Checklist for the ISMP 2018-2019 Targeted Medication Safety Best Practices for Hospitals

This tool was developed in order to assist hospitals in analyzing their current status with implementing the **ISMP 2018-2019 Targeted Medication Safety Best Practices for Hospitals**. Please refer to the **Targeted Medication Safety Best Practices for Hospitals** document for related references, as well as the rationale and significance for focusing on each of these **Best Practices**. Additional resources, including Frequently Asked Questions, can also be found on the **Best Practices** webpage.

Each of the 14 **Best Practices** are listed in the first column of the table below. The second column, titled "Hospital Assessment," allows hospitals to assess their current implementation by performing a gap analysis. For this column, first select an answer ("Fully Implemented," "In Progress," "Not Implemented," or "Not Applicable") under the "Implementation Status" dropdown menu (or handwrite your answer next to it). Below your answer, provide a more descriptive analysis of your current status and rationale for your selected answer. In the last column ("Action Required/Assignment"), hospitals can detail their action plan for fully implementing each of the **Best Practices**, as well as to assign individuals or teams/committees for completing certain related tasks.

The purpose of the **Targeted Medication Safety Best Practices for Hospitals** is to identify, inspire, and mobilize widespread, national adoption of consensus-based best practices on specific medication safety issues that continue to cause fatal and harmful errors in patients, despite repeated warnings in ISMP publications. ISMP encourages hospitals to focus their medication safety efforts on these **Best Practices**, and utilizing this tool may help to assist hospitals in their process for identifying gaps in their safety practices and in developing their action plan for implementation.

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 1		
Dispense Vin**CRIS**tine (and other vinca alkaloids) in a minibag of compatible solution and not in a syringe.	**Implementation Status**	

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2018 – 2019 ISMP Targeted Best Practices		Hospital Assessment	Action Required/Assignment
Best Practice 2			
a	Use a weekly dosage regimen default for oral methotrexate in electronic systems when medication orders are entered	**Implementation Status**	
b	Require a hard stop verification of an appropriate oncologic indication for all daily oral methotrexate orders. *For manual systems and electronic order entry systems that cannot provide a hard stop, all daily orders for methotrexate are clarified if the patient does not have a documented oncologic diagnosis.* *The hospital works with its software vendors and information technology department to ensure that this hard stop is implemented.)*	**Implementation Status**	
c	Provide specific patient and/or family education for all oral methotrexate discharge orders.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 2 continued		
➢ Double-check all printed medication lists and discharge instructions to ensure that they indicate the correct dosage regimen for oral methotrexate prior to providing them to the patient.	**Implementation Status**	
➢ Ensure the process for providing discharge instructions for oral methotrexate includes clear written instructions AND clear verbal instructions that specifically review the dosing schedule, emphasize the danger with taking extra doses, and specify that the medication should not be taken "as needed" for symptom control.	**Implementation Status**	
➢ Require the patient to repeat back the instructions to validate that the patient understands the dosing schedule and toxicities of the medication if taken more frequently than prescribed.	**Implementation Status**	
➢ Provide all patients with a copy of the free ISMP high-alert medication consumer leaflet on oral methotrexate (www.ismp.org/AHRQ/default.asp).	**Implementation Status**	

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Best Practice 3			
a	Weigh each patient as soon as possible on admission and during each appropriate outpatient or emergency department encounter. Appropriate encounters include all encounters where the patient is being seen by a licensed independent practitioner, excluding life threatening situations where the delay involved in weighing the patient could lead to serious harm (e.g., major trauma). It is specifically meant to exclude laboratory and other services where medications are not prescribed or administered.	**Implementation Status**	
	➢ Have metric scales available in all areas where patients are admitted or encountered. The metric weight is documented in the medical record.	**Implementation Status**	
	➢ Do not rely on a patient's stated weight, a healthcare provider's estimated weight, or a documented weight from a previous encounter.	**Implementation Status**	
b	Measure and document patient weights in metric units only.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 3 continued		
➢ If scales can measure in both pounds and kilograms/grams modify the scales to lock out the ability to weigh in pounds.	**Implementation Status**	
➢ If purchasing or replacing scales, buy new scales that measure in, or can be locked to measure in, metric units only.	**Implementation Status**	
➢ Have conversion charts that convert from kilograms (or grams for pediatrics) to pounds available near all scales, so that patients/guardians can be told the weight in pounds, if requested.	**Implementation Status**	
➢ Ensure that computer information system screens, medication device screens (e.g., infusion pumps), printouts, and preprinted order forms list or prompt for the patient's weight in metric units only.	**Implementation Status**	
➢ Document the patient's weight in metric units only in all electronic and written formats	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 4		
Ensure that all oral liquid medications that are not commercially available in unit dose packaging are dispensed by the pharmacy in an oral or ENFit syringe. ***Exception:*** *If the pharmacy is employing unit-dose packaging automation that does not use oral syringes, unit dose cups/bottles may be provided in place of oral syringes. However, ensure that oral or ENFit syringes are available on nursing units in case patients cannot drink the medication from the cup or bottle.*	**Implementation Status**	
➢ Do not stock bulk oral solutions of medications on patient care units.	**Implementation Status**	
➢ Use only oral syringes that are distinctly marked "Oral Use Only."	**Implementation Status**	
➢ Ensure that the oral syringes used do not connect to any type of parenteral tubing used within the organization.	**Implementation Status**	
➢ When ENFit syringes are used for administration of oral	**Implementation Status**	

	2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
	liquid medications, always highlight on the label, or affix an auxiliary label, “For Oral Use Only” on the syringe or highlight the statement if it is on the label.		

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 5		
Purchase oral liquid dosing devices (oral syringes/oral dosing cups/liquid dosing droppers) that only display the metric scale.	**Implementation Status**	
➢ If patients are taking an oral liquid medication after discharge, supply them with (or provide a prescription for) oral syringes, to enable them to measure oral liquid volumes in mL.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 6		
Eliminate glacial acetic acid from all areas of the hospital. *Laboratory use excluded if the laboratory purchases the product directly from an external source.*	**Implementation Status**	
➢ Remove and safely discarded this product from all areas of the hospital (including the pharmacy, clinics, and physician office practices) and replace it with vinegar (5% solution) or commercially available, diluted acetic acid 0.25% (for irrigation) or 2% (for otic use).		

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 7		
Segregated, sequester, and differentiate all neuromuscular blocking agents (NMBs) from other medications, wherever they are stored in the organization. **Exception:** Excludes anesthesia-prepared syringes of NMBs.	**Implementation Status**	
➢ Eliminate the storage of NMBs in areas of the hospital where they are not routinely needed.	**Implementation Status**	
➢ In patient care areas where they are needed (e.g., intensive care unit), place NMBs in a sealed box or, preferably, in a rapid sequence intubation (RSI) kit.	**Implementation Status**	
➢ If NMBs must be stored in automated dispensing cabinets (ADCs), standardize storage practices throughout the organization by keeping them in lock-lidded pockets.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 7 continued		
➢ Segregate NMBs from all other medications in the pharmacy by placing them in separate lidded containers in the refrigerator or other secure, isolated storage area.	**Implementation Status**	
➢ Place auxiliary labels on all storage bins and/or ADC pockets and drawers that contain NMBs as well as all final medication containers of NMBs (e.g., syringes, IV bags) that state: **"WARNING: PARALYZING AGENT — CAUSES RESPIRATORY ARREST — PATIENT MUST BE VENTILATED"** to clearly communicate that respiratory paralysis will occur and ventilation is required. *Other acceptable alternatives to labeling storage bins and/or ADC pockets is to affix an auxiliary warning label (in addition to the manufacturer's warning on the cap and ferrule) directly on all vials and/or other containers stocked in storage locations, or by displaying a warning on the ADC screen, which must be acknowledged prior to removal of a NMB.*	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 8		
Administer high-alert intravenous (IV) medication infusions via a programmable infusion pump utilizing dose-error reduction software. *This best practice applies to all hospital settings (both inpatient and outpatient [e.g., MRI, ED, outpatient infusion clinics], AND in all situations (including anesthesia use and PCA). The only exception is for small volume vesicant infusions (i.e., chemotherapy vesicants) which, when administered via the peripheral route, should only be infused by gravity and **NOT** by an infusion/syringe pump. For a list of recommended high-alert medications, visit: www.ismp.org/Tools/institutionalhighAlert.asp.*	**Implementation Status**	
➢ Ensure that dose error-reduction software is employed on all pumps with this feature (i.e., smart pumps). Specifically, ensure that drug libraries are built and installed on all smart pumps, and staff are using the error-reduction software.	**Implementation Status**	
➢ If smart pumps are not already in use in all areas, ensure the capital equipment budget includes the purchase of this technology as soon as possible.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 8 continued		
➢ Require periodic maintenance, updating, and testing of the software and drug library for all smart pumps.	**Implementation Status**	
➢ Evaluate the alerts regularly and determine if staff are responding to them appropriately.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 9		
Ensure all appropriate antidotes, reversal agents, and rescue agents are readily available. Have standardized protocols and/or coupled order sets in place that permit the emergency administration of all appropriate antidotes, reversal agents, and rescue agents used in the facility. Have directions for use/administration are readily available in all clinical areas where the antidotes, reversal agents, and rescue agents are used.	**Implementation Status**	
➢ Identify which antidotes, reversal agents, and rescue agents can be administered immediately in emergency situations to prevent patient harm.	**Implementation Status**	
➢ Use this list to develop appropriate protocols or coupled order sets to ensure that the above best practice is met.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 10		
Eliminate all 1,000 mL bags of sterile water (labeled for "injection," "irrigation," or "inhalation") from all areas outside of the pharmacy.	**Implementation Status**	
➢ Use alternatives to avoid the storage and use of 1,000 mL (1 liter) bags of sterile water for injection, irrigation, or inhalation in patient care areas. For example, replace all 1,000 mL (1 liter) bags of sterile water for injection, irrigation, or inhalation with 2,000 mL (2 liter) bags of sterile water for injection, irrigation, or inhalation with or bottles of sterile water for irrigation or vials.	**Implementation Status**	
➢ Establish a policy that 1,000 mL bags of sterile water can only be ordered by the pharmacy.	**Implementation Status**	
➢ The pharmacy needs to work with respiratory therapy and other relevant departments of the hospital to establish guidelines regarding the safest way to provide large volumes of sterile water when needed for patient care.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 11		
When compounding sterile preparations, perform an independent verification to ensure that the proper ingredients (medications and diluents) are added, including confirmation of the proper amount (volume) of each ingredient prior to its addition to the final container.	**Implementation Status**	
➢ Specifically, eliminate the use of proxy methods of verification for compounded sterile preparations of medications (e.g., the "syringe pull-back method," checking a label rather than the actual ingredients).	**Implementation Status**	
➢ Except in an emergency, perform this verification in all locations where compounded sterile preparations are made, including patient care units.	**Implementation Status**	

Best Practice 11 continued			
	➢ At a minimum, perform this verification for all: - High-alert medications (including chemotherapy and parenteral nutrition) - Pediatric/neonatal preparations - Pharmacy-prepared source/bulk containers - Products administered via high-risk routes of administration (e.g., intrathecal, epidural, intraocular), and - Other compounded sterile preparations that the organization believes are high-risk	**Implementation Status**	
	➢ Use technology to assist in the verification process (e.g., barcode scanning verification of ingredients, gravimetric verification, robotics, IV workflow software) to augment the manual processes. It is important that processes are in place to ensure the technology is maintained, the software is updated, and that the technology is always used in a manner that maximizes the medication safety features of these systems.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 12		
Eliminate the prescribing of fenta**NYL** patches for opioid-naïve patients and/or patients with acute pain ***Opioid-tolerant patient:*** *Opioid tolerance is defined by the following markers: Patients receiving, for 1 week or longer, at least: 60 mg oral morphine/day; 25 mcg transdermal fenta**NYL**/hour; 30 mg oral oxy**CODONE**/day; 8 mg oral **HYDRO**morphone/day; 25 mg oral oxy**MOR**phone/ day; 60 mg oral **HYDRO**codone/day; or an equianalgesic dose of another opioid, including heroin and/or non-prescribed opioids.*	**Implementation Status**	
➢ Ensure the organization has a process in place to routinely document the patient's opioid status (naïve vs. tolerant§) and type of pain (acute vs. chronic) in the health record or prescriber orders.	**Implementation Status**	
➢ Implement a process to verify and prevent orders for fenta**NYL** patches in patients who are opioid-naïve or with acute pain. Examples include the use of hard stops during order entry, electronic alerts, automatic interchange, and pharmacy interventions with prescribers.	**Implementation Status**	

Best Practice 12 continued			
		Implementation Status	
	➢ Eliminate the storage of fenta**NYL** patches in automated dispensing cabinets or as unit stock in clinical locations where acute pain is primarily treated (e.g., in the emergency department, operating room, post-anesthesia care unit, procedural areas).		

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 13		
Eliminate injectable promethazine from the hospital.	**Implementation Status**	
➢ Remove injectable promethazine from all areas of the hospital including the pharmacy.	**Implementation Status**	
➢ Classify injectable promethazine as a non-stocked, non-formulary medication.	**Implementation Status**	
➢ Implement a medical staff-approved automatic therapeutic substitution policy to convert all injectable promethazine orders to another antiemetic.	**Implementation Status**	
➢ Remove injectable promethazine from all computerized medication order screens, and from all order sets and protocols.	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 14		
Seek out and use information about medication safety risks and errors that have occurred in other organizations outside of your facility, and take action to prevent similar errors.	**Implementation Status**	
➢ Appoint a single healthcare professional (preferably a medication safety officer) to be responsible for oversight of this entire activity in the hospital.	**Implementation Status**	
➢ Identify reputable resources (e.g., ISMP, The Joint Commission, ECRI, patient safety organizations, state agencies) to learn about risks and errors that have occurred externally to improve.	**Implementation Status**	
➢ Implement a medical staff-approved automatic therapeutic substitution policy to convert all injectable promethazine orders to another antiemetic.	**Implementation Status**	
➢ Establish a formal process for monthly review of medication risks and errors reported by external organizations, with a new or existing interdisciplinary team or committee responsible for medication safety. The process should	**Implementation Status**	

2018 – 2019 ISMP Targeted Best Practices	Hospital Assessment	Action Required/Assignment
Best Practice 14 continued		
include a review of the hospital's current medication use systems (both manual and automated) and other data such as internal medication safety reports to determine any potential risk points that would allow a similar risk or error to occur within the hospital.		

	➢ Determine appropriate actions to be taken to minimize the risk of these types of errors occurring in the hospital.	**Implementation Status**	
	➢ Document the decisions reached and gain approval for required resources as necessary	**Implementation Status**	
	➢ Share the external stories of risk and errors with all staff, along with any changes that will be made in the hospital to minimize their occurrence, and then begin implementation.	**Implementation Status**	
	➢ Once implemented, periodically monitor the actions selected to ensure they are still being implemented and are effective in achieving the desired risk reduction. Widely share the results and lessons learned within the facility.	**Implementation Status**	