CENTRE FOR HEALTHCARE INNOVATION

CHI Learning & Development (CHILD) System

Project Title

Reducing Rework Through Optimising Specialist Outpatient Clinic Day Surgery and Laboratory Billing

Project Lead and Members

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Organisation(s) Involved

Singapore General Hospital

Healthcare Family Group Involved in this Project

Healthcare Administration, Medical

Applicable Specialty or Discipline

Otolaryngology

Project Period

Start date: March 2020

Completed date: Mach 2022

Aims

- Improved Patient Satisfaction
- Accurate Billing Missing Charges
- Manpower Savings on Rework
- Improved Staff Satisfaction and Morale



CHI Learning & Development (CHILD) System

Background

See poster appended/below

Methods

See poster appended/below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign

Productivity, Time Saving

Keywords

Billing, Outpatient, Day Surgery

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SPECIA LABOR Singapore Healthcare Management 2022

REDUCING REWORK THROUGH OPTIMISING SPECIALIST OUTPATIENT CLINIC DAY SURGERY AND LABORATORY BILLING

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In SGH, the Department of Otolaryngology-Head & Neck Surgery (ENT-HNS) provides outpatient consultation services from ENT Centre and Specialist Outpatient Clinic (SOC) A. Patients receiving treatment under this department are commonly treated for conditions relating to the ear, nose and throat. As part of the care provided, patients may undergo minor procedures clinic, thus converting their outpatient visit to a Day Surgery visit. One such procedure is Post Nasal Space Biopsy (PNS Bx).

PROCESS IMPROVEMENT

Through patient feedback and staff engagement, Day Surgery Billing of minor procedures performed in clinic was an opportunity for improvement. Multiple stakeholders from SOC, Patient Financial Services (PFS), Finance, Pathology, Information Technology(IT) Office and ENT-HNS Department were engaged to review the current workflow. The revised workflow was then piloted from March 2020 onwards and the results were tracked from April 2020 to March 2022 (FY20-FY21).

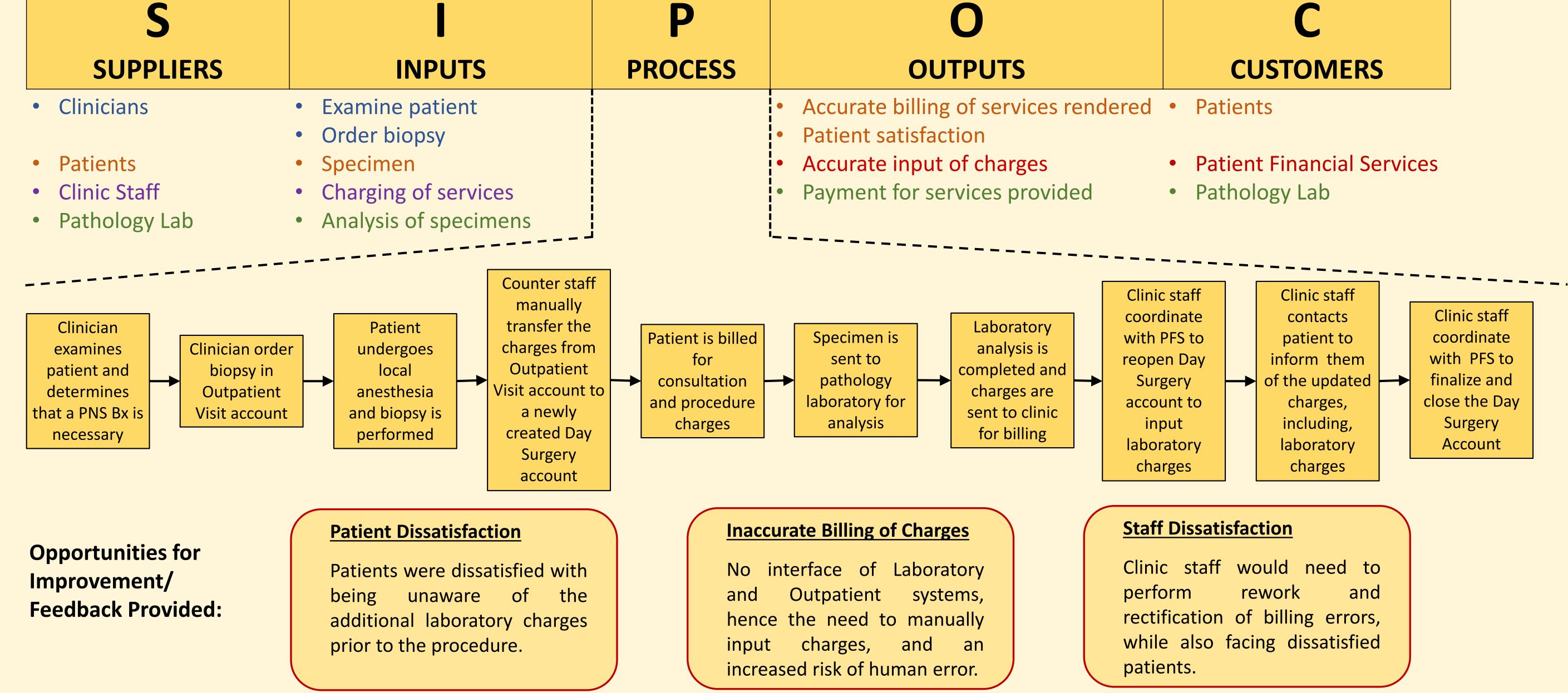
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mproveme

Workflow

Revise

INTRODUCTION



Process Improvement 1:

IT Office was engaged to enable the interface function of SOC Day Surgery and Laboratory Billing.

Interface of Day Surgery and

Laboratory Billing

Process Improvement 2: Development of Financial Counselling Information Sheet

A PNS Bx Patient Information sheet was developed to counsel patients of the additional charges incurred from the biopsy. Staff were trained to provide Financial Counselling to patients using the information sheet.

Process Improvement 3: Sharing with Clinicians

The revised workflow was shared at clinical department meetings to gather the support and participation of the clinicians.

Process Improvement 4: Enabling IT Equipment

Colleagues from IT Office were engaged to update current equipment in clinics (CPOE* Printers and PC) to enable the printing of Day Surgery Account CPOE* labels.

*CPOE: Computerized Providor order Entry

Laboratory

Clinician examines patient and determines that a PNS Bx is necessary

Clinic Staff creates Day Surgery Visit Account Clinician order
biopsy in Day
Surgery Visit
Account

Room Assistant
provides
Financial
Counselling to
patient for
laboratory
testing
specimen

Patient
undergoes local
anesthesia and
biopsy is
performed

Patient is billed for consultation and procedure charges

Specimen is sent to pathology laboratory for analysis

analysis is completed and charges are automatically interfaced into patient billing and finalised

Improved Patient Satisfaction

Patients are aware of the laboratory charges and are not surprised upon receiving the final bill, and there has been no recorded feedback since.

Accurate Billing – Missing Charges

With the interface of billing systems, the charges are automatically inserted by the system, thereby eliminating human errors.

Manpower Savings on Rework

With the interface of systems, there is no manual entry of charges or coordination of subsequent laboratory charges by clinic staff. This equals to 15 minutes of manpower savings per case.

	No. of Cases	Time Saved per case	Hours Saved
FY20	283	0.25 Hrs	70.75
FY21	282	0.25 Hrs	70.5
Total Manpower Hours Saved			<u>141.25</u>

Since the pilot began in April 2020, there has been a total savings of 141.25 hours

Satisfaction and Morale

Improved Staff

As the charges have been financially counselled to patient, clinic staff do not need to contact patients to inform about the charges.

CONCLUSION

Outcome of

Workflow

Revision:

With the revised workflow, SOCs saved 141.25 hours of rework.

EXPANSION OF PROJECT

With the success of the pilot, the clinics would proceed with other clinic procedures using the same revised workflow, such as Nose Polyp Biopsy and Larynx lesion Biopsy. This optimized workflow can be adapted by other SOCs to perform minor procedures.