



## Rest & Recovery: An Approach to Improving Patient Sleep Quality

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2017 National Association of Clinical Nurse Specialists

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## Disclosures



The presenter(s)

Have "No Relevant Financial Relationships with Commercial Interests"

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## UCLA Medical Center



- ❖ UCLA is a level 1 trauma center
- ❖ 520 private patient rooms
- ❖ Independent accredited hospitals located within the medical center
  - ❖ Resnick Neuropsychiatric hospital
  - ❖ Mattel Children's hospital



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## Significance & Background



- ❖ Sleep is essential for physical and psychological wellbeing
- ❖ Sleep deprivation can lead to:
  - Delirium
  - Derangements in multiple organ systems
  - Delayed healing & recovery
- ❖ May contribute to increased hospital lengths of stay
- ❖ Patient dissatisfaction attributed to sleep interruptions at night

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## Project Goal & Objectives



- ❖ The goal of the Rest and Recovery project is to provide a restful and healing environment
- ❖ Improve the patient experience by minimizing sleep interruptions

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## The Patient Voice



- ❖ Patient & caregiver interviews (n=17)
- ❖ Major source of dissatisfaction: frequent interruption of patients' rest
- ❖ Press-Ganey patient satisfaction survey: quietness at night = 46<sup>th</sup> percentile rank

1. Distractions from clinical care

"It's not just the nurses. So many people come in."

2. Disruptions to recovery

"Nurses kept coming every hour."  
"The beeping does not stop."

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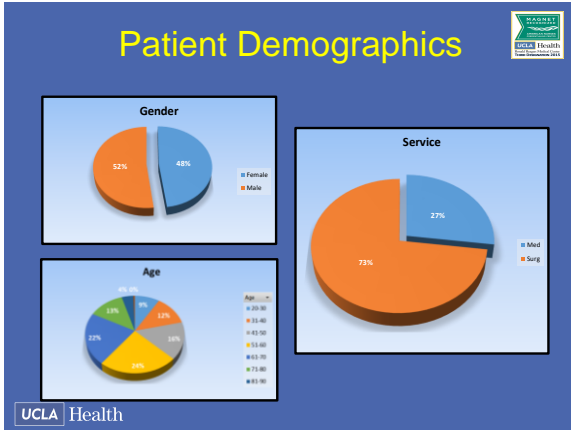
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### Methodology & Plan

- ❖ Interprofessional team of nurses, surgeons, laboratory personnel
- ❖ Lean Six Sigma methodology for quality improvement
- ❖ Outcomes measured at 90 day, 6 month, 1 year
- ❖ **Go Live** October 16, 2016 on two acute care surgical units

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### Goals

- ❖ Reduce number of labs encounters between 2300-0400 by  $\geq 10\%$
- ❖ Increase patient satisfaction for "quietness of the hospital environment at night" by 10 percentile points
- ❖ Reduce rates of Altered Mental Status (AMS)
- ❖ Reduce Length of Stay (LOS)

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## Intervention



- ❖ Education: Nursing, physician, ancillary staff
- ❖ Rest & Recovery sleep hours 2300-0400
- ❖ Quiet hour signs
- ❖ Lab draws after 0400
- ❖ Noise reduction
- ❖ Bundling care interventions to minimize sleep interruptions
- ❖ Sleep quality evaluation on daily interdisciplinary rounds

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## Rest & Recovery Signs



<p><b>Rest &amp; Recovery Checklist</b></p> <p><b>Day Shift</b></p> <p><b>Night Shift</b></p> <p><b>Signs and Symptoms</b></p> <p><b>When to call your nurse</b></p> <p><b>Please be mindful of your conversations and noise levels during this time.</b></p> <p>UCLA Health   © 2014 UCLA Health</p>	<p><b>Quiet Please</b></p> <p><b>Healing in Progress</b></p> <p>Quiet hours are from 11 pm to 4 am.</p> <p>During this time, please help us create a healing environment!</p> <p>UCLA Health   © 2014 UCLA Health</p>	<p><b>STOP</b></p> <p><b>Rest &amp; Recovery in progress 11 pm to 4 am</b></p> <p>Please check with nurse before entering room</p> <p>UCLA Health   © 2014 UCLA Health</p>
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## Standard Nursing Workflow



Standard Nursing Workflow	
<ul style="list-style-type: none"> <li>❖ Optimize the environment                             <ul style="list-style-type: none"> <li>○ Wear quiet shoes</li> <li>○ Speak/talk quietly</li> </ul> </li> <li>❖ Report faulty/noisy equipment                             <ul style="list-style-type: none"> <li>○ Door hinges</li> <li>○ Trolley wheels</li> </ul> </li> <li>❖ Ensure appropriate lighting                             <ul style="list-style-type: none"> <li>○ Close blinds at night</li> <li>○ Use low lighting in the room</li> </ul> </li> <li>❖ Readjust time of interventions to avoid quiet hours</li> </ul>	<ul style="list-style-type: none"> <li>❖ Address &amp; manage pain</li> <li>❖ Administer sleep medications when ordered, before 2300</li> <li>❖ Round hourly at night without disrupting patient's rest                             <ul style="list-style-type: none"> <li>○ Visually inspect for safety</li> </ul> </li> <li>❖ Include patient evaluation of sleep on interdisciplinary rounds &amp; shift handover</li> </ul>

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## Outcomes



Metric	Target	Baseline	90-days	180-days	Results at 180-days
% R & R patients	≥40%	0%	44%	38%	38%
Lab encounters	≥10%	928	793	708	↓24%
Quietness at night	↑10 percentile points	46 <sup>th</sup> percentile	73 <sup>rd</sup> percentile	69 <sup>th</sup> percentile	↑23 percentile points
Altered Mental Status	n/a	14.88%	12.24%	12.33%	↓17.4%
Length of Stay	n/a	7.5 days	7.0 days	6.8 days	↓0.7 days
Bed Days Saved	n/a	n/a	414 days	1045.1 days	1045.1 days
Case Mix Index	n/a	2.11	2.24	2.14	↑0.03

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## The Patient Voice



- ❖ R & R patients (n) = 153.
- ❖ Non \$ & \$ patients (n) = 231
- ❖ 52.38% of R & R patients that had 6+ hours of sleep
- ❖ 76.47% of R & R patients rated sleep quality **Greater Than 3**, compared to:
- ❖ 54.11% of non R & R patients rated their sleep quality **Greater Than 3**

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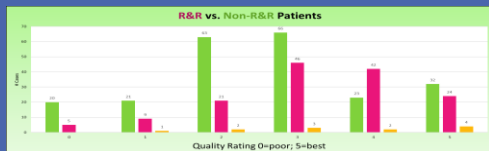
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## Sleep Outcome



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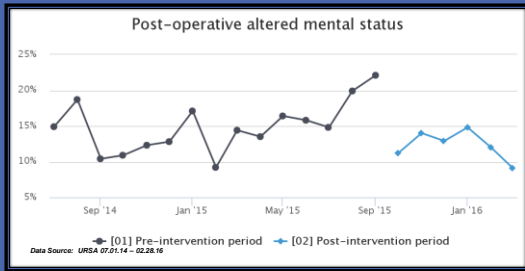
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# Altered Mental Status



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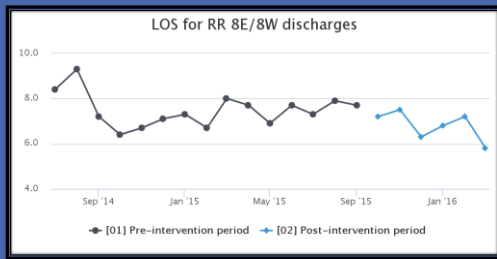
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# Length of Stay



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# Impact & Next Steps



- ❖ Positive outcomes disseminated system-wide
- ❖ System sleep committee convened to expand program
- ❖ Patient satisfaction scores continue to improve
- ❖ Rest & Recovery fully enculturated

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Thank You



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## References



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