Closing the Loop

Dr. Sam Patel - Clinical Project Lead

The Challenges



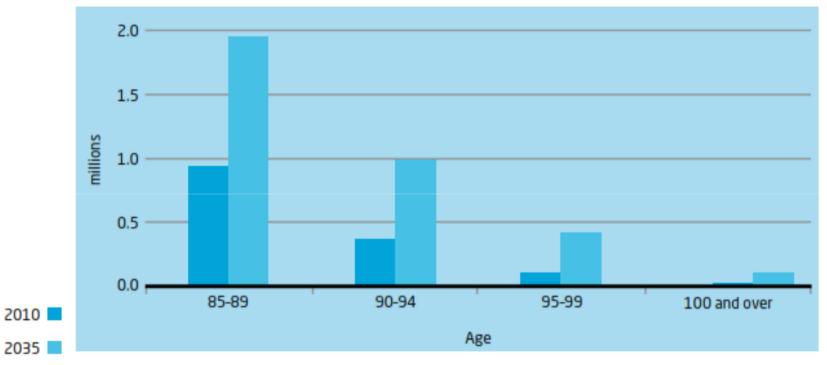


- Care is becoming more complex
- Polypharmacy is becoming the norm
- 40% of serious medication errors are due to transcription₁.



1. Williams, D. J. P. (2007). "Medication Errors." <u>J R Coll Physicians</u> Edinb **37**: 343-346.





Note: The number of people aged 90 and above is projected to more than triple by 2035; the number of people aged 95 and above is projected to more than quadruple; and the number of centenarians is projected to rise from 13,000 in 2010 to 110,000 in 2035, a more than eightfold increase.

Source: Office for National Statistics (2011)

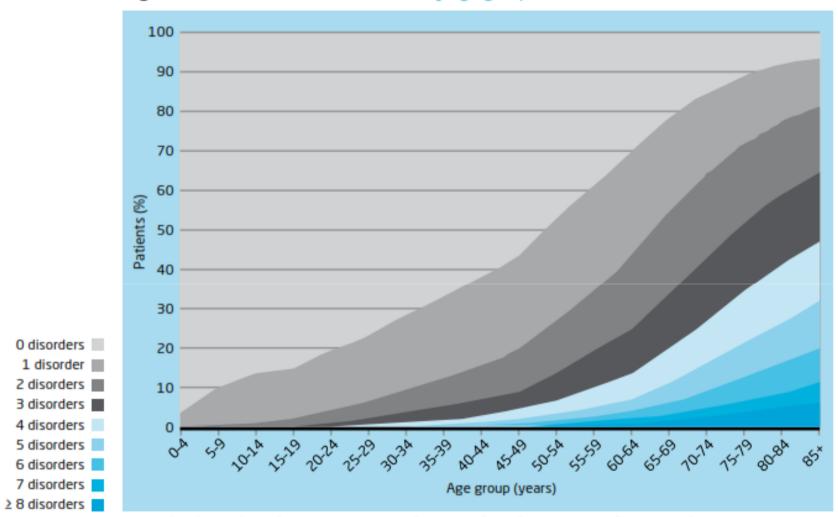


Figure 5 Number of chronic disorders by age group

Note: This figure shows how common it is to have significant long-term conditions in relation to age. Few people (fewer than 30 per cent) do not have at least one condition by the age of 60, and many people will have two or three.

Source: Barnett et al (2012) 3

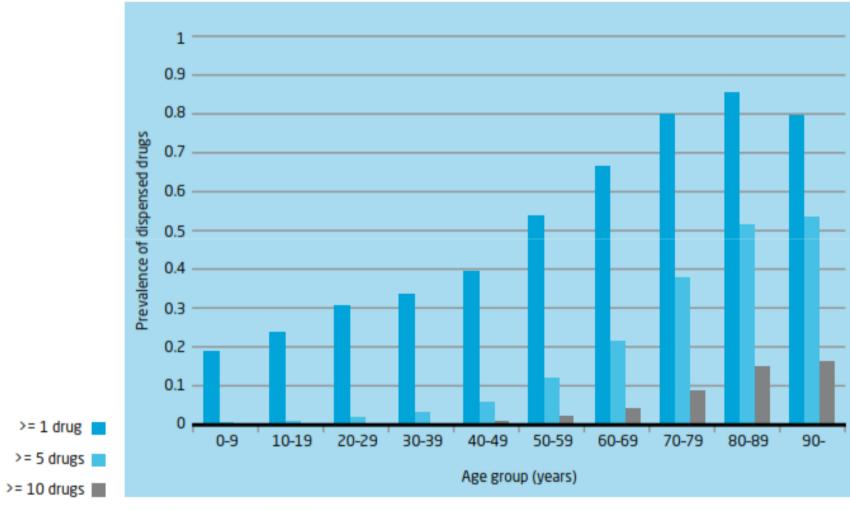


Figure 4 Polypharmacy, Sweden, 2005 to 2008

Source: Hovstadius et al, (2010b)

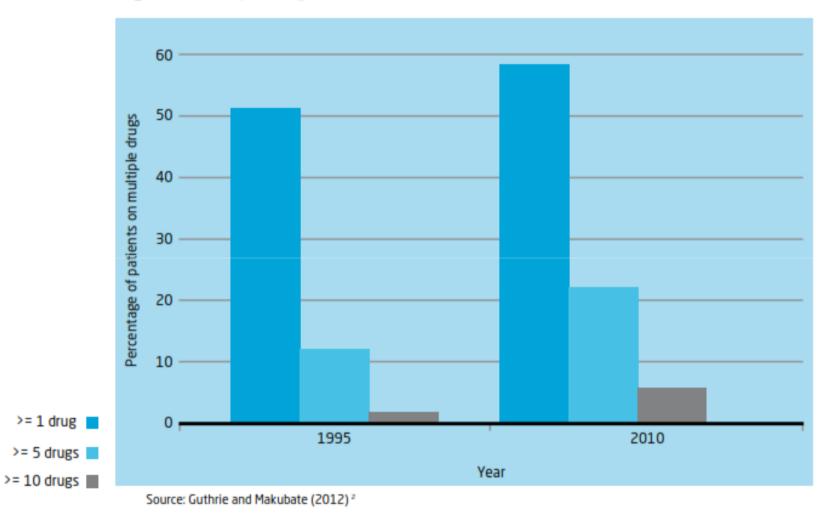
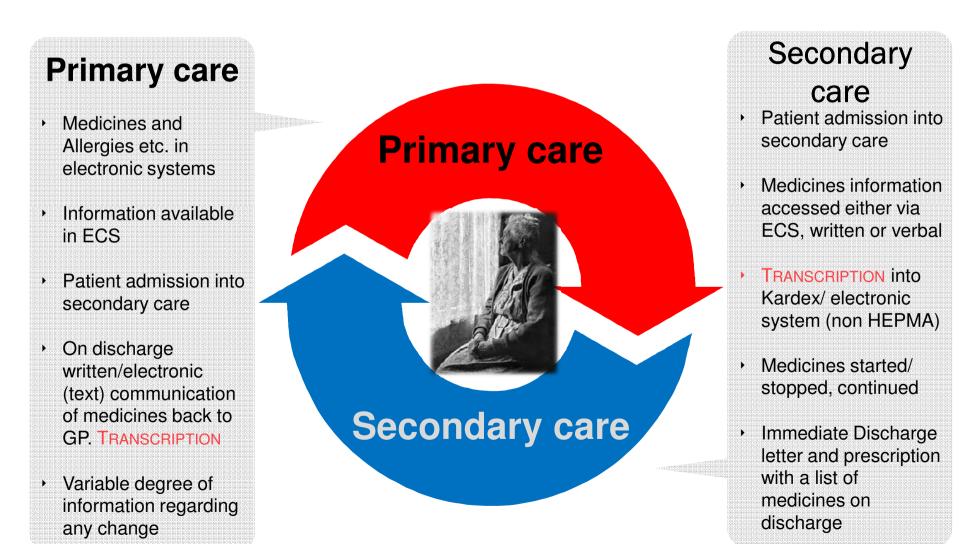
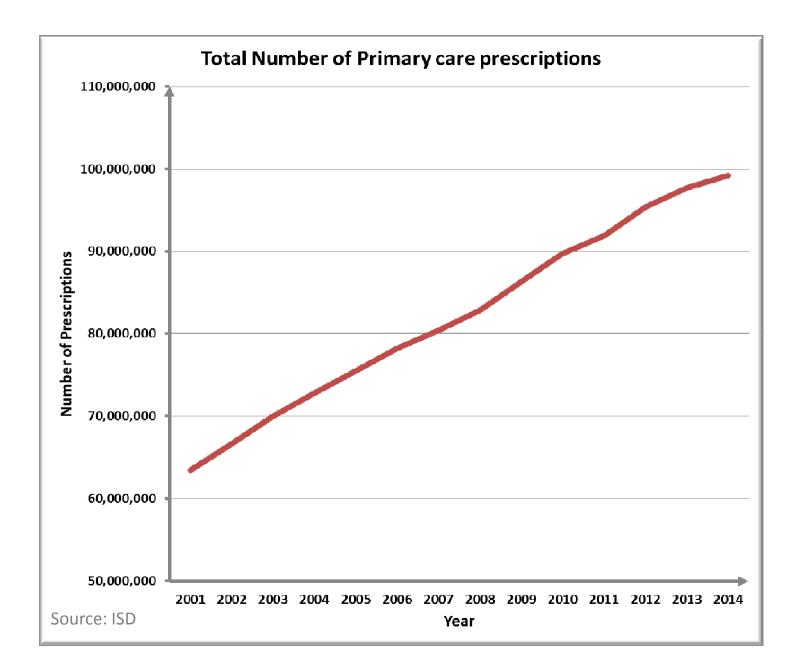


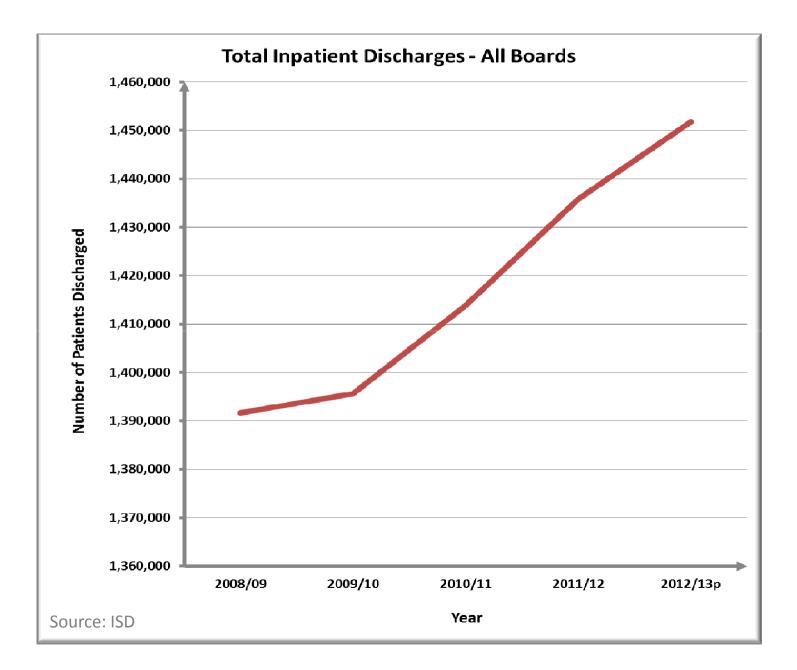
Figure 3 Multiple drug use, Scotland, 1995 and 2010

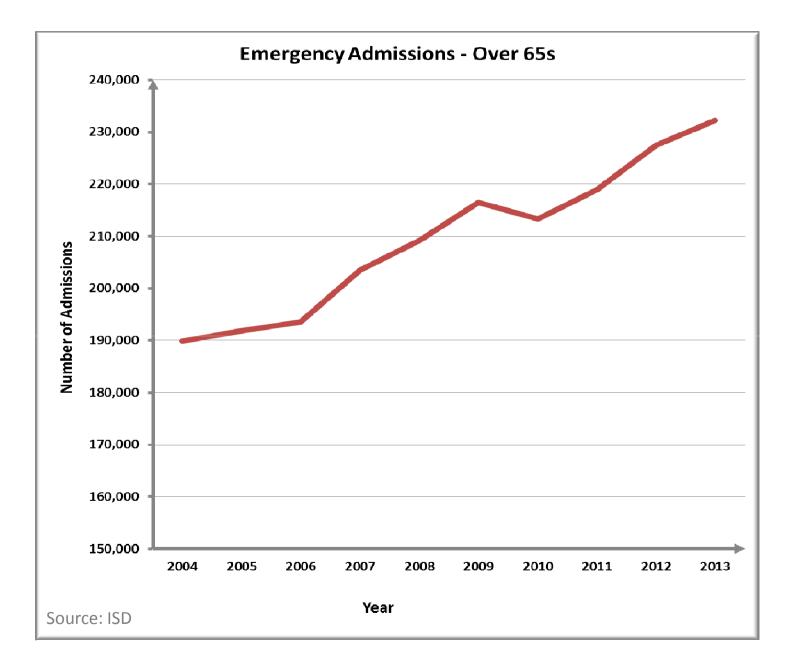
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Medicines communication









The Current Situation





- Poor processes
- Current electronic solutions reproduce paper solutions
- …'Improve the electronic communication between primary and secondary care'

Background









Background



Closing the Loop











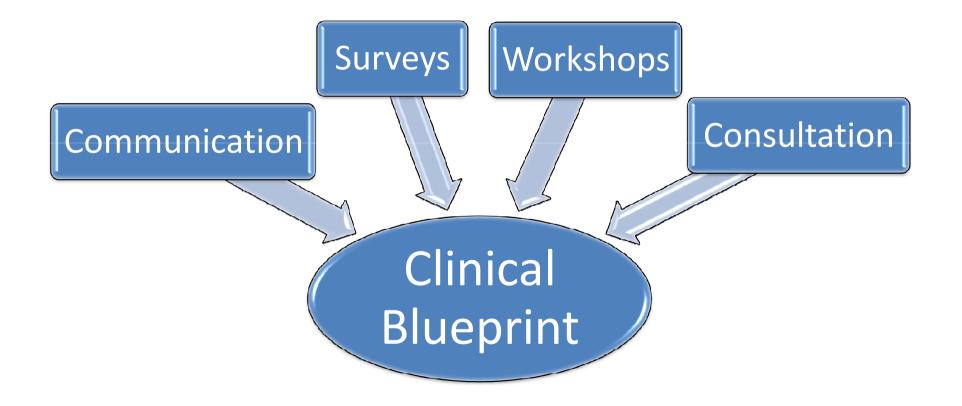
Original remit

Problem Definition & Current State Mapping

Early Supplier Engagement Establsih Clinical Blueprint & Requirement Develop set of shareable tools, guidance & standards Support for Supplier Engagement around software development

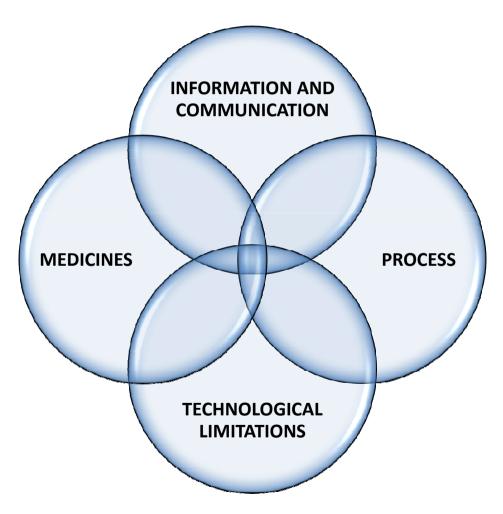
Clinical Engagement



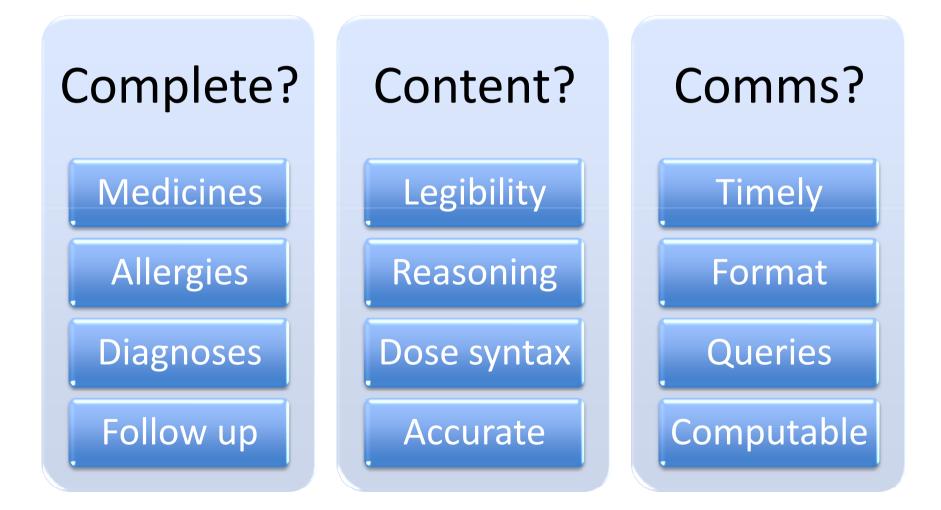


Where are the problems?





Information and Communication



Medicines



Closing the Loop

Primary care

- Manual Meds Rec
- No Import
- Alphabetizing?

ECS

• Format

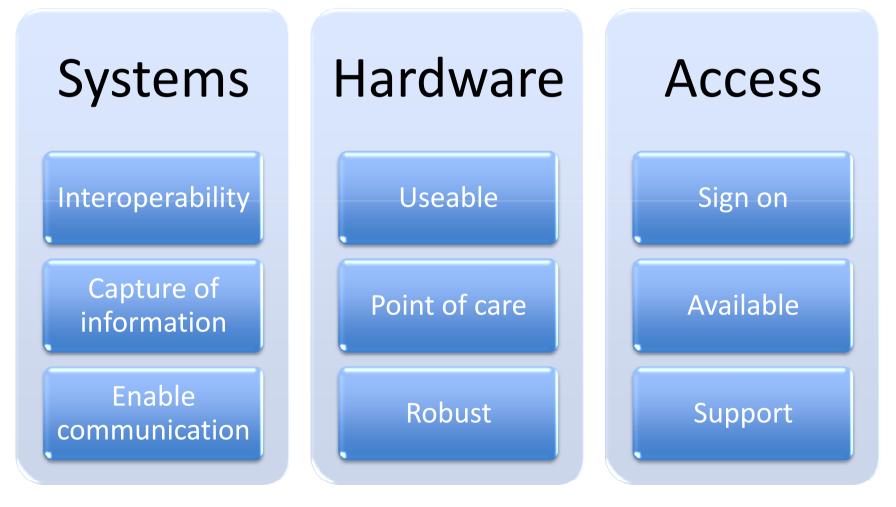
- Not always complete
- Variable trust

Secondary care

- Incomplete recording
- Reasons for change not easily
 - found
- Outpatients

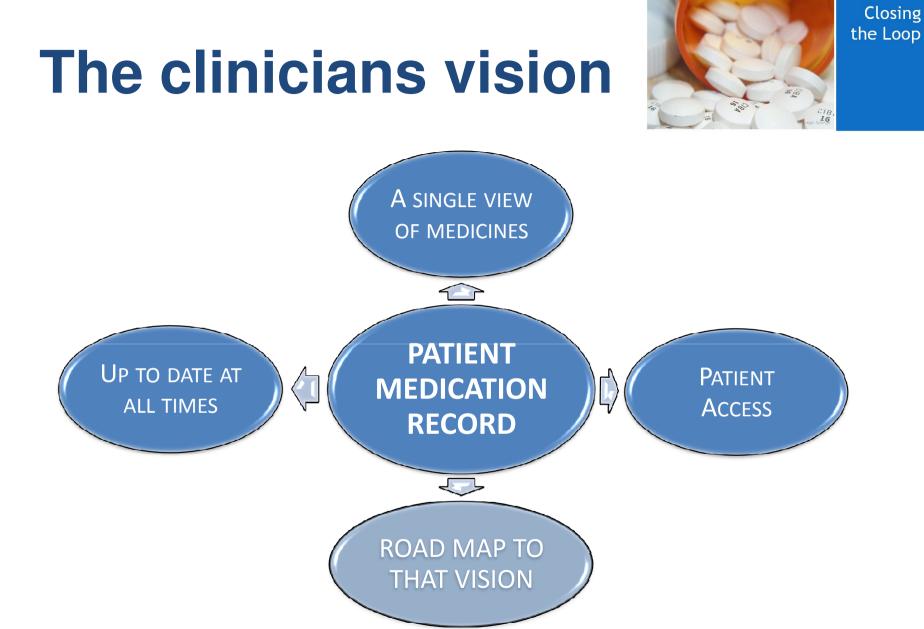
Technology











Four Pillars



Closing the Loop

- Information Content
- Information Quality
- Information Context
- Communication



Underpinning principles

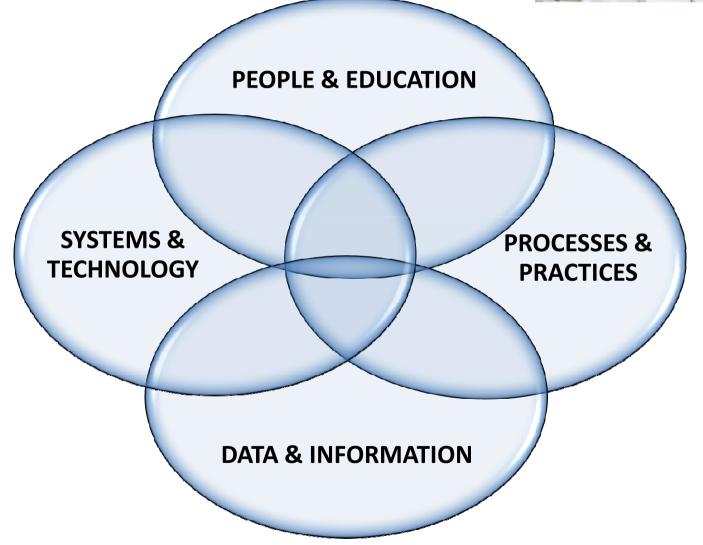


- Eliminate transcription wherever possible
- Preserve the integrity of medicines information at every stage
- Do not duplicate tasks
- Make it easy to do the right thing
- Make it hard to do the wrong thing
- Make it easy to sort, filter and search for information
- Enable staff to use systems
- Support staff to carry out processes
- Effective use of different technologies

A MESSAGING STANDARD?

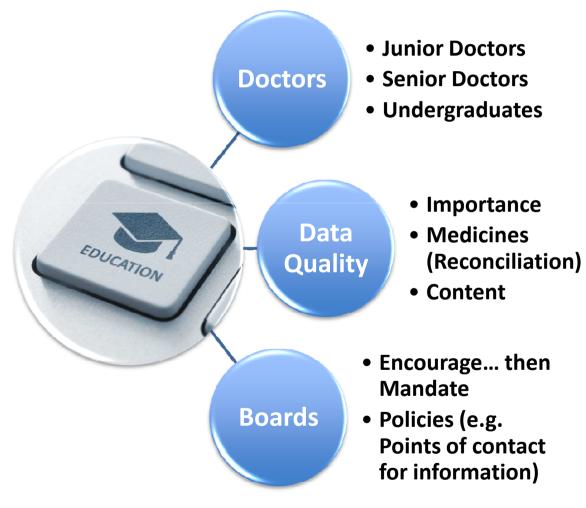
A Clinical Roadmap?





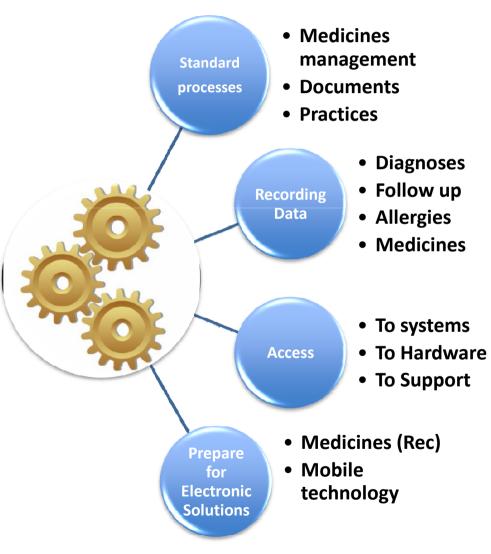
People & education

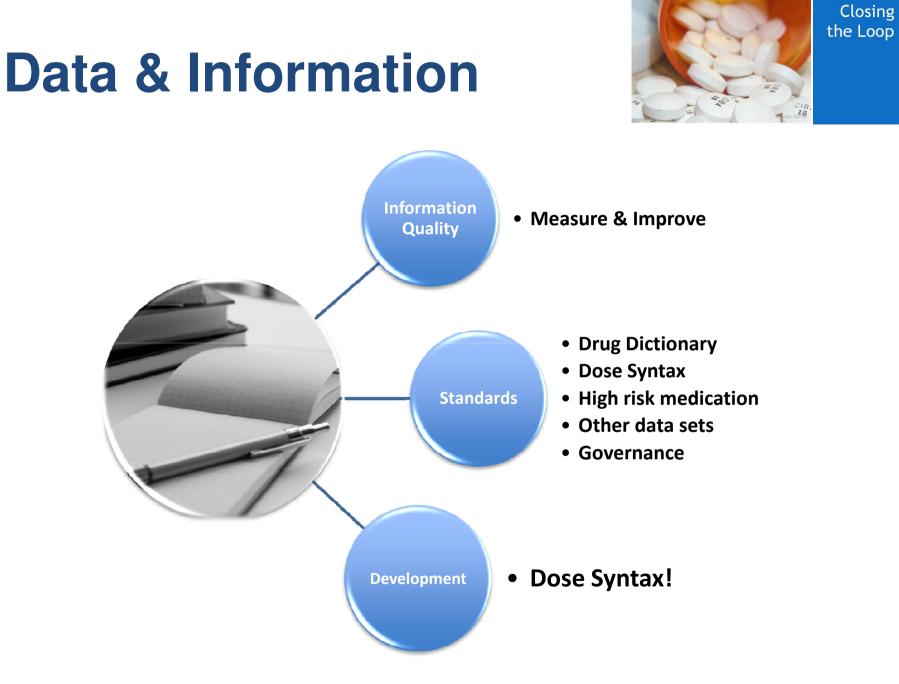




Processes & Practices

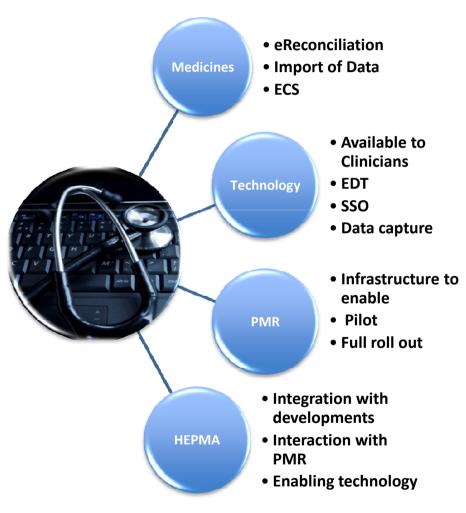






Systems & Technology





FIVE YEARS?





A growing problem.

Part of the solution is technology based but cannot be entirely delivered by IT

- Scope of change includes but extends beyond eHealth with multiple stakeholders
- Potential to realise multiple benefits
- BUT the main focus is Patient safety





Changes in clinical processes? **Education**? Improve ECS? Standards and common language? System development? In which order? WHAT DO YOU THINK?

Core Project team



- Dr Sam Patel, Respiratory Consultant, Clinical Project Lead NHSL
- Dr Maureen Byrne General Practice, GP Lead GG&C
- James Cardwell-Moore, Project Manager Capita Health
- Alastair Bishop IT/eHealth GG&C Lead GG&C
- Professor Gerry Mckay, Clinical Pharmacology, Consultant Secondary Care GG&C
- Dr Bill Martin General Practice, GP Lead NHSL
- Owen Walpole Management Trainee, Project Team NHSL
- Jim Little, Project Facilitation Capita Health

'... Vision is not enough: it must be combined with venture. It is not enough to stare up the steps; we must step up the stairs.'

Vaclav Havel.





Changes in clinical processes? **Education**? Improve ECS? Standards and common language? System development? In which order? WHAT DO YOU THINK?