

## BACKGROUND

The Foot Care & Limb Design Centre (FLC) at Tan Tock Seng Hospital (TTSH) completed the set up of its emergency trolley (e-trolley) in July 2014.

With a multi-disciplinary setting involving multi-stakeholders in FLC; scheduling, workload distribution and communication among the various disciplines to ensure daily compliance of e-trolley checks was a challenge.

The average compliance during the first six months post e-trolley set-up was at 91%, below hospital standards of 100%.

The aim of this project is to achieve and maintain 100% compliance for daily e-trolley checks at FLC.

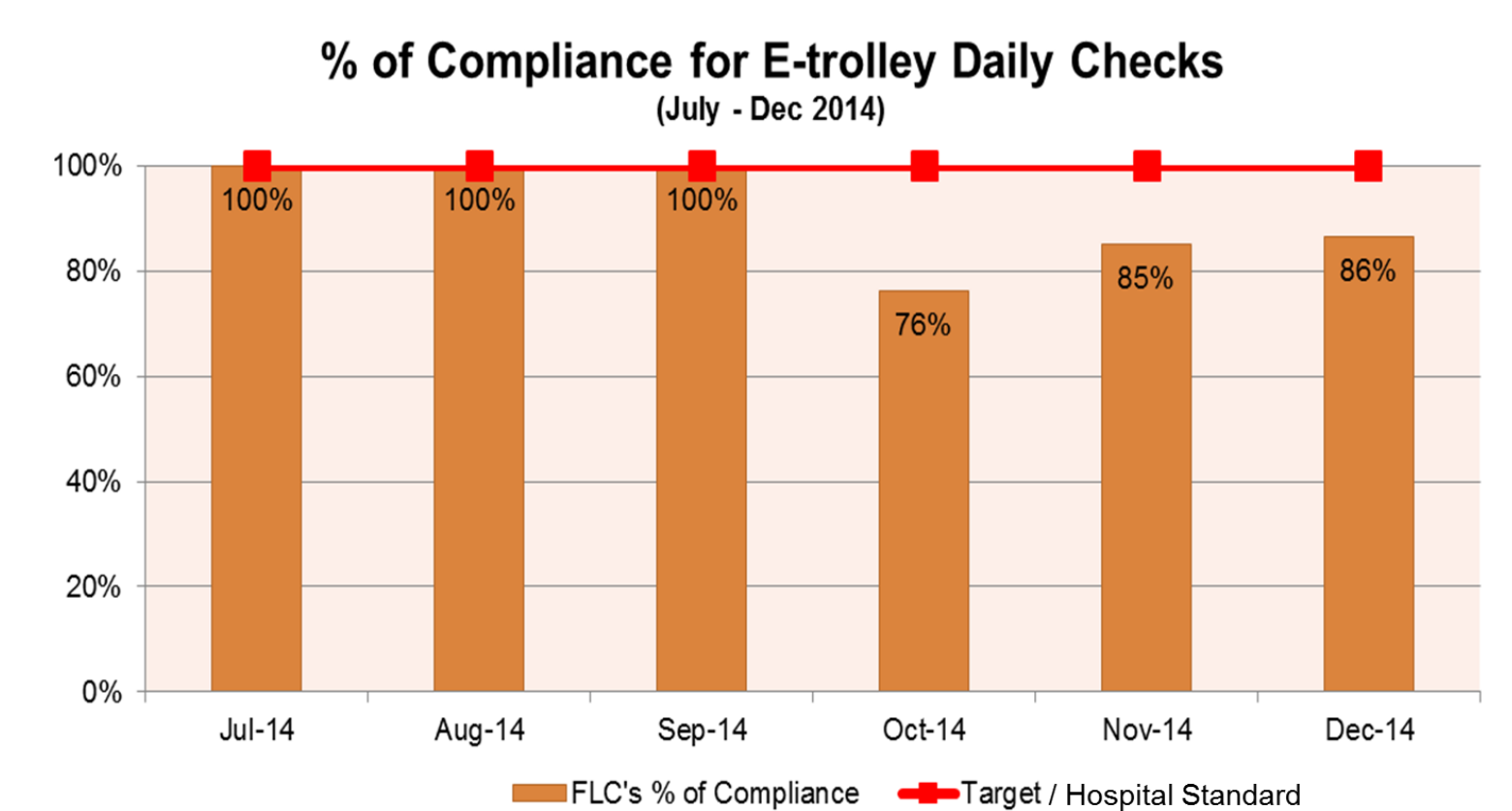


Figure 1: Percentage of Compliance for E-trolley Daily Checks (Pre-intervention)

## METHODOLOGY

With the help of quality improvement tools, an interdisciplinary team-based approach for problem solving was implemented.



Ground staff from the various disciplines engaged in planning and reviewing the current processes



Baseline survey conducted to access current gaps and staff satisfaction



Various key factors discussed using a Cause-and-Effect diagram



Root causes identified and prioritized using the Pareto Principle through multi-voting

The main causes identified in order of priority were:

1. Majority of trained staff working offsite
2. Unclear workflow for trigger of coverage
3. No duty coverage reminders
4. No cross-department communication

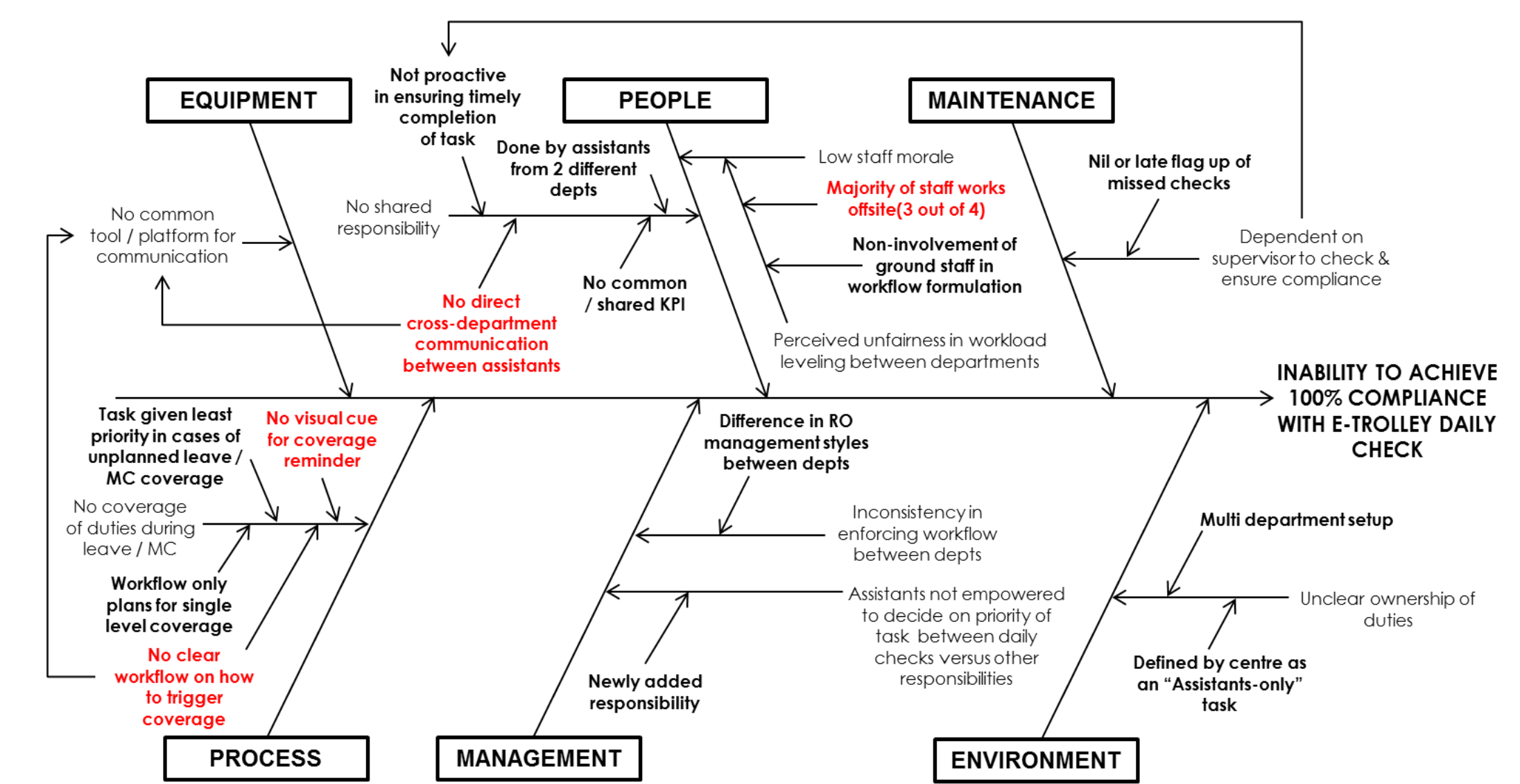


Figure 2: Cause-and-Effect Diagram

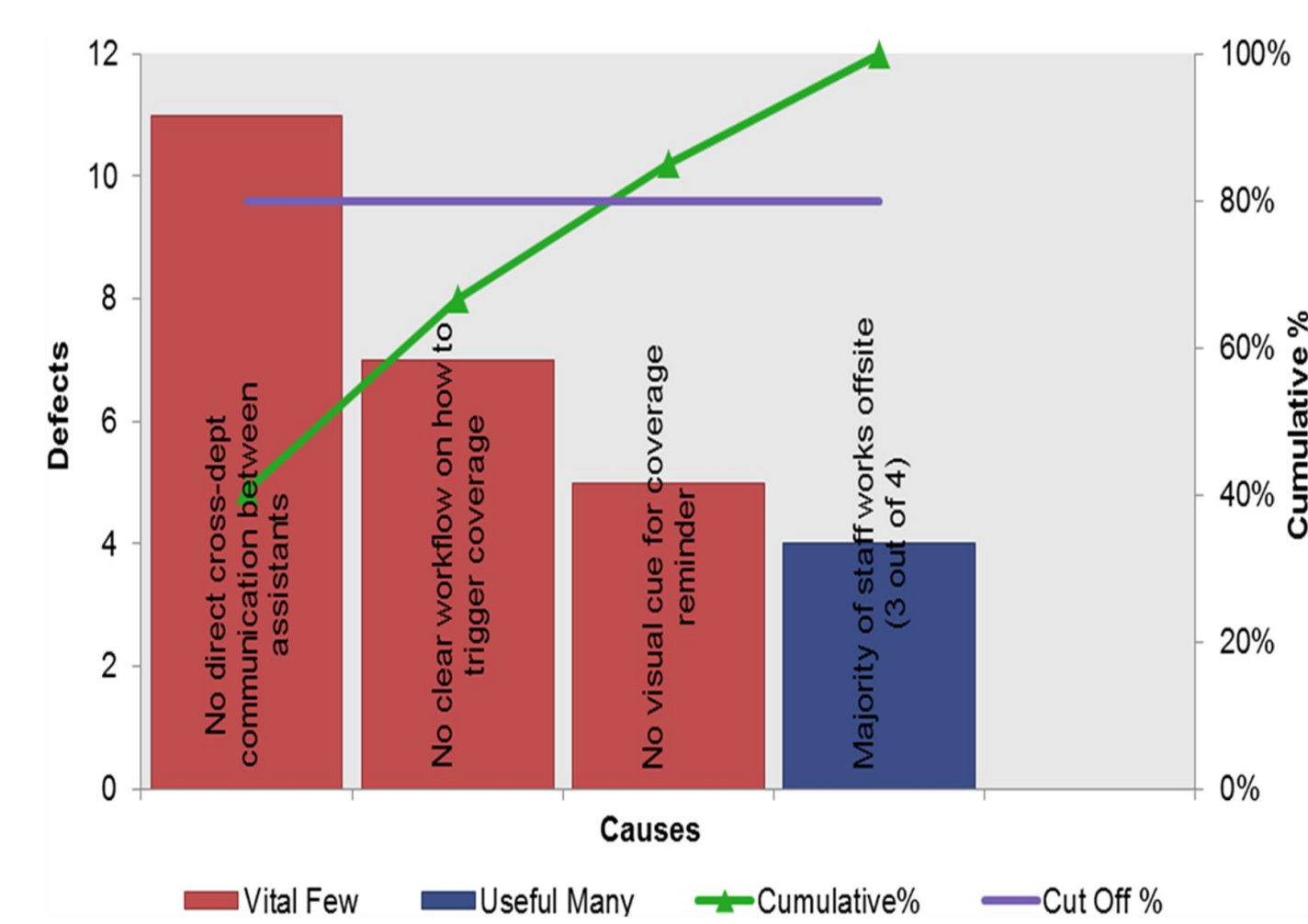


Figure 3: Pareto Chart

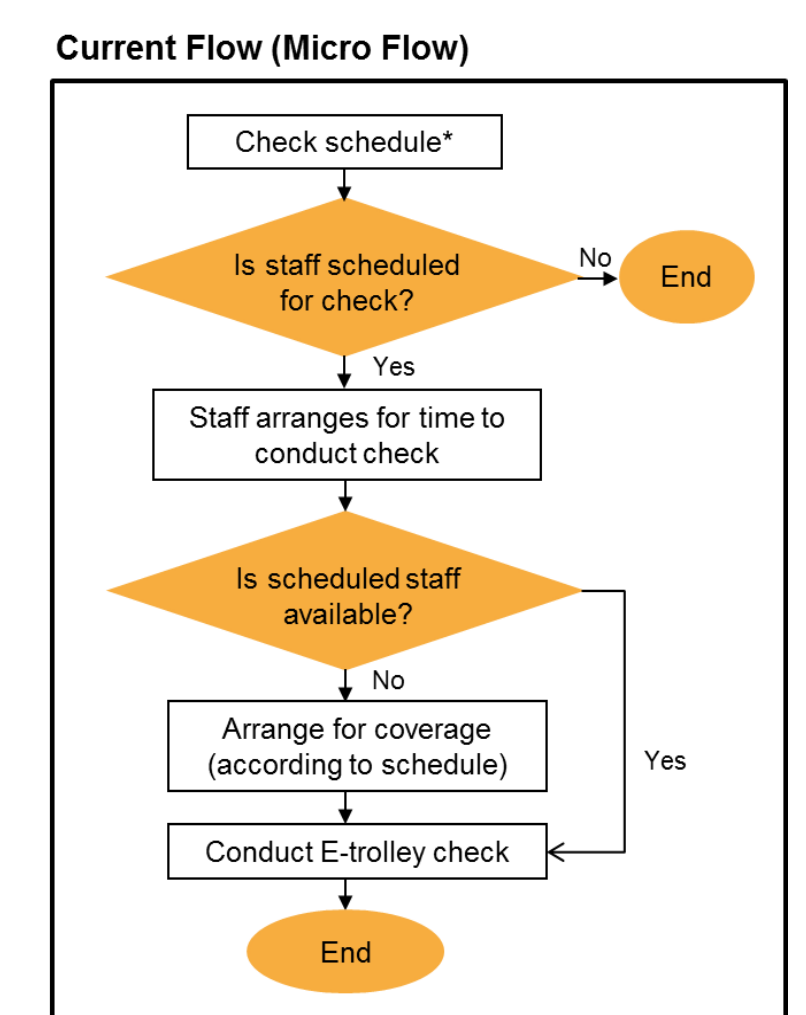


Figure 4: Workflow (Pre-intervention)

## INTERVENTION

The following were implemented:

1. Duties reassigned for better workload-leveled schedule with double coverage

Day	Duty	Cover
MON*	POD 1	P&O 1
TUES	P&O 1	P&O 2
WED	P&O 1	P&O 2
THUR	POD 1	P&O 1
FRI	POD 1	P&O 1

Figure 5: Schedule (Pre-intervention)

Day	Duty	Cover 1	Cover 2
MON*	POD 1	P&O 1	POD 2
TUES	POD 1	P&O 1	POD 2
WED	P&O 1	PHYSIO	POD 1
THUR	P&O 1	PHYSIO	POD 1
FRI	POD 1	P&O 1	PHYSIO

Figure 6: Schedule (Post-intervention)

2. Standardised communication platforms were set up for timely coverage activation, with visual reminders on a shared calendar

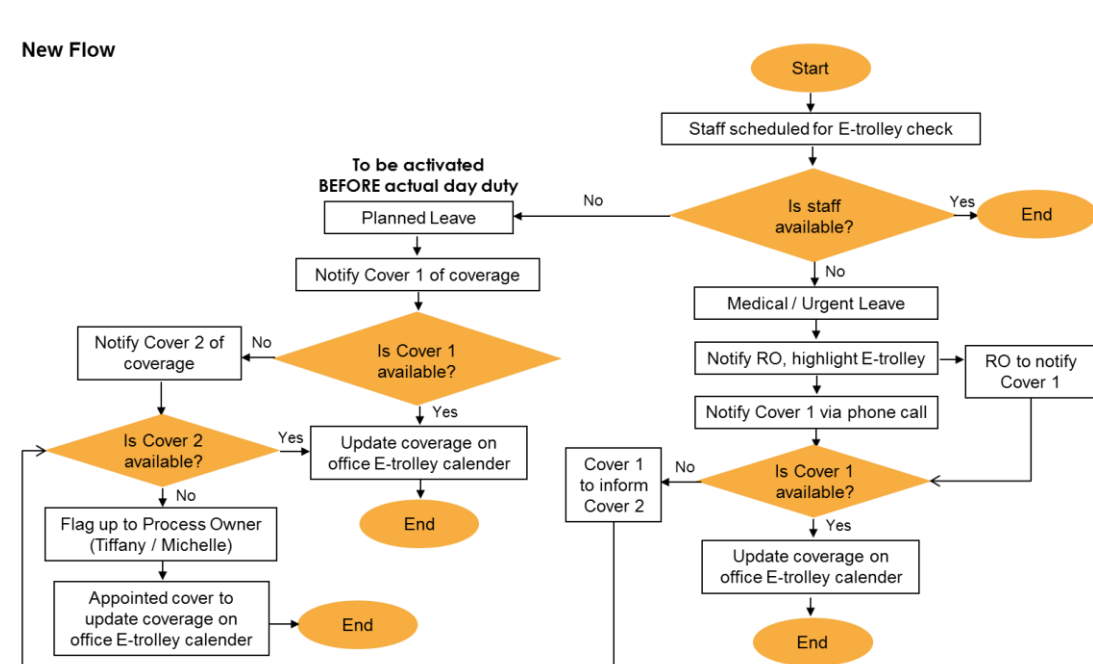


Figure 7: Workflow (Post-intervention)

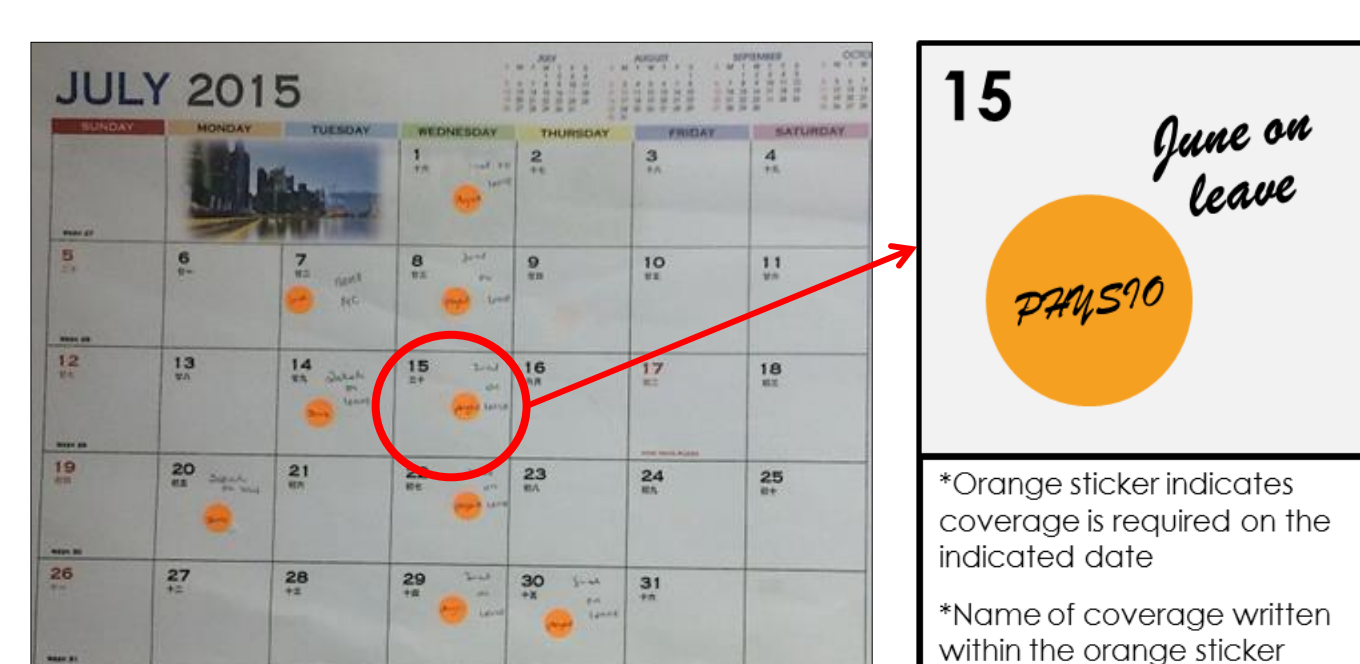


Figure 8: E-trolley Common Calendar

3. Initiatives were complemented with a team performance indicator, included in each staff's performance appraisal

## RESULTS

The average compliance improved by 9%, achieving and maintaining 100% compliance continuously over a six-month period. Post implementation survey also indicated a 32% improvement on staff satisfaction.

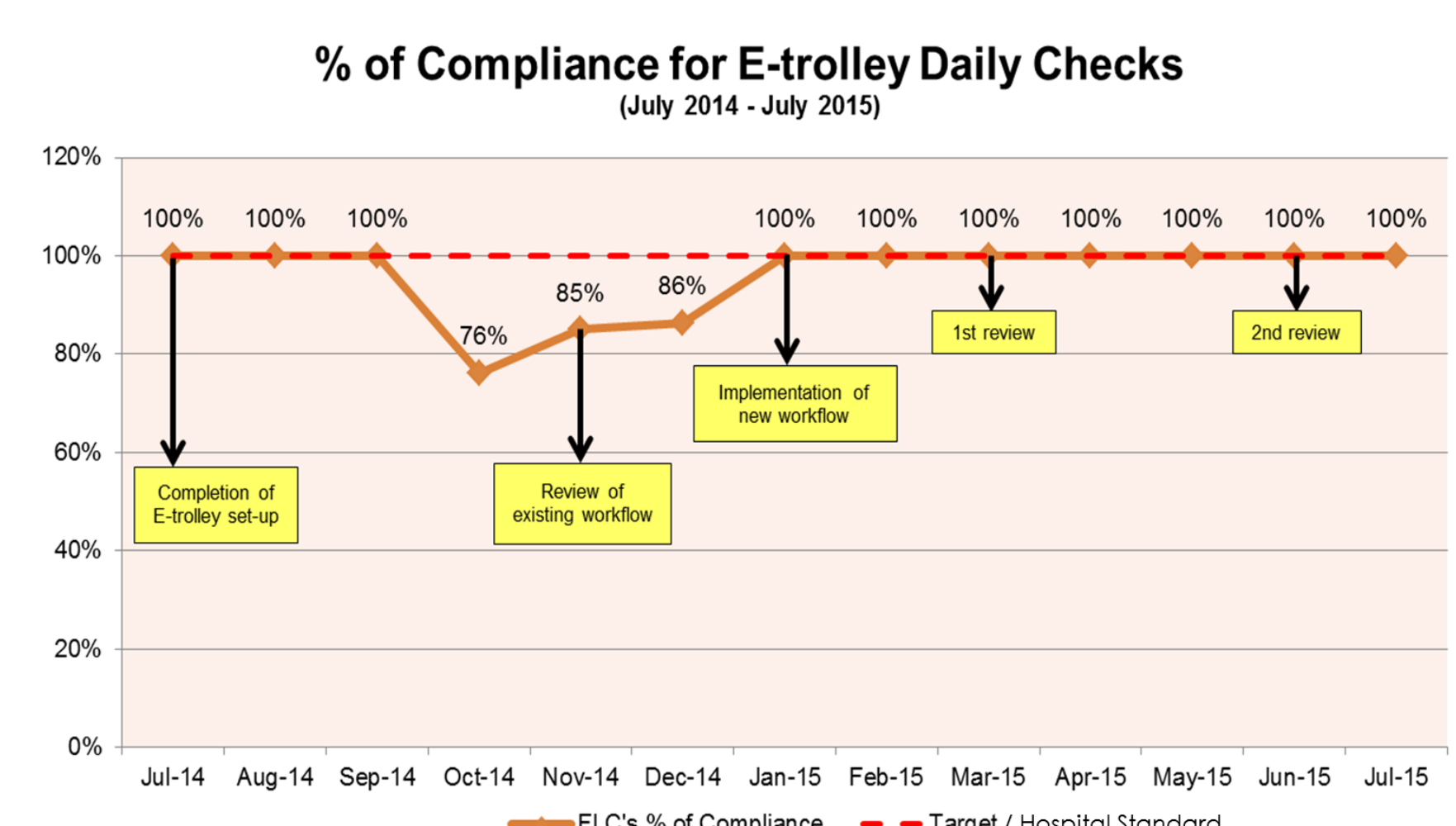


Figure 9: Percentage of Compliance for E-trolley Daily Checks (Post-intervention)

## CONCLUSION

Through establishing clear lines of accountability and common understanding to the Centre's shared responsibilities, the project encourages an environment for open communication among staff, empowering users to take responsibility and ownership, which helps prevent rate than treat any misses. Positive results from this project may be spread to work areas that operate in similar multi-stakeholder set-up with shared responsibilities.