

makingITwork

A regular news update from the National Programme for Information Technology

Programme's positive step

The National Programme for IT is to become an Executive Agency of the Department of Health. A reduction in the number of Department of Health arms length bodies, freeing up at least £500 million for frontline services, will also see the National Programme given additional responsibilities for IT functions in the NHS.

Becoming an Executive Agency is a positive step for the National Programme, says director general of NHS IT Richard Granger. "We have achieved much over the last 18 months and we can build on those achievements through a strengthened organisational framework and so continue to modernise the NHS and provide better services to patients by delivering essential IT."

The National Programme will become an Executive Agency from 1 April 2005. It will take on the IT functions currently managed by the NHS Information Authority (NHSIA) which is to be abolished.

The information management functions of the NHSIA will form part of a new Health and Social Care Information Centre.

Key stakeholders are to be consulted on the transfer of work and functions from the NHSIA to the National Programme, and staff will be kept fully informed of the transfer timetable.

Richard said: "This is an exciting opportunity for the National Programme and it is testament to the professionalism and skill of its staff that we have been tasked with ensuring that IT investment and business change are co-ordinated and delivered across the NHS."

Frontline drive



Frontline staff are helping to shape the implementation of the National Programme for IT through a series of information-exchange roadshows.

The roadshows are being used to inform NHS and social care organisations about the National Programme and its key projects.

Crucially, they are providing the National Programme with the opportunity to learn from staff on the frontline who are leading implementation and service change.

Professor Aidan Halligan, director general of benefits realisation, is heading up the roadshow visits.

He said: "For all its scale, there is nothing in the National Programme

that has not been done to some degree by someone, somewhere.

"The pool of talent and learning needed to make this Programme a success is already out there. The roadshows are one opportunity to tap into it."

The roadshow visits involve a National Programme team meeting organisation chief executives, board members and frontline staff to share information.

Every roadshow will result in action that will help the individual

On the road: Professor Aidan Halligan discusses the way forward with staff during a roadshow at Salford Royal Hospitals NHS Trust.

organisation or shape the National Programme's implementation.

A roadshow diary will also be shared via the National Programme's new-look website at www.npfit.nhs.uk

Clinical engagement – page 6

A new website dedicated to the National Programme for IT has been launched. Go to www.npfit.nhs.uk for all the latest news about the National Programme and its projects.





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Revolution ahead for patient records

New electronic system banishes paper records

From the editor

The makingITwork newsletter is one of the components of an increased focus on communications as the National Programme for IT moves into implementation. The recent launch of our website (www.npfit.nhs.uk) and the many conferences, cluster events and roadshows are other examples.

This second issue of makingITwork contains articles on the roadshows (pages 1 and 6) which are designed to improve clinical engagement and ensure two-way communications along with the Front Line Support Academy initiative (page 4).

There are features on the Picture Archiving and

Communications System (PACS) at Shrewsbury and Telford NHS Trust (pages 10-11) and the 'paper versus electronic' debate (pages 12-13) which looks at the impact the NHS Care Records Service will have on staff working in NHS records departments across the country.

There's also an update on the National Programme's key projects (pages 14-15) and interviews with clinicians who are helping to make implementation a reality (pages 5 and 7).

I hope you find makingITwork helpful. Please send your news, views, questions and contributions to npcomms@npfit.nhs.uk



Gordon Hextall

Chief operating officer
National Programme for IT

Managing priorities

The National Programme for IT has now moved into the early stages of the implementation phase, with patient appointments starting to be booked electronically.

A number of priorities have been identified to keep the Programme on track. Chief operating officer Gordon Hextall said: "Firstly, people need to recognise that this is not just an IT Programme.

"It's an IT-enabled change programme and we need to pay full attention to both IT delivery and implementation of the transformation that IT makes possible.

"So, ensuring that we have

robust, realistic and co-ordinated plans right across the National Programme, together with equally robust risk and issue management, is the foundation for successful delivery.

"After that, we need to pay attention to a range of key areas within the plans to make sure we have IT solutions to implement and that the service is prepared to receive and use them."

The work currently underway to help continue to ensure successful delivery of the National Programme includes:

- checking supplier performance to meet delivery dates and keep within contracts

- compliance testing of existing IT system suppliers
- continuing to improve communications and engage the wider NHS
- preparation and training, specifically targeted at sites due to go live
- financial planning and management of available funding
- benefits realisation to ensure that improvements for patients, clinicians and the NHS are secured
- maintaining capability and capacity in skills required
- evaluation on a stage-by-stage basis to ensure lessons are learned and applied to the rest of the programme.

The National Programme for IT

The National Programme will procure, develop and implement modern, integrated IT infrastructure and systems for all NHS organisations in England by 2010.

The £6bn National Programme will deliver:

- an electronic NHS Care Records Service
- an electronic booking service – 'Choose and Book'
- a system for the Electronic

Transmission of Prescriptions

- a national network – N3
- 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.

Want to know more?

For further information about the National Programme please contact the chief information officer at your local strategic health authority or your local cluster regional implementation director. Alternatively you can email the communications team at npcomms@npfit.nhs.uk

Putting patients in the picture



New era: PACS will replace the traditional X-ray film and light box

Millions of patients will get treatment more quickly and efficiently thanks to new technology to be rolled out across the country from this summer.

The new system will enable images such as X-rays and scans to be stored and mailed electronically rather than printed on film and filed manually, enabling doctors to provide a much faster diagnosis.

Instead of having to physically transfer an X-ray or scan by hand from one hospital department to another, health professionals across the NHS will be able to access the

information at the touch of a button.

The system, PACS – Picture Archiving and Communication System – is being established under the National Programme for IT. PACS technology will be rolled out from this summer through five Local Service Providers with national coverage due to be completed in three years.

Patients in rural areas will especially benefit because PACS will be available in minor injuries units and other diagnostic locations, cutting the number of

journeys to hospital.

Other benefits include patients not having to wait whilst their X-rays are processed and delivered by hand from one department to another, and clinicians will no longer have to hold X-rays up to light boxes to make their diagnosis.

There will also be improved staff and patient safety with reductions in radiation dosages from X-rays and hazardous chemicals for film processing no longer being used.

The Telford experience – page 10

Voice for staff and patients

A new body has been set up to ensure clinicians and patients have a voice in the implementation of the National Programme for IT.

The Care Record Development Board (CRDB) will provide clinical and patient input in the development of IT by the National Programme.

It will ensure NHS IT helps deliver better care and supports the Government's top priority of putting the interests of patients first.

The CRDB replaces the Public Advisory Board and the National Clinical Advisory Board.

It is chaired by the Department of Health's national director for patients and the public Harry Cayton, and will bring patients, the public, social care and health professionals together in one body.

The board will have a particular focus on the development of the NHS Care Records Service (NHS CRS).

Health minister John Hutton said: "The new board will ensure the NHS develops patient-centred care processes that are supported by the IT being delivered by the National Programme."

Action teams will be commissioned to carry out specific pieces of work and make recommendations to the CRDB. Their work will be based on the priorities of the National Programme ensuring recommendations are given at the appropriate time to inform the development of the care records.

Harry Cayton said: "We will set the new paradigm for care, working with the National Programme to ensure the NHS can maximise the benefits that the new IT has to offer to support improvements in care."

The work of the CRDB will be made publicly available and a conference for stakeholders is planned for November 2004.

The CRDB is currently recruiting members. To find out more visit www.npfit.nhs.uk/crdb The closing date for applications is 27 August 2004.

Joining forces for change

The National Programme for IT has joined forces with the NHS Confederation to run a series of events to highlight the work of the National Programme and progress to date.

The sessions provide NHS leaders with opportunities to raise issues and ask questions of the National Programme's senior managers, including director generals Richard Granger and Aidan Halligan, on behalf of their organisations and staff.

A national event and four regional events have already taken place between May and July. The second national event will take place in Leeds on 14 October 2004 and will focus on the implementation process and meeting service objectives.

A fifth regional event is also scheduled for the autumn.

Supporting leaders

A new Front Line Support Academy (FLSA) has been established to help staff implementing IT in the NHS and social care.

The academy will be made up of three schools – leadership, teamworking and communications – and will include support for education, training and informatics.

It will be used by staff whose role is to make the implementation of the National Programme for IT a reality in local health communities.

The FLSA will feature a simulator made up of a series of sets that replicate hospital wards, GP surgeries and non-clinical settings where staff will learn how best to use new systems.

The FLSA is under development with the first participants due to start in October. Further updates will be made available on the National Programme website, www.npfit.nhs.uk

Expert advice

Ovum and Gartner will provide key information to enable the National Programme to monitor the supplier market and learn from the best IT practices in the world.

Ovum will undertake an industry liaison role with existing system suppliers and provide market intelligence of the IT and healthcare marketplace. Individual assignments will be carried out by leading analyst, Tola Sargeant.

Gartner will provide research services to National Programme leaders, including strategic health authority chief information officers. It will provide market intelligence of the global IT marketplace and individual assignments will be undertaken by leading analyst Jonathan Edwards.

Gordon Hextall, the National Programme's chief operating officer, said: "Both firms have excellent pedigrees and can help the NHS to learn from best practice elsewhere in the world as we develop and implement our IT systems. By awarding two contracts, we are maintaining one of our contracting principles of competition. We expect to get the best from both UK and global IT and healthcare marketplace developments. We also expect Ovum and Gartner to work collaboratively on assignments where appropriate."

Ovum chief executive Chris Dines

Two leading firms of IT market analysts have been appointed to strengthen the National Programme for IT's drive to secure best value for money in the NHS.



Top advice: Market analysts will help secure best value for money

said: "We are delighted to be working with the National Programme and the supplier community to provide industry liaison and market intelligence that will support the NHS through the roll out of this vital and exciting Programme."

Gordon Head, Gartner European Healthcare business development manager, said: "The use of independent research and advisory services strengthens the message that the National Programme is

committed to applying best practice and providing best value through IT to clinicians and patients alike."

Academy showcase

The National Programme for IT showcased its new Front Line Support Academy (FLSA) at the NHS Live event in July.

Director general of benefits realisation Aidan Halligan delivered one of 14 master classes at the high-profile event held in London's Docklands on the substantial benefits that renewing and modernising NHS IT systems will bring.

He demonstrated how the FLSA's simulator will be used to support NHS staff responsible for implementing the National Programme. The simulator focuses on the skills and behaviour associated with leadership, teamwork and communication.

NHS Live is a year-long national project designed to promote joint participation and exchange best practice to improve patient experience.

Leaflet launched for patients

The National Programme for IT has launched a new leaflet for patients. The leaflet, 'makingITbetter – more choice & control over your healthcare', explains what the National Programme is and the benefits of introducing modern IT systems to the NHS.

It details how everyone will have a new electronic NHS Care Record and how patients will have more choice about when and where they are treated through the new 'Choose and Book' programme.

The leaflet is available at www.npfit.nhs.uk/publications.asp Hard copies of the leaflet, which



is available in other languages and formats, can be requested from the NHS Information Authority information line on 08453 660066, quoting reference 1741 or by emailing information@nhsia.nhs.uk

All in a day's work



The world of adult mental health expects to reap great benefits from electronic records. Martin Baggaley, consultant psychiatrist for South London and Maudsley NHS Trust and clinical director for adult mental health in Lewisham, has brought his considerable experience to the London National Programme implementation board. *makingITwork* reports.

Integrated care

As former chair of the Royal College of Psychiatrists' Computers in Psychiatry Special Interest Group, Martin says that adult mental health has possibly the greatest need for integrated electronic records of any health specialty – and if it works for this sector then it will work for all.

“Recent inquiries into failings in adult mental health services have identified failings in communication as being at the root of the problems,” says Martin, who has been involved with the London Integrated Mental Health Electronic Record project for two years.

“My trust set up a health informatics system six years ago because we saw the need. At any time we have approximately 3,500 active patients with only 100 in hospital and the rest in the community. We need information to be available 24 hours a day wherever the patients may turn up if something goes wrong. Locally there are over 100 sites, including A&E at three or four different hospitals in the area, community health team bases and police stations, where they could seek or be recommended for help.”

Martin believes that, longer term, electronic systems will make it much easier to manage patients across different health service boundaries.

“I think it will cut down substantially on arguments about discharging and transferring people because, effectively, with joint access to records you are working for the same organisation. We should end up deciding on a patient-by-patient basis how care is shared between ourselves and primary care. Being fully

‘It is very important to be flexible and anticipate that different teams work in slightly different ways, because the critical aspect in the success or failure of electronic records will be in the interface for the clinician. Most people concentrate on hardware and software, but it’s the human interface that’s going to be the issue.’

integrated will be extremely helpful.”

Having appreciated the benefits that the National Programme could deliver, Martin’s colleagues had concerns that they wanted to be addressed in the design of any software.

“I am keen to ensure software designers didn’t have an exclusively acute hospital orientation – psychiatrists are not particularly interested in blood tests, X-rays or booking operations. In fact, many of our issues are also relevant to users in primary care so I am speaking up for a wide variety of users.

“It is very important to be flexible and anticipate that different teams work in slightly different ways, because the critical aspect in the success or failure of electronic records will be in the interface for the clinician. Most people concentrate on hardware and software, but it’s the human interface that’s going to be the issue.”

Martin feels the difficulties he’s had juggling the London National Programme board timetable alongside his clinical duties have been worth it.

“Previously some programmes have been

over-complicated and didn’t allow clinicians to work in the way they used to, but the human interface is the key element in making the programme be acceptable. My messages are being heard, and the Programme is being amended, based on my experience.”

He can look at the way staff working in his own trust has changed over the years to see how much difference a good IT programme can make to the treatment of patients.

“Having clinicians use these records, with access to all key information, has made everything so much safer and has led to dramatic improvements in treatments. Clinicians now know about previous violence, medications, who to contact. Once we had this information we couldn’t imagine how we used to survive without it.

“When I first arrived at the trust you could have blown up all the computers and nobody would have noticed. Now everybody gets extremely angry if the system goes down even briefly, which demonstrates how much we use electronic records.”



Professor
Aidan
Halligan

Clinical

engagement

Director general of benefits realisation, Professor Aidan Halligan is on the road meeting clinicians and other NHS staff.

He has instigated a series of roadshows to share information about the National Programme with NHS organisations and their frontline staff. More importantly, the roadshows are helping him to find out what staff want from the National Programme.

Professor Halligan acknowledges the criticism made in recent months about the lack of clinical engagement. "There hasn't been much engagement by clinicians in the early stages of the Programme and for that, I apologise. We do need to be open and honest and the most important part of communication is listening.

The National Programme for IT is committed to clinical engagement. *makingITwork* talks to Professor Aidan Halligan.

"That's why I am getting out there and finding out what people really want. The idea of the roadshows is to visit trusts and organisations and pick up the stories and the questions and think about how they factor into central design and local deployment."

To date, Professor Halligan has

completed nine roadshows.

"Everywhere we go we find enthusiasts and people who are natural leaders. We want to harness that enthusiasm and have those people help us make the National Programme a success."

Local engagement will also be brought about through

transitional leadership teams identified in each local healthcare community. They will be supported through the new Front Line Support Academy to become effective leaders who are fully equipped to take on the task of implementation in their local area.

Professor Halligan said: "Implementation won't work unless it is owned locally. The biggest learning point from previous implementations is that transitional leadership is vital.

"That means having IT professionals, management and clinicians working as a team. But few of us work effectively as a team, we've not been trained to. We are bringing in people to demonstrate how teams can work effectively. They will also train NHS staff how to influence others in a positive way."

The National Programme's engagement strategy also extends to patients and the public. The new Care Record Development Board will involve both patients and clinicians in the evolution of the National Programme.

"We have to be open with everyone about what it can and can't deliver," said Aidan.

"The message from the frontline is 'give me the tools to do my job'. That's what we are doing here with the National Programme – making IT usable, useful and compelling."

Q&As

When will the roadshow visit my organisation?

We currently plan to run one roadshow visit per week. Visits can be requested via the roadshow pages on the National Programme website at www.npfit.nhs.uk. We can't promise to accept every request but we do try to make sure that visits are fairly distributed in terms of the types of organisation and geographical spread.

What happens on a roadshow?

Typically we meet with the chair, chief executive and other members of the organisation's formal leadership to gain a picture of the local issues and concerns. This is often followed by a short tour, which gives us a chance to see local IT initiatives and meet the people who lead

and use systems at the front line of health care. I generally give a closing presentation and we have an open Q&A session on the National Programme and its implications.

How is that translated into action?

Often there are local issues that we can help to resolve. Over and above that, the feedback we get directly informs our strategic thinking. We're now working on some new approaches to communication that are directly inspired by comments made during roadshow visits.

What does the organisation gain?

Fundamentally it's a chance to be heard, a chance for people at the frontline to express what they really think and feel about the

National Programme, good and bad. This feedback is listened to, very carefully. But we also hope to have communicated our vision of what the National Programme will achieve and our belief that local leadership is absolutely critical to its success.

What do you really learn from a roadshow?

There's no substitute for directly connecting with the people who have made really intelligent use of IT in the delivery of health care.

Very quickly we saw the same general themes emerging from our first visits, but there is also something unique about each one, that refines our understanding of what the National Programme means for people at the sharp end. We never leave a roadshow without having learned something new.

Design for life

Hundreds of individuals are helping shape the way in which patient data will be compiled, viewed and used in the future. One of these is Steve Jones, chair of the Southern Cluster clinical advisory group.

Steve, consultant vascular surgeon at Taunton and Somerset Hospital, is a strong advocate of the benefits to be gained from the National Programme. He has had a keen interest in health informatics, especially clinical computing, for 15 years.

He also spent three years as lead clinician on a procurement project for 12 trusts in the South West, that was eventually overtaken by the National Programme.

Steve was an obvious candidate to chair Southern Cluster clinical advisory group, after the regional implementation director and SHA chief information officers decided that clinical input to the Programme should be on a formal basis. This not only created a definite route through which the views and concerns of individual health professionals could be channelled, but also gave software developers at The Fujitsu Alliance, the Local Service Provider, valuable clinical input.

Steve explains, "I also chair the functional design group of the common solution project, which seeks to co-ordinate efforts of two clusters, ourselves and London, because our Local Service Providers are both using the IDX solution so we are establishing a single

system. The system was developed in the US so we have had the interesting problem of having to Anglicise it. It also has to fit with the way the NHS works. This is just part of the vital role clinicians are playing in the design process."

"The process of designing what will be included in the NHS Care Records Service is being led centrally by the National Programme's design authority.

"The current work is focused on designing the functionality and appearance of the NHS Care Records Service. If the final result is not something that is easy to use, makes people's work easier and enables them to do a better job that improves patient care, then adoption will be difficult. Our purpose is to make sure it is usable, benefits staff and gives better results to patients.

"This is a very exciting project with the opportunity to greatly improve the quality of care we offer. Simple things such as having instant communications between different areas of the health service, prescriptions and automatic checking for dosages and allergies are major benefits. The electronic NHS will deliver better, safer and higher quality care."

Q&As

What are we getting?

This will depend on which cluster you are in and the needs and IT systems in your local organisation. For organisations in the Southern Cluster, the early part of the service will include a new Patient Administration System (PAS), plus security and knowledge management, patient identification, data collection, patient monitoring and reporting.

There will also be programmes to help with planning, management and evaluation of maternity care and services.

When are we getting it?

In the Southern Cluster the first systems are expected to go live in spring 2005. Organisations in other clusters will be going live from summer 2004 onwards.

Will NHS IT staff lose their jobs as a result of the National Programme?

The National Programme is about increasing NHS resources and capacity and helping to deliver a modern, 21st century health service.

It is, of course, impossible to guarantee anything in the long term, but in the short and medium term there are huge tasks in deployment, implementation and management to support the new systems and services being introduced.

Some support roles will change and develop over time, as new systems and services are phased in. Staff employed by the NHS are a valued resource and knowledge base. Where necessary, they will be supported locally in adapting and developing their roles.

I don't know how to use a computer – will I have sufficient training?

Your local health organisation will have plans in place to help, which will almost certainly hinge on a generic, basic IT skills qualification called the European Computer Driving Licence (ECDL) or an equivalent qualification.

It may be that all you need is the ECDL introductory package known as Getting Started.

Once you have mastered the basic skills, local arrangements will be in place to ensure that you get the right skills you need to use systems, at the right time. Talk to your local training manager if necessary to see what's available and what's required.

You can find out more about ECDL in the NHS by visiting www.ecdl.nhs.uk

Will it take me longer to treat patients than it does now?

No. Reduced administrative requirements will enable clinicians to make more productive use of their time in appointments and spend less time outside these appointments chasing missing records or test results

In addition, other key measures will save clinicians time. These include improved patient information, including details of all the care providers involved in the treatment of a patient; greater support in diagnosis; and instant access, 24 hours a day, to patient records, diagnostic tests, images and results.



Clinical input: Steve Jones, chair of the Southern Cluster clinical advisory group

Great deal on products and services

The Enterprise Wide Arrangements (EWA) deals already struck by the National Programme are great news for NHS organisations across the country.

NHS organisations will be able to benefit from the negotiating power already brought to bear by the National Programme and ensure best price for products and services.

EWA team lead Robin O'Connor said: "This is the first time the NHS has been able to exercise its full weight to drive down prices and benefit from economies of scale for these products.

"There are significant savings that NHS organisations can realise by accessing some of the EWAs we've already set in place."

However, the EWAs do not remove the need for NHS organisations to demonstrate value for money and, where appropriate, run competitive procurements.

EWAs have been negotiated with a range of companies including:

- Cisco Systems
- EMC Computer Systems
- Hewlett Packard
- SeeBeyond
- Sun Microsystems
- Oracle
- Health Language Inc
- TATA Consultancy Services

Details of the individual EWAs and contact details for the companies involved are available on NHSnet – www.npfit.nhs.uk/ewa

Alternatively, contact your SHA chief information officer.

CIOs are supporting organisations to negotiate with suppliers tied into the EWAs.

Huge savings for the NHS on essential IT products and services



An eye

The ink's been dry for some time now on contracts between the National Programme for IT and its major suppliers, BT, CSC, Fujitsu, Accenture, Atos Origin and Cable and Wireless.

Large sums of money will start to be paid as the suppliers deliver the IT services which will modernise the way the NHS works, enabling doctors, nurses and other healthcare professionals to improve further the care they deliver to patients.

And the National Programme is being shrewd. It is flexing its considerable negotiating muscle to ensure value for money and significant cash savings over the lifetime of its contracts.

It made sure that its contracts with the major players – the prime contractors – enabled the National

Programme to negotiate directly with the prime contractors' sub-contractors to secure better deals.

Already, estimated savings of over £100 million have been made

'There is the potential to gain further savings for trusts and the rest of the NHS.'

through the process of direct negotiation with subcontractors – a process which involves Enterprise Wide Arrangements (EWA) between the National Programme and the sub-contractors.

Robin O'Connor heads up the EWA team at the National Programme. He said: "There are

about 80 subcontractors involved in the National Programme and many are being used by more than one of the prime contractors.

"The contracts between the subcontractors are large, particularly when you aggregate them, and we wanted to exploit that. It gives us more purchasing power and, when you buy in bulk, you get it cheaper."

Subcontractors supplying hardware, software and consultancy support have all been involved in the EWA process to date.

"We engineered the contracts so that we can negotiate with the subcontractors to see if we can get a better price than the prime contractor received," said Robin.

"The prime contractor then has to accept the better price and we can pass the savings back to the NHS."

NHS organisations can secure more money for patient care thanks to the negotiating power of the National Programme for IT. **makingITwork** looks at how they can benefit.

for value

Flexing financial muscles

The National Programme's purchasing might is being felt across each of the five clusters.

Chief information officer for Essex SHA Iain Marsland said: "The EWA process is very welcome. It's exercising the authority of the National Programme to get better costs and deals with our key IT vendors.

"Previously, we could exercise the weight of individual NHS organisations and individual procurements, but the National Programme has brought the weight of the full NHS to reduce prices on key applications and services. The EWAs also put pressure on other suppliers who are in direct competition with those subject to the EWAs.

"We need to ensure we are getting best value for money, through products which can deliver real change - and the National Programme has gone a huge way down that road - whilst keeping costs to an absolute minimum and now the EWA process is helping us to do that also. This enables us to put more money into frontline care delivery."

Andy Morris, finance and information director at Southend Hospital NHS Trust, said: "Any deal that gets better prices for us, the NHS and patients has got to be good news. The more we save on IT, the more we have for other services."

Robin and his team expect the number of EWAs to grow as the National Programme seeks to use its size to secure products and services at more competitive rates. The savings realised mean more money in the NHS pot to be spent on improving patient care elsewhere.

"By being innovative in the way we conduct the contracting process, we are getting even better value. It reinforces our desire to get the best quality IT in the NHS at the best possible price."

And the benefits from the EWA process are not just for the National Programme and its projects alone. Many of the subcontractors involved in the National Programme already do business with other parts of the NHS, mainly trusts.

'The contracts between the subcontractors are large, particularly when you aggregate them, and we wanted to exploit that. It gives us more purchasing power and, when you buy in bulk, you get it cheaper.'

Robin said: "We're trying to wrap the other business into the EWA process as well so there is the potential to gain further savings for

trusts and the rest of the NHS."

Another measure built into the agreements ensures that the prices offered to the National Programme 'are the best in the world', said Robin.

"We will ensure that this is maintained and if other people get offered better deals, we will expect the same. And we will review the EWAs - the cost of IT is moving all the time and we want to make sure we continue to get the best deal."

Crucially, securing best value for money is not at the expense of quality. Robin said: "The prime contractors were chosen and we accepted their solutions so there is no compromising on quality. It's not about going from a Rolls Royce to a bike. It's about getting the best price on the Rolls Royce."

No going back

Clinicians at a district hospital which has been operating PACS (Picture Archiving and Communications System) for 18 months say they would not want to work in a unit that uses traditional film again. [makingITwork](#) reports.



No going back: Superintendent radiographer Will Smith and colleagues appreciate the benefits of PACS

Princess Royal Hospital, part of the Shrewsbury and Telford NHS Trust, has invested in a PACS system that makes digital images of X-rays available at the touch of a button. As a result health professionals can call up radiological records within minutes of X-rays or scans being taken. The records are then available to everyone simultaneously and should not get lost. The system is available at computers throughout the 350 bed hospital and is linked to all units, including A&E.

“One helpful by-product of the introduction of PACS,” said superintendent radiographer, Will Smith, “is that the number of internal phone calls has fallen by 90 per cent! Previously all these calls were from doctors and clinicians trying to track down a patient’s X-rays within the hospital.

“PACS has also brought about other non-financial benefits.

“Before PACS we had smelly chemicals and film processors that regularly broke down. We had piles of film everywhere in the office. We had handling problems with

the film. We had lost films, we had staff doing two or three hour ward rounds to pick up films that had been done the night before – and during all these processes no one else could look at them!”

The Princess Royal Hospital has also found that patients are spending less time in hospital thanks to the instant availability of the scans, at any time of day or night. Scans are linked to clinicians’ reports so all relevant information is available as required.

Since the system became operational no images have been lost, which means no patient has needed to be called back for a repeat examination. The ability to manipulate images, to lighten, darken or enlarge critical areas also aids instant diagnosis, often eliminating clinical uncertainties that would previously have required a second X-ray.

The initial cost of the hardware required, plus a seven-year management contract, made the installation of PACS a £2.5 million fixed-cost project. The long term financial implications, however, are

Instant access: images available on screen at the touch of a button for Julie Young, superintendent radiographer at Princess Royal Hospital



virtually cost-neutral. The annual cost of film has dropped from around £220,000 to £18,000. There is no requirement to keep replacing processors and it has been possible to reduce clerical support.

The trust will be storing the old films for seven years for legal reasons, but there is no chance of ever returning to the old technology.

"If we ever suggested going back to films I think we'd have a riot," says Will. "The whole department appreciates the benefits of PACS – it's all about convenience, instant access and no lost film."

'Before PACS we had smelly chemicals and film processors that regularly broke down. We had piles of film everywhere in the office.'

Meeting high standards

Approved suppliers for PACS provide systems that fulfil specifications laid down by clinicians and supported by the Royal Colleges.

The recommended systems have been vetted and assessed as fit for purpose, as well as demonstrating best value.

The scale of NHS investment has been used to achieve price savings on PACS equipment and support bought through recommended global suppliers: prices on servers have been reduced by up to 82 per cent, disc storage costs reduced by 71 per cent and CR image acquisition equipment costs cut by up to 65 per cent.

To run PACS systems successfully trusts need to have full clinical engagement and adequate electronic communications infrastructure to carry the images.

Funding

While there will be considerable material savings when traditional film technology is replaced by PACS a central fund of £60 million has also been made available this year to bridge any affordability gaps.

Trusts need to prepare a business case to enable the strategic health authority to decide its priorities and timetable. SHAs will prepare any application to the central fund.

Existing equipment

If trusts already have PACS equipment in operation then it will be treated as any other existing system and remain in use for its viable life time. The assessment of viability must include its ability to interface with the NHS Care Records local and national services.

Information control

The new patient electronic records being delivered under the NHS Care Records Service (NHS CRS) will be subject to strict information governance standards and controls compliant with the NHS Confidentiality Code of Practice and legislation which includes the Data Protection Act 1998.

Systems being introduced to deliver the NHS CRS have been built to ensure that security and patient confidentiality are uppermost when an electronic record is accessed and information shared.

Three key elements will ensure that the NHS CRS is secure:

- access controls – staff accessing an electronic record will have to have a ‘legitimate relationship’ with the patient, and will only see the information that they need to do their jobs
- authentication procedures – including registration systems, tokens and passwords
- patient control – including a ‘sealed envelope’ in which a patient can hide part of their electronic record, only to be opened (except in an emergency) with express consent.

Phil Walker, deputy head of digital information policy at the Department of Health, said:

“The National Programme provides us with the first real opportunity to implement technical solutions to ensure patient confidentiality is respected and patient information is secure.

“The measures being put in place will do a lot to safeguard records and enable clinicians to work in a confident way when accessing those records.”

NHS organisations are required to comply with the Confidentiality Code of Practice and the Data Protection Act (processing of information) and this is being supported and measured using the Information Governance Toolkit launched



last November (www.nhsia.nhs.uk/infogov/igt).

Acute trusts were the first to use the toolkit this year, using self-assessment. The rest of the NHS is to follow, with performance measured from next year by NHS internal audit.

Performance on information governance compliance contributes to the star rating awarded to NHS trusts.

Phil added: “This isn’t primarily about star ratings or legal compliance. Information governance contributes directly to care processes, safeguards patients’ rights and supports the patient choice agenda.”

Mike Pringle and his GP colleagues request up to 80 patient records between them every morning at their Collingham practice in rural Nottinghamshire.

The process used to involve practice staff spending hours pulling out patients’ paper records, then re-filing them after each consultation.

Now, at the touch of a button, Mike and his partners view records on screen the minute a patient walks through the surgery door.

“We’ve been paper-light for the last four years,” said Mike, whose practice numbers 6,200 patients. “We haven’t written any physical records in that time. The benefits of electronic records are

considerable. “They are much more complete and accurate, they are faster to access and more integrated so, for example, they link with the appointments system here.”

Research carried out by Mike shows initial concerns about the introduction of electronic records were unfounded.

“One of our worries was that doctors might lack the necessary typing skills and that records might not be complete – details would be missing, abbreviations would be used. But this is not the case – records are complete, more accurate and better than manual records.”

Paper records were also

Information guardians

Consultant anaesthetist Guy Turner is the caldicott guardian at the Royal West Sussex NHS Trust.

Caldicott guardians are senior staff in NHS and social services organisations appointed to protect confidential patient information.

They were introduced following the 1997 Caldicott Report which identified weaknesses in the way parts of the NHS handled confidential patient data.

The drive to improve information governance in the NHS has meant the role of caldicott guardians is changing, particularly with the move to create national electronic care records.

Guy said: "Previously my role was around auditing and answering colleagues' questions about the use of information.

"Now we've been through the information governance toolkit process which is very different from previous procedures. This whole agenda will become even more important as the NHS looks to introduce electronic records.

"I support the introduction of electronic records and will be working to ensure that patients information is protected. We need to ensure that patients have sufficient information, at the right level, to make informed decisions about how their data is stored and shared."



Reams and reams: Senior health records manager Rosemary Wood and director of information management and technology Martin Bell with some of North Bristol NHS Trust's two million paper-based records

Revolution ahead for patient records

By 2010, every patient will have an electronic patient record, banishing paper records to the archives. **makingITwork** reports on the electronic record revolution.

vulnerable. "Records can also go missing, or they're filed in the wrong place, or never turn up at all. An electronic record hasn't got the same risk."

Rosemary Wood, senior health records manager at North Bristol NHS Trust, cannot wait for electronic records to be introduced there. Rosemary oversees a department responsible for some two million paper-based records stored across four hospital sites.

Up to 26,000 notes are pulled out and re-filed every month by the department which employs around 80 whole time equivalents to get the job done.

North Bristol NHS Trust is the result of a merger between

Frenchay Healthcare NHS Trust and Southmead Health Services NHS Trust in April 1999. The merger has contributed to the huge task of storing and keeping track of paper records held across a range of hospital buildings.

Rosemary said: "The merger has brought about added complexities to what is a high-demand frontline service.

"There has been quite a growth in the volume of records, and there is a much greater flight of notes between sites. It is an enormous task to administer, not least the practicality of keeping notes and delivering them to where they are needed, sometimes urgently."

The trust is simplifying its records

system by merging the files of patients who have previously attended both Frenchay and Southmead hospitals to create one new record.

"But electronic records are the ultimate panacea for every record manager," said Rosemary. "It will mean a radical change in working practices but electronic records have enormous benefits – considerable cost savings, alleviation of missing files and lost records. Authorised staff will have immediate access to a record whenever and wherever a patient presents. Access to electronic records will be limited to individual users on a 'need to know basis', hence patient confidentiality will be protected.

"For this trust, electronic records will have the greatest benefit because of the administrative complexities we deal with on a day-to-day basis. I can't wait!"

Janine Brooks, the NHS Information Authority's caldicott guardian, is keen to re-assure patients and NHS staff that security measures and access controls covering patient information are robust. She said: "We have obligations to make sure national NHS databases are not accessed and shared inappropriately. The strict controls already in place ensure that patient confidentiality is jealously protected. That will set the standard for the NHS Care Records Service."



What's next?

Summer 2004 – Summer 2005

- Choose and Book – first electronic booking of hospital appointments from GP surgeries
- NHS CRS – first phase sees the development of basic health record to include patient demographic information, birth and death notification, recording of allergies
- ETP – phased roll out due to start in early 2005
- PACS – roll out due to start summer 2004
- Email and Directory Services – new service, known as CONTACT, available to NHS staff
- GP IT system – QMAS.

Summer 2005 – Summer 2006

- NHS CRS – second phase under which health record grows to cover orders and results for diagnostic images and pathology; support for care pathways; GPs notified of emergency and out of hours encounters.

2006 – 2008

- NHS CRS – third phase provides support for all doctors and nurses to help with decisions. Care at home helped by remote links to healthcare professionals anywhere in the community. Better healthcare planning also enabled by using the facts and figures held on NHS CRS
- ETP – to be fully implemented
- PACS – to be fully implemented.

Up to 2010

- Final features incorporated to complete full integration between health and social care systems in England.

Making

Headway is being made across all aspects of the National Programme for IT. makingITwork looks at achievements to date.

■ Choose and Book

'Choose and Book' is the name now being used for the electronic booking service.

The first successful online patient appointments of the Choose and Book service from primary care have been made in the early adopter sites.

The roll out of the Choose and Book service will continue at early adopter sites throughout summer 2004.

The National Programme strategy is to have a phased, incremental implementation to ensure a smooth, effective adoption of Choose and Book throughout the roll out process.

A range of information and awareness-raising material has been developed to support Choose and Book including a website – www.chooseandbook.nhs.uk

■ NHS Care Records Service (NHS CRS)

The initial elements of the NHS CRS to support Choose and Book have been delivered, enabling GPs to book appointments into secondary care and produce electronic referral letters.

A number of key components of the service were delivered for the initial go live, including secure access via smartcards, the patient demographic service (PDS) and the transaction messaging service (TMS).

The PDS will provide the non-medical patient information for care records such as patient contact details, whilst the TMS is the system that will manage all the messages that flow to and from the central spine of the care records service.

■ Electronic Transmission of Prescriptions (ETP)

The ETP team is working towards a progressive implementation of ETP beginning in early 2005.

The technical design of the service is largely complete and the team is now supporting system suppliers in the development of ETP-compliant systems and deployment plans.

Further meetings have been held with the Pharmaceutical Services Negotiating Committee's community pharmacy sub-group, community pharmacy organisations and the Prescription Pricing Authority.

progress

■ National Network (N3)

N3 is the name for the new National Network that will provide wide area networking services to the NHS in England. N3 will provide substantially increased bandwidth compared to the current NHSnet and greater value for money.

N3 will enable the implementation of the NHS Care Records Service, Choose and Book, the Electronic Transmission of Prescriptions and the transfer of digital images such as X-rays through Picture Archiving Communication Systems (PACS).

Implementation of the first connections to support Choose and Book have been achieved and full roll out of N3 services started in July.

■ Picture Archiving and Communications Systems (PACS)

PACS technology will be rolled out from this summer with national coverage completed in three years.

The clusters are formulating their three-year plans for implementation and contract work is also ongoing at both national and cluster level.

The central PACS team is working with clusters, LSPs and contracting and finance teams to clarify any outstanding questions

around the PACS contract.

Workshops are being held to further refine the business template and implementation guide for PACS.

The systems will be fully compliant with the NHS Care Record Service.

■ Email and Directory Services (EMDS)

The National Programme and EDS have settled a dispute around EDS' EMDS. The settlement, facilitated by the Centre for Effective Dispute Resolution (CEDR), was achieved amicably without any attribution of blame to either party. Cable & Wireless (C&W) has been appointed as the new contractor to manage central email and directory services for the NHS.

As part of this settlement, arrangements for continuity of service and handing over the service to C&W have been agreed so there will be no interruption of service to the NHS.

The new service to be provided by C&W will be known as CONTACT and will be available to staff from autumn 2004. It will provide a central directory of professional contact details for all NHS staff in addition to the email service. The service will offer email accessible via a website or through email clients such as Outlook. It will

also provide services such as email to fax, email to SMS messaging and a calendar service for managing time, tasks and resources within and across NHS organisations.

■ GMS Contract IT Project

The National Programme for IT is now in the process of rolling out the Quality Management and Analysis System (QMAS) to all practices and primary care trusts (PCTs) in England.

The new General Medical Services contract for GPs – introduced from April – meant a special payment system was needed to support the contract's Quality and Outcomes Framework (QOF) which rewards practices for the care they deliver.

The new national IT system will accurately calculate payment values and provides practices and PCTs with access to the same information about achievements against the QOF and expected payment values.

Graham King, GMS Payments programme director at the National Programme, said: "QMAS supports the underpinning principles of the QOF by bringing achievement in quality of care to the clinician's desktop."

For more information please visit: www.npfit.nhs.uk/qmas

Benefits

Feel the benefit

Benefits realisation is becoming a buzz phrase as strategies are put in place to ensure the National Programme for IT delivers its two key aims: improved patient care and better working lives.

Strategic health authorities (SHAs) are leading the process of change needed to realise the benefits from implementing new and modern IT systems.

They are introducing a range of measures to enable staff in NHS

Plans are being put in place to realise the benefits of the National Programme for IT. **makingITwork** reports.

organisations to make the necessary changes, achieve benefits and share their experiences.

In the North East Cluster, a benefits realisation group has been established where SHAs are coming together to adopt a common approach to benefits realisation.

The group has nominated three projects to act as pilots – covering acute, primary care and mental health settings. Mark Adams, who leads on benefits realisation at Northumberland, Tyne & Wear SHA, said: "The aim is to deliver three case studies highlighting different aspects of learning which will help inform best practice guidelines and provide a resource to be used by other organisations.

"We want to move to a situation where benefits become the common language of delivery, helping to ensure that each project meets its objectives and offering a means of integrating the National Programme with all other service development initiatives. We want to ensure there is alignment between initiatives to achieve common goals and targets – the benefits become the mortar between the bricks."

West Yorkshire SHA's change and benefits strategy has led to the formation of a change and benefits management group and a change and benefits network. Events dedicated to raising awareness and developing local knowledge and



skills in benefits management have also been organised.

Business change manager at the West Yorkshire SHA Wayne Edginton said: "Our task is to enhance the knowledge and skills of the people leading this work to bring about benefits realisation, co-ordinate the work in West Yorkshire, and to add value to the work going on in local organisations and health communities.

"The goal must be improved patient experience – to do that we have to transform our present systems of healthcare delivery and the National Programme is one of the enablers of system change."

A benefits network is also being planned in North & East Yorkshire and Northern Lincolnshire SHA. Head of booking, Alexandra Roberts said: "We need to support organisations to take benefits forward. The network will be made

up of people experienced in change and benefits processes and others who can share information and act on best practice."

The National Programme recognises that engaging and empowering frontline staff is key to successful implementation and benefits realisation.

Its strategy – 'Delivering benefit from the National Programme for IT' – highlights how the implementation programme will depend on solid, consistent communications with staff and patients; good local leaders to take on the transition; and matching and exceeding the expectations of patients and clinicians.

Director general of benefits realisation, Aidan Halligan said: "The potential benefits are huge and you can be sure the NHS will be safer, effective, more efficient, more equitable than ever before."

Safety first for patients

Patient safety has improved under an electronic prescribing project at Montagu Hospital, Doncaster.

Computers on wards enable prescriptions to be entered at the bedside. Once prescriptions have been verified by clinical pharmacists at ward level, integration with the trust's pharmacy computer system allows them to be transmitted immediately to the hospital's pharmacy for dispensing. During one month in the first 10, the system's decision support facility identified more than 3,000 potential drug interactions, 70 allergies and 3,800 duplicate medications, preventing possible harm to patients by modifying prescribers' intentions in approaching one per cent of all prescriptions.

Under the system, the administration of medicines is also recorded electronically at the bedside. Staff say the system is more precise and less administration time is required.

Pharmacy and medicines management clinical director Andrew Barker said: "We realise that the final form of the system required under National Programme may be different to

our own and we might have to change what we already have in place. However, we have already got staff operating electronic prescriptions which is the big leap forward. With just a small amount of retraining they will be able to operate whatever system is finally specified - we already know all about the processes involved."