Faster and More Accurate Monthly RTS Report

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Background

The SGH Specialist Outpatient Clinics (SOCs) submit a monthly RTS (Room charges to Service Provider) report to the SGH Finance Division to track the usage of the SOC consultation rooms.

As the calculations involve the clinic sessions booked by the various specialties, odd week bookings, sharing of rooms and various other usage patterns have to be taken into account to provide an accurate report. A section of a clinic roster is provided as an example and how the different permutations are calculated is shown in Figure 1.

The previous method of calculating the RTS report was done by translating the clinic roster into the format used for RTS reporting (examples of the clinic roster and RTS report are shown in Figure 2), based on number of clinic sessions booked per department per week. This was a manual process and due to the various booking permutations, this method of calculating the sessions was tedious, time-consuming and error-prone.

Methodology

The team reviewed the structure of the clinic roster that was maintained in a Microsoft Excel format and was able to restructure the roster data fields to facilitate a semi-automated process. This was achieved by (1) standardizing the data inputs to facilitate the use of tables and (2) incorporating formulates to draw on the tabulated data and generate a data string format that is compatible with the RTS report structure. The flow of the data is represented in Figure 2.

Results

The time taken to process a single clinic's RTS report was drastically reduced from the existing 30 minutes to less than 3 minutes (Figure 3). The time savings is multiplied when this method is applied to the 22 clinics and centres throughout the SGH SOCs. The time saved allows clinic executives more time to focus on clinic operations and improved their efficiency.

Error-proofing is also introduced into the process due to the automation involved, which reduces the risk of miscalculation and time required for checking and rework.

Conclusions

Through the use of information technology and automation, in this case with Microsoft Excel, work processes such as RTS reporting can be made more efficient and error-proof. There is certainly a benefit to the use of IT at work and more can be done to further implement the use of IT to improve efficiencies throughout the SOCs.
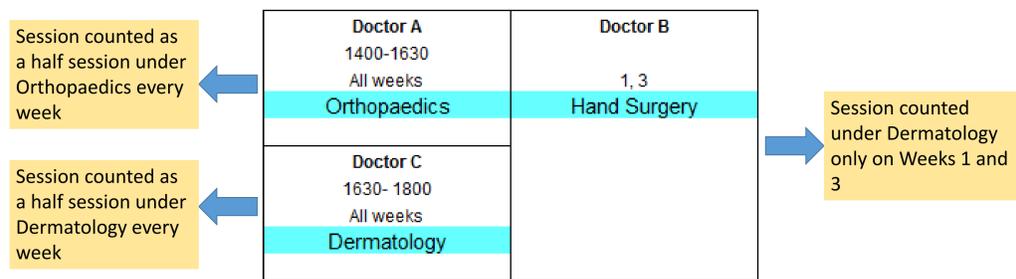

Figure 1: Example of a section of a clinic roster and how the different usage permutations are calculated.

(1) An example of a clinic roster, showing how clinic sessions are arranged by day of week and clinic rooms. Sessions that run on particular weeks only or are sharing rooms are also recorded here.

(2) Information taken from the clinic roster is automatically sorted and organized into tables. The sessions booked by the respective specialties are sorted by days and weeks.

(3) Using the data from the previous tables, the sessions booked by the respective specialties are automatically counted and displayed in a RTS report compatible format.

(4) The data is copied from the previous table and pasted into the RTS report with ease.

Figure 2: Automated flow of data from the clinic roster to the RTS report.
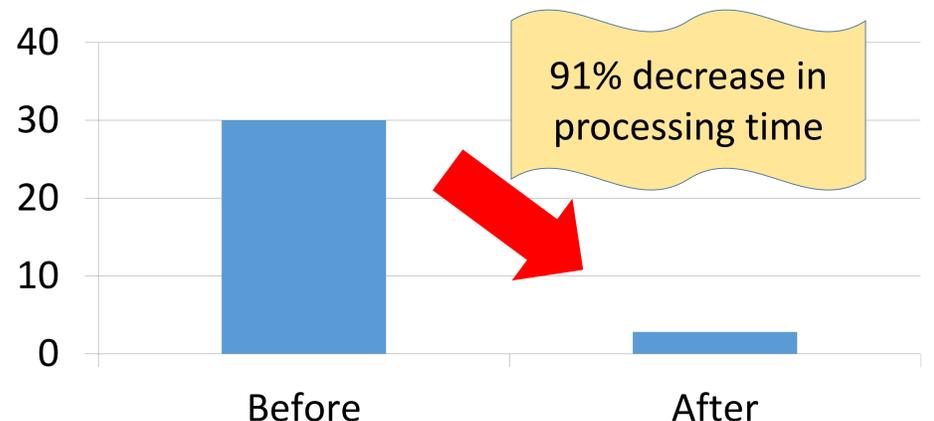

91% decrease in processing time

Figure 3: Processing time of RTS report before and after implementation of the automated process.