



The CAPSULE – Redesigning Medication Processing and Bill Collection Flow at Outpatient Pharmacy

Singapore Healthcare Management 2016

Do Nguyen D, Zainudin S, Fan WS, Chia L, Chia KL, Yap WY, Tan WQ, Ong PS
 Khoo Teck Puat Hospital, Alexandra Health Group



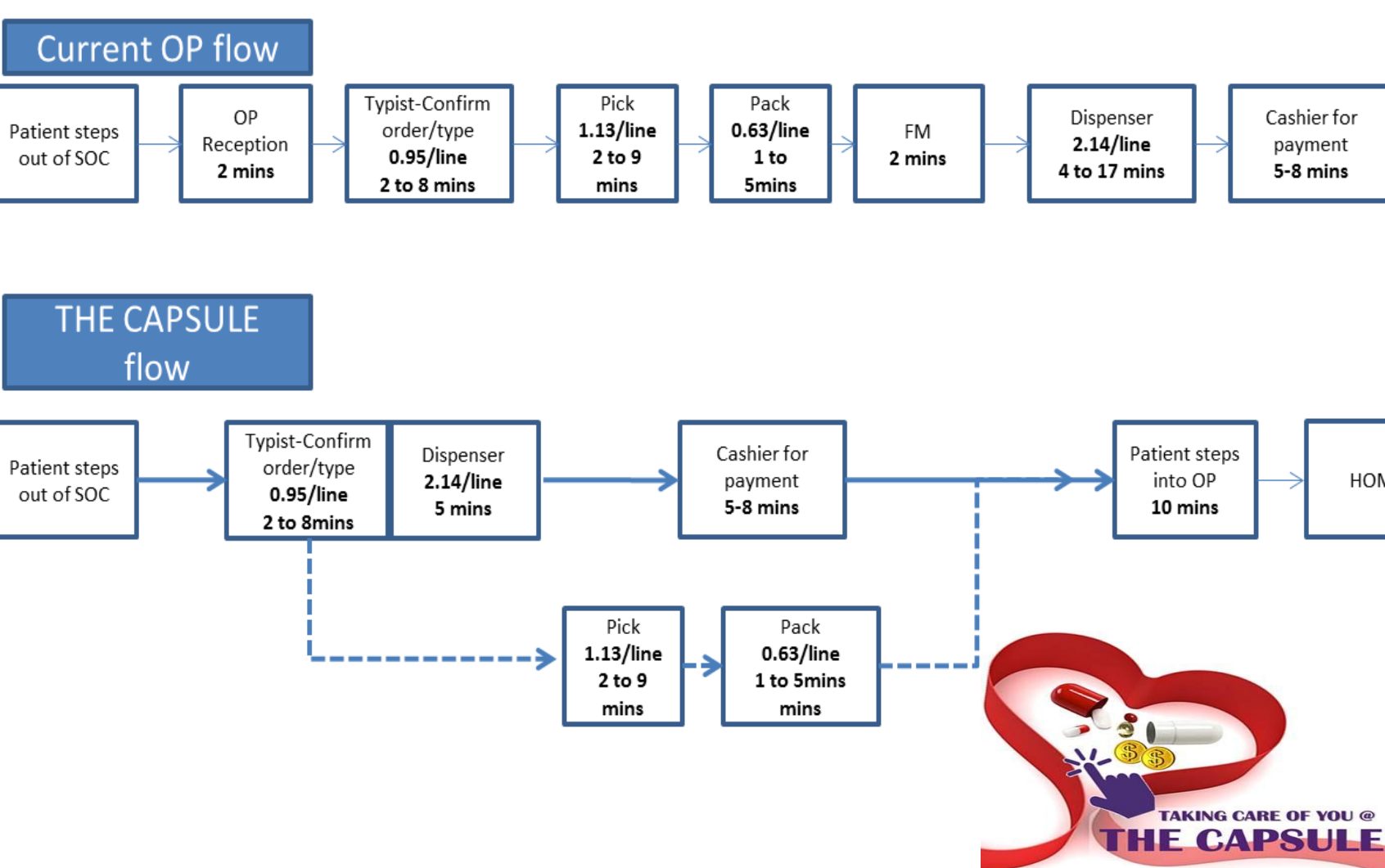
Background:

A new workflow (The Capsule) was proposed to address long wait time issue at Outpatient Pharmacy (OP) by:

- ✓ Reducing unnecessary waiting points
- ✓ Introducing one-stop billing
- ✓ Reducing reworks

The aim of this project is to evaluate The Capsule workflow's feasibility for permanent implementation.

Patient Flow in OP versus THE CAPSULE



Method:

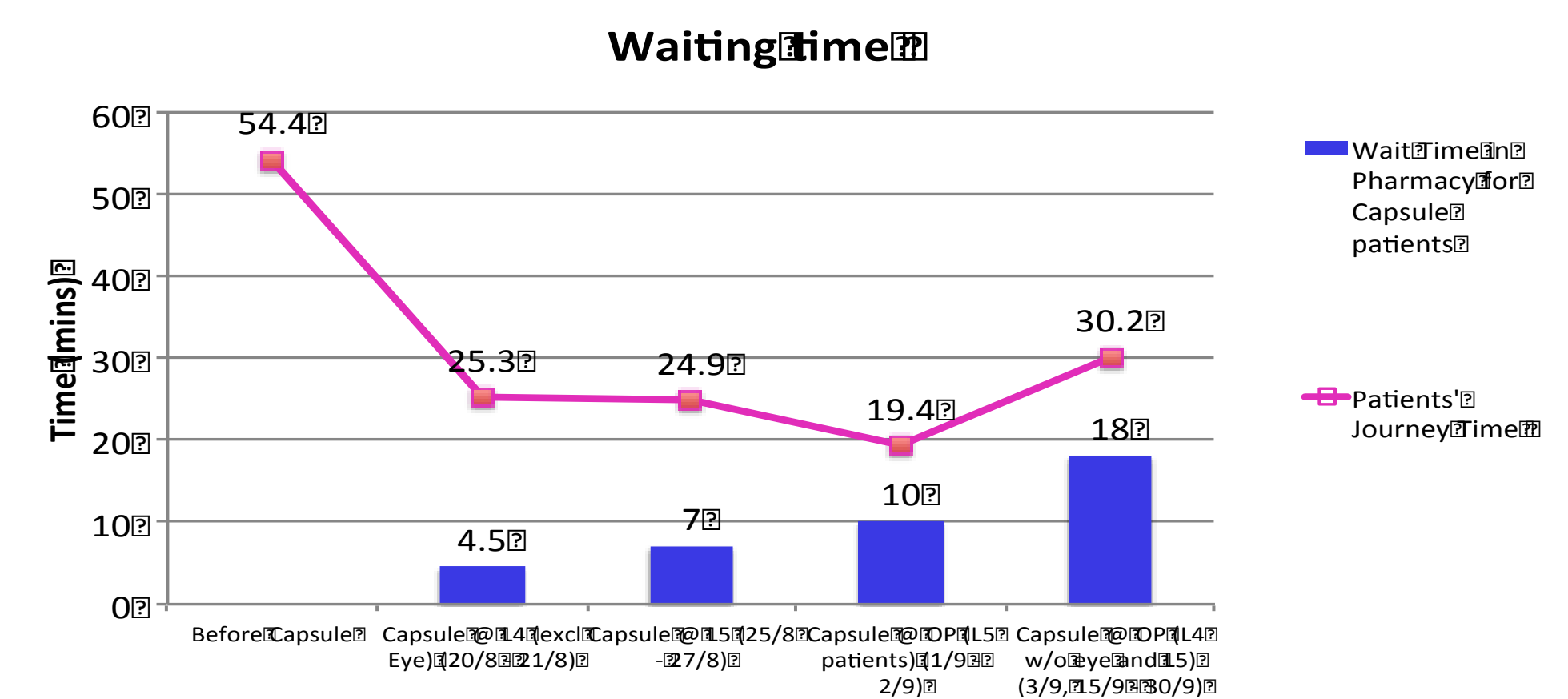
- **Study design:** Prospective, single-center, observational cohort study, conducted at KTPH between June and November 2015. We trialed the workflow at different physical locations: near Level 4 or Level 5 clinics, or inside OP
- **Target population:** Level 4 and/or Level 5 Specialist Outpatient Clinics (SOCs) patients, who generally have longer and more complex prescriptions.
- **Data collection:**
 - ✓ Patients' journey time is defined as the time between patient leaving the clinic (Level 4 or 5) and leaving OP.
 - ✓ Patient satisfaction data were collected through surveys
 - ✓ Productivity, which was assumed to be a measure of both manpower and load.



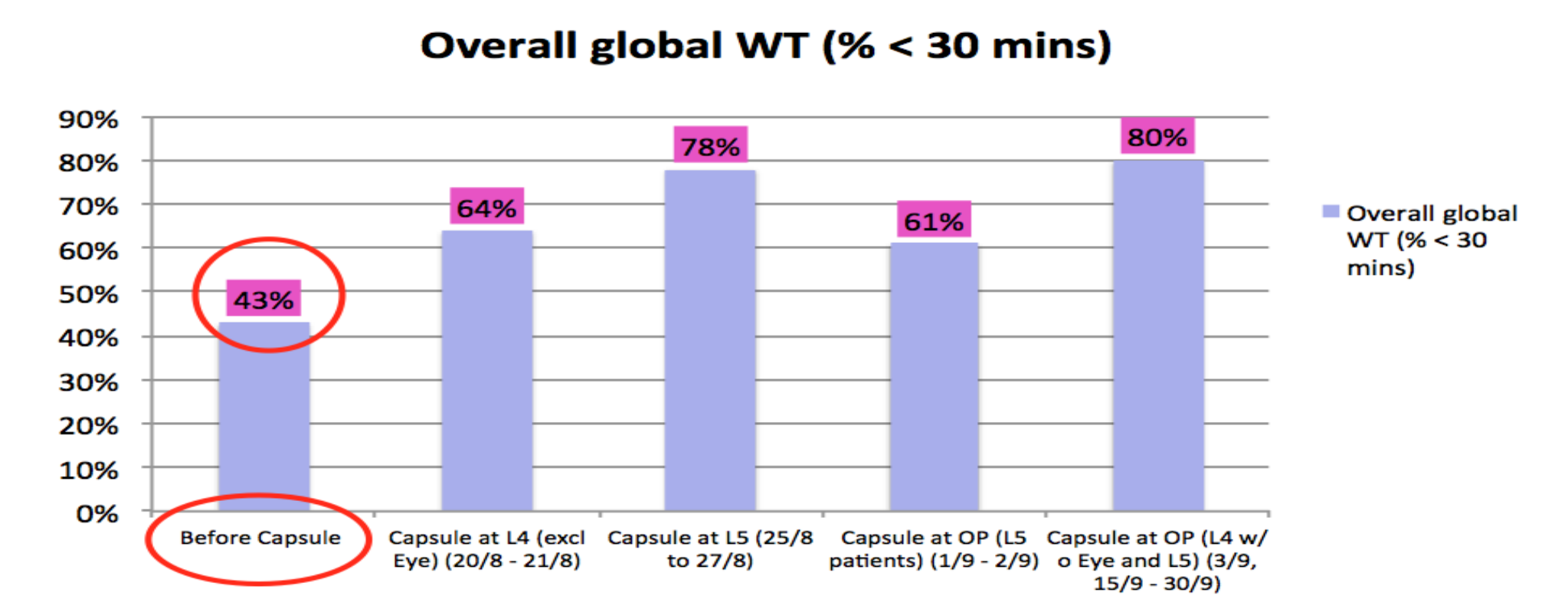
Result:

(a) Waiting Time

Data have shown tremendous improvement, patient's journey time was **reduced by 50%** (54.4 minutes versus average 25 minutes post implementation).



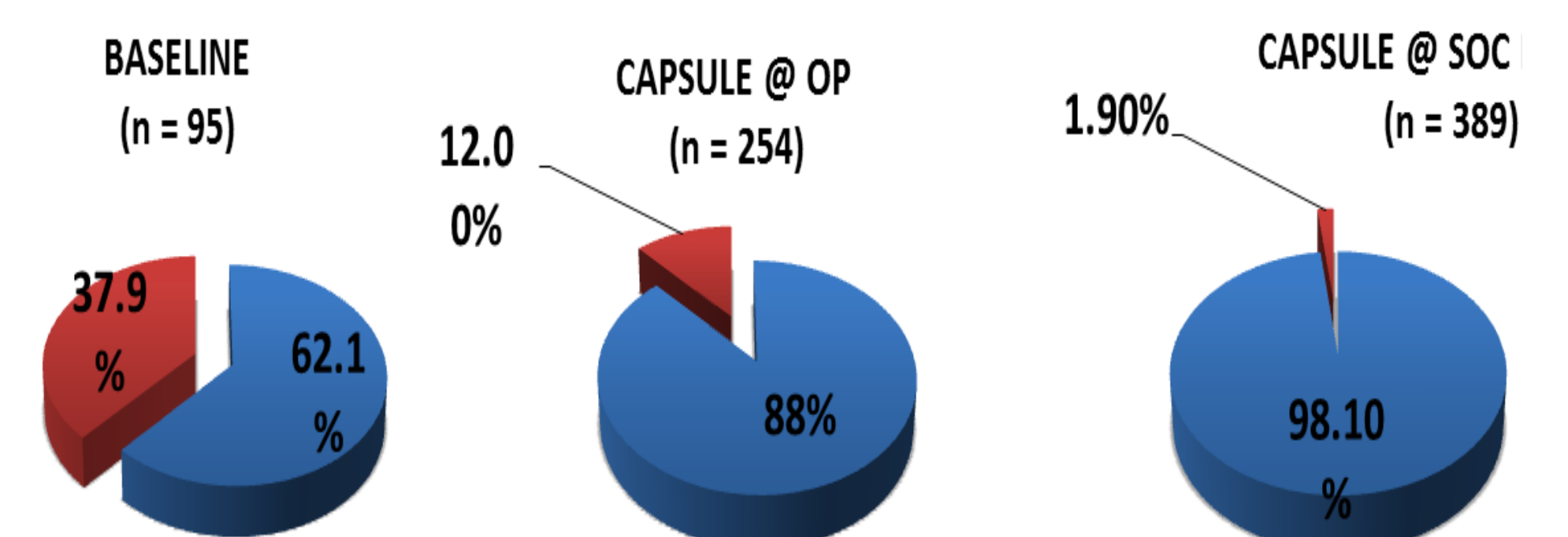
Percentage of patients served within 30 minutes, had also doubled (43% before versus 80% post implementation).



Are you happy with the wait time in Pharmacy?

(b) Satisfaction

Pharmacy patients' satisfaction had a **1.5-fold improvement** (62% to 98% of patients who were happy with the wait time).



(c) Cost savings

With the change in workflow, OP achieved higher productivity. **Annual cost saving in manpower headcount is approximately \$588,000.**



Conclusion:

The Capsule workflow was overall well received.

Impact & Sustainability

- ✓ Findings suggest strong feasibility for The Capsule to continue.
- ✓ Efforts are being made to improve working environment for staff, to ensure The Capsule can become a permanent workflow.
- ✓ Further improvement is being considered to continue providing better service, such as one point appointment making and payment. Another is to offer home delivery service to further even out workload at Outpatient Pharmacy.

