

## **Bundle Informatics and Information Governance Committee 14 February 2019**

### **AGENDA**

9.30am Boardroom, Carlton Court, St Asaph LL17 0JG

- 1 IG19/1 Chair's opening remarks
- 2 IG19/2 Apologies
- 3 IG19/3 Declarations of Interest
- 4 09:30 - IG19/4 Draft minutes of the previous meeting held on 13.11.18 and summary action plan  
IG19.4a Minutes IGIC 13.11.18 v.03 draft.docx  
IG19.4b Summary Action Log.doc
- 5 09:35 - IG19/5 Review of Corporate Risks Assigned to the Information Governance and Informatics Committee  
*Dr Evan Moore*  
*Recommendation:*  
*The Committee is asked to approve risk 10a & 10b for inclusion on the Corporate Risk Register, consider the relevance of the current controls, review the actions in place and consider whether the risk scores remain appropriate.*  
IG19.5a Risk Register coversheet V2.docx  
IG19.5b CRR10a.pdf  
IG19.5c CRR10b.pdf  
IG19.5d Existing CRR10.pdf
- 6 Informatics
- 6.1 09:50 - IG19/6 Informatics Operational Plan Objectives – 2018/2019 Quarter 3 performance update  
*Mr Dylan Williams in attendance*  
*Recommendation:*  
*The Information Governance and Informatics Committee is asked to use this report to:*
  - Monitor progress against the Informatics Operational Plan and delivery of the roll out of core National IT systems
  - Approve amendments to the previously published 2018/2019 Operational plan that are highlighted via change or exceptionIG19.6 Informatics Operational 18\_19 performance update Feb 2019 - IGIC.doc
- 6.2 10:20 - IG19/7 Digital Strategy  
*Dylan Williams in attendance*  
*Recommendation:*  
*The Committee is asked to note the following:*
  - There is an Informatics Plan in place to support the Three Year Plan
  - Core national and local system implementation will provide a foundation for service transformation through digital technologies
  - There is a strategy being developed to integrate data and services through technology
  - Investment will be required to deliver the overall Digital Strategy and this will be outlined in the final Strategic Outline Plan.
  - Note progress on the development of BCUHB's Digital StrategyIG19.7a Digital Strategy cover sheetV2.docx  
IG19.7b Digital Strategy To Support TYP - Feb 2019 - IGIC.doc
- 6.3 10:50 - Comfort break
- 6.4 11:00 - IG19/8 Review and Approval of Informatics Operational Plan 2019/20  
*Mr Dylan Williams in attendance*  
*Recommendation:*  
*The Committee is asked to:*  
*Approve the Informatics Operational Plan 2019/20*  
IG19.8a Informatics Operational Plan Cover Sheet IGIC Feb 19.docx  
IG19.8b Informatics Operational Plan 2019\_20 - Feb 2019 - IGIC.doc
- 6.5 11:30 - IG19/9 Chair Assurance report : Digital Transformation Group  
*Mr Dylan Williams in attendance*  
*Recommendation:*  
*Note issues of significance of the Digital Transformation Group*  
IG19.9 DTG Chairs report for Feb IGIC (003).docx
- 7 Information Governance
- 7.1 11:40 - IG19/10 Information Governance Summary Key Performance Indicator Report for Quarter 3 - 2018/19

*Mrs Justine Parry in attendance*

*Recommendation:*

*The Committee is asked to note the progress with regards to the Health Board wide information governance key performance indicators.*

IG19.10a KPI coversheet.docx

IG.10b KPI Summary Report Qtr 3 2018-19.docx

- 8 IG19/11 Issues to inform the Chair's Assurance report
- 9 12:10 - IG19/12 Date of next meeting 5.5.19 9.30am Carlton Court
- 10 Exclusion of the Press and Public

*Resolution to Exclude the Press and Public*

*"That representatives of the press and other members of the public be excluded from the remainder of this meeting having regard to the confidential nature of the business to be transacted, publicity on which would be prejudicial to the public interest in accordance with Section 1(2) Public Bodies (Admission to Meetings) Act 1960."*



**Information Governance and Informatics Committee**  
**Draft minutes of the meeting held on 13.11.18**  
**in the Boardroom, Wrexham Maelor**

**Present:**

Mr John Cunliffe	Independent Member– Committee Chair
Prof Jo Ryecroft Malone	Independent Member
Ms Lucy Reid	Independent Member
Cllr Cheryl Carlisle	Independent Member ( <i>part meeting</i> )

**In Attendance:**

Mr Andrew Doughton	Performance Audit Manager, Wales Audit Office
Mrs Grace Lewis-Parry	Board Secretary
Dr Evan Moore	Executive Medical Director
Mrs Justine Parry	Assistant Director Information Governance and Assurance
Mr Dylan Williams	Chief Information Officer
Ms Diane Davies	Business Support Manager (Secretariat)

Agenda Item Discussed	Action By
<b>IG18/1 Chair's Opening Remarks</b>  The Committee Chairman welcomed all to the inaugural meeting of the Committee	
<b>IG18/2 Apologies for Absence</b>  Apologies were received from Mrs Gill Harris.	
<b>IG18/3 Declarations of Interest</b>  None were received.	
<b>IG18/4 Committee Terms of Reference</b>  <b>IG18/4.1</b> The Executive Medical Director presented this item. He reminded that on 6.9.18 the Board approved a range of proposals for Board and Committee arrangements including revisions to the remit of the Finance and Performance Committee to focus more on operational performance and budget compliance, and the establishing of an Information Governance & Informatics (IGI) Committee to be chaired by the Board IT Independent Member. This would enable the F&P Committee to focus more clearly on the key finance and performance issues but would also provide improved Board oversight and engagement with the IG (and IT) agenda. The IGI Committee would link into the F&P Committee (via Committee Business Management Group) on matters relating to in year performance and into the Strategy, Partnerships and Population Health (SPPH) Committee on future plans, but would report directly to the Board	

<p>through its Chair's Assurance Reports and its Annual Report as per other Board Committees. It was noted that the Information Governance and Informatics Committee would meet quarterly.</p> <p><b>IG18/4.2</b> The Executive Medical Director emphasised the need for the organisation to have an effective IT Strategy in order to meet organisational needs and evolve a staff culture that encouraged all staff to view both Information Governance and Informatics as part of their role, ensuring that these specialist departments were contacted at early stages of developments within their services in order to plan and support efficiently. The Committee strongly concurred that Informatics was an enabler for change within the organisation.</p> <p><b>IG18/4.3</b> The Committee Chair raised his early concern regarding national systems which was noted. He also suggested consideration be given to renaming 'Informatics' within the Committee title to 'Digital'. Following discussion on others attending meetings, it was agreed that the Executive Medical Director would discuss this further at the next Executive Team meeting and feedback a recommendation on whom should be 'in attendance' on a regular and also adhoc basis.</p> <p><b>It was resolved that the Committee</b> reconsider the TOR in May 2019</p>	EM
<p><b>IG18/5 Committee Cycle of Business</b></p> <p>The Committee considered the inaugural draft of the Cycle of Business. It was agreed that the Director of NWIS be invited to attend the next meeting, following which consideration would be given to the future frequency of attendance. The Executive Medical Director and Chief Information Officer agreed to feedback a recommendation on the content and frequency of Records Management reports to be included within the COB. It was agreed that the Information Governance Annual report be scheduled to the August meeting.</p> <p><b>It was resolved that the Committee</b> Agreed the COB subject to the amendments discussed</p>	DD  DD
<p><b>IG18/6 Summary action plan</b></p> <p>The action log was updated.</p>	
<p><b>IG18/7 Corporate risks assigned to the Committee</b></p> <p><b>IG18/7.1</b> The Committee noted the risk which had been allocated from the Corporate risk register, namely that : There is a risk that the Informatics infrastructure is not fit for purpose. This may be due to: (a) A lack of capacity and resource. (b) Increasing demand. (c) Reliance on the NHS Wales Informatics service. This could lead to failures in clinical and management information systems, impacting negatively on patient safety/outcomes, and greater risk of cyber-attack.</p> <p><b>IG18/7.2</b> The Executive Medical Director stated that whilst the organisation had an</p>	

<p>appetite for the use of technology there were financial implications. The Committee questioned whether there was a need for more specific risks in order that they (and their controls) can be better understood. In addition, it was discussed that the risk should be split into 2. Such as National and local systems and infrastructure or managing current infrastructure and lack of investment.</p> <p><b>IG18/7.3</b> The Committee put forward a number of queries which included more specificity in respect of CRR10 action 2 and questioning clinical audit data quality. A discussion ensued on the forms of assurance provided which were understood to be discussed further at a future Board workshop. It was noted that the health records management risk discussed was being dealt with as part of the department's risk register. In response to the Committee Chair, those present were unaware of any further risks.</p> <p><b>It was resolved that the Committee</b></p> <p>Options for splitting the risk would be considered and brought to the next meeting for further discussion, following which a recommendation would be put forward to the March Audit Committee as appropriate.</p>	DW/EM
<p><b>IG18/8 Informatics Operational Plan quarter 2 performance and update</b></p> <p><b>IG18/8.1</b> The Chief Information Officer presented this item. He drew attention to the Operational Plan changes and exception reports provided within the report as well as significant events which were outlined. In particular, he elaborated on the set up of the '<i>Local Eco System</i>' Project. The Chief Information Officer drew attention to an underspend on the financial revenue position and Capital progress. It was noted that the most significant singular change was to the IPT telephony programme, following further discussion it was agreed that update reports be provided regarding this project to future meetings. The Committee was concerned to note that BCUHB was in the position of not being able to access its own data in respect of a national system being developed for District Nursing.</p> <p><b>IG18/8.2</b> The Committee requested that Benefits Realisation updates be provided within future reporting to the Committee. BCU's position on the Electronic Patient Record was discussed and concern raised regarding progress and whether the risks were adequately monitored, the Chief Information Officer agreed to explore this further.</p> <p><b>IG18/8.3</b> The Committee sought clarity on the Department's challenges. The Chief Information Officer described the need for effective business case development, programme management office support and issues relating to clinician informatics skills gaps. Discussion also ensued on the challenges with the patient booking system. The Board Secretary reflected on the findings of the staff survey in respect of change management which would be moved forward with the emerging Workforce Strategy. Discussion ensued on WCCIS and the Wales Audit Office lessons learned findings. The Committee Chair expressed great concern on WCCIS development issues.</p> <p><b>IG18/8.4</b> It was agreed that a replacement copy of the plan be circulated to members as not all narrative could be viewed.</p> <p><b>It was resolved that the Committee</b></p> <p>note the Informatics Operational Plan and highlighted risks</p>	<p>DW</p> <p>DW</p> <p>DW</p>

note the reviewed alignment of plans to BCU objectives	
<p><b>FP18/9 Digital Transformation Group Chair's Assurance report</b></p> <p><b>FP18/9.1</b> The Chief Information Officer presented this item. He highlighted lost opportunities, benefits and risks resulting from delays in national systems as well as good progress on business intelligence work. However he advised that further ownership of data quality and real time data input was required. He also reported on the need for a more coordinated corporate approach to initiatives such as Technology Enhanced Care (TEC) as part of the Integrated Medium Term Plan process.</p> <p><b>FP18/9.2</b> In respect of risk and the potential actions and mitigation costs outlined in supporting the Telepath system and the Committee's concern regarding escalation, the Board Secretary clarified the governance system in place. The Chief Information Officer confirmed that the issues outlined in respect of TEC had been addressed with the Executive Director of Primary and Community Services. The Committee Chair challenged the Informatics department to be more proactive in suggesting other ways that technology could be used to support improvements. A discussion ensued on evidence interpretation, technology at home and Telehealth.</p> <p><b>It was resolved that the Committee</b></p> <p>noted the issues of significance</p> <p>supported attendance from Area Teams at meetings</p>	
<p><b>IG18/10 Update on national response to Wales Audit Office Informatics report</b></p> <p><b>IG18/10.1</b> The Performance Audit Manager ~ WAO presented this item. It was noted that he was also in attendance for the meeting to observe as part of BCUHB's structured assessment. He advised that at the Finance and Performance Committee held on 26.7.18, Wales Audit Office received a request to provide an update on the process being adopted at a national level.</p> <p><b>IG18/10.2</b> It was highlighted that the report identified a number of risk and issues including: a need to strengthen informatics leadership across NHS Wales, and a significant need to strengthen governance arrangements for NWIS; many national systems were significantly delayed which caused widespread frustration; and a need to better track, record and monitor national systems because currently it was unclear whether they were delivering the intended benefit. The Public Accounts Committee report on Informatics Systems in NHS Wales was also provided, he drew attention to the 5 recommendations outlined. A particular concern in respect of capacity and capability was highlighted.</p> <p><b>IG18/10.3</b> The Performance Audit Manager ~ WAO advised that a Welsh Government response was expected which could be addressed at the next meeting. The Chief Information Officer also reported that a WG review had been commissioned on Infrastructure which was expected by the end of December 2018.</p> <p><b>IG18/10.4</b> The Committee questioned whether there was an appetite for an alternative to the national model and whether other solutions could be put forward to 'parachute in'. In</p>	

<p>the discussion that followed the need for a different culture was emphasised in order for change to occur. The Committee reinforced their concern with the issues highlighted.</p> <p><b>It was resolved that the Committee</b>          Noted the report          Agreed to highlight the concerns raised with the Board</p>	
<p><b>IG18/13 Information Governance (IG) annual report 2017/18</b></p> <p><b>IG18/13.1</b> The Assistant Director Information Governance and Assurance presented this item and apologised that the 2017/18 report had been submitted late in the year. She advised that the report focussed heavily on GDPR and also contained the Information Governance Group workplan in addition to the Caldicott report. The Assistant Director Information Governance and Assurance drew attention to increased visits and support to managed practices, information governance incidents, auditing, IG risk register, requests for information, increased mandatory training compliance and work with GP clusters.</p> <p><b>IG18/13.2</b> The Committee questioned the general outcomes of notifications regarding access to family member data generated from the National Intelligent Integrated Auditing System, it was agreed that the Assistant Director Information Governance and Assurance circulate a briefing note to members explaining the process. In response to the Committee's query the Chief Information Officer undertook to include Data Quality progress reports within the Informatics assurance report going forward.</p> <p><b>IG18/13.3</b> The Information Governance Team was commended on BCU's significantly improved mandatory training rate of completion. The Assistant Director Information Governance and Assurance agreed to provide an update report on serious incidents which had been reported to the Information Commissioners Office advised within the IG quarterly reports going forward. Concern was noted in Secondary Care in respect of non-compliance rates in responding to Freedom of Information Requests.</p> <p><b>It was resolved that the Committee</b>          noted the report and improved compliance with information governance practice          endorsed the Information Governance Annual Report 2017/18</p>	<p>DW</p> <p>JP</p>
<p><b>IG18/11 Information Governance Group Chair's Assurance report incorporating quarterly KPI and compliance report</b></p> <p><b>IG18/11.1</b> The Assistant Director Information Governance and Assurance drew attention to the Quarter 2 Information Governance (IG) key performance indicator report which highlighted:</p> <ul style="list-style-type: none"> <li>• Continued improvement in responding to FOI requests from 81 to 82%;</li> <li>• Continued improvement in responding to non-clinical subject access requests from 60 to 88%;</li> <li>• 89% compliance with responding to Health Record requests. This has been impacted by the reduction in time frame for responses as part of legislative changes from 40 to 28 days;</li> <li>• Continued reporting and follow up to ensure lessons learnt from IG incidents, 68 reported this quarter with 2 assessed as requiring notification</li> </ul>	

to the Information Commissioners Office and Welsh Government;

- Continued improvement in compliance with mandatory information governance training, up to 81%;
- 193 support calls received and dealt with, within 2 working days;
- Reduction in the reported notifications issued from the National Intelligent Integrated Auditing Solution (NIAS) from August to September;
- Continued approval of data processing and data protection impact assessments to ensure compliance with legislation.

**IG18/11.2** It was also noted that the IGG had received a progress report on the internal work programme and findings from a recent Information Commissioner's data protection audit. The tier 3 Information Governance Risk Register was revised to take account of the effect the national infected blood inquiry, destruction of records and the Patient Record Transition Work Programme. Updates were also received in respect of the Patient Record Group and the ICT Governance and Security Group. The IGG update also reported that a verbal update had been received on WCCIS and a pilot commencing with 4 district nursing sites in the West from February 2019. Previous IG concerns raised were in the process of being addressed nationally. The Group noted the implementation of a national working group tasked with the development of the Welsh IG Toolkit.

**IG18/11.3** The Committee discussed at length the barriers to attaining total mandatory compliance including potential effects on the organisation such as forming part of the reasons that the Deanery temporarily withdrew previously at a BCU site.

**It was resolved that the Committee**

noted the report

**IG18/12 Information Governance Policies**

The Committee considered the following policies which had been developed via the National Information Governance Management and Advisory Group on behalf of the Wales Information Governance Board which had approved the policies for national adoption on 26.6.18.

- Information Governance Policy – a new policy to replace the Health Board's IG06 Data Protection and Confidentiality Policy.
- Email Use Policy – second version of this national policy. This is supported by the Health Board's internal IG08 Email Procedure.
- Internet Use Policy – second version of this national policy to replace the Health Board's current IG09 Internet Access Procedure. This will be supported by Health Board guidance to cover illegal, obscene, racist material, and a list of blocked / unblocked internet site categories.  
In response to the Committee's query, the Chief Information Officer provided further clarity on the organisation's access for appropriate use.
- Information Security Policy – a new policy to replace the Health Board's IG05 IM&T Security Policy.




<p>The Assistant Director Information Governance and Assurance agreed to address the queries raised in respect of encryption (5.2) and concern regarding email storage in records management (5.5)</p> <p><b>It was resolved that the Committee</b></p> <p>endorsed the All Wales Information Governance, Information Security, Email and Internet policies for use by the Health Board.</p>	
<p><b>IG18/14a Issues of Significance to Inform the Chair's Assurance Report</b></p> <p>To be considered outside the meeting.</p>	
<p><b>IG18/14b Any other business</b></p> <p>It was noted that a service desk report would also be provided at future meetings.</p> <p>The Chairman invited member's observations to be forwarded to him in respect of the management of the inaugural meeting.</p>	
<p><b>IG18/15 Date of next meeting</b></p> <p>9.30am 14.2.19 Carlton Court Boardroom</p>	

BCUHB Information Governance and Informatics Committee Summary Action Log – arising from meetings held in public				
Officer	Minute Reference and Action Agreed	Original Timescale	Latest Update Position	Revised Timescale
<b>Actions outstanding transferred from Finance and Performance Committee</b>				
John Cunliffe	<b>FP18/187.2 Performance report</b> Independent Board member for Information Technology would raise the issue of investment potential for the development of a bespoke system with the Chief Information Officer via the Information Governance and Informatics Committee.	1.11.18	Raised with Chief Information Officer	Action to close
<b>13.11.18</b>				
Evan Moore	<b>IG18/4 Committee Terms of Reference</b> Feedback a recommendation on whom should be 'in attendance' on a regular and also adhoc basis, following consideration at Executive Team	1.2.19		
Evan Moore Dylan Williams	<b>IG18/5 Committee Cycle of Business</b> The Executive Medical Director and Chief Information Officer to feedback a recommendation on the content and frequency of Health Records reports to be included within the COB.	1.2.19	Completed	Action to be closed
Diane Davies	<b>IG18/5 Committee Cycle of Business</b> Update COB to reflect IG Annual report in August meeting	1.2.19	Completed	Action to be closed
Dylan Williams	<b>IG18/8 Informatics Operational Plan</b>		Completed	Actions to

	<b>quarter 2 performance and update</b> <ul style="list-style-type: none"> <li>– Provide IPT telephony programme update reports to future meetings</li> <li>– include Benefits Realisation updates within future reports</li> <li>– explore further BCU's position on the Electronic Patient Record</li> <li>– circulate replacement copy of plan in order that all narrative could be viewed.</li> </ul>	1.2.19	IPT and benefits realisation to be included in future reports - work is underway to restructure the performance update to better serve IGIC EPR and Health Records are on agenda 14.2.19	be closed
Justine Parry	<b>IG18/13 Information Governance (IG) annual report 2017/18</b> <ul style="list-style-type: none"> <li>– Circulate a briefing note to members re NIIAS family member data</li> <li>– Provide an update report on serious incidents advised within the IG quarterly reports going forward.</li> </ul>	1.2.19	Briefing note circulated  A new section has been incorporated into the quarterly KPI reports which details the previous incidents reported to the ICO and the outcome where known. All this information will also be captured as part of the overall IG Annual Report.	Actions to be closed
Justine Parry	<b>IG18/12 Information Governance Policies</b> <ul style="list-style-type: none"> <li>• Information Security Policy – a new policy to replace the Health Board's IG05 IM&amp;T Security Policy. The Assistant Director Information Governance and Assurance agreed to address the queries raised in respect of encryption (5.2) and concern regarding email storage in records management (5.5)</li> </ul>	<del>1.2.19</del> 5.5.19	This is an issue which require involvement of NWIS due to national policy and will be raised at the next national IG management advisory group to be held on 6.3.19	



Information Governance and Informatics Committee 14.2.19	 <b>GIG CYMRU NHS WALES</b>	Bwrdd Iechyd Prifysgol Betsi Cadwaladr University Health Board
To improve health and provide excellent care		

<b>Report Title:</b>	Review of Corporate Risks Assigned to the Information Governance and Informatics Committee
<b>Report Author:</b>	Mr Peter Barry, Head of Risk & Assurance
<b>Responsible Director:</b>	Dr Evan Moore, Executive Medical Director
<b>Public or In Committee</b>	Public
<b>Purpose of Report:</b>	<p>The attached report has been produced from the web-based Datix system and details the risk entries allocated to the Information Governance and Informatics Committee:</p> <p>CRR10 Informatics - In the November 2018 IGI Committee meeting it was identified that this risk entry in its present format is too nebulous, covers many strands of service delivery and limits the ability of the Health Board to focus on and address key issues. Following discussions, it was recommended that this risk is disaggregated to two key components – Informatics infrastructure and Health Records. These risks, are included for consideration;</p> <p>CRR10a - Informatics infrastructure capacity, resource and demand. CRR10b - Informatics - Health Records.</p> <p>It has been agreed that the CRAF risks will be formally reviewed twice per year by the Board's Committees. These risks will next be presented to the Committee in May 2019.</p> <p>The current version of CRR10 is attached for comparison purposes.</p>
<b>Approval / Scrutiny Route Prior to Presentation:</b>	The full Corporate Risk and Assurance Framework (CRAF) is scrutinised by the Health Board twice per year and is published on the Board's external facing website. Individual risks are allocated to one of the Board's Committees for regular consideration and review.
<b>Governance issues / risks:</b>	The report provides for the identification of the risk, the arrangements in place presently to control the risk and further mitigation action/s required.
<b>Financial Implications:</b>	These are identified through development of business cases and strategic outline plan required as part of further actions to achieve the target risk score.
<b>Recommendation:</b>	The Committee is asked to approve risk 10a & 10b for inclusion on the Corporate Risk Register, consider the relevance of the current controls, review the actions in place and consider whether the risk scores

	remain appropriate.
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<b>Health Board's Well-being Objectives</b> <i>(indicate how this paper proposes alignment with the Health Board's Well Being objectives. Tick all that apply and expand within main report)</i>	√	<b>WFGA Sustainable Development Principle</b> <i>(Indicate how the paper/proposal has embedded and prioritised the sustainable development principle in its development. Describe how within the main body of the report or if not indicate the reasons for this.)</i>	√
1.To improve physical, emotional and mental health and well-being for all		1.Balancing short term need with long term planning for the future	
2.To target our resources to those with the greatest needs and reduce inequalities		2.Working together with other partners to deliver objectives	
3.To support children to have the best start in life		3. Involving those with an interest and seeking their views	
4.To work in partnership to support people – individuals, families, carers, communities - to achieve their own well-being		4.Putting resources into preventing problems occurring or getting worse	√
5.To improve the safety and quality of all services	√	5.Considering impact on all well-being goals together and on other bodies	
6.To respect people and their dignity			
7.To listen to people and learn from their experiences			
<b>Special Measures Improvement Framework Theme/Expectation addressed by this paper</b>			
Governance – management of risk. Strategic and Service Planning.			
<b>Equality Impact Assessment</b>			
Not applicable for governance paper of this nature.			

*Disclosure:*

*Betsi Cadwaladr University Health Board is the operational name of Betsi Cadwaladr University Local Health Board*

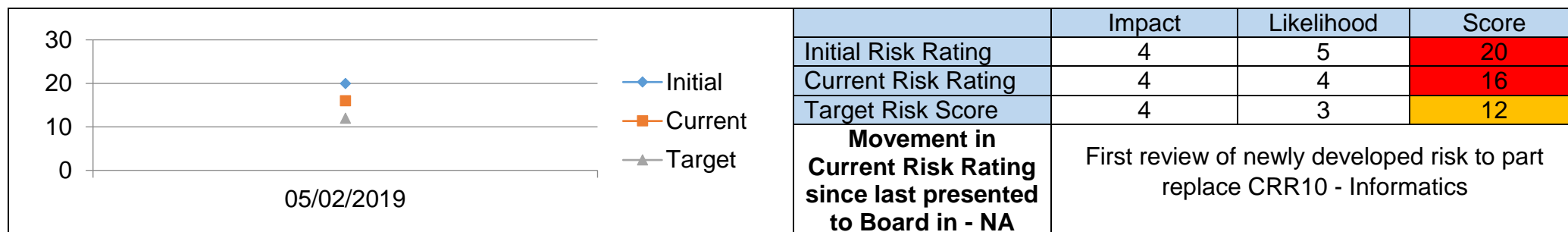
CRR10a	<b>Director Lead:</b> Executive Medical Director	<b>Date Opened:</b> 01/08/2015
	<b>Assuring Committee:</b> Information Governance & Informatics Committee	<b>Date Last Reviewed:</b> 05/02/2019
	<b>Risk:</b> Informatics infrastructure capacity, resource and demand.	<b>Target Risk Date:</b> 31/12/2019

There is a risk that the Informatics infrastructure is not fit for purpose. This may be due to:

(a) A lack of capacity and resource.

(b) Increasing demand.

This could lead to failures in clinical and management systems, and a failure to support the delivery of the Health board plans impacting negatively on patient safety/outcomes. It may also pose a greater risk to the Health board of infrastructure failures and cyber attack.

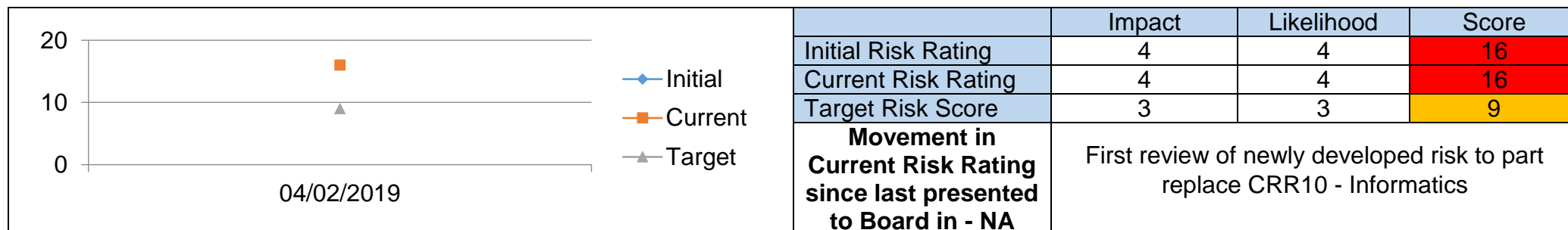


Controls in place	Further action to achieve target risk score
1. Governance structures in place to approve and monitor plans. 2. Approved and monitored plans (Capital, IMTP and Operational). 3. Integrated planning process and agreed timescales with BCU and third party suppliers. 4. Key performance metrics to monitor service delivery and increasing demand.	1. Develop associated business cases for resource required for SOP under direction of DTG. 2. Secure additional Capital and revenue budget going forward (with business case justifications). 3. Workforce development plans including KPI's to mitigate risks (Fixed term contracts, aged workforce etc).

Assurances	Links to		
1. Annual Internal Audit Plan. 2. WAO reviews and reports e.g. Structured assessments and data quality. 3. Scrutiny of Clinical Data Quality by CHKS. 4. Auditor General Report - Informatics Systems in NHS Wales.	Strategic Goals	Principal Risks	Special Measures Theme
	2 3 4 5 6 7	PR6 PR5 PR2	Strategic and Service Planning

CRR10b	<b>Director Lead:</b> Executive Medical Director	<b>Date Opened:</b> 04/02/2019
	<b>Assuring Committee:</b> Information Governance & Informatics Committee	<b>Date Last Reviewed:</b> 05/02/2019
	<b>Risk:</b> Informatics - Health Records	<b>Target Risk Date:</b> 31/12/2019

There is a risk that the right patient information is not available when required. This could be caused by a lack of suitable storage space, uncertain retention periods, and the logistical challenges with sharing and maintaining standards associated with the paper record. This may result in a failure to support clinical decisions for safer patient outcomes and an inability to meet our legislative duties.



Controls in place	Further action to achieve target risk score
1. Corporate and Health Records Management policies and procedures are in place. 2. Health Records Storage Strategy which has been approved and implemented. 3. Case note tracking software, procedures and asset register in place. 4. Escalation via appropriate committee reporting.	1. Review the impact of enquiries - including HASCAS, National Blood Inquiry. 2. Improve assurance around results management using technology such as WCP app or CHAI, which will read to less reliance on paper. 3. Development and approval of the digital health record business case. 4. Business case approval for storage for all patient records.

Assurances	Links to		
1. Patient Record Transition Group and Patient Records Group. 2. ICO Audit review.	Strategic Goals	Principal Risks	Special Measures Theme
	8	PR1	Not Applicable

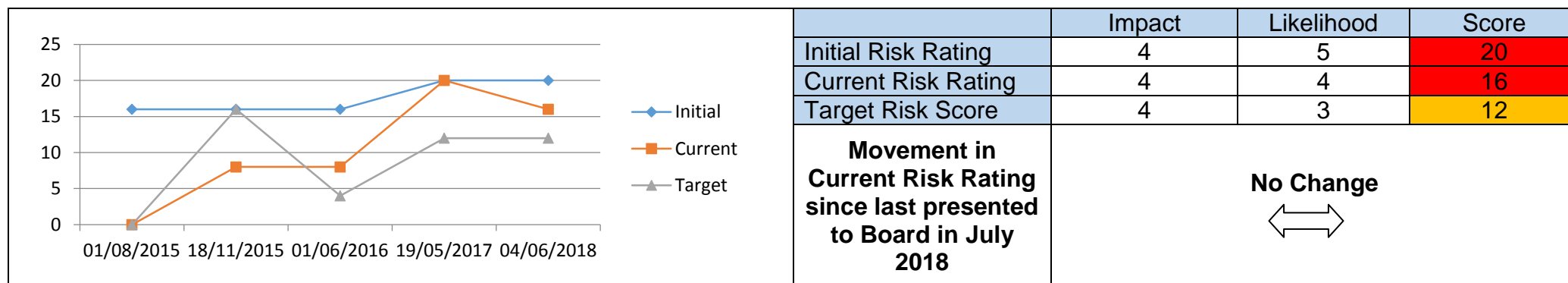


CRR10	<b>Director Lead:</b> Executive Medical Director	<b>Date Opened:</b> 01/08/2015
	<b>Assuring Committee:</b> Information Governance and Informatics Committee	<b>Date Last Reviewed:</b> 13/09/2018
	<b>Risk:</b> Informatics	<b>Target Risk Date:</b> 31/12/2019

There is a risk that the Informatics infrastructure is not fit for purpose. This may be due to:

- (a) A lack of capacity and resource.
- (b) Increasing demand.
- (c) Reliance on the NHS Wales Informatics service.

This could lead to failures in clinical and management information systems, impacting negatively on patient safety/outcomes, and greater risk of cyber-attack.



Controls in place	Further action to achieve target risk score
<p>Controls Part A &amp; B:</p> <ol style="list-style-type: none"> <li>1. Governance structures in place to approve plans and approved plans for 2018 (Capital, IMTP and Operational).</li> <li>2. Integrated planning process and agreed timescales.</li> <li>3. Forward programme of business case development.</li> <li>4. Local innovation to address operational risk (e.g. SBRI, ETTF).</li> <li>5. Programme management approach to the implementation of Systems including Gateway review process where required.</li> <li>6. Detective control and processes e.g. Performance Monitoring, reporting and escalation structures in place.</li> <li>7. Governance structure for Informatics to review requests for work and prioritise.</li> <li>8. Draft Informatics Strategic Outline Plan detailing the "investment</li> </ol>	<ol style="list-style-type: none"> <li>1. Refine and agree the Strategic Outline Plan for Informatics - Quarter 3 2018.</li> <li>2. Agreed Strategic direction for the Electronic Patient Record SOC date TBC.</li> <li>3. Develop associated business cases for resource required for SOP and SOC and to address failing infrastructure e.g. Central File Library. (Qtr 3 BC Central File Library, Tele health and Digital Dictation QTR 2/3 2018).</li> <li>4. Engagement with National Teams at multiple levels and escalation of issues via processes re requirements for:- <ol style="list-style-type: none"> <li>a. A more user friendly better performing Welsh Clinical Portal.</li> <li>b. Delivery of a single Radiology System (TBC Qtr 2/3 2018 2019).</li> <li>c. Rapid development of the Welsh Care Record Service.</li> </ol> </li> </ol>

<p>requirements for technology and digitally enabled service change" produced to support local and national planning.</p> <p>9.Increased revenue budget 2018 2019</p> <p>Controls Part C</p> <ol style="list-style-type: none"> <li>1. Engagement with National Teams at Multiple Levels</li> <li>2. Integrated planning process and agreed timescales from third party suppliers including NWIS Note: evidence of slippage past agreed dates is suggested to be a trend for NWIS</li> <li>3. Participation in change control process</li> <li>4. Specifications for Products and services agreed via Governance Structures</li> <li>5. Quarterly Contracting Reviews against SLA commenced Jan 18</li> <li>6. Review meetings with NWIS directors twice a year</li> </ol>	<p>5. Secured additional Capital and revenue budget going forward (with business case justifications).</p>
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Assurances	Links to		
<ol style="list-style-type: none"> <li>1. National system implementation oversight by NMIB chaired by the Cabinet Secretary.</li> <li>2. Annual Internal Audit Plan.</li> <li>3. WAO reviews and reports e.g. Structured assessments and data quality</li> <li>4. Scrutiny of Clinical Data Quality by CHKS.</li> <li>5. Auditor General Report - Informatics Systems in NHS Wales</li> </ol>	Strategic Goals	Principal Risks	Special Measures Theme
	2 3 4 5 6 7	PR6 PR5 PR2	Strategic and Service Planning



<b>Report Title:</b>	<b>Informatics Operational Plan performance update:</b> <ul style="list-style-type: none"> <li>Performance against Informatics Operational Plan Objectives – 2018/2019 Quarter 3</li> </ul>
<b>Report Author:</b>	Mrs Tracy Williams, Informatics Head of Performance and Improvement
<b>Responsible Director:</b>	Mr Dylan Williams, Chief Information Officer
<b>Purpose of Report:</b>	<p>The Information Governance and Informatics Committee is asked to use this report to:</p> <ul style="list-style-type: none"> <li>Monitor progress which has or is being made against the Informatics Operational Plan and monitor delivery of the roll out of core National IT systems</li> <li>Approve/be advised of changes to the previously published 2018/19 operational plan that are highlighted via change or exception</li> </ul>
<b>Approval / Scrutiny Route Prior to Presentation:</b>	This paper aims to provide the Information Governance and Informatics Committee with a mechanism to enable it to approve and monitor progress that Informatics has made against the 2018/2019 Operational Plan via a report (for Quarter 3)
<b>Governance issues / risks:</b>	<p>The overall status of the majority of deliverables are on target, progress is being made against all of our Informatics objectives i.e. Digital Roadmap, Digital Mobile Workforce, Digital Infrastructure etc.</p> <p>Eight projects which were reported as “at risk”, “experiencing issues” or “off target” in quarter two report remain off target. Whilst off target, progress is still being made against some of these projects e.g. WPAS is scheduled for Implementation WC 04.03.19, IPT telephony has been re- profiled and Governance is due to be strengthened.</p> <p>At the end of this quarter, an additional project has been reported as “at risk” (Single Sign on). Whilst this will not progress as originally planned, recruitment of dedicated resources to enable a digital mobile workforce will support progress in 2019/ 2020. This project forms part of plans for 2019/2020.</p>
<b>Financial Implications:</b>	<p>Financially an £800k revenue underspend at year-end has been declared to support the Health Boards overall financial position; this is based upon current position and predicted outturn. This is non-recurrent as increased WTE's will increase the staffing spend going forward.</p> <p>The discretionary capital programme for Informatics has been uplifted in M9 to reflect additional non-recurrent discretionary capital which was</p>

	awarded to all Health Boards by the Welsh Assembly Government (WAG). Significant focus on outturn will need to be maintained to ensure that full outturn <u>against specified schemes</u> is achieved. This is subject to monitoring at the Capital Programme Management Group
<b>Recommendation:</b>	<p>The Information Governance and Informatics Committee is asked to use this report to:</p> <ul style="list-style-type: none"> <li>• Monitor progress against the Informatics Operational Plan and delivery of the roll out of core National IT systems</li> <li>• Approve amendments to the previously published 2018/2019 Operational plan that are highlighted via change or exception</li> </ul>

<b>Health Board's Well-being Objectives</b> <i>(Indicate how this paper proposes alignment with the Health Board's Well Being objectives. Tick all that apply and expand within main report)</i>	√	<b>WFGA Sustainable Development Principle</b> <i>(Indicate how the paper/proposal has embedded and prioritised the sustainable development principle in its development. Describe how within the main body of the report or if not indicate the reasons for this.)</i>	√
1.To improve physical, emotional and mental health and well-being for all		1.Balancing short term need with long term planning for the future	√
2.To target our resources to those with the greatest needs and reduce inequalities		2.Working together with other partners to deliver objectives	√
3.To support children to have the best start in life		3. Involving those with an interest and seeking their views	√
4.To work in partnership to support people – individuals, families, carers, communities - to achieve their own well-being		4.Putting resources into preventing problems occurring or getting worse	√
5.To improve the safety and quality of all services	√	5.Considering impact on all well-being goals together and on other bodies	
6.To respect people and their dignity			
7.To listen to people and learn from their experiences			
<b>Special Measures Improvement Framework Theme/Expectation addressed by this paper</b>			
<a href="http://www.wales.nhs.uk/sitesplus/861/page/81806">http://www.wales.nhs.uk/sitesplus/861/page/81806</a>			
<b>Equality Impact Assessment</b>			
<b>N/A</b>			

Disclosure:

Betsi Cadwaladr University Health Board is the operational name of Betsi Cadwaladr University Local Health Board

## Performance against Informatics Operational Plan Objectives – 2018 2019 Quarter 3

This summary report aims to provide the Information Governance and Informatics Committee with a mechanism to monitor the progress that Informatics is making against its Operational Plan. Reporting is by benefits delivered, change/exception to plan, or significant event only.

### 1. Objective Status

As indicated in table 1, the total number of objectives/ projects to be delivered in 2018 2019 has reduced to 49. Digital dictation is being led through the Administration and Clerical Review, the Radiology upgrade is being led by imaging services and Incorporating Infection Prevention and control data was a previous years deliverable. As such, these will no longer be reported.

Table 1 shows that the overall status of the majority of deliverables remain on target (34). That the overall status of 4 projects are “not applicable” as these projects are scheduled to begin in Quarter 4. Eight ” projects which were reported as “at risk”, “experiencing issues” or “off target” in Quarter 2 report remain off target. Where appropriate e.g. there has been a change these are subject to further reporting. At the end of this quarter an additional project has been reported as “at risk” (Single Sign on). Projects that are experiencing issues or off target form the primary focus of this paper along with significant events which have occurred in other projects.

Table 1; Summary table of progress against objectives

Total Number of Objectives/Projects						
52						
	Complete	On Target	At Risk	Experiencing Issues	Off Target	Not Applicable
Overall Status	2	30	1	4	3	12
Quality Status	2	33	0	3	2	12
Milestone Status	2	32	1	2	4	11
Cost Status	2	32	0	1	3	14
Risk Status	2	32	1	2	3	12
Benefit Status	2	33	0	1	3	13

**Objectives delivered and benefits realised this quarter;** Whilst the Paediatric Mobile Nursing Application (CHAI) project was scheduled for completion within this quarter, no projects have been completed. As detailed within previous reports two projects completed to schedule in Quarter 1.

### Operational Plan Change or Exception;



The **Paediatric Mobile Nursing Application (CHAI)** which aims to replace paper nursing documentation was previously reported as *experiencing issues* due to extended project time lines. As this project should have been delivered in Quarter 3, it is now reported as “off target”. A Dry Run which started in Quarter 2 has continued to ensure that engagement is not lost within Clinical Teams. Lessons learnt from another Health Board have also been subject to review. The dry run and lessons learnt have identified additional 'showstopper' issues, fixes are therefore required to support go live. During this quarter the Project Board have made the decision to 'Pause and Reflect' on the project as “fixes” would increase project costs beyond budget, timescales require review and issues resolution. The “pause and reflect” report commissioned by the Project Board has recently been completed. It contains several recommendations that need to be made to progress the project before continuing onto the next phase. The Project Board is due to review and consider these within the next quarter. **Benefit – fully digitised mobile nursing records which allows more time nursing time released for direct care.**



**Improving Assurance of Results Management.** This project remains reported as *experiencing issues* due to the restrictions that NWIS have placed on BCU to take the “My Ping” solution into User Acceptance Testing. Since the previous report, a small number of BCU

clinicians have been selected to pilot a Welsh Clinical Portal (WCP) mobile application on iPod devices for WCP notifications and a “to do list”. The pilot is scheduled to run from February until the end of April. Whilst pilot criteria has not been clearly defined by NWIS at present, it is anticipated that functionality and devices will be assessed. **Benefit – more effective results management leading to improved safety and reduced reliance on paper.**



In a further *change to plan*, the current phase of the **Welsh Patient Administration System (WPAS)** Project (upgrading Myrddin in the East) is scheduled for implementation w/c 4<sup>th</sup> March. The revision from February to March, which was supported at Project Team and Project Board level will enable additional time to resolve data queries e.g. those relating to the follow up waiting list and will minimise risks that would have been faced if implementation were to clash with English and Welsh half-term holiday periods. **Benefit area– single integrated administration systems leading to improved patient management and communication with primary care (electronic referral management). Also will allow redesign of pan BCU service flows for scheduling appointments.**



In a *change to plan*, further delays are anticipated for **Welsh Emergency Department System (WEDS)** project due to the withdrawal of the “appointed” project Manager from the role. The project will be re-profiled once a project manager is in post. Interviews have been rescheduled for the end of January. The 2019 2020 plan has been based upon a successful appointment / start date of April 2019. **Benefit area– single emergency department digital record leading to improved patient management within unscheduled care.**

## Operational Plan Significant Event;



Whilst still reported as *off target*, work continues to progress with approved pilots for the **Welsh Community Care Information System (WCCIS)**. Additional project, change management and system management staff resources are in various stages of recruitment. These will support the pilots that are scheduled to start with District Nursing Teams in the West during Quarter 4 of 2018/2019 and Quarter 1 of 2019 2020. Commercial implications of the pilot projects are currently being investigated. **Benefit area– provision of single health and social care system across North Wales including community, mental health and social care and will enable mobile working for community resource teams.**



**Patient Management Status Boards** (also referred to as stream or flow); continue to be deployed as part of an “interim solution” in Central whilst we await a National Product that will support patient flow and bed management by displaying data to support ward rounds. Eight additional wards have been identified within Central for “screens”, extending the original project scope. The project Board have confirmed that these can be supported within available budget and resource allocation. This will conclude the project pending evaluation, recommendations and or a National Solution. **At a glance patient status boards in acute wards.**



Dedicated resources were appointed at the end of Quarter 3 to support a range of projects to enable a Digital Mobile workforce. Following a period of induction these will be focused on a number of priority projects in 2019 2020 including a more phased and targeted expansion of

**Skype** for business (currently reported as on target) and the extension of a pilot for **Single Sign On** and a “follow me anywhere” desktop (currently reported as at risk). **Benefit areas– increased online collaboration through skype and single swipe secure access to all clinical systems in the emergency quarter.**



As reported at the end of Quarter 1, BCU entered into an agreement with the Welsh Government to host a Centre of Excellence for Small Business Research Initiatives. During the past two quarters, the centre has been established, a centre manager has been appointed and significant progress has been made against year one deliverables with outputs including a bid to support healthy ageing and the establishment of a talent pool to support work. Quarter four priorities include healthcare wide partnership working to establish additional health challenges. This will further objective delivery.



Whilst the **IPT telephony** project is reported to be *experiencing issues* the project has been re-profiled. A project Board is due to be established in the final quarter of this year to improve the governance around this project. This will include a formal review of progress to date and Project Board direction for the project going forward. Project planning suggests an increase to implementation timescales of over one year, this would result in a 6 year project. Slippage is attributable to contracting and resource issues that have been subject to previous reporting. These issues are now suggested to be resolved. **Benefit area– provision of modern, secure unified communication systems that will support modernisation telephony services across BCU.**



Progress has been made against plans to provide a “safe environment” at Health Records Sites. In Central remaining work to replace a staircase outside of the library porta cabin was completed at the end of Quarter 3. The relocation of casenotes to support business continuity in Central has allowed us the opportunity to track both libraries to 'any location filing' which has improved the way in which staff search and file records within the library. The YGC File Library Programme Board have now reduced the frequency of their meetings, due to the success of the project and are next due to meet to review progress and continue discussions on long term solution in March 2019.

Discretionary Capital spends in the East have supported the procurement of additional units to “house” case notes in / replace damaged units. Work is scheduled for completion in the East by mid-January.



## Finance

**Revenue position;** the Informatics position at the end of M9 is depicted in table 2. It shows a cumulative underspend of circa £760k.

Cumulative and in month underspend remains attributable to Pay. This is due to the full year effect of increased WTE staff which were awarded as part of 2018 2019 cost pressures and budget setting activities. It is also attributable to factors including, recruitment timescales, a lack of suitable candidates and the effects of lead-time required to understand the impact of legislative changes and design services appropriately.

Increased recruitment activities in quarter 3 have slowed the rate of underspend and those planned to occur in quarter 4 will support the use of the allocation in 2019 2020 which is essential to support services and deliver plans.

An £800k underspend at year-end has been declared to support the Health Boards overall financial position; this is based upon current position and predicted outturn.

M9 Summary Allocation revisions to date	£
Original allocation	3,000,000
Mobile devices-Community	72,000
Additional discretionary (Omniceil +Telepath)	1,732,000
Additional discretionary-Perimeter Security	144,000
Additional discretionary-Therapy Manager	150,000
sub total	5,098,000
Less Declared Underspend	739,000
<b>Total</b>	<b>4,359,000</b>

date £678k (£604k M8) of allocations have been spent. Significant focus on outturn will need to be maintained to ensure that full outturn against specified schemes is achieved.


Revenue	Annual Budget £000	Year to Date Budget £000	Year to Date Actual £000	Year to Date Variance £000	Year End Forecast £000	Risk	Notes
Achievement against Revenue Resource Limit	17,125	12,840	12,080	-760	-750	Green	Expected increase in staffing in Q4

Cost Improvement Programme	2018-19 Savings Target £000	2018-19 Additional Savings Target	2018-19 Recurring Savings Plans £000	2018-19 Non-Recurring Savings Plans	2018-19 Balance	Risk	Notes
Savings Plans	-441	-250	346	345	0	Amber	Additional Recurring Savings applied to WCCIS - pressure in future years when WCCIS operational. Further savings are likely to be applied in 2019-20

**Discretionary Capital;** The discretionary capital programme for Informatics has been uplifted in M9 to reflect additional non-recurrent discretionary capital which was awarded to all Health Boards by the Welsh Assembly Government (WAG). Table 3 provides a summary of capital allocated and returned. The total allocation which includes schemes led by Pathology (Telepath) and Pharmacy/PMO (Ominicell) now equates to £4,359,000k.

Some revisions to individual projects have been made since the previous report to ensure full outturn e.g. monies have been reallocated from schemes such as Single Sign on (SSO) and Welsh Community Clinical Information System (WCCIS) to reflect actual spends to date (WCCIS) or a realisation that the scheme is unlikely to progress this year (e.g SSO). These have been subject to reporting at the Capital Programme Management Group. To



Strategy, Partnerships and Population Health Committee  14.2.19	 <b>GIG Cymru NHS Wales</b> Bwrdd Iechyd Prifysgol Betsi Cadwaladr University Health Board  To improve health and provide excellent care
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<b>Report Title:</b>	Digital Strategy development update
<b>Report Author:</b>	Dylan Williams, Chief Information Officer
<b>Responsible Director:</b>	Dr Evan Moore, Executive Medical Director
<b>Public or In Committee</b>	Public
<b>Purpose of Report:</b>	To brief the Committee on how the Informatics plans and developing Digital Strategy will support the Three Year Plan.
<b>Approval / Scrutiny Route Prior to Presentation:</b>	Chief Information Officer Presented at the February 2019 Digital Transformation Group
<b>Governance issues / risks:</b>	The risks to the delivery of the plan and strategy are outlined as a) Failure of national systems to deliver to time and scope b) Insufficient resource to manage the complex plan and strategy c) Failure to change ways of working through technology  The paper outlines how these risks will be mitigated.
<b>Financial Implications:</b>	The first year of the Digital Strategy is defined by the Informatics Operational Plan. The longer term Strategy will require significant funding (subject to separate business cases) that will be outlined in the final Strategic Outline Plan which will be published in May 2019
<b>Recommendation:</b>	The Committee is asked to note the following: <ul style="list-style-type: none"> <li>• There is an Informatics Plan in place to support the Three Year Plan</li> <li>• Core national and local system implementation will provide a foundation for service transformation through digital technologies</li> <li>• There is a strategy being developed to integrate data and services through technology</li> <li>• Investment will be required to deliver the overall Digital Strategy and this will be outlined in the final Strategic Outline Plan.</li> <li>• Note progress on the development of BCUHB's Digital Strategy</li> </ul>

<b>Health Board's Well-being Objectives</b> <i>(indicate how this paper proposes alignment with the Health Board's Well Being objectives. Tick all that apply and expand within main report)</i>	√	<b>WFGA Sustainable Development Principle</b> <i>(Indicate how the paper/proposal has embedded and prioritised the sustainable development principle in its development. Describe how within the main body of the report or if not indicate the reasons for this.)</i>	√
1.To improve physical, emotional and mental health and well-being for all		1.Balancing short term need with long term planning for the future	√
2.To target our resources to those with the greatest needs and reduce inequalities		2.Working together with other partners to deliver objectives	√
3.To support children to have the best start in life		3. Involving those with an interest and seeking their views	
4.To work in partnership to support people – individuals, families, carers, communities - to achieve their own well-being	√	4.Putting resources into preventing problems occurring or getting worse	
5.To improve the safety and quality of all services	√	5.Considering impact on all well-being goals together and on other bodies	
6.To respect people and their dignity			
7.To listen to people and learn from their experiences			
<b>Special Measures Improvement Framework Theme/Expectation addressed by this paper</b>  <a href="http://www.wales.nhs.uk/sitesplus/861/page/81806">http://www.wales.nhs.uk/sitesplus/861/page/81806</a>			
<b>Equality Impact Assessment</b>  <i>(If no EqIA carried out, please briefly explain why. EqIA is required where a change of policy or direction is envisaged and/or where budgets are being reduced. It is particularly important that the biggest, most strategic decisions are subjected to an EqIA – see <a href="http://howis.wales.nhs.uk/sitesplus/861/page/47193">http://howis.wales.nhs.uk/sitesplus/861/page/47193</a> )</i>			

*Disclosure:*

*Betsi Cadwaladr University Health Board is the operational name of Betsi Cadwaladr University Local Health Board*

## Purpose of the document

The Informatics (or digital/ IT) strategy and delivery in Wales has been the subject of close scrutiny and criticism during the past year following Welsh Audit reports and Public Account Committee hearings and subsequent final report which was published in October 2018. This document aims to brief the Board on progress against the development of the wider Strategic Outline Programme and confirms that BCU is working to a very clear informatics operational plan that will both sustain 'business as usual' whilst implementing key enablers to support the emerging Three-Year Plan.

Specifically this document:

- Provides an update on current reviews of national informatics service.
- Explains how the operational plan is established and agreed.
- Details the current draft informatics operational plan and its importance in underpinning BCU's Three Year Plan and service integration agenda.
- Illustrates, through tranche, diagrams how the operational plan and strategy connects legacy silos of information and business processes which will:
  - Improve operational systems in the acute settings.
  - Enhance communications between primary and secondary care.
  - Enable the integration of mental health, community and social services.
- Will highlight why successful delivery of the current plans will enable secure data sharing across traditional health and care boundaries and how pathways of care and detailed, accurate public health information will become a by-product of care processes.
- Details potential emerging local initiatives that will play an important role in modernising services regionally and will need to be prioritised and funded appropriately.

It is important to note that the strategy of shifting to digital services through our operational plan is highly ambitious and complex: Not only are we replacing and unifying fundamental business systems but we are also introducing digital services in partnership with multiple stakeholders and suppliers.

In order for any digital strategy to work it must be delivered in unison with effective workforce, finance and estate strategies. It will require an increased level of clinical and public engagement and increased investment. The Introduction of technology in the absence of a clear purpose and competent and resourced workforce will only have limited benefit to staff and patients.

## Welsh Audit and Public Accounts reports

In January 2018, Wales Audit Office published its report on informatics systems in NHS Wales<sup>1</sup>. While this report relates to informatics across all of NHS Wales, it clearly considers the national arrangements, and in doing so raises issues relating to the national hosted organisation NHS Wales Informatics Services (NWIS).

Welsh Government issued a response to the original WAO report that accepted all the recommendations and has initiated two specific reviews, which will help address the governance and technical aspects of national informatics. These are;

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<sup>1</sup> Wales Audit Office report on Informatics Services 2018 [http://www.audit.wales/system/files/publications/NHS\\_-\\_Informatics-2018%20-%20English.pdf](http://www.audit.wales/system/files/publications/NHS_-_Informatics-2018%20-%20English.pdf)

1. Welsh Government Informatics Governance Review. An organisation called Local Partnerships are undertaking a review with health organisations and looking at all aspects of governance and are due to report back in January.
2. Welsh Government National Architecture Review. WG have commissioned an independent review of the technical architecture for Wales which will look at sustainable modern architecture to deliver the longer-term health and social care architecture. This report is likely to report out before the financial year-end.

BCU is the highest consumer of national systems in Wales, and we remain committed to maximise the benefits of the national best of breed systems, and actively support the grounding principle to provide access to patient information across Wales and beyond. We continue to work closely with national organisations to deliver the Welsh Government's published digital strategy – [Informed Health and Care – A Digital Health and Social Care Strategy for Wales](#) (December 2015)

Both these reviews should have a significant positive impact on the direction and technical delivery of both national and local digital strategies. The Chief Information Officer will provide further updates to the Board in due course.

## Operational Plan and Strategic Outline Plan

The Informed Health and Care strategy outlines the overall vision for technology in Wales and sets out clearly the need to continue to follow the 'One for Wales' approach.

The annual Informatics Operational Plan is a local document that sets out the funded digital plan over a five-year horizon but with a focus on the current financial year and is refined annually via the organisations planning processes. The Plan summarises the requisite projected resources that we have available to support the delivery and details the monitoring and reporting arrangements, which are in place to ensure appropriate governance.

Welsh Government national planning guidance recommended that each organisation develop an Informatics Strategic Outline Plan (SOP) that outlines the longer-term range of potential options available to the organisation to deliver digital services for both staff and patients.

Whilst we are aligned with the national strategy each health board in Wales is at a different stage of implementation and may have differing service priorities. Therefore the SOP quantifies costs specific to Betsi Cadwaladr where possible and should be used as part of the wider organisational planning process as a 'menu of options' for prioritised investment in digital service and the vision set out in Informed Health and Care.

The first draft of the SOP identified additional investment of over £20m would be required over five years to deliver the benefits of digital services. However, successful implementation of new technologies coupled with better use of existing systems and processes could yield significant quality and cash releasing and qualitative efficiency savings. The next phase for the SOP is to verify costs and benefits and this work is scheduled to complete in May 2019 and will incorporate the impact of the national governance and architecture reviews.

Clearly all operational plans and strategies within the NHS have to deal in the complexity and continuous changes in demand. Informatics is one of those services which is not only affected by increased demand but also the nature of demand i.e. emerging disruptive technologies coupled with an expectation to mainstream these new technologies within complex legacy technical arrangements has been a constant theme for the past eight years.

The management of the flow from service need, idea or innovation through to the operational plan follows some key principles and processes that are shown below.

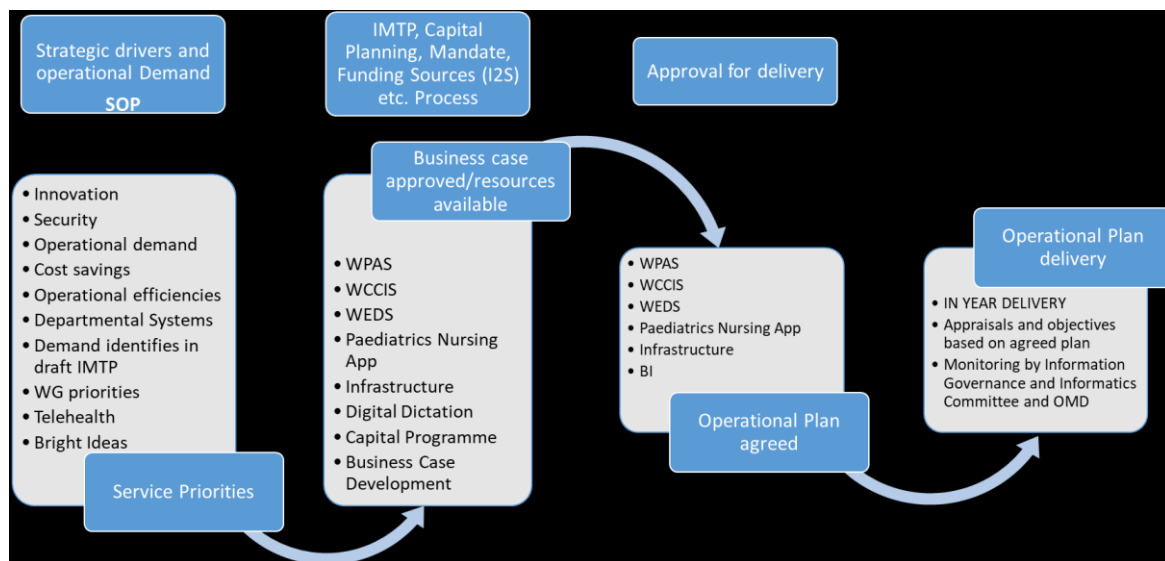


Figure 1 – Flow from demand to delivery

Figure 1. Illustrates how the demand, or pipeline of work, for digital technologies is identified at a strategic, national or operational level. These demands are prioritised by the service via the normal planning route such as the Three-Year Planning process, capital management process or submission of bids for Invest to Save etc. Schemes that are approved via a business case or appropriate resource allocation will then become part of the operational plan. Schemes that are not approved or are not deliverable within the existing resource are queued for the subsequent annual plan or can become part of the existing annual operational plan via two routes;

- A business case justification and/or resource for delivery is approved – including support costs.
- Existing schemes are de-prioritised to allow capacity for other emerging priorities.

## A Clear Plan for 2019 and beyond

The plan for 2019/22 remains consistent with the approach of previous years, which is to implement technology to maintain and improve our existing infrastructure and systems whilst supporting patient care, service transformation and growing our capacity and capability.

The three year 'enabling' plan is derived from a previously approved five-year rolling plan, which has been developed to underpin service needs and support the delivery of a number of strategic developments in Digital Records, Analytics, Information Management and Information Communications Technology. Our plans and developments are based on the Informed Health and Care Strategy that Informatics driven work will produce:-

## OUR VISION



### FOR PATIENTS

Instant access to information to keep them healthy; where they are on waiting lists details of appointments (and the ability to change them); visibility of results; and other correspondence.



### FOR HEALTH CARE PROFESSIONALS

Fast, modern computers; up to date office automation software, instant messaging, and telephony; and the ability to work anywhere. Our health professionals will have access to an electronic patient record wherever they are. Our optimised systems will support the clinical work, rather than create admin overheads and will be available to partner professional groups, GPs and social services.



### FOR MANAGERS & STAFF

Instant access to information on the state of the whole health system e.g. waiting lists; booking of patients; progress to targets; service intelligence; and operational information highlighting day to day running.

Our approach and pace to deliver the vision considers resource availability, national and legislative context which influences priorities, direction and pace of delivery and our previously published “guiding principles”

Delivering the vision will be influenced by resource availability and “guiding principles” that will be taken into account when making planning and operational decisions e.g. evaluating new requests to undertake work.

The principles detailed below have been adopted, as they are based upon, evidence based best practice and considered essential to success.

### Informatics Guiding Principles

- An incremental prioritised approach
- Maximise the use of national Systems
- Scalable connected solutions
- The solution focuses on behaviour not technology
- Alignment to strategic objectives
- Supports statutory compliance
- Reduces known risk
- Supports Service e.g. Continuity
- Enables Service Transformation / delivers benefits e.g. Financial
- Financial Sustainability

The need to get the basics right e.g. safe and sustainable infrastructure for Health Records and maintain our focus on the delivery of the plan is essential. In effect, this means that there will be very few opportunities to introduce new or additional technology outside of those identified within this plan or those emergent ones, which are driven by legislative requirements.

The resultant focus on our plan will ensure that we maintain the required pace to deliver a range of projects that underpin our previously published objectives.



**Digital Roadmap;** Adopting a digital by default principal, capturing data once and reusing it, minimising the use of paper and working towards “paper free at the point of care”. The building blocks of a single patient view which those receiving, providing or supporting patient care can access.



**Data Driven Decision Making;** providing tools to put data from a variety of sources at the heart of decision making in a timely and user friendly manner. Providing insights to inform effective decisions through synthesising information from a variety of sources



**Underpinning service transformation;** Supporting services to combine technological opportunities with new business processes, that enable us to meet our Local and National responsibilities



**Digital Mobile Workforce;** providing digital tools to support staff to undertake duties, work together and communicate effectively from a variety of locations. Reducing overheads, supporting strategies and enabling “time to care”



**Managing Innovation and emerging technologies;** Learning and Innovating by providing accelerators of digital transformation. Collaborating with innovators and entrepreneurs and suppliers to encourage innovation



**Digital Infrastructure;** Providing, developing and maintaining a secure, flexible and robust infrastructure to enable a digital future. Getting the “basics right” and building an Infrastructure to support transformation






**Workforce Development, Transparency, Sustainability and Standards;** Nurturing a digital culture throughout the organisation. Supporting staff to develop and provide services that meet the efficiency, quality and sustainability challenges that we face. Adopting evidence based best practice and meeting our legislative requirements










The plan lists the projects that will be undertaken to deliver each of the objectives. High-level timescales are indicated along with “rolling” schemes.

The Informatics priorities for 2019 to 2022 which will include:-


-  Phase 3 of the *Welsh Patient Administration Project (WPAS)*, which supports the acute hospital care programme. In 2019/20, we will replace the commercial patient administration system that is currently in use in the West. We will continue to standardise processes related to this system before merging three instances of the administration system into one unified national system in 2020/21. (Central phase 1 was completed in 2017/18; East phase 2 was the focus for 2018 2019 and West is phase 3). A single PAS will also pave the way for data sharing between systems (via interfaces) and unlock functions of national systems, which rely on a single data feed e.g. supporting Patient Reported Outcome Measures (PROMs) /Patient Experience Measures (PREMS) and referral management. Enhancements to WPAS that are planned will also partly support the management of patients along a Single Cancer Pathway (via functionality referred to as Tracker 7).
-  Completing pilot studies that commenced in 2018 2019 to learn lessons to inform wider installation and utilisation of the *Welsh Community Care Information System W. Assuming functionality delivery to specification and plans*, the focus will be on a phased implementation to deliver the integrated Health and Social care system. This system underpins transformation as it is designed to enable Health and Social Care professionals to work together to provide care closer to people’s homes. This project therefore supports Mental Health and Care Closer to Home programmes. Preparation work for standardising ways of working, testing and will be key in the run up to full availability of functionality. (see *Figure 5*, page 12)
-  Re-constituting the previously paused *Welsh Emergency Department System* project which assists with the management of the patient within the Emergency department and the patients’ pathway. This project will support the unscheduled care programme to transform the way that our Health Professionals work in delivering services and improving patient care.


To supplement these National programs and to accelerate the Health Board’s journey to an Digital Health Record, **Digital Roadmap** priorities include a number of local innovative solutions. Specifically, following the introduction of the GDPR and the ICO Audit, and to manage the transition from the paper record to the digital record, the **Patient Record Transition Programme** has been established and will focus on projects to:

-  Drive the progress on the project to a BCUHB Digital Health Record.
-  Be GDPR and DPA 2018 compliant in respect of responding to subject access requests received from the public and third parties; across paper and digital local and national platforms.
-  Ensure where oncology information is held in the ‘acute’ main patient casenote; that acute casenote (past and present) is marked and a solution is in place to retain the set to comply with the minimum 30-year retention period.
-  Respond to the National Infected Blood Inquiry in respect of access requests and work across Wales to review the impact of and options to address the imposed embargo on destruction of paper records.
-  Map out the storage, processes, management arrangements and standards compliance, for all types of patient records, and present options to improve compliance and availability of non-acute record types.

-  Make progress in digitising paediatric and adult nursing documentation through the trialling of local innovation and piloting the national digital nursing application.
-  Improve the assurance on results management with planned pilots for Welsh Clinical Portal (WCP) and WCP App in January 2019.

Whilst we are committed to digitising patient records, we will also need to ensure that the services that we deliver are safe, effective and sustainable. A permanent solution for Health Records storage in Ysbyty Glan Clwyd will be required circa 2022/23 along with solutions that meet the safe storage needs of all sites.

 Many of our objectives require us to maintain our emphasis on getting the basics right. **Data Driven decision making** is no exception. A concentration on process will be required to leverage the benefits of the tools that we already have. Data Driven decision making will only be possible if we have accurate real time data to inform business intelligence. Specific priorities for 2019/20 therefore include delivering content to support flow/efficiency-based decisions around real time admit discharge and transfer data. Outcomes in real time driven by clinicians which also support referral to treatment time measurement. We will also continue the work to provide administrative data to support clinical engagement, improve data quality and patient care.

 As in previous years, **Digital Infrastructure priorities** will remain the primary source of Informatics Discretionary Capital spend (circa 85%). Rolling programmes of work are required to “get and keep the basics right”, these include enhancements to core infrastructure such as the replacement of networks and obsolete hardware. They also include the continuation of projects such as the migration of our telephone infrastructure from an “end of life” solution to one, which is fully supported and capable of underpinning service change once fully implemented.

A requirement to proactively manage and secure our data, which is borne through the growing use of systems together with the increased collection of data to manage and support patients and improved legislation will see an increased concentration on the plethora of disparate systems deployed throughout the health Board. Outputs for 2019/20 will include security assessments and policies that will inform priorities for future years.

For reference *Figure 5* (pages 14 &15) highlights the previously approved Informatics long term plan.

## Digital Enablers

The above operational plan is foundational, but a number of initiatives will be developed in 2019/20 and we will also need to spend time identifying business sponsors and capacity to investigating additional enablers to deliver digital services. Some of these key ‘discretionary’ initiatives are outlined below. The final SOP will provide more detail on outline costs and benefits for each scheme.

Initiative	Benefit	Local or national	Stage
Digital Health Record (ecosystem)	A single interoperable Digital Health Record(DHR) system that will provide a cohesive view of the acute patient record; supporting integration with the best of breed systems locally and nationally, provide	Local but integrated to national systems	Project established, business case preparation



	greater access to systems and information, improving and streamline working practices and removing 'paper' from the system.		
Digital Dictation and Speech Recognition	Investment in scaling up the Digital Dictation and Speech Recognition technology we already have to improve safety and efficiency as well as the acceleration of the Digital Health Record and automated clinical coding using SNOMED CT (an international standard for structured electronic vocabulary for electronic health records). This system has the potential to revolutionise how clinical outcomes are captured – allowing clinicians to capture their own activity at the point of care. This will lead to better understanding of clinic capacity and demand.	Local but will need to interface with national systems	Bid submitted to Welsh Government Invest to Save fund and pre-procurement stage. Draft specification developed
Fast Healthcare Interoperability Resources (FHIR) adoption	Developing an interoperable infrastructure and resources to share data securely and effectively as part of a wide ecosystem. This will allow data from all care settings to be shared appropriately and allow a wide “public health” view of data across North Wales.	Local and linked to National Clinical Data Repository	Business case development
Microsoft Office 365	Enhances mobility for staff and cloud based digital services. This will link with existing national mobile strategy initiative.	National or local depending on national architecture review	Business case preparation
Community mobile working	The need to develop technical and business process support for the development of integrated services and care closer to home prior to WCCIS i.e. co-locations of health and social care teams and services.	Local	Costs submitted as part of Three Year Plan
RFID tracking – wider asset tracking	Building on the successful RFID tracking of paper records project, we will evaluate the use of this technology to track automatically other assets and patient locations within a hospital setting.	Local	Pending business case.
Technology enhanced care	Allow virtual consultations that could allow virtual triage, demand management and support the care closer to home agenda.	Local (will require access to national systems –	Draft business case developed

		WCP,111 etc.)	
Electronic Patient Flow	<p>A coordinated national approach to manage patient flow in hospital to support more effective care at the bedside and more efficient use of bed capacity and better discharge planning.</p> <p>A local initiative is under development to utilise local tools and developments to BI tools as an interim to the longer-term solution to support unscheduled care.</p>	National and Local.	<p>National outline business case developed.</p> <p>Local PAS, Stream and BI being utilised in the interim.</p>
Critical Care information System	To digitise critical care environments providing the latest technologies at the bedside with automated monitoring and observations – this will enable key clinical resource to manage critical care capacity across North Wales regardless of location.	National procurement	Outline Business Case Stage – driven by Critical Care network.
Electronic Patient Letters trial	Building on the success of the patient appointment reminder system we will trial smart phone appointment reminders that allows patients to securely view and store their appointment letters. This will lead to more efficient booking process, better information for patients (including choice of language and “browse aloud” technology) and reduction in printed appointment letters.	Local pilot	Requires GDPR impact assessment, service lead and scoping
Sexual Health System	<p>Procurement and implementation of a sexual health electronic patient record. There is an existing sexual health system in North Wales but needs increased support.</p> <p>Note: The sexual health system is one example of speciality systems and other will require similar approach to resolution i.e. national or local business cases.</p>	National	Business case being developed by Public Health Wales. Consideration to increased local support needed.
E Prescribing	Digitise the prescribing and administration of medicines and provide decision support to prescribing clinicians. Evidence shows reduced harm and better overall management of medicines.	National	Outline Business Case under development
Patient portal	Allowing patients and their carers direct access to their own records securely	National	WG lead organisation for

	and book appointments. My Health Online provides limited access to records and ABMU have implemented Patient Knows Best in some specialties.		patient portal. Some elements available through myHealth Online
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*Table 1 – Potential local discretionary and national initiatives for prioritisation*

## Why Year 3 is key for transformation

The Three Year Plan will outline the organisation's approach for service delivery and improvement. However, it should be recognised that the first two years are predominantly about laying the foundation for digital transformation. The following sections and schematics on Data and Process Islands illustrates how technology will overcome traditional legacy barriers to unified care models. The ability to track all interactions with patients in primary, secondary, community, mental health and social care models will become a reality and be enabled through a combination of:

- Adopting recognised national standards for sharing data.
- Maximising the using of nationally available systems as well as
- developing a local Digital Health Record to mitigate any gaps in national systems which cannot support local management of the paper record.

Assuming the outcomes of the National Informatics Governance and Architecture reviews lead to an improvement in NHS Wales' ability to procure, develop and implement key technologies then the delivery of core services will allow year 3 and beyond to be transformational for the organisation, its stakeholder organisations and citizens of north Wales.

*Figure 3* illustrates ( but does not include all projects) how the majority of acute care systems will, over the life time of the Three Year Plan, be unified and connected. Importantly:

- The priority acute systems, WPA, WEDs, WCP implementations will deliver the ability to capture all planned and unplanned care activity. This will lead to improved communications with primary care through enabling electronic referral and discharge communications.
- The development of the local Digital Health Records in partnership with national systems will reduce the reliance on paper and increase the use of technology at the bedside.
- Technologies such as digital dictation and speech recognition will enable outpatient information to be collected as a by-product of care. The clinicians will record their own activity in real time without significantly changing current processes. Thus facilitating better quality outcomes and provide a real time view of clinic activity and capacity.
- Clinical communications could be coded automatically allowing primary care to receive coded outcomes
- Our data warehouse and business intelligence solutions will use coded information previously unavailable to support a wider and accurate public health view of citizens of north Wales. This will lead to whole system care pathways and the ability where outreach services are required.

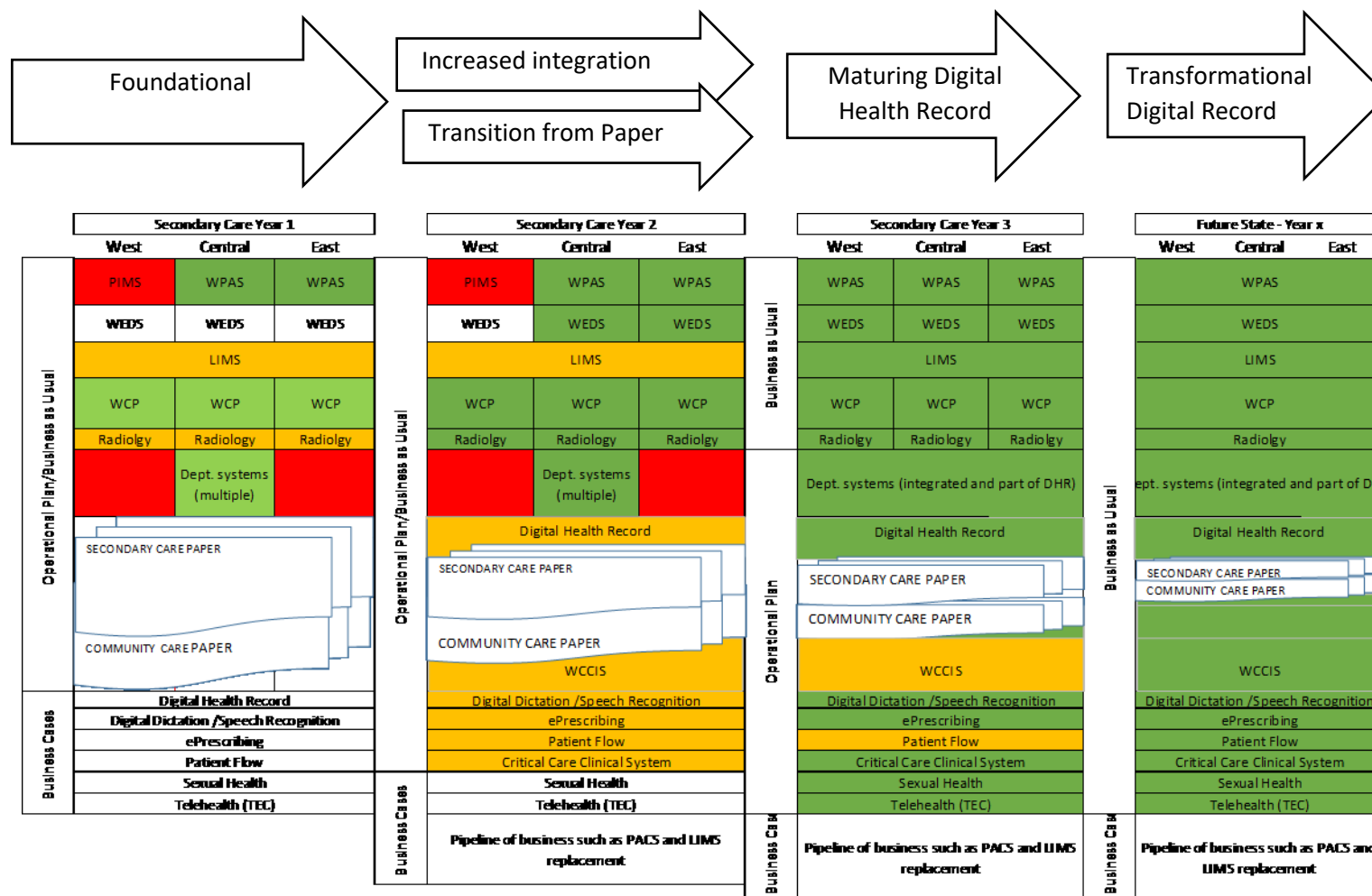

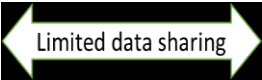




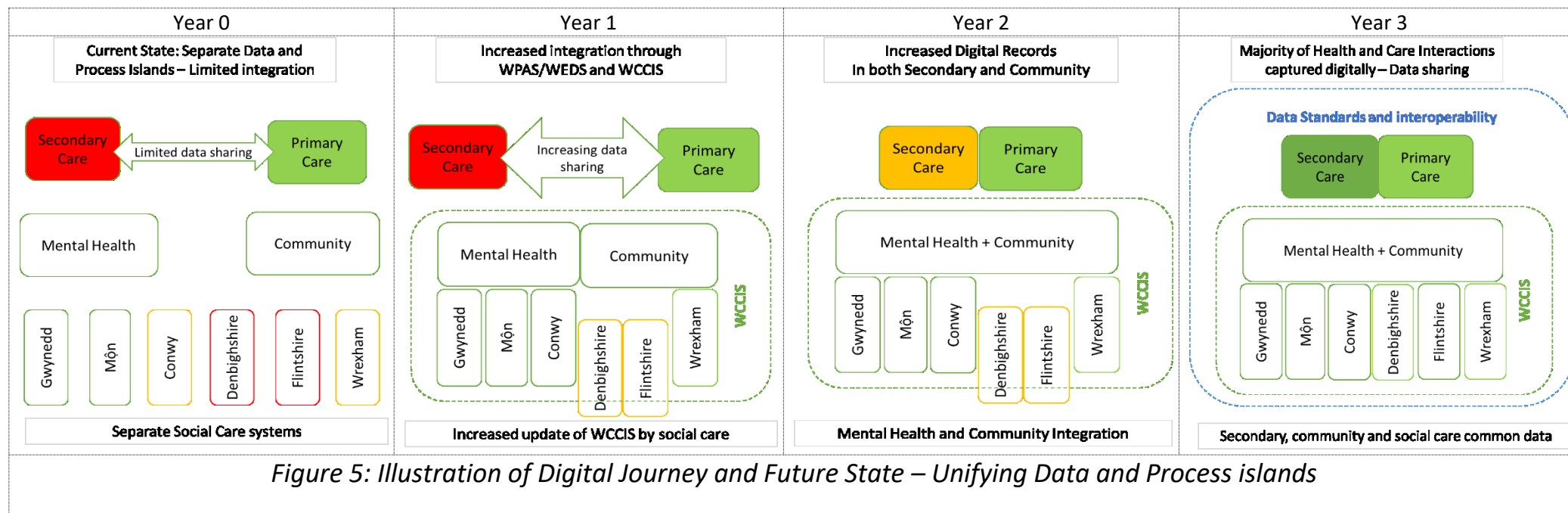


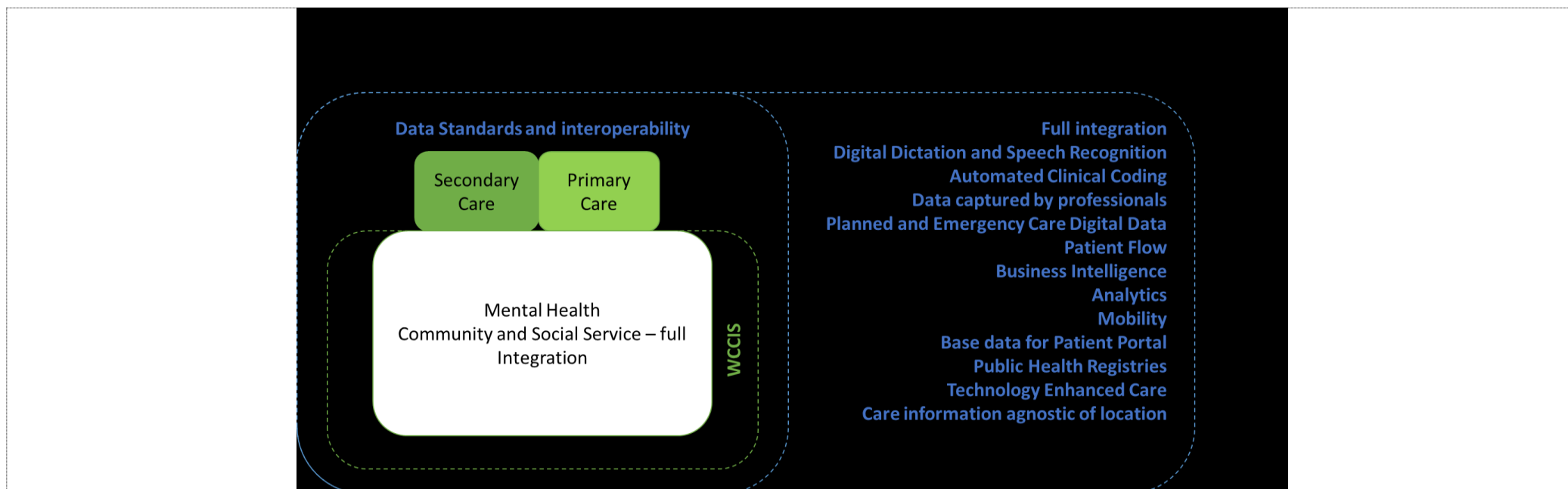
Figure 4 – Shift to unified Digital Service over time – Business Case to Delivery cycle and supporting “Excellent Hospital Care”

Figure 4 demonstrates how the majority of acute systems will be harmonised and support Excellent Hospital Care. However, this must be seen in a wider context of primary care and supporting the Care Closer to Home element of the Three Year Plan. In Figure 5, (Page12) the shift from separate silos of information is shown over the timeline of the plan. The key elements to note are defined below.

	<p>This represents Figure 4 and acute care in particular and the journey to harmonise systems and processes whilst reduces the reliance on paper leading to a green status in year 3.</p>		<p>Communications between primary and secondary care exist but they are limited. Most referrals to secondary care from primary care are already electronic but <u>until WPAS</u> is rolled out completely the process will be manual in secondary care as the referral management has been designed to work with one PAS. Over the period communications will improve until all referral and discharge information is electronic and both secondary and primary care data will be accessible.</p>
	<p>Primary care or GPs are already nearly fully digital (although North Wales will change suppliers and system during the next two years) hence the status of green.</p>		<p>Community have limited IT systems and rely on paper. The green outlines indicate our commitment to WCCIS and it is seen as the main enabler for integrating health and social care.</p>
	<p>Mental Health services transition acute and community. Although there are systems in use they are limited but the green outlines indicate our commitment to WCCIS</p>		<p>Local authorities do have IT systems for social care. Both Gwynedd and Môn have already implemented WCCIS. Other local authorities are at different stages of commitment to WCCIS and this figure illustrates potential phasing towards a single system. These social care systems are not currently connected to each other or health and WCCIS will be the enabler for this.</p>

The shift from year 0, or current state, to year 3 shows the improving state of acute digital services together with a shifting of the traditional separated data silos found in community, mental health and social care to a more integrated model. The year 4 model shows a tightly coupled system that still has obvious inherent and necessary organisational boundaries. However, the sharing of data and information will no longer be a constraint to management or planning of services. The year 4 model allows professionals to work in their preferred systems e.g. GPs will primarily use GP systems but will be able to access secondary care systems should they need to. Similarly, community resource teams will use WCCIS but will be able to access wider data that is relevant to their role. At this stage care pathways, improved safeguarding and highly connected public health data become a reality.





## Delivery, Monitoring and Risks

The above figure shows a highly ambitious digital strategy but it is clearly a simplified view of a very complex programme. The health board currently manages in the region of 300 IT systems and each will need to have a plan for sustainability, development and business continuity.

Assurance against delivery of the strategy and the operational plan will be provided to the Board by the Information Governance and Informatics Committee.

The high level risks for the delivery of the strategy are outlined below.

Risk	Impact	Mitigation
Delays in delivery of national systems	This issue has been the subject of detailed public scrutiny and these delays have limited BCUs ability to move forward with modernising its services despite a clear commitment to the national strategy.	<p>Positive recommendations from the imminent Informatics Governance and Architecture Reviews.</p> <p>Development of the local Digital Health Record ecosystems that will compensate for gaps in national systems but continue to share data using the national infrastructure and agreed standards</p>



Increased and competing demand for technology	Competing demand and increased portfolios will spread existing informatics resource thinly and detract from the main pillars of the strategy.	Robust programme management and change control. The informatics service will not start additional projects or support new systems without an approved funded business case.
Staff unwilling to change ways of working	New technology investment will have limited benefit and not modernise services	<p>Projects will include capacity for change management. Each informatics initiative will have a business sponsor and that workforce modernisation is a strong element of technology implementations.</p> <p>Chief Clinical Information Officer, Chief Nursing Information Officer and supporting Clinical Officer roles will be developed further to provide strong clinical leadership during transition to digital.</p> <p>The Digital Health Record programme will include the capacity to manage the transition arrangements from paper to digital.</p>

## For Planned Programme

Enter S - Project Start

Enter D - Design

Enter P - Procurement

Enter I - Implementation

Enter C - Project Close

**R**    Readiness

## Informatics Five

## Year Plan

[L] = Local Solution

[illegible]

UNDERPINNING SERVICE TRANSFORMATION	Detailed annual architecture review and technology roadmap - Systems(yr. 1 to year 5)	D	C		S	D	C		S	D	C		S	D	C		S	D	C		S	D
	[L] Expand on technology to track assets, patients, pharmaceuticals and resources (yr. 1 to yr. 2)	D	I	I	I	C																
	Leverage the value of national systems via intelligent integration/stapling/context sharing. (yr. 1 to yr. 5)	D	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	C		
	Portal to PAS stapling to view data in one place to drive clinical work/efficiencies. (yr. 2 qtr. 2)																					
	BCU Standardisation to support the introduction of a single instance of WPAS	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	C		
DIGITAL MOBILE	[L] Mobile Device Management Strategy, (Dependent on Publication of National Mobile Strategy Dev due	S	D	D	D	I	I	C														
	Further Rollout of Skype for Business, (yr. 1 – 2)	I	I	I	I	C																
	Single sign on including context sharing, (yr. 1 – 3)	I	I	I	I	D	D	I	I	I	C											
	Information Technology Self-Service web portal strategy and business case (yr1 qtr. 3)	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C
MANAGING INNOVATION & EMERGING TECHNOLOGIES	Innovation management and delivery via technology funds (yrs. 1 – 5) (possible Cyber security yr. 1 - 2)	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C
	Host a Centre for Health Innovation Challenges in BCU. In collaboration with Welsh Government and Industry. Note break point end of QTR1 2019 2020 is in place. This assumes not used.	D	D	I	I	I	I	I														
DIGITAL INFRASTRUCTURE	Datacentre expansion and consolidation Wxm (Qtr. 2 YR 1), YG (YR 2 estate dependent)	I	C	S	D	I	I	I	I	C												
	Provision of support for Health Board Wide Estates Reconfiguration Schemes e.g. YGC Redevelopment	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Development of ICT infrastructure monitoring and reporting systems (SCOM/ORION) (yr. 3)		S	D	I	I	I	I	I	C												
	Leveraging the benefits of licencing (yr. 2 – 5) (Microsoft Products)		S	D	I	I	I	I	I	I	I	I	I	I	I	C						
	Wide Area Network Transformation (PSBA) “spend to save” – Year 1 – yr3	I	C																			
	Cyber security gap analysis and improvements for threat mitigation yr. 1 - 5	I	D	I	I	I	D	I	I	I	D	I	I	I	D	I	I	I	D	I	I	I
	Core Infrastructure upgrades/expansion/refresh - Network YR 1 – yr5	I	D	I	I	I	D	I	I	I	D	I	I	I	D	I	I	I	D	I	I	I
	IPT Telephony Programme Continuation . Migration of users to telephony system. Year 2 of a 5 year	I	I	I	I	I	I	I	I	I	I	I	I	C								
	Switchboard and paging system rationalisation		SD	I	I	I																
	Replacement of obsolete server operating systems (2003 / 2008)	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	C			
	Strategy and Scope for Office 365 (yr. 1 -3)	D	D	I	I	I	I	I	I	C												
	Migration towards cloud based hosting solutions (Microsoft and NWIS) (BI and Azure)				S	D	D	I	I	I	I	C										
	Desktop Hardware Lifecycle.- Hardware Replacement Programme	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C
WORKFORCE DEVELOPMENT, TRANSPARENCY, SUSTAINABILITY & STANDARDS	Place Marker - possible Provision of Training via Centre of Health Challenges			S	D	D	I	I														
	Workforce learning and development (e.g. HWB, Mentoring Programme, Increased compliance)			S	D	D	I	I	C													
	Sound Financial Management (e.g. CIP projects)		S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C
	General Data Protection Regulations																					
	Place Marker - Repository for guidelines and self help	S/D	D	I	C																	
	Safe Environment - New Ysbyty Glan Clwyd File Library	D/I	I	C																		
	Safe Environment - New Ysbyty Gwynedd Preparation Office	I	I	C																		

Figure 5 – Overall five year plan for Informatics

***Appendix A - Glossary of key national systems used in the Figures 3 and 4***

**Welsh Clinical Portal (WCP)**

The Welsh Clinical Portal is the centre piece for Secondary Care Professionals. It is a secure portal that brings together information about the patient that enables good decisions to be made. As new databases, applications or services are introduced this will be manifested in the WCP as enhanced functionality. It provides more comprehensive information about the patient and enables communication with other professionals involved in delivering their care, putting the patient at the centre of care.

**Welsh Community Care Information Solution (WCCIS)**

WCCIS is a national system for use by Adult Social Services, Children Social Services, Community and hospital mental health clinicians, community and hospital allied health professionals, community nurses and health visitors. The solution will bring together information for social and health care professionals who would otherwise provide care independently of each other.

**Welsh Emergency Department System (WEDS)**

WEDS is a national emergency department (A&E) system. It is a nationally agreed master services agreement with EMIS Health (formerly Ascribe) which can be called for by Health Boards as required. NWIS will be responsible for hosting the infrastructure, integration with other national systems, coordinating implementation projects and managing the national contract.

**Welsh Laboratory Information Management System (WLIMS) Including Blood Transfusion and WTAIL**

LIMS is a nationally hosted system that provides diagnostic services to Primary and Secondary Care settings.

**Welsh Patient Administration System (WPAS – Myrddin)**

The WPAS (Myrddin) is the system that provides the efficient management of people and resources in health care settings.



<b>Report Title:</b>	Review and Approval of Informatics Operational Plan 2019/20
<b>Report Author:</b>	Mr Dylan Williams, Chief Information Officer
<b>Responsible Director:</b>	Mr Dylan Williams, Chief Information Officer
<b>Public or In Committee</b>	Public
<b>Purpose of Report:</b>	<p>The Informatics Operational Plan for 2019/2020 complements the Health Board's Three year Plan for 2019/2022 providing more detail on year one deliverables.</p> <p>This plan provides detail on what Informatics will do over the coming year to deliver its vision. It summarises the projected resources that are available to support the plan. It also details the monitoring and reporting arrangements, which are in place to ensure appropriate governance.</p> <p>The plan remains consistent with the approach of preceding years and is part of a rolling 5-year plan, which has also been subject to review. Our need to get the basics right and focus on the delivery of the plan mean that there will be very few opportunities to introduce new or additional technology outside of those identified within this plan. Priory projects are aligned to Informatics' objectives and include:-</p> <ul style="list-style-type: none"> <li>• Phase 3 WPAS (West). Completion of pilot studies for WCCIS, Reconstitution of WEDS project. Phase 2 of an Electronic Patient Records Programme. These are included in Digital Roadmap projects</li> <li>• Delivery of content to support flow/efficiency based decisions around real time admit discharge and transfer data. Outcomes in real time driven by clinicians to support referral to treatment time measurement. These are included in Data Driven Decision Making projects</li> <li>• A transition programme to review the management arrangements to support good record keeping across all patient record types. This is a service transformation project</li> <li>• A phased and targeted expansion of SKYPE. Further roll out of GovRoam. Extension of Pilots to inform better use of technology in the community. These are included in Digital Mobile Workforce priorities</li> <li>• Progression of year two plans for the Small Business Research Initiative Project that is hosted by BCU on behalf of Wales.</li> </ul>

	<ul style="list-style-type: none"> <li>• Core infrastructure upgrades</li> <li>• Expansion and Consolidation of Networks. Replacement of obsolete server operation systems. Continuation of projects such as Telephony. These are included in Digital Infrastructure priorities</li> <li>• Progression of permanent storage solutions for Health Records – particularly Central area. Development of training programmes for System Owners. These are included in Workforce development, transparency and sustainability and standards projects</li> </ul>
<b>Approval / Scrutiny Route Prior to Presentation:</b>	The paper had been approved by the Chief Information Officer and viewed by the Digital Transformation Group at the meeting held 4/2/19 and recommended for approval
<b>Governance issues / risks:</b>	
<b>Financial Implications:</b>	Budget allocation to be confirmed
<b>Recommendation:</b>	<p><i>The Committee is asked to:</i></p> <p>Approve the Informatics Operational Plan 2019/20</p>

<b>Health Board's Well-being Objectives</b> (indicate how this paper proposes alignment with the Health Board's Well Being objectives. Tick all that apply and expand within main report)	√	<b>WFGA Sustainable Development Principle</b> (Indicate how the paper/proposal has embedded and prioritised the sustainable development principle in its development. Describe how within the main body of the report or if not indicate the reasons for this.)	√
1.To improve physical, emotional and mental health and well-being for all		1.Balancing short term need with long term planning for the future	√
2.To target our resources to those with the greatest needs and reduce inequalities	√	2.Working together with other partners to deliver objectives	√
3.To support children to have the best start in life		3. Involving those with an interest and seeking their views	√
4.To work in partnership to support people – individuals, families, carers, communities - to achieve their own well-being		4.Putting resources into preventing problems occurring or getting worse	√
5.To improve the safety and quality of all services	√	5.Considering impact on all well-being goals together and on other bodies	√
6.To respect people and their dignity	√		
7.To listen to people and learn from their experiences	√		
<b>Special Measures Improvement Framework Theme/Expectation addressed by this paper</b>			

<http://www.wales.nhs.uk/sitesplus/861/page/81806>

**Equality Impact Assessment**

**N/A**

*Disclosure:*

*Betsi Cadwaladr University Health Board is the operational name of Betsi Cadwaladr University Local Health Board*



GIG  
CYMRU  
NHS  
WALES

Bwrdd Iechyd Prifysgol  
Betsi Cadwaladr  
University Health Board



# Informatics Operational Plan

2019/2020

Dylan Williams, Chief Information Officer



## Introduction

The Informatics Operational Plan for 2019 2020 complements the Health Board's Three Year Plan for 2019 2022. This plan provides additional detail on what Informatics will do over the coming year to support the Three Year Plan and its long term vision.

It summarises the projected resources that are available to support the plan. It also details the monitoring and reporting arrangements, which are in place to ensure appropriate governance

## Strategic Context

It is acknowledged that the NHS will continue to face significant challenges due to increasing demand, a growing and aging population, rising expectations and financial constraints. It must do this with an absolute focus on the delivery of high quality health services and the demonstration of best value for taxpayers' money <sup>(1,2)</sup> whilst bringing care closer to home <sup>(2)</sup> Informatics is a crucial enabler in meeting the challenges by bridging service divides and enabling change through digitally enabled care. Informatics is widely acknowledged to be "important to the future sustainability of NHS Wales, supporting the delivery of better outcomes for patients and making more efficient and effective use of scarce financial and human resources" <sup>(3,4,5)</sup>.

As an enabler, Informatics will be required to support the delivery of a seamless and sustainable service required by The Social Services and Well Being (Wales) Act 2014 and the Well Being of Future Generations (Wales) Act 2015.

## 2017 2018 Deliverables

Throughout 2018 2019, Informatics delivered a meaningful programme of work to meet challenges <sup>(6)</sup>, it:-

- Increased bandwidth and processing capacity and improved business continuity by delivering Discretionary Capital Schemes designed to reconfigure, rationalise and support business continuity e.g. Public Sector Broadband Aggregation (PSBA) and data centre expansion (East).

- Delivered services in challenging circumstance. Enacting Business Continuity Plans for Health Records as a result of Library infrastructure failings in Central.
- Moved closer to rationalising core systems by upgrading the Welsh Patient Administration System (WPAS) in East (phase 2 of the project).
- Entered into an agreement with the Welsh Government to host a centre of excellence for Small Business Research Initiatives within Health on behalf of Wales and established the centre.

## Issues of Significance

Progress was achieved in the face of significant constraints. These constraints remain, providing context for this plan.

*Strategically*; whilst the high-level vision for the National Welsh Informatics Service (NWIS) is clear, there remains a need for greater direction on "once for Wales" priorities and addressing known barriers to progress. Many National systems have been significantly delayed. It is widely acknowledged and reported that there is a substantial way to go until "outdated IT systems are replaced" <sup>(3)</sup> and that required resilience and functionality is in place to support patient care and underpin service transformation <sup>(3,4,5)</sup>. Despite clear failings to deliver, the Auditor General has found little reason to be optimistic that things are changing" <sup>(3,5)</sup>

*Locally* despite progress against special measures actions, the Health board continues to face significant challenges in relation to the financial position and some key areas of performance. This includes Informatics targets such as clinical coding timeliness and clinical coding completeness.

The historic under investment in Informatics Services <sup>(4,7,8,9)</sup> both Nationally and Locally mean that constraints are faced with supporting transformation and service efficiency <sup>(8)</sup> leading us to maintain an approach of "keeping the lights on"

The plan remains consistent with the approach of preceding years, which is *to implement technology, to maintain and improve our existing infrastructure and systems whilst supporting patient care, service transformation and growing our capacity and capability.*

This annual plan is derived from a rolling five-year plan, which is detailed in Appendix 1. The plan has been developed to underpin service needs and support the delivery of a number of strategic developments in Digital Records, Analytics, Information Management and Information Communications Technology.

Our 2019 2020 plan sets out what we will do over the coming year to support the delivery of our vision which is based on principles from “Informed Health and Care; A digital Health and Care strategy for Wales (2015). Informatics driven work will produce:-

## OUR VISION



Our approach and pace to deliver the vision considers resource availability, National, local and legislative context which influences priorities, direction and pace of delivery and our previously published “guiding principles” <sup>(10)</sup>.

Our continued need to “get the basics right” and focus on the delivery of objectives, will result in limited opportunities to introduce new or additional technology outside of those identified within this plan or emergent priorities, which are driven by legislative or safety requirements. Any that are will need to be agreed and prioritised against criteria aligned to strategic objectives, statutory compliance, service need, (e.g. by reducing risk or enhancing continuity), or the delivery of transformational/ financial benefits. They must also be delivered within the resource available to maintain financial sustainability

## Informatics Objectives

In line with the 2018 2019 plan, the 2019 2020 plan will be achieved through implementing a range of incremental projects to deliver the following objectives:-

Figure 1; Informatics Objectives



## Priorities for 2019 2020

The plan for 2019 2020 depicted on page 7 is year one of the digital health section of BCU's Three Year Plan and year one of the rolling 5 year plan which forms Appendix 1.

It catalogues the projects that will be undertaken to deliver each of the objectives listed. High-level timescales for projects are detailed along with "rolling" schemes and anticipated benefits.



As shown, Nationally based Informatics priorities that will further our "**Digital Roadmap**" include:-

- Phase 3 of the Welsh Patient Administration Project, which supports the acute hospital care programme. In 2019 2020, we will replace the commercial patient administration system that is currently in use in the West. During this time we will **underpin service transformation** by continuing to standardise processes related to this system before merging three instances of the administration system into one unified National system circa 2020 2021 (phase 4).

Cost savings circa £140k per annum will be realised once we have achieved a single instance of the Welsh Patient Administration System (WPAS). This will contribute to the reduction of our financial deficit. (Central phase 1 was completed in 2017 2018; East phase 2 was the focus for 2018 2019 and West is phase 3).

A unified WPAS will pave the path for data sharing between other National systems (via interfaces) and "unlock" functions of National Systems, which rely on a single data feed e.g. supporting Patient Reported Outcome Measures (PROMs) and Patient Experience Measures (PREMS). Enhancements to the National Patient Administration System which are planned will also partly support

the management of patients along a Single Cancer Pathway (via functionality referred to as Tracker 7).

- Completing pilot studies that commenced in 2018 2019. This will inform wider installation and utilisation of the *Welsh Community Care Information System*. Assuming functionality delivery to specification and plans, the 2020 2023 focus will move to a phased implementation in conjunction with partners and in line with best value to deliver the integrated Health and Social care system. This system underpins transformation as it is designed to enable Health and Social Care professionals to work together to provide care closer to people's homes. This project therefore supports Mental Health and Care Closer to Home programmes.
- Re-constituting the previously paused Welsh Emergency Department System project which assists with the management of the patient within the Emergency department and the patients' pathway. This project will support the unscheduled care programme to transform the way that our Health Professionals work in delivering services and improving patient care. Its final phase circa 2022 2023 will result in a single Welsh Emergency Department System across BCU. This is dependent upon a single PAS

To supplement these Nationally based priorities and to accelerate the Health Board's journey to an electronic patient record, Digital Roadmap priorities in figure 2 also include a number of local innovative solutions. These aim to bridge the well-publicised challenges and gaps of National solutions <sup>(3,4,5)</sup> :-

- Completing the deployment of the paediatric nursing mobile Application (CHAI = *Connected Healthcare Administrative Interface*) on the acute paediatric wards within our hospitals. This will focus on the continued digitisation of nursing records and the

use of mobile devices to move process closer to the patient's bedside. Efficiency savings in nursing administrative times have been evidenced to be circa 30 percent for this project. This project will be superseded with National nursing documentation as available.

- Phase 2 of a local Digital Health Record (DHR) Project will strengthen our investment and approach to the delivery of an electronic patient record. This project will see the creation and installation of a local document repository that delivers and receives outputs to and from National Products. It will support the generation of electronic documents that will “build up” the patients electronic record. As electronic records will support the removal of barriers to multidiscipline and multi-site care this project supports multiple transformation programmes, efficiency and patient safety agendas.



Many of our objectives require us to maintain our emphasis on getting the basics right, **Data Driven decision making** is no exception. A concentration on process will be required to leverage the benefits of the tools that we already have. Data Driven decision making will only be possible if we have accurate real time data to inform business intelligence. Specific priorities for 2019 2020 therefore include:-

- Delivering content to support flow/efficiency based decisions around real time admit discharge and transfer data.
- Outcomes in real time driven by clinicians that will also support referral to treatment time measurement.

We will also continue work to provide administrative data to support clinical engagement, improve data quality and patient care.

The Intelligent Reporting Information System will continue to be developed in 2019 2020, dashboards built upon content are

planned for bed management and infection control. Improved availability of “meaningful” data will **Underpin Service Transformation** by ensuring that data is available to support decision making.



In addition to **Underpin Service Transformation** a transition programme will be developed in 2019 2020 that will review the management arrangements to support good record keeping across all patient record types (e.g. paper and digital). These will include Mental Health (e.g. CAHMS, Drug and alcohol); Radiology, Audiology, Posture & Mobility Service (formerly ALAC), Sexual Health, Speech and Language Therapy, Community Hospitals, Child Health, Podiatry, Emergency Department, Physiotherapy, Occupational Health, Acute Records, Oncology, Midwifery, Genetics, Diabetics, Primary Prisoner Clinical Record. This programme and its outputs will be designed to meet legislative requirements (GDPR) and to support the delivery of recommendations detailed in Health and Social Care Advisory Service and Ockenden reports.



Plans to enable a **Digital Mobile Workforce** during 2019 2020 will be supported through dedicated resources that were appointed at the end of 2018 2019. Priority projects include:-

- A phased and targeted expansion of Skype for business which supports, instant messaging, group conversations and content sharing. Efficiency and financial savings from this project will be captured via the travel efficiencies group and will contribute to BCU cost savings. NWIS has also committed to enabling SKYPE services in GP practices to support cluster working and enable easier communications.
- Work will continue on the roll out of GovRoam across public sector sites in North Wales. This will enable BCU staff to connect to the BCU corporate Network from any Public Sector

Site or premises where wireless network coverage exists.  
The initial roll out of GovRoam during 2018 has proved successful in enabling access to support community working for mobile users.

- Extension of mobile technology for community resource teams teams will also inform better use of mobile technology to support daily duties and enable efficiencies










# Informatics Operational Plan 2019 OVERVIEW



[L] = Local Solution

Key for Planned Programme  
S - Project Start  
D - Design  
P - Procurement  
I - Implementation  
C - Project Close

Figure 2.

STRATEGIC PRINCIPLE / OBJECTIVE		PROJECT	EXISTING SCHEME	2019-20				BENEFIT				
				Q1	Q2	Q3	Q4	SA	PB	SB	FB	CB
 <b>DIGITAL ROADMAP</b> Adopting a digital by default principal, capturing data once and reusing it, minimising the use of paper and working towards "paper free at the point of care".  The building blocks of a single patient view which can be accessed by those receiving, providing or supporting patient care.		[L] Paediatric Mobile Nursing Application (Chai) / Replacing Paper Nursing Documentation (N)	✓	D	I	I		✓	✓	✓	✓	
		[L/N] Improving Assurance of Results Management (Stopping Printing Results) - Dependent on National Programme	✓	D				✓	✓	✓	✓	✓
		[L] Local Document Repository/Digital Forms (Exploration to Accelerate the Journey to the EPR). Phase 1 Business Case. Phase 2 Procurement and Implementation	✓	P	P	I	I	✓	✓	✓	✓	✓
		Welsh Patient Referral Service (National On-line Electronic Referral System also known as WAP)	✓	D	D	D	D	✓	✓	✓	✓	✓
		Welsh Care Record Service Programme (National Repository for Information & Sharing Across Wales). Phased supply of local patient records	✓	D/I	D/I	D/I	D/I	✓	✓	✓	✓	✓
		Welsh Clinical Portal (National Portal to Record and View Patient Information) - Extensions & Handover System.	✓	D/I	D/I	D/I	D/I	✓	✓	✓	✓	✓
		Welsh Image Archive System (National Sharing PACS Images Across Wales C21:X21s - Yr2 ) - Support										
		Welsh Results Reports Service (WRRS - National Repository for Results Reporting & Sharing Across Wales) - Support & Comms	✓	D/I	D/I	D/I	D/I	✓	✓	✓	✓	✓
		Welsh E-Documents Reporting (National E-docs from within the WCP) - Hep-C.	✓	I				✓	✓	✓	✓	✓
		Welsh E-Documents Reporting (National E-docs from within the WCP) - Digitisation of Nursing	✓	I	I			✓	✓	✓	✓	✓
		[L] Digital Dictation Business Case. Approval and Funding (yr1). Funding dependent further work year 2 - 4	✓	P	I	I	C	✓	✓	✓	✓	✓
	Com, MH & S/Care EPR	Welsh Community Care Information System (WCCIS) (National Integrated Health and Social Care System)	✓	I	C	D	I	✓	✓	✓	✓	✓
		Welsh Hospital Electronic Prescribing and Medicines Administration System (WHEPMA)		S	D	D	D	✓	✓	✓	✓	✓
	Core Systems	Medicines Transcribing Electronic Discharge (MTED) - Recording medicines and adding them to a discharge letter	✓	C				✓	✓	✓	✓	✓
		Welsh Patient Administration System (WPAS) East (National PAS Implementation and Standardisation).	✓	C				✓	✓	✓	✓	✓
		Welsh Patient Administration System (WPAS) West (National PAS Implementation and Standardisation).	✓	S	D	I	I	✓	✓	✓	✓	✓
		Welsh Emergency Department System (WEDS) (National ED System - Yr. 1 - Local implementation MPI interface. 2021 2022 work dependent on single PAS WEDS with full interfaces	✓	S	S	D	I	✓	✓	✓	✓	✓
		Neopost Implementation. Supporting an Estates project for more efficient ways to send Mail and digital communications	✓	I	I	I	C	✓	✓	✓	✓	✓
 <b>DATA DRIVEN DECISION MAKING</b> Providing tools to put data from a variety of sources at the heart of decision making in a timely and user friendly manner. Providing insights to inform effective decisions through synthesising information from a variety of sources.		[L] Local Data Warehouse expansion (New build\infrastructure refresh yr1 and further data acquisition yr. 2-5)	✓	I	I	I	I	✓	✓	✓	✓	✓
		Live ADT- organisation depending, mainstreaming real time dashboards	✓	I	I	I	I	✓	✓	✓	✓	✓
		Mobile dashboard via Power BI (yr. 1 – 2 NWIS Dependent)	✓	I	I	I	C	✓	✓	✓	✓	✓
		Improved Demand and capacity modelling capability using latest technology and learning	✓	D	D	S	I	✓	✓	✓	✓	✓
		[L] Patient Management Status Boards (e.g. red to green and inquests, including Bed Management)	✓	D	I	I	I	✓	✓	✓	✓	✓
 <b>UNDERPINNING SERVICE TRANSFORMATION</b> Supporting services to combine technological opportunities with new business processes, that enable us to meet our Local and National responsibilities.		Detailed annual architecture review and technology roadmap - Systems(yr.1 to year 5)	✓	C		S	D	✓	✓	✓	✓	✓
		[L] Expand on technology to track assets, patients, pharmaceuticals and resources (yr. 1 to yr. 2)	✓	I	I	I	C	✓	✓	✓	✓	✓
		Leverage the value of national systems via intelligent integration/stapling/context sharing. (yr. 1 to yr. 2)	✓	I	I	I	I	✓	✓	✓	✓	✓
		Portal to PAS stapling to view data in one place to drive clinical work/efficiencies. (yr. 2 qtr. 2)	✓					✓	✓	✓	✓	✓
		IG Toolkit - Supporting BCU in Meeting the Requirements	✓					✓	✓	✓	✓	✓
 <b>DIGITAL MOBILE WORKFORCE</b> Providing digital tools to support staff to undertake duties, work together and communicate effectively from a variety of locations - reducing overheads, supporting strategies and enabling "time to care".		BCU Standardisation to support the introduction of a single instance of WPAS	✓	I	I	I	I	✓	✓	✓	✓	✓
		[L] Mobile Device Management Strategy, (Dependent on Publication of National Mobile Strategy Dev due Summer 2018)	✓	D	D	D	I	✓	✓	✓	✓	✓
		Further Rollout of Skype for Business, (yr. 1 – 2)	✓	I	I	I	C	✓	✓	✓	✓	✓
		Single sign on including context sharing, (yr. 1 – 3)	✓	I	I	I	D	✓	✓	✓	✓	✓
		Information Technology Self-Service web portal strategy and business case (yr1 qtr. 3)	✓	S/D	I	I	C	✓	✓	✓	✓	✓
 <b>MANAGING INNOVATION &amp; EMERGING</b> Learning and innovating by providing accelerators of digital transformation. Collaborating with innovators and entrepreneurs and suppliers to encourage innovation.		Innovation management and delivery via technology funds (yrs. 1 – 5) (possible Cyber security yr. 1 - 2)	✓	S/D	I	I	C	✓	✓	✓	✓	✓
		Host a Centre for Health Innovation Challenges in BCU. In collaboration with Welsh Government and Industry. Note break point end of QTR1 2019 2020 is in place. This assumes not used.	✓	D	I	I	I					
 <b>DIGITAL INFRASTRUCTURE</b> Providing, developing and maintaining a secure, flexible and robust infrastructure to enable a digital future.  Getting the "basics right" and building an Infrastructure to support transformation.		Datacentre expansion and consolidation Wxrn (Qtr. 2 YR 1), YG (YR 2 estate dependent)	✓	C	S	D	I	✓	✓	✓	✓	✓
		Provision of support for Health Board Wide Estates Reconfiguration Schemes e.g. YGC Redevelopment	✓	I	I	I	I	✓	✓	✓	✓	✓
		Development of ICT infrastructure monitoring and reporting systems (SCOM/ORION) (yr. 3)	✓	S	D	I	I	✓	✓	✓	✓	✓
		Leveraging the benefits of licencing (yr. 2 – 5) (Microsoft Products)	✓	S	D	I	I	✓	✓	✓	✓	✓
		Wide Area Network Transformation (PSBA) " spend to save" – Year 1 – yr3	✓	C				✓	✓	✓	✓	✓
		Cyber security gap analysis and improvements for threat mitigation yr. 1 - 5	✓	D	I	I	I	✓	✓	✓	✓	✓
		Core Infrastructure upgrades/expansion/refresh - Network YR 1 – yr5	✓	D	I	I	I	✓	✓	✓	✓	✓
		IPT Telephony Programme Continuation. Migration of users to telephony system. Year 2 of a 5 year	✓	I	I	I	I	✓	✓	✓	✓	✓
		Switchboard and paging system rationalisation	✓	S/D	I	I	I	✓	✓	✓	✓	✓
		Replacement of obsolete server operating systems (2003 / 2008)	✓	I	I	I	I	✓	✓	✓	✓	✓
		Strategy and Scope for Office 365 (yr. 1 - 3)	✓	D	I	I	I	✓	✓	✓	✓	✓
		Migration towards cloud based hosting solutions (Microsoft and NWIS) (BI and Azure)	✓			S	D	✓	✓	✓	✓	✓
		Desktop Hardware Lifecycle- Hardware Replacement Programme	✓	S/D	I	I	C	✓	✓	✓	✓	✓
		Place Marker - possible Provision of Training via Centre of Health Challenges	✓		S	D	D	✓	✓	✓	✓	✓
		Workforce learning and development (e.g. HWB, Mentoring Programme, Increased compliance)	✓		S	D	D	✓	✓	✓	✓	✓
 <b>WORKFORCE DEVELOPMENT, TRANSPARENCY, SUSTAINABILITY &amp; STANDARDS</b> Nurturing a digital culture throughout the organisation. Supporting staff to develop and provide services that meet the efficiency, quality and sustainability challenges that we face. Adopting evidence based best practice and meeting our legislative requirements		Sound Financial Management (e.g. CIP projects)	✓	S/D	I	I	C	✓	✓	✓	✓	✓
		General Data Protection Regulations	✓					✓	✓	✓	✓	✓
		Place Marker - Repository for guidelines and self help	✓	D	I	C		✓	✓	✓	✓	✓
		Safe Environment - New Ysbyty Glan Clwyd File Library	✓	I	C			✓	✓	✓	✓	✓
		Safe Environment - New Ysbyty Gwynedd Preparation Office	✓	I	C			✓	✓	✓	✓	✓

CODE	BENEFIT	EXPLANATION
SA	Strategic Benefit	The objective underpins the deliver of strategic objectives for the Welsh government, the Health Board or Informatics e.g. the objective is essential to deliver care to the community etc.
PB	Patient Benefit	The objective will improve or support the patients experience or outcome. This includes Direct Patient Benefits (DPB) and Indirect Patient Benefits (IPB). For example and upgrade to Symphony will have a direct patient benefit by improving the number of patients even within 4 hours, or reducing Health records inefficiency through process improvements will indirectly benefit the patient the patients by reducing the number of lost records.
SB	Staff Benefit	The objective will improve or support staffs experience, satisfaction, workload. Etc. motivation and workload. As patients receive better care from staff who feel happier.
FB	Financial Benefit	The objective will reduce costs current borne by Informatics or the Health Board or avoid costs altogether e.g. capital or revenue expenditure will be reduced 1% as a result of the objective
CB	Compliance Benefit	The objective will support or improve compliance against standards and legislation e.g. Health and Care, Data Protection

- Digital mobile workforce priorities also include the extended use of a tool that supports “single sign on” within all Emergency Departments. Dedicated Research and development for this tool will be scheduled to increase the number of applications that can be accessed through it and to investigate a “follow me anywhere desktop”.
- Device testing for WCCIS is also planned pending delivery of a mobile Application from NWIS.

As access to health board systems and applications on mobile devices becomes more commonplace a significant amount of work will be required to ensure safe and secure integration of android and apple devices to our networks



To progress the **Management of Innovation and Emerging Technologies** we will build upon 2018 2019 foundations. Verbal commitment to fund the Centre of Excellence for Small Business Research Initiatives within Health on behalf of Wales has been provided for 2019 2020. Areas of focus which will be progressed during 2019 2020 include working with partners to identify ways to “support people to stay healthy and remain independent irrespective of geography and connectivity constraints”. The Centre also plans to collaborate with public Health Wales in the initial quarters of 2019 2020 in areas of unmet needs.

Informatics will also seek to establish closer working relationships with innovation forums both internally and externally to foster a collaborative approach which will support and inform technological advancements.



As in previous years, **Digital Infrastructure** priorities will remain the primary source of Informatics Discretionary Capital spend; accounting for approximately 85 percent of

spend. Rolling programmes of work are and will always be required to “get the basics right” and ensure that our digital infrastructure is safe, secure and robust enough to enable a digital future.

Priority areas of work are listed on page 13, they include core infrastructure upgrades and expansion/ consolidation of networks. Replacement of obsolete server operating systems (2003 and 2008). Priorities shown also include the continuation of projects such as the migration of our telephone infrastructure from an “end of life” solution to one, which is fully supported and capable of underpinning service change once fully implemented.

A requirement to more proactively manage and secure our data, which is borne through the growing use of systems, the increased collection of data to manage and support patients and improved legislation (e.g. General Data Protection Regulations) will see an increased concentration on the plethora of disparate systems deployed throughout the health Board.

Outputs for 2019 2020 will include security assessments and policies. The output of these assessments will undoubtedly inform priorities for future years



**Workforce Development, Transparency, sustainability and Standards** will form a core part of the work required for 2019 2020 and beyond. Several Projects are planned and

will include:-

8

- Improving the safety and quality of our services. For example whilst we are committed to digitising patient records, we will need to ensure that the services that we deliver are safe, effective and sustainable. A permanent solution for Health Records storage in Ysbyty Glan Clwyd will be required circa 2022 2023 along with the delivery of a new clinic preparation area in Ysbyty Gwynedd circa 2019 2020 as we will remain dependent upon paper records for some time

- Development of training programmes for System Owners throughout BCU to mitigate risks relating to critical systems managed by staff who lack appropriate knowledge and or skills.
- Review our Informatics performance and assurance framework to ensure continued confidence in the way we work.

Whilst a number of initiatives will be furthered in 2019 2020 we will also need to spend time investigating; “additional” enablers, reflecting upon gaps in National offerings, and building business cases to support further work where appropriate. Our plans for 2020 and beyond may therefore be refined to reflect these.

Examples of initiatives/schemes that will be investigated in 2019 2020 which will require additional funding are likely to include:-

- Future phases of Digital Health Record and Health Records Transition Programme
- Microsoft – Office 365 will be Nationally Procured, costs are currently unknown, Health board Costs are anticipated to be in the region of £1-2m in 2020 2021
- Support for transformation work which is identified within the Three Year Plan which will require Business Analysis
- Mobile working in community areas/teams.

## Benefits

Our plan will deliver a number of benefits as we move towards delivering our vision. At a high level this is depicted in figure 3.

As shown on page 7, deliverables have multiple anticipated benefits e.g. improving the assurance of results management, which provides benefits in all measurement areas. Analysis highlights that strategic alignment will be furthered through the delivery of

multiple projects particularly those, which further the “Digital Roadmap”, “Data driven decision making” or those which further a “digital mobile workforce”. Similarly, to the 2018 2019 projects the greatest benefit areas from this years priorities are anticipated to be to patient, staff and finance.

These will be furthered through the delivery of projects such as the implementation of a single Patient Administration System, greater integration of systems, the continued development of tools to support the reporting and information needs of the organisation and a focus to improve core infrastructure

*Figure 3; Expected outcome of Plan on our Vision*

### EXPECTED OUTCOME OF PLAN ON OUR **VISION**



## Challenges or risks to the delivery of the plan

- Challenges posed by the National Programme and a once for Wales approach e.g. National Infrastructure and Products which are not delivered as specified or on time
- Balancing and improving the delivery of services whilst meeting increasing demand and implementing new systems or processes to support the needs of the Health board
- Ensuring that equipment is fit for purpose. An infrastructure which is built upon aged systems proves difficult or



impossible to integrate to support everyday working or service transformation in any meaningful way.

- Capacity to invest in and maintain our infrastructure and address critical risks resulting from aging IT equipment and 'unsafe' physical infrastructure
- Ability to contain demand for services and products in light of emerging technology, service reconfiguration and wide spread estates schemes
- Ability and capacity to effectively engage with the workforce and for the workforce to embrace change management processes required to leverage the benefits of technology. Healthcare professionals and leaders will need to reimagine and advise on how work will need to be done.

## Governance

Governance arrangements for Informatics highlighting the groups and committees concerned with ensuring the overall direction, effectiveness, supervision and accountability of Informatics is depicted on page 11.

The Governance structure has been revised from the previous year to show the Digital Transformation Group reporting to both the EMG and the newly established Information Governance and Informatics Committee (IGIC). As shown in figure 4 the IGIC will largely replace the Finance and Performance committee in relation to Informatics Governance. It is anticipated that the committees remit will support additional scrutiny by providing more time to focus on Informatics related strategy, plans, performance, risks and issues.

Clinical leadership will continue to be provided by Medical and Nursing Informatics officers who form part of the Informatics Senior Management Team. This supports patient focus as clinical input is

at the core of all of our decisions including reviewing and agreeing requests for resource, and transformation bids.

As noted within the diagram, approval of this operational plan is gained from the IGIC on behalf of the Health Board. In agreeing this document, the committee are confirming that:-

- They have provided scrutiny and assurance for the Informatics Operational Plan.
- The Operational Plan is an accurate reflection of the priorities that we need to deliver to support the visions and plans of the Health Board and its partner agencies e.g. the Welsh Assembly.
- The Operational Plan provides a comprehensive overview of all key factors e.g. challenges and opportunities relevant to the delivery of these plans.

Whilst the IGIC are responsible for approval and progress monitoring, progress against elements within the plans may also be provided to relevant committees upon request.

Progress against operational plans will be reported to the IGIC via quarterly reports. Updates against the plan will be by 'change or exception' and a year-end summary report will be produced.

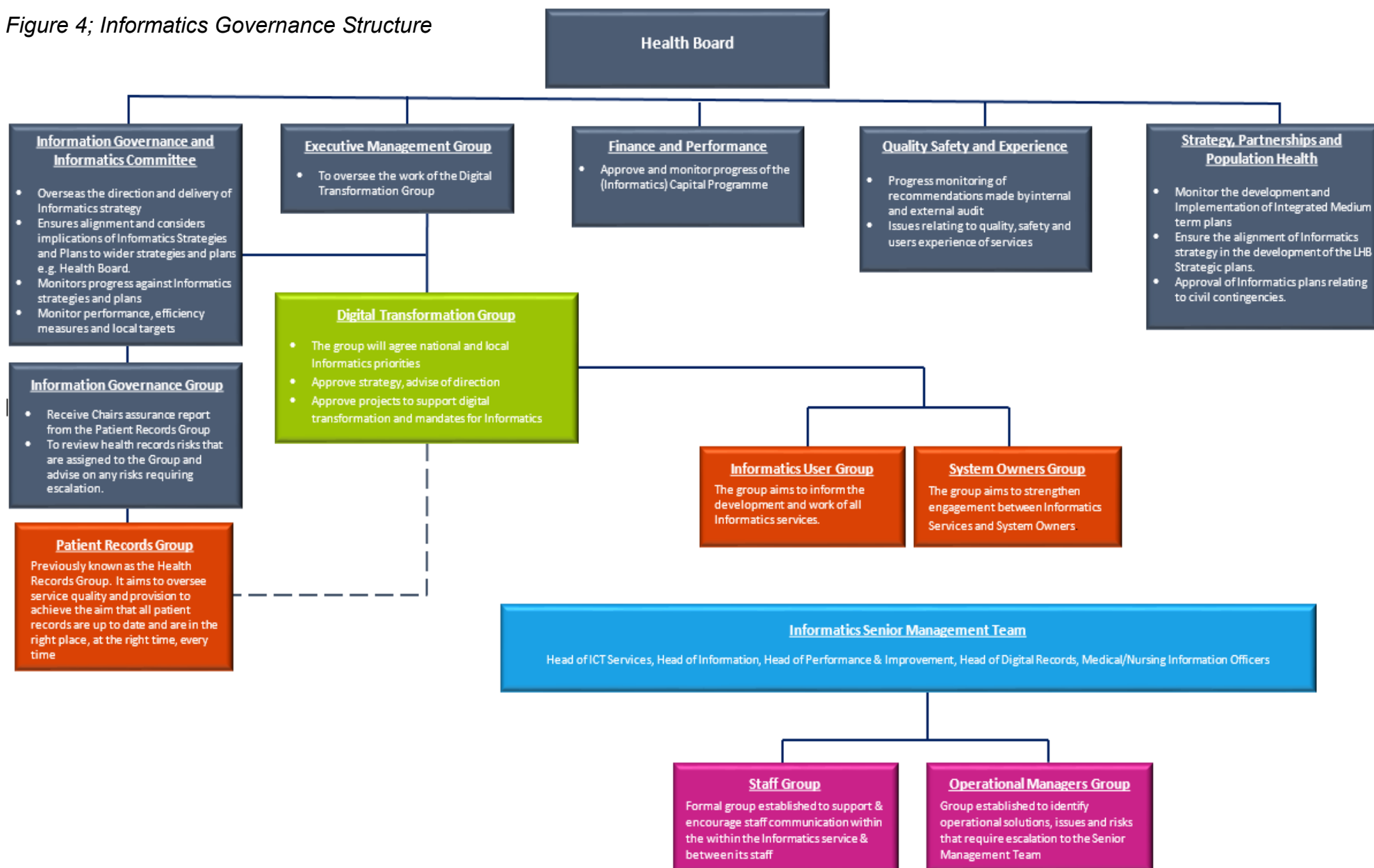
## Workforce Plan



Informatics services were historically delivered by five functional areas as depicted. During 2019 2020, we will aim to reconfigure our services to four functional areas which will be designed to support operational effectiveness and

the delivery of our operational

Figure 4; Informatics Governance Structure



and strategic plans. Interim arrangements are currently in place to support this change.

During 2018 2019, additional revenue resources were provided to support service delivery, to fund approved cost pressures and for specific projects (WCCIS). As a result Whole Time Equivalent (WTE) budgeted numbers were increased by 17 to 422. Main beneficiaries were Clinical Coding to address a previous cost pressure, Health Records to support legislative changes and ICT to support service delivery and reduce the risks posed by our over reliance on temporary staff.

It is acknowledged that we have been slow to leverage the full benefits that would have been available from the increased staffing due recruitment timescales (all areas), a lack of suitable candidates (ICT and Projects) and lead-time required to understand the impact of legislative changes and design services appropriately (Health records).

Increased recruitment activities during the last two quarters of 2018 2019 should enable full benefits of these posts in 2019 2020 and full spends of increased allocation in 2019 2020.

Benefits which can be identified to date include a 20 percent reduction in fixed term staffing from March 2018 to November 2018. Whilst further reductions are anticipated and are required, reductions to date will reduce risks to continuity of services and support the retention of essential knowledge and skills.

Recruitment remains challenging for fixed terms posts that are required for specific projects (WPAS, SBRI Centre). This has resulted in the use of agency, bank staff and overtime. Whilst an increase WTE actual will support service delivery in many areas it is

acknowledged that the nature of our work will always require some fixed term support.

### Workforce Planning

29 percent of our workforce are aged over 50 and 19% are aged 30 or below. Typically staff in the highest age bands hold the lengthiest tenure (the greatest organisational memory) and benefit from higher pay bands as they are employed in our most skilled roles.

Targeted programmes of work will be continue to mitigate risks. These will include skill mix reviews; robust documentation of operating processes, risk assessment reviews relating to over reliance on key individuals and an additional focus on succession planning and apprentice opportunities for roles which pose the greatest risk.

### Support Train and Develop our Staff

We will continue to invest in our staff to ensure that Informatics' Professionals are well placed to inform and enable safe and efficient health care. A review of Informatics training programmes which is linked to pay bands and informed by workforce data and Training needs Analysis findings will be used to inform training plans and provision for 2019 2020

Professional training courses<sup>13</sup> which were offered in 2018 2019 such as Project Management are likely to remain a feature and will help to ensure a high level of professionalism within services with the numbers of qualified practitioners increasing to service our expanding portfolios. Training programmes for system owners will also be developed within the first two quarters of 2019 2020 based upon findings from training needs analysis.

Findings from initiatives such as the HWB and lessons learnt from setting up a “bank”, to service the SBRI Centre of Excellence will be reviewed. It is anticipated that these will be used to inform a wider “talent bank pilot” that will aim to support workforce sustainability and succession planning within Informatics.

Whilst informal mentoring programmes are in place within Informatics we will seek to formalise these and extend the offering this will enable staff to benefit from the experience and networks of more experienced colleagues and support their wider development needs.

December 2018 data shows that 80% of staff have received an appraisal to review their performance and support their development (BCU average of 60%) and that 92% of staff were fully compliant with their mandatory training (BCU average of 84%). Established programmes of work will continue in 2019 2020 to maintain and improve compliance by providing support to service areas with the lowest compliance rates.

### Staff Engagement

The staff group has lost prominence during 2018 2019, a review of its membership and remit will be conducted in 2019 2020 to ensure that it is re-established and remains fit for purpose. Whilst the sickness absence rate for Informatics is consistently below the BCUHB average, areas of increased focus are likely to include staff health and well-being as we look support staff through change and in busy and pressure environments. The group will also identify and manage improvements that are required following analysis of the Staff Survey findings that were received in January 2019.

### Financial Plan

Our Draft Strategic Outline Programme (approvals will be requested in Quarter 2) sets out the challenges of delivering our vision and highlights that the draft forecast investment required for delivering major digital transformation in the organisation over the next three years stands at over £20m capital and £20m for revenue <sup>(9)</sup>.

As Informatics fully acknowledges the requirement to operate within the limits of the funding, available our plans are predicated on resources, which are available.

### - Discretionary Capital - To be updated

Informatics discretionary allocation requests for 2019 2020 were in the region of £5 million. This was less than 2018 2019 request of circa £6million as we have been clearer about our capacity to manage any funds which are allocated within year.

Due to the funding pot available within BCU and the funding requirements from other scheme areas such as Estates, Mental Health and Medical Devices, a risk-based approach has been taken to prioritising Informatics schemes within a cost envelope of **xx Allocation Unknown TBC currently assuming Circa 3 Million, figure to be updated once known**. As in previous years schemes have been prioritised by considering statutory compliance, service continuity, risk reduction and the projects ability to transform services and deliver benefits.

**Figure x** details the schemes<sup>14</sup>. As indicated these mirror our objectives e.g. Digital Roadmap and Digital Infrastructure. The primary area of investment for 2019 2020 remains consistent with previous spends and will be focused on our Digital Infrastructure. 90 percent of anticipated spend is in this area to combat challenges from a backlog of maintenance and to ensure that our digital infrastructure is safe, secure and robust enough to enable a digital future.

Investments will be reassessed throughout the year to reflect any changing quality, safety or efficiency issues.

Delivery and monitoring of Capital schemes will be managed through established forums

Figure x *Informatics planned Capital expenditure in 2018 2019* to be revised when allocations are agreed

Cap Code		2018 2019 Re- provision	2019 2020 Capital	Total Project Spend
	<b>DIGITAL ROADMAP</b>			
	Welsh Patient Administration System (WPAS) West	50,000	19,000	69,000
N/A	Local Document Repository/Digital Forms - phase 1		300,000	300,000
	<b>DATA DRIVEN DECISION MAKING</b>			
	Software upgrade in Auditbase to support clinical outcome measurement		16,000	
	<b>UNDERPINNING SERVICE TRANSFORMATION</b>			0
	<b>DIGITAL INFRASTRUCTURE</b>			0
1B52	IPT Telephony Programme Continuation. Migration of users to telephony system		390,000	390,000
	Area West - FMS Critical Monitoring System for Pharmacy		10,200	10,200
1B94	Wide Area Network. Wireless Expansion and Upgrades		180,000	180,000
	<b>Core Infrastructure upgrades/expansions</b>			<b>2,245,000</b>
	- Access Control System (ACS) Replacement Program		250,000	
1B89	- Perimeter Security		60,000	
	- Resilient Server Loads Balancers		30,000	
	- Server virtualisation expansion and refresh		175,000	
	- YG Radiology - Network Cabinet refresh and comms room build		55,000	
	- Paging Infrastructure Refresh/Replacement		25,000	
1B86	- LAN Phase 3 Switch Equipment Replacement DGH & Community		750,000	
1B90	- Hardware replacement		800,000	
1B88	- Single Sign On expansion	0	100,000	
	<b>Total</b>	<b>50,000</b>	<b>3,160,200</b>	<b>3,194,200</b>

#### - Revenue - section to be updated when position is known

In 2018 2019 Informatics contributed some £800k towards the health boards underlying deficit. This was possible due to increased funding and delays in leveraging the full benefits of this. Increased recruitment activities during the last two quarters of 2018

2019 will increase staffing costs considerably but these will remain within the cost envelope allocated.

The revenue allocation for Informatics which will be detailed in Figure x when known is currently unconfirmed. For the purposes of planning it has been anticipated to be circa seventeen million pounds which is in line with the 2018 2019 allocation.

Figure 6; *Informatics Revenue 2019 2020 to be inserted once finalised.*

Whilst we await the distribution of individual savings targets for Corporate departments we have identified Informatics costs saving schemes for 2019 2020.

- PSBA – £200K. This scheme realises savings available due to contract re-negotiation with NWIS for Health Board Access to the All Wales Data Communication network (Public Sector Broadband) and an ongoing programme of work which is being undertaken to reconfigure and rationalise our usage. This programme of work is due to complete in 2019 2020.
- Retire and Return – £5k estimated. Savings will be made as contributions will no longer be made to the NHS pension costs. Finance are currently projecting costs for us.

We have been unable to identify any other areas of savings. If savings requirements are above those identified we would need to review commitments within the operational plan.








#### References

No	Reference
1	The Welsh NHS Confederation (2016), <i>Public Health Challenges in Wales: A Briefing for AMs</i> .
2	(2017), The Annual Quality Statement for NHS Wales, Delivering high quality health services to the people of Wales 2016/2017 and 2017/2018.. <a href="https://gov.wales/topics/health/nhswales/?lang=en">https://gov.wales/topics/health/nhswales/?lang=en</a>

3	(2018) National Assembly for Wales Public Accounts Committee, "Informatics Systems in NHS Wales, November 2018 <a href="http://www.assembly.wales">www.assembly.wales</a>
4	(2018) The Parliamentary Review of Health and Social Care in Wales. "A Revolution from Within: Transforming Health and Care in Wales. <a href="https://gov.wales/docs/dhss/publications/180116reviewen.pdf">https://gov.wales/docs/dhss/publications/180116reviewen.pdf</a> [Accessed 03.01.2019]
5	Auditor General for Wales (2018), Informatics Systems in NHS Wales. Published January 2018. <a href="https://www.audit.wales/system/files/publications/NHS_-_Informatics-2018%20-%20English.pdf">https://www.audit.wales/system/files/publications/NHS_-_Informatics-2018%20-%20English.pdf</a> [Accessed 03.01.2019]
6	Performance against Informatics Operational Plan Objectives 2018 2019 (Quarters 1 , 2 and 3) submitted to the Finance and Performance Committee
7	(2015) Wales Audit Office, Diagnostic review of ICT capacity and resources, Betsi Cadwaladr University Health Board Doc Ref 552A2015
8	(2017) Wales Audit Office, Structured Assessment 2017- Betsi Cadwaladr University Health Board Doc Ref 285A2017-18
9	Wachter, R., M. <i>Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England</i>
10	Williams, D. (2018) 2018 2019 Informatics Operational Plan. Betsi Cadwaladr University Health Board Doc



[L] = Local Solution

STRATEGIC PRINCIPLE / OBJECTIVE		PROJECT	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
 <b>DIGITAL ROADMAP</b> Adopting a digital by default principal, capturing data once and reusing it, minimising the use of paper and working towards "paper free at the point of care".  The building blocks of a single patient view which can be accessed by those receiving, providing or supporting patient care.	Acute EPR	[L] Paediatric Mobile Nursing Application (Chai) / Replacing Paper Nursing Documentation (N)	D	I	I																					
		[L/N] Improving Assurance of Results Management (Stopping Printing Results) - Dependent on National Programme	D																							
		[L] Local Document Repository/Digital Forms (Exploration to Accelerate the Journey to the EPR). Phase 1 Business Case. Phase 2 Procurement and Implementation	P	P	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I			
		Welsh Patient Referral Service (National On-line Electronic Referral System also known as WAP)	D	D		D	D	D	I	I																
		Welsh Care Record Service Programme (National Repository for Information & Sharing Across Wales). Phased supply of local	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I			
		Welsh Clinical Portal (National Portal to Record and View Patient Information) - Extensions & Handover System.	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I			
		Welsh Image Archive System (National Sharing PACS Images Across Wales C21:X21s - Yr2 ) - Support	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I			
		Welsh Results Reports Service (WRRS - National Repository for Results Reporting & Sharing Across Wales) - Support & Comms	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I	D/I			
		Welsh E-Documents Reporting (National E-docs from within the WCP) - Hep-C.	I	I																						
		Welsh E-Documents Reporting (National E-docs from within the WCP) - Digitisation of Nursing Documents - PILOT	I	I																						
 <b>DATA DRIVEN DECISION MAKING</b> providing tools to put data from a variety of sources at the heart of decision making in a timely and user friendly manner. Providing insights to inform effective decisions through synthesising information from a variety of sources.	Core Systems	[L] Digital Dictation Business Case. Approval and Funding (yr1). Funding dependent further work year 2 - 4	P	I	I	C																				
		Welsh Community Care Information System (WCCIS) (National Integrated Health and Social Care System)	I	C	D	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	C					
		Welsh Hospital Electronic Prescribing and Medicines Administration System (WHEPMA)	S	D	D	D	I	I	I	I	I	I	I	I	C											
		Medicines Transcribing Electronic Discharge (MTED) - Recording medicines and adding them to a discharge letter	C																							
		Welsh Patient Administration System (WPAS) East (National PAS Implementation and Standardisation). Phase 2	C																							
		Welsh Patient Administration System (WPAS) West (National PAS Implementation and Standardisation). Phase 3	S	D	I	I	I	C																		
		BCU Welsh Patient Administration System (WPAS) Data Migration (National PAS Implementation and Standardisation) . Phase 4	S																							
		Welsh Emergency Department System (WEDS) (National ED System - Yr. 1 - Local implementation MPI interface. 2021/2022 work	S	S	D	I	I									D	I	C								
		GP Out Of Hours - Welsh System Implementation (All Wales 111 Service System Implementation)											S	D	D	D	D	D	D	C						
		Cancer Network Information System (Placeholder only subject to NWIS/WG business case - CANISC Replacement)																								
 <b>UNDERPINNING SERVICE TRANSFORMATION</b> Supporting services to combine technological opportunities with new business processes, that enable us to meet our Local and National responsibilities.		Sexual Health System (Placeholder only PHW priority Subject to National Business Case and Specification)																								
		Critically Ill - Clinical Information System for Wales (Placeholder only being lead by All Wales Collaborative)																								
		Neopost Implementation. Supporting an Estates project for more efficient ways to send Mail and digital communications	I	I	I	C																				
		[L] Legacy Systems Archive	P	I	C																					
		[L] Local Data Warehouse expansion (New build/infrastructure refresh yr1 and further data acquisition yr. 2-5)	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	C					
		Live ADT- organisation depending, mainstreaming real time dashboards	I	I	I	I	I	I	C																	
		Mobile dashboard via Power BI (yr. 1 – 2 NWIS Dependent)	I	I	I	C																				
		Improved Demand and capacity modelling capability using latest technology and learning	D	D	S	I	I	I	I	I	I															
		[L] Patient Management Status Boards (e.g. red to green and inquests, including Bed Management)	D	I	I	I																				
		 <b>DIGITAL MOBILE WORKFORCE</b> Providing digital tools to support staff to undertake duties, work together and communicate effectively from a variety of locations - reducing overheads, supporting strategies and enabling "time to care".		Detailed annual architecture review and technology roadmap - Systems(yr. 1 to year 5)	C		S	D	C			S	D	C		S	D	C		S	D	C		S		
[L] Expand on technology to track assets, patients, pharmaceuticals and resources (yr. 1 to yr. 2)	I			I	I	C																				
Leverage the value of national systems via intelligent integration/stapling/context sharing. (yr. 1 to yr. 5)	I			I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	C						
Portal to PAS stapling to view data in one place to drive clinical work/efficiencies. (yr. 2 qtr. 2)																										
BCU Standardisation to support the introduction of a single instance of WPAS	I			I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	C						
[L] Mobile Device Management Strategy. (Dependent on Publication of National Mobile Strategy Dev due Summer 2018)	D			D	D	I	I	C																		
Further Rollout of Skype for Business. (yr. 1 – 2)	I			I	I	C																				
Single sign on including context sharing. (yr. 1 – 3)	I			I	I	D	D	I	I	I	C															
Information Technology Self-Service web portal strategy and business case (yr1 qtr. 3)	S/D			I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C				
 <b>MANAGING INNOVATION &amp; EMERGING LEARNING</b> Learning and Innovating by providing accelerators of digital transformation. Collaborating with innovators and entrepreneurs and suppliers to encourage innovation.				Innovation management and delivery via technology funds (yrs. 1 – 5) (possible Cyber security yr. 1 – 2)	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C		
		Host a Centre for Health Innovation Challenges in BCU. In collaboration with Welsh Government and Industry. Note break point end of QTR1 2019/2020 is in place. This assumes not used.	D	I	I	I	I	I																		
		 <b>DIGITAL INFRASTRUCTURE</b> Providing, developing and maintaining a secure, flexible and robust infrastructure to enable a digital future.  Getting the "basics right" and building an Infrastructure to support transformation.		Datacentre expansion and consolidation Wxm (Qtr. 2 YR 1), YG (YR 2 estate dependent)	C	S	D	I	I	I	I	C														
				Provision of support for Health Board Wide Estates Reconfiguration Schemes e.g. YGC Redevelopment	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I		
				Development of ICT infrastructure monitoring and reporting systems (SCOM/ORION) (yr. 3)	S	D	I	I	I	I	C															
				Leveraging the benefits of licencing (yr. 2 – 5) (Microsoft Products)	S	D	I	I	I	I	I	I	I	I	I	I	C									
				Wide Area Network Transformation (PSBA) " spend to save" – Year 1 – yr3	C																					
				Cyber security gap analysis and improvements for threat mitigation yr. 1 - 5	D	I	I	I	D	I	I	D	I	I	D	I	I	D	I	I	D	I	I	D	I	I
				Core Infrastructure upgrades/expansion/refresh – Network YR 1 – yr5	D	I	I	I	D	I	I	D	I	I	D	I	I	D	I	I	D	I	I	D	I	I
				IPT Telephony Programme Continuation. Migration of users to telephony system. Year 2 of a 5 year project	I	I	I	I	I	I	I	I	I	I	C											
Switchboard and paging system rationalisation	SD			I	I	I																				
Replacement of obsolete server operating systems (2003 / 2008)	I			I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	C						
 <b>WORKFORCE DEVELOPMENT, TRANSPARENCY, SUSTAINABILITY &amp; STANDARDS</b> Nurturing a digital culture throughout the organisation. Supporting staff to develop and provide services that meet the efficiency, quality and sustainability challenges that we face. Adopting evidence based best practice and meeting our legislative requirements		Strategy and Scope for Office 365 (yr. 1 -3)	D																							
		Migration towards cloud based hosting solutions (Microsoft and NWIS) (BI and Azure)			S	D	D	I	I	I	I	C														
		Desktop Hardware Lifecycle.- Hardware Replacement Programme	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C				
		Place Marker - possible Provision of Training via Centre of Health Challenges			S	D	D	I	I																	
		Workforce learning and development (e.g. HWB, Mentoring Programme, Increased compliance)			S	D	D	I	I	C																
		Sound Financial Management (e.g. CIP projects)	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C	S/D	I	I	C				
		General Data Protection Regulations ??????																								
		Place Marker - Repository for guidelines and self help	D	I	C																					
		Safe Environment - New Ysbty Glan Clwyd File Library	I	C																						
		Safe Environment - New Ysbty Gwynedd Preparation Office	I	C																						





<b>Report Title:</b>	<b>Digital Transformation Group – Chairman’s report</b>
<b>Report Author:</b>	Mr Dylan Williams, Chief Information Officer
<b>Responsible Director:</b>	Mr Dylan Williams, Chief Information Officer
<b>Public or In Committee</b>	Public
<b>Purpose of Report:</b>	To advise the Committee of the business discussed at the meeting held on 4.2.19.
<b>Approval / Scrutiny Route Prior to Presentation:</b>	The paper had been approved by the Chief Information Officer
<b>Governance issues / risks:</b>	The report includes a) Highlighted learning and opportunities for Patient Portal technologies b) Review of and approval of Informatics operational plan c) Review of informatics risks
<b>Financial Implications:</b>	None
<b>Recommendation:</b>	The Committee is asked to:  Note issues of significance of the Digital Transformation Group

<b>Health Board’s Well-being Objectives</b> <i>(indicate how this paper proposes alignment with the Health Board’s Well Being objectives. Tick all that apply and expand within main report)</i>	√	<b>WFGA Sustainable Development Principle</b> <i>(Indicate how the paper/proposal has embedded and prioritised the sustainable development principle in its development. Describe how within the main body of the report or if not indicate the reasons for this.)</i>	√
1.To improve physical, emotional and mental health and well-being for all		1.Balancing short term need with long term planning for the future	√
2.To target our resources to those with the greatest needs and reduce inequalities		2.Working together with other partners to deliver objectives	√
3.To support children to have the best start in life		3. Involving those with an interest and seeking their views	√

4.To work in partnership to support people – individuals, families, carers, communities - to achieve their own well-being		4.Putting resources into preventing problems occurring or getting worse	√
5.To improve the safety and quality of all services	√	5.Considering impact on all well-being goals together and on other bodies	
6.To respect people and their dignity			
7.To listen to people and learn from their experiences			
<b>Special Measures Improvement Framework Theme/Expectation addressed by this paper</b>			
<a href="http://www.wales.nhs.uk/sitesplus/861/page/81806">http://www.wales.nhs.uk/sitesplus/861/page/81806</a>			
<b>Equality Impact Assessment</b>			
<b>N/A</b>			

*Disclosure:*

*Betsi Cadwaladr University Health Board is the operational name of Betsi Cadwaladr University Local Health Board*

**Digital Transformation Group**  
4<sup>th</sup> February 2019  
Emergency Seminar Room, Ysbyty Glan Clwyd

## **1. Purpose of the group**

The purpose of the Digital Transformation Group, which reports into the Executive Management Group, is to provide a robust and functional governance structure to support BCU in its journey of digital transformation. This will be achieved by:-

- Strengthening the Health Board's focus on Informatics to underpin its planning capability, and to support better decision making.
- Allowing senior service managers and clinical leads time to discuss and develop a strategic approach to digital transformation.
- Ensuring that its Informatics service is well placed to support new national IT systems as they become available through the provision of advice and guidance e.g. on service priorities and business capabilities.
- Ensuring that local innovations to meet service need are considered in light of approved strategies and plans and that disparate technology agendas are linked.
- Improving clinical and service engagement through the Digital Transformation Group and the underpinning groups that provide support. That is the Informatics User Group, and System Owners Group.

## **2. Meeting summary**

The group met on the 4<sup>th</sup> February and was chaired by the Chief Information Officer. It was noted that attendance was low and the meeting was not quorate. Lack of attendance for such an important strategic group is a concern to be escalated to EMG. The main items of business were as follows.

## **3. Strategic**

The group received a presentation by Patient Knows Best (PKB) - a commercial company that provide a cloud based digital patient portal which allows patients to access and interact with their own health information. The aim of the presentation was to inform the group of the potential benefits to patients and the service of patient portal technologies.

The group learnt about PKB's experience with ABMU and NWIS over the past two years. The specific examples were for urology patients who are now able to their own test results with further work planned for clinical letters and scheduling of appointments.

The group learned that this sort of service can provide:

- Basic clinical information such as blood test results, patient letters
- Patient information – such as condition specific information and videos, tutorials
- Shared care plans
- Direct messaging between clinicians and patients
- Ability for patients to update or upload health information such as blood pressure, activity tracking information etc.

- Patients with a secure tool for managing their health information and allowing them control to who can access their information. Note: this does not replace health board clinical systems or records but is a secure view of a subset of those records.

The approach taken in ABMU was focused on specific chronic conditions to support the patient – other approaches have been taken elsewhere such as agreeing that all test and letters could be made available for all patients ( subject to appropriate governance).

The group welcomed the presentation and reflected that:

- A patient portal is a vitally important strategic tool which could lead individual patient and service benefit; both supporting the secondary care and care closer to home agenda. This technology could also support targeted public health and prevention information sharing.
- There were differing views on patient portal importance as a technology for the board at this point in time i.e. should the health board be prioritising patient portal technology at a time when it is working hard to provide the basic technology for secondary and community care over the next three years? It was noted that patient portal does not feature in the Three Year Plan and this is as a result of challenges in prioritising this technology versus. existing business as usual and Three Year Plan objectives. There are parallels here with the previous meeting's discussion regarding technology enhanced care/telehealth.
- The issue should be escalate to EMG for further discussion.

### **3. Risk items**

The Informatics Head of Performance and Improvement provided an overview of informatics risks. Following on from the previous IGIC meeting the Informatics corporate risk is now split to identify

- a) Risks associated with NWIS delivered systems and the impact on the business of delays or changes in scope
- b) Risks associated with local capacity and infrastructure that could impede the delivery of the Three Year Plan and business as usual.

Two other risks were identified for escalation to the IGIC

- The emerging risk related to the logistics and storage of patient records to meet legislative requirements. The national Blood Inquiry and changes to retention requirements of cancer patient records has resulted in an embargo on the destruction of paper records, which will need mitigation via increased storage, and the development of digital records. Programmes of work also continue to identify more permanent accommodation in Central.
- The System Owners sub-group of the DTG has identified a risk that system owners (e.g. those individuals identified as the owner of systems classified as critical to business or clinical services within the GDPR asset register) are:-
  - not all fully engaged or appropriately represented on the Systems Owners Group.

- Not all appropriately skilled or able to discharge their duties (based on initial training needs analysis data where less than 50 percent assess themselves as able to fulfil required tasks in a range of areas).

Significant risks are apparent. Engagement and training is required in order to ensure that system owners are informed and able to discharge their responsibility in several areas including critical systems maintenance and business continuity. Further work is required to baseline the current situation, it is likely that additional resource will be required to resolve this.

Whilst the high-level risk identified for the laboratory system, Telepath, in the previous DTG remains a critical risk, the group heard that Welsh Government Capital Funding has been utilised to procure hardware and stabilise the system. Orders have been placed by the laboratories. The risk will remain high on the risk register until the implementation of new hardware.

#### **4. Terms of reference:**

The DTGs terms of reference were amended to reflect the link reporting to IGIC committee.

#### **5. Strategy and Planning**

**Three Year Plan** – The Head of Health Strategy and Planning provided an update on the Three Year Plan submission and it was agreed that amendments to the plan in relation to informatics would be reported via the DTG.


**Digital Strategy Update to the Board** – The paper was noted and seen as a useful overview of the intent to harmonise services via technology, whilst recognising some of the timescales were illustrative and that final timescales will be subject to the Three Year Planning process.

**Review and Approval of the Information Operational Plan** - The plan was reviewed and approved pending final revenue and capital allocations. The Assistant Area Director – Central felt that the plan lacked clarity on support for community resource teams, primary care and local authorities and was focuses on secondary care. The CIO noted these observations and confirmed a request for transformation monies to fund dedicated resource for a technical “service integration team” to specifically look at these areas had been submitted.

#### **6. Business Case Review**

The Eye Care Business case and related letter from WG seeking revenue support from the health board were circulated for information. It was noted that not all the revenue required has been identified in the business case – especially in relation to change management, project management and technical support.

Data to support “revenue savings” or clear authority to commit revenue savings was not evident prompting additional concerns about an ability to release Health Records staff to deliver the benefits outlined within the business case

Information Governance and Informatics Committee	 <b>GIG CYMRU NHS WALES</b>	Bwrdd Iechyd Prifysgol Betsi Cadwaladr University Health Board
14.2.19	To improve health and provide excellent care	

<b>Report Title:</b>	Information Governance Summary Key Performance Indicator Report for Quarter 3 - 2018/19
<b>Report Author:</b>	Justine Parry, Assistant Director of Information Governance and Assurance
<b>Responsible Director:</b>	Grace Lewis-Parry, Board Secretary
<b>Public or In Committee</b>	Public
<b>Purpose of Report:</b>	To inform members of the Committee on progress against the Health Board's Information Governance Key Performance Indicators.
<b>Approval / Scrutiny Route Prior to Presentation:</b>	Due to the cancellation of the Operational Information Governance Group, this report has been produced by the Information Governance Team, agreed by the Assistant Director of Information Governance and Assurance and approved by the Board Secretary.
<b>Governance issues / risks:</b>	<p>It is a statutory requirement to comply with Data Protection and the Freedom of Information Legislation.</p> <p>Non-compliance with the legislation can lead to penalties imposed by the Information Commissioner and loss of confidence by the public in the Health Board's ability to protect the privacy of their information.</p>
<b>Financial Implications:</b>	Non-compliance with the legislation can lead to significant fines imposed by the Information Commissioners office.
<b>Recommendation:</b>	The Committee is asked to note the progress with regards to the Health Board wide information governance key performance indicators.

<b>Health Board's Well-being Objectives</b> <i>(indicate how this paper proposes alignment with the Health Board's Well Being objectives. Tick all that apply and expand within main report)</i>	√	<b>WFGA Sustainable Development Principle</b> <i>(Indicate how the paper/proposal has embedded and prioritised the sustainable development principle in its development. Describe how within the main body of the report or if not indicate the reasons for this.)</i>	√
1.To improve physical, emotional and mental health and well-being for all		1.Balancing short term need with long term planning for the future	
2.To target our resources to those with the greatest needs and reduce inequalities		2.Working together with other partners to deliver objectives	x
3.To support children to have the best start in life		3. Involving those with an interest and seeking their views	

4.To work in partnership to support people – individuals, families, carers, communities - to achieve their own well-being		4.Putting resources into preventing problems occurring or getting worse	<b>x</b>
5.To improve the safety and quality of all services	<b>x</b>	5.Considering impact on all well-being goals together and on other bodies	
6.To respect people and their dignity	<b>x</b>		
7.To listen to people and learn from their experiences			
<b>Special Measures Improvement Framework Theme/Expectation addressed by this paper</b>			
Not applicable			
<b>Equality Impact Assessment</b>			
Not applicable			

*Disclosure:*

*Betsi Cadwaladr University Health Board is the operational name of Betsi Cadwaladr University Local Health Board*



## Information Governance Summary Key Performance Indicator Report Quarter 3 2018/19

<b>Name of Author:</b>	Justine Parry, Assistant Director: Information Governance and Assurance (Data Protection Officer)
<b>Report Date:</b>	31 <sup>st</sup> January 2019
<b>Responsible Director:</b>	Grace Lewis-Parry, Board Secretary
<b>Summary of business:</b>	<p>Due to the cancellation of the Operational Information Governance Group, Progress against the Quarter 3 Information Governance (IG) key performance indicators are highlighted below:</p> <ul style="list-style-type: none"> <li>• A slight decrease in responding to FOI requests from 82% to 79%;</li> <li>• A decrease in responding to non-clinical subject access requests from 88% to 76%;</li> <li>• An increase in responding to Health Records requests from 89% to 94% (with 100% compliance within HMP Berwyn);</li> <li>• Continued reporting and follow up to ensure lessons learnt from IG incidents, 93 reported this quarter. All serious incidents categorised as Level 2 are assessed as requiring notification to the Information Commissioners Office and Welsh Government. For this quarter, two serious incidents were externally self-reported. The first incident was highlighted to the Health Board via North Wales Police as it was alleged information had been removed from a health record. The second incident involved missing community children's records. Full investigations are ongoing as well as a full health record audit. One incident regarding an internal confidentiality breach was also categorised as a near miss;</li> <li>• Maintained compliance rate with mandatory information governance training, at 81%;</li> <li>• 185 support calls received and dealt with, within 2 working days;</li> <li>• Significant reduction in the reported notifications issued from the National Intelligent Integrated Auditing Solution (NIAS) from 72 in Quarter two to 46 during Quarter 3;</li> </ul>



	<ul style="list-style-type: none"> <li>Continued approval of data processing and data protection impact assessments to ensure compliance with legislation.</li> </ul>
<b>Key assurances provided at this meeting:</b>	<ul style="list-style-type: none"> <li>Progress against performance indicators, internal and external Information Commissioners improvement plans.</li> <li>Communications provided widely across the Health Board to support learning lessons from reported incidents and audit findings.</li> </ul>
<b>Key risks including mitigating actions and milestones</b>	<ul style="list-style-type: none"> <li>Compliance with legislation. This is being monitored via the work programmes and reported as part of the key performance indicator reports.</li> </ul>
<b>Special Measures Improvement Framework Theme/Expectation addressed</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Issues to be referred to another Committee</b>	None
<b>Matters requiring escalation to the committee</b>	None
<b>Well-being of Future Generations Act Sustainable Development Principle</b>	<p><i>The work of the IG Team will help to underpin the delivery of the sustainable development principles by</i></p> <p><i>Supporting a productive and low carbon society through the development of systems and procedures to increase the responsible use of informatics.</i></p> <p><i>Working collaboratively across Wales to deliver solutions with partners to improve planning and delivery of services.</i></p>
<b>Planned business for the next meeting:</b>	<p>Range of regular reports plus</p> <ul style="list-style-type: none"> <li>Quarter 4 Key Performance Indicator compliance</li> <li>Quarter 4 Work programme</li> <li>IG Internal Audit Report</li> <li>IG Risk Register</li> </ul>
<b>Date of next meeting:</b>	10 <sup>th</sup> April 2019