

# NOISE POLLUTION

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### Introduction

We at ELHT have been actively working to improve the level of acceptable noise as a quality improvement initiative.

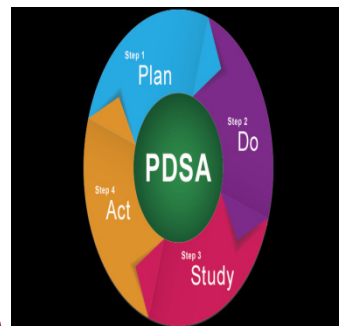
Noise pollution has been found to be a common contributory factor to both negative patient experiences and staff stress levels. (Konkani et al, 2014).

Our aim was to audit current experiences, identify areas of improvement and implement changes to improve the quality of future experience.

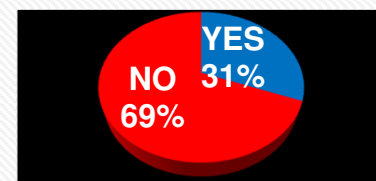
### Key Messages

In identifying the source of noise pollution changes can be made to reduce the negative impact.

### Method



**DO YOU  
CONSIDER THE  
UNIT TO BE...**



■ YES ■ NO

### Conclusions & Discussions

we carried out a number of audits firstly to identify quality of sleep at home and compared this with the patient experience in hospital. Secondly identify patients, relatives and staff perceptions of noise on the unit and thirdly to group what actions that caused the most disruptive noise.

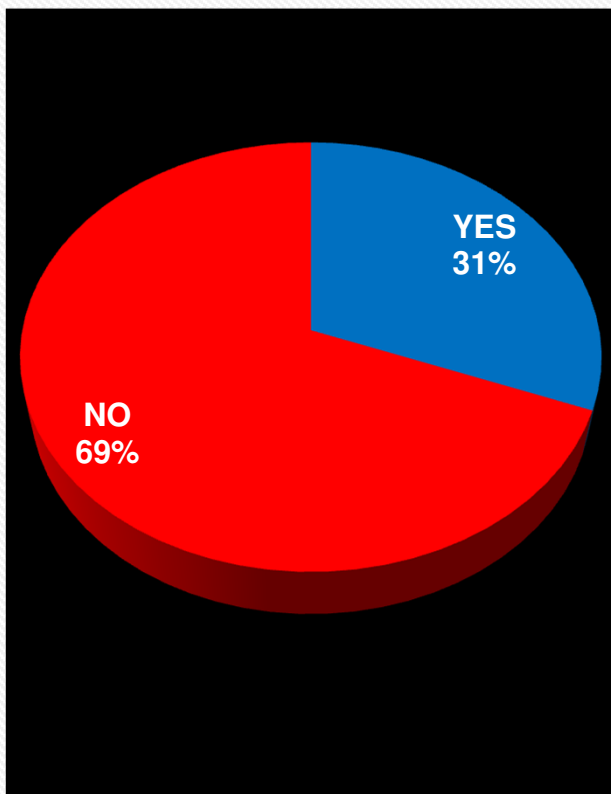
Not surprisingly we found that an admission onto ITU does have a negative impact on patients quality of sleep. Patients, relatives and staff general perception of noise on the unit was 69% in favour of not being noisy and thirdly that the most common cause of disruptive sleep was nursing intervention, alarms and lights.

As a unit we have been able to invest in slow close bins and doors, dimmer light switches and most recent new ventilators and monitors which allow improved alarm levels and screen dimmers. We have added masks and ear plugs to admission packs and we are educating staff on bundle nursing interventions and linking our two hourly SKINN BUNDLE with a rotational tilt cycle which allows less disruption when sleeping. We did trial a red light initiative also but unfortunately this was found to be inappropriate when assessing colour overnight.

In the future we plan to continue our audits, educate staff and implement the soundear II as a means of measuring sound levels and continuing this quality improvement initiative.

# Noise pollution

**DO YOU CONSIDER  
THE UNIT TO BE  
NOISY?**

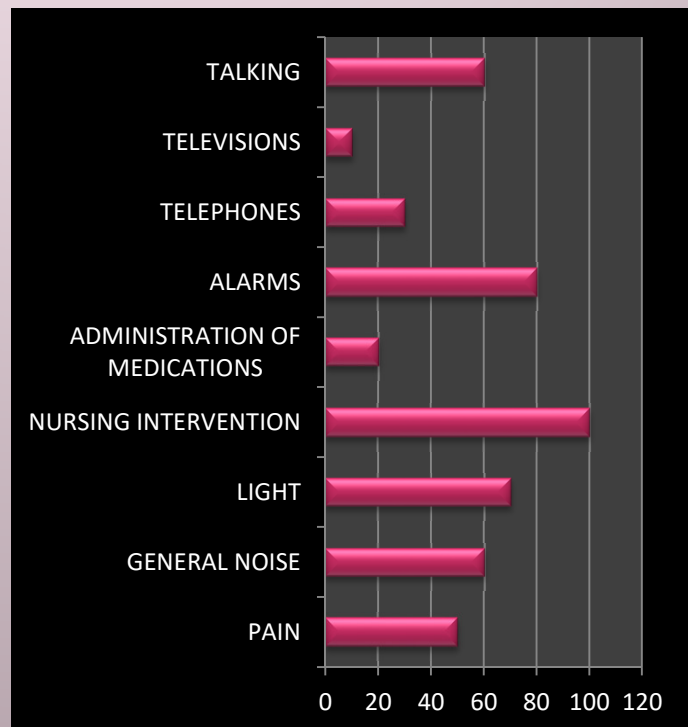
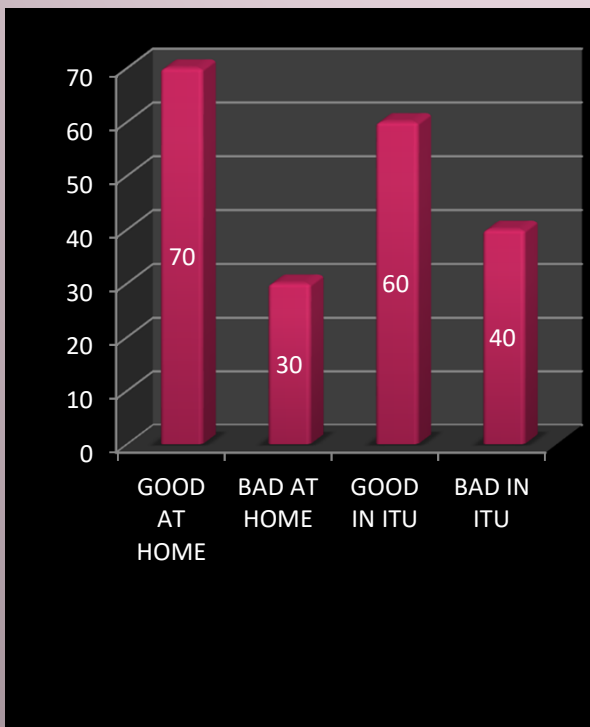


■ YES ■ NO

Following the PDSA model we did the following:

- Planned our audits to obtain current knowledge of noise perception.
- Do our audits on CAM-NEGATIVE patients, relatives and staff.
- Studied our results.
- Acted on our results and continued the cycle of our planned implementations.

# Sleep audit ELHT



**Our audits identified noise to have a negative impact on patients sleep when compared to home pattern giving cause to the implementation of a quality improvement initiative.**

**We were able to subgroup causes of disruption and implement change in practice.**

- **SLOW CLOSE BINS AND DOORS**
  - **LIGHT DIMMERS**
- **NEW MONITORS AND VENTILATORS**
  - **EDUCATION**
- **BUNDLE CARE INTERVENTIONS**
- **ADDING EAR PLUGS AND EYE MASKS TO ADMISSION PACKS**
  - **LINKING SKINN BUNDLE WITH ROTATIONAL TILT CYCLE.**

# The future



**OUR CONTINUED INITIATIVE IS TO IMPLEMENT THE SOUNDEAR II INTO PRACTICE AS BOTH A MEASURING TOOL FOR AUDIT, MONITORING AND EVALUATING NOISE LEVELS AND RESOURCE FOR STAFF TO IDENTIFY INCREASED NOISE LEVELS AND CHANGE PRACTICE FOR THE BETTER.**