

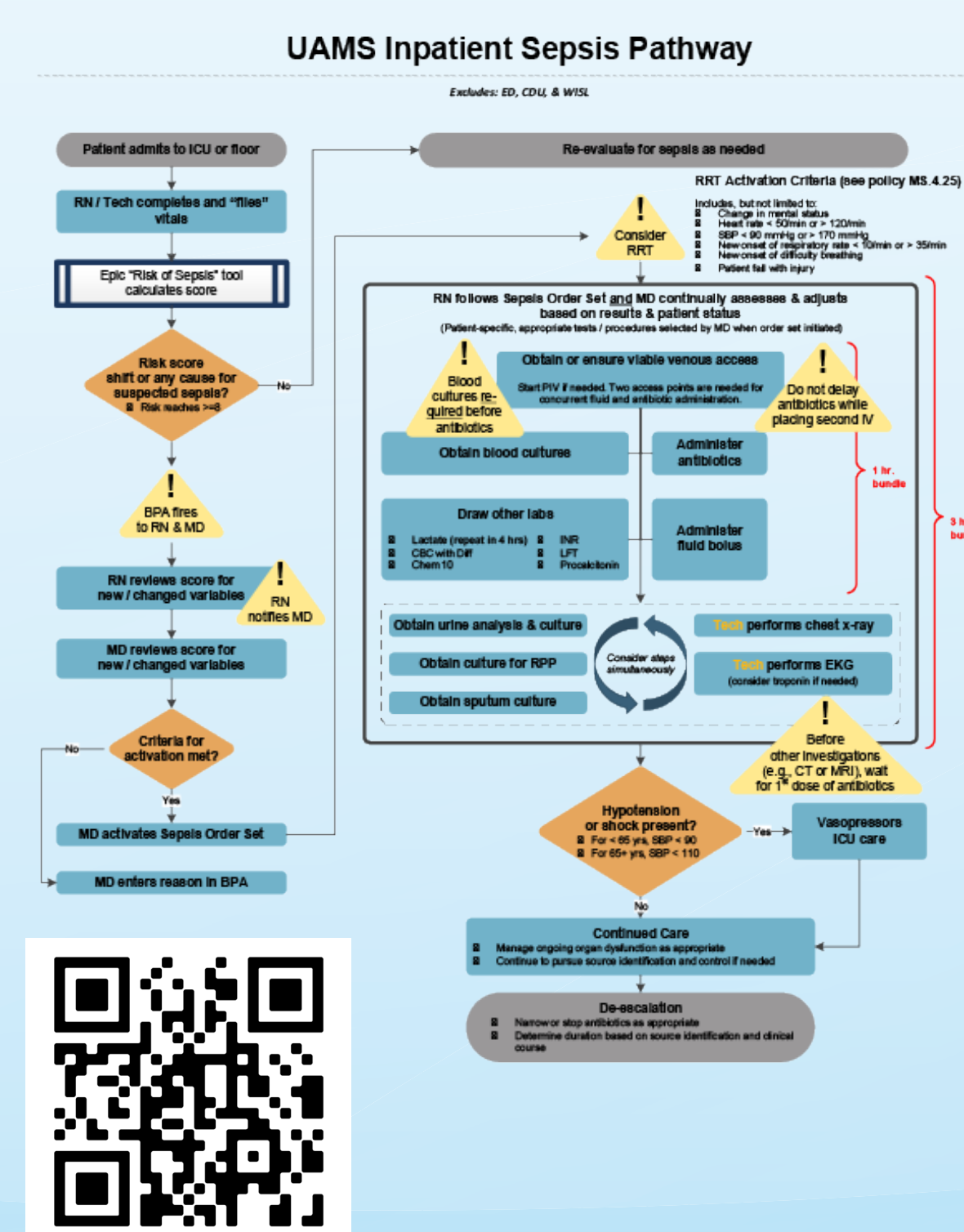
# TMF HQIC Collaborates with University of Arkansas for Medical Sciences (UAMS) Reduces 30-day Sepsis Mortality Rate with New Clinical Pathway Standard

# PROBLEM

The risk-adjusted mortality index for patients diagnosed with sepsis at UAMS, a Level 1 trauma center, was significantly higher than other top academic medical centers, with a baseline rate of 25.124 percent from October 2020 through September 2021. More than half of the patients who died after being admitted to the facility had sepsis. Leadership recognized the need to create a sepsis diagnosis and treatment pathway for clinical staff to use consistently throughout the hospital.

## INTERVENTIONS

- ◆ Created a sepsis team that was co-led by a critical care physician, a medical-surgical nursing director and a process improvement analyst
- ◆ Expanded the existing emergency room sepsis workflow to create an inpatient clinical pathway for timely identification and treatment of sepsis
- ◆ Implemented new sepsis clinical pathway in November 2021 (scan QR code below for copy of workflow)
- ◆ Created new Best Practice Alert (BPA) for nurses and providers if patient's Risk of Sepsis score reached a designated threshold
  - Nurse was responsible for notifying the provider about any change in sepsis variables
  - Provider was responsible for evaluating patient and activating the sepsis order set
- ◆ Developed sepsis order set, which outlined evidence-based treatment protocols for labs, fluids, medications, nursing tasks and other orders
- ◆ Prioritized open and effective communication between providers, nurses and leadership regarding the patient's treatment using the sepsis clinical pathway
- ◆ Engaged physician leadership to highlight importance of the sepsis clinical pathway across services and provider groups
- ◆ Had physician leadership review and take appropriate follow-up actions based on performance on process measures



## CONCLUSIONS

- ◆ Identify sepsis early to improve patient outcomes
- ◆ Practice standard and open communication between providers and nurses, as well as among providers for successful implementation of a clinical pathway
- ◆ Involve as many departments as possible, including the following:
  - Provider and nursing leaders across critical care, medical-surgical, infectious disease, emergency medicine and cancer divisions
  - Pharmacy, quality and process improvement, information systems and clinical documentation staff
- ◆ Use senior leadership, such as the chief compliance officer and chief nursing officer, to highlight the importance of the work and to maintain momentum

## NEXT STEPS

- ◆ Review order set and BPA biannually for updates and edits
- ◆ Monitor sepsis bundle compliance data, and improve compliance within specific areas as necessary

## RESULTS

UAMS saw a 20.74 percent relative improvement rate in its 30-day sepsis mortality rate from baseline to Year 2 after implementing its sepsis clinical pathway in November 2021.

