

## Singapore Healthcare Management 2016 Improve Patient Care through Physiological Monitoring

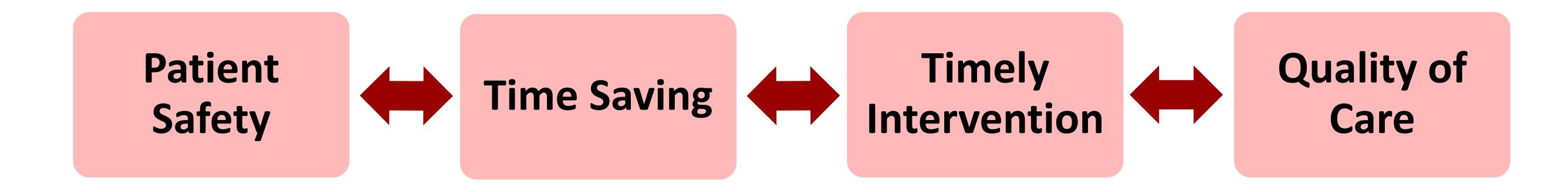
Lee Kok Meng Dave / Ang Kwee Ying, Deslyn / Clary Bell Fernandez Jurong Health Services

# Introduction

Importance: Vital signs measurement is one of the basic indicators of patients' condition in the hospital;
 Accurate and timely documentation of vital signs is essential for clinical assessment of the patients.



- Issue: Previously, vital signs were either manually recorded on paper or manually entered into the Electronic Medical Record (EMR) system. This can be time consuming and may give rise to problems such as incomplete documentation or late entry, illegible recording and/ or misidentification of patient.
- Aim: In JurongHealth, vital signs documentation is automated, ensuring patient safety through timely and accurate documentation, thus improving the quality of care for patients. Timely intervention would be driven via automatic alerts and reminders for parameters out of normal limits.





c) Real-Time

Availability

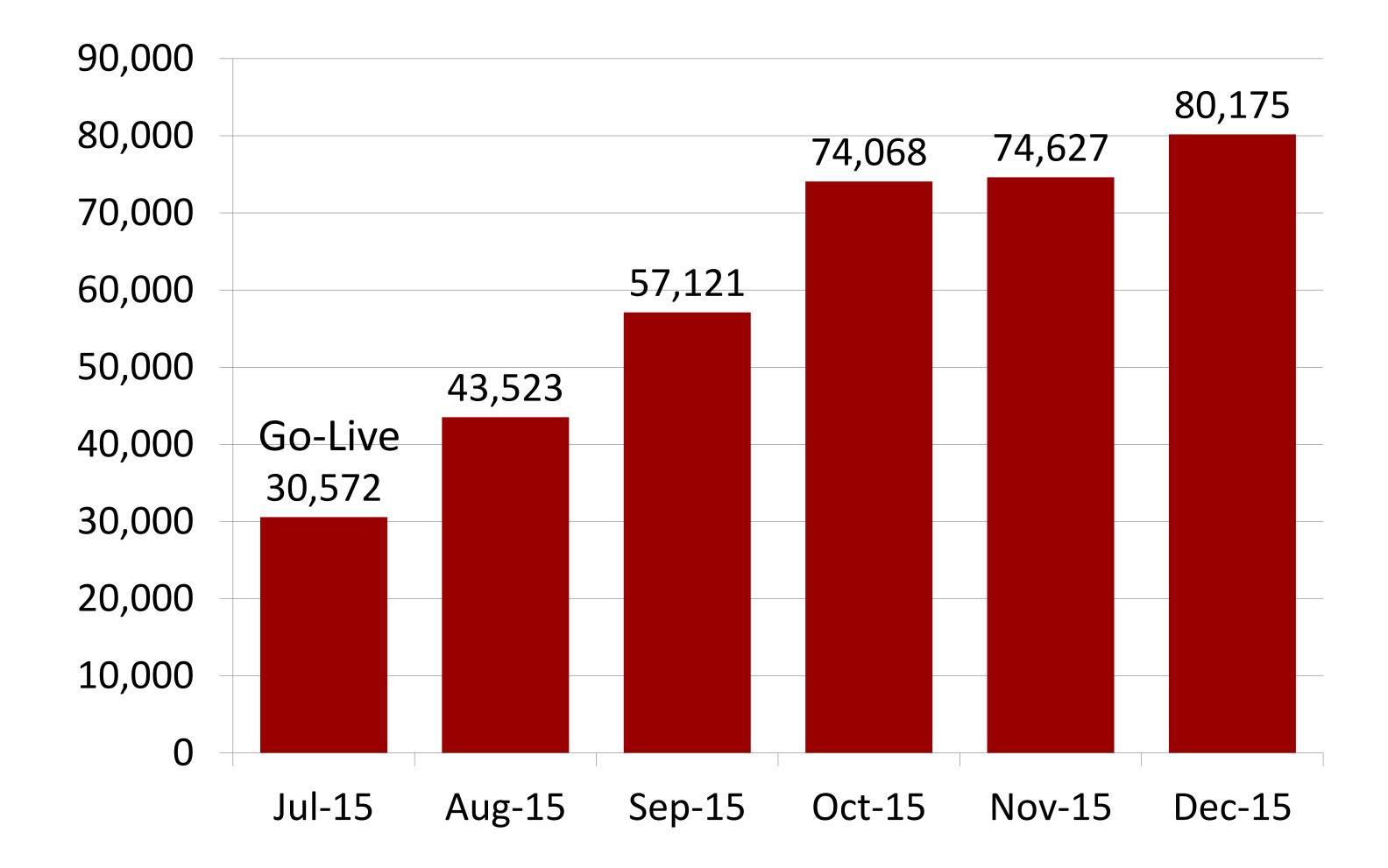
of Data



b) Data Integration with EPIC Real-time readings are made available to anyone with approved EMR access. EMR supported workflows, alerts and trends are automatically set up for Clinicians to

review.

Thereafter, vital signs measurements of the patient will be taken using the physiological monitors by the nurse. These measurements are integrated seamlessly into Epic EMR system through secured wireless



#### Data from Jul 2015 until Dec 2015

Total sets of device	Total time saved*	Time saved* per
integrated vital signs	(mins)	month
		12002 minutes

## a) Barcode Scanning

Clinicians in Ng Teng Fong General Hospital (NTFGH) wards and Jurong Community Hospital (JCH) wards and clinics will scan the patient's wrist tag/barcode to correctly identify the patient.

connections.

360,086 readings 720,172

120,028 minutes

(2,000 hours)

### Benefits:

- Increased efficiency eliminate need for manual charting
- 2000 hours saved\* per month
- Real-time alerts for vitals outside of normal range
  Accurate charting through has eade checks
- Accurate charting through bar-code checks
- \*Assuming 2 minutes (manual process of charting data in paper forms) were saved for each set of vital signs