



Project Title

Simplifying Work Processes to Reduce Processing Time

Project Lead and Members

- Lee Ling Ling
- Sheila Tan Sok Mui

Organisation(s) Involved

KK Women's and Children's Hospital

Healthcare Family Group(s) Involved in this Project

Healthcare Administration, Medical

Project Period

Start date: Jul 2020

Completed date: Aug 2021

Aims

• To aim to improve the operational efficiency by reducing 50 processing time in generating telehealth workload report by leveraging on IT system.

Background

See poster appended/below

Methods

See poster appended/below

Results

See poster appended/ below



CHI Learning & Development (CHILD) System

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign, Quality Improvements, Workflow Redesign, Productivity, Manhour Saving, Time Saving

Technology, Digitalisation, Systems/Platforms, Digital Health, Data Analytic

Keywords

Data Extraction, Data Analysis, Lean Methodology

Name and Email of Project Contact Person(s)

Name: Lee Ling Ling

Email: singaporehealthcaremanagement@singhealth.com.sg



Simplifying Work Processes to Reduce Processing Time



Lee Ling Ling, Sheila Tan Sok Mui

Introduction

The onset of COVID-19 pandemic has triggered rapid shift from traditional face-to-face care to telehealth. Similar to other services, it is important to monitor the workload and to capture manpower utilization for regular reporting.

Prior to the pandemic, due to the low and infrequent telehealth services, tracking of these data was done manually by the respective departments. With the surge of telehealth services, delays of data submission by the respective departments were noted. This resulted in a longer time needed to collate and analyze the data before submitting the report to senior management.

Aim Re

We aim to improve the operational efficiency by reducing 50% processing time in generating telehealth workload report by leveraging on IT system.

Method

Staff assisting with telehealth workload report was gathered and discussed the process and the challenges they faced. Together we mapped and reviewed the process involved when generating telehealth workload reports.

Through root cause analysis, we have identified the cause of the delay. Together, we have also explored the potential solution and its feasibility of extracting data available in existing systems.

Problem	Root Cause	Solution
Long hours spent to generate workload information resulted in delay reporting	Multiple sources of information, which included manual recordings of data	Leverage on one system (eHIntS) for data extraction. Eliminate data inaccuracy and the wait for data.

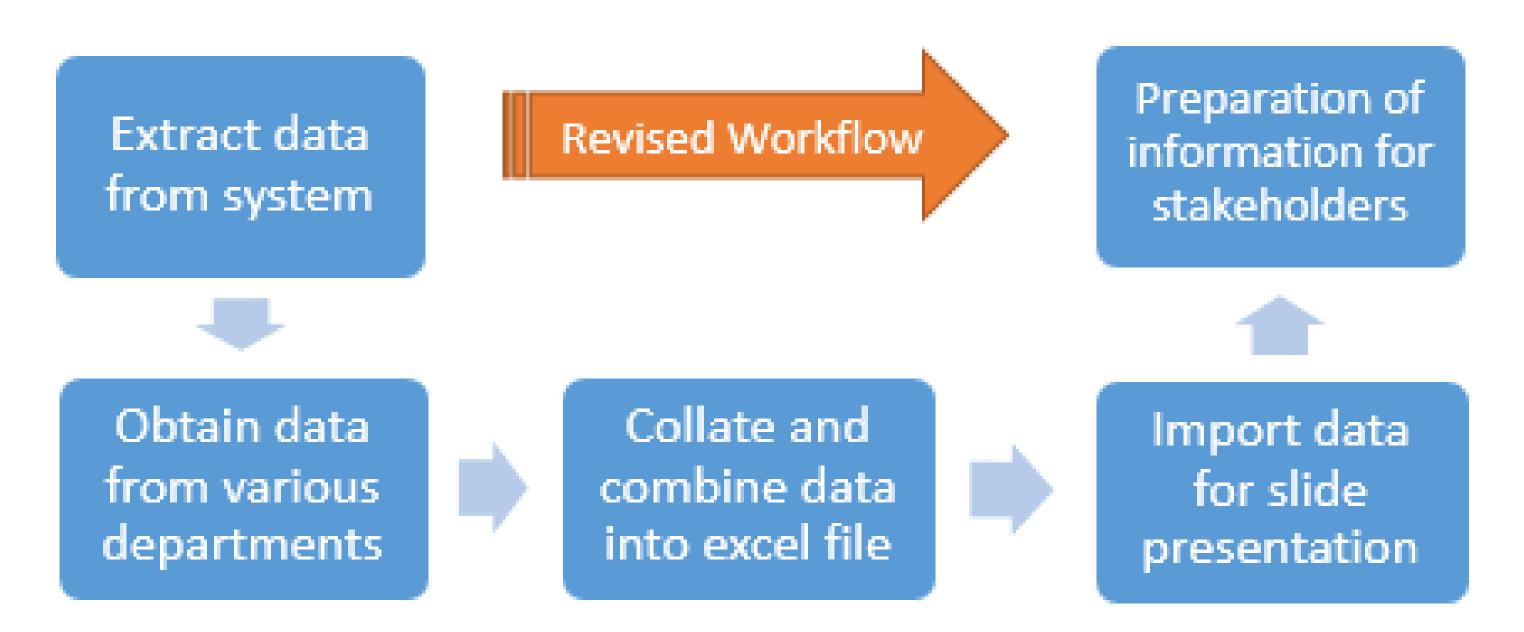
Table: Root Cause Identified and Solution to Mitigate the Problem

Intervention

From the process flow, we eliminated the unnecessary processes (waste – Lean Methodology) from 5 steps to 2. The team went on to trial extracting the required data directly from eHIntS in January 2021. The trial showed a reduction of 30 minutes when preparing the report despite additional steps to verify and data check for accuracy. Feedback was favorable with the revised workflow.

Other than time reduction, the revised workflow has eliminated the need for respective departments to manually collate and submit the data.

The report was further enhanced to include a Dashboard with comprehensive graphs/charts and customized report for reporting to stakeholders.



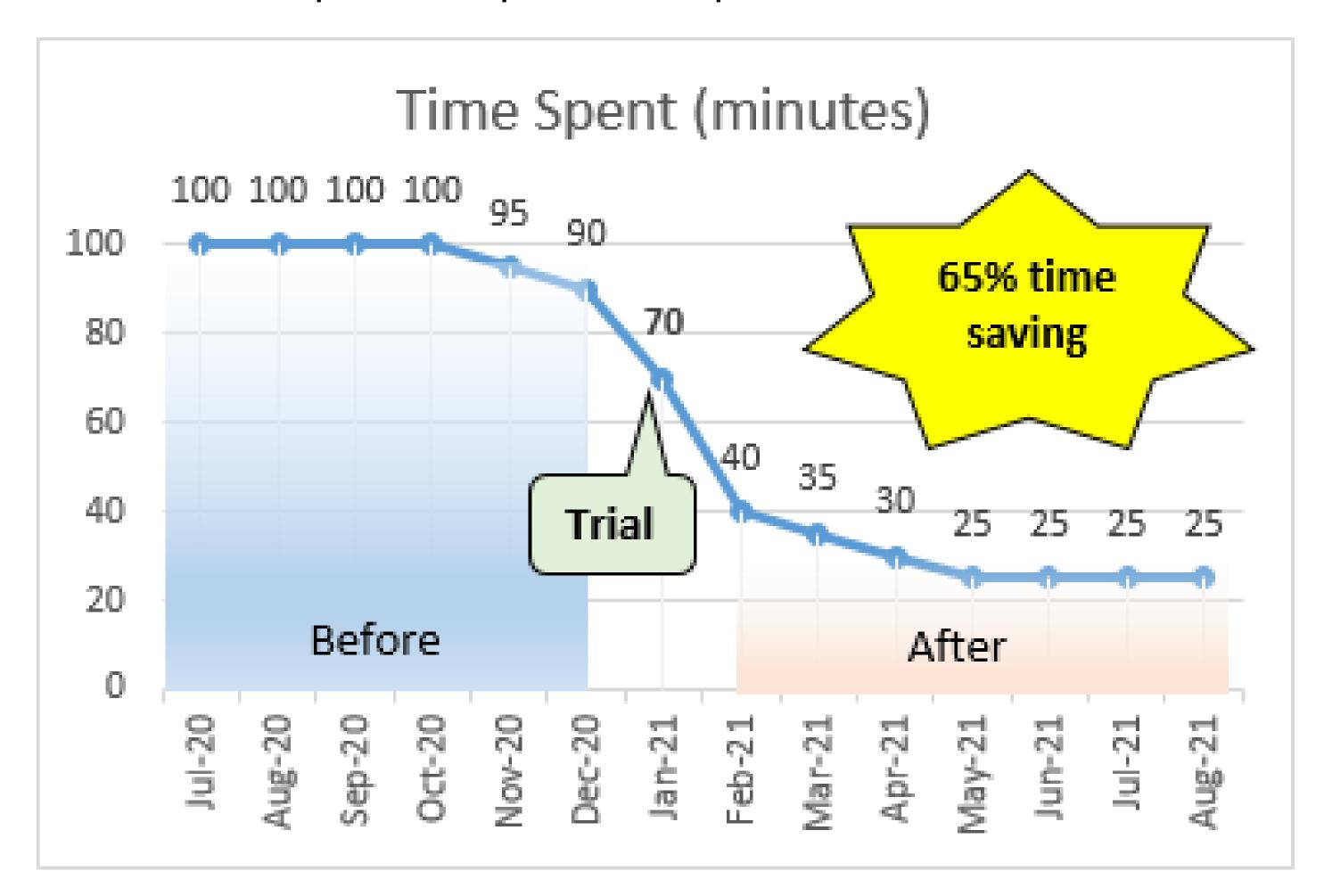
Flowchart: The process was significantly streamlined from 5 steps to 2 steps.

Results

The dashboard and reports customised in eHIntS are readily available for transpose to slide and export for reporting.

Since implementing the new workflow, the time spent on preparing for telehealth workload data and slides have further reduced.

The team can now spend the time saved to analyse the trend, discuss action plan to improve the uptake of telehealth services.



Run Chart: Further reduction of Time Spent on Report Preparation

Overall, the team saved an average of 65% of time, beyond our target. This is largely due to the streamlined workflow and staff familiarization when extracting data from system.

Conclusions

This project truly demonstrates inter-professional collaboration. Integrating financial, operational and IT aspects to review processes, eliminate wastes to enable staff to effectively utilize their time working on value added tasks, alleviating concerns of staff fatigue and burn-out.