Perfusing the Pancreas: A Quality Improvement Project to Optimize Pancreatitis Management in a Tertiary Academic Center

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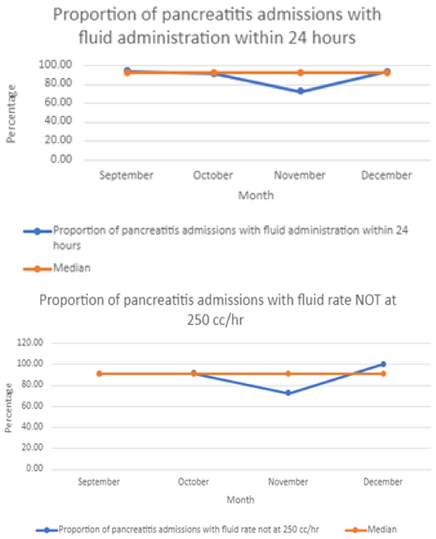
Aim Statement

Identify trends and barriers to guideline-directed resuscitation in pancreatitis and improve the proportion of patients resuscitated with at least 250 cc/hr of IV fluids.

Background

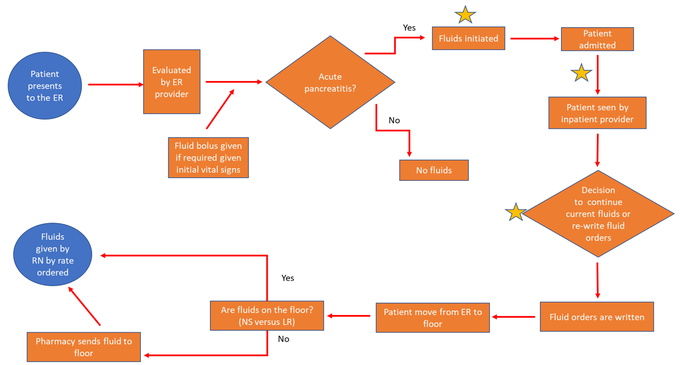
- Acute pancreatitis (AP) is one of the leading gastrointestinal (GI) causes for hospitalization.
- Numerous studies have addressed the role of early fluid resuscitation and nutrition initiation in reducing the morbidity and length of stay associated with AP. Multiple GI societies have developed guidelines on the optimal management of AP.
- At our institution, we have observed AP management that differs from the guidelines.
- We aim to identify the trends in the management of AP and the barriers to guideline adherence. We plan to use this data to enact systematic interventions that improve adherence to guideline recommendations.

Baseline Conditions

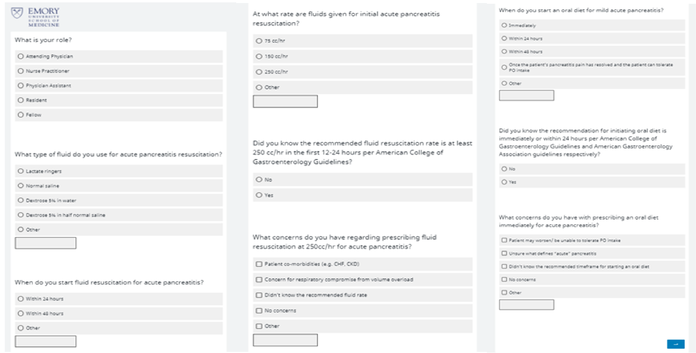


- To establish a baseline for our intervention, we evaluated all patients hospitalized with a diagnosis of acute or acute-on-chronic pancreatitis (ACP) from September to December 2021.
- Nearly all hospitalized patients received intravenous fluids within the first 24-hours of admission. However, by a similar percentage, the patients were not resuscitated with fluids at a rate of 250 cc/hr.

Methods/Analysis

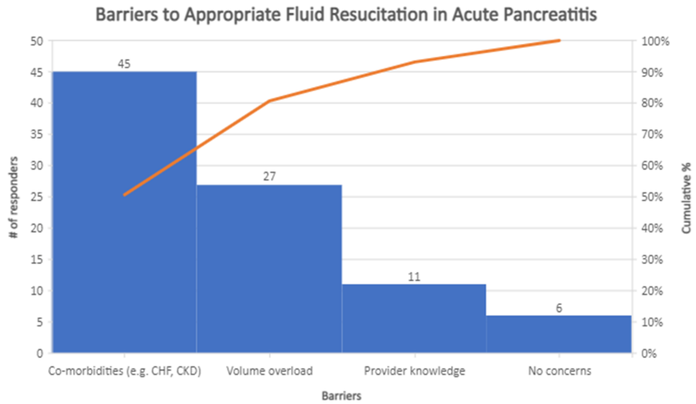


A process map was developed to identify areas for improvement in our hospital's management of pancreatitis.

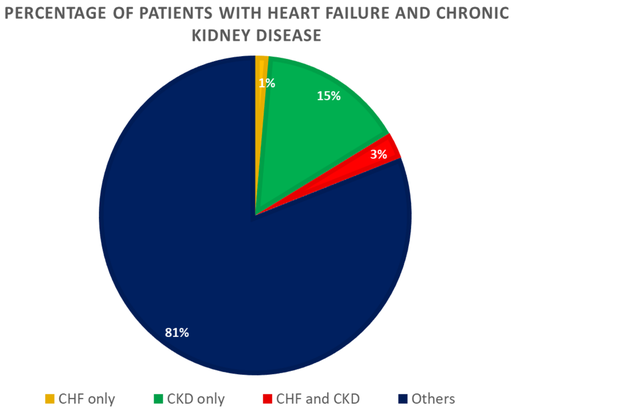


A survey was sent to hospital medicine and teaching teams to identify potential barriers to achieving guideline-directed resuscitation in pancreatitis.

Results



Our survey results by Pareto analysis demonstrated that a concern for patient comorbidities and volume overload were the primary barriers to meeting guideline-directed fluid resuscitation.



Our secondary analysis demonstrated that a significant majority of patients admitted with pancreatitis do not have comorbidities like CHF or CKD that would predispose to volume overload.

Future Directions

1) Volume overload is a significant concern in acute pancreatitis. As new literature emerges on the appropriate resuscitation for pancreatitis we may need to update our aim to reflect this and other future developments.
2) Utilize our hospital's new EMR to create a Smartphrase with AP resuscitation guidance and conduct a Plan-Do-Study-Act (PDSA) Cycle with our updated aim.

References

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