



Singapore Healthcare
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Clinic Room Utilisation Report Speed Up

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Introduction

1. Clinic rooms are limited resources in the Specialist Outpatient Clinic.
2. Hence it is vital to optimise their utilisation to create enough supply to meet demand to improve access to care, in line with the Singapore General Hospital's vision.
3. In order to do so, accurate and timely information on the clinic room utilisation is needed to plan for supply improvement initiatives.
4. In the previous process, the staff will need 8 days per month to produce the clinic room utilisation report.
5. The team was given the goal of reducing the time taken to produce this report with a higher accuracy.

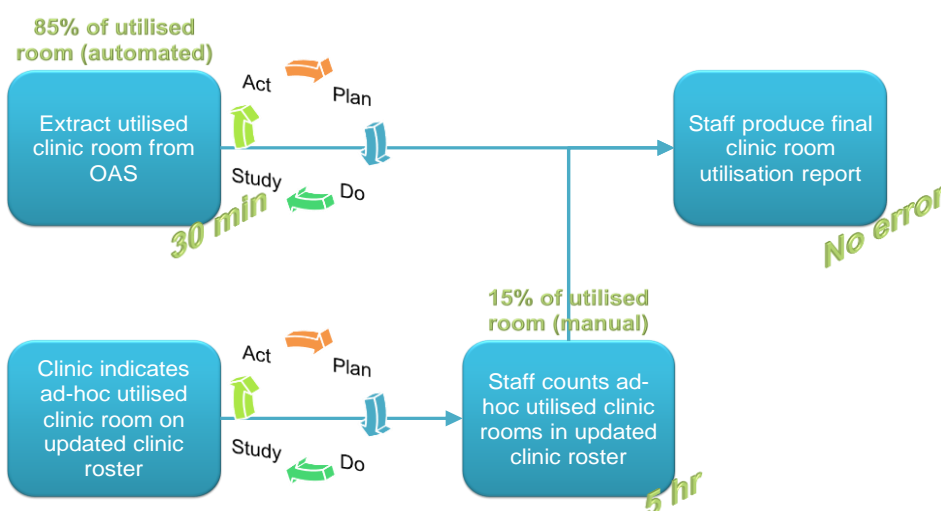
Problem

1. In the previous process, the staff will need 8 days per month to produce the clinic room utilisation report.
2. The long time needed is due to the labour-intensive work of manually counting all the utilised clinic rooms in all the punctuality reports.
3. Over time, the staff will experience fatigue in manual counting, leading to errors in the reported clinic room utilisation.



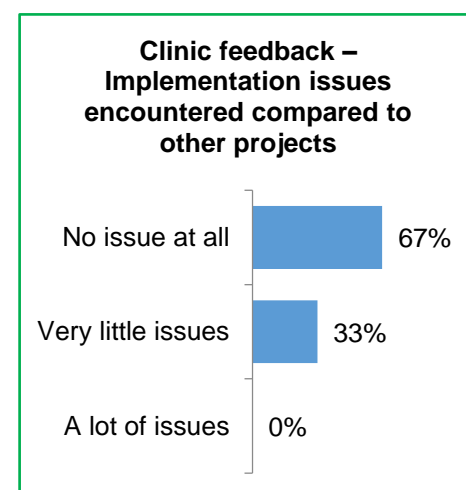
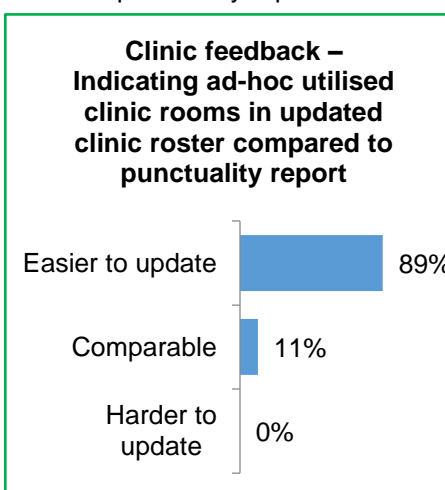
Methodology

1. The PDSA cycle was used as the methodology to design, test and study the solutions before their implementation.
2. In the first PDSA cycle, the team developed a solution to extract the utilised clinic rooms from OAS.
3. In the second PDSA cycle, the team developed an updated clinic roster for the clinic to indicate the ad-hoc utilised clinic rooms for the staff to count.
4. To produce the final clinic room utilisation report, the team combined the solutions from the first and second PDSA cycles.



Result

1. In the previous process, the staff needed to count about 5,000 utilised clinic rooms in all the punctuality reports, which will take 8 days.
2. Time taken by the new process:
 - The staff only needed to count 15% of ad-hoc utilised clinic rooms in all the updated clinic rosters, which will take 5 hours.
 - The remaining 85% of utilised clinic rooms would be extracted from OAS, which will take 30 minutes. They need not be counted.
3. Accuracy of the new process:
 - Initially, the new process was found to have a difference of -2.6% to $+5.4\%$ from the punctuality report.
 - On further investigation, the new process was found to match OAS exactly.
 - This means that the new process is 100% accurate, while the punctuality report had an error between -2.6% to $+5.4\%$.



Conclusion

1. The team has achieved the goal of reducing the time taken by the staff to produce the clinic room utilisation report from 8 to about 1 day per month.
2. The new process has increased productivity by about 87.5% through partial automation.
3. Moreover, the new process has achieved 100% accuracy on the clinic room utilisation reported.
4. Finally, the new process has reduced fatigue of the staff in manual counting.



"So much of counting, so tired yet so little time to meet deadline ☹"
Mei Qi



"Sometime have to double count to ensure it is correct.
So stressed ☹"
Susanna



"Process has speeded up! Life's a breeze now ☺" – Mei Qi & Susanna