

# Supporting Transformation



# Contents

<b>Foreword</b>	3
<b>Introduction</b>	4
<b>Beginning the benefits journey</b>	6
<b>Where are we now?</b>	8
<b>How we are supporting transformation</b>	20
<b>Conclusion</b>	26
<b>Appendices</b>	28



# Foreword

Throughout 2006/07 the NHS has introduced new computer systems and services to improve how information is stored and shared in the NHS. This new information technology (IT) provides opportunities for the health service to make changes and deliver better, safer care for patients.

Supporting better, safer care is the main aim of the National Programme. It was central to our case for investment.

At the heart of our drive to transform the service is the need to ensure we continue to be able to rise to the global challenges facing every modern healthcare system - growing patient expectations around access, quality and responsiveness; demographic changes that are seeing more people live longer; and, the constant march of modern technological and medical advances.

We will only be able to meet these challenges if we modernise and change and create a safe and secure infrastructure around which our clinicians and staff can deliver the benefits of real change to the patients that they serve. The National Programme for IT (NPfIT) is crucial to that success and has already achieved much.

If we look toward the end of this year, our ability to deliver 18 week waiting times for our patients simply would not be possible if we hadn't developed the systems that NPfIT has delivered, and at the end of 2007 the NHS became the first healthcare system in the G8 nations to deliver universal coverage of digital x-rays.

These are substantial achievements and, going forward, the Local Ownership Programme will ensure that as the National Programme proceeds it will be increasingly adaptable to meet the needs of the local NHS.

I do not underestimate the task of introducing new information technology. It is now for leaders in the NHS to understand, seize and exploit the opportunities this technology presents to help improve the care we deliver for our patients.

David Nicholson  
NHS Chief Executive

# Introduction



*"My opinion of PACS?  
Brilliant. The whole  
process was much  
slicker and quicker than  
I was expecting. I'd been  
anticipating a four to six  
hours visit to A&E that day,  
and yet our total time there  
was less than two hours."*

**Leigh Cameron,  
Mother of patient**

Throughout 2006/07 the NHS has introduced new computer systems and services to improve how information is stored and shared in the NHS. This new information technology (IT) provides opportunities for the health service to make changes and deliver better, safer care for patients.

Supporting better, safer care is the main aim of the National Programme. It was central to our case for investment.

The National Programme has a number of key projects. Each has its own purpose and contributes to the overall goal of linking a patient's health information together, helping those providing them with care.

Some projects, such as implementing a new broadband network for the NHS provide important foundations for other work. These projects were planned and delivered in the early part of the Programme. Others have longer timeframes.

Financial and efficiency savings will increase as more new computer systems and services begin to be installed in hospitals, GP practices and other care settings. This provides increased opportunities to support real transformation to improve the quality and safety of care for patients.

EVERY YEAR 5,000 MORE PATIENTS ARE ABLE TO HAVE THEIR PROCEDURES PERFORMED BECAUSE DIGITAL X-RAYS AND SCANS ARE AVAILABLE WHERE AND WHEN THEY ARE NEEDED – 20% OF X-RAY FILMS USED TO GO MISSING.

*"GP2GP is good news for practices. It takes an electronic medical record and transfers it directly to another practice. The record is reproduced completely at the other end. In fact, the record looks virtually identical to how it would have appeared on the previous practice's system. The medical record comes across as soon as the other practice sends it across. It's been great to have a new patient register in the morning, come in for a consultation in the afternoon and have the record already here, ready and waiting."*

**John Hampson, GP**



# Beginning the benefits journey

The front line systems and services which the National Programme for IT is bringing will improve the way information is stored and shared in our NHS organisations.



*"With Choose and Book, I'm not left waiting to hear from the hospital. I can make plans and don't need to put my life on hold. The whole system is very much improved and I'm very impressed."*

**Tony Flowers, Patient**

The NHS has been using paper-based systems for many years as well as computer systems that don't link up. However, old-fashioned systems do not support the information sharing that is needed for modern care. That care can be both technically complex and delivered by more than one organisation. Patients can receive treatment from a team of health care professionals. They may be based in different buildings or organisations across primary and secondary care, or out in the community.

By enabling information to be linked electronically, staff caring for the patient will have secure access to accurate, up to date patient information twenty four hours a day, seven days a week improving diagnosis and care.

The patient's information will 'follow' them as they receive treatment, rather than being stuck in a filing cabinet or on a particular computer. This should end the paper chase between GP surgeries, hospitals and departments, resulting in fewer lost records and test results.

The new systems and services also support increased choice and convenience for patients in booking outpatient appointments and obtaining their repeat prescriptions. And, by improving patients' access to their information, they will be assisted in making more informed decisions about their care.

New front line systems and services will increasingly deliver such benefits but, before they could be implemented, firm foundations had to be laid. These foundations have strengthened and improved technical and security standards as well as putting in place vital infrastructure, like a state of the art secure broadband network to link NHS organisations across England.

By updating and replacing old technology, efficiency and quality improvements have been made. In many cases this has helped us towards our main goals of better, safer care for patients and better value for money for the NHS.

EVERY DAY UP TO 24,000 PATIENTS ARE ABLE TO CHOOSE A CONVENIENT TIME, DATE AND PLACE FOR THEIR FIRST OUTPATIENT APPOINTMENT USING CHOOSE AND BOOK.

*“Release 2 of the Electronic Prescription Service will bring huge benefits for my pharmacy. It will really help with planning daily workload. Nomination will help to manage stock control. All in all, EPS gives us scope to really enhance the service we offer to our patients.”*

**Richard Dean, Independent Pharmacist**

It is however the new front line systems and services which will deliver the greatest potential benefits for the NHS and patients. Every day the number of new front line and clinical systems in daily use is accelerating. Some of these systems, such as digital x-rays and scans and electronic booking of appointments are now widely available throughout the NHS.

Whilst IT investment will not in itself deliver all potential benefits, it does provide opportunities for profound and wide ranging changes in the way healthcare can be delivered for the benefit of whole health communities. These changes come not just from implementing new computer systems and services, but in equipping people with new skills to take advantage of that IT, adopting more efficient processes and making the best use of facilities.



# Where are we now?

The NHS is half way through a massive change programme for which IT investment is a key enabler.



The NHS change programme began in July 2000, with the publication of the NHS Plan. It was followed by the health reform programme which introduced patient choice, practice-based commissioning, payment by results, foundation trusts and independent sector treatment centres.

The most challenging stage of the NHS's change programme is now underway. The investments and reforms are driving the transformation which will deliver real and significant benefits for patients. Infrastructure provided by the National Programme for IT is helping to enable this transformation.

*"My colleagues wouldn't be without it now, and neither would the practice staff. Choose and Book saves us time and money, and our patients leave happy and with their confirmed appointment. There are no more follow-up phone calls and consultations, and no more cases of me forgetting to write their referral letter, because with Choose and Book, I know exactly what I need to do."*

Amir Hannan, GP

## National Programme systems and services

The core projects which make up the National Programme are:

- **N3** – the secure broadband National Network for the NHS in England.
- **NHS Care Records Service** – the backbone of the new IT systems and services, enabling patient information from different parts of the NHS to be linked electronically, with detailed records held locally and a Summary Care Record available across all NHS organisations in England to support out of hours and emergency care.
- **Picture Archiving Communications Systems (PACS)** – digital x-rays and scans to replace outdated film-based systems for fast, accurate diagnosis.

ALL GPs IN ALL 8,800 PLUS GP PRACTICES NOW HAVE A CONNECTION TO FAST, SECURE BROADBAND NETWORKING SERVICES FROM N3.



*“I’ve been allergic to penicillin since my second child was born. I think it would be a very good idea that the doctors or nurses treating me should have that information, so they didn’t give me an injection of penicillin. When I did have one, in my left leg, the leg swelled from the knee to the hip, and it took quite a long while to go away.”*

Janet Bissett, Patient

- **Choose and Book** – an electronic booking system to improve choice and convenience for patients requiring a first outpatient referral.
- **Electronic Prescription Service** – enabling prescriptions to be sent electronically from the prescriber to the pharmacy.
- **Support for GP IT** – including a choice of GP systems and GP2GP which enables a patient’s records to be transferred electronically when they change GP practice.
- **NHSmail** – a secure email and directory service for the NHS.

In addition, we are supporting local NHS organisations to implement a range of other essential local front line and clinical systems across primary and secondary care to meet their needs and priorities.

These include Single Assessment Process systems for care of the elderly; Map of Medicine to support prescribers; patient administration systems; radiology, A&E and theatre systems; ambulance communication systems; community, clinical and child health systems; systems to support care in prisons; and systems to support processes, such as data miner systems, tray management systems, portal systems and order communications systems.



# Where are we now?



*"The new systems that are now coming on stream I think will provide the clinicians with real tools to manage their work load and care for patients effectively."*

**Andrew Dove, Emergency Department Consultant**

## What's already in place?

By 31 March 2007, 14,200 National Programme systems had been installed across the NHS. Of these 12,150 provided vital foundations for Choose and Book and the Electronic Prescription Service. In addition, over 18,000 locations, many ahead of schedule, were connected to the National Network for the NHS (N3), the secure broadband network.

Over 1,400 front-line systems had also been installed by this date, double the number from the previous year. They included new systems in GP practices and systems for digital x-rays and scans in hospitals (see Facts & Figures, table A, p29).

## Benefits for patients

These systems provide major opportunities for NHS organisations to make significant changes that make a big impact for patients, enabling choice, faster diagnoses and reduced waiting times.

Choose and Book, for example, allows patients to choose their outpatient appointment according to their own priorities – whether that is the first available date, the hospital closest to their home, or fitting their appointment around their family or work commitments.

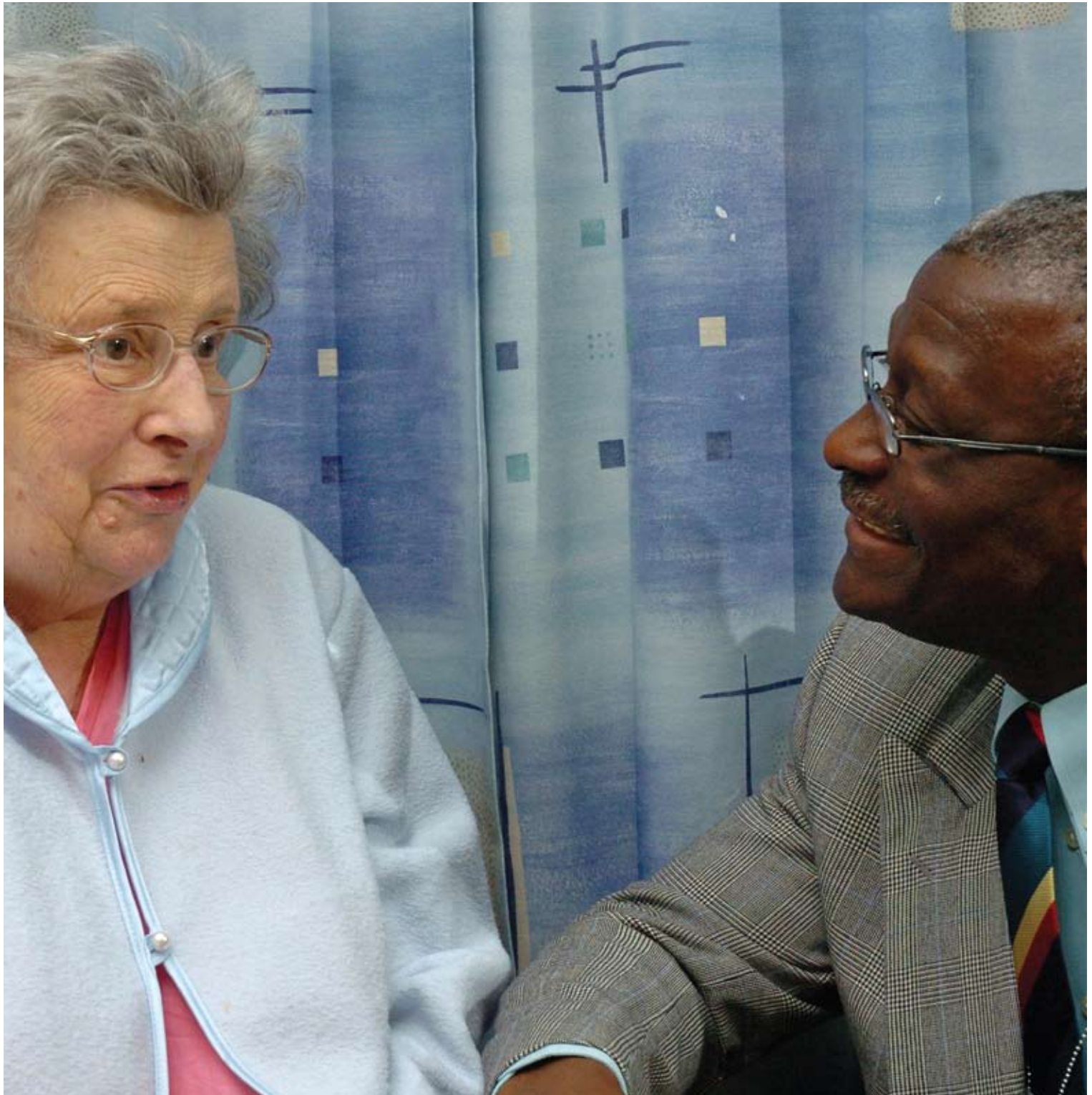
For patients with complex conditions, the systems offer those involved in their care the opportunity to plan a care pathway more efficiently. They may work in different specialties, and be based in different locations, but everyone can have access to up to date electronic information.

Similarly, digital x-rays and scans enable a second opinion to be given electronically, in real time, by a specialist in a different location.

All of the above supports the delivery of care at the right time and in the right place.

*“The PACS implementation has been stunningly successful. It will benefit virtually every single person in this country at some stage in their life. It changes in a fundamental way, the way we look at x-rays and scans. From a diagnostic point of view it adds so many tools that just were not available when we were looking at single images on fixed pieces of film.”*

**John Somers, Consultant Radiologist**



# Where are we now?

*"We are now on the brink of the most exciting phase of the new Electronic Prescription Service in which patients, GPs and dispensers will all start to reap the true benefits of a full electronic service. Electronic repeat dispensing should be the jewel in the crown for everyone involved as patients will need to order their regular repeat prescriptions less often, improving convenience and reducing the workload placed on GP practices."*

Anthony Kaye, GP

## Savings and efficiency gains

Better value for money for the NHS is one of the National Programme's goals. Based on evidence of cash savings collected for the period to 31 March 2007, the NHS has made over £208 million of one off savings through its central purchasing power and delivery of systems to date.

Recurrent savings identified are expected to be almost £120 million each year. These savings are being obtained not only from replacing old, worn out technology with state of the art systems but also from associated savings, such as no ongoing film or chemical costs for trusts which have implemented digital x-rays.

Based on the evidence already collated, real cash releasing savings to March 2014 (the contracted period) can be confidently estimated at £1.14 billion (see Facts and figures, table B, p30).

Efficiency gains are just as important as the cash savings which the National Programme is enabling. Time savings for staff and patients are among the large numbers of such improvements which were reported in the period. Valuation of these improvements is underway to measure their positive impact on costs and efficiency.



*“Healthcare is moving out of hospitals into the community and having a shared patient record where things can be passed between the services is vital.”*

**Jon Orrell, GP**

## **Benefits from new infrastructure**

The National Network for the NHS (N3) is now in place, replacing old technology and providing efficient, secure, high quality network and broadband connectivity for NHS computer systems and services. This has brought savings for the NHS of £192 million and will continue to save the service almost £95 million each year as old networks are replaced.

In addition to generating cash savings, N3 is bringing benefits for the other frontline applications which simply could not function without it. The new network supports the secure, rapid electronic transmission of prescription messages from GP surgeries to pharmacies, as well as the transfer of a patient’s complete GP record from one practice to another in a fraction of the time it used to take.

And in secondary care, the secure central storage of digital x-rays and scans enables them to be effectively shared across multiple hospital sites within a healthcare community. This can assist a more rapid diagnosis and effective ongoing care for the patient, with healthcare professionals able to retrieve appropriate images whenever they are needed, rather than waiting for x-ray films to be physically transported to them.



# Where are we now?



## Benefits from national systems and services

The implementation of the new infrastructure is now enabling national applications to be rolled out and measurable benefits to be reported.

Since the implementation of Choose and Book a number of sites have reported huge reductions in the time taken to process a GP referral. In some locations the reduction has been up to 88 per cent, with the time taken for a patient to receive an appointment falling by up to 93 per cent. The number of patients failing to attend a booked appointment has also reduced by up to 23 per cent and this continues to improve. Work is currently underway to develop consistent benchmarks and ways of measuring these benefits.

Large numbers of deployments have taken place as the first stage of the Electronic Prescription Service continues to roll out. This lays the foundations for significant savings when the second stage is implemented.

The first stage is introducing barcoded prescriptions which can be scanned by the pharmacist, cutting out the possibility of errors from retyping information. The second stage will enable patients to nominate a pharmacy where their prescriptions can be sent automatically - without the need for paper. This will improve convenience, especially for those with complex and chronic conditions who require ongoing repeat prescriptions. They will no longer need to call at their GP practice to collect a prescription form as it can be automatically sent to their preferred pharmacy.

An initial review of a group of practices in the North East using the GP2GP electronic record transfer system showed significant efficiency savings and process improvements. These included almost 20 minutes saved in summarising each record; over 15 minutes saved in searching for each correct record; and improvements of up to six weeks in transferring records when a patient changes GP practice.

*“As with other busy practices, we are constantly trying to keep up-to-date with our summarising. With GP2GP, we now ensure that as electronic health records come in, we ‘read code receipt’ them. We are then able to search for these records easily and ensure they are summarised as quickly as possible.”*

**Sandra Easdale, Summariser, Registration, Deduction and GP Links Clerk**

The Personal Demographics Service (PDS) holds patient demographic information on the secure central database of the NHS Care Records Service (known as the Spine). Authorised organisations using the PDS are beginning to report measurable efficiency savings and process improvements. This evidence will be collected and analysed over coming months.

The Secondary Uses Service (SUS) holds anonymised patient data which will be used to inform health service planning and improve the targeting of public health services. Savings of approximately £1.27 million have already been achieved from shutting down the systems which SUS replaces. Recurrent savings of over £5 million per year are anticipated.

SUS also plays a key role in enabling the move to payment by results and in providing information to support the improvements in waiting times to achieve the 18 weeks target. It is also supporting world class commissioning through the provision of the NHS Comparators service. This enables primary care trusts and GP practices to gain a clear evidence-based understanding of current and future needs. This means they can shape local NHS services to deliver improvements in quality, service and choice for patients.



*“It is so much quicker to input patient details compared to writing them all out on paper. Plus the system gives you prompts, so you’re checking for more symptoms than you would have done before and you end up with a much more comprehensive patient record.”*

**Matthew Syrat, Clinical Supervisor Paramedic**

# Where are we now?



## Benefits from local systems and services

Local NHS organisations are reporting a mix of benefits once they are up and running with their systems in a 'business as usual' fashion. Some of these benefits can be easily measured and quantified, others do not have a direct monetary value.

Benefits like enabling someone to choose, or for a carer to understand and participate in a care plan, do however support improvements in quality, safety and the patient experience and so they underpin NHS reform. We include examples of these non-measurable benefits in this report and are collecting other examples and evidence for future reports.

Substantial benefits have been identified and measured from the digital technology which revolutionises the way the NHS captures, records and uses patient x-rays and scans. Digital technology - Picture Archiving and Communications System (PACS) - is now being used in most hospitals in England and is due to be completed by the end of 2007.

Trusts are already reporting that the time taken for radiologists and radiographers to issue reports to clinicians have typically been halved from more than six days to less than three. These report turnaround times continue to fall with some hospitals issuing reports on images within 24 hours.

*"GP2GP is a fantastic example of how IT can support seamless continuity of care. It really works! It makes such a difference, especially when treating patients with chronic conditions because I have more than just the patient's word to go on."*

Guhendran Ravi-Shanker, GP

EVERY GP PRACTICE IN ENGLAND NOW RECEIVES PAYMENT FOR THE CARE THEY DELIVER THANKS TO QMAS.



*“Choose and Book is a huge improvement because it cuts out the time consuming administration processes of old, ensuring that patients are treated more quickly.”*

**David Fluck, Consultant Cardiologist**

As well as improved patient care, the introduction of PACS is also saving money, with trusts reporting an average saving of £250,000 in their first year of using the technology.

Cash savings alone from the digital imaging systems that have been in place for at least three months are shown to be over £14 million, with £17.3 million then being saved annually.

Based on this evidence, we can confidently anticipate that when PACS is fully implemented, savings will be in excess of £35 million. As local organisations take the opportunities offered by the new technology to redesign and improve their imaging services, these benefits will be surpassed many times over.

At this stage, the focus for patient administration systems (PAS) has been on replacing existing systems. Having put new technology in place, additional features and functions can now be added, such as enabling detailed care records to be shared between the local NHS organisations which usually work together.

Significant cash savings from these PAS will not be realised until this detailed care records element of the NHS Care Records Service is rolled out over the coming months and years. However, where NHS organisations have not widely used a PAS in the past, such as some community services, immediate improvements are being realised.

For example, a team using a community clinical system has been able for the first time to use a shared calendar. This has enabled them to set up a centralised appointments booking service with a single call centre. They report that this “has saved administration time as well as providing an improved service to patients”.

Specialised child health and mental health systems have also been available ahead of fully integrated electronic care records. Again, as more features and functions are added as the NHS Care Records Service develops, more substantial benefits will be realised. Meanwhile benefits recorded include improved monitoring of child immunisation plans, easier scheduling of regular health checks and improved clinical governance.



# Where are we now?

*"I think the NHS Connecting for Health project is very interesting because of how useful it's going to be, and what a difference it will make to doctors and to patients. I think that for professionals to be able to share and access records is vital because there may be things, for example, allergies to penicillin or things like that, which are really, really important. I think it'll save time and money as well."*

**Jenny Stiling,**  
Chair, Public Patient  
Involvement Forum

Other initial evidence of efficiency and clinical quality improvements for community mental health teams includes, a 12.5 per cent reduction in waiting lists; a reduction in waiting times of up to 12 weeks and savings of 30 to 60 minutes of clinical time per day as administration decreases for staff.

Benefits which cannot be quantified but are equally important for mental health teams include new systems enabling the "sharing of service user details {which} leads to improved risk management. Providers know, in times of crisis, who to contact and who is involved".

Emergency care is benefiting from new accident and emergency systems. This means that A&E staff not only have the information they need about the patient before that person arrives in the department, but the patient's care is managed more efficiently from initial contact with the attending paramedic through to their discharge from hospital.

In specialisms such as podiatry, benefits recorded include reductions in average waiting times for new referrals from ten to three weeks in one clinic and from four months to four weeks in another, with one waiting list alone reducing from 2000 to 250 people.

The National Programme has also provided some GP practices with replacement systems. This has already brought £617,000 of savings in software license and hardware maintenance costs, with recurring savings of over £1.6 million per year.

We will continue to work with local NHS services to gather evidence and measure benefits and to encourage NHS organisations to use new systems as a catalyst to transform their services to make the most of the opportunities that the new IT provides.

*"I had a heart attack in 1989, which meant I had five bypasses done. Eight years later I had to have four of those re-done. In between, I had blockage to my left kidney artery and that had to be replaced. So I have quite a convoluted medical history and I also take quite a lot of medication, so every time I go to hospital, I have to go through explaining to junior doctors, and nurses, and A&E, and consultants, exactly what's happened, and then someone else comes along, I have to explain it all again, and again, and again. And if it was available electronically wherever I was in the country, it would speed up the diagnosis and treatment for me."*

**John Taylor, Patient**



# How we are supporting transformation

The National Programme has evolved and continues to do so to meet the needs of an ever changing NHS and, in turn, respond to the changing needs of patients and the public.



## Changing needs

In his Annual Report for 2006/07, NHS Chief Executive David Nicolson said: "Change is always difficult, but it is a necessity, not an option in the NHS."

The necessary changes which are being made throughout NHS organisations in England are supported by the installation of National Programme products and services. These IT systems and services continue to be developed to meet the needs of the NHS and to support the NHS in the changes it is making for the benefit of patients.

Patients' needs are also changing. Their expectations are rising, with the desire for timely access to high quality services. Diverse communities require more responsive NHS services and better integration with social care services. There are rising levels of long term conditions and an ageing population.

The National Programme for IT is developing and implementing technology to support the NHS in meeting these challenges.

It is increasingly able to support improvements in timely, safe, effective care at every NHS location through improved information sharing and decision support for remote diagnosis and treatment. Such technology is, for example, already enabling more people with conditions like diabetes to be treated out of hospital and closer to their own homes.

*"I think it's a great thing to share information. We need to see the information as well. And if I think it's a good thing and I know my wife and kids think it's a good thing, then I'm sure other people will, too.."*

**Peter Mansell, Patient**

## Support for reforms

IT systems and services are a key enabler for NHS reforms such as choice, continued improvements in waiting times and payment by results, which provides a strong incentive to the NHS to respond to the needs of patients.

The different parts of the NHS are all working for the benefit of patients, whose care is often delivered by NHS staff from different specialisms and organisations. This has implications for how the different parts of the NHS relate to one another.

The National Programme is increasingly assisting the NHS to share information across the boundaries of specialisms and organisations more easily, helping staff to provide seamless care and facilitating payment to NHS organisations for the services they provide.

## Continued delivery of local and front line systems

Now the infrastructure is in place, front line local clinical systems can be delivered according to local needs and priorities across England.

National IT systems, such as digital imaging and the Electronic Prescription Service will also deliver increased benefits for NHS staff and patients as they become more widely available across the NHS.

In addition, NHS organisations have the opportunity to make the most of the infrastructure which is now largely in place. For example, significant savings are already being made on telephone calls by using internet technology offered through the National Network for the NHS (N3).



*“I work for all the NHS trusts in West Sussex and having to drive around to access my emails in each location would be a nightmare. My emails from each trust are auto-forwarded into my NHSmail account making it very easy and trouble free to access my mail. I would not be able to do my job without it as time management would be off the scale. Thanks for a fab system that works really well.”*

Lorraine Brown, Family and Childcare Co-ordinator

# How we are supporting transformation



## Leadership and local ownership

In its report on the National Programme for IT (June 2006) the National Audit Office noted the need to “Ensure that NHS organisations can and do fully play their part in implementing the Programme’s systems.” (Page 6 of full report)

In October 2006, the NHS Chief Executive demonstrated clear leadership and ownership of the NHS IT agenda. Under his direction, the National Programme for IT Local Ownership Programme (NLOP) was established. It aims to reinforce the position of the National Programme for IT as part of mainstream NHS business and to ensure that products and services delivered under the Programme are meeting, and continue to meet, NHS priorities.

The responsibility of strategic health authorities (SHAs) and primary care trusts (PCTs) for the local delivery of NPfIT systems and benefits realisation was underlined and the accountability made explicit in the Department of Health document ‘The NHS in England: the Operating Framework for 2007/08.

With NLOP the local NHS owns the implementation and can prioritise the delivery of systems or services to meet their local needs, for example a trust could elect to implement systems that support emergency care ahead of other systems if this is what their organisation needs.



*"PACS has made a huge difference to the service we offer. Based on geography and time, the system has increased efficiency. I no longer need to travel from site to site. I can use one base and see all the files I require to make an assessment no matter where the scans have been done."*

**Raju Kalidindi, Consultant Radiologist**

## **Priorities for action**

The scale of IT change planned in the NHS over the next few years is unprecedented. The expected benefits will be significant and vital in ensuring the future success of the service.

A concerted effort is required at all levels. The real benefits of the new IT systems and services are realised at the front-line of health services. Action to ensure that those benefits are effectively realised and maximised include:

- Prioritising and focusing on benefits management and reporting – not just in relation to the National Programme, but for wider health service transformation. NHS Connecting for Health is working with SHA partners to establish an effective framework to help ensure this is achieved. SHAs are responsible for providing an annual statement of benefits realised.
- Agreeing a consistent set of benefits and their definitions – developing a common approach and guidance on benefits management so NHS organisations can maximise their potential for benefits.
- Exploring the opportunities which National Programme systems and services bring for realising benefits – with SHAs and PCTs taking the lead in identifying and maximising economy-wide benefits in partnership with other NHS organisations. NHS CFH will continue to support this work over the coming year.
- Monitoring benefits realised in a robust and comprehensive way – using streamlined standards, tools and processes so the NHS can report on benefits without excessive resource, overhead, or time delay.

*"It can sometimes take a long time to find out important information like a patient's medications, their allergies and key medical history. We have to include information like that in the long form we complete for our records and the hospital handover. If we and the hospital have access to an electronic summary of information it will mean we can take care decisions more quickly and spend less time filling in forms."*

**Matt Freer, Community Paramedic**

# How we are supporting transformation

*“Diabetes can affect your feet, it can affect your eyes, it can affect your heart, and because there are so many different specialists involved in all of these areas, sharing of information is going to be extremely important to us. If someone treating me didn’t know that I had diabetes there is a possibility that I could go into a diabetic coma, which could be fatal.”*

**Brian Wootton, Patient**

## Looking forward

This Benefits Statement covers the year to 31 March 2007. Since that date an informatics review has been commissioned. The review commenced in October 2007. It is considering:

- how data collected by the NHS can be brought together to ensure patients, staff and the public have the information they need
- whether the approach being taken with the NHS Care Records Service and SUS accommodates the changes in the NHS
- how to ensure that those managing informatics are engaged in the development and implementation of policy, and support delivery of the core objectives of the NHS.

As part of the informatics review NHS Connecting for Health is undertaking the largest staff and public engagement programme to date. It is planned that this style of, and approach to, engagement is adopted for the future.

EVERY DAY NHS STAFF USE THE PERSONAL DEMOGRAPHICS SERVICE TO CHECK DEMOGRAPHIC INFORMATION ABOUT 1.4 MILLION PATIENTS, ENABLING LETTERS TO BE POSTED TO THE CORRECT ADDRESS AND PATIENT INFORMATION TO BE HANDLED MORE EFFICIENTLY.

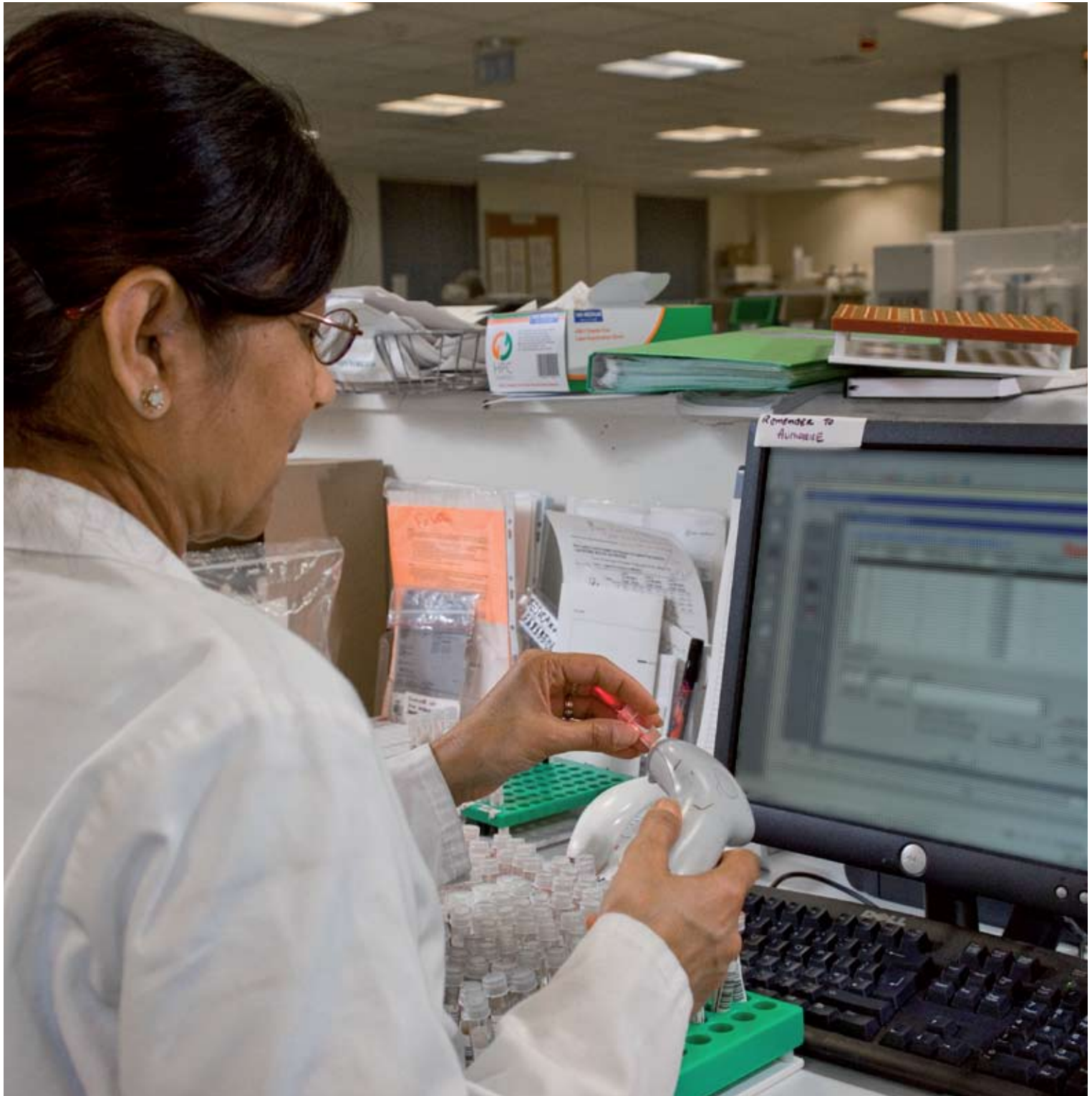


“

*“What I like about Choose and Book is that it is so effortless and quick. It allows me to fit appointments in around my life without taking unnecessary time off work and enables me to be seen as quickly as possible.”*

**Sarah Payne, Patient**

”



# Conclusion

Benefits are being realised by the NHS from National Programme systems and services at an ever increasing rate.



To date, evidence of cash releasing benefits has been collated from approximately 20 per cent of NHS organisations with National Programme systems. This will increase significantly over the coming months. The establishment of a robust and comprehensive benefits management framework is now well underway and the number of IT systems and services in the NHS is increasing.

The next year will be an exciting time for the Programme and the NHS. As more new frontline and clinical systems are deployed, NHS organisations will be able to seize the opportunity for more wide ranging service transformation across healthcare communities.

We anticipate reporting significant savings for trusts which choose to use N3 internet technology to reduce their telephone costs. With digital x-ray systems deployed in all hospital trusts in England by the end of 2007, we now expect not only financial savings, but a solid body of evidence highlighting process and efficiency improvements.

During the next year the Early Adopter programme for the NHS Care Records Service will be completed. This will not only provide us with important feedback to inform the roll out, but will also provide evidence of benefits which staff and patients across the NHS in England can expect from the new ways of storing and sharing information.

*“Having worked towards operating a paperless practice for 10 years now, we realised straight away what potential benefits the Electronic Prescription Service could bring to both our practice and our patients.”*

Louis Smith, GP Surgery  
Business Manager

**MORE THAN 3,500 GP PRACTICES ARE NOW BENEFITING FROM GP2GP SOFTWARE, REDUCING ADMINISTRATION AND ENSURING RECORDS ARE AVAILABLE WHEN THEY ARE NEEDED FOR NEW PATIENTS.**

*“I was at home, I virtually passed out and I was so disorientated, that I couldn’t remember what was wrong with me. I couldn’t remember what medications I took. Had they known what my medication was, they would have known immediately why.”*

**Pauline Hartley, Patient**

Choose and Book will continue to become more widespread and the service will be developed, not only as a result of feedback from NHS users, but also from patients who visit the Choose and Book patient website to make their outpatient bookings.

As the first stage of the Electronic Prescription Service is completed, and the second stage begins, patients will experience the convenience of having their repeat prescriptions sent electronically to the pharmacy of their choice. We also anticipate evidence of time and efficiency savings for GP practice staff and dispensing contractors as the system is developed.

The increase in uptake of NHSmail will continue across the NHS, as staff embrace its proven technology for the secure transfer of patient information and the benefits of easier contact, particularly for community based individuals and teams.

In primary care, we will continue to make improvements to the Quality Management Analysis System and general practice clinical systems to support the operation of the Quality and Outcomes Framework. A framework of suppliers for GP Systems of Choice (GPSoC) will be put in place. The implementation of GP2GP software will continue, dramatically improving the time taken for patient records to be transferred between practices.

These developments as well as other implementations of frontline and clinical systems, should over the next year enable us to provide evidence from a greater number of NHS organisations.

Information technology is a key enabler for change and the new measuring and reporting procedures will help to ensure that benefits are ambitiously benchmarked and pursued. Evidence of all benefits will be collated, including how IT investment and change has assisted organisational change and wider health system improvements.



# Appendices



## 1. Scope of this report

This report looks at:

- how progress to date is already underpinning service change
- real savings and other benefits derived from IT systems and services that have had time to 'bed in'
- how future benefits will be delivered and reported.

Information in this report focuses on benefits from systems and services which are 'mature', ie stable, reliable and proven, and where the system has had time to form part of everyday NHS services.

Evidence of benefits has been collected for the period to 31 March 2007. The inevitable time lag between benefits being realised and evidence being collected and analysed means that not all benefits realised from that period have yet been reported.

This report uses evidence from approximately 20 per cent of NHS organisations where National Programme for IT products and services are in daily use.

Evidence of benefits is categorised as:

- cash releasing savings
- other measurable benefits to which a financial value can be attributed
- non-measurable benefits which provide local value.

Evidence of benefits is gathered continuously, building an increasingly rich and comprehensive picture. This will be reported in future annual statements.

## 2. Facts and figures

### A. Summary of front line systems installed to March 2007

	Apr 04 to Mar 05	Apr 05 to Mar 06	Apr 06 to Mar 07	Total
Electronic Prescription Service	1	311	3,796	4,108
Choose and Book	35	4,208	3,799	8,042
GP Systems	26	309	297	632
Map of Medicine	8	132	292	432
Single Assessment Process systems	13	25	6	44
GP2GP Record Transfer	0	17	602	619
Patient Administration Systems	0	65	53	118
Picture Archiving and Communications System	0	31	57	88
Radiology systems	0	5	11	16
Theatre systems	3	8	7	18
Accident and Emergency systems	1	3	1	5
Ambulance Electronic Communication System	0	3	0	3
Community Systems	0	21	18	39
Child Health Systems	0	21	22	43
Data Miner systems	0	0	6	6
Tray Management systems	0	0	1	1
Portal systems	2	2	0	4
Prisons systems	0	6	8	14
Order Communications systems	0	0	4	4
<b>TOTALS</b>	<b>89</b>	<b>5,167</b>	<b>8,980</b>	<b>14,236</b>

# Appendices

## B. Evidenced financial savings as at 31 March 2007

Products	Reporting organisation	Benefit description	Actual reported savings to 31/3/07 £'000s	Annualised recurrent savings £'000
<b>Infrastructure</b>				
N3	NHS Connecting for Health	Decommissioning nhs.net (eg contracts, infrastructure, maintenance)	75,520	48,000
N3	NHS Connecting for Health	Cancelling the nhs.net GP connections 256k upgrade programme.	30,000	10,000
N3	NHS Connecting for Health	N3SP negotiated tariff savings with voice suppliers	86,575	36,870
<b>National applications</b>				
Spine SUS	NHS Connecting for Health	Decommissioning NHS Wide Clearing Service	1,268	5,072
<b>Local applications</b>				
Child Health	1 PCT	License, operating and maintenance costs	45	45
Community clinical systems	4 PCTs	Staffing and other efficiency savings on solution integration	138	186
LSP GP systems	3 PCTs covering approximately 55 practices	Software license costs and hardware maintenance	517	636
LSP GP systems	3 PCTs covering approximately 78 practices	Software license costs	100	980
PACS	53 organisations	Film, chemical processing and maintenance cost savings	9,129	11,659
PACS	53 organisations	Administration savings	2,742	2,742
PACS	53 organisations	Offsite storage and transportation cost savings	153	153
PACS & RIS	7 organisations	Film, chemical processing and maintenance cost savings	1,914	2,465
PACS & RIS	7 organisations	Administration savings	235	257
PACS & RIS	7 organisations	Offsite storage and transportation cost savings	19	19
SAP	1 PCT	System maintenance	24	24
<b>Total</b>			<b>208,379</b>	<b>119,108</b>

## C. Estimated total financial savings for contracted period to March 2014 (based on evidence summarised in Table B)

- i) Actual achieved and reported cash releasing savings (as at 31 March 2007),

	<b>£'000</b>
<b>Total reported cash releasing savings to 31/3/07</b>	<b>208,379</b>

- ii) Total expected savings (extrapolating from data above for the remaining life of the NPfIT contracts, ie to 31 March 2014)

	<b>£'000</b>
Total reported cash releasing savings to 31/3/07	208,379

Annualised recurring savings 1/4/07 – 31/3/14 119,108 x 7 years	833,756
--	---------

<b>Total expected cash releasing savings to 31/3/14</b>	<b>1,042,135</b>
---	------------------

- iii) The total above is based on totalling the **actual reported** savings to date to the end of the contract. In some areas we can have a higher level of certainty based on the sample size which has reported savings. Taking these into account by extrapolating the savings to **all completed deployments** at 31/3/07 for PACS, GP systems and community clinical systems, a further £96 million of cash savings is confidently expected in the period to 31/3/14, bringing the total to:

	<b>£'000</b>
<b>Total quantified expected cash releasing savings to 31/3/14</b>	<b>1,138,135</b>

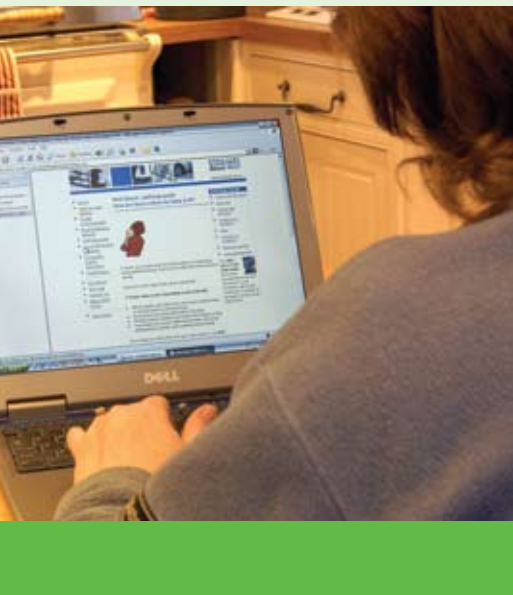
As outlined above, this total of reported cash releasing benefits to date and expected will be updated and will increase in later statements as the data are collated over coming months.



LOCUMS AND STAFF WHO CHANGE JOBS FREQUENTLY ALWAYS RECEIVE THEIR EMAILS BECAUSE THEIR NHSMAIL ADDRESS IS SAME THROUGHOUT THEIR EMPLOYMENT.

# Appendices

## D. Costs and expenditure overview



Benefits to date reported by the NHS are in the context of the overall cost and expenditure to date of the NPfIT.

In June 2006 the National Audit Office (NAO) published its 'Statement into the National Programme for IT in the NHS'. The figures quoted were derived from the original business cases submitted to HM Treasury and the ten year financial forecasts reported to the National Programme Board.

The Statement quoted the anticipated gross costs of the Programme (scaled up where applicable to a ten year timeframe), before accounting for any IT savings, costs avoidance or services benefits and are summarised as:

### Headline ten year forecast expenditure\*:

**£ 6.8 bn** Core national contracts (extended with extra services)

**£ 2.2 bn** National implementation activity (and new projects)

**£ 3.4 bn** Local expenditure on NHS CRS implementation and PACS

**£12.4 bn** Projected ten year total

### Actual expenditure to date

The chart opposite presents a comparison of the forecast and actual expenditure of the NPfIT to the period 31 March 2007. This shows that the actual expenditure to March 2007 on the systems which are delivering the benefits for which we have begun to collate evidence, is some £2.4 billion. This is less than the original forecasts of expenditure made in 2004 and 2006.

In addition, the balance on the advance payments to suppliers was £390.8m at 31/03/2007.

The National Audit Office acknowledged in its Statement that innovation in the National Programme's contracts was designed to protect the taxpayer from increasing costs in the event of delays to delivery:

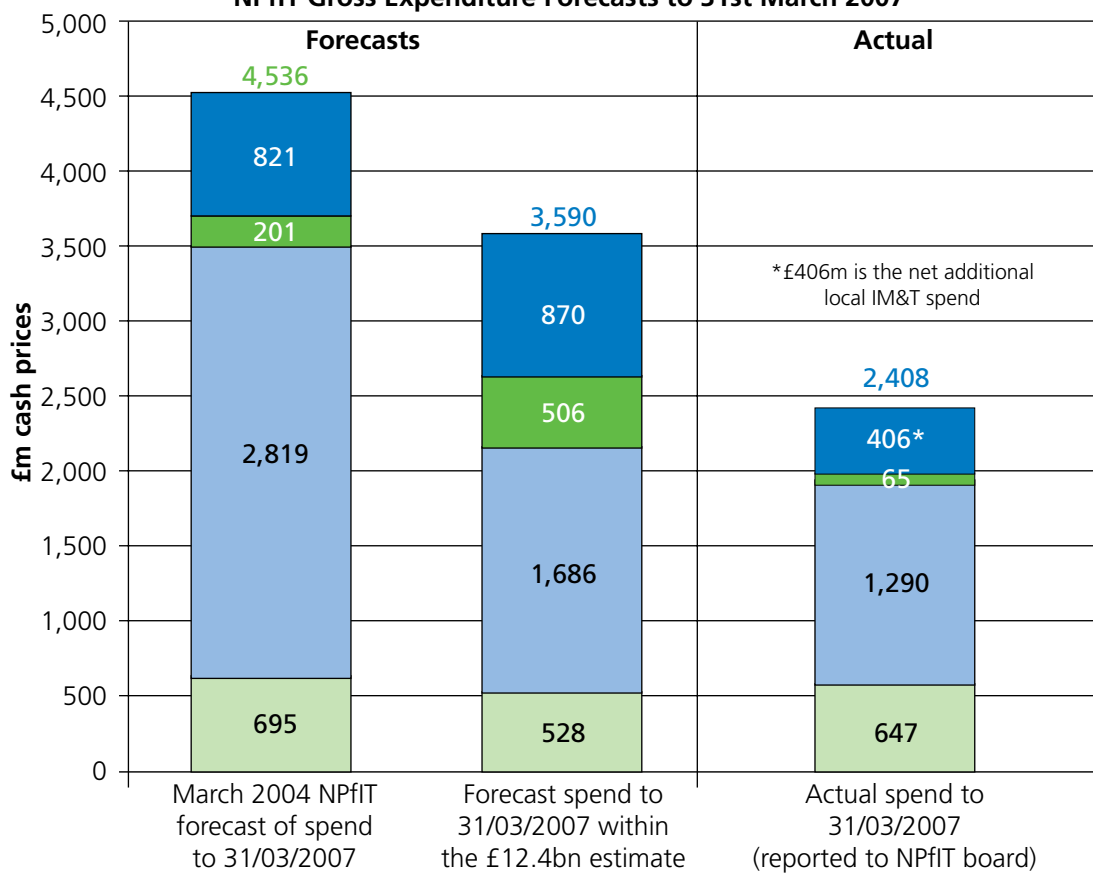
*"NHS Connecting for Health bought the systems at a fixed competitive price transferring financial and delivery risk to the suppliers, and it does not pay suppliers until services are proven to be delivered and working. So, although there have been delays in delivering the NHS Care Records Service, the suppliers have borne the cost of overcoming difficulties in delivering the software and not the taxpayer."*

NAO, NPfIT in the NHS, 2006.

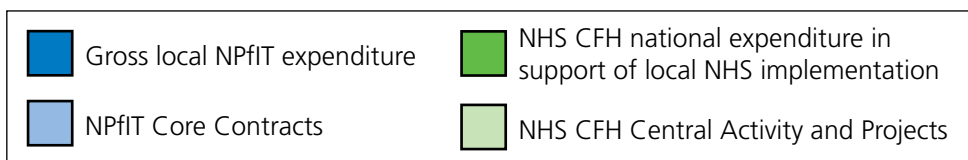
\*All NAO figures exclude non-cash items and are presented in a consistent 2004/05 price basis



**NPfIT Gross Expenditure Forecasts to 31st March 2007**



**Source of expenditure forecast/actual**



# Appendices

## 3 – Background to the National Programme for IT

1998

*Information for Health committed the NHS to lifelong electronic health records for everyone*

July 2000

*NHS Plan*

January 2001

*Building the Information Core: Implementing the NHS Plan outlined the information and IT systems needed to deliver the NHS Plan and support patient-centred care and services*

April 2002

*Wanless Report recommendations for IT in the NHS*

April 2002

*Delivering the NHS Plan developed the vision of “a service designed around the patient” offering patients more choice of where and when to access treatment, with IT to support this vision*

June 2002

*Delivering 21st Century IT Support for the NHS – a National Strategic Programme laid out the first steps*

October 2002

*National Programme formally established.*

All figures shown in blue boxes throughout the document are correct at 28-02-08

IT NOW TAKES JUST MINUTES TO TRANSFER A PATIENT'S RECORD FROM ONE GP PRACTICE TO ANOTHER USING GP2GP SOFTWARE, RATHER THAN UP TO SIX WEEKS USING TRADITIONAL METHODS.





*Connecting for Health*

For more information  
about NHS Connecting for Health please visit  
[www.connectingforhealth.nhs.uk](http://www.connectingforhealth.nhs.uk)