AUTOMATING NURSING'S KNOWLEDGE

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A Vision for Nursing

- Care plan linked with decision support
- Automated data collection
- Nursing data included in EHRs
- Enable best practice research
- Compare nursing service delivery models

WHAT DO WE NEED TO REALISE THIS VISION?

- A standard approach
- A common language
- Ability to link data from different software applications
- Data sharing and comparing
- Ability to capture nursing knowledge
- Semantic interoperability

TERMINOLOGY IN CONTEXT

- ICN has produced the ICNP

- http://www.icn.ch/pillarsprograms/international-classification-for-nursing-practice-icnpr/
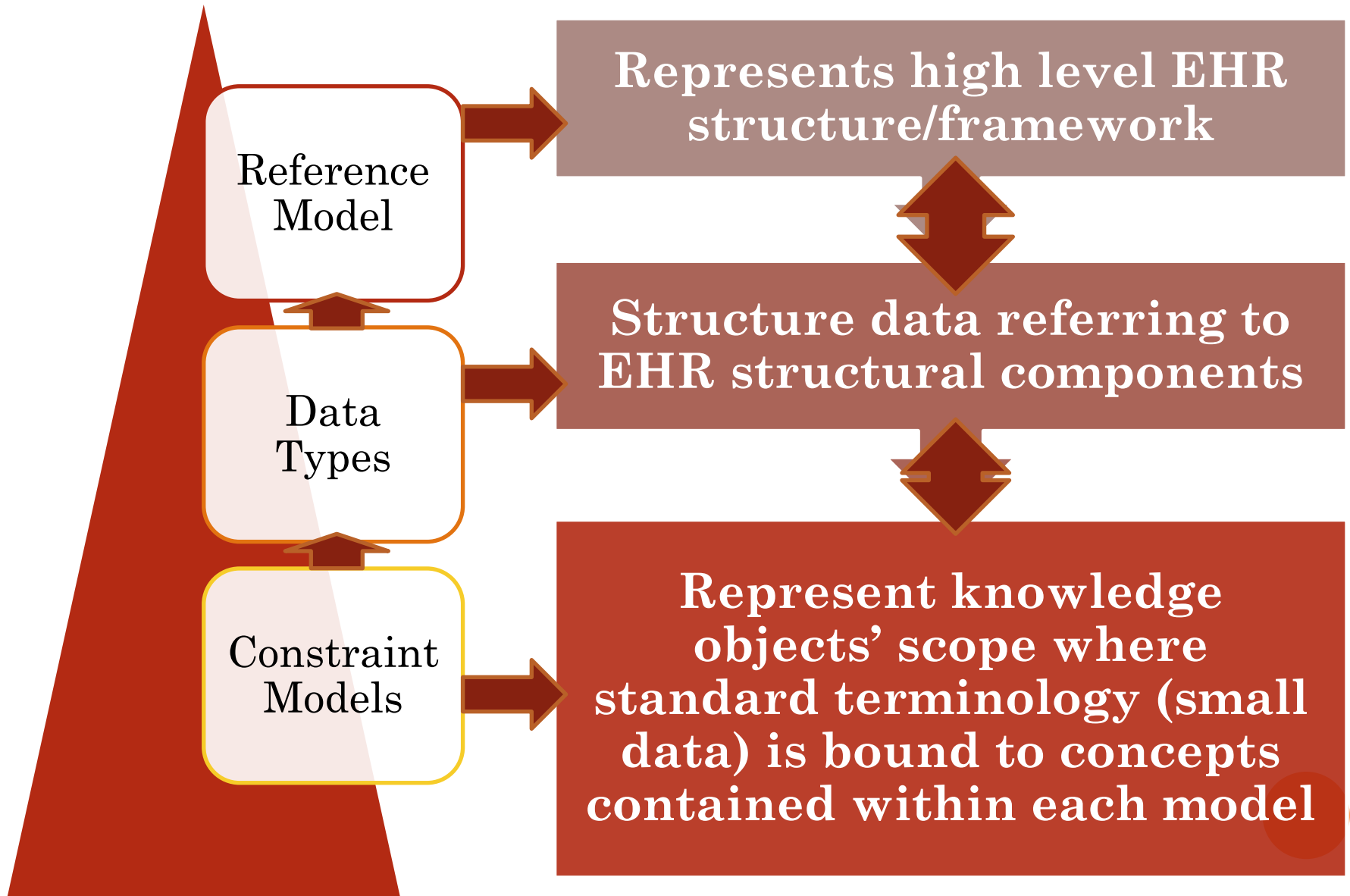
- Standard terminology binding to all concepts

ISSUE

- Requires national governance

KEY FEATURES OF NURSING'S KNOWLEDGE

- Data reflect concepts
- Concepts are labelled, named, identifiable
- It's not about standard terms
- Terms have meaning
- Meaning must be retained throughout the automated data flow lifecycle.

Electronic Health Record

Reference Model → Represents high level EHR structure/framework

Data Types → Structure data referring to EHR structural components

Constraint Models → Represent knowledge objects' scope where standard terminology (small data) is bound to concepts contained within each model

WHAT DOES THE NURSING PROFESSION NEED TO DO?

- Model nurses' knowledge
  - [this enables computerised knowledge processing]
- Validate and govern nursing's knowledge objects – DCMs/Archetypes
- Participate with a well established international community online

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NURSING PROFESSION FUTURE DIRECTIONS

- Provide leadership

- Develop standard sets of nursing domain clinical content models

- Adopt Standard nursing terminology -ICNP

- Govern nursing knowledge

- Engage with CoNNO – all specialties

- Position statement – Nursing & eHealth

 http://www.conno.org.au/publications

REFERENCES

- OpenEHR - http://www.openehr.org/
- An open domain-driven platform for developing flexible e-health systems
- The openEHR Clinical Knowledge Manager (CKM) is an international, online clinical knowledge resource

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