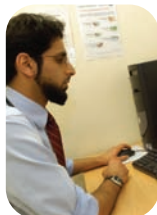
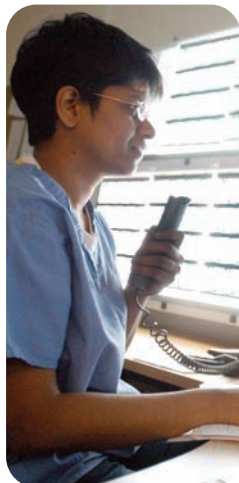
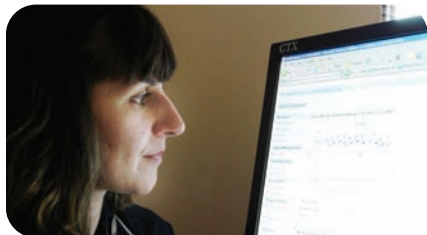




Informing Healthcare  
Hysbysu Gofal Iechyd



# Informing Healthcare

## Achievements

### May 2006

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## Foreword

Informing Healthcare was set up to make a major contribution to improving the standard of patient care in Wales through the development of new and better uses of information and technology. This is a major long-term programme but I am impressed by the substantial amount of work Informing Healthcare has accomplished so far and am delighted to report this progress.

The IHC Programme addresses complex issues in the design, structuring and resourcing of health care provision. The Informing Healthcare team has tackled this complex task in partnership with the clinical, IMT and informatics colleagues in the service to arrive at a clear – and shared – understanding of the problem and how to design and deliver better information and technology services to improve healthcare in Wales.

I am delighted to be able to report that Informing Healthcare has established firm foundations for its Programme and is making excellent progress in its mission.

I would like to draw particular attention to a number of key points relating to what we have done and how we are working.

- Our design approach is centred around the care of the individual and the services they receive and this underpins all our work.
- A commitment to working in close partnership with clinicians is essential and has been an important and integral element of our work to date. This is seen in the many ways we are supporting care providers and improving information resources available to them - providing PCs, laptops, training and access to vital clinical knowledge and tools.
- From the outset we have recognised that Informing Healthcare could not succeed without the active involvement of clinicians. We have been committed to seeking and building on input from clinicians in our development work and we have been delighted by clinicians' willingness to play such an active role. Our own commitment to this partnership is demonstrated by the fact that our work in this area is led by practising clinicians – a GP and a surgeon, soon to be joined by a national Lead Nurse; by our national architecture consultation conference in September 2005; and by our continuing relationship with NHS teams and communities.
- We have laid the foundations for the Programme by investing in the network infrastructure to ensure that it met essential standards of security, reliability and resilience.
- Our focus in the development of our projects has been on the early delivery of patient benefits and it gives me great pleasure to see some of these initiatives – for example the remote glucose testing pilot - taking shape.
- Our approach - incremental, phased, building on what is there - is designed to ensure that we develop solutions that are feasible and robust, whilst making the most effective use of resources.

We have the support of a team of dedicated professional staff at Informing Healthcare and I wish to thank them for their ongoing commitment to the development of the Programme. I also thank all those we have been working with within the health, social services and voluntary sectors.

The challenges facing us should not be underestimated but, working as a cohesive team and in close collaboration with our partners, we are confident that Informing Healthcare will succeed in its aim to develop and deliver an infrastructure across Wales which will enable the NHS to integrate and improve the standard of care for patients.

**Ian Kelsall**  
**Chairman**

## Introduction

We have produced this document to outline our key achievements to date as we continue to build a major, long-term programme of improvement, change and investment.

This report complements the current 2<sup>nd</sup> Edition of the National Case for Informing Healthcare which we revise every six months as we move forward in creating a set of information and infrastructure services that will support the improvement of patient care across the NHS and social care in Wales.

Our core driving principles are set out in *Making the Connections* and *Designed for Life* and the IHC Programme intends to play its part in implementing the vision of working together to deliver world class healthcare services for the people of Wales.

### Patient-centred care

Our design approach is based on providing information to support the care of the individual and the services they receive, with the aim of enabling patients to have a more informed understanding of their illness and treatment options, and thus to take greater responsibility for their own care.

Improving patient care underpins the design and development of the technical infrastructure so that we can help to deliver early patient benefits through the projects we are undertaking. This work is outlined in more detail in the report and provides some exciting illustrations of the changes we are seeking to bring about. For example:

- The remote glucose testing service shows how new ways of delivering care will give people with diabetes more control over their condition and enable them to receive more of their care based at home, whilst improving clinical outcomes and reducing avoidable hospital admissions
- The My Health Online maternity pilot will enable women participating in the project to explore how they would like to use this online information tool, providing feedback for future development, as we test out the initial set of functionality

### Working with and engaging clinicians

The report outlines the many ways in which we are supporting and providing resources to clinicians – improving their access to IT equipment, clinical information resources and IT training, national software licenses, networks and staff to take forward IHC initiatives.

### Building new information services

Informing Healthcare's aim to support integrated care by integrating information is being progressed through a number of projects. The concept of the Individual Health Record is being validated by a pilot being set up in Gwent utilizing an emergency care record. Considerable work has been done establishing the principles and practice around consent and the National Architecture. Both these issues will be tested within the pilot.

### The National Architecture

Developing and gaining agreement to a national Technical Architecture is critical to our success because it will become the blueprint which describes how all information systems will work together across NHS Wales to deliver a set of services that will provide the right information at the right time in the right place and in the right way to allow patients and clinicians to make informed decisions about

healthcare. We will be using it to move Wales safely away from a situation where systems have been designed around organisational requirements and into a situation where they are designed around patients' requirements and their information can be shared securely. It will be the map that we will use to make decisions about phasing, planning and standardisation as we migrate towards a corporate approach to information and technology management.

**Dr Gwyn Thomas,**  
**Programme Director**

# 1. Designing services around the individual

The design of services around the individual and the care they need is the basis of the Informing Healthcare Programme. This section illustrates the patient benefits we are aiming to achieve and our first steps in engaging patients and the public.

## 1.1 My Health Online (MHOL)

My Health Online is intended to be a web-based portal that will provide the people of Wales with access to the important information in their own health record. It will empower individuals by giving them the opportunity to take responsibility for their own health and to access the information they want. Eventually it will be developed as a means by which patients manage their relationship with the NHS.

Through greater integration with NHS Information systems in the future, this could extend to the ability to make appointments, correspond electronically, and also could provide patients with convenient access to relevant personal health information.

The development of MHOL will take time to achieve, entailing the resolution of complex medico-legal issues. We are taking the development forward in discretely managed phases beginning with a pilot maternity portal.

A pilot maternity portal has been developed with the active involvement of expectant and recent mothers as the first prototype of My Health Online. This is now built in both English and Welsh languages.

The online resource is intended to support the patient-held maternity record, and is a personal pregnancy record. It gives expectant mothers the chance to monitor the pregnancy against check lists, upload scans and also gives them access to reliable and quality assured health information leaflets and links to approved web sites.

## 1.2 Remote glucose testing

Informing Healthcare has initiated a research project to define the impact of remote monitoring of blood glucose. Working in collaboration with the Diabetic Research Unit of the University of Cardiff, the project covers 200 patient volunteers, who all have uncontrolled diabetes.

An electronic glucose reading device is connected to the patient's telephone line and readings are automatically transferred from the meter reading to a contact centre where two diabetes nurses are on hand to monitor the readings.

This provides the opportunity to pick up on early indications of any instability in the blood glucose, and the ability to immediately contact the patient to check the causes and discuss plans to rectify this with the patient.

Patient involvement in the project team helped to determine the best choice of system to implement, which is now delivering accurate detailed readings.



## 1.3 Patient involvement

We are acting on our commitment to engage public and patients, as a first step, a register of patient groups has been established, ensuring that the patient and carer voice is heard as decisions are made on service change or development.

30 patient and carer support groups have registered to contribute to the development of Informing Healthcare projects

In collaboration with Health Solutions Wales (HSW), NHS Direct Wales (NHS DW) and the Wales Centre for Health (WCfH), Informing Healthcare undertook a review of online health information services. The outcomes demonstrated that all the organisations involved needed to address content duplication and inconsistent messaging.

The NHS Wales Web Design Board has now been established to work on a national web architecture, and has adopted a shared 12-month strategic plan to create health information web sites for Wales that are designed with assurance and involvement from users.

## **2. Building new information services**

The examples of projects bringing benefits to individual patients shown in section 1 will form part of a wider programme focused on individuals and the care they need. Central to this is the development of the Individual Health Record.

### **2.1 Individual Health Record (IHR)**

The underlying principles and our approach to developing the Individual Health Record (IHR) are set out in detail in the Second Edition of the National Case.

The Individual Health Record will contain the information most important to the overall safety, effectiveness, and efficiency of an individual's care, namely:

- Personal details - identity and preferences
- Care relationships - who is involved in the patient care
- Information from health events - eg discharge summary, op letters
- Overall current state of health - eg current prescribed medication

It will be used by both professional carers and the individual - with an audit trail.

The aim of an Individual Health Record is to integrate information at the time of care, so that patients are empowered by having the information they need to take part in decisions about their own healthcare.

The concept of an Individual Health Record represents a new way of sharing information that will ensure that care is co-ordinated and coherent across the care 'journey'.

The primary purpose of an Individual Health Record (IHR) is to support the overall health and care of the person to which the record relates. Over time - with the person's agreement – this could be made available across care providers.

### **2.2 Improving Out-of-Hours Services**

Informing Healthcare recognised that the most immediate short term benefit to patients would be achieved in emergency, out-of-hours care by making improved patient identification and details available to clinicians providing unscheduled care to patients attending an out-of-hours (OOH) service.

A project to take the first steps towards that objective has now been designed to develop, deploy and support an application for use by clinicians using the Gwent OOH service in a pilot project due to start in Autumn 2006.

The application will be a web-based portal that will allow the clinician to make use of information available through an Individual Health Record Information Service.

Importantly the project will validate the potential benefits for an Individual Health Record and will test aspects of the National Architecture.

## 2.3 Cancer Information Network

Cancer Network Information System Cymru (CaNISC) is developing improved communication links for the treatment of cancer patients by providing an electronic cancer record to support patient care across organisational boundaries in Wales, in line with Calman-Hine.

In Spring 2006, CaNISC completed the development of an additional module to support multi-disciplinary teams (MDT). The tool allows real-time data-entry of the consensus of the clinical team during meetings as they discuss and validate patient treatment plans. It can produce a clinical summary, and supports the team as they agree and record the stage of the cancer.

The availability of this clinical record allows for the collection, storing and reporting of Cancer Waiting Times data. This information is then easily available to the Trust responsible for reporting.

CaNISC provides a datasource for other healthcare organisations in Wales and provides the means for quality control of cancer care by clinical audit and monitoring of national standards

Eleven NHS Trusts currently use elements of CaNISC to record information on newly-diagnosed cancer patients and a majority of Welsh NHS Trusts submit their reports on the Cancer Waiting Times (CWT), which measure the time to treatment for newly-diagnosed cancer patients in Wales.

One of the objectives for CaNISC is to supply data for the Welsh Cancer Registry and the first pilot upload of data was run in March 2006.

The participation of cancer teams in National Audit is a key requirement in *Designed for Life*. CaNISC now makes it possible for teams to meet this target, and, in collaboration with the relevant Cancer Service Coordinating steering groups, limited audits on lung and breast cancers have been carried out.

The information held by CaNISC also helps Cancer Networks in their role of performance monitoring the compliance of their trusts in meeting the SaFF targets.

## 3. Supporting the care providers

Working with clinicians and all care providers in Wales has been a substantial early priority for Informing Healthcare. Our main areas of work here have focused on:

- providing access to online information and clinical tools such as the Map of Medicine® (see below)
- increasing access to equipment improving resources for clinicians and the delivery of care to patients
- providing essential training for NHS Wales staff
- working with NHS Wales to tackle the problem of duplicate patient records
- supporting and promoting informatics as a profession within NHS Wales.

In order to achieve maximum benefit for care providers, Informing Healthcare has made it a key priority to engage with care providers throughout our activities. The success of this has been recognised within and outside Wales.

### 3.1 Information

#### 3.1.1 Clinical knowledge resources

Informing Healthcare has enabled wider access to a greater number of knowledge tools, resources and information. Used to support and educate clinicians and decision makers, these support a more informed patient care and represent a significant cost saving for NHS Wales.

Informing Healthcare has bought 170 complete full-text electronic resources including databases, journals and guidelines.

Informing Healthcare wanted to make sure that clinicians had equal access to specialist journals across Wales, so commissioned the University of Wales, Aberystwyth to conduct analysis on what was needed across clinical groups.

Informed by NHS involvement from representatives across clinical, knowledge and library specialisms, a list of core content was quality assured by a senior external stakeholder group of Welsh Assembly and NHS staff.

A significant achievement in this area has been the acquisition of 104 high quality peer-reviewed journals to enhance the NHS Wales e-library, procured on a corporate basis with an investment in the region of £500k.

The new list of e-journals means that there are now over 200 available online across NHS Wales, including high profile titles from a wide range of international publishers.

The journals cover Nursing, Midwifery and Allied Health, Medical and Dental, Public Health, Pharmacy and Healthcare Management.

Together they represent a significant set of resources for the NHS workforce, which will support clinical decision making, evidence-based practice (clinical and management), lifelong learning, research, patient safety and clinical governance.

To ensure that maximum benefit and value is derived from the new resources, Informing Healthcare has funded training across Wales for healthcare staff to support the use of the new journals and other online resources.

Across Wales, 216 Primary Care staff from practice managers to local health board staff have registered for this training at local IT training centres funded by Informing Healthcare, including 124 GPs and 54 practice nurses.

Funding from Informing Healthcare helped to enhance existing IT training resources in secondary care. Ceredigion Trust were able to provide 12 satellite sessions across its area to target key users of the e-library.

Welsh Assembly Government policy staff now have access to a custom made page on the Assembly Library intranet. These are used to create a range of customised Current Awareness Bulletins for Assembly Health & Social Care staff with a focus on the policy issues in major health areas.

Welsh Assembly Health and Social Care staff are now able to access over 20 high level resources equivalent to the standards usually provided by universities specialising in health and social care. The Assembly Library Services estimate that this has saved them a minimum of £135,000.

### **3.1.2 Map of Medicine®**

Informing Healthcare negotiated a national contract on behalf of all NHS Wales organisations for the use of the online clinical pathways tool Map of Medicine®. Corporate procurement of the Map of Medicine reduced the potential spend by approximately £500k and is another example of how the IHC Programme can save money by exercising the greater national purchasing power of the NHS across Wales

Map of Medicine® provides over 250 evidence-based clinical care pathways in an interactive and user-friendly web based tool and its purchase is part of IHC's continuing plan to achieve increased value for money for NHS Wales by negotiating national deals.

The Map of Medicine® helps healthcare professionals to find and use specialist knowledge across Accident & Emergency, Medicine, Mental Health, Obstetrics and Gynaecology, Oncology and Palliative Care, Paediatrics, Radiology, and Surgery.

Map of Medicine® will be available to all NHS clinical staff and students. In addition, managers and commissioners will be able to use it as a resource to assist in a wide range of planning activities.

This new resource will provide clinicians with a useful knowledge tool to support clinical decision making and patient care. It will be evaluated over the coming year to establish and demonstrate its potential.

*“The Map of Medicine has been developed by clinicians and is based on the best clinical evidence available. The pathways available to both Primary and Secondary Care clinicians will aid in the development of innovative models of treatment for all patients. I welcome the opportunity to develop agreed best practice across the health sectors.”*

Dr David Gozzard, Medical Director at Conwy and Denbighshire NHS Trust

## 3.2 Equipment

Informing Healthcare has provided funding for NHS Wales to purchase PCs and laptop computers to boost existing IT resources. These have been adopted for use across healthcare settings including innovative wireless PCs to enable flexible clinical use at the time of patient care.

NHS Trusts have been able to buy IT equipment from a National Framework Contract, and Informing Healthcare has also supplied funds to enable Trusts to support local deployment.

Emphasis has been on delivering additional access to technology for staff who did not previously have it, and to upgrade equipment that cannot run modern applications.

Since November 2004, an additional 5,600 new PCs and laptops have been provided for staff with no access to computers.

Over 3,700 old PCs that were unable to run the latest software have been replaced.

The extra IT resources in the NHS will help prepare for any new systems within diagnostic services and the eventual deployment of the Individual Health Record in clinical settings.

*“Access to PCs has enabled staff to view PACs on screen and has therefore released nursing time which hitherto was spent walking to and from the X-ray department and waiting for X-rays”*

In Gwent Healthcare NHS Trust, North Glamorgan and Conwy and Denbighshire NHS Trusts, funding was used to pilot ‘wireless wards’. This is a mobile, wireless-enabled PC on a trolley in wards and outpatient departments allowing staff the use of a flexible clinical workstation, with the potential to search for results or to record patient care at the bedside.

*“The PCs in clinics have been a great advantage in being able to view results for patients when not immediately present on the notes. The same thing can be said for the wireless trolleys .... the trolleys have also been particularly helpful at morning handover.”*

Dr Ian Bowler, Consultant in Paediatrics Gwent Healthcare NHS Trust

Firmly in line with the principles of *Making the Connections*, Informing Healthcare made sure that purchasing on this scale represents the best value for money, taking advantage of 'corporate' purchasing to avoid duplication of effort and maximising investments from public funds.

Informing Healthcare's corporate approach to procurement has already achieved an added value of 15-25% effectively avoiding a potential spend of approximately £1-2 million.

*"Now the computer is more readily available - rather than sharing it with 9 staff - I am able to retrieve information more quickly"*

*"I am now able to book urgent patients onto cancelled clinic slots, get test results quickly, and get contact details which allows much better communication"*

Staff survey - Conwy and Denbighshire NHS Trust

### 3.2.1 Microsoft Enterprise Agreement

Informing Healthcare, on behalf of NHS Wales, struck a deal with Microsoft to provide the latest desktop and mobile computing software to benefit healthcare staff and patients.

In January 2006, Informing Healthcare successfully concluded negotiations with Microsoft for a National Enterprise Licence for Wales. The agreement means that the latest Microsoft operating and software licences will be provided for 35,000 computer desktops throughout NHS Wales, ensuring staff across the service have access to key software and systems.

The arrangement also includes Microsoft providing strategic support and training to staff across NHS Wales and has the additional benefit of Software Assurance, which enables organisations to upgrade and keep current the latest versions of all the Enterprise products.

This procurement has delivered direct cost-savings for NHS Wales: an assessment within the Business Case calculated that to get to the same position as an Enterprise Agreement using existing arrangements would have cost approximately £8m more.

This means that NHS Wales is getting the best possible deal for its IT systems and allows local money for patient care to go further.

*"This is excellent news for NHS Wales – and for patient care. The cost-saving deal we have agreed with Microsoft means that we can continue to ensure that money is focused where it is needed – on providing world class services for patients."*

Health Minister Dr Brian Gibbons

The benefits of the Microsoft deal for NHS staff includes training vouchers for skills in the latest IT products, as well as a 'home use' programme for those staff who have a licence at work, allowing them to buy a reduced-cost licence of the latest MS Office software

With the most up-to-date Microsoft Software installed, all NHS Wales desktops will have access to Microsoft's Welsh Language Pack. This has been provided as an add-on developed by Microsoft in conjunction with the Welsh Language Board.

### 3.3 Learning

Informing Healthcare is undertaking a programme of training to ensure that NHS Wales staff have the IT skills required to ensure they will be able to get the most benefit from new systems and equipment.

Informing Healthcare has adopted the European Computer Driving Licence (ECDL) as the benchmark qualification for all NHS staff, with the intention to develop a reputable learning environment for NHS Wales which is robust enough to support Trusts to deliver effective training.

*"I would recommend the ECDL course to anyone wishing to learn, to fill knowledge gaps or simply gain accreditation for their current skills."*

Admin Co-ordinator, Infection Control

The first round of funding - £7.9 million – was targeted at ensuring that every NHS Trust had at least a baseline standard of training resource, preparing them for the imminent modernisation of the NHS in Wales.

Informing Healthcare has funded 50 full time and 32 part-time IT trainers across NHS Wales

There are no costs to individual NHS staff undertaking the training, and in addition, flexible use has been put in place to enable staff to train at times that are convenient for them.

15,473 learners had undergone ECDL induction at 28 February 2006.

9,511 staff registered with an ECDL logbook and ready to sit their first test at 28 February 2006

IHC works closely with the National Learning and Innovation Agency in Healthcare (NLIAH) in all of its activities and one example of this is the transfer of the ongoing management of the ECDL to the Agency on April 1 2006. Informing Healthcare will continue to hold a strategic sponsorship role.



### 3.4 Tackling record duplication

For a national information sharing system to be effective, the data it carries needs to be reliable. The incidence of duplicate or repeat records, and ones which are contradictory can be high and is an obstacle to effective healthcare delivery.

Informing Healthcare has checked nearly half a million patient records which have been identified as being potential duplicates or have important information missing.

IHC has funded 100 new staff across Wales to work on eliminating and combining duplicate records: 213,210 records had been successfully merged by 31 January 2006.

This work will help to reduce the risk to patients of incorrect or potentially dangerous treatment being administered if important medical conditions are omitted or not available because of multiple records. Whilst situations like this are rare, the improvements being made in reducing duplicate records represents a significant benefit to patients.

By March 2006 IHC's duplication project had reduced the incidence of duplicate NHS records across Wales by three quarters

*"The duplication project team are saving a lot of time for the pathology departments as they are sorting and cleaning the lists of patients' samples daily. This saves an hour a day and means that if we are checking patient details there may only be a couple of records to check through ... not a huge list."*

Joanna Minney, Clerk in the Haematology Department, North Glamorgan NHS Trust

The merging of duplicate patient records is not a simple exercise, but this will not only make sure that doctors have a complete picture of the patient medical history and results, but the patient can be reassured that a trustworthy record is held about their healthcare history.

*"The investment from Informing Healthcare has accelerated our ability to address the issues of duplicate records within different IT systems and physical case notes in our Trust. This has already made a significant impact and helped to reduce clinical risk. The continued reduction in duplicate records is an essential prerequisite to the creation of a single holistic record of care. This issue is therefore firmly at the centre of the Trust's IM&T agenda."*

Ian Phillips, Associate Director of IM&T, Bro Morgannwg NHS Trust.

### 3.5 Informatics

Informing Healthcare is providing national leadership and sponsorship of the professional development of health informatics staff across NHS Wales.

By promoting the development and acknowledgement of a Health Informatics profession, Informing Healthcare is responding directly to the wishes of delegates at its National Architecture week held in Autumn 2005, and will ensure that the NHS in Wales has a competent, confident health informatics workforce.

In the last year, working in collaboration with UK Health Informatics leads in Scotland, England and Northern Ireland, Informing Healthcare has set and agreed the Health Informatics National Occupational Standards for Wales.

Informing Healthcare initiated a bursary scheme in collaboration with the University of Swansea in September 2005 to support a number of NHS staff studying for a Masters degree in Health Informatics.

Ultimately this initiative will involve moving towards a professional status for health informatics through professional registration via the UK Council for Health Informatics (UKCHIP).

Informing Healthcare will work alongside the National Leadership and Innovation Agency for Healthcare (NLIAH) and with other NHS and external bodies such as higher education and professional organisations to support these aims through education, training and continuing professional development.

## **4. The National Architecture**

The National Architecture defines the blueprint for the future provision of information services in NHS Wales. It sets out principles and concepts establishing the context in which information systems and services can be developed, in order to help modernise healthcare in Wales.

The Second Edition of the National Case sets out our approach to the development of the National Architecture, including the healthcare design and technology principles underpinning it.

The basis for this was developed by over 100 experts in healthcare and technology design at the National Architecture Conference in September 2005. At this event, involving clinicians and IT representatives, an approach to the design of information services was adopted which allows for the right amount of flexibility to meet local needs. A set of critical design principles were agreed by which all organisations in the NHS in Wales will work together in future to develop new services, namely doing things:

- in common by design,
- in common by agreement, and
- locally by agreement.

### **4.1 Care Management Systems Strategy (CMS)**

The first edition of the CMS strategy is now complete and consultation with the service across Wales is now underway. The CMS Strategy is due to be completed by the end of June 2006.

We are engaged in the process of developing a CMS strategy that will meet future care service needs. We are committed to making the most effective use of existing resources – both in terms of existing experience and expertise on the ground and capitalising on in-house applications and tools where feasible and appropriate. In conjunction with this, we are in the early stages of securing a strategic partner to provide the specialist additional capacity and capability required.

Specifications are currently being developed in the following areas:

- Transfer of Care Communications (ToCC).
- Test request and results reporting (TRRR).
- Laboratory Information Management System.
- Radiology Information System.

### **4.2 Technical infrastructure**

Underpinning all the architecture services is a set of infrastructure facilities covering network services, hardware platforms and service management. The strategies for these are being developed and the work done so far is summarised below.

#### **4.2.1 Networks**

Informing Healthcare's investment of over £6m in a range of enhancements to networks and associated services is preparing NHS Wales to deliver benefits directly to patients, carers and clinicians.

Welsh ambulance stations are now able to connect electronically to each other and to NHS hospital Trusts due to the installation of networks funded by Informing Healthcare.

Funding from Informing Healthcare has enabled improvements to be made to networks nationwide, bringing all NHS Wales networks up to a largely common standard. Funding included approximately £1million for the NHS in Wales to pay for the installation and continued management costs and running costs of new equipment.

A number of key improvements have been achieved:

- Network connections to previously un-connected sites have enabled a quicker exchange of information between sites resulting in more effective delivery of healthcare to patients.
- Network upgrades have created greater capacity for data transfer - removing bottlenecks - and also allowing new services to be considered, such as fast transmission of radiology images and videoconferencing.
- Measures to strengthen the security of networks have been put in place to make them robust enough to carry increased data and at higher speeds.

We are currently participating in the all-Wales Broadband Project to re-procure a Wide Area Network for the public sector in Wales.

#### **4.2.2 Broadband**

The remote nature of many Welsh locations can create barriers to the delivery of healthcare and of access to health services by patients.

Informing Healthcare provided £750,000 in February 2006 to enable NHS Trusts to improve connections with their remote community sites, establishing fast and convenient links.

Every NHS Trust in Wales is now able to provide a remote online facility to a number of its key staff, and a specification for the procurement of a national service has been written with the intention that there will be a full service across Wales before July 2006.

Helping NHS staff to work flexibly has a direct impact on their ability to care for patients, by bringing them nearer and giving them the ability to manage patient care from more than one location.

Informing Healthcare piloted a consumer broadband project which enabled 150 clinicians and senior management users to work from home using a central, secure system.

#### **4.2.3 Telehealth**

Over the last six months, the Welsh Assembly Government's Telehealth Programme has been wholly transferred to Informing Healthcare and new management arrangements

have been put in place. The aim is to forge closer links with Social Care so that people can be supported at, or close to, their homes through services that take account of their whole needs. The following investments have been made during the past year:

- Links between A&E departments in Prince Phillip Hospital, Llanelli and West Wales General Hospital, Carmarthen to provide support to the Nurse Practitioners and doctors working in A&E out-of hours.
- Lecture Theatre and seminar rooms in new Post Graduate Centre, Princess of Wales Hospital, Bridgend.
- Upgrading technologies used to support the virtual Cancer MDT meetings between Ceredigion and Swansea NHS Trusts.
- Supporting the All Wales Specialised Seating and Wheelchair Services in the provision of:
  - Equity of service throughout Wales
  - Single point referral processes
  - Improved clinical governance
  - Education and training for staff and referrers

The Welsh Health Video Service supported by Health Solutions Wales has continued to develop with the team members receiving training to become Polycom video conferencing engineers.

### **4.3 National Architecture Design Board (NADB)**

Developing the National Architecture is a major area of our work and instrumental to its governance and strategic direction is the National Architecture Design Board, which was established following the National Architecture conference in September 2005.

Informing Healthcare has brought together a group of experts in both healthcare and ICT design who will make the necessary decisions to ensure that new systems work to support individual care consistently across the NHS in Wales.

NADB's role is to determine all design aspects of the Individual Health Record (IHR), care management systems, infrastructure and information governance. The NADB is accountable to the Director of Informing Healthcare and offers IHC the assurance that the activities of the Programme are right for NHS Wales and right for the citizens of Wales.

The NADB has agreed and approved the approach that will be taken to control use of the IHR. This includes the protective mechanisms which need to be in place to authenticate the identity of those people wanting to access the record, and to make sure that they have a legitimate reason for doing so.

A joined-up approach to information governance across healthcare in Wales is strengthened by reciprocal membership between the Assembly Government's Welsh Information Governance Standards Board (WIGSB), and NADB.