

Background

Complications of Fluid Overload

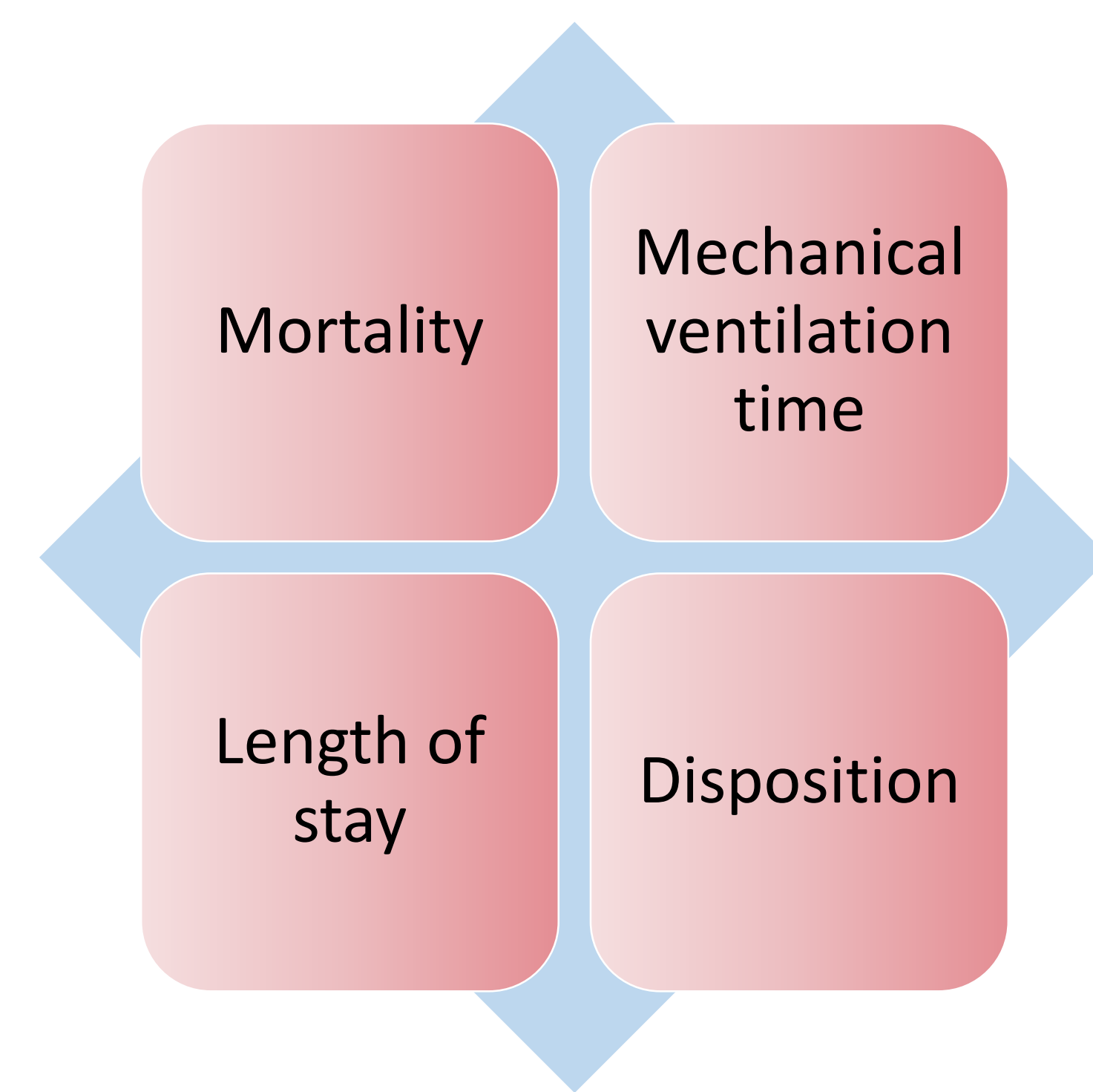


Figure 1: Fluid overload is common within the intensive care setting and is known to cause pathophysiologic alterations and negative patient care outcomes

Fluid Stewardship

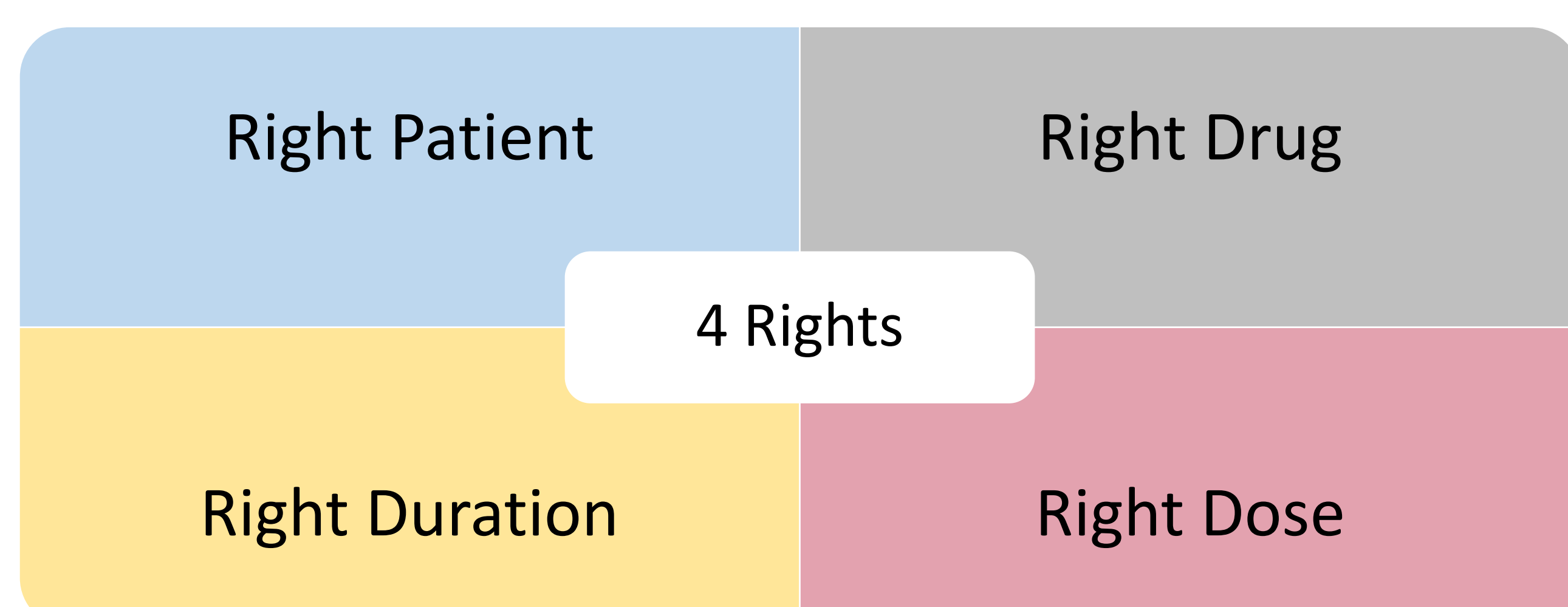


Figure 2: Pharmacists play a key role in fluid stewardship in critically ill patients including evaluation of need of resuscitation, determining proper fluid choice, assessing volume status, and determining resuscitation volume

ROSE Curve for Timing of Fluid Interventions

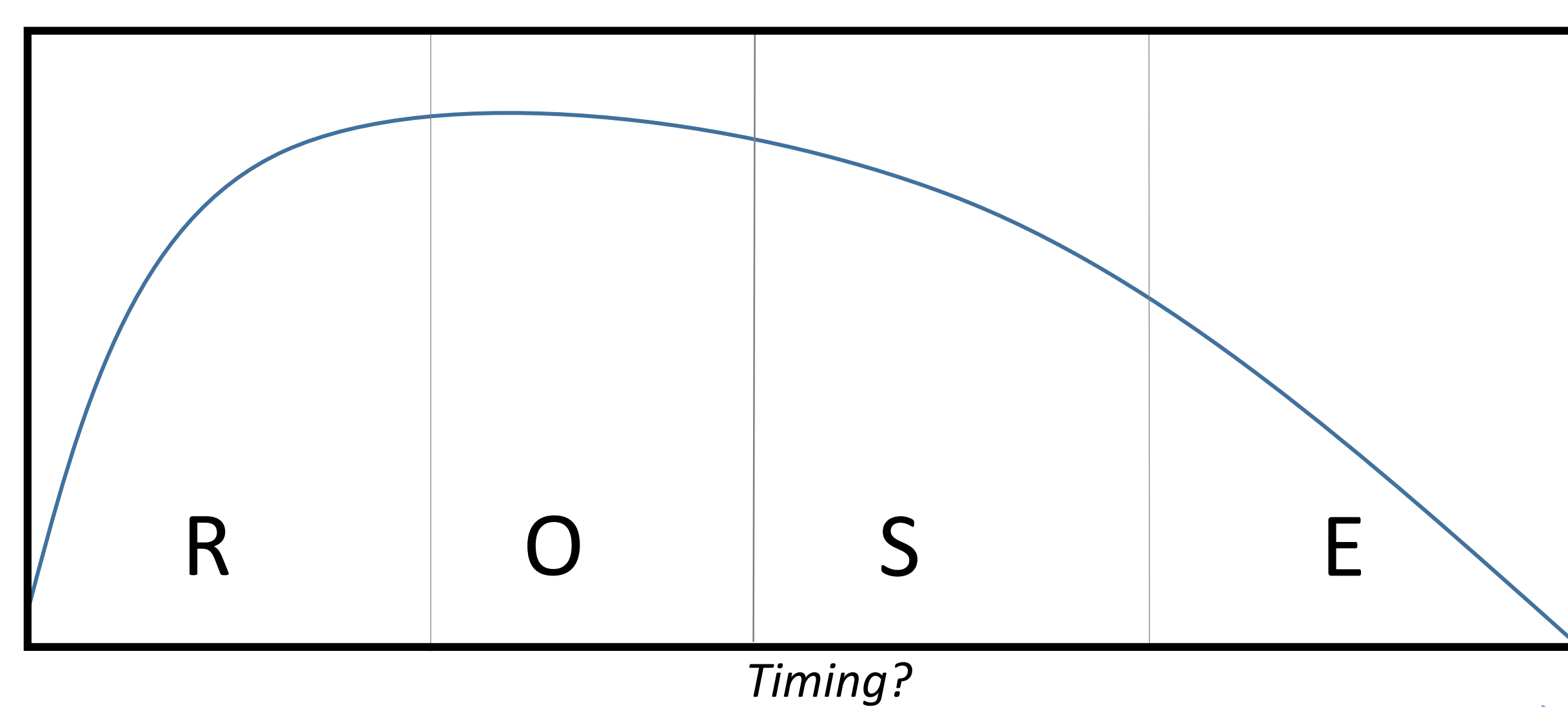


Figure 3: Prospective identification of patients at risk for fluid overload may help optimize timing of clinical interventions for pharmacists

MRC-ICU Scoring Process

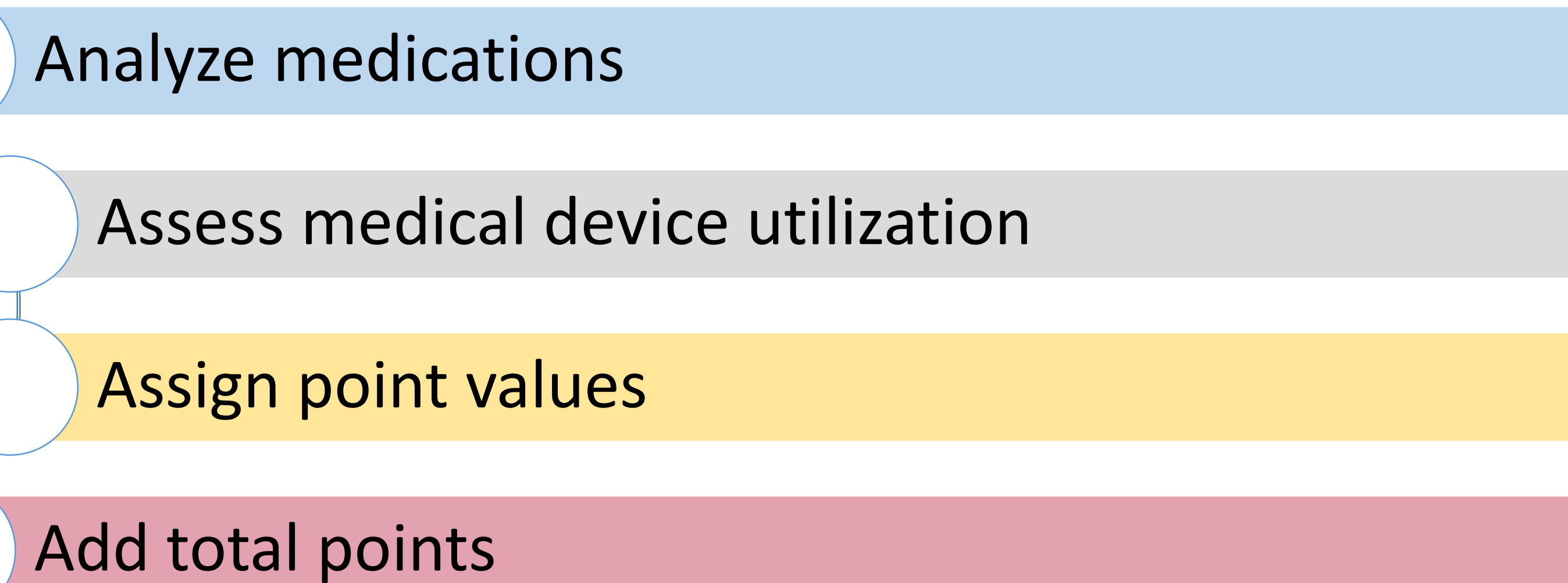


Figure 4: The MRC-ICU scoring tool measures medication regimen complexity and may be able to predict patients in highest need of fluid stewardship

Investigator Team

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A direct correlation between the MRC-ICU score and fluid balance in the intensive care setting is expected



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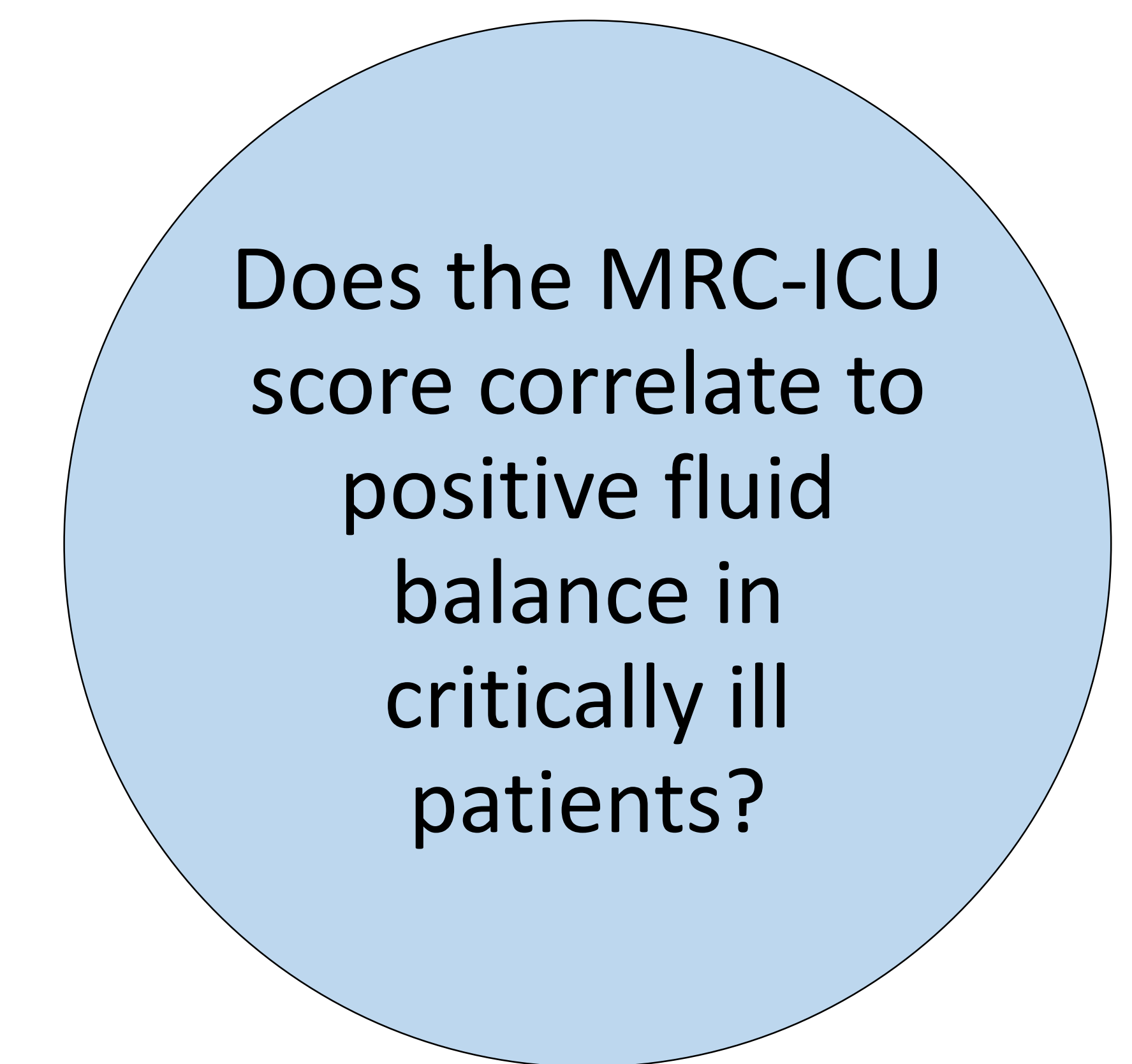


HealthCare

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Study Design

Hypothesis



Methods

- Patients admitted to the medical intensive care unit between January 1 2017 and April 2018 were included
- Inclusion criteria will consist of patients aged 18 years or older, admitted to the intensive care unit for over 72 hours
- Total fluid volume and specific IV medication administration data will be collected for the first three intensive care unit days
- Data will be collected via chart review of the electronic medical record with an expected population of 50 patients
- Demographic information, including patient age and gender, will be collected. Descriptive and inferential stats will be used as appropriate. Sample size was estimated to be 50 patients.

Future Implications

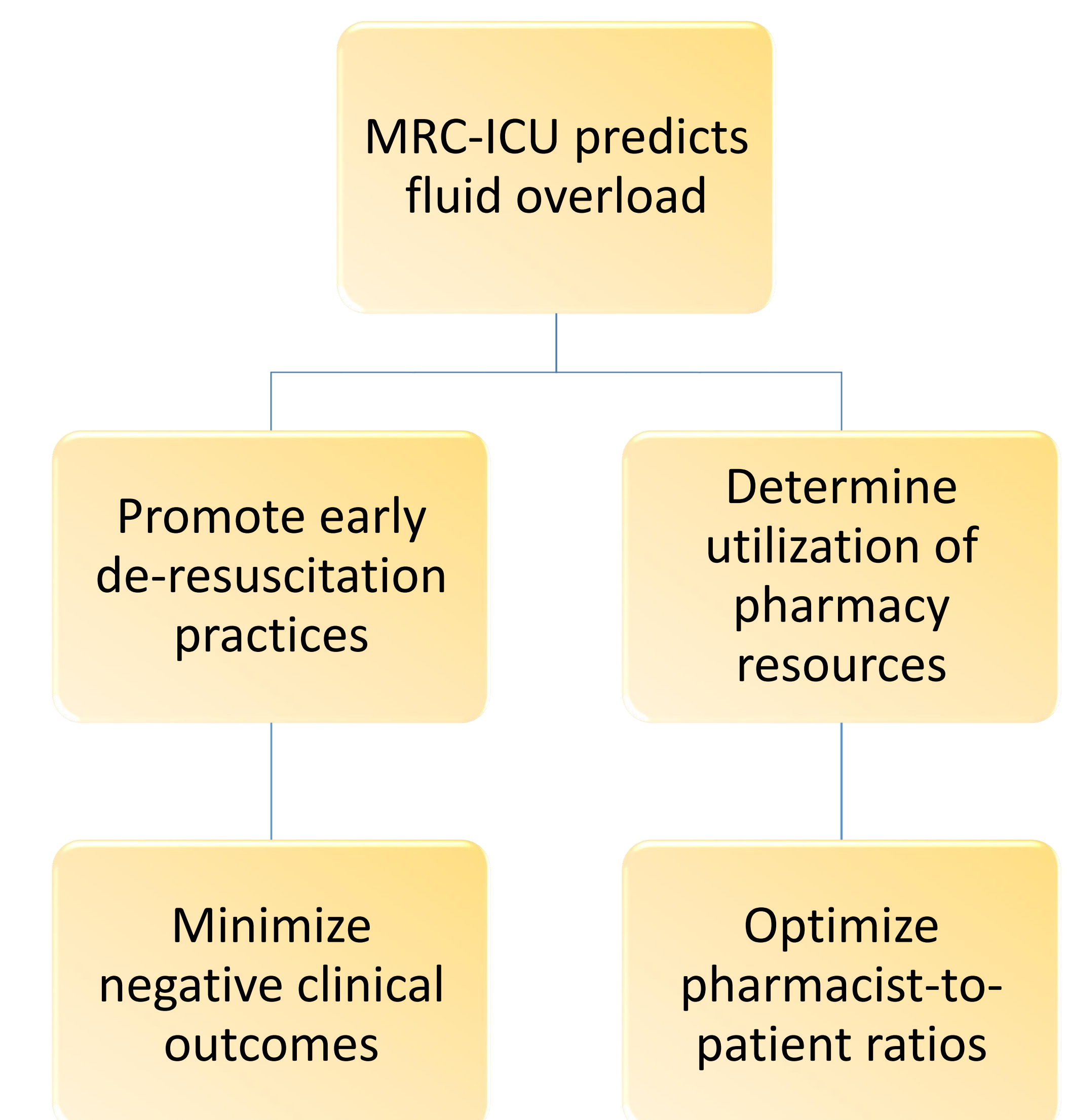


Figure 5: Accurately predicting fluid overload in ICU patients may help minimize negative patient outcomes and optimize pharmacist workflow.

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