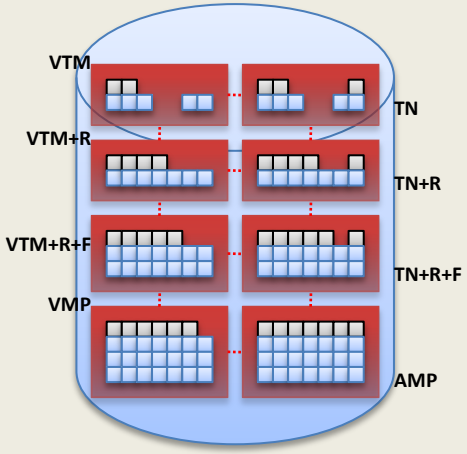
Application of eHR

Drug Standards in eHR CMS Adaptation and Structured Alert Module

Connie Lau
Pharmacist
Hospital Authority

The uses of Hong Kong Medication Terminology Table (HKMTT)

HKMTT is the HK-wide eHR Drug standards to identify the registered pharmaceutical products used in Hong Kong.



HKMTT high level model

Which activities can HKMTT be applied to ?

Drug records sharing

Prescribing

Dispensing

Drug allergy documentation

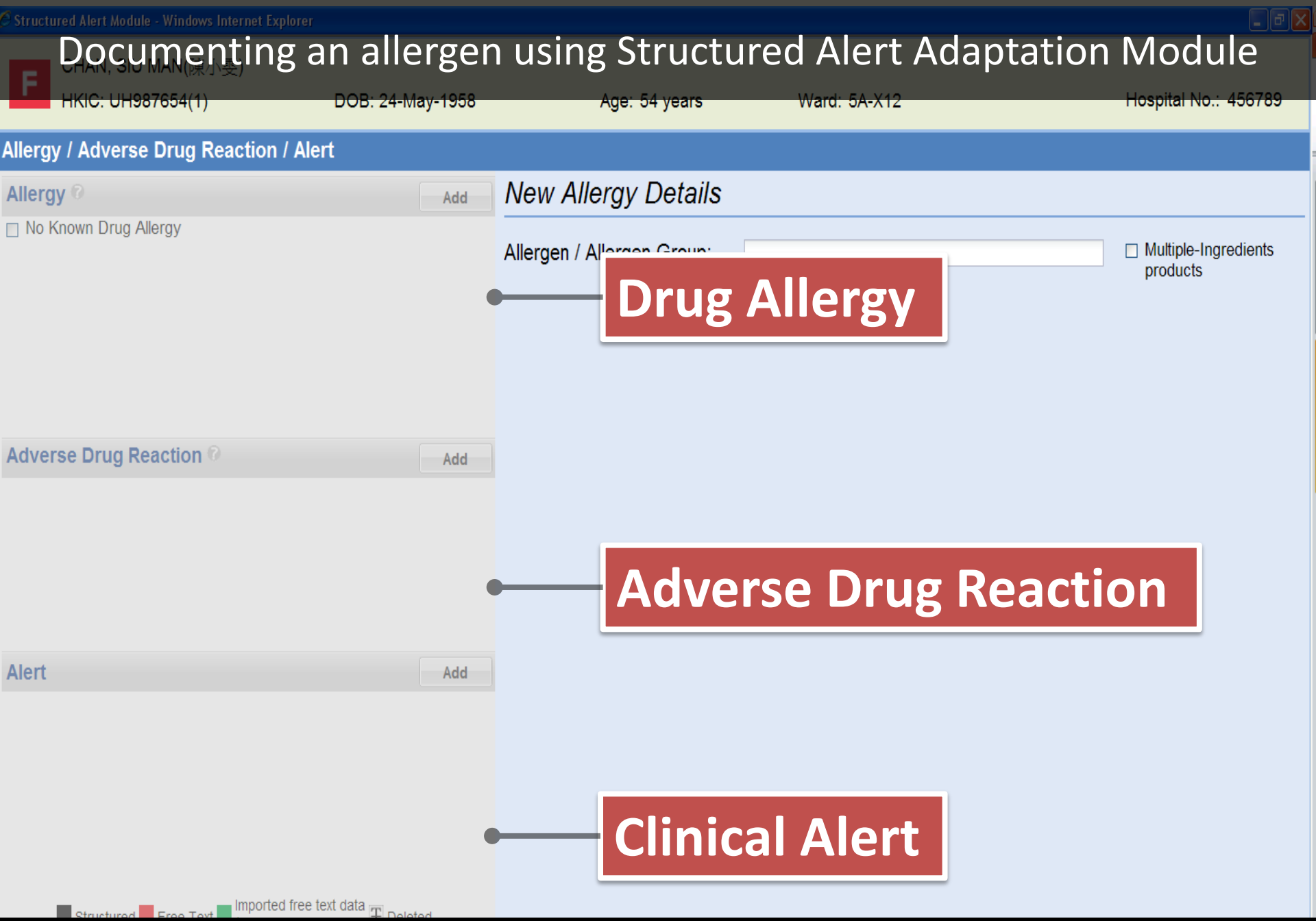
This Session

Medication decision support

Structured Alert Adaptation Module

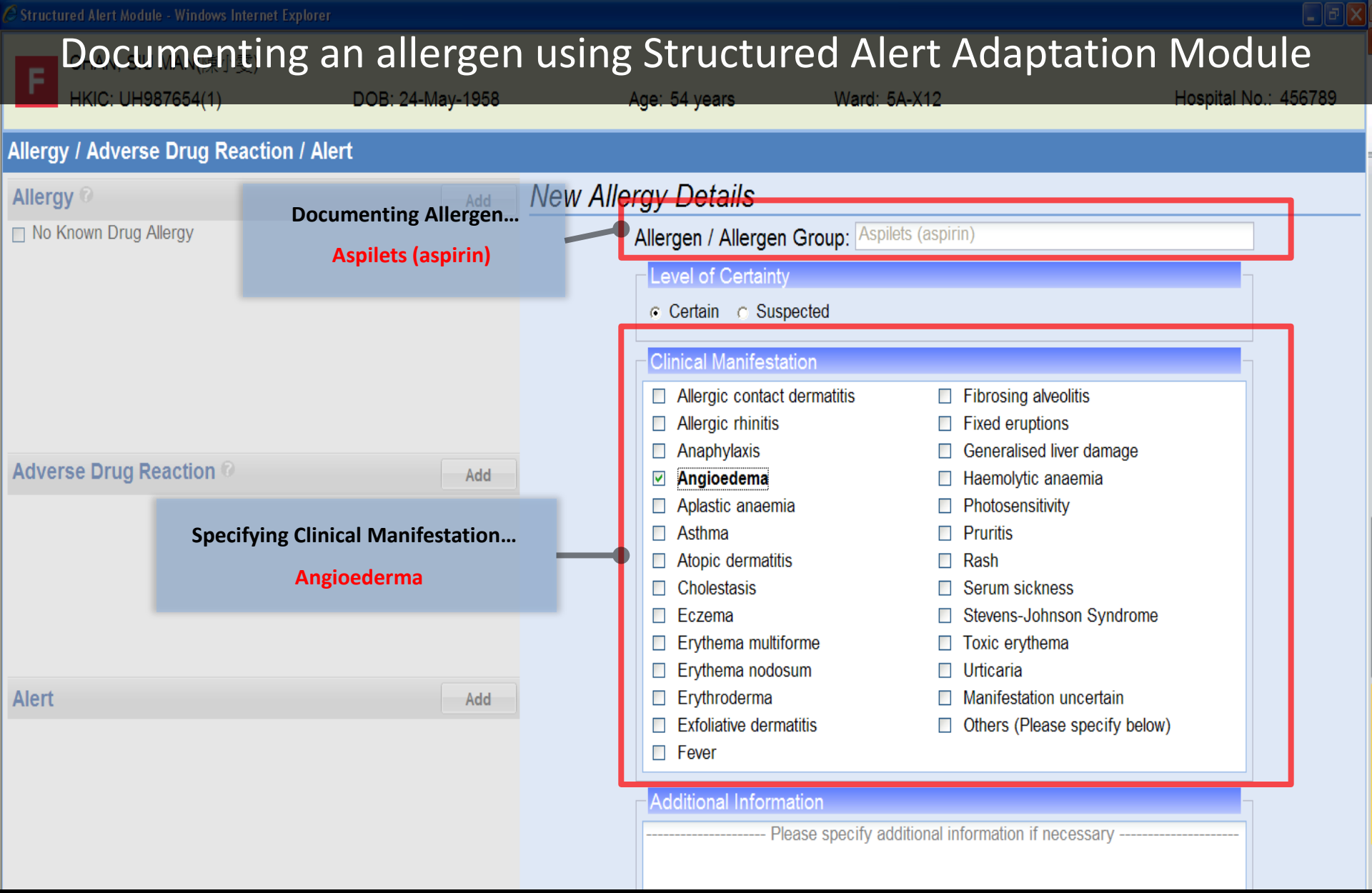
- To enhance the capability of private hospitals to:
  - capture patients' allergy record
  - share these records with the future eHR system
- eHR Office has developed:
  - Structured Alert Adaptation Module (SAAM)
- Private hospitals can adopt SAAM by integrating them into their own eMR systems.

Documenting an allergen using Structured Alert Adaptation Module



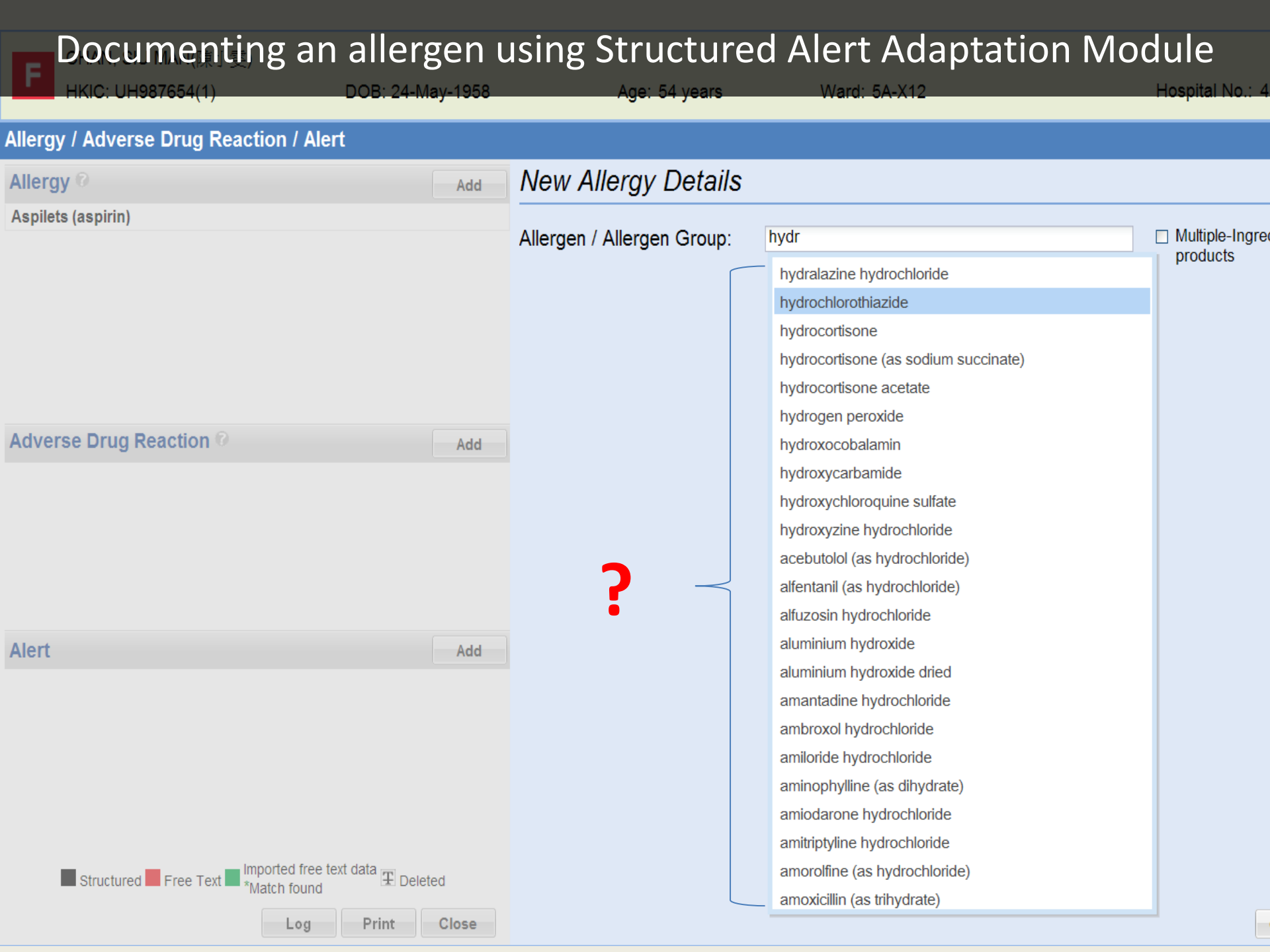
The screen dump of SAAM.

Documenting an allergen using Structured Alert Adaptation Module



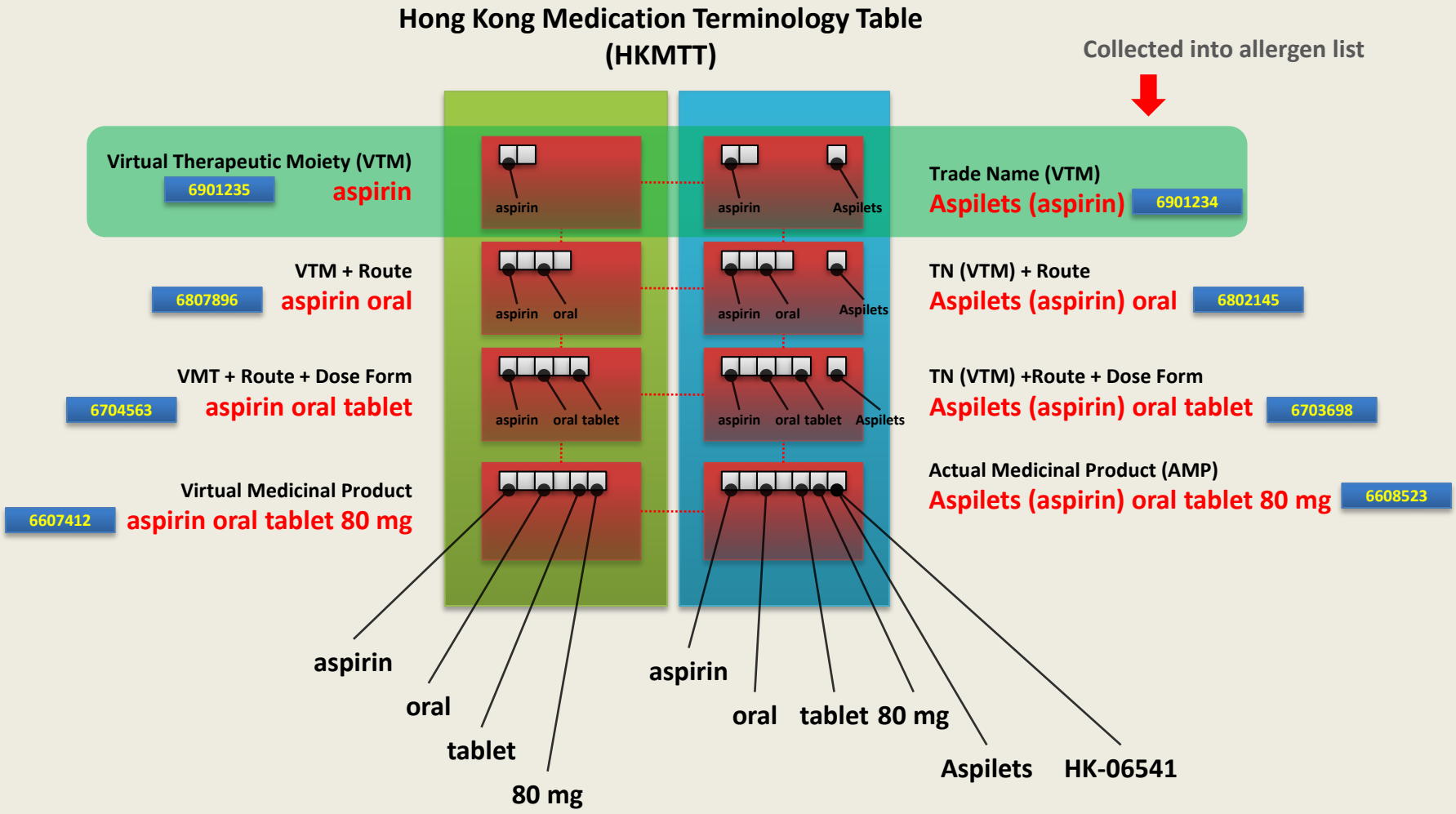
It is the screen dump of SAAM. In this example, the allergen 'Aspilets (aspirin)' can be picked up from the allergen list and therefore, can be documented structurally.

Documenting an allergen using Structured Alert Adaptation Module



The allergen list in the eHR Structured Alert Adaptation Module comes from HKMTT

HKMTT example - Aspilets ®



The top level adopted for allergen list - Why?

- Information on ingredients of the allergen is sufficient for drug allergy checking
- Trade name is used to assist the doctors in searching the allergen

Drug nomenclatures

MOE Module - Windows Internet Explorer

CHAN, SIU MAN(陳小雯)
HKIC: UH987654(1) DOB: 24-May-1958 Age: 54 years Ward: 5A-X12 Hospital No.: 789456

Allergy / Adverse Drug Reaction / Alert

Allergy Add
Aspilets (aspirin)
Augmentin
T4 (levothyroxine sodium)
benzhexol hydrochloride
co-trimoxazole

Adverse Drug Reaction Add

Alert Add

Structured Free Text Imported free text data *Match found Deleted

Log Print

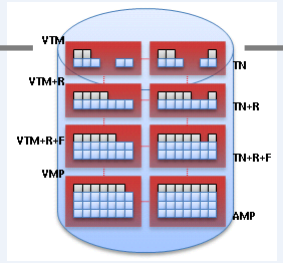
New Allergy Details

Allergen / Allergen Group:

Multiple-Ingredients products

World Health Organization

International Nonproprietary Name (INN)



Trade name, e.g.

Augmentin

Abbreviation

T4 (levothyroxine sodium)

Former British National Name (BAN)

benzhexol hydrochloride

INN = trihexyphenidyl hydrochloride

Other commonly used name

co-trimoxazole

co-trimoxazole (sulfamethoxazole + trimethoprim)

Cancel

Close

Drug allergy: *Brofen*

Drug allergy: *Septrim, Cotrimoxazole*

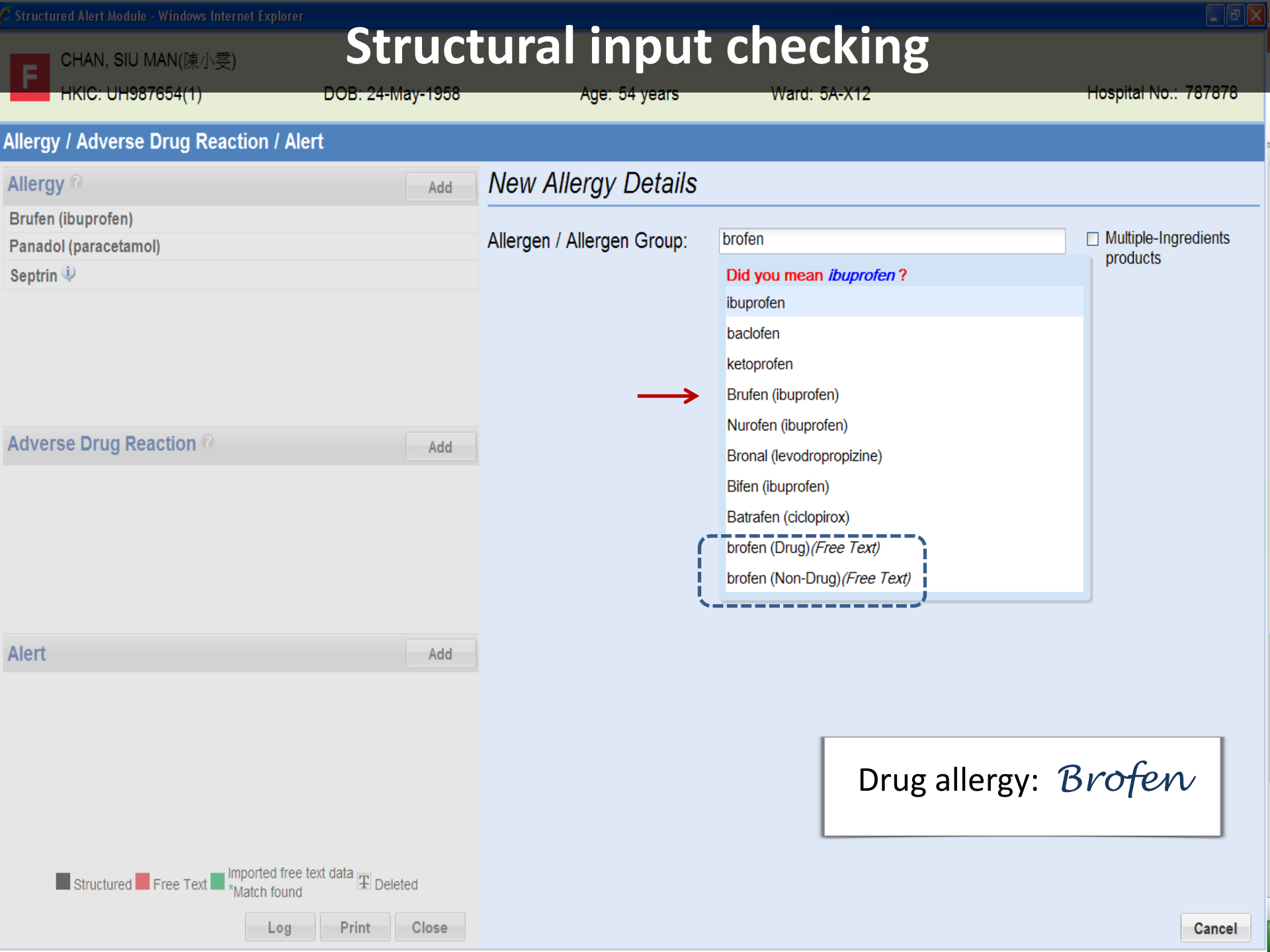
Drug allergy: *Biogesic, Panadol*

What's Biogesic?

What's Brofen?
Is it Brufen?

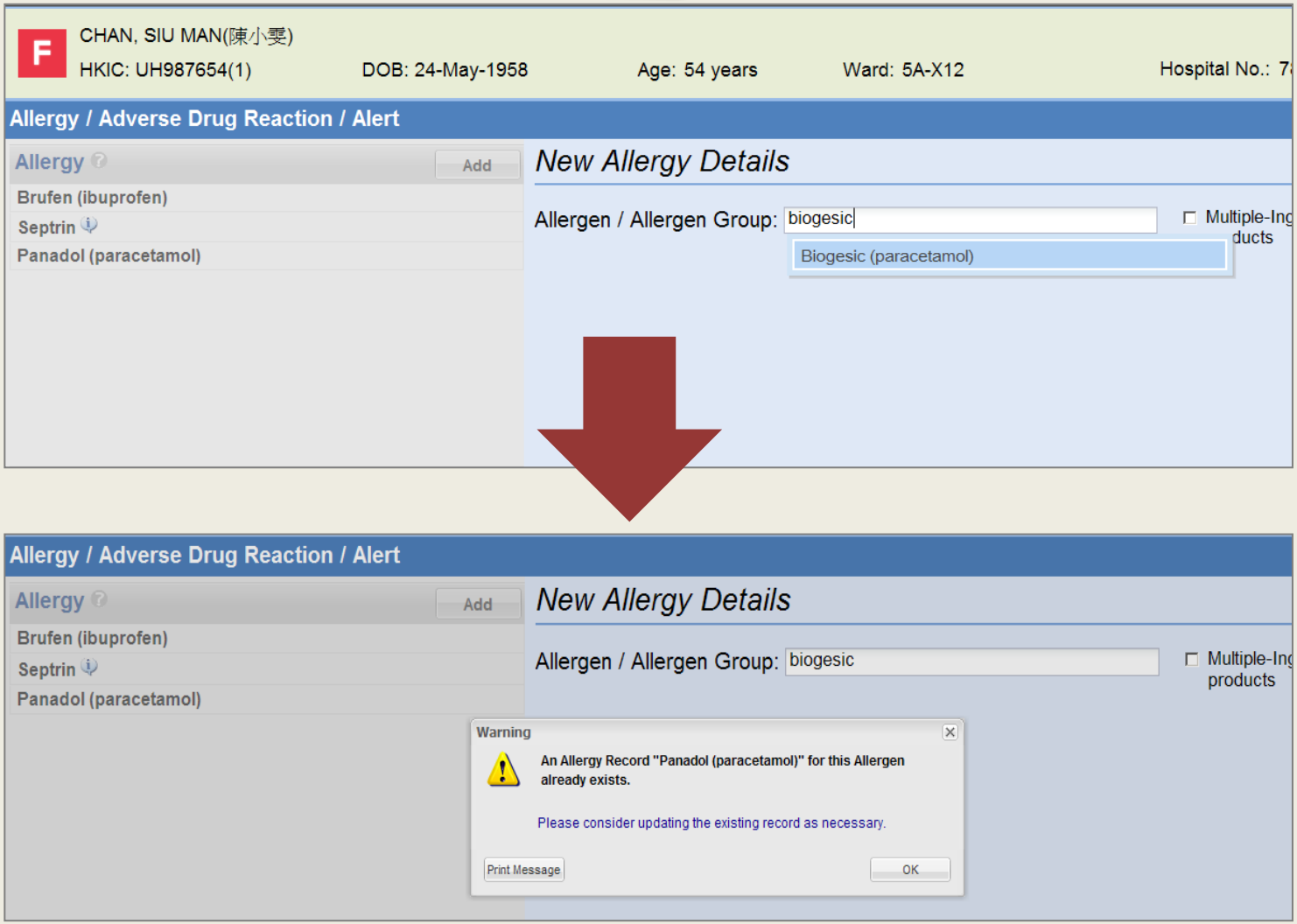
Septrim = Septrin
= cotrimoxazole ???

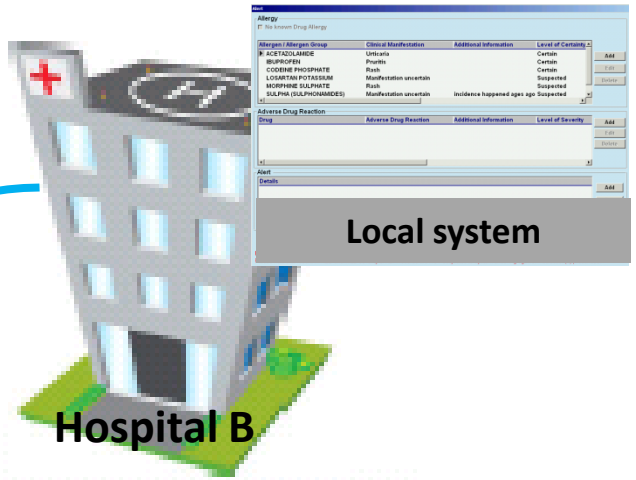
Structural input checking



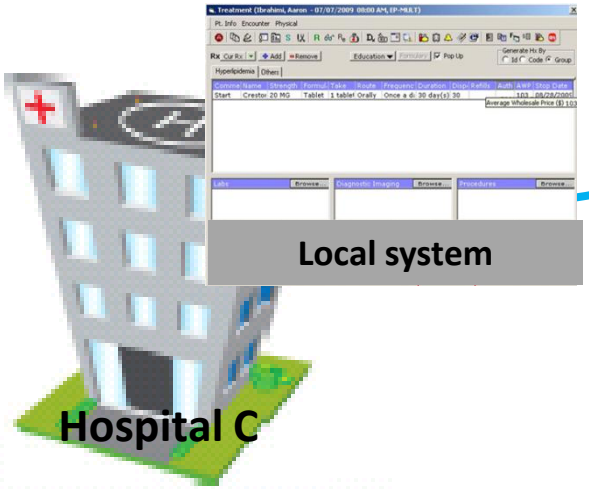
Duplication checking

Drug allergy: *Biogesic, Panadol*





eHR
Drug Allergy
Record

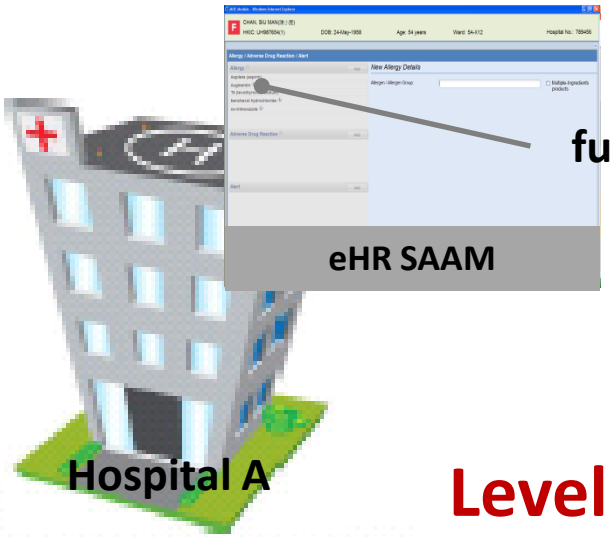


Data submitted to eHR sharing platform

Level 3: Coded information with full HK and international interoperability

Level 2: Non-coded text information

Patient allergy record is one of the sharable data in the eHR

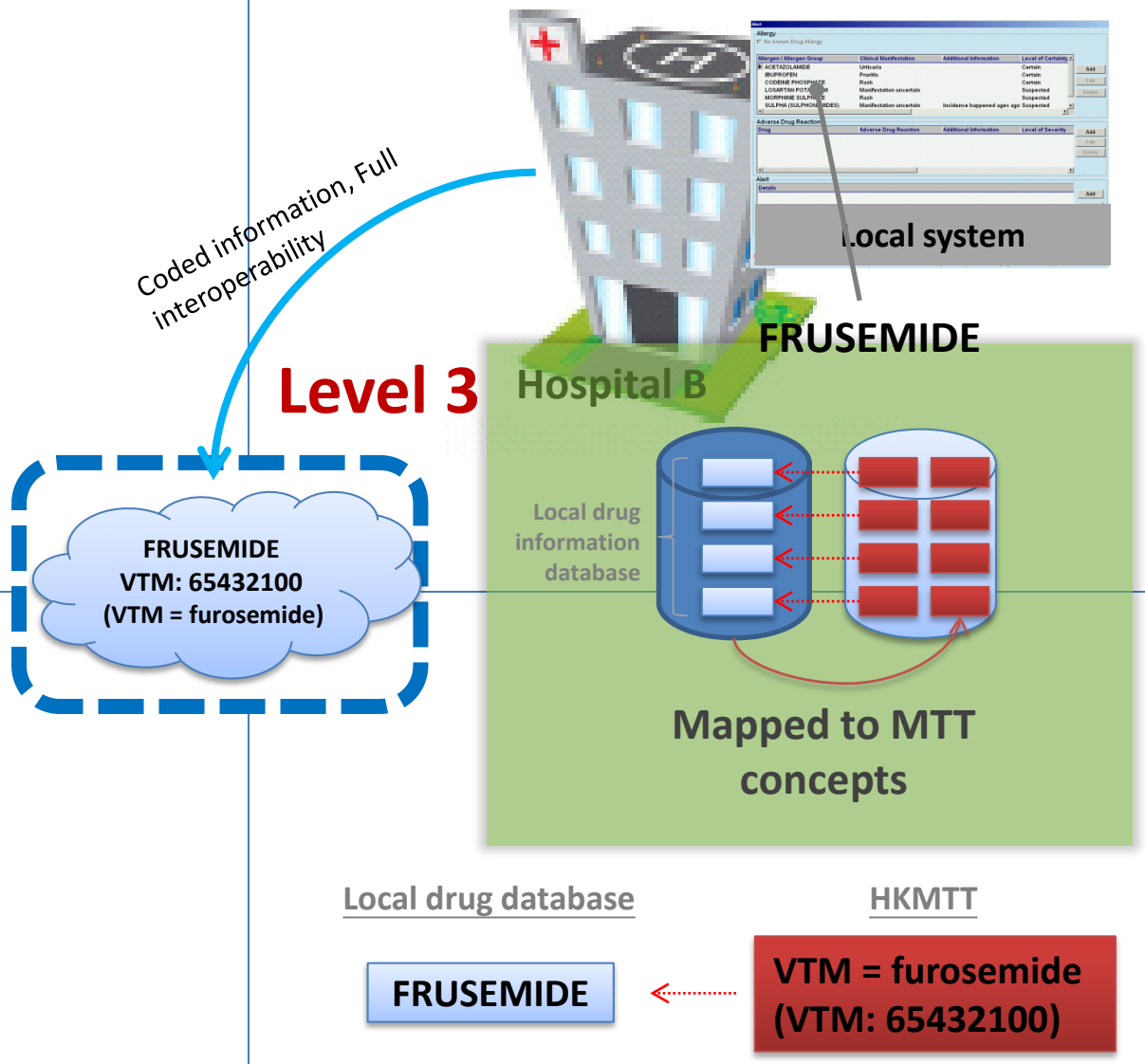


Level 3

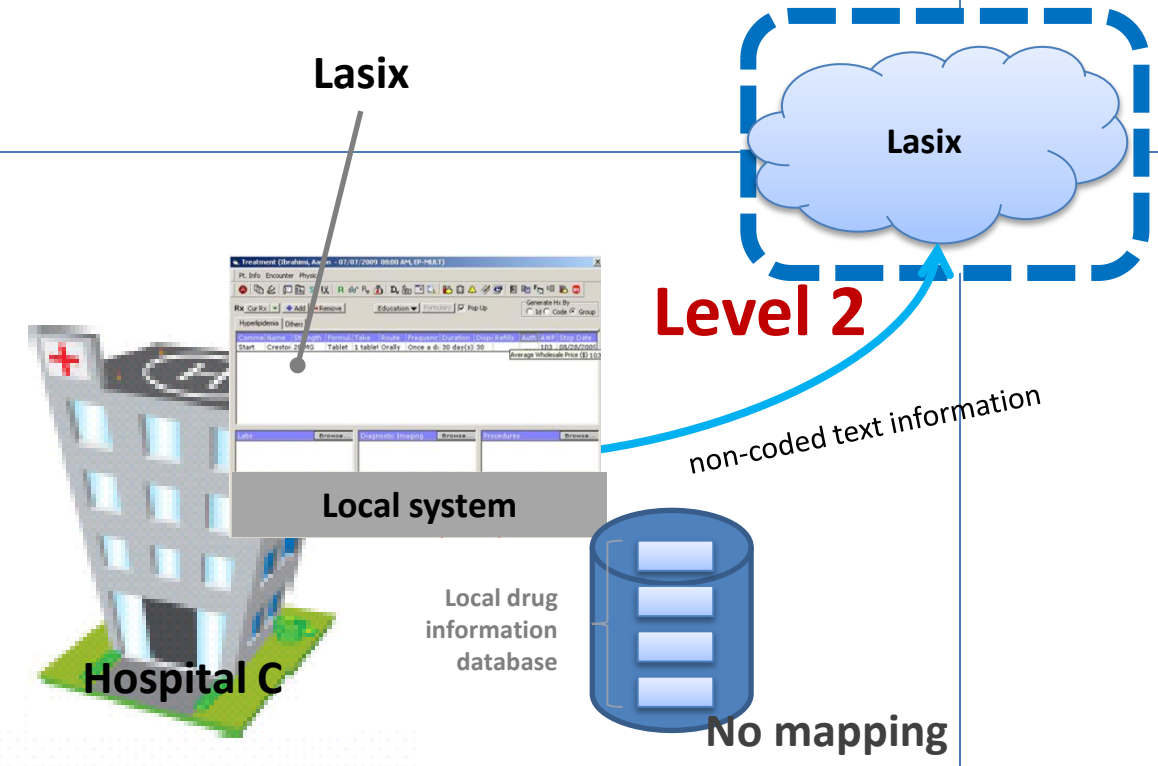
Full interoperability

furosemide
VTM: 65432100

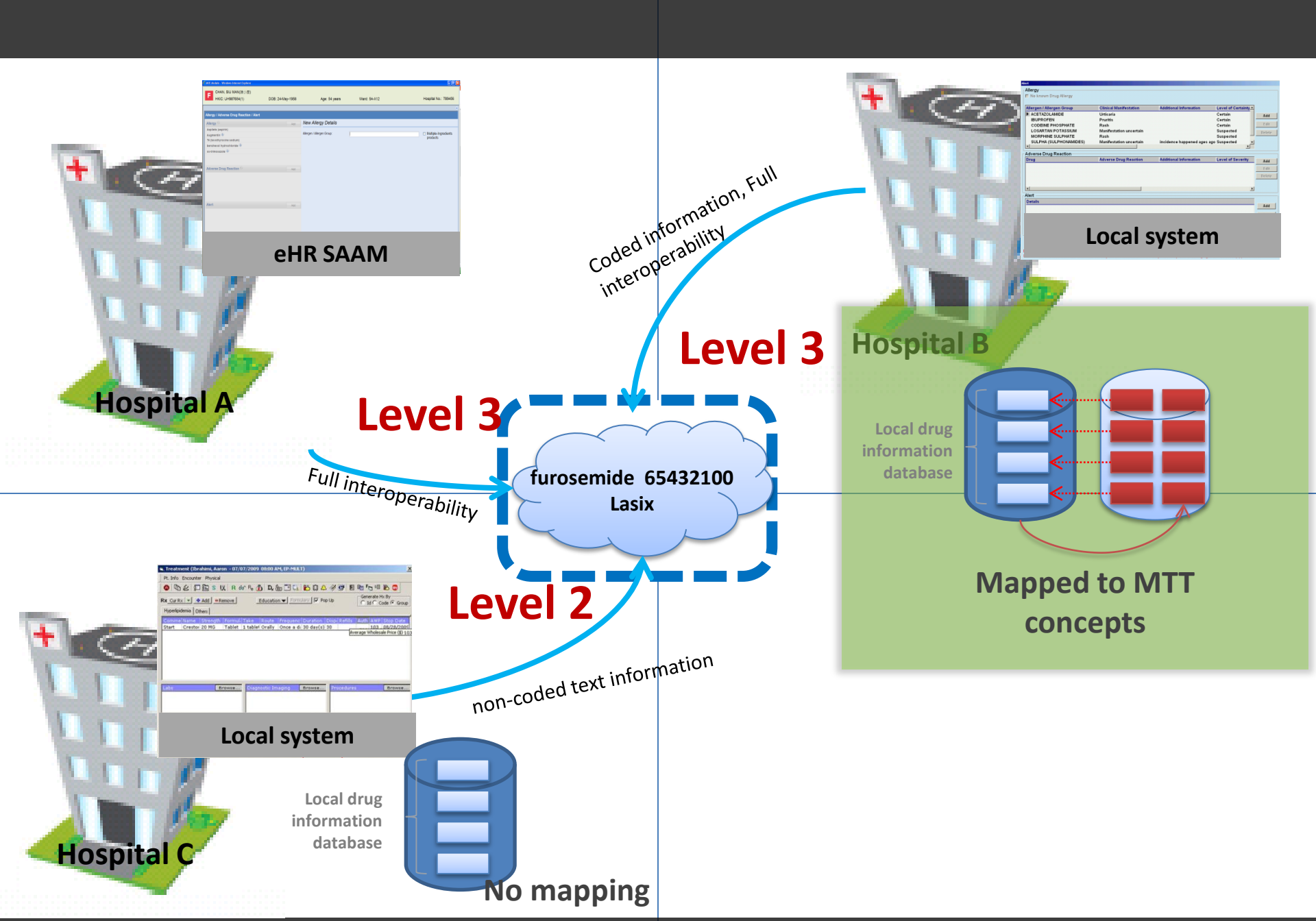
The allergy record is captured by the eHR Structured Alert Adaptation Module



The allergy record is captured by the local developed system in which the drug database is mapped to HKMTT.



The allergy record is captured by the local developed system.



The eHR sharing platform is able to group the level 3 allergy record.

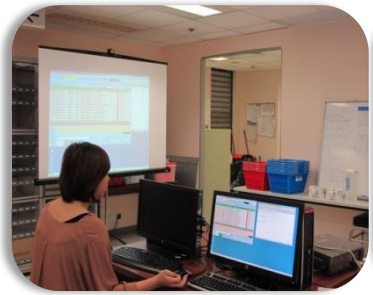
Who are the users of the Structured Alert Adaptation Module developed by eHR Office?

Currently,
Evangel Hospital, Precious Blood Hospital and St. Teresa's Hospital are applying the SAAM in their own eMR system.

More is coming……
Canossa Hospital
Department of Health
Hong Kong Adventist Hospital
Tsuen Wan Adventist Hospital
Union Hospital

Implementation of the Structured Alert Adaptation Module

1. Work out the implementation plan that fits for local hospital
2. On-site training



3. On-site support

Summary

- **What's** Structured Alert Adaptation Module?
  - Developed by eHR Office
  - To capture electronic allergy record and share these records with the future eHR system
- **How's** Structured Alert Adaptation Module?
  - HKMTT data is applied
  - User-friendly and smart searching function
- **Approach** of allergy record sharing
  - Level 3: Structured Alert Adaptation Module/ mapping with HKMTT
  - Level 2: local developed recording system

Thank you.