# QuietCare: A QIP to Improve Patient Sleep Quality in Hospitals **Student Number:**

## **Problem**

Quality of physical environment in hospitals contributes to patients' safety and wellbeing (Sawyer et al., 2020).

The Care Quality Commission (2019) reports that 22% of patients express disturbance of sleep due to staff interference.

Need for comprehensive and systemic intervention which can improve the patientcentric environment promoting uninterrupted and restorative sleep for patients.

30-50% of people admitted to

NHS hospitals suffer from

significant sleep disturbance

(Astin et al., 2020).

### Aim

**Rationale** 

To improve the sleep quality in patients in XYZ surgical ward over a three-month period by implementing a sleep improvement care bundle.

## Implementation Plan Using PDSA (Katowa-Mukwato et al., 2021)

 Educate nurses on working quietly.

Plan

- Provide patients with eve masks and ear plugs.
- •Implement a light-based call system.

#### Do

- Conduct training sessions for all nurses working on the ward.
- Equip doors with soft close options.
- Provide nurses with comfortable but low noise footwear.
- Modify the existing call system to become a dual notification system.
- •Test a light-based system and educate nurses on lightbased calls.

#### Act

- Assess nurses' views on the training session.
- Consider patient feedback on the quality and impact of earplugs and eye masks.
- Evaluate the light-based call system and response.
- •Consider scale-up of the intervention.

### Study

- Noise level
- •Decibel level in patient care areas before and after intervention.
- Nurse feedback
- Nurses' satisfaction with noise reduction metrics.
- Patient feedback
- Perceived disturbance in sleep before and after feedback.
- Satisfaction with eye masks and ear plugs.
- •Call response monitoring
- •Response time to lightbased calls.
- Nurse and staff feedback on light-based calls.

## **Vision**

 Reduction in sleep quality in hospitalised patients leads to delays in recovery, including more time in hospital (Ritmala-Castren et al.,

**Nurse Education** (Morse and Bender, 2016)

(Obanor et al.,

Call Response

Modification

2015)

(Galinato et al.,

2021)

Decreased sleep quality causes inflammation and increased activity of nervous system, causing negative metabolic effects (Burger et **Patient Comfort** al., 2022).

Nurses play an essential role in providing support to patients at night.

Nurses' active involvement in a targeted QI programme is important (Diaz-Alonso et al., 2018).

- Provide patients with adjustable eye masks to reduce exposure to external light.
- Supply comfortable and high-quality earplugs to minimise external noise and its impact.

• Conduct training sessions for nursing staff on the

• Emphasise the impact of loss of sleep quality on

• Provide practical solutions, including closing doors

gently, using soft tones, wearing quiet shoes and

importance of sleep quality.

minimising overall ambient noise.

patient outcomes.

- Provide patients with information in the form of an information brochure.
- Upgrade the call button system to operate using lights during night hours.
- Train nursing staff on recognising the light-based call system and responding promptly.
- Provide education to patients on the need to use light signals during nighttime hours.

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