



# Singapore Healthcare Management 2024

# SINGHEALTH MOBILE INPATIENT CARE @HOME

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SingHealth MIC@Home is a new care model that taps on virtual care to deliver hospital-level care for suitable patients at home. It augments overall hospital capacity and preserves inpatient capacity for higher acuity cases.

## INTRODUCTION

First piloted in April 2022, MIC@Home patients are admitted to a virtual ward where they have 24/7 access to a team of healthcare professionals via teleconsultations and/or home visits, until they are fit for discharge.

Suitable patients are onboarded to MIC@Home from various touchpoints, including ED, SOC, and the wards. At home, the patient has daily clinical reviews and treatments (e.g. IV antibiotics) provided by the care team. Typical length of stay is up to 7 days.

### Hospital care brought to patients at home.

Eligible patients onboarded from various touchpoints

Care team includes doctors, nurses & allied health professionals



## METHODOLOGY

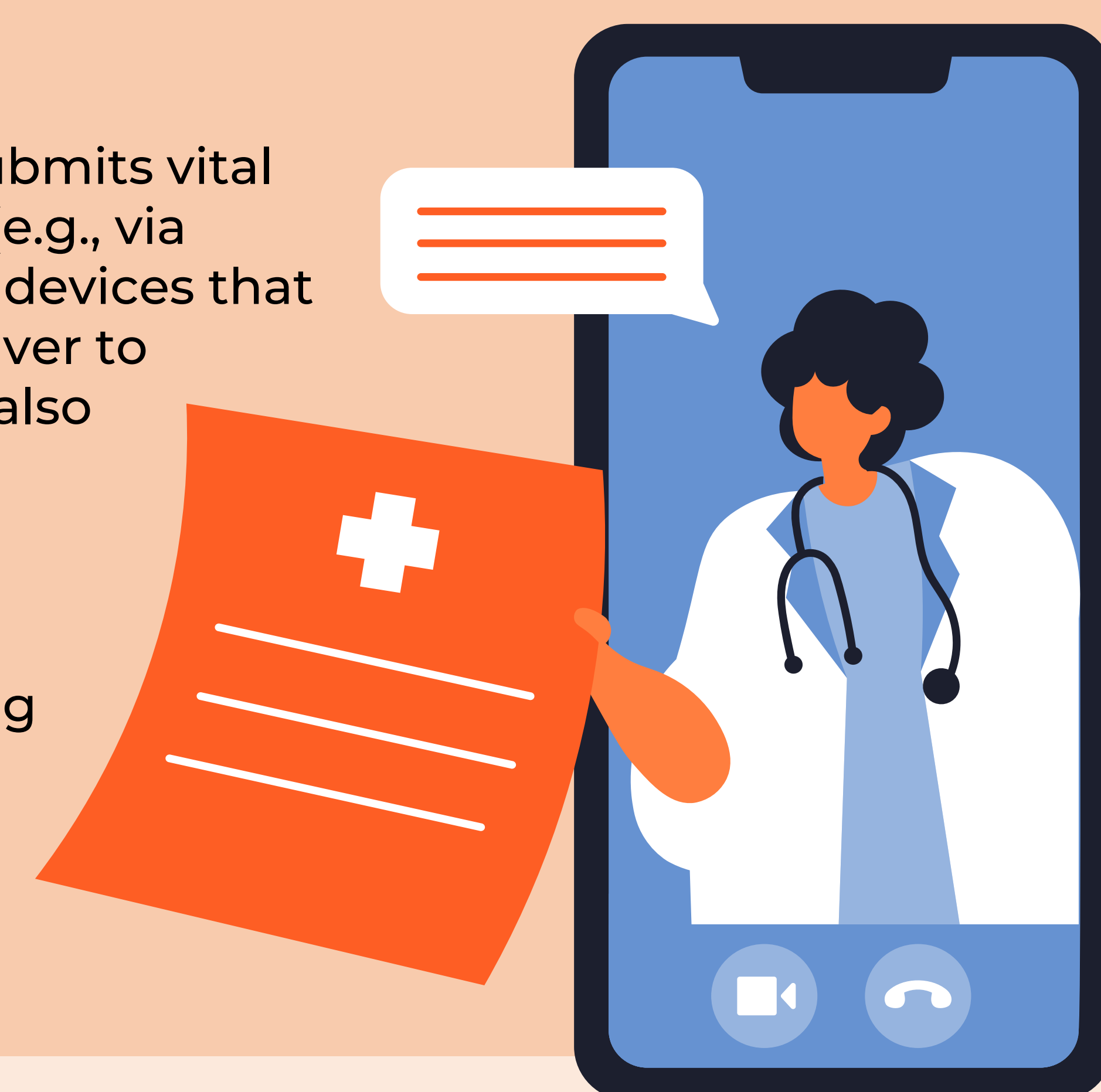
SingHealth MIC@Home leverages on a One SingHealth approach and enablers such as remote clinical monitoring, video consultation and partnerships with 3<sup>rd</sup> party providers. A SingHealth MIC@Home Workgroup comprising members from institutions and domains collaborate as a cluster to improve our services.

### REMOTE CLINICAL MONITORING (RCM)

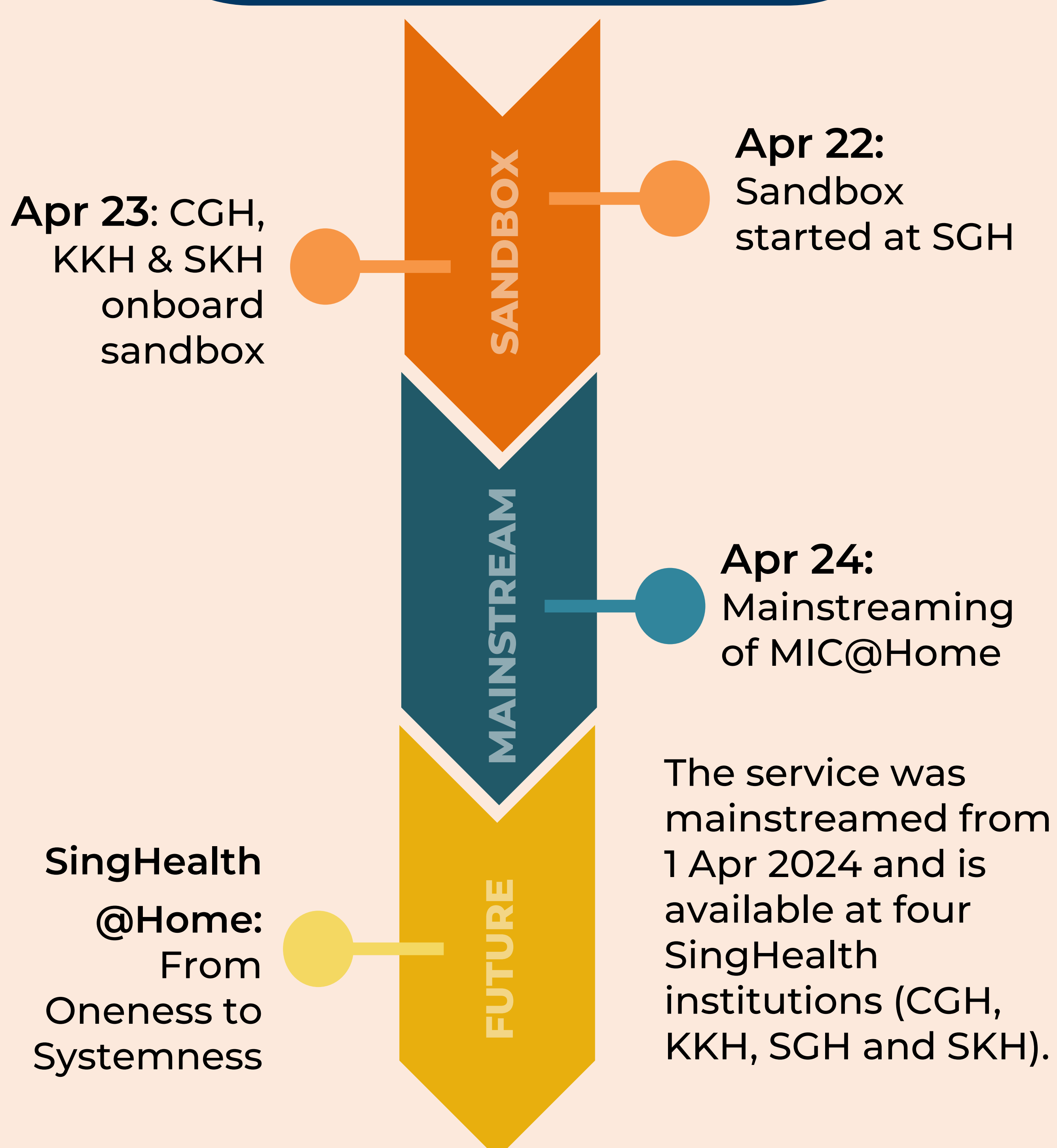
The patient/caregiver takes and submits vital sign readings to the clinical team (e.g., via FormSG). Bluetooth-enabled RCM devices that reduce the need for patient/caregiver to manually submit their readings is also currently being piloted.

### VIDEO CONSULTATION (VC)

VCs allow visual assessment during the clinical review and acts as a safeguard for patient safety. It is also reassuring for patients and caregivers to see the care team, fostering better communication.



## TIMELINE



## RESULTS

From April 2022 to 30 April 2024, CGH, KKH, SGH, SKH



**1016 PATIENTS RECRUITED**



**5518 BED DAYS SAVED**



**195 MAN-DAYS SAVED FROM RCM**



**\$5.52M ESTIMATED COST SAVINGS**

Assuming the following:

- No. of Bed Days saved = Total Length of Stay
- No. of man-days = Total LOS of patients on RCM X 0.5+ / 8^
- + = 0.5 hours (i.e., 30 minutes) approximated from 3 calls each lasting 10 minutes each to patients to obtain vital signs readings if patients do not submit readings via RCM
- ^ = 8 hours per man-day
- For healthcare expenditure, we are assuming an estimate of S\$1,000 per bed day saved (Lian Leng Low et al., Applying the Integrated Practice Unit Concept to a Modified Virtual Ward Model of Care for Patients at Highest Risk of Readmission: A Randomised Controlled Trial. PLOS ONE, 18.)

## CONCLUSION

This initiative can help relieve some pressure off the bed crunch, while allowing patients to recover in a familiar environment without compromising care. As part of the expansion, more conditions will be covered under the programme, allowing for more patients to receive hospital-type care at the comfort of their homes. It also serves as a template for future hospitals to pivot from "brick-and-mortar" hospitals to a smart hospital with seamless digital integration.