Transradial Access Chair Recovery Decreases Length of Stay

Purpose of study/project
To evaluate the impact of recovery in a recliner versus a cart on length of stay after transradial artery access

Background/Significance
• Transradial artery access rates for procedures have grown in the last decade (Dugas & Schussler, 2016)
• At our institution volume increased from 18% in 2015 to 31.5% in 2017
• Due to increase, decision was made to explore options for optimization of patient flow while improving patient experience
• Previously, transradial access patients recovered on a cart in a private room with a sterile, clinical atmosphere
• Leadership felt this led to patient perception of ill health and prolonged recovery
• Transradial artery access recovery does not require bedrest (Bonnett, Becker, Hann, Haynes, & Tremmel, 2015)

Sample and setting
• Sample
  – Cardiac catheterization patients scheduled for transradial artery access
  – Discharged home the same day
• Setting
  – 620 bed, urban, Magnet-recognized quaternary medical center in the Midwest
  – 41 bed Pre-post procedure area with individual rooms for recovery

Methods
• Transradial artery access candidates were randomly assigned to a room with a reclining chair versus a room with a cart
• Chair rooms were redecorated with furniture, lighting and blankets to create a home-like atmosphere for patient comfort
• Post-procedure length of stay was compared to usual care
• Length of stay was defined as time returned to post-procedure unit to time of discharge
• Collaboration between the procedure area and post-procedure area was integral to successful patient selection and data collection
• Follow-up phone calls made within 72 hours after procedure included additional questions related to comfort, satisfaction and historical approach

Findings/Results/Outcomes
• Data collected between 4/17/17 to 6/1/17

<table>
<thead>
<tr>
<th>Total Number of Radial Cases Surveyed</th>
<th>88</th>
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</thead>
<tbody>
<tr>
<td>Number of Radial Cases – Cart</td>
<td>52</td>
</tr>
<tr>
<td>Average Time to Discharge</td>
<td>4.08 hours</td>
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<tr>
<td>Number of Radial Cases – Chair</td>
<td>36</td>
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<tr>
<td>Average Time to Discharge</td>
<td>3.42 hours</td>
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<tr>
<td>Time Savings with Radical Room</td>
<td>26 minutes per patient</td>
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<tr>
<td>Total Nursing Time Saved</td>
<td>15.38 hours</td>
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Feedback from follow-up phone calls reflects
• A potential correlation with increased satisfaction
• Recovery using the chair method was preferred by patients

Implications
• Improved patient experience with chair recovery
• Provides patients a comfortable, calming environment with more freedom of movement
• The use of a recliner room has the potential to increase capacity and throughput by decreasing recovery time and nursing time
• The rooms have now been expanded for the use with same day percutaneous coronary intervention (PCI) patients and other patient populations that do not require a cart for recovery

References

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