Early Implementation of CHF Orders and Physician Education

Qazi Haider DO, Tapannita Padhi DO, Hunter Thornberg DO, Barry Brown DO, Alexandra Villacres MD

Background

- The 2013 ACCF/AHA guidelines on the management of heart failure describe several self-care regimens to assist patients in monitoring their symptoms of heart failure. These include fluid and sodium restrictions, daily weight monitoring, physical activity, and medication adherence. Educating patients on the importance of these self-monitoring regimens has been shown to improve outcomes and reduce days of hospitalization. [1,2]

- For example, a systematic review of 35 educational intervention studies for patients with HF demonstrated that education improved knowledge, self-monitoring, medication adherence, time to hospitalization, and days in the hospital. In fact, it was discussed that patients educated in all 6 categories of the HF core measures from The Joint Commission were significantly less likely to be readmitted for any cause, including HF. The six categories are activity, weight, diet, discharge medications, follow-up appointments, and worsening symptoms. [3] This highlights the significance of implementing strict fluid restrictions and daily weight monitoring when inpatient to help reduce the length of hospitalizations for patients admitted with acute decompensated heart failure.

Objective

The objective of this quality improvement project is designed to optimize management for patients admitted to Medical City Weatherford for congestive heart failure exacerbations by early placement of CHF related orders to EHR and educating resident physician on the availability of CHF order sets in the EHR.

Cause and Effect

This initiative aimed to increase the early implementation of CHF orders such as daily weights and fluid restrictions through the use of visual cue cards and resident physician education regarding CHF order sets. This was in efforts to reduce length of stay for CHF exacerbation patients and improve overall treatment response.

Prior to the implementation of our QI strategies usage of CHF order sets was 39%, in comparison to 69% amongst MCW resident physician. This was gathered through polling done three weeks after the initial educational session. In addition to these findings, senior residents also reported increased accuracy of orders from first year residents.

The implementation of these strategies and increased resident physician participation will need further investigation through retrospectively reviewing CHF exacerbation patients in order to further assess impact on length of stay.

Results

Resident Physicians Response to CHF Ordering Education

<table>
<thead>
<tr>
<th>Use of CHF order set and Diet Modifiers before QI strategies</th>
<th>Use of CHF order set and Diet Modifiers after QI strategies</th>
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<tbody>
<tr>
<td>Yes: 32</td>
<td>Yes: 14</td>
</tr>
<tr>
<td>No: 14</td>
<td>No: 25</td>
</tr>
</tbody>
</table>

Discussion

PDSA Strategic Implementation

Plan: Defining the need for CHF exacerbation management education in the form of visual reminders and resident physician education

Do: Successfully providing cue cards at physician work stations and demonstrating order sets in Meditech to resident physicians.

Study: Prior to implementation of these strategies the usage of the CHF order set and fluid restriction diet modifiers among resident physicians vs. subsequent usage after QI strategies

Act: Retrospectively review CHF exacerbations to assess increased resident CHF orders education and decreased length of stay.

Conclusion

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References

