This year, The Mount Sinai Hospital is implementing a program to enhance early identification and management of inpatients with suspected sepsis. The hospitalwide initiative is based upon a pilot program developed by the Division of Pulmonary, Critical Care and Sleep Medicine that began in 2012. Since its inception, the sepsis mortality rate has decreased by 40 percent hospitalwide.

The “Stop Sepsis Program” uses a novel clinical-decision support tool to increase early recognition, guide standardized treatment, and monitor process and performance metrics. Building on the sepsis-recognition guidelines developed by the Greater New York Hospital Association, Mount Sinai then implemented a new real-time, vital-sign tracking and provider-notification tool within the Epic electronic health record (EHR) system. The EHR is programmed to recognize subtle changes in the patient’s status, such as body temperature or altered mental status. When these changes trigger a monitoring alert, the Medical Acute Response Service (MARS) team steps in to further assess the patient and begin aggressive sepsis care if needed.

Weekly meetings of physicians, nurse managers, and IT staff further review each case that triggers an alert, to make any improvements in the recognition and response time and to eliminate any possible barriers to care, all in an effort to provide seamless collaboration. Charles A. Powell, MD, Chief, Catherine and Henry J. Gaisman Division of Pulmonary, Critical Care and Sleep Medicine, and Janice and Coleman Rabin Professor of Pulmonary Medicine, will oversee the hospitalwide program.

“This program is successful because of its data-driven, multidisciplinary approach to implementation, evaluation, and improvement,” says Scott Lorin, MD, Associate Professor of Medicine (Pulmonary, Critical Care and Sleep Medicine) and Director of the Medical Intensive Care Unit. “Ultimately, it is our patients who will benefit.”
Studying a New Antibody Inhibitor in Sarcoidosis Patients

The Mount Sinai Hospital, considered to have the largest sarcoidosis program in the world, is one of only several institutions to offer a Phase II clinical trial to investigate the efficacy of immunological therapy in patients with chronic pulmonary sarcoidosis. The trial will assess the safety and tolerability of an antibody directed against macrophage colony-stimulating factor (m-CSF), a protein associated with the development of sarcoidosis. The antibody was well-tolerated in healthy volunteers and patients with rheumatoid arthritis during the Phase I trial.

The antibody being tested is a first-in-class inhibitor of m-CSF that is believed to suppress activated monocytes and macrophages involved in the formation of sarcoidal granulomata and reduce the granulomatous inflammatory burden. Patients treated with the antibody are likely to experience improvement in their symptoms.

“...the current standard treatment for chronic pulmonary sarcoidosis is corticosteroids,” says Adam Morgenthau, MD, principal investigator at the Mount Sinai site, and Director of the Sarcoidosis Clinic and the Alvin S. Teirstein Sarcoidosis Support Group. “But many patients do not respond to these drugs, and those who do often develop long-term complications. We are optimistic this study may lead to new treatments to improve lung function and quality of life.”

PATIENT-CENTERED CARE

Strategies for Integrating Palliative and Intensive Care

Even as more hospitals offer a palliative service, “intensive care” and “palliative care” are often thought to be mutually exclusive, and palliative care is typically postponed until after intensive care therapy has failed.

But at Mount Sinai’s Medical Intensive Care Unit, Judith Nelson, MD, JD, Professor of Medicine, (Pulmonary, Critical Care and Sleep Medicine) is a leader in integrating palliative care into the care of all critically ill patients, including those still receiving aggressive therapies. “Nobody has to choose one form of care over the other,” says Dr. Nelson. Work by Dr. Nelson and others has shown that patients and families want both, and that they benefit from receiving palliative care along with intensive care throughout their time in the ICU. Providers of care benefit, too, because when communication is proactive and patients get the care they want, treatments that are unwanted and will not help can be avoided.

Dr. Nelson’s research has also helped identify opportunities and strategies to improve communication with clinicians for patients and families, and to reduce physical and psychological distress that often accompany critical illness. She has highlighted the unmet palliative care needs of patients who survive initial treatment in the ICU but remain critically ill on a chronic basis, dependent on mechanical ventilators and other intensive therapies.

Working with the Center to Advance Palliative Care at Mount Sinai, Dr. Nelson created and continues to lead The Improving Palliative Care in the ICU (IPAL-ICU) Project, which provides technical assistance, tools, and training materials to ICUs in hospitals across the country and around the world. “When the critical care team has the knowledge and skill to provide all appropriate intensive treatments while attending simultaneously to palliative needs, patients will achieve their best outcomes and families will feel informed, supported, and satisfied,” she says.