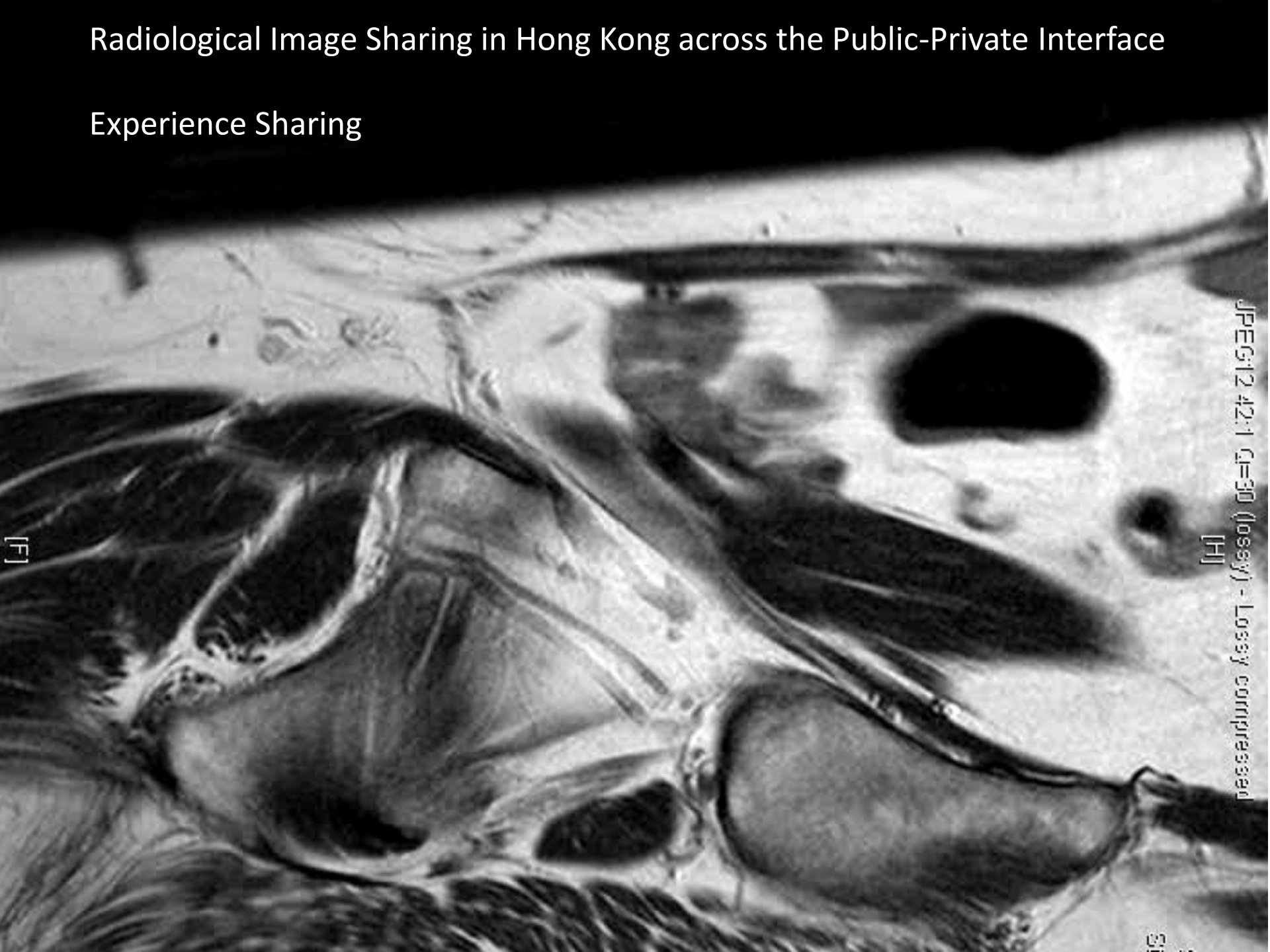
Radiological Image Sharing in Hong Kong across the Public-Private Interface

Experience Sharing

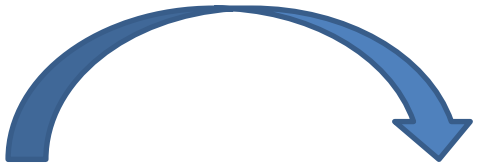


Workflow

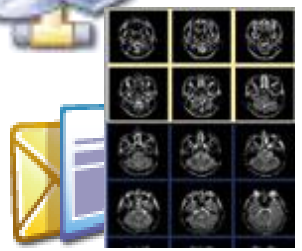
HA Hospital

Doctor's Office

GCRS

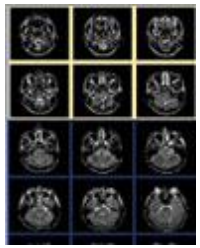


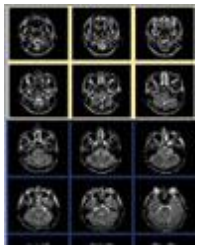
Private Radiology Center Registration



Radiology Department

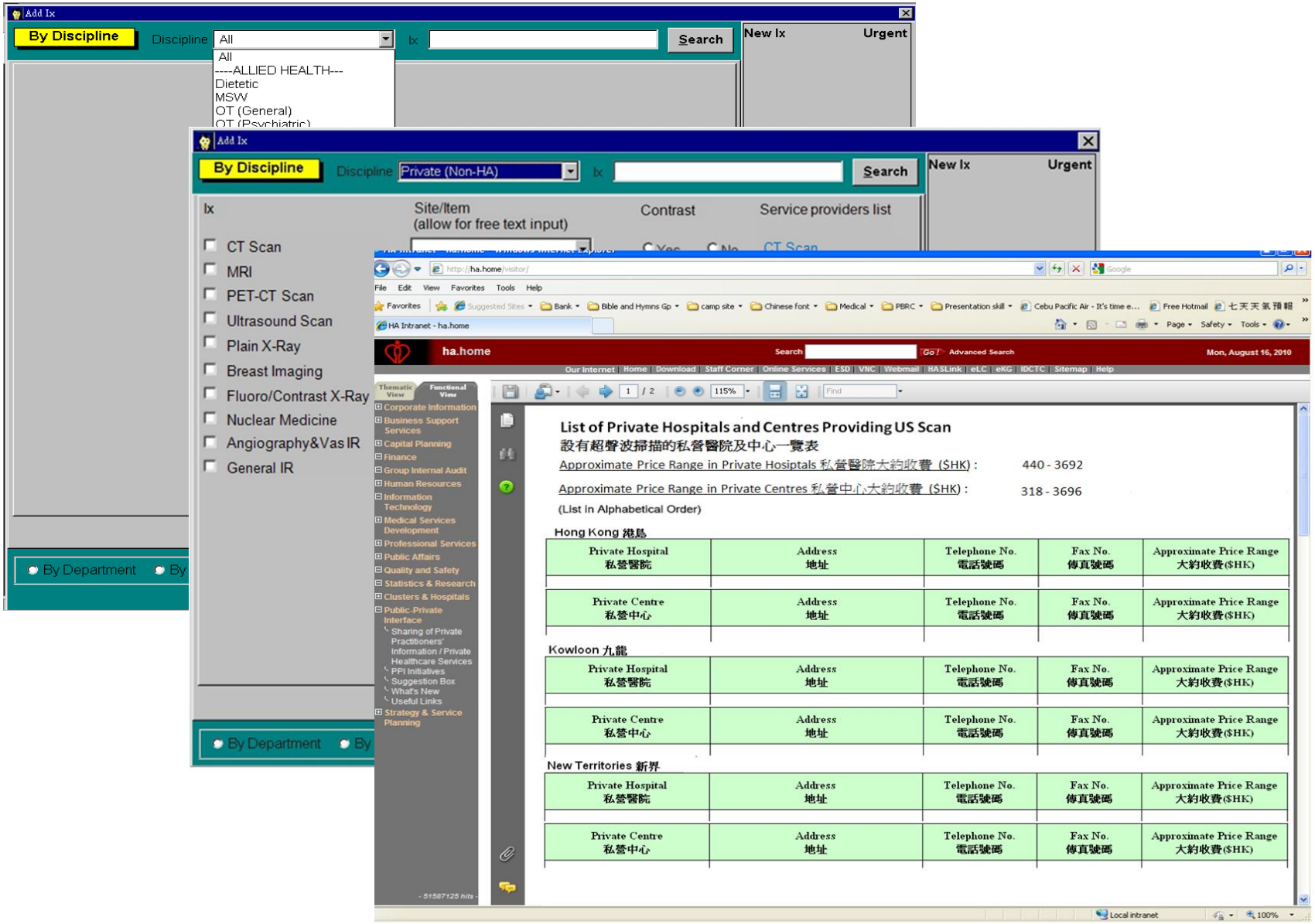
ePR



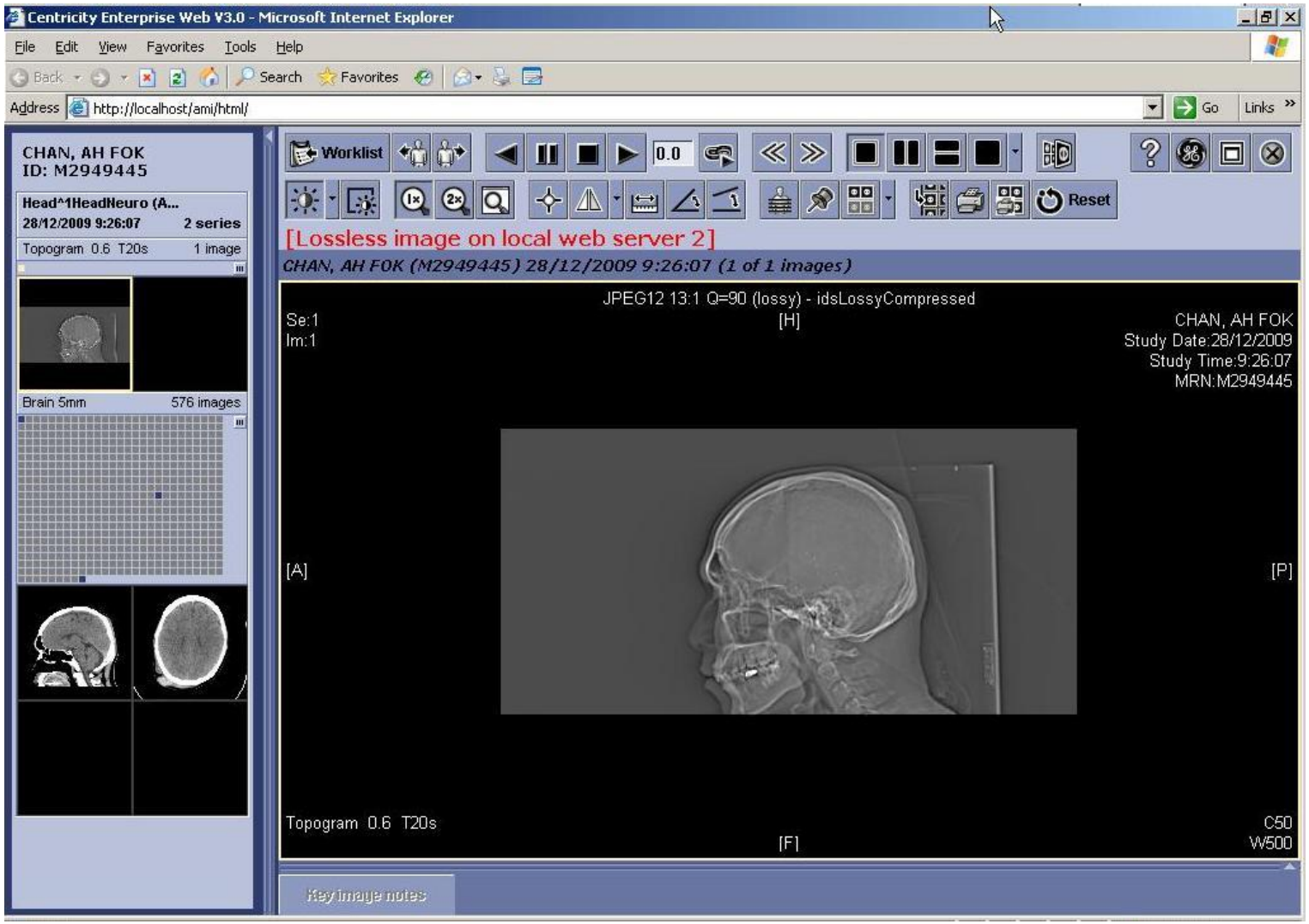


IT Systems

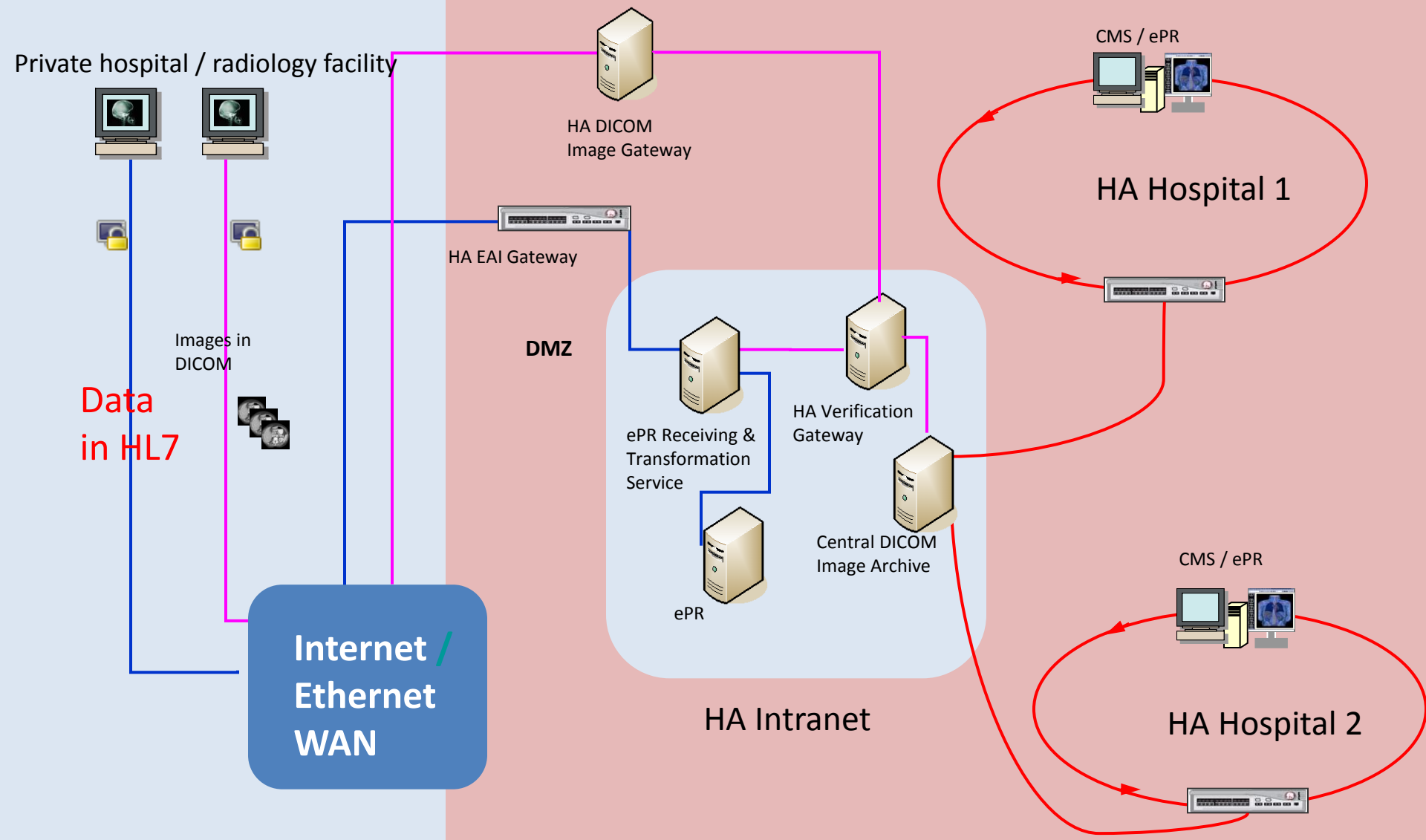
Private Radiology order entry

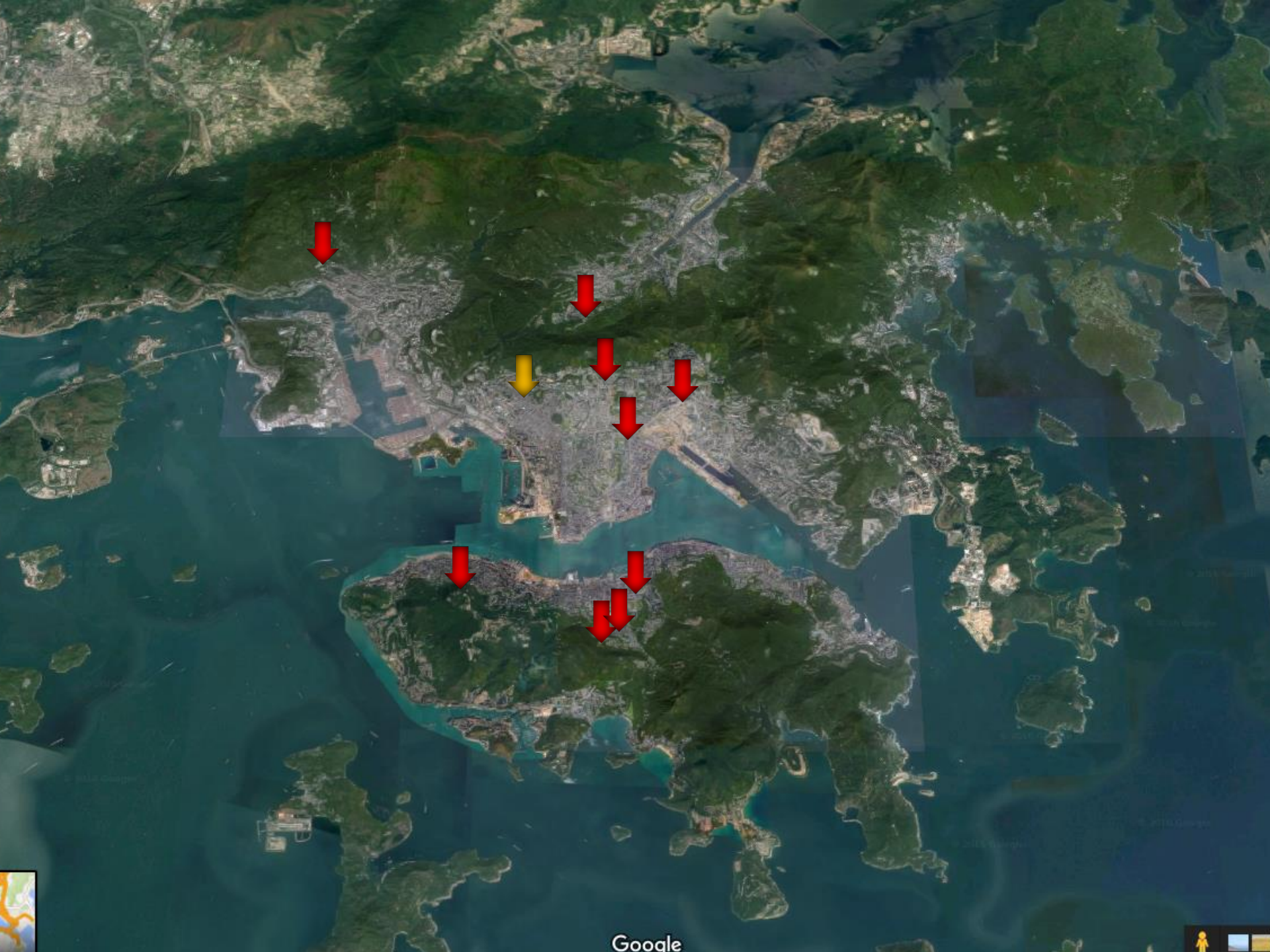


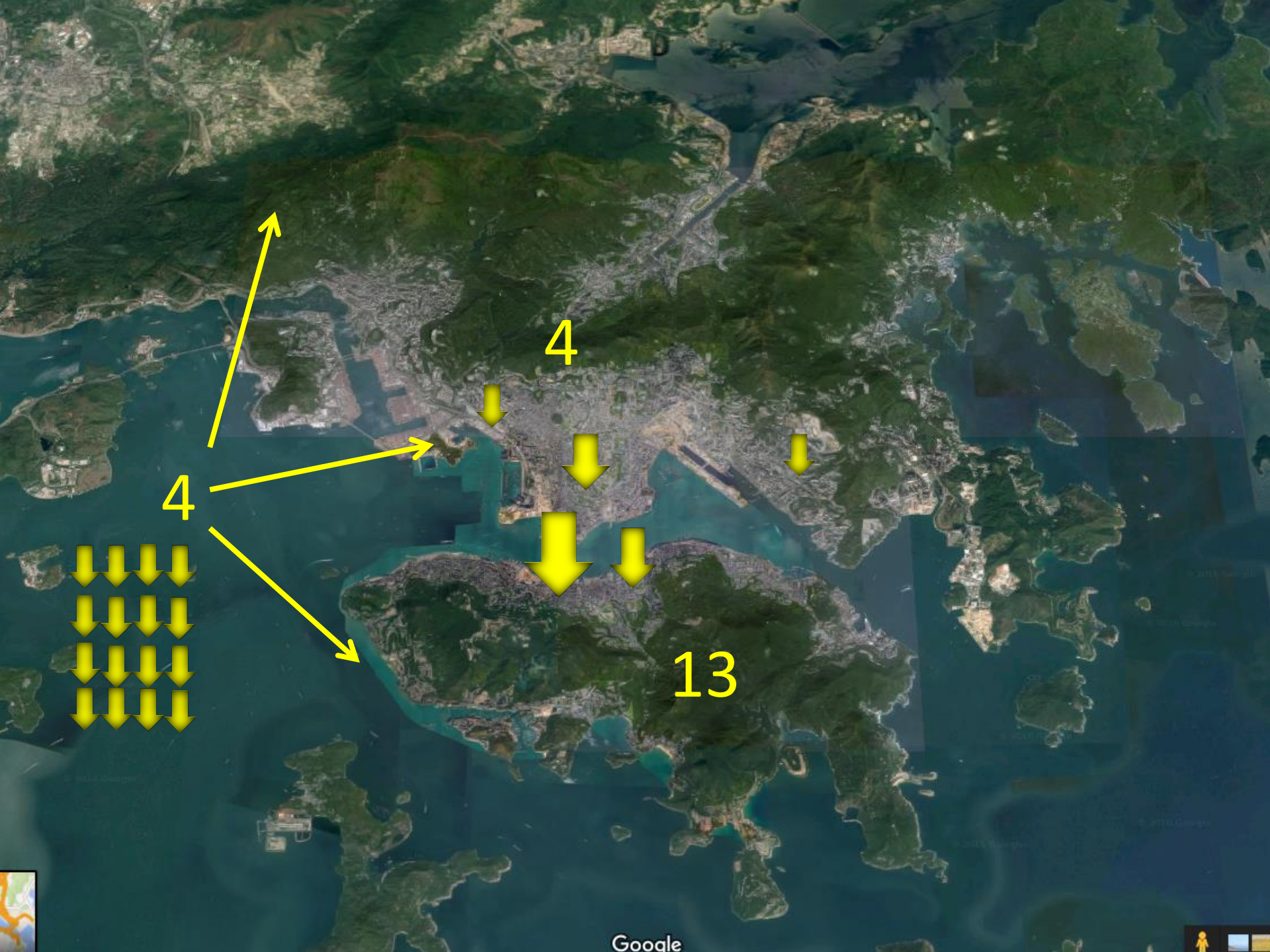
ePR & image browser



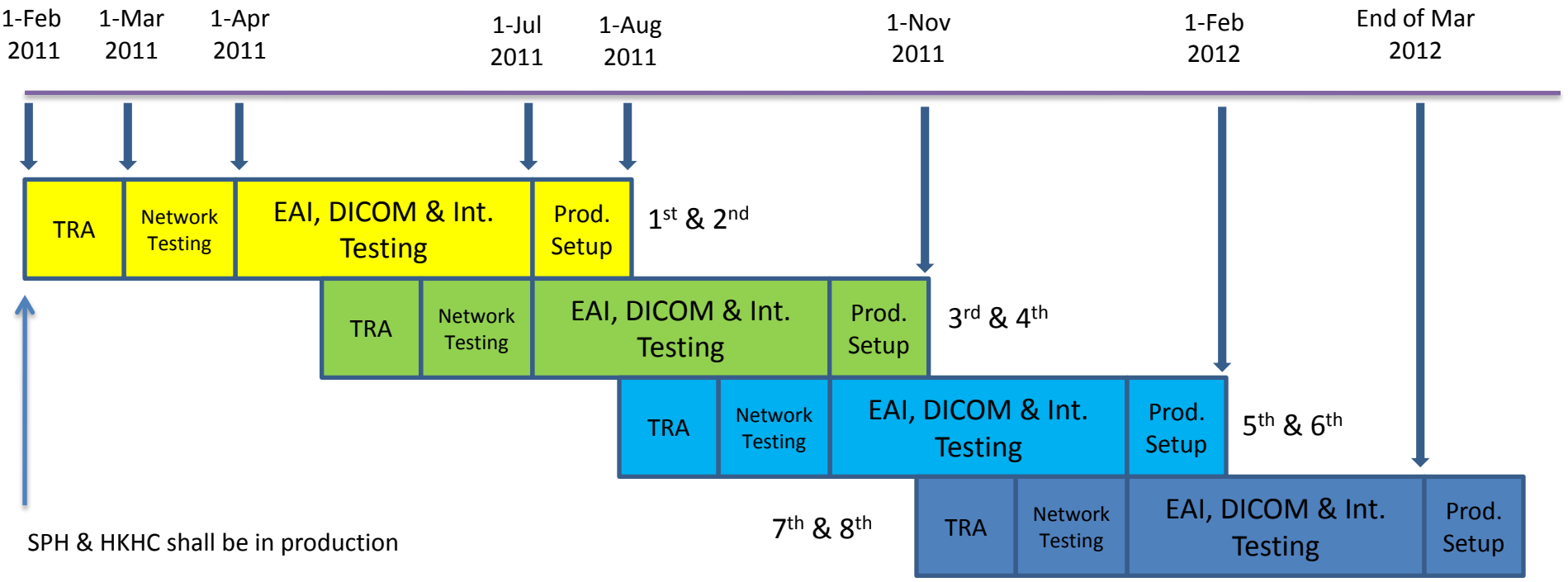
System Workflow & Architecture




Google

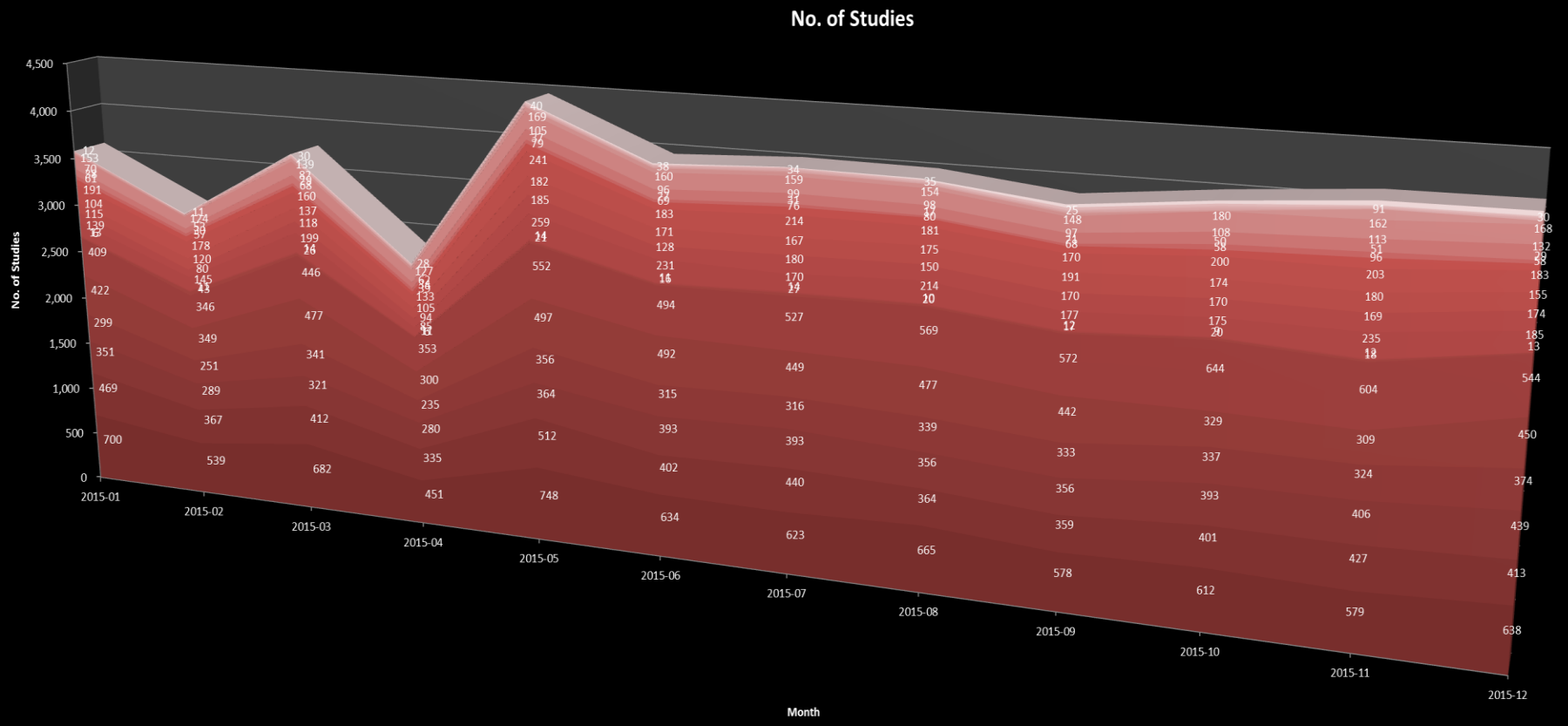

4
4
13
Google

Progress and plan from 2011/12

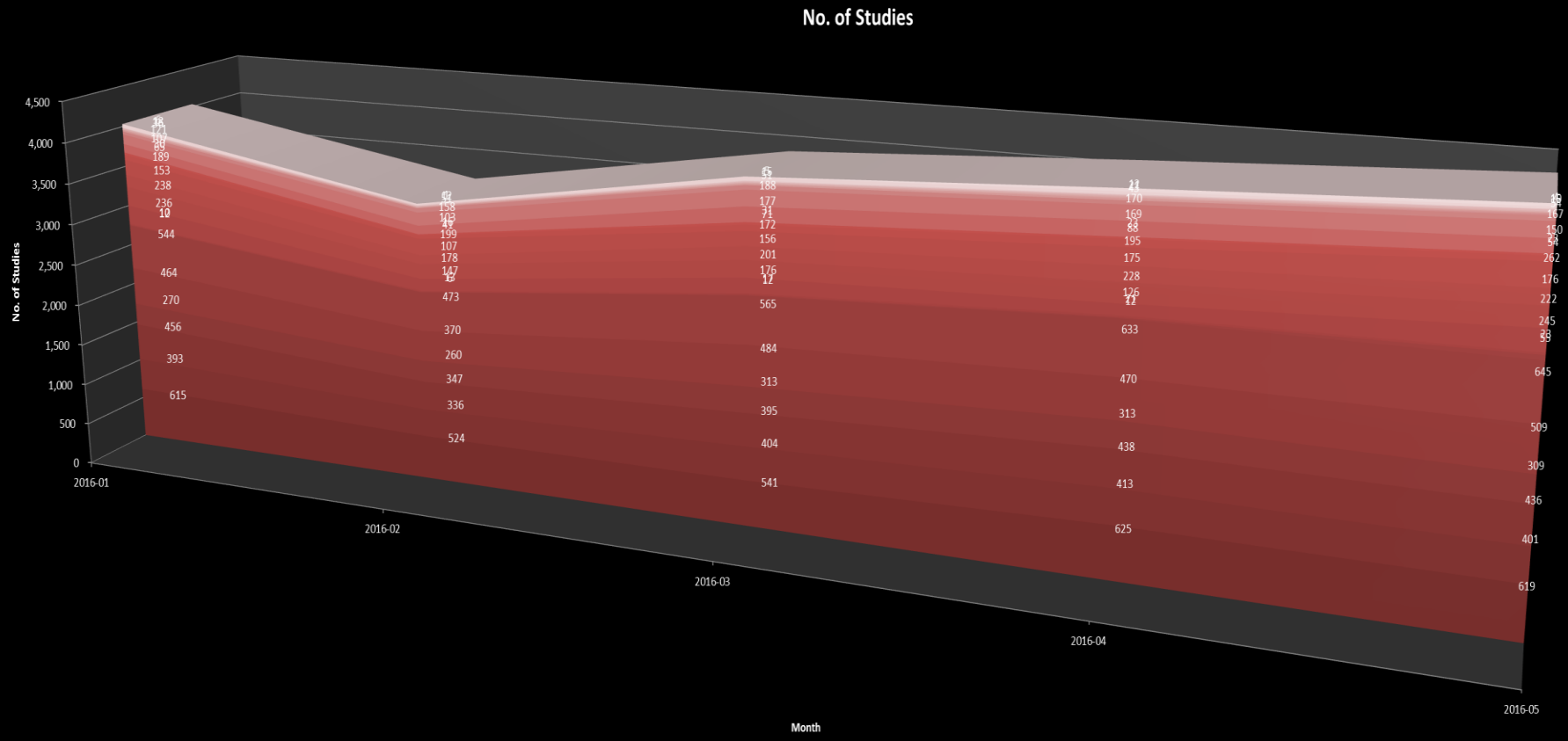


TRA – Technical Readiness Assessment

Monthly Utilization in 2015

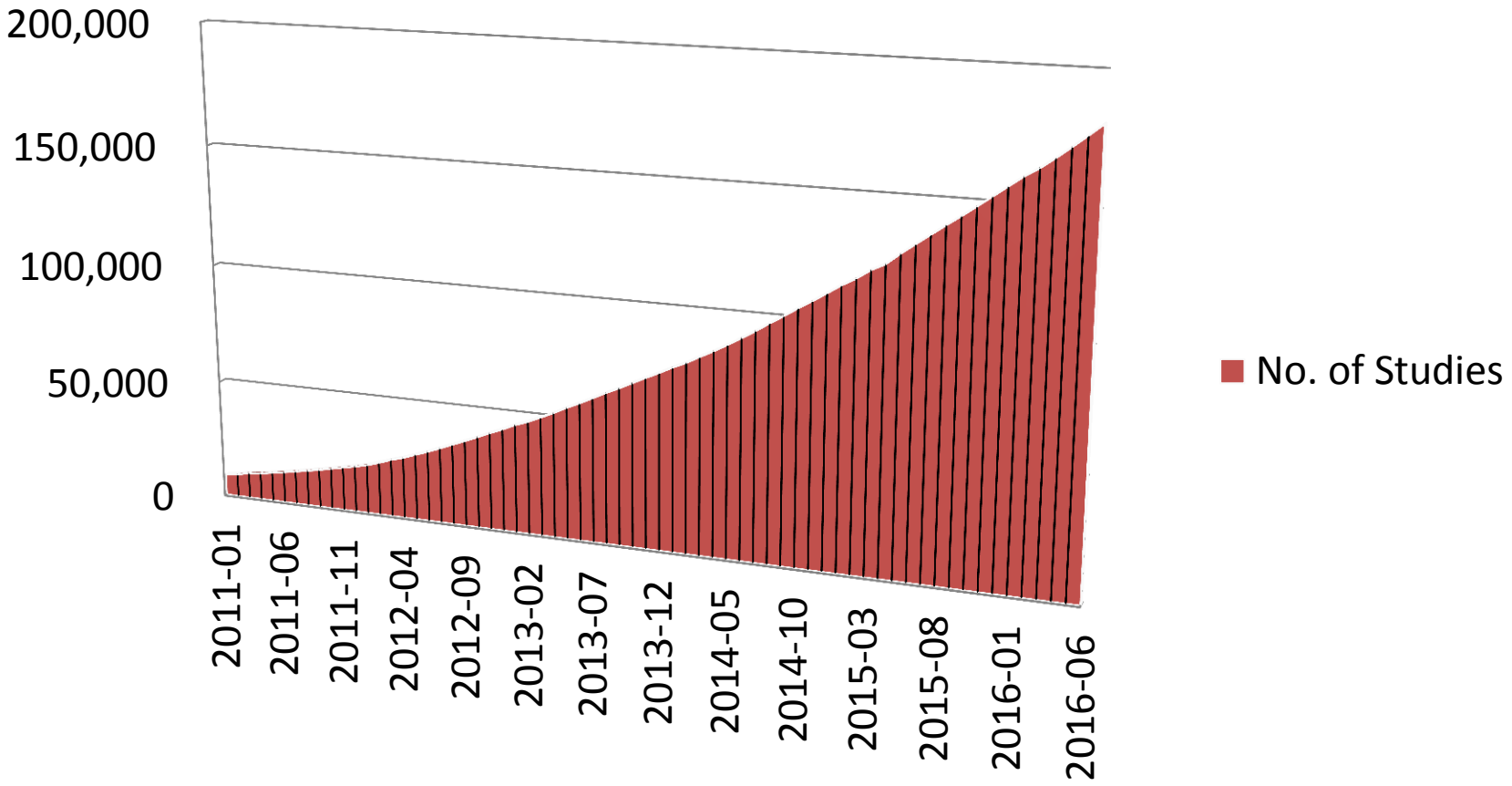


Monthly Utilization in 2016

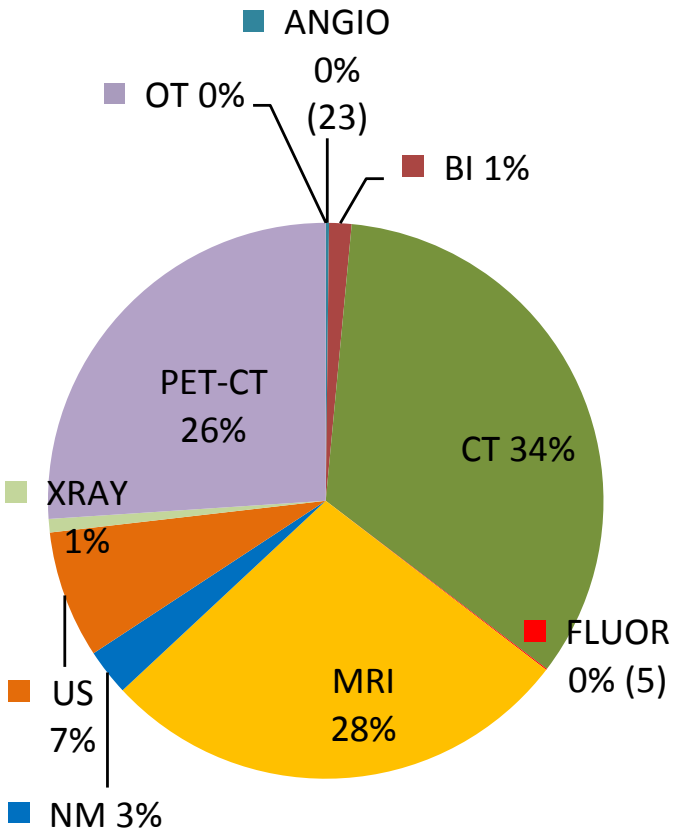


+ 40 studies per month over the past 18 months

Accumulated No. of Studies



Distribution of Modality (2011-2016)



Comparison between HA and Private Radiology over a 12 month period (2014-15)

	HA	Private	Private /HA
CT	389 032	13 328	3.4%
MRI	64 875	10 299	15.9%
USG	239 477	3116	1.3%
Mammogram	21 082	417	2.0%
PET-CT	-	11 201	-

Leveraged by corporate initiatives

協作造影
Radi Collaboration

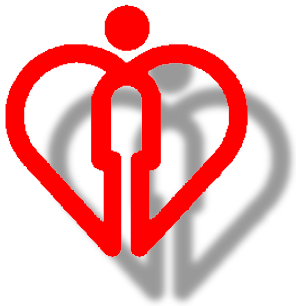
5 service providers awarded tender
Full subsidy
CT & MRI services
Newly diagnosed Ca & follow-up scans
>16,200 bookings

7 service providers awarded tender
Partial subsidy for HA staff
CT, MRI, Breast imaging services
~50 studies per month

Lessons Learned

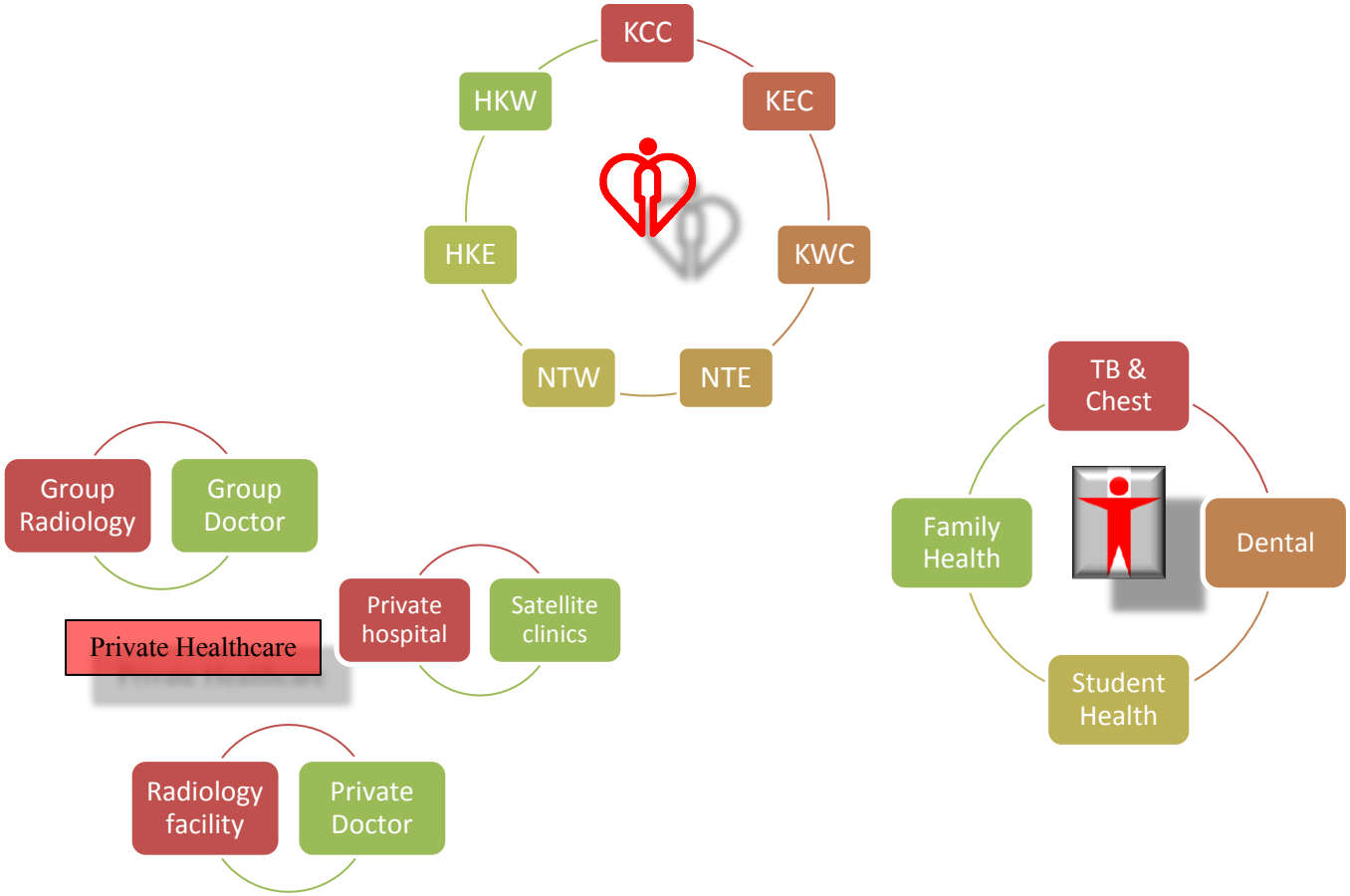
Challenges for image distribution in the eHR Sharing System

3 enterprises

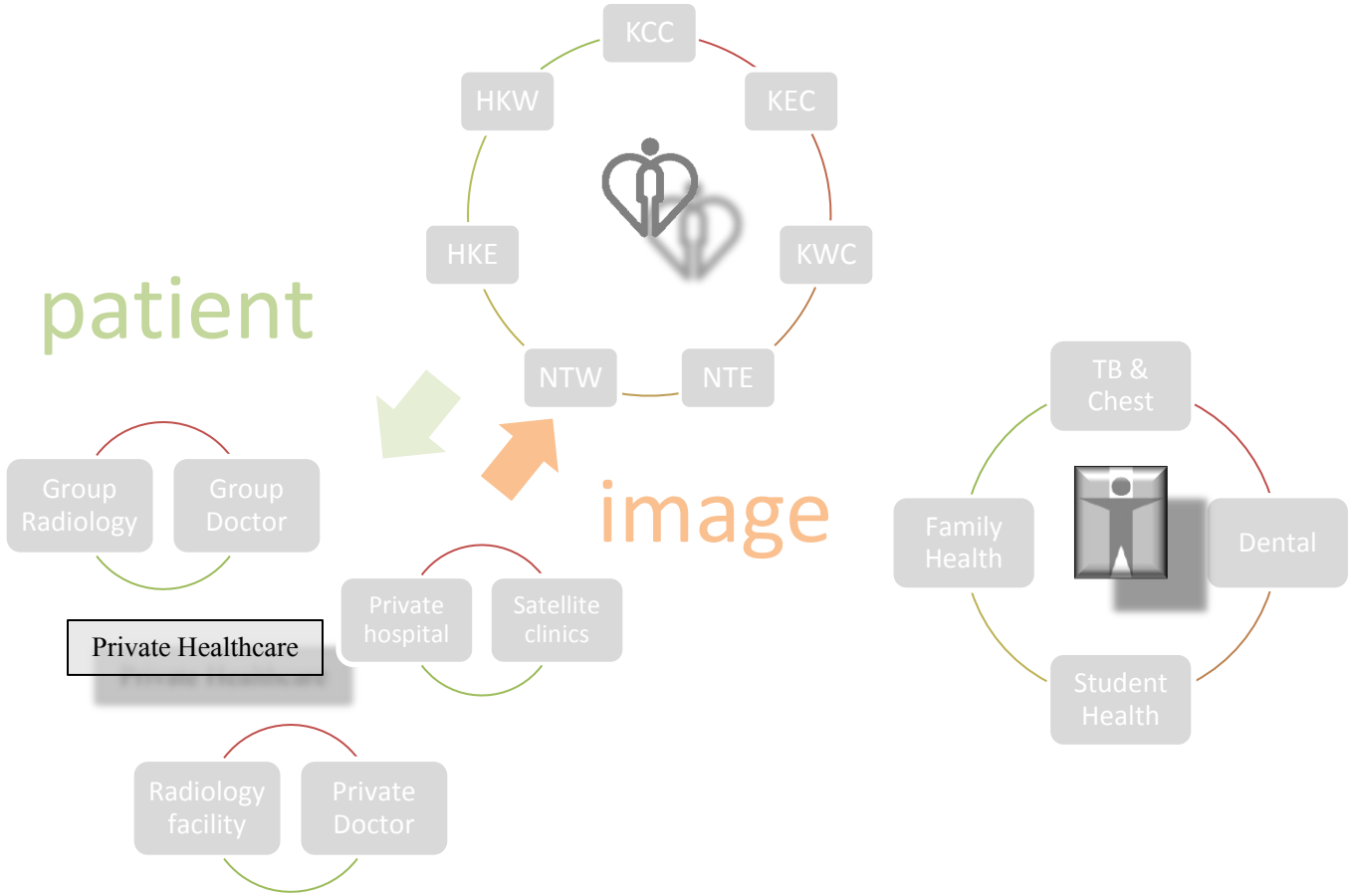


Private Healthcare

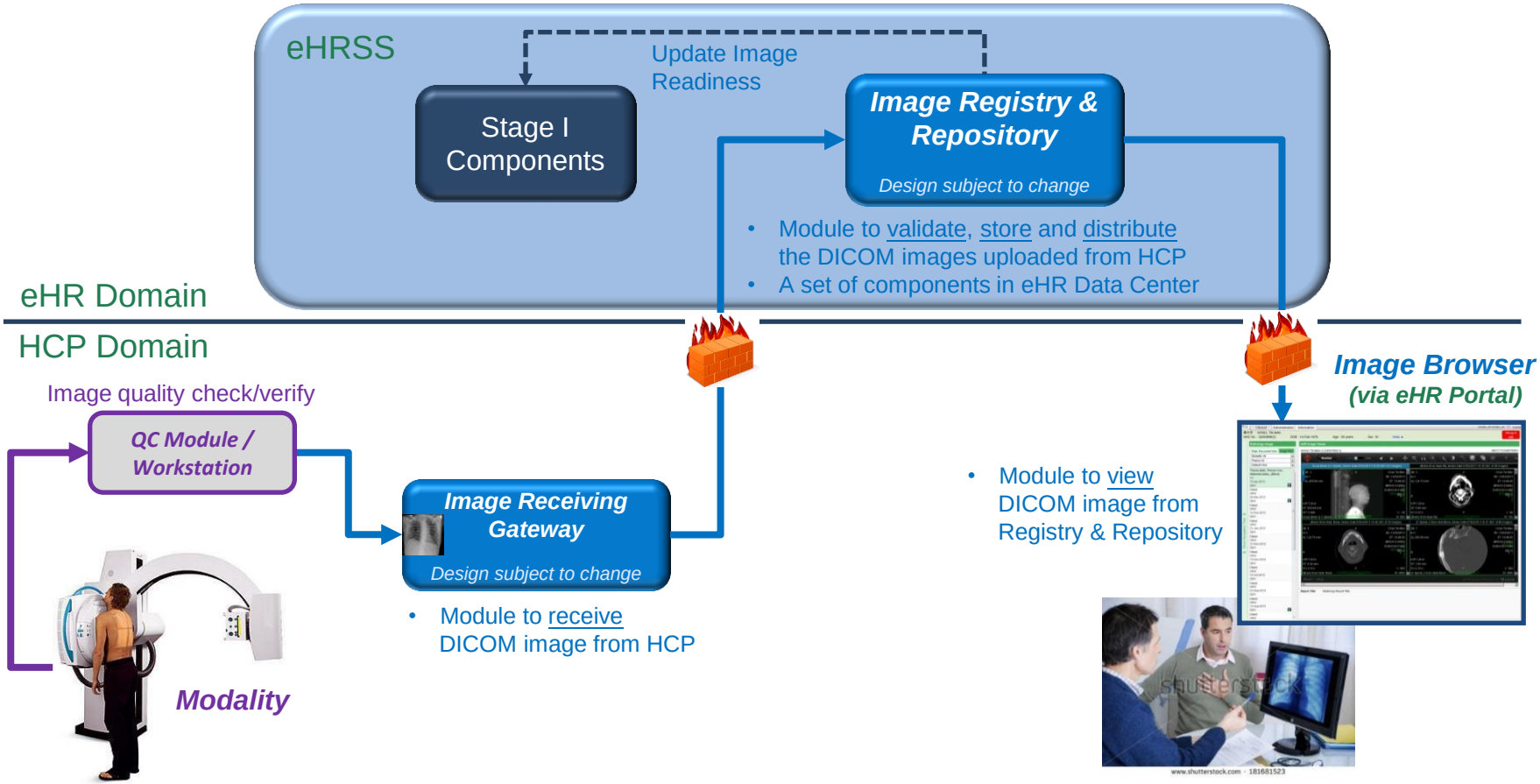
Intra-enterprise Image Distribution



Inter-enterprise Image Distribution



Proposed architecture for eHR image distribution



陳大文 CHAN, TAI MAN
HKIC No. : Q000511(4) DOB : 28-Feb-1960 Age : 55 years Sex : M Details ►

Allergy & ADR | Select Patient | Close Record

醫健通 ehealth | All | Local | Non-Local | Help

- Clinical Note & Summary
  - Clinical Note & Summary
  - Birth Record
- Encounter / Appointment
- Problem & Procedure
  - Problem / Diagnosis
  - Procedure
- Medication
  - Prescribing History
  - Dispensing History
- Laboratory Record
  - Chemical Pathology
  - Microbiology & Virology
  - Toxicology
- Radiology Record
  - General Radiology
  - Ultrasonography
  - Computed Tomography
- Immunisation Record

Problem / Diagnosis Details ▸

Date	Description
19-Jun-2005	Diabetes mellitius
19-Jun-2005	Hypertension
01-Oct-2014	Appendicitis
23-May-2009	Acute gastritis
07-Jun-2008	Bronchitis

Laboratory Record Details ▸

Date	Description	Institution
19-Jun-2015	CBP	PWH
19-Jun-2015	LFT, RFT, Glucose, Lipid	PWH
15-Jan-2015	CBP	PWH
15-Jan-2015	LFT, RFT, Glucose, Lipid	
28-Oct-2014	CBP	
28-Oct-2014	LFT, RFT, Glucose, Lipid	

Encounter / Appointment

Start Date	Specialty
19-Jun-2015	Medicine / Internal medicin
15-Jan-2015	Medicine / Internal medicin
28-Oct-2014	Medicine / Internal medicin
14-Oct-2014	Medicine / Internal medicin
01-Oct-2014	General Surgery
20-Jun-2014	Medicine / Internal medicin

Allergy & Adverse Drug Reaction Details ▸

Allergen	Allergy Information
TETRACHCLINE	Suspected, Rash
ASPIRIN	Certain, Rash

ADR Causative Agent	ADR Information
HYDROCHLOROTHIAZIDE	Mild, Hypokalemia

Proposed Integration Standard

- **XDS-I b**
  - **Developed by IHE (Integrating the Health Enterprise)**
  - **XDS profiles for most healthcare domains**
  - **XDS-I specifically for Imaging**

  - **Defines file format during distribution**
  - **Defines interactions between systems across enterprises**

Greenland
Iceland
Finland
Sweden
Canada
Ukraine
France
Spain
Turkey
Iraq
Algeria
Libya
Egypt
Mali
Niger
Sudan
Chad
Nigeria
Ethiopia
Kenya
DR Congo
Tanzania
Angola
Namibia
South Africa
Mexico
Venezuela
Colombia
Brazil
Peru
Bolivia
Indonesia
Papua New Guinea
Australia
New Zealand
North Pacific Ocean
North Atlantic Ocean
South Atlantic Ocean
This Map shows some of the places that the IHE XDS family of profiles are being used today. It is a work in progress.
6,263 views
SHARE

Thank you