



# **Electronic Health Record: Pre-requisite and Challenges**

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2/15/2007

e-Health Asia

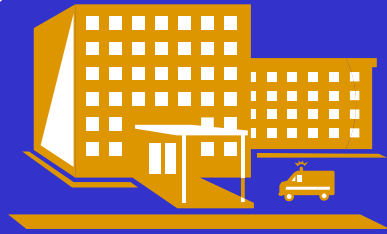
# Objective

- 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

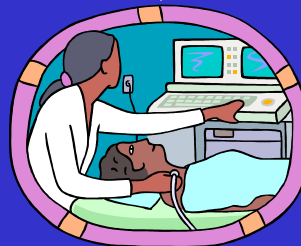
# E.H.R within Organisation



Laboratory



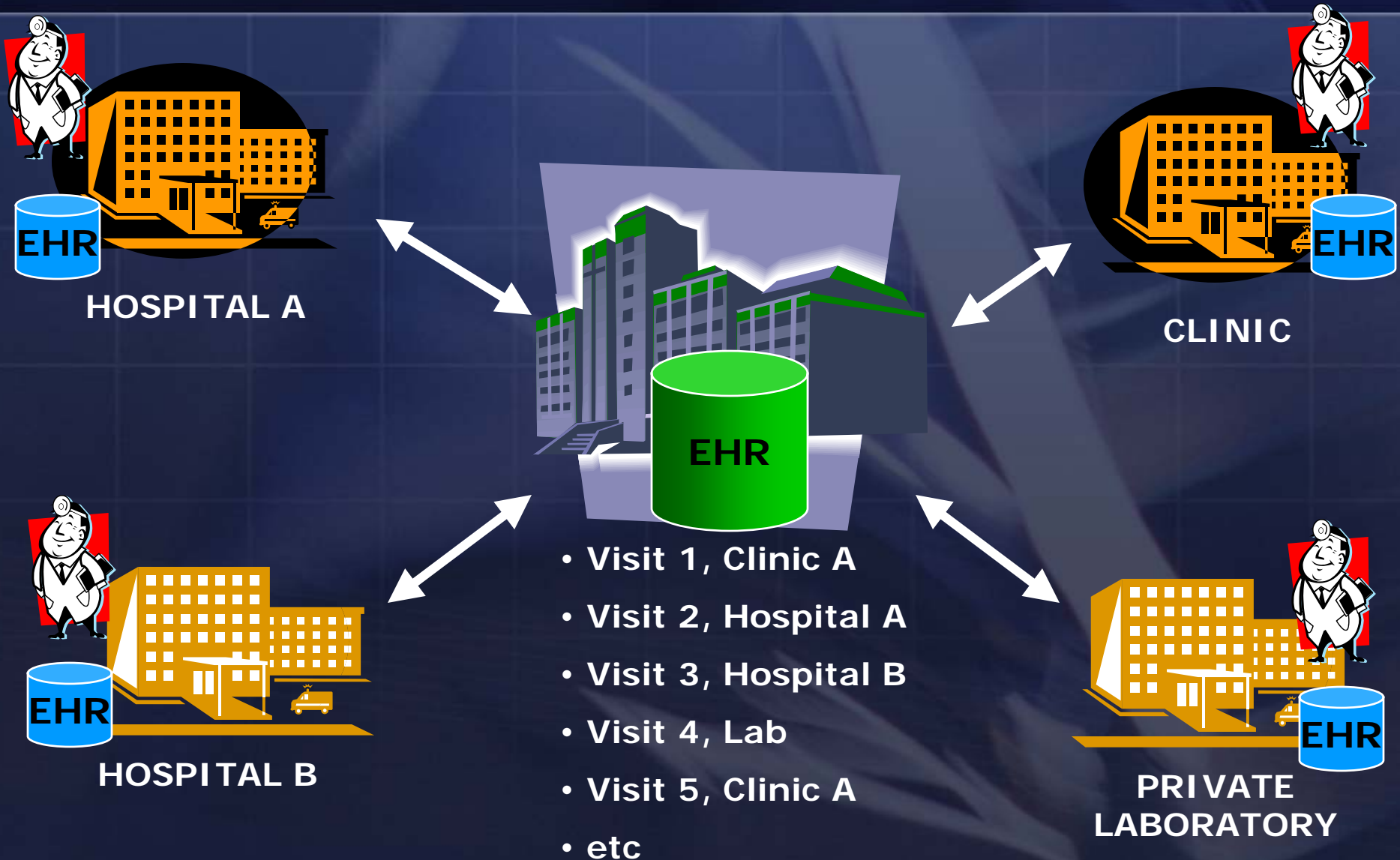
Pharmacy



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
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# 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

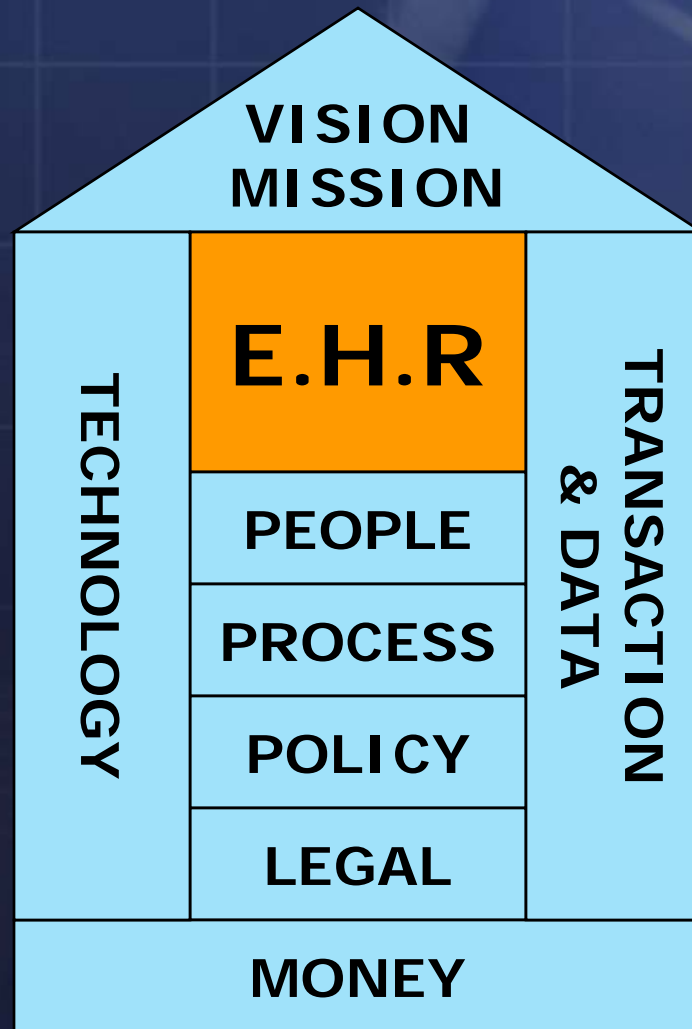
# Pre-Requisite 7: Technology

- 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, with 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