CWM TAF MORGANNWG

COVID19 – SAMPLING AND TESTING OPERATIONAL PLAN

1 BACKGROUND

- 1.1 The Public Health Protection Response Plan developed by Public Health Wales (PHW) on behalf of Welsh Government proposes three key elements:
 - preventing the spread of disease through contact tracing and case management,
 - population surveillance, and
 - sampling and testing different people in Wales
- 1.2 This plan identifies the key actions required by partners across the Cwm Taf Morgannwg Region to operationalise the sampling and testing requirements needed to support the Welsh Government's Test, Trace, Protect Strategy.
- 1.3 The operational plan should be read in conjunction with the latest CTM Testing Strategy, which is regularly updated to reflect national and local policy changes. The strategy brings together the ongoing work around improving testing in CTM to meet the testing demands as lockdown is eased across Wales and routine healthcare work is resumed.

2 AIMS

- 2.1 The purpose of the sampling and testing work stream is to provide a testing and sampling service to our communities and hence targeted data for surveillance to take place.
- 2.2 In line with the Testing Strategy, the aims of the plan are as follows:
 - Consolidate reductions in the transmission of COVID-19 within the CTM community by encouraging compliance with self-isolation guidance for symptomatic individuals and their households.
 - Reduce transmission of COVID-19 within the CTM community by encouraging compliance with self-isolation for individuals with confirmed COVID-19 and their contacts, as part of Welsh Government's "Test, Track, Protect" strategy.
 - Protect vulnerable people, both within closed settings and in the community, by reducing their risk of exposure to COVID-19.
 - Enable key workers, from the NHS, public sector and private sector settings, to return to work as quickly as possible following a negative COVID-19 test result.

- Surveillance of COVID-19 within the CTM community to enable greater understanding of the epidemiology of SARS-CoV-2 in the CTM population and better planning of the COVID-19 response.
- Support future plans for easing of lockdown restrictions and enable rapid response to local outbreaks once general social isolation guidance has been eased.
- 2.3 The specific, measurable objectives of testing are as follows:
 - Provide tests for 100% of all symptomatic inhabitants of CTM, within 24hrs of them requesting a test.
 - Provide tests for 100% of all Care Home residents and staff once every 2 weeks (asymptomatic).
 - Provide tests for 100% of symptomatic Care Home residents within 24hrs (as a result of symptoms being identified).
 - Provide tests for a random sample of 150 CTM hospital staff randomly per week.
 - Provide pre-operative screening tests for 100% of 72 hours before operations take place.
 - Provide serology tests for CTM staff/key workers/residents as directed.
- 2.4 At the time of writing this operational plan, the current groups able to access antibody testing are as follows:

Key:

In Current Testing system	Partially in Current Testing system	Not in Current Testing system
	Asymptomatic	
Health and Social Care Workers	Mild-Moderate Symptoms	
	Severe Symptoms	
	Asymptomatic	
Key Workers from agreed partner organisations including WAST, police and Local Authority	Mild-Moderate Symptoms	
medaling W/S1, police and Local National	Severe Symptoms	
Key Workers from wider organisations including	Asymptomatic	
utilities, food production, transportation and	Mild-Moderate Symptoms	
supermarkets	Severe Symptoms	

	Asymptomatic	
Enclosed settings - Care Homes	Mild-Moderate Symptoms	
	Severe Symptoms	
	Asymptomatic	
Enclosed settings - Non-care home settings including prisons	Mild-Moderate Symptoms	
including prisons	Severe Symptoms	
	Asymptomatic	
Extremely Vulnerable Groups in the Community	Mild-Moderate Symptoms	
	Severe Symptoms	
	Asymptomatic	
Vulnerable Groups in the Community	Mild-Moderate Symptoms	
	Severe Symptoms	
Wider Community	Asymptomatic	
	Mild-Moderate Symptoms	
	Severe Symptoms	
Antibody Testing – random testing currently only	Asymptomatic	
offered to WG pre selected groups	Mild-Moderate Symptoms	
	Severe Symptoms	

2.5 It may be necessary to add more objectives as the scope of testing increases; these will become part of supporting operational plans which will be 'individual test specific' and will be agreed by the Regional Strategic Oversight Group (RSOG).

3. DEMAND AND CAPACITY

Antigen

The demand for Testing depends on two key factors – disease activity and extant Welsh Government policy. As disease activity has changed over the course of this pandemic, so has Government Testing policy, although it is not suggested that the latter has necessarily accurately tracked the former. For example, at the peak of disease activity in early April, Government policy precluded testing of residents in the community whose symptoms were mild-moderate and not requiring hospital attendance or admission. However, in the last two weeks when disease activity has been relatively low, it is now policy that every member of the population is able to access testing irrespective of the seriousness of symptoms.

In looking forward from this point, we have considered recent empirical data on disease activity and testing demand and are working to three possible scenarios. We're planning on the assumption that scenario 1 plays out between now and the autumn while scenario 2/3 play out over the winter.

Table 1

Scenarios	Daily Demand	Daily Capacity
× 1 – Current status (best case)	340	
		470
This assumes we do not get a second peak and	Made up as follows:	
that COVID-19 activity remain as it has been in		Made up as follows:
the last two weeks. During this time, we do an	200 (ranging from 61-281 daily) through existing	
average of 340 tests per day in CTM. Of these, 3-	CTUs	270 through existing Coronavirus Testing Units
4% are positive.	140 (ranging from 130-150 daily) on care homes	200 on care homes testing
	testing	
2 – Status at peak in early April (mid-case)		1,370
Assumes that we get a second peak.		Made up as follows:
International evidence suggest a peak at 1-1.5	850	
times the 1st peak. So this scenario assumes a	830	1,130 through 3 Mass Testing Units (see
second peak in winter that's as high as the peak		breakdown in Table 2 below)
we had in early April. Because WG testing policy		240 on care homes testing (supported by 1
was different in April to what it is now, we've		mobile testing unit)

used the hospital admissions ratio (74 now vs. 180 in April, so ratio of 2.5) to estimate the ratio of actual testing demand. So that means we do 340 *2.5 = 850 tests with a positivity rate of 27% (which was the average rate in CTM at peak).		
3 – Second peak at 1.5 times April peak (worst case)		1,695 Made up as follows:
Assumes we get a second peak that is higher than the first – at 1.5x and a positivity that's at the upper limit of what we've had – 35%.	1275	1,130 through Mass Testing Units 240 on care homes testing 325 through 2 further Mobile Testing Units

^{*}This is based on actual data over the past 2 weeks which has included sampling in response to demand for testing from Health Board Employees and household, Key Workers across Police, WAST, Fire Service, Utilities, Local Authorities, Education, Healthcare Agencies, Retail, Defence, Care Home Staff and Residents, Prison, Testing for Pre-operative purpose, Renal Dialysis testing requests and Random healthcare staff testing

Table 2 Capacity

Delivery	Number of lanes	Daily maximum (5 min appointments 9-4pm)
Abercynon	5	800 – based on Deloittes estimate of tests per day
Kier Hardie	3	126
Ysbyty Seren	3	126
RGH	1	78
Mobile Care home/no 3 Teams		*565 weekday with military support in respect of transport for care homes swabs
transport community team		(Average per day including weekend)
Estimated capacity		1,695 per day

Serology

The serology demand and capacity is more difficult to define as it is not an urgent test, unlike the antigen test. Welsh Government have asked that a sample of teachers are the initial group tested and these started from Monday 15th June; healthcare workers and care home staff/residents are the next priority groups. Separate short operational plans will be produced for:

- Teachers
- CTM UHB Staff
- Care Homes

A draft demand and capacity model for serology is below:

Table 3

Group	Number to be tested	Lab Capacity (8000 per month)
Teachers	1,500	1,500 over 2 weeks
Healthcare	17,500	To be confirmed
Care Home staff/residents	Approx 6000	To be confirmed

1. WORKFORCE REQUIREMENTS

The workforce requirements are based on the assumptions for the delivery of the current capacity highlighted in the above tables. The staffing required changes rapidly and the workforce has to change/adapt to the work stream in line with changing national guidance, policy and also needs to be response to local need.

The core components of the testing work stream are:

- Booking and Results
- Sampling (Antigen (swabbing) and Antibody (Phlebotomy)
- Laboratory

1. Booking & Results

The workforce currently being used for booking tests and providing results are the POW outpatient booking team and PHW teams who have been undertaking this function for Antigen testing on a shot term basis. The plan for any booking and results team would be for it to be downscaled substantially once the majority of the booking function is done via the online UK portal; however this is not the current situation. The current assumption is that in time the Antigen booking and results function will be 2 members of staff per day for both booking and to give results that were unable to be text.

The serology work stream has no plans currently for an online option; therefore current plan for 8000 tests per month will require a team of approximately 20 staff (based on the antigen booking/results team).

The proposal would be to have 1 booking and results team going forward to support both Antigen and Antibody testing.

The current requirements for the booking/results team is set out below and is for a 7 day 9-5 service, based on the demand and capacity estimates above.

Table 4

Staff required	Band	Number	
Team lead	B5 (RN)	1.72	
Supervisor	B4	3	
Booking/results	B2/3	25	

2. Sampling

Antigen

The plan for the community testing is that there will be 4 sites where staff and the public can be tested that will be. The staffing model outlined in the below table is based on the number of staff required daily to meet the maximum capacity outlined. The assumptions that have been made in this staffing model are the following:

Staff numbers per site/per day/7 days per week

Site	Staff required	Band	Number
Abercynon (Public)	Managed by Deloittes		
Kier Hardie (Public)	Registered Nurse	B5	1
(1 mobile unit see	HCSW	B2	6
below)			
	Admin Lead	B3	1
	Admin	B2	3
Ysbyty Seren (public)	Registered Nurse	B5	1
(1 mobile unit see	HCSW	B2	6
below)			
	Admin Lead	B3	1
	Admin	B2	3
RGH (Staff & Pre-op)	Registered Nurse	B5	1
	HCSW	B2	2
	Admin Lead	B3	1
	Admin	B2	0
Mobile Care home/no	Registered Nurse	N/A	0
transport + 2 mobile			
units attached to MTCs			
	HCSW	B2	4 staff 3 (Mon – Fri) 2 staff x 3 (Sat /Sun) = 18
	Admin Lead	B4	1
	Admin	B2	4 to cover all mobile units

The total number of staff required per day for the testing units by staffing group is outlined below:

Registered Nurse (B5) x 3 HCSW (B2) X 42 Admin (B3) x3	Admin (B4) x 1
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Serology phlebotomy and lab requirements

This work stream is under development and 3 smaller operational plans will be produced.

The booking and results will be combined in to one Antigen and Antibody team as described above.

Post	Grade	WTE
Phlebotomy	Band 3	15.3
MLSO	Band 6	3
MLA	Band 4	9.7
MLA	Band 3	157

3. Laboratory

Antigen testing

The Laboratory staffing requirement is dependent on the type of equipment in the Laboratory.

The only platform currently available is the Launch platform running at 55 tests per day and require staffing outlined above.

Currently all serology is supported by the Prince Charles Hospital Lab.

4 OPERATIONAL MANAGEMENT

4.1 The proposed organisational structure for Testing:

Programme Management Team

Programme Manger

- Responsible for the management and co-ordination of the Health Board's response to the testing against rapidly changing PHW and WG policies and guidelines.
- Work closely with the PH strategic lead and clinical lead to ensure the programme adheres to WG and HB policies, process and guidelines
- Ensure clear governance and oversight of the individual testing work streams
- Prepare and deliver strategic and operational documents as required by SRO and WG
- Update RSOG on testing activity, issues and risks as the programme evolves
- Be the point of contact for the testing work stream
- Line manage Programme support manager, Performance and information manager and admin support

Programme Support Manager

- With the programme lead, further develop the Programme plan including a timeline, key milestones (with flexibility due to the nature of the programme) and key performance indicators
- Develop Programme documentation for each work stream
 - Weekly project strand updates/highlight reports
 - Risk and issues log (overarching)
 - Lessons learned
- Co-ordinate updates and gather information for presentation for team meetings and RSOG
- Map interdependencies across the programme

- Work with colleagues across the testing programme to develop a process map for each cohort of testing being cognisant of the fact that there are multiple ways to navigate across Antigen and Antibody testing
- Support the development of reports as required with Programme lead

Performance and information

- Provide analysis of data from multiple data streams to ensure tracking of demand, capacity and other outputs (as required) to inform the strategic and operational development of Covid-19 testing for the HB
- Produce presentations and reports to support the RSO, programme lead, PHW strategic lead and clinical lead as required.

Admin support

- Provide administrative support to the operational meetings and day to day activity
- Room booking
- Attendance
- Recording key actions form meetings
- Develop folder and filing system for the operational team to store and access documentation

Operational Team

Clinical Lead

- Providing senior clinical leadership to the testing unit teams ensuring regulatory and professional standards are met.
- Lead for quality governance / learning, including effective risk management, including all aspects of PTR.
- Lead on compliance of safe systems of work and the health and wellbeing of staff / users of the service

Public Health Operational Lead

- Providing public health leadership and expert public health knowledge for the operational management of the testing programme.
- Link between the testing programme and the Local Public Health Team.

5. INFRASTRUCTURE, SUPPORT & INTERDEPENDENCIES

- There will be a need for the Programme Management Team to be versatile, evolving with the changing requirements of the Testing programme.

 There will need to be a core team of staff, as outlined above, which will be reviewed in March 2021, or earlier, as needed.
- 5.2 The successful delivery of the Testing work stream has many interdependencies and there will need to be subgroups under each work stream lead:
 - Booking
 - Swabbing
 - Laboratory
 - Serology
 - Results
- 5.3 This plan will also detail the actions, timescales and responsible people to implement the CTM UHB COVID19 testing strategy.

6 GOVERNANCE & ACCOUNTABILITY

- 6.1 It is proposed that there is a governance management group to oversee the operational delivery of the testing arrangements. This group will be responsible for the following:
 - Risks
 - Lessons Learned
 - Concerns/compliments
 - SOP's
- 6.2 The Regional Strategic Oversight group will be responsible for overseeing all aspect of the delivery of the response Plan; Contact Tracing and Case Management, Surveillance and Testing Strategy and will be chaired by the UHB Executive Director of Public Health and/or Director of Public Health, protection & Community Services who will both report to weekly Local Authority & UHB CEOs/Council Leaders meetings.

7 TIMESCALES

- 7.1 The Testing plan is already in operation
- 7.2 An action plan setting out the key milestones and deadlines moving forward is presented at Appendix 1.

8 PARTNERSHIP, COMMUNITY ENGAGEMENT & COMMUNICATIONS

- 8.1 Underpinning this approach will be the effective communication of risk and clear messages to our citizens on the arrangements being put in place for Testing so people know what to expect. A communication and engagement plan has been developed by the Communication work stream as part of the overarching programme of work
- 8.2 Partnership working, co production and collaboration is key to the success of this work steam; the operational group meeting has representation from all partners involved in the delivery of this work; smaller task and finish groups have, and will continue to have going forward, representation from PHW, HB and LA.

9 FINANCIAL IMPLICATIONS

- 9.1 The financial implications of putting these arrangements in place have yet to be fully quantified and will change as the work stream develops. Initial estimated of a 12 month cost are outlined in the finance paper.
- 9.2 In the initial phase staff were drawn from existing resource; however as 'normal' services are re- introduced across the HB it will be necessary to undertake a wider recruitment exercise and therefore develop a workforce plan; this now has to be a key priority. In addition there are likely to be costs associated with ICT, infrastructure and telephony. As the plan is implemented it will be necessary to ensure all costs associated with the approach are captured and quantified.
- 9.3 The national response plan includes a section on finance and resources which indicates that the additional costs for contact and trace will now have to be coordinated by Welsh Government and that further clarity will be required on the financial support arrangements that will be provided to partners.

Appendix 1

ACTION PLAN

Ref.	Action	Milestone	Person/Organisation Responsible	Deadline
1	Executive Agreement of testing strategy, Operational Plan and finance outline	•	Kelechi Nnoaham and Executives	June 2020
2	Implement plan for additional self- administered lanes to be added to Kier Hardie and Bridgend testing sites ad for these to be operational	4 site model	Sharon O'Brien Andy Francis	22 nd June Bridgend 29 th June Keir Hardie
3	Abercynon site to be handed over to Deloittes	Site run by Deloittes with swabbing demand and capacity fed back to HB – reporting mechanism clear and in place	Programme lead, clinical and operational leads for each site	By 26 th June
4	Mobile community testing (x1)	 Set up rolling programme for care homes residents and staff Implement the WG initiative for testing care home staff via an online portal, alongside HB support of testing residents Care homes staff to be familiar with the processes Care Homes Task and finish group established (includes HB, PHW and LA representation) Support citizens in the community who unable to use the on line portal or attend a testing unit 	Care homes lead and clinical operational leads (Sian Lewis, Ceri Wilson)	By 22 nd June for implementation and ongoing support
5	Serology testing	Random testing of Teachers	Phil Webb	End of June completion
		Random testing of CTM UHB staff – operational plan	John Geen	completion date to be agreed

		•	Random Testing of Care Home staff/residents – Operational Plan –	PHW support to develop an operational plan	completion date to be agreed
6	Staffing model agreement and recruitment into fixed term posts and bank hours as required	•	Agreement to proceed with fixed term posts and any bank hours required Full team in place as required to ensure continued development of the testing programme and service delivery associated with the programme	Exec agreement HR with clinical and Programme lead	June
7	Develop programme plan for continuation of testing programme; to include plans for response to emerging outbreaks	•	Ability to mobilise Mobile Units with Military support and plan for when military support ends	Programme lead plus, programme support manager, military and clinical operational leads	End of July
8	Secure premises for booking, results and care homes teams to be based (antigen and antibody) and care homes admin team	•	Property identified (Ysbyty Seren) furnishings and IT in place Staff relocated	Programme Lead, Clinical lead, planning lead, IT, facilities	End of June/beginning of July
9	Ensure all stakeholders are kept informed of changes and developments	•	Stakeholder mapping and level of interest/need to know etc around testing (could already be in place) work with Covid -19 Comms lead	Programme lead, Programme support Manager Comms Lead	July