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Welsh Assembly Government



# Informing Healthcare Achievements 2008

using information and technology for better patient care



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# Chairman's introduction



I am pleased to have the opportunity to comment on Informing Healthcare's continuing and steady progress, particularly in the area of the Individual Health Record, and the Welsh Clinical Portal – which now allows clinicians to order tests in pathology and radiology.

For me personally, highlights over the past 12 months include the launch of our health informatics laboratory at Swansea University, our work in information governance, and the success of the second International Advisory Group Conference in September 2007.

One of the striking things about the development of the lab has been the collaboration between Informing Healthcare, the Centre for Health Information, Research and Evaluation at Swansea University, NHS Wales and commercial suppliers. It demonstrates what can be achieved by successful co-operation.

I am confident that this venture will contribute directly to improvements in patient safety and service quality by ensuring new systems are designed to meet the needs of NHS Wales and are rigorously tested before they are released. The lab also has a major role to play in identifying 'best of breed' systems and involving clinicians and patients at the start of new system design.

Informing Healthcare's commitment to involving clinicians and patients was noted by the panel of nine international experts invited to review progress of health IT in Wales at the second International Advisory Group Conference. Following three days spent visiting NHS trusts around Wales and examining all aspects of the Informing Healthcare programme, the panel confirmed that Informing Healthcare was on the right course and praised the programme's transparency and efforts to involve clinicians and patients in decision-making.

As we review our achievements to date, I would like to commend the exceptional efforts of staff both in Informing Healthcare and the NHS trusts in Wales and the collaborative working partnerships that are proving to be key to the successful delivery of improved services enabled by technology.

Ian Kelsall  
Chairman

# Chief Executive's introduction



This achievement report provides a clear picture of Informing Healthcare's work and illustrates the successes and challenges of both the programme and our partners in NHS Wales.

Reflecting on events since we published our last achievements brochure in June 2007 this has perhaps been the most significant period since the programme was formed in December 2003. We graduated from our phase of readiness, planning and service improvement to implementation and delivery.

Pharmacy systems in all hospitals across Wales were replaced with one upgraded centrally-hosted system and new radiology systems for all trusts in Wales will be completed during 2008. Roll out of the new national email and directory service is now under way, which will provide the foundation for the national services needed for effective technology-enabled change in NHS Wales. This means NHS staff have access to the most up-to-date systems and services, improving efficiency and safety.

We have also made considerable progress with our three strategic projects - the electronic Individual Health Record, the patients' website My Health Online and the Welsh Clinical Portal. Each of these projects are in different stages of development but ultimately they are all aimed at improving the quality and safety of care for the citizens of Wales. Our incremental approach means we are implementing change in partnership with NHS colleagues as these projects progress. We are already providing clinicians with improved access to information to deliver care and in time this will lead to delivery of the single electronic health record.

Of equal importance is the work achieved on technical standards and publication of an infrastructure strategy, the framework for our health information highway, which is backed by the clinical and technical communities in Wales.

We have also developed and put into practice an approach to patient consent and confidentiality that has been widely consulted on and modified to reflect real situations and patient care. As patient information is shared more widely, we will review and adapt this model to ensure we continue to have the right balance between patient confidentiality and the benefits of information shared between care providers. We are pleased that this approach has the support of clinicians, patients, the Office of the Information Commissioner and other stakeholders. Based on our understanding of public need and satisfaction with our approach, we now have a platform to inform further developments.

It is now acknowledged that information and technology touch every aspect of patient care. They are no longer optional extras. A view that was reinforced by feedback from clinicians during our three day tour of Wales with the International Advisory Group panel in September 2007. It's this level of support and collaboration from the health communities in Wales that has helped to accelerate progress, and I take this opportunity to thank all those who have contributed or worked with us.

Informing Healthcare's approach is fast-paced and ambitious, but grounded in the pragmatism of incremental change, which allows us to work in partnership with our NHS colleagues, to create prototypes, which we have been able to develop, learn from and build on.

Looking ahead our continuing challenge is to maintain the momentum of delivery at a time when the NHS Wales is undergoing a period of re-structure. We intend to focus our efforts on working closely with clinicians, patients and NHS Wales to ensure technology-enabled change makes a real difference to patient care.

Gwyn Thomas  
Chief Executive

# Improving Patient Safety

## Making patient records available to NHS health professionals, where and when they are needed

A patient is rushed by ambulance into the Medical Assessment Unit in Newport's Royal Gwent Hospital. He's very ill and very agitated. He tries to tell the doctor what's wrong, but with the patient in this state, the doctor's not sure he has the whole story.

The doctor heads to a nearby computer terminal and brings up the patient's Individual Health Record. Instantly, the doctor acquires the essential information for the man's latest medical records from his GP system and as a result has a clearer picture of the patients likely problem and can provide better care.

The Individual Health Record (IHR) was introduced into the Royal Gwent Hospital's Medical Assessment Unit (MAU) in June, the first time any emergency unit had electronic access to the important information from a patient's GP record.

Doctors who access the IHR can immediately view patients' prescribed medications, major diagnoses, blood pressure readings, test results and procedures. Early feedback indicates that clinicians are immediately seeing benefits in crucial situations, whether confirming a patients information with that of their GP or using it when a patient arrives confused or unconscious.

It's also saving time. In the first 3 months of use the number of phone calls to the patients GP to find out vital information fell from 31% to 10%. MAU staff also believe the IHR is a tool which is aiding improvements in prescribing. For example, information on the correct type of insulin to administer to patients with diabetes is at their fingertips. It also helps in preventing the prescription of allergic or contra-indicated medicines. This includes not re-issuing medicines, which the patient has already tried but was stopped by the GP as they were unsuitable or not appropriate.

*"Until the introduction of the IHR, medical staff didn't have access to patients' GP records. This means they only knew what the patient could remember. When a patient is unwell, sometimes they forget important things about their health or current medications. When they are very ill they sometimes can't give a history at all"*

Dr Martin Murphy, Clinical Director, Informing Healthcare

The IHR is also available in out-of-hours care in Gwent, where it was introduced in November 2006. A recent survey of clinicians working in out-of-hours care in Gwent showed that over 70% felt that the IHR helped to inform their clinical decisions. When dealing with older patients, or those with chronic conditions, this rose to 80%.

*"The benefits to the patient of this system is in providing safer care for the individual. Once we have accessed this information, we can see the patients feel more confident that we have a better understanding of their problem. For example, being able to access the individual health record means that I will know that a patient's symptoms may be due to a bad reaction to a drug, rather than something else."*

Dr Julian Costello, an out-of-hours GP in Gwent

The IHR is being developed in stages with advice from clinicians and stakeholders taken at every step. The starting point was decided by clinicians who said that out-of-hours care would benefit most quickly from the sharing of information between care providers. The IHR is also pivotal to changes outlined in the Assembly Government's Delivering Emergency Care Services (DECS) strategy.

Delivery of the IHR benefits to the rest of Wales is underway. The stepwise approach is successfully building the trust of the patients and professionals in these new information services.



## One safe way to access hospital computer systems in each health community in Wales

The Welsh Clinical Portal is the electronic front door to all hospital systems and information. The Welsh Clinical Portal draws together the information on a patient from different systems so the clinicians see a safe, familiar view of the records wherever they are working in Wales.

The portal looks like a web 'home page' and brings together information such as patient lists, test results and clinical letters. It is secure and only provides access to a patient's record to staff who are directly involved in their care.

The design process, which has directly involved users, means that the portal is being developed by clinicians for clinicians. More than 200 clinicians have been involved in the design of the portal to date along with NHS Wales IT development and project management staff. The first version was developed in six months in 2007 and went live in the cardiac rehab clinic in Cardiff in early 2008. The portal went live in Carmarthenshire in Autumn 2008, and will be closely followed by Cardiff and Vale and Gwent health communities. The portal is being developed in five stages:

- Version 1 enables clinicians to request tests for pathology, radiology and other services such as physiotherapy assessment.
- Version 2 enables clinicians to create and send discharge letters and other clinical correspondence.
- Version 3 will support recording of detailed clinical assessments.

- Version 4 will enable clinicians to prescribe and manage medicines.
- Version 5 will fully integrate care planning and electronic clinical pathways.

Ultimately, the portal will provide all the information needed to support the whole of patient care; bringing information together and enabling staff to look across the whole care pathway. It will support safer and more patient-centred care by supporting routine clinical tasks using modern technology, and giving the clinician access to the patient records.

The portal will be implemented separately in each health community, and will support the new organisations currently being created. It is a flexible tool that will be available to clinical and administrative staff across hospital and community, including GPs.

The Welsh clinical portal will enable the hospital records and the individual health record to be used together and is a significant step towards the single record.

## Leading the way in IT innovation in healthcare

*“The way in which patients are cared for and treated is continually changing to keep up with new technology and medical advances. People are now living longer and managing conditions that would have been fatal when the NHS began. This new laboratory will enable the NHS in Wales to be at the forefront of innovation.”*

Edwina Hart, Minister for health and social services

A new state-of-the-art health informatics research laboratory was launched in Swansea University in June.

The Informing Healthcare Health Informatics Research Laboratory is believed to be the first of its kind in the UK and Europe. The laboratory simulates a range of healthcare settings experienced by patients in Wales so that innovative new technology can be extensively tested before being introduced in the NHS.

The labs are born from collaboration between Informing Healthcare and the Centre for Health Information, Research and Evaluation (CHIRAL) at the institute of Life Science, Swansea University. Their purpose is to create an information and technology infrastructure that supports integrated patient care across NHS Wales.

Within the lab is a series of ‘pods’ which represent settings that mimic a patient’s home, a GP practice, the out-of-hours GPs service and a hospital outpatients clinic.

Linking into the Informing Healthcare programme, the labs act as a hub bringing together ideas and innovation from health professionals, university researchers, patients and suppliers.





## Identifying people with chronic conditions who need extra care

A new tool is being developed to help identify people at increased risk of an emergency admission to hospital or in need of additional care.

The Predictive Risk Stratification Model, known as Prism, will use existing population and health data to band the population according to the level of risk of emergency admission – helping to support proactive care management.

Over fifty GP practices in Swansea, Torfaen, Bridgend, Neath Port Talbot and Carmarthenshire have provided anonymised data for the development of the Prism algorithm. The information they receive back will divide the patients into four tiers, according to their risk of readmission or deterioration of their chronic conditions.

## Map of Medicine for NHS Wales

Given the rapid advance in medicine it is imperative to ensure all clinicians can access up to date knowledge sources when they need them. The online clinical knowledge resource – map of medicine – has been made available across NHS Wales. The tool helps healthcare professionals plan the best possible treatment programmes for patients. The Map of Medicine was selected following completion of a two year evaluation project involving 3,000 users and a competitive national procurement. It is a fundamental building block needed to move health services towards pathway based care .

It is a web-based visual representation of over 400 evidence-based patient-care pathways. It covers 28 clinical specialities and is designed to present the most up to date synthesised evidence in the form of the pathway of care for specific conditions. One of the benefits of the

GP practices - along with specialist nurses and local care teams - can use the data to help inform what additional care or support could be offered or preventative treatments to help avoid deterioration in an individual's health and keep people out of hospital.

Workshops with participating GP practices are being arranged so that GP practice representatives can receive their stratified patient lists and consider the best ways to use the information. Next steps will be the validation of the stratified lists by GP practices and monthly updates to the stratified lists (Autumn 2008). In parallel, Informing Healthcare will continue to develop the computer-based system that will run the Prism model, allowing GP practices to refresh their stratified lists as required, to reflect patients' ongoing health status. This is a vital step to introducing a more community focused service for patients with chronic diseases and long-term conditions.

tool is that it can be localised - changed to reflect local or nationally agreed pathways.

The map is being successfully implemented on a phased basis across Wales and there are now over 4000 registered users. The Map's pathways are being integrated into clinical systems and used to remodel patient pathways across the country to improve patient care.

Recently Informing Healthcare hosted senior clinicians and IT staff from Denmark who are evaluating the map, alongside Norway, Sweden and Western Australia.

A National Editorial Board has been created to enable Wales to use the map to create and disseminate national clinical pathways when these are agreed. e.g. for renal failure. Map address: <http://app.mapofmedicine.com/>



# Improving patients access to services

## Making it easier for patients to manage their own healthcare

People in Wales will soon be able to book appointments at their GP practice using their home computers.

The 'My Health Online' service gives patients the ability to manage some basic healthcare tasks such as GP appointments and the ordering of repeat prescriptions. Over the last 12 months, a trial of My Health Online has been available to patients at five Welsh surgeries using the EMIS GP system.

In the future, patients will be able to access their own health records, and for a short period the trial included a selected group of patients accessing their GP health records. The patients were able to look at GP consultation notes, test results and medications. The trial was an opportunity to identify any issues that may arise in the future development of My Health Online. The ongoing trials are also exploring how convenient and easy-to-use the service is, and issues around consent, privacy and information sharing.

Patients' views are informing the development of My Health Online at every step. In a large scale evaluation exercise, over 2000 patients in Wales have been contacted. In one set of research with 313 Welsh internet users it was found that 31% had difficulty getting through on the phone to their GP, and the major benefit identified with My Health Online was saving time (89% of respondents) and convenience (87%). Research with existing users of an online appointment system said it was three times as fast to book an appointment online compared to by phone, and nearly twice as fast for repeat prescriptions.

Other evaluation work has included interactive patient workshops looking at security and usability, and consultations with clinicians and practice staff looking at issues such as quality assurance, process maps and design.

In October, My Health Online was featured on ITV Wales News with interviews from patients and the practice manager at one of the trial surgeries - Swansea's Grove practice.

## My Health Online case study

*Jane, a working mum from Swansea, needed to order a repeat prescription and book an appointment with her doctor, but she was unable to do this during the day due to work commitments. When she was home in the evening*

*she was able to log onto My Health Online from her home computer and use the service to make an appointment with her doctor, and to order the repeat prescription.*



## Telehealth helping patients in their homes

Patients with chronic obstructive pulmonary disease – COPD – in Carmarthenshire are taking part in trials of telehealth equipment which allows patients to measure their own vital signs, such as heart rate and blood oxygen levels and send the results via a free-phone telephone line to a chronic disease management nursing team.

A key benefit of the initiative is anticipated to be a potential reduction in hospital admissions as healthcare professionals will be in a better position to proactively manage the health of their patients.

The six-month trial - being managed by Informing Healthcare, and involving forty patients - is part of a

European Commission funded project called 'Better Breathing'. Teams from Catalonia, Denmark and Norway are also taking part in the project.

In another area of telehealth - video links are being used across Wales, and specifically in Cancer care. In South West Wales Video conferencing is allowing cancer experts to discuss treatment for patients, saving on long journeys and giving cancer experts the chance to use their time more effectively. A few patient consultations have also taken place by video link, helping to keep care closer to home.

## 'A to Y' of health is good medicine for Welsh speakers

An on-line Welsh health encyclopaedia - backed by Informing Healthcare - was launched on the NHS Direct Wales website in November. It is the first ever 'A to Y' of health information in the Welsh language. The encyclopaedia offers information on over 650 health conditions and medical problems.

Partners in the development of the encyclopaedia included the Wales Centre for Health, NHS Direct Wales and Welsh language specialists. Medical experts were also on hand to provide advice and clarification on specific conditions, treatments and procedures. The main priority for the team was to keep the information as easy to understand as possible while still being informative to patients.



# Improving the security of medical records

## Information Governance

The Informing Healthcare approach to Information Governance in Wales has been recognised by international peers as good practice in terms of 2 crucial areas.

Firstly, the consent model which is evolving gives patients a real say in both use and access to their personal medical information. Secondly, GPs and other NHS professionals are assured that all patient information is protected.

Shared information is essential to support seamless patient centered care and improve patient safety. The Welsh model enables this sharing to take place in a safe secure way. It also provides opportunities to deliver better and controlled access for research data which seeks to improve the general health of the citizens of Wales.

The 'model' has been developed in consultation with key stakeholder groups and this engagement is the key to the models success. The principles and guidelines in the model have been applied in relation to the Individual Health Record used by the Gwent Out of Hours Service to provide improved patient safety and care and is now being rolled out in other areas and care settings.

The experience in Gwent has provided an in-depth understanding of the key issues including consent and confidentiality to be addressed and has allowed the validity of the solutions implemented to be fully tested in a real-life care setting.

The principles of the models for consent and confidentiality consist of;

- Inform patients and public providing an opportunity to opt out should they wish.
- Use and collect, relevant information only, based on implied consent for legitimate healthcare purposes.

Explicit consent from individual patients is sought wherever practical and necessary.

- Prove the identity of the user online and enable access.
- Proactively monitor and audit access to detect breaches early.
- Use existing legal, professional and employment sanctions for misuse.

During the past year the IHC Programme Board has given its backing to the model saying that it was the right balance between sharing information electronically to support better clinical care, and protecting the privacy of the individual patient.

The year has also seen the formation and several meetings of the National Information Governance Advisory Group (NIGAG). This group of experts includes clinical, patient, legal and ethical membership. The group has a full work agenda and has already reviewed and endorsed the



models of confidentiality being used for the programme underway by IHC. It is chaired by the Caldicott Guardian for Wales.

Information Governance at Informing Healthcare has also assisted NHS Wales in two important facets of confidentiality and sharing – Caldicott and WASPI. In WASPI (Wales Accord for Sharing Personal Information)

IHC has been a core member of the WASPI design team since its inception. With Caldicott IHC has supported the Guardians with regular meetings and conferences as well as providing the engagement and resources to review and rewrite the Caldicott Manual. The new manual is due to be launched by Dame Fiona Caldicott in November this year.

## National e-mail and directory services rolling out across Wales

Working in the NHS today will often involve using e-mail as an essential tool to support working practices and care of patients.

This is why Informing Healthcare is launching a national e-mail and directory service that will improve upon the current services available to NHS Wales.

Microsoft's National Active Directory and E-mail exchange is being rolled out across NHS Wales during 2008/09. It is making it easier for NHS workers to find and exchange information with colleagues. The new e-mail addresses have a consistent and memorable look, and remain the same regardless of the employees place of work: For example, Dr Tom Thomas and nurse Mary Evans would have the following email addresses.

Tom.Thomas@wales.nhs.uk  
Mary.Evans13@wales.nhs.uk

It is giving an e-mail address 'for life' to NHS employees.

The national email and directory service enables a single secure login to be created so that staff can access systems and services regardless of where they are working. This is especially useful for doctors or nurses who may need to access electronically stored information and email from different NHS Wales locations e.g if they work in two different hospitals.

The new service provides a secure log on for the Welsh Clinical Portal.

The service also allows for common standards to be established for email and active directory management. This assists in the reporting, control, security and compliance of information exchange. The new system allows end-to-end encryption of information between organisations – and offers the opportunity, with appropriate controls and processes, to send medical information via secure email.

# Improving efficiency – working together in Wales

## Made in Wales

The Myrddin Patient Administration System (PAS) was developed by staff in Carmarthen NHS Trust (now part of Hywel Dda NHS Trust) more than a decade ago, and has proved to be a great success. It has now been recommended as a national PAS and is being implemented incrementally into more hospitals. In May 2008 it went live at North East Wales NHS Trust, this involved joint working between Gwent NHS Trust who conducted data migration, Hywel Dda NHS Trust who developed the

system and North East Wales trust who carried out the implementation. By the end of the year Gwent NHS Trust should also have the system.

*“To achieve such a major systems change with so little disruption is a huge achievement”.*

Medical Director Mark Scriven

The Welsh Clinical Portal works with the Myrddin PAS.

## Introducing technical standards for NHS Wales information systems

Following significant consultation and approval by the Informing Healthcare National Architecture Design Board, a series of technical standards have been identified and issued to NHS Wales. The standards are to be used for the development and implementation of information systems and services.

The growing set of standards and definitions cover how information should be held and communicated, and processes for the development and use of systems.

The standards have been collated in a document called National Architecture Standards. The National Architecture is a framework for the design and development of information systems within NHS Wales. The framework is available on the Informing Healthcare website: <http://www.wales.nhs.uk/ihc/page.cfm?pid=27258> and updated versions will be posted when available.



## Radiology care across Wales improved by upgraded information system

Every NHS Trust in Wales uses a radiology information system to manage appointments, generate reports and schedule the use of rooms and equipment. The systems also share details of examinations with picture archiving and communications systems to allow the capture, storage and display of diagnostic images.

Most hospitals in Wales have been using a radiology information system called RadIS to perform these tasks, but this system which was originally developed 20 years ago is no longer able to cope with the complexity and volumes of information needed to manage a modern diagnostic imaging department. An improved system called RadIS2 has been developed.

Better management of patient waiting times, workflow, examination rooms and equipment utilisation will form part of the package. In time, there will be desktop integration with picture archiving and communications systems and digital dictation systems which allow dictated reports to be automatically transcribed into text.

The improved system has so far been implemented in seven sites in Wales – Royal Glamorgan, Prince Charles, Bronglais, Princess of Wales, Velindre, Gwynedd and Glan Clwyd Hospitals - with the rest of the country due to follow during 2008 / 2009.

The new ordering system within the Welsh Clinical Portal works with Radis2 and enables clinicians to request radiology investigations electronically for the first time.

## Case made for an all-Wales laboratory information management system

Pathology services across Wales provide an essential contribution to the healthcare system, carrying out around 20 million tests every year. The current system supporting these vital services is 20 years old. Activity has consistently risen in most areas of the service as doctors increasingly use pathology tests and advice to support diagnosis.

Laboratory information management systems (LIMS) are used in pathology for recording and exchanging information such as blood test results. The systems also link to the machines which conduct the tests and analyse the samples.

Such high volume and growing demand have led to IHC supporting a national initiative to replace the disparate LIMS currently in use in Wales

The strategic outline case for a new all-Wales LIMS was recently approved by the Welsh Assembly Government, and the outline business case has now been submitted to the Health and Social Services Minister. The new LIMS will provide a modern, flexible and integrated solution for the whole of NHS Wales.

The project team is continuing to work on developing the specification of the new system. The all-Wales LIMS should begin to be implemented during 2009.

The new LIMS system is specified to work with the Welsh Clinical Portal.

## Progress with a cancer information system for Wales

*“The inclusion of CANISC data for cancer registration will bring immense benefits to WCISU. The clinically rich data will enhance the quality of information produced by the unit which will in turn ensure that epidemiological information will be of the highest quality.”*

Shelagh Reynolds, General Manager of WCISU (the Cancer Registry for Wales)

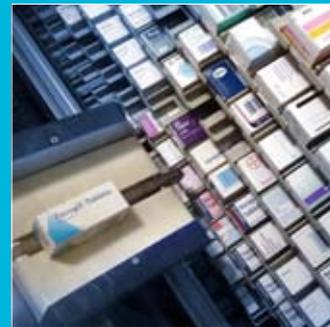
Electronic health records are of particular value in cancer care as patients with that diagnosis frequently travel between different hospitals during their treatment. Each hospital requires instant access to the most up-to-date information, which is a basic requirement for providing the best quality of care. During the last year the information held in CANISC has been recognised by clinicians, the Welsh Information Governance and Standards Board and the Wales Assembly Government as meeting the needs of a national electronic cancer record. All acute trusts in Wales now use CANISC as their cancer information system to provide the reporting requirements for cancer waiting times. The system is also the information source in all trusts for national audits in bowel, lung head & neck, and stomach & oesophageal cancers and will be used later this year for the first national breast cancer

audit in Wales. Its use to facilitate multidisciplinary care is increasing although this depends on the provision of local facilities and training.

CANISC has moved from its development phase to an established national IT system hosted at Health Solutions Wales and will be managed for the service by the Business Services Centre. Development will continue to be necessary to provide improvements in ease of use by the service and to take account of the continual changes in the investigation and treatment of cancer.

Informing Healthcare has also launched a Cancer Histopathology Reporting Project to streamline and improve the quality, completeness and availability of cancer histopathology information across Wales which will in turn help to improve patient care and safety. Chirp (the Cancer Histopathology Information Reporting Project) will convert the current paper-based system of histopathology reporting of cancer specimens to an electronic version which will interface with CANISC. It will streamline the reporting process and enable high quality information to be available at the point of care wherever CANISC is in use.

The CANISC system will be available in the Welsh clinical Portal.



## Good medicine for Pharmacy

Hospital pharmacy systems across Wales are being upgraded as part of a project to improve the way medicines are managed.

All NHS Trusts in Wales, with the exception of parts of Abertawe Bro Morgannwg University NHS Trust, run the EDS hospital pharmacy system. The system is used in pharmacies and on the wards to manage the ordering, dispensing and distribution of medicines.

Over the last year, essential upgrades have been completed in 12 hospitals with the EDS system. The remaining 2 sites are due to go live on the new system by the end of 2008. The 'behind-the-scenes' improvement has stabilised the system and created a platform for further progress in medicines management. The system software has been re-written in Cache and has been moved from local servers

held at each trust to a central set of servers managed by Health Solutions Wales.

The medicines management project has also introduced an electronic medicines management system (e-MMS) on two wards in Cardiff and Vale. It means that information hand written on the patient's drug chart can now be electronically transcribed by pharmacy staff at the patient bedside. This helps to improve the clarity of prescriptions, increases accuracy and reduces dispensing errors. Informing Healthcare is using this work - together with the excellent existing work that is already taking place in trusts - to develop a common electronic transcribing system for use across Wales. This will aid hospital discharge and improve patient safety as a legible record of patients medication will be sent to the GP and given to the patient.



## Connecting Wales

For the first time key ICT networks supporting health, education, local government and other local services in Wales are joining together into a single communications network called the PSBA network (Public Sector Broadband Aggregation). Last year the Welsh Assembly Government awarded a £74 million, seven year contract to Logicalis UK to provide the underlying network infrastructure.

The development of the new network has involved major collaboration activity across the Welsh Public Sector, which started as early as 2004. The Health sector involvement has been led by Informing Healthcare, alongside the other founding sectors of Local Government, Higher & Further Education and the Welsh Assembly itself.

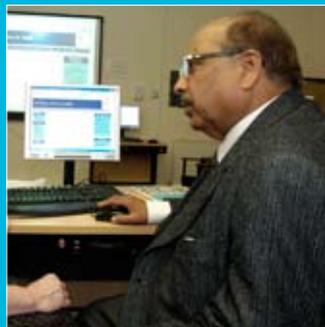
NHS Wales' Digital All-Wales Network, dawn2, has provided an excellent foundation for Health over the past 7 years, where a lot of the aspirations of having a true

multimedia network have already been realised. These include the use of shared services, a corporate video conferencing capability and a common approach to many of its data and voice services.

The new PSBA network will be making use of the same technical architecture already in use on dawn2, but will bring the benefit of extending its scope beyond Health and to other sectors. This new network will facilitate much more effective and secure sharing of information across and between sectors, as appropriate, and will help to promote much more common approaches to service provision.

During the coming years the PSBA network will touch every corner of public services and will be a major facilitator to the delivery of improved and richer services in Wales.

The new national email and directory service forms the firm foundation needed for IT across NHS Wales.



## Electronic Clinical Communications

A new way of referring patients to hospital consultants is being tested in Wales. The electronic referral system - SCI Gateway, a Scottish development they are happy to share with Wales - eliminates paper referrals for patients needing hospital care.

At present, when a GP refers a patient to a hospital consultant a referral letter will be written, printed and posted to the hospital.

Two GP practices in Cardiff and Vale are the first to try the electronic system, which has been used successfully in Scotland for a number of years with over 90% of GP's using it.

In May 2008 the first electronic referral was successfully sent from a GP practice (Cathays Surgery) to the Cardiff and Vale Referral Management Centre, where it was

received, viewed and redirected to the University Hospital Wales (UHW). The referral was received by UHW and the delivery was electronically confirmed to the GP practice. This initial success provides the green light for the continuation of the trials.

The trial is conducting a technical evaluation of the system, testing it with users, and determining the benefits for patients and healthcare staff. Following this evaluation Wales will be in a good position to roll out a service that benefits patients and improves efficiency.

Informing Healthcare is working in partnership with the Scottish Executive's eHealth programme, the Scottish Care Information team, local GP practices, the Vale of Glamorgan Local Health Board's Referral Management Centre, Cardiff and Vale NHS Trust, Business Services Centre and Health Solutions Wales.



## Engaging with our stakeholders

Ongoing engagement with clinicians, patients and suppliers is a crucial principle of Informing Healthcare, and the trusted relationships which have been built are paving the way for the successful introduction of new systems and services.

Engagement is wide ranging and happening at all stages of projects, including regular meetings of various boards:

### Nurses, midwives and health visitors

A strategic framework has been developed for engaging nurses, midwives and health visitors, and regional reference groups have been established with representatives from all groups, and all areas of Wales.

### Technical forum

A technical forum has been set up to provide independent and expert assurance on the use of progressive technologies to support patient care. The forum draws from a wide range of stakeholders, including representatives from academia and suppliers, and will support Informing Healthcare's current governance arrangements.

### Programme Board

Informing Healthcare's programme board members represent a wide range of NHS and stakeholder organisations. The board plays a vital role in overseeing developments of the Individual health record and other service improvement programmes, and its members also serve as ambassadors for the programme.

### Implementation Board

An implementation board was set up during 2007 with representations from health communities in Wales, the NHS and commercial suppliers joining Informing Healthcare's executive directors. The implementation board's responsibilities include determination of priorities, phasing, investment, communication and financial planning.

### Patient Safety Board

The Patient Safety Advisory Board provides advice to the programme about patient safety. It monitors the programme's products and services, to ensure patient safety issues are addressed. The board includes representatives from the National Patient Safety Agency.

### National Architecture and Design Board (NADB)

The NADB ensures that timely corporate decisions are made, when required in Wales, on the design of the information systems that support the clinical care of the individual. A key element of the NADB work is to determine the scope of the design and the constraints on the design. The design board has clinical and technical members from across Wales.



## Experts confirm Informing Healthcare is “on the right course”

In September 2007 a review panel of internationally acclaimed healthcare experts visited NHS trusts around Wales and declared that Informing Healthcare is “on the right course”.

The tour was part of Informing Healthcare’s second international peer review conference – the IAG 2007. As well as the international panel, the conference

attracted more than 120 delegates from within NHS Wales, other care organisations, government and commercial partners. At the end of the conference the review panel praised Informing Healthcare’s transparency and efforts to involve clinicians and patients in decision-making, and gave the programme a ‘thumbs up’ for work achieved so far.

## Framing the future for Health Informaticians

Around 3000 people working in NHS Wales are health informatics professionals. Work areas within the Health informatics field include information management and information and communication (ICT), as well as jobs in health informatics education and health records management.

New and safe health services are all underpinned by what modern ICT can do, and we need to ensure Wales attracts new staff to work in this expanding field and develop them.

Informing Healthcare is raising the profile of Health informatics staff, and promoting education, training and professional development through the Welsh Health Informatics Professional Development Programme.

These developments coupled with the IHC Health Informatics Research Laboratory at Swansea University are preparing the ground for Wales to take its place at the forefront of Health Informatics.

## Jobs in Health Informatics

We've recently delivered the first ever health informatics career framework which is a first for Wales.

The framework has been developed specifically for health informatics staff, and is an important step in recognising health informatics as a crucial part of the NHS. The framework identifies and opens up career opportunities in health informatics. It helps individuals to plan their own careers, and organisations to plan workforces.

Other benefits of the framework:

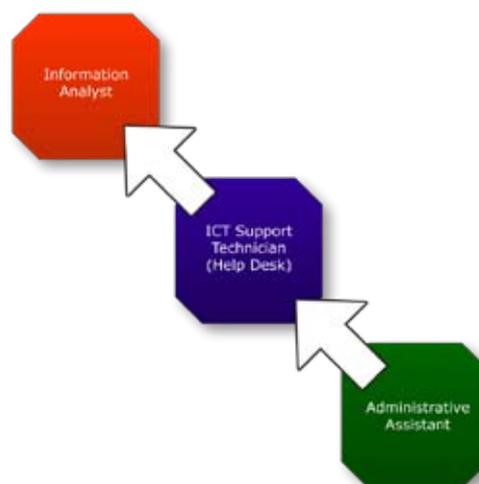
- Provides employers with a tool to support recruitment, retention and talent management.
- Facilitates more systematic and effective education and development through skills escalation.
- Provides a benchmarking tool within the Health Informatics family and beyond to other healthcare roles.
- Places Health Informatics in the mainstream of healthcare.
- Promotes professional identity and recognition.

### How can the health informatics career framework help Susan?

Susan left school and went to work for her local NHS Trust as an Administrative Assistant. In this role she was working with a bookings system, receiving calls from members of the public and processing records in a hospital

environment. This work gave Susan a good awareness of hospital processes and computer systems. She worked here for several years before moving into work on a Help Desk to provide advice to members of staff on the use of Trust wide systems and communications. This experience around IT helped her progress in IT support, with a particular emphasis on the use of data and information. Her most recent progression has been into the role of Information Analyst.

This diagram shows Susan's progression within Health Informatics, and is a segment from the Health Informatics career framework:





There's also a 'Hi-ProFILE' website offering a one-stop shop for health informaticians. The site offers career information for people working in all aspects of Health informatics.

A qualification bursary has also been launched which provides all HI staff - from data entry clerks to IT programmers - an opportunity to gain professional qualifications aiding their career development. Informing Healthcare is also continuing to run a higher education bursary scheme, and another graduate trainee will be starting a comprehensive development programme in September 2008.

*"I think the progress made so far is excellent and you are to be commended for pushing forward the programme at such a pace"*

Robin Jones, Head of IT, NHS Trust



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