Project Title

Reducing Inpatient Falls in a Community Hospital

Project Lead and Members

Project lead: Dr Tiew Lay Hwa (Director of Nursing)

Project members:

- Ms Helen Chen (Assistant Director of Nursing)
- Ms Losa Mary Ann Realubit (Nurse Manager)
- Ms Geetha Kunasaigaran (Principal Physiotherapist)
- Ms Mendova Richelle Amante (Principal Therapist Assistant)
- Dr Sandhya Chandramohan (Registrar)
- Mr Kelvin Lin (Clinical Audit Executive, Healthcare Performance Office)

Organisation(s) Involved

Ang Mo Kio - Thye Hua Kwan Hospital (AMK-THKH)

Project Period

Start date: 2017

Completed date: 2019

Aims

To reduce inpatient average fall rate by 0.4 per thousand patient days

Background

See attached

Methods

See attached

Results

See attached

Lessons Learnt

This was not started as a project but a hospital-wide patient care improvement endeavour, which has no end date. With technology-enabled devices, risk factors such as patient profile and volatile, uncertain, complex and ambiguous environment could be mitigated.

Even though the outcome was encouraging, continuous monitoring and sustainability need to be considered to ensure the fall prevention interventions remain relevant and / or maintained if applicable.

From the healthcare system perspective, our mental models, paradigms and mindsets would need to change and look beyond our circumstantial barriers or challenges.

As the organisation is a non-profit organisation, resources are limited in areas like capabilities, capacity and finance. As significant amount of time and effort were expended, it is important that sustained attention is considered to keep improvements on track. Senior management's commitment and support are therefore critical.

Conclusion

We had observed a reduced 0.4 incidence of inpatient falls per 1000 patient days. With any change, some forms of resistance and teething problems were expected. Even though outcome was encouraging, sustained attention is important to keep improvements on track.

From the healthcare system perspective, transformational change in patient safety requires us to change our mental models, paradigm and mindsets. We thrive to look beyond the prevailing challenging circumstances and lead with commitment, "Can-do" spirit and continuous improvement mindset.

Project Category

Care Redesign

Keywords

Care Redesign, Falls Prevention, Patient Safety, Improvement Tool, Kaizen, Genchi Genbutsu, Go See Ask, Plan Do Check Act, Community Care, Ang Mo Kio - Thye Hua Kwan Hospital, Morse Fall Scale

Name and Email of Project Contact Person(s)

Name: Dr Tiew Lay Hwa

Email: layhwa_tiew@amkh.org.sg

太和观 THK
ANG MO KIO
THYE HUA KWAN HOSPITAL
太和观医院

Reducing Inpatient falls in a Community Hospital

Tiew L.H., Chen, H., Losa M.A., Amante M.R. ,Geetha K., Sandhya C., Lin K.

Background

Annually, the falls incidence was high as compared with all the community hospitals. The incidence of injuries was concurrently high too. Despite the high level of attention given to falls prevention , it remains high.

Aim

Reduce Inpatient Average Fall Rate by 0.4 per thousand patient days

Assessment of problem and analysis

Using the Kaizen Genchi Genbutsu concept , the Falls Prevention Quality Assurance Sub-Committees went to **'Go, See, Ask'** people and processes at the 'shop floor'.

The findings were:

- Environment – toilet and shower facilities located at one end of wards making it challenging for patients to access
- Patient profile – mainly beyond 65 years old with multiple comorbidities with and without cognitive impairment
- Manpower assignment – distributed amongst 8 cubicles with each cubicle comprising 6 to 8 beds

Solutions planned to address

- Early identification of patients getting out of beds without calling for help
- From task-focused to team-work

Strategy for Change/Intervention

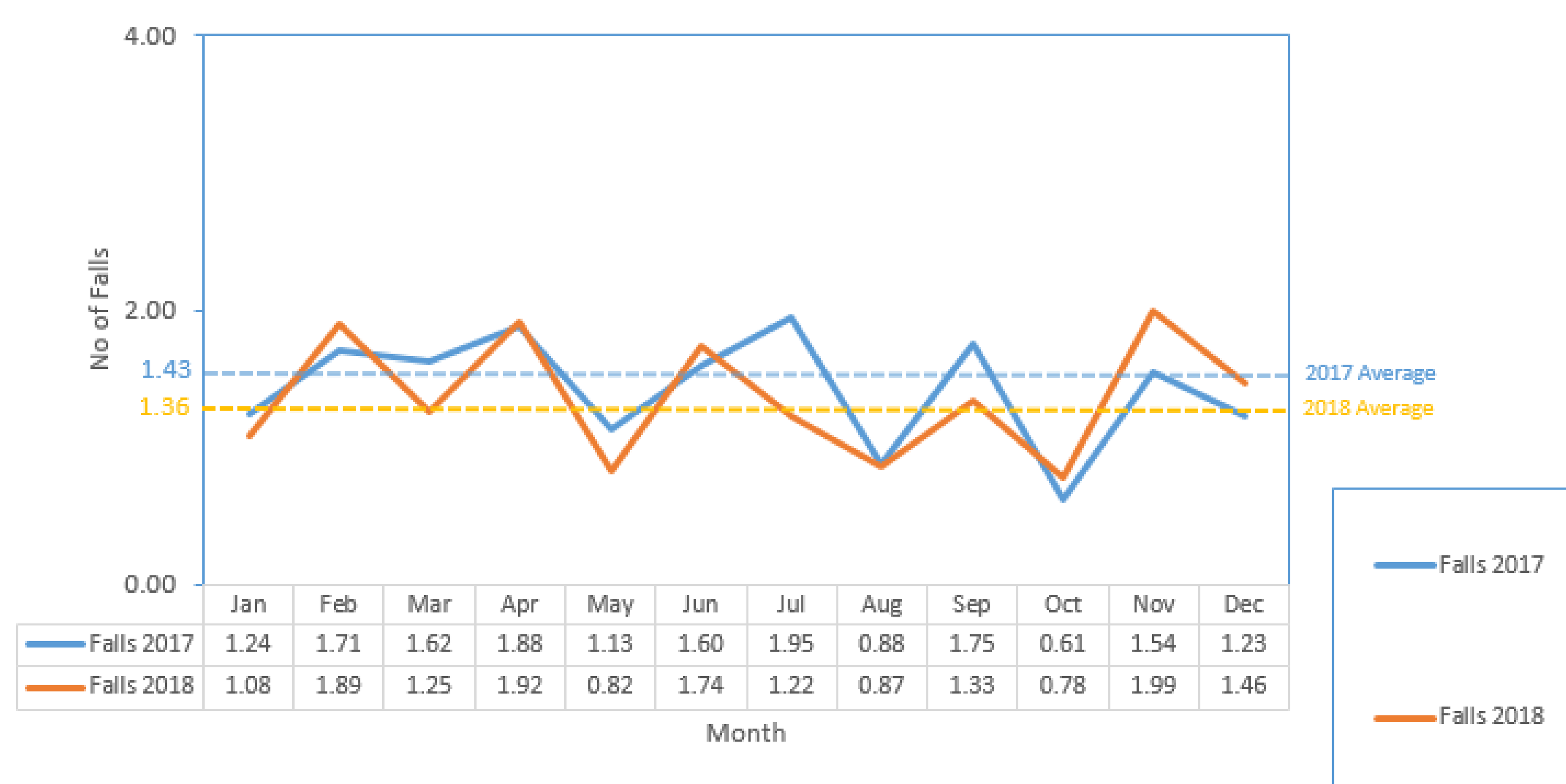
Method used was **'Plan, Do, Check and Act' model** to implement the actions plans.

Solutions were introduced one at a time:

- Obtain feedback from staff through 2-weekly meetings with the ward supervisors and monthly meetings with shop-floor nurses
- Monitor the measurement of falls sensor mats
- Introduce the skill-mix and acuity-based staffing model
- Conduct mini RCAs since Feb 2019
- Share appropriate interventions and lessons learnt among all the nurses via daily ward roll call
- Collate and consider interventions from the mini RCAs as preventive interventions, which are relevant and appropriate to the six variables in the Morse Fall Scale

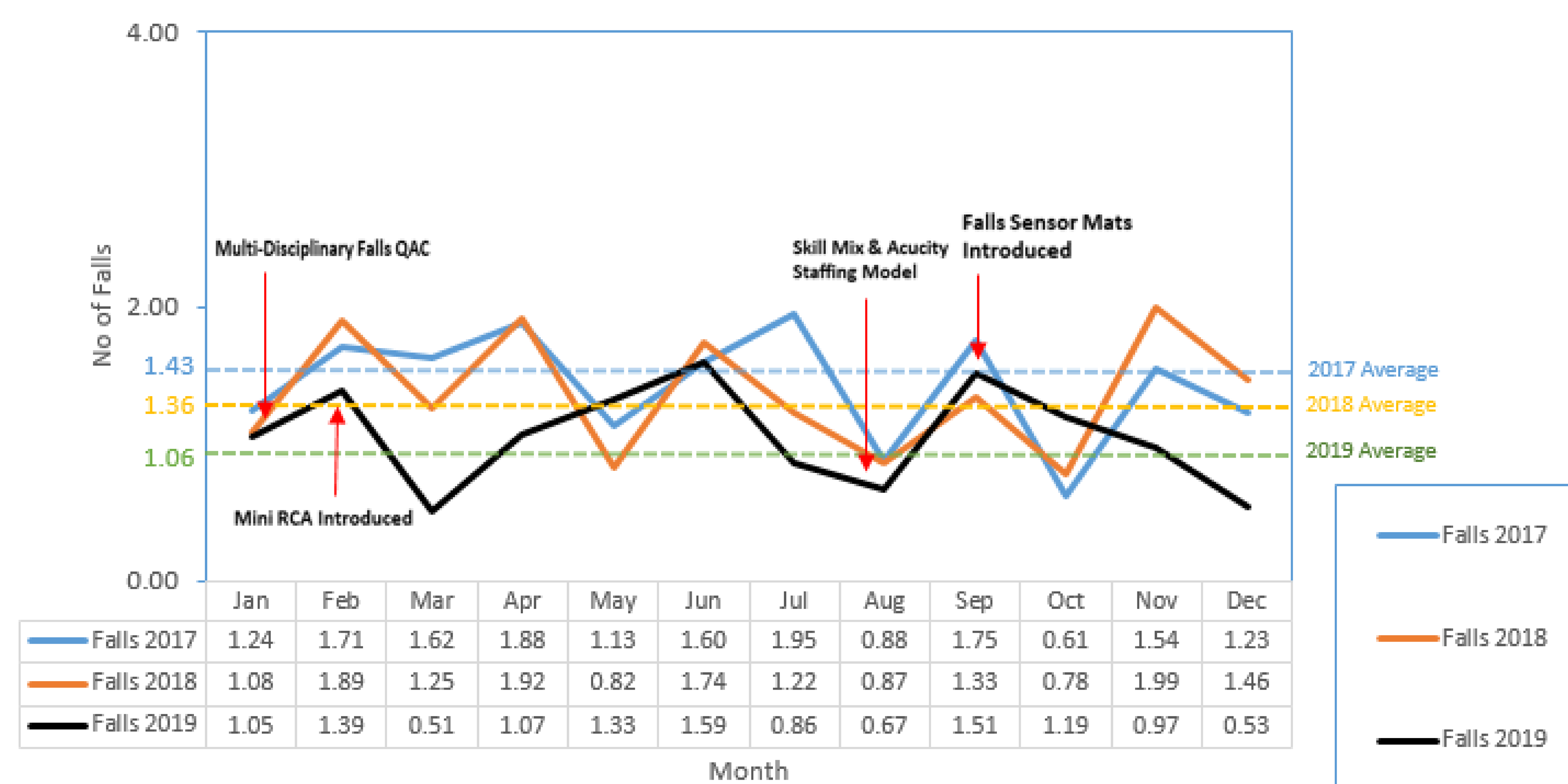
Measurement of Improvement

Pre-Project 2017-2018 Results



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Falls 2017	1.24	1.71	1.62	1.88	1.13	1.60	1.95	0.88	1.75	0.61	1.54	1.23
Falls 2018	1.08	1.89	1.25	1.92	0.82	1.74	1.22	0.87	1.33	0.78	1.99	1.46

Post-Project 2017-2019 Results



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Falls 2018	1.08	1.89	1.25	1.92	0.82	1.74	1.22	0.87	1.33	0.78	1.99	1.46
Falls 2019	1.05	1.39	0.51	1.07	1.33	1.59	0.86	0.67	1.51	1.19	0.97	0.53

Lessons Learnt & Conclusion

- We had observed a reduced 0.4 incidence of inpatient falls per 1000 patient days. With any change, some forms of resistance and teething problems were expected.
- This was not started as a project but a hospital-wide patient care improvement endeavour, which has no end date. With technology-enabled devices, risk factors such as patient profile and volatile, uncertain, complex and ambiguous environment could be mitigated.
- Even though the outcome was encouraging, continuous monitoring and sustainability need to be considered to ensure the fall prevention interventions remain relevant and / or maintained if applicable.
- From the healthcare system perspective, our mental models, paradigms and mindsets would need to change and look beyond our circumstantial barriers or challenges.