Project Title

Reduction of No-Show Rate in Sleep Laboratory

Project Lead and Members

Project lead: Cheryl Tan, Snr Asst Manager, Allied Health

Project members:

- Shaffinaz Abd Rahman, Sleep Technologist
- Montaniel Emelita Naval, Sleep Technologist
- Lee Wei Lin, Snr Asst Director, Allied Health
- Dr Chua Ai Ping, Snr Consultant, Respiratory Medicine

Organisation(s) Involved

Ng Teng Fong General Hospital; National University Health System

Project Period

Start date: Jul 2017

Completed date: Jul 2018

Aims

To reduce the monthly patient no-show rate for sleepstudy from the current 9.1% to 5%.

Background

See attached

Methods

See attached

Results

See attached

Lessons Learnt

Getting buy-in from the various stakeholders (Finance, SOC FC, Counter PSA, Business Office, Contact Center and Sleep Technologists). A standard script and FAQ created with inputs from staff from all levels ensured a clear message and objective.

Conclusion

Through this quality improvement project, the team concluded that communication to patients must be aligned at all touchpoints. This project found that deposit collection is effective in improving the monthly no-show rate for sleep study by 51% from 9.1% to 4.3%.2. In addition, the Sleep Lab's average utilisation rate has also improved from 80.6% in 2017 to89.2% (Jan-Jun 2018).

Project Category

Care Redesign

Keywords

Care Redesign, Care Design, Patient-Centred Care, Workflow Improvement, Improvement Tools, Fishbone Diagram, Plan Do Study Act, Pareto Chart, Bed Utilisation, Reduced Wastage, Patient Appointment, Operations, Ng Teng Fong General Hospital, National University Health System

Name and Email of Project Contact Person(s)

Name: Cheryl Tan

Email: Cheryl_pr_tan@nuhs.edu.sg

DEPOSIT COLLECTION REDUCES NO-SHOW RATES FOR SLEEP STUDIES

CHERYL T., SHAFFINAZ A. R., HENCEL M. T., EMELITA N. M., LEE W. L., CHUA A. P.

Problem and Aim

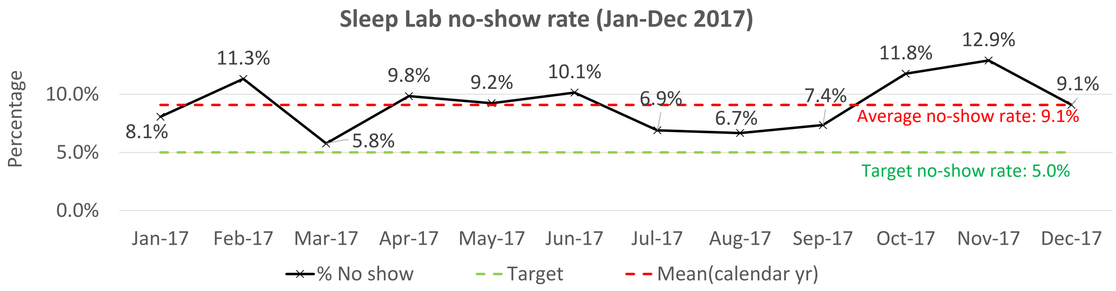
No-shows, late cancellation and last minute rescheduling contribute to a lower bed utilisation and affects the lead-time for other patients who require a sleep study.

In 2017, the average monthly no-show rate was 9.1%. More patients were also being referred for sleep studies due to raised awareness of sleep disorders.

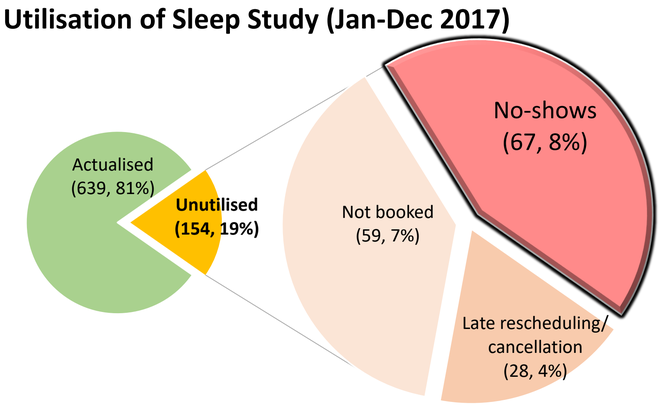
The project aims to reduce the monthly patient no-show rate for sleep study from the current 9.1% to 5%.

Establishing Measures

Sleep Lab No-show rates (Jan-Dec 2017)

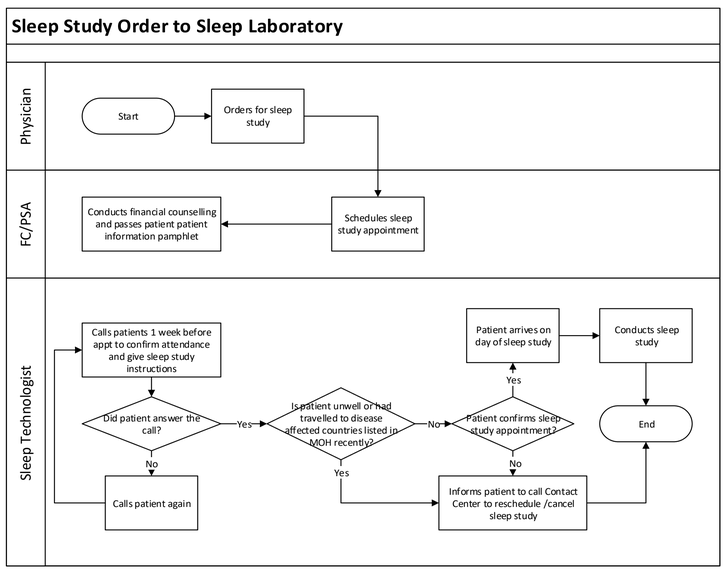


Utilisation of Sleep Study (Jan-Dec 2017)

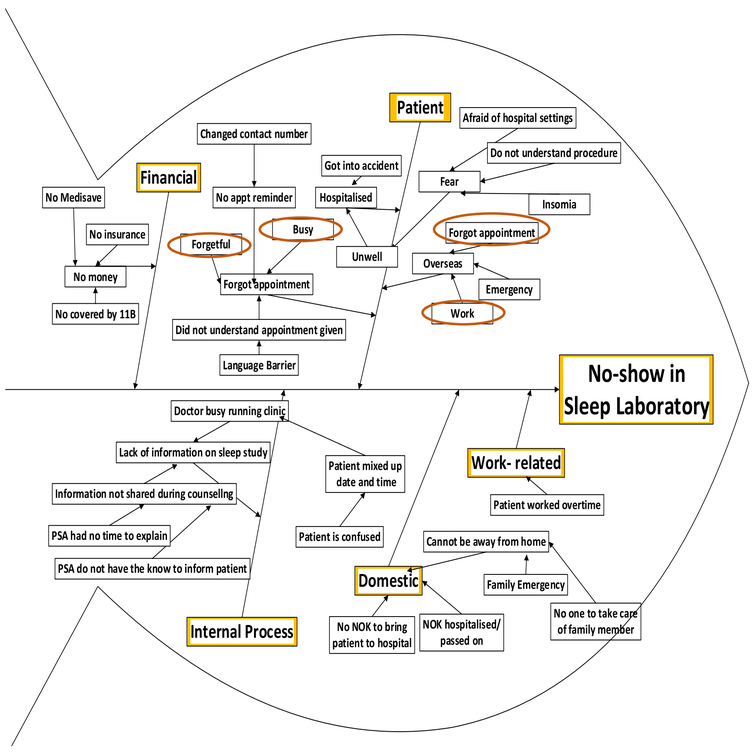


Analyzing Problem

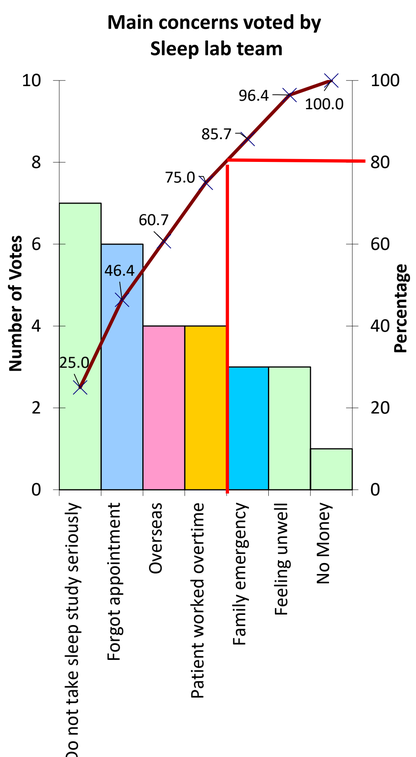
Workflow



Fishbone Diagram



Pareto Chart



Selecting Changes

Fishbone diagram & pareto chart showed that the causes for no-show was primarily due to patient's behavior (habitual no-show). Top causes & proposed solutions were summarised in the table below.

Top root causes	Possible Solutions
Patient do not take sleep study seriously	1. Collection of deposit for the booking of sleep study appointment 2. Penalise patients only in the event of no-show
Patient forgot about the appointment	

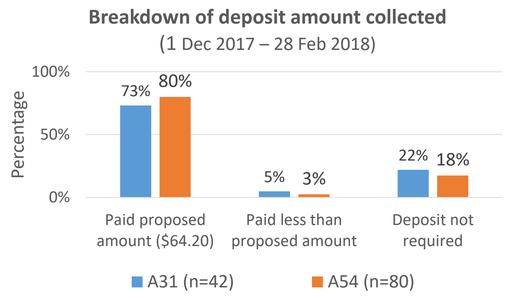
We decided to implement deposit collection because it increases patients' commitment for the sleep study and can relate to it positively as compared to penalising patients which may be seen as a punishment.

We designed the workflow, created the charge code, script and FAQs for patients and PSAs respectively. This was piloted in high referral service areas at A31 Sleep Medicine, A54 ENT & JMC ENT clinics. Deposits were forfeited in the event of no-show or late cancellation/rescheduling done in less than 5 working days.

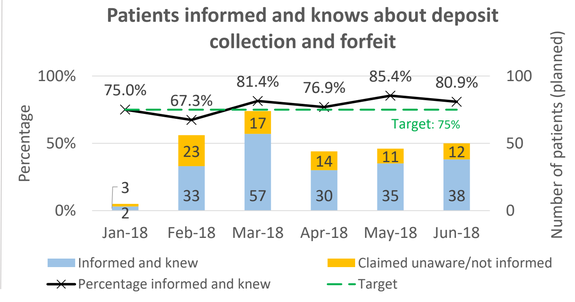
Testing/Implementing Changes

CYCLE	PLAN	DO	STUDY	ACT
1.1	Start deposit collection	Communication of workflow and collection of data	• No patient rejected sleep study. • Handful of patients not aware when refund will be received	Revise communication to patient
1.2	Revise script and FAQs to FC PSAs	Continue to monitor data collected	• Drop in no-show rate. • Overall improvement in bed utilisation.	Adopt change

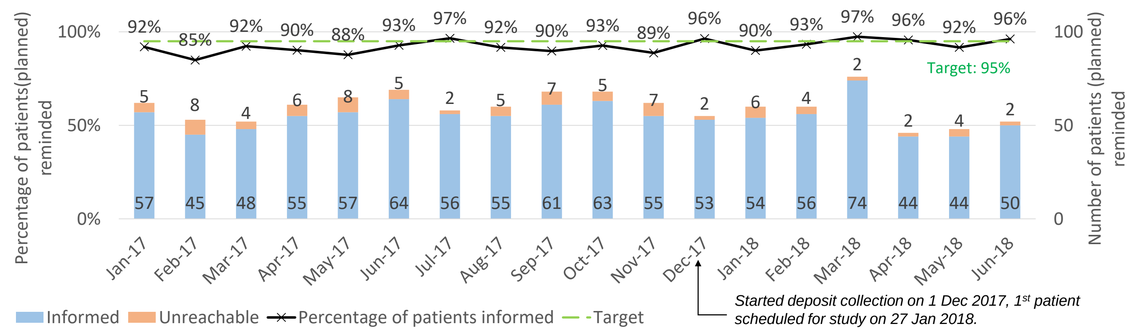
Balancing Measure 1: Percentage patients who rejected sleep study due to deposit collection. (Target = 0 patient)
No patient rejected sleep study as of end Feb 2018.



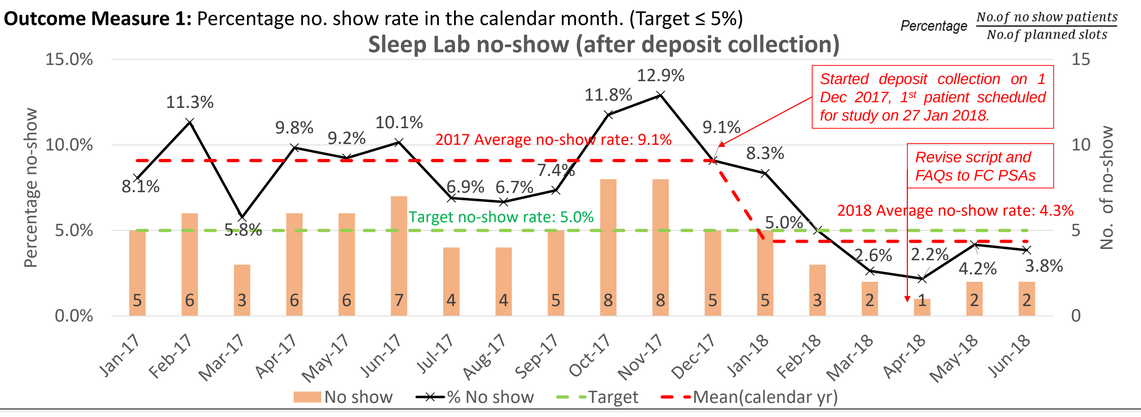
Process Measure 1: Percentage patients informed during FC and aware deposit collected will be forfeited in the event of no-show. *(Target ≥ 75%)* $Percentage\ \frac{No.of\ patients\ informed\ at\ FC}{No.of\ planned\ patients}$



Process Measure 2: Percentage of patients called to remind of appt and informed of forfeit of deposit. *(Target ≥ 95%)*



Outcome Measure 1: Percentage no. show rate in the calendar month. (Target ≤ 5%)



Learning Points

1. Deposit collection is effective in improving the monthly no-show rate for sleep study by 51% from 9.1% to 4.3%.
2. Sleep Lab average utilisation rate improved from 80.6% in 2017 to 89.2% (Jan-Jun 2018).

Acknowledgements We sincerely thank Finance, Business office, Service Operations, Quality, Innovation, Improvement & Contact Center for their invaluable inputs in implementing the workflow. We also thank the rest of the Sleep Laboratory team members Dr Sridhar V, Dr Adeline T. and Victoria M. for their contributions.

Ng Teng Fong General Hospital
Jurong Community Hospital
Jurong Medical Centre