



Singapore Healthcare
Management 2014

Risk Mitigation for Patient Safety on duplication of Medical Records



KK Women's and
Children's Hospital
SingHealth

Yasa Yap Siew Geok, Joanne Lee Kah Hui
James Chee Kok Leong, Margaret Woot Yap Yin, Peh Siew Huay
KK Women's and Children's Hospital

INTRODUCTION

Department of Document Management Services (DDMS)

DDMS supports the hospital's operations in a range of services relating to patient's medical records. The major services are **retrieval of medical records**, **clinical coding**, **medical reports processing**, **archival of medical records** and **patient bio data merging**. We also ensure that all patients' records & information are confidential.

BACKGROUND

Duplicate Medical Records – Patient Safety Issues

Every Month we are receiving duplicate medical records from users and we have spend a lot of time on checking the system (for its last locations) and tracing back the old records (existing old record) for merging ...

What effect do duplicate medical records have on patient safety?

It may seem like the most innocuous of errors, creating duplicate medical records could jeopardizes patient safety, patients could be **mistreated** with **missing or incorrect information** in their medical records causing unintended injury or illness.

OBJECTIVE

Managing Medical Records

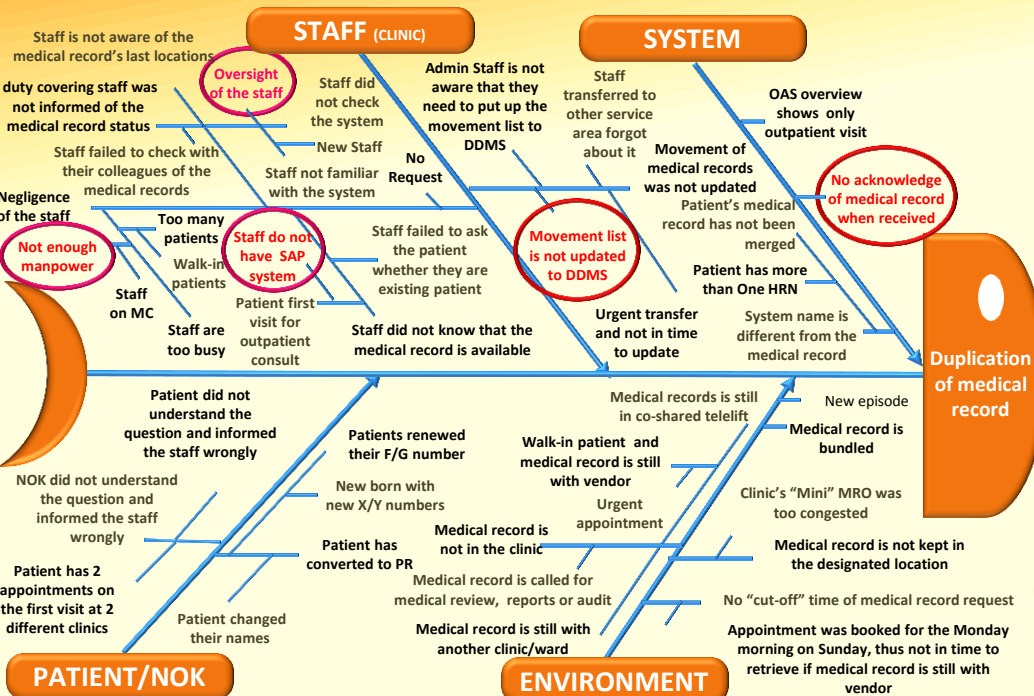
To ensure that the information of patient's medical records is readily available for doctors.

To prevent duplication of patient's medical records and ensure patient's safety

METHODOLOGY

The team brainstormed and the tool used to identify the **5** major causes is the Cause and Effect (Fish bone diagram). The findings revealed that majority of causes are contributed by human factors. Thus, the team decided to mitigate the situation by adopting **Human Factors Analysis and Classification System (HFACS)**.

Root Cause Analysis (RCA)



Human Factors Analysis and Classification System (HFACS)

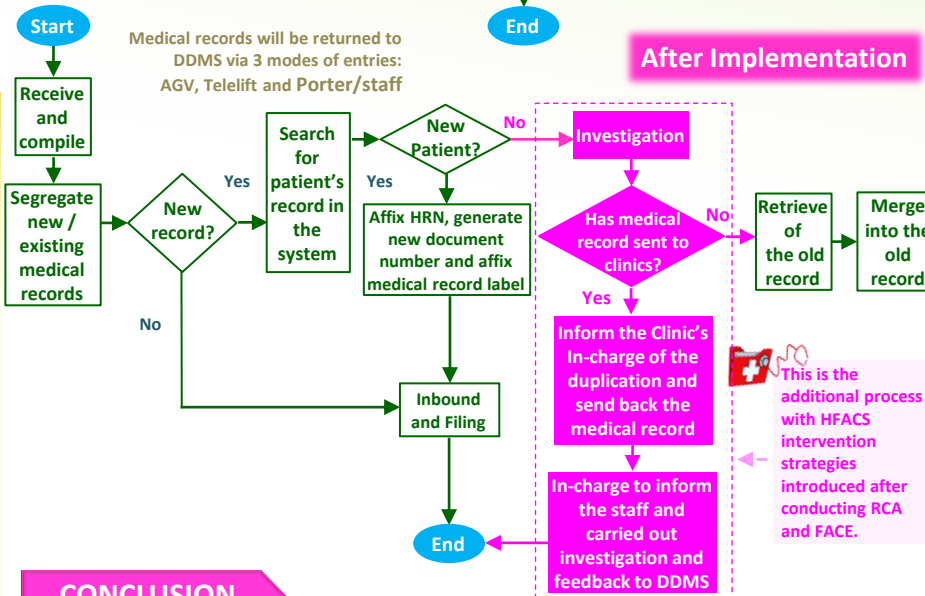
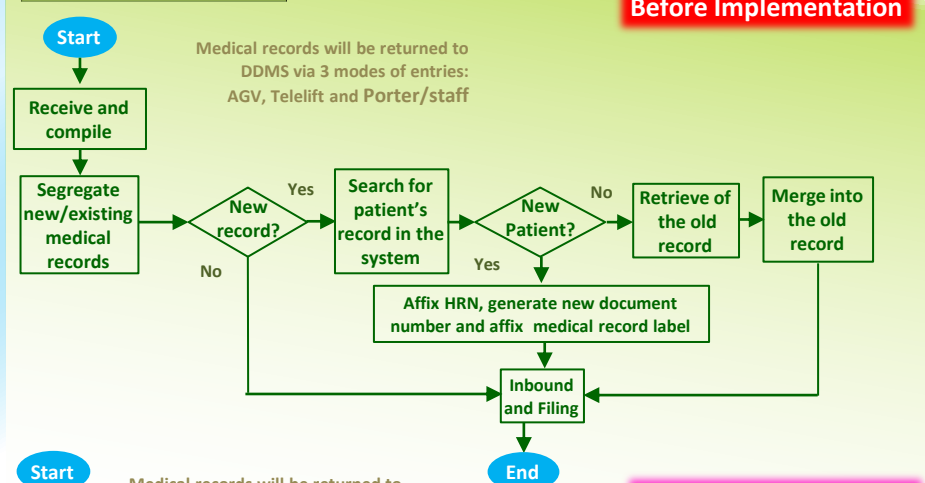


Intervention Assessment (FACES)

We conducted an intervention assessment (FACES) to ensure intervention strategies are directly target the underlying systemic causes of errors.

- | | |
|---------------------------------------|--|
| Feasibility - can it be done? | ✓ Yes! Is quite easily done. |
| Acceptability - will staff accept it? | ✓ Yes! Staff accepted the additional workflow. |
| Cost - can we afford it? | ✓ Yes! We can afford it. |
| Effectiveness - will it work? | ✓ Yes! It will work and patient safety risk is adequately-controlled. |
| Sustainability - will it last? | ✓ Yes! Is sustainable and can be enhanced with system enhancement. |

RESULT



CONCLUSION

What we have Achieved

Patient Safety

With every new record is checked and feedback, the additional HFACS intervention strategies has strengthened the Patient Safety.

HFACS Level 1 resolved : Safe Acts

✓ Unsafe Acts were mitigated with adequate training, timely counseling and coaching from the respective clinics' NMs/NCs, thus staff are equipped with better Skill-Based, right Decision encouraged, and correct perception when carrying the task.

HFACS Level 2 resolved : Preconditions for Safe Acts

✓ Preconditions for Unsafe Acts were transformed to safe Act through collaboration with Clinics' NMs/NCs via active communications, coordination, planning and teamwork to the clinics staff.

HFACS Level 3 resolved : Safe Supervision

✓ This constant reminding and close supervision raises the patient safety awareness and staff vigilance, minimise further duplication of folders to an acceptable level.

✓ The new process promotes better team work and improve morale among colleagues.

Staff Morale

Better staff morale, collaboration and resources saved (\$), with less duplication of folders

Cost Saved

The average estimated cost of a duplicate record is **\$S25**.

If the records aren't reconciled, the costs are even higher.

Time lost by a patient and provider is often overlooked as a consequence of duplicate records.

Period	Peads	Cost	O&G	Cost
2Q13	12	\$ 300	47	\$ 1,175
3Q13	9	\$ 225	50	\$ 1,250
4Q13	8	\$ 200	44	\$ 1,100
1Q14	2	\$ 50	36	\$ 900

\$525 saved

We managed to reduce **83%** and **23%**

on duplication of medical records for Paediatric and O&G patients respectively



Sustainability and Spread...

HFACS Level 4 resolved : Organizational Influences

To transit from paper-based health care records to **scanned medical record (SMR)** to document imaging and conversion of patient records management systems. Scanned (forward scanning) files will be in digital format, so as to enhance the flexibility of record tracking, maintaining, accessing, and securing these valuable medical records and promote better patient safety.