Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

Clinical Futures Programme Business Case and Full Business Case for Specialist Critical Care Centre

Supplementary Submission – 15th July 2016

1.0 Introduction

This report is a formal supplementary submission to the Clinical Futures Programme Business Case (CFPBC) and the Specialist Critical Care Centre Full Business Case (SCCC FBC) submitted to Welsh Government in October 2015. The report incorporates an update on a number of key issues that have progressed since formal submission and also responds to the key issues arising from the assessment made by the Capital Investment Board on 23rd March 2016, as outlined in the letter from Martin Sollis to Judith Paget dated 22nd June 2016.

The overarching response submitted in February this year to the scrutiny questions provided a comprehensive response to many of the issues raised, and this is also attached as supporting information (Appendix 1 and 2).

2.0 Summary of Key Issues

The key issues covered in this report that have been progressed since submission or have emerged as themes from the feedback process include:

- Strategic Fit of the Clinical Futures Strategy and its continued relevance in the context of the South Wales Plan.
- The impact of the SCCC on Health Gain and Performance Improvement.
- The Value for Money of the SCCC and the adequacy of its Return on Investment.
- Workforce Skills and Sustainability.
- Recent Learning from Northumbria NHS Foundation Trust.
- Progress with the Care Closer to Home agenda and Development of Primary Care Services.
- Current Service Sustainability Issues.

3.0 Response to Key Issues

3.1 Strategic Fit of Clinical Futures and SCCC in the context of South Wales Plan

3.1.1 The Health Board, through its Integrated Medium Term planning cycle, has refreshed its Clinical Futures Strategy each year to ensure that this is regularly updated and fit for purpose. These reviews have reaffirmed the relevance of the strategy and ensured that it fully reflects the outcome of the South Wales Programme (SWP) for Paediatrics, Obstetrics, Neonatal Services and Emergency Medicine and the subsequent work of the South Wales Collaborative on Acute Medicine and Surgical specialties.

3.1.2 The key outcome of the SWP was the move towards centralising vulnerable acute services, which for Gwent and South Powys would be achieved by the advent of the Specialties Critical Care (SCCC). This reinforced one of the key tenets of the Clinical Futures Strategy.

3.1.3 The subsequent work of the South Wales Collaborative, identified that the number of regional hubs identified in the South Wales Programme (5 excluding Hywel Dda) could not be sustained when applied to Surgical specialties and General Surgery in particular. This identified that for South Wales excluding Hywel Dda, three regional Hubs could be sustained in the long term. In these considerations, the SCCC was identified as one of the three regional Hubs (together with UHW and Morriston Hospitals).

3.1.4 This has reinforced the views of the National Clinical Forum, who in their response to the South Wales Programme considered that five centres would not be sustainable in the long term and that a more radical approach rather than a limited realignment of services may be required to provide a long term sustainable solution.

3.1.5 The clinical models underpinning the Clinical Futures Strategy were comprehensively tested against the models developed by the Clinical Reference Group covering Paediatric, Obstetric, Neonatal, Emergency and Acute Medicine and Surgical specialties. They were underpinned by a number of core principles, in particular acuity based care and reconciled with related workforce plans.

3.1.6 The clinical models for surgical specialties were revised in the light of the South Wales Collaborative models, with the overwhelming majority of arthroplasty moved from the SCCC to the Royal Gwent Hospital and a parallel shift of high acuity elective and emergency surgery in ENT, Maxfax and Urology shifting from the Royal Gwent Hospital to the SCCC.

3.1.7 The clinical models for medical specialties were similarly subject to revision, with detailed work undertaken to refresh the medicine model that resulted in a differentiated model for the SCCC, Royal Gwent Hospital, Nevill Hall Hospital and Ysbyty Ystrad Fawr. The UHB's progress with this model was endorsed by the Gateway Review and is supported by an integrated workforce plan.

3.1.8 The above seeks to demonstrate that the Clinical Futures Strategy has been continually updated and that it fully reflects the outcomes of strategic planning in South Wales.

3.1.9 The Health Board has successfully centralised a number of services, for example acute stroke services and the GI bleeding service, but scale and complexity of interdependencies are such that the centralisation described in the FBC/PBC is such that it cannot be delivered with existing hospital infrastructure.

3.1.10 The Health Board's plans fully reflect the principles of repatriation and reciprocity in its detailed capacity planning. The step down of care of the streaming of patients based on acuity for emergency and electives are fully embedded in the Health Board's Clinical Futures Capacity Plan.

3.1.11 The work of the South Wales Collaborative has demonstrated that for Gwent and South Powys, the Health Boards Clinical Futures Capacity Plan is robust. It is important to note that the modelling of flows in the event of 3 centres in South Wales has relatively limited impact on the SCCC as the flow of patients from the two hospital

that would be affected (Prince Charles Hospital, Merthyr and Princess of Wales Hospital, Bridgend) primarily flow to UHW.

3.1.12 As noted in the Health Board's January submission there would be 'space' physical capacity at the Royal Gwent Hospital following the opening of the SCCC which could be available to other Health Boards to mitigate pressures, notably at UHW. Although the outcomes of the South Wales Collaborative were discussed at a workshop in October 2015, there has been limited discussion on the strategic impact of this work on the configuration of services in South Wales. Notwithstanding the SCCC remains the best strategic fit for the population of Gwent and South Powys as part of the wider strategy for South Wales. The PBC/FBC therefore seeks to describe this but cannot provide a solution for demand capacity planning in South Wales.

3.1.13 The Health Board does not underestimate the capacity constraints across South Wales that have a significant impact on the centralisation of services. It is notable that some two years after the approval of the recommendation of the South Wales Programme, progress has been limited. For the Health Board, the solution remains with the SCCC. It is however apparent that capacity constraints and the need for capital to address this, within the South Central Acute Care Alliance are such that the implementation of change arising from the changed status of the Royal Glamorgan Hospital will not be achieved until Spring 2018 at the earliest.

The FBC and PBC do however provide a solution for services in Gwent and South Powys and have the potential to provide capacity to support further changes across South Wales.

3.1.14 It is notable that in its letter of approval of its IMTP (2016/17 – 2018/19), there is a requirement that the Health Board work at pace to resolve the outstanding service and workforce planning for the South Wales Programme and Acute Care Alliances to ensure timely implementation).

3.2 Health Gain and Performance Improvement

3.2.1 Since submission of the PBC and FBC further work has been undertaken on the submitted Benefits Realisation Plan to both review and refine the plan and to provide more quantification of baseline performance and targets for improvement.

In summary and work in progress:

- The Health Board has reviewed and focused efforts on a reduced number of key benefits.
- Worked with clinicians to identify key quantifiable indicators to allow both benchmarking and measurement.
- Identified key enablers or "drivers of benefits" linked to the Benefits Realisation Plan.
- Cross-referenced these key benefits to both Clinical Futures and Welsh Government Investment Criteria.

3.2.2 In addition to the above the services of Deloitte have been commissioned to provide an enhancement of the quantification of benefits and value added as a consequence of the SCCC investment. The analysis will be based on a small number of high impact indicators that are evidence based and can be converted to a monetary value. Benefits will be monetised (where applicable) using the Quality Adjusted Life Years (QALYs) methodology; and the total estimated benefits of the indicators will be

synthesised into a Net Present Value (NPV) using an approach consistent with the Treasury Green Book.

A draft Benefits Map has been developed (Appendix 3) as part of this exercise and this presents the flow of benefits from the SCCC to the indicator outcome.

The key focus indicators that have been identified as measurable, relevant, material and supported by an evidence base are summarised in the following table

Benefit	Indicator	Drivers of Benefits
Mortality	RAMI Crude Mortality	24/7 Critical Care Services Additional staffing levels More efficient care pathways Specialist scheduling New and better equipped facilities
Infection Control	C.diff Cases Methicillin resistant /sensitive cases MRSA Cases	New and easier to clean facilities Facilities more compliant with national requirements Isolation of critical care
Marginal Health Impacts	Length of stay % patients waiting <26 weeks for treatment (RTT) Readmission rate after 7 days Readmission rate after 30 days	Specialist Scheduling Better specialist equipment More efficient care pathways 24/7 critical care Decrease of infection rates
Patient experience	Cancelled ops Waiting times (4h and 12h targets)	New and better equipped facilities Specialist scheduling 24/7 critical care services
Morbidity	Reduction in unplanned admissions for COPD and Heart Failures linked to QALY Sepsis and pneumonia-related metrics	24/7 critical care services Isolation and concentration of specialist critical care More efficient pathways Establishment of MDTs

3.2.3 It is anticipated that this work will be completed within the next 4-6 weeks and the output will present the total estimated benefit, per capita benefit and net present value.

3.3 Value for Money and Return on Investment

3.3.1 The Economic Appraisal undertaken in the approved OBC using the prescribed Generic Economic Model, identified a new build SCCC to give the best value-for-money of all of the options considered.

3.3.2 Clinical improvements to be derived from the SCCC are also recognised to be economically beneficial which are yet to be fully captured. These benefits are being quantified by Deloitte (as described above) in order to demonstrate the full economic value of the investment.

3.3.3 The FBC shows that recurring financial efficiency savings of £6.771m per annum will be achieved from the implementation of the SCCC, by way of:

- Bed reductions as a result of length of stay improvements (86 beds).
- Savings on medical staff costs in key specialties through the centralisation of clinical services.
- Released Theatre capacity through centralisation of services.

3.3.4 These savings, in addition to the avoidance of costs associated with the 'Do Nothing' option of £8.987m per annum give an overall financial benefit of £15.758m per annum on a recurring basis once the development is fully implemented.

3.3.5 The revised service models and the addition of a site does necessitate re-investment in both the clinical model (£3.885m) and supporting running costs (£3.630m) which will feature as part of the Health Board's annual IMTP process. From a clinical model perspective this incremental investment in particular is material in relation to the recruitment of the medical staffing required to support the planned medical model on four sites, and a seven day a week basis.

3.3.6 The recurring savings/cost avoidance is therefore:

	£000	
Summarised as:	-8,987	Avoidance of Do Nothing Costs
	-6,771	Efficiency savings from New Build
	-15,758	**Overall Savings / Cost Avoidance**

3.3.7 These savings generate a Return on Investment against the capital build costs (£318.665m) of 4.9% per annum. The associated payback period (without indexation) would therefore be 20 years once a recurrent position has been achieved.

Once implemented, the SCCC will support financial sustainability in the region of £150m over a recurrent ten year period.

3.4 Workforce Sustainability

3.4.1 The workforce challenges facing the NHS across the UK are very relevant to Wales and the Clinical Futures Strategy is a key element of the Health Board's response. A number of clinical services cannot be sustained on their current configuration in the medium term, with the medical workforce the primary constraint. In this regard, it is notable that the South Wales Programme reported that despite a decrease in site provision across South Wales there was an increase in a minimum of 17 consultant workforce across those specialities to meet professional standards and the new configuration, which included the SCCC as one these centres.

3.4.2 Additionally, whilst the nursing and therapy workforce supply across Wales will have increased by 2019 due to the increase in commissioning numbers, the overall numbers fall short of organisations' anticipated need. The ongoing impact of the Safe Nursing Staffing Bill (Act) 2015 has still yet to be seen on non acute ward areas.

3.4.3 Nursing training numbers will have increased by 2019 by 30% which will support the Welsh Region. The Clinical Futures model will offer increased training opportunities for nurses, whilst releasing up to 200 posts through efficiencies (included in financial savings) delivered through improved performance and ward configuration. As such, the SCCC will help mitigate nursing workforce pressures. This will support the development of a "magnet" hospital culture, providing improved training opportunities and assisting with retention and recruitment of nurses into ABUHB and ultimately Wales.

3.4.4 The SCCC will be a primary enabler in delivering workforce sustainability, improve the capacity to deliver 7 day services in a number of staff groups and provide the release of efficiencies in others through the improvement in key performance indicators and improved critical mass of services. However, this is supported by a significant programme of workforce modernisation that will reduce the reliance on the medical workforce and improve the skill mix in other professional groups through a prudent workforce planning approach.

3.4.5 A programme of training and education has already commenced for the following new roles, many of which have already been implemented:

- Emergency Nurse Practitioners in emergency departments to facilitate the expansion nurse led minor injury units.
- Physician associates in acute medicine and general practice.
- Advanced Nurse Practitioner roles in Neonates, Gynaecology, Paediatrics and Surgery, some already acting in a junior doctor tier 1 capacity.
- Extended scope of practice for therapy and diagnostic services, and utilising skills of independent prescribing to enhance patient care.
- As Care Close to Home schemes evolve, this will reduce the demand on acute care services and facilitate a reconfiguration of resources.
- Recognising the need to move from a medically delivered model, there has been development of multidisciplinary teams within secondary care and Primary Care, through inclusion of pharmacists, therapists, nursing and social workers, and these will continue to expand.
- Development of Rapid Access Mental Health Teams within the acute sector and Out of Hours services, including the use of Advanced Nurse Practitioners, paramedics and the co-location of these.
- Maximising the potential of existing SAS doctors and SD doctors.

3.4.6 The Board has already the richest component skill mix across any other HB across South Wales. For example, AHUHB has the highest numbers of assistant practitioners in Radiology than anywhere else in Wales. However, whilst there is an ongoing drive to raise the bar and achieve maximum efficiency of the workforce, new emerging roles and new ways of working have a limit to how they can support medical sustainability. For example, the new Advanced Practitioner roles are not able to operate at the same senior level as a Tier 2 or Tier 3 medical decision maker. To achieve this centralisation and reduction in the number of rotas for fragile services is required. Without this the workforce challenge is greater.

3.4.7 The Health Board is facing major challenges in its recruitment. Many appointments have been accepted on the expectation that the SCCC will be approved but the continued delays are making retention difficult. A new modern hospital facility that supports evidence based service models of care will attract new skilled people into Wales, especially given our location close to the English border helping to address the national challenges faced in relation to the clinical workforce.

3.4.8 The Health Board has demonstrated that following the development of a number of its new hospitals, there has been a positive impact on staff performance in terms of sickness, improved staff morale and recruitment through improved working conditions. The SCCC will deliver a similar impact on staff performance and well-being.

3.4.9 Whilst Northumbria is facing similar shortfalls in a number of staff groups such as nursing, the existing vacancies are lower pro rata of head count than those within ABUHB. This is testament to the perception of staff in their reward for engagement in

the development of new services and their journey of transformation and new ways of working. The staff in Northumbria are proud of their new hospital and the recognition and reward it has brought, all ultimately contributing to high levels of staff engagement and being an employer of choice. It is expected that these benefits would be delivered by the SCCC.

3.5.10 The Workforce Plans to support Clinical Futures and the SCCC have been undertaken through extensive clinical engagement and workload profiling and are considered to be challenging but realistic. Without the SCCC, the workforce challenges become more unrealistic.

4.0 Other Updates

4.1 Continued Learning from Northumbria

4.1.1 Northumbria has embarked upon a very similar model of care to that described in the Health Board's Clinical Futures Strategy with a central specialist centre supported by local general hospitals. Formal evaluation from Northumbria has not yet been undertaken, however they report improvements in performance that have exceeded their expectations after the first six months following a visit to the new centre by the UHB including key medical staff. These include:

- An assessed out rate of 38%.
- Average A&E wait of 2.25 hours.
- ALOS at SCCC of 2.5 days.
- Elective General Surgery cancellation rate of zero.

4.1.2 The UHB have sent two clinical teams to Northumbria and have developed an action plan informed by experiences of Northumbria that could be applied in ABUHB. This has been presented at the Clinical Futures Programme Board and is being taken to the relevant Divisions and Departments for their consideration and action.

4.2 Progress with the Care Closer to Home Agenda and Development of Primary Care Services

4.2.1 As set out in the Programme Business Case and previous scrutiny responses the Health Board is committed to its Care Closer to Home agenda and in developing primary and community care services in order to support the whole system change required to support the delivery of its Clinical Futures Strategy.

4.2.2 The Health Board has very clear operational plans for primary and community care as set out in its Integrated Medium Term Plan which focuses specifically on:

- Prevention and reducing health inequalities.
- Strengthening primary and community care.
- Delivering more care out of hospital.
- Delivering more integrated care especially in relation to chronic conditions.

4.2.3 Excellent progress is being made in relation to these operational plans which have been set out in previous submissions in September 2015 and February 2016.

4.2.4 Additionally, the Health Board continues to focus on its development of Neighbourhood Care Networks and planning and delivery services at a NCN level in partnership with key stakeholders including local authority, housing and the third sector. Unlike any other Health Board in Wales, from their inception the Neighbourhood Care Networks have been multi-disciplinary and multi-organisational, providing an excellent platform on which to build integrated care models with partners.

4.2.5 The publication of the Social Services and Wellbeing Act (Wales) brings with it a real opportunity for the Health Board to work with its partners at a unitary authority and NCN level to plan and delivery integrated care where service models are wrapped around patients needs and the emphasis is on prevention and wellbeing as opposed to sickness and hospitals.

4.2.6 This is being taken forward with Local Authorities, Housing Associations, the third sector, Community Health Council and professional bodies and will clearly articulate the long term vision for primary and community care and what is required in terms of the next stage in the further development of primary and community services in the context of the Well Being of Future Generations Act.

4.3 Current Service Sustainability Issues

4.3.1 As described in the Health Board's Clinical Futures Strategy, the sustainability of a number of acute specialties will ultimately be achieved through their consolidation on to a single site, the SCCC. This strategy is consistent with the outcome of the South Wales Programme and the work of the South Wales Health Collaboration on the clinical models and future configuration of medical and surgical specialties.

4.3.2 The SCCC case describes how specialist services will be centralised as a means of providing critical mass and delivering both improved outcomes and Deanery expectations to improve medical training. It is however recognised that there will be a challenge in sustaining services prior to the advent of the SCCC and these are described in the Health Board's IMTP in particular how the UHB will address the sustainability of a number of services, with particular regard to the timetable for achieving medical educational contracts.

4.3.3 In the last year, the Health Board has successfully centralised its hyper acute stroke services at the Royal Gwent Hospital, delivering the plan described in its last IMTP. This builds upon the centralised models in place for a number of specialties, including urology, ENT and maxillofacial. Due to the interdependencies of clinical services, the Health Board however lacks the physical capacity to centralise all services prior to the opening of the SCCC, compounded by the quality of the existing infrastructure of our two acute hospitals in Abergavenny and Newport.

4.3.4 The Health Board's Service Sustainability Service Change Plan within its IMTP therefore identifies how the Health Board will sustain its services prior to the planned opening of the SCCC. This encompasses both a review of the actions to sustain Paediatric, Obstetric and Neonatal services following the implementation of a new service model to sustain services at Nevill Hall Hospital. For surgical specialties it describes how a plan will be developed to respond to the August 2016 Deanery timetable for improving training and for other specialties in August 2017.

4.3.5 In 2015/16, the Health Board implemented new workforce models to sustain Paediatric, Obstetric and Neonatal services at the Nevill Hall and Royal Gwent Hospitals to achieve Deanery requirements to centralise medical training at the Royal Gwent

Hospital and enable improved quality of medical training. This has required the appointment of hybrid consultants, Clinical Fellows and specialist nursing posts, with gaps filled by agency staff. These plans were described in the previous IMTP and have a further full year effect cost of £1.2m in 2016/17. While the new workforce model has been implemented, it has not proven possible to recruit to substantive roles for all posts, notably Clinical Fellows and it is therefore over reliant upon medical agency staff to cover posts and remains fragile. This was illustrated over the Christmas period where extraordinary contingency measures were undertaken to maintain service continuity, including the transfer of <35 week births from Nevill Hall Hospital to Royal Gwent Hospital for a limited period. The above is compounded by the calibre of some agency doctors which has resulted in their early release and national recruitment difficulties, exacerbated by maternity leave and sickness.

4.3.6 It has previously been demonstrated that the Health Board does not have the capacity to centralise inpatient Paediatric, Obstetric births and Neonatal services at the Royal Gwent Hospital without very significant capital expenditure, which would have a long lead in period and would be superceded by the creation of the SCCC. In order to sustain services prior to the opening of the SCCC it has been necessary to review the current workforce model to determine whether through additional actions this can be staffed with greater assurance or whether an alternative clinical model is feasible, which would have a bearing on the configuration of inpatient Paediatric, Neonatal and Obstetric services. The Health Board has concluded that despite significant effort in seeking to strengthen recruitment and retention through a number of interventions, it will not be feasible to sustain Paediatric services at two sites prior to the opening of the SCCC.

4.3.7 The Health Board is therefore appraising the feasibility and impact of centralising inpatient Paediatric services onto a single site (either at Nevill Hall Hospital or Royal Gwent Hospital), which requires the interdependencies between inpatient Paediatrics, Neonatal services and Obstetric care to be carefully appraised. This work programme encompasses quality and patient experience, together with potential changes to patient flows and how these can be mitigated through innovative clinical and workforce models.

4.3.8 For surgical specialities, the Service Sustainability SCP describes how the Health Board will achieve Deanery expectations of delivering the educational contract with the Health Board seeking to expand the number of non-training medical posts to sustain services on both the Nevill Hall and Royal Gwent Hospitals. Such are the interdependencies on General Surgery in particular that the centralisation of this speciality is not feasible though it is readily acknowledged that the reliance on non-trainees as risks, as demonstrated by experiences with Paediatrics.

5.0 Summary

This submission has sought to address the key issues arising from the Welsh Government Investment Board's assessment of the Clinical Futures Programme Business Case and the Specialist & Critical Care Centre Full Business Case and augments the overarching response submitted in February 2016 in response to scrutiny questions.