



Electronic Health Record: Pre-requisite and Challenges

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e-Health Asia

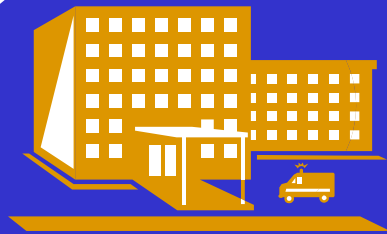
Objective

- Share my experience – from what I'd observed in my previous E.H.R projects involvement
 - Pre-requisite list to E.H.R
- Highlighted Issues
 - Vision and mission
 - People
 - Process
 - Policy
 - Legal
 - Transaction
 - Technology

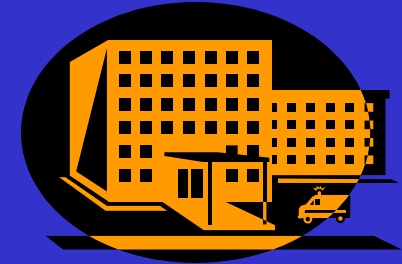
Electronic Health Record

- A record, where we keep individual health information electronically (store, process, view)
- Model 1:
 - E.H.R within organisation
- Model 2
 - E.H.R - longitudinal

E.H.R within Organisation

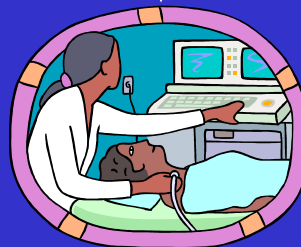


Laboratory



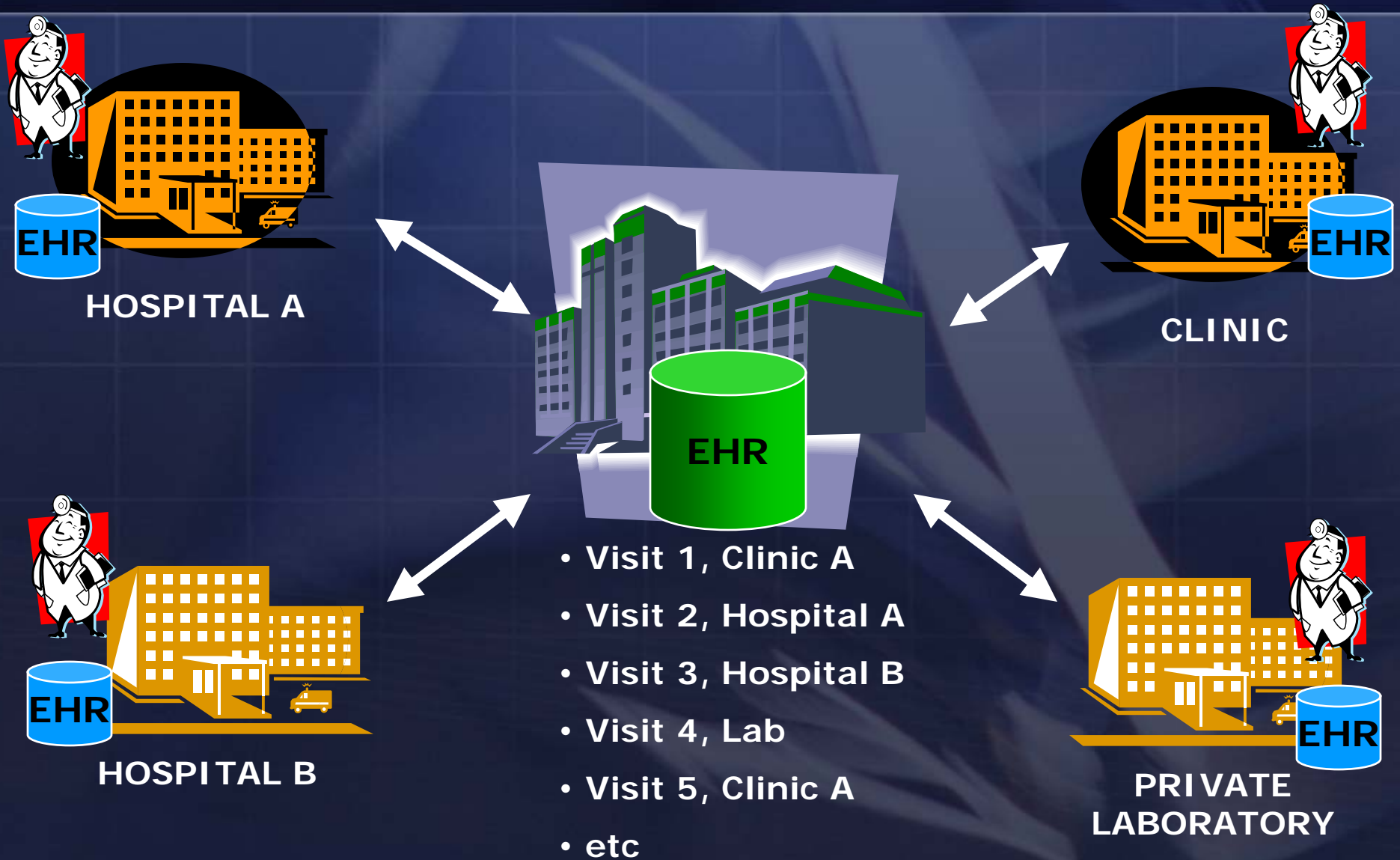
Pharmacy

Users



Type 1: Hospital with in-house ancillary services

E.H.R Longitudinal



Pre-Requisite 1: One Direction, One Goal

- What is the vision and mission
 - Target goal/s and objectives
 - What benefit to be realised
 - Documentation?
 - Continuity of care?
 - Aggregated data for planning/research
 - Healthcare financing?
 - Etc...
- Everybody must share the same goals
- Method:
 - Strategic Information System Plan
 - IT Blueprint

Pre-Requisite 2: People Readiness

- Two Perspectives
 - Project Champion
 - Lead
 - Direct
 - Integration of people
 - Will achieve service integration
- Method:
 - Awareness
 - Early change management
 - Autocratic

Pre-Requisite 3: Process Integration

- Patient Care
 - Cut across different department/services
 - Need service integration
- Method:
 - Business Process Reengineering

Pre-Requisite 4: Policy

- When services integrate
- Policy must be harmonised
- Method:
 - Business Process Reengineering

| | |
|-------------------------------|----------------|
| New and Improved Processes | Policy Changes |
|-------------------------------|----------------|

Pre-Requisite 5: Medicolegal

- Is your E.H.R Legal?
- E.H.R will be used by healthcare providers to make decision
- Data Protection Act
 - Will it be a constraint to E.H.R operation?
 - Does it address E.H.R legal needs?
 - Consent management?
- Method:
 - Form an E.H.R Medicolegal committee
 - Privacy and confidentiality
 - Security
 - Process and Policy matters

Pre-Requisite 6: Transaction

- What transaction?, What data?
- What data will you keep in E.H.R?
 - All data for each clinical event?
 - E.H.R within organisation
 - Summarised data for longitudinal EHR?
 - Only keep Shareable data
 - Continuity of care?
 - Scan data or Free Text or Structured +/- image?
- Needs:
 - Communication standard
 - Data Structure
 - Vocabulary Standard
- Which health informatics standard can we use?
- Need knowledge workers

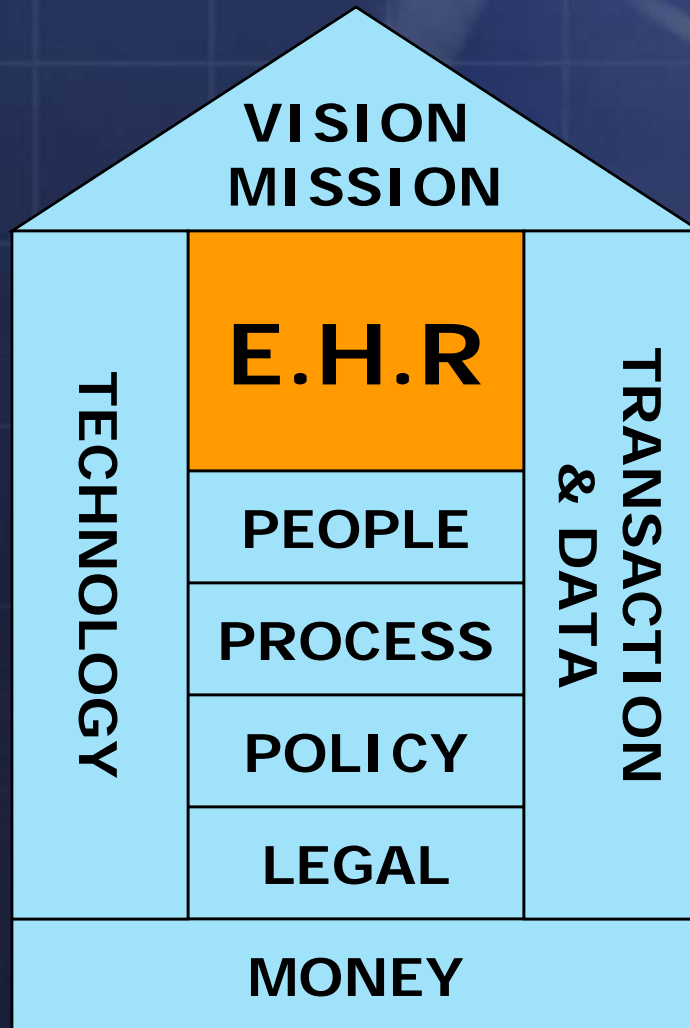
Pre-Requisite 7: Technology

- E.H.R keeps electronic data of patient
- Source of data for Longitudinal EHR?
 - Does the facility/department that provide E.H.R Data "Source" needs to be computerised?
 - Point of care information system
 - How deep is the computerisation required?
- What is the bandwidth limitation?
- Integration Method
 - Integrating the Healthcare Enterprise (IHE)
 - Coming soon to Malaysia

Pre-Requisite 8: Budget

- How much do you plan to spend?
 - Do we have the Budget?
 - Difficult to benchmark
- Method:
 - Strategic Information System Plan

Summary



**E.H.R.
PROJECT PLAN**

1. Without Vision/Goals = human without eyes

2. Without Policy = human without brain

3. Without People = human without heart

4. Without process = human without limbs

5. Without planning on Transaction & data = human without mouth

6. Without technology = No shoes

8. Without Money = Without any clothing



7. Without legal protection = Without ground to stand



The image features a close-up, artistic photograph of a hand holding a pen, likely a fountain pen, with the nib pointing towards the bottom right. The background is dark and blurred, showing some light streaks. A light gray grid is overlaid on the entire image. At the bottom, there is a dark blue gradient bar. The text "THANK YOU" is written in white, bold, uppercase letters on this bar.

THANK YOU