Pathway Navigator

From a static clinical pathway to a specific patient management tool

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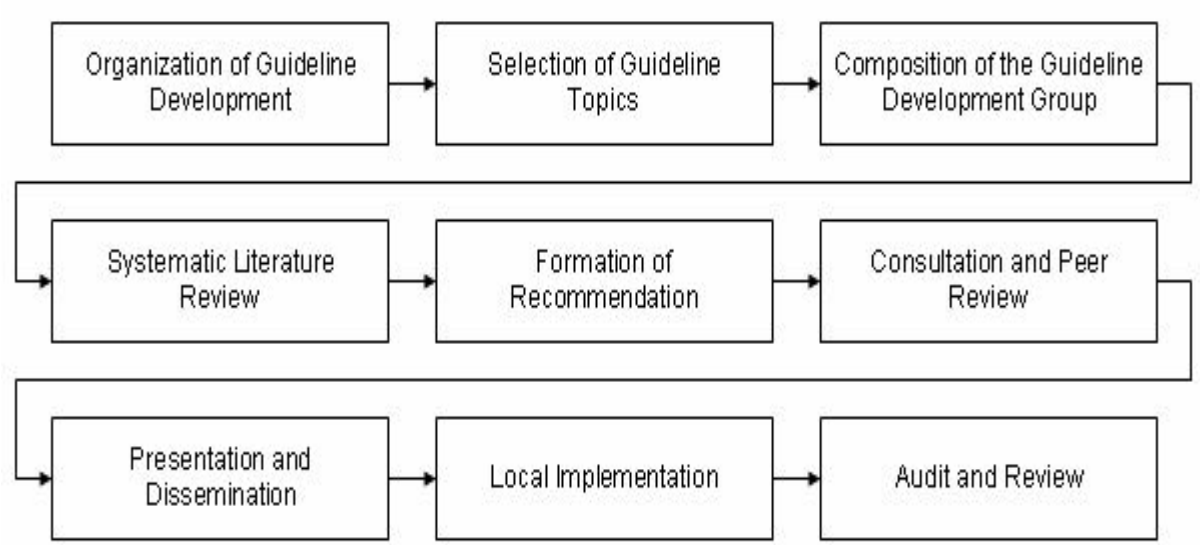
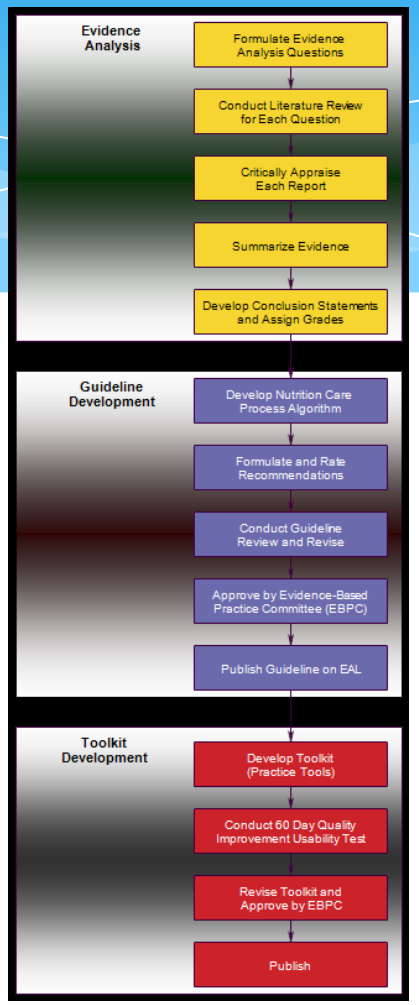
A Pathway Navigator will improve compliance with best practice

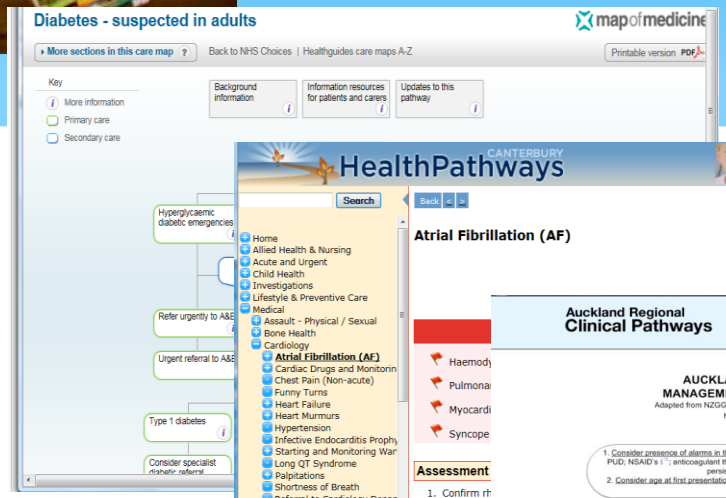
- Multitude of guidelines and pathways available
- Limited improvement in variation and cost reduction
- Success limited by implementation
- Published guidelines and algorithms are inadequate
- We need a Pathway Navigator at the point of care

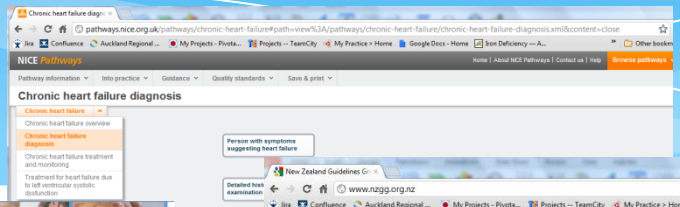
Guideline Process

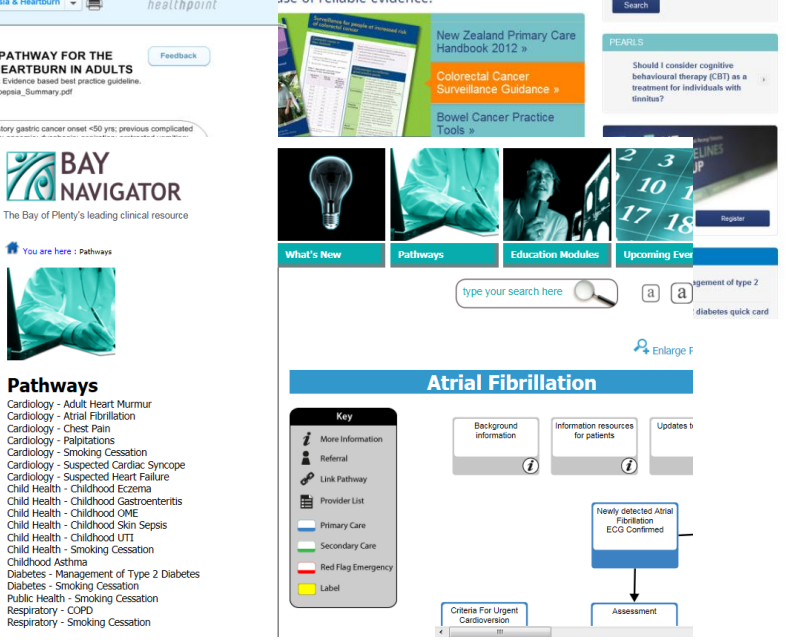




Published and localised







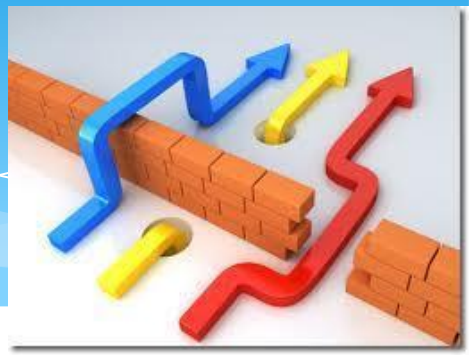
Utilisation Gap

- Gap exists between guideline development and utilisation
  - Recommendations from guidelines are not followed
  - Improved outcomes (reduced variation and cost) not achieved
- Falls short because inability to implement effectively

Guideline dissemination

- Publication alone with/without educational program is ineffective
- Locating and looking up guidelines is time-consuming
- Enhanced by using computers at the point of care
- Simply displaying guidelines does not increase adherence

Barriers to adoption



- Guidelines of variable quality
- Conflicting recommendations, clinician disagreement
- Inertia associated with traditional practice behaviours
- Lack of incentives to change
- Patient-specific and community-wide factors

Making change happen

- In order for clinicians to follow recommendations, they must agree with the guidelines
  - Balance of positive and negative incentives
    - “it is in my best interests to do this”
  - Capability
    - “I have the ability to do this”
  - Understanding
    - “I understand what I need to do”

Agreement with the guidelines

- Lobach's Model for Consensus Building
  - PRESENTATION (specialist)
  - SURVEY (all clinicians)
  - ADAPTATION (opinion leader and specialist)
  - REPEAT SURVEY (all clinicians)
  - FURTHER ADAPTATION(opinion leader and specialist)
  - DISTRIBUTION (opinion leader and specialist)
  - GROUP DISCUSSION(all clinicians)
  - CONSENSUS.

Map to GPS Navigation

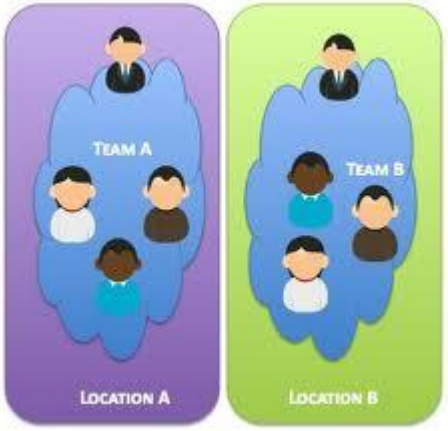
What should I do next ?

- Next specific action
  - Patient
    - Current phase of care (initial presentation, therapy, follow up)
    - History, examination and investigations
    - Previous treatment and outcome
    - Actions taken by other providers
  - Resources available (localised)
  - Judgement of provider

Spans time and place

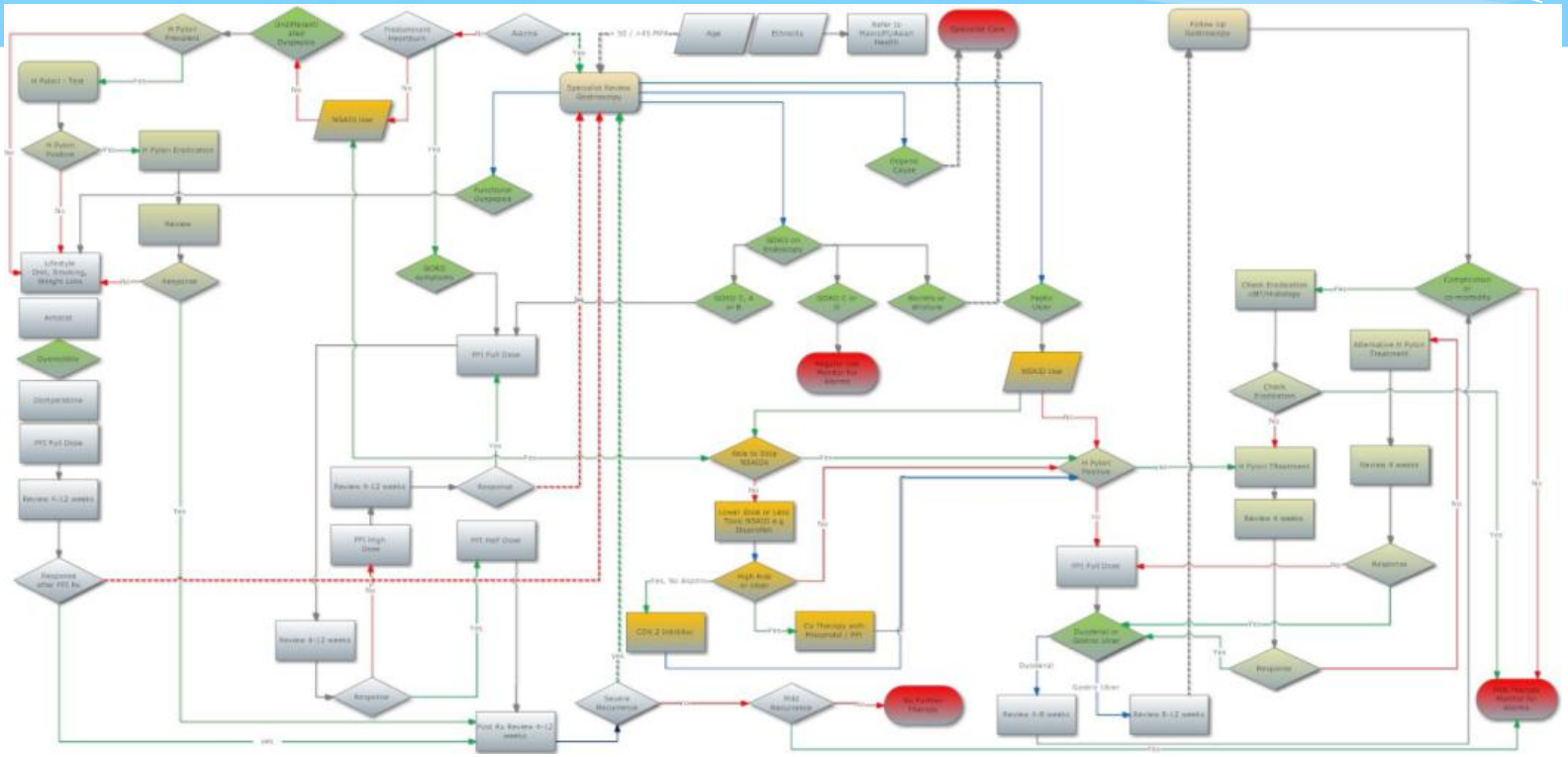
Multiple Visits

Multiple Sites

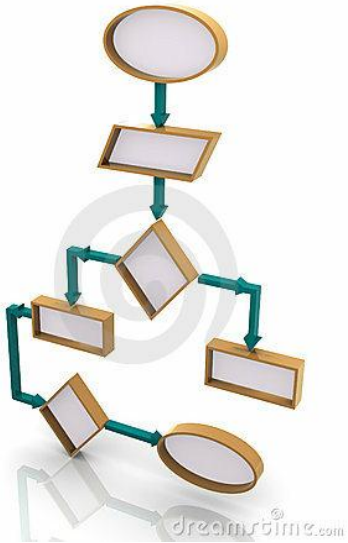


Multiple providers

One dimensional flow



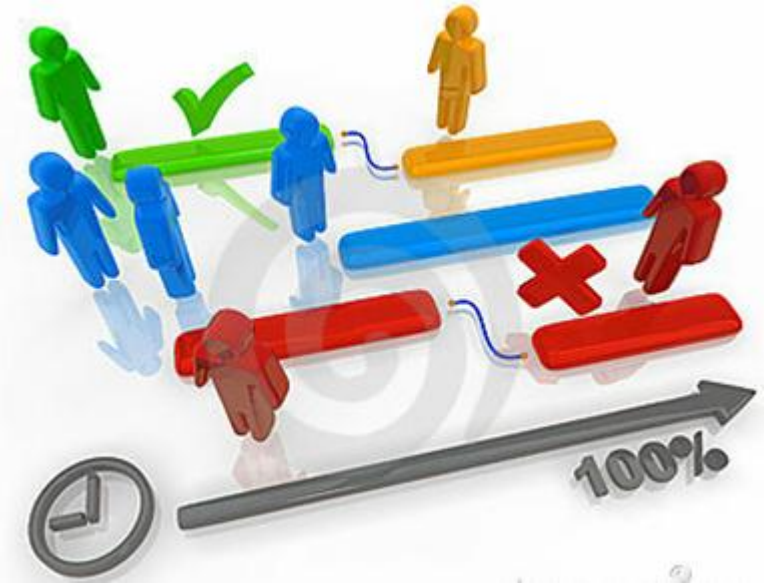
Multi dimensional , Concurrent



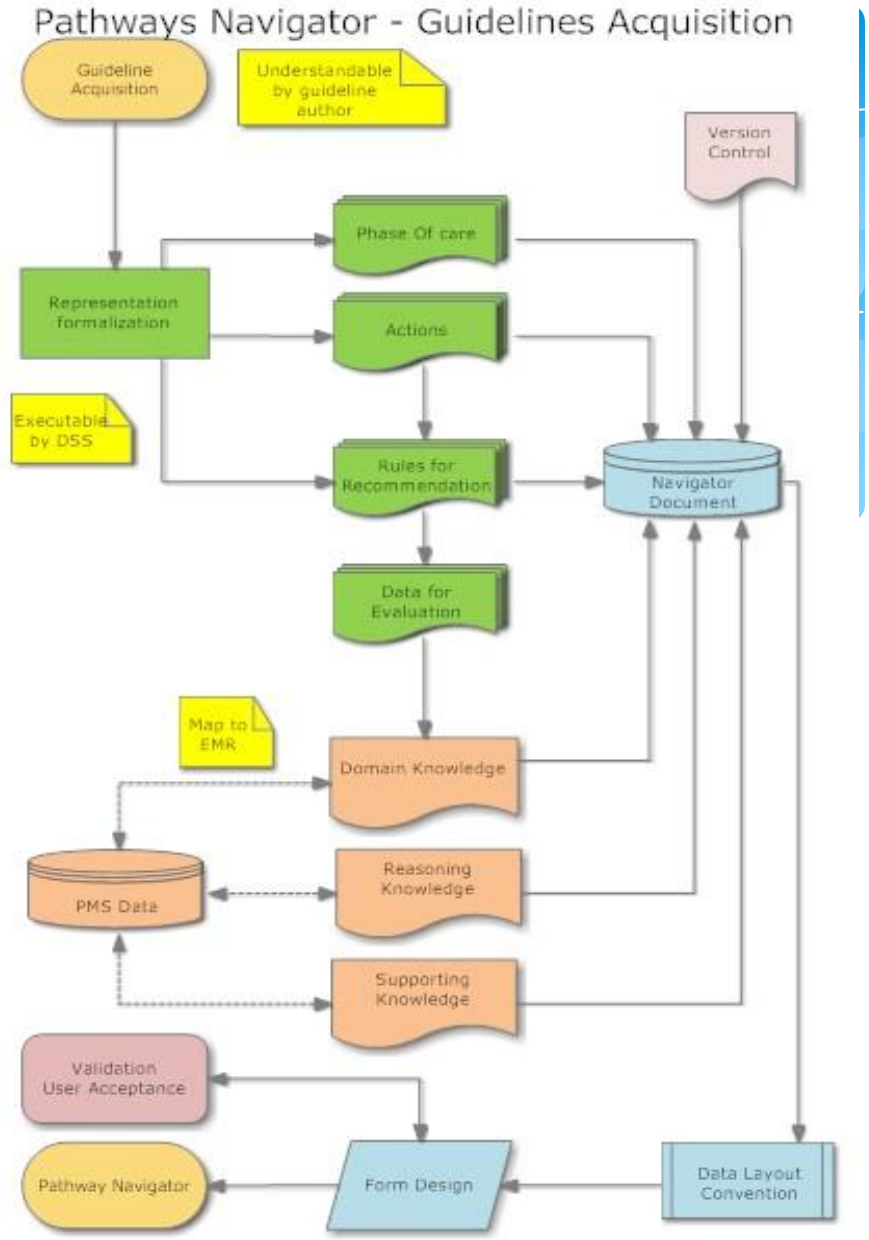
Not restricted to one dimensional flow

Many options, variable sequence

Concurrent streams

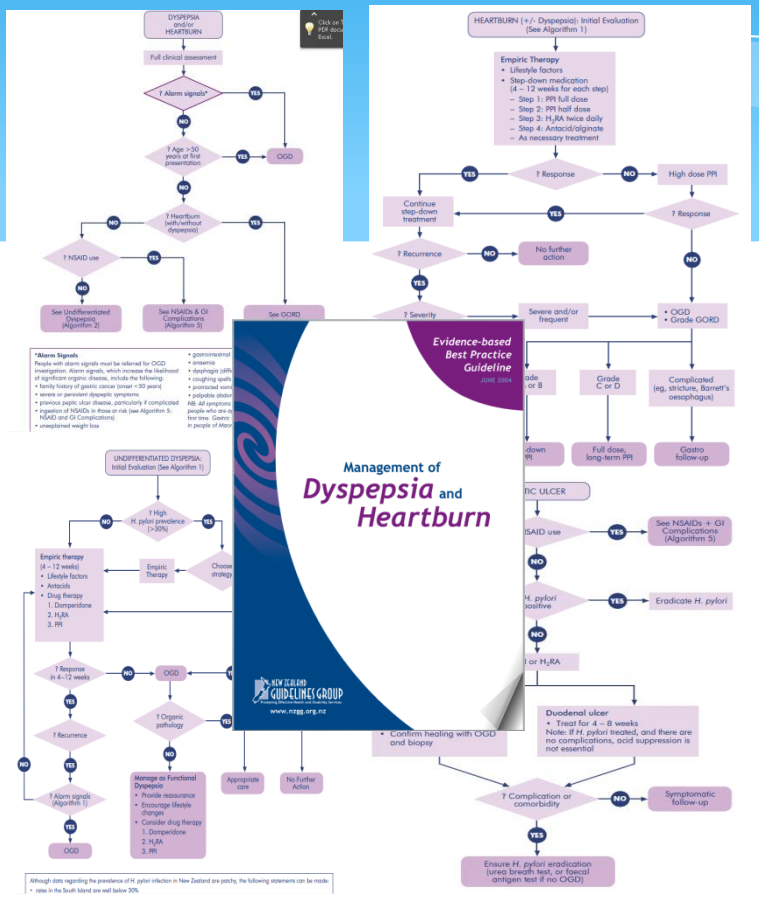


Pathway Navigator Process ©



- Complex process
- Models and tools for extracting and organizing knowledge
- Gaps and inconsistencies need to be addressed
- Rules validated against original guidelines
- Limited published experience with automating EMR-integrated complex algorithms
  - Arden, GEM, Protégé, GLIF, EON, Prodigy

Guideline to patient centric view



Dyspepsia | Ryan Maxwell

Signed in as:

Initial Presentation | NSAID | H.pylori | Treatment | Review | Post Review

Initial Presentation

Demographics

Gender: Male Female

Maori/Pacific/Asian Ethnicity

In a population with >30% H. pylori

South Auckland, Porirua, East Cape, Pacific Islands, Asia including India, South Africa have infection rates all >30% - other places of origin in New Zealand generally have infection rates < 30%). Maori, Pacific and Asian peoples have > 30% prevalence - up to 70% in some groups

History

Presenting Complaint

Initial Date 31/05/2012

Age at first onset 47

Predominant Symptom: Dyspepsia Heartburn

Unexplained Weight Loss

Select Action

RECOMMENDED

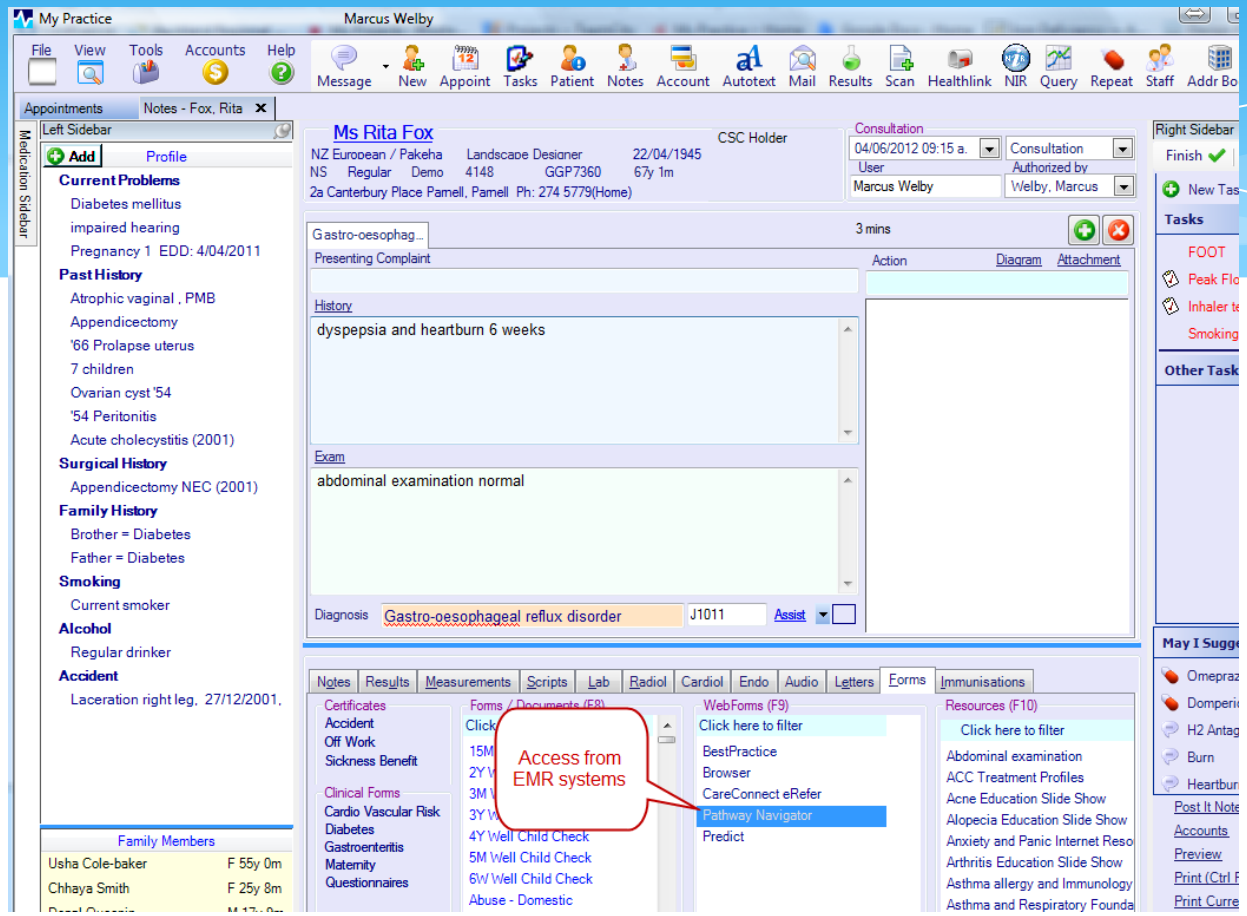
- Refer Gastroscopy
- Offer referral to Maori Health, Pacific Health or Asian Health

INSUFFICIENT DATA

- H.pylori Management
- NSAID Management
- Treatment

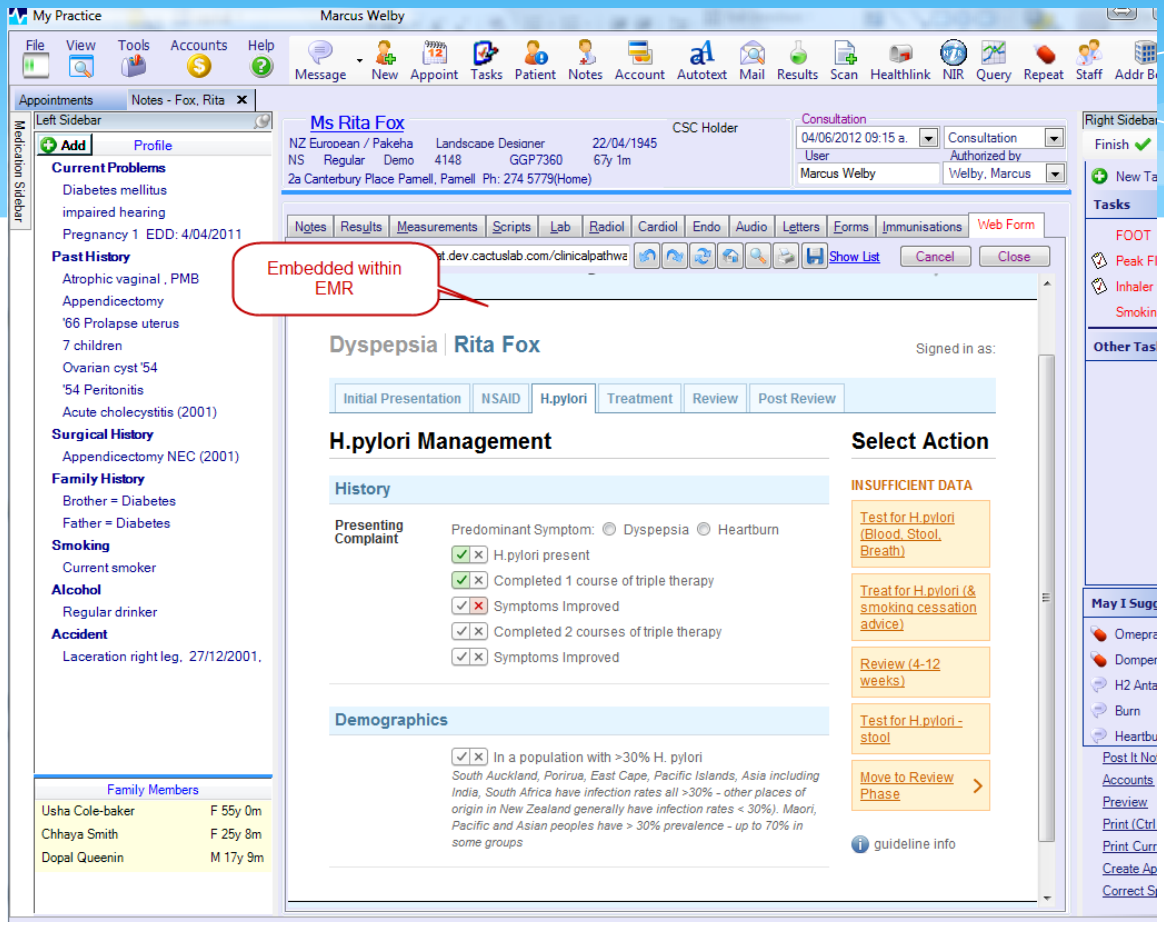
guideline info

EMR Integrated access

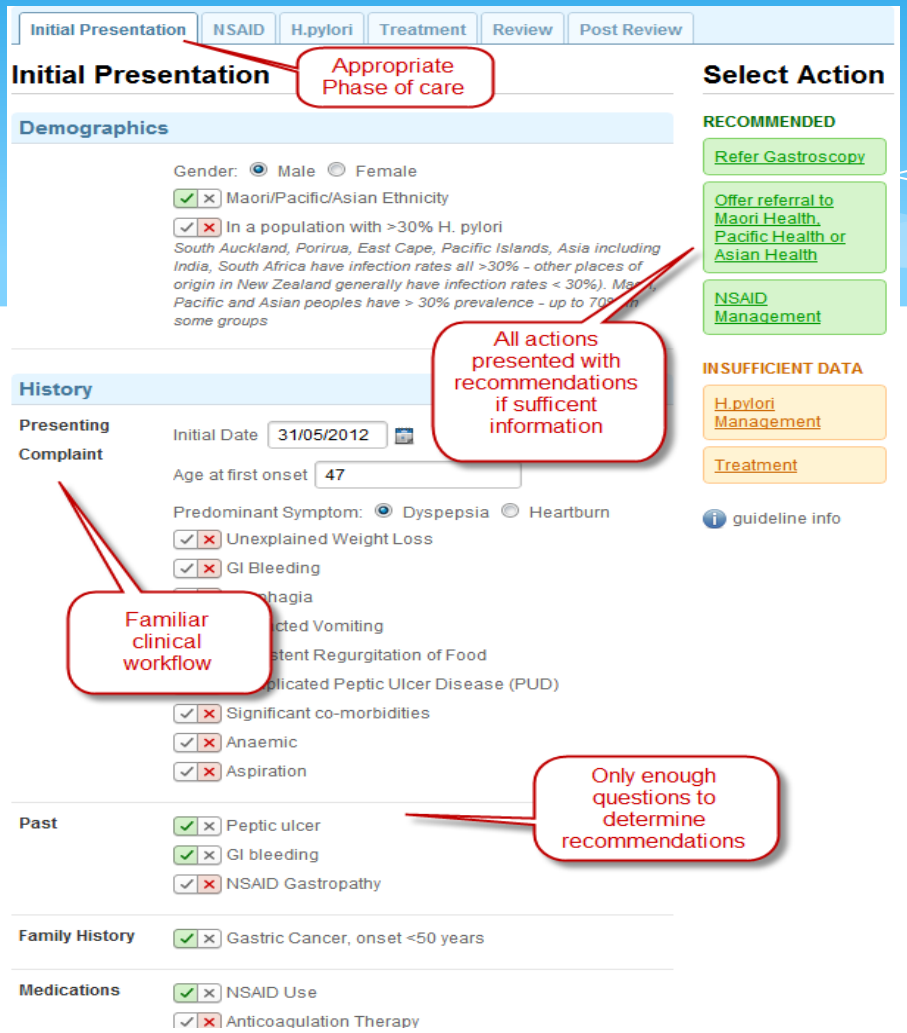


Disclaimer: Please note this software `Pathway Navigator' is in beta testing, this version is not intended for commercial release. The software and its development are confidential to Pathway Navigator Ltd. (c) 2012

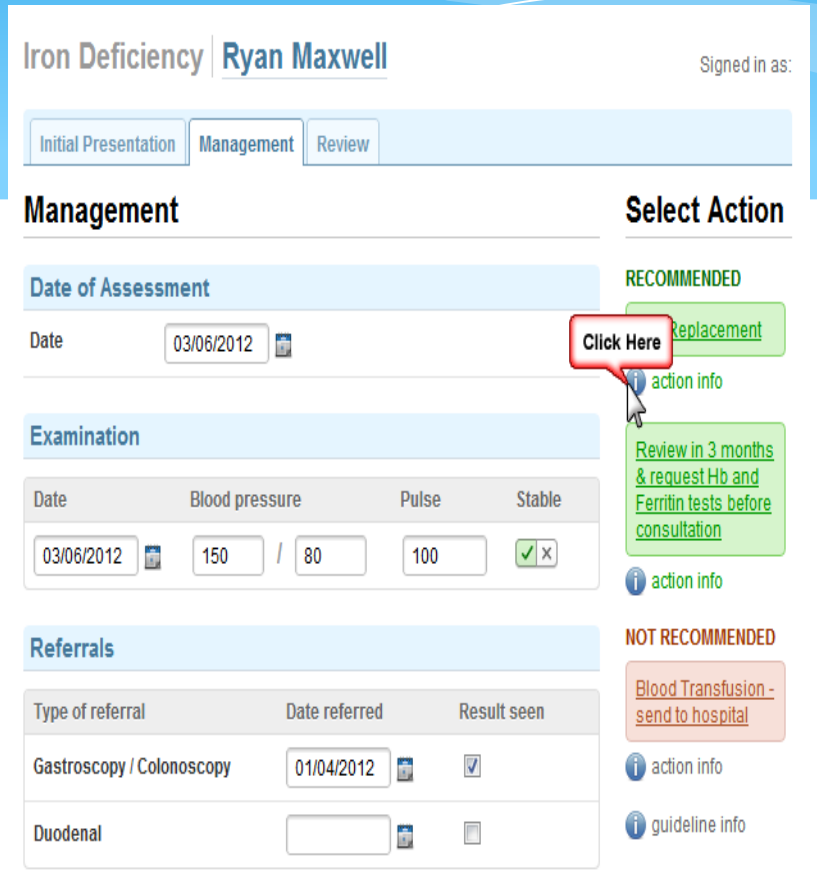
Seamless, shared information

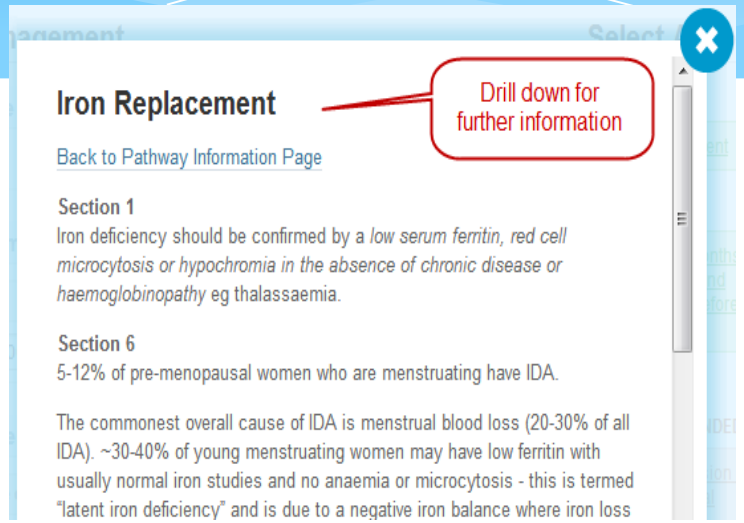


Smart Presentation



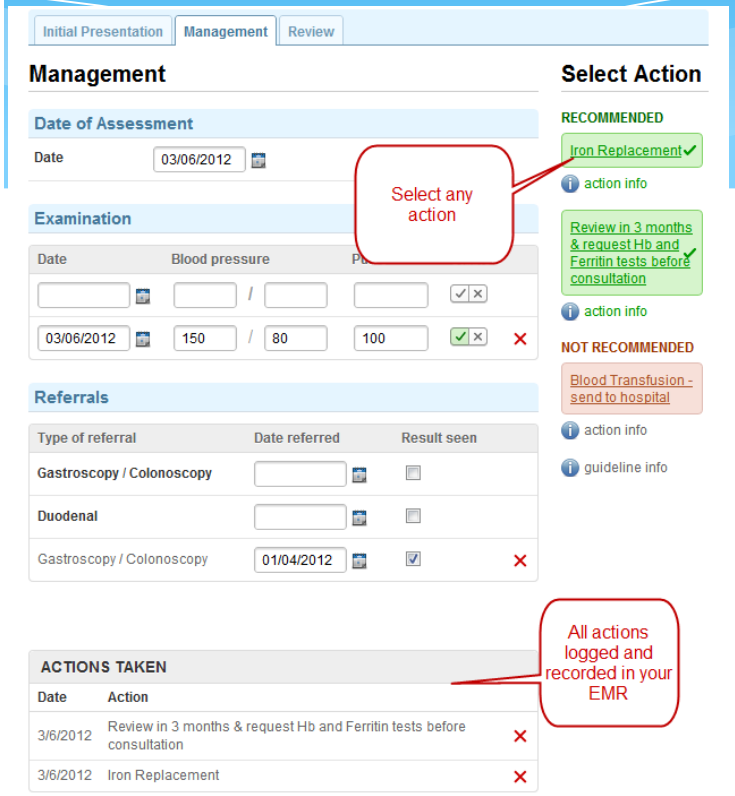
Supportive information available





Enables

- Practitioner may
  - apply judgement
  - change order
  - Share pathway
- Maintain audit trail
- Usage information



Demo

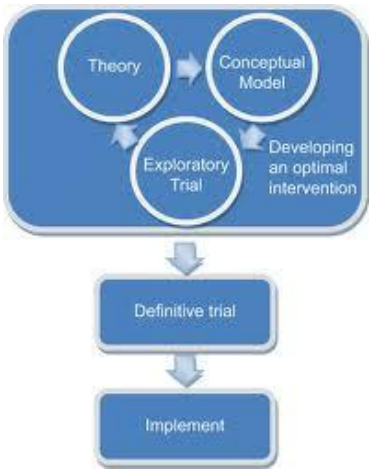
Summary

Pathway Navigator :

- Will ease utilisation of any clinical pathway
- Is patient specific
- Is relevant to the patient's current phase of illness
- Fits in with a GP/Health professionals work flow
- Takes account of the patient's history/results
- Will resume from the last interaction
- Is able to be shared with other health professionals
- Can be integrated with PMS/ Hospital systems
- Helps with Implementation and uptake of agreed guidelines

Implementation Plan

- Pilot system
- User Acceptance Testing
- Measure performance /behaviour change
- Refine
  - Extend range of pathways
  - Deployment options



For further Information: Contact John

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