

Road Map to a Medication Safety Program



The Road Map to a Medication Safety Program provides evidence-based recommendations/standards for Minnesota hospitals in the development of a comprehensive medication safety program. The road map and accompanying tool kit were developed by the MHA Adverse Drug Event Advisory Group with funding through CMS' Partnership for Patients (P4P) Initiative.

The road map reflects published literature and guidelines by relevant professional organizations and regulatory agencies as well as best practices identified by the MHA Adverse Drug Event Advisory Group. The road map and tool kit will be reviewed regularly and updated as indicated through published literature.

We would like to thank the following individuals for sharing their time, expertise and stories which made the road map and tool kit possible.

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Road Map to a Medication Safety Program



	Safe from ADE	Specific Actions(s)	Audit Questions	Yes	No
S	Safety Teams and Organizational Structure	1) Secure endorsements and resources for Medication Safety.	1a) The facility's leadership endorses implementation and sustainment of the Medication Safety road map practices. 1b) Senior leadership has clearly communicated overall goals for Medication Safety. 1c) Senior leadership regularly reviews progress toward goals and supports adding resources as appropriate. 1d) The facility has a designated senior leadership sponsor for Medication Safety.	<input type="checkbox"/>	<input type="checkbox"/>
		2) Promote Medication Safety representation and champions throughout the facility.	2a) The facility has an interdisciplinary team involved in addressing Medication Safety with representation from across the facility. Medication Safety champions/team members/liasons with clear roles and expectations have been designated from: 2b) Physician/licensed independent provider knowledgeable in medication safety. 2c) Nursing 2d) Safety/Quality 2e) Pharmacy 2f) The facility has a process in place to engage other team members as regular or ad-hoc members as appropriate (e.g., dietary, laboratory, surgery, purchasing, education, risk management, human resources). 2g) The facility has a designated coordinator(s) for Medication Safety. 2h) The coordinator(s) has designated time to serve in this coordination function.	<input type="checkbox"/>	<input type="checkbox"/>
		3) Identify gaps and develop action plans	The interdisciplinary team: 3a) Reviews the Medication Safety plan throughout the year, and updates the plan as needed, to prioritize and address newly identified improvement opportunities. 3b) Reviews data results at least quarterly and identifies strengths and opportunities. 3c) Commissions subgroups as needed to address priority issues requiring subject matter experts (e.g., IV team, respiratory, pain team).	<input type="checkbox"/>	<input type="checkbox"/>
A	Access to Information	1) Track progress on process and outcome measures.	Data Collection A process is in place to collect Medication Safety bundle/process data for the following as applicable: 1a) Hypoglycemic agent gap analysis 1b) Anticoagulant gap analysis 1c) Opioid agent gap analysis A process is in place to track the following ADE measures, at a minimum: 1d) Number of patients with INR >5 (or outside of established therapeutic range.) 1e) Number of patients with blood glucose < 40 (or outside of established therapeutic range.) 1f) Number of naloxone administrations (or established opioid ADE measure)	<input type="checkbox"/>	<input type="checkbox"/>

		<p>1h) A process is in place to affirm the reliability of both the process and outcome data obtained through audits.</p> <p>1i) Standard criteria exist for conducting audits. (e.g. chart audits) when needed.</p> <p>1j) The facility's documentation system (electronic or paper) is designed to capture sufficient detail about adverse drug events that occur to allow for adequate event analysis.</p>	<input type="checkbox"/>	<input type="checkbox"/>
	2) Review and analyze the data for improvement opportunities.	<p>Data Analysis A process is in place to:</p> <p>2a) Routinely review and analyze data for process improvement opportunities/defects.</p> <p>2b) Analyze data related to possible medication-related readmissions to identify gaps and opportunities for improvement.</p> <p>2c) Track progress against established targets (e.g., run charts, control charts, dashboards, scorecards.)</p> <p>2d) Prioritize and act upon identified issues.</p>	<input type="checkbox"/>	<input type="checkbox"/>
	3) Medication Safety Program data is shared within and across units on a regular basis to identify improvement strategies.	<p>Data and Information Sharing Medication Safety Program Event and Adverse Drug Event data and learnings are shared on a regular basis:</p> <p>3a) Within units</p> <p>3b) Across units</p> <p>3c) With leadership</p> <p>3d) With medical staff</p> <p>3e) With the board (s)</p> <p>3f) Medication Safety Program/Adverse Drug Event learnings are routinely shared through stories as well as through data (e.g., include in daily briefings, unit staff meetings, safety committees, newsletters.)</p>	<input type="checkbox"/>	<input type="checkbox"/>
	4) Reporting test results in timely manner	4a) A process is in place to provide stat laboratory test results 24 hours a day and 7 days per week to ensure safe and timely monitoring of high risk medications.	<input type="checkbox"/>	<input type="checkbox"/>
	5) Conduct patient screening and identify potential risks	<p>5a) The facility's electronic health record directly interfaces with the laboratory system to automatically alert practitioners to abnormal values, indicating a potential need to modify high-alert medication therapy. {add n/a option}</p> <p>The facility's electronic health record and/or pharmacy computer system:</p> <p>5b) Screens medication therapy against the patient's clinical profile for contraindications, interactions and dose appropriateness before drugs are administered. N/A: <input type="checkbox"/></p> <p>5c) Alerts health care practitioners to duplicate class orders for medications. N/A: <input type="checkbox"/></p> <p>5d) Performs dose range checks. N/A: <input type="checkbox"/></p> <p>5e) A process is in place for practitioners to screen for and document existing diseases or conditions that could affect the dosing of medication therapy prior to initiating antithrombotic, hypoglycemic or opioid therapy.</p>	<input type="checkbox"/>	<input type="checkbox"/>
	6) Use prospective analysis methods to identify risks and/or potential failures in care	<p>6a) Prospective risk analysis methods (e.g., drug monograph, failure modes and effects analysis - FMEA) are used to proactively identify potential risks associated with introduction of new medications and medication modalities (e.g., fentanyl PCA or liposomal bupivacaine) and new devices (e.g., smart pumps).</p> <p>6b) A process is in place to prioritize and act upon issues identified through the analysis.</p>	<input type="checkbox"/>	<input type="checkbox"/>

F	Facility Expectations	1) Follow standardized practices	<p>1a) The facility follows standardized clinical practice guidelines when developing order sets, policies and procedures.</p> <p>1b) There is standard process in place to promptly retrieve outdated protocols, pathways, guidelines, nomograms, order sets, flow sheets and/or checklists throughout the facility and to replace with updated versions.</p> <p>1c) There is a standard process in place to communicate changes to staff.</p> <p>In facilities with key or multiple teams addressing medication safety (e.g., anticoagulation therapy group, pain committee or diabetes management team):</p> <p>1d) Key teams lead and develop institutional policies and procedures related to specific high-alert medications (e.g., the anticoagulation therapy team leads anticoagulation practices; pain team leads opioid practices; diabetes management team leads hypoglycemic agent practices).</p> <p>1e) There is a process in place to ensure communication and information sharing within teams and across teams.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2) Leadership establishes and communicates clear expectations	<p>2a) Direct patient care staff (e.g., nurses, physicians, pharmacists, pharmacy technicians) is informed of expectations and performance standards regarding their role in the Medication Safety Program.</p> <p>2b) Support staff (e.g., laboratory, supply chain, operations) is informed of expectations and performance standards regarding their role in medication safety.</p> <p>2c) The facility has a well defined process to support a culture that encourages staff to speak up and “stop the line” regarding any concern related to medication safety.</p> <p>2d) The “stop the line” process clearly outlines:</p> <ul style="list-style-type: none"> • When to stop the line; • How to stop the line, e.g., “I need clarity”; • The chain of command to follow if not supported in stopping the line; • Clear communication to staff from managers and leadership that staff will be supported if they speak up. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
		3) Provide education for direct care and support staff	<p>Expectations and supporting Medication Safety Program education have been incorporated into new employee orientation for:</p> <p>3a) Direct patient care staff</p> <p>3b) Support staff</p> <p>3c) Expectations and supporting Medication Safety Program education have been incorporated into employee orientation for personnel employed by outside agencies and contracted personnel.</p> <p>3d) Medication Safety Program education is provided to direct care staff at least annually.</p> <p>3e) Medication Safety Program education is provided to support staff when new relevant information is available.</p> <p>3f) Expectations and supporting Medication Safety Program education have been incorporated in new physician orientation.</p> <p>The facility has a process in place which evaluates staff competencies related to high-risk medications including:</p> <p>3g) Education on high risk medications in provider, prescriber, pharmacy, and nursing staff orientation and ongoing competency assessment.</p> <p>3h) Development of policies which clearly delineate the roles and responsibilities of physicians, prescribers, pharmacists, and nurses for high-risk medication use.</p> <p>3i) Education on how to conduct effective independent double checks for high risk medications.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

		4) Establish a structured communication process	<p>4a) The facility has structured communication tools (e.g., Situation, Background, Assessment, Recommendation (SBAR) for communication related to high-risk medications at all levels of the organization.</p> <p>A structured hand-off process is in place throughout the organization with specific elements outlined that must be included for hand-offs:</p> <p>4b) During shift-change</p> <p>4c) Between departments/units</p> <p>4d) To other facilities</p>	<input type="checkbox"/>	<input type="checkbox"/>
		5) Establish an effective medication reconciliation process.	<p>The facility's admission medication reconciliation process includes, at a minimum:</p> <p>5a) A "good faith effort" at verification of patient home medication list.</p> <p>5b) Identification and resolution of potential drug interactions.</p> <p>5c) Identification and resolution of concomitant therapies.</p> <p>The facility's discharge medication reconciliation process includes, at a minimum:</p> <p>5e) Verification of patient medications and dosages.</p> <p>5f) Flag potential for medication-related readmissions (e.g., polypharmacy, high-alert medications, multiple disease states, etc.).</p>	<input type="checkbox"/>	<input type="checkbox"/>
		6) Disclose unanticipated outcomes.	<p>A process is in place to promptly inform families when an Adverse Drug Event occurs and includes, at a minimum:</p> <p>6a) Direction on who should discuss the unanticipated outcome with the patient/ family and how that discussion should occur.</p> <p>6b) Individuals designated to provide disclosure to patients receive training on effective disclosure strategies.</p> <p>6c) A process for disclosing to, and updating, patient/family as the event is reviewed and analyzed.</p> <p>6d) A designated person is available to provide support and just-in-time training to staff members who are about to disclose an unanticipated outcome to a patient/family.</p>	<input type="checkbox"/>	<input type="checkbox"/>
E	Engagement of Patient, Client, Resident and Family	1) Educate and empower patients and families.	<p>1a) A process is in place to assess and address any barriers to patient/ family ability to understand their role in Adverse Drug Event prevention (e.g., cultural, language, hearing impairment and health literacy).</p> <p>1b) Patients/families are educated on their role in preventing Adverse Drug Events and prevention measures they can expect to see from staff and providers caring for them in the hospital (e.g., bedside barcoding, explaining purpose of medications, identifying potential side effects of medications, asking name and birthdate before medication administration).</p> <p>1c) A process is in place to assess patient /families' level of understanding of the education provided (e.g., teach back.)</p> <p>1d) The facility has a process in place to encourage patients and families to speak up if they have concerns about direct care/support staff/ provider practices or other issues that may increase the risk of a medication error.</p> <p>1e) A process is in place to report back to patients/families that have shared a concern.</p>	<input type="checkbox"/>	<input type="checkbox"/>