



**Singapore Healthcare
Management 2022**

Streamline Pathology Reconciliation Process for NHCS@SKH Outpatient Cases

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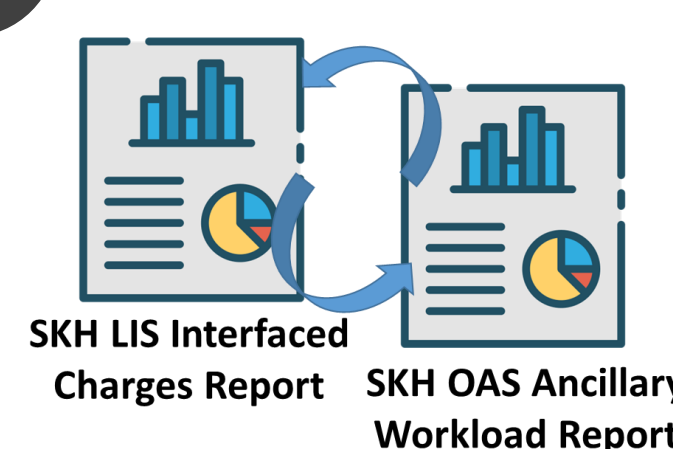
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Introduction & Problem Statement

Doctor's consultation and other common ancillary services (such as blood test) rendered at Medical Centre Level 4 for NHCS@SKH outpatients are currently charged in NHCS Outpatient Administration System (OAS) since end June 2021. Based on the current established partnership between SKH and NHCS, the processing of phlebotomy specimens are being supported by SKH Pathology, aided by SKH Laboratory Information System (LIS). However, both LIS and OAS systems are not interfaced at system level to synchronise the resulting of specimens and charging of services together. To ensure that all blood test services have been accurately charged to outpatients based on the test specimens processed, reconciliation and rectification tasks are being performed by SKH Pathology & SOC on a daily basis (see illustration).

For NHCS@SKH outpatient cases, SKH Pathology is unable to perform the up-front reconciliation step (Step 1 in illustration) as they do not have access into NHCS OAS to retrieve the OAS ancillary report. As such, Pathology sends all NHCS@SKH cases to SOC for staff to perform manual checks if a rectification is needed for each case on a daily basis

1



Reconciliation by Pathology

Daily reconciliation using reports from SKH LIS and OAS to identify cases requiring follow-ups or with discrepancies

2



Bill Rectification by SOC

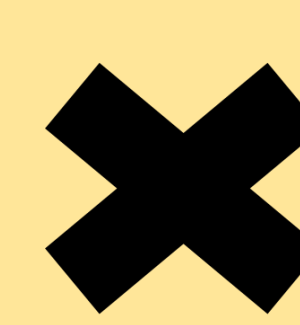
Pathology sends the list of outpatient cases that requires rectifications to SOC on a daily basis for follow-ups

Translates to,

~470 visits/ month

~7.4 minutes to check/ visit

~58 hours of checking/ month

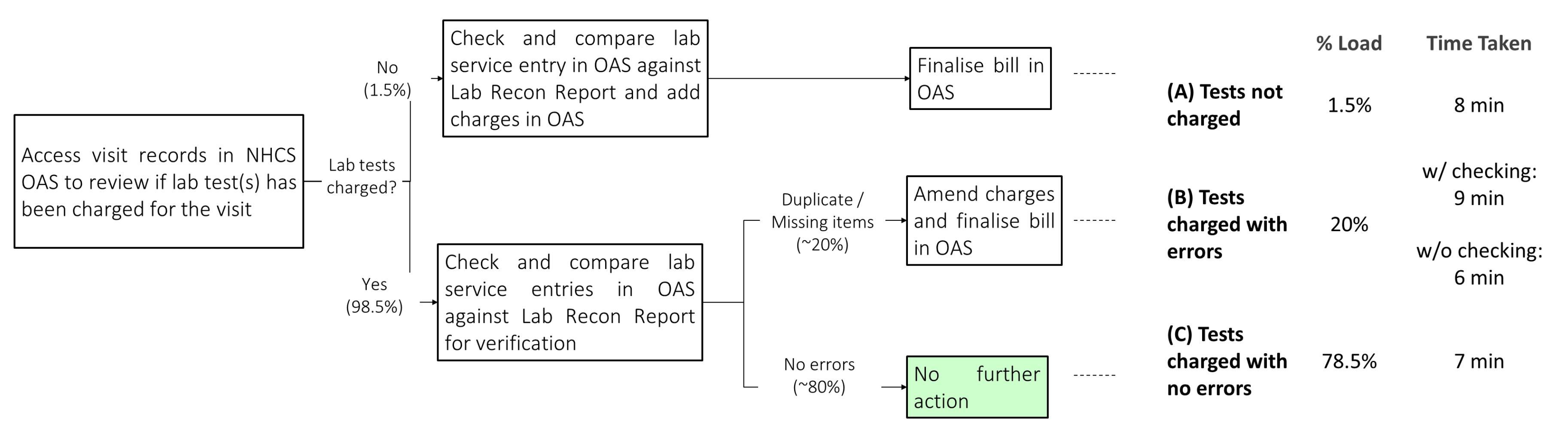


* Based on period from 16 Jun 21 to 03 Nov 21 (4.5 months), there were a total of 2,100 visits with Lab Service Line Items for NHCS@SKH outpatient case:

Methodology

Understanding Current Process

Study was performed to document the current process and identify the associated workload, including the estimated amount of man-hours needed (see illustration on the right)



Brainstorming on Feasible Solutions

Identified the following 2 options that involve zero cost for implementation:

- Option 1:** Schedule daily email batch job from NHCS OAS to allow the automated sending of NHCS OAS Ancillary Workload Report to selected group of SKH Pathology staff
- Option 2:** Provide NHCS OAS access to selected group of SKH Pathology staff

Engaging Stakeholders

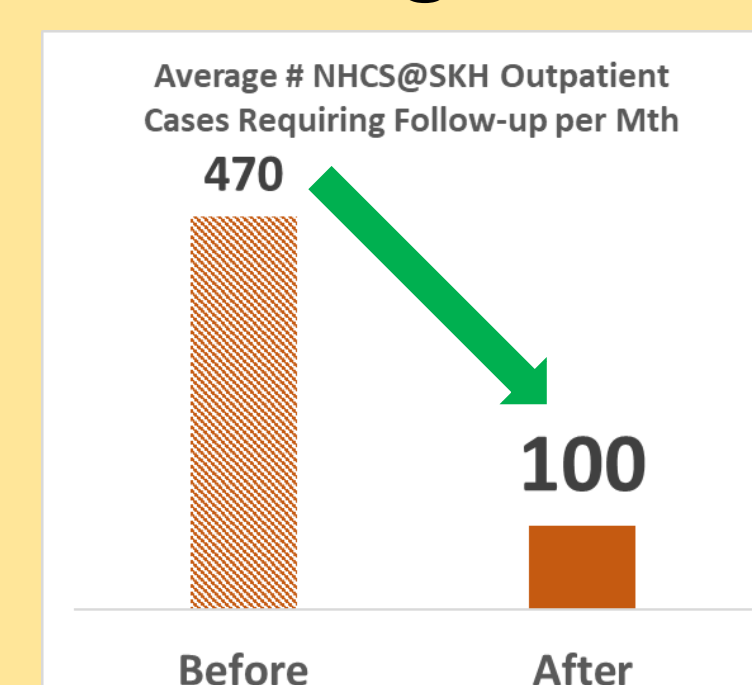
Working group comprising of representatives from SKH Clinic Outpatient Operations, SKH Pathology, NHCS Department of Cardiology and NHCS Finance was organised to discuss and review on potential solutions

Implementation

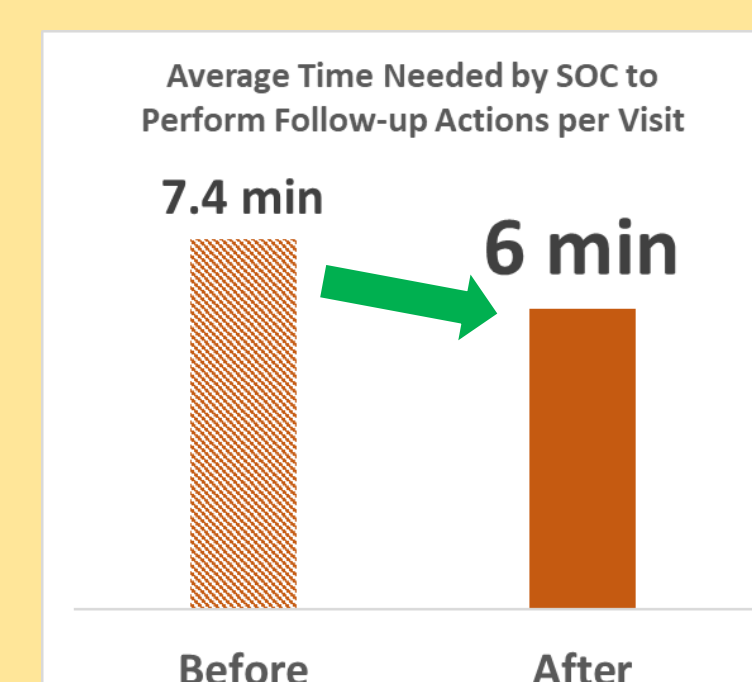
Based on the needs of SKH Pathology, the working group proposed to adopt option 1. SKH Pathology team will automatically receive the report and perform their daily reconciliation to identify true cases requiring follow-ups w.e.f 24 Jan 2022

Results & Conclusion

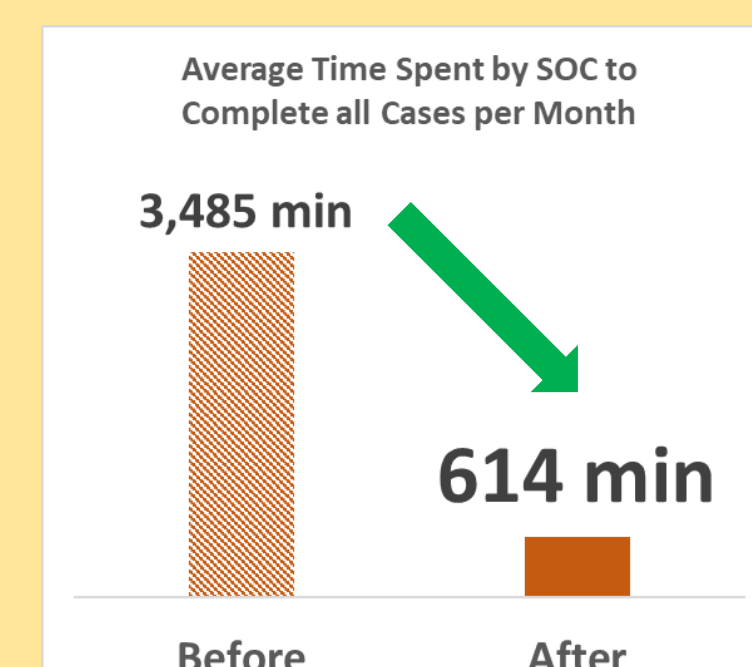
Following outcomes were achieved:



79% Reduction in average number of NHCS@SKH outpatient cases requiring follow-ups per Month



17% Reduction in time needed by SOC to perform follow-up actions per Visit



82% Reduction in time spent by SOC to complete all cases per Month

✓ 100% Staff Satisfaction
✓ \$0 Cost Involved

Through this quick win, we were able to achieve estimated net savings of 47.9hours per month. Staff are now able to perform other value-adding tasks and also ensure any rectifications and follow-ups needed are processed in a more timely manner.