



**Singapore Healthcare  
Management 2019**

## CAN-DO:

# Capacity Assessments at the Nursing Home, Done On-site

Soh Keng Chuan<sup>1</sup>, Lim Wei Shyan<sup>1</sup>

Susan Gui<sup>2</sup>, See Wai Keong<sup>2</sup>, Lin Shuzhen Esther<sup>3</sup>,

Tay Eng Sin<sup>3</sup>, Tan Cheng Ling Caroline<sup>4</sup>, Sim Beng Choo Maria<sup>2</sup>

<sup>1</sup>Department of Psychological Medicine, KTPH

<sup>2</sup>Nursing Administration, Villa Francis Home for the Aged

<sup>3</sup>Business Development, KTPH; <sup>4</sup>Operations, KTPH



**Khoo Teck Puat  
Hospital**  
National Healthcare Group

## Introduction

Psychiatrists are often requested to perform assessments of mental capacity for patients with mental illness and/or cognitive impairment. Conventionally, nursing home (NH) residents requiring such assessments are reviewed in the Specialist Outpatient Clinic (SOC). However, this “business-as-usual” process introduces much hassle for the patient, and also works out to be disruptive, time-consuming, costly, and even potentially unsafe. By proposing an improved workflow, this project seeks to deliver an **improved patient experience**, and to concurrently increase:

**Cost savings** by freeing up manpower and eliminating transportation between NH and SOC

**Time savings** by reducing turnaround time for assessments and medical reports

**Accuracy** in assessment with enhanced validity

Mental capacity assessments account for 20% of KTPH psychiatric medical reports.

## Methodology

The current workflow poses challenges for both the hospital and the NH. For KTPH:

- Difficulties in assessment – confused/disoriented NH resident, accompanying NH staff unfamiliar with resident’s baseline mental state.
- Takes up manpower resource of Medical Records Office (MRO) and clinic staff to facilitate medical report request and SOC visit respectively.

For NH:

- Time delays – waiting for clinic appointment, waiting for medical report after assessment.
- Increased costs: Ambulance transport, accompanying nursing aide.

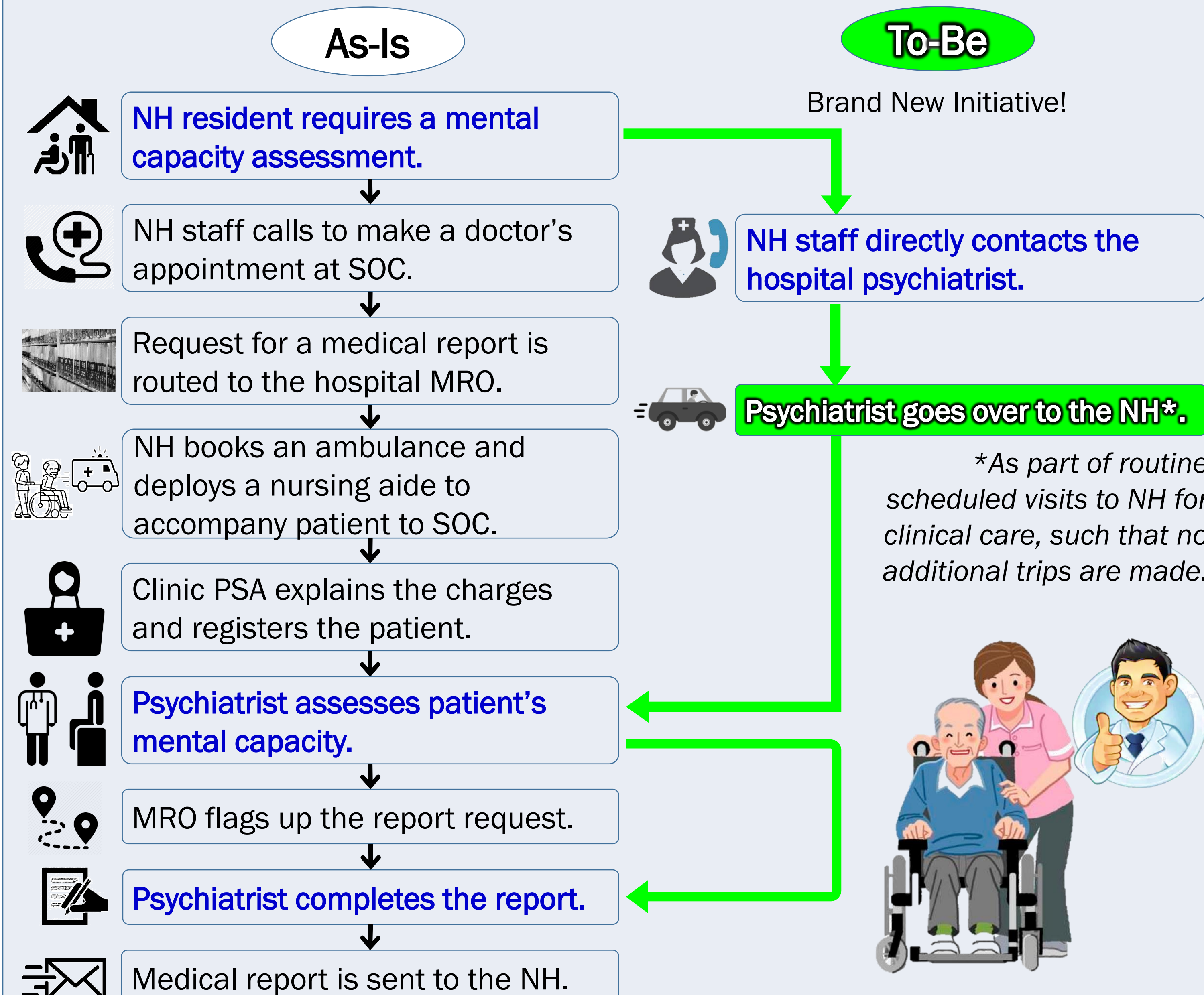
The CAN-DO project draws inspiration from the principles of :

- 1) Lean Manufacturing process of **Toyota Production System**: eliminate waste (Muda, むだ/無駄), one-piece flow, and a “pull” system.

*“All we are doing is looking at the timeline... and we are reducing that timeline by removing the non-value-added wastes.” – Mr. Taiichi Ohno*

- 2) The Define-Measure-Analyze-Improve-Control (DMAIC) roadmap of **Six Sigma**.

**Value stream mapping** of the existing workflow served to identify the **Muda**. This was followed by a **process redesign**, from “As-is” to “To-be”.



A collaboration with Villa Francis Home for the Aged (VFH) allowed a pilot platform for mental capacity assessments to be performed in the NH.

## Results

<b>Better</b>	<b>Faster</b>	<b>Cheaper</b>	<b>Safer</b>
Improved quality and ease of capacity assessment	Turnaround time reduced: from 45 days to <1 month	49% savings in cost each time: \$324 → \$166 per assessment	Same-day report, reduced risk of “wrong-patient” errors

Other benefits of CAN-DO:

- Shorter SOC appointment waiting times (for other first-visit patients)
- Manpower freed up in MRO, SOC and NH
- Reduced carbon footprint



CAN-DO is well-aligned with:

1. MOH’s “3 Beyonds” strategy (Beyond Hospital to Community)
2. NHG’s 4 Principles and 7 Rules (4P7R – Systems Thinking).



## Sustainability and Follow-up

- **Think Big:** Future possibilities might include the use of tele-consults to conduct mental capacity assessments.
- **Dig Deep:** The CAN-DO project team is committed to regularly monitor the demand for such services and source for stakeholders’ feedback, in order to periodically revisit the cost-benefit ratio.
- **Start Small:** The capacity assessments are embedded in the routine work arrangements between KTPH and our NH partners, with the NH nearest to the hospital selected to carry out CAN-DO’s pilot trial.
- **Act Fast:** CAN-DO has already been rolled out to 3 NH partners, with plans to be extended to future prospective partners.

With the ageing population and longer life expectancies, the demand for mental capacity assessments in the NH setting is expected to increase. VFH alone has an estimated caseload of 10-15 cases a year, and the positive impact of this project will correspondingly magnify as it reaches out to more NH partners.

## Conclusion

This project has elicited favourable outcomes for patients and healthcare stakeholders. It has led to more effective care within a familiar environment, lowered healthcare costs, reduced turnaround time, and ultimately provided the patients with a hassle-free experience.