



Medication Reconciliation Road Map

MHA’s road maps provide hospitals and health systems with evidence-based recommendations and standards for the development of topic-specific prevention and quality improvement programs, and are intended to align process improvements with outcome data. Road maps reflect published literature and guidance from relevant professional organizations and regulatory agencies, as well as identified proven practices. MHA quality and patient safety committees provide expert guidance and oversight to the various road maps.

Each road map is tiered into fundamental and advanced strategies:

- **Fundamental strategies** should be prioritized for implementation, and generally have a strong evidence base in published literature in addition to being supported by multiple professional bodies and regulatory agencies.
- **Advanced strategies** should be considered in addition to fundamental strategies when there is evidence the fundamental strategies are being implemented and adhered to consistently and there is evidence that rates are not decreasing and/or the pathogenesis (morbidity/mortality among patients) has changed.

Operational definitions are included to assist facility teams with road map auditing and identifying whether current work meets the intention behind each road map element.

Resources linked within the road map include journal articles, expert recommendations, electronic order sets and other pertinent tools which organizations need to assist in implementation of best practices.

Road map sections	Road map questions (if not present at your hospital or answering no, please see next column for suggested resources)	If specific road map element is missing, consider the following resources:
General practices	<p><i>(check each box if “yes”)</i></p> <p><input type="checkbox"/> Are there defined roles and responsibilities for each discipline involved in the medication reconciliation process?</p> <ul style="list-style-type: none"> - Do process and procedures define: <ul style="list-style-type: none"> o who is responsible to conduct medication history interviews? o who is responsible to review the Best Possible Medication History (BPMH)? o who is responsible to compare the admission/transfer/discharge orders with the BPMH? - Are there established policies for obtaining or reviewing a BPMH when a pharmacist is not available (e.g. for non-24-hour pharmacy hospitals)? <p><input type="checkbox"/> Do you have a policy and procedure that defines the medication reconciliation process available to all staff?</p> <ul style="list-style-type: none"> - Answer yes if you have a written medication reconciliation policy/procedure that staff can access. 	<ul style="list-style-type: none"> • Institute for Healthcare Improvement Model for Improvement (2011) • AHRQ Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation (2012) • Society of Hospital Medicine Medication Reconciliation Implementation Guide (download) • Sample Medication reconciliation Responsibility Assignment Matrix, a.k.a. RACI (Responsible, Accountable, Consulted, Informed). A RACI matrix is designed to clarify expectation on the level of participation for each role. (Courtesy St. Luke’s Hospital, Duluth)

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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">General practices, continued</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Do you have a process in place, e.g. observation audit or staff conversation, to determine whether the medication reconciliation process is being followed? <input type="checkbox"/> Does the facility have a process, e.g. audit tool or method, to evaluate how well its medication reconciliation process is working? <ul style="list-style-type: none"> - Example process measures: percent of unreconciled medications; unreconciled medications per 100 admissions, percent of admissions with unreconciled medications. - Example of outcome measures: number of adverse drug events. <input type="checkbox"/> Does the facility have a strategy, e.g. PDSA, to conduct medication reconciliation process redesign if audits show the process is not working? <input type="checkbox"/> Are patients evaluated to determine if they have barriers to obtain medications (e.g. financial and transportation)? <ul style="list-style-type: none"> - Answer yes if patients are screened for barriers to obtain medications, and if the hospital has resources to mitigate those barriers (care coordinators, social workers, relationships with community partners, etc.) If applicable, the facility's Community Health Needs Assessment may list available community resources (CHNAs are required for nonprofit facilities). 	<ul style="list-style-type: none"> • MARQUIS: Medication reconciliation implementation manual • Sample Medication reconciliation Admit Audit Tool & Sample Medication reconciliation Discharge Audit Tool (Courtesy St. Luke's Hospital, Duluth) • MARQUIS: Medication reconciliation implementation manual • IHI Model for Improvement • TJC White Paper (2010)
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Develop an accurate list of current home medications</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Is the BPMH accessible to the clinical care team and used as the reference point for ordering decisions and reconciliation, medications to be administered during the episode of care, and determining the patient's medication regime upon discharge? <ul style="list-style-type: none"> - Answer yes if above conditions are met and every member of the care team has access to the BPMH in the Electronic Health Record (EHR). <input type="checkbox"/> Do accountable staff follow a standardized process to document the patient's BPMH in the EHR or paper chart? <ul style="list-style-type: none"> - Answer yes if medication histories are recorded in the same place for every patient, and not on screens that are hidden from some providers (e.g. a nursing notes page that a physician wouldn't have access to). <input type="checkbox"/> Are accountable staff trained and evaluated in their ability to follow the organization's process for obtaining a BPMH? <ul style="list-style-type: none"> - Answer yes if the staff who obtain medication histories receive training and evaluation in history taking. A checklist can be a helpful tool to ensure the history is complete. 	<ul style="list-style-type: none"> • MATCH, 2012 • Best Possible Medication History Train the Trainer Materials (Society for Hospital Medicine)

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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Develop an accurate list of current home medications, continued</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Do accountable staff use two or more sources, including patient/family interview whenever possible, to obtain the BPMH? <ul style="list-style-type: none"> - If the patient brings a list and is alert and oriented, that is considered two sources. <input type="checkbox"/> If the patient cannot be interviewed upon admission, is there a process in place to interview the patient/family for the BPMH as soon as practical? <input type="checkbox"/> Has the facility established a goal to obtain the BPMH within a specified timeline? <ul style="list-style-type: none"> - Answer yes if the facility has established a measurable timeframe for completing the history (for example, not “as soon as possible”, but “within X hours of admission”). <input type="checkbox"/> Is there a place in the EHR to indicate “as prescribed” versus “as taken”? <ul style="list-style-type: none"> - For example, the functionality of the EHR may allow a clinician to flag if not taken as prescribed. <input type="checkbox"/> Does your process include a designated team member to review the BPMH and mark complete? <ul style="list-style-type: none"> - Answer yes if the BPMH is reviewed by a team member. (Define roles for who can review and indicate the review is complete. For example, a pharmacist can override a nurse; a nurse can’t override a pharmacist.) <input type="checkbox"/> Is there a visual indicator to show the hospitalist/ prescriber that the BPMH has been reviewed and is complete? <ul style="list-style-type: none"> - Answer yes if the prescriber can see that there are no outstanding questions about the medication list and that it has been reviewed. 	<ul style="list-style-type: none"> • MARQUIS: Medication reconciliation implementation manual
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Develop a list of medications to be prescribed after admission</p>	<p><i>(check each box if “yes”)</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> In non-emergency situations, is the patient’s BPMH available to the prescriber when the admission orders are written? <ul style="list-style-type: none"> - Answer yes if the usual practice is to have BPMH available to the prescriber when orders are written. 	

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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Compare medication on the BPMH with the inpatient prescription orders</p>	<p><i>(check each box if “yes”)</i></p> <p><input type="checkbox"/> Is there a defined process in place to identify and correct unintended discrepancies found when comparing the BPMH with the current inpatient orders, admission orders, transfer orders or discharge orders?</p> <p><input type="checkbox"/> Upon transfer between levels of care, does the prescriber review the patient’s BPMH, the current medication orders and the transfer orders and consider if each medication should be continued, discontinued, held or modified for the new level of care?</p>	<ul style="list-style-type: none"> • The Joint Commission, National Patient Safety Goals (pages 5 – 6) • MATCH, 2012
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Make clinical decision based on the comparison</p>	<p><i>(check each box if “yes”)</i></p> <p><input type="checkbox"/> In preparing for discharge, does the prescriber review the patient’s BPMH, the current order and compare them to the discharge medication orders to ensure that a decision is made to continue, resume or discontinue each medication?</p>	<ul style="list-style-type: none"> • MATCH, 2012 • MARQUIS: Medication reconciliation implementation manual
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Communicate the new medication list to appropriate caregivers and to the patient/ family/care providers</p>	<p><i>(check each box if “yes”)</i></p> <p><input type="checkbox"/> Do patient discharge instructions around medication management use the teach-back method and include instructions to bring a medication list to their primary care provider, update their list when there are changes, and carry the medication list with them at all times in case of an emergency?</p> <p><input type="checkbox"/> Do you have a process in place for external transfers that includes how to transmit the current and accurate medication list to the receiving provider?</p> <ul style="list-style-type: none"> - The transmission of the current and accurate list may be electronically or on paper. <p><input type="checkbox"/> Is the patient’s discharge medication list and accompanying instructions provided to the patient in the patient’s preferred language and at an appropriate health literacy level?</p> <ul style="list-style-type: none"> - If the facility has a Patient and Family Advisory Council, consider asking them to review discharge instructions and provide feedback. 	<ul style="list-style-type: none"> • Discharge medication counseling video for Marquis (Society of Hospital Medicine) • MN Health Literacy Partnership Teach Back Training • You: Your Own Best Medicine

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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Communicate the new medication list to appropriate caregivers and to the patient/family/care providers, continued</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Is there a process to ensure the patient receives a number to call with questions about their medications after discharge? <ul style="list-style-type: none"> - Are patients referred to the pharmacy number on the label? The facility should define the best number to call. - Consider follow-up phone calls to patients (or a subset of high-risk patients). <input type="checkbox"/> Is there a process in place to ensure the patient's ambulatory care provider(s) receives the reconciled discharge medication list? 	

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