Project Title

Robotic Process Automation (RPA) for Cybersecurity, Identity Access Management (IAM), In-Patient Referral and Data Transformation

Project Lead and Members

Project Lead(s): Low Tat Foong, Senior Manager, IT

Project Members:

- Tam Wei Qiang, Senior IT Specialist, IT
- Sandy Lee Manager, AHO

Organisation(s) Involved

St Andrew's Community Hospital

Healthcare Family Group(s) Involved in this Project

Healthcare Administration

Applicable Specialty or Discipline

Information Technology

Aim(s)

To standardize / streamline business processes and to reduce manpower costs.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

- Not all high-volume, tedious and mundane processes are suitable candidates for RPA. Clear-cut workflow rules and data sources must be available for RPA to automate it effectively. If not, it will take much longer to sieve out the rules and code it into RPA, and this will translate to higher costs for the project implementation.

- Factoring in exception handling is very important in RPA projects. Though it seems straight-forward that the robot only mimics what humans are doing, but in the event of exceptions, the robot will not know how to react, unless the human teaches it how to. Thus, we need to go in-depth to discuss exception scenarios during requirements stage, to define the corresponding handling, recoveries and notifications when exceptions occur.

- Getting vendor to maintain RPA process for every little change can be costly. Therefore, it will be worthwhile to build up internal team competency on RPA, so that minor tweaks or changes can be delivered more cost effectively.

Conclusion

It is a misbelief that RPA will "phase out" staff from the organisation, which worries many of us. But the truth is that RPA is here to really ease our work, so that we need not dwell in on repetitive tasks. Instead, we can then devote more time to do some other higher-value and important work for our clients / patients and for the organisation.

Project Category

Care & Process Redesign

Value-Based Care, Productivity, Manhour Saving

Keywords

Robotic Process Automation, Business Process, Manpower

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Robotic Process Automation (RPA)

Project Sponsors: Dr Loh Yik Hin, Ms Tan Lay Kheng
Team Leader: Low Tat Foong
Team Members: Tam Wei Qiang, Sandy Lee

BACKGROUND

- High-volume, tedious and mundane processes are demotivating, hindering work productivity, and preventing staff from focusing on higher value work such as serving patients and ensuring cybersecurity.

PROJECT AIM

- SACH believes RPA is the right technology to adopt in automating high-volume, tedious and mundane processes, with the primary objectives to standardize / streamline business processes and to reduce manpower costs.

PROJECT DESIGN/ STRATEGY

▶ Technical evaluation of suitable RPA products.

▶ Engage HODs in conducting Build-A-Bot sessions, to bring up awareness and subsequent buy in on RPA.

▶ Conduct Process Discovery journey for shortlisted processes, proposed streamlining, get partners to develop the RPA requirements for SACH.
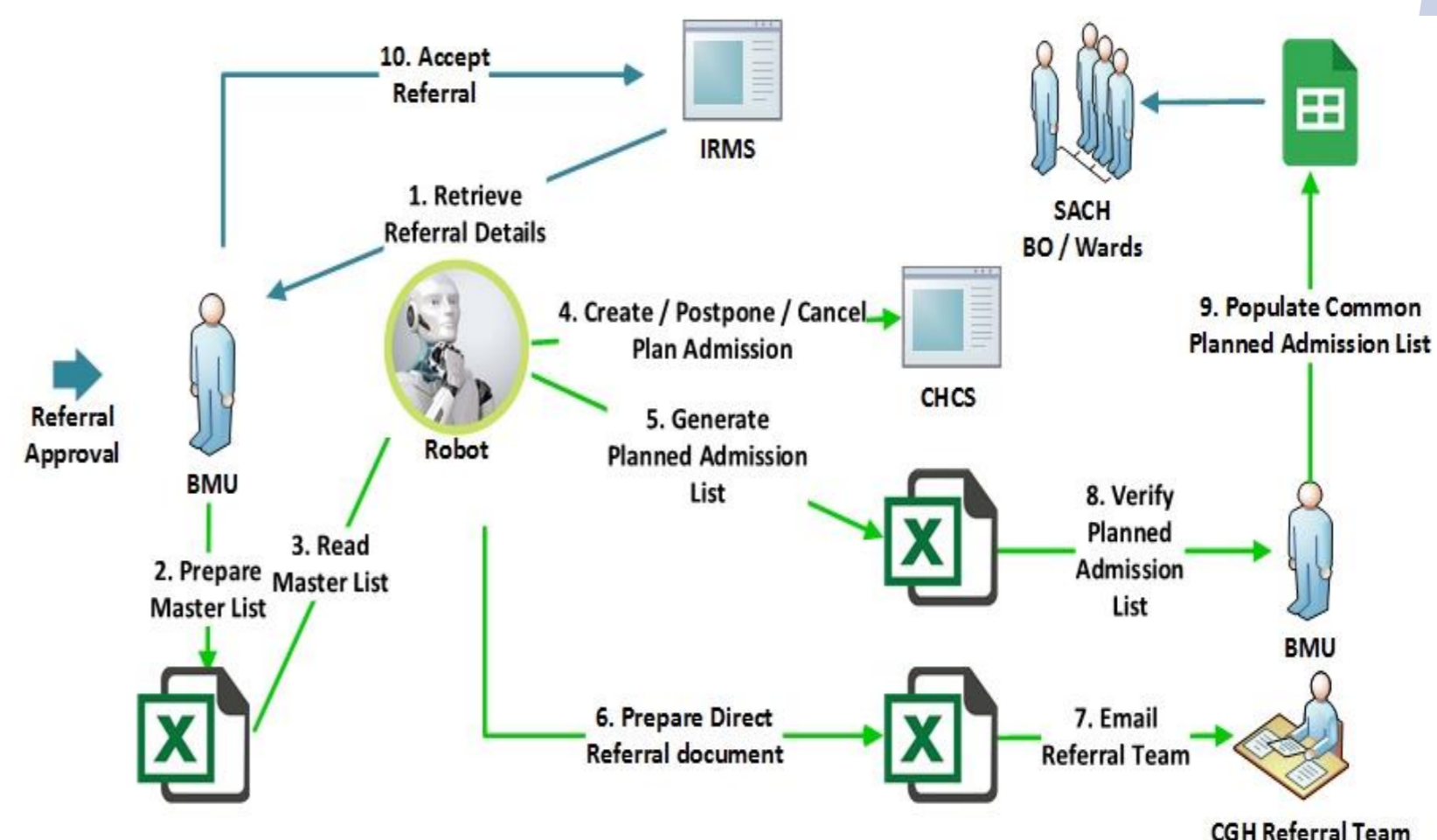
RPA IMPLEMENTATIONS

- Cybersecurity
- ID Management
- CHCS Report Automation
- Client Data Interface
- BMU Referral

PROBLEM ANALYSIS

- Below illustrate an example of the BMU Referral.

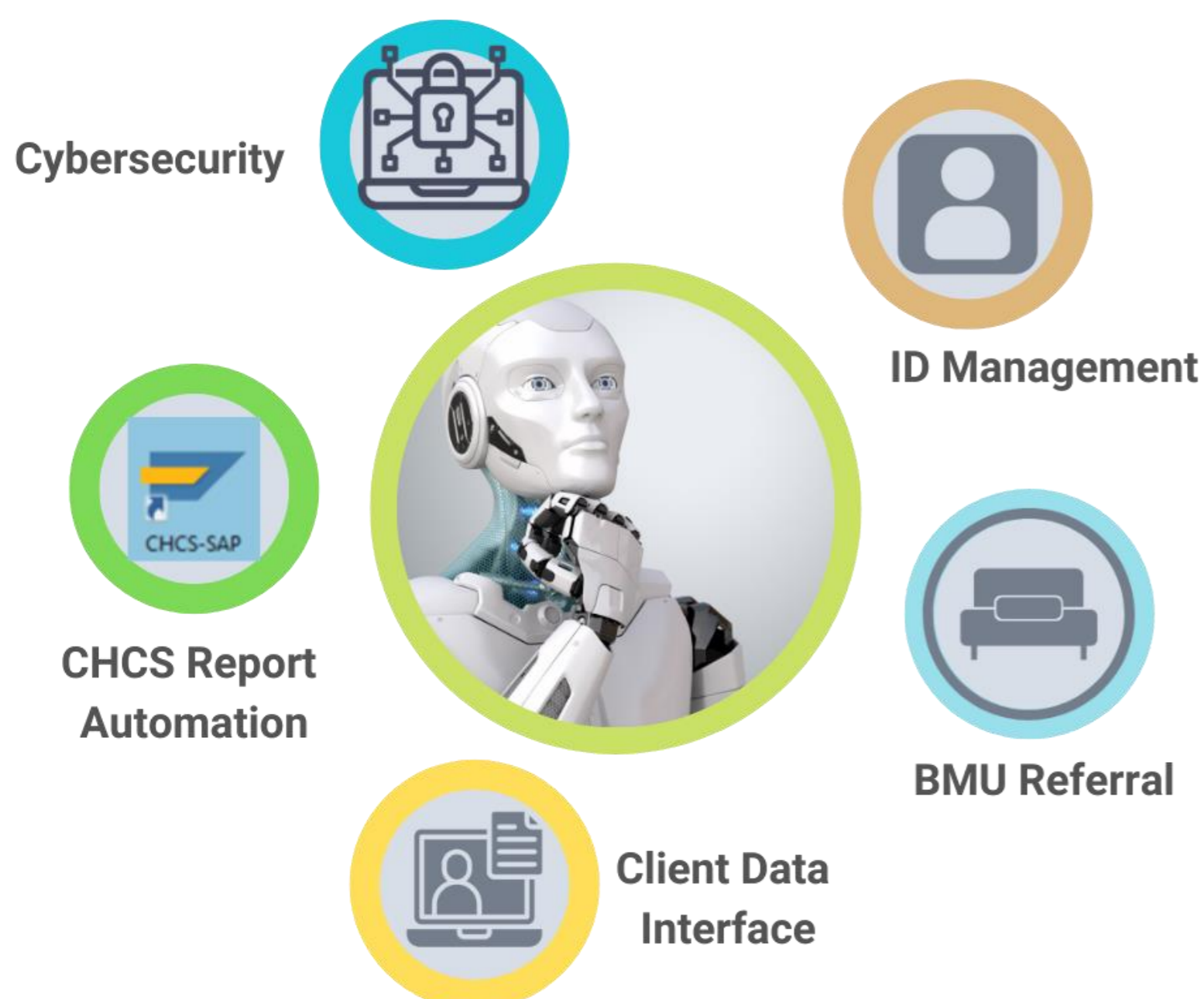### Process Flow (Before RPA)
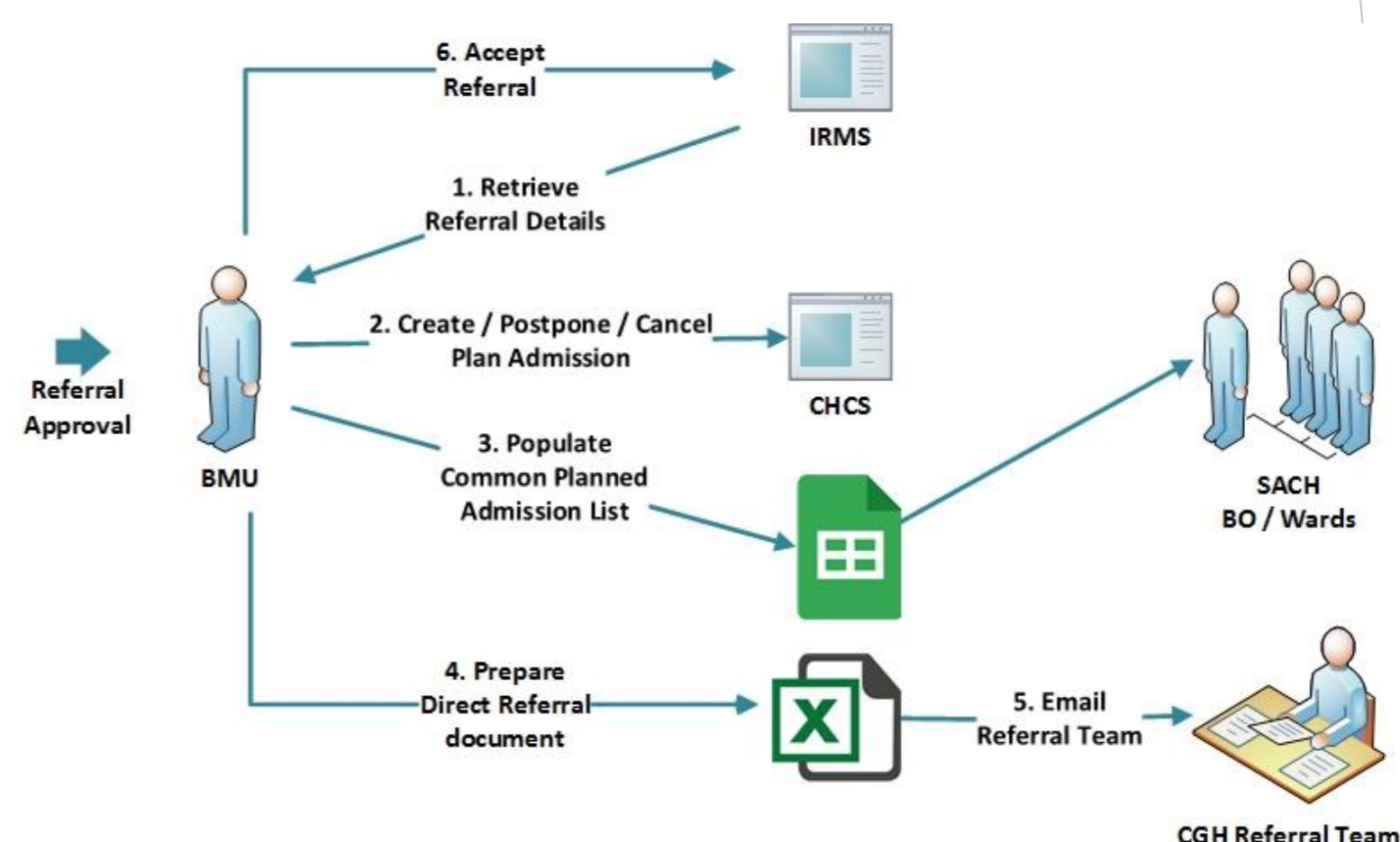
Process Flow (After RPA)

OUTCOMES

Cost and manpower saving (total of ~$258K per year):

Process	At baseline
Cybersecurity	$130,000 per year
ID Provisioning	$18,000 per year
BMU Referral	$5,500 per year
Client Data Interface	$70,000 per year
CHCS Report Automation	$35,000 per year

FUTURE PLANS

- To continue on RPA journey to embark more process automation for the company.

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