



Singapore Healthcare Management 2018

Johnson & Johnson

PAVE



# A DIGITAL HEALTH SOLUTION FOR PATIENT ACCESS PROGRAMS

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## BACKGROUND

Medicines are constantly developed for the benefit of patients globally. However, access to innovative medicines such as biologics could be hindered due to high cost. Patient Access Programs (PAPs) that help patients access necessary medicine by providing financial support are being tracked by hospitals manually, leading to human errors and inefficiencies. Thus, hospitals in Singapore started phasing out PAPs.

To allow patients to continue having access to innovative medicines, Johnson & Johnson developed PAVE – a first of its kind digital solution application to help hospitals and patients manage PAPs.

PAVE aims to:

- Eliminate manual tracking of PAPs leading to enhanced efficiency and staff productivity
- Increase patient adherence to treatments through appointment reminders
- Enhance patients' ownership of their care by providing education materials

## METHODOLOGY

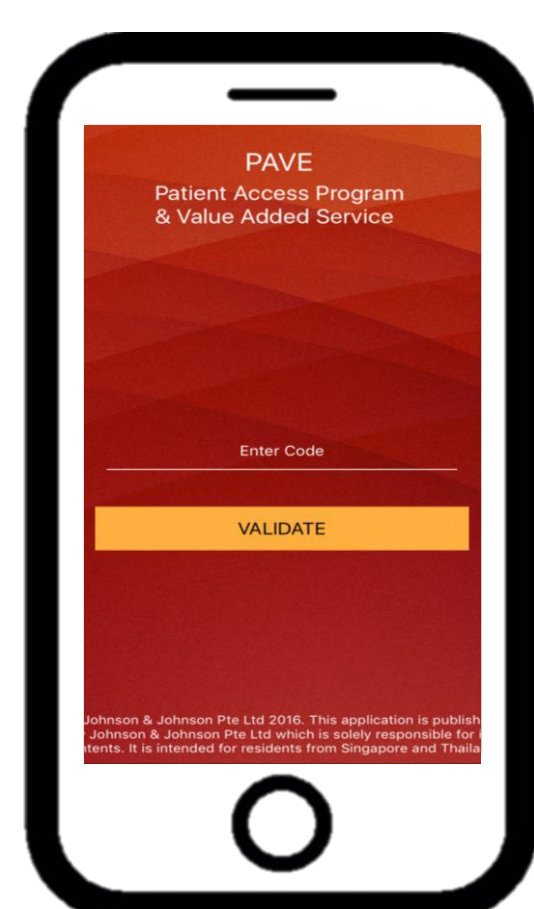
### Developing PAVE

A cross-functional team consisting of market access, strategic account management, IT, sales, marketing, legal and compliance was formed to develop PAVE.

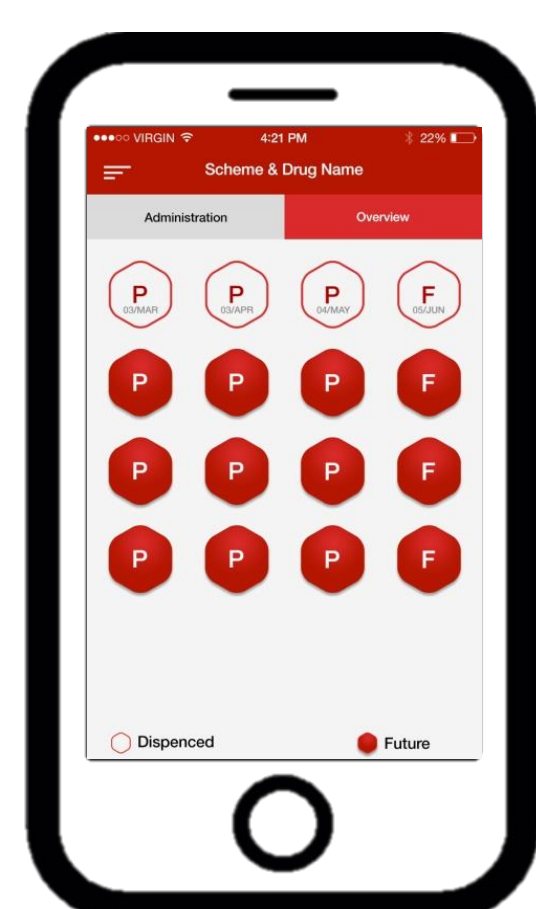
Input from pharmacists and patients' insights were gathered and discussed within the team to validate requirements.

### Using PAVE

Patients enrolled in the PAP are given a unique access code each to login to the app. The pharmacist uses the patient's phone to scan a QR code and validates administration details while dispensing the medication. The transaction is automatically updated in the patient's PAVE app and the pharmacist's PAVE portal.



Patient's PAVE Login Page



Patient's PAVE Payment Schedule

Patient Summary

Select Filter: [Select]

Filter by: [Search Term]

Country: [Select]

[Filter] [Reset]

Sl No	Access Code	Program Name	Product Name	Hospital	Country	Latest Dosage Strength	Recent Dispensing History	Estimated Next Visit Date	Status of Next Visit
1	067MAB	Demo Program	Demo Product	Demo Hospital	Singapore	25 mg	Free (11 Nov 2016) Pay (21 Nov 2016) Free (01 Nov 2016) Pay (21 Nov 2016) Free (01 Nov 2016)	19 Feb 2017	Pay
2	7002BBI	Demo Program	Demo Product	Demo Hospital	Singapore	25 mg	Pay (21 Feb 2017) Free (21 Feb 2017)	22 May 2017	Free

Pharmacist's PAVE Portal

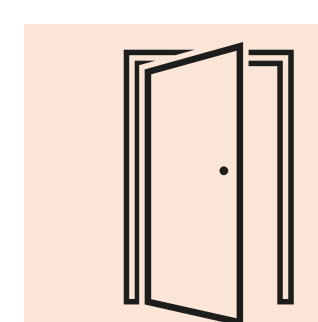
## RESULTS

### RECOGNITION



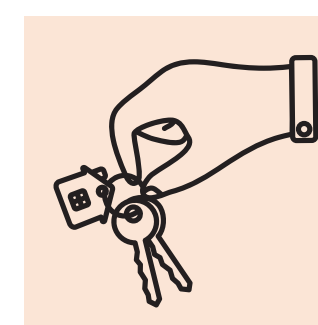
National Healthcare Group's 4P7R Reward & Recognition Award (Team). Judging criteria included patient-centered care, systems thinking, learning organization and staff engagement.

### BENEFITS TO PATIENTS



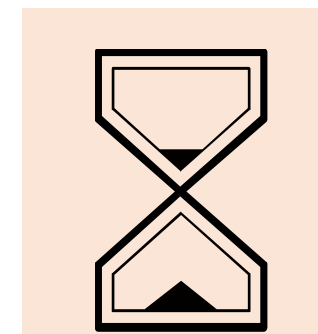
#### Enhanced Access to Innovative Medications

With PAVE, hospitals can continue giving access to 40% of the patient population with potential affordability issues.



#### Patient Ownership

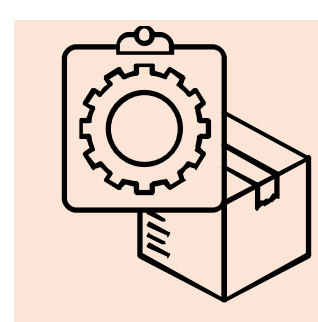
Patients and caregivers now have greater clarity of their biologics regimen, which includes dosing and payment schedules. This can potentially lead to increased patient adherence.



#### Reduced Wait Time at the Pharmacy

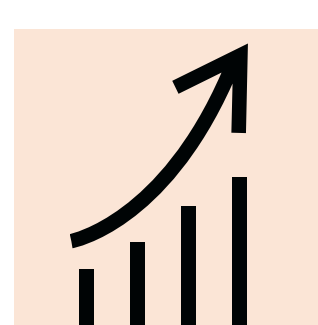
Patients experience shorter wait time by 30% due to streamlined processes leveraging on a digital platform.

### BENEFITS TO HOSPITALS



#### Easy Management of Inventory

Pharmacists have a real-time overview of paid/free inventory.



#### Improved staff productivity

PAVE reduces 6h of manual tracking per week or 13 days of pharmacists' time a year by reducing administrative burdens and thus, human errors and reworks.



#### Improved patient outcomes

Better patient adherence to treatments reduces the risks of exacerbated illness through missed appointments.

## SPREAD & SCALABILITY

PAVE is adopted in the Singapore General Hospital (SGH), National University Hospital and National Skin Center. In 2017, PAVE expanded regionally to other hospital groups in Thailand and Malaysia.

The PAVE team continuously ensures up-to-date app and usability improvements by engaging in discussions with key stakeholders. In Mar 2018, an innovation workshop was conducted to brainstorm on ways to overcome any challenges faced and to enhance PAVE further.

With release 4 of PAVE, PAVE now facilitates content development by implementing patient education materials to enhance patient engagement and ownership in their own care journey. Additionally, PAVE has been used as an adherence monitoring tool for SGH patients.

Through leveraging on digital technology, PAVE has shown to be a successful representation of how a private-public partnership could result in a solution that facilitates patient access and enhances efficiency within the hospital.