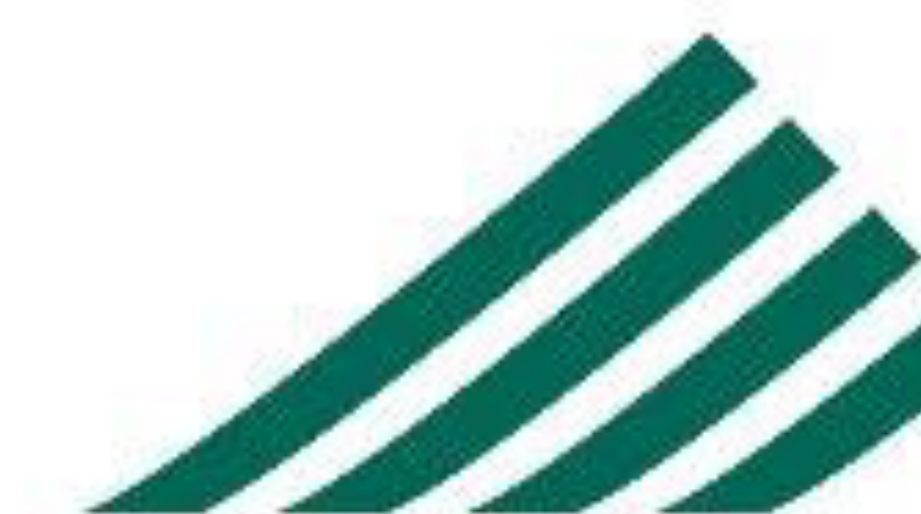




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Quiet Hours Intervention: Impact on Patient Care and Recovery

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Dartmouth-
Hitchcock

Clinical (PICO) Question

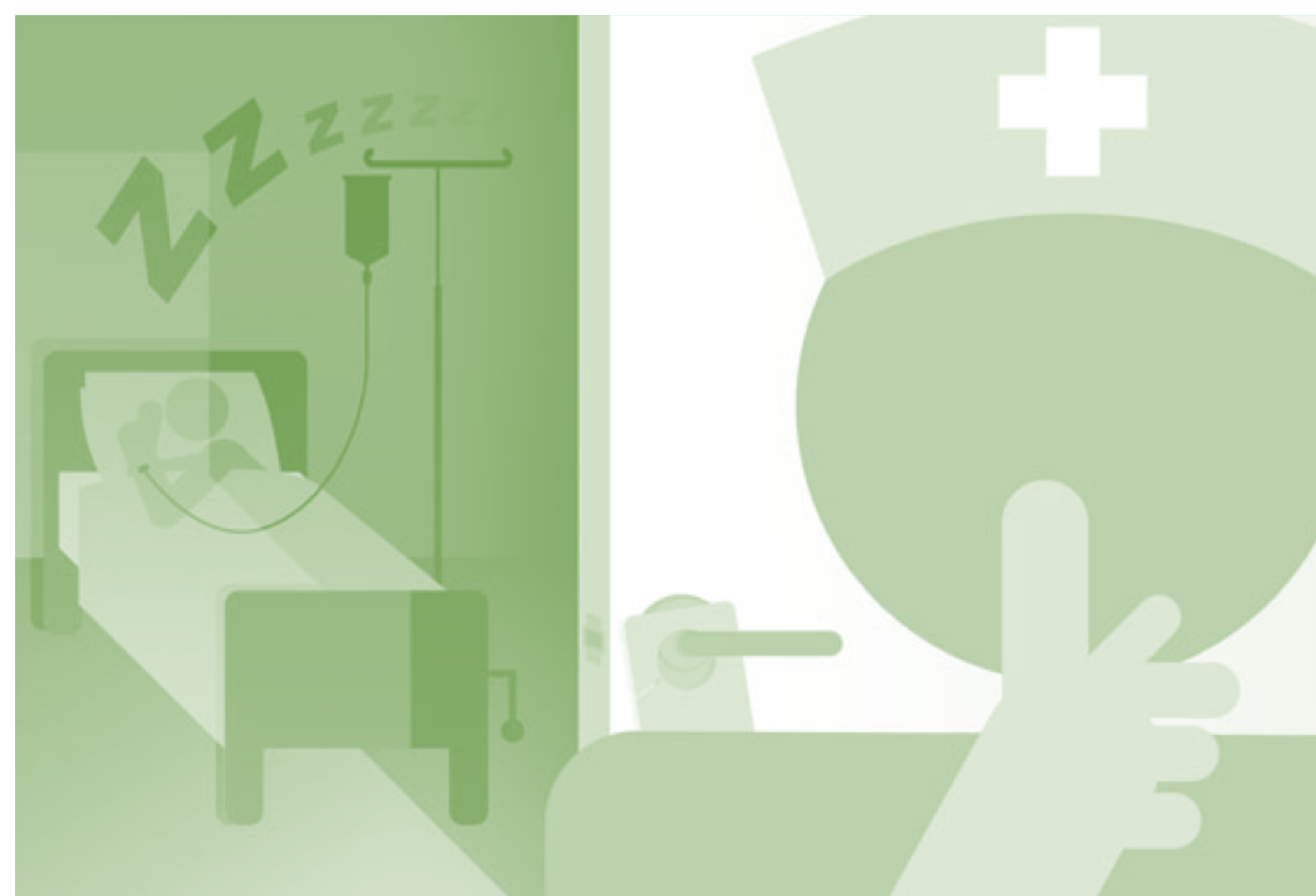
For inpatients, does implementing a 2-hour quiet hour period, compared to no intervention, impact the patient's recovery and care?

Aim/Purpose

- At Dartmouth Hitchcock Medical Center (DHMC), 40% of the patients reported that the area around their room was always quiet at night, which is much lower than the national and state average (Dartmouth-Hitchcock, 2019).
- Identify clinical research supporting a 2-hour quiet period on all units on the DHMC visitor policy.

Background/Problem

- WHO Noise Level Guidelines : 35dB, max 40dB (World Health Organization, 2009).
- Medical equipment and staff voices : 70 - 75 dB; same level as a busy restaurant! (Blomkvist et al., 2005).
- Increased noise disruption can disrupt patient sleep → increased blood pressure, altered memory, increased agitation, and less tolerance for pain (Mazer, 2006).



Clinical Implications

- In just 1 hour of implemented quiet time, 38% of staff members stated that they could have uninterrupted lunches, a break from unit chaos, and more time to accurately document (Boehm & Morast, 2009).
- Increased patient satisfaction scores on noise from the 39th to the 55th percentile (Boehm & Morast, 2009).
- Noise can lengthen hospital stays by slowing the recovery rate, due to side effects of increased metabolism, heart rate, and blood pressure (NVW Editorial Staff, 2017).

Research Recommendations

- "Noise level" lights to notify the unit of elevating noise levels on the floor
- Further research on the beneficial effects of reducing noise level
- Identifying whether age and gender affect noise level tolerance

Practice Recommendations

- Inform patients and family about quiet hours
- Place quiet hour posters on every patient door
- Reduce volume of call alarms at the nurse's station
- Reduce IV/Masimo alarm levels during the night
- Restrict non-emergent doctor/lab visits during the quiet period
- Develop a white noise channel on TV

Recommended Policy Updates

- New section in Visitor Policy at D-H Lebanon, as shown:
- IV. Policy Statement
 - NEW: Family and visitors will abide by the rules of the 2 hour quiet hour intervention in which:
 - ✓ Phone calls will be limited inside
 - ✓ Conversations with physicians, associate providers, clinical staff members, and all personnel will not be conducted outside of patient rooms and will be scheduled outside of the 2 hour quiet period if possible
 - ✓ No big groups of visitors, unless necessary
 - ✓ Closed patient room doors, unless medically necessary