

# To Improve Patient's Experience by Enhancing Nursing Procedures at Night in the Cardiovascular Medicine (CVM) wards



**Singapore Healthcare Management 2015**

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 SingHealth

## BACKGROUND

The project was initiated following several feedback from patients whom claimed that they have interrupted sleep due to lightings and frequent nurses' routines.

Nurses take care of patients need even in the middle of night. Activities such as feeding, vital sign taking, diaper changing will require switching on bedside lighting.

The glares from the overhead lighting and noise from frequent nursing activities caused sleep disturbance to patients.

The objective of this project is to minimize the environmental barrier that affect quality sleep for patients.

## Patient Feedback



Double lights & Ceiling lights switched on. Light glares through curtains caused disturbance to patients



Nursing activities at night interrupts patients sleep.



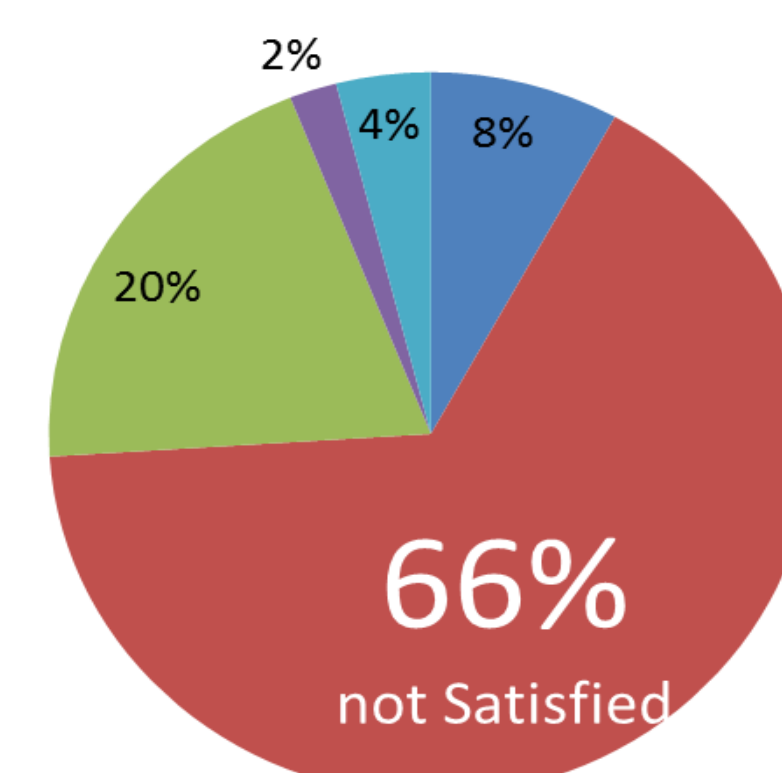
Replace ceiling light which shines directly on patient's face

It will be great if you can spend more time in the morning checking parameters "from 4:50am to 6:00am" Because it is difficult to sleep after you were awoken by nurses at 4:50am

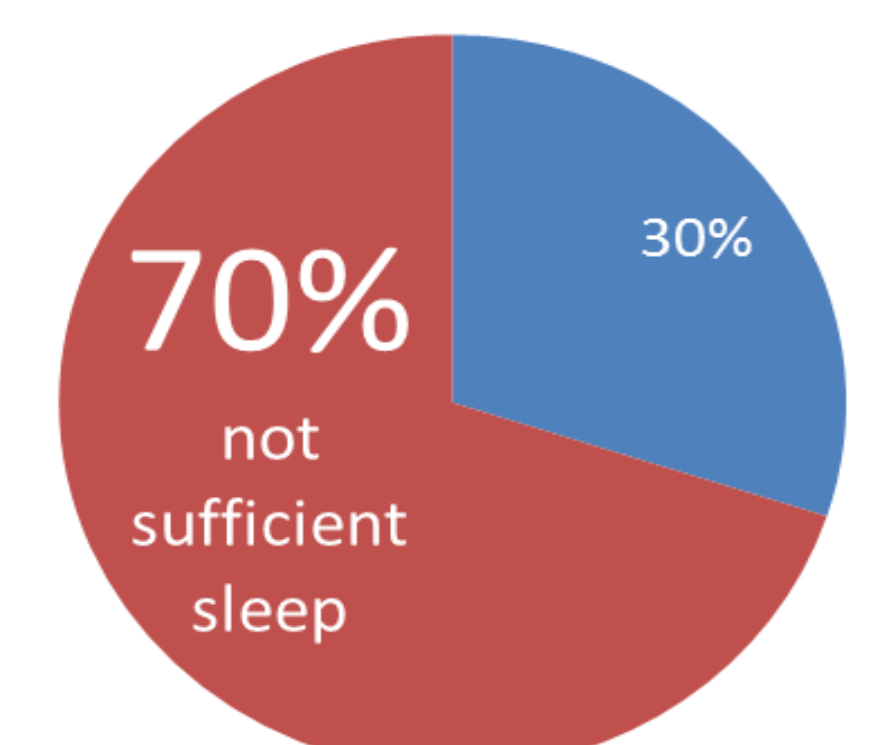
Install the Ceiling lights with shades in order for patient who need to sleep and rest early

## Previous Situation

**Patient Satisfaction of Hospital Stay at Night (Pre-Implementation)**



**Sleep sufficiency at night (Pre-Implementation)**

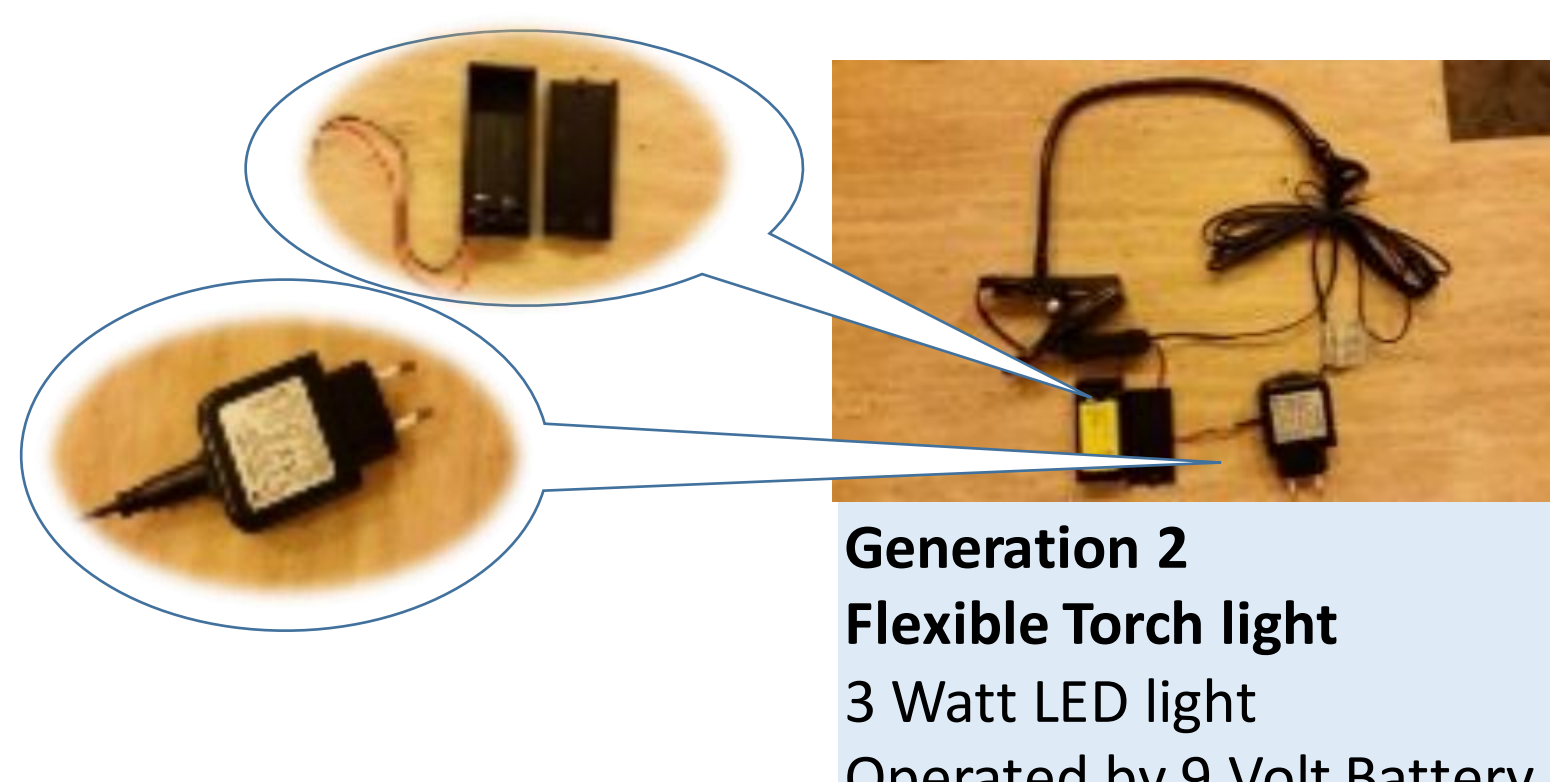


## Previous Workflow at Night

Schedule & Frequency of nursing activities at night shift					
Nurse activities	Ward 44A	Ward 44B	Ward 47B	High Dependency (HD)	Intermediate Care Area (ICA)
Vital sign taking	10pm, 6am	10pm, 6am	10pm, 6am	1hourly x10	1hourly x8
Elimination round	2hourly x5	2hourly x5	2hourly x5	2hourly x5	2hourly x5
ECG check	4	4	4	10	8
NasalGastro Feeding round	11pm, 6am	11pm, 6am	11pm, 6am	11pm, 6am	11pm, 6am
Check on IV drip/blood transfusion	1hourly as per required x 4	1hourly as per required x 5	1hourly as per required x 4	1hourly as per required x8	1hourly as per required x6

## INNOVATIVENESS OF SOLUTIONS

### 1) Flexible Torch Light on Computer On Wheels Replace the use of overhead lights



### 2) Re-designed Nursing Workflow allow longer uninterrupted sleep at night

#### Consolidation of Nursing Activities at Night

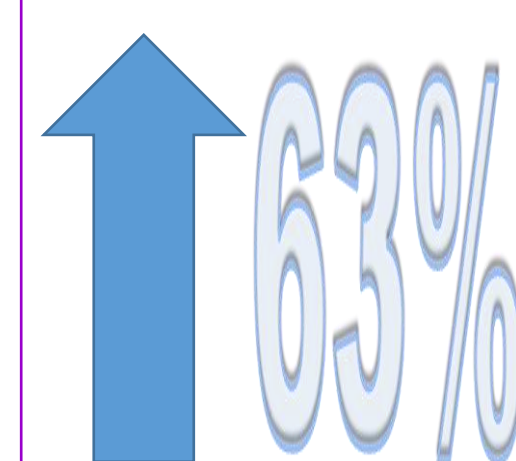
##### BEFORE Consolidation

Nurse activities	Ward 44A (16 pt.)	Ward 44B (24 pt.)	Ward 47B (24 pt.)	High Dependency (HD) (10 pt.)	Intermediate Care Area (ICA) (8 pt.)
Vital sign taking	10pm, 6am	10pm, 6am	10pm, 6am	1hourly x10	1hourly x8
Elimination round	2hourly x5	2hourly x5	2hourly x5	2hourly x5	2hourly x5
ECG check	4	4	4	10	8
NasalGastro Feeding round	11pm, 6am	11pm, 6am	11pm, 6am	11pm, 6am	11pm, 6am
Check on IV drip/blood transfusion	1hourly as per required x 4	1hourly as per required x 5	1hourly as per required x 4	1hourly as per required x8	1hourly as per required x6

##### AFTER Consolidation

Nurse activities	Ward 44A (16 Pt.)	Ward 44B (24 pt.)	Ward 47B (24 pt.)	High Dependency (HD) (10 pt.)	Intermediate Care Area (ICA) (8 pt.)
Vital sign taking & Elimination Round	10pm, 6am and 2 x 2 hourly round	10pm, 6am and 2 x 2 hourly round	10pm, 6am and 2 x 2 hourly round	1 hourly	1hourly
Vital sign taking & ECG taking & Elimination Round	4 Patient / night	4 Patient / night	4 Patient / night	10 Patient / night	8 Patient / night
NasalGastro Feeding round	11pm, 6am	11pm, 6am	11pm, 6am	11pm, 6am	11pm, 6am
Check on IV drip/blood transfusion	1hourly as per required x 4	1hourly as per required x 5	1hourly as per required x 4	1hourly as per required x8	1hourly as per required x6

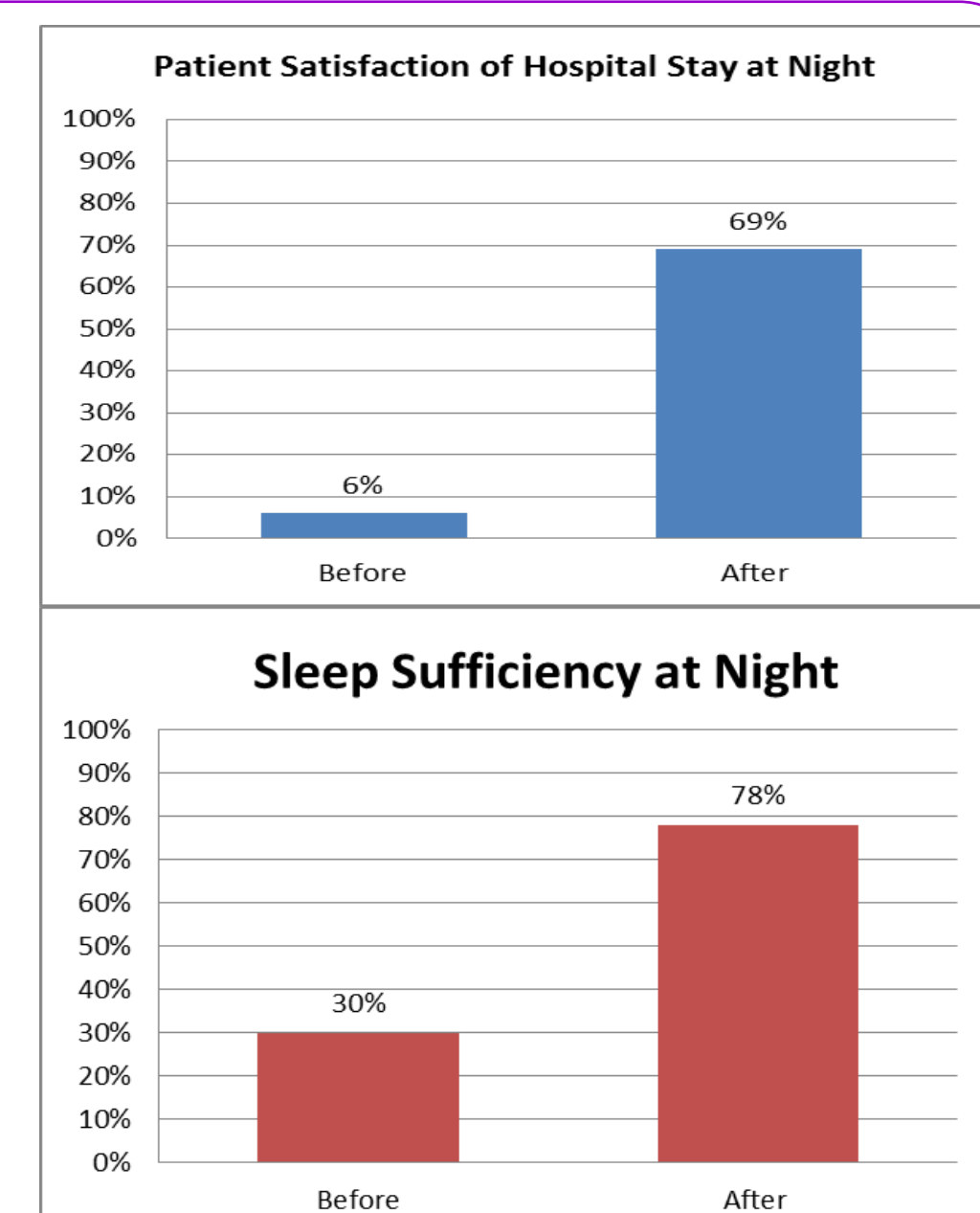
## RESULTS



Increased Patients' Satisfaction of hospital stay at night significantly from **6% to 69%**.



Improved patients' sleep at night from **30% to 78%**.



The consolidated visits to patient at night has improved work efficiencies of nurses in performing their ward routines. The re-designed workflow has brought work synergies of night shift nurses to deliver patient care. Time savings and manpower savings were achieved with the concurrent nursing activities.

**Man hours savings**  
**\$75,240 per annum!**

## Spin Off

- Implementation of flexible torch light at other NHCS Wards (Ward 56 & Short Stay Unit)
- Flexible torchlight for other supporting services at night
- Sharing at SGH ground connect sharing session

## Sustainability

- Training for existing and new staff
- Continuous monitoring of patient satisfaction at night
- Regular feedback Sessions with Staff
- Regular audit to ensure compliance of using flexible torch light

## Intangible Benefits

### Enhance Acuity of Patient Care

Increased accuracy in locating the puncture point when taking patients' blood with the improved adjustable lighting.

### Improve Teamwork & Job Satisfaction

Re-designed work process leads to better collaboration and coordination of care among staffs.

### Quality Patients Care

Patients experienced lesser disturbance with the enhanced nursing workflow at night.

## Acknowledgement

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## METHODOLOGY

