Effectiveness of Ultrafiltration on Patient Outcomes
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Problem:
Heart failure is the most frequent cause of hospitalization for those over age 65 and is the leading cause of recurrent hospitalization. Ultrafiltration (UF) has become an appropriate treatment of volume overload in patients with decompensated heart failure. Quality/risk data, Clinical Nurse Specialist, and nurse administration concerns about costs and patient outcomes led to an EBP project to identify best practice.

Evidence:
The EBP team conducted a comprehensive review of literature to identify current ultrafiltration EBP. Research states that ultrafiltration safely produces greater weight and fluid loss than intravenous diuretics, reduces 90-day resource utilization for heart failure, and is an effective alternative therapy for heart failure patients.

Strategy:
The IOWA Model of EBP (Tiler et al, 2001) was used to guide the project.

Practice Change:
Charts of patients with renal failure or congestive heart failure who had ultrafiltration therapy were reviewed for specific outcomes such as overall cost, length of stay, wait time to receive ultrafiltration and readmission within 30 days after receiving ultrafiltration.

Evaluation:
Current policy states that patients who receive ultrafiltration must be admitted to the critical care unit. Review of the data revealed that admission to a critical care unit is costly to both the patient and the institution. The recommended practice change is to perform ultrafiltration as an outpatient if patient meets specific criteria.

Results:
Review of 44 charts identified that lack of adequate central line access was a barrier to patients receiving treatment in a timely manner which adds to the overall costs to both the patient and institution. Sixty-five (65) percent of the patients were not readmitted to the hospital within 30 days after receiving ultrafiltration.

Recommendations:
Incorporate evaluation measures into on-going audits to determine long-term costs, readmission rates, and length of stay.
Lessons Learned:

- Access to central line is a barrier to patient receiving ultrafiltration in a timely manner
- Ultrafiltration should be performed as outpatient if patient meets criteria

Bibliography:


