



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:
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">The facility’s core strategies for the early detection and treatment of sepsis and septic shock</p>	<p>FUNDAMENTAL (check each box if “yes”)</p> <ul style="list-style-type: none"> <input type="checkbox"/> A physician or advanced practice provider is designated to leader sepsis performance improvement efforts. <ul style="list-style-type: none"> - Identified person ensures that regular sepsis multidisciplinary team meetings are convened to review cases, sepsis data and quality measures, and promote education. <input type="checkbox"/> Sepsis care champions are promoted and recognized by the organization. <ul style="list-style-type: none"> - All staff that play a role in identification and treatment of patients with sepsis such as nurses, lab, pharmacy, etc. - Acknowledgment of sepsis champions may include early detection recognition, success in bundle implementation. <input type="checkbox"/> Routine sepsis screening performed in the ED and inpatient units based on SIRS criteria. 	<ul style="list-style-type: none"> • List of sepsis team participants for sepsis multidisciplinary team participation. • Screening for sepsis in the emergency department can lead to early treatment and save lives. Consider using the MHA ED Seeing Sepsis Screening tool identified signs and symptoms. MHA ED Seeing Sepsis Screening Tool • A standardized order set can provide the care team with clear direction on how to treat septic patients coming into the emergency department. Use the Seeing Sepsis 3 and 6-hour bundles to ensure that your organization incorporates all essential treatment elements. Surviving Sepsis 3 Hour Bundle Surviving Sepsis 6 Hour Bundle

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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">The facility's core strategies for the early detection and treatment of sepsis and septic shock, continued</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Standardized order sets in the ED and inpatient units for early detection and treatment of sepsis and septic shock that incorporate the Surviving Sepsis Campaign 3 and 6 hour bundles. <input type="checkbox"/> For patients with sepsis or septic shock evidence based guidelines are in place that indicate when to transfer to a higher level of care. 	<ul style="list-style-type: none"> • Ensuring timely transfers of patients to a higher level of care can improve health outcomes and save lives. The MHA Act Fast Poster assists staff in understanding patient sign/symptoms that warrant transfer to a higher level of care. MHA Act Fast Poster
	<p>ADVANCED (check each box if "yes")</p> <ul style="list-style-type: none"> <input type="checkbox"/> A process is in place to initiate a rapid response to treat patients that screen positive for sepsis, patterned after other time critical emergencies such as trauma, STEMI or stroke. <input type="checkbox"/> Ongoing, annual, interdisciplinary education on early detection and treatment of sepsis and septic shock, examples include simulation exercises and grand rounds. <input type="checkbox"/> Current and evidence-based literature is provided to patients in the clinic/community setting to increase public awareness. <ul style="list-style-type: none"> - Literature is intended to provide lay persons with public health information regarding sepsis warning signs and symptoms and inform of the importance of seeking urgent medical care for this condition. Examples of outreach include website, community outreach events, posters or presentations. <input type="checkbox"/> Equipment is routinely available for clinicians to use at the bedside to evaluate sepsis patients for fluid responsiveness, volume or perfusion status. Examples: bedside ultrasound or thoracic impedance (e.g. NICOM, Cheetah device or Flo-Trac). 	<ul style="list-style-type: none"> • Rapid response teams have improved outcomes for patients who experience critical emergencies such as STEMI and stroke. Evidence from AHRQ states, "hospitals that use screening criterion, fast-track diagnostic testing, protocols to support the prompt initiation of treatment and ongoing monitoring can reduce sepsis mortality by 54.5 percent" (AHRQ, 2012). AHRQ Innovations, Rapid Response Teams • Minnesota hospitals examples of rapid response to positive sepsis screens • Patient literature examples: CDC website Life after Sepsis Fact sheet
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">A sepsis quality improvement process is in place</p>	<p>FUNDAMENTAL (check each box if "yes")</p> <ul style="list-style-type: none"> <input type="checkbox"/> Tracking and monthly review of sepsis incidence and mortality rates and process measure. <input type="checkbox"/> Monthly review of compliance with routine sepsis screening and rapid treatment according to Surviving Sepsis Campaign 3 and 6-hour bundles, which includes documentation of time zero and use of a sepsis order set. 	<ul style="list-style-type: none"> • Understanding data collection methodologies is important to confirm the accuracy and reliability of the data. Consider using the MHA data specifications to ensure that sepsis data is being collected according to national standards. MHA Data Specifications

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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">A sepsis quality improvement process is in place, continued</p>	<p>ADVANCED (check each box if “yes”)</p> <p><input type="checkbox"/> Routine monthly analysis of sepsis cases to examine opportunities for improvement, using a nonpunitive root cause analysis (RCA) model. This includes a process to share all findings with staff in a real time.</p>	<ul style="list-style-type: none"> Reviewing compliance with sepsis treatment can assist team in understanding gaps in best practice implementation. Consider visiting the Surviving Sepsis website to learn more about the 3 and 6-hour bundle. Surviving Sepsis Website