



GIG
CYMRU
NHS
WALES

Iechyd a Gofal
Digidol Cymru
Digital Health
and Care Wales



Wales Institute of Digital Information
Athrofa Wybodaeth Ddigidol Cymru



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

200
1822 - 2022

Looking back and looking forward at digital transformation in Wales

• people, policy & politics

Rhidian Hurle MB,BCh, MRCS, Pg Med Ed, MSc Digital Health , MD, FRCS (Urol), FFCI

CCIO Wales / Medical Director DHCW, Consultant Urological Surgeon

IGDC • DHCW



NHS Wales in NUMBERS



Nº of Major Hospitals
15



Nº of GP Practices
408

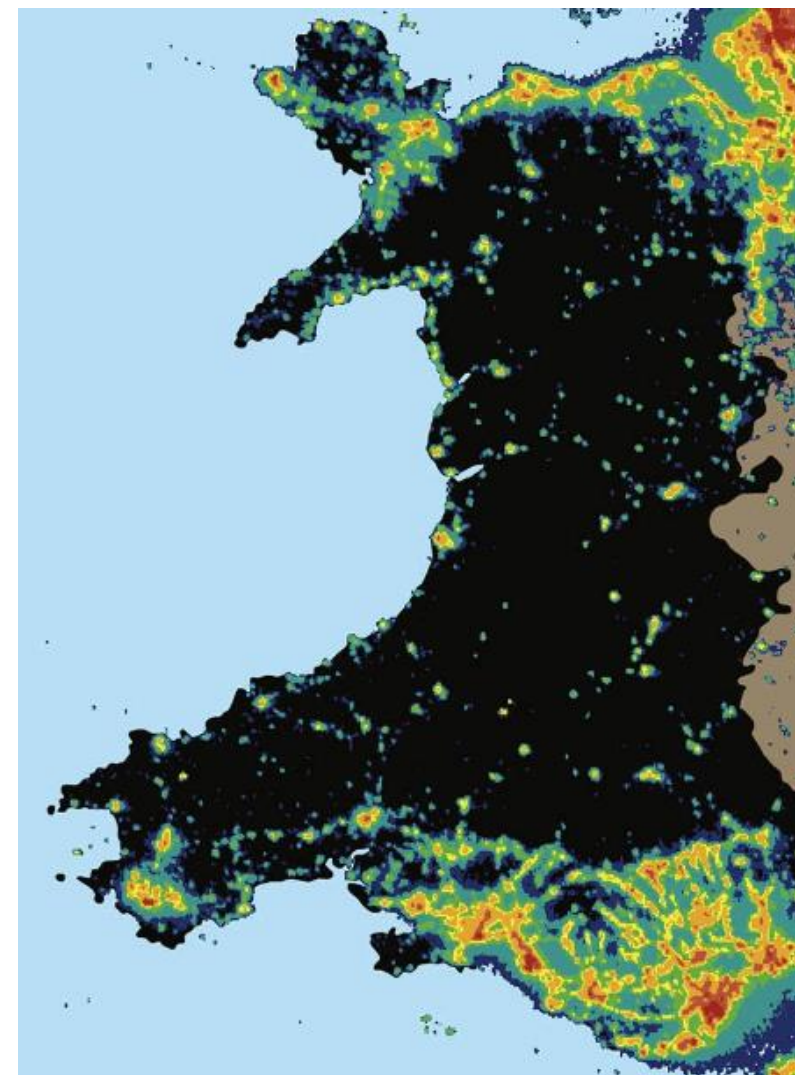
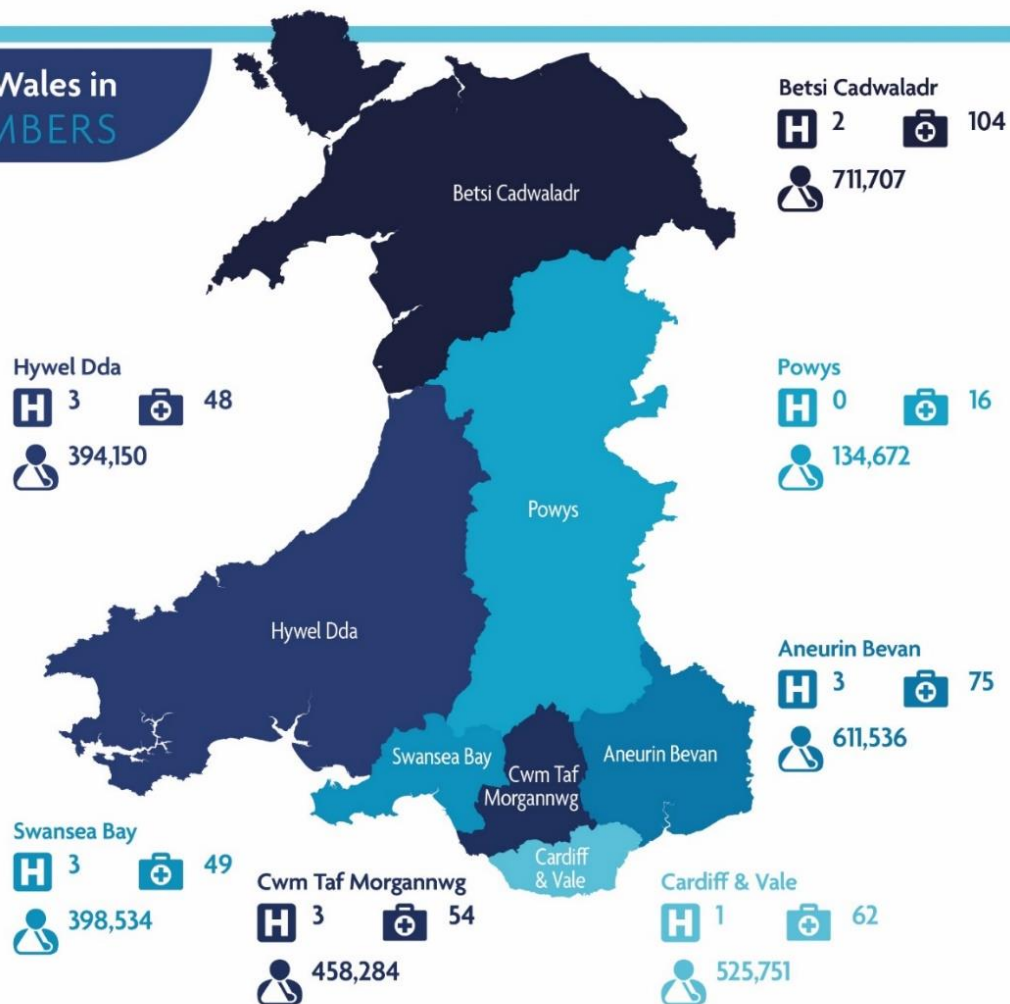


Nº of GP Registered Patients
3.2 Million (approx)



Gwasanaeth Gwybodeg Informatics Service

Data collated by NHS Wales Informatics Service
figures accurate Nov 2019







Learning from the (organisational) past.



Notes on Nursing: What It Is and What It Is Not.

“if Florence Nightingale were carrying her lamp through the corridors of the NHS today she would almost certainly be searching for the people in charge”

Roy Griffiths 1983

“ of the IT ”

Rhidian Hurlle 2015

1987				Peter Walker	
Working in Wales					
1988	Welsh Health Planning Forum				
1989	Strategic Intent and Direction				
1990				David Hunt	
1991		31 NHS Trusts ⁸	8 FHSAs		
1992			GP fundholding		
1993	Caring for the Future			John Redwood	
1994				William Hague	Peter Gregory
1995					
1996			5 Health Authorities ⁹		
1997				Ron Davies	
1998	Putting Patients First		GP fundholding abolished	Win Griffiths ¹⁰	
1999	National Assembly of Wales		22 Local Health Groups	Alun Michael ¹¹	
2000				Jon Owen Jones ¹²	
2001	NHS Wales Plan	14 NHS Trusts ¹⁴		Jane Hutt ¹³	
2002					Ann Lloyd
2003			22 LHBs ¹⁵		
2004					
2005	Designed for Life			Brian Gibbons	
2006				Edwina Hart	
2007					
2008					
2009		7 ¹⁶ (New) Local Health Boards and 3 NHS Trusts			Paul Williams
2010	5 Year Framework				
2011				Lesley Griffiths	David Sissling

The Welsh Government is the executive of the devolved National Assembly for Wales.
Established in 1999 as the *Welsh Assembly Government* by the Government of Wales Act 1998

Table 1.1: Drivers of health need and cost over the next 20 years

		Type of trend	Factor in model	
The health service in 2022		Patient and public expectations	Fast access: reduced waiting times	
			Safe and high quality treatment: improved clinical governance	
			Better accommodation	
		Delivering high quality	National Service Framework (NSF) areas	CHD
				Renal
				Cancer
Diabetes				
Scenarios		Changing health needs	Health status	Mental health
				Extending the NSFs to other areas
Impacting on demand	Changing health needs	Demography	Life expectancy	
			Proximity to death	
			Health needs in old age	
Impacting on supply	Technological development and medical advance	Likelihood of seeking care for a given level of need	Impact of health promotion and disease prevention	
Impacting on supply	Use of the workforce and productivity	Pay and prices		
			Productivity	

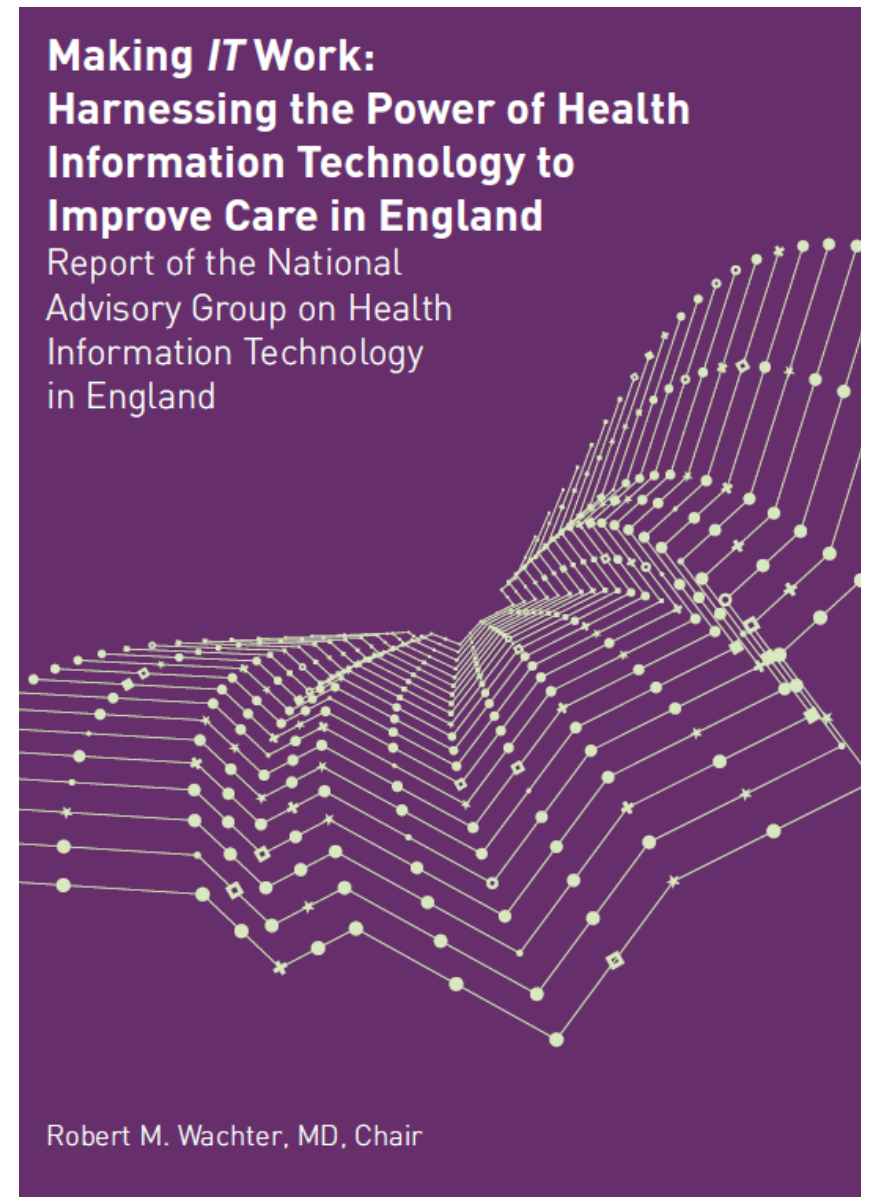
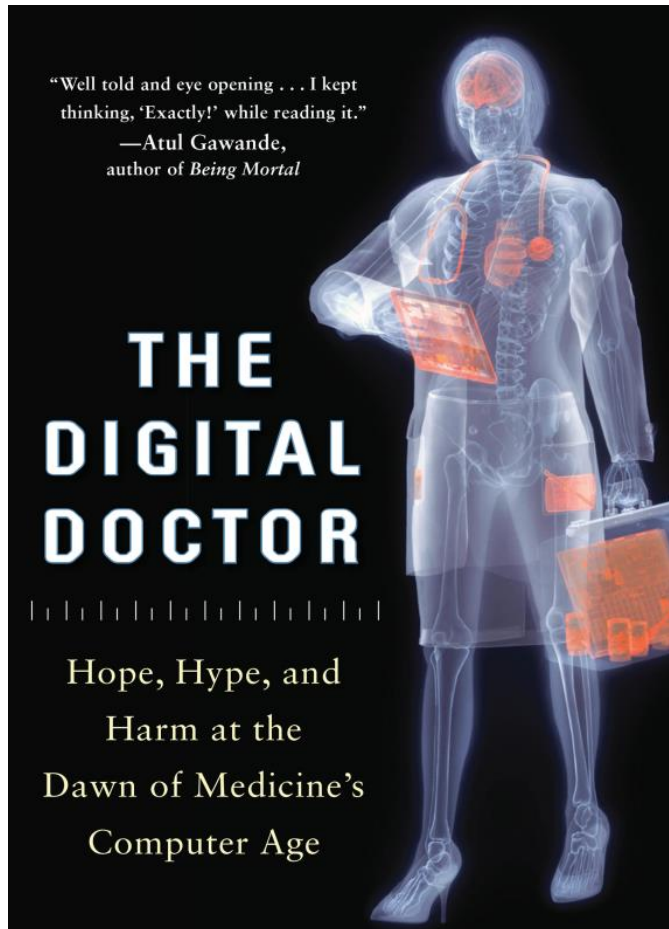
Sir Derek Wanless



2002 report for the then chancellor of the exchequer, Gordon Brown.

[Securing Our Future Health: Taking a Long-Term View](#) made the case for a significant and sustained investment in the NHS, the like of which had not been seen since the service was created in 1948.

The one thing the NHS cannot afford to do is to remain a largely non digital system...it's time to get on with IT Wachter Review September 2016





Llywodraeth Cymru
Welsh Government

www.gov.wales

Informed Health and Care

A Digital Health and Social Care Strategy for Wales





GIG
CYMRU
NHS
WALES

Supporting professionals

Health & Social Care Professionals use digital tools to do their jobs more effectively.

'Once for Wales'
Creates solid platform between systems.



Information for you

Connect with health & social care.

Using technology, digital tools and apps.

Look after your own well-being



Improvement and innovation

industry **academia**

- Improve decision making
- Better use of data
- Plan service change
- Improve quality and performance.

A planned future

Joint planning, partnership working & stakeholder engagement ensure opportunities are prioritised.



The 4 principles of prudent healthcare

Public and professionals are **EQUAL PARTNERS** through **CO-PRODUCTION**



CARE FOR those with the greatest health need **FIRST**



Do only **WHAT IS NEEDED**



and do **NO HARM**

Reduce **INAPPROPRIATE VARIATION**



through **EVIDENCE-BASED** approaches

For further information visit www.prudenthealthcare.wales




The Parliamentary Review of Health and Social Care in Wales

A Revolution from Within: Transforming Health and Care in Wales



Final Report
January 2018



Dr Ruth Hussey
CB OBE (Chair)



Professor Sir
Mansel Aylward CB



Professor
Don Berwick



Professor Dame
Carol Black DBE



Dr Jennifer Dixon
CBE



Nigel Edwards



Professor
Keith Moultrie



Eric Gregory



Professor Anne Marie
Rafferty CBE

**Population
Health and
Wellbeing**

**Quality
of Care**

**Best value
for money**

**Wellbeing of
Health and
Care Workforce**

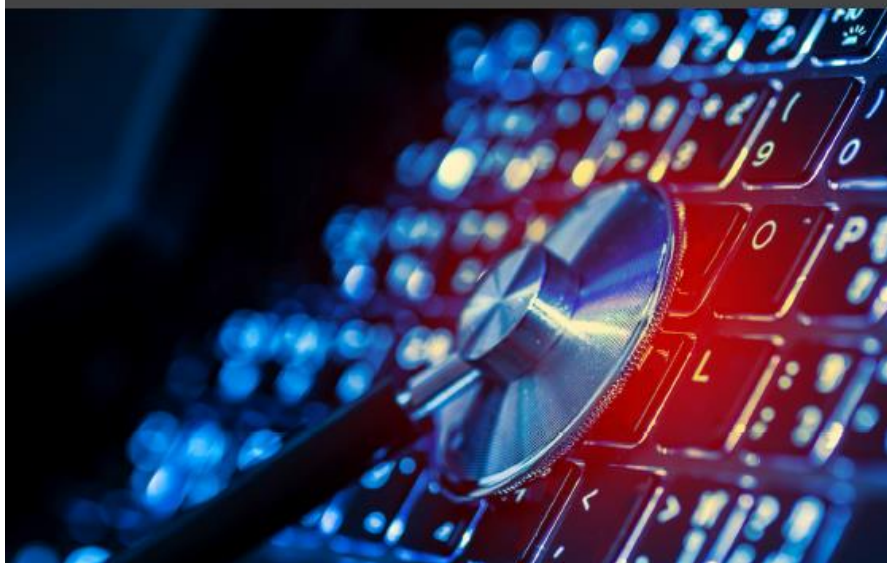
Recommendation 7: Harness innovation, and accelerate technology and infrastructure developments

Maximise the benefits of technology and innovation to pursue the Quadruple Aim and deliver more effective and efficient care. This needs the right culture, behaviours and leadership to embrace innovation, embed collaboration and support prudent risk-taking.

11 January 2018

Archwilydd Cyffredinol Cymru
Auditor General for Wales

Informatics systems in NHS Wales



Huw Vaughan Thomas
Auditor General for Wales

- 1 The NHS has a clear vision for an electronic patient record but there are some key weaknesses in the arrangements to support and oversee delivery
- 2 Key elements of an electronic patient record are being put in place but significant delays and issues with functionality cause frustration and it is unclear whether intended benefits are being achieved

Informatics Systems in NHS Wales

November 2018



www.assembly.wales

Committee Chair:



Nick Ramsay AM
Welsh Conservative
Monmouth

Current Committee membership:



Mohammad Asghar AM
Welsh Conservative
South Wales East



Neil Hamilton AM
UKIP Wales
Mid and West Wales



Rhianon Passmore AM
Welsh Labour
Islwyn



Adam Price AM
Plaid Cymru
Carmarthen East and Dinefwr



Jenny Rathbone AM
Welsh Labour
Cardiff Central



Jack Sargeant AM
Welsh Labour
Alyn and Deeside

The following Members were also members of the Committee during this inquiry:



Vikki Howells AM
Welsh Labour
Cynon Valley



Lee Waters AM
Welsh Labour
Llanelli

Recommendation 4. NWIS is currently overstretched and improvement requires far more than simply pouring more money into the existing organisation, which is unlikely to achieve significantly different results. We recommend that any additional funding apportioned to NWIS needs to be tied to reorganisation to achieve the improvements that are required. Page 15



We have reached three major conclusions

01

Current state

The current approach to digital architecture in NHS Wales is unsustainable and will not enable the ambition set out in A Healthier Wales to be achieved as things stand

The focus on centrally led projects and platforms is now starting to limit the ambitions of the system and of individual organisations within it. This in turn is impeding advances in care and innovation in the system. There is widespread frustration in Health Boards and more widely, but an acknowledgement that a collective approach is required. There is also an acknowledgement of the scale of the task, and the commitment and skills of the teams in NWIS and locally.

02

Opportunity

There is a significant opportunity for digital transformation in health and social care in Wales and the timing is optimal

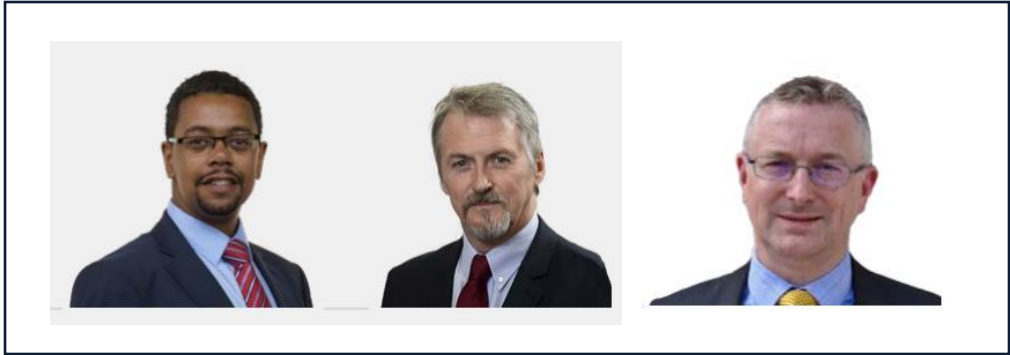
Globally, there has been recognition in the last two years, that traditional approaches to digital technology in health and social care are no longer fit for purpose. The technology vision set out in A Healthier Wales aligns with this global thinking and is achievable. The ingredients are there in terms of the digital building blocks required, and the overall commitment and capability at a system level. The challenge is more tractable in Wales than in many health economies, and could enable the nation to become a true global exemplar.

03

Approach

A digitally transformed NHS in Wales is achievable, but achieving the ambition requires a fundamental change of approach and focus

There needs to be a twin track approach so that resilience and innovation proceed in tandem, and at pace. There will need to be a keen focus on three major architectural building blocks alongside taking the opportunity to seize some immediate opportunities to make a real difference to patient care. The work should be undertaken as a collaborative, whole system approach and make use of all of the available capacity and capability.



- Accelerate progress towards a fully integrated national digital architecture, the roll out of the Wales Community Care Information System, and creating an online digital platform for citizens, alongside other nationally mandated services.
- Invest in the future skills we need within the health and social care workforce, and in the wider economy, to accelerate digital change and maximise wider benefits for society and the Welsh economy.
- Develop an ‘open platform’ approach to digital innovation, through publishing national standards for how software and technologies work together, and how external partners can work with the national digital platform and national data resource.
- Significantly increase investment in digital infrastructure, technologies and workforce capacity, supported by stronger national digital leadership and delivery arrangements.
- Establish a national data resource which allows large scale information to be shared securely and appropriately.

From 2018

From 2018

From 2018

From 2019

By 2020

Independent Investigation of the National Health Service in England

The Rt Hon. Professor the Lord Darzi of Denham OM KBE FRS FMedSci HonFREng

September 2024

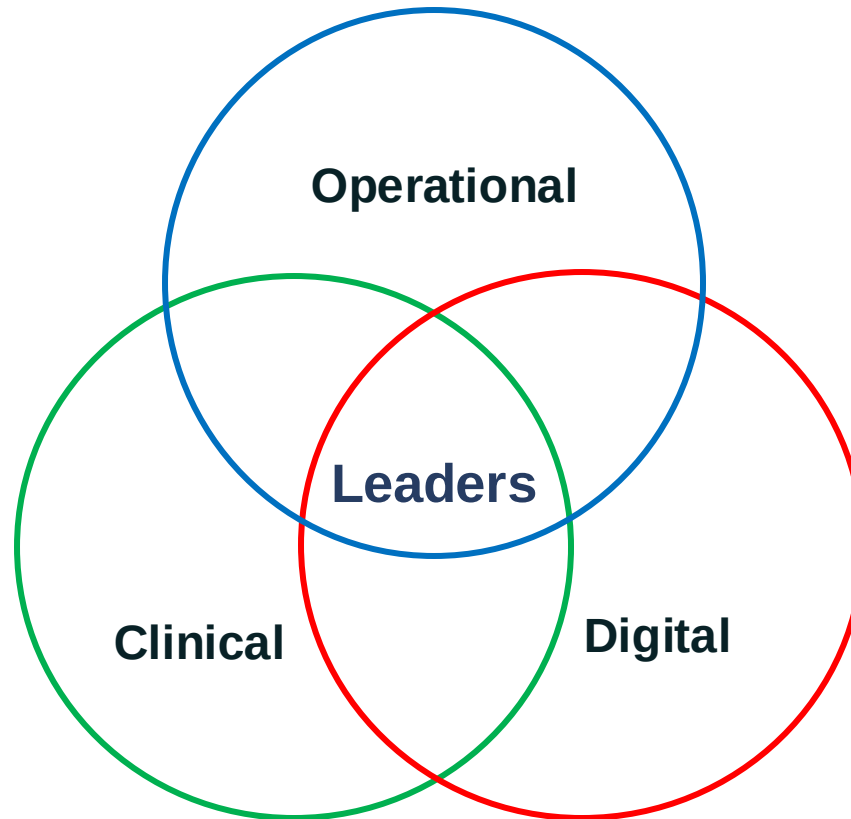


1. The National Health Service is in serious trouble

The British people rely on it for the moments of greatest joy – when a new life comes into being – and those of deepest sorrow. We need it when we are suffering from mental distress or hurting from physical pain and for all the times when care and compassion matter most. Yet public satisfaction – which stood at a record high in 2009 – is now at its lowest ever.

Tilt towards technology. There must be a major tilt towards technology to unlock productivity. In particular, the hundreds of thousands of NHS staff working outside hospitals urgently need the benefits of digital systems.

Embedding digital within leadership



“ There is no cavalry coming over the hill. Our destiny really does lie in the skills, the experience, the commitment of staff at all levels in the NHS.”



Selling Change

- **Improve** safety
- **Reduce** patient pathway waiting times
- Enables Transparency of **behaviours**
- Quality **Improvement** opportunities
- Require the same people to work **differently**
- Benefits **not always visible** to primary user
- Many issues are **people problems**, not technology problems
- Organisations must **invest** in the organisational change bit
- Engaged **leaders** – find them, keep them
- Training **before** technology introduced
- Real time **support** once “live





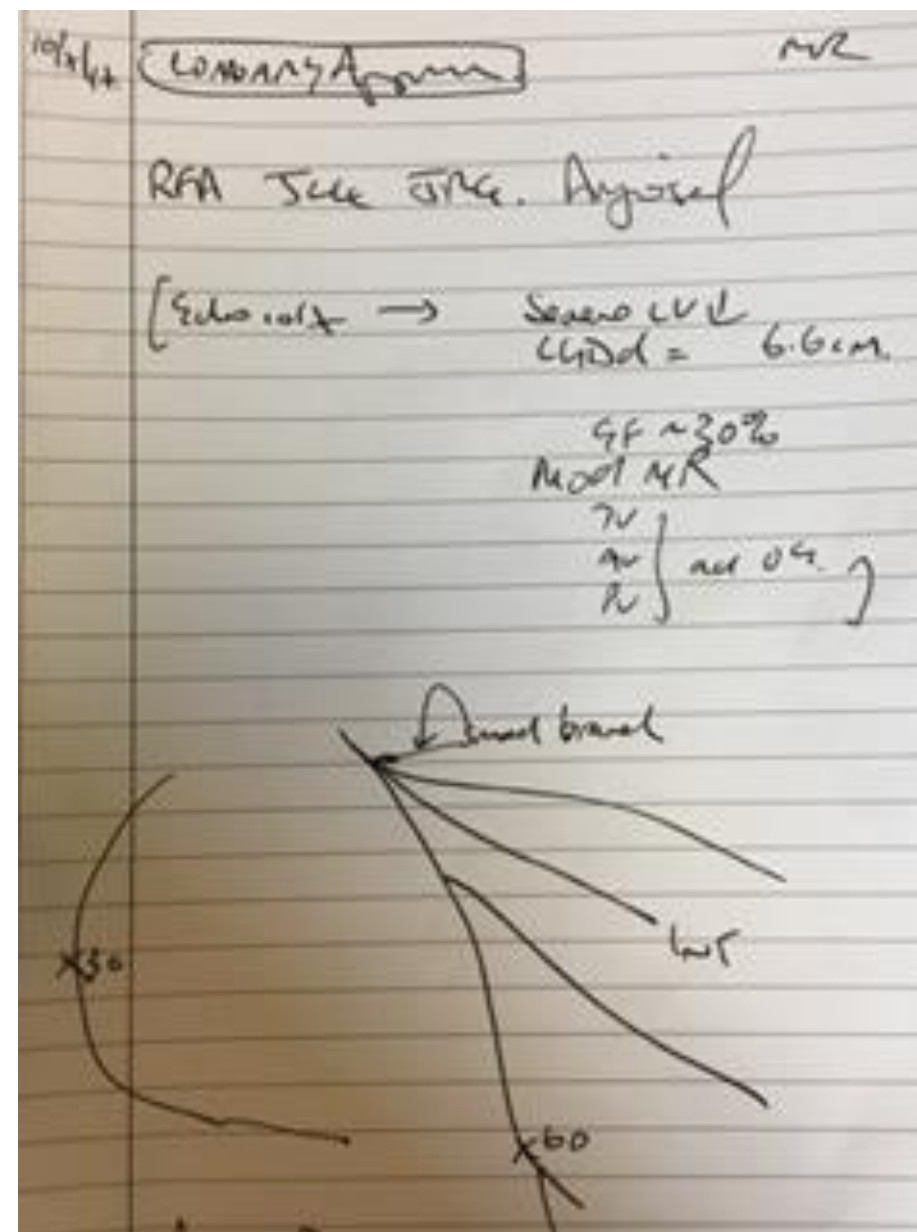
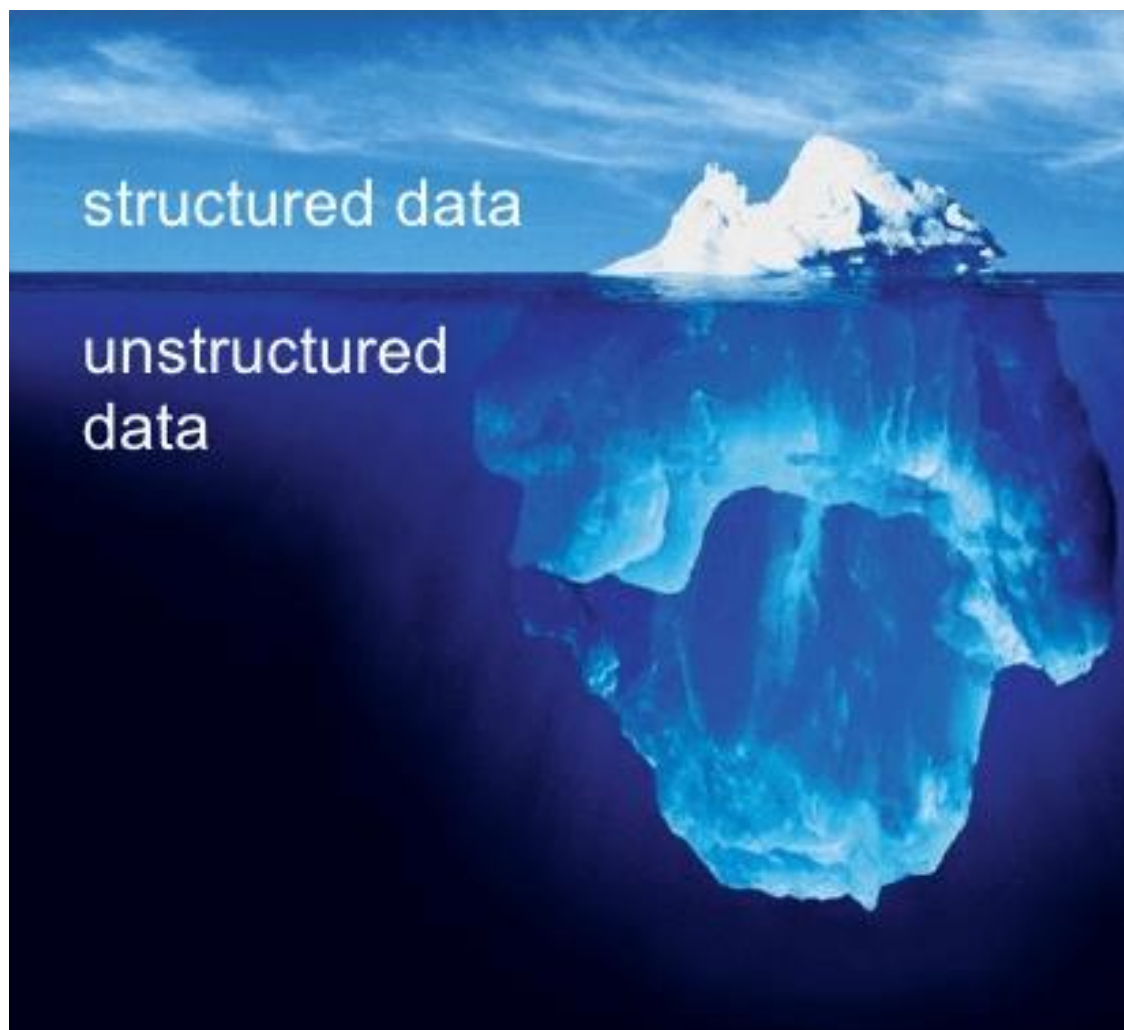
Nursing staff praying the WiFi will be working for the consultant ward round

St Elsewhere Hospital 2022

The Interface fundamentally determines the behaviour

*pervasive computing : Location specific, Contextual, Timely - to
create an environment where the connectivity of devices is
embedded in such a way that the connectivity is unobtrusive and
always available.*





Urology Clinical Condition v Sub-Specialty

WelshPAS activities in 2023/2024

6 clinical conditions

16 sub-specialties

DIAG_CODE	CONSULTANT_SPECIALTY	NEW_DESCRIPTION	CONSULTANT_SPECIALTY	SPECIALTY_NAME	MAIN_SPEC_NAME
351	101000	Urology - UTI	101000	Urology	Urology
352	101000	Urology - PSA	101001	Urodynamics	Urology
1040	101000	Urology - Urol POW JAT (FUNB)	101002	Urology Ambulatory	Urology
1043	101000	Urology - Urol POW RN (FUNB)	101005	Urology Planned Procedures	Urology
1049	101000	Urology - Urol POW Urodynamics	101008	Urology Pre Assessment	Urology
1050	101000	Urology - Urol POW Uroflow	101017	Flexible Cystoscopy RGH/PCH	Urology
			101020	Urology Diagnostic Procedure	Urology
			101021	Check cystoscopy RGH/PCH	Urology
			101040	Haematuria RGH/PCH	Urology
			101206	WFIM	Urology
			101400	Urology Paeds RGH/PCH	Urology
			101401	Urology Paeds Transfer	Urology
			101402	Urology Transfer RGH/PCH	Urology
			101666	Urology Assessment	Urology
			101667	Urology Spire	Urology
			101999	Urology USC Identifier	Urology

Swansea Bay

89 clinical conditions

47 sub-specialties

DIAG_CODE	CONSULTANT_SPECIALTY	NEW_DESCRIPTION	CONSULTANT_SPECIALTY	SPECIALTY_NAME	MAIN_SPEC_NAME
571	101000	Urology - Perineal closure-urethral fistula	101000	Urology	Urology
GS3	101000	Urology - Urology (O/P)	101001	Erectile Dysfunction	Urology
683	101000	Urology - Catheterisation	101002	Check Cystoscopy	Urology
S1J	101000	Urology - Testicular Biopsy	101003	Urology Planned Procedure List	Urology
S1N	101000	Urology - Incontinence Clinic D/C	101004	Pre-assessment Urology	Urology
S1P	101000	Urology - Urodynamic Studies (D/C)	101005	Prostate (Urology)	Urology
S1S	101000	Urology - Change of Catheter	101006	Urology NPB	Urology
S1T	101000	Urology - Impotence Clinic D/C	101007	Urology - Andrology	Urology
S1W	101000	Urology - Urethral Dilation	101008	Urology Haematuria	Urology
S29	101000	Urology - Bladder Neck Incision BNI	101010	Urodynamics (Urology)	Urology
S34	101000	Urology - Rigid Cystoscopy	101011	Urology one stop Biopsy	Urology
168	101000	Urology - Excision Urethral Diverticulum	101012	Urology PSA	Urology
S48	101000	Urology - Flexi Cystoscopy	101013	Urology Fertility	Urology
S49	101000	Urology - Biopsy - lesion	101014	Urology Penile	Urology
S50	101000	Urology - Circumcision	101015	Urology - LUTS	Urology
S81	101000	Urology - Bladder calculus	101016	Urology - Nursing RTT Inc	Urology
177	101000	Urology - Litholapaxy	101017	Flexible Cystoscopy	Urology
178	101000	Urology - Nephroureterectomy	101018	Urodynamic Urology Therapies	Urology
SC1	101000	Urology - Pyelo BRST	101019	Urology Paeds	Urology
SC3	101000	Urology - Urethrotomy	101020	Urology Diagnostic Procedure	Urology
SE4	101000	Urology - Urethrotomy	101026	Urology - Check Stent	Urology
U01	101000	Urology - PCNL	101030	Urology - Combined Clinic	Urology
P11	101000	Urology - Check Cystoscopy	101035	TRUS Biopsy	Urology
018	101000	Urology - Colposuspension	101120	Urology Green PACU	Urology
019	101000	Urology - Nesbitts Op	101122	Pen B	Urology

CTM

Behaviours “*the herding Cats challenge*”

Recognise and work on the different elements

Political Dimension

Personal Dimension

Human Behaviour

Organisational Behaviours

Interests, motivations and blockers

Time and timing



Collect – Store - Share

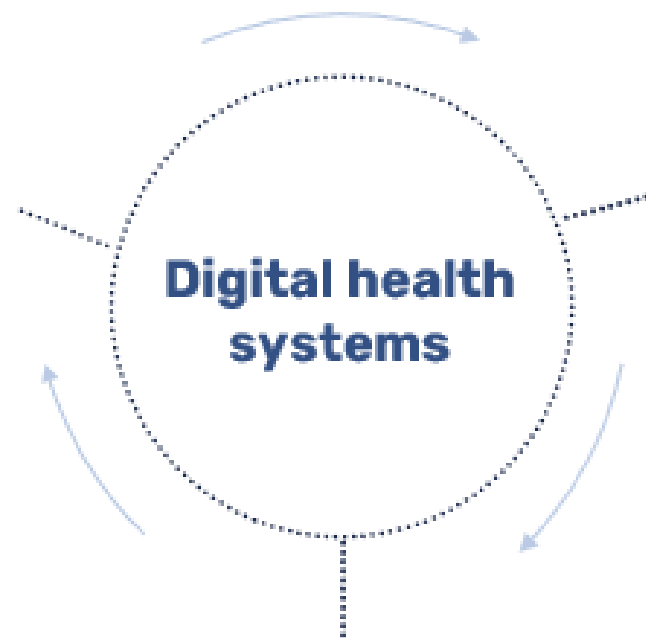


NDR

Adnodd Data Cenedlaethol
National Data Resource

Focus, strategy, and governance

- Focus for and value from deploying IT
- Governance, funding, and prioritisation
- Organisational and IT strategic planning

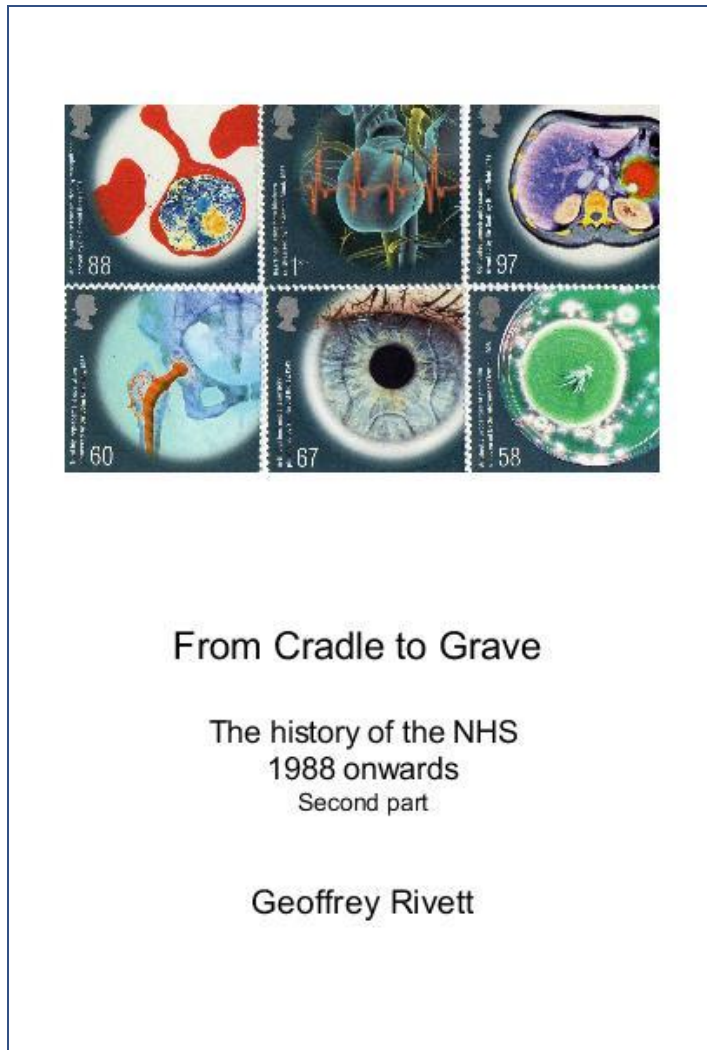
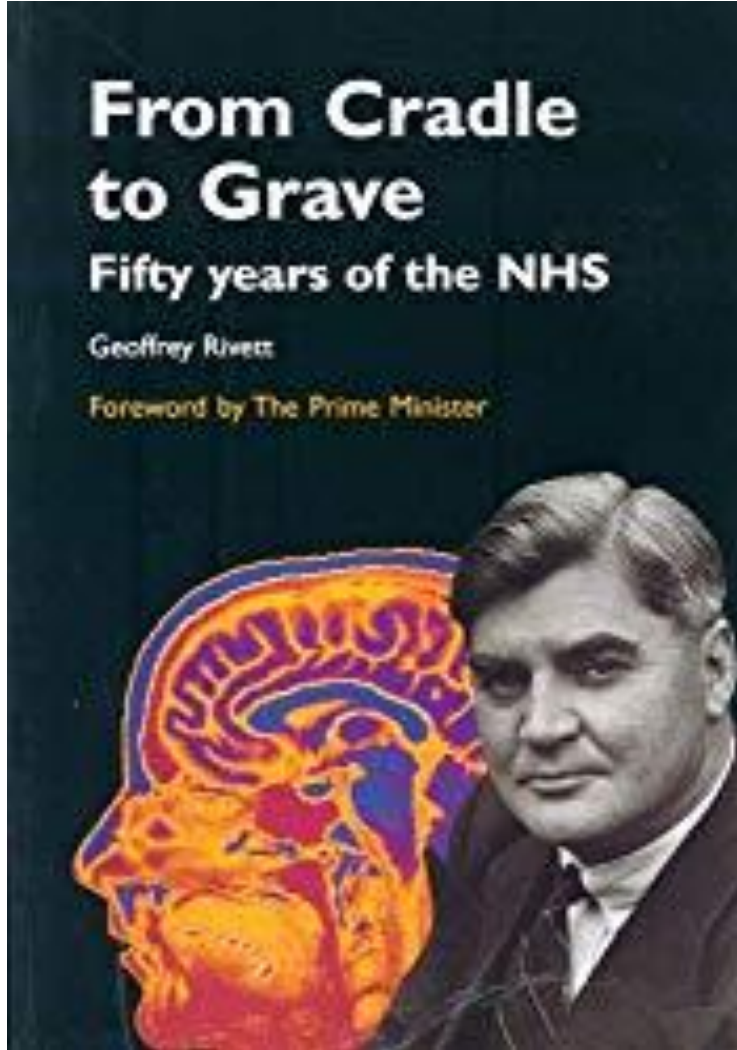


Infrastructure, data, security, systems, and technologies

- IT infrastructure and operations
- Systems and technologies
- Data and analytics
- Key vendor relationships
- Security and risk management

Leadership and skills

- Non-IT leadership in IT-related matters
- Non-IT CxO skills, focus
- CIO skills
- IT-related skills



Thank You for Listening

