



Coogee Bay Manifesto Meeting

Sharing clinical knowledge across care settings

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June 2007

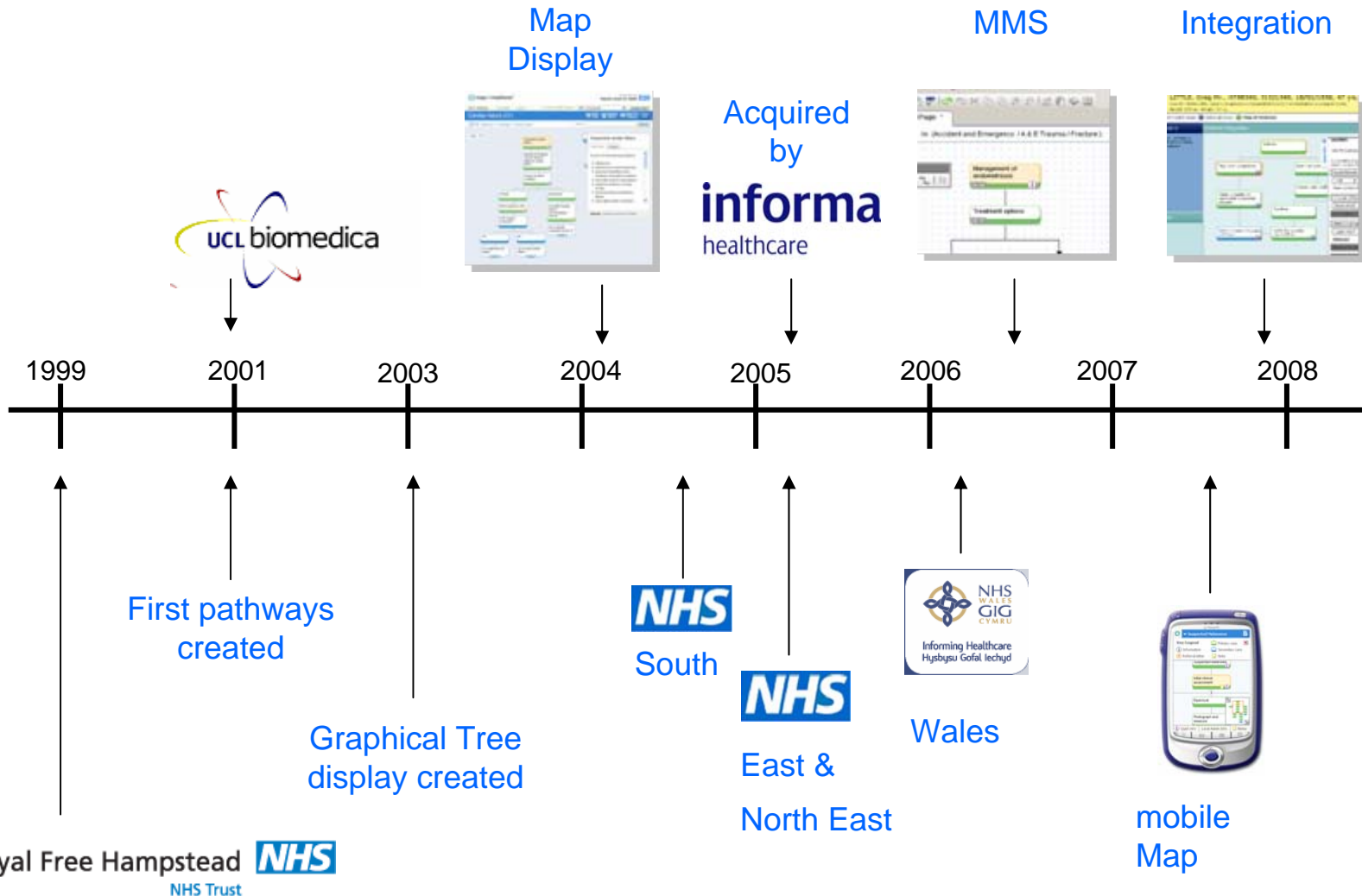
AGENDA

- Background
- Demonstration
- National Health Service drivers
- Illustrations of future use
- Q & A



Background and status

Map of Medicine History



About Informa plc

- 1734: first issue of Lloyd's List pinned to the wall of Edward Lloyd's City of London coffee shop
- 1798: T&F publishes first edition of the Philosophical Magazine
- 20 million customers and prospects
- 40,000 book titles
- 10,000 events annually
- 7,400 employees
- 2,000 subscription products
- 150 offices in 43 countries
- 120+ businesses



an archipelago of trading islands



A Problem in Healthcare

- Overload
 - Growing information base
- Clinical governance
 - Overload of guidelines
 - Addressing students, locum and agency staff – limited local knowledge
- Increasing patient safety issues and rising patient expectations
 - Less patient time, more referrals
 - Recent Data
 - Medical errors
 - Rising cost of claims
 - Value of evidence



Clinical Governance: Overload

In the UK, in guidelines alone,
there is an overwhelming number and volume:

Example GP Practice - 855 different guidelines*

- a pile 68 cm high
- weighing 28 kg

Significant variation:**

- *Content*
- *Development*
- *Dissemination*
- *Implementation*
- *Evaluation*



How do we stay current and consistent?

* Guidelines in general practice: the new Tower of Babel? *BMJ* 1998;317:862-863

** Guidelines on anticoagulant treatment in atrial fibrillation in Great Britain: variation in content and implications for treatment. *BMJ* 1998;316:509-513

Patient Safety: Recent Data

Power of Evidence

80% of US physicians changed their care as a result of evidence*
as follows:

Avoided hospitalisation in 12%

Reduced overall length of stay in hospital in 19%

Changed diagnostic tests in 51% and drug choices in 45%

Avoided additional tests or procedures in 49%

* Marshall J G. *The impact of the hospital library on clinical decision making: the Rochester study*. Bull Med Libr Assoc. 1992 April; 80(2): 169–178

** Fischer MA, Avorn J. *Economic implications of evidence-based prescribing for hypertension: can better care cost less?* JAMA 2004;291:1850-6.

Human factors in mobilizing best-practice

We all tend to be change averse

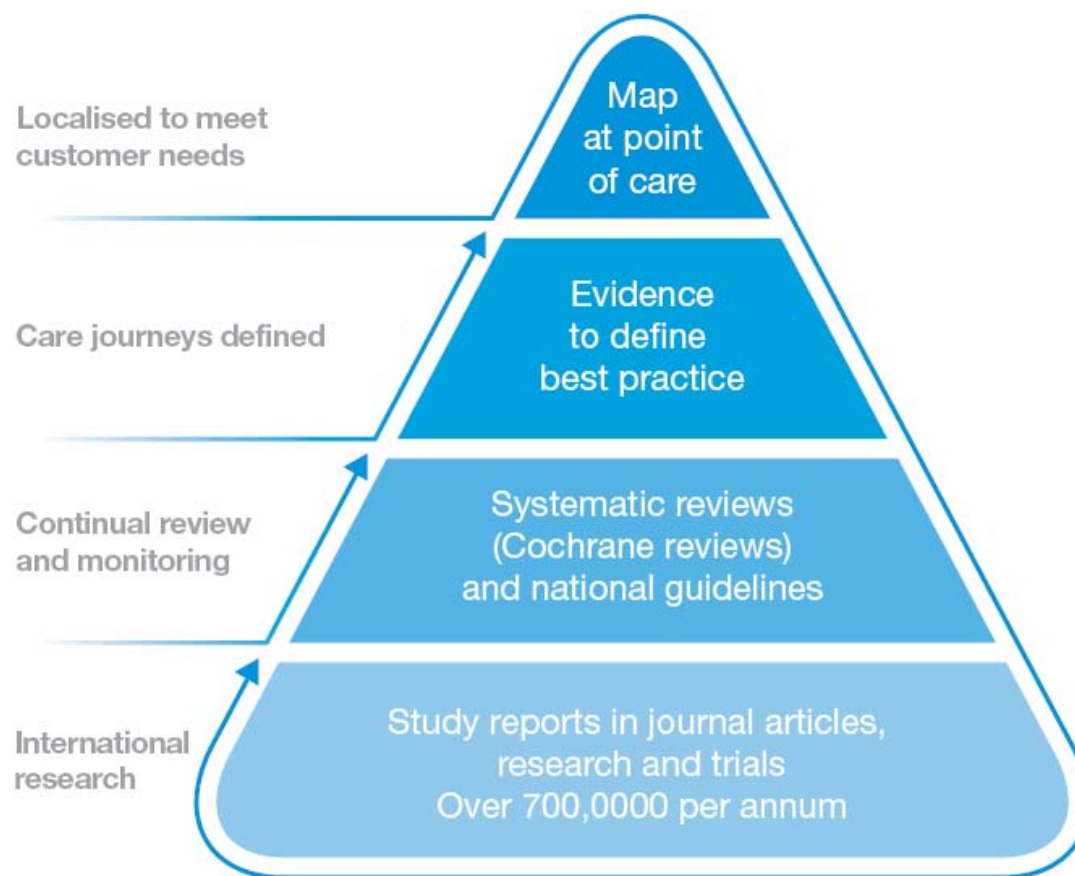
We are risk averse

In order to be able to engage clinicians, the ideal tool should fit with clinicians' "thought-flow" as much as admin workflow

IT needs to be intuitive and must deliver real benefit to the user – making clinicians feel safer while being time neutral

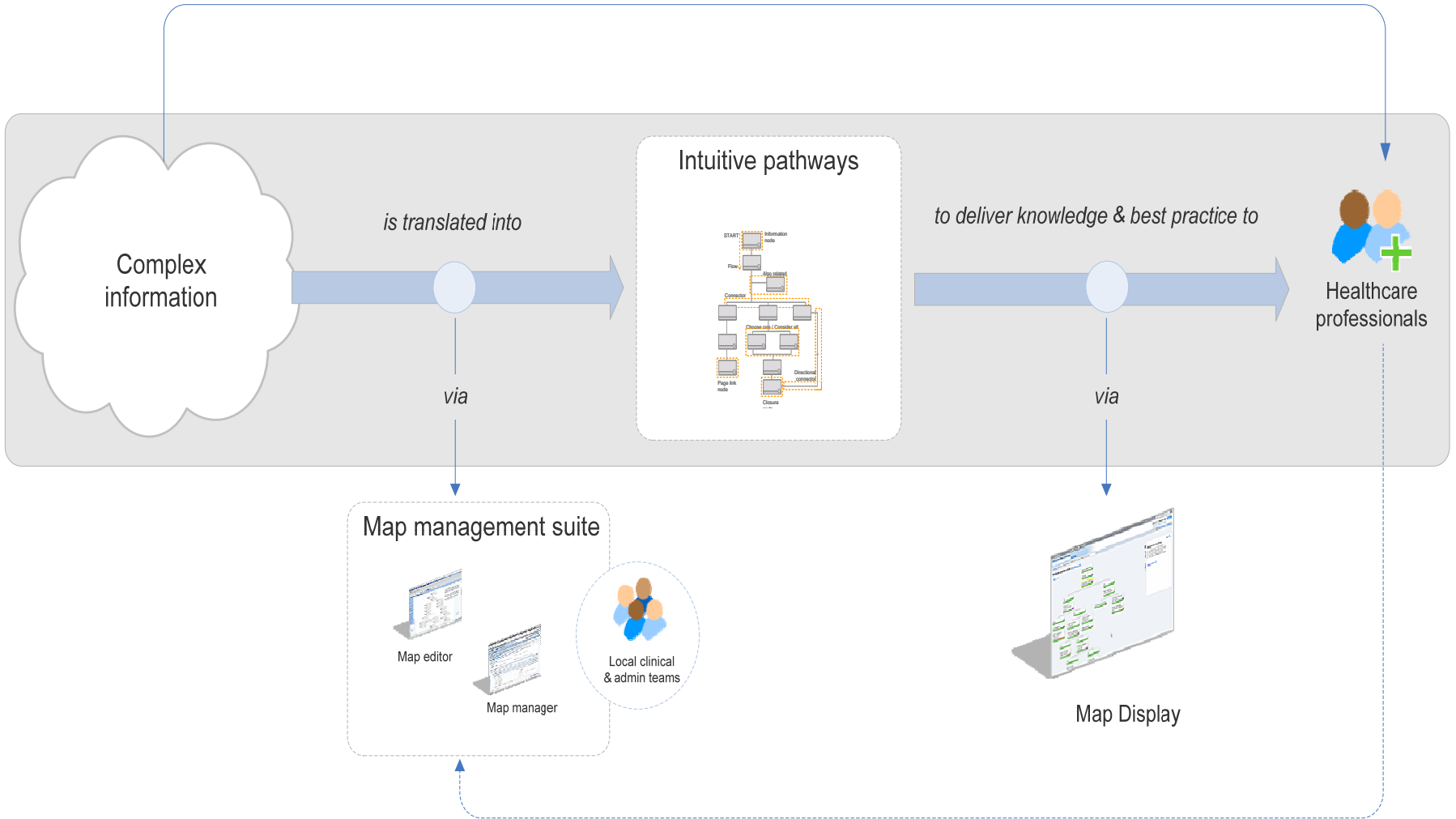
Political issue – how do we drive consensus around best-practice, incorporate local knowledge and guidance

MAP OF MEDICINE OVERVIEW





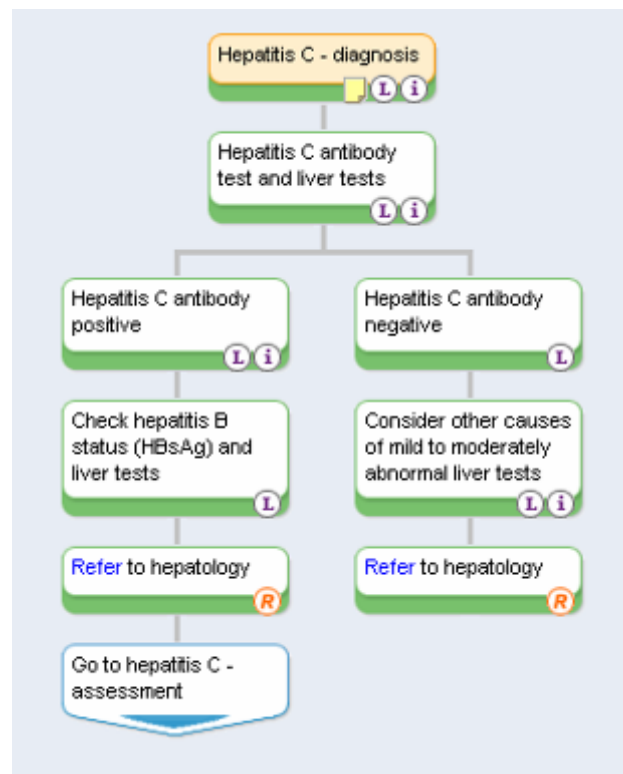
access relevant third party knowledge sources in context



provide feedback and adapt to reflect local practice

A FLEXIBLE SERVICE FOR HEALTHCARE PROFESSIONALS

More than a source of clinical guidelines, the Map of Medicine is a flexible service for healthcare professionals



- Integrated into clinician’s workflow
- National, local, personal
- Facilitates healthcare planning, monitoring and management
- Blurs the boundaries across care
- Broad evidence-based content coverage
- Dynamic knowledge sharing framework
- Supports CPD

Chest pain - cardiac

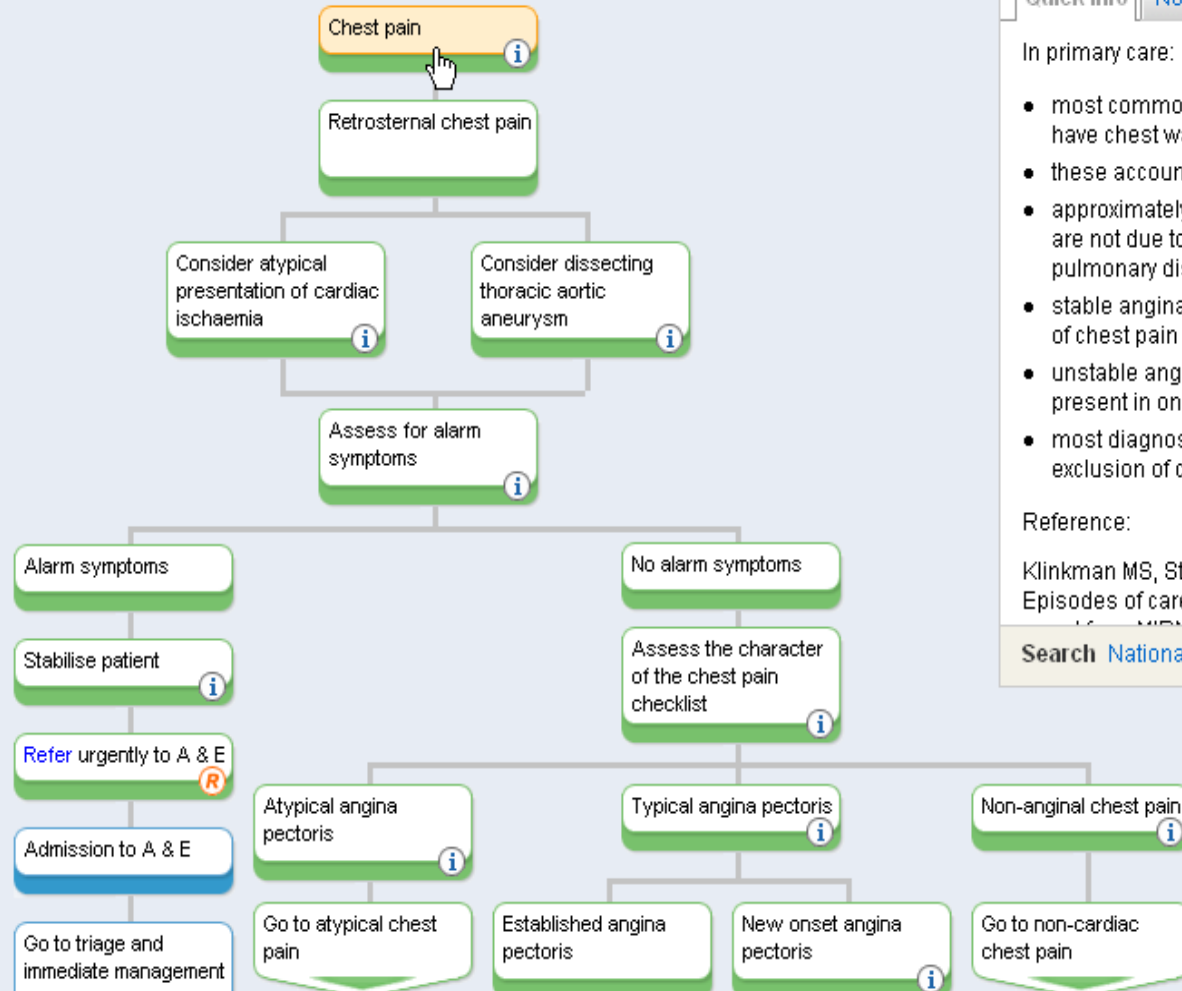
Print page | Give feedback | Referral Letters | Return Home

Medicine / Cardiology / Chest pain

Search: (e.g. asthma or "chest pain") [Search](#)

! This pathway may contain out of date information as the review date has passed

Key



Chest pain

Quick info | Notes | Add local info

In primary care:

- most common presentations of chest pain have chest wall causes
- these account for 36% of episodes
- approximately 60% of chest pain diagnoses are not due to cardiac, gastrointestinal or pulmonary disease
- stable angina pectoris is responsible for 11% of chest pain episodes
- unstable angina or myocardial infarction is present in only 1.5%
- most diagnostic testing is directed to exclusion of coronary disease

Reference:

Klinkman MS, Stevens D, Gorenflo DW. Episodes of care for chest pain: a preliminary

[Search National Library for Health](#)

International search scope



Centre for Reviews and Dissemination



CMA INFOBASE
clinical practice guidelines



EMBASE.com



The NHS Health Technology Assessment Programme



Australian Government
National Health &
Medical Research Council



NHS
National Institute for
Health and Clinical Excellence

**clinical
evidence**



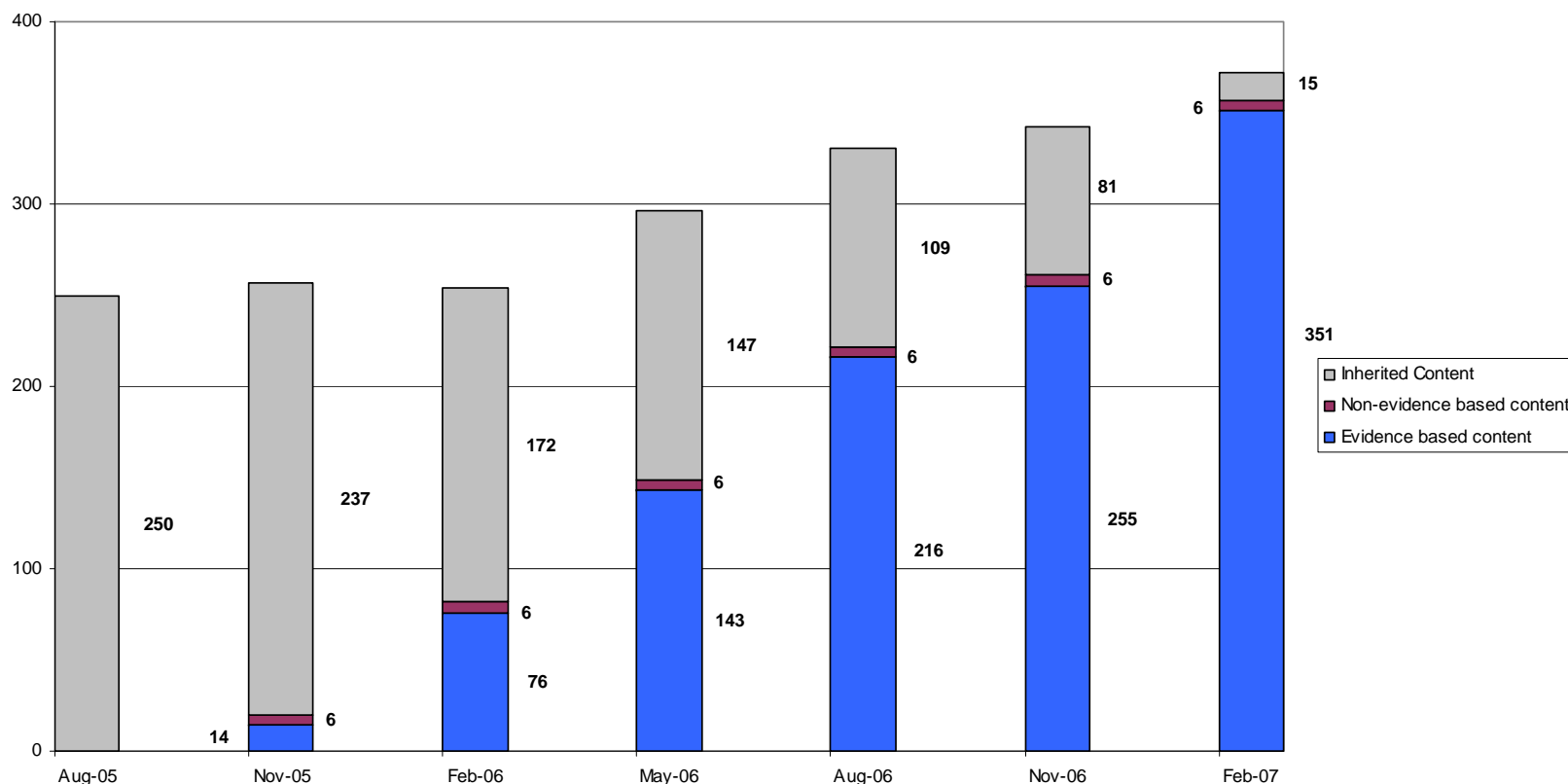
Australian Government
National Health and Medical Research Council

SIGN
Scottish Intercollegiate Guidelines Network



HOME

Content status – March 2007



- 372 pathways consisting of 1445 pages
- 27 specialties
- 400 images across 5 specialties

LICENSED TERRITORY and PROPOSED EARLY ADOPTER SITES



Newcastle

Cancer care network

Gateshead Acute

Localised Rheumatology pathways

Bradford

Needs to be deployed into Acute

Rotherham

Needs to be deployed into Acute

Heywood, Middleton and Rochdale

18 week wait

Wirral

Commissioning

South Beds

18 week wait

West Herts

Commissioning

Avon

Cancer network

East Surrey

18 week wait



DH / NHS drivers

NATIONAL PRIORITY AREAS

Higher quality, consistent and collaborative care across primary, community and acute boundaries

- **Improving patient / health worker experience:**
 - Promoting the use of information to support choice
 - More consumer focused service provision

- **Improving effectiveness and efficiency in care for long-term conditions**
 - Promotes better self care & treatment in a community setting
 - Avoid hospitalisation wherever possible to reduce load on acute care

- **Improving access to services**
 - Providing fair and prompt access to care
 - Reducing waiting for majority of patients

- **Improving health and well-being of the population**
 - Reduce the load on the health system by keeping people out wherever appropriate
 - Focus on caring for the people that really need it

TARGETS THROUGH TO 2007/2008

Rapid adoption of best practice, sharing of clinical and service knowledge, clinician and patient collaboration for long term disease management

- Reduce Mortality (heart and stroke, cancer, suicide)
- Reduce inequalities in care
- Improve support for personalised care plans
- Reduce emergency bed days by 5% before 2008 – better primary or community care
- Involve patient / user in decisions

KEY NHS POLICY DRIVERS

Manage supply and demand, improve consistency and quality of processes, make efficient use of resources available

- **Model resource against process**
 - Create virtual resource pools
 - Create virtual processes

- **Operate within a rapidly changing environment**
 - Financial constraints
 - Customer changes (demographics, technology usage)
 - Quality of care expectations

- **Consider systems changes**
 - Foundation Trusts
 - Involvement of private sector

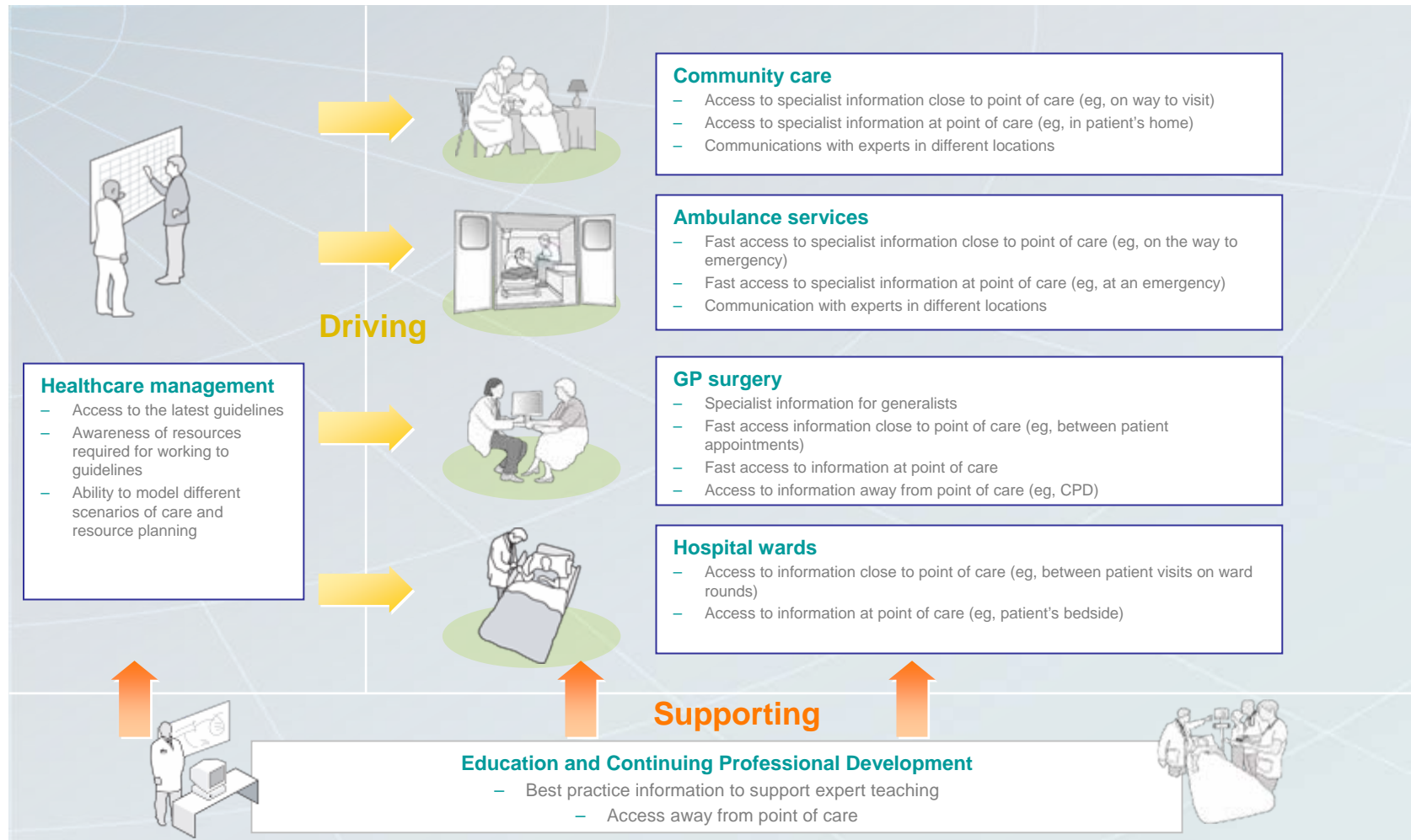
SERVICE REDESIGN – 10 CHANGES

1. Day care surgery is default approach
2. Improve the stages from assessment to diagnosis
3. Manage and model variation in patient admissions
4. Smooth variation in length of stay & discharge state
5. Avoid unnecessary follow-ups; follow up in right setting
6. Increase reliability of therapeutic interventions
7. Apply systematic approach to chronic conditions & prevention
8. Optimise patient flows
9. Redesign & extend roles for effective patient pathways
10. Minimise queues by redesigning schedules



Map of Medicine
supports 9 out of 10

NHS USER REQUIREMENTS ACROSS SETTINGS



OVERVIEW

EVIDENCE ANALYSIS

The editorial team analyse and synthesise global clinical research. The team includes some of the best known and most skilled designers and producers of evidence-based information products in the field. The extended team consists of the world's brightest doctors, epidemiologists, librarians, writers and scientists.



PATHWAY AUTHORIZING

Rigorous editorial methodologies are used to create content for The Map of Medicine. A sophisticated content management system contains over 1150 pages of clinical flows. The Map of Medicine contains unique, trusted and up to date content.

PATIENT ACCESS

Patients can access The Map of Medicine directly over the Internet. Personal subscriptions can be used to keep personal notes and communicate effectively to their GP.



CLINICAL TRAINING

Adapted versions of The Map of Medicine can be used by students, health workers and clinicians for Continued Professional Development.



HEALTH MANAGEMENT AND PLANNING

Managers, administrators and planners can use The Map of Medicine to develop scenarios based on approved care pathways. Integrating pathways and operational data helps development of treatment based financial and operational plans.



mapofmedicine®



FEEDBACK

CARE MANAGEMENT PROTOCOLS



ACCREDITATION

Many care pathways are accredited by Royal Colleges and National Healthcare governing bodies. The Map of Medicine thereby acts as a means of communicating clinical guidelines directly to clinicians at the point of care.

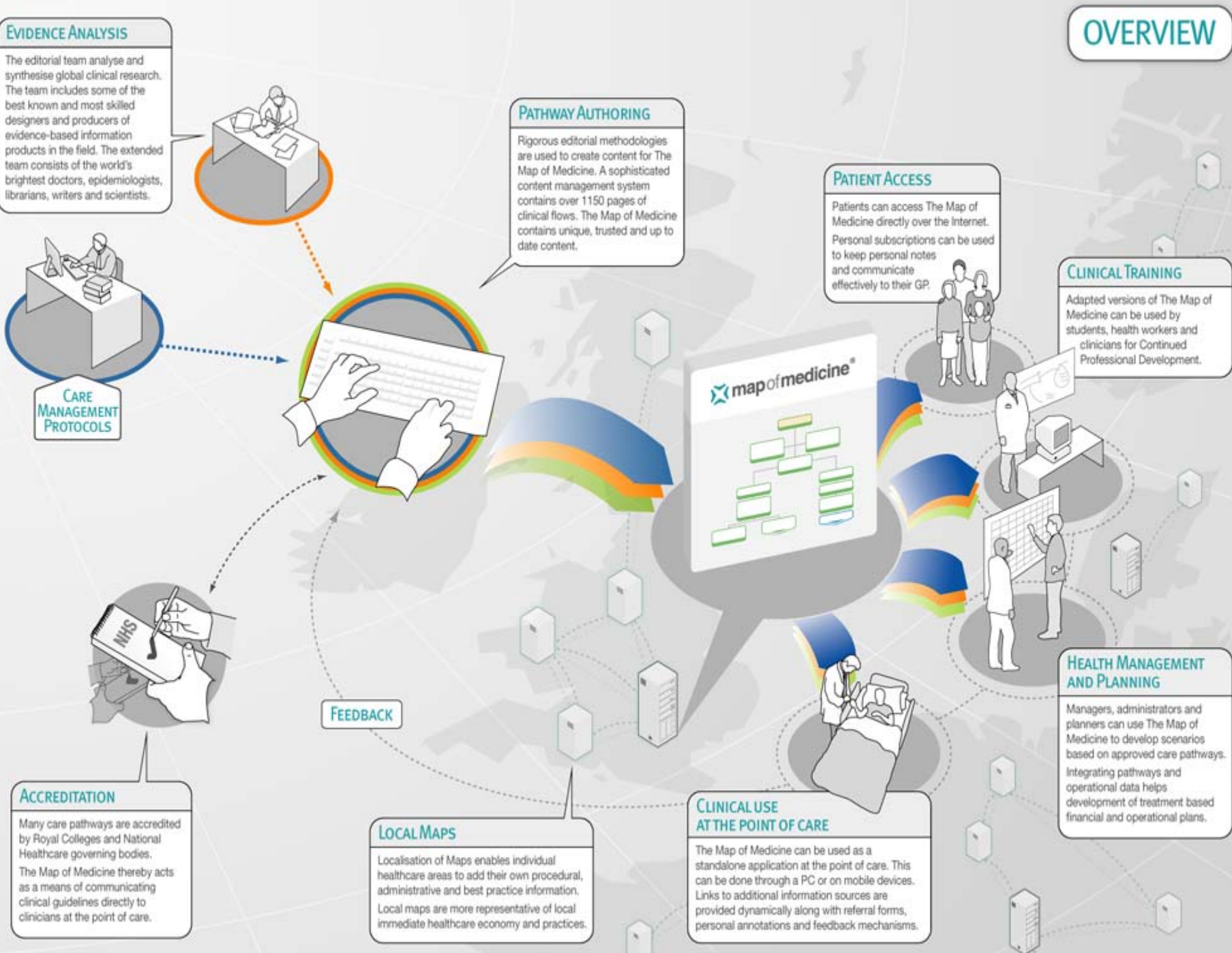


LOCAL MAPS

Localisation of Maps enables individual healthcare areas to add their own procedural, administrative and best practice information. Local maps are more representative of local immediate healthcare economy and practices.

CLINICAL USE AT THE POINT OF CARE

The Map of Medicine can be used as a standalone application at the point of care. This can be done through a PC or on mobile devices. Links to additional information sources are provided dynamically along with referral forms, personal annotations and feedback mechanisms.





Product development

MAP OF MEDICINE DEVELOPMENT: EXISTING AREAS OF FOCUS



Healthcare planning and management

Integration with profiling and simulation tools



Mobile Map of Medicine:

Making the Map of Medicine Mobile

- Developing world
- UK



Improving generalist-expert communication and reconfiguration through telecoms

Eg, Expert Network with call management



Integration with clinical systems

- Easy access from clinical workflow
- Triggering actions within EPR systems



HEALTHCARE PLANNING AND MANAGEMENT

File Edit Structure Active Encouragement Scenario Control Help

Healthcare Planning Scenario Tool

Norfolk, Suffolk and Cambridgeshire **NHS**
Strategic Health Authority Built 2.55

Current Mental Health

UPDATED



Map of Medicine links

1. [Emergency mental health services](#)
Mental Health / Other / Self harm

2. [Community-based mental health services](#)
Mental Health / Other / Self harm

3. [Phobic disorder - specialist mental health services](#)
Mental Health / Anxiety disorders / Anxiety

4. [Panic disorder - specialist mental health services](#)
Mental Health / Anxiety disorders / Anxiety

5. [Generalised anxiety disorder - specialist mental health services](#)
Mental Health / Anxiety disorders / Anxiety



MOBILE MAP





EXPERT NETWORK

Dr A. Hatton (Online) | Profile | Admin report | Log out

Current view **regional** | national | Other views

Ecstasy overdose

Connect to expert x
 Print page
 Give feedback
 Referral Letters
 Return Home

Accident and Emergency / Poison Centre / Ecstasy overdose

Key

Ecstasy overdose

General features

Monitor all patients

Features of severe toxicity?

Yes

No

Contact ITU or CCU

General management

General management

Specific management

Cardiovascular

Severe metabolic

Hepatic dysfunction

Hyperthermia

Agitation and

2 experts available within **Poison Centre**

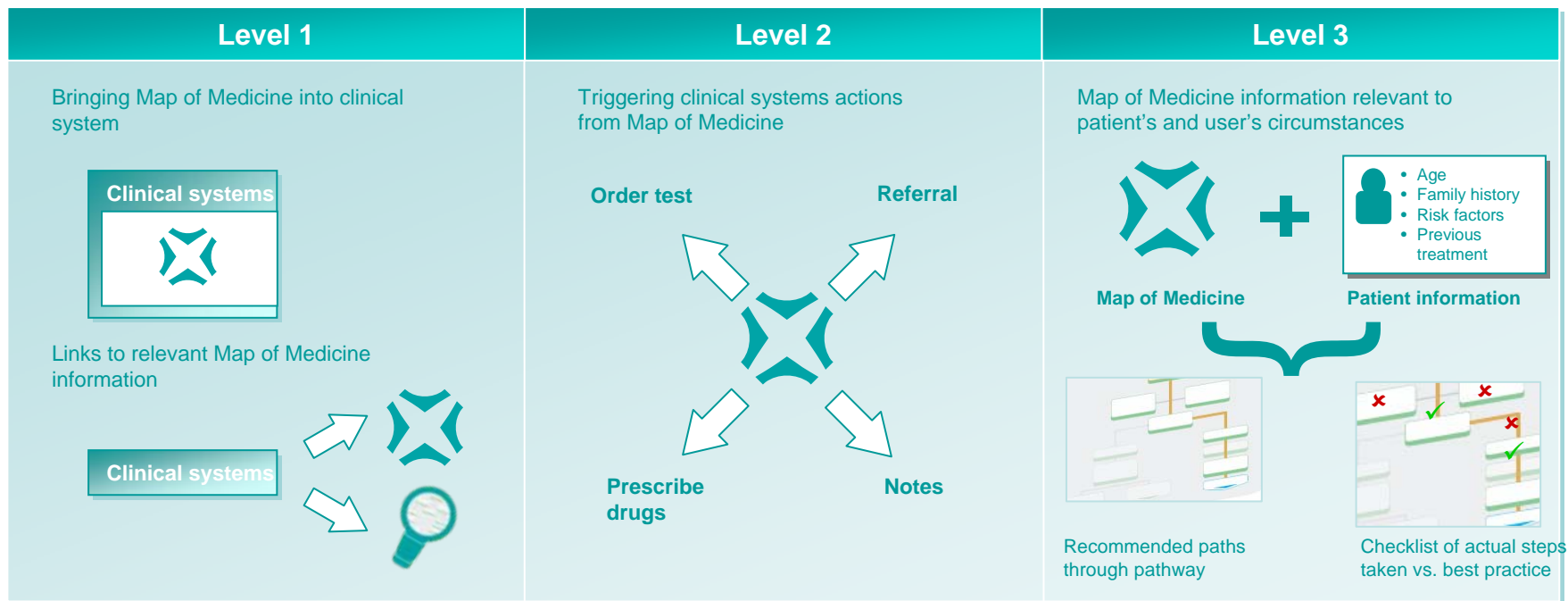
Dr John Ollier
Royal Infirmary of Edinburgh
Offline Chat Phone

Dr Claire Simpson
Glasgow Royal Infirmary
Online Chat Phone

Search (pain")



Integration with clinical systems



There are three levels of integration proposed between the Map of Medicine and partner EPR, EMR and PAS solutions:

- Level 1 = Providing the clinician with Map of Medicine content relevant to their situation
- Level 2 = Enabling use of the Map of Medicine to perform clinical actions
- Level 3 = Combining guideline, patient and related information into electronic care pathways (e-CPs) and beyond



Thank you!

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