National Programme for IT

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OMG/HL7 workshop

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- Our aims

- What is the National Programme for IT?

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- Benefits

- Questions

In 2003-2004:

- there were 325 million consultations with GPs or nurses in primary care

- 13.3 million people attended a first outpatient appointment with a consultant

- nearly 13.9 million people attended A&E and there were 4.2 million emergency admissions

- over 5.4 million people were admitted to hospital for planned treatment

- over 649 million prescription items were dispensed in the community

- 6.4 million calls were made to NHS Direct

- 6.5 million hits to NHS Direct Online

- over 1.5 million patients visited walk-in centres

Context

- Trusts

  - Most systems do not support the movement of information between buildings and departments

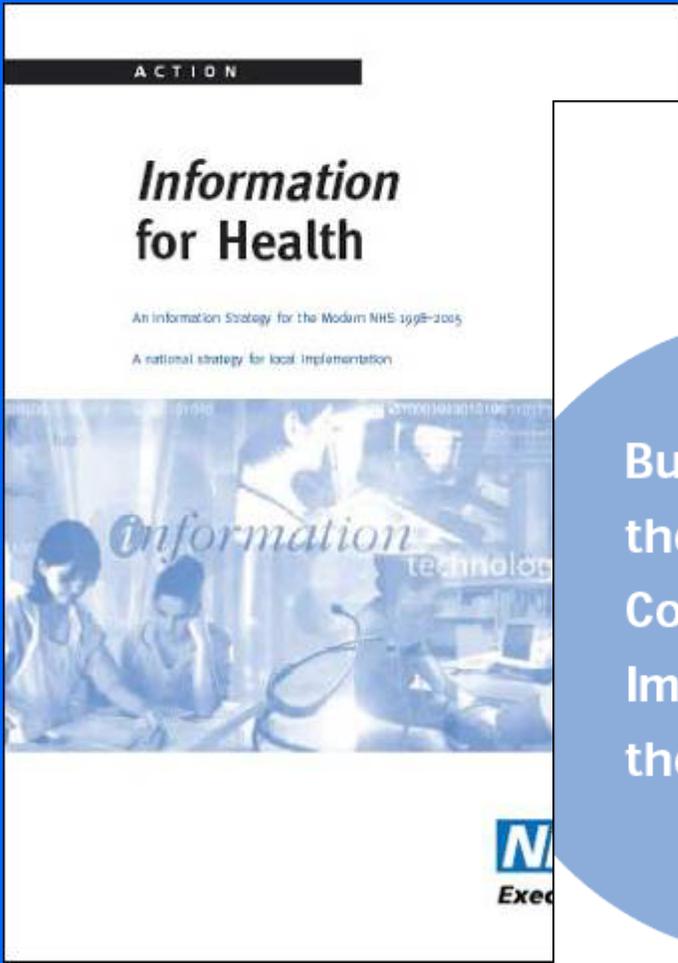 - Several records often created for the same patient

Context

- Primary Care

  - Most individual practices have their own IT applications and databases

  - Patient records are not easily transferred to other practices or care providers

  - Development and effective implementation of care pathways is inhibited

  - Paper-based records delay modernisation and the delivery of National Service Frameworks
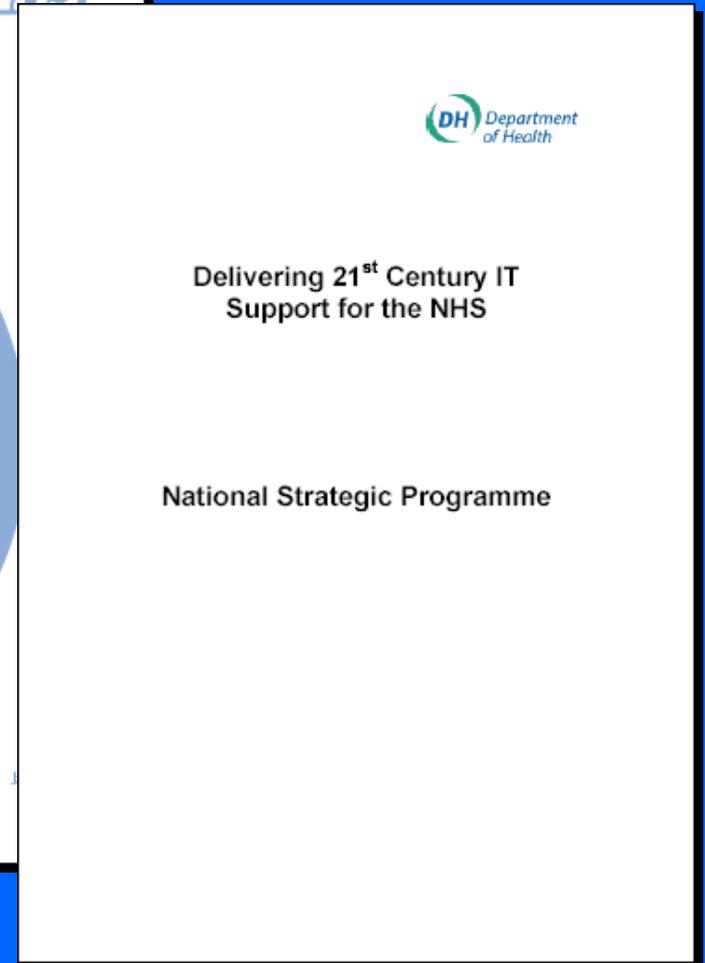
Context

Information for Health
An Information Strategy for the Modern NHS 1998–2005
A national strategy for local implementation

Sept 1998

Building the Information Core – Implementing the NHS Plan

Jan 2001

Delivering 21st Century IT Support for the NHS

National Strategic Programme

June 2002

Context

NHS

National Programme for Information Technology

launched October 2002

Se

Our aims

To improve patient choice and the quality and convenience of care by ensuring that those who give and receive care have the right information at the right time

To deliver 21st century IT support for a modern and more efficient NHS

What is the National Programme for IT?

NHS Care Records Service

Choose & Book

Electronic Transmission of Prescriptions

N3, the National Network

NHS Care Records Service

- In a study of 317 GPs in Yorkshire, 17% said that lost paper records had led to wrong drugs being given

- 60% thought that the introduction of electronic records would improve standards of care
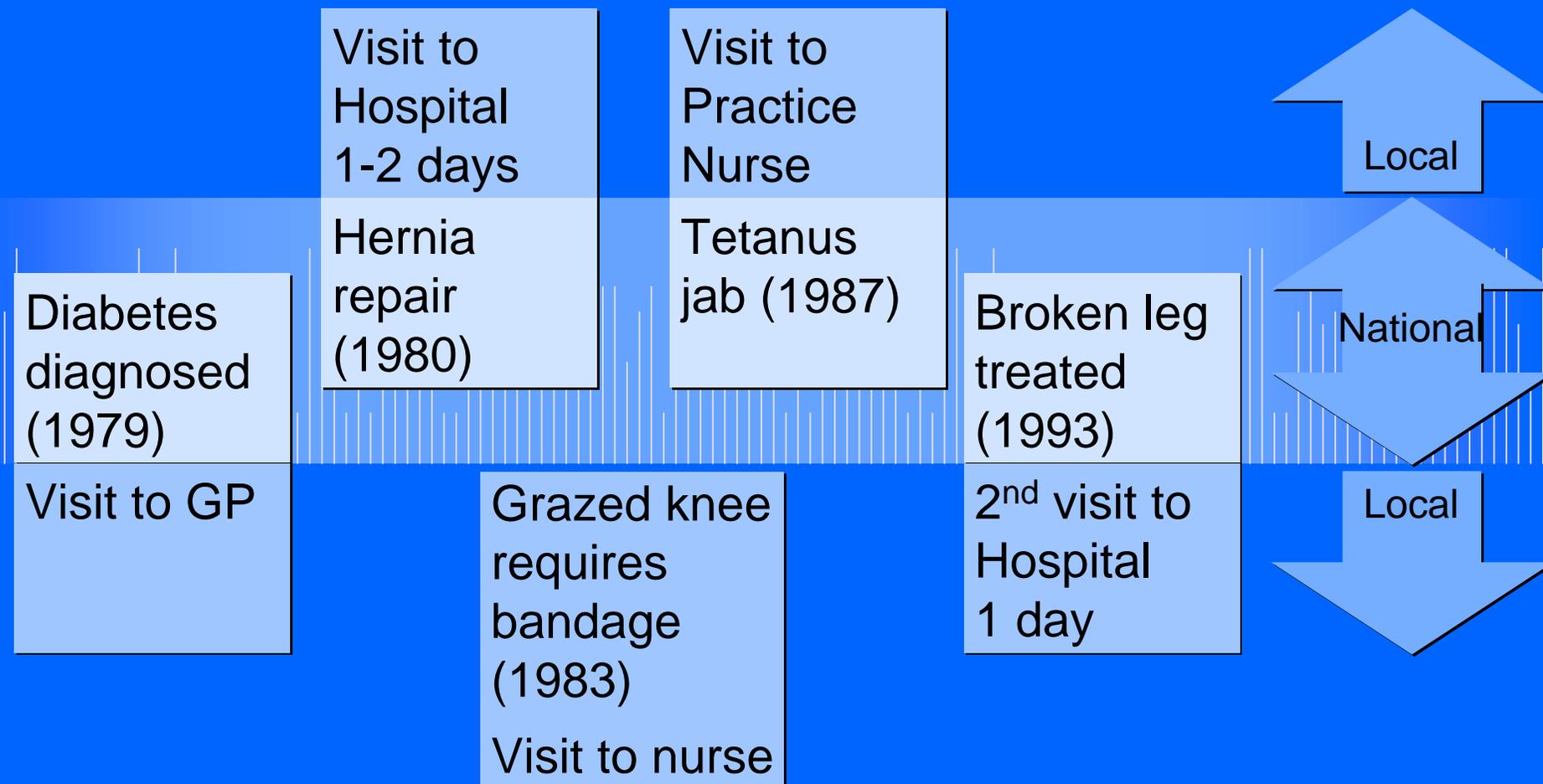
NHS Care Records Service

- A single electronic health record for every patient in England
  - a comprehensive history of patients' health and care information, regardless of where, when and by whom they were treated
  - providing healthcare professionals with immediate access to medical records and care notes 24 hours a day, seven days a week
  - in time, individuals will have access to their own health record
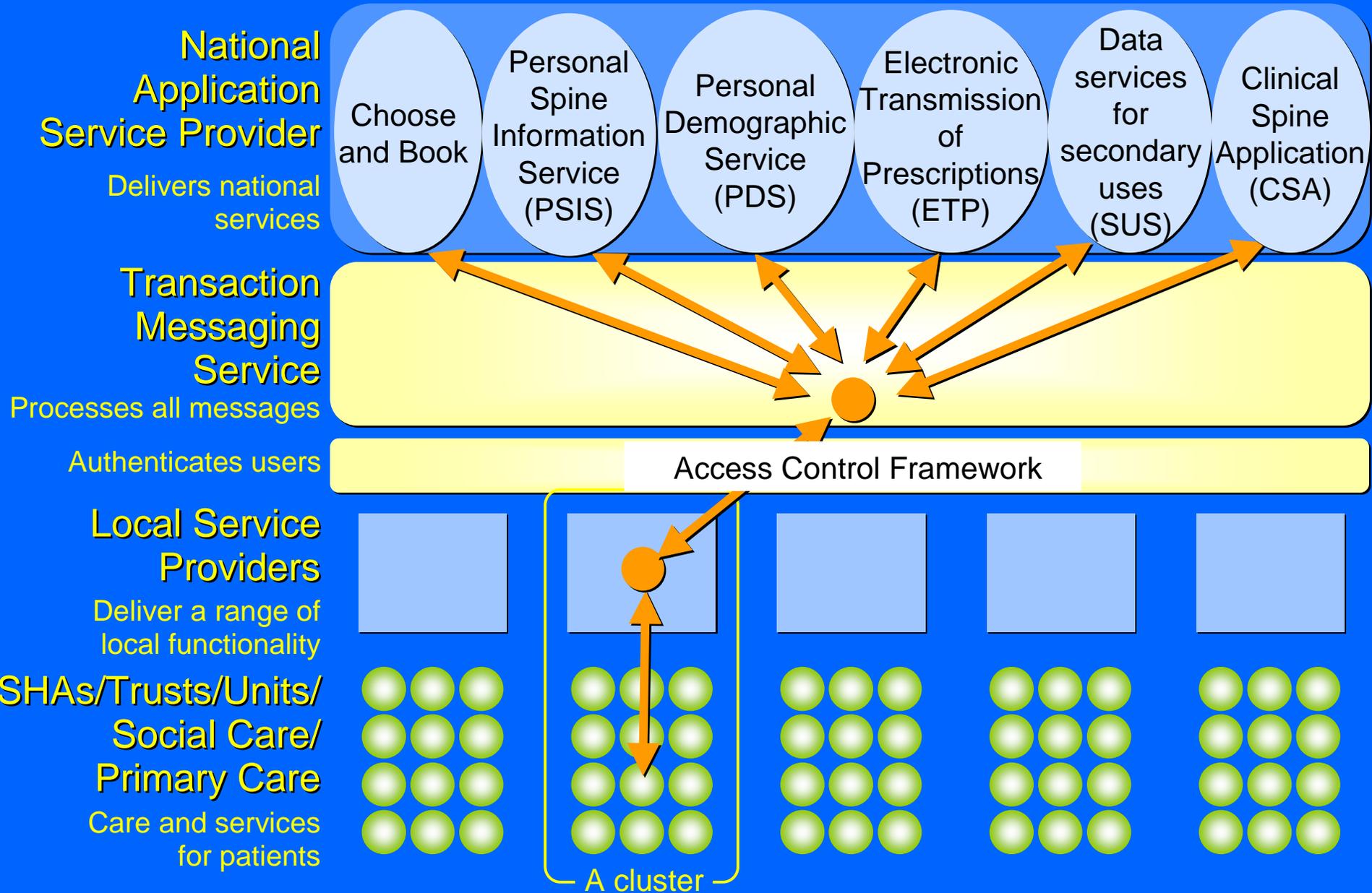 - supporting the NHS in collecting and analysing information

NHS Care Record

Patient X NHS Care Record National and Local

NHS No: 000 000 0000

Year 2005

	Visit to Hospital 1-2 days	Visit to Practice Nurse	
	Hernia repair (1980)	Tetanus jab (1987)	
Diabetes diagnosed (1979)			Broken leg treated (1993)
Visit to GP	Grazed knee requires bandage (1983)		2nd visit to Hospital 1 day
	Visit to nurse		

Local

National

Local

NHS Care Record Service Overview

National Application Service Provider

Delivers national services

- Choose and Book
- Personal Spine Information Service (PSIS)
- Personal Demographic Service (PDS)
- Electronic Transmission of Prescriptions (ETP)
- Data services for secondary uses (SUS)
- Clinical Spine Application (CSA)

Transaction Messaging Service

Processes all messages

Authenticates users

Access Control Framework

Local Service Providers

Deliver a range of local functionality

SHAs/Trusts/Units/ Social Care/ Primary Care

Care and services for patients

A cluster

NHS Care Records Service

- **Benefits for patients**
  - improved quality and convenience of care
  - participation in care decisions
  - access to personal health information

- **Benefits for clinicians**
  - improved patient information and access to patient records
  - reduced administrative burden
  - more efficient and appropriate referrals

- **Benefits for the NHS**
 - greater ability to plan according to demand and improve performance

Choose & Book

- Choose and Book will enable patients to choose a convenient place, date and time for their initial hospital appointment

- By the end of 2005, patients in England will be able to choose from one of four or five hospitals (or other healthcare provider facilities) commissioned by their PCT

- A big step towards giving patients greater involvement in the choices and decisions about their treatment

Choosing and booking hospital appointments – three simple steps
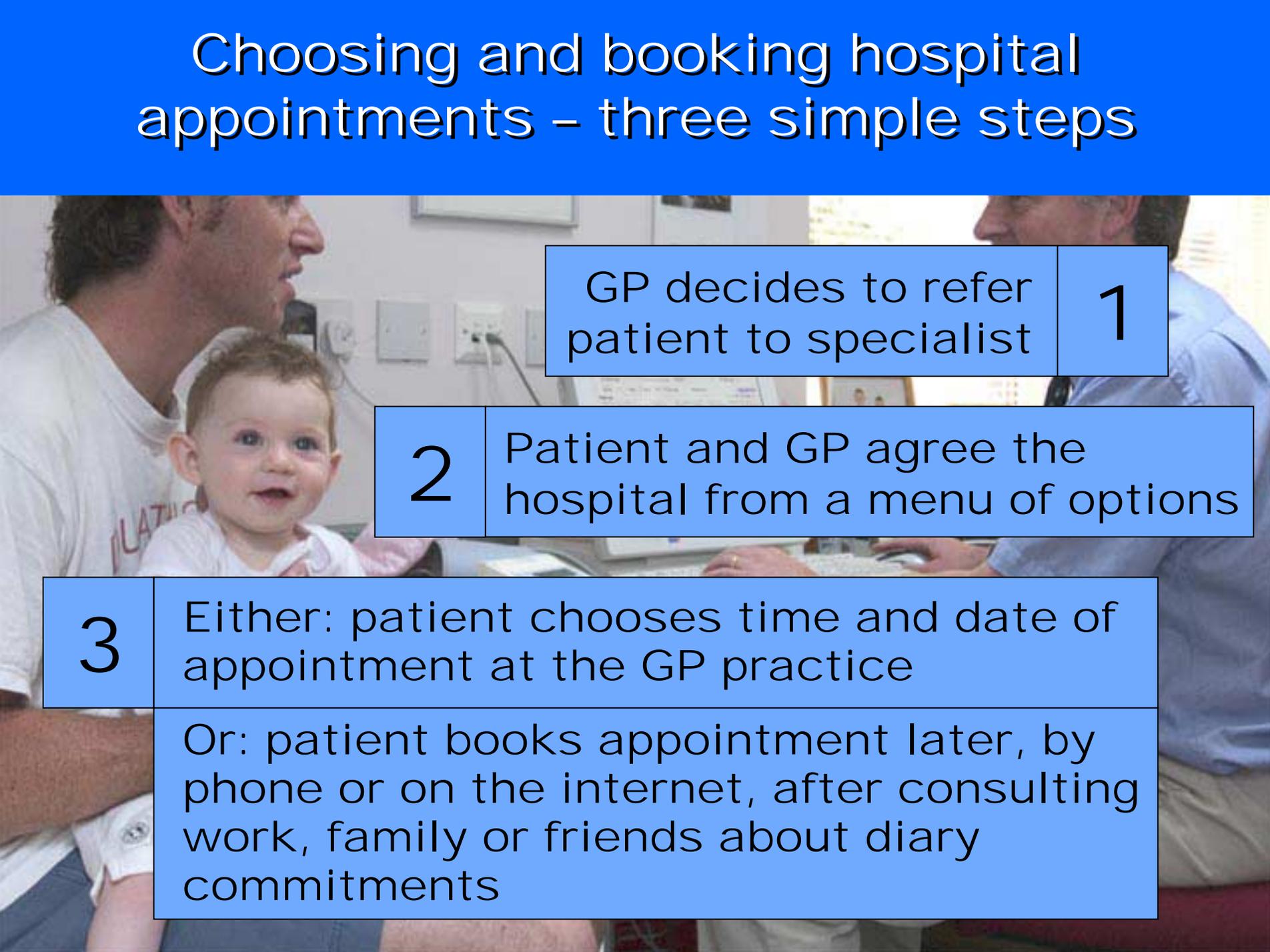
GP decides to refer patient to specialist | **1**

2 | **Patient and GP agree the hospital from a menu of options**

3 | **Either: patient chooses time and date of appointment at the GP practice**

Or: patient books appointment later, by phone or on the internet, after consulting work, family or friends about diary commitments

Choose & Book

- Benefits for patients
  - more choice and control over when and where they are treated
  - greater convenience and certainty – reducing the anxiety of referral
  - shorter, more personalised referral process

- Benefits for admin staff
  - simplified administration

Choose & Book

- **Benefits for GPs**

  - reduction in consultation time taken up by patients chasing progress of referrals

  - greater access to patient's care management plans, ensuring correct appointments are made

  - access to advice and guidance to ensure appropriate referrals

- **Benefits for consultants**

  - better quality, legible referrals

Electronic Transmission of Prescriptions

A study in the British Medical Journal in July 2004 suggested that:

- admissions related to adverse drug reactions cost the NHS up to £466m annually

- the true rate of death taking into account all adverse drug reactions (those causing admission, and those occurring while patients are in hospital) may turn out to be greater than 10,000 a year.

Electronic Transmission of Prescriptions

- In 2003:

    - over 659 million items were dispensed in the community

    - an increase of 5.3% on 2002

    - the total cost of these prescription items was over £7.5 billion

Electronic Transmission of Prescriptions

- **Benefits for patients**
  - improved safety, access, convenience and choice

- **Benefits for prescribers and dispensers**
  - improved information enabling them to carry out their clinical roles more effectively and safely
  - reduction in administration

- **Benefits for primary care trusts**
  - better use of resources and improved patient care

- **Benefits for the reimbursement agency**
  - improved capacity and potential unit cost reduction

N3, the National Network

- A chest x-ray originally had to be delivered by taxi, taking hours

- Using a standard telephone line it took half an hour to transmit

- Using NHSnet it took approximately 4 minutes

- Via a typical N3 link to a GP surgery, it should take less than 1 minute

- A user at a main trust location should receive the image in around 15 seconds

N3, the National Network

- A combination of broadband connections and network services that will link all NHS organisations in England, providing a reliable means for data to be exchanged between NHS organisations

N3, the National Network

- **Benefits of N3**
  - a fast and reliable network for NHS organisations
  - networking solutions and services that are tailored to the needs of individual organisations
  - sufficient bandwidth for NHS organisations to implement new approaches to healthcare
  - allowing the NHS to take early advantage of updates and improvements in networking technology
  - allowing NHS organisations to integrate their voice and data networks

IT for General Medical Services payments

Quality Management and Analysis System

- Provides timely feedback for GP practices on the quality of care delivered to their patients

- Based on 146 clinical and organisational indicators detailed in the GMS Contract

- Rewards and recognises good practice

IT for General Medical Services payments

Quality Management and Analysis System

- Benefits

  - Ensures the payment rules that underpin the GMS contract are implemented consistently across all systems and practices in England

  - PCTs should see fewer avoidable hospital admissions through improved chronic disease care

Picture Archiving and Communications Systems (PACS)

Since PACS became operational at the Princess Royal Hospital, part of Shrewsbury and Telford NHS Trust, no images have been lost, which means no patient has needed to be called back for a repeat examination

Picture Archiving and Communications Systems (PACS)

- Systems to capture, store, distribute and display static or moving digital medical images

- Takes away any need to print on film and to file or distribute images manually

- Will provide 100% access to digital images in NHS organisations throughout England

- Digital images will form an essential part of every NHS patient's NHS Care Record

Picture Archiving and Communications Systems (PACS)

- Benefits for patients
  - joined-up care
  - reduced re-testing due to loss of film - reduction in radiation dose
  - quicker discharge from hospital and better care planning
  - fewer appointments and operations postponed

Picture Archiving and Communications Systems (PACS)

- Benefits for clinicians
  - improved image quality and viewing capability
  - reduction in time looking for lost images
  - images available 24 hours a day, seven days a week
  - simultaneous image viewing across multiple sites and locations
  - quality images for teaching and presentation

Picture Archiving and Communications Systems (PACS)

- Benefits for the NHS

  - more efficient use of facilities and staff

  - reduced expenditure on films, chemicals, transport and storage - with benefits for the environment

Email and Directory Services (EMDS)

- Cable and Wireless' new service is known as Contact

- It will provide:

  – an NHS email service

  – a central directory of professional contact details for all NHS staff

  – email to fax, and email to SMS messaging services

  – calendar service for managing time, tasks and resources within and across NHS organisations

Implementation

- National Application Service Providers (NASPs)
  - responsible for applications common to all users nationally

- Local Service Providers (LSPs)
  - provide IT systems and service in the five regional clusters in England
  - ensure that the national applications can be delivered locally
  - ensure that both national standards and local needs are met

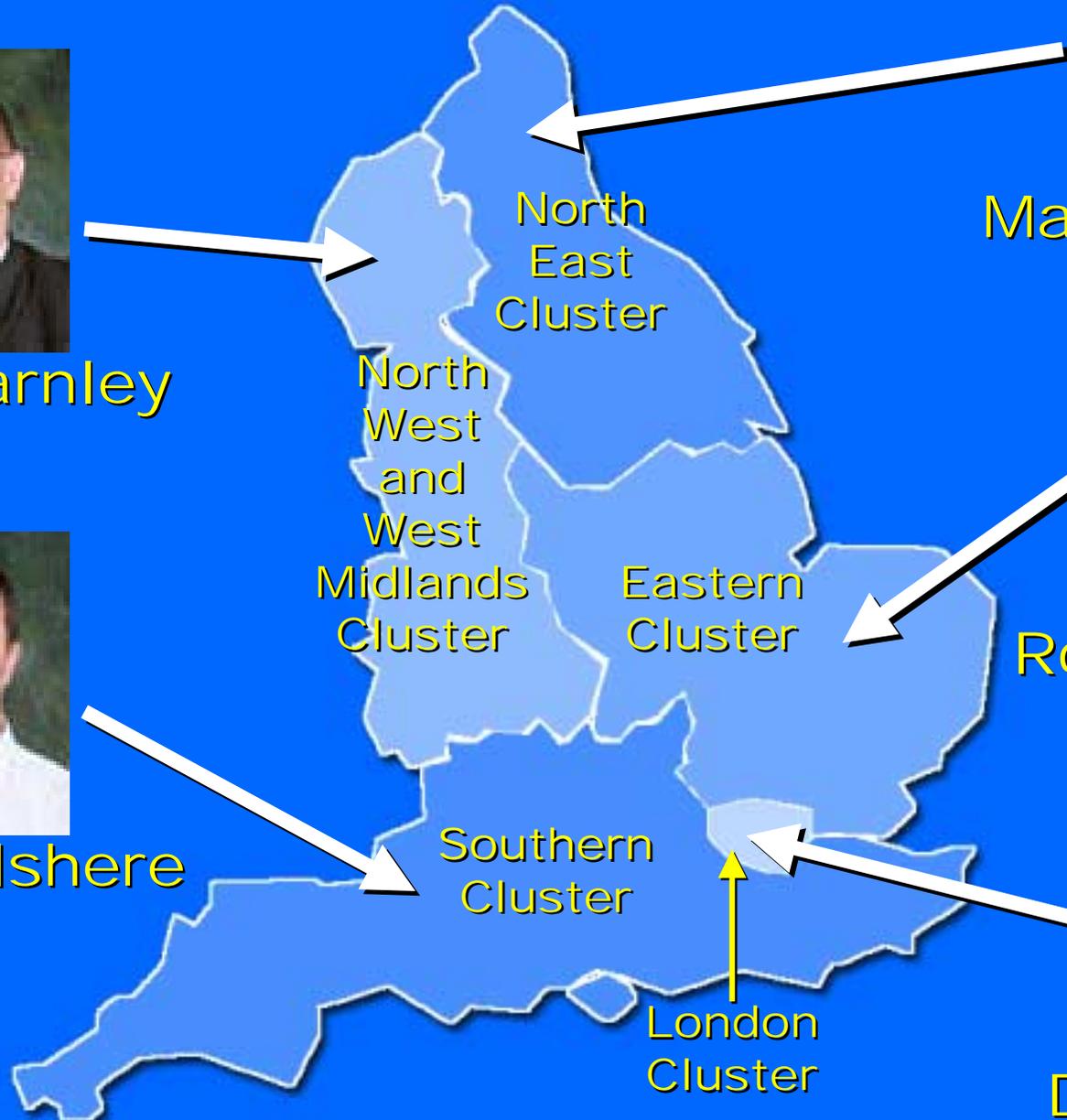# Implementation

Paul Charnley

Martyn Forrest
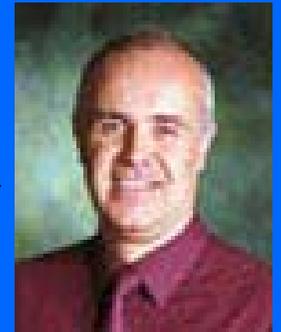
John Willshere

Robin Arnold

David Kwo

North East Cluster

North West and West Midlands Cluster

Eastern Cluster

Southern Cluster

London Cluster

Service Providers

National Application Service Providers

Choose and Book Service
Atos Origin (formerly Schlumberger Sema)

NHS Care Records Service
BT

Infrastructure Service Provider

N3, the National Network
BT

Local Service Providers

North West & West Midlands Cluster
The CSC Alliance

Southern Cluster
The Fujitsu Alliance

North East Cluster
Accenture

Eastern Cluster
Accenture

London Cluster
Capital Care Alliance, led by BT

Achievements to date

2003
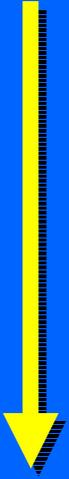
- January 2003 – Notices issued in Official Journal of the European Community (OJEC) for NASPs and LSPs

- October 2003 – Contract for Electronic Booking Service (Choose and Book) awarded

- December 2003/January 2004 – LSP contracts awarded

2004

- February 2004 – Contract awarded for N3, the National Network

- May 2004 – Announcement of PACS suppliers

- July 2004 – Creation of Care Record Development Board announced

Achievements to date

2004

- July 2004 – first online patient appointments made from primary care via Choose and Book service

- Summer 2004 – initial elements of NHS Care Records Service supporting Choose and Book, delivered

- August 2004 – enterprise wide arrangements with key suppliers announced

- August 2004 – Successful go-live for QMAS system

- October 2004 – Contact email and directory service launched

- November 2004 – announcement of Microsoft arrangements
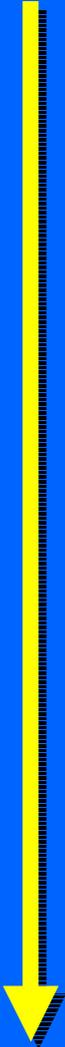
Achievements to date

2004

- November 2004 – National Integration Centre established

- November 2004 – A&E system implemented at Queens Medical Centre (E Cluster) by LSP

- November 2004 – Quality and Outcomes Framework assessment tool launched

- December 2004 – Single Assessment Process system in NE Cluster launched

- December 2004 – Implementation guide launched

Looking forward

2004

- Phased roll out of Choose and Book

- Basic patient demographic information

- Email and Directory Service - Contact - available to NHS staff

- GP IT system - QMAS

2005

Looking forward

2005

- Phased roll out of Electronic Transmission of Prescriptions begins

- Recording of allergies

- Beginning of summary health record

- Analysis and reporting through the Secondary Uses Service

- GP to GP record transfer

- Orders and results for diagnostic images and pathology

2006

- Birth and death notification

Looking forward

2006

- GPs notified of emergency and out of hours encounters
- Health record grows
- Support for care pathways
- Support for all doctors and nurses to help with decisions
- Electronic prescribing
- Care at home helped by remote links to healthcare professionals anywhere in the community
- Better healthcare planning by using the facts and figures held on NHS CRS
- Picture archiving and communications systems (PACS) fully implemented
- Electronic Transmission of Prescriptions fully implemented

2008

Looking forward

2008

- Final phase of NHS CRS – full integration between health and social care systems across England

2010

Benefits

- Patients will benefit from greater involvement in decisions about their care and greater access to and ownership of their records

- Clinicians will benefit from less administration and faster, more efficient access to information and services

- The NHS will benefit from time and cost savings brought about by reduced administration and improved output from the baseline IT spend

Questions

Our aims

To improve patient choice and the quality and convenience of care by ensuring that those who give and receive care have the right information at the right time

To deliver 21st century IT support for a modern and more efficient NHS

NHS

National Programme for Information Technology