

A Comprehensive System Wide Sepsis Policy Review and Development of a Strategic Plan for the Implementation of a Nurse Driven Sepsis Protocol in the Adult ICU

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Introduction

The **purpose** of this project is to perform a comprehensive review of adult ICU sepsis protocols and policies across a large northeast hospital system with a goal of developing a strategic plan for the implementation of an adult nurse driven sepsis protocol to present to the ICU stakeholders.

Background and Significance

- Sepsis overwhelming immunological response to an infection that can lead to tissue hypoperfusion, end organ damage and dysfunction, amputations or death.
- *U.S.* − 1.7 million cases with 270,000 deaths annually (Rhee et al., 2017)
- **Worldwide** 30 million cases with 8 million deaths annually (Gyawali et al., 2019)
- 1 in 3 inpatients deaths had sepsis (CDC, 2019)
- Cost 27 billion dollars annually for all payer groups (Celeste & Moore, 2016)
- Problem:
 - Patients who are living longer with significant comorbidities may require ICU care. Contributing risk factors for sepsis include lengthy hospital stays and advance therapies such as invasive lines and devices.
 - Despite established Surviving Sepsis Campaign (SSC) guidelines, delays in sepsis treatment occur and result in an increase in morbidity, mortality and hospital costs.
 - Current literature examines nurse driven sepsis protocols in the emergency department (ED) and ward settings, but there is a gap in literature that investigates nurse driven sepsis protocols in the adult ICU.

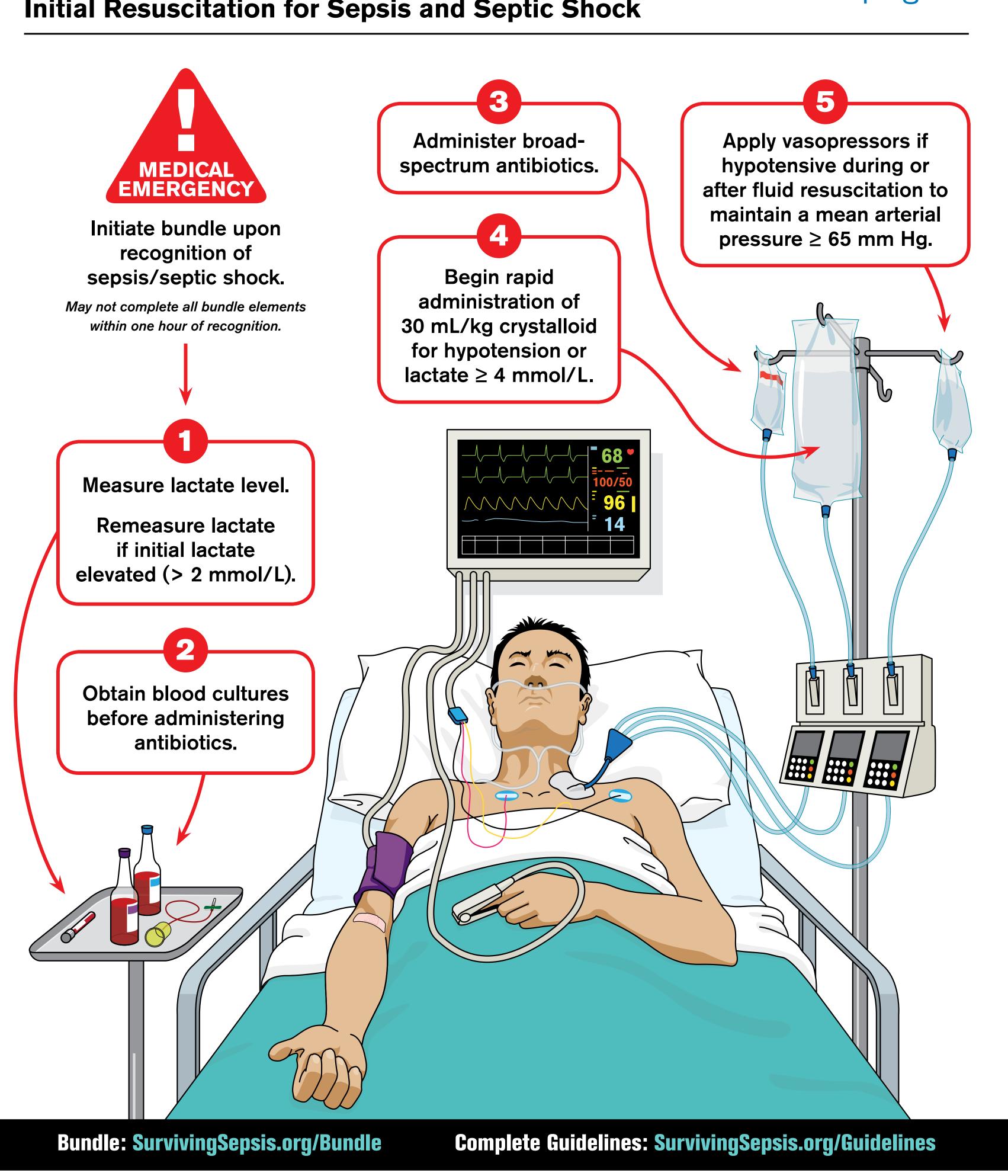
Methodology

- A sample of existing adult ICU sepsis protocols and policies was collected from 11 acute care facilities belonging to a large northeast hospital system with the aid of an online survey tool via an encrypted email server.
- A one-page consent was included with the online survey that allowed for the utilization of information for the purpose of the project.
- The results from the questionnaire were compiled in a table.
- A strategic plan for the implementation of a nurse driven sepsis protocol for the adult ICU was developed and presented to ICU stakeholder at an urban, teaching hospital.

Hour-1 Bundle

Initial Resuscitation for Sepsis and Septic Shock





Results

- Survey response rate is 81%
- Within 9 facilities, several variations of sepsis policies and protocols exist
- Only 1 facility follows a nurse driven sepsis protocol
- All facilities follow house wide sepsis protocols and policies
- None of the facilities follow sepsis protocol specific to adult ICU
- All facilities follow evidence-based sepsis guidelines
- 66% of policies and protocols received were 5 years or older

Clinical Implications

A 1-hour nurse driven sepsis protocol for the adult ICU was created and may potentially:

- decrease the delays in sepsis treatment
- decrease patient morbidity and mortality
- increase staff collaboration and compliance
- decrease hospital costs Ways to prevent delays in care:
- Point of care lactate level draw
 - easy and fast to obtain
 - decreases lab delays
- Sepsis antibiotic kit located in medication pyxis
 - decreases pharmacy delays
- Potential to streamline sepsis treatment in adult ICUs across the system



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