Session objectives

- Describe a new theory to address the HCAHPS Quiet at Night measure
- List the methods used by one organization to improve patient sleep and healing
- Develop an action plan to improve the Quiet at Night measure in their own organization
IHI is an independent not-for-profit organization based in Cambridge, Massachusetts, is a leading innovator, convener, partner, and driver of results in health and health care improvement worldwide.

Planetree, Inc. is a mission based not-for-profit organization that partners with healthcare organizations around the world and across the care continuum to transform how care is delivered. Powered by over 50,000 focus groups with patients, families, and staff, and over 37 years of experience working with healthcare organizations, Planetree is uniquely positioned to represent the patient voice and advance how professional caregivers engage with patients and families.

Griffin Hospital is a 160-bed acute care community hospital serving more than 130,000 residents of the Lower Naugatuck Valley Region with a mission to:
- Provide personalized, humanistic, consumer-driven healthcare in a healing environment.
- Empower individuals to be actively involved in decisions affecting their care and well-being through access to information and education.
- Provide leadership to improve the health of the community served

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### Our work together

- **Pilot the aim of “sleep” and the conceptual framework—content and methods—in one unit with a design for “spread” in other units**

- **Activities:**
  - Weekly check-ins with team leaders
  - Onsite meeting to support early testing and spread
  - Resources to guide work (e.g., measurement plan)
  - All-team conference calls
  - Executive briefings
The “Quiet at Night” dilemma

All improvement requires change, but **not all change** leads to improvement.
Two similar, but different aims

Lose Weight

Be Healthy

The risks of satisfaction

“A nurse at the New Jersey hospital lacking Splenda said, ‘This somehow became the fault of the nurse and ended up being placed in her personnel file.’ “

The Cost of Satisfaction

A National Study of Patient Satisfaction, Health Care Utilization, Expenditures, and Mortality

Joshua J. Fenton, MD, MPH; Anthony J. Jaccard, MD; Kesa O. Gertzbein, MD, MPH; Peter Flores, MD

Respondents in the highest patient satisfaction quartile (relative to the lowest patient satisfaction quartile):
- higher odds of any inpatient admission
- greater total expenditures
- greater prescription drug expenditures
- higher mortality
Two similar, but different aims

“Quiet at Night”

Sleep

CONTRIBUTING FACTORS TO POST-HOSPITAL SYNDROME:

- sleep deprivation
- disruption of normal circadian rhythms
- poor nourishment
- poorly controlled pain and discomfort
- medications that can alter cognition and physical function
- deconditioning due to bed rest or inactivity

Readmissions: The boomerang effect


An outcome that matters to healing

Elevated levels of cortisol and other stress response hormones
Impaired wound healing and cellular immunity
Worsened cognitive functioning, including delirium, cognitive slowing and deterioration, and decreased motivation to task
Increased mortality

Diminished sleep
What matters to patients?

“I have said to the nurses, can’t you just do everything at the same time? If a patient is sleeping and it is 6 am they shouldn’t wake you up to take your blood pressure. You finally fall asleep and they wake you up. Everything is for them and not for you.”

“Our night nurse came in and asked if you want to sleep and rest instead of hourly checks. She explained some people want to be bothered and some like to sleep.”

“I was in ICU for 3 days after a heart surgery. You’d hear a roar and then laughter, it was a group of nurses. It was not funny that night. I thought about if I had a problem, who would help me? I was afraid. It’s not routine to a patient in ICU, even though it’s routine to them.”

What matters to staff?

From...

Aim: Improve percent of patients reporting their room is always quiet at night from 58% to 68% by March 31, 2017.

To...

Aim: Improve patients reporting they got 6+ hours of sleep per night from 30% to 60% by March 31, 2017.
Your turn

- In 2 minutes, reflect individually or turn and talk to your neighbor.
- Draft an aim statement that includes sleep, healing, or “why” for patients & families
  - What do you plan to improve?
  - By how much?
  - By when?
  - For what system?
  - Why?
- You’ll want to go back to your organization and vet this with your team and collect baseline data.

Key take-aways (reference)

- Consider whether to make sleep your aim.
  - Sleep has important implications for patient healing and (potentially) readmissions.
- Don’t let satisfaction be your only measure.
  - Consider adding patient-reported measures of health or engagement
  - Use qualitative measures that allow patients and families to provide feedback about their experience
- Make sure your leaders and staff understand and communicate the “why” behind any work on satisfaction. How will the work ultimately make life better for those you serve?

Aim to measures

Aim: Improve patients reporting they got 6+ hours of sleep per night from 30% to 60% by March 31, 2017.

Family of measures
Measures that matter

**Outcome Measures**
- Longest consecutive stretch hours of sleep
- Quiet at Night Scores
- HCAHPS scores
- Patient’s self-reported quality of sleep

**Process Measures**
- Number of times a person enters a patient’s room during quiet time
- Number of pre-quiet time check-ins
- Number of patients where sleep was discussed
- Number of patients with sleep goals

**Balancing Measures**
- Staff satisfaction/joy in work
- Workload
- Cost

Value of fast feedback
Data for improvement

% Patients Reporting 6 or More Hours

% Patients

0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

Interruptions per patient per night

Interruption

0
2
4
6
8
10
12

Your turn

- In 2 minutes, reflect individually or turn and talk to your neighbor.
- Draft a balanced set of measures to drive improvement in this area:
  - Outcome: What is the ultimate goal of improving the system?
  - Process: Are the parts/steps in the system performing as planned?
  - Balancing: Are there any unintended consequences to our improvement?
- How will you collect this data?
- What do you need to do to message “data for improvement” for others?

Key take-aways (reference)

- Make sure your measurement strategy matches your overall goal
- Identify “fast feedback” mechanisms to drive real-time improvement
  - Sleep
  - Interruptions
- Make sure staff understand the purpose of your measurement system to avoid people feeling “blamed” or incorrectly reporting data
- Start your efforts by collecting baseline data to show where your organization stands in some key areas
- Interview a handful of patients to identify quotes and qualitative data to support improvement ideas
Solutions are driven by the aim

**AIM**
90% of patients get at least 4 hours of uninterrupted sleep each night

**Measures**

Outcome:
- Hours sleep
- Quiet at Night Scores
- HCAHPS scores

Process:
- Number of interruptions

Balancing:
- Staff satisfaction
- Pressures/voices (or other staff worry)
- Use of sleep meds

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**Identify sleep as a shared goal**
- Talk to patients/families about sleep goals
- Build will/engagement among staff
- Develop individualized sleep goals as part of care plans

**Implement “quiet your mind” strategies**
- Explain realistic expectations to patients/families
- Address all patient/family worries and concerns
- Provide access to real time information
- Access to mindfulness tools, e.g. meditation, journals, etc.
- Respond to call lights during day

**Develop personalized nighttime routines**
- Utilize a standard protocol for nighttime (with individualized exceptions based on preferences)
- Understand patient/family preferences for nighttime routine

**Improve workflow**
- Keep patients awake/stimulated during day
- Develop medication workflow that aligns with sleep goals
- Use bedside shift reports before nighttime
- Reduce unnecessary interruptions

**Address environmental concerns**
- Limit the amount of light/changes of light in patients room
- Reduce noises from equipment and facilities
- Change location of nurses station
- Implement quiet hours
Generating ideas from those in the know

Using **data** to change the conversation
The impact/effort matrix

HIGH IMPACT

- Reduce unnecessary interruptions
- Develop individualized sleep goals as part of care plans
- Develop medication workflow that aligns with sleep goals
- Limit the amount of light/changes of light in patients' room
- Keep patients awake/stimulated during day
- Respond to call lights during day
- Change location of nurses station
- Reduce noises from equipment and facilities
- Provide access to real-time information
- Talk to patients/families about sleep goals
- Address all patient/family worries and concerns
- Understand patient/family preferences for nighttime routine
- Access to mindfulness tools, e.g., meditation, journals, etc.
- Use a standard protocol for nighttime (with individualized exceptions based on preferences)
- Explain realistic expectations to patients/families

LOW IMPACT

- Identify sleep as a shared goal
- Build will engagement among staff
- Develop individualized sleep goals as part of care plans
- Explain realistic expectations to patients/families
- Address all patient/family worries and concerns
- Provide access to real-time information
- Access to mindfulness tools, e.g., meditation, journals, etc.
- Respond to call lights during day
- Utilize a standard protocol for nighttime (with individualized exceptions based on preferences)
- Understand patient/family preferences for nighttime routine

HARD

- Keep patients awake/stimulated during day
- Respond to call lights during day
- Change location of nurses station
- Reduce noises from equipment and facilities
- Provide access to real-time information

EASY

- Talk to patients/families about sleep goals
- Address environmental concerns
- Develop personalized nighttime routines
- Improve workflow
- Address environmental concerns

AIM

90% of patients get at least 4 hours of uninterrupted sleep each night

Measures

Outcome:
- Hours sleep
- Quiet at Night Scores
- PCAMS scores

Process:
- Number of interruptions

Balancing:
- Staff satisfaction
- Presures colors (or other staff worry)
- Use of sleep meds
Quiet your mind PDSAs

**AIM**
90% of patients get at least 4 hours of uninterrupted sleep each night.

**Measures**
- **Outcome**
  - Hours sleep
  - Quiet at Night Scores
  - HCAHPS scores
- **Process**
  - Number of interruptions
  - Number of sleep related interruptions
- **Balancing**
  - Staff satisfaction
  - Staff health
  - Ongoing noise levels
  - Use of sleep med

**Identify sleep as a shared goal**
- Talk to patients/families about sleep goals
- Build will/engagement among staff
- Develop individualized sleep goals as part of care plans

**Implement “quiet your mind” strategies**
- Explain realistic expectations to patients/families
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**Address environmental concerns**
- Limit the amount of light/changes of light in patients room
- Reduce noises from equipment and facilities
- Change location of nurses station
- Implement quiet hours
After “other”, medications account for second most interruptions & most interruptions between 5 – 6 AM.
Process mapping

Double occupancy & two shifts leads to interruptions for bedside shift report.

Patients woken up for medications (time variable)

Multiple PDSA cycle ramps

Quiet your mind
Sleep as a shared goal
Workflow
Environmental issues
Testing to implementation

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<td>Cost of failure small</td>
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<td>Large-scale test</td>
<td>Implement</td>
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Testing to reliability and sustainability

- Track reliability:
  - Process measures and ongoing measurement
  - Observation
  - Open mindedness
- Simplicity:
  - Make the right thing to do the easy thing to do
  - Ask staff to identify contexts in which the new process is challenging
- Standardization:
  - Reduce reliance on human memory (e.g., workflow, checklists, prompts in existing processes)
  - Integrate into training, orientation, and “the way we do things around here”
  - Identify the unspoken way experienced staff act and make it explicit
- Identify a long-term owner
Scale-up

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<th>25</th>
<th>125</th>
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<td>Nurses</td>
<td>Techs + Nurses</td>
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<td>Documentation</td>
<td>Paper and pen</td>
<td>Whiteboard</td>
<td>EMR</td>
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<tr>
<td>Learning</td>
<td>Heads</td>
<td>Huddles</td>
<td>Posted in break room</td>
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- Evidence changes are leading to improvement
- Engage the hearts and minds of staff in other units—stories and data
- Engage other units is identifying local modifications to their contexts
- Engage in testing—larger scale—to try out modifications and identify ways to make it reliable
- Ask other units to collect data to make sure the changes are impactful in their area of work

Your turn

- In 2 minutes, reflect individually or turn and talk to your neighbor.
- Identify 3 – 5 change ideas that may be useful for your work
- How will you test this on a small scale?
- Write out a PDSA for one of the changes you plan to test on a small scale.

Key take-aways (reference)

- Start meetings by looking at the data to generate high-leverage change ideas
- Engage staff in generating ideas about how to improve the system
- Use effort-impact grids to generate ideas and evaluate impact on sleep
- Run multiple PDSAs in a night
- Test different changes in parallel; complex changes require work in multiple areas
Managing improvement: Night shift

Keeping pace
- Leverage existing meetings
- Set pace goals (e.g., # PDSAs)
- Leadership reports
- Do work together
- Coordination of efforts

Engaging staff
- Timing
- Listen to ideas
- Engage many in testing Make it fun and purposeful
- Leverage the recognition economy
- Role of all shifts
- Data changes the conversation

Building capability
- “At the elbow” coaching
- Strong day-to-day lead
- Data for improvement
- Learning curve

Your turn
- In 2 minutes, reflect individually or turn and talk to your neighbor.
- Consider three or four ways to improve the management of this initiative.
- Who will lead this work? What skills or capabilities might you need to build to help them lead the work.

Key take-aways (reference)
- Identify a day-to-day driver of the work; consider those within and those outside the unit.
- Create a workplan or document to make predictions about and track pace.
- Provide basic improvement training to those on the night shift.
- Use “at-the-elbow” coaching to help individuals run PDSAs on “Quiet Your Mind.”
- Leverage existing huddles or meetings for improvement work.
- Engage the day shift to help with data collection, change ideas, or closing the loop on PDSAs.