Agenda – Public Accounts Committee

Meeting Venue:	For further information contact:
Committee Room 3 – The Senedd	**Fay Bowen**
Meeting date: 23 April 2018	Committee Clerk
Meeting time: 13.45	0300 200 6565
	SeneddPAC@assembly.wales

(Pre-meeting)

(13.45 – 14.00)

(The Committee agreed on 16 April 2018, a motion under Standing Order 17.42 to resolve to exclude the public from Item 1 of this meeting)

1 **The Welsh Government's Supporting People Programme: Consideration of the draft Report**

(14.00 – 14.45) (Pages 1 – 48)

PAC(5)-11-18 Paper 1 – Draft Report

2 **Introductions, apologies, substitutions and declarations of interest**

(14.45)

3 **Paper(s) to note**

(14.45 – 14.50) (Pages 49 – 51)

4 **NHS Wales Informatics Services: Evidence Session 2**

(14.50 – 16.20) (Pages 52 – 86)

Research Briefing

PAC(5)-11-18 Paper 2 – Paper from Aneurin Bevan University Health Board

PAC(5)-11-18 Paper 3 – Paper from Hywel Dda University Health Board

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

Nicola Prygodzicz – Director of Planning and Performance, Aneurin Bevan University Health Board

Mike Ogonovsky – Assistant Director of Informatics, Aneurin Bevan University Health Board

Karen Miles – Director of Planning, Performance and Commissioning, Hywel Dda University Health Board

Anthony Tracey – Assistant Director of Informatics, Hywel Dda University Health Board

5   Motion under Standing Order 17.42 to resolve to exclude the public from the meeting for the following business:

(16.20)

Item 6 and Items 1 & 2 of the meeting on 30 April 2018

6   NHS Wales Informatics Services: Consideration of evidence received

(16.20 – 16.45)

Agenda Item 1

Document is Restricted

Concise Minutes – Public Accounts Committee

Meeting Venue:	This meeting can be viewed
Committee Room 3 – The Senedd	on [Senedd TV](#) at:
Meeting date: Monday, 16 April 2018	http://senedd.tv/en/4741
Meeting time: 14.00 – 17.30	

Attendance

Category	Names
Assembly Members:	Nick Ramsay AM (Chair)
	Mohammad Asghar (Oscar) AM
	Neil Hamilton AM
	Vikki Howells AM
	Rhianon Passmore AM
	Adam Price AM
	Lee Waters AM
Witnesses:	Andrew Griffiths, NHS Wales Informatics Service (NWIS)
	Steve Ham, Velindre NHS Trust
Wales Audit Office:	Huw Vaughan Thomas – Auditor General for Wales
	Mark Jeffs
	Mike Usher
Committee Staff:	Meriel Singleton (Second Clerk)
	Claire Griffiths (Deputy Clerk)

1 Introductions, apologies, substitutions and declarations of interest

1.1   The Chair welcomed the Members to the meeting.

1.2   There were no apologies.

2 Paper(s) to note

2.1 The papers were noted.

2.1 Following Member's consideration, it was agreed that the Chair will write to the Welsh Government seeking further clarity and explanation on the challenges of digitalisation and public procurement.

2.1 Challenges of Digitalisation: Letter from the Welsh Government (4 April 2018)

2.2 Care experienced children and young people: Additional information from the WLGA (April 2018)

2.3 Care experienced children and young people: Additional Information from the Fostering Network (April 2018)

2.4 Public Procurement: Letter from the Welsh Government (20 March 2018)

3 Natural Resources Wales: Scrutiny of Annual Accounts 2015-16

3.1 Members noted the letter and that a further update will be available before the summer recess.

4 Audit of Cardiff and Vale University Health Board's Contractual Relationships with RKC Associates Ltd and its Owner

4.1 Members noted the action plan update and that a further update will be provided in September.

5 Scrutiny of Accounts 2017-18: Consideration of responses to the Committee report

5.1 Members noted and discussed the responses to the recommendations contained in the Committee's Report.

5.2 The Chair agreed to write to the Welsh Government and National Library of Wales with the Committee's observations on their responses.

6 NHS Wales Informatics Services: Evidence Session 1

6.1 Members received evidence from Andrew Griffiths, NWIS Director and Chief Information Officer for Wales and Steve Ham, Chief Executive, Velindre NHS Trust as part of their inquiry into NHS Wales Informatics Services.

6.2 Steve Ham agreed to send further information on a number of points raised.

7 Motion under Standing Order 17.42 to resolve to exclude the public from the meeting for the following business:

7.1 The motion was agreed.

8 NHS Wales Informatics Services: Consideration of evidence received

8.1 Members considered the evidence received.

9 Resourcing for Brexit scrutiny: Letter from the Llywydd (16 March 2018)

9.1 Members considered the letter from the Llywydd and it was agreed the Chair would respond with their views.

10 The Welsh Government's initial funding of the Circuit of Wales Project: Consideration of the draft Report

10.1 Members noted the correspondence between the Chair and the Heads of the Valleys Development Company and that a response was expected later this week from the Cabinet Secretary for Economy and Transport.

10.2 Members considered the draft report and agreed to reconsider a further draft in Committee.

Agenda Item 4

Document is Restricted

Public Account Committee – 23ʳᵈ April 2018
Wales Audit Office (WAO) Report on NHS Wales Informatics Service

Aneurin Bevan University Health Board Response

General Overview and Feedback

1. In general, the Health Board welcomed the audit and agreed with all the recommendations within the WAO report. The report reflects fairly the situation in NHS Wales and provides a focus on the role of the NHS Wales Informatics Service (NWIS). The challenges set out within the report require greater collaboration between Welsh Government (WG), NWIS, Health Boards, Trusts and other NHS Wales organisations and reflects the areas of improvement that have informed the agenda of the National Informatics Management Board (NIMB).

Question 1 -*The Welsh Government's leadership role for informatics in NHS Wales, including, for example, ensuring NHS bodes agree what 'Once for Wales' means in practice.*

2. The response to this question has been split into two parts:

(a)   Leadership

3. The Health Board acknowledges and supports the WAO recommendations and the WG response to this issue.

4. At a local level, the Executive Director of Planning & Performance has responsibility for the Informatics agenda, supported by the Medical Director as the Caldicott Guardian. The Clinical Informatics agenda is also well supported by an Associate Medical Directors and a newly established Lead Nurse for Clinical Informatics. The Health Board is also currently recruiting two Clinical Informaticists.

5. In December 2017, the Health Board established a new Transformation to Digital Delivery Board, which has service and clinical representation, as part of its overarching Clinical Futures Strategy. This Board is supported by a Clinical Counsel/Reference Group that ensures greater clinical representation and influence into the informatics agenda.

(b)   Once for Wales

6. The Once for Wales principle and approach is generally well supported across Wales and in the Health Board. The Once for Wales recent Task and Finish process has proved a valuable exercise in bringing together expertise from across Wales to explore and define the way forward.

7. The Task and Finish Group has made much progress in 2017/18 in reaching a consensus on the meaning of Once for Wales and how NHS Wales should proceed. The meaning of 'Once for Wales' has been redefined and is about all parties involved in health and care in Wales working collaboratively to add value and deliver the strategy of a single electronic health and care record, ensuring that information is entered once and is made available to all those who need it, at the time and place they need it.

8. This work should provide greater direction to NHS Wales and should enable Once for Wales is implemented at a greater pace going forward as it is not about local and national systems but a common set of standards.

Question 2 - *The work the Welsh Government is doing to better understand the costs of delivering its vision for informatics and how that could be funded given the downwards trend in spending on ICT and the £484 million estimate of the cost of delivering the vision for informatics on top of current budgets.*

9. The Welsh Government has acknowledged the further work this requires in their response to the report, recognising a robust assessment of the investment requirements, predicted business benefits, alternative funding models and savings opportunities are all essential in addressing this issue.

10. The scale of investment set out in the Health Board Strategic Outline Plan that would enable delivery of the digital strategy was extensive and for the Health Board represents an additional £7m revenue and £11m capital each year. However, given the demand and availability of resources both in terms of workforce and finance, it is essential that we strengthen our prioritisation mechanisms to ensure we focus on the digital programmes that will deliver the optimum balance between cost and benefit at both a local and national level, utilising national and international evidence and best practice. Improved prioritisation should enable appropriate directing of resources to deliver at a greater pace.

11. The Health Board established a new Informatics Strategy Board in December 2017 as part of its Clinical Futures Strategy. The Board provides oversight of the digital agenda over the next five years and supports prioritisation of critical projects driven from the requirements of the service in the context of the National and Once for Wales agenda.

Question 3 - *The extent of resourcing and investment at a local level.*

12. The Health Board recognises the significance of the digital agenda and the opportunities it presents as a key enabler of innovation, change and efficiency across the NHS. It also recognises the importance of ensuring the safety and sustainability of our infrastructure, systems and information, and for patient experience and outcomes.

13. Whilst the national agenda has supported a number of key national programmes and priorities, the Health Board recognises its role in terms of investing in local services to deliver its operational and strategic agenda.

14. Over the past 5 years, the Health Board has committed a total of £9.248m, an average of 19.12% (ranging from 13% to 30% in 2017/18) of its discretionary capital each year on IT, alongside the All Wales Capital Programme investments of £8.275m. From a revenue perspective the expenditure on informatics has increased significantly from £4.01m in 2013/14 to £7.23m in 2017/18, an 80% increase over 5 years, with a total of £29.2m being spent over the same period.

15. Some specific examples of prioritisation and investment into the digital agenda as a key enabler of delivering our service strategy include the Welsh Community Care Information System (WCCIS), Digital Health Record and the patient flow pilot project.

Question 4 – *The effectiveness of governance and accountability arrangements in light of concerns identified by the Auditor General and the recommendations of the Parliamentary Review to bring bodies such as NWIS within a strengthened central NHS Wales Executive function.*

16. The Health Board supports the WAO recommendation and acknowledges the WG response to this issue. Further work is required to strengthen the clarity and accountability of NWIS role in delivery of the digital agenda and NIMB needs to play a key role in addition to local and national governance arrangements in setting out priorities and expectations of NWIS in the future delivery of the strategy.

17. The current National Informatics model is complex and the multidisciplinary role that NWIS fulfils from authority through to supplier, together with its hosting arrangements, as highlighted within the Parliamentary Review, confuses lines of accountability. Therefore, the governance arrangements should be informed by more independence and that there is a requirement for greater objectivity and transparency.

18. As NWIS provide services which Health Boards/Trusts are dependent upon for successfully discharging our statutory obligations to our populations, it is therefore essential that Health Boards and Trusts are able to hold NWIS directly to account on this delivery.

Question 5 - *Local leadership, including clinical leadership, and NHS bodies' perspectives on the factors behind slow progress in delivering the electronic patient record.*

19. In general terms, the Health Board would consider the following factors as key contributors to the slow progress in delivering the electronic patient record:

- High levels of optimism at the planning stage with insufficient business change planning at the outset, which should be clinically and service driven. This is referred to under other responses and the need for transformation first and business change capacity being a key learning point from projects such as this. This has been a key area of focus in some of our more recent projects and system implementation.

- Appropriately identifying the full resource implications of successful implementation at the outset and workforce recruitment issues.
- A growing programme of priorities that compromised the delivery of the key projects as existing workforce resources are then too thinly spread.

20. All of these issues have been recognised at both a national and local level and inform the approach to future projects as set out in other areas of this WAO report.

Question 6 - *Workforce challenges, including recruitment and retention of ICT specialists.*

21. The Health Board recognises and acknowledges the workforce challenges the informatics sector face not just from an NWIS perspective but also at local Health Board level. The WG response sets out that this is also a broader public sector challenge and how Health Education and Improvement Wales (HEIW) and the Welsh Institute for Digital Innovation will help address some of these issues.

22. Agenda for Change, the NHS pay structure, is not responsive to market trends and rightly awards more points to direct clinical care. However staff are often attracted to an ambitious programme with development opportunities alongside other benefits of working for the NHS. These need to be a core component of our recruitment and retention strategy. Many of the future resource requirements to support digital innovation will include roles such as business analysts, project managers etc. as opposed to just IT specialised skilled staff.

23. More specifically, the Health Board has built relationships with the University of South Wales, Cardiff University, The Software Academy and Alacrity to support our recruitment challenges and workforce sustainability.

Question 7 - *Getting greater clarity about whether the intended benefits of investment are being achieved.*

24. As set out in the WG response, progress has been made over the last 12 months in establishing a benefits framework and toolkit across NHS Wales as part of A Planned Future Workstream of the Digital Strategy.

25. It is recognised that NHS Wales and NWIS will need to ensure appropriate investment in Clinical and Business analysis and grow its business change capacity. This investment needs to be appropriately identified in all future business cases and has been a key learning point from previous projects.

26. The Health Board has ensured that recent business cases have fully considered the cost and capacity required for business change and is very much focused on the Nuffield principles of Transformation First with the digital solution acting as an enabler which is a key criteria for future success.

Summary and reflections in context of Parliamentary Review

27. In summary, the digital agenda provides significant opportunities to transform the health and social care services of the future.

28. A number of the issues and challenges within the WAO Report were also considered by the Parliamentary Review into Health and Social Care report, "A revolution from within: Transforming health and social care in Wales", published in January 2018.

29. It recognises the significance of technology and the need to maximise the benefits and innovation of technology to accelerate efficiencies in care, decision support, making care accessible to the public and supporting the wellbeing agenda, all aligned with the Quadruple Aims defined by the Review. Recommendation 7 of the review sets out the need to harness innovation and accelerate technology.

30. The Parliamentary Review report also recognises that we have been moving towards a more integrated system for a number of years and there are many good examples of new models of care that are already working in Wales. The challenge is how we can be more radical and ambitious, to accelerate the pace in moving to a genuinely seamless system. Following the Parliamentary Review report, we are working with the WG and other organisations in the health and social care sector to develop a plan of action that will deliver the best services to the people of Wales. The right governance structure, a robust clinically led prioritisation programme and clear and innovative funding models are all key requirements for the future agenda with "transformation first" at the heart of system redesign.

Public Accounts Committee – 23rd April 2018

Wales Audit Office Report on Informatics Systems in NHS Wales

Hywel Dda University Health Board Response

General Overview and Feedback

Hywel Dda University Health Board (UHB) welcomes the Wales Audit Office (WAO) report on the Informatics Systems in NHS Wales and agrees with all of the recommendations. We believe the report fairly reflects the current digital challenges in NHS Wales and provides a focus for improvements going forward that will need to be overseen by the National Informatics Management Board (NIMB).

We agree that these challenges require greater collaboration between Welsh Government (WG), NHS Wales Informatics Services (NWIS), Health Boards, Trusts and other NHS Wales organisations, and as such, Hywel Dda UHB will play our part in their future delivery.

Question 1 -*The Welsh Government's leadership role for informatics in NHS Wales, including, for example, ensuring NHS bodes agree what 'Once for Wales' means in practice.*

1. Consistent with Aneurin Bevan UHB's submission, our response to this question is also split into two parts:

    (a)   Leadership

2. Hywel Dda UHB acknowledges and supports the WAO recommendations and the WG response to this issue.

3. At Board level, the Executive Director of Planning, Performance and Commissioning (Senior Information Responsible Owner (SIRO)) and the Assistant Director of Informatics (Deputy SIRO) have responsibility for the Informatics agenda. They are supported by the Medical Director as the Caldicott Guardian.

4. We have an emergent position regarding the clinical informatics agenda, having only recently appointed a Chief Clinical Information Officer (CCIO) who is now helping to both shape and support the 2018/19 Hywel Dda UHB Digital Strategic Plan. The CCIO represents the interests of all clinical staff groups on Informatics projects. At the simplest level, the CCIO provides clinical leadership and input on national and local informatics projects, and ensures that informatics and Information Communications and Technology (ICT) projects are designed with healthcare users firmly in mind. It is a critical role that unites informatics and clinical practice, ensuring the successful use of information and ICT systems in the transformation of healthcare.

5. As part of our Transforming Clinical Services (TCS) Programme, we acknowledge our Digital Strategic Plan is pivotal to the successful transformation of our services. In the prelude to public consultation, our digital planning and our digital ambition is integral to many of the current objectives of our Board committees and subcommittees, ensuring that momentum is retained and we are 'digitally fit' for whatever the outcomes are of wider service change.

(b)   **Once for Wales**

6. Hywel Dda UHB essentially supports the 'Once for Wales' principle, as there are clearly many aspects which would need, and indeed greatly benefit from, a standardised 'Once for Wales' national programme, given the population size of Wales. To do so, will provide considerable advantages over other health systems in the UK and it fully aligns to Wales' planned, integrated and collaborative system philosophy for health and care.

7. However, there can be a down-side and that is that delivery at pace can sometimes be placed at risk through:
    - Too much tolerance of delays in signing up to national initiatives, so creating delay in the overall national rollout;
    - The different states of legacy infrastructure / backlog maintenance across organisations which can inhibit rapid universal adoption of new systems; and
    - Lack of responsiveness to patient and clinical need; 'Once for Wales' should really be viewed as a 'framework', defining mandatory national systems development which help deliver the Welsh Clinical Portal / single Electronic Health Record at pace, but is flexible and also allows the development of local, more innovative and agile systems.

8. In Hywel Dda UHB, our Digital Strategic Plan aligns with the National Informatics Plan, very much using it as a framework to which we align our local developments, as follows:

Start of the Plan	2018/19	2019/20	2020/21
• Health Board Annual Plan Approved • Updated Digital Health Plan and SOP approved and submitted • Transforming Clinical Services Strategy development and Informatics elements identified • Revitalisation of the Clinical Information Group led by Clinicians	**National Developments** **Information for you** • Citizen/ Patient portal (Readiness Phase) **Supporting professionals** • Welsh Patient Referral Service rollout • Further Medial Transcribing and eDischarge rollout • Welsh Care Record Service increase • Laboratory Information Management System Mortuary • Readiness for Welsh Community Care Information System • Myrddin 505 + • Blood transfusion • Results Notification • ICNET software **Local Developments** **Information for you** • Skype for Business **Supporting professionals** • Digital Dictation • Skype for Business **Improvement and innovation** • Single sign on – Emergency Department and High volume areas • Glangwili Network Complete • Bronglais Network readiness • Data Centre redevelopment • Business Intelligence • Switchboard Rationalisation (Phase 1 – technical scoping exercise) • General Data Protection Regulation Implementation • Implementation of Information Governance Training and Awareness Strategy • Implementation of Caldicott Principles in Practice Action Plan • Cyber Essentials and ISO 27001 compliance assessment • Start progressing 'Information for you Roadmap' work within the Health Board and links to patient record digitisation.	**National Developments** **Information for you** • Citizen/ Patient portal (Pilot Phase & partial rollout) • GP E-Advice • Further eDocs **Supporting professionals** • Welsh Community Care Information System rollout to first phase (District Nurses) • Radiology electronic requesting • Blood transfusion • Pilot e-prescribing • Radis Merger • Children and Young Persons Integrated System Implementation • Welsh Clinical Portal Mobilisation • Welsh Image Archive Service **Local Developments** **Supporting professionals** • Paging at BGH, GGH and PPH • Office365 (initial roll out) **Improvement and innovation** • Single sign on – all Health Board • Switchboard Rationalisation (Phase 2 – Implementation of 2 switchboards consoles) • Refresh / Replacement of Citrix • Withybush Network Replacement infrastructure • Prince Philip Network Replacement • Ongoing General Data Protection Regulation Implementation • Continue improvements resulting from the Caldicott Principles in Practice Action Plan • Implementing ISO 27001 Action Plan and developing Information Security Management System • Progressing 'Information for you Roadmap	**National Developments** **Information for you** • Citizen/ Patient portal (roll out) **Supporting professionals** • Continued Welsh Community Care Information System rollout • Cardiology picture archiving and communication system Refresh • Fuji picture archiving and communication system Refresh • Welsh Diabetes System • Upgrade • ePrescribing rollout **Local Developments** **Supporting professionals** • Medical records Digitisation • Equipment Tracking Radio-frequency identification • Office365 (continued rollout) **Improvement and innovation** • Switchboard Rationalisation (Phase 3 – Project completion) • Refresh / Replacement of Citrix infrastructure • Withybush Network Replacement • Continue improvements resulting from the Caldicott Principles in Practice Action Plan • Implementing ISO 27001 Action Plan and developing Information Security Management System • Progressing 'Information for you Roadmap' work within the Health Board and links to patient record digitisation.

Question 2 - *The work the Welsh Government is doing to better understand the costs of delivering its vision for informatics and how that could be funded given the downwards trend in spending on ICT and the £484 million estimate of the cost of delivering the vision for informatics on top of current budgets.*

9. WG have acknowledged that, '*Investment follows confidence in governance and prioritisation, and therefore a better case for investment needs to be made. We need a robust assessment of the investment required, and to consider how we can better resource the informatics agenda. This should include creating a virtuous circle of digital enabling benefits that can add further value.*'

10. Hywel Dda UHB agrees with this statement given the competing priorities experienced in the provision of health and care which all organisations are facing in meeting ever increasing demand. Against such a backdrop, it is incumbent on all members of the National Informatics Board (NIMB) to be able to evidence how benefits will be realised from ICT investment, over and above the case for other priority investments in workforce and medicines, for example.

11. Our estimate of our need is £23.4m capital and £8.3m revenue over 5 years to manage both essential backlog maintenance as well as step change improvement in development of the electronic health record. To put this in context, on this basis, we know we need an average of £4.7m capital each year, £2m of which is required just to standstill and address replacement of ICT networks and equipment.

12. Over the past 2 years, Hywel Dda UHB has not experienced a downward trend and indeed more favourable WG funding - £4.5m in 2016/17 and £3.2m in 2017/18 compared to £1.55m per annum for the 7 previous years - has allowed us to begin to address our high risk major infrastructure projects as identified by WAO. With this very helpful much higher level of investment, we have also progressed wi-fi expansion, switchboard consolidation, desktop replacement to deal with end of life Windows XP devices, network replacement for 1 hospital and the start of another, paging replacement in 2 sites and replacement of our primary Data Centre, with the second to be recommissioned in 2018/19.

13. Whilst not downward, therefore, it can be seen that we need to quickly determine how nationally we can secure increased funding to ensure a step-change in innovation and to guarantee we remain cyber secure. For example, as well as investment to deliver integrated community health and social care staff mobilisation as part of the Welsh Community Care Information System (WCCIS), we also need to progress business cases which support improved equipping of hospital clinicians so that they can work with greater information at the patient's bed-side.

14. In addition, cyber security measures are not as robust as they need to be, especially given that many medical devices are digitally enabled. These ambitions can only be achievable if the virtuous circle of digital enabling benefits that can add further value is evidenced and secured by NIMB going forward.

Question 3 - *The extent of resourcing and investment at a local level.*

15. Hywel Dda UHB covers about 25% of the landmass of Wales and because of the challenges posed by our geography, our Transforming Clinical Strategy has identified ICT as a key enabler. As part of 'The Big Conversation', undertaken from 20th June to 15th December 2017 during Phase 1 of the Transforming Clinical Services programme, the public told us:

- There must be more integrated, joined-up working between different community and primary care services to achieve good quality local healthcare;
- Investing in modern technology to provide online consultant clinics, online appointment bookings and telemedicine was suggested as one way to use resources more wisely;

- That a centralised repository of electronic patient notes would be beneficial in achieving joined-up services in so far as it would allow all health professionals across a range of disciplines to access notes readily, speeding up patient appointments and assessments; and
- The need for public reassurance that this would be underpinned by secure IT infrastructure with sufficient back-up systems. There was also concern that spending large amounts of money on such changes would be fruitless unless full, accurate notes are uploaded in a timely manner by staff.

16. We therefore recognise the vital role that technology and digital solutions can make, namely:

- Improves access to services, minimises the impact of unnecessary travel and supports more care closer to, or in the patient's own home;
- Reduces the amount of time spent in hospital by expanding the range of ways in which professionals can spot problems and initiate early and appropriate intervention; and
- Helps people to better manage their own care, creating a 'partnership' between patient and clinician.

17. Therefore our aim is to provide a patient-centric, modern, efficient healthcare system for the population of Hywel Dda UHB. At the heart of this system is a modern, robust Information and Communication Technology (ICT) infrastructure, recognising the GP record at the core with interoperability into each of the neighbouring electronic systems that interface with a patient's journey through the NHS and wider community, such as social care services. Indeed, in terms of this integrated working, we are currently trying to progress the Business Case for WCCIS which indicatively requires £2.6m capital investment over 5 years and £4.8m revenue, with recurrent revenue and capital costs of £1.6m in total per annum thereafter.

18. Informatics is now critical to the everyday working of all of our staff and every patient contact and our aim in the medium to long term is to be a paper light Health Board. This is essential especially with the geographical split of our hospitals. Paper notes are simply not keeping pace with the speed at which patients are moving between hospitals and between Health Boards across Wales.

19. Our aim is to use more video conferencing in administrative and clinical environments transforming patient care by enabling professionals to see citizens/patients at home remotely, supporting virtual multi-disciplinary team meetings, allowing two or more people to collaborate on the same information in a single system at the same time, and incorporating real-time presence information to let staff working in the community know which colleagues are available to provide advice or assistance.

20. All of these aims have been drawn from public feedback from our engagement which, as part of our Digital Strategic Plan, have been categorised under three strategic enablers for ICT development, namely:

- Single Digital view;
- Telehealth; and
- Patient & Public Access

21. Each of these has then been aligned to the national / local systems that will help us deliver this necessary transformational change as follows:

	Strategic Enabler	National and Local initiatives which will help	What our public told us they want and where they want it

Single Digital view	Managing a single, digital view of a patient's care and history across Primary, Community and Secondary Care services, improving patient centric care, reducing delays in information seeking and removing re-keying errors	• Welsh Care Record Service
		• Welsh Imaging Archiving Solution
		• Patient Portal
		• Welsh Community Care Information System
		• Medical Transcribing and e-Discharge
		• Welsh Clinical Portal
			• Community Care
			  • Easy Access to information about what's available in community
			  • Able to book timely appointments
			  • Seamless, well-co-ordinated care that offers continuity
			  • Shared information and access to electronic health records across services
			  • Able to access a range of healthcare / advice through online services
			  • People encouraged to take responsibility for their own Health conditions
			  • Central IT systems – improvements in information sharing

Telecare	Providing the digital tools to support employees in their day to day activity, reducing admin and travel time and enabling increased clinical contact	• Mobile Devices Strategy
		• Employee Self-Service Kiosks and apps,
		• Rollout of Skype for Business
		• Single sign on
		• IT Self-Service web portal
		• Improvements in Telecare / Telemedicine
		• Welsh Community Care Information System
		• Welsh Clinical Portal
			• Community Care
			  • Increase provision of telemedicine / skype appointments, online information / advice
			  • People encouraged to take responsibility for their own Health conditions
			
			• In Hospital Planned Care
			  • Use Skype and Telemedicine where appropriate to reduce patient travel

Patient and Public Access	Digitising the processes across the Health Board that support patients and employees across all care settings,	• Patient Portal / Citizen portal which shows who accesses patient records
		• Welsh Patient Referral Service
		• Welsh Community Care Information System
		• Welsh Hospital Electronic Prescribing and Medicines Administration
		• Welsh Clinical Portal – further extension thereof
			• Community Care
			  • Central IT systems – improvements in information sharing
			  • People encouraged to take responsibility for their own Health conditions
			
			• Urgent and Emergency Care
			  • Public Education on how to lead healthy lifestyles
			
			• Hospital Planned Care
			  • Information and Medical Records shared between departments
			  • Improved discharge planning
			  • Provide Information to help with navigation around hospitals, access to transport etc

Question 4 *– The effectiveness of governance and accountability arrangements in light of concerns identified by the Auditor General and the recommendations of the Parliamentary Review to bring bodies such as NWIS within a strengthened central NHS Wales Executive function.*

22. Hywel Dda UHB supports the WAO recommendation and acknowledges the WG response to this issue. Further work is required to strengthen the clarity and accountability of NWIS's role in delivery of the digital agenda and NIMB needs to play a key role, in addition to local and national governance arrangements, in setting out priorities and expectations of NWIS in the future delivery of the strategy.

23. The current national informatics model is complex and the multidisciplinary role that NWIS fulfils from authority through to supplier, together with its hosting arrangements, confuses the lines of accountability. Therefore, the governance arrangements should be informed by more independence and there is a requirement for greater objectivity and transparency.

24. As NWIS provide services which Health Boards and Trusts are dependent upon in order to successfully discharge our statutory obligations to our populations, it is therefore essential that Health Boards and Trusts are able to hold NWIS directly to account on this delivery.

Question 5 - *Local leadership, including clinical leadership, and NHS bodies' perspectives on the factors behind slow progress in delivering the electronic patient record.*

25. In support of the submission from Aneurin Bevan UHB, Hywel Dda UHB also considers the following factors key contributors to the slow progress in delivering the electronic patient record:

- High levels of optimism at the planning stage with insufficient acknowledgement of the requirement for significant clinical business change processes and understanding of the need for transformational service change planning at the outset, which has to be clinically and service owned in order to succeed.
- This needs to be backed up by business change capacity, which is essential for implementation at pace and has been a key area of focus in our development of the WCCIS business case, and appropriately identifying the full resource implications.
- Ensuring that the ever increasing programme of national priorities do not compromise the delivery of the key projects as resources, in relation to financial and workforce, are then too thinly spread.

26. All of these issues have been recognised at both a national and local level and informing the approach to future projects as set out in other areas of this inquiry response.

Question 6 - *Workforce challenges, including recruitment and retention of ICT specialists.*

27. NHS workforce challenges are nearly always a challenge and the digital agenda is no exception to experiencing this: in recent times, Hywel Dda UHB has worked with NWIS in offering apprenticeships and we have secured 3 apprentices in the last 3 years which have then been employed within the ICT department after their training. We are actively working with NWIS in developing a training programme for ICT staff, however the more technical roles, such as cyber security, clinical coders and infrastructure technicians, are difficult to recruit to. Nonetheless, in terms of overall retention across our Informatics Department, 93% of employees were retained over the period 2017/18.

28. As is the case with most Health Boards, we anticipate that the newly formed Health Education and Improvement Wales (HEIW) and the Welsh Institute for Digital Innovation will further improve recruitment and retention efforts, but in Hywel Dda UHB, as part of our regional partnerships, have also taken some really innovative approaches to addressing these issues. Collaboration across Hywel Dda UHB, Abertawe Bro Morgannwg UHB and Swansea University, as part of ARCH 'A Regional Collaboration for Health', is aiming to deliver a holistic regional model for health, building on the principles of establishing a relationship with our citizens, working together to develop local values focused on the health and wellbeing of our communities, and, a big part of this will involve digital solutions.

29. In particular, we are accelerating our collaborative digital approach through the Swansea Bay City Deal (which includes Swansea, Carmarthenshire, Neath Port Talbot and Pembrokeshire Councils), and which along with ARCH, has secured significant digital investment from Treasury which is looking to reduce the health inequalities of citizens by providing state of the art technology, access to more jobs, and improving the digital skills

and digital talent within South West Wales. The advancements in technology via the Internet Coast, will provide an effective hyper-connected ICT ecosystem and market place for education on the move and blended learning. Longer term benefits will be the connected citizen, which will allow people to take control of their own health care. Eleven major projects are now underway, delivering world-class facilities in the fields of energy, smart manufacturing, innovation and life science, with major investment in the region's digital infrastructure and workforce skills and talent underpinning each.

30. Some of the benefits which we are looking to realise are:

- Improvements in digital technologies to enable the use of personalised medicine - new digital technologies also allow people to track and analyse their own health data, and to share this and other health knowledge with others in ways that will aid prevention and management of long–term illnesses;
- Developments through making better use of the power of people through social innovation - key to a revolution in how people are involved in their own care and that of others, and improving the quality of care as well as new insights into human behaviour will improve clinical quality and make it easier for people to lead healthy lifestyles;
- Big Data Analytics – the ability to undertake complex longitudinal patient pathway analytics and business intelligence reporting across primary and community care, and evidencing where we can add value; and
- Projects will also include expanding the provision of fixed ultra-fast broadband, 4G and Wi-Fi capabilities to benefit both rural and urban areas of the region as well as supporting innovation with 5G mobile connectivity.

Question 7 - *Getting greater clarity about whether the intended benefits of investment are being achieved.*

31. Whilst nationally, as part of NIMB, NHS Wales is developing a benefits framework and toolkit as part of Work-stream 4 of the National Digital Strategy, in the interim Hywel Dda UHB's approach is that all ICT investments, programmes and projects are required to map their outcomes and benefits to a consistent set of strategic benefits that are clearly and succinctly defined, embrace 'Once for Wales' principles, and, as such, link to the Integrated Medium Term Planning objectives of both NWIS and Hywel Dda UHB. Finally, very importantly, investment benefits must be focused on the patient, clinician and service benefits, defined as follows:

Strategic Benefits	Outcomes and benefits that must be evidenced
Patient Safety increased	• Increased timeliness and availability of relevant clinical information so reducing medical transcription errors and patient safety risks by having the right information available when required, as systems will be interconnected which will reduce the need to transcribe information. • Clinicians will also be more confident that they are following the patient's wishes.
Positive patient outcomes increased	• Easy access to relevant clinical information to increase speed and relevance of diagnosis, care, and onward referral to treatment. • Integrated systems such as WCCIS will provide enhanced information sharing, which will improve the care clinicians will be able to deliver.
Patient confidence increased	• The availability and targeting of accurate and relevant information at the patients point of contact. Patients will have the opportunity to record their decisions and express wishes about their care so that this information is available to all professionals looking after them, so ensuring that any care the patient receives is in line with what they've decided. • Patients will not have to repeat sensitive and sometimes difficult information numerous times.

Strategic Benefits	Outcomes and benefits that must be evidenced
	• Patients will be able to see their information via the patient portal. Digital solutions will empower patients to take more control over their conditions. By both providing on-line education about their condition and enabling them to manage it, patients become more independent and less reliant on the support of care professionals. Most importantly, patients feel part of their monitoring and treatment and consequently can share in decisions and actions which delver better clinical outcomes.
Legal compliance	• Requirement to comply with policy, legislation and standards
Healthcare system efficiency increased	• Processes are faster, or wasteful processes can be decreased or eliminated to improve productivity, via system interoperability
Overall healthcare system costs decreased	• ICT improvements eliminate wasteful processes and reduce expenditure. For example, reduced stationery costs - no more need for paper records when the Health Board moves to paper light.

Summary and reflections in context of Parliamentary Review

32. In summary, the digital agenda provides significant opportunities to transform the health and social care services of the future.

33. A number of the issues and challenges within the Auditor General for Wales Report were also considered by the Parliamentary Review into Health and Social Care report, "A revolution from within: Transforming health and social care in Wales", published in January 2018.

34. It recognises the significance of technology and the need to maximise the benefits and innovation of technology to accelerate efficiencies in care, decision support, making care accessible to the public and supporting the wellbeing agenda, all supporting the Quadruple Aims defined by the review. Recommendation 7 of the review sets out the need to harness innovation and accelerate technology.

35. The Parliamentary Review report also recognises that we have been moving towards a more integrated system for a number of years and there are many good examples of new models of care that are already working in Wales. The challenge is how we can be more radical and ambitious, to accelerate the pace in moving to a genuinely seamless system. Following the Parliamentary Review report, we are working with the WG and other organisations in the health and social care sector to develop a plan of action that will deliver the best services to the people of Wales. The right governance structure, a robust clinically led prioritisation programme and clear and innovative funding models are all key requirements for the future agenda with "transformation first" at the heart of system redesign.