



Minnesota Hospital Association

Road Map to a Delirium Detection, Prevention and Management Program



The Road Map to a Delirium Detection, Prevention, and Management Program provides evidence-based recommendations/standards for hospitals in the development of a comprehensive delirium program. The road map and accompanying tool kit were developed by the MHA Delirium Pilot Work 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 Delirium Pilot Work 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 Delirium Detection, Prevention and Management Program



Audit Questions	Yes	No	If answered question “No” – identify the Specific Action plan(s) including persons responsible and timeline to complete.
Infrastructure			
Teamwork			
1) There is organizational leadership support for a structured delirium program.	<input type="checkbox"/>	<input type="checkbox"/>	
2) An interdisciplinary team is in place to address delirium detection, prevention and management. Team members include at a minimum: nursing, nursing assistants, medical staff, pharmacy staff (with knowledge of geriatrics/delirium), therapy staff, and leadership (e.g., clinical director, nursing director).	<input type="checkbox"/>	<input type="checkbox"/>	
3) There is a structured process in place for on-going collaboration between team members in the care of patients at risk for delirium (e.g., incorporating delirium in daily rounds).	<input type="checkbox"/>	<input type="checkbox"/>	
4) There is a designated coordinator(s) for the delirium program with dedicated time to serve in this coordination role.	<input type="checkbox"/>	<input type="checkbox"/>	
Data			
5) A data collection process is in place to track outcomes for ongoing evaluation of the effectiveness of the delirium program and to identify opportunities. Possible measures for delirium include: <ul style="list-style-type: none"> • number of patients developing delirium after admission to the hospital • number of patients coming in to the hospital, either inpatient or outpatient (e.g., ED), with delirium • number of falls • LOS for patients 65+ and/or in the ICU • mortality rates for patients 65+ and/or in the ICU • number of ventilator days 	<input type="checkbox"/>	<input type="checkbox"/>	
6) A data collection process is in place to collect information on delirium practices including, at a minimum: <ul style="list-style-type: none"> • number of patients in the organization’s identified high-risk population (e.g., 65+, 70+) administered benzodiazepines and antihistamines • number of patients with documented delirium administered benzodiazepines and antihistamines 	<input type="checkbox"/>	<input type="checkbox"/>	
Engagement of patient, families, staff, physicians, and volunteers			
7) Initial and ongoing education is provided for all clinical staff, and includes, at a minimum: <ul style="list-style-type: none"> • delirium risk factors • delirium detection • delirium prevention strategies • strategies for management of delirium-related behaviors 	<input type="checkbox"/>	<input type="checkbox"/>	

Audit Questions	Yes	No	If answered question "No" – identify the Specific Action plan(s) including persons responsible and timeline to complete.
8) Volunteers, and staff, are trained to cognitively engage patients at risk for delirium.	<input type="checkbox"/>	<input type="checkbox"/>	
9) Education is provided for physicians and residents, and includes, at a minimum: <ul style="list-style-type: none"> • ABC medications that can perpetuate delirium - antihistamines, benzodiazepines and anti-cholinergics • use of other high-risk medications that can perpetuate delirium • recognizing and diagnosing delirium • responding to change in condition • cardiac monitoring • critical care, managing extubation, and sedatives • physician diagnostic coding for delirium 	<input type="checkbox"/>	<input type="checkbox"/>	
10) Staff responsible for assessing and diagnosing delirium receive training to improve the accuracy of recognition and diagnosis.	<input type="checkbox"/>	<input type="checkbox"/>	
11) Patient/family education is provided for all patients at risk for delirium and includes, at minimum: <ul style="list-style-type: none"> • delirium risk factors • how to recognize delirium • their role in preventing delirium 	<input type="checkbox"/>	<input type="checkbox"/>	
12) Families are invited to participate in, and are educated on, activities they can engage in with the patient to promote cognitive stimulation and help prevent delirium.	<input type="checkbox"/>	<input type="checkbox"/>	

Detection

1) A defined process is in place to identify patients at risk for developing delirium upon admission. Possible approaches include: <ul style="list-style-type: none"> • assuming delirium risk for patients at highest-risk for developing delirium (e.g., patients on ventilators, patients with hip fractures) and instituting prevention efforts at admission; • using a delirium screening tool (Confusion Assessment Method (CAM), Nursing Delirium Symptom Checklist (NuDESC), Neelon and Champagne (NEECHAM) Confusion Scale) for patients in the target population defined by the organization (e.g., patients 65+ or 70+, patients in the ICU); • using a quick screen, such as the DEAR tool, to pre-screen patients at risk for developing delirium after surgery or other invasive procedure. • a combination of the above strategies. 	<input type="checkbox"/>	<input type="checkbox"/>	
2) A defined process is in place for ongoing monitoring of change in patient risk status for all patients in the delirium-risk populations.	<input type="checkbox"/>	<input type="checkbox"/>	
3) A process is in place for physicians to collaborate with nursing staff when diagnosing delirium to capture a full picture of the patient's baseline and current cognitive status.	<input type="checkbox"/>	<input type="checkbox"/>	
4) The organization has developed an agreed upon set of delirium diagnostic codes.	<input type="checkbox"/>	<input type="checkbox"/>	

Prevention

Prevention strategies are in place for all inpatient older adults which include, at a minimum:			
1) Review for potentially inappropriate medications which can contribute to delirium.	<input type="checkbox"/>	<input type="checkbox"/>	

Audit Questions	Yes	No	If answered question "No" – identify the Specific Action plan(s) including persons responsible and timeline to complete.
2) A process is in place on admission to gather information from the patient and family when patient is admitted that will assist staff in providing a familiar environment and routine, such as: favorite television show, hobbies/interests, regular sleeping schedule, and preferences.	<input type="checkbox"/>	<input type="checkbox"/>	
3) Patient information on preferences and routines is easily accessible to staff caring for the patient.	<input type="checkbox"/>	<input type="checkbox"/>	
4) Patients and families are educated on the importance of movement, and strategies are in place to encourage movement, such as encouraging patients to eat meals in the chair rather than the bed, setting goals for early movement and a plan for progressively increasing activity as patient's condition improves.	<input type="checkbox"/>	<input type="checkbox"/>	
5) Sleep hygiene practices/protocols are in place (e.g., determining normal sleep patterns, avoiding daytime napping, increasing daytime stimulation, establishing bedtime routines) to assist patients in maintaining normal sleep/wake patterns.	<input type="checkbox"/>	<input type="checkbox"/>	
6) Patients have access to, and are encouraged to use (or assisted in using), any sensory aids such as hearing aids, glasses and dentures.	<input type="checkbox"/>	<input type="checkbox"/>	
7) Nutritional and hydration status are assessed.	<input type="checkbox"/>	<input type="checkbox"/>	
8) Nutritional supplements are provided and intake of oral fluids is encouraged.	<input type="checkbox"/>	<input type="checkbox"/>	
9) Patients and family members are educated on the importance of eating and drinking to prevent delirium.	<input type="checkbox"/>	<input type="checkbox"/>	
10) Tethers, such as IVs and Foley catheters, are limited when medically feasible.	<input type="checkbox"/>	<input type="checkbox"/>	
11) Patients are engaged in meaningful, stimulating conversations and activities.	<input type="checkbox"/>	<input type="checkbox"/>	
12) Patients showing initial signs of confusion or other signs of delirium should be evaluated to ensure that there is not another underlying cause for these initial signs, such as: pain; electrolyte imbalance, incontinence/intestinal problem, or infection.	<input type="checkbox"/>	<input type="checkbox"/>	

Medications

Education is provided for prescribers and nurses which includes:

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| 1) Information on medications that perpetuate delirium (e.g., ABCs – antihistamines, benzodiazepines and anti-cholinergics). | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2) Appropriate use of medications to manage delirium-related behaviors resistant to non-pharmacological management techniques. | <input type="checkbox"/> | <input type="checkbox"/> | |

Strategies are in place for, and the organization's culture supports, appropriate prescribing and administration of high-risk medications for older adults which include, at a minimum:

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| 3) Non-pharmacological interventions are considered prior to prescribing high-risk medications for older adults, such as: eliminating or reducing the use of bedtime hypnotics through the use of sleep hygiene protocols/practices; and investigating underlying issues related to agitation or pain. | <input type="checkbox"/> | <input type="checkbox"/> | |
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Audit Questions	Yes	No	If answered question "No" – identify the Specific Action plan(s) including persons responsible and timeline to complete.
4) If non-pharmacological interventions are unsuccessful, lower-risk medications are tried prior to higher-risk medications.	<input type="checkbox"/>	<input type="checkbox"/>	
5) Awareness of the risk of prescribing medications that can perpetuate delirium, such as the ABCs - Antihistamines, Benzodiazepines and anti-Cholinergics. If these medications are prescribed, they are started at a lower dose for older adult patients with slow titration and lower maximum dosing.	<input type="checkbox"/>	<input type="checkbox"/>	
6) A process to determine risk factors, including high anti-cholinergic load, which would trigger a medication review for patients at risk for developing delirium.	<input type="checkbox"/>	<input type="checkbox"/>	
7) Medication reviews include considerations for tapering, eliminating, substituting for, or temporarily discontinuing high-risk medications.	<input type="checkbox"/>	<input type="checkbox"/>	
8) Order sets for older adult patients are reviewed for high-risk medications and modified as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	
9) Dose reduction strategies, such as auto-dose reduction, for high-risk medications (e.g., ABCs - antihistamines, benzodiazepines and anti-cholinergics).	<input type="checkbox"/>	<input type="checkbox"/>	

Management of Behaviors

1) The organization has a process to rapidly put more emergent strategies in place for patients assessed as positive for delirium with behaviors that are not re-directable (e.g., severe agitation, combativeness). Strategies may include, but are not limited to: <ul style="list-style-type: none"> • Crisis Response Team/process • Phone call to physician/psychiatrist/Advanced Practice Nurse • Delirium order set 	<input type="checkbox"/>	<input type="checkbox"/>	
2) A decision-support tool is in place to guide pharmacological management of delirium-related behaviors, such as psychosis-like symptoms, that are resistant to non-pharmacological management techniques.	<input type="checkbox"/>	<input type="checkbox"/>	
3) The decision-support tool emphasizes: the use of non-pharmacological management techniques; the fact that medications do not treat delirium and can increase the risk of perpetuating delirium; and the role of PRNs.	<input type="checkbox"/>	<input type="checkbox"/>	

Emergency Department

1) Education is provided for all emergency department clinical staff, and includes, at a minimum: <ol style="list-style-type: none"> a. delirium risk factors b. delirium detection c. strategies to avoid perpetuating delirium, which include, at a minimum: <ul style="list-style-type: none"> • sensory (e.g., ensure patients have glasses, hearing aids, dentures, pocket talkers) • appropriately assessing and managing pain • avoiding high-risk medications or minimizing exposure (i.e., lower dosages) • avoiding unnecessary procedures that may perpetuate delirium, such as unnecessary catheter use 	<input type="checkbox"/>	<input type="checkbox"/>	
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Audit Questions	Yes	No	If answered question "No" – identify the Specific Action plan(s) including persons responsible and timeline to complete.
2) If an older adult patient is admitted as an inpatient from the ED, a process is in place to encourage family members to bring in sensory aids if they were not initially brought to the hospital.	<input type="checkbox"/>	<input type="checkbox"/>	
3) Delirium risk, any known specific prevention strategies, and all medications administered in the ED are communicated to the inpatient staff, if patient is admitted, or to the next setting of care.	<input type="checkbox"/>	<input type="checkbox"/>	
ICU/short- or long-term ventilated patients			
1) A process is in place to gather information from the patient and family when patient is admitted that will assist staff in providing a familiar environment and routine, such as: use of hearing aids and glasses, favorite television show, hobbies/interests, regular sleeping schedule and preferences.	<input type="checkbox"/>	<input type="checkbox"/>	
2) Daily multi-disciplinary rounds are in place in the ICU to coordinate delirium prevention and management strategies.	<input type="checkbox"/>	<input type="checkbox"/>	
3) Daily rounds include: review of the results of daily awakening and breathing control trial, level of sedation, medications, and progressive mobility status.	<input type="checkbox"/>	<input type="checkbox"/>	
Prevention strategies are in place for all ICU patients which include, at a minimum:			
4) Review for potentially inappropriate medications which can contribute to delirium.	<input type="checkbox"/>	<input type="checkbox"/>	
5) Patients and families are educated on the importance of movement, and strategies are in place to encourage movement and set goals for early movement and a plan for progressively increasing activity as patient's condition improves.	<input type="checkbox"/>	<input type="checkbox"/>	
6) Sleep hygiene practices/protocols are in place, such as determining normal sleep patterns, avoiding daytime napping, increasing daytime stimulation, and establishing bedtime routines, to assist patients in maintaining normal sleep/wake patterns.	<input type="checkbox"/>	<input type="checkbox"/>	
7) Patients have access to, and are encouraged to use (or assisted in using), any sensory aids such as hearing aids, glasses, and dentures.	<input type="checkbox"/>	<input type="checkbox"/>	
8) Tethers, such as IVs and Foley catheters, are limited when medically feasible.	<input type="checkbox"/>	<input type="checkbox"/>	
9) Patients are engaged in meaningful, stimulating conversations and activities.	<input type="checkbox"/>	<input type="checkbox"/>	
10) Patients showing initial signs of confusion or other signs of delirium should be evaluated to ensure that there is not another underlying cause for these initial signs, such as: pain, electrolyte imbalance or incontinence/intestinal problem; or infection.	<input type="checkbox"/>	<input type="checkbox"/>	
For ventilated patients, the following additional strategies are incorporated:			
11) Assess pain using a valid and reliable pain monitoring instrument.	<input type="checkbox"/>	<input type="checkbox"/>	

Audit Questions	Yes	No	If answered question "No" – identify the Specific Action plan(s) including persons responsible and timeline to complete.
12) Use an analgesic first to treat pain before treating with a sedative. If unable to maintain goal RASS score, consider IV push medications before beginning continuous sedation.	<input type="checkbox"/>	<input type="checkbox"/>	
13) Monitor level of agitation/anxiety and sedation with a reliable tool (e.g., RASS tool) at least every shift.	<input type="checkbox"/>	<input type="checkbox"/>	
14) Establish a goal of maintaining patients at a lighter RASS score (i.e., goal of 0 to -1).	<input type="checkbox"/>	<input type="checkbox"/>	
15) If additional sedation is required, use non-benzodiazepine sedative.	<input type="checkbox"/>	<input type="checkbox"/>	
16) Daily awakening and breathing coordination trials (stop sedatives every day, following established protocols to identify patients appropriate for trials, and if needed, restart at sedation at 50% previous dose, titrating as needed).	<input type="checkbox"/>	<input type="checkbox"/>	
17) A decision-support tool is in place to assist staff in using physiologic criteria to incorporate daily progressive mobility.	<input type="checkbox"/>	<input type="checkbox"/>	
18) Early and progressive mobilization/movement is provided based on patient's daily physiological status.	<input type="checkbox"/>	<input type="checkbox"/>	