

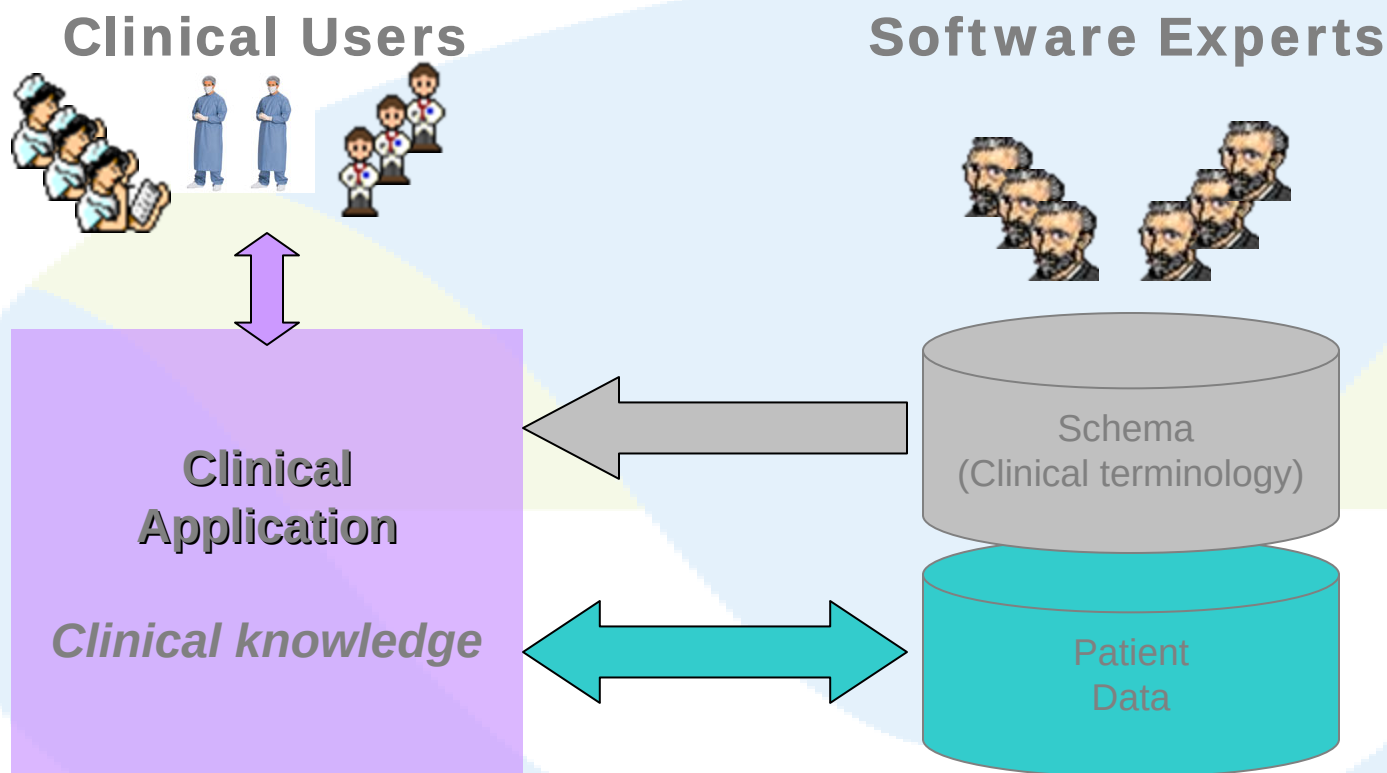
Empowering the Clinixian

- A Clinical System Development Revolution -



Presented by David Ashton, Meridian Health Informatics

The traditional approach to clinical applications design:



How is **Clinixian** different?

o**Clinical application design tool that allows expert clinicians to directly specify how electronic medical records are stored**

o**Architecture:**

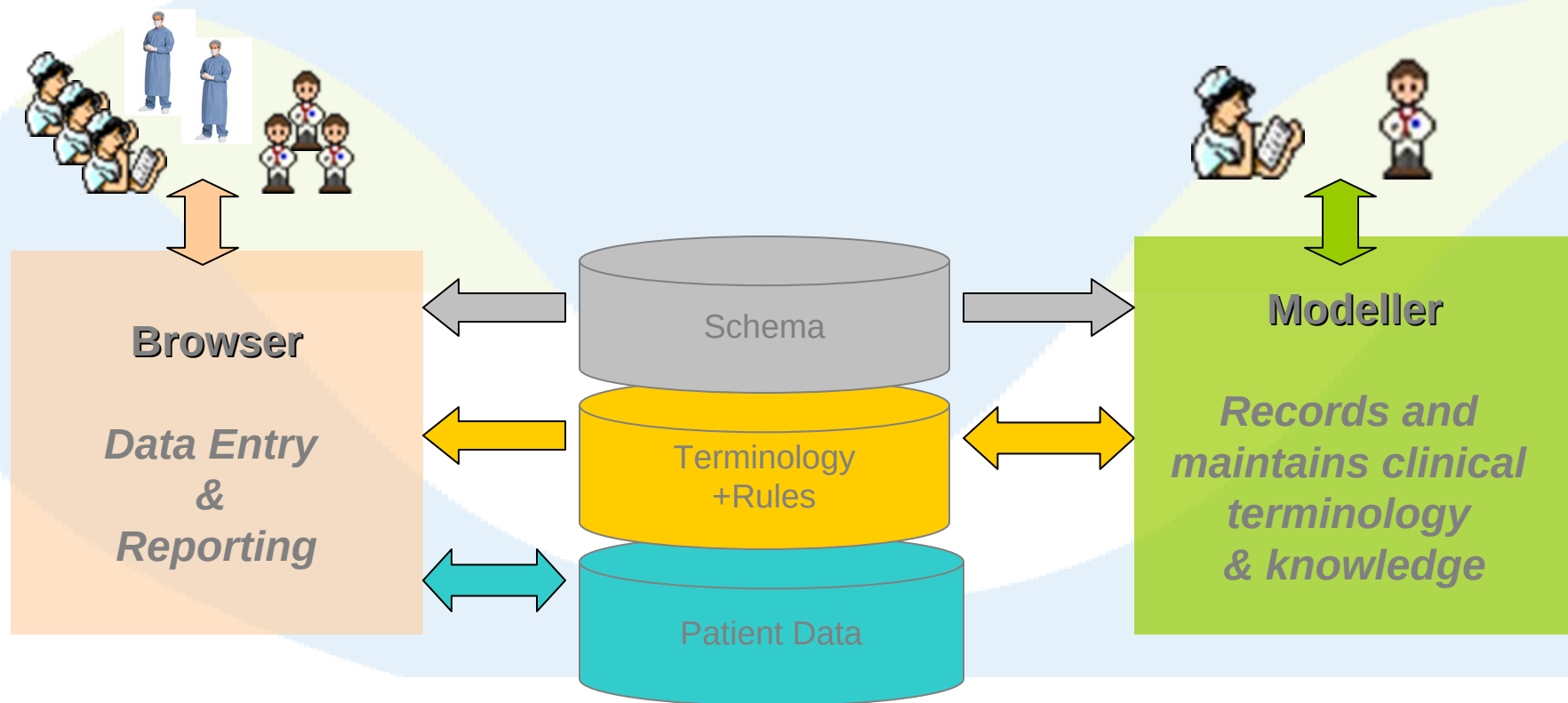
- **Uses 'Archetypes' to describe how clinical information is stored**
- **Two level data model architecture**

o**Information representation is strongly oriented towards classifications**

Elements of the *Clinixian* approach

Clinical Users

Clinical Experts



*Demonstration of GUI/Web versions of the
Queensland and NSW obstetrics models:*



Key *Clinixian* Benefits

- o **High level of clinician engagement and ownership**
- o **Promotes collaboration on the use of clinical terminology and rules**
- o **Improve quality, reduce risks**
- o **Facilitates the easy analysis of aggregate data to support clinical process improvement**
- o **Technology allows scalable deployment (ie desktop to state / nation wide)**

Test Run: 1234567 - TEST TEST (Modified)

Add Pregnancy Add Prior Pregnancy Add Baby Add Group/Form Test Save Test Delete

1234567 - TEST TEST

- Pregnancy
 - Current Pregnancy Booking & History
 - Estimated Date Birth & Parity
 - Past Medical History
 - Family History
 - Drug & Allergy History
 - Psychosocial Assessment
 - DV
 - Further Contacts Data
 - Pregnancy Administration & I
 - Model of care & date allocat
 - Mother Antenatal Visits
 - Complications in Current Pregnancy
 - Mother Pre-labour, Labour & Anaest
 - Baby 1, Test Hospital
 - Mother Post-birth (all women)
 - Mother Postnatal, Hospital Discharg

HEART	
Hx heart disease	No past history of
RENAL DISEASE	
Hx kidney/renal disease	Congenital anomaly of the kidney
HYPERTENSION	
Hx hypertension	
GIT/LIVER	
Hx GIT/liver disease	
RESPIRATORY	
Hx respiratory disease	
ENDOCRINE	
Hx endocrine disease	
AUTOIMMUNE	
Hx autoimmune disease	
MUSCULO-SKELETAL	
Hx musculo-skeletal disease	
NEUROLOGICAL	
Hx neurological disease	
METABOLIC	
Hx metabolic disease	
SKIN	
Hx skin disease	
BLOOD PRODUCT	
Hx blood product transfusion	
HAEMATOLOGICAL	
Hx haematological disease	

Hx kidney/renal disease

Have you ever been diagnosed with a kidney or renal disease

☐ No

☒ Congenital anomaly of the kidney

Hx glomerulonephritis

Hx documented recurrent UTI or pyelonephritis

Not known

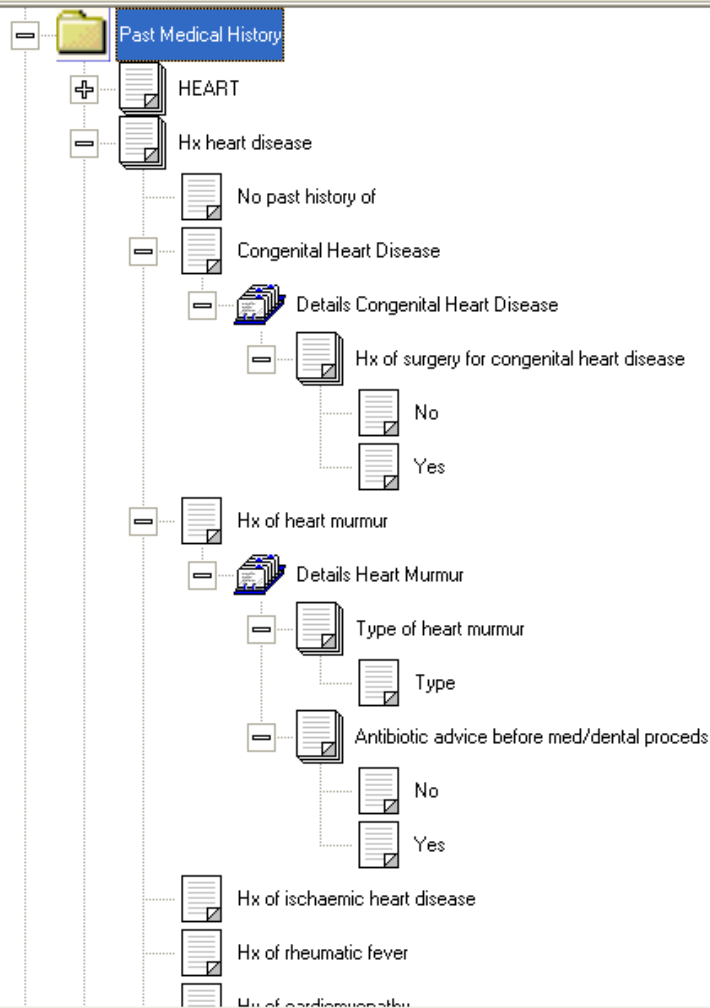
Only one Kidney

Matrix Modeller - [Matrix Models]

File Edit Options Window Help

Models Rules Health Area GP/Obstetrician Medical Practice Security Report Profile New Group New Archetype Edit Archetype Save Run Cut Copy Paste Delete Refresh

Path: Patient > Pregnancy > Current Pregnancy Booking & History > **Past Medical History**



Consortium Data [Archive](#)

Thread Name: Past Medical History

Description: Thread

Help:

Mnemonic: tMedicalHistory

SNOMED Code: 2554129018

Occurrence: 1

Characteristics: ☐ Sensitive ☒ Mandatory

☒ Consortium Protected Data

Icon: ☐ Use Default Icon

Rules Security

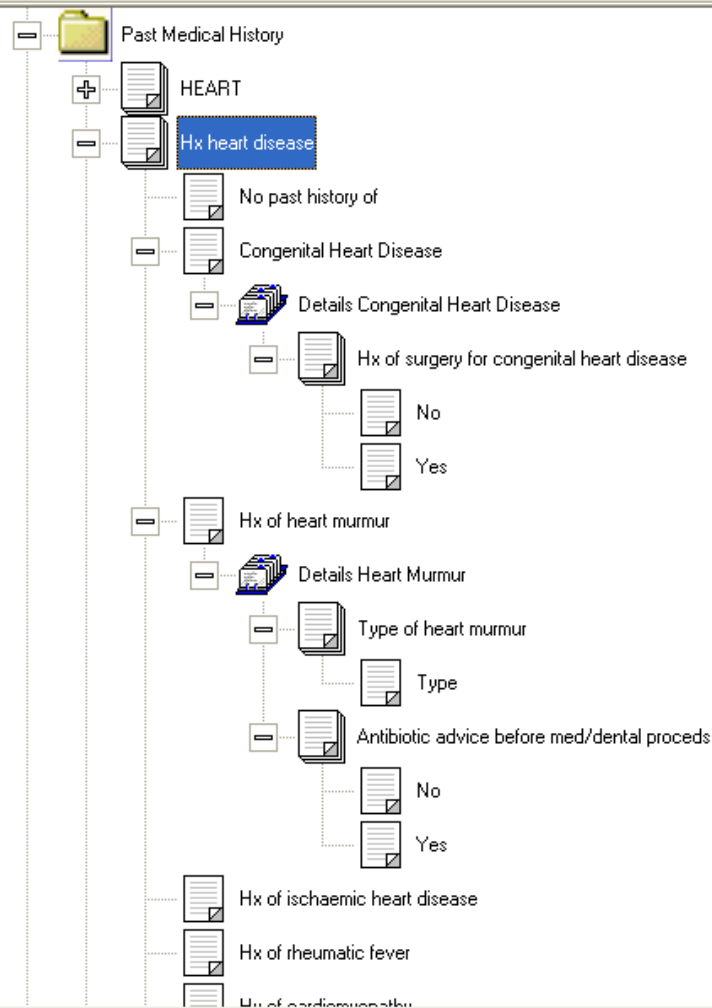
Description	Valid From	Valid To	Options

Matrix Modeller - [Matrix Models]

File Edit Options Window Help

Models Rules Health Area GP/Obstetrician Medical Practice Security Report Profile New Group New Edit Archetype Save Run Cut Copy Paste Delete Refresh Audit

Path: Patient > Pregnancy > Current Pregnancy Booking & History > Past Medical History > Hx heart disease



Consortium Data Archive Version 2

Description: Hx heart disease

Help: Have you ever been diagnosed with a heart problem

Type: ☐ Header

☐ PDC Data

Mnemonic: HxHeartDisease

SNOMED Code: 93561011

Constraints: ☒ Unique

Occurrence: 2

☐ Read Only

Valid from: 14/03/2007 13:10

Valid to: 14/03/2017 13:10

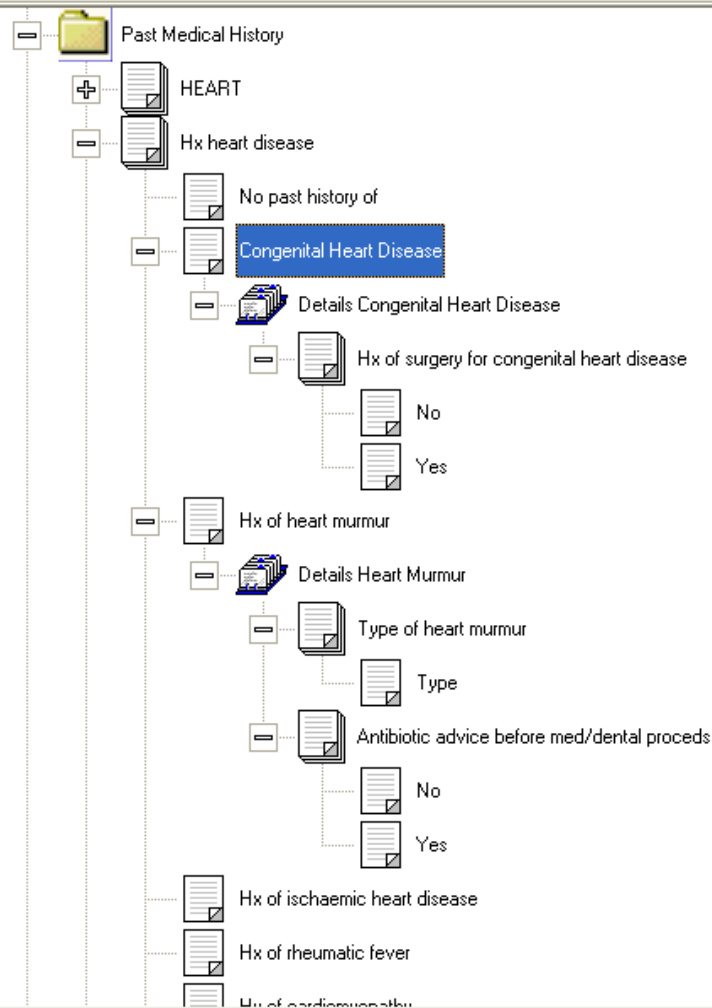
Domain Values Security Usage

	Description	Default	Extension	Mnemonic	Help
▶	No past histor	☐	None	No	
	Congenital H	☐	None	CongenitalHe	History of con
	Hx of heart m	☐	None	HeartMurmur	
	Hx of ischae	☐	None	IschaemicHe	
	Hx of rheuma	☐	None	RheumaticFe	
	Hx of cardiom	☐	None	Cardiomyopa	
	Hx of myocar	☐	Text	MyocardialInf	
	Hx of other h	☐	Text	Other	
	Not known	☐	None	NotKnown	

Matrix Modeller - [Matrix Models]



Path: Patient > Pregnancy > Current Pregnancy Booking & History > Past Medical History > Hx heart disease > Congenital Heart Disease



Consortium Data Archetype Version: 2

Description: Congenital Heart Disease
Help: History of congenital heart disease with followup in childhood
Mnemonic: CongenitalHeartDisease
SNOMED Code: 22613011

General Event Extension Children Models

- ☐ Make this domain value as default
- ☐ Automatically advance to next archetype
 - ☐ When selected, do not accept other values