

Change Package

Adverse Drug Events: Sustain & Spread

About the Change Package:

The Change Package establishes recommended interventions endorsed by the CHCA “Adverse Drug Events: Sustain & Spread” Advisory Panel. When implemented collectively, breakthrough improvement is likely to be achieved. Some tips about using the change package include:

- Hospital teams are urged to select a broad array of topics from the Change Package. However, teams are **not** expected to implement every recommendation outlined in the package.
- The change package does **not** include every element of a safe medication system. You may need to improve other processes, including taking steps to ensure compliance with pediatric medication guidelines and patient safety goals. Key resources include:

[National Patient Safety Goals - Joint Commission](#)

[Issue 39 - April 11, 2008: Preventing pediatric medication errors - Joint Commission Sentinel Event Alert](#)

Population: The Population for this collaborative is all patients on inpatient care units, which includes all intensive care units and the Emergency Department (ED). The following populations are **excluded**:

- Perioperative areas
- Outpatient services

Focus medications:

The change package is designed address general medication safety **and** the following high-risk medications. Hospitals are **not** required to focus on all four medication types.

1. Opioids
2. Anticoagulants
3. Insulin
4. Total Parenteral Nutrition (TPN)

The following are outside the scope of the Collaborative and are intentionally excluded from the change package:

- Medication reconciliation
- Technology selection and implementation
- Staffing
- Construction and remodeling

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Change Strategies	Key Changes
1. Standardization of Medication Ordering	Ensure compliance with the medication ordering components of your high alert medication protocol(s)
	Develop consensus based protocols and order sets based on best practice guidelines. <ul style="list-style-type: none"> • Limit options; do not simply consolidate every prescriber's preference into one large order set. • Include best practice alerts in the electronic system • Focus on high risk processes, e.g., <ul style="list-style-type: none"> ○ Weaning patients from opioids, especially on transition from the ICU to the floor ○ Patient Controlled Anesthesia (PCA)
	Use corollary orders to provide prophylaxis for known drug reactions, e.g., to prevent constipation from opioids, prevent post-operative nausea and vomiting, reduce chemical burns after IV infiltration.
	Ensure that adjunct therapies are started appropriately and stopped when the primary therapy is stopped or interrupted, e.g., <ul style="list-style-type: none"> • Stop potassium supplements when Lasix is stopped • Adjust insulin when TPN/IV fluids are held or patient is made NPO (may need fluid order)
	Limit formulary options
	Use standard clinical scoring tools for medication ordering, e.g., sedation and insulin scales

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2. Clinical Decision Support	Real-time pharmacist consultation, e.g., <ul style="list-style-type: none"> • Include clinical pharmacists on rounds • Engage pharmacists located on high-risk units • Telephonic consultation
	Increase ADE detection, in real time if possible <ul style="list-style-type: none"> • Voluntary reporting systems • Automated detection • Surveillance by unit staff • Chart review
	Mitigate ADEs in real time <ul style="list-style-type: none"> • Follow-up promptly on lab results that indicate a potential or actual ADE (e.g., potassium, glucose) • Promptly evaluate patients who receive reversal agents, such as naloxone
	Appropriate use of laboratory findings <ul style="list-style-type: none"> • Ensure that laboratory orders are completed and reviewed as appropriate before medication ordering and/or administration • Connect medication orders to lab results for proper dosing (e.g., renal/hepatic function) • Direct lab results to the clinician who needs the information to take action as needed
	Redesign care systems based on actual ADEs, e.g., if naloxone is used frequently, evaluate whether opioid doses could be reduced
	Family-centered rounds that include a daily conversation about medications

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3. Reliable Medication Dispensing Processes	Safe medication labeling, e.g., <ul style="list-style-type: none"> • Prevent errors associated with look-alike and sound-alike drugs • Pharmacy generated patient-specific labels should focus on the dose and not the dosage form. • The labeling format should mirror the MAR so that the information can be easily matched during medication administration.
	Improve the use of automated dispensing cabinets <ul style="list-style-type: none"> • Reduce frequency of overrides • Reduce number of medications given prior to pharmacy review • See ISMP's Guidance on the Interdisciplinary Safe Use of Automated Dispensing Cabinets: http://www.ismp.org/Tools/guidelines/ADC_Guidelines_Final.pdf
	Redesign floor stocking processes to reduce human error, e.g., <ul style="list-style-type: none"> • Differentiate concentrations and look-alike, sound-alike drugs • Notify staff of important changes in stock locations
4. Reliable Medication Administration Processes	High reliability with the "5 Rights"
	Independent verification before administration of high risk medications
	Reduce interruptions during medication administration, e.g., <ul style="list-style-type: none"> • Nurse wears a "safety vest" while administering medications to indicate that he/she should not be interrupted • Make the med room a "quiet room"
	Safe pump use <ul style="list-style-type: none"> • Independent double check for all pump setup, rate change, shift change, bag/syringe changes. • Check drug, concentration, rate, patient identification.
	Include patients and families as partners to ensure safe administration of medications, e.g. verify identity via armband.

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5. Patient Safety Culture	Critical event communication <ul style="list-style-type: none"> • Use SBAR • Do not proceed in the face of uncertainty • Use clarifying questions • Improve handoffs
	Create an adverse event response team: <ul style="list-style-type: none"> • Train key staff in techniques to respond immediately following an adverse event, including: recognition, disclosure, and support for involved staff, patient & family. • Conduct pro-active training and drills prior to event to help in creating a more organized response during actual events.
	Safety Culture Changes: <ul style="list-style-type: none"> • Re-enact or simulate ADEs • Unit-based safety champions • Initiate or modify WalkRounds to address medication safety issues • Conduct regular safety briefings. Develop mechanisms to identify common themes and address issues identified.
	Reduce staff intimidation <ul style="list-style-type: none"> • Develop and distribute an intimidation survey as the first step in creating an awareness of the issue. • Have administrative leaders (including physicians) actively engage in a dialogue about the untoward safety consequences of intimidation in the workplace. Be intolerant of any practitioner (physician, nurse, pharmacist, or other) who intimidates a co-worker.