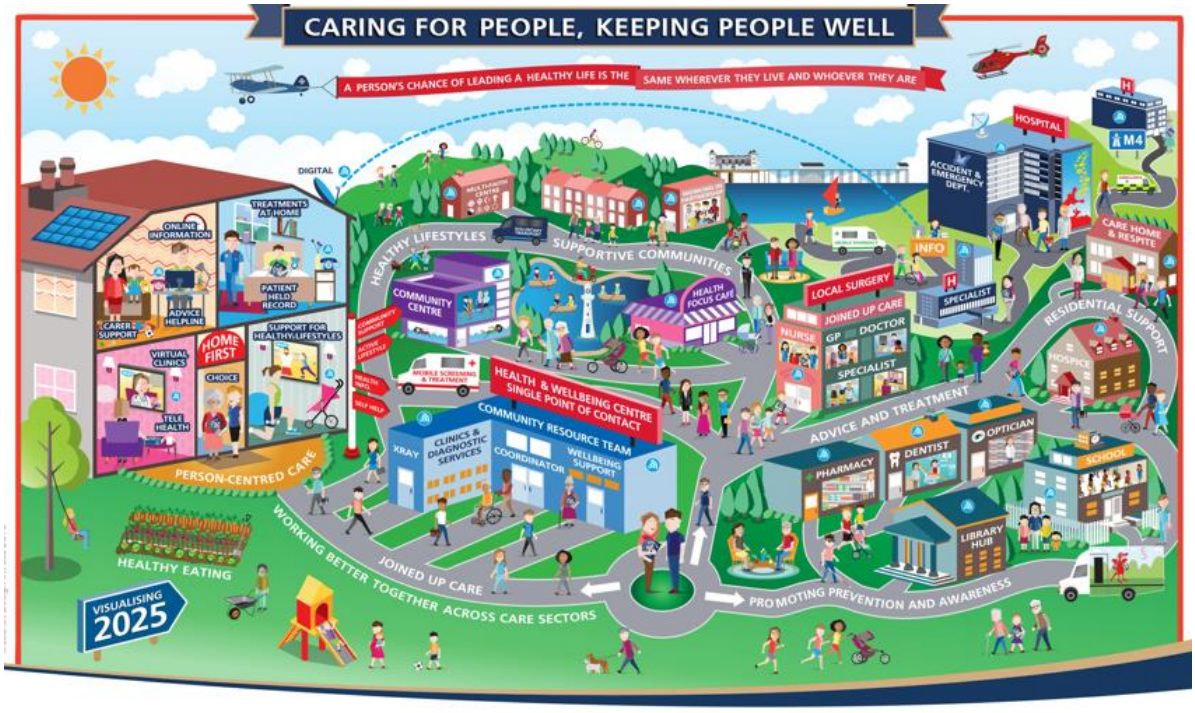


CARDIFF AND VALE UNIVERSITY HEALTH BOARD

SERVICE DELIVERY PLAN 2020-21

QUARTERS 3 and 4

Contents

EXECUTIVE SUMMARY

2020 has been a year like no other as we continue to tackle the unprecedented global challenge of Covid-19. Like others this pandemic has tested our organisation and our staff in all manner of ways. As this will unfortunately continue to be the case we have developed a plan for the remainder for 2020/21 which continues to address the challenge head on.

As it is neither possible nor desirable to set out a fixed plan for the coming six months due to the unpredictable nature of this pandemic. As such we have developed three broad scenarios (not predictions or projections) for the coming six months to support in our thinking and help us produce an agile and flexible plan. These scenarios were;

Covid-19 "worst-case"
Covid-19 "best-case"
Covid-19 "central"

For the purposes of writing this plan we have adopted the Covid-19 "central" scenario as our triangulation point. It remains vital though that this is seen within the context of the UHB continuing to adopt its approach to gearing and thus being ready to respond to any eventuality.

To ensure we continue to meet the needs of our local population over the coming six months and beyond whilst at the same time supporting our extraordinary staff we have used what these scenarios have told us to shape the description of our responses around the four harms associated with Covid-19 *(i) Harm from Covid-19 itself, (ii) the indirect harm of Covid-19, (iii) harm from an overwhelmed NHS and social care system (iv) harm from wider societal actions*.

Harm from Covid-19 itself

Our bed modelling shows;

- Total physical bed capacity is likely to be sufficient in all plausible scenarios once the full surge capacity is in place
- Prior to that there remains a theoretical risk that demand in a RWC scenario would exceed bed availability
- The greatest period of risk may well be during December & January, when the totality of the surge capacity is not yet available, in the event of a Covid-19 second wave 2-3 times larger than the first and coinciding with winter
- Specific bed demand and timing of that demand will be determined by both Covid-19 and the extent to which non-Covid-19 returns to normal (both of which are demand-driven and not predictable), with elective activity having a comparatively marginal effect on bed demand
- However modelling suggests that planning for up to 1600 beds will be adequate for all but the worst-case Covid-19 scenario

Harm from an overwhelmed NHS and social care system

Our plan describes the replacement field hospital to the DHH - a temporary modular build which will accommodate up to 400 beds known as 'the lakeside wing'. This capacity will be delivered in 2 phases with phase one due to deliver 166 beds by the 25th November and Phase 2 to deliver the remaining beds by the end of January 2021.

In addition we describe the work we are doing with our wider partners across social care to manage pressures and challenges being faced across 'test, track and trace' and care homes.

Our Workforce

Through scenario planning our plan shows that we understand what our workforce needs are and that workforce is the biggest issue facing us which must be effectively managed.

Covid-19 worst-case – this would involve staffing our internal additional surge capacity beds (106) across critical care and additional IP beds created in UHW, UHL, Barry & St David's. In addition, we would need to staff our additional field hospital capacity of 350 field hospital beds and further 50 IP beds in Lakeside Wing. This represents a total additional bed capacity of 506.

Covid-19 best-case – this would involve retaining existing staffing levels; recruiting temporarily into the 50 additional winter bed capacity; maintaining absence levels at around 5.5%; continuing to recruit permanent posts to manage turnover and; with a focus on returning non-Covid-19 (emergency and elective) to normal levels. This represents a total additional bed capacity of 156.

Covid-19 central scenario – this would involve retaining existing staffing levels; recruiting temporarily into the additional winter bed capacity; temporarily redirecting/redeploying staff from acute non ward areas and service closures to staff the internal additional surge capacity and a further 166 beds in the field hospital facility (116 field hospital beds and 50 IP beds in total). This represents a total additional bed capacity of 272 (50 + 106 + 116).

In-direct harm from Covid-19

In the context of our Planned Care strategic framework we are maintaining a focus through quarters three and four on two key elements of planned care –

Treatments: key activities to increase activity across- Orthopaedics, our second cardiac theatre, day Surgery at UHL and cataract activity
Outpatients: Key activities across Clinical Prioritisation, Adapted ways of working and configuration

In addition we have a plan that sets out how the range of essential services which we provide will be maintained over the coming period.

Harm from wider societal actions

We outline the actions we will be taking in regards to long Covid-19 and specifically our population's mental health and wellbeing along with how we are working with our health partners to deliver sustainable health services collaboratively where clinically appropriate.

Our other critical enablers

Finally we address the other critical enablers and associated actions which will underpin the success of this plan. These include;

- Effective management of our finances
- Our capital and estate
- Our approach to research, development, innovation and technology
- The effective management of winter

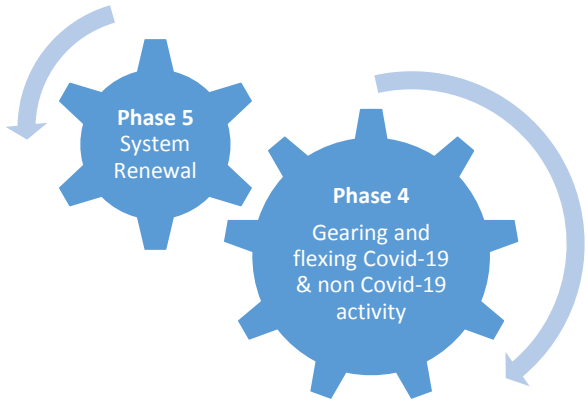
OUR APPROACH TO PLANNING

2020 to date

Our initial 2020/21 plan developed in quarter one and refined in quarter two indicated the UHBs immediate acute response to the pandemic and was described through a series of phases (below) underpinned by a *gearing* approach..

Phase 1	Repurposing capacity and zoning within UHB acute hospitals
Phase 2	Commissioning new infrastructure and additional capacity within UHB facilities
Phase 3	'In Extremis' planning- the commissioning short-term surge capacity outside UHB facilities
Phase 4	The ongoing response to the pandemic- our operating model and gearing approach to ensure that the UHB is able to continue to provide a flexible approach to developing and balancing our capacity to deliver essential services
Phase 5	our proposed approach to system renewal

Quarter 3-4 planning



Unfortunately Covid-19 is going to exist within society for some time and as such our system must adopt and further learn to operate within this context.

Whilst we have moved out of a period of emergency planning (phases 1-3) we now operate in a circular process in order to continually balance phases 4 and 5.

Our core aim in this quarter 3&4 plan has been to describe how we will do this to best affect. To deliver this aim our thinking had to go through a number of initial steps-

i. Scenario Planning

From an early stage in the pandemic the UHB has established the concept of 'gearing' reflecting the need for health services to be adaptable and respond differently depending on the prevalence of Covid-19 and the resulting impact on service provision. The original gearing levels remain extant (see table 1) but of course the breadth of each 'gear' means there are also multiple degrees within each of these levels. Consequently this approach sets the framework for our response and planning, but the position is reviewed multiple times per day with dynamic decision-making.

Table 1

	Post-COVID-19	Significant	Substantial	Severe	In extremis

COVID-19 daily attendances	0	0 – 50	50 – 100	100 – 200	> 200
COVID-19 daily admissions	0	0 – 25	25 – 50	50 – 100	>100
COVID-19 patients in hospital	0	0 – 250	250 – 500	500 – 1000	>1000
COVID-19 critical care	0	0 – 35	35 – 75	75 – 150	>150

The emergence of Covid-19 has brought unprecedented challenges and uncertainties to the operational delivery and operational planning of health services. To exemplify this the latest modelling indicates NHS Wales needs to be in a position to respond to a range of 0 – 68,000 Covid-19 infections per week and 0 – 2000 Covid-19 hospital admissions per week, with Welsh Government requiring the UHB to make up to 795 hospital beds available for Covid-19 patients.

The timing of a second wave (or indeed the reality that we are already in it given the consistent uptake in cases we are seeing within our local population) is uncertain and may coincide with non-Covid-19 winter pressures. In addition it is unknown what impact this second wave will have on non-Covid-19 emergencies, following a substantial drop in demand during the first wave. This uncertainty with emergency demand compounds a substantial backlog of elective work – at historically high levels – and an unquantifiable level of unmet demand resulting from the first wave.

Given this context it is clearly not possible or desirable to set out fixed plans for the forthcoming six months. Rather the task is to clearly articulate how we intend to respond at different levels of Covid-19, i.e. the *gearing* approach, and the potential implications for our service delivery, our workforce and our finances.

To that end we developed three broad scenarios (shown in table 2), representing the range of plausible circumstances (for Covid-19) over the coming months, to test thinking:

Table 2:

Scenario		Gear	Description
1	**Covid-19 "worst-case"**	**Severe**	Utilising the Swansea University RWC model for Covid-19 (although bed figures adjusted) plus typical effects of winter for non-Covid-19.
2	**Covid-19 "best-case"**	**Significant (lower end)**	Equivalent of the situation over the past few months persisting. Low prevalence of Covid-19 remains for the rest of the financial year but does not disappear entirely. IP&C controls still required and minimal Covid-19 capacity in place but otherwise the focus is on returning non-Covid-19 (emergency and elective) to normal levels.
3	**Covid-19 "central" scenario**	**Substantial**	A second (and potentially third) Covid-19 wave occurs of similar size and duration to the first wave.

The specifics of these scenarios are set out in **appendix one.** However it is important to stress **these scenarios are not predictions or projections**. These are purely scenarios to support our planning and provide an indication of the implications for service delivery, finance, workforce etc.

For the purposes of ultimately writing this plan and providing an accompanying minimum data set (MDS) we have used the **Covid-19 "central" scenario** as our triangulation point. However as reiterated at various points this must be acknowledged in the context of the UHB possessing a clear approach to *gearing* which allows us to be both flexible and agile in terms of how we deliver the required level health care services to our population in other scenarios if required.

We also used the collection of MDS information as part of this exercise and to triangulate what the *'art of the possible*' was within these scenarios.

ii. Identifying risk

We then identified the high-level risks presenting themselves in these scenarios (shown below). This allowed us to be clear on where the focus of our plan needed to lay.

Risk 1: Covid-19 prevalence exceeding modelling
Risk 2: The impact of R1 on system capacity- *Covid-19 and non Covid-19*
Risk 3: The impact of R1 on finance (above funded plan)
Risk 4: The impact of R1 on our workforce
Risk 5: The additionality of a particularly harsh winter

At the same time we considered our full Board Assurance Framework and the risks currently identified to ensure a line of sight was not being lost to any wider challenges facing the organisation.

See also **section 8** around our governance.

EU Transition

The risk in relation to EU transition has not been added to the organisations BAF due to the fact that there is a separate document already in place which details all the risks in relation to Brexit. It is acknowledged that it would also be very difficult to wrap 'Brexit' up into just one risk on the BAF.

Our Brexit Risk document is in the form of a Business Continuity Plan and is regularly reviewed by the Brexit Task and Finish Group. The plan details the risks, likely impact and mitigating actions. The Chair of the Group is the Executive Director for Strategic Planning.

iii. Ensuring an internal and external for with the strategic context

Finally we looked to cross reference and 'sense check' with the wider strategic context to ensure alignment.

Internal alignment

Shaping Our Future Wellbeing and its key principles remain our organisational compass and have underpinned the development of this plan. Whilst we are in exceptional times it remain vital that a consistent line of sight is maintained to what was, and still is the best thing for the people we serve;

- Empower the Person
- Home first
- Outcomes that matter to people

- ❖ Avoid harm, waste and variation
- ❖ Promote equity between the people who use and provide services

External alignment

A number of wider strategic drivers continue to help us set the direction of our plan and these are shown in the table below. Whilst these have been guiding principles and 'markers' for us in our planning we have also looked to signpost to specific sections of this plan where their consideration has been particularly pertinent.

The context	The strategic drivers	How and where we reflect this in our plan
The four harms associated with Covid-19	• The direct health impact • The indirect health impact • The health system being overwhelmed • The wider societal impact	Sections – 2,3,4,5
A Healthier Wales	**<u>The quadruple aim</u>** • Improved population health and wellbeing • Better quality and more accessible health and social care services • Higher value health and social care • A motivated and sustainable health and social care workforce **<u>The ten design principles</u>**	Essential services- *section 4* Our regional working – *section 5* Our Workforce- *section 7*
The WG winter protection plan and the Cardiff & Vale RPB winter protection plan	• Preparing for winter • Protecting the people of Wales • Care Homes	Working with our care homes- *section 3* Managing winter – *section 6* Working with our partners- *section 6*
Funding Opportunities	• Urgent and emergency care fund • Discharge to Recover and Assess funding • Eye care sustainability fund	*Sections 4 & 6*

Triangulating these three phases of our thinking then allowed us to describe our response whilst ensuring integration with our workforce and financial planning.

Section 1: OUR CONTINUED RESPONSE to THE DIRECT HARM OF COVID-19

This section focus on the acute setting. We however fully recognise the huge role that primary care have, are, and will, play in our continued response to the pandemic and this is reflected in **section 3.**

Our acute site functional bed capacity

The emergence of Covid-19 brings with it the most significant challenges to hospital bed capacity, possibly in the history of the NHS. There are three main aspects to this:

1. **Scale** - In the worst-case scenarios Covid-19 threatens to overwhelm hospital capacity. The UHB must therefore be prepared for the possibility of having to provide many hundreds of additional beds to accommodate Covid-19 patients.

2. **Uncertainty** - The scale, timing and duration of any subsequent Covid-19 waves are unknown and inherently uncertain, as is the impact that would have on non-Covid-19. In addition it is evident from the first wave that Covid-19 demand can accelerate to very high levels in only a matter of weeks. The UHB must therefore have a plan that is highly responsive and flexible, working in short time horizons of no more than 4-6 weeks.

3. **Complexity** - Irrespective of the level of Covid-19 demand it is necessary to safely segregate inpatients to minimise the risk of hospital transmission. The UHB has previously set out its approach to streaming, with five separate patient pathways (red, purple, blue, orange and green). This inevitably brings with it a different order of complexity to configuring and operationally managing our acute hospital sites.

In order to function within this environment the UHB has previously set out the components of our new operating model:

a) Design principles: to make decisions in a consistent fashion
b) Gearing: to provide the appropriate level of response at the right times
c) Streaming and zoning: to safely segregate patients and minimise risk
d) Surveillance: to closely monitor changes in Covid-19 demand
e) Green zones: to provide dedicated “Covid-19-free” environments
f) Planning cycles: 4-6 operational planning cycles within the framework of the annual plan

The details for each of these have been set out in previous plans and continue to be the approach we are taking.

Within this context the bed plan for the UHB cannot be described in the traditional manner of ‘what and when’. However it is possible to set out how the UHB’s response will change at different levels of Covid-19 (our gearing approach) and stress-test the resilience of plans against different scenarios.

Modelling of bed demand

As described in our *approach to planning* section the UHB’s approach to planning for quarter 3 and quarter 4 has been to establish three high-level scenarios and test our response against each to understand the likely impact and limitations. **These are not projections but plausible scenarios** to *stress-test* our bed plans against.

The detail of the assumptions behind these scenarios is provided in **appendix one**. The results of this modelling is shown below **(graphs a,b,c)** against the available capacity with phase one representing all of the adult, physical health beds available to the UHB prior to Covid-19; phase 2 the additional wards established within the UHB’s estate in response to Covid-19 (e.g. two additional wards in the community hospitals, the converted physiotherapy department, the HCID unit etc); and phase 3 the Lakeside Wing Surge Hospital (for simplicity the DHH capacity is not shown on the charts but is available to the UHB until the 12th November).

The modelling has the following caveats:

- No provision made for loss of capacity due to infection outbreaks
- Covid-19 demand does not include in-hospital transmissions

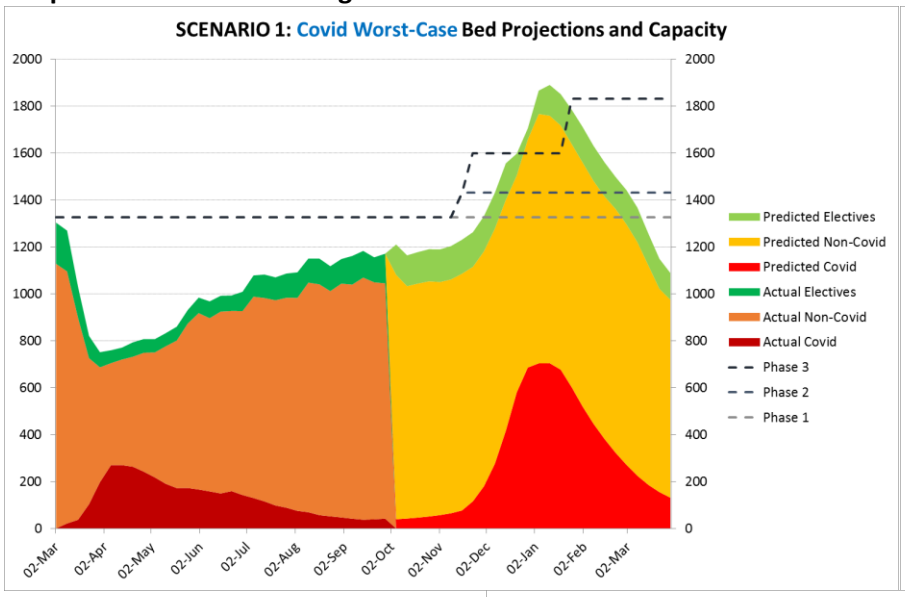
- Modelling concerned with bed capacity only, staffing modelling will need to factor in increased absence due to Covid-19 sickness/isolation
- No bed provision made for non-CAV services to be supported/centralised (e.g. Royal Glamorgan, social care, thoracic etc)
- Plan assumes Spire retained until at least the end of the financial year
- Implicit assumption that discharge flows into community & social care will be maintained
- Makes no provision for further bed spacing

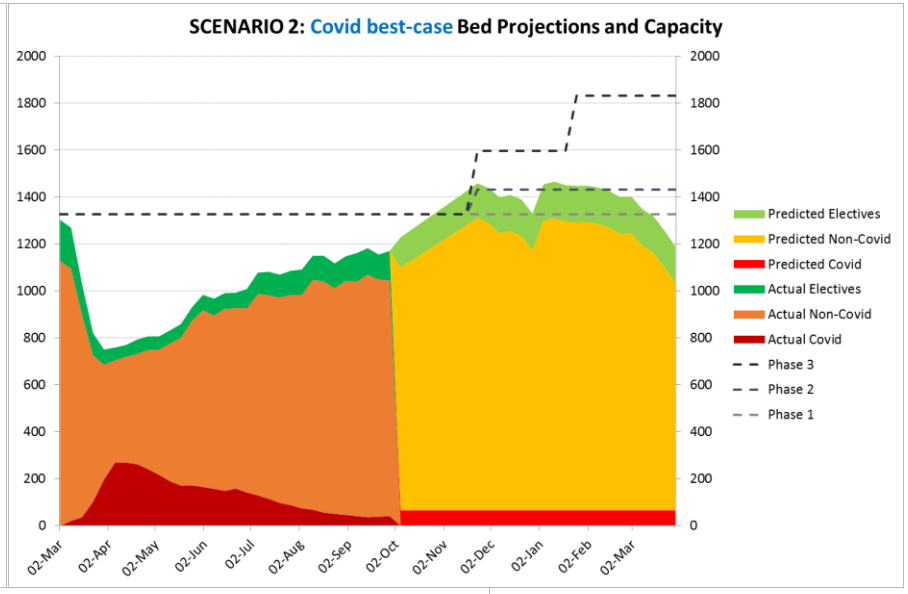
From this analysis we have drawn the following conclusions:

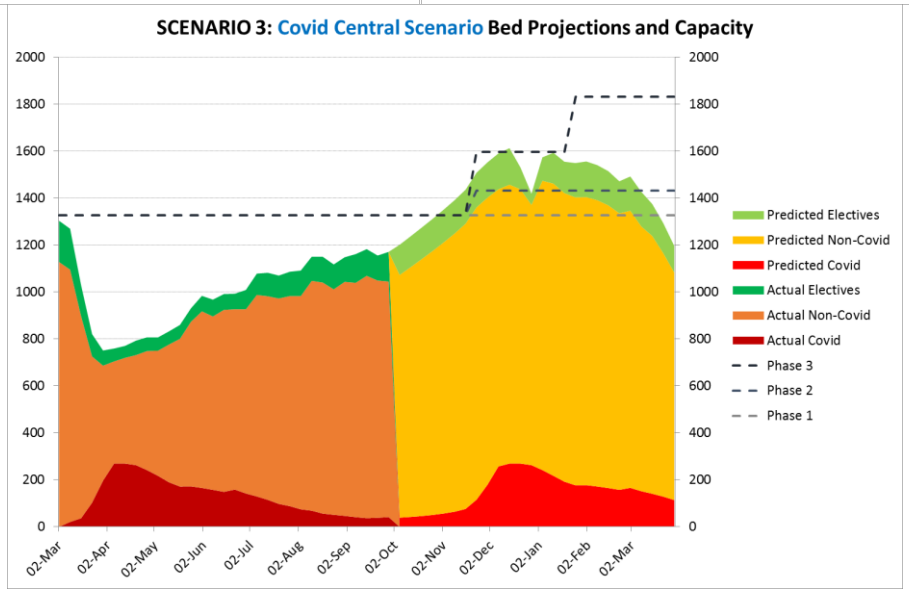
- Total physical bed capacity is likely to be sufficient in all plausible scenarios once the full surge capacity is in place (noting the caveats above)
- Prior to that there remains a theoretical risk that demand in a RWC scenario would exceed bed availability
- The greatest period of risk may well be during December & January, when the totality of the surge capacity is not yet available, in the event of a Covid-19 second wave 2-3 times larger than the first and coinciding with winter
- Specific bed demand and timing of that demand will be determined by both Covid-19 and the extent to which non-Covid-19 returns to normal (both of which are demand-driven and not predictable), with elective activity having a comparatively marginal effect on bed demand
- However modelling suggests that planning for up to 1600 beds - i.e. all of phase 2 plus the first 166 of Lakeside Wing - will be adequate for all but the worst-case Covid-19 scenario

Graphs – *a,b,c*

Outputs from Bed Modelling for Three Covid-19 Scenarios







Zoning of capacity (including Green Zones)

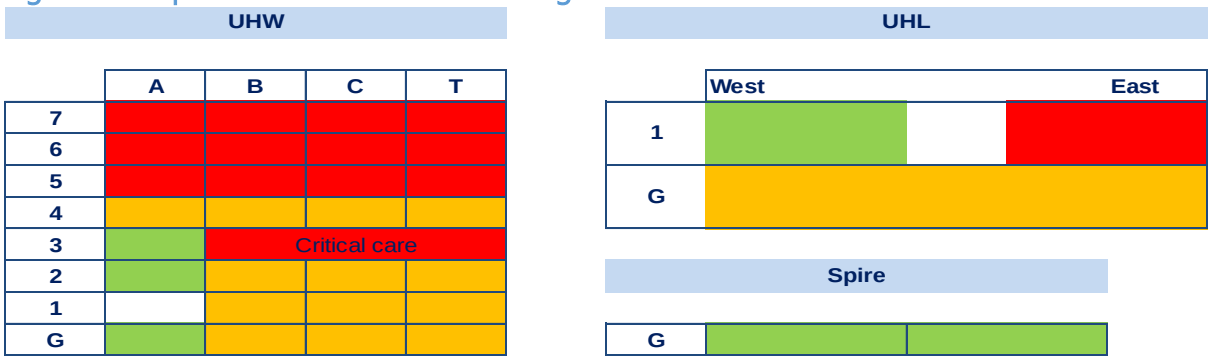
As described in previous plans we have, since the onset of the pandemic, been segregating Covid-19 positive, Covid-19 suspected and non-Covid-19 patients. In addition the Spire hospital and the Short Stay Surgical Unit (SSSU) at UHW have been used as 'Covid-19-free' (Green) facilities to provide essential and urgent operating. Green zones have since been established in main theatres in UHW and at UHL, with further expansion planned to be completed during November.

These green zones operate as a 'hospital within a hospital', including separate access, facilities, processes and staffing. The functioning of the green zones is described in a range of SOPs, with controls tightened as the community prevalence for Covid-19 changes (i.e. the gearing approach).

Over the summer the UHB has, like all Health Boards, seen a significant reduction in Covid-19 patients in hospital and therefore a contraction of the Covid-19 footprint, with wards repurposed to once again provide non-Covid-19 services. Nonetheless, in the event of a significant second wave, the zoning plan remains as previous with Covid-19 patients initially placed on the top floor at UHW and the red zone expanding downwards as necessary; with the East wing, first floor used at UHL.

The Dragon's Heart and Lakeside Wing will continue to have a clinical model based upon step-down, thus facilitating the displacement from these red zones should that be required.

Figure 1: Simplified schematic of site zoning



The fundamental objective of establishing these green zones is to protect patients whilst re-commencing core services. To support this we have a systematic clinical audit process in place to capture the outcomes of all surgical procedures, again this has been in place from the early stages of the pandemic.

The UHB has a role in providing services to patients outside of Cardiff and Vale and we continue to have active dialogue with WHSSC and other Health Boards (Swansea Bay in particular) on the support we can offer through these green zones to ensure time critical services (e.g. thoracic, upper GI and hepatobiliary surgery) can recommence across South Wales.

Test, Trace and Protect

Working with our local authority partners we have established our TTP service as one of the key pillars to the safe releasing of lockdown measures. The contact tracing service is hosted by Cardiff Council on behalf of the three organisations; Contact Tracers and Contact Advisors are managed in teams by the Council, with Environmental Health Officer oversight. A Regional Team provides oversight of the public health response across Cardiff and the Vale of Glamorgan, and provides advice on the management of incidents as they arise.

The TTP service has had to respond to an increase in local cases in recent weeks, particularly in Cardiff. This increase has led to the implementation of additional local lock down measure, and until the effect of this is seen, we expect case numbers to continue to rise.

We continue to devote a large proportion of our capacity to the response, currently focused on delivering TTP in our region and the recent arrival of students to the city also has the potential for additional seeding of infection from other areas, and onward local spread which will require resources to address this.

To respond to this;

- ❖ We continue to work closely with Cardiff University and are supporting the development of a new walk-in testing centre located close to the University and City centre.

- ❖ Cardiff Council have been recruiting and training additional contact tracers and advisors (to which we continue to work in partnership and to provide staff to them via Secondments). The tracing service is now also operating 8am to 8pm, 7 days a week which represents an expansion of hours.

Whilst our performance data over recent weeks has shown response times to be above average in Wales, the recent uptick in cases, compounded with the effects of delays in results from Lighthouse labs resulting in large batches being received at once, has caused some deterioration in performance which we are clear we must try to address.

As the pandemic has progressed and we have worked together as a regional team to manage and minimise local risk and have learned much about how infection spreads within our local population. This learning is shared regularly at the regional board and has informed our local plans, for example in developing local communications to target our higher risk populations. This has also been shared at the Regional IMT, and through the escalation processes agreed locally, to report to Welsh Government.

The Test, Trace and Protect component of the minimum data set which accompanies this plan provides further detail on our position to date and our projections for the remainder of 2020/21.

Our Planning for Covid-19 mass vaccination

Every Health Board in Wales was tasked with submitting preliminary plans for the delivery of the Covid-19 vaccination programme locally by 3 September 2020 to the Chief Medical Officer for Wales. Cardiff and Vale UHB submitted a strategic level plan, approved by the CVUHB Chief Executive Officer. A more detailed operational plan for mass vaccination in Cardiff and the Vale of Glamorgan will be submitted later in October 2020.

We are however progressing a number of activities in this area which includes;

- ✓ Establishment of a Covid-19 Vaccine Programme Delivery Board chaired by the Executive Director of Public Health.
- ✓ Established five work-streams to undertake preparatory work- i) Workforce & Training; ii) Vaccine Considerations, iii) End-to-end Person Journey; iv) Venues and Logistics; v) Communications.
- ✓ Modelling work currently being underway for priority population groups (based on JCVI guidance) and workforce to provide a better understanding of operational requirements
- ✓ Three Mass Vaccination Centres have been identified and agreed.
- ✓ A costed plan being worked up.

We are also working through a number of risks which have currently been identified and these include;

- Funding to support the mass vaccination programme
- The impact of a Second wave of Covid-19 and consequent impact on staffing and resource
- The unknown exact timescales for vaccine availability
- Workforce capacity and training required for vaccination delivery – our workforce hub is supporting the recruitment to the Community Testing Unit in readiness for a vaccine programme.
- Compliance and engagement from eligible groups
- Wider winter pressures

Our workforce response

Our staff are the most extraordinary part of this organisation and we remain extremely proud of their achievements both during the immediate emergency phase of the Covid-19 pandemic and their continued ongoing response both over the summer and as we head into winter combined with the uptick in Covid-19 which we are now seeing in our community.

It is anticipated Scenarios 1, 2 and 3 described earlier will broadly impact on the workforce as follows:

Scenario 1: Covid-19 worst-case – this would involve staffing our internal additional surge capacity beds (106) across critical care and additional IP beds created in UHW, UHL, Barry & St David's. In addition, we would need to staff our additional field hospital capacity of 350 field hospital beds and further 50 IP beds in Lakeside Wing. This represents a total additional bed capacity of 506. This would be beyond the ultimate stretch for our workforce capacity and as we could not supply all the nursing and medical staff it would require the closing down of non-essential services and re-direction of staff appropriately; as well as a fundamental change to the workforce model to use available Therapy staff, Students, Retired Returners; and re-organising medical rotas across the board again to support Covid-19 zones. This could see our absence levels rise to over 9% again and the number of staff shielding rising to over 600.

Scenario 2: Covid-19 best-case – this would involve retaining existing staffing levels; recruiting temporarily into the 50 additional winter bed capacity; maintaining absence levels at around 5.5%; continuing to recruit permanent posts to manage turnover and; with a focus on returning non-Covid-19 (emergency and elective) to normal levels. This represents a total additional bed capacity of 156.

Scenario 3: Covid-19 central scenario – this would involve retaining existing staffing levels; recruiting temporarily into the additional winter bed capacity; temporarily redirecting/redeploying staff from acute non ward areas and service closures to staff the internal additional surge capacity and a further 166 beds in the field hospital facility (116 field hospital beds and 50 IP beds in total). This represents a total additional bed capacity of 272 (50 + 106 + 116). This will mean further extending the Temporary Bank, Facilities Bank and engaging further temporary workers on fixed term contracts in readiness to gear up. This could see an increase in absence to around 6 – 7% as our own staff fall ill with the virus and are required to self-isolate and resilience is low.

We are therefore currently increasing temporary recruitment as part of this readiness plan. The Workforce Hubs remain in place to ensure a fast pace, multi-professional approach to workforce resourcing for the following:

- Winter/Covid-19/Surge (wards)
- Facilities Staff – creating a Facilities Bank
- TTP & Community Testing Units – additional staff due to the increase in demand
- Mass Immunisation – Covid-19 & Flu vaccine

We are undertaking a number of actions to ensure our workforce is best position to respond to the ongoing pandemic. These include;

- ✓ Recruiting 50 Facilities staff (housekeepers, porters) on 12 week contracts and we are establishing a Facilities Bank to enable us to call upon more staff quickly as and when needed. This temporary resource will provide a solid backfill for any gaps and manage absence more effectively. Through Social Media and virtual recruitment we have already appointed 49 individuals.

- ✓ Plans for the out of hospital Community Resource Teams with additional funding to support these teams.

As students are now resuming their academic programmes, or have joined us in substantive posts following graduation we are not building our plan based on large cohorts being available to us. However, all students are offered the opportunity to register with us on our Temporary Banks and will be able to

choose to work for us on a temporary basis as they deem appropriate to fit in with their educational commitments.

Those staff who have returned from former retirement will remain on our temporary registers – although we do not at this stage anticipate relying heavily on this group at this stage. Internal staff who have retired and returned as part of the UHB Policy remain a very valued group of staff who form part of the staffing compliment. The adjustment in the NHS pension policies to support retaining this group has helped bring them back earlier and makes for an easier transition.

See also **section two** regarding our medical surge workforce planning.

Section 2: PREVENTING OUR SYSTEM BECOMING OVERWHELMED

In extremis- Our field hospital

During Q1 the UHB, in addition to reconfiguring existing acute beds to appropriately cohort patients requiring hospital admission, the UHB also implemented a range of community and acute hospital infrastructure schemes to supplement the core bed base of the UHB by a further 106 beds. In addition to this, the Dragon's Heart Field Hospital was also rapidly established at the Principality Stadium to establish a further 1500 temporary beds to provide capacity for an 'in extremis' response to the potential demand predicted in the first wave of the pandemic. As the national lockdown restrictions took effect and the first wave of the pandemic subsided, the options to replace the temporary field hospital capacity with a proportionate and more sustainable option has been developed. The replacement field hospital capacity is being provided on the UHW in the form of a temporary modular build, Lakeside Wing, which will accommodate up to 400 beds. Construction is underway and on schedule. This capacity will be delivered in 2 phases with phase one due to deliver 166 beds by the 25th November and Phase 2 to deliver the remaining beds by the end of January 2021.

The decision to mobilise the capacity in Lakeside Wing will be under continuous review through our daily operational meetings where the flow, cohorting and occupancy of wards on all sites is under continuous review. From an operational management perspective, Lakeside Wing will be treated as an extension of UHW and will therefore be co-ordinated by the UHW Local Coordinating Centre (LCC). In recognition that 350 of the beds are in wards in Lakeside Wing that have been designed as temporary field hospital accommodation, additional operational measures have been taken to mitigate or manage fire safety and IP&C requirements.

The most significant challenge will be the staffing of this capacity in addition to the existing enhanced core and winter capacity. The management of the staffing for the unit will be through the nursing and medical workforce hubs that have been established at UHW. In addition to the appointment of additional temporary and permanent staff, the process for redeployment and skill mixing of teams will be co-ordinated through these professionally led hubs to ensure that patient and staff safety is appropriately assessed and balanced.

Critical Care

Critical Care within Cardiff and Vale UHB has expanded both its footprint and workforce to best meet demand from the outset of the pandemic. It is recognised that as a regional Tertiary centre that critical care activity is very much demand-driven and, as such, significant challenges exist in maintaining a prescribed level of activity. Flow and efficiency of the patient's pathway remain the key determinants of managing demand in an ITU setting and are referenced below- we recognise that both of these factors are within our systems' control.

Therefore, we have a zero tolerance approach to delayed discharges with an escalation policy that aims to keep two staffed admission and stabilisation beds to reduce DTOCs and expedite admission has been agreed by our Executive Team and has been operational since the 28th of September 2020. The efficacy of the revised escalation plan will be audited and amendments made as appropriate in due course.

Nevertheless, we remain relentless in our focus on ensuring that our critical care surge plans can be activated quickly and we have a developed escalation plan **(appendix two)** which is kept under constant review.

We equally recognise the importance of maintaining our Covid-19 and non-areas within our critical care setting- **appendix three** shows a schematic of our critical care footprint.

Critical Care arrangements are reviewed frequently in adherence to the UHB's first principle of remaining Covid-19-ready. Balancing this with a return to essential services requires weekly review ensuring our services are agile in response to demand and Covid-19 prevalence. This is undertaken via a weekly review of the UHB footprint by Directors of Operations and Executives.

Only essential surgery (RCS category 1 and 2) has been taking place at UHW. Plans are being implemented during Q3 as green zones are further developed to extend the scope of operating. It is anticipated that routine surgical patients will be cared for in the Post Anaesthetic Care Unit and as such will not have a material impact on ICU capacity.

As the pandemic evolves, it is clear that Continuous Positive Airway Pressure (CPAP) is critical in the management of some patients with Covid-19. As such specific areas outside of Critical Care at both UHW and UHL continue to have been designated for CPAP provision. This replicates the model employed in response to the first wave of Covid-19 admissions in March.

The environment within critical care, with only a small number of isolation rooms and facilities that do not meet current HBN standards creates a number of challenges that the team are required to manage operationally.

Our workforce response

In keeping with the organisations approach to 'gearing' in order to respond to the ebb and flow of Covid-19 we are making plans across the organisation to ensure the availability of workforce so support the operational change in gears at any given time.

These activities include;

- ✓ Continuing to move registered and non-registered Nursing Bank staff into permanent and fixed term contracts; with 35 HCSW currently recruited with a further 40 moving from the Bank.

- ✓ Ensuring that permanent registered nurse recruitment is ongoing with a recent successful virtual recruitment event yielding over 50 registered nurses who will join us in Q3 and Q4.

Our next virtual nurse recruitment event is taking place at the end of October. We also welcomed a further 12 international nurses during September and a further cohort will start in November.

- ✓ Medical and Dental workforce plans being refined as we intend to open clinical areas and more specifically align any additional trainee resource to these areas rather than across the board.

- ✓ Our deliberate attention to continue permanent Medical recruitment throughout this year is also paying off as new members join us regularly and we are filling a number of hard to fill posts.

- ✓ We are also reviewing the acceleration of recruitment plans for Physician Associates to help supplement the workforce model.

- ✓ Ensuring those additional nursing staff who worked throughout the first wave of the pandemic undertake one shadow shift per month under the supervision of a substantive Critical Care nurse during which they will work through a set of clinical objectives.

- ✓ Allied Health Professionals redeployed during the initial wave continuing to receive update training as appropriate, both speciality specific but also to support other members of the critical care MDT in skills such as oral care and proning patients.

- ✓ Progressing work to create a library of media and digital resources to enable on-going training and as a point of reference for existing staff –these will include identification of clinical emergencies (alerting help and initial management), and pastoral support for staff unfamiliar with a Critical Care environment.

Working with our partners- care homes

The Covid-19 pandemic is proving a particularly challenging time for care home providers- particularly the financial pressures which many face as a result. We recognise that even with the additional support being made available to the sector some care home businesses may become financially unviable through the reductions in occupancy coupled with the fixed capital costs and increasing expenditure on infection control, resident isolation, and staffing.

This poses a significant risk to not only Cardiff and Vale but also the wider functioning of the Health and Social Care system in Wales. Consequently we remain committed to the ongoing national work to clarify the legal, financial and statutory issues regarding the NHS stepping in to support the sector if required. This work is being facilitated by the National Director of Complex Care to support Health Boards to identify the key issues in relation to nursing home contingency planning. The current positon can be seen in **annex four.**

This should also be seen in the context of the Regional Partnership Board overseeing delivery of the action plan developed in response to the WG-commissioned rapid review of care homes conducted by Professor John Bolton. See **annex five.**

Directors of social services have also been asked by Welsh Government to ensure sufficiency of care home provision across the region and to have contingency plans in place.

Section 3: OUR RESPONSE TO MITIGATING THE INDIRECT HARM OF COVID-19

Essential Services

At various points in this plan we reflect on the experience of the first wave where many of our clinical boards were reporting a reduction in referrals across a range of their essential services. In many cases this was owing to the general public not wanting to 'burden' the NHS at time of such pressure and/or being too scared to attend a healthcare setting for fear of catching Covid-19.

As we move deeper into the second peak and the winter months we remain committed to both aligning with national messaging about the NHS continuing to be 'open' and it being safe for patients to present with their healthcare needs as well as developing our own messaging specifically for our local population.

Throughout the pandemic the UHB has maintained core essential services with our prioritisation of need based upon clinical-stratification rather than time-based stratification. Given the significant uncertainty in the current operating environment, it is extremely difficult to forecast activity with any degree of certainty. However a range of added activity planning assumptions have been factored in, including:

- The extent to which current Covid-19 activity changes.
- The Health Board's ability to continue to access independent hospital support (Spire Hospital)
- Activity changes as a result of continuing clinical audit outcomes for the developing 'green zones'.
- No further interruption to specialist PPE requirements for surgery and critical care.
- Theatre throughput being sustained or improved as clinical teams get used to using PPE during procedures.
- Sustaining and improving clinician confidence to undertake clinical activity.
- Sustaining and improving patient confidence in accessing services.
- Avoiding or mitigating staff absence as a result of protection, shielding or TTP related advice.
- Environmental guidance changes and any impact on bed availability.

These activity planning assumptions formed part of the minimum data set return which accompanies this plan.

At the beginning of the COIVD-19 pandemic, we reached an early agreement with Spire Healthcare to enable patients with non-complex cancer and other urgent conditions to receive treatment at Spire's Cardiff hospital. This allowed us extra capacity to care for Covid-19 patients at our main sites, in particular to enable space for regional services. The majority of the Health Board's patients at Spire Cardiff were/are being treated for cancer or for time critical/urgent health conditions. Gynaecological, Gastroenterological, Urological, Breast, Neurological, Haematological, Colorectal and ENT services have all be seen at Spire during the pandemic. An overview of activity seen at is shown below;

Spire Cardiff hospital - C&V UHB activity summary

	Operating Theatres																		
	Cancer					Non Cancer						Outpatient activity						Other Treatments	
w/c	Breast Cancer	Colorectal	Gynae	Urology	ENT	Ophthal	Spines	Orthopaed	AV Fistula	Max Fax	CEPOD lite	Breast	Ophthal	Neuro	Renal	Haem	Other	Endoscopy	Cardiology
10/08/2020	5	10	5	0	2	0	3	7	0	0	8	0	174	0	0	62	24	27	12
17/08/2020	6	9	7	0	0	0	5	4	0	3	10	11	108	0	0	52	0	22	9
24/08/2020	5	7	9	0	4	0	4	12	0	0	4	12	65	0	0	49	22	24	8
31/08/2020	7	3	3	0	0	0	6	3	0	0	4	10	111	0	0	54	0	29	10
07/09/2020	9	5	4	0	0	0	6	8	0	0	6	12	101	0	0	66	24	34	12
14/09/2020	8	3	0	0	0	13	3	4	0	4	5	10	113	0	0	63	22	36	0
21/09/2020	5	5	7	0	0	0	3	10	0	0	6	22	120	0	0	56	21	38	0
28/09/2020	3	5	0	0	3	12	2	11	0	2	0	20	121	0	0	34	23	16	0
05/10/2020	7	15	2	0	0	0	6	6	0	0	4	20	132	0	0	47	24	31	0
12/10/2020	4	10	6	0	0	12	5	9	0	2	0	13	126	0	0	54	11	29	0
Total up to and including 16 October 2020	*151*	*190*	*134*	*21*	*46*	*101*	*92*	*116*	*43*	*21*	*141*	*858*	*3,128*	*106*	*12*	*1,256*	*256*	*697*	*132*
Sub totals					*542*						*514*						*5,616*		*829*
Control total																			*7,501*

The UHB has, since the height of the first wave, been steadily increasing its core theatre activity. This is within the context of theatre cases taking approximately 50% longer post-Covid-19.

As Covid-19 cases continue to increase within our community and we move deeper into a second wave the continued use of the independent sector remains a key dependency for the UHB if it is to continue to *plan for stability* and continue to deliver the levels of non Covid-19 activity which have bene achieved to date during the pandemic.

The remaining section of this plan provides greater detail for a number of essential services with **Annex six** providing a high level position statement for all others.

Cardiac services

With the exception of exercise tolerance testing, all diagnostic and treatment modalities for cardiovascular disease are now fully operational. Urgent treatment and some diagnostic tests have been maintained throughout the pandemic period. Clinicians acted swiftly to identify and prioritise high risk cases to ensure the most vulnerable patients received treatment. The primary coronary interventional services, as well as the structural cardiology service, were again protected throughout the pandemic.

The provision of cardiothoracic surgery has provided one of the biggest challenges to the Health Board during the past six months. Poor outcomes linked to patients contracting coronavirus postoperatively led to the suspension of all but life threatening surgery. The cardiothoracic team have worked hard to develop clinically safe pathways in tandem with national guidance. Limited critical care and ward capacity, allied to the pandemic, restricted the number of procedures that could be carried out on a weekly basis. The

urgent need to increase clinical activity became the main focus for the Health Board and, following a number of clinically-led discussions, the decision to transfer cardiothoracic services from UHW to UHL was agreed. Additional critical care and ward facilities are due to come on line in mid-Quarter 3 which will further increase the level of surgical activity.

We remain confident that the second theatre, additional Cardiac ITU, and ward beds will be available from mid-October enabling activity that exceeds pre-Covid-19 levels, to recover the backlog which we currently have.

In the immediate term due consideration has been given to cross organisational working in this area but to date a move to a full regional MDT has not taken place. However we have always remained committed to the concept of mutual aid and equity of access across the region and as such remain ready and able to accept thoracic patients from Swansea to Cardiff for operative treatment should they be referred- at which point a full regional MDT would be instigated.

Most recently we have been in close dialogue with Swansea Bay Heath Board who have had to suspend routine planned cardiac surgery at Morriston Hospital following a localised Covid-19 outbreak. We will continue to work with the Health Board to ensure essential services can be maintained across South Wales.

Cancer

Throughout the first wave of the pandemic we continued to deliver surgical cancer treatments through the use of dedicated “green” zones including Protected Elective Surgical Units (PESU) within the sites at UHW, UHL and the use of The Spire in Cardiff.

During this time however we saw a reduction in a range of referrals and activity;

- ✓ There was a reduction in the number of referrals received by the Health Board (during April and May the number of GP referrals dropped as low as 30% of normal expected volumes and this had a direct impact on the number of cancer diagnosis and cancer treatments delivered).

- ✓ Due to the severely reduced “routine” referral activity and decreased A&E attendances during Q1/2 the number of incidental cancer findings has also reduced significantly.

- ✓ Historically we expect to commence 180 first definitive treatments for cancer each month (this excludes all tertiary cancer activity). During May 2020 this fell to a low point of 96 treatments.

GP referrals volumes have now returned to near normal pre-Covid-19 levels but we have not yet experienced an increase in referrals to account for potential “suppressed demand”.

The proportion of surgical first definitive treatments compared to all treatments shows that the Health Board has also now returned to a position of over 50% being surgical in type, which is comparable to pre-Covid-19 levels.

When delivering diagnostic services in a Covid-19 safe environment there is a significant impact on the available capacity, the total number of patients that can be seen in any dedicated session. The impact is that there is approximately 70% normal capacity available in Radiology and Endoscopy services. This situation naturally leads to extended waiting times for some patients.

However the Health Board has learnt many things during the initial Covid-19 pandemic including more streamlined approaches to cancer pathways and faster decision making which will support with mitigating the reduced capacity levels described above. These include;

- ✓ Seven day working
- ✓ Working collaboratively across Health Board boundaries and exploring alternative diagnostic tests to enable patients with suspected cancer to have access to the right tests to confirm or discount a cancer diagnosis as soon as possible.

With the current resurgence in CovidD-19 cases in the community plans are already in place to implement similar and better approaches to ensure diagnostic and cancer services can continue within Covid-19 restrictions such as safe delivery of surgical procedures, social distancing, etc.

Active cancer pathways continue to be closely tracked and monitored to ensure that each pathway is progressing towards a diagnosis and/or treatment. Where capacity is affecting the time taken to progress to the next step then plans for recovery including additional sessions are considered where possible. The active number of pathways extending beyond the 62 day standard are reducing as a result however some patients will receive their first definitive treatment beyond 62 days. The Health Board is implementing a Harm Review process during Q3/4 to assess all pathways concluding in excess of 104 days from referral to ensure that no harm took place and that organisational learning takes place to prevent future delays.

We remain supportive of any cross boundary working that improves the effective use of limited capacity, improves patient experience and removes inequities of access to services for patients. Current cross boundary work includes;

- Working closely with Swansea Bay to create a Lung Surgery Regional Tracker where the available capacity across the 2 South Wales lung centres will be fully utilised through joint planning.
- Whilst the Health Board hosts the robot for South Wales, the Urology Consultants have worked closely with Cwm Taf and Aneurin Bevan to ensure that access for patients to robotic procedures across the 3 Health Boards is equitable.
- We are reviewing the processes around Regional MDT meetings in terms of flow of information, actions for local Health Boards and the safeguarding of patients. This work will be ongoing throughout Q3/4.

In addition we are currently also developing a case for internal investment in a *Prehabilitation to Rehabilitation (P2R) programme* which will support and improve cancer outcomes that matter to people.

Diagnostics (Radiology and Pathology)

Summary Position

Within Radiology services there has been ongoing increase in activity levels through quarter 2. Across all modalities the service is now at 79% of pre Covid-19 activity. For Cellular Pathology services during quarter 1 and 2 when demand decreased there was significant changes in both laboratory and reporting processes in order to improve turnaround times. The removal of waste within processes has meant that turnaround times have improved and are being sustained as demand levels increase, currently at 75% of pre Covid-19 levels.

Backlog and Plan

The backlog for the two services need to be considered differently. For Pathology services there is currently no backlog and weekly reviews of performance levels are focussed on maintaining turnaround times as the demand increases.

Radiology has a significant challenge in terms of the overall backlog. This needs to be considered both from an overall perspective and in terms of the risk for patients. The categorisation of risk in radiology is at 6 levels, P1-6, with P1 representing the highest risk level for patients. The risk levels are under regular review by the consultant team and currently all patients within risk levels 1 and 2 are being accommodated with the majority of P3 being seen within 4 weeks.

The overall backlog is monitored based on the numbers of patients waiting greater than 8 weeks being the previous target for radiology:

Modality	Number of Patients greater than 8 weeks
CT	230
MR	2832
Ultrasound	3470

The process of managing these backlogs is through managing risk, activity and demand management. In risk terms the priority levels are determining which patients are prioritised. Activity levels are continuing to increase but are balanced against a process of ensuring that the department is regularly reviewing the IP+C requirements. There is a process of reviewing pathways in conjunction with primary care in order to ensure that we are only undertaking diagnostics that cannot be appropriately managed through other pathways.

The key risk to the delivery of increased activity and decreased backlogs and risk is the availability of scientific staff. The availability of radiography staff continues to present a challenge nationally. However workforce plans are under review within the department to ensure that every opportunity to skills mix has been taken to mitigate this known shortage. There is also an active process of reviewing the IP+C assumptions within the planning for radiology. This will ensure that safely we are maximising the potential to scan patients.

Through the essential imaging services group there is a consideration for the need of commercially available mobile scanners that are staffed. Cardiff and Vale UHB have inputted to this process, and there will be a need to work regionally in the use of this capacity. As an organisation there is previous experience of Cardiff and Vale patients being scanned on a regional basis. Should this opportunity arise, we welcome working with other Health Boards to manage the backlogs equitably on a regional basis.

Children's Services

During the first wave of the pandemic we saw a significant drop in unscheduled demand for children's services and we saw a pattern of late presentation of illness in some children. We worked hard to encourage parents to bring their children to seek hospital care if they were worried. We also temporarily established a separate children's emergency theatre service with dedicated paediatric CEPOD lists.

Should a second wave, potentially compounded by seasonal unscheduled care pressures, we will continue to work closely with primary care colleagues and via direct social media campaigns to avoid this drop in demand once again occurring.

The table below provides a current position statement;

Speciality	Status	Qtr. 3-4 Actions
Paediatric Inpatients	• Growing volumes (10% rise October 2020 vs. Q3 2019/20) • longest length of waits of pts waiting (70% rise October 2020 vs. Q3 2019/20) for Surgery.	• Clinical risk being managed by senior review of patients waiting beyond 52wks • Close working with Theatres & Anaesthetics regarding theatres timetabling.
Paediatric Community	• Growing volumes (19% rise October 2020 vs. Q3 2019/20) • longest length of waits of pts waiting (56% rise October 2020 vs. Q3 2019/20) for Neurodevelopmental assessment.	• Clinical risk being managed by senior review of patients waiting beyond 52wks. • Service redesign work underway
Obstetrics and Gynaecology	• Growing volumes (27% rise October 2020 vs. Q3 2019/20) and longest length of waits of pts waiting (85% rise October 2020 vs. Q3 2019/20) for benign Gynaecological Surgery.	• Clinical risk being managed by senior review of patients waiting beyond 52wks • dialogue with Theatres & Anaesthetics re. Theatres timetabling.

Primary Care

From the outset of the pandemic, during the summer months and as we begin to move into the winter months primary care as made a huge contribution to the organisations response to the pandemic. Some of the highlight achievements include;

- Our Cardiff South West Primary Care Cluster bringing together ten GP practices to work in partnership with Cardiff City Stadium to host a brand new drive-through clinic model for pre-arranged vaccination clinics throughout the autumn and winter months. As of 10th October has delivered over 800 flu vaccinations.

https://cavuhb.nhs.wales/news/latest-news/cardiff-primary-care-partnership-delivers-successful-drive-through-flu-jab-clinics/

- Continued use of telephone triage, e-consult and video consultations
- Continued focus on ensuring primary care support to care homes and those on palliative care pathways through a Directly Enhanced Service (DES) to increase specific support to care homes.
- Utlising eye care sustainability funds through to March 2021 enabling close working between our PCIC and surgery clinical boards to shift suitable eye care activity traditionally taking place in hospital settings to primary care based optometry services.

As we move forward we continue to work set our work against the five priorities of the primary and community care framework and the nationally agreed 'milestones' (see **table three** below) whilst obviously ensuring the Cardiff and Vale 'lens' remains to ensure we are delivering services in the most appropriate manner to meet our local populations needs.

Table 3

Priority	Current Status	Progress against national milestone	Key Risks
Delivery of essential services	In relation to General Medical Services, the requirement for the provision of delivery against full contract requirements commenced on 1 October 2020. There is pressure on the service due to increasing demand but escalation plans have been developed to support and maintain access to core GMS. For General Dental Services the amber status as directed by Welsh Government is currently in place. Phone first is in place with triage to determine urgent cases. There are currently 69 GDS practices providing aerosol generating procedures (AGPs) with appropriate PPE and five Urgent Dental Centres are currently in place to provide urgent access for non-registered patients. Optometry services are now providing routine services. Independent prescribing and ODTCs still in place to provide support in primary care and reduce demand on secondary care. Pharmacy services also business as usual.	*Milestone - Health Boards will use this monthly reporting mechanism to monitor activity against the five essential services categories to be provide an indication of recovery of the primary care system.* In relation to reporting against the milestones, work still being led nationally on reporting against the measures as not all are available centrally. Services are all in place but need to ensure mechanisms in place for capturing activity (usually done retrospectively).	Key risks relate to the demand on GMS, hence business continuity plans being reviewed and additional escalation plans being developed. Awaiting national guidance on position in relation to contractual requirements and whether there will be relaxation. Escalation plans have been developed and include local arrangements to support resilience and sustainability.
COVID-19 local outbreaks or second wave – delivery of services in response to surges and outbreaks	For GMS, all 9 clusters in Cardiff and Vale developed business continuity plans to include: • Establishing robust plans by which to maintain GMS services, should staffing capacity at practice level be severely affected through Covid-19 through development of buddy arrangements between practices. • Developing centralised hub/s within the cluster by which to manage patients who are displaying a level of respiratory symptoms which potentially could be Covid-19 related • Identifying options to deliver a centralised Model should GMS provision at a cluster level prove unsustainable over time.	*Milestone - Health Boards will have plans in place to respond to local outbreaks including the reestablishment of Covid-19 hubs and urgent and emergency care centres for dental and optometry.* All plans in place to respond to local outbreaks. Daily operational meetings were established during Covid-19 (these are currently weekly) and the frequency will be increased as required.	

Priority	Current Status	Progress against national milestone	Key Risks
	• Some practices chose to continue to operate a respiratory hub within their own premises, staffed by their own resources. Arrangements established earlier in the year have all been reviewed and updated based on learning. More detailed escalation plans have been developed for GMS. Whilst GMS Covid-19 hubs have been in place across all clusters, the use has varied across Cardiff and Vale, they are however available to be utilised as required. A Covid-19 hub was established and has remained in use for the Urgent Primary Care/Out of Hours service. There are five Urgent Dental Centres in place and four of the seven Community Dental Centres are able to provide AGPs. Optometry services currently running as normal but previous arrangements can be reintroduced (whereby the 68 practices could redirect to 17 practices across the 9 clusters).		
Care homes – primary and community care service provision	An action plan **(appendix five)** has been developed between the Health Board and local authority partners in response to the John Bolton rapid review of support to care homes. There are regular multiagency care home position meetings held in each LA area as well as meetings with representatives of the care home and domiciliary care sector. This includes advice, guidance and support in relation to testing, outbreaks, business continuity and PPE, as well as supporting safe discharge from hospital including the commissioning of intermediate care isolation beds. More recently the draft All Wales Care Home Framework has been shared. This has been developed through the National Strategic Programme for Primary Care. This links to the John Bolton work but suggests a model and actions to support Health Boards in providing a standard of consistency across Wales. The framework consists of four main themes: • Access • Consistency	*Milestone- Health Boards will assess their service provision to care homes against the framework with a view to adopt, adapt or justify. This will include: i. an immediate plan for winter 2020/21 ii. a long term plan* An action plan has been developed. Progress will be monitored via the Joint Management Executive Meeting between the Health Board and two local authorities. A market position report is being developed. An initial review has been undertaken in relation to each of the	The key risk relates to the management of outbreaks both in terms of testing capacity and support for the homes.

Priority	Current Status	Progress against national milestone	Key Risks
	• Connectivity • Outcomes The proposed self-assessment framework has eight main areas. An initial review has been undertaken in relation to each of the eight statements and the Health Board is working in line with these. An action plan will be finalised when the All Wales Care Home Framework is formally issued. The current care home directed enhanced service covers 96.6% of beds across Cardiff and Vale. There are 79 patients where the enhanced service does not provide cover but there is access to support from GMS. The key risk relates to the management of outbreaks both in terms of testing capacity and support for the homes.	eight statements and the Health Board is working in line with these. An action plan will be finalised when the All Wales Care Home Framework is formally issued.	
Rehab– recognition of increased demand for rehabilitation across four main population groups	We have developed a rehabilitation framework that mirrors the Welsh Government framework and links to our Shaping our future wellbeing strategy. https://shapingourfuturewellbeing.com/wp-content/uploads/2020/02/The-Cardiff-and-Vale-Rehabilitation-Model-February-2020.pptx In May 2020 we also launched a covId rehabilitation framework. http://www.cardiffandvaleuhb.wales.nhs.uk/sitesplus/documents/1143/Cardiff%20and%20Vale%20Covid%20Rehab%20model%20May%202020.pdf We have also adopted the national rehabilitation modelling and evaluation tools to work across health and social care system and model rehabilitation needs and a therapy lead for this has been identified See also our approach to 'long covid' described in **section four** which includes the development of a bespoke rehabilitation website keepingmewell.com	*Milestone- Health Boards will assess their rehabilitation services against the framework with a view to adopt, adapt or justify. This will include: i. an immediate plan for winter 2020/21 ii. a long term plan*	

Priority	Current Status	Progress against national milestone	Key Risks
	In addition we are currently also developing a case for internal investment in a *Prehabilitation to Rehabilitation (P2R) programme* which will support and improve cancer outcomes that matter to people.		
Step-up and step down bedded community services to address the issues identified in Right Sizing Community Services	The Health Board, in partnership with local authority partner services has taken action to address issues identified in the review. A Senior Operational Group has been established (chaired by the Director of Ops, PCIC Clinical Board) and regular updates are provided to the Joint Management Executive Team meeting which includes the two local authorities. A plan for winter has been developed and additional capacity is being secured in terms of therapy and domiciliary care. There is also a series of actions underway to improve processes and ensure the most effective use of resources, this includes single assessments as well as regular reviews of existing packages of care. Isolation beds will also be used to help reduce delayed transfers of care as part of the discharge to assess model. A tender has been issued for the joint commissioning of reablement beds supported by the CRT in Cardiff. A tender has been issued for the joint commissioning of reablement beds supported by the CRT in Cardiff.	*Milestone; Health Boards will assess current models against this framework and develop plans to align service models to the national framework. This will include: i. an immediate plan for winter 2020/21 ii. A long term plan* An action plan has been developed. Further work to be undertaken to ensure appropriate capacity across the whole system to meet demand.	
Urgent primary care – an urgent primary care model	An urgent primary care hub was established in Central Vale in winter 2019 as a pilot. The aim was to provide additional capacity for a range of patients with urgent primary care needs to be seen at the hub, or directed to other services as appropriate. Feedback from patients was extremely positive and the model has been shared as good practice by Welsh Government. Proposals have been developed and submitted to extend this hub as part of the pathfinder work for urgent primary care centres. A new phone first triage model has also been introduced since early August. The CAV24/7 model provides access to urgent primary care and also enables people to be booked into the Emergency Unit or Minor Injuries Unit as appropriate. Note more detail provided in 'Managing Winter' (**section five**).	*Milestone- ABUHB, CaVUHB, BCUHB to establish pacesetters for Urgent Primary Care centres.* Proposal being developed and will be submitted by deadline.	

Planned Care

As well as maintaining essential services we have begun to re-introduce more routine services where it is safe to do so. We plan to keep doing this through the next six months.

We have been able to achieve this through:

- Establishment of Protected Elective Surgery Units ('Green zones') in UHW and UHL (**see section one**)
- Use of Spire Private Hospital capacity (see **section three**)
- A refreshed Outpatients Transformation Programme, clinically led across primary and secondary care

We will continue to operate within national and local operating frameworks, with the overriding principle being the need to minimise harm. Our approach to rebalancing planned care entails:

- Remaining 'Covid-19' ready
- Prioritising patients with the greatest clinical urgency – moving from time based targets to clinical risk stratification
- Minimising hospital attendances to keep patients safe
- Using technology and innovation to introduce new ways of meeting needs
- Monitoring demand, as well as activity, given concerns at the start of the pandemic that people may be delaying seeking medical help for serious health conditions

Current position

In Quarter 2, the Health Board took stock of its Planned Care position, viewing waiting lists through four lenses – *volume, age, stage of pathway and risk*. This analysis concluded that the scale of our challenge is significant and cuts across a number of areas;

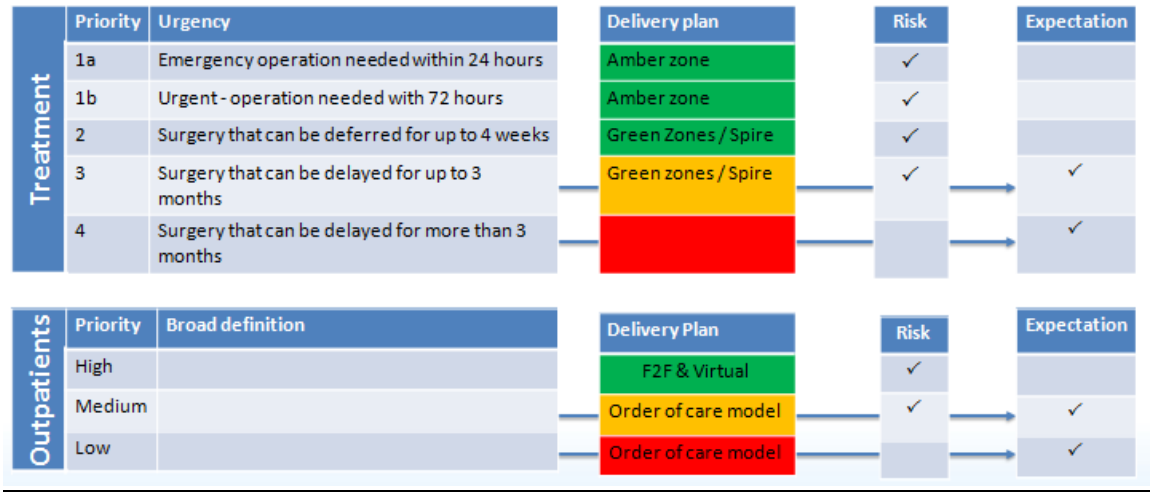
- Pathways- c. 280,000 existing;
- Whilst waiting list growth is currently marginal there has been a significant deterioration in waiting times;
- That we have further work to do on recording risk for treatments and defining risk for outpatients.

We have also enjoyed some success in increasing demand and activity (albeit it back to lower levels than pre-Covid-19) which will support addressing the view that there may have been / is pent up demand within our population. At the end of quarter 2 key statistics were:

- Primary Care referrals into Secondary Care fell to 30% of previous levels at Covid-19 peak – but have recovered to 74%
- Outpatient activity fell to 27% of previous levels at Covid-19 peak – have recovered to 64%
- Elective inpatients and day case treatments fell to 22% of previous levels at Covid-19 peak, now recovering to 62% (This includes activity undertaken at Spire Private Hospital).
- Surgical operations fells below 10% of pre-Covid-19 levels at the start of the pandemic but have recovered to 51%

Looking Forward

Our Planned Care strategic framework (below) focuses on the two key elements of planned care – *treatments and outpatients*. It provides a structured method by which to define how our plan is supporting the management of risk and expectation.



Treatment Prioritisation

The treatment element of the framework is well defined, with prioritisation based on the Royal College of Surgeon definitions. Changes were made to our PMS in Quarter 2 to allow recording of RCOS Level 1 to 4 priorities at a patient level. New patients added to surgical waiting lists are now categorised against these levels. Work is now underway to ensure existing patient waiting list records are updated to include the level assigned via the clinical risk assessment.

Resuming Surgical Activity

Throughout the pandemic the UHB has maintained essential surgical operating. The UHB set out in its annual plan and quarter 2 update the plans to establish and expand green zones to allow the safe increase in surgical operating. As stated above the UHB's elective surgical activity has been steadily increasing over the summer and is currently at just over 50% of pre-Covid-19 levels. In October additional operating sessions have being added to the schedule in UHW main theatres and short-stay surgery unit (SSSU); plus a second cardiac theatre is coming on-line at UHL, limited GA activity is recommencing in the Dental Hospital and cataract operating is re-starting in Ophthalmology outpatients (initially for 3 sessions per week but with the intention to increase this through the quarter). The expectation is these actions will allow overall activity to approach 60% of pre-Covid-19 levels during October.

The final phases of construction for the green zones will be completed in November, facilitating Breast Surgery returning to UHL and the recommencement of Orthopaedic operating. This will bring a further step-change in activity of 50 cases per week, partially offset by the reduction in Spire provision, taking activity to around 70% of pre-Covid-19 levels.

The UHB's ambition for the remainder of the financial year is to further increase elective surgical activity through increasing the number of theatre sessions and, subject to Covid-19, reducing the time between cases. Indicatively this could allow the UHB to reach 80% of pre-Covid-19 levels. All of the above is supported by detailed, speciality-level capacity plans.

Impact of Covid-19 on Surgical Activity

Inevitably the above plans will to some extent be dependent upon the prevalence of Covid-19. The green zones have been designed to allow elective activity to safely continue even when the prevalence of Covid-19 is high. The UHB's bed, finance and workforce plans are also designed with this in mind. Therefore the expectation is these plans will be relatively resilient to increasing levels of Covid-19. Nonetheless there will of course be limits to this. In broad terms the UHB's intentions are as follows:

1. to maintain essential services in all circumstances (up to and including the Covid-19 worst-case scenario)

2. to maintain current levels of elective activity even in the event of a significant second wave (equivalent to the peak period in the central scenario)
3. outside of a peak of Covid-19, to steadily grow elective activity to reach around 80% of pre-Covid-19 levels
4. to work with Welsh Government to secure additional capital investment to expand theatre and diagnostic capacity to reach 100%+ of pre-Covid-19 activity levels during 2021-22 (see below)

Increasing Capacity to Pre-COVID-19 levels & Reduce Backlogs

As stated above the UHB, in common with other providers across the UK, has seen a significant increase in the number of long-waiting patients. Post-Covid-19 it is likely to be many years before the UHB has fully recovered from this position and this will only be achieved through a combination of service redesign and increased capacity. The UHB has, prior to Covid-19, been developing a number of capital proposals which, given the implications of the pandemic, are now even more urgent to support backlog reduction. The UHB would like to work with Welsh Government to prioritise and expedite these programmes to achieve the earliest possible increase in capacity:

Table three: *Priority Proposals to increase Capacity*

Proposals	Outline Plan	Estimated Potential Capacity
Two theatres at UHL	Permanent replacement for two Orthopaedic theatres in CAVOC	840 cases per year
Stand-alone cataract facility	Off-site, modular twin theatre	5000 cases per year
Endoscopy expansion	2 x additional Endoscopy theatres at UHL, co-located with the existing department	3360 procedures per year

Outpatients

The Outpatient element is being progressed via the Outpatients Transformation programme. Three workstream form this programme:

- **Clinical Prioritisation** – Triaging patients according to their clinical need
- **Adapted ways of working** – accelerating and embedding adapted ways of working e.g. virtual outpatients; see on symptoms; healthpathways
- **Configuration** – Creating environments that (i) minimise in-hospital transmission of Covid-19 but maximises throughput (ii) supports care close to home

These are underpinned by a number of enablers including digital and communications.

Outpatient actions for Q3-4	
Defining the risk and 'default'	Our clinicians have broadly landed on three categories of risk for outpatients – high, medium and low and have defined an Order of Care model (see below). In the next quarter, further work will be done at a specialty level to further define risk and the Order of Care. 
Maximising space	Work has now commenced on ensuring that the use of this space is maximised - thereby allowing us to safely increasing the number of face to face outpatient appointments (where this is the appropriate method of review).
Creation of a 'virtual village' in UHL	Clinician feedback is that creation of a dedicated physical space to undertake virtual outpatients would have the potential to strengthen governance arrangements and further increase uptake. It is anticipated that the Health Board would set up a number of 'virtual villages' across primary and secondary care estate but the initial plan is to establish a virtual village in UHL as a proof of concept.

The continued uncertainty regarding future demand – Covid-19 and non-Covid-19 – and the new levels of complexity that we are working in does mean that there remains some risk regarding delivery of planned care services. Since the start of the pandemic, a constant balance of risk has been made in relation to the extent to which services continue to operate and can restart versus the potential harm from infection. Going forward, this balance of risk will continue to be applied and our actions will continue to be guided by clinical advice.

The wider public health agenda

We recognise the importance of preventing and responding to both the direct and indirect consequences of Covid-19, including long term impacts on health and social inequalities and as such have agreed revised key public health priorities for 2020-1 in addition to Covid-19, which are set out in full in our revised plan.

These include actions in the following areas: immunisation, tobacco, healthy weight, healthy environment and travel, health inequalities, mental well-being, alcohol, sexual health, falls prevention, dementia, healthy schools and pre-schools.

This is intent is evident through our launch of the *move more, eat well* plan (www.movemoreeatwell.co.uk) which has the full backing of our PSBs and RPB.

We will keep these priorities under review as elements of them may need to be flexed up and down to respond to autumn and winter Covid-19 pressures.

Section 4: OUR RESPONSE TO THE WIDER SOCIETAL IMPACT OF COVID-19

Mental Health

As we continually look to balance our provision of essential services against the ongoing challenges presented by Covid-19 we continue to evaluate and revaluate our mental health service provision to ensure the safe, timely and high quality services continue to be provided.

As we head into quarter 3 and 4 our headline position is one which shows that;

- ✓ We plan to maintain all mental health services including all therapeutic group work through quarter three and four.
- ✓ For the purposes of Covid-19 readiness in Hafan Y Coed, this has not been safely possible in Q2 due to an adolescent admission to PINE ward (Red and purple Covid-19 cohorting area). This adolescent has now been transferred to a smaller unit at HYC releasing PINE ward back for Covid-19 purposes.
- ✓ Mental Health services across Wales via the national commissioning team will no longer make available a block contract for private beds for Covid-19 surge purposes. Local mental health services will monitor and calibrate the need for additional beds through its local Covid-19 response meetings and directly spot contract beds itself.
- ✓ For mental health services for older people we have ensured ward East 10 at UHL remains available for cohorting Covid-19 Purple/Red stream service users who test positive for or require isolation whilst being tested for Covid-19 as per UHB modelling.
- ✓ We are in the process of supporting the establishment of an accommodation commissioning plan for adolescents needing accommodation in crisis. This is being done in conjunction with the Local Authority / Children & Women'[s and Medicine Clinical Boards

Nevertheless, service demand has now returned to, or exceeding, pre-Covid-19 activity. To mitigate the immediate risks and challenges which this presents we are taking the following actions;

- ✓ Continued investment into 'Pre-GP' services along with the ongoing review of recent 3rd sector investment in capacity to provide CCI Therapies model and Silver Cloud (anticipating further WG investment in 3rd sector support to meet tier 0/1 needs and preserve specialist services).
- ✓ Temporary expansion of the Primary care Liaison GP Cluster service. This support is being provided via additional an additional three practitioner posts to secure prevalence rather than population capacity in all clusters, particularly South and East Cardiff areas.
- ✓ We are assessing gaps in the dementia pathway in Primary care in light of 25% increase in dementia referrals to CMHTs. The anticipated investment in 3rs sector provision will be designed to support or partially support this service gap.
- ✓ We are enhancing admission avoidance 'out of hospital services' to offset demand, particularly in MHSOP due to their core bed losses. With investment in community and crisis services – in line with MHSOP and the UHB transformation strategy.
- ✓ Maintain compliance with Parts 2,3 & 4 of Mental Health Measure / CMHT routine RTA 28 day standard / 26 week RTT target for psychological interventions
- ✓ We look to remain a lead user of digital platforms.

Addressing long COVID-19

We recognise that the impact of Covid-19 is likely, but not solely, generational. The consequences of the virus will last well beyond the arrival of any vaccine. It is acknowledged that these consequences will be manifested in a number of ways including; the financial impact, the long-term impact upon our current (and future) workforce, the impact of pent up demand following into our system as well as, most importantly, the long term health impact upon people who have been severely affected by the virus might subsequently experience- mental and physical and the demand this will place on our system.

Early steps we have made include;

- A 'long covid' rehabilitation model has been developed by a team of AHPs, with a lead GP and input from secondary care clinicians

- The creation of an online resource – www.keepingmewell.com a new digital rehabilitation resource with information specifically developed to support rehabilitation, with an initial focus on COVID-19 rehabilitation that anyone can access anywhere to help keep themselves well and aid recovery from COVID-19.

- Working with GP clusters to develop a Long COVID rehabilitation service

- Working with the *SilverCloud* online therapy service to provide free online mental health and wellbeing therapy without needing to wait for a referral from a GP

See also the rehabilitation in **section three** of this plan.

Service Collaboration

We continue to work closely with commissioners and partner health boards to ensure that together we are protecting and strengthening fragile regional and tertiary services where we have the biggest challenges.

Focussed work continues to take place in a number of specialities including:

- Interventional radiology,
- Vascular surgery
- Ophthalmology surgery
- Upper GI cancer surgery,
- Paediatric gastroenterology and
- Paediatric neurology,
- Cochlear Surgery
- Oral & Maxillo Facial Surgery – out of hours

The UHB has established executive partnerships with both Swansea UHB and CTM UHBs to co-ordinate the collaborative scoping of sustainable service plans that will need be delivered in partnership to strengthen existing fragile services – implementing urgent interim measures where necessary – and planning for improved future sustainability of services in response to meeting national clinical service standards and making effective use of our specialist workforce. Where this collaboration involves tertiary service provision, area, we are also working closely with WHSSC to align planning and commissioning discussions.

These regional planning partnership arrangements supplement the SE & SC Wales Regional planning programme which relates to services provided across the AB, CTM, South Powys and C&C UHB catchments.

In addition, we are liaising with individual and the Board of CHCs to ensure that engagement and, where appropriate, consultation activities are appropriately addressed.

Section 5: MANAGING WINTER

We know that this winter is going to be an especially challenging time for the organisation. We also know that mitigating the impact of the season is not an excise which can be done in isolation. There are actions which are within our exclusive gift whilst there are also actions which need to be progressed in collaboration with our wider health and social care partners.

In parallel to the development of this plan has been the multiple emerging opportunities to access emergency winter funds confirmed via letters such as that from Stephen Harrhy, Director, National Programme for Unscheduled Care on the 02 October 2020. Where appropriate in the subsequent sub sections we look to signal where our emerging proposals will support our direction of travel described.

Internal action- *addressing our unscheduled care system*

We continue to shape our unscheduled care plans around the goals of the national *urgent and emergency care framework* and specifically the four priority areas which the unscheduled care board have identified for quarter 3-4 (bold below)

1. **111 / contact first models to enable patients with urgent care needs to be signposted to the right place, first time**

CAV 24/7 went live on the 5th August 2020. This was Wales' first phone first approach to Unscheduled and Urgent Care. Patients are able to phone CAV 24/7 prior to attending the Emergency Unit and receive a clinical triage via the telephone. If, after the telephone triage, it is felt that the patient needs to attend the Emergency Unit, they will be given a timeslot to arrive. This not only provides a much more amenable experience for the patient but also allows the department to conform to social distancing. If a patient rings CAV 24/7 and it is felt they do not need the Emergency Unit, they are referred in to specialities, or signposted to Primary Care services.

Around 150-250 calls a day are being received by CAV24/7 (in addition to the usual Urgent Primary Care/Out of Hours calls). Around 64% are being booked into EU/MIU and others dealt with or signposted to other primary care services.

Feedback from clinicians and operational managers has been extremely positive. Whilst the number of attendances to EU has not reduced as originally expected, they have remained fairly flat, whereas prior to introduction of CAV24/7 attendances were increasing. With the booking facility it also means it has been easier to manage as these are now planned attendances.

Feedback from patients has been extremely positive. A survey has been completed by more than 650 people with the key messages:

- ✓ 87% would be happy to use the service again.
- ✓ 86% happy with the time taken to answer the call.
- ✓ 86% satisfied with the service from the call handler.
- ✓ 78% had the call back on time, or earlier from a clinician.
- ✓ 87% satisfaction with the service from the clinician.
- ✓ 81% seen within 1 hour of appointment given.

We are looking to develop a retrospective proposal for CAV24/7 in order to access emergency winter funds that have been identified to support 111/contact first models.

2. **24/7 same day / urgent primary care models of care to enable people to access care in their local community, preventing unnecessary attendance at Emergency Departments and admission to hospital.**

Work across this theme remains highly complementary to the objectives outlined within the primary and community care framework (**see section three**)- we have ensured close working between our primary care/ community teams and our unscheduled care teams.

We have submitted an urgent primary care pathfinder proposal to further develop the Central Vale hub and to extend the model to cover the whole of the Vale locality by developing a hub model in both the Eastern and Western Vale clusters which is proposed to start (Central Vale) from the 1 December 2020 and the Western Vale and Easter Vale to from mid-December 2020.

3. **Ambulatory emergency care to enable patients to safely bypass the Emergency Department and prevent unnecessary admission (Goals 3 and 5).**

UHW has a Medical Admissions Emergency Care Unit (MAECU). This operates 5 days a week (Mon-Fri) from 0900 – 2200. MAECU takes medical patients who are referred in by a GP for further investigations. Pre Covid-19 it would see between 30 – 60 patients a day, with Mondays being the busiest day of the week. Approximately 85% of patients would be discharged home the same day and avoid admission into the hospital. Amb scoring at triage in the Emergency Unit is also used to enable patients to be streamed directly into MAECU and avoid the Emergency Unit.

4. **Embedding the four discharge to recover then assess pathways to prevent unnecessary admission and enable a home first approach to improve experience and outcome (Goals 3 and 6).** *See also our c*ollaborative action – *Working as part of the Cardiff and Vale of Glamorgan Regional Partnership Board*

For patients who present to the department we have a number of pathways for the medically well patients this includes- The Frail Older Persons Assessment Liaison (FOPAL) service.

Established at UHW in 2014 to deliver Comprehensive Geriatric Assessment (CGA) to frail older people in the Emergency Unit (EU) and Assessment Unit (AU). This team consists of a consultant geriatrician and nurse supported by colleagues in the EU/ AU department. Early input from the FOPAL team has shown to successfully increase the number of people returning home and reduce the 30-day readmission rate.

Pathway 1 – when a frail older person presents at the front door they will be reviewed and provided with comprehensive geriatric assessment. The FOPAL team has close links with intermediate care services therefore if a person is medically well but unable to cope at home and requires review of their social support, the team will make the necessary arrangements in the community to facilitate discharge home with adequate support. This will prevent unnecessary admission to an acute medical ward. For people who are medically well and safe to return home but require treatment or a period of rehabilitation, they can be referred to the Elderly Care Assessment Service (ECAS) for medical review and a planned programme of rehabilitation. They can be seen as early as the following day if required. This will maximise a person's functional independence and psychological wellbeing, whilst supporting people to optimise their recovery and maintain their independence in the community.

For people who are medically unwell, they will continue their admission to an acute medical ward. However the provision of rapid CGA will reduce hospital associated clinical decompensation. This should result in a reduced overall length of stay for those who require admission.
Whilst on the acute ward, a person's potential ongoing care needs will be identified to ensure adequate support is provided at home when discharged.

During their ward admission, once a person is medically well and if they are safe between care visits they will return home to continue their care and rehabilitation at home/ usual place of residence. This will be achieved with support from the Community Resource Teams (Discharge to Recover and Assess-Pathway 2

If a person is not safe between care visits and unable to return home they will transfer to a 'step down' bed (Pathway 3) at St David's Community Hospital at the earliest opportunity for further assessment, rehabilitation and recovery.

Frailty Intervention Team (FIT)

During January to mid-February 2020, the Frailty Intervention Team (FIT) was piloted on both the UHL and UHW sites using RPB winter funding. This multidisciplinary team (nurses, OT, physios and support from FPOC team) led by a consultant geriatrician, built on the success of the FOPAL Service by providing an enhanced service 7 days per week. The Medicine Clinical Board continues to work closely with colleagues across CD&T and PCIC clinical boards to establish a full multidisciplinary FIT team at both UHW and UHL sites on a substantive basis.

We are in the process of evaluating the full impact of the FIT. Some early headlines include:

- The FIT team at UHW saw a total of 1024 patients in EU and AU during the intervention period. This equates to 115 patients a week who received intervention from the FIT team, compared with 47 patients a week seen by FOPAL.

- The FIT team facilitated discharge directly from EU/AU for 219 patients. This equates to an additional 14 patients discharged a week when compared with the FOPAL team, despite no change in the number of patients aged ≥75yrs attending urgent care.

- EU re-attendances and 28 day readmissions were stable during this period, suggesting that additional discharges were safe and appropriate.

- After the implementation of the FIT teams at UHW and UHL there was a consistent reduction in occupied beds for patients aged ≥75yrs for seven consecutive weeks from 20th January, with an average of 12 fewer occupied beds per week for this cohort.

As RPB funding ran out and the pandemic hit, FIT was suspended after 9 weeks. The FOPAL team was later reinstated in UHW in July (2wte frailty nurses and five morning geriatrician sessions).

Internal action- *our Flu Vaccination Programme*

Ensuring we have an effective flu vaccination programme is a key action we are progressing as part of not only protecting the more vulnerable members of our population but also to support mitigating the risk that our system could become overwhelmed during the winter months.

In our Community

GPs and Community Pharmacies experiencing unprecedented demand for flu vaccine amongst at risk groups and are currently implementing innovative delivery models to at-risk groups such as drive throughs to support social distancing. The first (national) fortnightly reporting for flu uptake (IVOR) is due to commence imminently and once available, the Local Public Health team will share this information with Cluster Leads and GPs practice throughout the season. This along with regular newsletter updates for Primary Care Providers and a public-facing campaign with ensure we have a robust media campaign regarding the flu vaccination.

In addition planning is underway to extend a pilot undertaken in Flying Start areas during 2019/20 to increase uptake amongst two, three and four year olds who attend flying start childcare settings. This is in addition to the established primary School vaccination programme that has once again commenced and is also seeing high uptake rates to date.

The vast majority of flu vaccine will be administered before the Christmas break with our school programme being completed by the second week of December with catch–up sessions for year groups who have missed their scheduled school sessions due to self-isolation requirements, being planned for

half term using hubs and appointment system. Fortnightly uptake monitoring will be shared with Clusters and GP practices for each risk group. Our expanded programme (to people aged 50+) is also expected to conclude by the end November.

Across our staff

As part of our commitment to we are delivering a flu vaccination to at least 75% of health care workers we have taken a number of actions which includes;

- ✓ 20% extra vaccine ordered at the start of the season
- ✓ New Flu Champions recruited and trained
- ✓ Proactive uptake being monitored at departmental and Clinical Board level
- ✓ Extra staff / vaccinating capacity put in place across all our Clinical Boards
- ✓ Mass Vaccination / drop in sessions arranged regularly by Occupational Health Service
- ✓ New incentives introduced (including a weekly raffle for staff)
- ✓ Extra staff / vaccinating capacity put in place across all our Clinical Boards
- ✓ Staff communications ongoing

Collaborative action – *Working with our health system partners*

We received a helpful letter from the WAST CEO on the 14 October which alerted all Health Boards to firstly the potential impacts on emergency ambulance response times during the winter period, in particular, the risk to patient safety in your populations and secondly to seek support for the actions that need to be taken to mitigate some of these risks.

We recognise that ensuring flow through our system, particularly in winter, will involve close working with the Welsh Ambulance Service NHST (WAST) and are thus fully committed to working together not only with the service but also the National Collaborative Commissioning Unit (NCCU) who act on behalf of the Emergency Ambulance Services Committee (EASC) on the issues described within the letter.

In relation to WASTs Non-Emergency Patient Transport (NEPTS) service we are led understand that the first cut the NEPTS Demand & Capacity Review report will be available in Dec-20, which will include a sensitivity analysis of the impact on NEPTS capacity of reduced patients per journey. In the interim we also understand work will be undertaken in October to model the impact on NETPS capacity of reduced journeys and reduced patients per journey.

Clearly there is a dependency between these pieces of work and the UHB being in a position to articulate what additionality (or not) discharge activity we may require over the winter and indeed during the rest of the pandemic.

Collaborative action – *Working as part of the Cardiff and Vale of Glamorgan Regional Partnership Board*

Cardiff and Vale of Glamorgan Regional Partnership Board is preparing a Winter Protection Plan that provides an overview of arrangements mobilised to protect our citizens and health and care system from the impact of winter, in the context of ongoing Covid-19 infection. The plan addresses the six goals set and cross references to this plan for Health Board-specific elements, particularly the response to goal 5: Great hospital care. *Discharge to Recover and Assess funding* will provide additional capacity and capability within the system to expedite flow out of hospital for people who are medically fit and ready for the next stage of their rehabilitation. This will therefore support the Health Board's ability to respond to increased demand on unscheduled care.

The partnership is currently modelling likely demand and assessing the additional capacity required across the system. *Discharge to Recover and Assess funding* for the region will be used to offset the increased costs, which are significantly in excess of the funding available. Partners are currently mobilising services at risk to ensure that the system is ready before significant increases in demand.

The main focus of the plan is ensuring that our local system is able to ensure that people receive the care and support in the most appropriate place for them. In the main this will be their home, including where this is a care home and that admission to hospital is only for situations where the care and treatment required cannot be provided elsewhere.

Our system's integrated Winter Protection Plan sets out how our partners are working together to mitigate the impact of winter, in the continuing presence of Covid-19. Partnership with our two local authorities is particularly critical to ensure we have a safe system of support:

- People in care home settings and the staff who support them, including access to personal protective equipment, infection prevention and control and access to expert advice on managing infection in closed settings
- Children and young people needing support with emotional wellbeing and mental health needs
- Discharge home from hospital, including robust protocols to ensure no-one is discharged from hospital with a Covid-19 positive diagnosis
- Discharge to recover and assess ensuring people have access to rehabilitation and reablement to regain their health, wellbeing and independence following a hospital admissions and to ensure no decision about the future long-term care needs are made within a hospital setting when the person has not fully recovered
- Prevention of avoidable admissions to hospital through our Cardiff Community Resource Team and Vale Community Resource Service
- Cardiff Council First Point of Contact officers and Vale of Glamorgan Age Connects staff ensuring 'what matter's to you?' conversations take place on wards to ensure proportionate support is put in place and connections made to the wide array of third sector support resources
- Ensuring the domiciliary care sector (both in-house and independent) is mobilised to meet the additional demand created by winter
- Significant levels of support from the Third Sector to people who have been shielding or remain unable to access food and other support and are at risk of social isolation

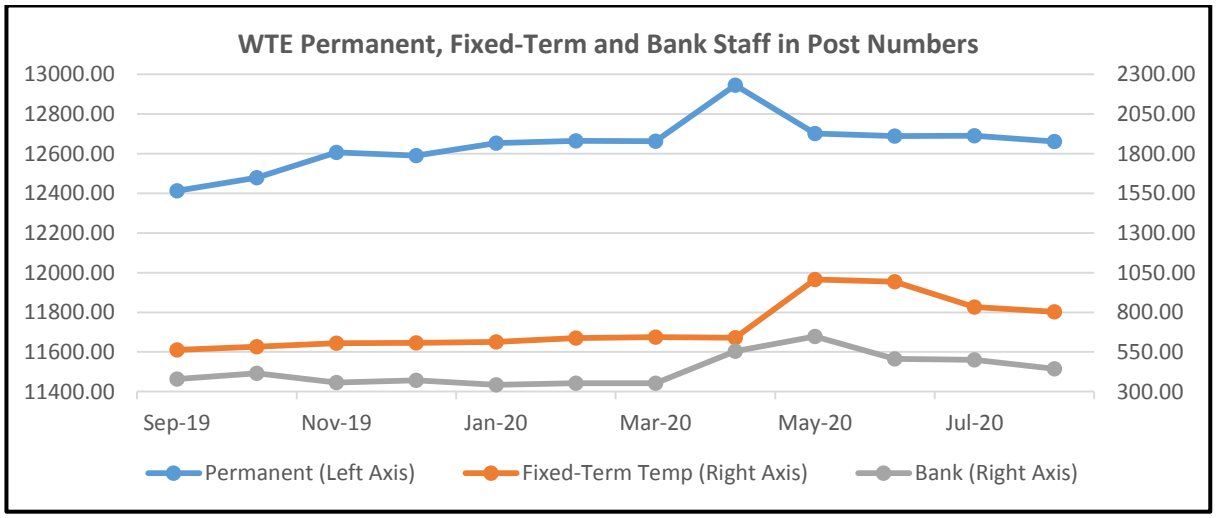
The following capacity is being extended which will materially support the wider delivery of this quarter 3-4 plan as we have recognised that effective flow is a key dependency for the 39rganisation:

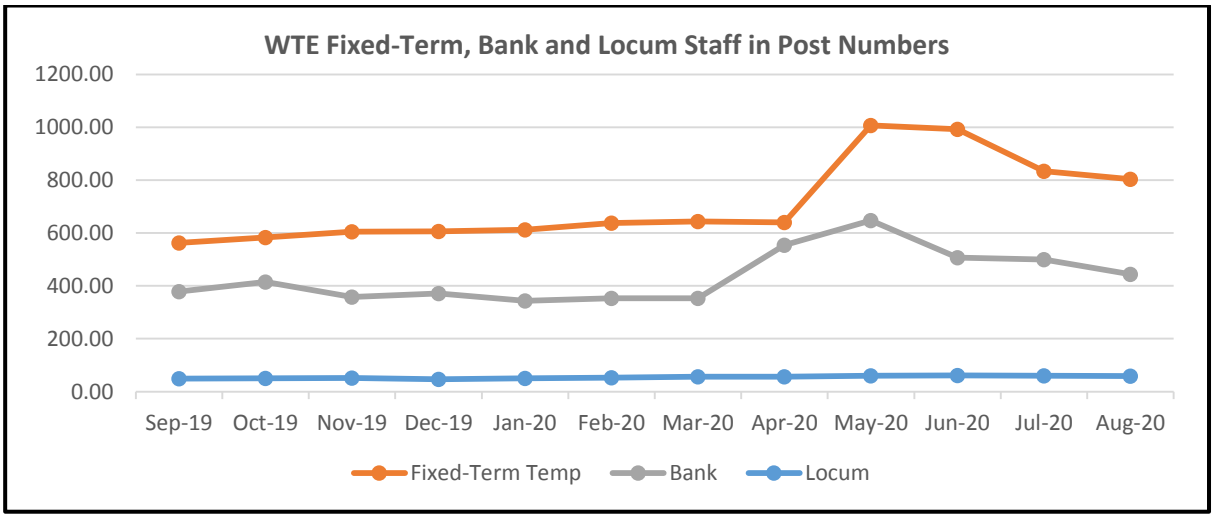
Initiative	Initiative descriptor	Timescale
Step down community bed capacity	Ensuring there is adequate community bed capacity to enable people to be discharged for further recovery and rehabilitation to ensure decisions about long-term care are made at the right point in the person's recovery. To ensure that people are able to leave the acute setting as soon as they are medically fit to be discharged. • Covid-19 isolation capacity • Residential reablement (pathway 2) • Discharge to assess nursing beds (pathway 3)	Additional capacity between Nov'20 – March '21
Increased intermediate care step down capacity	• Get Me Home plus capacity (pathway 2) • Additional care capacity • Additional therapy and nursing capacity	Additional capacity between Nov'20 – March '21
Increased in-hospital discharge capacity	Ensuring flow through the hospitals is optimised through additional: • First Point of Contact Officers • Discharge liaison nurses (supporting self-funders) • Social work single point of access and triage	Additional capacity between Nov'20 – March '21

Section 6: OUR WORKFORCE

Headcount and Temporary Staffing

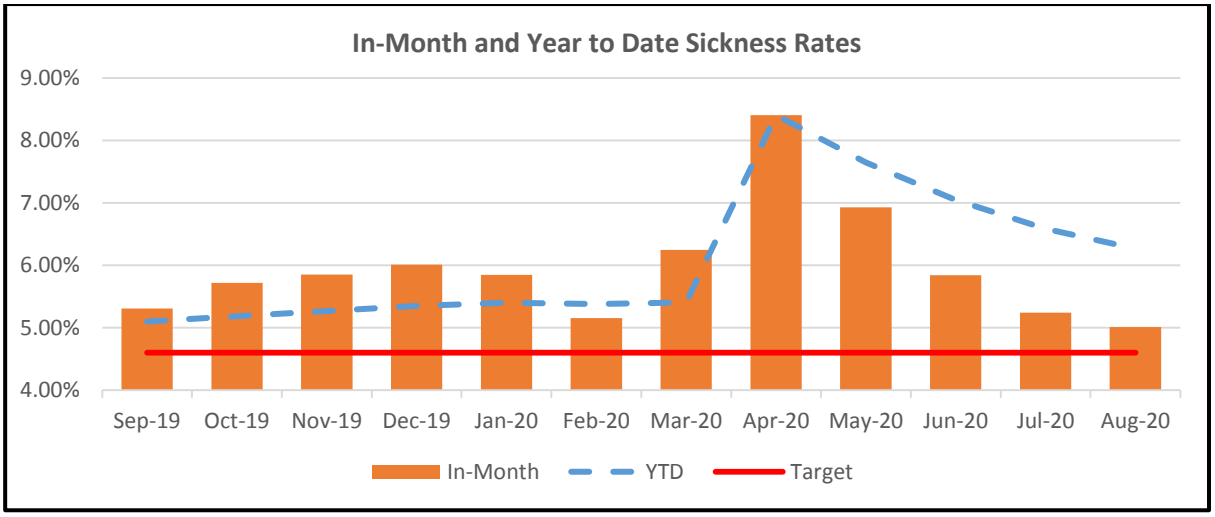
The Tables below illustrate our staffing journey since last September and the spike in whole time equivalent temporary staffing during April and May which then dipped back. As reported in Q1 and Q2 we have constantly recruited to the temporary bank registers and although a number of individuals have remained on our bank we are now recruiting more. Those temporary healthcare support workers that have remained on our bank are now being moved to fixed term and permanent roles which will help us sustain the workforce and also reward individuals with more stability as they have been loyal to us.





Staff Absence & Shielding Staff

The Table below shows the sickness actuals up to August 2020. This includes all sickness absence, including Covid-19. At our peak in April we were reporting absence of 8.41% which came back down to 5.24% in July and 5.01% in August.



As at 3rd August 2020, we had 637 staff shielding. Fifty percent of individuals were working from home or working on TTP, however, over 300 were not working from home. During the summer Clinical Boards managed to safely return staff to either working from home, working in alternative roles or working in Covid-19 safe environment/zones. There only remain under 20 staff who are not able to undertake meaningful work due to their individual circumstances and health.

The established Shielding Working Group meets regularly, in partnership with trade unions, and has developed clear Principles and principles for supporting the returning staff following Pausing.

Supporting Positive Culture Change

During the past 18 months prior to Covid-19, Cardiff and Vale UHB has strived to implement a system of leadership and culture which inspired a high level of trust among staff and allowing them to operate within low levels of bureaucracy. In 2019, the Health Board began its Amplify 2025 programme, which was based on what it had learnt from its partnership with New Zealand's Canterbury District Health Board. As part of this programme, staff were given the permission to innovate and act where they saw fit in order to make healthcare services better, more sustainable and more efficient in order to meet the goals as set out in the Health Board's 10-year strategy, Shaping Our Future Wellbeing, which was published in 2015.

The Amplify 2025 programme also had the goal of breaking down organisational barriers and bring leaders from across the health system together with a shared vision of improvement. We want to learn from each other and share ideas for a whole-system approach to culture and leadership transformation. Similarly, in 2019 the Health Board was instrumental in establishing and hosting the Spread and Scale Academy in Wales, which offered healthcare staff training and support in order to take a small-scale improvement project and develop it into something that can affect large-scale change.

These initiatives provided a cultural context in which the UHB was operating and, as such it wanted to drive change which was clinically-led rather than coming from the top down in response to the pandemic.

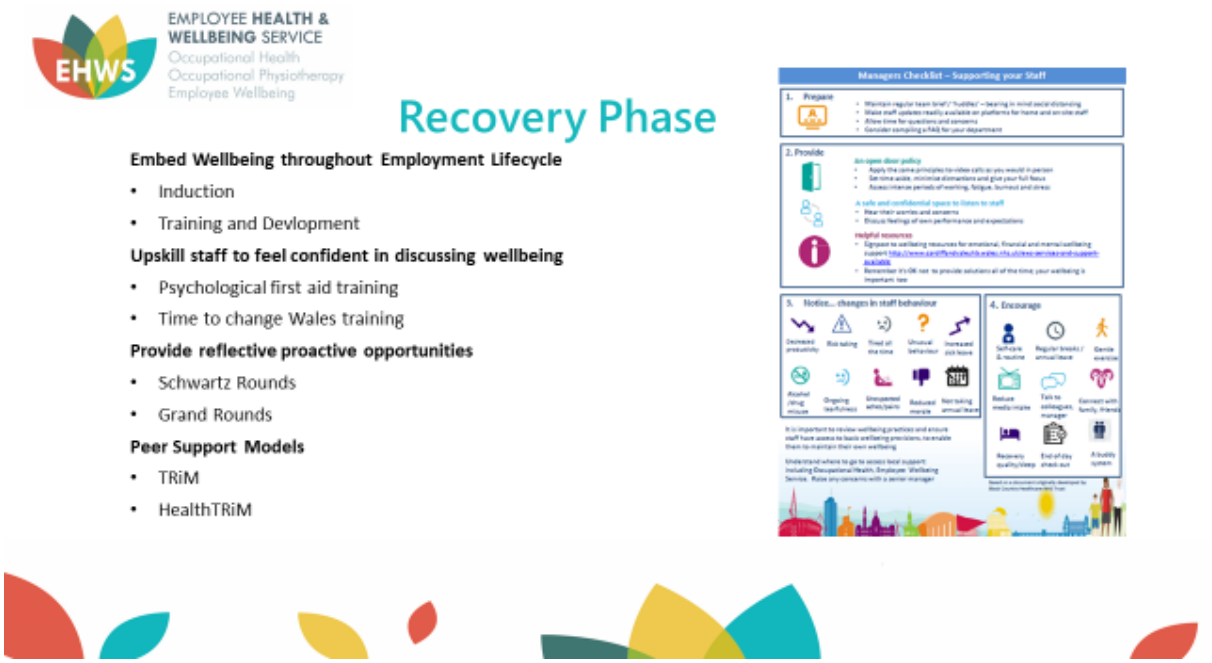
A new leadership structure and staff movement across traditional boundaries broke down barriers between clinical teams and silos. Staff have reported that traditional hierarchies were in some places flattened and that silos were broken down as colleagues came together to work collectively on the solutions to the challenges posed by Covid-19. Staff have been more accepting of change and willing to adapt as the pandemic focussed their attention. The ability to work on one project, towards one goal, with the understanding that it is for the common good was transformational for staff and services. Despite feeling tired and anxious, staff reported feeling as though they were included, trusted and energised by their work.

During Q2 we undertook a rapid feedback exercise with staff across the whole of the organisation to understand the impact of Covid-19 on our leadership capability and capacity, identifying what has really worked well, to understand what transformational changes have happened and to ensure this is embedded within the organisation although understanding any potential barriers. The last four months have presented many individuals with the greatest challenges of their career and people have responded with extraordinary resilience and innovation, and it is important that the achievements of the last quarter are appropriately acknowledged and celebrated – and that the sense of pride that there is for many working across the organisation is captured. A discovery report has been produced illustrating what Cardiff and Vale achieved during the pandemic.

The Organisational Development team now have the opportunity and responsibility to harness the clarity and energy felt by staff during the pandemic and establish how the Health Board can keep this momentum going forward, so that staff have an active input into the health system's future direction.

Continued Staff Wellbeing Support

The UHB had developed and rolled out a range of resources to support our workforce including Safe Havens, Relaxation Rooms, self-help guidance, access to psychological support as well as a range of other services and support arrangements – many of these are signposted through our Covid-19 Wellbeing Resources Pack.



We have established a clear process for the identification of staff through TTP and protocols are in place.

During the next 6 months – the immediate priority is the seasonal flu campaign which commenced in September. Following on from this will be the implementation of the Covid-19 vaccination programme once the vaccine is available.

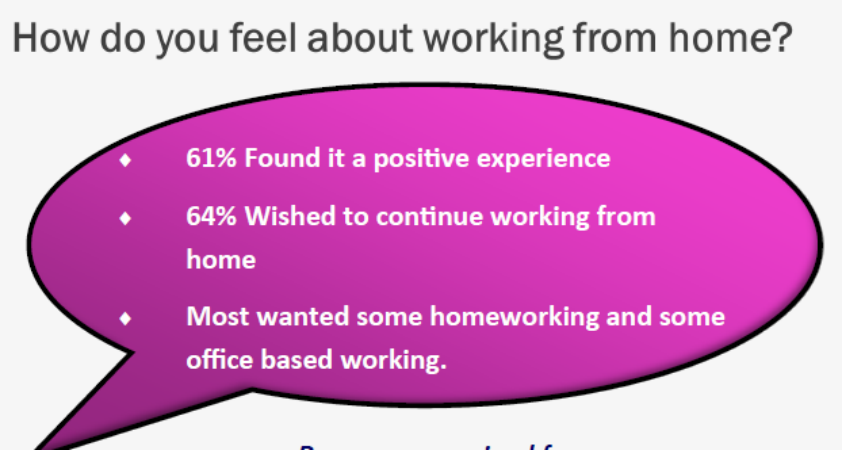
From a psychological well-being perspective we are currently in discussions with Remploy to develop a free mental health vocational rehabilitation programme which will provide non clinical mental health support for staff for up to 9 months. A bid has been made to the UHB Health Charity to fund the provision of a number of resources to support psychological wellbeing including Wellbeing Co-ordinators to deliver these programmes. An outcome of this bid is as yet unknown.

Helping staff with fatigue – the UHB has an existing Occupational Health Musculoskeletal pathway for staff, however this was not developed to deal with the effects of long Covid-19. The UHB has developed the Keeping Me Well platform which provide a range of resources to support Covid-19 Rehabilitation **https://keepingmewell.com/.** Although originally developed for patients, it is also applicable for staff.

A number of resources were developed during the initial stages of Covid-19 including free access to wellbeing Apps, online CBT resources, virtual exercise classes along with a number of bit size information leaflets. These are all currently available and are regularly being advertised via the communication team to ensure that staff know how to access them when required. The Head of Employee Health and Wellbeing and the Lead Counsellor for employee Wellbeing are continuing to offer proactive support to Line Manager to help them support the wellbeing of staff in the workplace

Wellbeing and Working from Home

We recently undertook a survey to gather the views and experiences of those who have worked from home during the pandemic. We received a fantastic number of responses; Highlights of the survey can be seen on the below attached.



It is clear that there are some lessons to learn and we are thankful for the open and honest views of our staff; largely the responses were positive and the majority of staff welcomed the opportunity to work from home although we know that working from home is not for everyone and some of our staff have found it particularly challenging.

We also recognise that there is a great deal of uncertainty surrounding the future and what our working arrangements will be. It is clear that, whilst Covid-19 has posed huge challenges to how we work and provide care to our patients it has also opened up several opportunities to allow us to question what we considered to be our routine way of working and to instil some real positive changes.

For the organisation, homeworking has certainly been one of those changes that we regard as being a positive change in direction and something that we would like to see continuing. At present we continue to encourage and support staff to work from home where they can. As well as supporting social distancing, the benefits to homeworking can include, a better work-life balance, avoiding the daily commute, and reduced travel costs. For the Health Board benefits include, better productivity, reduced requirement for office space and car-parking and a reduction in the carbon cost of delivering health and care services. There are also many benefits across the broader community including the reduction is road congestion, air pollution and the strain on public transport services.

It is acknowledged that there can also be negatives to homeworking, particularly around matters of employee well-being and health & safety, such as loneliness and loss of team contact, risk of domestic violence, difficulty keeping boundaries between home and work life, or simply the fact that IT capabilities may not be enhanced enough for employees to access everything that they need. We want to support this by helping to up-skill managers and staff to work effectively in a culture that values outcomes, not physical attendance.

It is important that we retain the benefits of homeworking. We want employees to have more opportunities to work from home – not less. We are currently exploring how we can embed homeworking into the organisation in a successful and sustainable way. Our aim is to introduce a recognised homeworking or remote working model that allows our staff to work from any number of different locations, including their home and office.

Supporting our Black, Asian and Minority Ethnic workforce

We have been actively involved in working with the National Black, Asian and Minority Ethnic Group in developing an accessible toolkit that will be rolled out to ensure that we are taking all appropriate precautions in the risk assessment and management of this particularly vulnerable group.

Recently our CEO asked members of staff from Black, Asian and Minority Ethnic backgrounds to share their experiences of working in the UHB and the issues of inequality they have faced. Our CEO has spoken with staff who shared their experiences, the learning from which we have found invaluable. We will now build upon this agenda to ensure that as a Health Board we are as inclusive as possible.

While we've seen the occasional inspiring story of grass-roots transformation initiated by employees looking to drive change, the truth is, diversity and inclusion has to come from all levels of an organisation. Therefore, all our Executives will each be taking a leadership role across the nine protected characteristics stipulated in the Equality Act 2010 (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation), and our CEO has chosen to lead on race. This is a complex area and his interactions with colleagues so far have illustrated how there are a variety views and opinions on how we can make sustainable and meaningful change, such as the establishment of a Black staff network or Forum.

Risk Assessments

At the start of the pandemic we introduced a risk assessment for our employees. We also had a separate assessment for Pregnancy. This was superseded as we introduced the Welsh Government Risk assessment process. Staff have been encouraged to undertake the self-assessment process and record this within the ESR system. Managers are required to undertake regular risk assessment conversations with all staff; especially those in vulnerable groups. Mitigating actions are being taken which mean staff are supported to work from home, moved to alternative duties, work in non-Covid-19 secure environments.

Section 7: OUR FINANCES

The Welsh Government wrote to the UHB on 19th March 2020 to confirm that whilst the UHB had an approvable plan, it had paused the IMTP process for an indefinite period so that organisations could focus on the challenges of Covid-19.

The UHB continues to progress its plans and is forecasting a breakeven year end position based upon the resource assumptions set out in NHS Wales Operating Framework 2020/21 for Q3 and Q4 and a continuation of LTA block arrangements for the rest of the financial year.

The Financial forecast is based on the UHB COVID-19 "central" scenario.

At month 6 the UHB is forecasting net expenditure due to Covid-19 to be £153.306m. The Covid-19 year-end forecast position is breakeven following receipt/confirmation of £153.306m Welsh Government (WG) funding that includes Urgent and Emergency Care funding. This is summarised in the following table:

Summary of Forecast COVID-19 Net Expenditure

	Forecast Year-End Position £m
Total Additional Operational Expenditure	153.29
Total Non Delivery Of Planned Savings	20.502
Total Expenditure Reduction	(19.214)
Total Release/Repurposing Of Planned Investments/Development Initiatives	(1.272)
NET EXPENDITURE DUE TO Covid-19 £m	**153.306**
Welsh Government COVID funding received / assumed	(149.256)
WG Urgent and Emergency Care Fund	(4.050)
Net COVID 19 Forecast Position (Surplus) / Deficit £m	**0.000**

- The breakeven financial forecast is dependent upon LTA block arrangements continuing for the rest of the financial year.
- The forecast position reflects the assessed Covid-19 costs included within the MDS;
- It is assumed additional forecast costs will be supported by Welsh Government Covid-19 funding and the UHBs capitation share of both the Welsh Government Sustainabilty fund and Urgent and Emergency Care fund.

- It is assumed Independent Sector Spire activity is funded to 31st March
- The current forecast excludes the cost of a mass Covid-19 vaccination programme which is currently being assessed.

This forecast includes funding received/assumed from Welsh Government totaling £153.306m as oulined below:

Welsh Government COVID-19 Funding supporting the forecast year end position as at September 30th 2020

Welsh Government additional COVID & Urgent & Emergency Care Funding	£m
Dragons Heart	(60.789)
Allocation Share 13.5% of £371.4m	(50.100)
Reflecting COVID Workforce Months 1 -3	(11.016)
LA TTP	(7.300)
PPE	(6.632)
UHB TTP	(3.081)
NHS and jointly commissioned packages of care	(3.024)
Independent sector provision (Spire)	(2.700)
Flu vaccine extension	(2.650)
Transformation Discharge	(1.251)
Mental Health Services	(0.503)
GMS DES	(0.210)
Urgent and Emergency Care Funding	(4.050)
Total Funding received / assumed £m	**(153.306)**

Key financial planning assumptions:

Dragons Heart Hospital

Within this forecast the Dragon's Heart Hospital costs are now assessed at £63.248m with a further £2.686m capital costs. The revenue cost of £63.248m represents set-up, decommissioning and consequential losses costs of £60.789m and running costs of £2.459m. This is based upon the DHH going on standby from 5th June and retention until 10th November 2020. The UHB continues to work to maximise value for money in the remaining occupancy, removal and reinstatement phases of the project and is hopeful that this will continue to reduce the overall cost of the project.

Dragons Heart Hospital consequential loss compensation costs for the WRU and Cardiff Blues of £3.659m are included in the 2020/21 forecast. These costs represent the best forecast that can be modelled at this time for events that might reasonably have been held at the Principality Stadium and Cardiff Arms Park in the period May 2019 to January 2020 but cannot be due to the continued occupancy of the Dragon's Heart Hospital to 31 October 2020. The forecast includes £8.537m of decommissioning costs for the DHH including reinstatement of the stadium.

COVID-19 and Winter Surge Capacity / Lakeside Wing

The UHB has developed alternative plans which have been shared with Welsh Government to establish a facility for surge capacity on the UHW site – Lakeside Wing. The plans have now been approved by Welsh Government. In addition to providing Covid-19 surge capacity, it will provide the surge beds that the UHB would need to commission for this winter, recognising that predicting winter demand this year is particularly difficult. The UHBs assessment is that of the 400 beds provided in this proposed facility, 50 would be developed as winter surge beds. The remainder would be kept as surge beds to use if there was a significant demand. The UHB's bed capacity plan maintains some of the initial bed expansion created in the UHB's GOLD capacity plan (wards in Barry and St David's Hospital as well as the

conversion of a physiotherapy area at UHW), but some of the beds originally identified as conversion to Covid-19 beds are required as the UHB brings back on line more non-Covid-19 activity.

Aligned to the Covid-19 "central" scenario the forecast includes additional staffing costs relating to additional Covid-19 capacity at UHW, UHL and St. David's (106 beds) coupled with additional winter capacity requirements (50 beds)

Additional workforce requirements relating to the utilisation of a further 116 beds within the Lakeside wing would need to be reviewed looking at utilisation of staff already in post, temporally redirecting / redeploying staff from acute non ward areas coupled with the availability of bank and agency staff if this additional surge capacity was to be required.

Resuming Non-Covid-19 Activity

Throughout the pandemic the UHB has maintained core essential services with our prioritisation of need based upon clinical-stratification rather than time-based stratification. Given the significant uncertainty in the current operating environment, it is extremely difficult to forecast activity with any degree of certainty

As well as maintaining essential services we have begun to re-introduced more routine services where it is safe to do so. We plan to keep doing this through the next six months.

We have been able to achieve this through:

- Establishment of Protected Elective Surgery Units ('Green zones') in UHW and UHL
- Use of Spire Private Hospital capacity
- A refreshed Outpatients Transformation Programme, clinically led across primary and secondary care

The reductions in non pay costs due to reduced elective capacity is now assessed and forecast to be £19.214m over the year. This represents activity steadily increasing throughout quarter 3 and quarter 4 aligned to the Covid-19 "central" scenario through the use of established green zones at UHW and UHL but not returning to pre-Covid-19 levels.

At the beginning of the Covid-19 pandemic, the UHB reached an early agreement with Spire Healthcare to enable patients with non-complex cancer and other urgent conditions to receive treatment at Spire's Cardiff hospital. This allowed the UHB extra capacity to care for Covid-19 patients on its main sites, in particular to enable space for regional services.

As Covid-19 cases continue to increase within our community and we move deeper into a second wave the continued use of the independent sector remains a key dependency for the UHB if it is to continue to plan for stability and continue to deliver the levels of non Covid-19 activity which have bene achieved to date during the pandemic.

Costs of Spire are included in the forecast to the 31st of March totalling £2.700m. Funding up until 31st December has been confirmed by Welsh Government and it has been assumed that this arrangement will continue for the rest of the financial year. As such the UHB has assumed a further £2.7m Welsh Government funding for this.

Regional Test, Trace and Protect (TTP)

Working with its local authority partners the UHB has established its TTP service as one of the key pillars to the safe releasing of lockdown measures. The contact tracing service is hosted by Cardiff Council on behalf of the three organisations; Contact Tracers and Contact Advisors are managed in teams by the Local Authority.

The TTP service went live on 1st June 2020. The forecast includes TTP costs (separately identified on TTP template) of £10.620m. This includes Local Authority costs of £7.539m that are £0.239m higher than the confirmed £7.300m income for local authority costs. Heath Board TTP costs totalling £3.081m are included within the forecast and assumed to be funded.

Enhanced Flu Vaccination Programme

A further pressure arose in month 5 around the cost of an enhanced flu vaccination programme. The costing of the programme is based on fees payable to GPs as this is the main delivery route for immunisations. The estimated cost which is estimated at £2.650m and is assumed to be funded. This has been calculated in line with the recent guidance and includes the provision of an additional 111,000 vaccines.

The forecast of costs outlined **exclude** the cost of a mass Covid-19 vaccination programme which are currently being assessed.

Personal Protective Equipment

In line with the planning guidance the UHB is assuming that its Covid-19 costs of PPE will be fully funded. At month 6 forecast costs are assessed to be £6.6m.

Urgent and Emergency Care Funding

We continue to shape our unscheduled care plans around the goals of the national urgent and emergency care framework and specifically the four priority areas which the unscheduled care board have identified for quarter 3-4:

I. 111 / contact first models to enable patients with urgent care needs to be signposted to the right place, first time
II. 24/7 same day / urgent primary care models of care to enable people to access care in their local community, preventing unnecessary attendance at Emergency Departments and admission to hospital.
III. Ambulatory emergency care to enable patients to safely bypass the Emergency Department and prevent unnecessary admission.
IV. Embedding the four discharge to recover then assess pathways to prevent unnecessary admission and enable a home first approach to improve experience and outcome

Funding has been assumed within the forecast totalling £4.05m reflecting the UHB allocation formula share of the £30m Urgent and Emergency Care Fund.

- £1.350m allocated to RPB for discharge to recover and assess pathways
- £0.540m for urgent primary care centres
- £2.160m for 111/contact first and Ambulatory Care

The UHB has established a 24/7 phone first triage approach, targeting citizens who would traditionally have walked up to the Emergency Department. The focus is on reducing footfall through the Emergency Department, social distancing has significantly reduced the capacity in the waiting area and the UHB does not want to create queues around UHW where we are not safely able to protect and prioritise patients.

Further bids against this fund are currently being progressed in line with set timescales.

The forecast does not include any additional costs to support the WAST tactical seasonal plan. This will be considered and prioritised against other expenditure plans.

Savings Programme 2020-21

The assessed slippage against the UHB £29m savings plan is forecast to be £20.502m and this includes the release of non-recurrent opportunities in month 6. A number of the UHB's high impact schemes were based on reducing bed capacity, improving flow coupled with workforce efficiencies and modernisation. It is not anticipated that significant progress will be made to improve this position until the pandemic passes. However, the UHB continues to identify and maximise all potential savings opportunities

available. Schemes that are continuing to develop and progress include procurement and medicines management.

Underlying Financial position

The 2020/21 opening underlying deficit was £11.5m. If the financial plan was fully delivered this would have reduced the underlying deficit to £4.0m by the year end. The achievement of this was very much dependent upon delivering the full year impact of 2020/21 savings schemes. The latest assessment is that as a result of the impact of Covid-19 this is £21.2m less than planned and this would increase the underlying deficit to £25.2m.

What is key for the Board is how it recovers from this Covid-19 period. It needs to avoid adding recurrent expenditure to its underlying position and to embed the many transformation changes that have been delivered at pace due to necessity. This is a period of both significant financial risk and opportunity for the UHB.

Financial Risks and Uncertainties

The financial plan sets out our best assessment of income and costs based upon alignment of capacity, activity, service and finances of the Covid-19 "central" scenario. The key financial risks and uncertainties are:

- Assumed Q4 funding for the independent hospital provision which has yet to be confirmed. This is assessed at £2.7m.
- Bids against the Urgent and Emergency Care Fund are yet to be confirmed.
- Continuation of block contract arrangements in Q3 and Q4. The NHS is unable to undertake the same levels of elective activity that it did pre Covid-19 19. Any movement away from block contacts to previous cost and volume contracts will significantly impact upon the delivery of this financial plan.
- The financial plan has been based upon the UHB Covid-19 "central" scenario, and the actual scale of impact will largely determine the resource requirements linked to workforce availability.

Dependent upon clarification of resource assumptions and the scale of a second Covid-19 wave, further mitigating actions may be required to manage these and other risks. Likewise it will be equally important to highlight any financial opportunities as early as possible.

Section 8: OUR CRITICAL ENABLERS

Infrastructure and Estates

Much of the focus of the capital and estates planning team for the last 2 quarters has been developing and implementing a range of enabling schemes to redevelop and/or reconfigure existing infrastructure to enable essential services to be delivered safely in a Covid-19 environment. These Green schemes and other major infrastructure enablers (e.g. Augments Oxygen infrastructure, whole service transfers from one site to another) are due to be completed during Q3.

The current major challenge for the team in Q3 & 4 is the development and delivery of the UHW-based surge capacity known as Lakeside Wing. This modular-build facility will be opened on a phased basis with 166 beds being available from the end of November and the remainder by the end of January. This development is progressing as we complete the decommissioning of the Dragon's Heart Field Hospital

temporary beds that were provided at the Principality Stadium. This facility is due to close on the 10th November.
In order to address some of the elective backlog pressures that have built considerably during the last 6 months the UHB has a number of capital schemes that are in different stages of development but all of which could be accelerated to provide fast-tracked, protected elective surgical and diagnostic capacity in specialities which are currently significantly constrained by existing capacity. These include:

- Acceleration of UHL orthopaedics theatres (All Wales Capital Programme SOC already submitted) – see Major Capital Schemes in Development table below
- Production of BJC for 2 offsite modular build cataract theatres – initial design plan agreed with clinicians
- Production of BJC for 2 theatre endoscopy suite expansion at UHL - – initial design plan agreed with clinicians.

In terms of the UHB's current Major Capital Programme the principal existing infrastructure schemes are outlined in the **table 4** below.

Table 4: *Major Capital Schemes in Construction*

Scheme (Capital value)	Current Position Update	Key Milestones
Acute Infrastructure		
Neuro & Spinal Rehab Unit at UHL – (£31m AWCP)	Relocation of Rookwood specialist spinal and neurological rehabilitation services to fit for purpose new build at UHL. Construction in progress.	Build end: Feb 2021 Service Occupation: May 2021
Cystic Fibrosis Unit – UHL. (£3.5m AWCP)	Replacement & expansion of current facilities in fit for purpose accommodation in new unit at UHL. Construction in progress.	Build end: Dec 2020 Service Occupation: Feb 2021
MRI Fit Out – (£5.63m AWCP)	2 scanners installed and 3rd in commissioning – training ongoing.	2 in service 3rd in commissioning
MTC Enablers (carried fwd from 19/20) ED CT scanner (£1.5m AWCP) Resus – additional bay (£0.462m AWCP)	Replacement scheme due to complete 2nd week in Dec. Awaiting final completion date – minor works outstanding.	CT installation complete mid Dec Resus – TBC
Community Infrastructure		
CRI Chapel development (£3.5m – ICF funded)	Integrated space for library & community services. Construction ongoing.	Completion due Jan 2021
CRI – Blocks 11 & 4 – 2nd floor (£5.132m AWCP)	Urgent remedial H&S works & relocation of MH community services and other Global Link occupants. Construction in progress	Completion due March 2021.

Major Capital Schemes in Development

Scheme (Capital value)	Current Position Update	Key Milestones
Acute Infrastructure		
Hybrid/Vascular & Major Trauma Theatre – UHW (£TBC)	OBC in final stages of development – Key enabler for SW Major Trauma Centre and SE Wales Vascular Surgical Network service delivery	Submit OBC to Board in Nov and await WG decision to proceed to FBC
UHL – Replacement theatres and additional ward facility (Est £11m – AWCP)	Replacement of 2 orthopaedic theatres at UHL that are no longer useable. SOC submitted.	Awaiting approval of SOC & funding to proceed to OBC
Genomics Centre For Wales (est £8m AWCP)	OBC in final stages of development for this joint infrastructure scheme in PHSW – critical enabler for national Genomics strategy	Submit OBC to Board in Nov and await WG decision to proceed to FBC

Scheme (Capital value)	Current Position Update	Key Milestones
Radio Pharmacy Unit Replacement (est £12.756m)	OBC in final stages of development for the replacement of inadequate accommodation – MHRA statutory compliance requirement	Submit OBC to Board in Nov and await WG decision to proceed to FBC
Mortuary Essential Upgrade works (est £1.6 - £2m)	HTA statutory compliance requirement. Scheme scoping currently under way to inform BJC.	BJC to be produced – timescale TBC
Critical Care UHW (£TBA) –	Scoping work being undertaken by C&E team for expansion and improvement of current accommodation (at risk – using discretionary capital). Business case route to be determined. Major Capital from AWCP required.	Scoping options to be concluded end Q3
UHL – Electrical and Oxygen (£4m AWCP)	New substation to address single point of failure and second VIE to augment existing oxygen plant. BJC under development	BJC to board end Q3
Main Theatre Refurbishment – UHW (est £10-£15m AWCP)	SOC being developed for 'Do Minimum' option – phased refurb in situ – to address significant inadequate and obsolete plant and modernisation requirements	SOC to Board June 2021
Community Infrastructure		
Wellbeing Hub – Maelfa (£12.881m AWCP – Primary Care Pipeline)	FBC submitted.	Awaiting WG decision to fund construction costs
Wellbeing Hub Penarth (£11.553m AWCP – Primary Care Pipeline)	FBC on hold – Alternative project options being explored	TBA with partners.
Wellbeing Hub Ely (Parkview) (£16 – 20m AWCP)	SOC approved. OBC no longer being progressed at risk and SCP stood down	Awaiting WG decision to fund OBC costs
SARC Hub – CRI (£10m AWCP)	SOC approved (Jan 2020) – awaiting WG decision to fund OBC planning costs. Essential accreditation compliance required to meet ISO requirements by 2023.	Awaiting WG decision to fund OBC costs
Health & Wellbeing Centre – CRI (£93m AWCP)	OBC on hold pending discretionary capital availability to support planning fees.	On hold.
CRI – Safeguarding Works (£? AWCP)	FBC on hold pending capital availability to support planning fees	Awaiting WG decision to fund FBC costs

PPE

We have an internal PPE cell which continues to meet weekly and is very closely linked into the wider NHS Wales PPE governance arrangements regarding the procurement and supply of PPE. In the context of this plan no new risks or issues are being reported meaning that PPE could be a rate limiting factor in the delivery of this plan.

Research, Development, Innovation and Technology

In ensuring long term system renewal it remains important that the organisation remains focused on both 'non Covid-19' innovation and technology as well as 'Covid-19' innovation- the schemes, projects, ideas which have been bought forward and/or emerged as a direct response of the pandemic.

Covid-19

From the outset of the pandemic we have taken a leading role in the research and development needed to fight Covid-19 including the now internationally known 'recovery' study where the UHB had nearly 200 participants. **Annex seven** provides more detail on the scale of the UHBs contribution to date across the Covid-19 R&D landscape.

Non Covid-19

Innovation 2025

Midway through *Shaping our Future Wellbeing* strategy the organisation is in the final stages of developing Innovation 2025. A plan for investment in innovation as a central pillar for realising our vision as a University Health Board.

Innovation 2025 continues to align innovation to the biggest challenges and service priorities set out in the UHB's ten-year strategy.

The Innovation Multidisciplinary Team (Imdt) conceived by our core innovation team remains at the heart of our innovation process and its success has led to adoption in other Health Boards and attracted attention from John Hopkins and the Mayo Clinic in the USA. The Imdt has an unprecedented level of expertise across the full innovation spectrum. As at July 2020 there have been 105 projects supported by the (Imdt)

Digital Innovation

We retain a digital transformation roadmap through to 2025 and whilst much of our immediate digital capacity is supporting the organisations immediate response to we recognise that it remains important that we set these immediate developments within the context of where digital across the Cardiff and Vale health community needs to be by 2025.

Appendix eight provides a schematic of our digital transformation. Some of the early steps which we will be looking to make on this journey include;

- ✓ Password for life
- ✓ Automated password reset
- ✓ Up to date internal directories
- ✓ New intranet with fresh content and search capability
- ✓ Workflow e.g. links and flow between EU work station and ward workstation; for job/task management
- ✓ Access almost everything on any device including your own
- ✓ Email accounts for all staff (including students, facilities etc)
- ✓ Roster / rota solutions for all staff

Communications

Our communications and engagement has largely been centred on responding and supporting the UHB operational response to the Covid-19 pandemic and the establishment of the Dragon's Heart temporary Field Hospital. As the first peak subsided much proactive work has been undertaken in reassuring our communities, getting some of our key services online and providing communications around the options available to patients across our range of communication channels, internally and externally.

The Communications and Engagement team has wherever possible continued with business as usual across all clinical and service boards in supporting the operational delivery of *Shaping our Future Wellbeing*. As we enter the annual cycle of winter communications, CAV247, the flu vaccination programme as well as a second peak of Covid-19 the team will be agile and respond to priorities seeking to inform, educate and reassure our communities as far as possible on accessing local health services.

The team has provided communications to targeted priority groups, such as those from Black, Asian, Minority Ethnic (BAME) groups and students and a range of stakeholders to ensure that our reach and information sharing is as far ranging as possible.

The Communications Team has also focussed on improving internal communications to staff and stakeholders and an additional series of newsletters and blogs are released regularly to keep people informed and updated with the latest health board position and operational information at a high level. There has also been a significant emphasis on communicating staff wellbeing and the availability of online and other services.

The feedback from surveys is that communication and speed of communication has improved and the team have identified the need to streamline and simplify information in a crowded information space.

Good Governance

We have had a clear approach for maintaining robust governance through the course of the pandemic with regular Board and Committee meetings taking place virtually to enable appropriate strategic oversight and scrutiny of the plans being developed and implemented. The organisation is currently reviewing its governance arrangements to ensure Welsh Government guidelines issued during Covid-19 continue to be implemented in an effective way.

Independent Board members had an informal session with the Health Boards Executive team and members of the Planning and Strategy team to support with the shaping of this plan. A final draft of the plan was also shared with the CHC, feedback was received and acted upon. We will also look share the final document with PSB and RPB partners

Upon submission this plan will be formally retrospectively approved at the next Board Development session and ratified in following formal Board of November.

The Board will receive assurance from the Strategy and Delivery sub-committee on progress with delivering the key elements of plan recognising it will continue to evolve and develop with each quarter refresh and update.

The Audit Committee will review and have oversight of governance and risk arrangements to ensure these remain robust. The strategic risks which Cardiff and Vale UHB are facing are described in the BAF see **appendix nine** and these are reported to every Public Board Meeting.

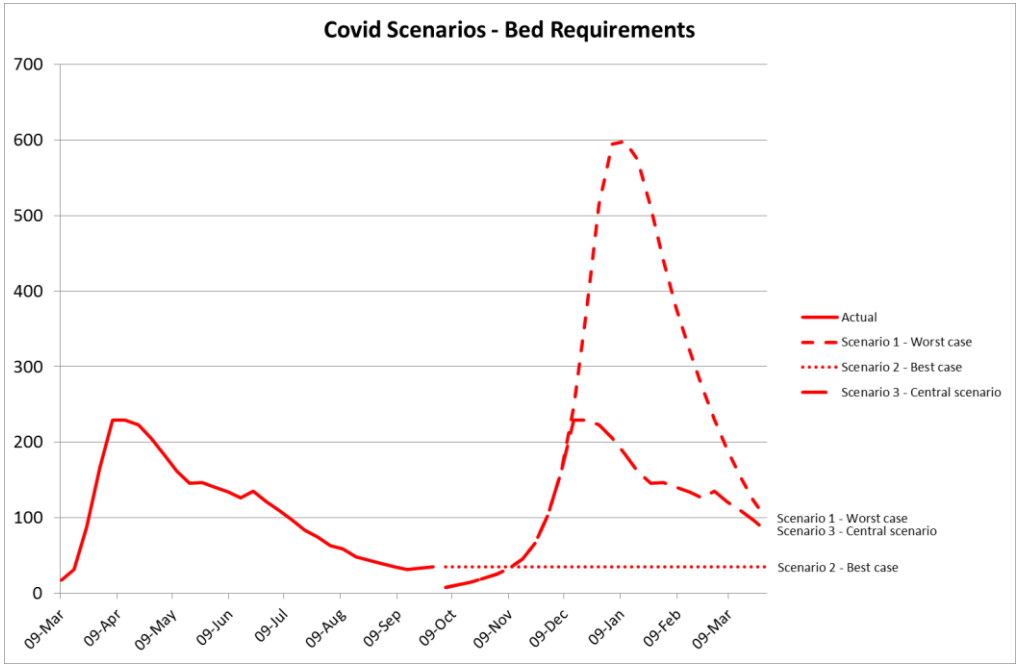
APPENDICIES

Annex One: *The UHBs three scenarios*

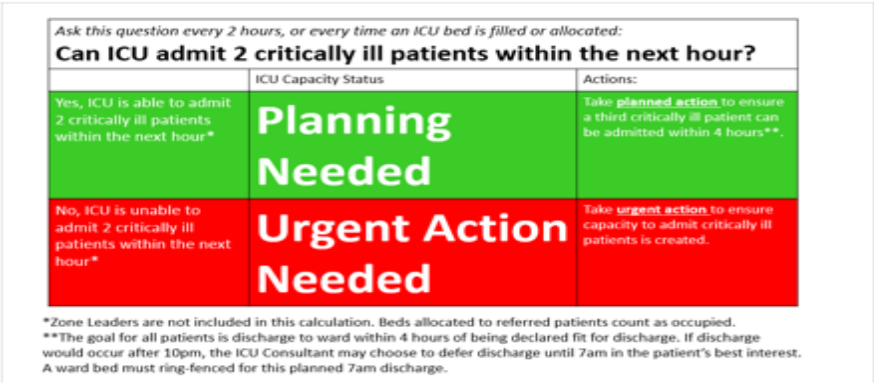
Scenario 1: Covid "Worst-Case"		
Covid	**Non-Covid emergencies**	**Electives**
1. Utilises the Swansea University RWC, adopted by WG, as the basis for the number of cases and admissions 2. LOS adjusted to reflect our actual LOS from wave 1 (note: LOS recognised as too short in Swansea model – revised version expected to be issued shortly) 3. Bed occupancy planned @ 85%	1. Utilises SfN (Lightfoot) forecast for non-Covid, with projection averaging 84% of last year 2. It has increased back to 83% of pre-Covid levels but has stabilised over past month 3. Note: in first wave non-Covid occupancy reduced to c.40% 4. Bed occupancy planned @ 85%	1. Utilises SfN (Lightfoot) forecast for electives, with projection averaging 82% of last year 2. It has currently increased to 67% of pre-Covid levels but is steadily increasing and Green Zone expansion planned during October & November 3. Note in first wave elective occupancy reduced below 30% 4. Bed occupancy planned @ 90%

Scenario 2: Covid "Best-Case"		
Covid	**Non-Covid emergencies**	**Electives**
1. Assumes total Covid bed demand is minimal and contained within Heulwen only 2. Bed occupancy planned @ 85%	1. Assumes occupancy of non-Covid emergencies returns to 100% of pre-Covid levels, at the rate of increase seen between April – August 2. This reaches 100% at end of November 3. Bed occupancy planned @ 85%	1. Assumes elective occupancy returns to 100% of pre-Covid levels, at the rate of increase seen between April – August 2. This reaches 100% by mid-December against pre-Covid 3. Bed occupancy planned @ 90%

Scenario 3: Covid Central Scenario		
Covid	**Non-Covid emergencies**	**Electives**
1. Assumes second wave initially follows trajectory of Swansea RWC but peaks at level of first wave 2. Recovery phase follows same trajectory as first wave 3. Bed occupancy planned @ 85%	4. As per Covid best-case	5. As per Covid worst-case



Annex Two- *Critical care escalation plan*

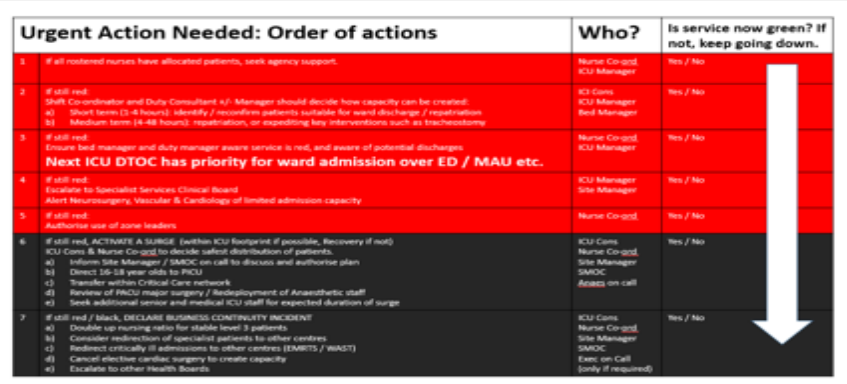


Ask this question every 2 hours, or every time an ICU bed is filled or allocated:

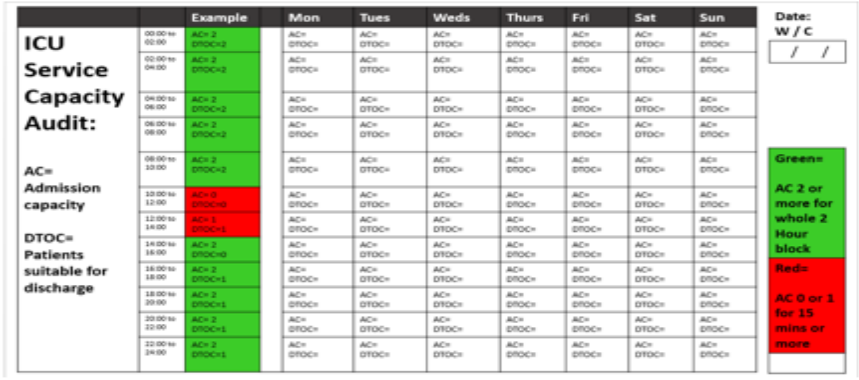
Can ICU admit 2 critically ill patients within the next hour?

	ICU Capacity Status	Actions:
Yes, ICU is able to admit 2 critically ill patients within the next hour*	**Planning Needed**	Take **planned action** to ensure a third critically ill patient can be admitted within 4 hours**.
No, ICU is unable to admit 2 critically ill patients within the next hour*	**Urgent Action Needed**	Take **urgent action** to ensure capacity to admit critically ill patients is created.

*Zone Leaders are not included in this calculation. Beds allocated to referred patients count as occupied.
**The goal for all patients is discharge to ward within 4 hours of being declared fit for discharge. If discharge would occur after 10pm, the ICU Consultant may choose to defer discharge until 7am in the patient's best interest. A ward bed must ring-fenced for this planned 7am discharge.



Urgent Action Needed: Order of actions	Who?	Is service now green? If not, keep going down.
1 If all rostered nurses have allocated patients, seek agency support.	Nurse Co-ord ICU Manager	Yes / No
2 If still red: Shift Co-ordinator and Duty Consultant +/- Manager should decide how capacity can be created: a) Short term (1-4 hours): identify / reconfirm patients suitable for ward discharge / repatriation b) Medium term (4-48 hours): repatriation, or expediting key interventions such as tracheostomy	ICU Cons ICU Manager Bed Manager	Yes / No
3 If still red: Ensure bed manager and duty manager aware service is red, and aware of potential discharges **Next ICU DTOC has priority for ward admission over ED / MAU etc.**	Nurse Co-ord ICU Manager	Yes / No
4 If still red: Escalate to Specialist Services Clinical Board Alert Neurosurgery, Vascular & Cardiology of limited admission capacity	ICU Manager Site Manager	Yes / No
5 If still red: Authorise use of zone leaders	Nurse Co-ord	Yes / No
6 If still red, ACTIVATE A SURGE (within ICU footprint if possible, Recovery if not) ICU Cons & Nurse Co-ord to decide safest distribution of patients. a) Inform Site Manager / SMOC on call to discuss and authorise plan b) Direct 16-18 year olds to PICU c) Transfer within Critical Care network d) Review of PACU major surgery / Redeployment of Anaesthetic staff e) Seek additional senior and medical ICU staff for expected duration of surge	ICU Cons Nurse Co-ord Site Manager SMOC Anaes on call	Yes / No
7 If still red / black, DECLARE BUSINESS CONTINUITY INCIDENT a) Double up nursing ratio for stable level 3 patients b) Consider redirection of specialist patients to other centres c) Redirect critically ill admissions to other centres (EMRTS / WAST) d) Cancel elective cardiac surgery to create capacity e) Escalate to other Health Boards	ICU Cons Nurse Co-ord Site Manager SMOC Exec on Call (only if required)	Yes / No



ICU Service Capacity Audit:

AC= Admission capacity

DTOC= Patients suitable for discharge

	Example	Mon	Tues	Weds	Thurs	Fri	Sat	Sun
00:00 to 02:00	AC= 2 DTOC=2	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
02:00 to 04:00	AC= 2 DTOC=2	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
04:00 to 06:00	AC= 2 DTOC=2	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
06:00 to 08:00	AC= 2 DTOC=2	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
08:00 to 10:00	AC= 2 DTOC=2	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
10:00 to 12:00	AC= 0 DTOC=0	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
12:00 to 14:00	AC= 1 DTOC=1	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
14:00 to 16:00	AC= 2 DTOC=0	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
16:00 to 18:00	AC= 2 DTOC=1	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
18:00 to 20:00	AC= 2 DTOC=1	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
20:00 to 22:00	AC= 2 DTOC=1	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=
22:00 to 24:00	AC= 2 DTOC=1	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=	AC= DTOC=

Date: W / C / /

Green= AC 2 or more for whole 2 Hour block

Red= AC 0 or 1 for 15 mins or more

Accepted= time accepted

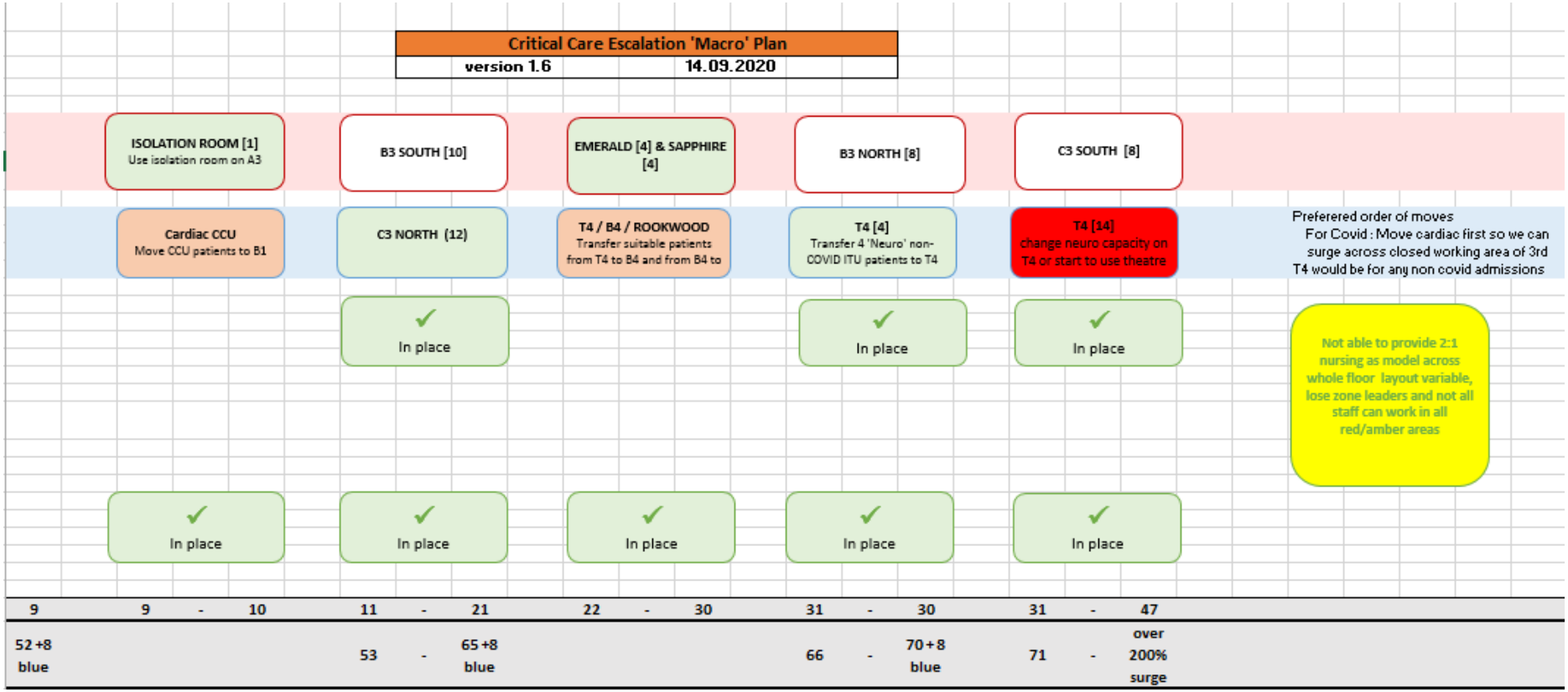
Ready= patient ready to come to ICU (eg patient recovered post laparotomy), time may be same as accepted if patient is ready to move)

Arrived= arrived in ICU

Datix if ready to arrived is >240 mins

		Mon	Tues	Weds	Thurs	Fri	Sat	Sun
Admission 1	Initials:							
	Accepted:							
	Ready:							
	Arrived:							
Admission 2	Initials:							
	Accepted:							
	Ready:							
	Arrived:							
Admission 3	Initials:							
	Accepted:							
	Ready:							
	Arrived:							
Admission 4	Initials:							
	Accepted:							
	Ready:							
	Arrived:							
Admission 5	Initials:							
	Accepted:							
	Ready:							
	Arrived:							

Annex Three – *Schematic of our critical care footprint*



Annex Four- *Care Home support and escalation issues*

Issue	Response
An overarching contingency plan that could be applied to any nursing care home closure must be developed in readiness for the winter period.	Home Closure procedure already in place and would be initiated in conjunction with partners
Clarify Regulatory Requirements	Clarify the role of HIW and other regulatory bodies
To enable ownership, a clear legal position and implementable action plan must be in place. LHBs working with Las as appropriate, are asked to consider the following as part of their overarching care home failure contingency planning.	Legal advice is requested– can a HB take 'ownership' of a privately owned business and what are the legal obstacles or supportive legislation to enable that to happen.
Determine clear legal advice for how a nursing care home could be run either solely by the LHB or jointly with the LA in line with legislation including NHS (Wales) Act 2006, Social Services and Well-being (Wales) Act 2016 and Local Government Act 2000;	Legal advice is requested to confirm HB position : If a home is nearing failure then administrators may already be involved. Can HBs purchase a business that is actively failing to this extent? Clarify if the suggestion of ownership if it applies to all Care Homes not just those deemed to be required to meet demand
Determine potential availability of capital funding to purchase and update buildings (if necessary), Determine understanding of potential pooled budgets ;	Funding source to secure " ownership" HBs required to assess capital/buildings requirements within the context of NHS buildings and maintenance standards
Compliance issue re building regulations and health and safety regulations	HBs have to assess and determine any capital/buildings requirements within the context of NHS buildings and maintenance standards? Consideration of Health and Safety legislation requirements
Human resource issue to be consider	TUPE of staff Ongoing funding resource for staff Management resource Professional Regulation and competency
Consideration of Charging Process particularly self-funding arrangements	Determination of charging element, financial assessments invoicing payment etc.
Safeguarding	What is the legal position re HBs purchasing care homes where there may be significant escalating concerns/safeguarding issues in that home?

Annex Five: *Care home partnership action plan*

070920ActionPlanToSupportResidentia

Annex Six: *Summary of all other essential services*

GREEN	AMBER	RED
<75%	50-75%	>50%

Essential Service	Status- Expected capacity for Q3-4 compared to pre-Covid-19	Action being taken to improve situation and/or action being taken to manage resulting risks (ONLY if amber or red)
Renal Dialysis	*Confirmation to follow*	
Solid Organ Transplantation	*Confirmation to follow*	
Thoracic Surgery		
Haematology	*Confirmation to follow*	
Neurosciences		

Essential Service	Status- Expected capacity for Q3-4 compared to pre-Covid-19	Action being taken to improve situation and/or action being taken to manage resulting risks (ONLY if amber or red)
Major Trauma Centre		
Stroke	*Confirmation to follow*	
Gastroenterology		**Endoscopy** Quarter 3 Capacity likely to be around 65-70% of pre COVID-19 **Mitigation:** Insourcing Continued use of Spire Look at use of FIT as an upfront diagnostic Micro managing capacity to ensure all capacity is utilised affectively Validation Review of complex patients with consultants (long waiters ie >52 weeks) Review of patients waiting greater than 26 weeks Validation – both clinical and administrative
Acute Oncology		
Lung Cancer		
Skin cancer		Micro managing capacity to ensure all capacity is utilised affectively. Undertaking one stop see and treat clinics within current capacity
HPB Cancer & Urgent		

Essential Service	Status- Expected capacity for Q3-4 compared to pre-Covid-19	Action being taken to improve situation and/or action being taken to manage resulting risks (ONLY if amber or red)
GI Cancer & Urgent		
Head & Neck Cancer & Urgent		2 x Dental theatres planned to open within Dental Hospital in November. Activity plans being drawn up to predict amber zone capacity.
Breast Cancer		
Spinal Urgent		
Urology Cancer		
Ophthalmology R1 & R2		3 x amber zone additional cataract sessions per week to go live in October. This will help free up some green zone theatre list space for R1&2 patients (glaucoma or VR). Additional 2 x GA green theatre sessions available from October also.
Emergency Surgery		
Trauma		
Emergency Ophthalmology		

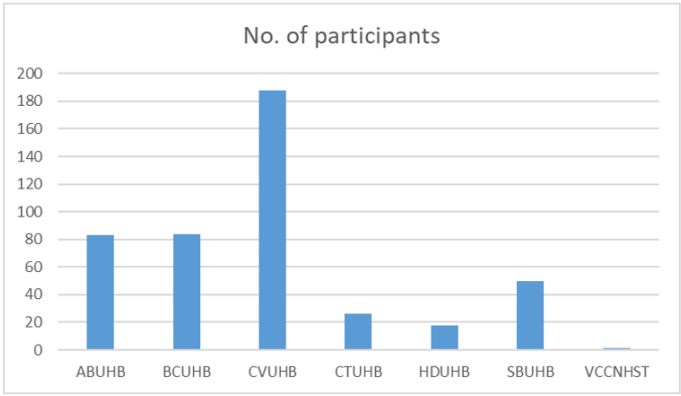
Annex Seven: *Cardiff & Vale UHBs Covid-19 Research and Development contribution*

Opened 43 Clinical Studies opened to date (10 CTIMP trials – over 200 patients enrolled) offering 17 different therapies to clinicians/patients

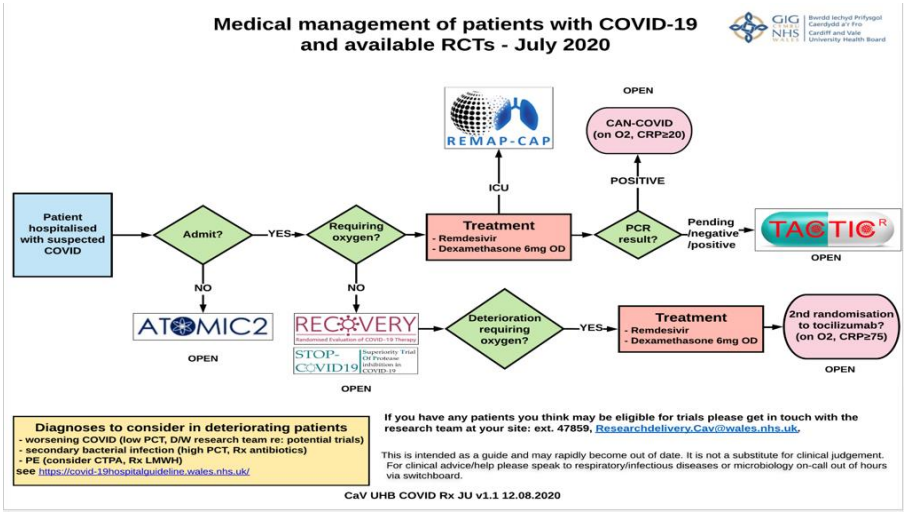
- **RECOVERY**
  - Dexamethasone, Hydroxychloroquine, Lopinavir/Ritonavir, Azithromycin, Tocilizumab (anti-Il-6 monoclonal antibody), Convalescent Plasma
- **GILEAD EAP – ITU Only**
  - Remdesivir (anti-viral)
- **TACTIC**
  - Ravulizumab (anti-complement monoclonal antibody), Baricitinib (anti JAK2/Il-6)
- **REMAP – ITU plus CPAP patients**
  - **Dexamethasone, Azithromycin, Lopinavir/Ritonavir, Anakinra (anti-Il-1 receptor), Interferon β (antiviral), Convalescent Plasma**
- **Stop Covid**
  - Brensocatib (Dpp1 inhibitor)
- **CanCovid**
  - Canakinumab (Anti Il-1 receptor monoclonal antibody)
- **CATALYST – Monoclonal antibodies**
  - Namilumab (anti-GMCSF), Infliximab (Anti TNF), Myelotarg (anti CD33) + others to follow
- **ATOMIC**
  - Azithromycin for A&E patients not admitted to hospital
- **Principle**
  - Azithromycin for GP patients not sent to hospital
- **Copter –** CVUHB Sponsored Convalescent Plasma
- **LFG316 –** Compassionate use anti-complement monoclonal antibody

Two other studies – never came to fruition as Sponsor withdrew.

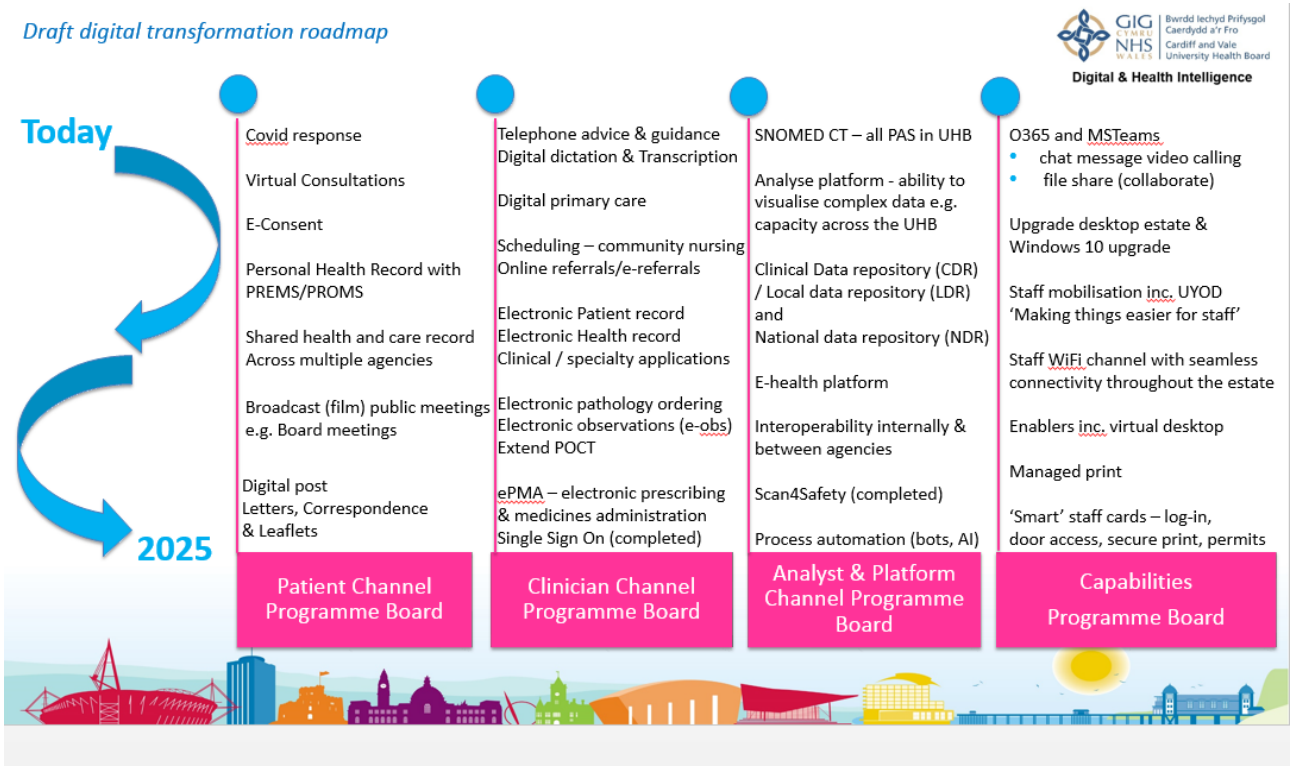
RECOVERY Study



Medical management of patients with COVID-19 and available RCTs - July 2020



Annex Eight: *Draft digital transformation roadmap*



Annex Nine: *September 2020 Board Assurance Framework*

6.3 BOARD ASSURANCE FRAME'