



 <p>GIG CYMRU NHS WALES Iechyd Cyhoeddus Cymru Public Health Wales</p>	<p>Name of Meeting Knowledge, Research and Information Committee Date of Meeting 06 June 2024 Agenda item: 3.1</p>
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Overview of aspects of Knowledge, Research, Information and Digital that are key to delivery of Screening Programmes	
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<p>Purpose</p>
<p>The paper provides an update on aspects of information and digital that are key and are being taken forward for the delivery of the screening programmes for the population in Wales.</p>

<p>Recommendation:</p>				
<p>APPROVE</p>	<p>CONSIDER X</p>	<p>RECOMMEND <input type="checkbox"/></p>	<p>ADOPT <input type="checkbox"/></p>	<p>NOTE X</p>
<p>The Committee is asked to:</p> <ul style="list-style-type: none"> • NOTE the report. • CONSIDER the report recommendations. 				

Link to Public Health Wales Strategic Plan

Public Health Wales has an agreed strategic plan, which has identified seven strategic priorities.

This report contributes to the following:

Strategic Priority	Delivering excellent public health services to protect the public and maximise population health outcomes.
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Summary impact analysis

Equality and Health Impact Assessment	The programmes are offered equitably to all of the eligible population. Our vision, across the national screening programmes in Wales, is that everyone eligible for screening has equitable access and opportunity to take up their screening offer using reliable information to make a personal informed choice.
Risk and Assurance	The screening programmes can only be delivered in line with standards if all of the eligible population are available on accurate demographic feeds and that there are safe and effective digital IT systems to manage participants through the pathway.
Health and Care Standards	Theme 3 - Effective Care
Financial implications	
People implications	Screening programmes are evidence-based population interventions, to either detect disease early or prevent disease occurring. They are offered at intervals in line with evidence.

1. Purpose/Situation

The paper provides an update on aspects of information and digital that are key and are being taken forward for the delivery of the screening programmes for population in Wales.

2. Background

Screening Division delivers, monitors, and evaluates seven population-based screening programmes, and coordinates the all-Wales managed clinical network for antenatal screening. Screening is the process of identifying apparently healthy people who may have an increased chance of a disease or condition. They are offered information, further tests and treatment to reduce associated problems or complications. Screening should always be a personal choice.

Our vision, across the national screening programmes in Wales, is that everyone eligible for screening has equitable access and opportunity to take up their screening offer using reliable information to make a personal informed choice. The aims of the programmes are either to reduce incidence of disease or improve early diagnosis to reduce the impact of the disease. In 2023/24 over a million screening offers were made to the population in Wales with more than 755,000 screening offers taken up.

In line with Strategic Priority 5: Delivering excellent public health services to protect the public and improve health outcomes, work to define what is meant by excellent screening has been described. This is in line with the Duty of Quality and STEEEP (safe, timely, effective, efficient, equitable and person-centred).



Delivery of Excellent Screening Services

- **Safe:** Our participants are invited to take up their screening offer with a quality assured and sustainable end-to-end pathway that offers them more chance of benefit than harm
- **Timely:** Our participants offered screening in line with UK NSC/ WSC recommendations and evidence base and complete their pathway promptly
- **Effective:** Our participants are offered a screening test and pathway in line with UKNSC/ WSC recommendations and evidence base
- **Efficient:** Resources deployed in a manner which provides an efficient and accessible service
- **Equitable:** Our participants are offered screening in a format that enables them to make an informed decision and they are able to access the test and pathway
- **Participant Centred:** Screening programmes are designed and delivered with key stakeholders to enable participants to take up their screening offer



To ensure screening programmes are delivered in line with quality standards, effective and safe digital systems are essential. There needs to be:

- access to an accurate demographic dataset to ensure we are able to invite all eligible people;
- safe and effective digital IT systems to manage participants through the screening pathway;
- timely monitoring of performance against standards;
- monitoring of outcome measures.

This paper provides the key aspect of information and digital that are a current focus for the delivery of the population screening programmes in Wales.

3. Description/ Assessment

3.1 Metric measures.

Screening Division has a long established process of monthly reporting against standards for each of the screening programme. The Screening Performance Activity Reports are prepared by the digital team and provide programmes with monthly detailed performance to identify focus for improvement. Key performance measures that provide overview of performance are included on Public Health Wales performance dashboard.

Work has been undertaken across the HPSS directorate to review the metric measures that are taken to PHW board to align with the Duty of Quality and STEEEP measures. The work on monitoring screening programmes was informed also by a workshop discussion at the Quality, Improvement and Safety Committee in October 2023.

From June 2024, the following metrics will be reported to PHW board

Table 1. Revised metrics aligned with STEEEP.

Reporting Area	Indicator	Quality Domain	Standard / Target
Divisional	•Monthly review of Divisional-wide datix incidents, complaints, and risks	Safe	
Abdominal Aortic Aneurysm Screening)	•WAAASP-005 Timely Referral to Elective Vascular Network Multidisciplinary Team (MDT)	Timely	100%
	•WAAASP-002 AAA Detection Rate	Effective	1%
	•WAAASP-001a AAA Screening Uptake within 12 months	Patient Centred	80%
Breast Test Wales	•BTW-006A Assessment invitations given within 3 weeks of screen.	Timely	90%
	• BTW-001C uptake for women aged aged 49 - <53 years (prevalent round) breast screening.	Equitable	70%
	•BTW-009A -Round length (invited within 36 months)	Timely	90%
	•BTW-004 Invasive cancer detection rate (incident screen)	Effective	4.1
	•BTW-001B Uptake-Percentage of invited participants who attend for screening - rolling annual rate	Patient Centred	70%



Bowel Screening Wales	<ul style="list-style-type: none"> •BSW-007 Waiting Time for Index Colonoscopy/Flexi-Sig Procedure Within 4 weeks of Booking SSP Appointment •BSW-001A Uptake for first invitation to bowel screening •BSW-005A Cancer Detection Rate at Index Colonoscopy/Flexi-Sig •BSW- 003C Bowel Screening Rejected Test rate •BSW-001 Bowel Screening Uptake within 6 months 	Timely	90%
		Equitable	60%
		Effective	10%
		Efficient	2%
		Patient Centred	60%
Cervical Screening Wales	<ul style="list-style-type: none"> •CSW-005A Waiting Time for Colposcopy Appointment •Coverage for women aged 25-29 years for cervical screening. •CSW- 008A Cervical Screening High Grade Detection Rate •CSW-002C Age-Appropriate Coverage 	Timely	90%
		Equitable	
		Effective	0.70%
		Patient Centred	80%
Diabetic Eye Screening Wales	<ul style="list-style-type: none"> •DESW-010 Referrals to Hospital Eye Services Within 2 Weeks of Screen Date (R3A urgent) •DESW-007 Grading Outcome Inadequate •DESW-002 Uptake – percentage of eligible participants who have attended a screening invitation 	Timely	>95%
		Efficient	<3%
		Patient Centred	>80%
Newborn Hearing Screening Wales	<ul style="list-style-type: none"> •NBH-004A Well babies •NBH-010 The percentage of screened babies referred for assessment •NBH-002B The percentage of offered babies who complete the screening programme 	Timely	
		Effective	
		Patient Centred	
Newborn Bloodspot Screening	<ul style="list-style-type: none"> •NBSW-004A Avoidable Repeat Rate •NBSW-001C Coverage (Newborns) Eligible newborn babies 	Efficient	<2%
		Patient Centred	>95%

3.2 Outcome Measures

The long-term strategy details the system wide outcomes that the adult screening programme aims to:

- Increase the proportion of bowel and breast cancers diagnosed at an early stage.
- Reduce the incidence of cervical cancer.
- Reduce sight loss from diabetic retinopathy.
- Reduce mortality from ruptured abdominal aortic aneurysms.

This evaluation work will be a good opportunity for integrated working with colleagues in the Knowledge and Research Directorate, Digital Team and Screening Division. A workshop has been set up for June to start to scope the workplan. As this work develops, we will improve our understanding on the impact of screening programmes for the pathway and whole system and outcomes for population will be a key focus.

Recommendation 1

The committee is asked to support this joint working to be able to evaluate the screening programme impact on system outcomes.

3.3 Equity

Our aim is to enable all eligible participants to make informed choices about screening. This is complex, influenced by language, community, cultural and economic factors impacting on behaviour, as well as physical access to services. To address existing screening inequity our strategy approach focuses action in five key areas. These key areas build upon our existing strengths and assets within the Screening Division and wider partner network:

- Communication
- Community and Engagement
- Collaboration
- Service Delivery
- Data and Monitoring

Data and monitoring are critical components that enable the equity strategy. Although we can measure some of the factors that we know affect the uptake of screening we are not able to measure all of the characteristics. Figure 2 shows

3.4 Digital IT systems to deliver, failsafe and evaluate screening programmes in Wales.

Screening Programmes in Wales cannot be delivered unless there are safe and effective IT systems to ensure:

- the eligible population is invited
- that people are managed correctly throughout the pathway
- there are safe processes for handover of participants to health boards for treatment and
- robust failsafes are in place.

Screening IT systems are incredibly complex to develop and run and any issue even if affects a very small percentage impacts a potentially large number of participants. There is very close working with the digital team and the division is completely reliant on their expertise and hard work.

The IT systems that we rely on for the screening programmes are mostly specific for each programme and have been developed in different ways. For example we use a specific welsh version of the English programme breast screening IT system (NBSS); a system developed with DHCW for the aneurysm screening programme (ASIMS); a commercial product for diabetic eye screening programme; and in 2022 we developed and implemented an inhouse IT system for the cervical screening programme (CSIMS).

A large discovery piece of work was undertaken by an external provider to review IT systems for screening and the findings were broadly to use the model we developed for the cervical screening programme – CSIMS as the template for futher systems and work to comparmentalise specific functions so they are interoperable across different programes.

On 15 May 2024 PHW implemented a new IT system (DEWIS) to ensure we are able to identify and invite women for breast screening. The previous IT systems used was NHAIS which is being decomissioned by England. An external provider was commissioned to develop the solution but due to timelines this was implemented internally with excellent working across teams.

IT systems are a continual focus for the division working closely with digital team and other partners that we rely on to update and develop the systems. An overview of the high level key issues is provided:

IT system	Current Situation	Action
<p>Newborn Screening Programmes – Newborn Bloodspot and Newborn Hearing screening. (NBSW)</p>	<p>DHCW developed the current newborn system and is responsible for the live system. This is currently on an unsupported software platform which exposes PHW to cyber security risks and operational and governance risk. The system is unstable operationally and cannot be updated or modified. DHCW have recently stated that they will not be able to proceed with proposed re-platforming.</p> <p>There is a risk that the Newborn Screening Database becomes inoperable for increasingly significant periods of time resulting in disruption to the Failsafe processes.</p> <p>Wales will be unable to expand bloodspot screening in line with UK national screening committee recommendations and Wales Screening Committee policy.</p>	<p>Issue being raised at Exec level with DHCW.</p> <p>Exploring potential alternative solution.</p>
<p>Breast Cohort Solution - DEWIS</p>	<p>England are decommissioning the IT system NHAIS – this was the system that was used for Cervical Screening since start of programme and CSIMS was developed in house in PHW and implemented Sept 2022. Breast cohort selection was also dependent on NHAIS. Attempts were made to work with England to use their IT system but this was not feasible. Therefore we developed own solution working with commissioned developers. This has integrated into SIMS in line with the direction from discovery. The new system went live successfully on 15 May 2024.</p>	<p>Working closely together to monitor new system and will also do retrospective and review with learning to take into next project</p>

Demographic Feeds	The demographic feed is key to being able to identify the eligible population. The demographic feed into SIMS from the Master Patient Index (MPI) feed has been identified to contain incorrect information. Work is ongoing with DHCW to enable an improved demographic feed from a more reliable data source (WDS) to ensure we have access to the most reliable and accurate information.	Issue escalated to DHCW at exec level. Working to resolve.
CaNISC replacement for Colposcopy which is part of the Cervical Screening Programme	PHW/CSW have been working with DHCW since 2021 to deliver a CaNISC replacement system for colposcopy. This is for a like for like replacement. Timeframes have been extended and this is now to be delivered by October/November 2024. A proposed solution to the storage of colposcopy images is being taken forward by DHCW. The cervical screening programme has not yet seen the proposed solution and is concerned that may not meet needs to the service.	A meeting has been set for 7 June when the solution detail will be shared.

Recommendation 3

The Committee is asked to recognise the work that is underway to ensure that the screening programme have safe and effective IT systems and the current issues that are being taken forward to try to resolve with partners.

3.5 SGRINIO (ScreeninG Research and Innovation for Improved Outcomes)

SGRINIO is a screening research group formed between Public Health Wales and Cardiff University (Division of Population Medicine) in January 2024. The collaboration recognises the importance of research, evaluation and innovation in the delivery of our screening programmes and helps PHW fulfil its statutory function as set out in its Establishment Order.

The research group aims to improve screening outcomes (increased screening uptake and a reduction in inequalities) through a tripod of

- behaviour change in the public and professionals,
- data linkage and sharing,
- rigorous research, evaluation and innovation.

The group is currently leveraging on the expertise of their organisations and wider stakeholders to explore the screening research landscape and identify assets available both internally and nationally. This will in turn inform the subsequent focus of the group.

4. Conclusion

To ensure screening programmes are delivered in line with standards and work to deliver excellent services; effective and safe digital systems are essential. The paper outlines key work that is being taken forward around reporting performance, work to describe outcome in wider system; necessary improvement work for the IT systems and work to take forward key research to further develop and innovate the programmes.

The committee is asked to consider and approve the following recommendations to take this work forward.

Recommendation 1: to support joint working to be able to evaluate the screening programme impact on system outcomes.

Recommendation 2: to support the approach that routine demographics in Wales should include data that enable detailed understanding on equity across protected characteristics.

Recommendation 3: to recognise the work that is underway to ensure that the screening programme have safe and effective IT systems and the current issues that is being taken forward to try to resolve with partners.

The Committee is asked to:

- **NOTE** the report.
- **CONSIDER** the report recommendations.