



Clean Up for Patient Safety

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1. Background

Periodic scheduled cleaning of the wards has been in place for years. However our Environmental Service team has been facing many challenges and was unable to clean all the areas in the wards during the scheduled cleaning within the time frame. On the scheduled day, Environmental Service team may be turned away due to the acuity and the high patients' occupancy. The ward Nurse Manager was not communicated earlier of the scheduled cleaning and unable to provide the support. Environmental Service team was then called back to perform ad-hoc cleaning when the ward is less busy. It caused disruption to the Environmental Service team as they needed to rearrange manpower for the ad-hoc cleaning of the ward which may not be available readily. This ad-hoc request cleaning results in inefficient and ineffective use of resources.

2. Aims

Our team aims to achieve 90% of ward areas being cleaned within the scheduled cleaning.

3. Evidence for there being a problem worth solving

Chart 1: Median of 82% of ward areas being cleaned during the scheduled cleaning

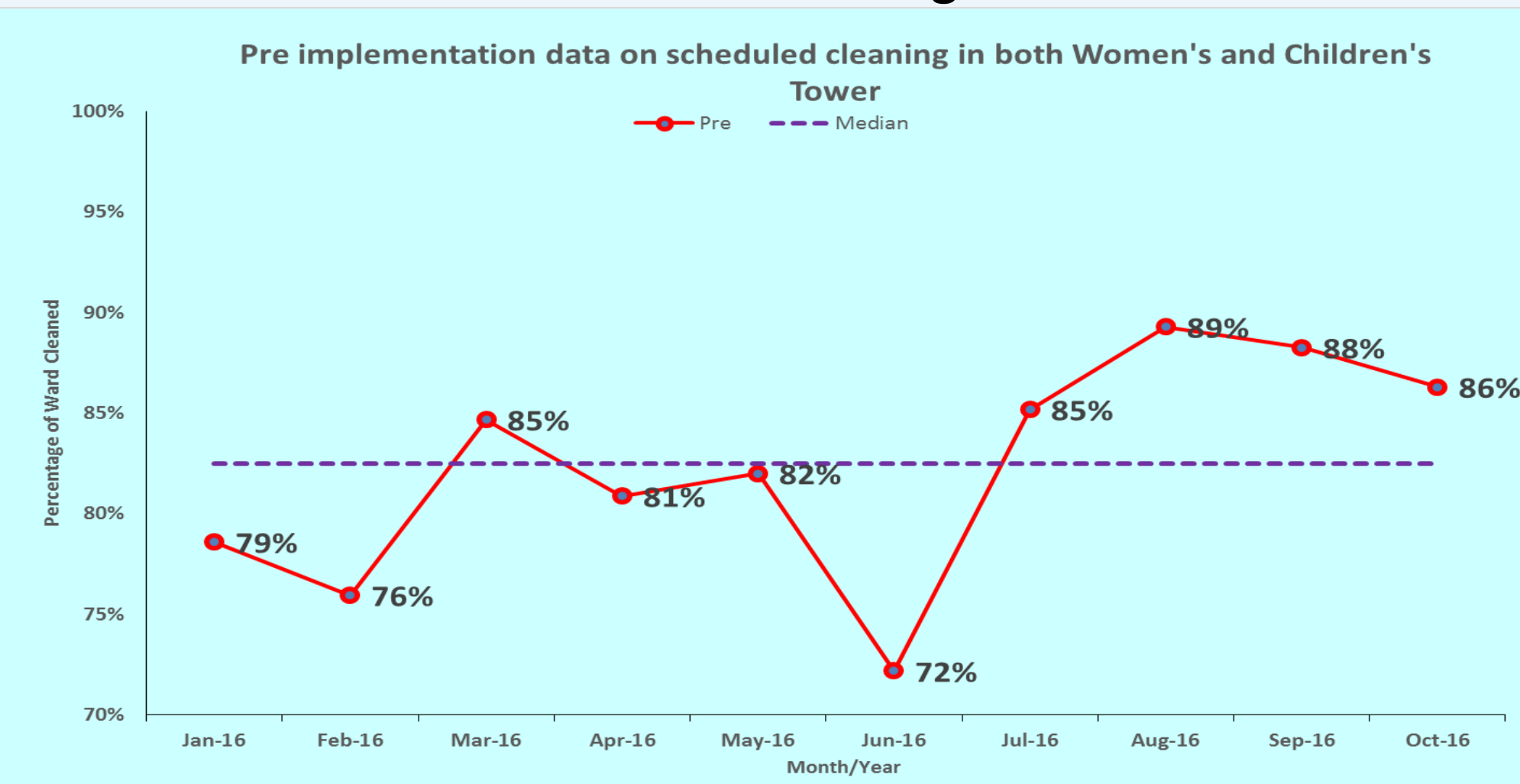


Chart 2: Median of 30 ad-hoc calls by ward nurses made to ES for ad-hoc cleaning

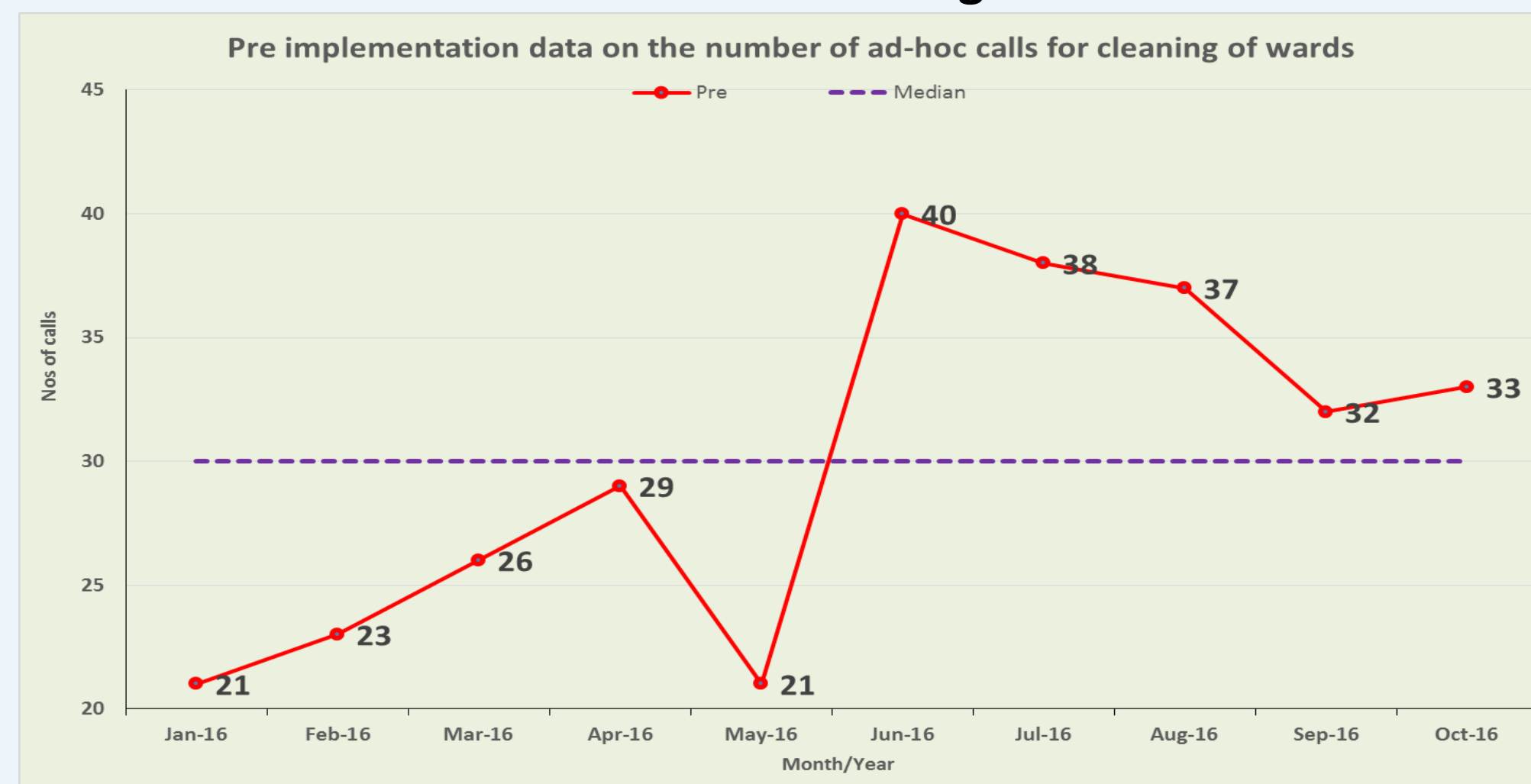


Chart 3: Median of 213 calls by ward nurses made to FM for fault reporting

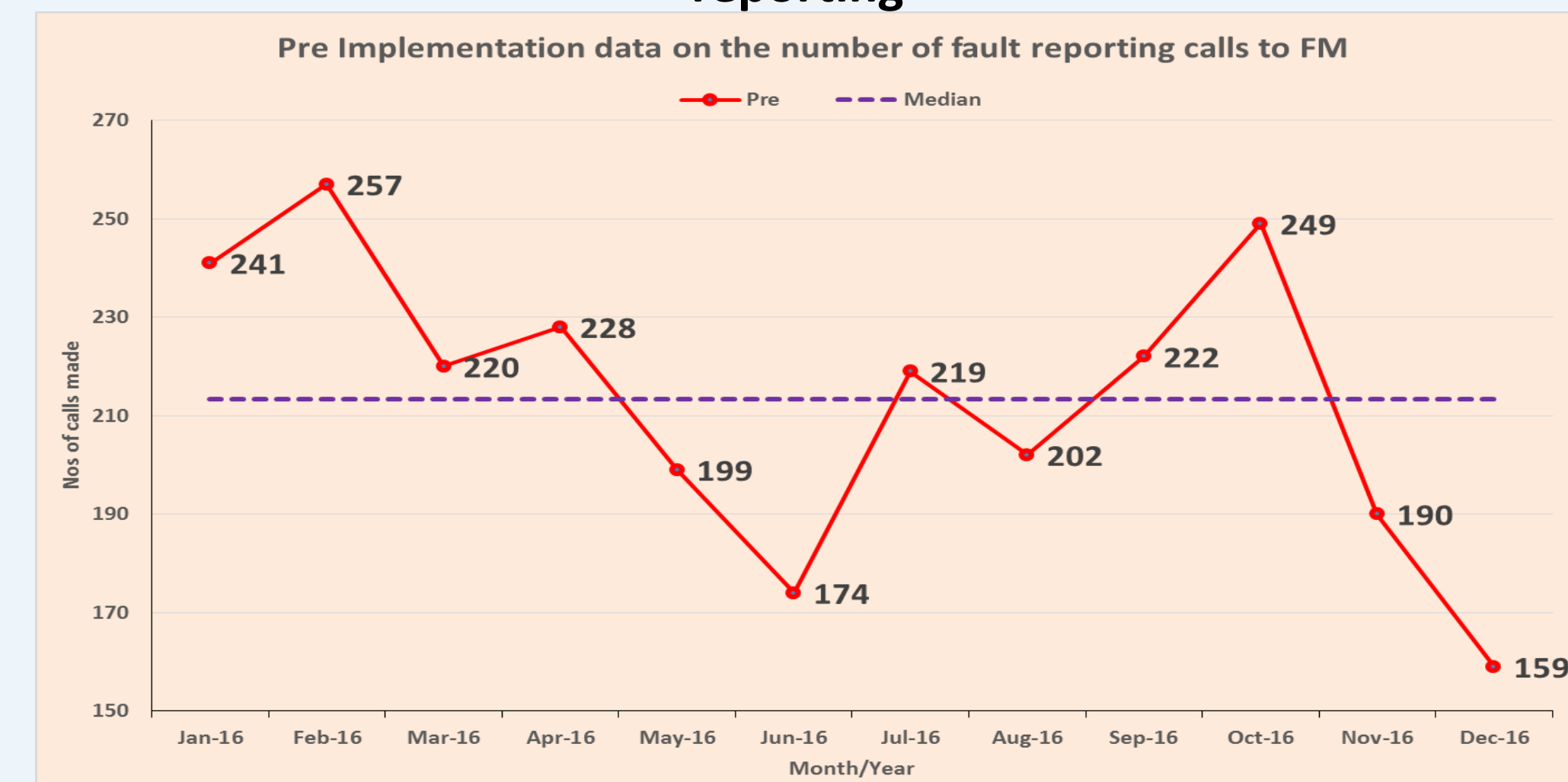


Chart 4: Time taken by ward nurse to contact Facilities Management and Environmental Services

Pre implementation data on time spent by one nurse to activate:			
Environmental Services for unscheduled cleaning		Facilities Management for defects rectification	
Activities	Time spend/nurse	Activities	Time spend/nurse
1. Nurse search for ES contact number from the people directory.	1 min	1. Nurse search for FM contact number from the people directory.	1 min
2. Inform ES to perform the unscheduled cleaning.	4 mins	2. Inform FM on fault reporting	4 mins
2. Nurse has to await ES arrival so as to coordinate the cleaning.	15 mins	2. Nurse has to await FM arrival so as to coordinate the fault rectification.	10 mins
3. Nurse has to facilitate ES for the cleaning.	5 mins	3. Nurse to facilitate FM on the fault rectification	5 mins
4. Nurse conducts a check and sign off upon work completion.	1 min	4. Nurse conducts a check and sign off upon work completion.	1 min
Total Time Taken per call	26 mins	Total Time Taken per call	21 mins
Average no of call per month	3	Average no of call per month	19
Total time taken per month	78 mins	Total time taken per month	399 mins

Chart 5: Time taken by Environmental Services to arrange for ad-hoc cleaning request

Pre implementation data on time spent by Environmental Services to arrange manpower for ad-hoc request cleaning of ward					
S/N	Activities	Time Spent (Mins)	Exec	Time spend	Housekeeper
1	Received and answer call request	1	1	1	
2	Check and arrange the deployment	2	1	2	
3	Call Project Team	1	1	1	
4	Discuss with Project Team	1			
5	Call/See NM to confirm the schedule	8	1	8	1
6	Project Team prepare cleaning tools and equipment	15			2
7	Transporting cleaning tools and equipment to the location	10			2
8	Pre-cleaning preparations	15			2
9	Cleaning procedure	90			2
10	Post cleaning arrangements	15			2
11	Handover to Nurse	5	1	5	
12	Pack-up cleaning tools and equipment	5			2
13	Cleaning of cleaning tools and equipment	15			2
14	Transporting/storing of cleaning tools and equipment	10			2
Total time spend (Mins)		193		17 mins	351 mins
Pre Implementation					30
Average total no of call per month				510 Mins	
Average total time taken per month					10,530 Mins

4. Methodology

The team conducted three pilots in six inpatient wards. After each pilot, the team evaluated the results and made the required changes:

1st pilot:
Started on 1st November 2016 in Ward 'A' and Ward 'B'
Evaluation and Action

- ES supervisor to liaise with Ward NM in coordinating the cleaning
- Provide memo to patient/caregivers announcing the scheduled cleaning
- Reviewed and enhanced the cleaning schedule
- Added more items to be cleaned in the cleaning checklist

2nd pilot:
Started on 5th December 2016 in Ward 'C' and Ward 'D'
Evaluation and Action:

- Wards will ensure there is a liaison staff in the ward
- ES supervisor to be present and perform their supervisory role and monitor the crews progress
- FM was invited to the meeting and involved in the rectification work during the scheduled cleaning

3rd pilot:
Started on 28th December 2016 in Ward 'E' and 'F'
Evaluation and Action:

- Brainstorm to further improve the cleaning schedule and revise the checklist
- FM joined in the meeting and agreed to the following work: Change of ceiling board and check for any minor repairs
- FM will coordinate their work with ES during the scheduled cleaning

5. Results – Pre and Post Implementation data

Chart 1: A significant and sustainable increase of 11% of wards being cleaned on schedule

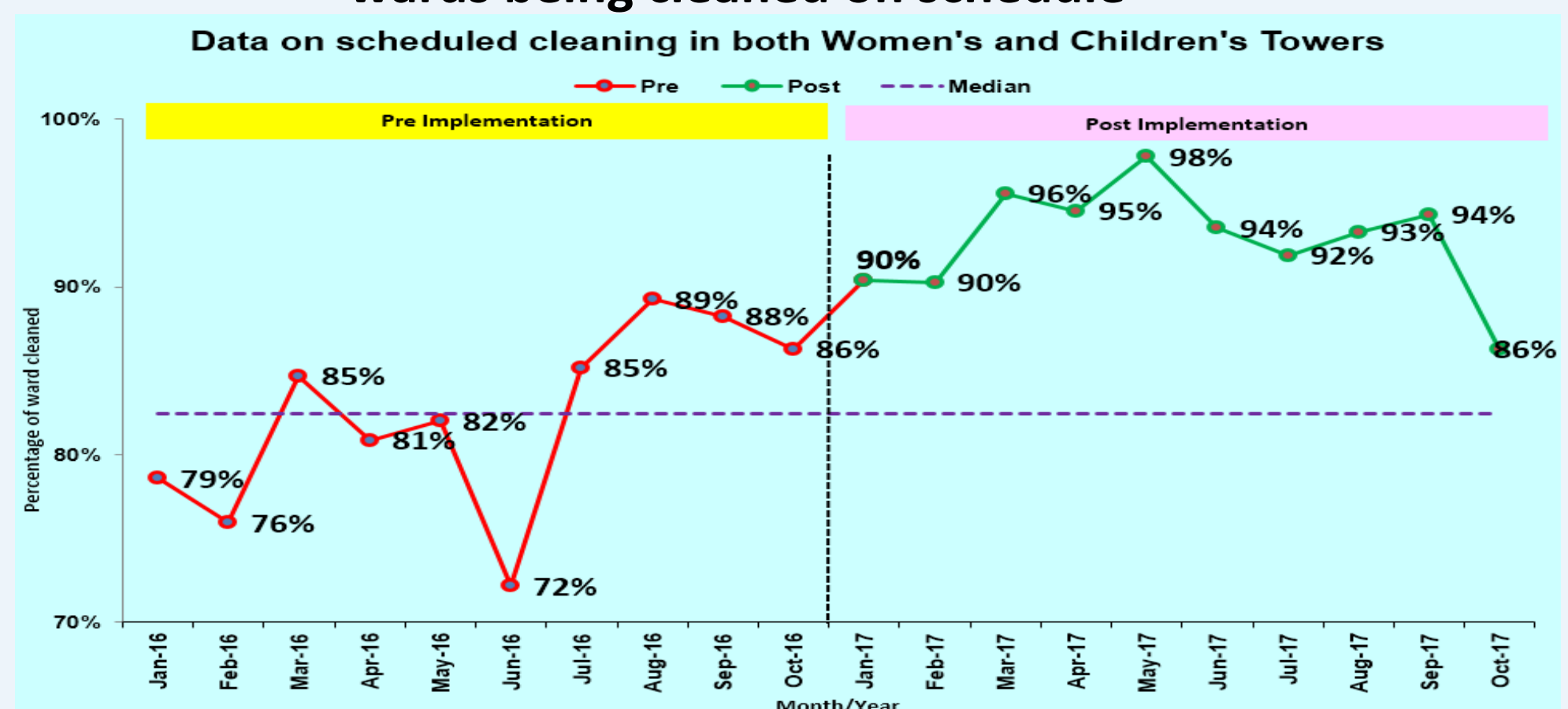


Chart 2: A significant and sustainable reduction of 58% of calls made by ward nurse to ES for ad-hoc cleaning

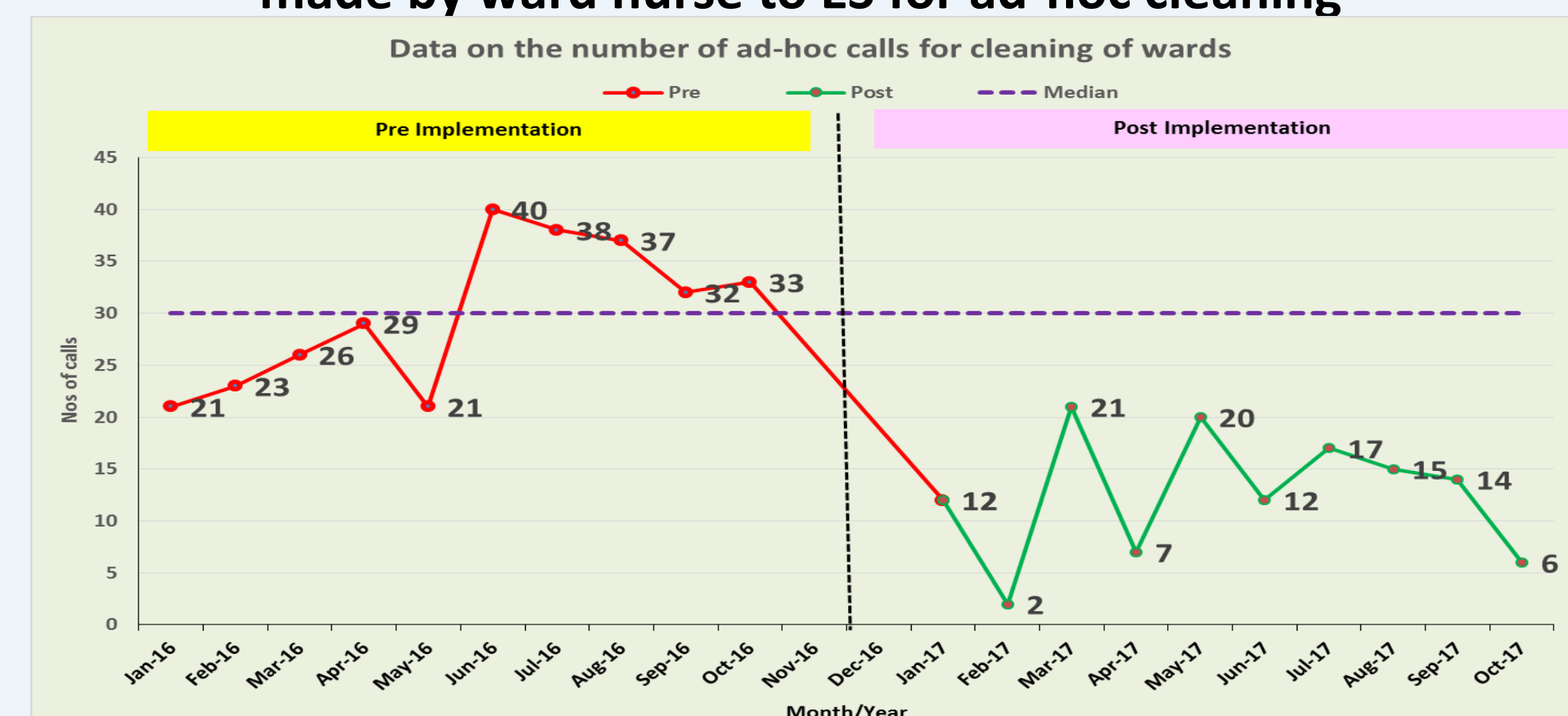


Chart 3: A significant and sustainable reduction of 28% of calls made by ward nurses to FM for fault reporting

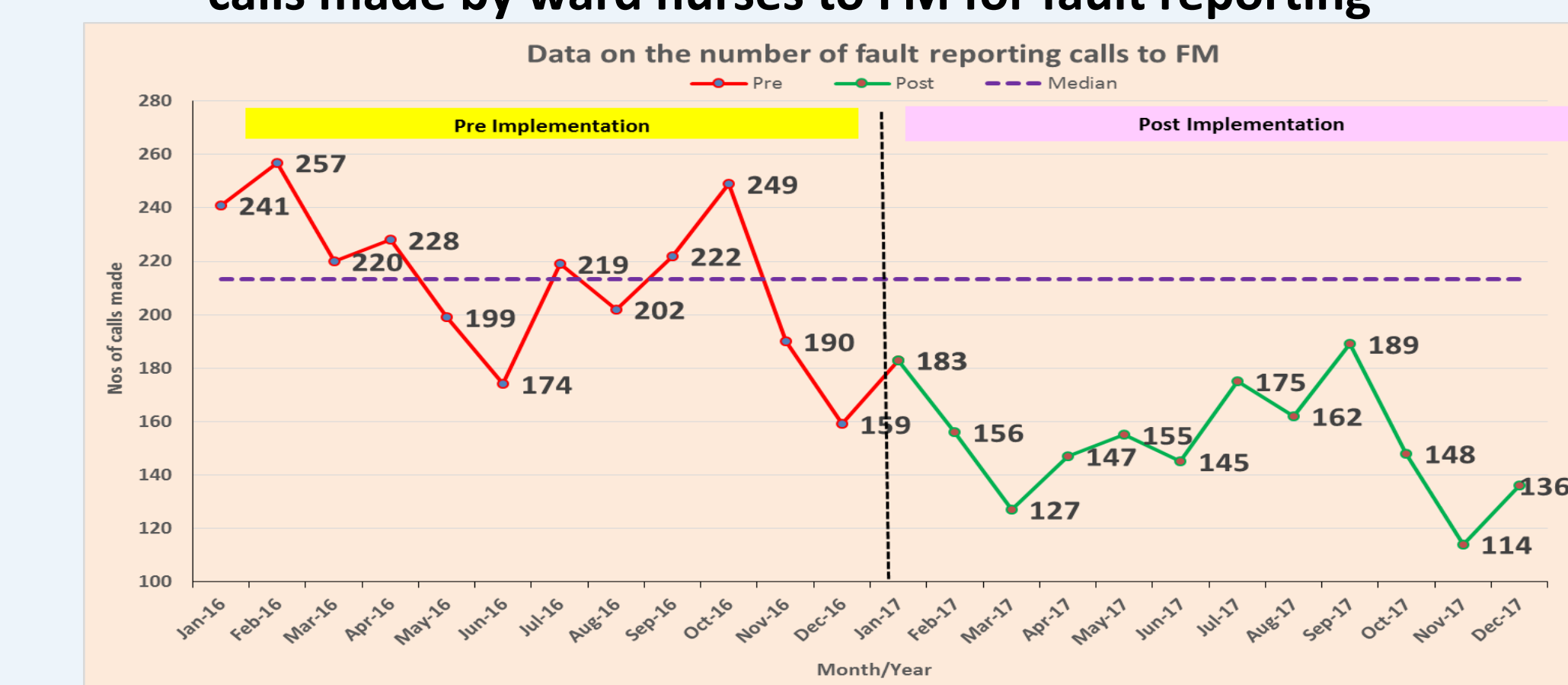


Chart 4: Reduction in time spent by nurses to call Facilities Management and Environmental Services

Data on time spent by one nurse to activate:			
Environmental Services for unscheduled cleaning		Facilities Management for defects rectification	
Activities	Time spend per nurse (Mins)	Average total no of call per month	Average total time taken per month (Mins)
1. Nurse search for ES contact number from the people directory.	1		
2. Inform ES to perform the unscheduled cleaning.	4		
2. Nurse has to await ES arrival so as to coordinate the cleaning.	15		
3. Nurse has to facilitate ES for the cleaning.	5		
5. Nurse conducts a check and sign off upon work completion.	1		
Total Time Taken per call	26		
Post Implementation			
Average total no of call per month	12.6	30	780
Average total time taken per month (Mins)	327.6		
58% reduction			
Data on time spent by one nurse to activate:			
Facilities Management for defects rectification		Environmental Services for unscheduled cleaning	
Activities	Time spend per nurse (Mins)	Average total no of call per month	Average total time taken per month (Mins)
1. Nurse search for FM contact number from the people directory.	1		
2. Inform FM on fault reporting	4		
2. Nurse has to await FM arrival so as to coordinate the fault rectification.	10		
3. Nurse to facilitate FM on the fault rectification	5		
4. Nurse conducts a check and sign off upon work completion.	1		
Total Time Taken per call	21		
Post Implementation			
Average total no of call per month	153	213.3	4479.3
Average total time taken per month (Mins)	3213		
28.3% reduction			

Chart 5: Reduction in time spend by Environmental Service - Executive coordination and housekeeper time

Time taken for Environmental Services to arrange for ad-hoc request											
S/N	Activities	Time Spent (Mins)	No of executive needed	Time spend (Mins)	Average total no of call per month	Average total time taken per month (Mins)	Executive Post Implementation	Average total no of call per month	Average total time taken per month (Mins)	Housekeeper Pre Implementation	Housekeeper Post Implementation
1	Received and answer call request	1	1	1							
2	Check and arrange the deployment	2	1	2							
3	Call Project Team	1	1	1							
4	Discuss with Project Team	1									
5	Call/See NM to confirm the schedule	8	1	8							
6	Project Team prepare cleaning tools and equipment	15								2	30
7	Transporting cleaning tools and equipment to the location	10								2	20
8	Pre-cleaning preparations	15								2	30
9	Cleaning procedure	90								2	180
10	Post cleaning arrangements	15								2	30
11	Handover to Nurse	5	1	5							
12	Pack-up cleaning tools and equipment	5								2	10
13	Cleaning of cleaning tools and equipment	15								2	30
14	Transporting/storing of cleaning tools and equipment	10								2	20
Total Time spend (Mins)		193		17						351	
Pre Implementation											
Average total no of call per month					30	510				10,530	
Average total time taken per month (Mins)						2142				4422.6	
58% reduction in Executive time											
58% reduction in Housekeeper time											

Chart 6: Total man hour saved of \$45,528 per year across Nursing and ES

Staff	Time saved (Mins)	Total man hour saved per month	Total man hour saved per year
Nurses to call ES for ad-hoc cleaning of wards	452.4		
Nurses to call FM for defect rectification	1266.3	\$3,794	\$45,528
ES Exec time to coordinate ad-hoc cleaning of wards	295.8		
ES Housekeeper to perform ad-hoc cleaning of wards	6,107.4		

6. Conclusion

We are able to achieve improvement that is statistically significant with 90% cleaning of ward areas within the scheduled time frame. With the increase number of wards cleaned within the schedule, it allow better utilisation of nursing time for patient care, effective and efficient utilisation of resources leading to improved work productivity.