



ACCOLADES

- ❖CGH Quality Forum 2013 (Silver Award)
- ❖MOH Health-PASS funding
- ❖Coverage by Channel 8 News as example of innovation in hospitals

PATIENT LOCATION MODULE (PLM)

Locating Inpatients with Ease @ ED

¹Hong Zigui, ¹Lee Chee Wei, ¹Gayathri Somu, ¹Vivienne Ho & ²Matthew Ng

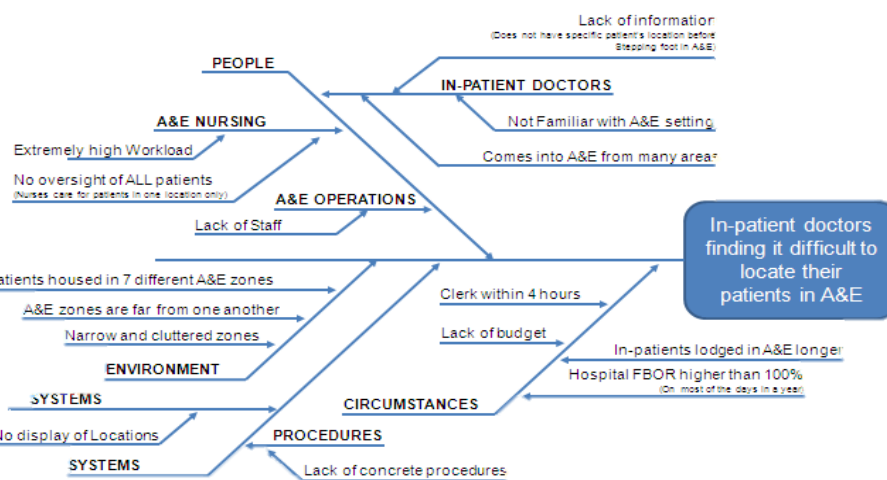
¹Changi General Hospital, Emergency Department
²Integrated Health Information Systems (iHIS)

BACKGROUND

Changi General Hospital (CGH) faces persistently high Functional Bed Occupancy Rates. Admitted patients often have to wait for hours in the Emergency Department (ED) for an inpatient bed. **Inpatient clinicians look for their respective patients to initiate treatment but with the overcrowding in the ED, the process of finding a patient becomes time-consuming and exasperating.** The ED team took up the challenge to design a system that captures inpatients' locations with ease.

1 THOUGHT PROCESS

The ED team made use of the root-cause analysis (Fishbone diagram) during our brainstorming sessions. After much discussion, **Patient Location Module (PLM)** was devised.



PATIENT LOCATION MODULE (PLM)

The ED team envisioned a system with the below in mind:

- Capture location of all admitted and observed patients in the ED, and
- Display the info electronically (intranet and within ED)

4 RESULTS

TIME TO LOCATE PATIENT

Before PLM
10-30 mins

With PLM
1 min

Other benefits

- ✓ Improved patient safety (inpatient treatment initiated promptly)
- ✓ Increased productivity (less time spent to locate patients)
- ✓ Improved morale

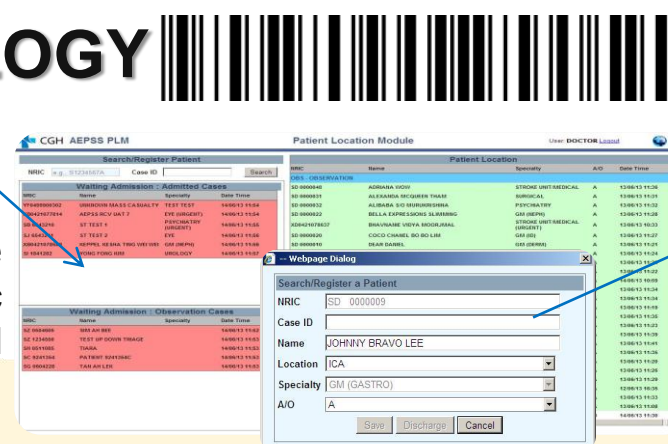
Time Savings:
> 1000 hours/month

FUTURE WORKS

With the expertise gained, the ED team is now developing an RFID system to track location by bed level and to integrate it with the bed booking system for enhanced efficiency.

2 METHODOLOGY

Area scanner



Patient's barcode scanned at specific location will be captured and displayed.

Scan barcode at exit scanner to remove name from listing

Exit scanner

NRIC	Name	Specialty	AIO	Date Time	Location
XD-5384	HENDRA LAM	STROKE UNIT	A	14/06/13 11:20	14/06/13 11:20
SG-9025	HONG CHWEE KIM	STROKE UNIT	A	14/06/13 11:06	14/06/13 11:06
SG-7331	KONG WEE YIN	STROKE UNIT	A	13/06/13 11:28	13/06/13 11:28
12-0700	PASSPORT	NEUROSURGERY	O	12/06/13 17:44	12/06/13 17:44
SA-4558	PLM TEST SUBJECT 1	ENT	A	12/06/13 16:34	12/06/13 16:34
SE-4979	SALIM BTE ABULLAH	GM (DERM)	A	13/06/13 11:27	13/06/13 11:27
SA-7445	SIEW KIAN AN @LOKEE	PSYCHIATRY	A	13/06/13 11:28	13/06/13 11:28
SF-8721	WEE FLORENCE	ORTHOPAEDIC	A	13/06/13 11:27	13/06/13 11:27
Y1-890W	Y NUMBER TESTING	EYE	A	14/06/13 11:40	14/06/13 11:40
SF-6580	MOHD SAID BIN ALI (TES	UROLOGY	A	13/06/13 11:20	13/06/13 11:20
SA-9947	N RAJALAKSHMI	CARDIOLOGY	O	13/06/13 11:31	13/06/13 11:31
SG-7740	POH ANN TONG	GM (INT MED)	A	13/06/13 11:30	13/06/13 11:30

Displayed at Nurses' Station in ED Observation Room.
URL available on Intranet for all staff

3 STAFF TRAINING



Adequate training was given with the help of an in-house produced video.
(Available in the CGH Intranet)

