Shaping our Future Hospitals

Response to Welsh Government communication from 16 July 2021

Following the letter dated 5th August 2021, we would like to take the opportunity to address some of the initial Programme Business Case (PBC) scrutiny queries raised in your letter dated 16th July 2021.

We want to reemphasise our commitment to working with the Welsh Government and NHS Wales to take this ambitious programme forward.

We are hoping this letter will provide you with the necessary assurance to enable the Health Board to proceed to the next stage of business case development and alleviate any concerns you may have about individual projects.

To take the issues you have raised in turn:

Issue 1: You accepted that PBC being clinically-led is the correct starting position; however, you did raise concerns about how such a complex document will be kept 'live'.

Gateway 0 Recommendation link- N/A

We are pleased that you agree that the Health Board's approach to clinical services should inform the direction of the programme. The future of our clinical services and health of our population is at the heart of everything we do and have been the driving force behind putting the business case forward.

There is no shying away from the fact that the programme is complex, comprising several projects, and the PBC is, as a result, also complex. In the early days of scoping the business case we agreed with you that it should be a living document which is updated when new information becomes available as the different projects progress – this was set out in Appendix T, Programme Business Case Scope, which we shared with you.

At the time the PBC was issued to you, we were aware that there were a number of gaps in information, this was acknowledged in the Scoping document and detailed in Appendix B, Comparison of PBC Content to Green Book Requirements.

We would expect the business case to be updated when new information is available and that the PBC will be able to be finalised once all the points have been addressed. The main points that are outstanding are:

- **Economic case** – quantification of risks and benefits and associated calculation of NPSV and the identification of the Preferred Way Forward, in accordance with the scoping document (appendix T)
- **Financial case** – full capital and revenue costings for each project and assessment of affordability position/funding strategy, the impact of affordability on the balance sheet and income and expenditure position.
- **Commercial case** – final procurement model for each of the individual aspects of the programme, charging mechanism and contractual arrangements.

Our expectation is that some of this information will only be available when substantial amounts of further work has been undertaken. For this reason, the relevant sections of the PBC will be updated alongside the development of the individual project business cases – as acknowledged in 1.10 of the Programme Business Case Scope. We would therefore expect to update the relevant sections of the PBC once Strategic Outline Cases (SOCs) have been completed for each individual project.

Section 2.1 of the PBC proposes that the programme is packaged into three individual projects, of which two will involve preparation of individual SOCs (and, subsequently, OBCs and FBCs) – Project 2 (Redevelopment of Hospital Infrastructure) and Project 3 (Development of an Academic Health Sciences Hub and a Life Sciences Eco-system).

Provided approval from the Welsh Government to proceed with further development of the programme is achieved, based on our original timescales, we anticipate that the key updates to Economic, Financial and Commercial cases will be made once the individual project SOCs are prepared.

At that stage, we expect that the PBC will present all key elements of the programme and thus will be, in effect, superseded by individual project business cases. Our suggestion would be that any further updates are made to the PBC only in the event of major changes to the programme, such as significant increase/decrease of the funding ask.

At programme completion, a post-programme evaluation exercise will be completed, to compare the outcomes achieved to those set out in the PBC and to assess the success of the programme. The PBC, as well as the

individual project business cases will also be subject to regular Gateway reviews to provide an independent view on continued programme viability.

Issue 2: You noted that the transformational elements and benefits of the programme did not come through strongly enough, in particular when it comes to moving away from like for like traditional hospital replacement or innovative ways of providing clinical services.

Gateway 0 recommendation link: #5

It is our view that the PBC does set out the transformational benefits we are looking to achieve through the programme. This is developed in the PBC as follows:

1. **Clinical services transformation – is comprised of three key aspects (as set out in Table 68, section 8.6.1 of the PBC)**:

- Clinical pathway development
- Digital and technology plan development
- Workforce transformation

2. **Clinical pathway development is the key sub-project of 1. (above) and in essence acts as a foundation for the rest of the programme.**

The proposed approach to this is truly innovative and aims to transform the function of the Health Board's hospitals – moving away from traditional hospital replacement. It is intended to become a Research Hospital of the Future, focussing on precision prevention, risk stratification of patients and data analytics, in order to ensure that care is delivered closer to home where possible, and only specialist, complex care and emergencies are reserved for the acute setting.

The Strategic case, in particular section 4.4.5 (p.53 onwards) goes into significant detail about the proposed approach and the transformational benefits it is going to deliver. This focusses on the role of Health Board's hospitals as Research hospitals of the future, precision prevention, risk stratification of patients and data analytics. This approach is informed by global best practice and will put C&VUHB at the forefront of medical innovation.

Our clinical model will continue to look at innovative, policy compliant ways of delivering services with a particular emphasis on prevention, treatment/management at home and in the community – all with the common factor of exploiting technology and data. Our approach to this was set out in 4.5.2.

Should Welsh Government have any ideas or suggestions with regards innovative models we have not considered, we could be glad to do so in Project 1 (Clinical Transformation).

3. **The Economic case, specifically section 5.5.2, described the main socio-economic benefits that will be delivered by executing this programme.**

Whilst it didn't seek to quantify those benefits at this stage, after discussion with Welsh Government, where we are able to reference benefits that have been delivered elsewhere we did so – please refer to pages 155 through to 179. The decision to not include clinical benefits, such as QALYs, at this stage, was deliberate on behalf of the Health Board as we are yet to go through the pathway development exercise which will inform the benefits.

As noted above, the clinical strategy development will be the overarching, most important project within the programme. It is our expectation that the transformational benefits, including QALY's, will be developed in further detail at SOC stage for the Redevelopment of Hospital Infrastructure. At this point, you will have a further opportunity to assess and comment on the transformational nature of the programme via the SOC approval process.

As of summer 2021, we have a clear overarching clinical strategy that has been taken to the public for engagement, receiving their overwhelming support. We are moving into the next level of granularity. Included in the original funding ask from the Welsh Government was the funding for the resource and support to accelerate the development of the clinical strategy to the next stage, which would be development of more detailed models of care starting at home and community.

Issue 3: You have queried how the Health Board and partners would ensure that the infrastructure is the right size and flexible configuration, given the shift from acute to primary and community care.

Gateway 0 recommendation link: #5

As you noted at the start of your letter, the PBC was clinically led. In our conversations with Welsh Government during the process, the message has always been to focus on the clinical strategy, and to consider infrastructure at a later stage once there is absolute clarity on what the clinical model will look like going forward.

For the PBC, we have commissioned Archus, a health planning specialist, to undertake indicative demand and capacity modelling. This informed high-level concepts of what the future hospital facilities may look like. Based upon our target clinical model, assumptions were developed (see section 4.4.3) on the efficiencies that can be delivered and changes in settings (generally from hospitals into the community) that could be achieved.

Some of the key assumptions were as follows:

Assumption	
Planning horizon	15 years from 2019 to 2034
Growth	4%p/a[1]
Telemed volumes	Range, up to 70% in certain specialties
Left shift from out of hospital (cut out entirely from the pathway)	10%
Outpatients' clinic utilisation	90% @ 12 sessions per week

These assumptions are ambitious but not unachievable.

In respect to your specific point regarding rightsizing, we would like to draw particular attention to the methodology, which was set out in section 4.4.6. Whilst as it stands, the PBC projects a moderate decrease in beds (25, from c 1,532 to c 1,507), this is adjusted for the 4% growth as set out above. Without intervention, given the population and non-demographic growth, under a do nothing scenario C&VUHB will be 330 beds short to meet the demand in year 2034. Therefore the absolute reduction over the planning horizon is 385 beds.

This modelling was undertaken at a high level and would be developed in significantly more detail at SOC stage for Redevelopment of Hospital Infrastructure. We will be re-running the demand and capacity modelling based on the updated set of assumptions from developing robust and detailed models of care.

Once there is a shared agreement and buy in into these models of care, the Health Board will work with a design team to ensure the proposed facility or facilities are "Flexible, safe, modern estate built following principles of modern methods of construction and contributing to the net zero carbon agenda", as set out in section 4.6 of the PBC.

Infrastructure flexibility is a factor that is being given serious consideration currently through the Hospital Infrastructure Programme in England. Learning from progress so far captured by our advisors Archus includes having long term planning horizons and providing standardised rooms with common layouts in 8sq/m divisible sizes (i.e. 8sq/m, 16sq/m, 24sq/m or 32sq/m) are two factors to help with ensuring flexibility. St Thomas' have been considering creating shell and core buildings and designing fit out as a separate programme – this is because given the lifecycle of the building and the number of evolutions medical practice will undertake in 50+ years, they don't want to be limited by space configurations determined as permanent decades previously,

Issue 4: You suggested that the alignment to the endorsed Primary Care model needs to be better set out in the case. The Future Hospitals PBC thus needs to demonstrate how the new facilities would enable a smaller, more specialised urgent/acute centre that complements the shift to home/local first provision.

Gateway 0 recommendation link: #3

Section 4.4.5, specifically pages 58-68, sets out the vision for the proposed clinical strategy with a focus on in-hospital versus out of hospital functions. We believe this is aligned to, and complements the Primary Care model /

[1] 4% growth assumption derived from Stats Wales local authority based projections, triangulated with CVUHB activity data and a 0.5% annual uplift to reflect potential under-reporting)please refer to section 4.4.3.2 on p46).

"Shaping our Future Wellbeing in the Community". Primary care clinicians were involved in clinical strategy development workshops and their views were included in the PBC.

The demand and capacity modelling set out in section 4.4.3 and 4.4.6 has shown the facilities will be smaller than they are today, taking total bed numbers as the metric. We also believe that the PBC sets out how specialist the facility would be. If the Cardiff, Vale of Glamorgan and South Wales' population stayed static in number and static in terms of prevalence of illness, then it could be inferred that our clinical model would deliver an even smaller facility, but this will not be the case in reality.

In terms of its function, the PBC lays out the concept of the University Hospital of the Future, summarised in section 2.2.3.1 and in more detail in section 4.4.5.4.

We acknowledge, however, that more can be done to achieve full convergence of the two PBCs (SOFW:IC and SOFH). As outlined above, we expect for this to take place at SOC stage for the Redevelopment of Hospital Infrastructure project, once there is full clarity around the proposed models of care.

C&V would like the data to define how big the facility will be specified rather than work on an assumption that the existing number of beds will reduce. Whilst we agree with, and encourage delivery of care closer to home, there are recent precedents of hospital builds in the UK have which have tended to result in facilities that are too small (Southmead, Bristol; Queen Elizabeth, Birmingham; Royal Liverpool) therefore C&V should remain vigilant of this danger.

Issue 5: You noted that the case needs to really emphasise the opportunities to be explored around enhanced Regional working given the range of services currently and forecast to be provided in the future. The case would be key in setting out how fragile services will be developed going forward.

Gateway 0 recommendation link: #1

We agree with, and support a regional approach to delivering clinical services. The PBC sets out our proposed approach to tertiary and quaternary services in section 4.4.4.3. It also contains letters of support from commissioners, neighbouring Health Boards and a Trust, recognising significant further work will need to be undertaken on respective clinical strategies to ensure a fully convergent approach.

Grant Thornton, our advisors on clinical strategy, are also engaged by another South Wales Health Board in developing clinical models and pathways; we also have arranged joint clinical strategy workshops in September with Swansea Bay to move forward tertiary services strategy.

We have existing partnerships with Velindre and Cwm Taf Morgannwg as referenced in our PBC.

It is suggested that assumptions are developed until a model is agreed with Welsh Government and the local Health Boards from which to plan from.

Issue 6: You stated that you do not consider the timescales identified to be realistic. You also outlined concerns around the financial ask, affordability and how this will be addressed.

Gateway 0 recommendation link: #6

In relation to this question, there are two points to address.

Firstly, the feasibility of proposed timescales. The Health Board's intention from the outset was to be as ambitious as possible, for two main reasons:

- The Estate at both UHW and UHL sites, as it currently is, is not sustainable in the long-term, and possibly not even in the medium-term. The maintenance backlog is high, and there is an ongoing risk of critical failure.

  An addendum to the PBC setting out the key estates issues is attached. This report covers the impracticality of delivering healthcare in UHW as well as the ongoing reactive maintenance that often first emerge by disrupting clinical delivery, such as sewage leaks.

  We believe strongly there is no time to lose. Our clinical colleagues could not wait much longer than this and in the absence of a rapid progressing of the SOFH programme, C&V will have to prepare and present to Welsh Government several very large business cases to maintain service continuity which were set out in the addendum mentioned above.

- The proposed timescales are not out of the ordinary. For example, construction of the new Whipps Cross hospital on a complex site in London is expected to take approximately 4 years – not too dissimilar to the 3.5 years included in the PBC. The Nightingale hospital experience across the country has also shown that a lot can be achieved in a short space of time.

  As there is significant impetus from the clinical perspective to improve the facilities as quickly as possible, we believe that, with sufficient support from our partners and Welsh Government, we can progress at pace.

With respect to the funding strategy, the expectation is not, and has never been for the Welsh Government to fund the full programme.

We acknowledge the financial constraints the Government is operating within. It should be noted that the capital costings included in the PBC were developed at a very high level – and whilst they contained significant exclusions, they also contained significant contingency. Further, the high level capital cost estimate was based on a number of assumptions that will impact the capital ask, but are flexible depending on the affordability position.

Specifically, the capital costings are based on the assumption that:

- All rooms will be single occupancy, based on global best practice;
- Redevelopment of UHL would be a full new build; in reality, it is more likely to be a part-rebuild, part-refurbishment

As per the scoping document agreed with the Welsh Government, the financial case at this stage was intended to give an idea of the scale, rather than set out a robust affordability position or a funding strategy.

At SOC stage, comprehensive costing and financial modelling will be undertaken, that will establish the affordability gap for each individual project and the programme as a whole. Based our advisors' experience with similar builds, we anticipate that a blended funding model would be developed for the capital cost.

The table below provides our initial consideration of different **capital** aspects of the programme and how we think these may be funded, please note this is not exhaustive and has been included to demonstrate the variety of options we will consider at SOC stage, once the affordability gap and capital requirements crystallise:

Programme part	Government funding	MIM	Private funding[2]	Other public sector contribution[3]	Sponsorship of space	Charitable donations
Physical hospital infrastructure	Yes	Yes				Yes
IT and digital infrastructure	Yes	Yes				
Medical equipment	Yes	Yes				Yes
Life Sciences infrastructure	Possible		Yes	Yes	Yes	Yes
Other non-clinical site infrastructure (dependent on design – may include teaching space, commercial space etc)			Yes	Yes	Yes	Yes

There are a number of projects ongoing in the UK that have adopted blended funding strategies similar to what we are planning, for example:

- Guy's and St Thomas' are looking to fund parts of their site development via an income strip model;
- Great Ormond Street Hospital have used charitable donations from its Great Ormond Street Hospital Charity for rebuild and refurbishment of hospital infrastructure

[2] This is used as an umbrella term to encompass the following: third party development leases, income strips, Sovereign Wealth Funds, pension funds, bank funds and others.
[3] University, Local Authority or other

- Imperial College Healthcare NHS Trust are considering a land for hospital swap with a developer to part-fund a new hospital in central London

The point to re-emphasise at this stage is that all funding avenues would be explored, and we do not anticipate to rely solely on the Welsh Government to deliver this project.

However, these conversations need to be initiated at the right stage, with the right information. At this stage, setting out options around investment from the University (on top of the c£20m invested and £200m - £300m Cardiff University envisage investing in the Heath Park West College of Biomedicine & Life Science Campus adjacent to UHW) or the Council is premature. We feel this would be timelier at SOC stage, when more physical information will be known, site options set out and the options around the Academic Health Sciences Campus set out. This will inform, for example, any investment that a Council might wish to make proportionate with the value they may be gaining from the location. The Academic Health Sciences Campus would be ripe for a blended investment which might include the Welsh Public Sector, UK Government, industry and philanthropic funding to name but a few.

We appreciate the concerns you may have around the programme at this stage and are committed to working alongside you to develop a solution that delivers the clinical services Wales deserves, boosts the economy, is environmentally friendly and financially sustainable.

We do not shy away from the fact that the programme is in its early stages, and significant work needs to be undertaken before concrete plans are put in place. We do not ask the Government to give absolute confirmation that the programme will go ahead. We are asking for support and endorsement of the concept, and the vision of what we are trying to achieve, as well as financial assistance to take the programme further.

We welcome any additional discussion or questions you may wish to ask.