Clarion Interprofessional Case Competition

Transplant Confusion at Southview Hospital

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Presentation Overview

- Southview Hospital Background
- Case Summary
- Analysis of Major Issues
- Recommendations
- Finances
Southview Hospital Background

- 525 beds not-for-profit hospital in Tampa, FL
- 30% of patient rooms are private
- 7 Primary care clinics
- 60% of patients not seen at one of its 7 clinics
- Recognized for stroke and heart care
- Computerized outpatient medical records
- Clinic labs visible to hospital
Southview Hospital

Mission
To improve the health and quality of life for the people it serves, in a manner that exceeds expectations of patients and visitors through:

Respect

Collaboration

Integrity

Service excellence
Case Summary:

Assessment

- JB diagnosed with acute renal failure
- Patient history unattainable, his wife was not present to provide information
- JB was ruled out as a transplant candidate
Case Summary:

Interventions

- Alcohol withdrawal protocol initiated
- Paracentesis performed
- Attempted placement of femoral catheter
Case Summary:

Interventions

- Multiple units of fresh frozen plasma given over first six days of hospitalization

- Quenton catheter placed in interventional radiology and dialysis initiated on day seven
Case Summary:

Outcomes

- JB experiences complications during dialysis on the fourteenth day of his hospital stay

- He transfers to the intensive care unit, is intubated, arrests, and dies
• JB’s wife confides to ICU staff the he would not have wanted any more invasive procedures, and that he wanted to die at home with his family.
JB’s Hospital Stay

Day 1
JB admitted
Paracentesis and
CIWA score of 12

Day 2
Transplant candidacy declined and fell trying to get to bathroom.

Day 4
Sitter and FFP
given before paracentesis

Day 5
Wife informed that JB is not a transplant candidate

Day 6
Paracentesis and femoral line attempted

Day 7
Dialyzed 3.5L

Day 8
Dialyzed and less confused

Day 11
Care conference

Day 14
Cardiac arrest and death
Where Checks and Balances Failed

Appendix I

Patient history and consent not fully obtained

Assumption made about confused patient

Care is shuffled among many staff

Communication and teamwork barriers

Patient not treated with a holistic approach

Insufficient communication between staff and patient

No protocol, algorithms or diagnoses key’s in place for kidney dysfunction

DNR/DNI poorly communicated to the patient

Sitter not assigned until after fall

Staff training not sufficient

Undignified Death
Major Issues

• Communication Barriers
  ▪ Staff to staff
    • Nurse to Nurse
    • Nurse to Nephrologist
    • MD to Nurse
    • MD to Pharmacist
    • MD to Specialist
  ▪ Staff to family/patient
    • MD to wife
    • Gastroenterologist to Wife
    • No care conference until Day Eleven
  ▪ Data entry
    • HUC
    • Dictation
    • Direct verbal
Major Issues

- Quality of care
  - Diazepam was given with hepatic and renal failure present
  - Foley catheter placement delayed
  - Sitter not ordered until after a fall
  - Pulled out IV line in spite of sitter present
  - Nephrologist accidentally cannulated the right femoral artery
Mission Shortcomings

• **Respect** – We did not respect the wishes of JB to pass away at home.

• **Collaboration** – We did not include JB and his wife on decision making about his care.

• **Integrity** – We did not follow the highest ethical practices in all decisions and care for JB.

• **Service excellence** – We did not provide the highest quality care in all aspects of JB’s care.
Recommendations

To Err is Human…(1999)

At Least **44,000** and as many as **98,000** Americans die each year as a result of medical errors.

Compared to….

Motor Vehicle Accidents-43,458
Breast Cancer-42,297
AIDS-16,516
Recommendations

Clinical and Administrative leadership must apologize to Mrs. Benson.

• Be open, honest, and empathetic.
• Explain what went wrong and why.
• Detail actions taken by hospital to prevent future incidences from occurring.
• Listen to Mrs. Benson and be proactively involved in her grieving process.
Recommendations

Complete EMR Implementation Immediately

• Physician access to patient records from clinics
• EMR components
  • Computerized Patient Order Entries
  • Master Patient Index
  • Decision Making Tree with Alerts
Recommendations

Staff Training & Education Programs

• Error Identification & Prevention Program yearly

• Interdisciplinary Teamwork & Communication Training yearly

• Further Education as needed if Quality Measures are not being met
Recommendations

Designate a primary nurse to be the care coordinator/case manager to:

• Arrange and lead care conferences as needed based on patient’s progress & updates

• Ensure areas are covered by following the Care Conference Checklist (See Appendix III) & information is conveyed appropriately

• Use Case Management guidelines (See Appendix IX)
Recommendations

Develop Treatment Algorithms for Key Diagnosis

- Example: See Appendix II
Recommendations

Protocol modification for CIWA & Sitter
(See Appendix VI & VII)

• Add alcohol level to CIWA assessment

• Considerations for clinicians on CIWA that state other factors (i.e. kidney failure) that may contribute to similar symptoms of alcohol withdrawal

• Chart-the nature of symptoms expected depending on blood alcohol level
Recommendations

Protocol modification for CIWA & Sitter
(See Appendix VI & VII)

• Require using the Confusion Assessment Method (CAM) & Mini Mental State Exam (MMSE) to diagnose confusion/altered state of consciousness

• Nurses/Physician-assess at admission, consider sitter if positive on CAM & results on MMSE Score
Financial Performance

- Increase in revenue greater than increase in expenses.
- Percentage of revenue from operations increasing.
- Total margin decreased – 41.5%.
- Non operating gains fell by -74%.
Financial Performance

- Financial resources available to implement recommendations.
- Net assets increased to $8.7 million.
- Over $145 million restricted by board for capital improvements.
- Board dispersed less than $2 million for capital improvements.
Finances:
Complete the EMR Immediately

- 55% reduction in serious medication errors (Bates)
- Compliance with recommended orders increased from 21.9% to 46.3% (Overhage)
- 23% increase in revenues following EMR implementation (Citizens Memorial Hospital)

<table>
<thead>
<tr>
<th>Estimated Cost of EMR: External Vendor Install</th>
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<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Total One-Time Capital</td>
</tr>
<tr>
<td>Total One-Time Operating</td>
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<tr>
<td>Total Implementation Cost</td>
</tr>
<tr>
<td>Total Annual OnGoing Cost</td>
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</tbody>
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Develop Staff Training Programs

- Error Identification and Prevention Program
  - Annual requirement for all staff
  - Additional training required if quality indicator metrics are not met

- Interdisciplinary Teamwork and Communication Program
  - Annual requirement for all staff

<table>
<thead>
<tr>
<th>Hospital Staff Composition</th>
<th>Number of Staff Attending Training</th>
<th>Length of Training Program (Hrs)</th>
<th>Cost of Training Program ($)</th>
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<tr>
<td>Physicians</td>
<td>500</td>
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<td>$124,443.57</td>
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<tr>
<td>Nurses &amp; Other Clinical</td>
<td>1250</td>
<td>1.5</td>
<td>$135,840.08</td>
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<td>Administrative (Business Operation Specialist)</td>
<td>2450</td>
<td>1.5</td>
<td>$102,226.73</td>
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Total 4200 $362,510.38
Recommendation Cost Summary

- Strong financial performance from higher patient volume and higher charges
- Larger patient volume underscores the need for EMR and training programs.
- Only $1.8 million board restricted investments spent to date for EMR implementation.
- Hospital’s surplus and BDICI are adequate for implementing recommendations
- PATIENT SAFETY MUST BE LEADERSHIP PRIORITY- ACT NOW

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Estimated Development &amp; Implementation Cost</th>
<th>Previous Hospital Investments</th>
<th>Remaining Implementation Investment Required</th>
<th>Ongoing Annual Costs</th>
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<tr>
<td>Complete EMR Implementation</td>
<td>$17,000,000</td>
<td>($1,830,146)</td>
<td>$15,169,854</td>
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<td>Error Identification and Prevention Program</td>
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<td>$0</td>
<td>$362,510</td>
<td>$353,127</td>
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<tr>
<td>Interdisciplinary Teamwork and Communication Training</td>
<td>$362,510</td>
<td>$0</td>
<td>$362,510</td>
<td>$353,127</td>
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<tr>
<td><strong>Total Cost of Recommendations</strong></td>
<td><strong>$17,725,021</strong></td>
<td><strong>($1,830,146)</strong></td>
<td><strong>$15,894,875</strong></td>
<td><strong>$2,706,254</strong></td>
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Southview Hospital

Mission

To improve the health and quality of life for the people it serves, in a manner that exceeds expectations of patients and visitors through:

- **Respect** for the inherent dignity of patients and their families
- **Collaboration** with patients, families and providers to achieve common goals
- **Integrity** to ensure all decisions and care are provided with the highest ethical practices
- **Service excellence** in all aspects of care
Questions?
References

- A Curriculum Guide for Teaching Medical Students and Family Practice Residents- [www.nymc.edu/fammed/medicalerrors.pdf](http://www.nymc.edu/fammed/medicalerrors.pdf)
- Minnesota Department of Health [http://www.health.state.mn.us/divs/hpsc/dap/hccis/stndrdrpts.html#out](http://www.health.state.mn.us/divs/hpsc/dap/hccis/stndrdrpts.html#out)
References

•Swiss Cheese Model. http://www.webmm.ahrq.gov/media/cases/images/cheese.jpg
•To Err is Human (2000). Institute of Medicine (IOM) http://books.nap.edu/openbook.php?record_id=9728&chapselect=yo&page=26
References

• Smita Patel, RPh, Abbott Northwestern Hospital
• Bonnie L. Westra, PhD, RN-School of Nursing, U of M
• Christine Mueller, PhD, RN-School of Nursing, U of M
• Nick Smith, 2007 MHA Candidate, U of M