Two effective initiatives for C-suite leaders to improve medication safety and the reliability of outcomes

As an industry, healthcare suffers from a high rate of failure—as many as 440,000 patients in hospitals suffer some type of preventable harm that contributes to their death each year, making medical errors the third leading cause of death in the US.\(^1\) Even with significant investments in technology, system design, and people, reliable patient outcomes have often been elusive given the inherent risks associated with the delivery of healthcare and the constant struggle to balance costs, quality, and safety. Can healthcare be safe? Can we really achieve highly reliable patient outcomes given human fallibility and the risky, unforgiving environment in which we work?

The unequivocal answer is yes. When David Marx, a culture and system reliability expert, talks about the way to achieve highly reliable outcomes, he points out that organizations will be reliable only around those things that they truly value and are willing to devote significant time and resources towards.\(^2\) This is where each organization’s senior leaders come into play—it is the C-suite leaders who decide what the organization values the most and for what they are willing to work hard to achieve.

To achieve reliable patient outcomes, safety must be one of the things leaders clearly want to be good at, a core value that cannot be reordered in the wake of competing priorities. Leaders must acknowledge human fallibility and the inherent risks associated with the delivery of care, thus centering this core value on realistic expectations—they continued on page 2—\(^\text{C-suite}\) >

<table>
<thead>
<tr>
<th>Table 1. ISMP Targeted Medication Safety Best Practices*</th>
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<tbody>
<tr>
<td>2014-2015</td>
</tr>
<tr>
<td>1  Dispense vin<em>CRIS</em>line in a minibag.</td>
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<tr>
<td>2a Use a weekly dosage default for oral methotrexate in electronic systems.</td>
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<tr>
<td>2b Require a hard stop verification for all \textit{daily} oral methotrexate orders to ensure the patient has an appropriate oncologic indication.</td>
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<tr>
<td>2c Provide specific patient/family education for all oral methotrexate discharge orders.</td>
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<tr>
<td>3a Weigh each patient on admission and at each outpatient/emergency department encounter.</td>
</tr>
<tr>
<td>3b Measure and document patient weights in metric units only.</td>
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<tr>
<td>4  Prepare and dispense all oral liquids that are not commercially available as unit dose products from the pharmacy in an oral syringe.</td>
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<tr>
<td>5  Purchase oral liquid measuring devices that only display metric measurements.</td>
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<tr>
<td>6  Eliminate glacial acetic acid from all areas of the hospital.</td>
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<td>2016-2017</td>
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<tr>
<td>7  Segregate, sequester, and differentiate all neuromuscular blocking agents from other medications.</td>
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<td>8  Administer high-alert intravenous medications via a smart pump utilizing dose error-reduction software.</td>
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<td>9  Ensure all antidotes, reversal agents, and rescue agents are readily available, with protocols, order sets, and directions for use.</td>
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<tr>
<td>10 Eliminate all 1,000 mL bags of sterile water from all areas outside of the pharmacy.</td>
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<tr>
<td>11 During sterile compounding, perform an independent verification of each ingredient prior to adding it to the final container.</td>
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*Full details and the rationale for the Best Practices can be found at: www.ismp.org/sc?id=417.
must chase reliability, not zero errors. They must also effectively communicate this message to the entire organization in specific terms, not jargon or safety slogans, and their message must be reflected in their behavior to be credible.

Broad-brush improvement efforts will only get you so far. Marx suggests that, to achieve extraordinary results, senior leaders must put in a lot of heavy lifting, tackling one type of undesired safety outcome at a time. In this regard, ISMP has identified two strategic initiatives related to medication/patient safety that we believe senior leaders should undertake to significantly improve reliable patient outcomes and to communicate to the organization that safety is a core value fully supported by leadership and worthy of the hard work needed to achieve—it’s what the organization wants to be good at. While there are many medication and patient safety initiatives worthy of consideration, these two initiatives clearly require strategic leadership to be successful and are very likely to result in highly reliable patient outcomes. They represent a perfect opportunity for leaders to get involved in medication and patient safety in a meaningful and efficient way.

**Strategic Initiative 1: Implementation of ISMP’s Targeted Medication Safety Best Practices**

In 2014, ISMP first launched the Targeted Medication Safety Best Practices for Hospitals (www.ismp.org/so?id=417), a set of six carefully selected, consensus-based interventions that address ongoing medication safety issues that continue to cause fatal or harmful errors in patients despite repeated warnings in ISMP publications. In 2016, five more targets were added to the Best Practices (Table 1 on page 1). The Best Practices are realistic, achievable, and highly effective interventions that will clearly improve patient outcomes by reducing or eliminating errors and/or mitigating patient harm. To keep the momentum moving forward, every 2 years new Best Practices are selected by ISMP and a national advisory group of safety experts and added to the list.

The Best Practices are intended to inspire and mobilize widespread national adoption, and with senior leadership committed to their implementation, this is beginning to happen across the country. In fact, in 2016, ISMP honored Ascension, the largest nonprofit health system in the US, with an ISMP Cheers Award for integrating the 2014-2015 Best Practices into the culture and operations at each of its 141 hospital sites. Their success far exceeded modest national efforts and was only possible with the full support and guidance of the senior leadership team.

**Leadership commitment to the Best Practices**

It can be a challenge to encourage and sustain participation by senior leaders who are managing multiple competing priorities. So, how did Ascension do it? The senior leaders at Ascension already had a strong commitment to helping the organization achieve highly reliable outcomes by designing great systems around their employees, building a Just Culture, and developing surveillance systems that allowed the organization to learn. Thus, the Best Practices were first reviewed and approved by the organization’s “high reliability” steering committee. Then, the organization’s most senior leaders set well-defined, nonnegotiable goals to embark on a journey to implement the 2014-2015 Best Practices within 180 days in all hospitals in the health system. A memorandum, endorsed by the executive, medical, nursing, pharmacy, and safety leadership, was drafted to explain the objective clearly. The leaders then cultivated a strong commitment to this objective with the chief executives at each hospital site, who were encouraged to engage all managers and local staff early in the drive to change.

To start, the organization initiated a collaborative effort to identify the gaps in the current implementation of the Best Practices and any real or perceived barriers to their implementation.
C-suite—continued from page 2

The vast improvement in adopting the Best Practices in this large organization was attainable largely because of the strong commitment and ongoing support that senior leaders provided for this strategic initiative, which we hope will provide a roadmap to the leaders in other organizations who want to achieve similar success.

Strategic Initiative 2: Creating a Learning Organization

Learning is the precursor to change. From the perspective of senior leaders, it’s the difference between trying to make the workforce perform flawlessly and understanding the constraints that are keeping them from flawless work. To learn, organizational leaders must have reliable safety information systems in place to collect, analyze, and communicate information about risks and errors; workers must be prepared to report risks, errors (including close calls), and any barriers to safe work; and the leaders must possess the willingness and competence to draw responsible conclusions from the safety information and facilitate substantial changes when necessary. A learning culture is probably the easiest to engineer and the hardest to make work in healthcare. Two significant reasons for this difficulty lie with the challenges associated with learning from the mistakes of others, and our resourcefulness in fixing problems in the moment but then forgetting to report them so long-term solutions can be explored and implemented.

There are two tangible and constructive ways that leaders can take an active role in overcoming these barriers to learning and promoting a learning organization. The first way is to develop an infrastructure for required review of published risks and external errors so the organization can learn from the experiences of others. The second way is to establish a forum for welcomed visibility of leaders in patient care units so they can learn firsthand from frontline staff about the barriers to safe care.

SAFETY briefs cont’d from page 2

Poison prevention—it’s about protecting your own kids, too! It’s National Poison Prevention Week (March 19-25, 2017), and we’re sure many organizations are involved in reaching out to the public about the importance of keeping children safe. But we’d also like healthcare professionals to take this time to reflect on protecting their own children and grandchildren. It’s amazing what kids can get into and how easy we make it! A recent survey of 2,000 parents showed a gap between what we know we should do to protect our kids and what we are actually doing. For example, while 9 out of 10 parents agree it is important to store medications within a child’s sight, on a shelf or surface at or above counter height.

A new report from Safe Kids Worldwide, Safe Medicine Storage: A Look at the Disconnect Between Parent Knowledge and Behavior, covers this topic and provides additional information that is worth considering and putting into action for parents and grandparents. Who can forget the “Granny Syndrome”? (www.ismp.org/sc?id=2881), a commercial manufacturers should also apply to outsourcers.

We’ve contacted PharMEDium and FDA about the concerns with the label. We believe that the labeling standards for commercial manufacturers should also apply to outsourcers.

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Join ISMP in celebrating the 85th annual National Doctors’ Day – March 30, 2017
Learning from external errors and using the ISMP Quarterly Action Agenda

One of the most important ways to prevent medication errors is to learn about problems that have occurred in other organizations and to use that information to prevent similar problems at your practice site. Experience has shown that a medication error reported in one organization is also likely to occur in another, given enough time. Because there’s a natural human tendency to “normalize” errors that happen elsewhere and believe they will never happen to you, leaders must convey that these external errors offer valuable and necessary learning opportunities and must be sought out and reviewed regularly. They must convey that the organization is vulnerable to errors, and that they consider external errors to be a “clear and present danger” in their organization for which steps must be taken to prevent a similar occurrence.

To establish an infrastructure for learning from external errors, leaders should identify reliable sources of information, establish a systematic way to review this information, assess the organization’s vulnerability to similar events, and determine a workable action plan to address any vulnerabilities.

To facilitate such a process, ISMP publishes the Quarterly Action Agenda in January, April, July, and October to summarize important topics published in the ISMP Medication Safety Alert! during the previous 3 months. The Quarterly Action Agenda was initiated 19 years ago to encourage organizations to use information about safety problems and errors that have happened in other organizations to prevent similar problems or errors in their practice sites. The Agenda is prepared for leadership to use at an interdisciplinary committee meeting and with frontline staff to stimulate discussion and action to reduce the risk of medication errors. Each item in the Agenda includes a brief description of the medication safety problem, a few recommendations to reduce the risk of errors, and the issue number to locate additional information. The Agenda is available in a PDF and Microsoft Word format, the latter of which allows organizations to document an assessment of their vulnerability to a similar error, actions required, and assignments for each Agenda item. This format facilitates reporting to senior leadership about the progress being made to assure that potentially harmful conditions identified as causing external errors are not present or are being addressed. The Quarterly Action Agenda is a useful tool for leaders to proactively address known medication safety issues that could otherwise lead to a harmful patient outcome in their organization.

Learning about barriers to safety through leadership rounds

Healthcare practitioners are repeatedly challenged by unexpected problems in their day-to-day work—up to one system failure every hour has been found to hinder patient care. They respond to these dysfunctional processes with first-order problem solving, addressing only the immediate symptoms they encounter. As a result, they tend to be very skilled and proficient at improvising with what they have on hand to create a solution to the problem or to work around it to get the job done. Unfortunately, roughly 93% of practitioners faced with a problem often fix it in the moment and forget about it, rather than fixing it and then reporting it. They are not necessarily trying to hide this information—instead, reporting often does not occur because they are simply pressed for time after being forced to quickly patch problems so they can carry out their immediate responsibilities.

We tend to encourage this aspect of critical thinking, problem-solving, resilience, and independence, but it comes at the expense of system learning.

While practitioners should be encouraged to both handle unexpected problems and then report them so steps can be taken to address their underlying causes, leaders visible and accessible on patient care units can also serve as a means for learning about these errors.

No, not methotrexate. Despite its name, MTX TOPICAL PAIN does not contain methotrexate or mitoXANTRONE, both cancer drugs associated with the dangerous abbreviation “MTX” which has led to mixups between them. When we saw “MTX” used for this over-the-counter (OTC) topical lidocaine 4% and menthol 1% patch sold by Unik Pharmaceuticals, we were taken aback. Perhaps more concerning is that arthritis sufferers are commonly treated with methotrexate and may be misled by “MTX” on this patch. The image on the product’s package also implies that it is used to treat joint pain, which it does not. Methotrexate is also used to treat psoriasis, a disease characterized by skin lesions, while the MTX Topical Pain product specifically warns against use in patients with damaged skin.

This combination of lidocaine and menthol ingredients is marketed under the OTC Drug Monograph process “for temporary relief of pain and itching associated with minor burns, cuts, scrapes, and minor skin irritations.” OTC products in compliance with an OTC Drug Monograph process “for temporary relief of pain and itching associated with minor burns, cuts, scrapes, and minor skin irritations.” OTC products in compliance with an OTC Drug Monograph may be marketed without submitting a product name for review or undergoing a preapproval review by the US Food and Drug Administration (FDA). According to FDA, the monographs establish conditions under which certain OTC active ingredients are “generally recognized as safe and effective.” FDA has been alerted to this error-prone abbreviation. We would appreciate hearing from readers who may have experienced an issue with this OTC product.
daily system failures and other risks that might threaten patient safety. Leaders who are regularly present in work areas and responsive to practitioners’ messages can quickly learn invaluable information upon which proactive interventions can be planned and implemented to improve the reliability of patient outcomes.

The Institute for Healthcare Improvement (IHI) (which recently announced plans to merge with the National Patient Safety Foundation) has described such a process, called Patient Safety Leadership WalkRounds. These rounds are designed to open the lines of communication about patient safety among employees and senior leaders so learning can occur, and to demonstrate leadership’s commitment to safety and communicate its value within the organization. IHI offers detailed instructions for senior leaders to conduct at least weekly, confidential rounds with 3-5 employees in rotating patient care units. A sample script with the types of questions to ask covering harm, risk, errors, system failures, and suggestions for error prevention and leadership interventions is provided, along with methods to measure success with the rounds (www.ismp.org/sc?id=2880). Leadership discussions with staff about problems encountered is often less threatening than discussion of actual errors and may be a great starting point that offers invaluable information upon which proactive interventions can be planned and implemented.

Conclusion

Widespread implementation of the Targeted Medication Safety Best Practices for Hospitals and the creation of an infrastructure for learning using the Quarterly Action Agenda and Patient Safety Leadership WalkRounds are efforts worthy of healthcare leaders who truly value medication and patient safety and want to achieve extraordinary results. These tools represent just a snapshot of how ISMP and other organizations can help healthcare leaders communicate and demonstrate the value of patient safety to the organization and their commitment to improve the reliability of patient safety outcomes.

References

2) Marx D. There is no such thing as a high reliability organization. What We Believe. 2017;11(1):1-2.

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Special Announcements

ISMP webinars
You don’t want to miss our next webinar, Implementation of Best Practices for Safer Insulin Pen Use: Stories from the Frontline, to be held on March 28. The webinar will explore the challenges associated with the safe use of insulin pens and the distribution of patient-specific pens from the pharmacy with the support of integrated electronic prescribing and bar-coding systems.

Also join us on April 20 to learn from the experiences of two successful medication safety officers as they present, Medication Safety Practitioners: Leading, Innovating, and Improving Healthcare. Hear firsthand how they prioritize medication safety issues, impact change, and address medication-related challenges.

To register, visit: www.ismp.org/sc?id=349.

ISMP and FDA/ISMP Fellowships
ISMP is still accepting applications for its 2017-2018 Fellowship programs until March 31. One ISMP Fellowship, funded by Baxter International, and two FDA/ISMP Fellowships are available. For details, visit: www.ismp.org/profdevelopment. Also see our announcement about a new International Fellowship program on page 1.

New ISMP FREE CE opportunities
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