



Singapore Healthcare Management 2016

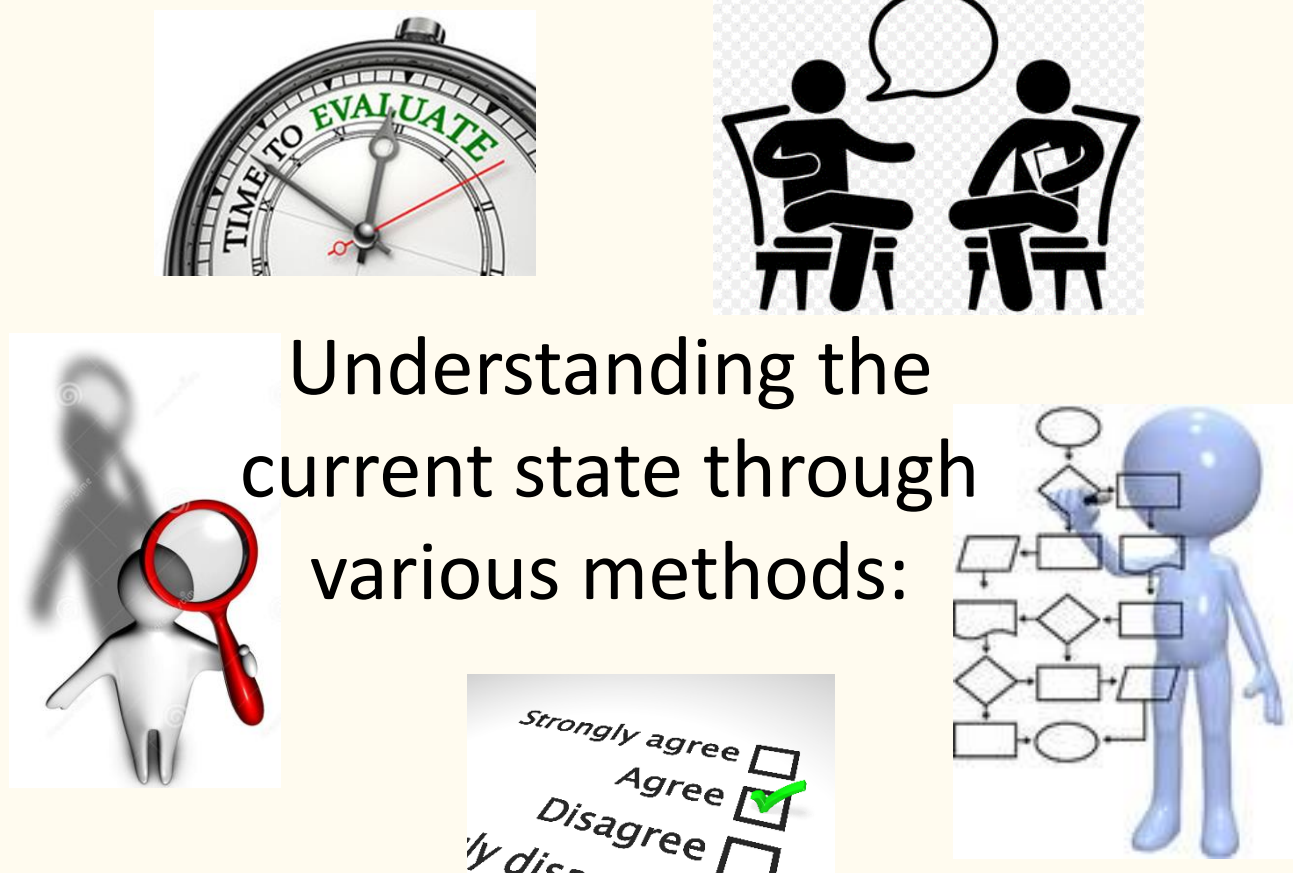
Enhancing the Financial Counselling (FC) Process with the Electronic Admission Form (EAF)

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The **SingHealth Financial Counselling Task Force** was formed to review and improve the patient experience at FC for elective inpatient admissions, and to improve the efficiency of staff involved in the FC process.

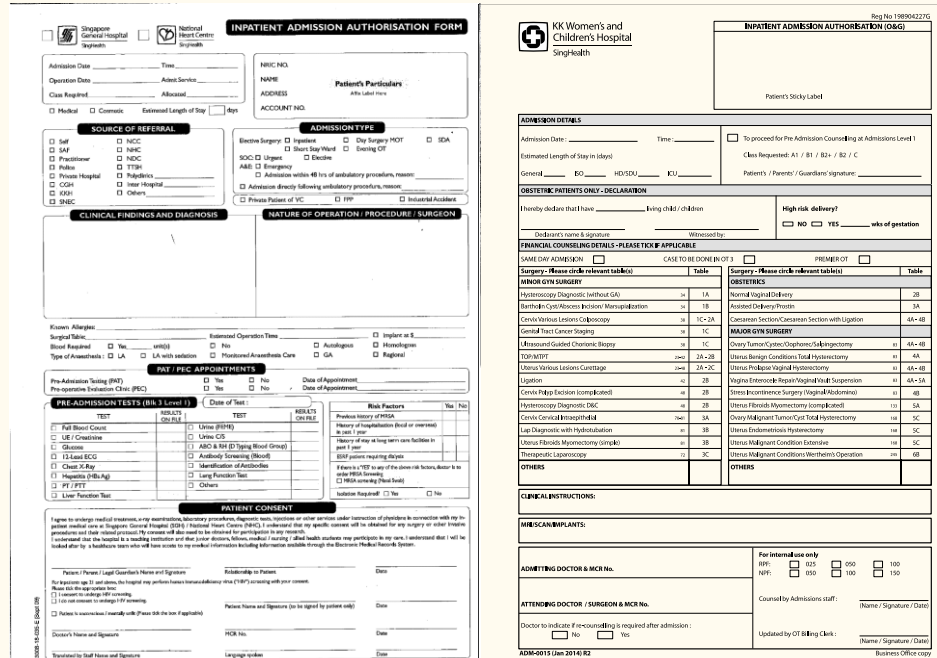


Observations of hardcopy Admission Authorisation Forms:

- Repeated entries of the same information, at different points, into different IT systems (by doctors, nurses, admission office staff)
- Transcription errors and incomplete documents, causing rework and frustration
- Time to trace, store and transport hardcopy admission forms (13,640 man-hours/year lost)

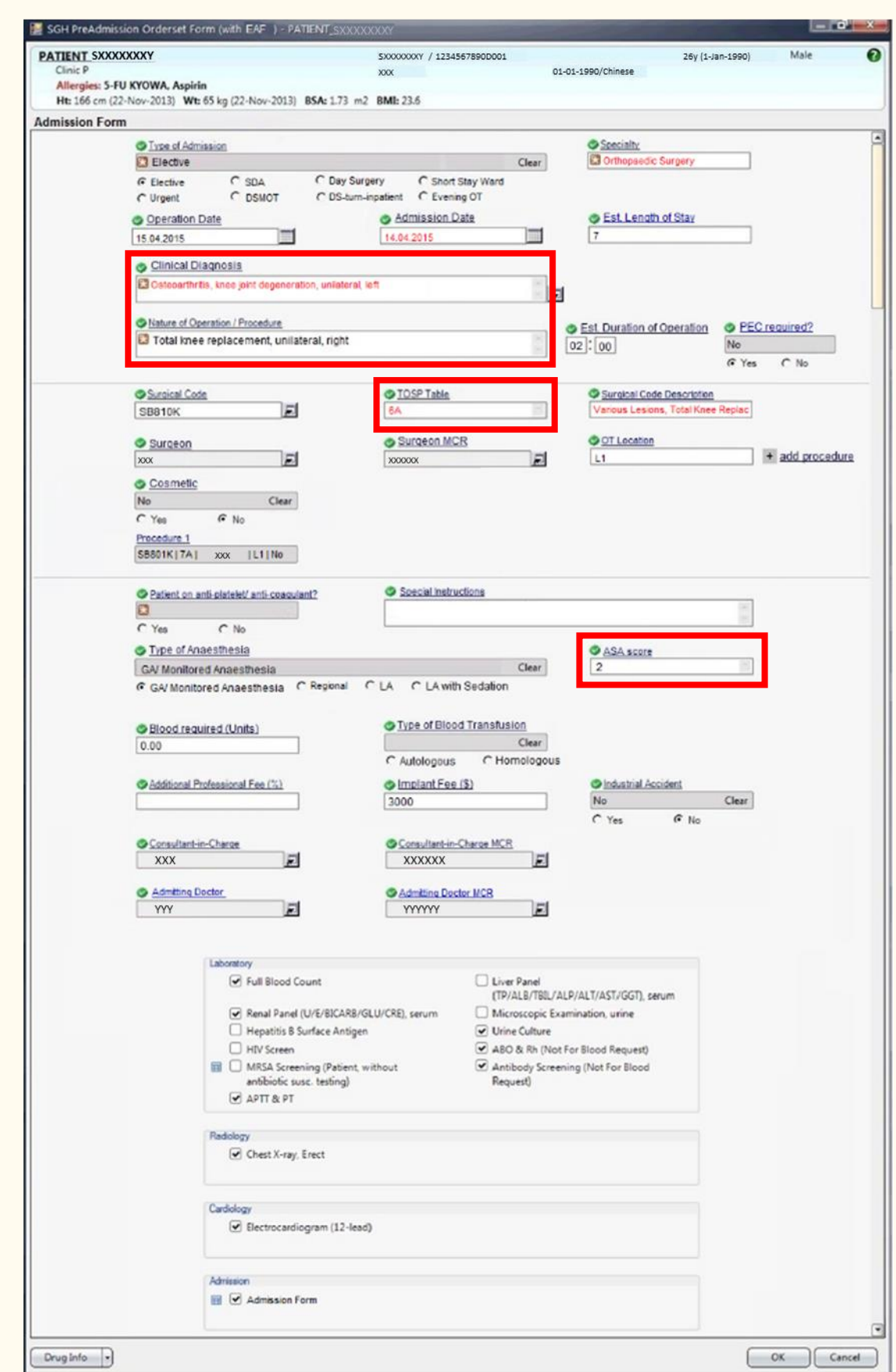
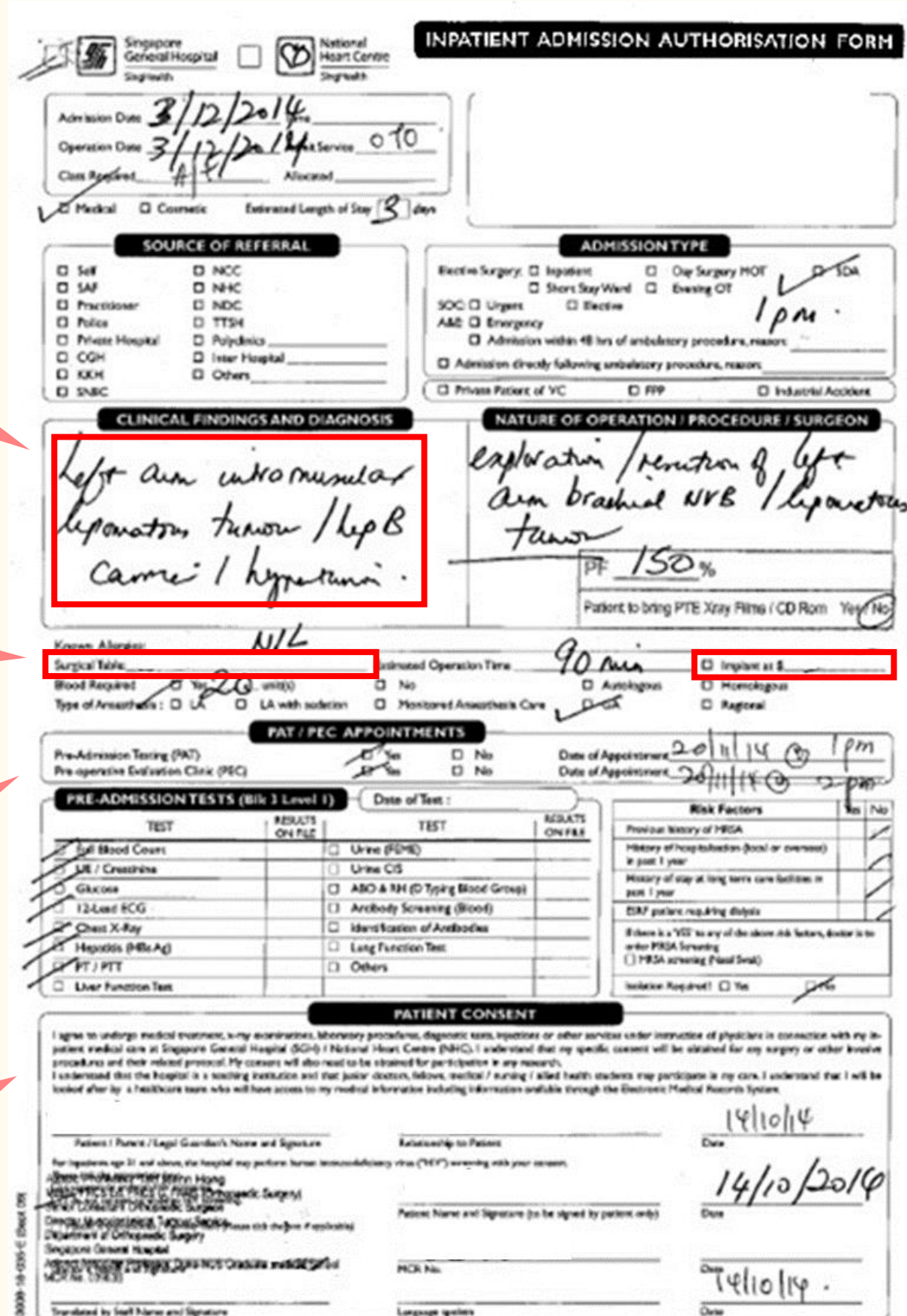
A cross-institutional and multi-disciplinary **Clinician Workgroup** was formed to **digitise**:

1. Inpatient Admission Authorisation Form (IAAF)
2. Ambulatory Surgery Authorisation Form (ASAF)
3. Endoscopy Listing Form



Hardcopy vs Electronic

- Insufficient space to write
- Illegible handwritings (i.e. staff need to clarify with doctors)
- Doctors unfamiliar with TOSP codes
- Mandatory fields not filled up (e.g. implant fees)
- Manual ordering of pre-admission tests (i.e. form gets transported from one department to another)



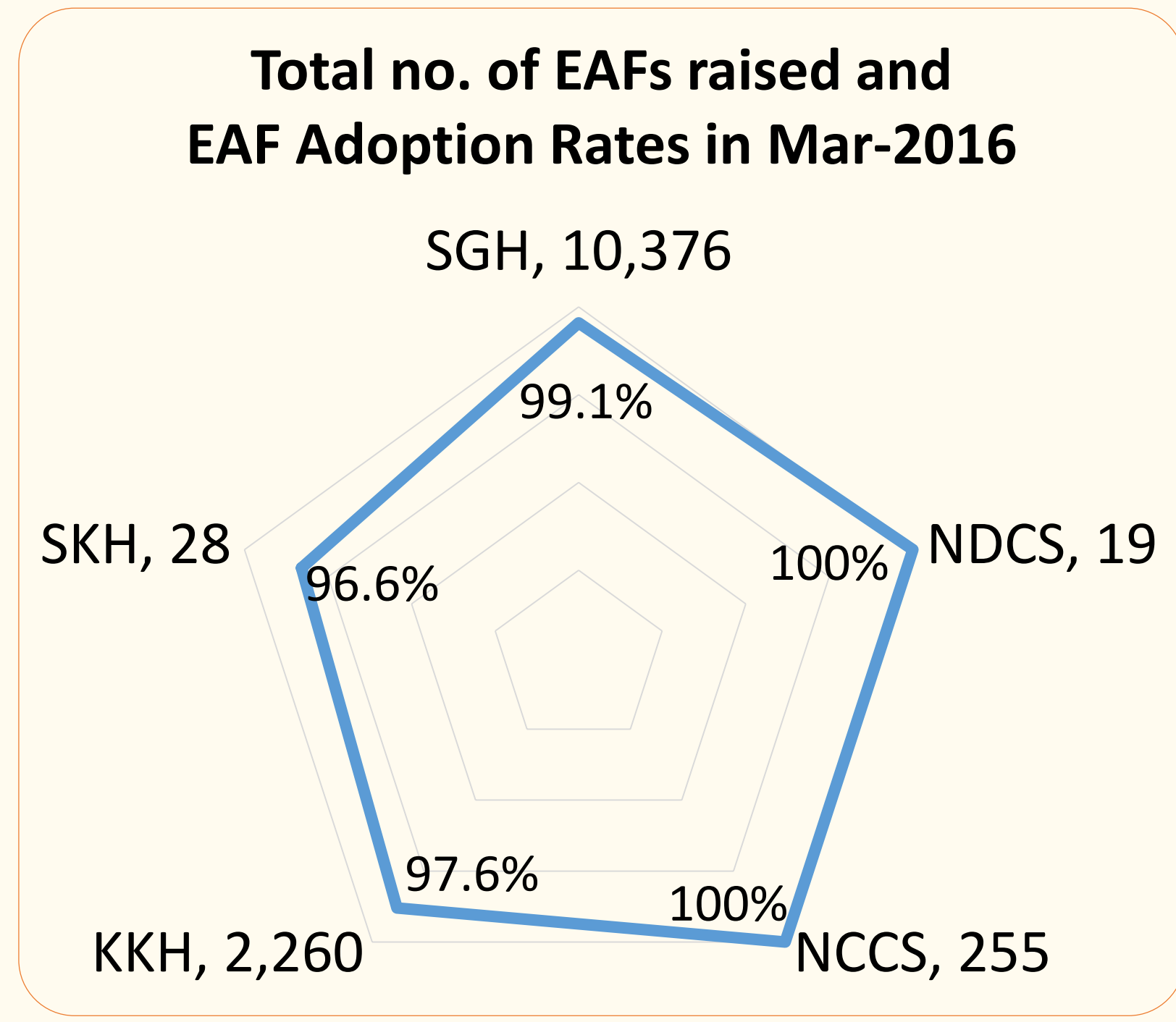
- Type-written diagnosis and instructions entry
- Auto-populated TOSP codes
- Auto-population of pre-admission tests based on ASA score and algorithms
- Direct ordering of tests within SCM
- System prompts for unfilled mandatory fields
- Saves printing costs and reduces storage space

Why EAF on SCM system?

1. Leveraging on an existing platform to launch cluster-wide
2. A platform which clinicians are familiar with
3. Can order EAF via CPOE without logging in to another system
4. Required data can be pulled from SCM to EAF directly

Reasons behind the high adoption rates:

- Clinician Workgroup consisting of doctors, nurses, ops staff, IT reps and administrators from various SingHealth institutions
- Roadshows and training sessions at the departmental level; one-page Quick Guide for clinicians to refer in their rooms
- On-site support (including IT rep) deployed at the first week of launch
- Continual enhancements based on users' feedback



- Aug-2015 SGH, KKH
- Dec-2015 NCCS, NDCS
- Jan-2016 SKH
- Apr-2016 SNEC
- Q4 2016 NHCS

"Nurses are happy as it eliminates the need to run in and out to clarify with the clinicians, or to transcribe. It is much easier for staff to read the form, instructions will not be missed leading to the postponement of ops."
A/Prof Goh Seo Kiat, Senior Consultant

"Time saving as Doctors' instructions are now legible and clear. Diagnosis, operation procedure and table codes are clearly filled."
Norhayati Binte Hamzah, Principal Enrolled Nurse

The Future of EAF

- ✓ Auto-flow of data into downstream systems
- ✓ Reduce errors
- ✓ Reduce unnecessary pre-admission tests

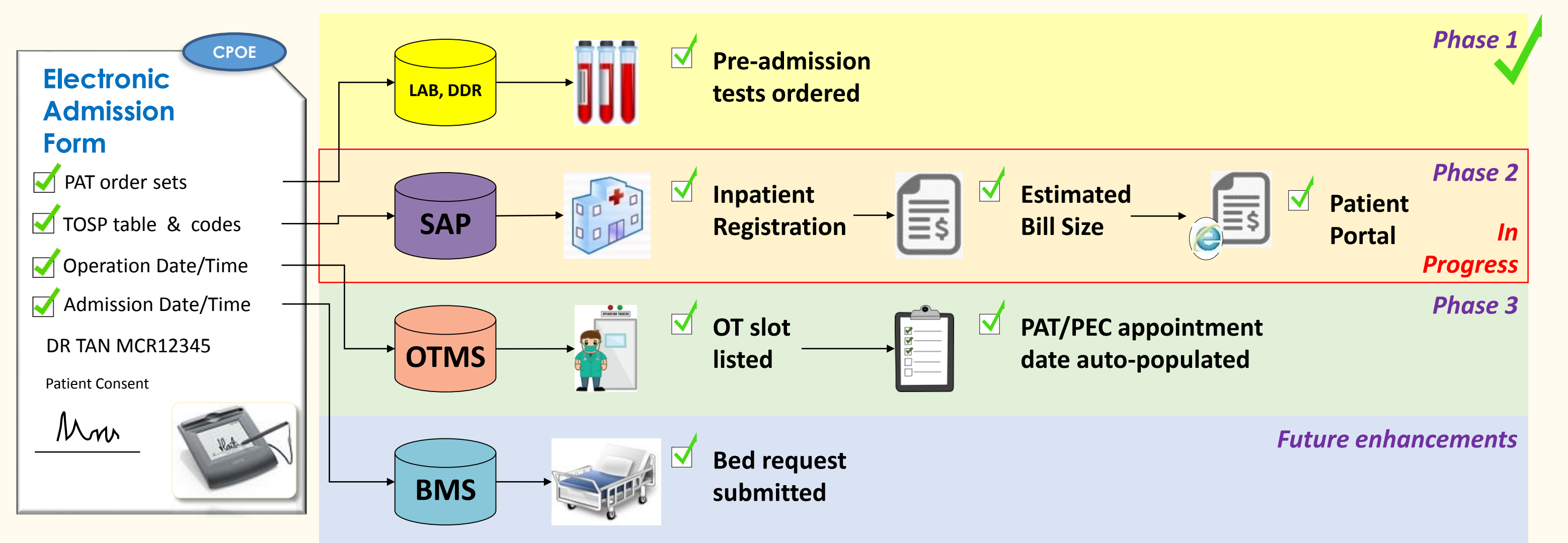
Projected Annual Savings

\$1.2 million Avoidance due to unnecessary tests

6,743 hours Clarifying incomplete & illegible hardcopy forms

13,640 hours Transport, tracing and storing hardcopy forms

35,358 hours Manual data entry into various systems



Credit: Dr Hairil Rizal, Dr Eileen Sim, PEC (SGH), Admissions (SGH)