to know to optimize the value of automated technologies while minimizing the pain of change



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# Executive Summary

The successful implementation of pharmacy automation solutions requires project and people management, knowledge and skills. Most practitioners, along with their technology providers, are well-versed in project management. Yet to fully harness the promise and benefits of automation technologies, pharmacists must carefully manage change that impacts users and constituents. This paper, developed by Swisslog Healthcare, will help you craft a change management program to ease the pain of technology implementation, while ensuring you reap the benefits of increased patient safety, operational efficiency and reduced costs.

The implementation of a new solution or technology is disruptive and begs the question, «**Why bother?**» The first section of this paper answers that question. Then, we define change management, along with specifics about why it's important to apply it to your pharmacy. In **Five Keys to Change Management Success**, we present strategies and tactics to help you achieve your implementation goals. We conclude with ways to measure and share your success. At the end there are links to resources to help you understand the nuts of bolts of change management in your environment.



# Why Consider Automation Technologies and the Hospital of the Future

Safety, cost-saving and other benefits must be weighed against the impact of implementations when considering new technology. Installing an automated solution is disruptive—requiring changes to your systems, processes, work space and the way your employees do their jobs. And, most people don't like change. Therefore, if change isn't handled properly, people often resist and look for ways to continue doing things the old way. That in turn, significantly degrades the clinical, financial and operational benefits that you'll achieve.

At some point during your technology evaluation process, you may question your decision to move from current processes. "Why bother? Why don't we just keep doing things the way we are?"

This section covers some of the reasons why implementing pharmacy automation solutions is well worth the effort.

## Change is Inevitable

Change is ongoing. Technological innovations as well as clinical research being conducted worldwide continuously change the practice of medicine. That means that **the tools to deliver care**, and the **best practices** associated with them, are always evolving to yield better clinical outcomes.

Along with practice changes are **changes in attitudes**. The information age ushered in informed consumers accustomed to getting what they want, including safe and effective medical care. Their search is made easier by an abundance of online resources to help them differentiate among healthcare providers.

The US federal government has shifted its measurement of what constitutes good health care as well, moving from outputs (number of procedures, number of tests, number of physician visits) to outcomes (clinical outcomes, patient satisfaction, overall cost savings).

**Today's pharmacy automation technologies offer substantial benefits. Chief among these are operational improvements that impact patient safety. Reducing medication preparation and delivery errors, along with the negative impact they have on clinical and operational outcomes, is critical. So too is the advancement of operational efficiencies. Budgetary pressures squeeze pharmacy executives to continuously find ways to reduce costs.**



## Why the hospital of the future must leverage automation technologies

The shift from outputs to outcomes has profound implications for hospitals and their pharmacies. Not least among these are the criteria for reimbursements. For example, Medicare ended reimbursement to hospitals for hospital-acquired conditions, colloquially referred to as “no pay for preventable events.”<sup>1</sup>

The addition of **patient satisfaction scores** to the criteria for reimbursement has sparked renewed emphasis on increasing the time that caregivers spend with patients. Automation technologies are one way to realize this end. For example, processing drug requests faster and more accurately allows caregivers downstream of the pharmacy to spend less time locating and retrieving medications and more time at patients’ bedsides.

**Projected labor shortages** make this time savings even more important. A review of recent studies projects long-term physician and nurse shortages in the United States of 155,000 and 500,000 respectively, by the year 2025.<sup>2</sup> With an aging population, and the greater incidence of disease and conditions among this group, the demand for healthcare services is expected to rise accordingly. Current health systems must be able to scale to handle more people requiring more services, at the same time that providers face labor shortages.

Once again, automation technologies provide relief. Such solutions deliver higher productivity while staying within the boundary that flat departmental headcounts impose.

**Cost pressures** are another trend facing pharmacies and hospitals. Consider that from 1990 to 2010, healthcare costs rose by 259 percent.<sup>3</sup> By contrast, workers’ wages during the same period rose by only 101 percent.<sup>4</sup> Reimbursement changes also necessitate that providers cut their expenses to ensure that they don’t price themselves beyond the ability of consumers to pay. Once again, simply scaling legacy systems won’t solve the problem because they rely heavily on manual—e.g., costly—processes.

### «Why change?»

**Automated solutions promise increased patient safety, better regulatory compliance, lower costs and workflow efficiencies.**

#### SOURCE

- 1 HEALTH CARE AT THE CROSSROADS: Guiding Principles for the Development of the Hospital of the Future. The Joint Commission, 2008, p. 12.
- 2 Zywia, Walt, “U.S. Healthcare Workforce Shortages: Caregivers,” Computer Sciences Corporation, Healthcare Group, May 2013.
- 3 Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. For full chart, see Young, Jeffrey, 14 “Health Care Spending Growth Is Slow For Third Straight Year: Report,” huffingtonpost.com, Jan. 7, 2013.
- 4 Social Security Administration, Average Wage Index., Wage Average Amount figures: 1990-\$19,857.45; 2010: 39,959.30.



**In addition to addressing the aforementioned challenges, pharmacy automation solutions deliver a number of benefits. These include:**

- **Increased patient safety.** Manual processes rely upon the accuracy of pharmacy technicians and specialists. As good as they are, they are still human, and humans makes mistakes. The implementation of automation technologies in healthcare settings has been shown to reduce errors by reducing the number of human touches.<sup>5,6,7,8</sup>
- **Improved compliance.** Pharmacy automation solutions allow pharmacists to incorporate compliance measures into their workflows. Moreover, accompanying software applications ease the administrative burden of providing reports to governmental agencies.
- **Lowered costs.** In addition to improvements in patient safety, pharmacy automation solutions deliver cost savings. For example, one pharmacy PillPick® Automated Packaging and Dispensing System implementation showed a reduction in inventory overhead of \$350,000 annually, along

**«...the implementation of technology solutions, such as... automated dispensing machines (ADMs), [and] carousel storage systems...can be utilized to decrease medication errors and subsequently improve patient safety.»<sup>9</sup>**

with a 40 percent reduction in missing doses, while slashing of cart fill-time by 71 percent.<sup>10</sup>

- **Increased efficiency.** Implementation of pharmacy automation solutions requires pharmacists to review their departmental processes. This allows low- or no-value add steps to be eliminated while minimizing the impact to safety and users. Hence, automation solutions promote increases in the efficiency of pharmacy operations.<sup>11</sup> That includes increases in the number of prescriptions dispensed per full-time-equivalent (FTE) pharmacist.<sup>12</sup>

#### SOURCE

- 5 Poon, Eric G., et al, "Effect of Bar-Code Technology on the Safety of Medication Administration," N Engl J Med 2010; 362:1698-1707, May 6, 2010.
- 6 Frank H., Morriss Jr., Paul, et al, "Nurses Don't Hate Change" - Survey of nurses in a neonatal intensive care unit regarding the implementation, use and effectiveness of a bar code medication administration system." Healthcare Quarterly, 12(Sp) August 2009: 135-140.
- 7 James, KL, et al, "The impact of automation on workload and dispensing errors in a hospital pharmacy." Int J Pharm Pract. 2013 Apr;21(2):92-104.
- 8 Chapuis, C., Roustit, M. et al, "Automated drug dispensing system reduces medication errors in an intensive care setting." Crit Care Med. 2010 Dec;38(12):2275-81.
- 9 Fiumara, Karen, Pharm.D., et al, "Case Study on the Use of Health Care Technology to Improve Medication Safety," Excerpted from: Medication Use: A systems Approach to Reducing Errors, Second Edition. Joint Commission Resources, [www.jcrinc.com](http://www.jcrinc.com).
- 10 Naseman, Ryan W., PharmD, MS, BCPS, "Maximizing Central Pharmacy Dispensing Technology," Pharmacy Purchasing & Products. April 2017. Vol. 14, No. 4, p.6.
- 11 James, KL, et al, "The impact of automation on workload and dispensing errors in a hospital pharmacy." Int J Pharm Pract. 2013 Apr;21(2):92-104.
- 12 Angelo, LB, Christensen, DB, Ferreri, SP, "Impact of community pharmacy automation on workflow, workload, and patient interaction." J Am Pharm Assoc (2003). 2005 Mar-Apr;45(2):138-44.



# What is Change Management?

The **Association of Change Management Professionals** defines change management as:

«...a deliberate set of activities that facilitate and support the success of individual and organizational change and the realization of its intended business results.»

Translating that to a pharmacy setting, change management includes the planning, communication, implementation, process evaluation and employee training activities designed to achieve clinical and operational goals.

At a high level, successful pharmacy automation solution implementations require the shepherding of people, processes and technology.

— **People** - The “people” in this case are anyone who will be affected by the new solution. That goes beyond pharmacy technicians, specialists and pharmacists to include your executive team (president, CFO, CIO, HR) and downstream “users” of the new system (doctors, nurses, practitioners).

— **Processes** - In order to optimize the use and benefits of pharmacy automation solutions, core processes need to be reevaluated. Pharmacist champions have the opportunity to eliminate non-value add steps and make other tasks transparent to the user.

— **Technology** - The implementation of a new technology requires attention to detail. That includes accommodating the installation of the physical components along with integrating their associated software applications with existing systems.

Conceptually, accounting for all three areas in your implementation will make the process easier, reduce user anxiety and bring you closer to achieving your desired goals.





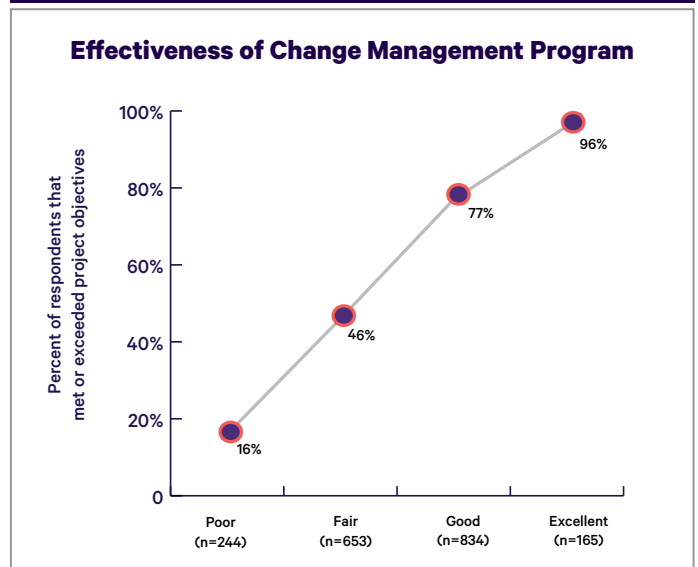


## Why is Change Management Important to Your Pharmacy?

The why of change management is best expressed by recognized change management experts Prosci, Inc. who believe that “The overarching purpose of change management is to accelerate the speed at which people move successfully through the change process so that anticipated benefits are achieved faster.”<sup>13</sup>

A methodical and well-thought out change management plan won’t just help you achieve your benefits faster, it is directly tied to how much your organization will benefit from the new solution as Figure 1 illustrates. Note that “Excellent” change management programs yield six times the successful outcomes of “Poor” programs.

Figure 1: The effectiveness of your change management program corresponds directly to the results you achieve.



### SOURCE

13 McCarthy, Claire, MA; Eastman, Douglas, Ph.D, “Change Management Strategies for an Effective EMR Implementation.” Healthcare Information and Management Systems Society. 2010.



## The human factor in change management

The human element of change management cannot be understated. In fact, the top five barriers to successful change management directly or indirectly relate to the management of people during the process.<sup>14</sup> To underscore this point, consider a case study presented to the American Society of Health-System Pharmacists showcasing the installation of an IV room barcode scanning system.<sup>15</sup>

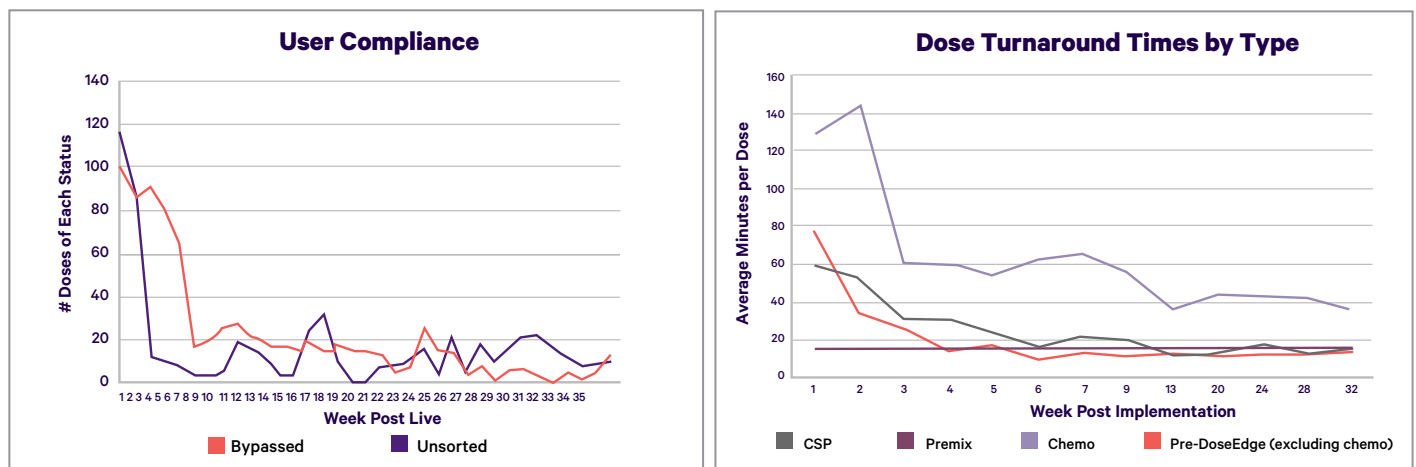
Note how in Figure 2 below, the dramatic drop in user resistance in week 3 (unsorted doses) corresponds with significant reductions in dose turnaround time (TAT). Managers in this case initially met with more resistance than anticipated, and subsequently revised and rebooted their change management program. The effectiveness of those changes led to a dramatic improvement in their desired pharmacy metrics.

In addition to clinical benefits, an effective change management program promotes “employee satisfaction, morale and engagement.”<sup>16</sup> This consequence may be attributed in part to a significant reduction in uncertainty in users’ minds that can undermine their willingness to participate in the change.

Confident that they are not being displaced or replaced by the implementation of automation, staff members are more likely to experience job satisfaction. Higher job satisfaction also relates to lower turnover. Hence pharmacy managers will not be left with the burden to fill positions in the wake of an automation solution implementation.

Now that we’ve identified what change management is, and why it’s important to your pharmacy, we’ll discuss five specific ways that you can leverage change management to safeguard the success of your solution implementation.

Figure 2: An increase in compliance results in a significant reduction in dose TAT.



### SOURCE

14 “Best Practices in Change Management-2014 Edition, Executive Overview,” Prosci, Inc., 2014, p. 4.

15 Melby, Michael, MS, FASHP, “Managing change for new pharmacy systems.” Dec. 7, 2011, slides 50 and 51.

16 McCarthy, Claire, MA; Eastman, Douglas, PhD, “Change Management Strategies for an Effective EMR Implementation.” Healthcare Information and Management Systems Society. 2010.



# Five Keys to Change Management Success

The body of change management knowledge available to pharmacists today is extensive. [\[See last page for sources to help guide your pharmacy change management program.\]](#) For the purposes of this paper, we'll call out five fundamentals to ensure the success of your change management program.

## Success Key #1: Adopt the proper mindset

Conceptually, change management is not a project, it is a process. Yes, the implementation of a new pharmacy solution will indeed have an “end” marked by a go-live date. However, your stakeholders and users will adopt and adapt to the changes of that solution at different paces.

While your star pharmacy technician may readily take to the new system, others may take longer to adapt. Moreover, they may need to be led down the path of adoption. That includes not just keeping them informed, but also encompasses training before the system goes live along with drills and continuing education after implementation for reinforcement. The change management process is designed to move your employees from their current state to one where they are comfortable, capable and willing to use your new solution.

## Success Key #2: Demonstrate unwavering executive leadership and support

Research shows a direct relationship between the effectiveness of implementation sponsors in

promoting the project and meeting the objectives of the solution implementation.<sup>17</sup> Thus, it's essential that you, your managers and your executive sponsors articulate and convey your unambiguous support for the project. While support is good, advocating and promoting the new solution to your staff, stakeholders and users is even better.

Advocating the new solution conveys your commitment to moving forward, no ifs, ands, nor buts. This effectively eliminates thoughts and discussions of returning to the old way of doing things. Moreover, it focuses your team's attention on working with you to ensure that the implementation is a success for everyone.

## Success Key #3: Develop a change management program plan

By creating and implementing a change management plan, you can sidestep issues, pitfalls and gotchas. A strong plan will position your team for success by educating them, keeping them informed and reducing their anxiety over the coming changes. The core of an effective plan includes clear, consistent communications, engagement, training and reinforcement.

SOURCE

<sup>17</sup> “Best Practices in Change Management-2014 Edition, Executive Overview,” Prosci, Inc., 2014, pp. 6-7.



**«I found that it was important to hammer on the positives that would affect my staffs’ corner of the world. Safety was number one. Everyone gets it that removing human intervention from processes eliminates the potential for human error. I also talked about better efficiency, but within the context of how it affected them. So for example, the new solution would improve our inventory management and generate resupply lists for them so that they wouldn’t run out of meds on weekends and have to call area pharmacies for inventory to carry them over.»**

- Noreen Todd, MHA, RPh, Coordinator of Experiential Education, School of Pharmacy, University of Saint Joseph

### **Communicate to reduce anxiety and keep the project on pace.**

Keep in mind that communicating does not always equate to persuading. To achieve the latter, it’s helpful to stress the clinical and business reasons for the upcoming change in all communications. These themes have been shown to be most important to employees, managers and senior leaders along with your expectations of them and their role in the implementation.<sup>18</sup>

**«Desired behavior change is achieved by helping people understand and internalize change and by preparing them to be successful contributors in the future state.»<sup>19</sup>**

### **Messaging: The why, how and when of the implementation**

One important theme to convey is that your new pharmacy automation solution will increase patient safety. Users and downstream “consumers” of your output alike have a genuine interest in promoting the safety of patients. Research supports this powerful “why” assertion.

Take the case of the implementation of a barcode medication administration system in a neonatal intensive care unit. There was a perception that the nursing team would be resistant to change. However, in a post-implementation follow up, researchers concluded that the nurses “...were adaptive to the new technology when they believed it increases patient safety, nursing professionalism and job satisfaction...”<sup>20</sup> In this case, a compelling motivator was the fact that the new system reduced preventable adverse drug events by 47 percent.

#### SOURCE

18 “Best Practices in Change Management-2014 Edition, Executive Overview,” Prosci, Inc., 2014, p. 7.

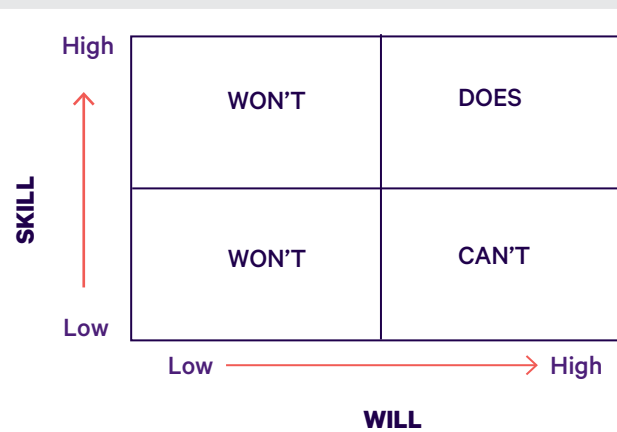
19 McCarthy, Claire, MA; Eastman, Douglas, Ph.D, “Change Management Strategies for an Effective EMR Implementation.” Healthcare Information and Management Systems Society, 2010.

20 Frank H., Morriss Jr., Paul, et al, “Nurses Don’t Hate Change” - Survey of nurses in a neonatal intensive care unit regarding the implementation, use and effectiveness of a bar code medication administration system.” Healthcare Quarterly, 12(Sp) August 2009: 135-140.



«Engaging individuals involves arousing two key aspects—[building their] willingness and ability.»<sup>22</sup>

Figure 3: Skill vs. Will Matrix for Success



One pharmacy automation implementation veteran underscores the importance of key messaging to effect successful change.<sup>21</sup>

An effective change management communications plan also clearly states your expectations of your staff and stakeholders. This includes assigning them their role and accompanying duties, as well as outlining the performance standards you expect them to meet. Clarity helps to reduce the uncertainty and anxiety that accompanies change.

Your communications plan will also include periodic updates and progress summaries. Collectively, they demonstrate the momentum of the project and reinforce the idea that the project will indeed come to an end and that your team can get back to a normal work life. Additionally, such updates help squelch rumors that often crop up in the absence of consistent communications.

### Engage to create desire to change and to overcome resistance

Because your goal is to promote behavioral and attitudinal changes among your staff, it's not enough to simply communicate to them. You must engage them. Involving employees and constituents in the change process accomplishes a few critical things. By getting their input, you are cultivating their emotional investment in the project, along with your desired outcomes. Additionally, the engagement of your staffers undercuts the perception of a dictatorial process and replaces it with a feeling of collaboration. In short, you will be growing your team's will to successfully implement and use the new automation solution.

That's half the battle as Figure 3<sup>23</sup> (above) illustrates. A successful implementation requires both your team's will to change, along with the skills necessary to affect that change. Success Key #4 discusses the skill side of the coin.

#### SOURCE

21 From an interview conducted April 29, 2014 with Noreen Todd, M.H.A., R.Ph. Coordinator of Experiential Education, School of Pharmacy, University of Saint Joseph.

22 McCarthy, Claire, MA; Eastman, Douglas, Ph.D, "Change Management Strategies for an Effective EMR Implementation." Healthcare Information and Management Systems Society, 2010, p. 13.

23 McCarthy, Claire, MA; Eastman, Douglas, Ph.D, "Change Management Strategies for an Effective EMR Implementation." Healthcare Information and Management Systems Society, 2010, p. 12.



## Resistance

The main barrier to garnering your team's will is their resistance to change. For many of your employees, that will be their default response. It's not unusual to hear them say things like, "Things are working great the way they are." "Why do we have to learn this new system?" and so on.

There are many psychological and emotional factors that contribute to their opposition. These include:

- **The fear of added workload.** Your pharmacy staff and downstream constituents (like nurses for example) may fear that the new solution will add to their already heavy workload. One of the advantages of automated solutions is their ability to make formerly manual process tasks transparent to users. It helps to alleviate your staff's fears by detailing specifically how the new solution will make their lives easier overall.
- **The fear of having to learn a whole new process.** Users will have to learn how to operate the new solution. That doesn't concern them so much as it bothers them that their productivity will be lower during this learning period. While this temporary dip in output is unavoidable, you are able to blunt the accompanying frustration by acknowledging this fact.

**«Employees will not support what they don't understand. [They] need to understand the project's vision and their individual role before they can help make it happen.»<sup>24</sup>**

- **Fear of being laid off.** Given the projected labor shortages referenced earlier, along with significant increases in utilization brought on by an aging population, most managers will maintain or add to their headcounts. If you have no plans to lay off personnel, it's vital to communicate this. In fact, rather than being laid off, you are likely to ask your team to play a more active role in your pharmacy's operations. Consider the case of the implementation of an automated dispensing system at one hospital pharmacy, which enabled the roles of pharmacists and pharmacy technician ACTs to be expanded.<sup>25</sup> The takeaway for staffers is that the automation will enhance the contributions they make versus replacing them.
- **Safety concerns.** Changes to ingrained processes and workarounds naturally cause anxiety for teams whose attention to detail is paramount to the safety of patients. The section "Listen to your staff and act upon their issues and concerns" below suggests ways to address this issue.

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### SOURCE

<sup>24</sup> Johnson, Brenda, L. and Davis, Valerie, R., "Change Management: A Critical Factor in EMR Implementation." March 8, 2004, Vol. 16, No. 5, p. 32.

<sup>25</sup> James, KL, Barlow, D, et al, "The impact of automation on pharmacy staff experience of workplace stressors." Int J Pharm Pract. 2013 Apr;21(2):105-16. Information and Management Systems Society. 2010, p. 12.





«Rather than have staff meetings that people could pop into and out of, I would suggest having what I call safety rounds. These are short, mandatory meetings prior to the beginning of a shift. We would discuss what was happening that day along with any problems or concerns my team may have been having around the implementation. I reinforced my open-door policy by making sure that they had my contact info along with my schedule. I find that the safety rounds reassured the staff that everything was under control. Moreover, it was a great way of making me aware of potential issues sooner rather than later.»<sup>26</sup>

- Noreen Todd, MHA, RPh, Coordinator of Experiential Education, School of Pharmacy, University of Saint Joseph

### **Involve employees to overcome resistance and get their buy in**

To engage employees and stakeholders you must involve them in every aspect of the new solution. This includes incorporating their input into the planning, implementation, go-live and subsequent use phases of the project.

### **Identify and recruit those who will be impacted**

The first step is to identify your stakeholders and users. By meeting with stakeholders early in the process and outlining your project plan, you have the opportunity to address their questions and concerns. Completing this work up front eliminates unpleasant surprises later, while having the added benefit of establishing a consensual foundation for your new solution.

One proven tactic to get your pharmacy staff on board is to identify the leaders among them. These are the people that your staff naturally looks up to and follows. Then, work with those people to get their buy in for your project. Once you've recruited them, they will be very effective in helping you to get buy in from the rest of your team.

### **Listen to your staff and act upon their issues and concerns**

By embracing two-way communication you will provide a means for employees to share their concerns with you. This will not only promote collegial relations, but it will give you valuable feedback that you can use to make informed decisions. One way to achieve this goal is through frequent “safety rounds” meetings.

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#### SOURCE

<sup>26</sup> From an interview conducted April 29, 2014 with Noreen Todd, MHA, RPh, Coordinator of Experiential Education, School of Pharmacy, University



## Success Key #4: Give your team the skills to adopt change

The goal of education and training is to move your staff to a production state as quickly as possible. That means providing them with the knowledge and skills they need to use the new solution. A few guiding principles will help you maximize the benefits of training. These include:

- **Take full advantage of vendor training.** Vendor implementation specialists have years of training and experience deploying the solutions you're implementing. Most offer hands-on training to help your team learn to use your new system. Ask about additional training opportunities available during the post-implementation phase.
- **Create detailed how-tos to cover post-implementation operations.** Written and video "how-tos" make excellent learning aids to teach your team to operate effectively in the post implementation phase. Given that pharmacy teams include people with diverse backgrounds and skills, it's helpful to use layperson's terms in your content.
- **Use drills to ingrain processes.** Despite the high uptime records of pharmacy automation, one of the biggest fears among pharmacy teams is what to do should the facility experience a power failure or have the system(s) go down. The creation and periodic execution of drills to reinforce downtime processes mitigates this anxiety.
- **Optimize the use of your new pharmacy automation solution.** Automation changes pharmacy processes. Avoid potential issues, including workarounds and bottlenecks, by mapping out the new workflow rather than hoping users figure it out on their own.





## Success Key #5: Reinforce the change to reap the full benefits of the solution

Managers who want changes to “stick” take the time to reinforce them. This includes:

- **Continuing education.** It can be a challenge for employees to absorb all the training content prior to your implementation. Recognize that training is an on-going process. It’s helpful to participate in periodic refresher and advanced training sessions to reinforce the initial learning plus build upon the basic content.
- **Reward desired behavior.** Given that the goal is to influence user behavior to adopt and use the new technology, it pays to reward those who do just that. A couple of tactics have been found to be effective.
  - **Give recognition.** Visible shout-outs are a very effective tool to reinforce desired behavior. This comes in the form of praising power users through a number of channels: at meetings, in departmental communications, in the employee newsletter, on the facility website etc.
  - **Offer incentives.** You may wish to include the adoption of the new solution in your employees’ performance goals. That would make it a part of their annual review, and thus, a contributing factor to any raise. Other potential incentives include nominal gift cards to restaurants or stores. These be awarded as individuals or teams achieve previously stipulated performance goals.
  - **Share success stories.** Experience shows that “early wins/successes foster buy in from others.”<sup>27</sup> By sharing brief summaries of employees who have successfully adopted and used your new solution you will nudge late adopters to follow suit.

### SOURCE

27 Stephens, Jennifer, MPH; Carman, Kristin, PhD, et al, “Implementation of Lean in a Community Health Center: A Case Study.” American Institute for Research. July, 2012. P. 14.



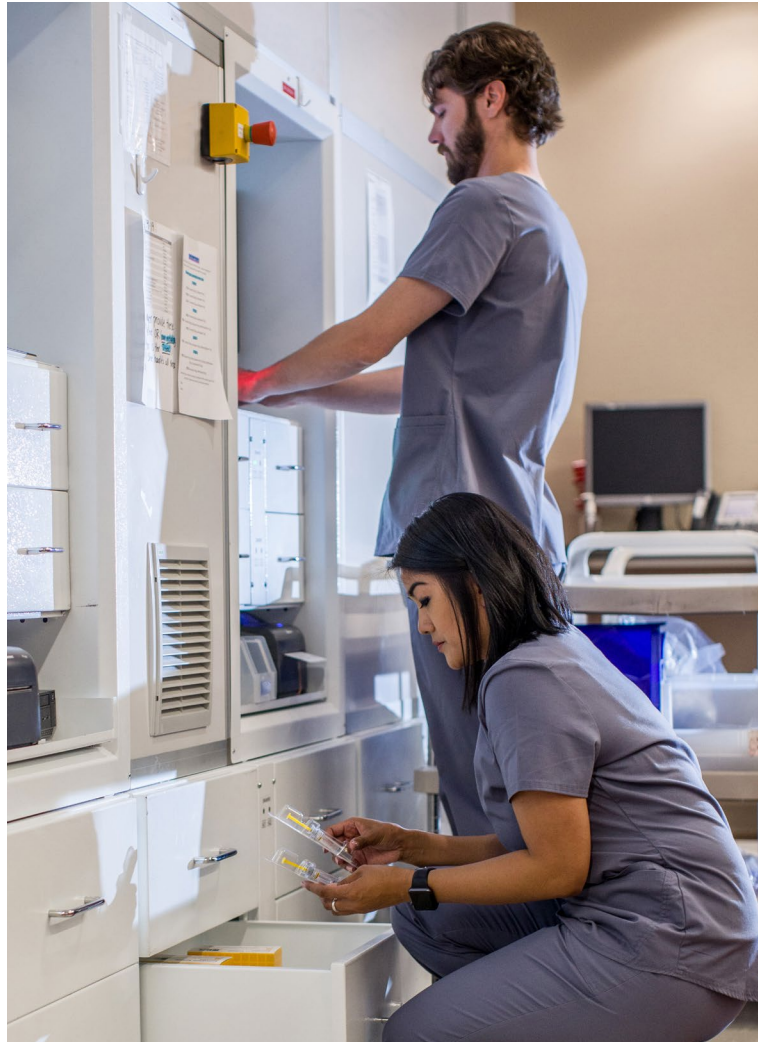
# Pharmacy Automation Solution Case Study:

**PillPick® Automated Packaging and Dispensing Provides a Fully Integrated Pharmacy Automation System to Efficiently Pick and Package Unit-Dose Patient Medication.**

**Operations:** 656 -bed major acute care community hospital with additional 230-bed and 214-bed Reactivation Care Centers. It's also a teaching facility affiliated with the University of Toronto and Queen's University. Humber River Hospital has a catchment area of 850,000 residents of North West Greater Toronto.

**Challenges:** Humber River Hospital was previously a multi-site organization lacking automated medication storage and management. The absence of efficiency-creating technology taxed skilled staff with labor-intensive manual tasks that limited their ability to participate in clinical activities.

**Solutions:** The relocation from multiple care delivery sites completely reliant upon primarily manual methods into a single, technologically advanced facility presented Humber River Hospital staff with tremendous opportunities to improve standards of care.



«Since partnering with Swisslog Healthcare, we have been able to re-deploy pharmacy technicians to patient-facing activities such as fulfilling the best possible medication histories in the ED or Surgical Clinic.»

- Albert Karas, Director, Pharmacy Services,  
Humber River Hospital



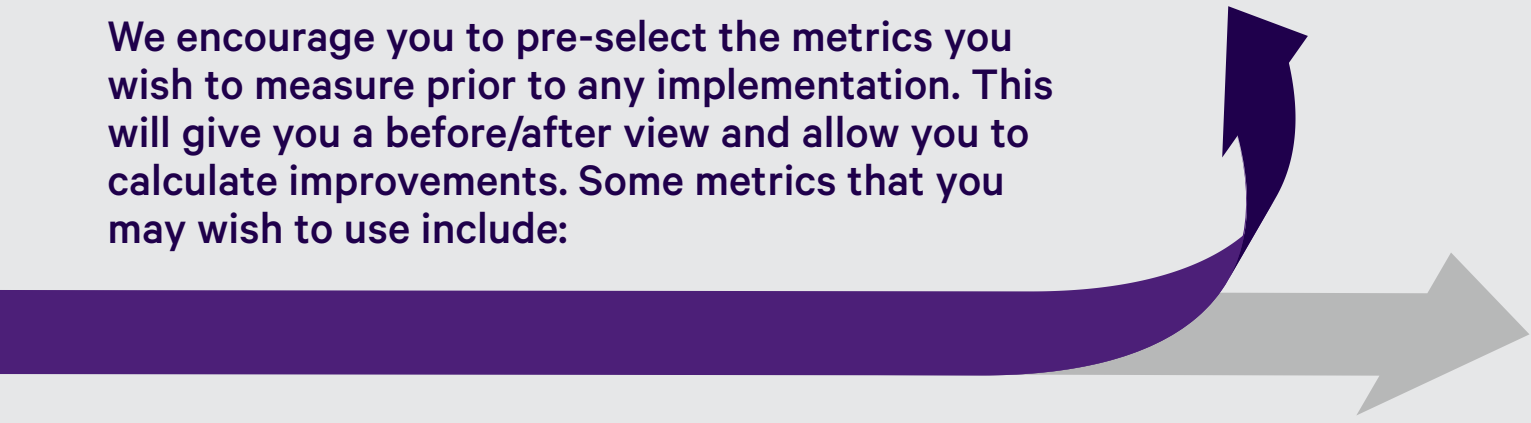


## Measure Your Success

By measuring and sharing your success, you'll back up the business case you made to secure your project funding. Moreover, it will provide valuable objective data to help your executive team understand the clinical and operational value that you're providing to your institution. Such information can be used as proof of your performance in your annual review as well as to strengthen your resume and LinkedIn profile. Tracking and sharing your success also contributes to the field of pharmacy. Your experience will help your peers successfully implement similar solutions. Thus, by articulating a numbers-based case, you'll be paying it forward to help others improve patient safety and to lower healthcare costs.



We encourage you to pre-select the metrics you wish to measure prior to any implementation. This will give you a before/after view and allow you to calculate improvements. Some metrics that you may wish to use include:



- **Changes in error/near miss rates.** One of the major drivers for implementing pharmacy automation solutions is to reduce errors so naturally, you'll want to track these statistics. Safety is not limited to patients as some pharmacy automation solutions promote the safety of users as well. In this case, it may be useful to compare OSHA claims before/after the implementation.
- **Service improvements.** Tracking delivery or turnaround times (TAT) before and after implementation is a good measure of pharmacy service, as are stats on lost medications. Measuring the number of calls for missing or lost doses is an effective way to demonstrate process improvement, along with qualitative surveys of nursing satisfaction.
- **Cost savings.** Second to patient safety and service, is the need to tally expense reductions. Such measures include reducing the cost to fill each medication order, along with lowering inventory overhead costs and even reductions in the number of drug shortages as a result of improved inventory visibility and management.
- **Change management program measures.**
  - Adoption. Once your solution goes live, you'll be able to identify who is using it and who isn't. "Adoption" may be measured by:
    - A low incidence of workarounds
    - Spot checks verifying employee usage of the new system without reversion to "the old way of doing things"
    - A lower incidence of potential errors
    - A measurable increase in staff productivity
  - Engagement. Completion of training sessions, along with the consumption of training materials, demonstrates a commitment to getting the skills needed to use the system effectively.
  - Minimal complaints, along with an absence of undermining behavior, demonstrate willingness to go along with the new solution.



## Conclusions

A number of issues are driving renewed interest in pharmacy automation solutions. Among these are governmental mandates, patient expectations, safety considerations, an older, sicker population and the need to cut costs. Yet, the deployment of such systems can be disruptive. Pharmacists can mitigate the pain of such implementations by rolling out a change management program. By meeting change issues head on, you will realize the full benefits of your solution sooner.

The key to an effective change management program starts with understanding that change management is a process, not a destination. Consensus

and cooperation are essential to funding and implementing a successful solution. Hence, garnering executive sponsorship and support is a fundamental goal. So too is crafting a change management plan. An effective plan includes powerful messaging themes (safety, efficiency) and communications tactics designed to engage and persuade your staff. These serve to build the will to change among users and stakeholders. User-friendly training sessions and materials provide the skills your team will need to succeed. And finally, activities that reinforce the change will serve to strengthen and ingrain your new system in your pharmacy's daily operations.





## Steps For Success

By applying these five keys, you will ease the transition to a new pharmacy automation solution and be assured of receiving the full benefits that such systems can deliver.

Contact Swisslog Healthcare to learn more about how our proven pharmacy automation solutions can help you:

- Improve pharmacy workflows
- Reduce errors to improve patient safety
- Deliver faster turn-around times
- Control inventory overhead
- Manage medication preparation, storage and retrieval
- Reduce medication loss and diversion

### SOURCE

13 — Sean Carey, Lean Management Healthcare Principles, March 27th, 2015 Hitech Answers.  
<https://www.hitechanswers.net/lean-management-healthcare-principles/>



# Resources for Implementing a Successful Pharmacy Change Management Program

A selection of references to help you in planning and executing change management.

Arredondo, Ricky. [How to Create a Healthcare Change Management Strategy](#). January 4, 2013. Includes a discussion of change management strategies, plans and communications tactics.

Eckes, Chad, CIO and Staren, Edgar, MD, Senior Vice President for Clinical Affairs and Chief Medical Officer, Cancer Treatment Centers of America. [Communication Management's Role In EHR Success](#). Healthcare IT News, June 10, 2009. This treatise provides the goals and tactics of a comprehensive communications plan for change management. While the focus is upon an EMR implementation, the principles apply to the deployment of pharmacy automation solutions.

Jones, John; Aguirre, DeAnne and Calderone, Matthew. [10 Principles of Change Management: Tools and techniques to help companies transform quickly](#). strategy+business, PwC Strategy & Inc., April 15, 2004. While this treatise details change management steps for businesses, the principles and concepts are applicable to pharmacy automation implementations.

US Department of Health and Human Services. [Organizational Change Management and Training Introduction](#). This site provides basic change management information in a clinical setting.

US Health Resources and Services Administration. [Health IT Implementation Toolbox: 9 Steps to Implement EHRs](#). While this Toolbox is specific to the implementation of EHRs, the processes, concepts and tools are directly applicable to the implementation of pharmacy automation solutions.

US Health Resources and Services Administration. [Project Meeting Plan and Agenda Template](#).







## CONTACT

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