GIG CYMRU NHS WALES | Iechyd Cyhoeddus Cymru Public Health Wales	**Name of Meeting** Quality, Safety and Improvement Committee **Date of Meeting** 10 November 2021 **Agenda item:** *4.2*

Update on the Screening Programmes

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Approval/Scrutiny route:	HPSS Directorate Management Team Meng Khaw, National Director, Health Protection and Screening Services; Executive Medical Director

Purpose

This report provides an update on the recovery of the Screening Programmes and some of the key developments that have been supported by additional funding by Welsh Government and are being taken forward.

Recommendation:

APPROVE	CONSIDER	RECOMMEND	ASSURANCE	NOTE
☐	☐	☐	☒	☐

The Quality, Safety and Improvement Committee is asked to:

- **Receive** this update report and take **assurance** that the recovery of the programmes is progressing and that there is continued development of the programmes as required.

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	6 - Supporting the development of a sustainable health and care system focused on prevention and early intervention

Summary impact analysis	
Equality and Health Impact Assessment	Included is an update on screening programmes and progress around recovery plan
Risk and Assurance	
Health and Care Standards	Theme 3 - Effective Care
Financial implications	Recovery plan for the screening division has been funded by the WG Finances for replacement of breast screening have been supported by WG Optimisation of the bowel screening programme has been supported by WG
People implications	The recovery plan

1. Purpose

This report provides an update on the recovery of the Screening Programmes and some of the key work streams that are been taken forward.

2. Recovery of Screening Programmes

Following the Welsh Government's announcement on 13 March 2020 of plans to suspend non-urgent outpatient appointments, Welsh Government agreed the recommendations of Public Health Wales to temporarily pause some of the population based screening programmes.

The temporary pause affected the following screening programmes: Breast Test Wales, Cervical Screening Wales, Bowel Screening Wales, Diabetic Eye Screening Wales and Wales Abdominal Aortic Aneurysm Screening. The Newborn Hearing Screening, Newborn Bloodspot Screening and the Antenatal Screening programmes have continued throughout the pandemic and were not paused at any point.

As the numbers of Covid-19 cases started to reduce the approach taken was to set out the conditions required to restart screening; to take a risk assessed approach to prioritise the cohort of participants requiring their offer and to safely phase the programmes restart so that the screening could be offered safely to participants. Programmes were reinstated in the following order: Cervical Screening (June 2020); Bowel Screening, Breast Screening and Aneurysm Screening (August 2020) and Diabetic Eye Screening (September 2020).

The programmes have continued to be offered since their reinstatement but there are constraints to recover the programmes. These include the reduced numbers of participants being able to be offered screening in each clinic due to covid safe pathways; limitations in availability of clinic locations; and reduction in staff availability.

A recovery plan has been developed, costed and agreed. The plan identified any forecast underspend within Screening revenue budgets for costs not expected to be incurred in 2021/22 due for example to reductions in spend due to lower than normal running costs. Additional funding was required to be able to support the plan in full (£1.01 million) and request went into the Welsh Government in June 2021 and in September 2021 this request was confirmed that supported.

2.1 Recovery Plan

To develop the recovery plan each programme has put together action plans to mitigate the service backlog. This involves increasing current work volumes to pre covid levels and beyond in order to recover for those participants who were delayed during the covid pause or by the slower than normal running levels since the restart.

Services will need to operate at over 100% of their pre covid run rate to recover the programmes. The approaches of increasing activity include

- Additional staffing.
- Additional hours undertaken by existing staff.
- Increasing number of clinic venues and efficiency with existing venues.
- Increased invitation numbers with associated in-year increase in consumables.

- Improving practices to increase efficiency e.g. outsourced mailing, telephone triage and open invitations.

Table 1. An overview of recovery schemes:

Programme	Recovery Scheme
Bowel Screening Wales	Increased rate of invitation distribution (inc Lab element)
Breast Test Wales	BTW Recruitment - Radiographers, APs & Pathway
	Additional Capacity - Retained Mobile Unit
	Additional Capacity -Screening Centres
	BTW Mail Outsourcing
Cervical Screening Wales	Increased rate of invitation distribution (inc Lab element)
Cross Programme	Additional Clinic Venues
Diabetic Eye Screening Wales	Screening capacity increase - inc Screeners & Pathway
	Outsourced Mail - DESW
	Freephone/Local Rate Telephone Number
	Opthalmology commissioning of retinal review
Wales Abdominal Aortic Aneurysm Screening Programme	Telephone triage to undertake triage ahead of clinics
	Screening 'navigator' at additional venues
	Long term capacity increase - inc Screeners, Clinical Skills & Pathway
	Maternity Backfill
Laboratory	Overtime to Manage additional capacity of BSW & CSW
Business Team	Screening recovery support manager

A summary of the current situation for each of the programmes that were paused and overview of the recovery plan is as detailed:

- **Cervical Screening:** currently have a delay of 1 month in sending out routine invitations and all of the women on early repeat have no delay in their invitations. We are currently receiving higher than usual number of cervical screening samples into our laboratory for testing, the turnaround for results within standards is challenging due to numbers and cytology staffing constraints. All of the colposcopy services across Wales are accepting referrals.

Position at reinstatement of programme in June 2020	4 month delay in routine invitations being sent out. Approx. 75,000 invitations delayed
Recovery Action: GPC Wales agreed a proposal for the phased increase in number of invitations until the backlog has been eliminated. This was to send an additional month of invitation every 3 months. This recovery plan has been implemented	
Position at October 2021 1 month delay in routine invitations being sent out.	
Timescale for Recovery: Programme will have recovered in December 2021 when no delay in routine invitations being sent out.	
Number of screens during recovery Average number of samples received pre-covid per month about 15,582 The number of samples sent to laboratory during the recovery has been maintained in line with pre-covid activity. With an average of 14,974 samples been received each month from October 2020 to September 2021.	
Funding for Recovery : Within the recovery funding as consumables and laboratory activity increased to support the increased activity	
Dependencies: CSW recovery has been dependent on cervical screening capacity in Primary Care. Laboratory capacity to process and review cytology of HPV positive samples. Continued LHB colposcopy capacity.	

- **Bowel Screening:** The programme has recovered with invitations been sent out within 6 weeks in sending out a kit to a participant who has been screened previously and all new participants joining the programme are sent their first kit with no delay. The turnaround for results is within standard. There are capacity issues within colonoscopy so the delay is the time taken for the participant to have their screening colonoscopy is variable across Wales from 7 weeks to up to 27 weeks. This is a significant concern and being discussed with Health Boards, Welsh Government and National Endoscopy Board.

Position at reinstatement of programme in August 2020	18 week delay in routine invitations being sent out to participants who have been screened previously.
Recovery Action: Additional invites to be issued each week to reduce backlog. Invite levels raised from 5500 (pre covid) to 7200 weekly invitations.	
Position at October 2021 Recovered as routine invitations being sent out to participants within 2 years and 6 weeks for their previous screen.	
Timescale for Recovery: Programme has recovered by October 2021	
Number of screens during recovery Average number of samples received pre-covid per month about 15,128 The number of samples sent to laboratory during the recovery has been consistently over usual pre-covid activity due to increased number of invitations and a higher uptake following restart (65%). With an average of 20,931 samples been received each month from October 2020 to September 2021.	
Funding for Recovery : Within the recovery funding as consumables and laboratory activity increased to support the increased activity	
Dependencies: Laboratory capacity to process FIT kits received . Continued LHB colonoscopy capacity for timely colonoscopy – activity has remained within commissioned levels.	

- **Breast Screening:** when the programme restarted in August, due to the covid secure pathways, the programme was about 70% of usual capacity due to longer times needed to screen each woman. The timeliness of the screening results and assessment clinics have been good. The number of women been able to be screened has increased over time due to improvements to the flow of the clinics and increased number of screening clinics which has resulted in reduced timeliness for assessment due to current staffing constraints in reading and arbitration.

Position at reinstatement of programme in August 2020	5 month delay in routine invitations being sent out to participants who have been screened previously.

Recovery Action:

Programme activity needs to increase to circa 12,000 screens per month. This needs to be sustained for at least 36 months going forward. Regions of longest wait have been prioritised in the round length plan.

Phase 1 (April 2021 – November 2021)
The recovery plan has been split into 2 phases with the first phase focusing on implementing additional capacity to prevent the round length from increasing further. Additional activity has been undertaken on weekends to increase the number of available slots to prevent further slippage and extending mobile breast screening unit site length. Static centre activity has been reviewed and optimised where possible. Open appointment invitations have been implemented to maximise the slot utilisation and reduce wasted appointments in the prevalent round women. The appointment slots have reduced in time as the flow of women through screening has been safely increased.

Phase 2 (November 2021 – April 2024)
The second phase can be implemented when social distancing measures are able to be relaxed allowing the service to increase capacity by reducing appointment slot length and increasing the number of available appointments to pre Covid levels. Weekend working should continue through this phase to accelerate recovery of round length over the proposed 36-48 month recovery period. Open appointment invitations will be used to maximise the slot utilisation and reduce wasted appointments, further consideration to extending this strategy to other cohorts or specific regions should be considered over Phase 2 if the outcome data supports the efficacy of open invitation.

Position at October 2021

Routine invitations are still delayed and this delay has increased with the average round length now 43.5 months.

Timescale for Recovery:

Anticipated recovery period is 36 – 48 months. A whole screening round is required to measure the impact of any intervention on round length. The whole screening pathway needs to be taken into consideration with the rate of screening matching the available resource to report on images and subsequent assessment required.

Number of screens during recovery

Average number of breast screens pre-covid per month was 9,866

The number of breast screens completed during the recovery has been lower than pre-covid activity due to reduced number of appointments able to be undertaken with covid safe pathways. With an average of 7,843 screens each month from October 2020 to September 2021. Although due to changes in the flow September 2021 activity increased to 9,822.

Funding for Recovery :

Additional radiography and assistant practitioner staff post recruited to support increased activity required. Bank staff being established to further support activity while ensure safe working levels for substantive staff.
Additional screening office pathway staff to support the Centre Coordinators and Regional Radiography Managers in the planning and administration of the round length plan and open invitation work.

Dependencies:
To meet the objectives the following criteria need to be met –

1. Social distancing measures will need to be relaxed to release further capacity in phase 2 – updated UK guidelines in review
2. Able to recruit additional staff and current staff willing to work additional hours.

Risks Associated with current service level:
Clinical – An extended round length will increase the number of interval cancers. Cancers detected at a later stage are associated with greater morbidity and mortality. A greater number of women will present with symptomatic breast cancer
Reputational – There is the risk of adverse publicity around the service provision
Legal Challenge – There is the risk of litigation secondary to delayed diagnosis

- **Abdominal Aortic Aneurysm Screening:** when the programme restarted in August and due to the covid secure pathways the programme was about 60% of usual capacity due to longer times needed to screen each man and a reduction in availability of screening venues. The number of men been able to be screened has increased since the reinstatement.

Position at reinstatement of programme in August 2020	5 month delay in routine invitations being sent out.
Recovery Action: • Ensuring that longest waiting participants are given appointments as a priority. • Identify regions where the longest waiting participants are based and look to increase venue capacity • Combine clinics in one site to have more days and less staff travelling time • Use of Tenovus mobiles in area where locations most limited to reduce waits • Recruit additional screening staff which will support recovery once trained • Continue triage to reduce DNA of clinics and improve use of available slots.	
Position at October 2021 South and North Wales regions position making improvement but West Wales region struggling more. This is being actively supported.	
Timescale for Recovery: Estimated 18 months.	
Number of screens during recovery Average number of AAA screens pre-covid per month was 1,152 The number of screens has increased significantly from Feb 2021 with average of 1,154 screens per month compared to an average of 505 when the service was first reinstated.	
Funding for recovery : Additional screening staff post recruited to support increased activity required. Additional temporary staff to support triage of participants before attend to support covid safe pathways and reduce DNA.	
Dependencies: Continued staffing available to undertake screening due to high covid levels. Availability of screening locations to undertake screening.	
Risks associated with current service level: Potential harm to men with an aneurysm who should have been screened when they were aged 65 years.	

- **Diabetic Eye Screening Wales:** when the programme restarted in September and due to the covid secure pathways were at about 35% of our usual capacity due to longer times needed to screen each person and a reduction in availability of screening venues.

Position at reinstatement of programme in September 2020	6 month delay in routine invitations being sent out.

Recovery Action:

Programme activity needs to increase substantially to circa 12,000 screens per month. This needs to be sustained until the service recovery.

The recovery plan is split into 2 phases

Phase 1 (April 2021 – November 2021)
Longer day working for Screeners to be adopted via 9 day fortnight working pattern to maximise clinic time and move travel time away from the core working day.
Work to expand the volume of screening venues will continue using cost-neutral venues and the Screening Division recovery monies to secure suitable additional accommodation.
The programme recruit divisional recovery monies to appoint x6 additional Screeners (2 per region) to provide extra clinic resource.
Recruitment of additional pathway staff to support additional invitations and managing appointments and results.

Phase 2 (October 2021 – April 2024)
The second phase can be implemented when social distancing measures are able to be relaxed allowing the service to increase capacity by reducing appointment slot length and increasing the number of available appointments to pre Covid levels. Progression to the implementation of outsourced printing to release pathway administration time for appointment booking and participant telephone cover; subject to investment for technical interfaces. Engagement with primary care colleagues to explore potential outsourcing of retinal reviews for low risk participants would positively impact on the service backlog are been scoped to be taken forward.

Position at October 2021

The number of diabetic eye screening completed during the recovery has been lower than pre-covid activity due to reduced number of appointments able to be undertaken with covid safe pathways. With an average of 3,061 screens each month from October 2020 to September

2021. Only 30% of participants have been screened within the last 24 months.

Timescale for Recovery:
Estimated at least 24 months.

Number of screens during recovery
Average number of DESW screens pre-covid per month was 10,103

The number of screens has increased since July 2021 to 4,600 screens per month but this is not sufficient to enable recovery of the programme

Funding for recovery :

- The programme is recruiting 6 additional Screeners (2 per region) to provide extra clinic resource. Recruitment of additional pathway staff to support additional invitations and managing appointments and results.
- Engagement with primary care colleagues to explore potential outsourcing of retinal reviews for low risk participants would positively impact on the service backlog are been scoped to be taken forward.

Dependencies:
meet the objectives the following criteria need to be met –

1. Social distancing measures will need to be relaxed to release further capacity in phase 2
2. Continued provision of existing clinic venues and increased venues
3. Support from information system company and IT support to enable a move to outsourced printing
4. Securing funding to outsource retinal review

Risks Associated with current service level:
Clinical – An extended R/L will increase the number of cases where diabetic retinopathy is not identified at an early stage. DR detected at a later stage is associated with irreversible sight loss. A greater number of people with diabetes will present with symptomatic DR.
Reputational – There is the risk of adverse publicity around the service provision
Legal Challenge – There is the risk of litigation secondary to delayed diagnosis
Efficacy – An eye screening programme with an extended R/L will not meets its fundamental objective of reducing sight loss caused by diabetic retinopathy.

3. Key Developments for the Programmes

There are several key developments that are currently underway for the programmes some of which were delayed due to the pandemic. These are important to be taken forward for either improved population health outcomes or the ability to sustainably offer the screening programmes. These are high priority and necessary but require staffing resource to take forward and there are competing priorities with recovery work underway. A short summary of two of the key developments are outlined.

3.1 Bowel Screening Optimisation.

The bowel screening programme currently issues a faecal immunochemical screening test kit to participants aged between 60 to 74 years of age every two years.

In 2018 the Chief Medical Officer for Wales wrote to Public Health Wales' stating that the intention was for the bowel screening programme to be optimised by April 2023. Optimisation includes the introduction of FIT for the entire eligible screening population, expansion of the eligible screening age range to include younger people from the age of 50 years and 150µg of haemoglobin/g of faecal material to 80µg/g.

The first year of the plan (2019) was completed with the full implementation of FIT as the primary screening test from September 2019.

Preparation was underway to implement the second year of the plan with reduction of the starting age of the eligible screening population from 60 to 55 years from April 2020 with confirmation of funding from Welsh Government and agreement from heath boards to implement. However the coronavirus pandemic stopped this preparation and the optimisation progress of the bowel screening programme was halted in March 2020.

The work was reinstated in December 2020 and with further work undertaken to get agreement with partners and stakeholders on how this could be taken forward. The high level implementation plan and milestones agreed are outlined below

- **2021** (by the end of October) – implement the reduction of the starting age for screening from 60 to 58 years with sensitivity of the FIT at 150µg of haemoglobin/g of faecal material. Implemented – invitations to include 58 and 59 years from 11 October. **This has now been implemented.**

- **2022** (by end of October) – implement the reduction of the starting age for screening from 58 to 55 years with sensitivity of the FIT at 150µg of haemoglobin/g of faecal material.
- **2023** (by end of October) – implement the reduction of the starting age for screening from 55 to 52 years and improved sensitivity of the FIT at 120µg of haemoglobin/g of faecal material.
- **2024** (by end of October) – implement the reduction of the starting age for screening from 52 to 50 years and increased sensitivity of the FIT at 80µg of haemoglobin/g of faecal material. At this point, the programme would be fully optimised.

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Model reworked based on latest estimated invites in Optimisation years Oct to Sept (takes account of impact of pause and additional invites)										
Predicted volumes/colonoscopy demand (index procedures) 62% uptake & 2% positive rate										
	FIT sensitivity	Age Range	Invites	Tests Returned	Positive Rate %	Positive Kits	Colonoscopy (fit for procedure)	Estimated Polyps	Estimated Adenomas	Estimated Cancers
***2019/20**	150	60-74	276,226	188,105	1.5	2,656	2,034	1,414	1,114	240
****Baseline**	150	60-74	285,000	176,700	2	3,534	2,986	2,135	1,619	348
2021/22	150	58-74	320,000	198,400	2	3,968	3,405	2,435	1,846	397
2022/23	150	55-74	459,000	284,580	2	5,692	4,887	3,494	2,649	570
2023/24	120	51-74	490,000	303,800	2.2	6,684	5,821	4,162	3,155	678
2024/25	80	50-74	501,000	310,620	3.3	10,251	8,833	6,316	4,788	1,030

3.2 Breast Test Wales Replacement Screening Equipment

In November 2019 Public Health Wales submitted a programme business case to Welsh Government seeking investment to replace the imaging equipment and mobile screening units to support the continued delivery of the breast screening programme in Wales. The business case was agreed at the BET team on 18 November 2019 and at PHW Board at 28 November 2019.

Following a period of delay caused by the covid disruption, BTW met with WG colleagues and undertook a revalidation of the preferred business case option and the proposed equipment replacement schedule. Welsh Government gained Ministerial approval for the case and this was approved in July 2021. Approval was given for a total spend of £7.845m to be spread across 2021/22 and 22/23. A project team has been established to take forward this work.

Agreed Option	**Proactively replace equipment and opportunistically seek to reduce the number & reliance on mobile screening locations**
Scope	Broadly continue to operate existing service model and adjust to reflect reductions in venues and introduction of hardstanding "plug in" screening facilities where possible.
Service Solution	Proactively replace imaging equipment and mobile screening units. Screening would continue on 11 mobile units and within the current 4 assessment centres. Breast Test Wales would opportunistically seek to reduce the 100+ screening venues by potentially merging sites onto longer term venues where population catchment allows e.g. new health centre developments, community hospital facilities. This will proceed on the basis that service uptake as a measure of participant acceptability cannot be compromised. Plug in hardstanding facilities will be identified to reduce service reliance on and disruption associated with mobile unit diesel generators. All assessment imaging and biopsy equipment would be replaced.
Service Delivery	In house. Screening and assessment services undertaken by Breast Test Wales.
Implementation	Investment is phased according to priority based on clinical risk and service disruption.
Funding	Public Funding. Purchase of imaging equipment and mobile units will be acquired and funded through NHS Capital Expenditure Programme.