

## **Developing an Ambulatory Sepsis Protocol to Improve Rapid Response for Interventional Radiology Patients in the PACU**

Team Leaders: Mahroz Mohammed BSN RN CMSRN, Dr. Stephen R. Lee MD

Team Members: Dr. Benjamin Arnold MD, Staci Eguia MSN RN CCRN,  
Barbara Merutka MSN RN CMSRN CAPA

The University of Texas at MD Anderson Cancer Center, Houston, TX

**Abstract Background Information:** According to the Centers for Disease Control and Prevention (CDC), at least 1.7 million adults in the United States develop sepsis and at least 350,000 die as a result. Ambulatory Interventional Radiology (IR) is a unique field where patients undergo minimally invasive procedures such as drain placements, nephrostomy catheter exchanges, biliary catheter exchanges, biopsies and various other procedures. Patients undergoing drain placements or catheter exchanges are often at a higher risk in developing sepsis due to the nature of the procedure and can present signs of sepsis within minutes into their recovery.

**Objectives of Project:** The objective of this project was to create and implement an ambulatory sepsis protocol. Creating sepsis protocols facilitate the use of evidence-based practices, including obtaining cultures, administering antibiotics, fluid resuscitation, and hemodynamic support. This this protocol would ensure treatment of sepsis is initiated quickly along with transferring patients to the nearest emergency room via 911 emergency medical services. Developing an ambulatory sepsis protocol, patient outcomes can be improved.

**Process of Implementation:** Nursing leadership worked in collaboration with multidisciplinary providers to develop an ambulatory IR sepsis management algorithm based on our institution's inpatient sepsis algorithm which follows current standards of care and evidenced based practice. The inpatient algorithm was reviewed and modified to be applicable in an ambulatory setting located 20 miles away from our home campus. Using this algorithm, an outpatient sepsis order set was developed for faculty to use and order pertinent labs, antibiotics and other interventions as needed.

**Statement of Successful Practice:** Establishing an ambulatory sepsis protocol streamlined initiation of treatment while awaiting EMS arrival. The developed order set for providers to use ensures improved response to sepsis events in the ambulatory perioperative environment. Additionally, implementation of a sepsis protocol provides a clinical tool for provider and frontline staff to assure standards of care for our patient population.

**Implications for Advancing the Practice of Perianesthesia Nursing:** A Sepsis protocol in the ambulatory postoperative recovery area is essential for safeguarding patients. Initiating a sepsis protocol could improve clinical outcomes and optimizing use of healthcare resources. By prioritizing early detection and intervention, the ambulatory sepsis protocol developed plays a vital role in effective management of sepsis while also promoting a culture of safety.