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WALES

Gwasanaeth
Gwybodeg

Informatics
Service

Service Guide

NHS Wales Informatics Service (NWIS) is a national organisation providing the information and technology services used by NHS Wales to support high quality patient care.

Our work covers the development of new national products and the delivery of operational technology and information services.

All products and services are developed in collaboration with health boards and health professionals in NHS Wales, to meet the needs of NHS Wales now and in the future.

Information Services

Data Collection and Management
We collect and process the facts and figures that help NHS Wales run effectively. The data we collect is stored in the NHS Wales data warehouse, in accordance with national standards and Information Governance policies. Collected data is analysed and converted to useful information that helps staff across NHS Wales and the Welsh Government in their work.

We also provide a Clinical Coding Helpline to clarify current classification rules and ensure data is recorded consistently and accurately.

Data to support health and care
To give Health Boards and Welsh Government access to the information they need in the way they want it, we produce a range of web apps including dashboards, data quality indicators, health maps, on-line reporting tools and tailored e-portals.

Commissioned by client organisations, information products and services are used for a wide range of purposes, from decision support, to patient safety initiatives, to allowing clinicians to refine patient care. As part of this service we also review 'legacy' on-line reporting tools and technologies which may need replacement.

Demographics
The Welsh Demographic Service is a database of patients resident in Wales and registered with a GP practice in Wales or England. It's used to trace a patient's administrative details, such as the patient's NHS Number.

Patient identity

To ensure each patient is identified accurately wherever they receive treatment, we have put in place the Master Patient Index (MPI). This accurately matches and links patient identities across several different systems, reducing error and the number of duplicate health records held for each patient. It is a key part of the Welsh Clinical Portal, which integrates patient records from several sources.

Reference Data

When clinical information is shared between organisations and computer systems it uses codes to ensure treatments, organisations and hospital locations are always described in the same way. We provide support for the datasets used by the different coding structures through our reference data service.

Infrastructure Services

Data Centres

NHS Wales national IT services are hosted at two data centres, based in Blaenavon and in Cardiff Bay. Keeping data in two locations rather than many, increases efficiency, security and safety and minimises costs.

Directory and email

Over 64,000 NHS Wales staff use our national directory service. It allows staff to log on to systems and services regardless of where they access a computer within NHS Wales. While our national email service provides a single up-to-date address book, that lets health professionals share diaries with colleagues across NHS Wales organisations. It also provides an email address "for life" for as long as staff remain within NHS Wales, e.g. dai.jones@wales.nhs.uk

A Mail Marshal service looks after e-mail routing, virus detection and custom message filtering and classification for all users in NHS Wales.

A managed email service is available to all GP Practices and Community Pharmacies and forms part of the national hosted e-mail service for Wales.

Domain Name Service

Website addresses (also known as URLs) are made up of words e.g. www.wales.nhs.uk, however computers work by using a number system called an IP address. The NWIS Domain Name Service converts the IP addresses into web addresses and vice versa. We also register and maintain new internet website addresses on behalf of the NHS in Wales.

Telephone, video and audio

The Welsh Health Telephone Network (WHTN) is a private internal telephone network for NHS Wales, and means staff can make free internal calls between sites. We provide telephony services at all NWIS sites including call centre, call logging and operator functionality.

Through the Welsh Health Video Service we support 500 registered video units that are used for multi-disciplinary meetings, cutting down on travel for specialist staff. Calls are free within NHS Wales networks. A similar service supports audio conferencing.

Communications Network

Broadband services for NHS Wales are provided through the Public Sector Broadband Aggregation (PSBA) service. PSBA delivers a wide range of communications service and supports voice, video and data traffic. We provide support for network management, monitoring and reporting, patching of servers, status alerts and trending.

Security Services

Keeping data safe

We manage the Code of Connection, which sets out what each NHS Wales' organisation must do to protect person identifiable information and keep it safe. While our National Encryption service provides encryption software licences for fixed hardware and mobile devices, organisations also have access to our Security Awareness service for advice and guidance. In the event of any form of breach we offer an Incident Response and Forensics service to gather evidence and investigate the cause.

Remote working

For staff who work from home or away from their base location we operate a Network Authentication service that allows staff to connect to the NHS Wales network via the internet (fixed, dial up and wireless).

A web-based Secure File Sharing Portal is now available to authorised users. It supports cross-sector working and avoids emailing documents with large file sizes.

E-tools, Web hosting and design

Call logging

Servicepoint is an on-line call-logging tool, developed in-house, which is used to manage IT issues for all-Wales IT systems.

www.wales.nhs.uk

Web hosting and design services

We host and support over 550 web sites for NHS Wales' organisations, including the HOWIS and Health in Wales websites, all of which use our award-winning in-house CASCADE content management system.

We maintain the e-Library for Health and provide specialist skills to support the NHS Wales virtual learning environment (VLE). Junior doctors use our internet-based system to apply for postgraduate and specialist training courses in Wales. Welsh Government and Public Health Wales use a range of our in-house developed web apps to support their work.

We offer a full package of internet and intranet support services to NHS Wales' organisations including:
• Design and build
• Implementation
• Testing
• Technical support
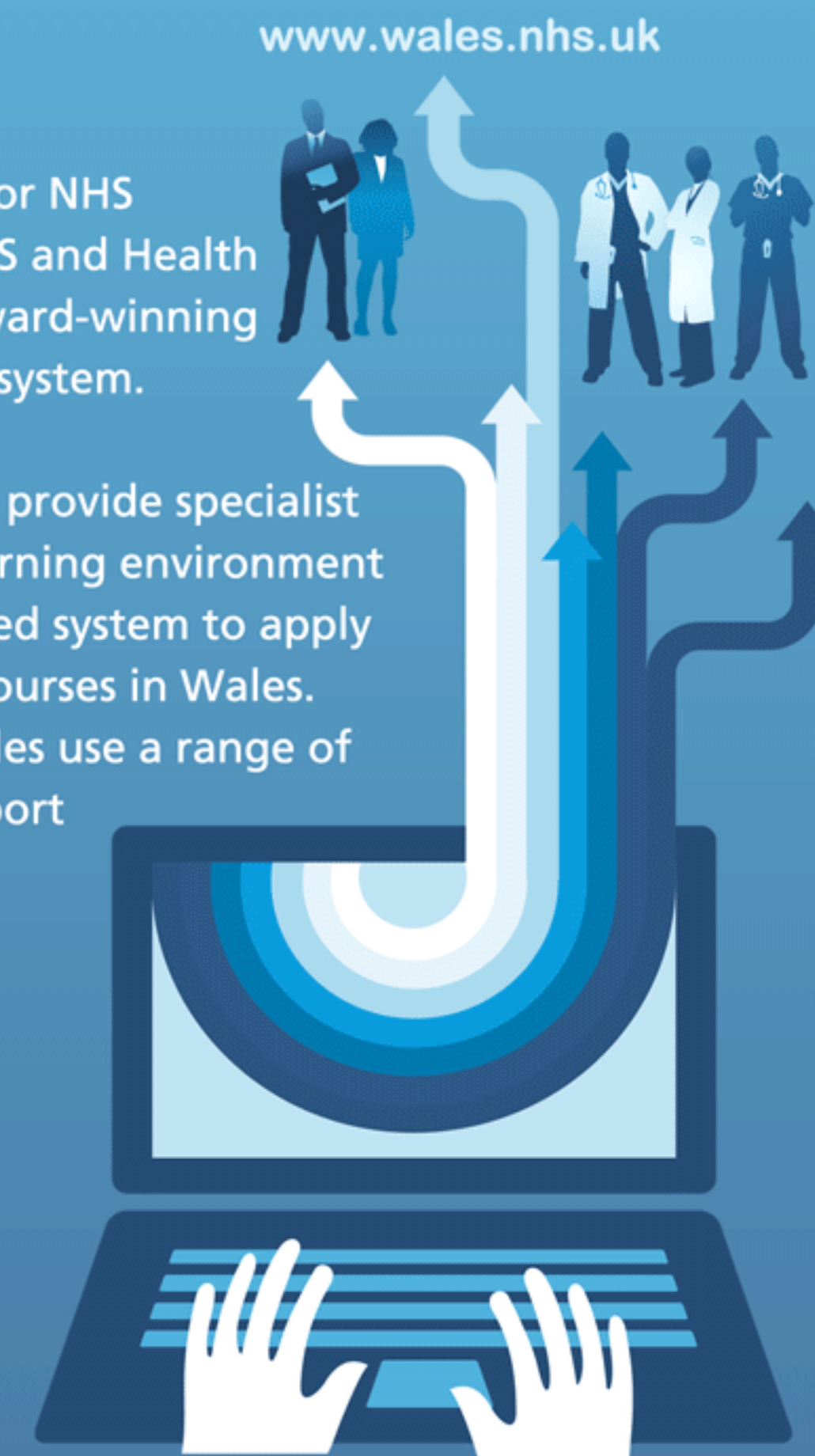
Desktop & local network services

Working behind the scenes NWIS IT staff deliver desktop and local network services to nearly 2,400 people. This includes support for desktop software and hardware, network printers, LANs and WANs, encryption and virus software.

Secondary Care Services

Integrating Care

To make it easier for health professionals in hospitals to carry out day to day tasks, we have developed the Welsh Clinical Portal. The portal unites key information from many sources to give one view of the patient's care and treatments. Pathology tests can be requested and results viewed through the portal, which includes an e-version of the pathology test rule book – the Wales' Pathology Handbook.

The portal integrates with the new national Laboratory Information Management System (LIMS), which is used to record and exchange information, such as blood test results. LIMS is replacing 18 different systems with one national system. This will allow health professionals to see all previous tests of patients that are registered on the Trakcare LIMS wherever they have received treatment in Wales.

Patient Administration System

Myrddin is the patient administration system (PAS) used by six out of the seven NHS Wales health boards. It has nearly 18,000 registered users. Hospitals use Myrddin to hold patient ID details, outpatient appointments, letters and notes. We provide ongoing development, support and maintenance and in some cases host the application for health boards.

Hospital Pharmacy

Robots are used to pick the medicines to be dispensed to patients at most NHS Wales hospitals using the Hospital Pharmacy System, it allows stock to be ordered and invoiced, and records and labels all medications ensuring medicines are delivered on time.

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Radiology

Every health board in Wales uses the Radiology Infomation System (RADIS2) to schedule patient appointments for medical imaging, such as x-rays and MRI scans. The system tracks the patient's progress, records diagnostic reports and produces a range of statistics on waiting times, capacity and demand for services. It sends results electronically to the patient's GP and is linked into hospital picture archiving, administration and ward viewing systems.

Services to support care for patients with cancer

Health professionals caring for patients with cancer can access information on diagnosis, treatments and care plans through the electronic CANISC system. We also support the Wales Cancer Bank, a research tool, recording tissue samples of anonymised cancer patients.

Primary Care Services

Linking GP services

Doctors and nurses working in out of hours and emergency care can now see the medical information about a patient, which is kept by the patient's GP. The online Individual Health Record service provides important information about each patient to help emergency staff make important clinical decisions.

GPs across Wales are now sending electronic referrals for out patient appointments using a secure link called the Welsh Clinical Communications Gateway. Similar services to send discharges electronically are in the process of being introduced.

As technology is central to the smooth running of GP practices, we manage the GP computer system framework contract. This provides GPs with a choice of suppliers while ensuring defined standards for primary care IM&T across Wales.
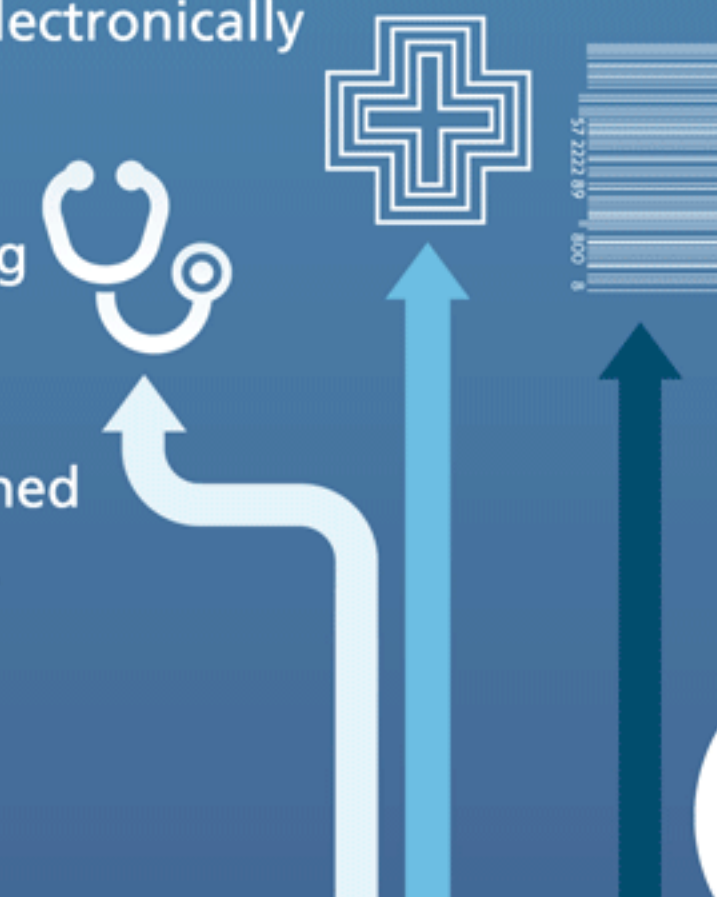
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Community Pharmacies across Wales can now scan in patients' medication details from a high-tech barcode printed on each prescription issued by the GP, reducing re-keying errors and increasing efficiency.

Patients can use the internet to book appointments with their GP and request repeat prescriptions through the new patients' website My Health Online.

GP Test Requesting

A new service to make it easier and quicker for GPs to request blood, urine and tissue tests from hospital labs is under way using the Welsh Clinical Communications Gateway. With over 15 million tests carried out in Wales last year, and over half requested by GPs, the GP Test Requesting service will streamline the process.

The service will include an electronic list of tests available and allow doctors to see previous test results from patients within their practice requested from other practices or hospitals.

Screening

Preventative screening programmes in Wales rely on the software we develop and support including the NHS Wales' bowel screening system, the breast screening and cervical cytology call and recall systems, supplied by NHS England, and the Newborn Hearing Screening programme, which detects hearing impairments at an early age.

Child Health

Children's health in Wales is supported through our Community Child Health 2000 system, which holds an e-record of immunisation, pre-school health and school-age health, dental and vision screening and special needs requirements.

Supporting patients with long-term conditions

Spotting the patients who are likely to be admitted to hospital in an emergency is helped by use of the predictive risk web service – PRISM, which allows health professionals to view risk scores against the patients in their community.

Performers List

We provide an online database containing details of all GPs, dentists, pharmacists and optometrists registered to work in Wales. The list provides assurance that the individual has the right qualifications and experience. It can be accessed from the NHS Wales Shared Services Partnership website www.bsc.wales.nhs.uk

**Darpau Gwybodaeth a Thechnoleg er gofal gwell
Delivering Information and Technology for better care**