

# RPA-DRIVEN AUTOMATION OF PATIENT ADMISSION FORMS

## INTRODUCTION

The Business Office Department staff used to manually transcribe similar information into four forms daily, consuming 15 minutes per patient. This process not only increased staff workload but also introduced a 5% error rate, negatively impacting patient care and administrative efficiency.

## TEAM LEADER & MEMBERS

Role	Name	Designation	Department
Improvement Coach	Jean Quak	Director	Finance
Leader	Ng Ling Ling	Executive	Business Office
Member	Nelson Teng	Snr Executive Asst	Business Office
Member	Jean Ong	Executive Assistant	Business Office
Member	Jeremiah Yeo	Executive Assistant	Business Office

## EVIDENCE OF PROBLEM WORTH SOLVING

### Time Consumption:

- Unnecessary time was spent in transcribing similar information manually across 4 forms:
  - Financial Counselling form
  - MediSave form
  - Patient Checklist form
  - Monitoring Form
- Estimated 15 minutes to fill up all forms for one patient.
- Difficulty in locating the hardcopies of the admission documents.

### Error Rate:

5% annually due to manual transcription.

### Workload Impact:

Negative effects on patient care and administrative efficiency.

## MISSION STATEMENT

To automate financial counselling related forms to reduce non valued added processes.

## METHODOLOGY

PDSA methodology is used to monitor project progress:

✓	<b>Plan</b>	Identify inefficiencies Set objectives Hypothesise RPA benefits
✓	<b>Do</b>	Send staff for training Trial RPA for one form Collect data
✓	<b>Study</b>	Analyse data Evaluate outcomes Identify areas of improvement and make changes
✓	<b>Act</b>	Fully implement RPA across all forms Monitor and refine the process

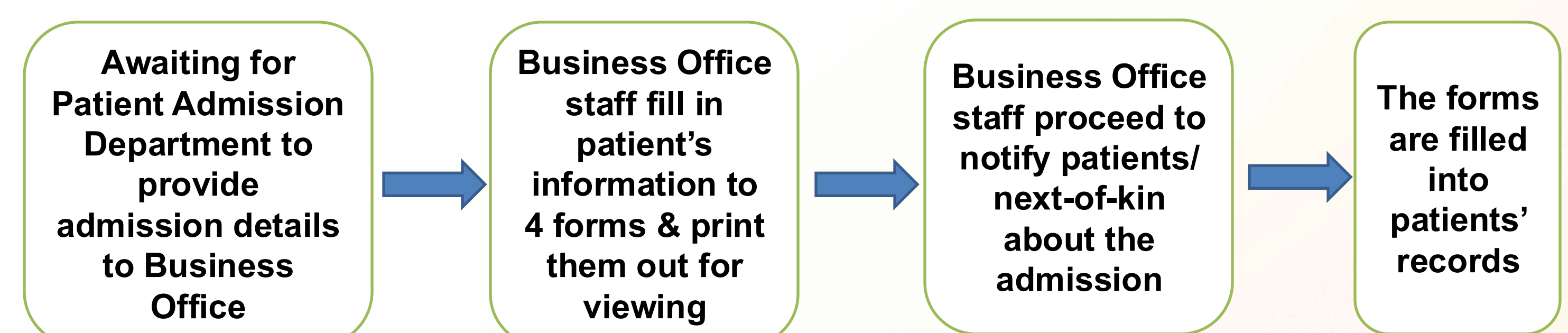
### Tools used

Robotic Process Automation (RPA), UiPath, is used to automate the entire process of filling up the financial counselling forms.

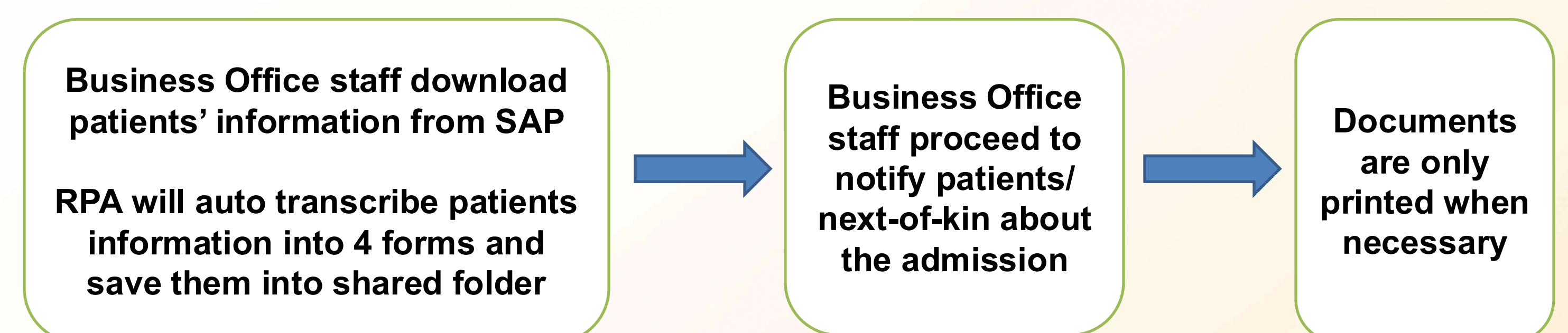
## INTERVENTIONS

- **Training:** Staff received a 3.5hour in-house orientation on RPA, followed by a 2-day structured RPA training.
- **Phased Implementation:** Starting with one form allowed for iterative learning and minimised disruption.
- **Collaboration:** Collaborated with other department to create a standardised template, simplifying the extraction of patient data.
- **Change Management:** Addressing staff concerns and providing adequate training were crucial.

### Work Flow Before Intervention



### Work Flow After Intervention



## RESULT

	BEFORE	AFTER	SAVINGS
<b>Forms Preparation</b>	~15 mins per patient	~ 2 mins per patient	~13 mins per patient ↑ Improved by 85%
<b>Error Rate</b>	5% annually	0% annually	↑ Improved by 100%
<b>No. of reams required</b>	21	14	7 reams saved ↑ Improved by 33%

**Time Savings: 564 hours annually**  
**Cost Savings: SGD \$28,000 annually**

## CHALLENGES ENCOUNTERED

Due to their unfamiliarity with the new processes, staff were initially hesitant and fear the unknown. Staff confidence grew after automating one form successfully.

## LESSONS LEARNT

- **Phased Implementation**  
Builds confidence, minimises disruption of existing workflows and work procedures.
- **Thorough Documentation Process**  
Detailing use-cases and instructions.
- **Addressing Staff Concerns**  
Foster user adoption through effective change management.