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ISMP

Acute Care
ISMP Medication Safety Alert!®
Educating the Healthcare Community About Safe Medication Practices

Telling true stories is an ISMP hallmark
Here's why you should tell stories, too…

Storytelling is a hallmark at the Institute for Safe Medication Practices (ISMP), a practice we have embedded in practically every aspect of our work. While we use and promote a vast array of sophisticated medication safety improvement tools, measures, and technologies, our most fundamental strategy to create change is a simple one—to convey compelling stories about medication errors and impactful change strategies to draw attention to problems and encourage people to act. Anyone involved in patient safety knows that improvement strategies are most effective within a culture that ensures any changes are well understood, embraced, and sustained. And, there is no better way to inspire and sustain cultural change than through the simple craft of telling factual stories that move listeners to action.

The Power of the Story

Storytelling is a familiar form of communication, one that resonates with us. Stories are part of our daily lives, from the anecdotes we tell friends to the books we read.[1] Factual stories educate us, touch us, and inspire us to take action. They are an efficient vehicle for getting people to understand, remember, and accept new ideas.[2] One thing is certain, lessons without stories rarely lead to learning and change.[3] It is the contextual details and the exposed humanity in stories that serve as the catalyst for change. No matter how powerful patient safety research data is, there is often nothing more powerful than a story to garner the motivation necessary to learn and change. Here's why…

Stories grab our attention. Stories expose dilemmas in a way that greatly enhances our attentiveness to the problem. They engage our curiosity, emotions, and imagination, and grab and hold our interest in ways that research data and quantitative numbers alone cannot. When a story catches our attention, we are more likely to understand its message and meaning than if the same message was presented with data and numbers.[1]

Stories are mentally rich. Since primitive times, stories have been the primary media used to learn about life, transmit cultural norms, make sense of the world we live in, and express emotions.[4] Seeing or hearing stories unfold makes analysis not just an intellectual experience but a much deeper personal experience.

Stories provide new perspectives. Stories often challenge our preexisting assumptions and open us up to new ways of thinking about an issue.[5] They allow us to raise awareness of an issue, inform a debate and discussion, and see the world in a different way than if we just experience it on our own. Presenting a different perspective of the world through storytelling can help shape, strengthen, or challenge our opinions and values.[1] In fact, stories often provide a safe space where we can create a more civil dialogue about our shared problems.[6]

Stories are more likely to be remembered and retold. People are more likely to remember information shared through a story than information presented through data or detail points.[7] While harnessing data when making decisions is important, data by itself fails to paint the whole picture.[6] Data provide the skeleton for an idea, but giving a face to it breathes life and importance into an issue, humanizes it, and helps communicate a

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Message in our Mailbox

I read the article regarding tacrolimus errors in the August 10, 2017 newsletter. The article has a link that takes you to a list of standard liquid concentrations established by the Michigan Collaborative Standardization of Compounded Oral Liquids (www.ismp.org/sc?id=2985). We have experience with the listed 0.5 mg/mL tacrolimus formula. I wanted to let your readers know that, at our facility, several errors have occurred with this formulation that led to patients taking the incorrect dose. They often mistake the mg dose for the number of mL and vice versa. Prescribers have also made this error. Perhaps the confusion is due to the small dose and volume. We have switched to compounding a 1 mg/mL suspension so that the mg dose is the same as the amount in mL.

Jennifer Dedering, PharmD, BCACP
Transplant Clinical Pharmacist
William S. Middleton VA Medical Center
Madison, WI

Editor's note: In July, the ASHP *Standardize 4 Safety Initiative* completed Compounded Oral Liquid Version 1.01 (www.ismp.org/sc?id=2981). The tacrolimus concentration is 1 mg/mL for ease of measurement (and safety, as noted by Dr. Dedering).

Take our survey on drug shortages

Because significant drug shortages continue to result in medication safety and cost concerns, ISMP is conducting a short survey to learn how shortages have impacted your hospital and patients. We are encouraging all hospital pharmacy directors (or designees) to complete our 11-question survey (pages **5-6**), and to submit their responses to ISMP by **October 6, 2017**, at: www.ismp.org/sc?id=3003. We plan to use the results to advocate for changes on a national level aimed at reducing the occurrence of serious drug shortages.

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message more effectively. The message can then be absorbed, understood, and acted upon.[8] Rather than dry facts, stories involve people or characters,[1] which nurture our human tendency to respond more strongly to a person at risk than groups (identifiable victim effect).[9] Stories lead to contemplation and reflection on how they apply to one's own life. We respond to stories with emotional details, and they are memorable because they often resonate with our own experiences.

Stories trigger empathy and healing. Studies reveal that sharing a factual story can nurture healing and create wholeness when nothing else can by empowering victims to give voice to their experiences, leading to a better appraisal of the situation and enhanced understanding and empathy for story participants.[4,6] Story readers/listeners experience vicariously the emotions of the storyteller—pain, fear, or joy, for example. Stories that appeal to the heart and not just the mind help us make sense of the senseless and inspire empathy.[1,6] They give us an opportunity to walk in another person's shoes, and glimpse the world as they see it. The story becomes a two-way narrative between the storyteller and listener that increases the sense of community among the organization.

Stories inspire and incite change. Studies demonstrate the positive persuasive effects of stories, particularly when compared to abstract presentations of data. In one study, a story about a young woman who used tanning beds and later developed skin cancer was more persuasive in decreasing intentions to tan among college students than a message with numerical evidence about cancer risk with tanning bed use.[4,10] Another study by the Kaiser Family Foundation showed the impact of storylines in the entertainment world.[4,11] For example, one in seven viewers of a medical-related television show consulted with a physician about a medical condition they had seen on the show.

To cite another example, hearing and retelling the story about a 2-year-old child, Blake, who died after chewing an improperly disposed fenta**NYL** patch that he had picked up on the wheels of his toy truck while playing in his grandmother's nursing home room[12] likely did more to change staff behaviors around patch disposal than any policy or data regarding accidental access. Data plays a crucial role in facilitating improvement, but the right story can also have the power to inspire and incite change,[1] including with manufacturers, regulatory agencies, accrediting agencies, and standard-setting organizations.

Challenges with Storytelling

Legal and public disclosure concerns. The primary barrier to storytelling in healthcare is the secrecy that has long accompanied risk and errors to keep them hidden from accusatory eyes. Today, many healthcare providers have shown an interest in sharing stories within their organizations about actual hazards and errors for the purpose of improving safety. Yet, important stories remain untold, particularly if a patient has been harmed, due to legal concerns and the risk of unwanted public disclosures. Organizations may be hesitant to tell their stories outside the confines of their internal peer review/quality improvement processes. Staff feedback about risk and errors may be narrowly focused on involved units and individuals. This cloak of secrecy makes it virtually impossible for the entire organization to learn from its mistakes.

As an alternative, some organizations have been sharing just the "lessons learned" from events, which often amounts to a list of required system and behavioral changes without the backstory that could provide the rich details needed to motivate staff to make and sustain the changes. Even if efforts are initially successful in instituting the changes, it is not enough if the culture cannot sustain the change.

Recommendations

In today's litigious society, it is unrealistic to expect organizations to simply share unbridled stories of risk and error outside or even within the organization. So how do we begin to bring our stories together in an actionable way to help keep patients safe?

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SAFETY briefs

HIGH-ALERT

Adrenalin labeling change coming. We have received several reports of errors and close calls involving mix-ups between **ADRENALIN** chloride solution (**EPINEPH**rine nasal solution [for topical use]) and **ADRENALIN** (**EPINEPH**rine injection), including stocking crash carts and emergency supplies with the nasal solution. The errors have been related to look-alike packaging and the fact that the brand name, Adrenalin, is prominently displayed on both products. Adrenalin injection previously came in a yellow carton and vial label to help differentiate it from the nasal solution. Sometime after 2014, Par Pharmaceutical changed the color scheme, and now the cartons of both products look nearly identical (**Figure 1**). The two solutions have different inert ingredients and are not interchangeable per the manufacturer.

When the nasal solution vial cap is removed, a pull-off tab is exposed, most often leading to recognition that the wrong product is at

Figure 1. Adrenalin nasal solution (L) is easy to confuse with Adrenalin injection. Par Pharmaceutical will be changing the nasal solution label text to blue.

hand. This has led to delays in obtaining the correct injectable drug. Also, the pull-off tab is not a reliable failsafe because the rubber stopper underneath it can allow withdrawal of the topical solution with a needle and syringe, just like an injectable solution.

We recently learned that Par Pharmaceutical is revising the nasal solution label, which will include blue instead of red print and align with the cap color. This should be accomplished by the end of December, so it may be some time until you notice the change. We have asked the company to send us a draft of the label change so we can see if the color change is enough to

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Setting the stage. Establish a safe and trusting environment in which the organization's stories can be reported, crafted, and shared without fear of external exposure, undue internal embarrassment, or unjust discipline of involved staff. See our 2012 May 17 and July 12 newsletters (www.ismp.org/sc?id=2991) for recommendations regarding the adoption of a Just Culture that encourages the reporting of errors along with frank discussions, including storytelling, about their causes. The trust to share stories and the willingness to listen to them and learn are firmly rooted in the organization's culture.

Crafting the stories. Stories should be crafted with just enough detail to: 1) describe the key risks or events leading up to an adverse event, 2) describe the underlying causes of the risk or error, 3) link the causes and adverse outcomes (potential or actual) to the desired system or behavioral changes, 4) describe the lessons learned, and 5) make the story memorable. If measurement data exist to support the story's conclusions, provide links or references to the data for those who want more information. Some stories, if used to stimulate discussion and feedback, may initially exclude the lessons learned or recommended changes to encourage analysis of the risk or error and innovative ideas for safety strategies.

When crafting a story, to the extent possible, de-identify the patient, the individual who reported the risk or error, and staff involved in the risk or error, so it cannot be traced back to specific individuals or patients. While stories should be truthful, unnecessary details should be omitted, and minor changes to the story (e.g., patient's age, weight, gender) can be made to facilitate contextual de-identification if the key causes of the risk or error and the lessons learned are not jeopardized or misrepresented.

Include stories from internal and external sources (e.g., ISMP newsletters) about risks, errors, and adverse events. Using internal sources for stories helps staff see risks lurking in their everyday activities and sends a message that the organization and everyone who works there are committed to safety. Using external sources for stories prompts the evaluation of similar risks within the organization that may otherwise be hidden, lying dormant for years before they may cause an adverse outcome. Using stories from external sources may be a great starting point for organizational storytelling, as these stories are often less threatening to staff and eliminate any legal risks. See our February 9, 2017, newsletter for additional recommendations for using information from external errors as the basis for storytelling to signal a "clear and present danger" (www.ismp.org/sc?id=2992).

Also create stories about the organization's achievements in safety and acts of caring.[3] These uplifting stories can be rewarding to staff, reinforce specific safety strategies, and motivate staff to continue participating in safety improvements.

Finally, keep in mind that stories may be crafted for sharing through more than just our verbal, reading, and listening skills. Stories can be conveyed in photographs, storyboards, video-storytelling,[13] and other visual media and arts that may communicate the intended message alone or enhance a story.

Sharing the stories. Establish a simple yet formal process for sharing internal and external stories that focus on risk, errors, adverse events, and improvements. Describe how storytelling will be used within your safety/quality improvement/peer review processes, the level of confidentiality required among storytellers and story listeners/readers, and how to clearly communicate these expectations through confidentiality policies and/or signed confidentiality agreements. Describe the venues at which stories can be shared—department and committee meetings, educational programs—and cannot be shared—discussions in the cafeteria, hallways, in direct patient care areas, via telephone.

Determine whether organizational stories can be shared verbally or in writing, or both. If stories are shared in writing during meetings, collect the written materials at the end of the meeting for proper disposal. Also consider creating ad-hoc or planned reenactments

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draw attention to the fact that it is for nasal use only. We have also recommend enlarging the text or using other label design methods to draw attention to the dosage form, "Nasal Solution (for Topical Use Only)."

Routine storage of 30 mL vials of **EPINEPHrine** outside the pharmacy should be avoided when possible. If vials of the nasal solution, which are only available in 30 mL containers, are necessary in patient care units, consider affixing a large "external use only" auxiliary label to reinforce proper use. As for 30 mL multiple-dose vials of **EPINEPH**rine injection, these are a set-up for 10-fold dosing errors because the labels continue to include a ratio expression (1:1,000). We have asked Par Pharmaceutical to change that to comply with USP <7>, which calls for elimination of ratio expressions. There is enough volume in a 30 mL vial to administer a fatal overdose. Barcode scanning at the point of care can also help detect wrong product errors before they reach patients.

Unsafe labeling of CSL Behring products. We want to make readers aware of several complaints we have received about look-alike products from CSL Behring. For example, their albumin (human) 25% Solution (**ALBURX 25**) is available in 50 mL and 100 mL containers, but the outer cartons are the same size and color (**Figure 1**), making it difficult to recognize the difference. If you look attentively, you will see the difference. There is also cross-over error potential with other CSL Behring products, such as between AlbuRx and **PRIVIGEN** (immune globulin intravenous human). These products could be easily confused as they also look very similar. We have contacted the company several times but have not been informed of any forthcoming changes. If you must use CSL Behring products, we hope you will scan the container barcode prior to dispensing. Circling the volume or adding an auxiliary label may also be helpful.

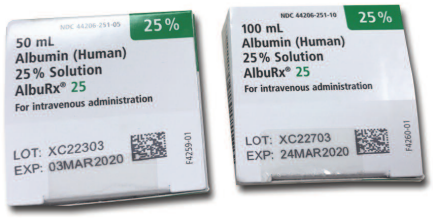

Figure 1. It may be difficult to tell the difference between these CSL Behring labels.

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of the stories.[1,3] There is anecdotal evidence to suggest that the 'told' story has more impact than a 'read' story because of the dynamic that is created between the storyteller and listener.[3] The printed text does not convey the speech rhythms, tone, pitch, eye contact, actions, gestures, grins, frowns, and other human expressions of the storyteller.[14] As a storyteller speaks, the listeners reconstruct the story, taking cues from the storyteller not apparent in a written story. Verbal stories also invite group discussion, as do stories that are open to inquiry before conclusions are drawn about its meaning.

Organizational leaders that are visible in the retelling of stories, either as the teller or listener, can send a powerful message to staff about their commitment to patient safety. Good catch recognition by leaders during unit huddles or department meetings can be used as one facet of visible leadership storytelling. Planned focus group sessions facilitated by leaders offer another venue for leadership storytelling.

If you feel that a particular medication safety story should be shared with the healthcare community at large due to the lessons it holds, we encourage you to report it to the ISMP National Medication Errors Reporting Program (www.ismp.org/merp). ISMP may then contextually de-identify and share the story with a wide healthcare audience while protecting anonymity, which can ultimately impact standards, regulations, practice, and product safety. Or, create the story within the organization's patient safety evaluation system and report it as patient safety work product to ISMP in our capacity as a Patient Safety Organization (PSO). PSOs can also provide a *Safe Table* forum for its members to share their patient safety stories in a confidential and legally privileged setting for the purposes of frank discussions and learning.[15]

Conclusion

As you reflect on the ways you might collect and share both external and internal organizational stories, keep in mind that it is through the telling of these stories that we will break the code of silence surrounding medical errors and make substantial headway on our journey to safer healthcare. As profoundly articulated by Donald Berwick, "We need more firesides, not spreadsheets."[3] We urge you to find ways to utilize this largely untapped resource for meaningful dialogue and improvement.

Let the stories unfold…

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Special Announcements

ISMP Medication Safety Intensive

Don't miss our highly acclaimed 2-day workshops, where you will learn how to look at your organization "through the eyes of ISMP." During the workshop, you will:

- Gain practice in error analysis
- Evaluate root causes of errors
- Select high-leverage strategies to improve medication safety
- Learn about various data collection methods to identify medication risks
- Learn how to use data from technology to help sustain safety efforts
- Learn how to measure the effectiveness of error-reduction strategies
- Earn 12 hours of continuing education (nurses/pharmacists)

Register now (www.ismp.org/sc?id=637) to join us on:

- **September 14-15:** Hackensack, NJ (near New York City)
- **December 1-2:** Orlando, FL

Cheers Awards nominations

Nominations for this year's **Cheers Awards** will be accepted through **September 9**. The prestigious awards spotlight efforts to improve medication safety from all healthcare disciplines. To submit a nomination, please visit: www.ismp.org/sc?id=1777.

To subscribe: www.ismp.org/sc?id=382

ISMP INSTITUTE FOR SAFE MEDICATION PRACTICES

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Report medication and vaccine errors to ISMP: Please call 1-800-FAIL-SAF(E), or visit our website at: www.ismp.org/MERP or www.ismp.org/VERP. ISMP guarantees the confidentiality of information received and respects the reporters' wishes regarding the level of detail included in publications.

ISMP Survey on Drug Shortages
FOR HOSPITAL PHARMACY DIRECTORS OR THEIR DESIGNEES ONLY

The continuing crisis with drug shortages, which has worsened during the past year, has resulted in ongoing medication safety and cost concerns. We are interested in learning about your experiences with drug shortages during the past 6 months. We encourage hospital pharmacy directors or their designees to please take a few minutes to complete our survey and submit your responses to ISMP by **October 6, 2017**, at: www.ismp.org/sc?id=3003. Directors of pharmacy may want to involve staff who assist with the purchasing of products. We plan to use the results to advocate for changes on a national level aimed at reducing the occurrence of serious drug shortages.

1 **In the past 6 months, how many individual drugs were involved in a drug shortage in your pharmacy?**

☐ None ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21 or more

2 **In the past 6 months, for which of these service lines did you experience at least one drug shortage?** (select all that apply)

☐ Surgery/Anesthesia ☐ Emergency Care ☐ Cardiovascular ☐ Gastrointestinal/Nutrition ☐ Pain Management
☐ Infectious Diseases ☐ Hematology/Oncology ☐ Neurology ☐ Obstetrics/Gynecology ☐ Endocrinology
☐ Allergy/Asthma ☐ Psychiatry ☐ Other (please specify): _____

3 **In the past 6 months, how often has your pharmacy been affected by at least one drug shortage?**

☐ Daily ☐ Weekly ☐ Monthly ☐ Less than monthly ☐ Never

4 **In the past 6 months, how often has your facility taken the following actions as a result of drug shortages to ensure patients receive the required treatment?**

Actions	Never	Rarely	Sometimes	Frequently	Always
Purchased excess inventory from the wholesaler					
Purchased a more expensive generic or brand alternative from the wholesaler					
Purchased a more expensive therapeutic alternative from the wholesaler					
Purchased a more expensive product from an outsourcing company					
Purchased a more expensive product from a new/different distributor					
Purchased a more expensive product from the "gray market"					
Used a drug outside its specific labeling (e.g., multiple doses from a single-dose container, extending the use-by date)					
Other (please specify): _____					

5 **In the past 6 months, how often has your facility taken the following actions as a result of drug shortages to reduce their impact on patient safety?**

Actions	Never	Rarely	Sometimes	Frequently	Always
Rationed and/or restricted drugs in short supply					
Added back-up inventory for critically important drug categories or changed par levels for drugs					
Added drugs to the pharmacy formulary as substitutes for drugs in shortage					
Opened accounts with new/different suppliers or wholesalers to secure back-up sources of drugs					
Devoted resources to clinical staff education about shortages and safe dosing of alternative drugs					
Regularly informed medical staff of drugs in short supply					
Added regular meetings with internal pharmacy staff to plan actions to address shortages					

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6 **In the past 6 months, how often have you received notifications from drug manufacturers, wholesalers, distributors, group purchasing organizations, and/or the US Food and Drug Administration (FDA) about drug shortages?**

Notifications	Never	Rarely	Sometimes	Frequently	Always
Advance notice of a drug shortage					
Cause of a drug shortage					
Duration of a drug shortage					

7 **In the past 6 months, how often have patients, the medical staff, leadership, nurses, or clinical departments expressed frustration with a pharmacist or pharmacy staff member as a result of a drug shortage?**
☐ Never ☐ Rarely ☐ Sometimes ☐ Frequently ☐ Always

8 **In the past 6 months, which of the following adverse effects have occurred in your facility as a result of a drug shortage?** (select all that apply)
☐ Patient treatment was delayed
☐ Patient received a less effective drug
☐ Patient did not receive the recommended drug or treatment
☐ Patient experienced an adverse outcome (please describe): _____

9 **Are you aware of any breaches in drug purchasing or allocation policies (e.g., hoarding of a drug on a unit, using drugs supplied in emergency carts for non-emergencies, unauthorized drug purchases) during a drug shortage in the past 6 months?**
☐ No ☐ Yes
If Yes, please describe any and all breaches (in confidence): _____

10 **Are you aware of any medication errors during the past 6 months that were caused by or associated with a drug shortage?** (select all that apply)
☐ No, not aware of any errors
☐ Yes, wrong drug error(s)
☐ Yes, wrong dose/concentration error(s)
☐ Yes, wrong diluent error(s)
☐ Yes, wrong drug formulation error(s)
☐ Yes, wrong route error(s)
☐ Yes, other type of medication error(s)
If Yes, please describe any and all errors (in confidence): _____

11 **Please select the category that best describes your position and practice setting.**
Position: ☐ Director of pharmacy ☐ Pharmacy manager/assistant ☐ Pharmacy purchasing agent ☐ Clinical/staff pharmacist
☐ Other (please specify): _____
Practice Setting: ☐ Teaching hospital ☐ Community hospital ☐ Critical access hospital
☐ Pediatric hospital ☐ Women and children hospital ☐ Cancer care hospital
☐ Other (please specify): _____