


# Integrated Care Program Phase 2 Implementation

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## ICP Phase 2 Context

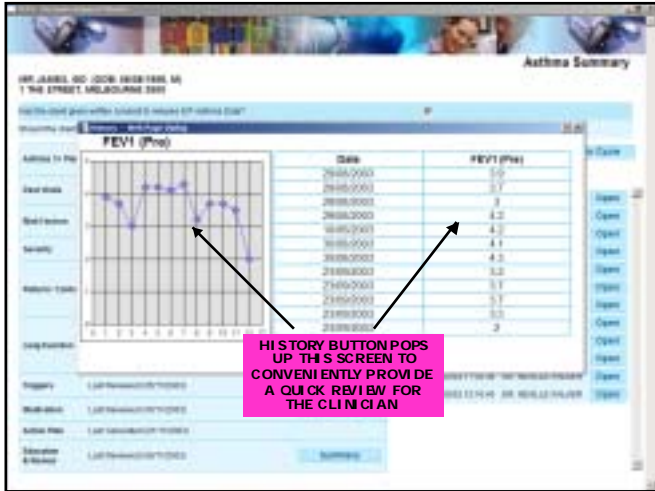
- Short development timeframe
- Initially addressed 2 clinical guidelines
- Short cycle iterative development
- GP desktop product delivery
- Supporting a GP in consultation
- Open standards realm
- High focus on evaluation.



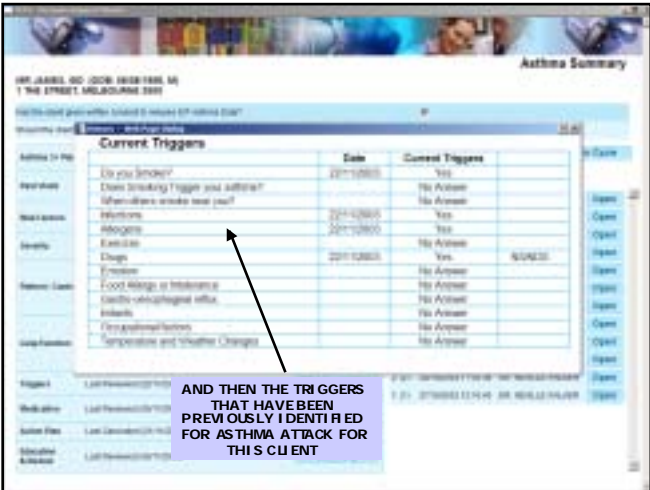

**HIGHLIGHTS**

**OBSERVATION HISTORY**

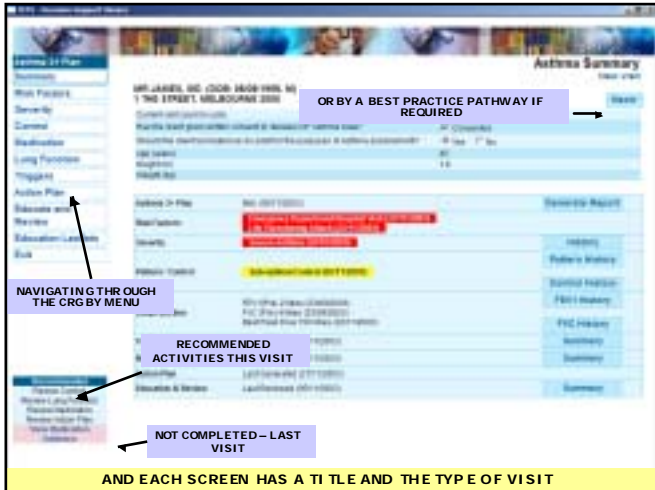
**PREVIOUS VISITS**



**HISTORY BUTTON POPS UP THIS SCREEN TO CONVENIENTLY PROVIDE A QUICK REVI/BW FOR THE CLINICIAN**



**AND THEN THE TRIGGERS THAT HAVE BEEN PREVIOUSLY IDENTIFIED FOR ASTHMA ATTACK FOR THIS CLIENT**



**OR BY A BEST PRACTICE PATHWAY IF REQUIRED**

**NAVIGATING THROUGH THE CRG BY MENU**

**RECOMMENDED ACTIVITIES THIS VISIT**


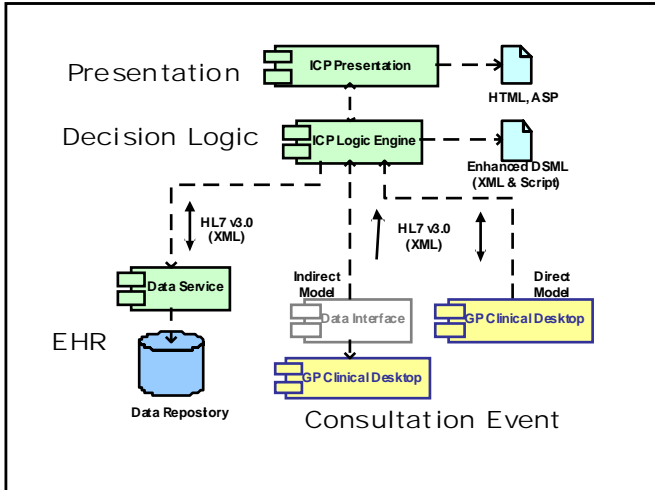
**NOT COMPLETED - LAST VISIT**

**AND EACH SCREEN HAS A TITLE AND THE TYPE OF VISIT**



# The Architecture


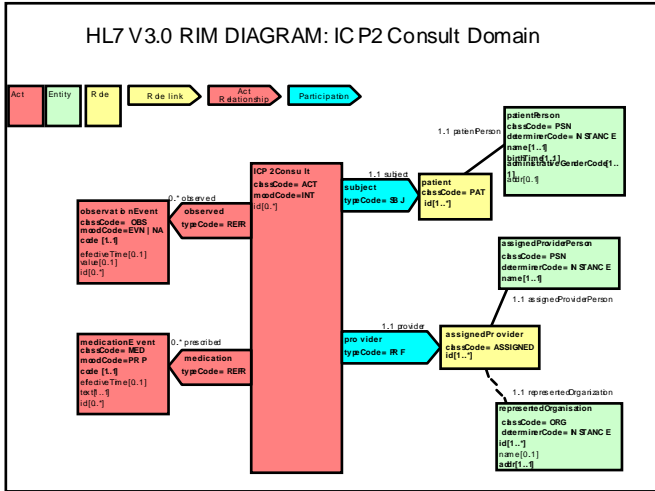
What we built and the context of our choices

# EHR & Consultation Event


Used:  
HL7 v3.0 Draft Message format

Alternatives:  
openEHR, CDA, HL7 v2.x

# HL7 v3.0 Domain Message Supports:


- Recurring Patterns
  - Age, Visit History, Observation History
- Custom/Semi-Custom Concepts
  - Predicted Spirometry, Asthma
  - Asthma 3+ Plan incentive
- Folders/Groupings
  - By visit or episode
  - By observation type
    - LOINC, ASTHMA3+ PLAN




# Decision Logic

Used:  
Enhanced DSML (XML, JavaScript)


Alternatives:  
GLIF, Arden Syntax, GEM, GELLO





### Enhanced DSML – What did it give us?

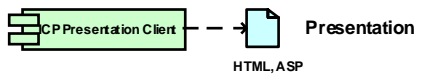
- Multiple definitions – areas, contexts
- Best practice paths, Decision tree
- Workflow data model
- Relationship to client health record data
- References to other material
- Multiple scripting engine choices (Default: JavaScript)



### Presentation

Used: HTML, ASP, XSL, CSS

Alternatives: Java UI, JSP




```

graph LR
    A[CP Presentation Client] --> B[Presentation]
    B --- C[HTML, ASP]
  
```




### What did it give us?

- Standard Display Patterns:
  - Menu System
  - Best Practice Navigation
  - Question and Answer
  - Client Demographic
  - Provider Demographic
  - Visit History
  - Observation History: Chart & Table
  - Recommended Items Event List & Prompting
- Customisable display
- Suitable for browser display




### A few considerations for future developments

- Context Based Tools
- Patterns and Modelling
- Scaling up





### Context Based Tools

- Role based – Client, Receptionist, Nurse, GP, Specialist
- Task based – Client pre-visit, Practice nurse tests, GP consult, Home visit etc.
- User devices – GP desktop computer, clinic terminals, mobile devices



### Patterns & Modelling

- Electronic Health Record Modelling
  - Coding standards and mappings
  - Domain models and translations
  - Health record object tools, components
- Linking and Embedding
  - Cross referencing
  - Embedded content
- Versioning and Support
  - Versioning of content
  - Versioning of framework models
  - Backwards compatibility



## Scaling Up

- Global Services
  - Standards for models & messages
  - Directory services
  - Connectivity, Security, Authorship
- Governance Process
  - Consolidation, optimisation
  - Validation, clinical and implementation
  - Authorship, Versioning
- Population Health Management
  - Outcome tools & analysis
  - Incentive program development
  - Distributed access, Multidisciplinary care



## Thoughts for today.

- Strategic Technical Planning
- Management Projects
- Technical Infrastructure Projects
- Validation and Quality Assurance
- Evaluation & Recommendation