Standardising the structure of medical records

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The clinical viewpoint

Source of clinical data for the electronic health record

Gaining consensus and developing professional standards

Dissemination, implementation and regulation

What medical records are for

Provide a consistently high standard of clinical care

Provide continuity of care

Better communicate and disseminate information between members of a wider healthcare team

Provide an accurate record of treatment care planning and delivery

Secondary purposes

- Data to support clinical audit and research
- A legal document to provide proof of care provided
- Provide information for management and policy – clinical coding

Current state of affairs

Increase in volume and complexity of clinical activity

- Accurate information crucial
- Outcome based commissioning

Working time directive for doctors

- Shorter hours more handovers

Plenty of evidence of poor record keeping

- Medical defence organisations case reports
- NHSLA financial settlements
- Audit Commission – 1995 and 1999 & PbR Framwork reports
- NHS Alliance surveys of discharge summaries
- Health Care Commission 2005/6 and 2006/7

The context

Every EHR system is different

Every hospital is different

All doctors write their notes differently

And all the other clinical professions?

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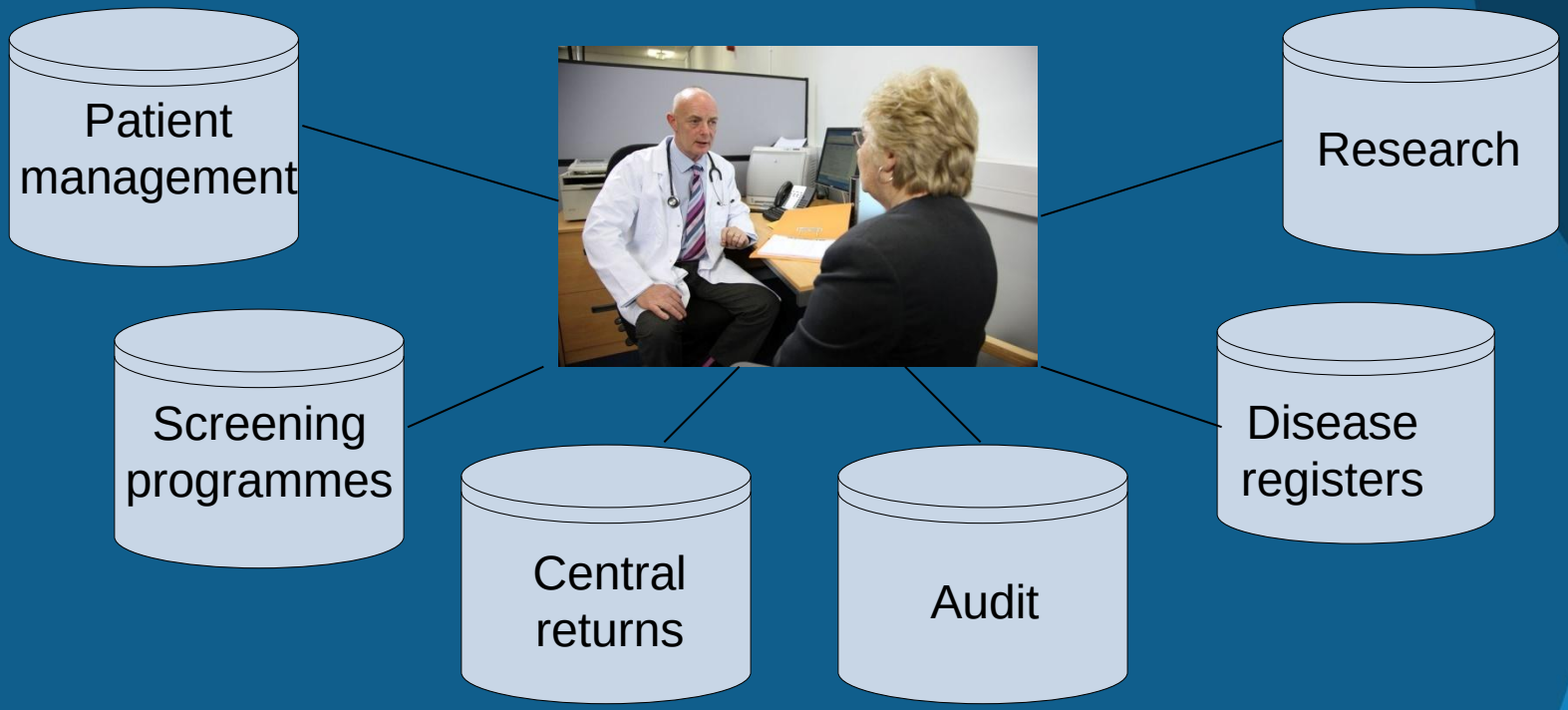
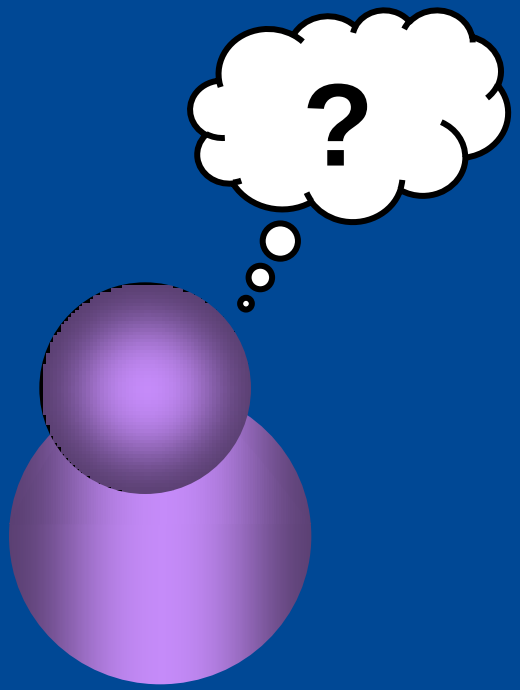
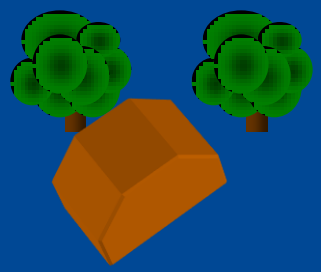
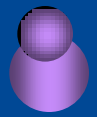

Patient management
Research
Screening programmes
Disease registers
Central returns
Audit

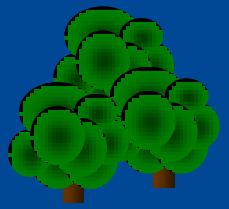


Royal College of Physicians
Setting higher medical standards

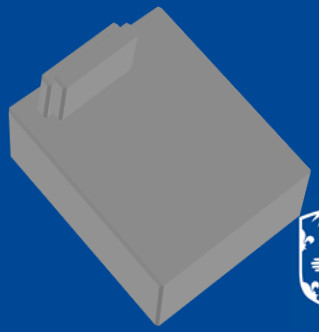


GP Surgery ↗





District General →



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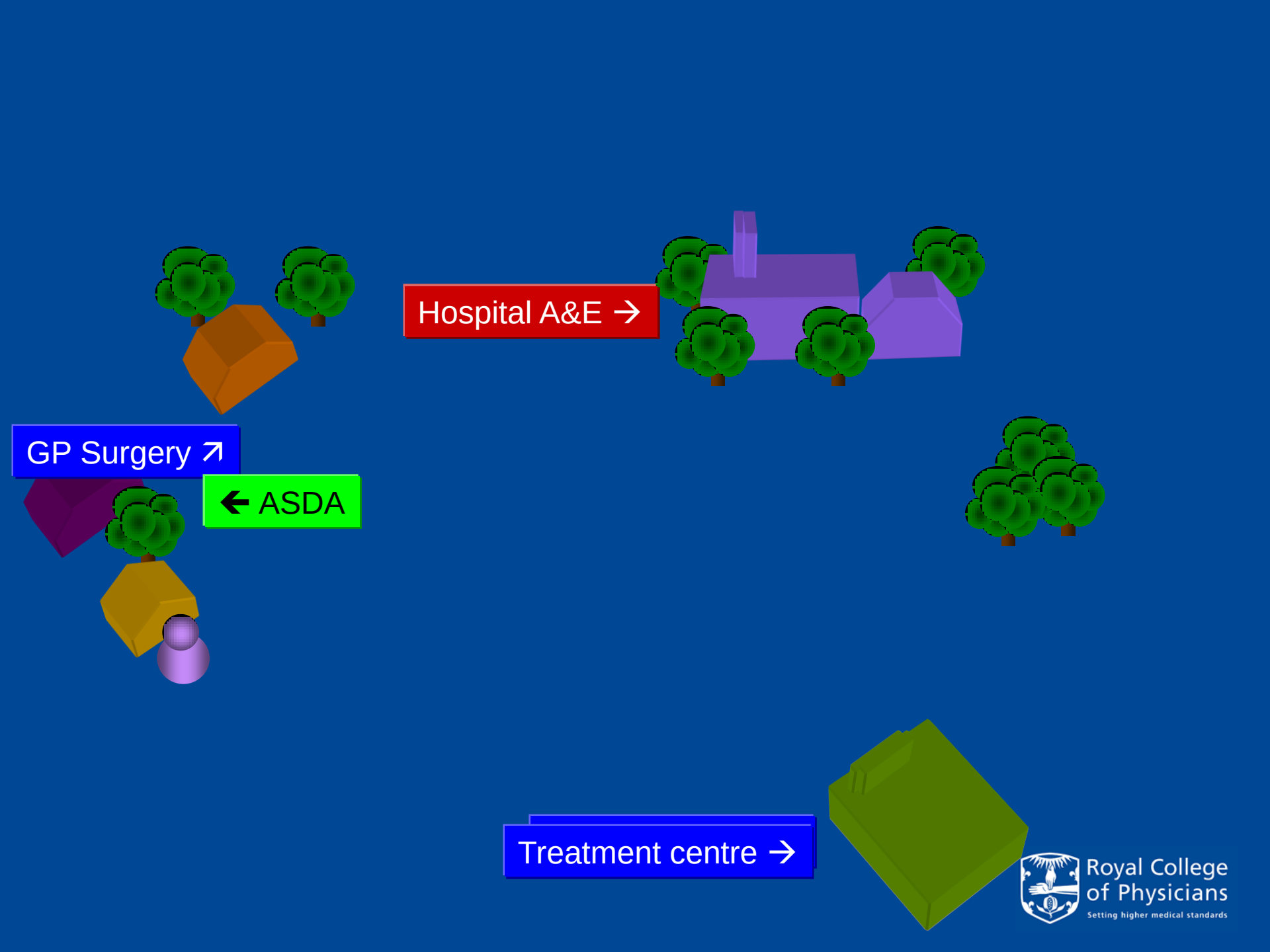

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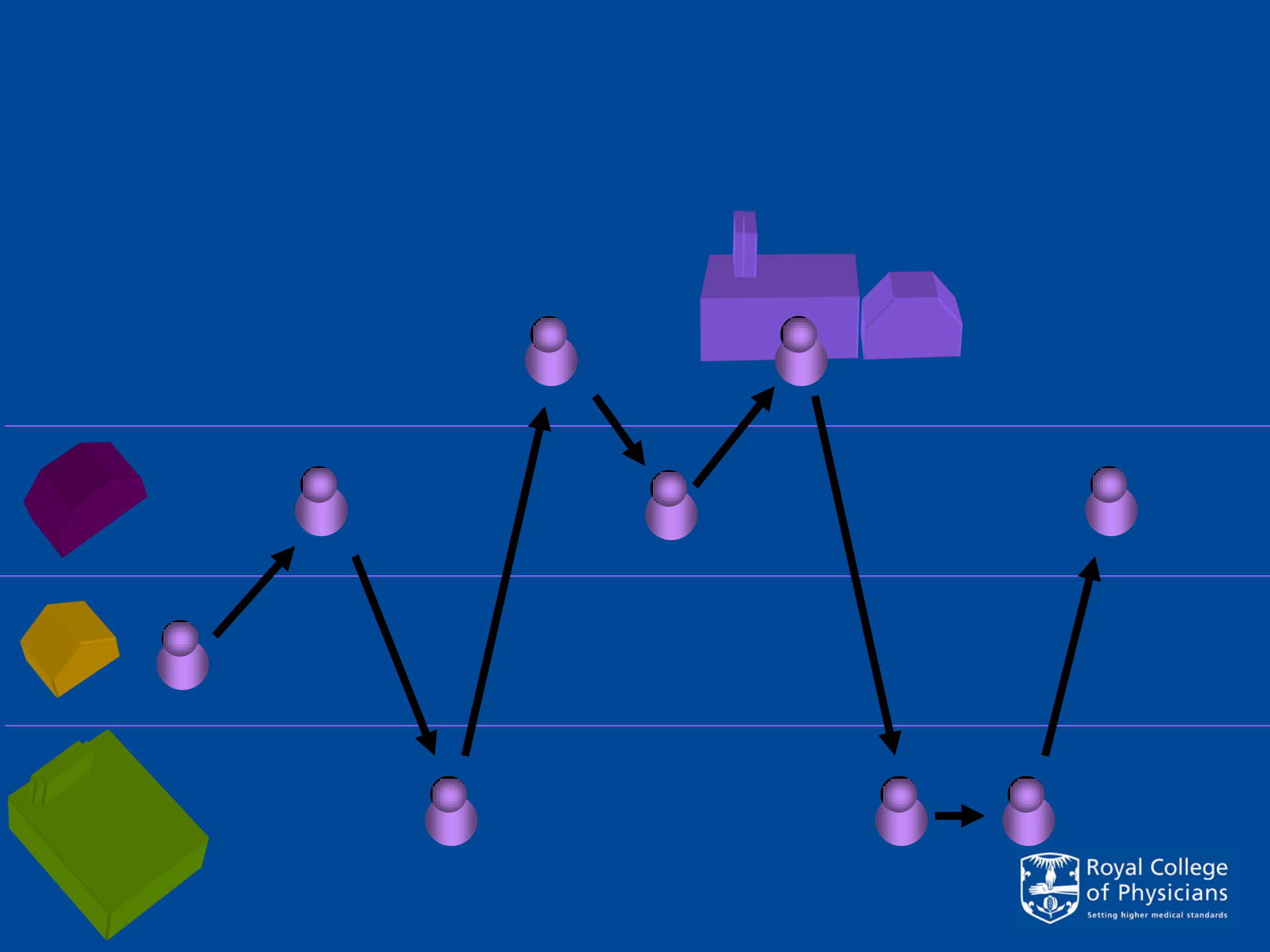

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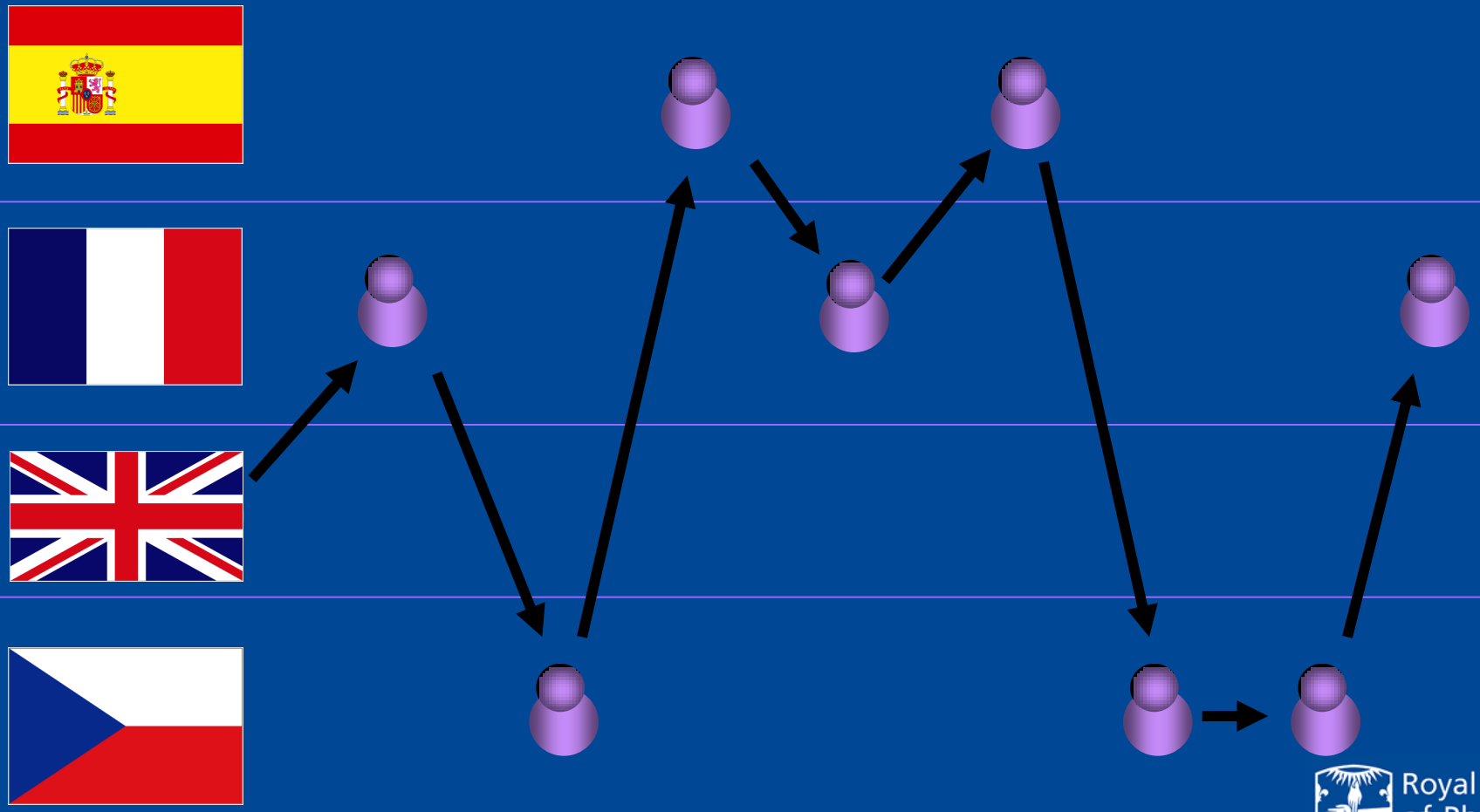

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Create some order in the chaos?

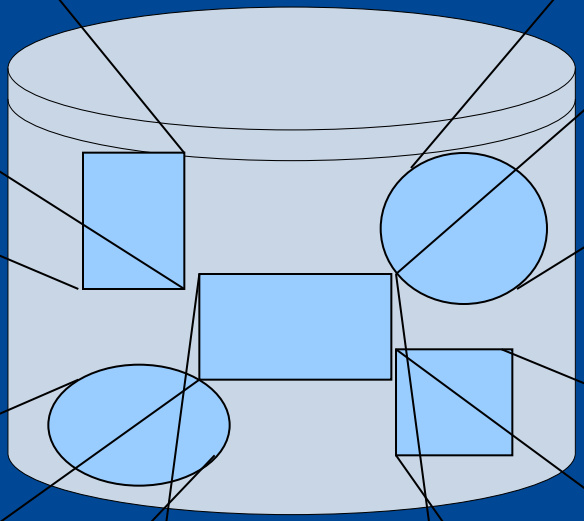
EHR's should reflect the way we work
not the way the computer works

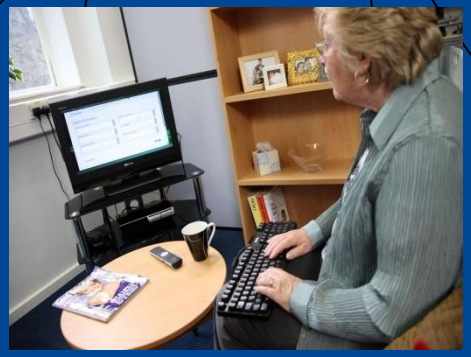
EHR's should reflect best practice

Consensus on what is best practice?

Standards for the structure and content?

Views of information in the patient focused record





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of Physicians
Setting higher medical standards

Record standards

Developing standards for content and structure

On-line questionnaire on each of the proposed headings

Admission - 3,000 responses with detailed comments from 1,900 (91% said ‘a good thing’)

Handover and Discharge > 3,000 responses

Developing standards for content and structure

RCP Patient Carer Network views sought

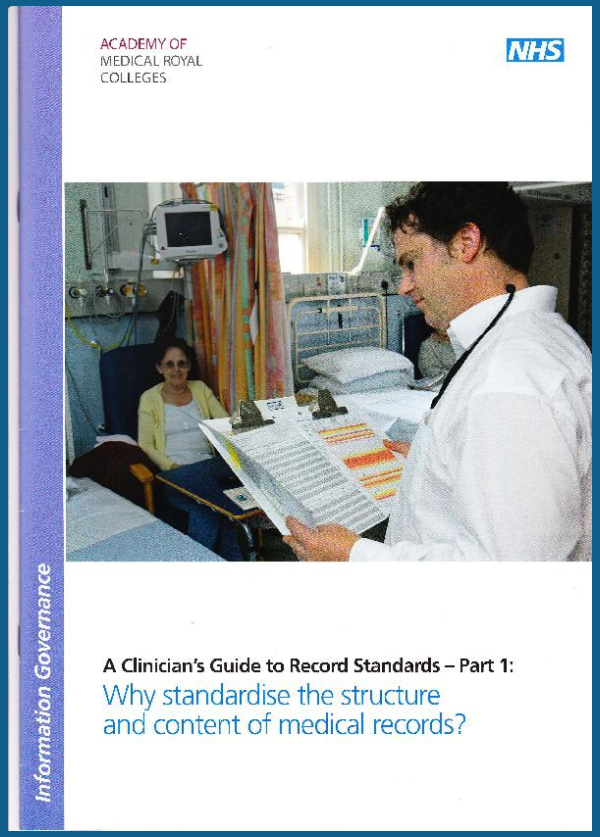
Detailed interactions with professional bodies

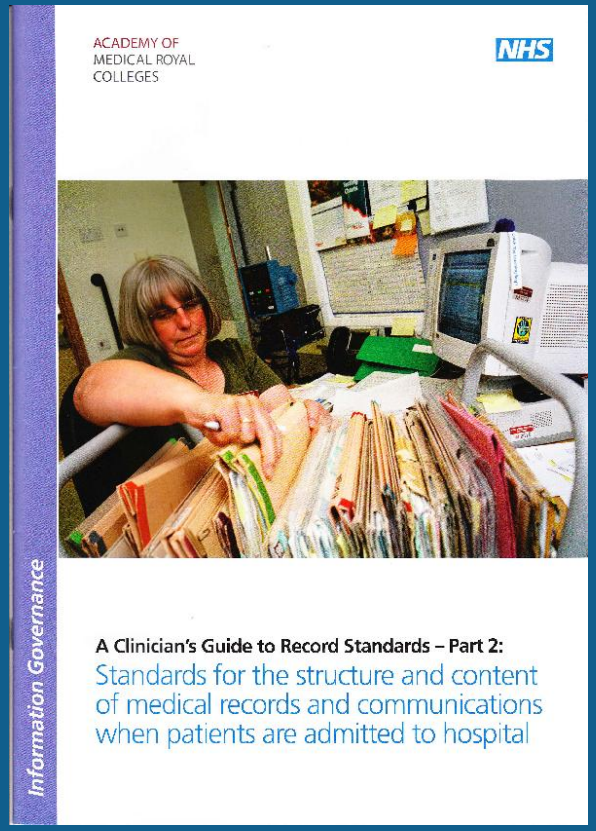
Piloted in 10 hospitals

Sign-off by the Academy of Medical Royal Colleges in April 2008

Submitted to NHS Connecting for Health and Information Standards Board

Developing national standards





Headings/sub-headings	Definition/illustrative description of the type of clinical information to be recorded under each heading
Social history	
- Lifestyle	The record of lifestyle choices made by the patient which are pertinent to his or her health or social care. Example the record of the patient's current and previous use of tobacco products, alcohol, recreational drugs pets, hobbies and sexual habits, menstrual and coital history.
- Social and personal circumstances	The record of a patient's social background, network and personal circumstances, eg occupational history, housing and religious, ethnic and spiritual needs.
- Services and carers	The description of services and carers provided for the patient to support their health and social wellbeing.
Family history	The record of significant illness in family relations deemed to be significant to the care or health of the patient, including mental illness and suicide.
Systematic enquiry	The record of clinical information gathered in response to questions to the patient about general symptoms from various physiological systems, including food intake (increasing/ decreasing), weight change, swallowing difficulties. Mood/anxiety etc.
Patient's concerns, expectations and wishes	The record of the patient's comments related to their perceptions of their symptoms, their wishes and goals related to their health and their perceptions of their anticipated treatment ((which may influence treatment). This could be the carer giving information if the patient is not competent. Also the extent to which the patient wants clinical information to be shared with relatives and others.
Observations and findings	Any clinical observation or finding made by the clerking doctor, with or without specific clinical examination.
- General appearance	The record of a doctor's 'end of the bed' assessment including general clinical examination findings, eg clubbing, anaemia, jaundice, obese/malnourished/cachectic, height, weight etc.
- Structured scales	eg Glasgow Coma Scale, ADL scales such as Barthel, nutrition screening scale etc.
- Vital signs	The record of essential physiological measurements, eg respiration rate, 02 saturation, heart rate, blood pressure, temperature and weight, Early Warning Score (EWS), including the time and date they were obtained.
- Mental state	eg Depression, anxiety, confusion, delirium.
- Cardiovascular system	The record of findings from the cardiovascular system examination.
- Respiratory system	The record of findings from the respiratory system examination.
- Abdomen	The record of findings from the abdominal examination.
- Genito-urinary	The record of findings from the genito-urinary examination.
- Nervous system	The record of findings from the nervous system examination.
- Musculoskeletal system	The record of findings from the musculoskeletal system examination.
- Skin	The record of findings from examination of the skin.
Problem list and/or differential diagnosis	Summary of problems that require investigation or treatment.
Relevant risk factors	Factors that have been shown to be associated with the development of a medical condition being considered as a diagnosis/ differential diagnosis. Thrombo-prophylaxis.
Discharge planning	Information in relation to discharge planning should be entered here, starting at the time of admission.

The data for clinical outcomes

Based on NICE quality indicators

We believe principal data source will be primary care systems

Sources of secondary care clinical outcome data will be HES and hospital communications

- OP letters discharge summaries

Electronic Discharge Summaries

IT systems cannot automatically interpret e-discharge summary data or re-use it within local patient records.

General Practitioners read ‘stacks’ of Discharge Summaries, local electronic records only updated manually.

Patients often receive hand-written paper discharge notes that are incomplete and difficult to read.

- Diagnosis at discharge	Primary diagnosis, secondary diagnoses and relevant previous diagnoses, including
- Operations and procedures	New and relevant previous operations and
- Reason for admission and Presenting complaints	The health problems and issues experienced by the patient resulting in their referral by a healthcare professional for hospital
- Structured scales	e.g. Glasgow Coma Scale, ADL scales such as
- Medication changes	If admission medication stopped need to state reason. If medication started and
- Discharge medications	Can include: • medication dispensed on discharge
Advice, recommendations and future plan	
Patient's concerns, expectations and wishes	The patient's expressed wishes, expectations and concerns.
Information given to patient and/or authorised representative	This can include: • relatives and carers • specific verbal advice and details of any discussions

Measuring Outcomes

- Diagnosis at discharge	Primary diagnosis, secondary diagnoses and relevant previous diagnoses, including complications and co-morbidities (e.g. for coding purposes).
- Operations and procedures	New and relevant previous operations and procedures, including complications and adverse events.
- Reason for admission and Presenting complaints	The health problems and issues experienced by the patient resulting in their referral by a healthcare professional for hospital admission, e.g. chest pain, blackout, fall, a specific procedure, investigation or treatment.
- Structured scales	Severity of illness scales

Outpatients

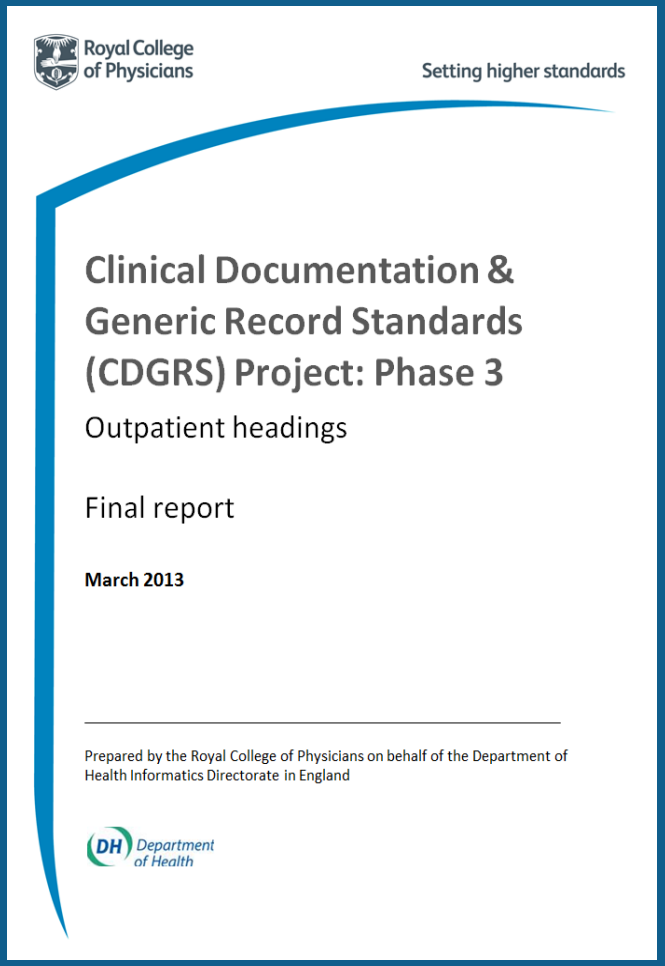
In 2008/9 there were:

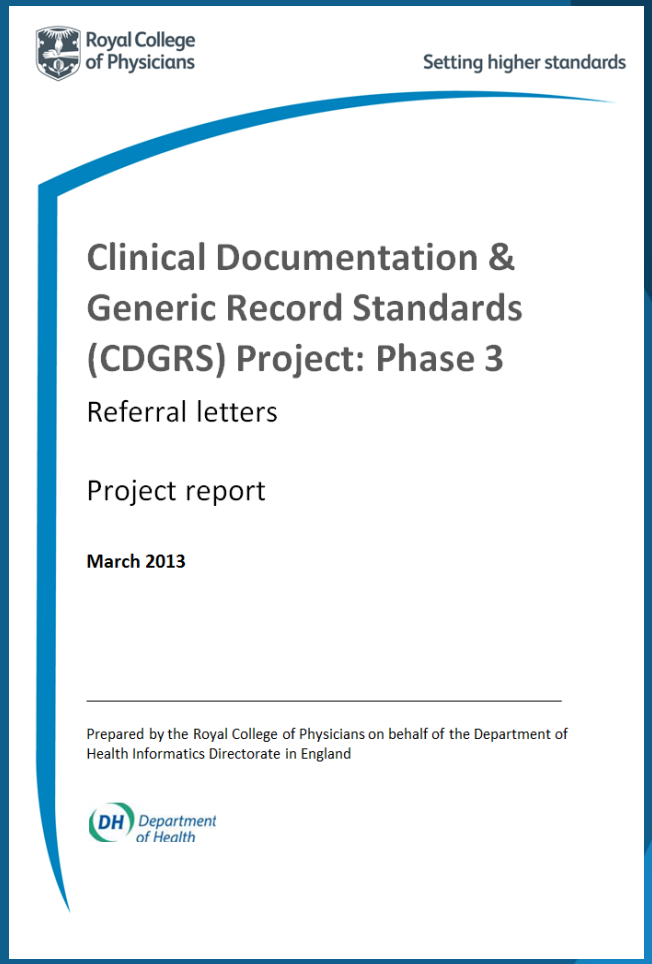
- 18.7 million first outpatient attendances
- 41.8 million subsequent attendances
- 72% first attendances advice/consultation
  6% specific procedure
- Remainder unknown = 4.1 million
- 14.2 million admissions for inpatient care

Outpatients
Varied and changing

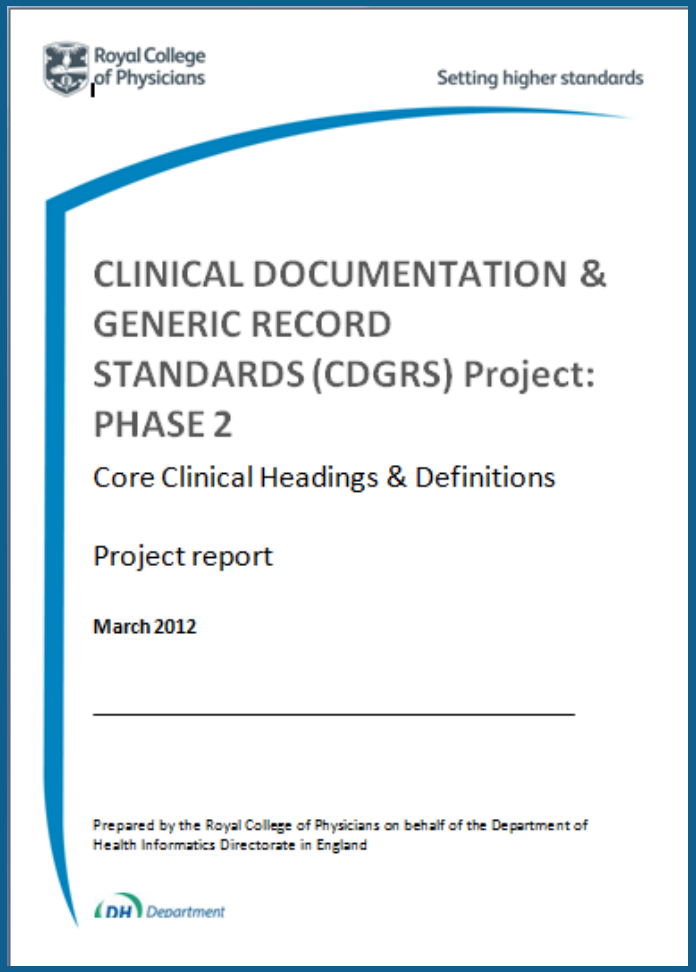
- Some specialties are primarily outpatients
- Specialised services
- Changing dramatically
  - Procedure based
  - New technologies
- About clinicians and patients

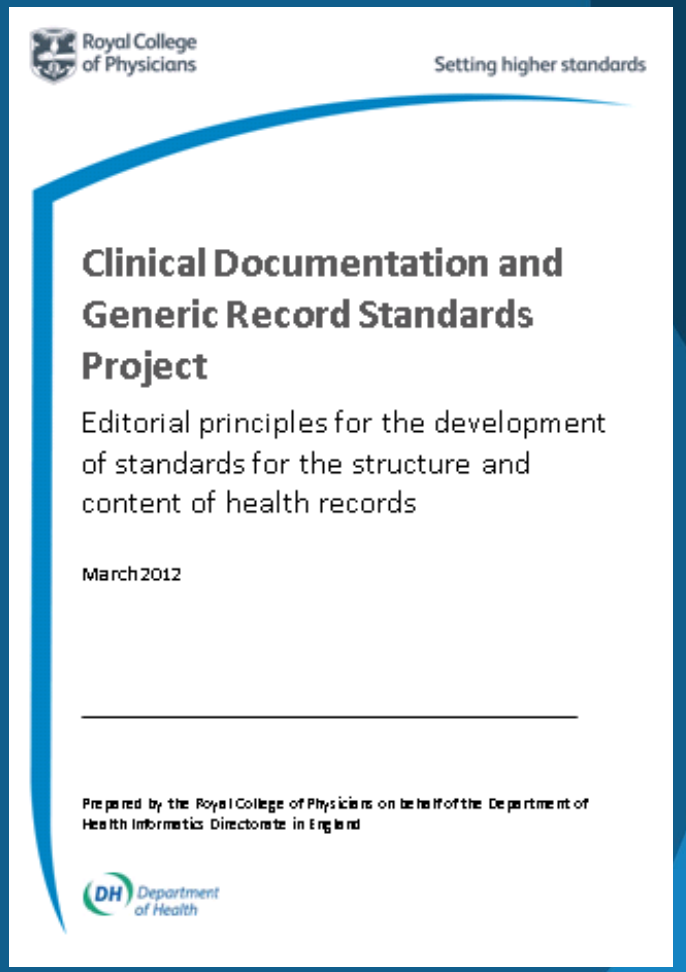
Outpatient and Referral Standards





Core Headings and Editorial Principles





DHID discharge summary project

- A gold standard electronic discharge summary
- Developed in a collaborative project between primary and secondary care
- Implementation toolkit published in summer 2011
- It will lead to summaries being sent and received directly and safely between computer systems.

http://www.connectingforhealth.nhs.uk/systemsandservices/clinrecords/24hour

Department of Health

The Discharge Summary Implementation Toolkit


About this Toolkit >


24 hr Discharge Summary >

Discharge Summary Standard >


Customising the Headings >


Case Studies >


References, Links and Contacts >

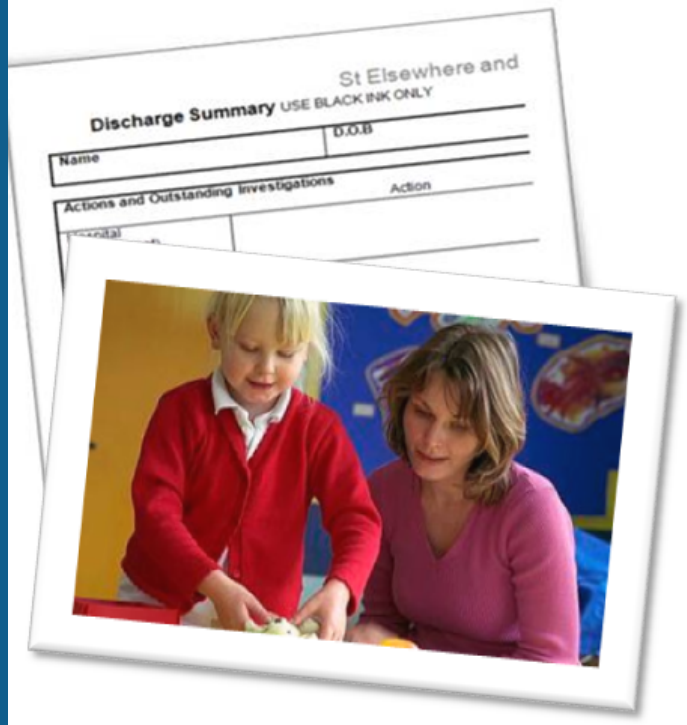
Version 1.0 July 2011

Contents Next

The Discharge Summary Standard

This project is based on the Headings published by the Royal College of Physicians in October 2008 after its approval by the Academy of Medical Royal Colleges . This section gives more detail about these headings and how they were defined.

Click on one of the sections or the Next button to continue.



1. Background of the Standard
2. What is a Discharge Summary Heading?
3. Headings as a Standard

Information on the discharge summary project available at:

http://www.connectingforhealth.nhs.uk/systemsandservices/clinrecords/toolkit/24hour

http://tinyurl.com/discharge-summary

The new revised standards

HISTORY	DESCRIPTION	TECHNICAL NOTE
History of Each Presenting Complaint or Issue	Information directly related to the development and characteristics of each presenting complaint. Including if the information is given by the patient or their carer.	This is linked to 'Presenting Complaint or Issue', so they would need to relate to each other in the IT system - impacting on messaging standards. SNOMED CT and/or plain text, and or/images
History since last contact	History since last attendance, discharge from hospital, etc.	No NHS DD entry. SNOMED CT and/or plain text
Information brought by patient	For example Patient Passport, diary data, pre-completed questionnaire, etc.	No NHS DD entry. Attributes: *Type of information (e.g. passport, diary) *Source of information (e.g. internet) *Copy of information (Word, PDF etc.) May just be plain text.

HISTORY	DESCRIPTION	TECHNICAL NOTE	UKTC comments
Reason for Referral	A clear statement of the purpose of the person making the referral e.g. diagnosis, treatment, transfer of care due to relocation, investigation, second opinion, management of the patient (e.g. palliative care), provide referrer with advice / guidance. This may include referral because of carers' concerns.	No NHS DD entry. May be SNOMED CT coded or plain text. To enable outcomes to be analysed coded data required, so this would be the direction of travel. Reason for admission, handover and referral are all types of 'Reason for contact'.	
Patient's Reason for Referral	Patient stated reason for referral. This may include any discussions that took place, the level of shared decision making involved, information about patients' source of advice. This may be expressed on behalf of the patient e.g. by parent or carer.	Plain text No DD entry	716101000000104 | Reason for referral (record artifact), patient reason could be captured in the value. 829261000000109 | Patient narrative (record artifact)

Clinical details

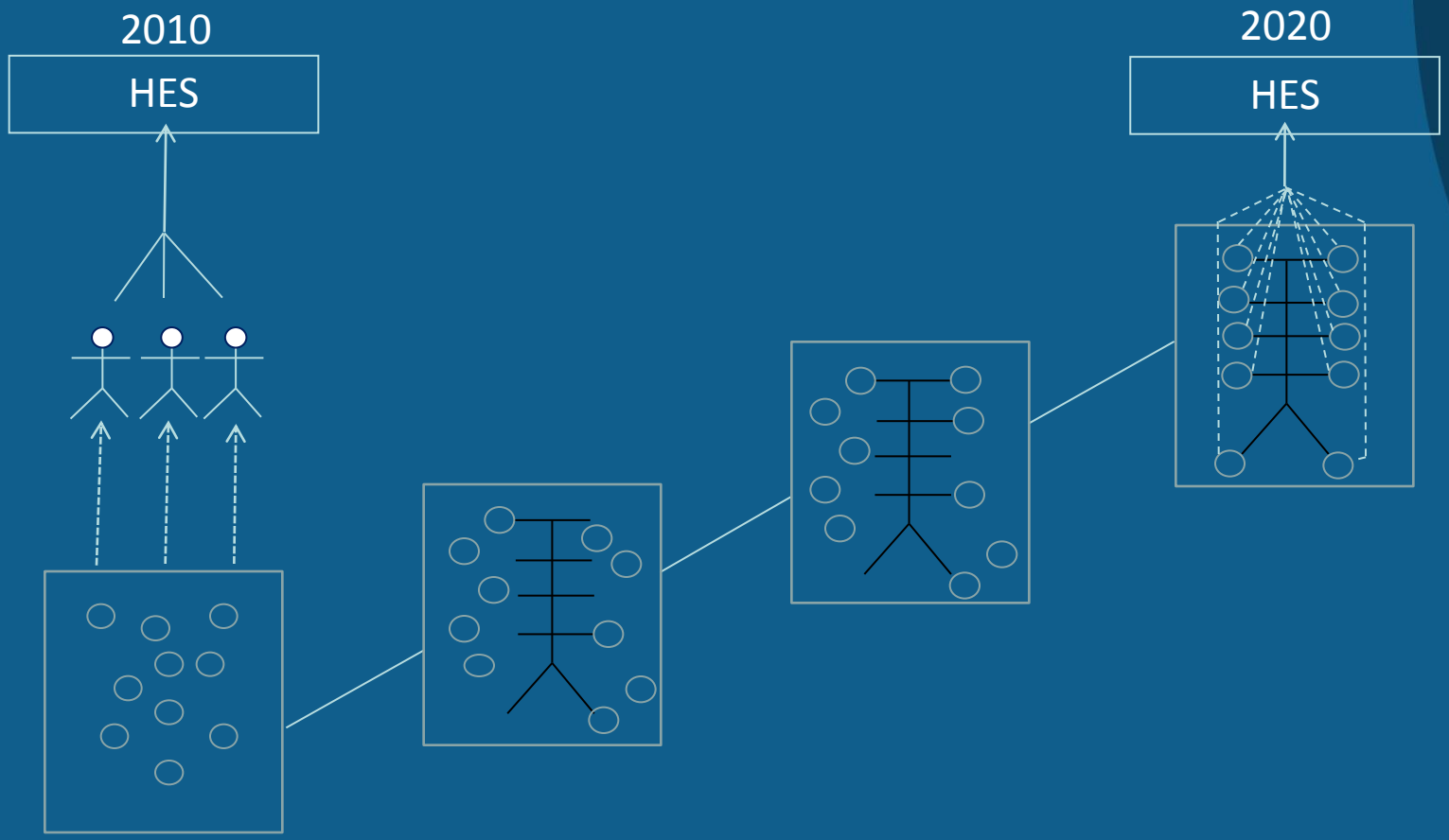
Subheadings	Clinical description	C	A	H	D	O	R
Reason for Admission	The health problems and issues experienced by the patient resulting in their referral by a healthcare professional for hospital admission, e.g. chest pain, blackout, fall, a specific procedure, investigation or treatment.	1	1	1	1	0	0
Reason for Handover	A clear statement of the reason for the temporary or permanent handover of care e.g. low potassium, immediately post-op, unstable medical condition.	1	0	1	0	0	0
Reason for Referral	A clear statement of the purpose of the person making the referral e.g. diagnosis, treatment, transfer of care due to relocation, investigation, second opinion, management of the patient (e.g. palliative care), provide referrer with advice / guidance. This may include referral because of carers' concerns.	1	0	0	0	1	1
Patient's Reason for Referral	Patient stated reason for referral. This may include any discussions that took place, the level of shared decision making involved, information about patients' source of advice. This may be expressed on behalf of the patient e.g. by parent or carer.	1	0	0	0	1	1

Referral template

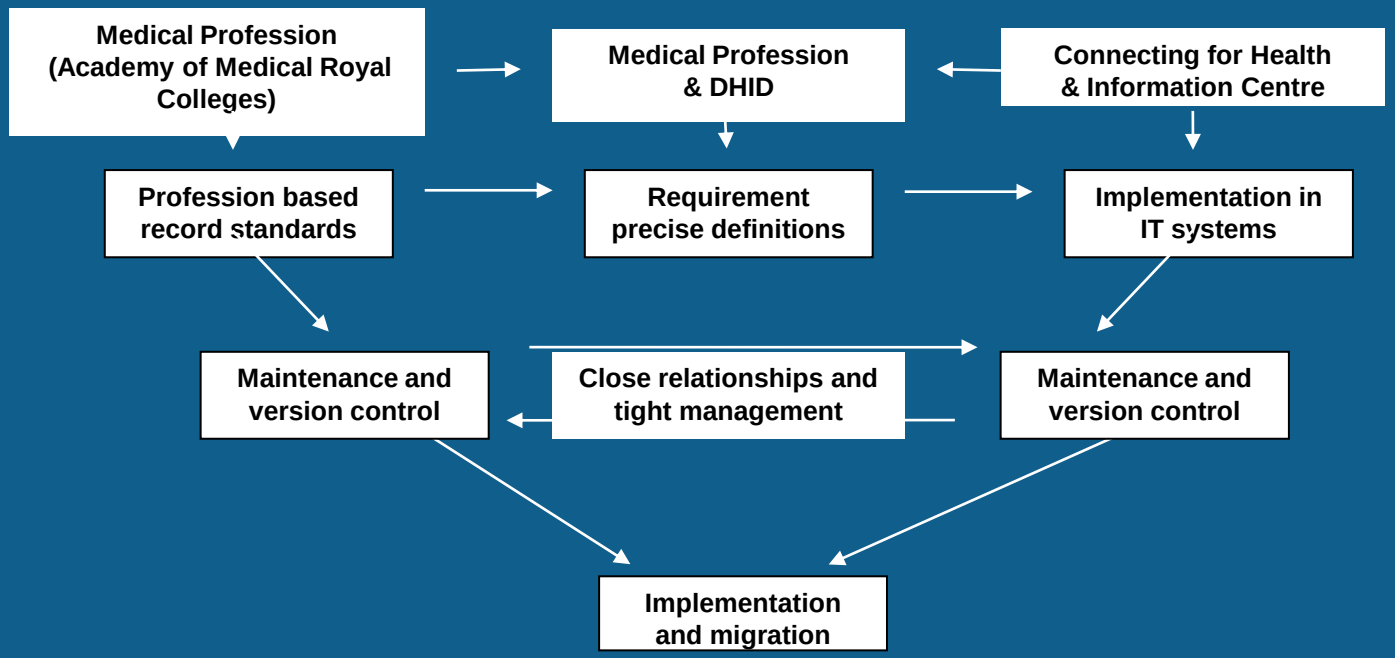
HISTORY	• Reason for Referral • Expectation of Referral • Patients' Reason for Referral • Patients' Expectation for Referral • Presenting Complaint or Issues	• History of Each Presenting Complaint or Issue • Relevant Past Medical, Surgical & Mental Health History • Management to Date • Urgency of Referral
FAMILY HISTORY	• Family History	
SOCIAL CONTEXT	• Lifestyle • Smoking • Alcohol Intake • Occupational History	• Social Circumstances • Household Composition • Lives Alone • Services and Care
EXAMINATION FINDINGS	• Examination Findings • Vital Signs	
ASSESSMENT SCALES	• Assessment Scales	
INVESTIGATIONS AND RESULTS	• Investigations Requested • Investigations Results • Procedures Requested	

Outpatient letter template

DIAGNOSES	• Diagnosis • Differential diagnosis
RELEVANT CLINICAL RISK FACTORS	• Relevant clinical risk factors • Clinical Risk Assessment • Risk mitigation
CLINICAL SUMMARY	• Clinical summary
INVESTIGATIONS AND RESULTS	• Investigations requested • Investigation results • Procedures requested
PROCEDURES	• Procedure • Complications related to Procedure • Specific Anaesthesia Issues
PLAN	• Actions • Agreed with patient or legitimate patient representative (Y/N) • Next appointment details


2010
HES
2020
HES

Consistency & technical precision

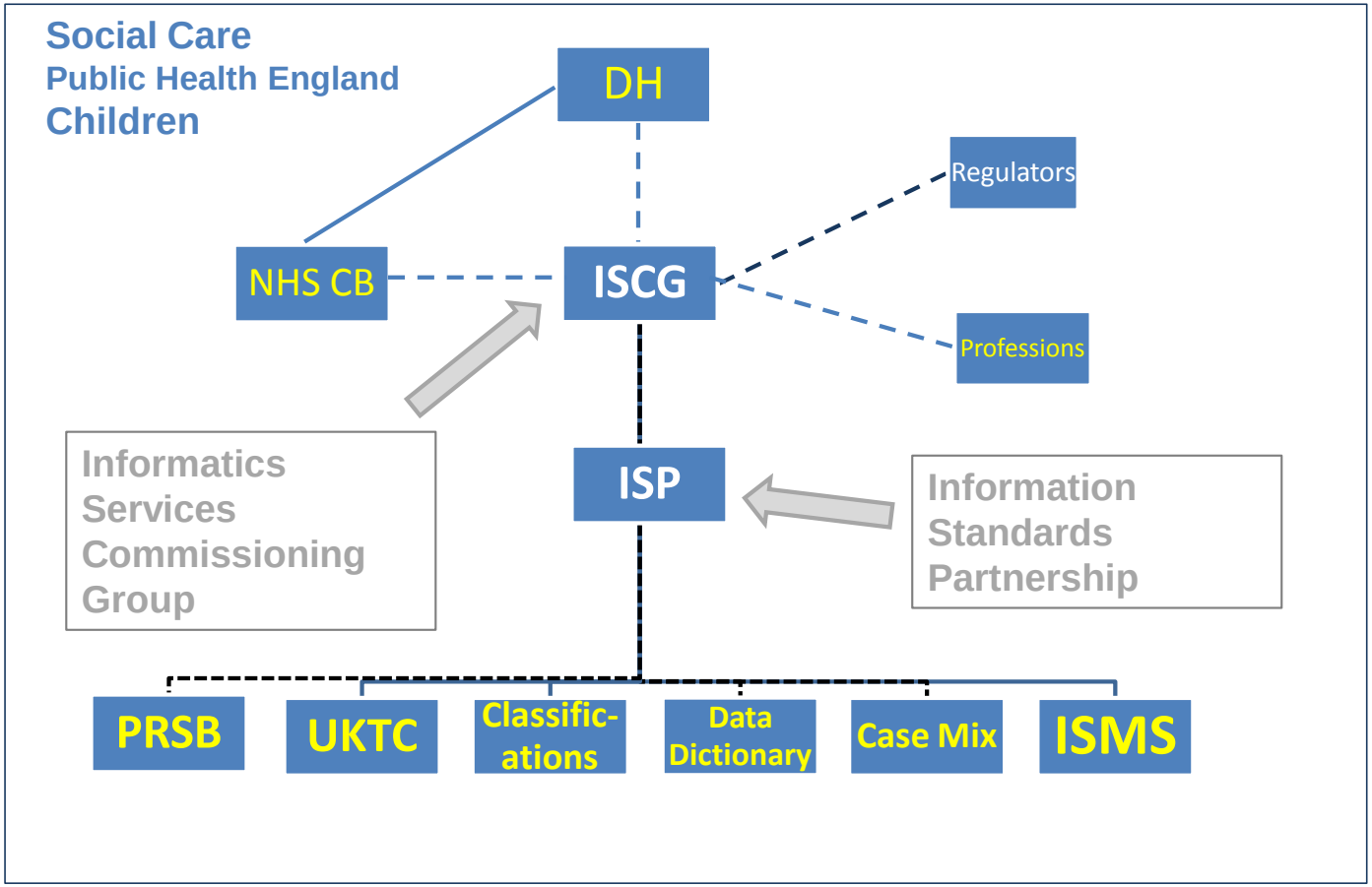


www.rcplondon.ac.uk/sites/default/files/devoloping-standards-for-social-care-records-report-of-joint-working-group.pdf

The JWG recommended the establishment of a Professional Record Standards Body to lead the development and professional assurance of clinical record standards across all specialties and clinical disciplines.

The standards will provide the foundation upon which to base the collection, storage, communication, aggregation and reuse of structured clinical information across organisational boundaries throughout health and social care.

Future State



Implementing the national standards

Embedded in

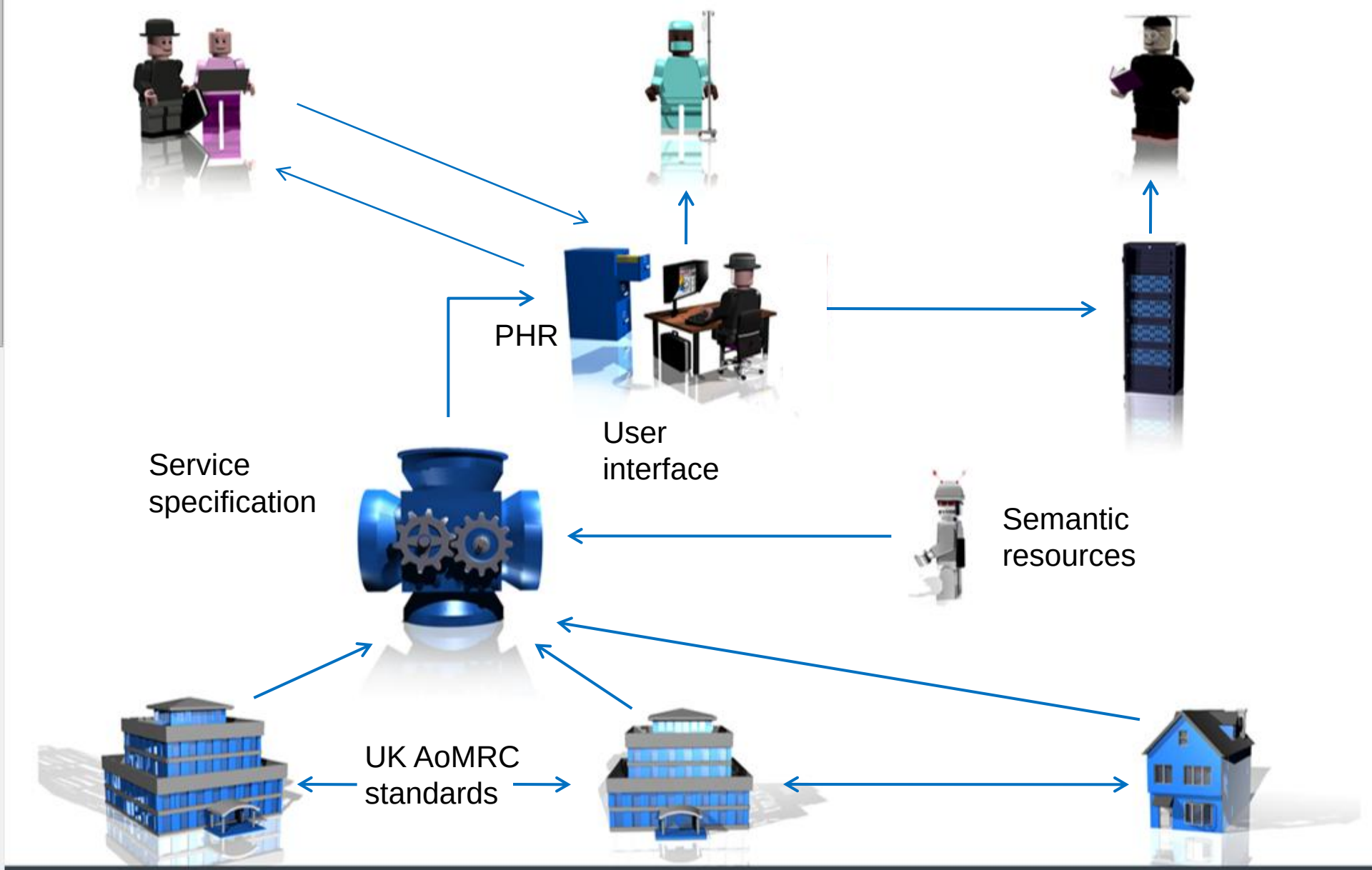
- GMC Tomorrow's Doctors
- NHSLA risk management standards
- Foundation years curriculum
- Revalidation

Royal Pharmaceutical Society

- transfer of care standards for medicines

DHID (CFH) discharge summary project

NHS Information Strategy


PHR
User interface
Service specification
Semantic resources
UK AoMRC standards

SUMMARY

The clinicians want an EHR system that reflects the way they work (and works!)

Evidence and consensus based professional standards for structure and content of clinical records

Dissemination, implementation, maintenance and regulation

Further information

Informatics@rcplondon.ac.uk