



**Singapore Healthcare Management 2024**

# Automation Of Requests to Porter Department For Transportation Services of Patients For Haemodialysis At The Renal Dialysis Centre (ARTS@RDC)

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## Background

Renal Dialysis Centre (RDC) in Singapore General Hospital (SGH) performs approximately 20,000 in-center dialysis sessions annually. Porter requests are done before and after each dialysis session manually. The task is labour intensive, inefficient, and prone to error with manual repetitive transferring of data into the e-Porter system.



**Mission**  
**To improve the current work process through Automation in RDC for non-value-adding administrative tasks**



## Intervention

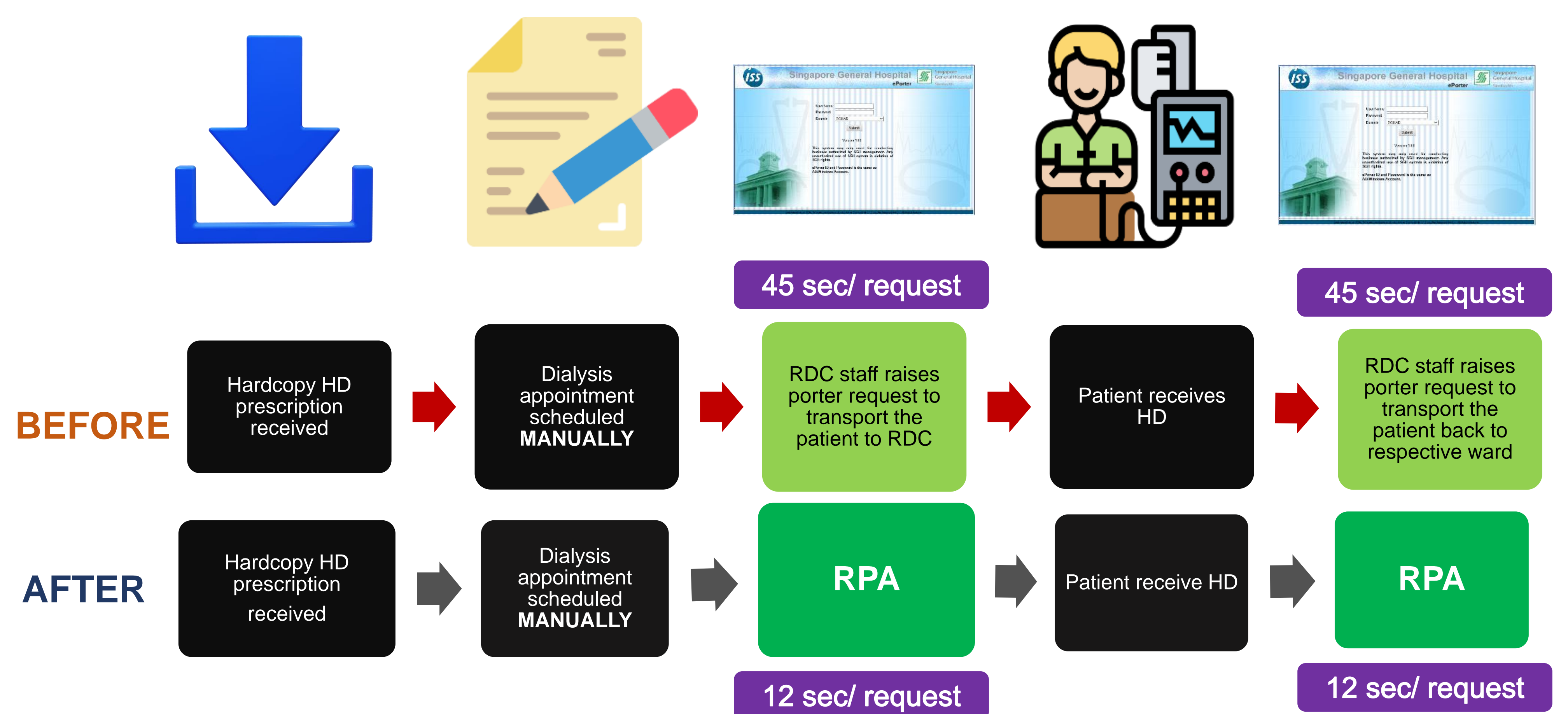
Robotic Process Automation (RPA) UiPath software – based technology programming was adopted for this project. RDC team collaborated with General services in SGH to trial this software, to automate request via SGH portering request system - e-porter system to arrange transportation for patients to and from Renal Dialysis Centre (RDC) for haemodialysis (HD).

The dialysis time slot of patient was scheduled in an excel sheet and the PRA read the scheduled dialysis time slot would automate with Macro Visual Basic Application (VBA) to auto populate the cases that required porter requests. PRA was programmed to read this information to raise a porter request on the e-porter system automatically

## Results

The baseline of time consuming to raise e-porter request on the e-porter system was 45 seconds manually for each patient versus the estimated time consumed by PRA was 12 seconds. The estimated time saving was equivalent to 1.48 hours daily, which is equivalent to 0.185 FTE saved /day to diverted to patient care activities.

**Diagram 1: Workflow Before and After Implementation**



## Discussion & Conclusion

The automation for raising porter requested on the e-porter system had shown to save time to allow nurses to perform other patient care activities. In addition, this process change also reduced manual transcribing errors which can lead to serious patient safety issues such as, wrong patient, wrong location, wasted trip for the porters, delay in starting the procedure and sending back to wrong location. This pilot project has provided an insight that Robotic Process Automation (RPA) UiPath software is useful to improve work processes in healthcare setting. The Robotic Process Automation (PRA) Uipath software has been budgeted and will be installed for Renal Dialysis Center in SGH and Outram Community Hospital.

## Acknowledgement

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