Hospital Modernisation

2019-2028

Programme Business Case

States of Guernsey
Hospital Services

WORKING TOWARDS A PARTNERSHIP OF PURPOSE

Contents

Version Control Table

Version	Date Issued	Summary of Changes	Author
0.1	02/07/18	Preliminary Draft of Programme Business Case (PBC)	J Coleman/D Parmar (JC/DP)
	05/07/18	Engaged advisors- External Consultants to provide cost review of historic prices and update	JC/DP/ External Consultants
0.2	06/07/18	3rd draft PBC	JC/DP
0.3	30/07/18	4th draft PBC	JC/DP
	26/07/18	Clarification of data from external advisors	External Consultant
	06/08/18	Final data clarification from external advisors	External Consultant
0.4	06/08/18	Working draft update PBC	JC/DP
0.5	15/08/18	Working draft update PBC	JC/DP
0.6	17/08/18	Updated financial data	External Consultant
0.7	17/08/18	Updated executive summary and final review	JC/DP
0.8	24/08/18	Updated Draft Version PBC	JC
0.9	07/09/18	Revised Executive Summary PBC	JC
1.0	25/09/18	0 PAR Review of PBC	UK NHS Consultant
1.1	05/10/18	PAR Review feedback and actions	UK NHS Consultant
1.2	23/10/18	Governance Board workshop to assess PBC	Gov Board
1.3	07/11/18	Re write of Draft PBC	JC/DP/Ext Consultants
1.4	26/11/18	PAR Review of Latest PBC	UK NHS Consultant
1.5	09/12 /18	Review of PBC	SRO
1.6	12/12/18	Governance Board Approve PBC	Gov Board
1.7	19/12/18	HSC Committee review of PBC	HSC Committee
1.8	03/01/19	Re write of Ex Sum and update PBC	JC/ External Consultant
1.9	09/01/19	Governance Board and HSC Committee review of PBC	Gov Board/ HSC Committee
2.0	15/01/19	Final draft Policy and Resource	JC/ External Consultant
2.1	16/01/19	Update in discussion with Treasury	JC /External Consultant

Version	Date Issued	Summary of Changes	Author
2.2	17/01/19	Update in discussion with Capital Portfolio	JC/DP/External Consultant
2.3	11/02/19	Update following request for amendments from HSC President.	JC/DP

Glossary of Terms

HMP	Hospital Modernisation Programme, the programme to transform the delivery of services.
PSR	Public Service Reform.
HSC	Committee *for* Health & Social Care.
Target Operating Model (TOM)	The operating model is a comprehensive view of the services' operations, including people, capabilities, processes, systems, and technology.
Partnership of Purpose (PoP)	The expression given to the future model of health and care.
VCR	Video Conference Room.
MSG	Medical Specialist Group.
Public Service	All those employed by the States of Guernsey.
Customer Journey/Pathway	The experience a customer has when interacting with the service providers.
Community Hub	A co-location of community services.
Walk-in-Clinic	Establishment of a Primary Care Service.
Pharmacy robot	Automation of Pharmacy drugs.
GDPR	General Data Protection Regulations.
SARS	St. John Ambulance and Rescue Service.
NMC	National Midwifery Council.
Critical Success Factors (CSF)	Key attributes essential to the delivery of a programme.
HSC	Health and Social Care.
PBC	Programme Business Case.
BDO	Consultancy that undertook bench marking at PEH.
SCIP	States Capital Investment Portfolio.
SOC	Strategic Outline Case
MTFP	Medium Term Financial Plan
BAU	Business as Usual
ED	Emergency Department

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1.0 Executive Summary

1.0 **Executive Summary**

1.1 The Committee *for* Health & Social Care (HSC) has set out through the Partnership of Purpose (PoP) to tackle some of the deep seated challenges within the Bailiwick's health and care systems including those relating to the physical infrastructure of the Princess Elizabeth Hospital (PEH). The Partnership of Purpose was approved by the States of Deliberation in December 2017 (Billet d'État XVII of 2017). The proposals within the Hospital Modernisation Programme are to enable the overarching vision that by 2025 we will have designed, built, and transitioned to a delivery model of services that is both sustainable and affordable within the context of the long term fiscal and demographic forecasts.

1.2 The current health and care system is unsustainable and not fit to meet the future health and care demands, this was highlighted in the KPMG report in 2017. This report also recognised that there will always be a need for a facility to deliver high quality acute hospital services on the island. The PoP sets out the intention to continue to use the PEH campus as the backbone of the health system but recognises that this cannot be achieved without investment being made in the required infrastructure of the PEH.

1.3 This Programme Business Case (PBC) seeks the approval in principle of the States of Deliberation for investment of capital funding estimated at £72.3m to £93.4m for all phases of the Modernisation Programme over a period of up to ten years. By seeking funding, HSC is committed to transforming the delivery of health and social care and will continue to work within the overall strategic objectives of the Partnership of Purpose and Delivery Pillars for Future Health and Care model.

1.4 The initial request is for approval of £ 44.3m, currently anticipated to be spread over a period of up to 5 years, for the specialist and programme resource needed to progress the programme and for completion of the initial high priority projects: (Women's & Children's Services, Critical Care Expansion and Theatre co location expansion and refurbishment. Furthermore, the funding will be used to complete the development control plan for the full programme, to conclude the feasibility study for the Medical Specialist Group's potential relocation onto the PEH campus and finalise the business case(s) and funding requirements for the remainder of the programme projects: all of which will be subject to separate outline and full business cases on a project by project basis.

1.5 The greatest return on the investment - the delivery of the Investment Objectives, Critical Success Factors and Benefits – will only be delivered by conclusion of the whole Programme. However, as these matters are beyond the current Medium Term Financial Plan (MTFP), this PBC seeks approval in principle for the whole programme and requests funding for the short term projects only. Some important projects, such as renewal of Orthopaedic Wards cannot be completed as a short term project, as their new location is dependent upon the relocation of the current maternity and paediatric wards. Hence, they are included in Medium Term Projects and subject to funding requests to follow. Nevertheless the orthopaedic project and latter schemes will deliver significant benefits to HSC by reducing surgical waiting times and off-island referrals and supporting the aims of the Partnership of Purpose.

1.6 The Modernisation Programme is formed of a series of significant individual projects (Figure 1). The main projects and their primary objectives are highlighted below. These projects are designed to resolve the most pressing clinical needs and bottlenecks faced by the hospital daily and that have potentially unacceptable risks and consequences, affecting both staff and service user experience as well as safety. At this stage the timescales associated with the Modernisation Programme are estimates only and will be refined during the next stage of the business case process. The programme estimates have been provided with advice from a UK consultant who understands healthcare capital development and the PEH site very well (having worked on earlier projects).

Project	Issues	Proposal	Timescale
Project 1 - Women's and Children's project Relocation of Maternity, Paediatric and Neonatal units.	• Distance of the Maternity Ward from theatre is currently identified as a high risk by the Nursing Midwifery Council; • Lack of a suitable adolescent ward has been identified as a high risk by external paediatric reviews; • Recruitment and retention of suitably trained nurses for the Neonatal unit has resulted in high agency cost; and • Lack of one stop clinics has had a negative impact on service user experience.	• Minimise the distance of the Maternity Ward from theatre and remove the reliance on lift transport; • Establish a new adolescent unit and appropriate facilities for children admitted with mental health or self-harming conditions; • Create staff efficiencies by supporting dual trained qualified staff for paediatric and neonatal units; and • Create an extended outpatient's service and one stop clinic for the delivery of women's and children's services.	2019 to 2021 Within Phase-1. Dependent on the relocation of medical stores.
Project 2 - New Critical Care Unit	• Insufficient number of beds resulting in postponement of elective surgery; • Insufficient capacity to meet future demands; and • Current facility does not meet regulatory standards.	• Create a new suitable unit with the correct facilities to improve patient dignity; • Expand capacity and create flexibility; and • Maintain location adjacent to theatres to reduce transfer risk.	Within Phase-1. Dependent on planning permission

Project	Issues	Proposal	Timescale
Project 3 - MSG Relocation	• Existing Medical Specialist Group (MSG) location does not meet their current and future requirements; • Currently on multiply sites; and • Does not support one stop clinics.	• To identify and agree a future location of the Medical Specialist Group (MSG) onto the PEH campus to meet their current and future needs; • Support patient-centred care by remaining in close proximity to the hospital allowing joint appointments to be developed with one stop clinics; and • To support collaborative working with acute hospital services. To support the new location a commercial arrangement will be agreed between HSC and the MSG.	By the end of 2019
Project 4 - Theatres Expansion and Refurbishment	• Lack of capacity to meet current and future demands; • Lack of unification within main theatres to be able to utilise all theatres for main surgery; • Split sites with main theatres and Day Patient Unit (DPU) does not support staffing flexibility and efficiencies, impacting staff morale; and • Current facilities have major maintenance issues that impact theatre activity.	• Increase theatre capacity within a flexible facility to meet current and future surgical demands; • Standardise all theatre suites; • Support the merging of theatre and DPU facilities creating staffing efficiencies and improved patient pathways; • Support a new pathway and increased capacity for main theatre and day theatre procedures reducing postponement of surgery, length of stay and providing improved patient outcomes; and • Improve maintenance reducing theatre down time, reducing potential postponements.	Within Phase-1.

Project	Issues	Proposal	Timescale
Refurbishment of Staff Changing Facilities	• Poor condition of facilities is identified in staff exit interviews, negatively impacting staff moral and retention; and • Existing facilities do not support increased numbers of staff who wish to walk / cycle / run to work.	• Modernise and refurbish staff change facilities to support the travel strategy encouraging staff to walk / cycle / run to work. (Due to the current impact on staff this project is now being funded separately by Property Minor Capital and has commenced.)	2019
Project 5 - Transport and Parking	• Lack of suitable parking to meet staff and service user demand is consistently one of the main complaints received by HSC from both staff and service users.	• Design a sustainable long term parking solution that meets the needs of service users and staff and supports the Healthy Living Strategy; and • Establish additional temporary parking to accommodate contractors who will require parking during the Modernisation Programme. To support this outcome, a UK consultancy company has been appointed and funded by Environment and Infrastructure to undertake a detailed travel strategy.	2019 (Temporary Parking) Long-term Solution within Phase 2
Project 6 - Orthopaedic Ward Relocation	• Orthopaedic surgical ward does not provide separate areas for trauma and elective orthopaedic surgery (mandatory within the NHS to reduce potential infection); and • Lack of capacity to meet current and	• Relocate the orthopaedic surgical ward adjacent to the general surgical ward to gain operating efficiencies; • Create separate areas for trauma and elective orthopaedic surgery; • Provide a flexible layout to meet current and future demands; and	2022 to 2026 (Estimated) Within Phase-2. Requires Women's and Children's project to be completed.

Project	Issues	Proposal	Timescale
	future demands of orthopaedic surgery.	• Provide capacity for revision of surgical cases to be undertaken on island.	
Project 7 - Day Patient Unit (DPU) Development	• DPU location does not support a pre admission process or a facility for the annual increase in Day Surgery identified within the British Association of day surgery (BADS) recommendations; and • Current facility does not support the merging of all theatres proposed with the new theatre suite.	• Relocate DPU and develop dedicated admission and discharge areas; • Create efficiencies by being in closer proximity to the new proposed theatres suite; • Increase capacity to support current and future day surgery demands; • Facilitate an improved admission process for elective surgery, increasing staff efficiency and reducing in-patient bed demand; • Support a new pathway for patient pre-admission clinics and discharge facilities reducing postponement of surgery, length of stay and providing improved patient outcomes; and • Support the merging of theatre and DPU facilities creating staffing efficiencies and improved patient pathways.	Within Phase-2.
Project 8 - Private Wing Redesign	• Poor facilities do not meet service user expectations and are consequently underutilised; • Current facilities do not accommodate day patient service user's requirements; and • Current facility is not flexible to support any requirements	• Relocate and improve the private service offering to meet current and future needs; • Increase use by patients with private medical insurance and those currently required to travel off island for private surgery; and • Develop a suitable facility with its own identity to	Within Phase-2.

Project	Issues	Proposal	Timescale
	from Health Tourism.	support future Health Tourism.	
Project 9 - New Equipment library	• Storage of equipment in multiple locations means an accurate asset register is not easily available; and • Lack of accurate asset register and a central storage facility results in overstocking of items and an inefficient process to maintain and service equipment.	• Establish a new inventory style system for equipment management within the PEH; • Support efficient stock control, service, and maintenance of medical equipment; • Improve sharing of equipment within wards and departments; and • Reduce the number of procurement requests and overall procurement cost.	Within Phase-2.
Project 10 - Emergency Department	• Lack of capacity to meet current and future demands; • Current facility does not provide a safe environment for at risk service users; and • Lack of space to develop an overnight admission unit.	• Increase size, refurbish, and modernise facility; • Redesign the department to support the delivery of efficient and safe service; and • Accommodate an overnight admission unit to improve patient pathways. •	2027 to 2028 (Estimated) Within Phase-3.
Project 11 - Pharmacy Improvement and Expansion	• Existing pharmacy is too small and does not easily accommodate future automation proposed for prescribing and dispensing services.	• Increase size, refurbish, and modernise existing pharmacy to reduce risks with the current condition of the facilities; and • Accommodate automation of drug prescription (dispensing robot) reducing risk and increase efficiency.	Within Phase-3. Dependent on relocation of SSD within new Theatres.
Project 12 - Pathology	• Condition of existing facility does not	• Improve conditions within the current facility to be able	Within Phase-3.

Project	Issues	Proposal	Timescale
	meet National Audit requirements; and • Size of existing facility limits options for operational efficiency improvements (e.g. merging of PEH and Burnt Lane labs).	to achieve National audit status; • Expand facilities to meet current and future requirements; and • Support the evaluation of improvements in efficiencies if joint location of PEH and Burnt Lane laboratories was undertaken.	Dependent on relocation of Orthopaedic Ward

Figure 1 List of Projects in the Programme

1.7 The main projects in Figure 1 have been carefully sequenced in respect of how they ideally need to be implemented. The programme will take a period of several years to complete and will span multiple capital funding tranches. The greatest benefit is derived from delivery of the full programme, noting that there will always be multiple demands on limited capital resource across future tranches. Should it not be possible to complete the entire programme, there will be a corresponding impact upon the ability to meet the stated improvements and totality of the benefits envisaged. The whole programme delivers the maximum non-financial benefits but also delivers significant future flexibility with a greater number of single rooms, better throughput and patient pathways in day surgery and theatres and resolves significant backlog maintenance risks.

1.8 The Modernisation Programme is designed to reflect the community's needs and the increasing anticipated demands for health care in the Bailiwick. This is currently not sustainable within the present hospital infrastructure. The Programme aims to achieve the most effective use of the current site while supporting business-as-usual without the expense and upheaval of temporary structures or the necessity for a total rebuild of the hospital. It will bring the current hospital up to the required regulatory standards and allow services and equipment to be updated within a flexible infrastructure, and provide a modern, safe, and efficient hospital campus with ability to meet the challenges of the Islands health care needs for the future.

1.9 The difficulties facing the current hospital were identified in recent external reviews commissioned by HSC, which have highlighted important recommendations that require changes to the existing facilities and support the case for change of the PEH site. A summary of these recommendations is given below:

- **Adult Mental Health Review:** The Emergency Department requires a more flexible and suitable facility (ligature free) for mental health clients;
- **Paediatric Review:** A designated area is required to support mental health service users and adolescent clients;

- **Maternity Review:** The existing maternity ward should be relocated adjacent to theatres to support emergency procedures and deliver the highest privacy and dignity required for any transfers from the ward to theatres. This was also a top recommendation from reviews completed by the Royal College of Obstetricians and Gynaecologist (ROCG) and the Nursing & Midwifery Council; (NMC) Review.
- **Medicine Review 2018:** Identified a number of issues –
    - The lack of two medical wards frequently requires movement of patients between wards which in turn causes stress to patients and staff. Due to the severity of this issue it has already been addressed, with the impact it will delay the Orthopaedic relocation project within the programme;
    - Flexible bed numbers would allow off-island services to be repatriated;
    - To support recruitment and retention, suitable staff facilities;
    - A dedicated VCR suite needs to be established to allow discussion with patients and peer support from UK colleagues;
    - There is a need for the development of acute geriatric service, frailty unit and rehabilitation services; and
    - There is an urgent need for an equipment library to reduce cost and improve efficiency.

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1.10 Programmes of this nature and scale are extremely complex and the Modernisation Programme will be completed in phases over a period of ten years. This phased approach will allow healthcare services to continue to be provided whilst refurbishment and improvement works are underway. The Modernisation Programme will consist of a series of construction and refurbishments projects, which are of considerable scope and complexity. It will be delivered giving maximum support to the local labour market and industries, whilst achieving a 'best value' approach. This will be done by ensuring that design details are delivered in a method that the local market can respond to and that the projects are packaged to suit the abilities of the local market; early engagement of the local market is key to supporting this.

1.11 The PEH is the hub for the provision of the medical services for the Bailiwick of Guernsey. It provides essential services to support Bailiwick residents from birth to end of life and it is highly likely that at some stage in their lifetime every single resident will benefit from the services provided by the PEH. It is the Islands only acute hospital and is comparable to a UK district general hospital, however the population it serves is much less than its UK equivalent which results to a diseconomy of scale and efficiency which the Modernisation Programme will aim to mitigate.

1.12 The Modernisation Programme will ensure the infrastructure it builds will be disability smart and meets the needs of the islanders with disabilities or long term conditions. HSC is committed to supporting the

Disability and Inclusion Strategy and ensure buildings and services meet the requirements of the new legislation, new policies and plans.

1.13 Serious consideration for the planning of the Modernisation Programme began in 2014. Subsequently a Strategic Outline Business Case (SOC) was submitted in 2015 to the Treasury and Resources Department. Then in 2016, P&R requested the SOC was prioritised under the categories of must/essential, should/desirable, and could/optional. In June 2017, the States agreed to implement the Policy & Resource Plan that included the MTFP 2017 - 2021. HSC was successful in application for the Modernisation Programme to be included within the Medium-Term Capital Plan for large capital projects.

1.14 The PEH has seen several improvement projects undertaken over the years including the general surgical ward refurbishment completed earlier in 2018, at a cost of £416K and the Mental Health and Wellbeing centre in 2015, at a cost of £26 million. A new wing to accommodate the medical, rehabilitation wards and oncology, physiotherapy, occupational therapy, renal and cardiology units in 2010, at a cost of £36 million. More recently the works for staff changing and transport and parking have also begun. These significant developments support the rationale why a new build hospital option is not plausible.

1.15 To ensure the Modernisation Programme still meets with all foreseeable future health care needs, a comprehensive revalidation process was undertaken in workshops facilitated by external consultants, to test earlier planning assumptions and that the areas of priority are still correct within this proposal. The workshops included representation from HSC senior management team, Medical Specialist Group (MSG), and senior members of States Property Services, Guernsey Housing Association and Portfolio Director. In addition, the Programme Governance Board was established in 2018 whereby the projects and their prioritisation for the Programme Business Case were reviewed and agreed as set out in this PBC.

1.16 The workshops supported that the key issues and benefits found in the Modernisation Programme should centre on compliance, efficiency, transformation, and flexibility. These Investment Objectives are:

1. To optimise the delivery of health and care services to provide good and measurable outcomes for the people of the Bailiwick of Guernsey.
2. To optimise patient flow, recovery, outcomes, and care delivery in the most appropriate environment.
3. To accommodate future proofing using flexible space with a vision for future innovations and regulations in health and care.
4. To enhance recruitment and retention of staff by providing a welcoming, modern, attractive and 'fit for purpose' environment for all.
5. To optimise the use of our local facilities and clinical resources.
6. To optimise the use of our public health and care service by providing a choice of exemplary quality private services.

1.17 The identified Investment Objectives are listed below with their current issues that prevent full optimisation:

Investment objective	Business Issues
1. Optimise the delivery of health and care	• To continue to operate the current services within existing building format limits the delivery of services and in some cases does not comply with current guidelines or provide a suitable environment for service users. Completion of the Programme would enable compliance to be demonstrated. • Current condition of some existing buildings causes difficulties in maintaining high standards of compliance. Improvements in building regulation and standards compliance could be measured on completion of the Programme. • Compliance with the Health Building Note (HBN) and Health Technical Memorandum (HTM) is not possible in some parts of the hospital due to current infrastructure. HBN & HTM compliance would be demonstrable on completion of the Programme. • Current Critical Care Unit (CCU), based on current bed numbers and growth in demand for such services, has an insufficient number of beds resulting in postponement of elective surgery. The delivery of a new CCU in 2023 would respond to existing demands and provide capacity for the future. • Operating within the existing format and fabric of the building is having a negative impact on the retention of staff. Following completion of the programme improvements in staff retention would be expected.
2. Optimise patient flow	• The current demand for medical beds is at a critical level, delaying non-emergency surgeries as medical patients need to be accommodated on the surgical wards. Conclusion of the revised Theatres and Day Patient Unit would show improved surgical capacity and reduce pressure on surgical beds. • Due to medical demand and lack of medical beds, patients must be moved between wards impacting patient experience and staff morale. Improvements in patient and staff satisfaction survey information would be expected on completion of the Programme. • The current provision of services is not flexible enough to support patient pathways and optimise Day-Patient care. Conclusion of the revised Theatres and Day Patient Unit would show improved surgical capacity and optimise patient flow.
3. Accommodate future proofing	• The current physical layout of the PEH, in the main remains inflexible. There is no built-in resilience and as demand for beds increases the risk of having to postpone elective surgery becomes greater.

Investment objective	Business Issues
	• The current layout does not provide the ideal opportunity for innovations or allow the PEH to easily comply with changes in health care regulation. • Completion of the Programme will provide PEH with the capacity and flexibility to respond to future demand.
4. Enhance recruitment and retention	• Recruitment and retention of staff remains a major issue for the PEH. • Current facilities in some of the buildings are of insufficient quality to attract highly skilled resources required to allow the PEH to operate and delivery a high-quality service. • Completion of the programme will improve staff morale and recruitment and retention.
5. Optimise the use of our local facilities and clinical resources	• Some of the services currently provided within the PEH may be better provided within the Community Hub or alternative locations, to ensure the correct patient pathway to support the service user at the centre; completion of the programme will support alignment with the Community Hub. To ensure this each project will evaluate in detail the current pathways and processes to highlight the changes needed to support the PoP and relocation of any services that would be better located for the service user within a community environment
6. Optimise the use of our public health and care service	• Currently our Private Patient offering is below standard, in terms of rooms and privacy; the completion of the new Private Wing project in the programme will offer ensuite rooms to expected standards. • In the current format we are unable to maximise the revenue from this service and are not meeting the targets of the HSC revenue budget; the new Private Wing will show an increase in private income.

1.18 Benefits for this capital investment will be realised by:

- Enabling part of the Committee's strategic vision for Partnership of Purpose to be realised and those actions relating to the physical infrastructure needed to support islanders' health and wellbeing;
- Supporting the design, build and transition to a delivery model for services that is both sustainable and affordable within the context of the long term fiscal and demographic forecasts;
- Facilitating a care system that is sustainable and fit to meet the future health and care demands of the acute hospital;
- Supporting user-centred care, empowering providers and integrated teams with an infrastructure that can support a focus on quality of care;

- Development of the hospital in such a way as to ensure secondary and acute care services are integrated so that, depending on requirements, "islanders will be able to deal with multiple health and care needs in one visit";
- Improved facilities and experiences for service users and staff which will improve retention of staff and support a reduction in agency costs;
- Optimise overall bed numbers with flexible accommodation to improve patient pathways, privacy and dignity and reduce overall length of stay and reduce revenue cost;
- Increase private patient income with a suitable private facility, to encourage those to utilise their medical insurance;
- Increase capacity and flexibility of services on island, to reduce off island cost; and
- Improve energy efficiency and reduced maintenance costs.

1.19 If investment in the Modernisation Programme is not supported there will still be a requirement for ongoing backlog maintenance and repair to ensure the areas of the aging hospital building can operate in a safe way. Without investment it will remain a property that is not efficient, flexible, or economical in its operation and will continue to be a revenue and capital burden for the States. It is estimated that approximately £17 million is forecast for spend on maintenance of the PEH for the next ten years to maintain systems and to fund the asbestos management programme. This Modernisation Programme is estimated to reduce maintenance costs by up to 50%.

1.20 This Programme Business case has been written following the 5 case business model.

1.21 The programme will follow Managing Successful Programmes (MSP) method with agile techniques to ensure that its diverse project dossier can be managed appropriately to deliver agreed outputs. Gateway reviews will take place between stages to ensure that the programme and projects are on target and independent programme assurance reviews (PAR) will be undertaken to ensure the programme is strategically aligned, fully researched, and has effective management in place. The outcome of the PAR review which informs the contents and direction of this business case is included in Appendix A.

1.22 The Modernisation Programme will be subject to post-project evaluations at each step to ensure all lessons that can be learnt from the individual projects are fully understood and assist other projects to ensure the programme has identified and delivered its predicted benefits.

1.23 To deliver this programme capital funding will be sought from the States of Guernsey. This capital cost is detailed within the Economic Case of the PBC but only at a high level to give the predicted financial range over the ten-year period that will be needed to support the programme.

1.24 The current estimated cost range verified by subject matter experts who are UK specialist consultants, also includes consultancy and design fees (approx. 15%), planning and legal work (approx. 2%), non-transferable equipment (approx. 5%), benchmarked values for abnormal and location factors and includes contingency and optimism bias assessed by the Hospital Modernisation Programme Board (approx. 15%) but does not include inflation cost.

1.25 The Commercial Case for this programme sets out the high level procurement arrangements and key activities which will need specialist advisors for, including but not limited to Project Managers, Architects, Engineers and Health Care Planners. This procurement will achieve best value for money and give the public assurance.

1.26 The Finance Case defines the future changes to revenue costs that may occur. Detailed analysis of project revenue implications will take place on a project by project basis in future business cases.

1.27 The Management Case sets out governance, risk management and high level timelines for the development of the PBC.

1.28 Each individual project, or group of projects, within the programme will develop a detailed project level business case, passing through an Outline Business Case and Full Business Case stage, with full capital and revenue costs that will need sign off by Policy & Resource Committee or the States depending upon total cost and delegated authority limits before going ahead.

2

2.0 The Strategic Case

2.0 The Strategic Case

2.1 The aim of the Strategic Case is to present the overarching case for change for the modernisation of the Princess Elizabeth Hospital (PEH). This PBC shows the overall strategic direction of the Modernisation Programme at the PEH but does not give the specific project details or options (as this is a programme business case), these will be developed as each individual project is progressed. Each project will analyse the *where are we now*, *where do we want to be* and *how do we get there*, showing how the projects proposal supports the Partnership of Purpose (PoP) vision.

2.2 It is worth noting that the PBC is one workstream in the overall transformation work being undertaken by HSC and is shown below how the PEH modernisation workstream sits within the wider strategic direction for the transformation of Guernsey's health and social care systems. The strategic drivers for the Modernisation Programme are centred on giving facilitation for transformation of health and social care services by delivering changes and improvements to the estate from which services are run.

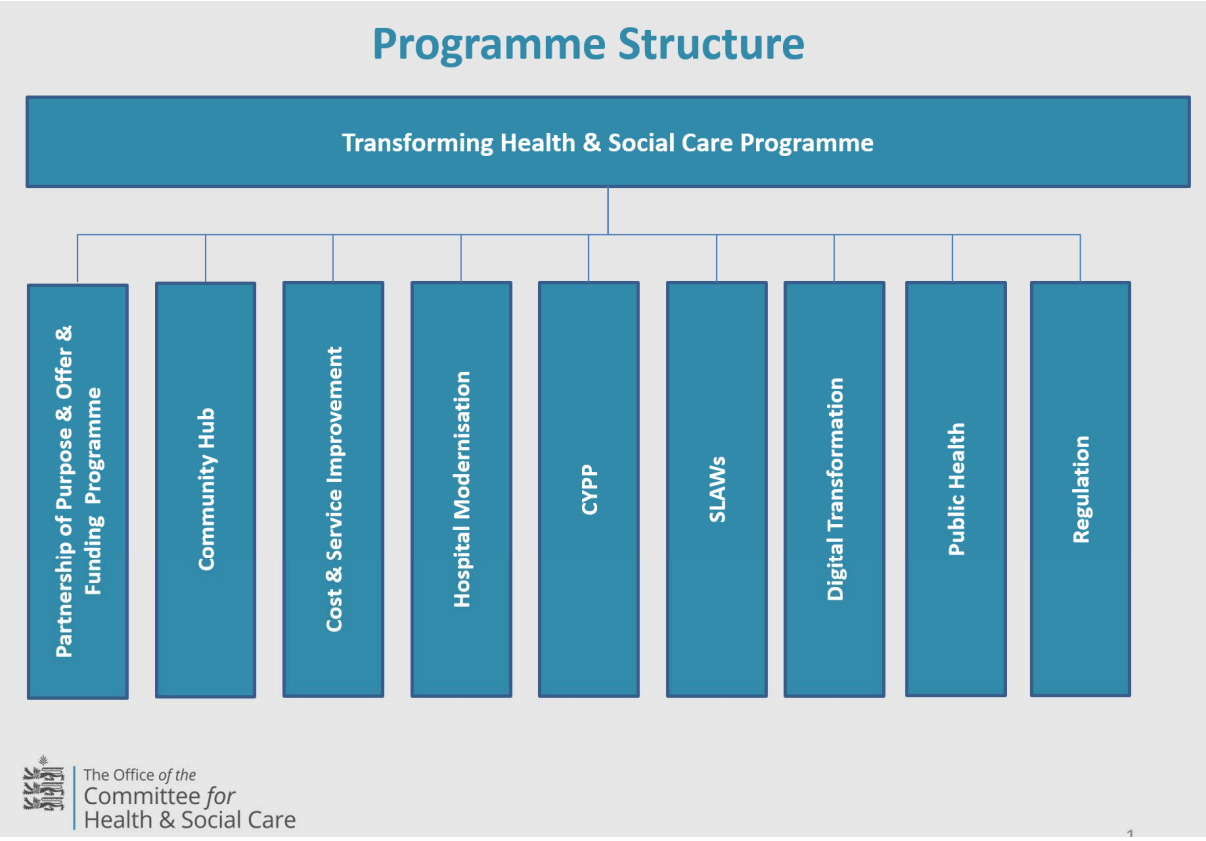


Figure 2 Programme Structure

2.3 This proposal is entirely aligned with the Transforming Health and Social Care programme and strategy and forms a key part of this strategy. In addition, the Services Guernsey themes are a key overall driver for the Programme. The strategic direction of the Island is paramount, to ensure outcomes are aligned

and the vision for Guernsey is in keeping with the models of health care for the future. The Services Guernsey strategy is depicted below and highlights how the PBC aligns and supports this.

Service Guernsey

2.4 The Modernisation Programme is designed to support all themes within the States Vision for Service Guernsey as identified below:

Figure 3 Service Guernsey's Themes

- **Service User Engagement:** This programme has agreed a Stakeholder strategy with the Modernisation Governance board which will ensure service users have regular updates and they are consulted and engaged at each stage and within each project.
- **Our People**: Staff will be involved and listened to in each project so that their current issues within the present facility can be addressed within the changes and developments. It had already been identified that the very poor standard of the current staff change facilities were having a very negative impact of staff moral so after successful discussion with property service the project to upgrade and refurbish the current facilities has been separately funded and has already commenced

- **Performance Management**: Each project as it develops must prove effectiveness and flexibility to meet the current and future demands, the UK strategic partner HSC is commissioning to support this programme will ensure health care planning and bench marking is used to justify and confirm the project objectives and outcomes.
- **Estate Optimisation**: This programme aims to refurbish, upgrade and rebuild areas of the current hospital and extend where necessary to provide an infrastructure that is cost effective and efficient and ensuring on-going maintenance is efficient with reduced risk currently faced with areas of asbestos in the property that requires lengthy and complex work around to support.
- **Service User Experience**: This programme management will ensure HSC Care Value Framework (6 C's) (Care, Compassion, Communication, Courage and Commitment) is recognised and supported through each project to ensure there is no impact to day services and that future development does not jeopardise health care standards
- **Value for Money**: All projects within the programme will ensure cost improvements forecasts and benefits are checked and quantified. Quality, productivity, and improvements within the programme will be set against HSC Care Value Framework (6 C's) to ensure planned efficiency do not affect clinical care or safety.
- **Technology and Innovation**: The modernisation programme will ensure all refurbishments and developments are flexible to meet future healthcare requirements for example the theatre development plans to design ability for future robotic surgery.
- **Digital:** HSC is committed to a Transformation Programme to support the PoP and the Modernisation Programme is closely linked to the digital transformation to ensure each project as it develops new physical pathways the necessary digital pathways and technology will be available to support improves and efficiencies.

Strategic aims and objectives

2.5 The Programme Business Case (PBC) is the key document that connects the modernisation of the PEH with the Partnership of Purpose. The programme of projects contained within the PBC is the facilitator for the objectives and visions of the Partnership of Purpose allowing the Health and Social Care (HSC) to transform their services for a sustainable future. The Modernisation of the PEH is designed to support the States commitment to a process of transformation of health and care services in the Bailiwick of Guernsey based on the key aims identified within the Policy Letter entitled "A Partnership of Purpose": The key aims in the Partnership of Purpose are allied with the aims of this PBC and are captured below.

- **Prevention**: supporting islanders to live healthier lives; Part of the Modernisation Programme is to evaluate current clinical pathways, analyse and respond to issues through the designing of new clinical pathways with the aim to reduce acute beds stay nights and support public health strategies.

- **User-centred care**: joined-up services, where people are valued; The Modernisation Programme aims to gives a connected approach to services where the needs of the patients have been listened to and considered from the outset.
- **Fair access to care**: ensuring that low income is not a barrier to health, through proportionate funding processes based on identified needs; The development of a private wing facility is to enable an increase in the use of private insurance to give income-based revenue without the need for an increased revenue fund from the States.
- **Proportionate governance**: ensuring clear boundaries exist between commissioning, provision, and regulation; The Modernisation Programme will be set up with defined reporting arrangements, including Executive sign off and lines of responsibility. The outcome of the modernisation programme will ensure that governance arrangements are set up for all services to make clear accountable persons and decisions makers.
- **Direct access to services**: enabling people to self-refer to services where appropriate; This programme will facilitate increase capacity in outpatient and diagnostic facilities to accommodate any development in self-referral systems to acute services.
- **Effective community care**: improving out-of-hospital services through the development of Community Hubs for health and wellbeing, supported by a Health and Care Campus at the PEH site delivering integrated secondary care and a Satellite Campus in Alderney; This Modernisation Programme is working closely with the Community Hub project to ensure services are in the most appropriate setting to give the most effective Health and Care services. That will include moving some services into the community setting which is in line with the 'care closer to home' objective.
- **Focus on quality**: measuring and checking the impact of interventions on health outcomes, patient safety and patient experience; Each project within this programme will be evidenced based to focus on delivering high quality outcomes, safety and patient experience and specifically addressing issues of safety and compliance.
- **A universal offering**: giving islanders clarity about the range of services they can expect to receive, and the criteria for accessing them; The Modernisation Programme will provide a consolidated and clearer approach to the delivery of services at the PEH. Stakeholder engagement will be a key part of the progression for each project to ensure all voices are heard.
- **Partnership approach**: recognising the value of public, private and third sector organisations, and ensuring people can access the right provider; This Modernisation Programme will ensure input and feedback from all partners within secondary and primary care sectors. The partnership approach will aim to deliver a sustainable and supported future for the PEH where stakeholder involvement is central.
- **Empowered providers and integrated teams**: supporting staff to work collaboratively across organisational boundaries, with a focus on outcomes. The Modernisation Programme will ensure each project has an integrated team approach ensuring all staff and service users feel able to feed into the project and as each project proceeds a core member of a team will be HSC's Culture, Arts

and Health Manager who works closely with the psychology team and a graphic designer to ensure each project improves the environment and communication methodology.

2.6 Each project will consist of multi-agency approach to involve all service users, partners, and staff with a focus on objectives to achieve the agreed outcomes. This joined up and collaborative approach will aim to empower the voices of all staff that might be involved or affected by the project.

2.7 The Partnership of Purpose is a key strategic driver for the Programme Business Case. HSC are working hard to connect all parts of the health and social care system for the people of Guernsey to allow for a far more efficient delivery of services for the future. The future model of health care is shown below depicting the cyclical relationship between all agencies working together for the future of health and social care services in Guernsey. The delivery of the Modernisation Programme will give the route for change for the HSC by giving the most flexible *infrastructure* for transformation and modernisation to take place.

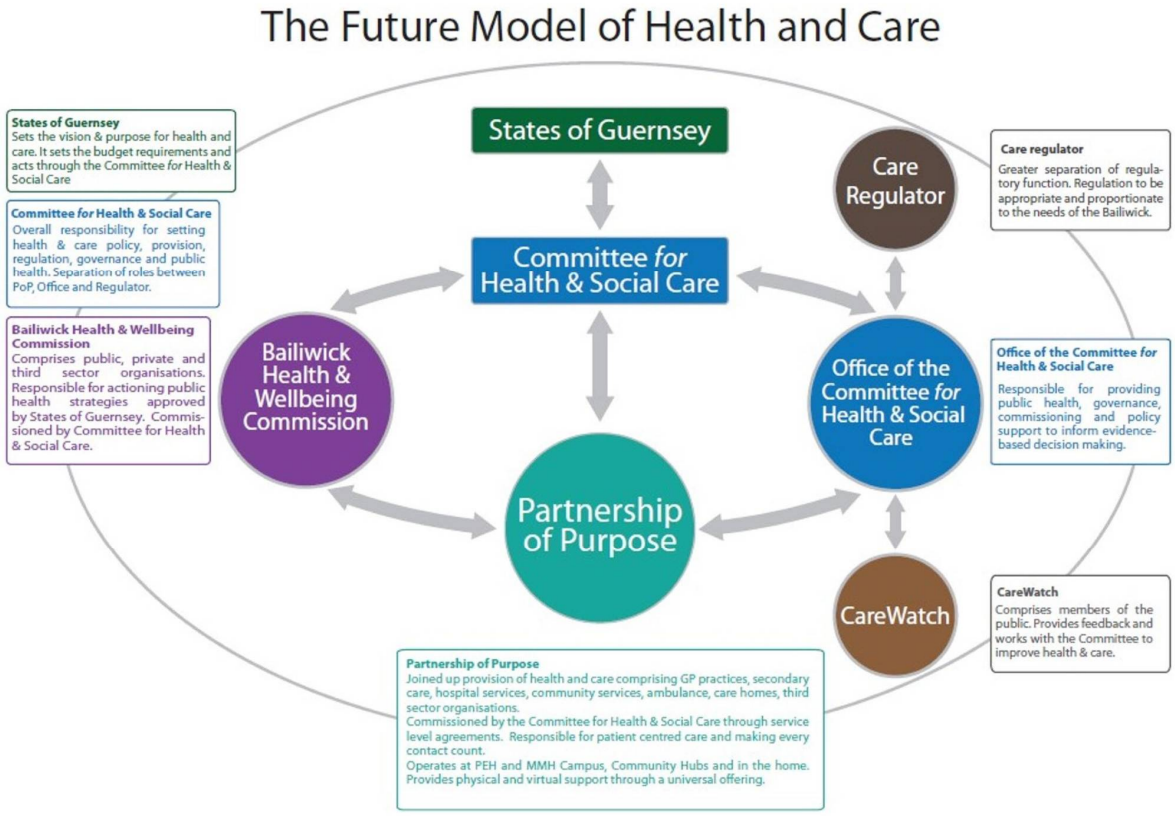


Figure 4 Future model of Health and Care

Context and history of the programme

2.8 The hospital modernisation programme has been under careful consideration and scrutiny for many years, with work undertaken previously in 2014 and 2016 based around a maintain, transform, and grow categorisation. In 2017 HSC submitted this programme into the portfolio prioritisation review and following feedback from the review redrafted and resubmitted its proposal under the categories of must, should and could projects. In 2018 the categories were tailored further, with the final classification agreed as *essential* (previously must), *desirable* (previously should) and *additional* (previously could).

2.9 This was supported and given priority in the Medium-Term Capital Plan and initial planning began. Due to the prolonged period of time the programme had taken to proceed, it was agreed that a review of the programmes objectives for investment and business needs should be undertaken to further confirm the needs and priorities. Workshops were held in 2018 with the stakeholders including, HSC Corporate Management team, senior users, and partners plus Medical Specialist Group (MSG), States Property Services, Portfolio Director and Environment and Infrastructure representation.

2.10 The purpose of the workshops was to engage and fully understand the stakeholder view and to confirm the categories for-the projects within the programme into;

- ***Short Term*** projects
- ***Medium Term*** projects
- ***Long Term*** projects

2.11 The results of these workshops aligned closely to the earlier reports but showed a far great urgency in the requirement to progress the programme due to the deterioration in property and increased clinical demands. This highlighted that now all projects had become essential but the order of priority within which they can be undertaken actually depended upon other projects to vacate space within the hospital. The workshops also confirmed the need for the progression of the Hospital Modernisation Programme to support the Partnership of Purpose objectives. The outcomes to achieve from the workshops were:

- To identify and agree objectives and benefits for each project
- To consider the future and flexibility on the solutions developed for each project
- To prioritise each project

The Island's Healthcare System - overview

2.12 The Island's healthcare system is similar to that of the UK but is also different in several respects. Primary care is delivered though a range of community-based services and a network of General Practitioners (GP's) with acute secondary care being delivered through the Medical Specialists Group (MSG) who work closely with the Princess Elizabeth Hospital. Both the GP service and MSG are standalone businesses which operate independently to the States of Guernsey. Patients with more complex clinical needs, beyond those that can be dealt with at the PEH, are treated on off-Island locations within the UK NHS. The

Island also has active private healthcare suppliers supporting both hospital and community requirements and is a key strategic part of the HSCs delivery of healthcare, be it through insurance-based systems for residents or via the health tourism route. It is worth noting that one marked difference to the UK is that GP and Emergency Department (ED) services are not free at the point of delivery and are charged depending on the time of day and complexity of treatment needed.

Strategies and policies

2.13 The Committee for Health & Social Care is committed to tackling some of the deep-rooted challenges of the Bailiwick's health and care system. To support the Committee, Partnership of Purpose aims to make 'every contact count' where the service user is placed at the centre of the clinical pathway, with prevention and treatment in the community having a far greater focus than ever before.

2.14 Partnership of Purpose is about the wholesale transformation of health and social care in the Bailiwick of Guernsey covering every part of the PEH's operating model and the Programme Business Case is a facilitator for this change to take place. Without the modernisation programme being taken forward the HSC are not able to truly transform due to the limitations on the current hospital both in terms of estate and service provision.

2.15 The Hospital Modernisation Programme of projects is a crucial enabler for the Partnership of Purpose and Future Health Care model improving and sustaining service user experiences and enabling technology development. The Policy and Resource Plan sets out the States' Vision for the Islands and defines several objectives and outcomes for the organisation. To facilitate the delivery of this vision, it will be necessary to redesign the way public services are delivered, a process which is governed by the framework for Public Service Reform.

2.16 The Hospital Modernisation Programme is an essential catalyst for change and covers each of the themes of the Policy and Resource Plan.

- **Our Quality of Life:** The PEH is critical to 'our quality of life', by giving access to urgent and immediate healthcare both during normal working and out of hours. In addition, the many services provided here including Occupational Therapy, Rehabilitation, Speech Therapy and Dietetics to name a few all contribute to a 'Healthy Community'.
- **Our Community**: The HSC and the PEH is committed to provide health care for all islanders of all social and financial standing. The PEH site is located centrally to where the largest conurbation of population resides, therefore access to the PEH is relatively easy via private and/or public transport. The PEH provides essential services to the Bailiwick of Guernsey. Most islanders will have accessed services at some time of their lives, be it being born at the PEH, having had surgery, or using the ED department or diagnostic facilities.
- **Our Economy:** The HSC contributes to the economy of the Bailiwick of Guernsey by offering private companies, investors, and visitors to the island modern, attractive, efficient healthcare facilities which are often critical when considering relocating or visiting the island. The Modernisation

Programme includes increasing and updating the private patient facilities to make the service more attractive locally to those holding health care insurance and supporting potential health tourism.

- **Our Place in the World:** This programme of change identified within the modernisation of the PEH has the potential to give advancement in services offered on Island and provide first class healthcare and protect and enhance the islands' place in the world.

Demographic demands and trends

2.17 Life expectancy at birth between 2015 -2017 was 80 years for men and 84 years for women and is one of the highest in the world. Men now aged 65 have an expected further life of 19 years, and women 22 years, and would be expected on average to live to 84 years and 87 years respectively.

2.18 The average number of live birth registrations in Guernsey was 601 per year during 2013-17 with modest year-on year reductions over that period. This is similar to the birth rate for Jersey in 2015 of 10.0 per 1,000 and lower than the England and Wales rate in 2014 of 12.1 per 1,000.

2.19 There were 607 deaths (excluding still births) registered in Guernsey in 2017. This equates to a crude rate for the three-year period of 846 per 100,000 and an age-standardised rate of 844 per 100,000. This rate was comparable to the death rates of Jersey and was significantly lower than the 2012-14 death rates of all English regions.

Population and demand

2.20 At the end of March 2017, (as published in January 2018) Guernsey's population was 62,193. Between 2017 and 2020, the population within key age ranges is expected to change, as shown below:

Population	0-15	16 - pension age	pension age to 84	85+	Total
Mar-17	9,949	40,154	10,429	1,661	62,193
2020	9,961	39,808	11,089	1,805	62,663

Figure 5 Population and demand

2.21 Whilst the overall population is expected to increase only marginally in this time, the number of those over 65 years is set to increase by around 2% per annum.

2.22 The over 65 years population is a minority – around 19.4% in 2017, rising to around 20.6% in 2020. However, for health and care services, this part of the population is fundamental, in terms of costs. The table below shows occupied bed days, by age, in Princess Elizabeth Hospital.

	0-15	16-pension age	pension age to 84	85+	Total
Bed days	3,065	10,875	16,794	9,741	40,475
	8%	27%	41%	24%	

Figure 6 Occupied Bed Days

2.23 The 20% or so of the population aged over 65 equates to 65% of HSC's occupied bed days. Similar data for community service referrals and activity, and acute off-island referrals, would show a similar proportion, if not an even greater inclination towards older people.

2.24 The operational and financial pressure created by this increased demand also finds that this demand is attributed to the elderly, suffering from falls respiratory illness or the growing need for those with hip replacements requiring revision surgery of their hip. The flexibility within the redesign programme aims to address these increasing demands.

2.25 At the other end of the age range, the population is not increasing. However, it is worth noting that advances in medical technology and practice mean that more children are surviving with conditions that would not have been viable a few years ago. This means that whilst the numbers of children are not increasing, the complexities, and consequently the costs of care are. The women and children's project will support a new children's pathway providing more care in the community and less acute bed numbers.

2.26 When sorted by the age-standardised rate of deaths the top three leading causes over the three-year period 2013–2015 were circulatory diseases, cancers ('neoplasms') and respiratory diseases: These causes accounted for 31%, 29%, and 13% of deaths respectively.

2.27 Preventable deaths are a key indicator tabled by England's Public Health Outcomes Framework. For Guernsey and Alderney, the preventable deaths can be broken down accordingly:

- 58% of cancer deaths (for 2010–12 the preventable proportion was 59%)
- 58% of cardiovascular disease deaths (for 2010–12 the preventable proportion was 62%)
- 74% of respiratory disease deaths (for 2010–12 the preventable proportion was 63%), and
- 95% of liver disease deaths (for 2010–12 the preventable proportion was 95%)

Admissions Data

2.28 As outlined above, those aged over 65 (around 20% of the population) constitute around 2/3 of all HSC activity. They are frailer, with more co-morbidities, and therefore spend longer in hospital when admitted. Since the beginning of 2015, over-65s have made up approximately 41% of all admissions, but 65% of all occupied bed days.

2.29 The average length of stay in hospital for those aged 18 to 65 is 3.9 days. For those aged 65 to 84, that rises to 9.2 days, and for those over 85, 14.1 days it is recognised that the current length of stay is too

long especially for the elderly who are institutionalised very quickly within an acute setting. This programme evaluates all pathways for each programme and does not rebuild a like for like service but aims to transform clinical pathways to aide in reducing average stays.

Projected Bed Usage

2.30 With the older population continuing to grow and predicted to grow more quickly from 2020 onwards it is imperative that this redesign is progressed to deal with health care demands and enable the Partnership of Purpose to transform services to give a sustainable health service for the future.

2.31 The number of bed days was projected until 2035 for each of the age groups using the most recent population predictions. The target occupancy rate used in the model was 85%.

2.32 Currently, the PEH has between 85 and 100 staffed beds per day (this can fluctuate day to day), however, the capacity is 115 acute beds (not including CCU, private ward or women's and children's beds). The model showed that the PEH currently (for 2018) needs 102 acute beds for contract patients, however, Victoria Wing is also currently used for contract patients which helps relieve the pressure. So far in 2018 43% of occupied bed days on Victoria Wing were for contract patients. This equates to 7 beds. The future proposals envisage Victoria Wing being dedicated to private patients and so not being available on a regular basis to accommodate contract patients.

2.33 The model predicts that in 2024 our demand for beds will exceed our capacity, see Table below, unless we continue to use Victoria Wing for contract patients. In which case demand could be met until 2028 as long as the private business was not grown by more than the conservatively predicted 10%.

Acute Beds	**2018**	**2024**	**2028**	**2035**
Occupied Bed Days Forecast	31,562	36,000	38,990	46,760
Beds Required at 85% Occupancy	102	116	126	151
Number of Acute Beds Available *1	115	115	115	115
Capacity or Shortfall	13	1	(11)	(36)
Beds Available in Private Ward as Outliers	n/a	n/a	9	0
Additional Beds Needed	n/a	n/a	2	36
Notes *1 Not including Womens & Childrens or CCU				

Figure 7 Projected Bed Usage

2.34 By 2035 it is forecast that capacity for an additional 36 beds will be required without intervention. Other transformation projects should help to mitigate this partially, however, this potential need should not be overlooked.

2.35 The downward pressure created by transformation programmes outside the Hospital Modernisation Programme and the patient flow improvements is expected to re-dress this balance. Beyond the current

programme (2028), when capacity is forecast to be required, vacant areas (e.g. Victoria Wing) in the hospital could be utilised for increased bed capacity should actual demand require it.

2.36 The very long term, beyond ten years, forecasting of healthcare demand is challenging due to the pace of change in modern healthcare, and therefore the Hospital Modernisation does safeguard for any potential future bed shortage assuming that the entirety of the programme is concluded and that Community Transformation, patient pathway efficiencies and current planned Hospital transformation continues as planned.

2.37 In summary, this PBC does not currently recommend the construction of further bed capacity, over the current numbers, aside from the required growth in CCU, but the long term demand forecasting will require knowledge of the results and impact of other Transformation Programmes such as the community projects to help reduce beds stay nights and community support.

The Case for Change

Clinical Challenges

2.38 Currently hospital services are provided primarily at the Princess Elizabeth Hospital, the main outpatient services are provided off-site by the MSG, with limited visiting consultants clinics commissioned from UK providers undertaken within the PEH. This programme will seek to consider the feasibility of, by the end of 2019, a location for the MSG Consultants onto the PEH campus, which will provide a consolidation of services at the PEH allowing for efficiency in the delivery of service and use of space required to deliver treatment and care.

2.39 The current operating model for PEH imposes a series of constraints on service delivery due to inadequate flexible space. These have the potential to significantly limit the role the services can play in transformation. Without change, this will result in the services becoming ineffectively used and a source of public and staff dissatisfaction. This programme will ensure all developments support the Digital Transformation Programme and the Community Hub Strategy by building a flexible structure that can meet the changing needs of modern health care for now and the future.

2.40 All but the most recent developments will need some form of upgrading. Several older ward areas have been converted for use as non-clinical space like offices or stores and as such space at the PEH is not being efficiently used. This programme will ensure all areas of the hospital are used appropriately and efficiently in flexible environments.

Business Challenges

2.41 The present hospital facilities for the delivery of health care functions have evolved and expanded over time but were never designed with consideration of both changes to the needs of service areas' activities or to meet emerging challenges or changing health care delivery. Current processes, pathways and infrastructure do not provide the flexibility for continuous improvement, or to implement transformation effectively. This restricts the health care delivery and does not make the service flexible or cost efficient.

2.42 HSC has identified at least 12 (twelve) projects that need to take place as part of the overall re-design of the Princess Elizabeth Hospital site. This programme is expected to have a lifespan of up to ten years.

2.43 The HSC's current capacity to achieve the Investment Objectives of this PBC is limited due to problems associated with the existing arrangements. These problems (or business needs) are caused by limitations with the current physical layout. A summary of these is provided below:

Investment objective	Business needs (problems with existing arrangements)
Optimise the delivery of health and care	Continuing to operate the current services within existing building format is limiting the delivery of the services and in some cases does not comply with current guidelines or provide a suitable environment for our patients; following the completion of the programme compliance with current guidelines would be demonstrable. Current condition of some of the existing buildings causes difficulties to maintain high standards of compliance; following the completion of the programme improvements in building regulation and standards compliance could be measured. Compliance with the Health Building Note (HBN) and Health Technical Memorandum (HTM) is not possible in some parts of the hospital; following completion of the programme HBN & HTM compliance would be demonstrable. Our current Critical Care Unit (CCU), based on our current bed numbers and growth in demand for such services, has an insufficient number of beds which results in postponement of elective surgery; the delivery of a new CCU in 2023 would respond to existing demands and provide capacity for the future. Continuing to operate within the existing format and fabric of the building is having a negative impact on the retention of staff; following completion of the programme improvements in staff retention would be demonstrated.
Optimise patient flow	The current demand for medical beds is at a critical level, which delay non-emergency surgeries as medical patients can need to be accommodated on the surgical wards; conclusion of the revised Theatres and Day Patient Unit would show improved surgical capacity and reduce pressure on medical beds. Often patients must be moved between wards due to medical demand and lack of medical beds which impacts on patient experience and staff morale; following

	completion of the programme improvements in patient and staff survey information would be demonstrable. The current provision of services is not flexible enough to support patient pathways and optimise Day-Patient care; conclusion of the revised Theatres and Day Patient Unit would show improved surgical capacity.
Accommodate future proofing	The current physical layout of the PEH, in the main remains inflexible. There is no built-in resilience and as demand for beds increases the risk of having to postpone elective surgery becomes greater. The current layout does not provide the ideal opportunity for innovations or allow the PEH to easily comply with changes in health care regulation; completion of the programme will provide PEH with the capacity to respond to future demand.
Enhance recruitment and retention	Recruitment and retention of staff remains a major issue for the PEH. Areas of the current building/s are insufficient to attract highly skilled resources required to allow the PEH to operate and delivery a high-quality service; following completion of the programme improvements in staff retention would be demonstrated.
Optimise the use of our local facilities and clinical resources	Some of the services currently provided within the PEH may be better provided within the Community Hub or alternative locations, to ensure the correct patient pathway are designed to support the service user at the centre; completion of the programme will support alignment with the Community Hub.
Optimise the use of our public health and care service	Currently our Private Patient offering is below standard, in terms of rooms and privacy; the completion of the new Private Wing project in the programme will offer ensuite rooms to expected standards. In the current format we are unable to maximise the revenue from this service and are not meeting the targets of the HSC revenue budget; the new Private Wing will support an increase in private income.

Figure 8 Business needs and spending objectives

Estate challenges

2.44 The PEH is a significant campus facility of 92,000m2, of which the actual hospital footprint is 38,000m2, located on the boundary of St. Martins, St. Andrews, and St. Peter Port. It is located just outside the main centre and comprises of varying building sizes and heights.

2.45 As has been the case with many UK hospitals, it has suffered over time from piecemeal redevelopment and refurbishment that now hampers its function and operational effectiveness, as the current physical environment does not facilitate a flexible design or the ability to meet current and future clinical requirements.

2.46 Many of the current clinical facilities date from the 1970s and 1990s (with some going as far back as 1930) and as a result exhibit serious levels of dilapidation. Significant elements of building structure and engineering services are now well beyond their useful economic life and need urgent replacement which will become a clinical risk if this modernisation programme does not proceed.

2.47 Due to concerns over the extent of dilapidation and functional obsolescence, and to ensure that it adopted a responsible approach to premises management, the HSC commissioned a property condition survey.

2.48 Draft findings of the condition survey are set out below which identify the importance of delivering the Modernisation Programme:

- much of the hospital's engineering services are at or have exceeded their design life;
- some aspects of statutory deficiency are difficult to address due the physical construction of the buildings or where only reconstruction would address the issues;
- many areas of the hospital exhibit poor functional suitability and do not fully comply with UK NHS standards (D);
- due to their age, many of the operational areas do not meet current standards restricting both the efficiencies and effective operational relationships with other functions within the hospital;
- some building areas are of poor quality in terms of their effectiveness as working environments and as spaces for modern healthcare; and
- some areas are not currently compliant with HBN standards and regulations.

Illustrative solution/scheme

2.49 The PBC is based around an illustrative solution which will be further developed when the programme is approved. Each project in the programme will be developed in a business case where further details on the outcome will be described. Central to the illustrative solution is the identification of investment objectives for this programme of projects.

Investment Objectives

2.50 Investment Objectives are the outcomes required of the programme. They are intended to ensure that clarity is provided for programme prioritisation and to help the programme's activities remain focused and aligned. The six key objectives listed are those agreed following the workshop on 25 April 2018. They are;

- To optimise the delivery of health and care services to provide good and measurable outcomes for the people of the Bailiwick of Guernsey.
- To optimise patient flow, recovery, outcomes and care delivery in the most appropriate environment.
- To accommodate future proofing using flexible space with a vision for future innovations and regulations in health and care.
- To enhance recruitment and retention of staff by providing a welcoming, modern, attractive and 'fit for purpose' environment for all.
- To optimise the use of our local facilities and clinical resources.
- To optimise the use of our public health and care service by providing a choice of exemplary quality private services.

2.51 The objectives have been designed to focus on what the programme needs to achieve, rather than the means of achieving it. They cover measurable economic and social outcomes in order that the progress and success of the programme can be monitored, and potential options can be assessed effectively without being unnecessarily constrained. The setting of these objectives is an iterative process, the targets associated with the objectives will become more detailed and precise as the programme progresses and individual project level business cases are developed.

The Projects

2.52 In addition to the identification of the projects, a prioritisation process has also been undertaken, by the Programme Governance Board in October 2018, the members agreed the prioritisation of the projects. This agreed prioritisation of projects provides the PBC with the direction of travel and focus for the next two to ten years, allowing the HSC to focus on development of each project. As identified above, the HSC will progress each project via the business case process whereby design teams will be appointed to provide design solutions, cost plans will be produced, and revenue assessments undertaken.

2.53 The plan below shows how the projects have been prioritised by the Programme Governance Board. The prioritisation considered the clinical need and impact but also the projects dependencies and needs adjacencies within the illustrative scheme. For example, the orthopaedic project is a high priority, but the illustrative relocation is dependent upon the women's and children's project completing so cannot be classified as a short term project.

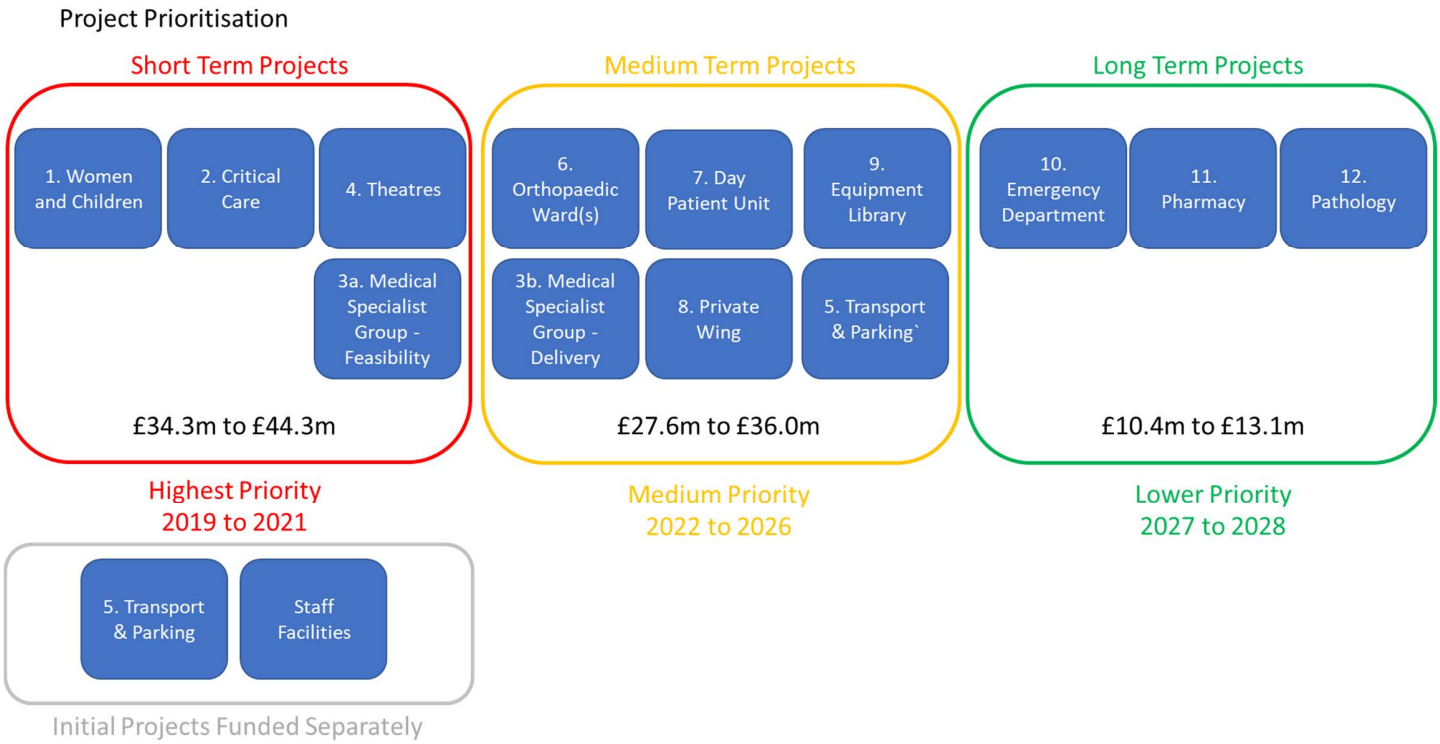


Figure 9 Prioritisation of projects

3

3.0 The Economic Case

3.0 The Economic Case

3.1 This Economic Case details the economic appraisal of illustrative development options for the Hospital Modernisation Programme (HMP) of Princess Elizabeth Hospital. It sets the context for the determination of these options and considers their relative performance against:

- Capital Costs;
- Investment Objectives;
- Critical Success Factors;
- Benefits, and:
- Proposed clinical outcome measures for each.

3.2 The HMP has been divided into phases to ensure it is manageable and to support appropriate monitoring and decision making. The initial phase of the programme was focused on identifying the preferred direction for the programme and dependencies that will impact on the programme and the agreement of the projects that are critical to proceed in the early stages of the programme.

3.3 This work was undertaken to support the Partnership of Purpose (PoP) for Health and Social Care (HSC). This was also re-assessed at the subsequent workshops with the Hospital Programme Governance Board (HPCB). A key vision and design principle of the PoP is User Experience – that will deliver customer satisfaction and high-quality health care outcomes. This vision principle is critical to this programme.

3.4 The Strategic Case has set out the HSC's future health and social care ambitions, which are supported by the States of Guernsey within the PoP and confirmed the longstanding conclusion that the current hospital was, and is not, entirely fit for purpose in meeting these ambitions. Recognising this, the HSC has completed a range of studies into the potential reconfiguration of the hospital, it is these previous studies that have been utilised to support this Economic Case's assessment if this Illustrative Scheme; that is one potential outcome to define the economic viability of each of the various projects collected into options based on their relative merit.

3.5 The relative merit of each project has been assessed and the projects grouped into short, medium, and long term options.

3.6 The options themselves serve only in this Economic Case as a method of relative assessment, one potential way of delivering the Programme. These will once funding has been approved initially lead to the creation of a Development Control Plan that will fully define the projects, in their relative importance in a scheme design that can be delivered and will be Transposed into individual project level business cases.

3.7 The project level business cases will use the same assessment criteria as the PBC. This will support the delivery of the Investment Objectives at a project level but will also allow refinement and development of financial benefits and clinical outcome measures at a project level; as there is insufficient detail at the Programme level to fully define them at this stage.

Context and Assessment within the Economic Case

3.8 The continued renewal, replacement and maintenance of its hospital services has long been a key priority for the States of Guernsey and it still is a cornerstone of its Health and Social Care modernisation agenda.

3.9 The PoP set out a vision of an integrated care model and a programme of change needed to meet the challenges facing the Island's Health and Social Care services. The provision of a hospital that is fit for purpose, capable of sustaining the acute care provision requirements for the population and that complements the integrated care strategy is seen as an enabler to this.

3.10 To align the choices in this business case a series of projects was assessed against a set of assessment criteria, this set of choices is based on a single method of completing the projects within the Programme. The nature of the Programme business case defines the of assessment (used and that which will be carried forward into the project level business cases) and selects a preferred option for which funding will be sought from the States of Guernsey.

Assessment of Options

3.11 During a series of workshops with the Hospital Programme Governance Board (HPGB) the opportunity was taken to measure the effectiveness of the agreed prioritised options for the projects within the Modernisation Programme.

3.12 Weighing of options was carried out as a poll of key members of the HPGB and key clinical and operational stakeholders, this was done as a separate discrete exercise to scoring to ensure transparency as is best practice under UK guidance.

3.13 Although there was support for the most ambitious option, which was to build a new hospital, it was strongly recognised that the substantial multi million cost of a new hospital, which would require a new location, could not be justified as there are areas of the current building that have recently been built or updated, and that were still very much fit for purpose Therefore, it was felt the preferred way forward of the production of a development control plan that defined a series of refurbishment, extension and new build projects would allow more immediate improvements to clinical services while maintaining business as usual (BAU) and support to the current clinical demands. This would reduce current clinical risks, such as travel distance / time to maternity theatre, reduce the numbers of surgical postponements with an increased CCU and theatre suite and improve service user experience in a shorter time scale.

3.14 The construction of a single new wing solution to the PBC priorities or a single new-build hospital replacement are not practical due to;

- A good proportion of PEH is of a very high standard, built within the last 5-11 years
- The new build costs would be significantly higher than the current programme.
- Partial new-build replacement for the programme would create inadequate adjacencies within the existing hospital and affect patient pathways and staff efficiencies.

3.15 The options (prioritised groups of projects) are assessed against the Investment Objectives, Critical Success Factors and Benefits to ensure a balance score card approach to their assessment. These balanced scored criteria are weighted, and an unweighted / weighted score produced for assessment of the options against them.

3.16 The weighting of categories for assessment of options, Investment Objectives, Critical Success Factors etc., has been undertaken initially and independently of the scoring. Each category was assigned one hundred percentage points and the individual aspects assigned values.

3.17 After weighting the options were scored on a basis in accordance with their ability to meet the assessment criteria, as per the table below;

Score	Benefit Scoring dimensions
0	The option does not meet the criteria expectations in any way or is not considered to be able to do so following any further development.
1	The option goes some way to meeting the criteria expectations or demonstrates an ability to do so following further development.
2	The option reflects at least half of the expectations of the sub-criteria but is unlikely to improve on this.
3	The option reflects at least half of the expectations of the sub-criteria and demonstrates that greater achievement is possible following further development.
4	The option meets the expectations of the criteria.
5	The option meets or exceeds the expectations of the sub-criteria and demonstrates that the expectations can be exceeded following further development.

Figure 10 Benefit Scoring

Investment Objectives

3.18 The Strategic Case defines several Investment Objectives, or strategic principals, against which each potential option will be measured, the Hospital Modernisation Governance Board have weighted them, and are identified below;

Investment Objective	Weighting %
IO1 - Optimise the delivery of health and care	25%
IO2 - Optimise patient flow	20%
IO3 - Accommodate future proofing	15%
IO4 - Enhance recruitment and retention	20%
IO5 - Optimise the use of our local facilities and clinical resources	10%
IO6 - Optimise the use of our public health and care service	10%

Figure 11 Weighted Investment Objectives

Critical Success Factors

3.19 A set of Critical Success Factors (CSF) were developed through discussion at the workshops, considering the project strategic objectives, the minimum project objectives, and relevant policies to inform the option shortlisting process.

3.20 Critical Success Factors are the key attributes essential to the delivery of the Hospital Modernisation Programme. The CSF were derived from the key programme objectives identified during the workshops, and weighted as defined in the table overleaf;

Critical Success Factor	Weighting %
CSF 1 - Strategic fit & clinical needs	
How well the option meets the agreed spending objectives, related clinical needs and service requirements, and provides holistic fit and synergy with other strategies, programmes, and projects. Measures: - Achieves excellent clinical outcomes, - Enables greater continuity and reliability of service functions, - Enables an ongoing improvement in patient pathways and experience - Demonstrates increased conformance with HTM's, and support on, policy requirements and opportunities and strategic change requirements. - Can be delivered in line with the programme aspirations of 'Partnership for Purpose'	30%
CSF 2 - Potential value for money	
How well the option maximises the return on the required spend (benefits optimisation) & optimises public value (social, economic, and environmental), in terms of the potential costs and benefits from the perspective of the organisation and wider society. Minimises associated risks. Measures: - Maximises revenue service cost, - Supports the advanced digital technology strategy to improve efficiencies with the within the health delivery, and - Provides resilience and assurance by data management and compliance with regulatory requirements. - Support potential to reduce current off-island costs. - Delivers within a ten-year cycle	25%
CSF 3- Supplier capacity and capability	
How well the option matches the ability of potential suppliers to deliver the required services and is likely to be attractive to the supply side. The ability of the market place and potential suppliers to deliver the required services and deliverables.	20%

Measures: - At least 3 suppliers will be sought in tendering for each procurement event. (It is hoped that this programme will give opportunities to local supplier to tender for the programme). Can be achieved to meet a start on site in 2019	
CSF 4 - Potential affordability	
How well the option can be funded from available sources of finance and aligns with sourcing constraints Measures: - The SOG has committed to support this as a major capital programme within the current capital portfolio.	15%
CSF 5 - Potential achievability & Social Acceptability	
How well the option: is likely to be delivered given the organisation's ability to respond to the required level of change and matches the level of available skills required for successful delivery. Measures: - This will reduce the current risk and pressure on BAU services at the PEH - It will improve recruitment and retention of staff - It will enhance private income - It will improve service user experience. - It will allow the relocation of the secondary health care services (MSG) on to the PEH campus	10%

Figure 12 Weighted Critical Success Factors

Benefits

3.21 The benefits are assessed in relation to the five benefit criteria that were identified in the Strategic Case in relation to spending objectives and addressing business needs; they are identified and weighted below;

Benefit	Weighting %
B1. Improved system resilience	25%
B2. Improved clinical outcomes	25%
B3. Improved resource management	20%
B4. Improved business intelligence and information sharing	20%
B5. Reduced running costs	10%

Figure 13 Benefit Criteria

Development options

3.22 The long list of options was collated by the Hospital Modernisation Governance Board.

3.23 The broad range of perspectives on the available options for transformation were identified and considered through both the workshops held in March 2018 and April 2018.

3.24 The Hospital Governance board met in October 2018 to review the projects and rank them relative to each other in their ability to deliver on the Investment Objectives and CSF's, Benefits and support the Partnership of Purpose, as shown in Figure 13 below;

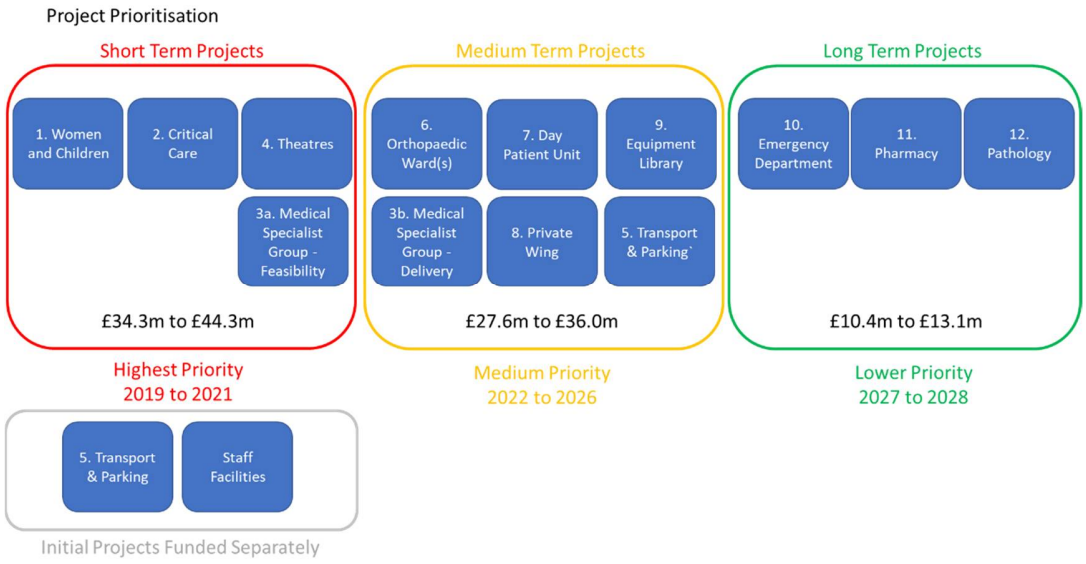


Figure 14 Prioritisation of projects

3.25 The October 2018 review workshop considered both the relative priority of the projects and how they might be grouped in the programme into Short, Medium and Long Term priorities, it also considered three projects that would be treated in special circumstances, as follows;

3.26 The Feasibility design for Project 3(a) the Medical Specialist Group (MSG) relocation will be considered as an essential project due to the time constraints of the lease on the existing property; the construction works for the MSG is included in Medium Term Projects. Staff Facilities & Car Parking will be progressed outside this programme with separate funding agreed by HSC, however the outcome of Project 5 - Car parking is subject to the outcome of the Travel Plan and an allowance has therefore been made in Medium Term Projects for the future impact and changes of the Programme on Car parking which also includes the potential impact of relocation of the MSG.

3.27 The Options summary, priced in accordance with methodology described in 3.32 later, for the Short Term aspects of service provision and renewal are indicated below:

Short Term projects within the Programme - One to Three Years	
Clinical Facility, Hospital Zone, or function	**Potential Cost Between:**
Project 1: **Women's and Children's**	£7.9m to £10.3m
Project 2: **Critical Care Unit**	£8.3m to £10.8m
Project 3a: **Medical Specialist Group - Feasibility** (Note: this project treated in two parts, an initial feasibility study as short term, followed by a relocation as medium term)	£0.5m to £0.6m
Project 4: **Theatres**	£15.8m to £20.8m
Internal HSC Staff costs	£1.8m
Forecast Total £millions of Short Term Projects	£34.3m to £44.3m

Figure 15 Costing summary of Short Term Projects

3.28 The Options summary for the Medium Term aspects of service provision and renewal, priced in accordance with methodology described in 3.32 later, are indicated below:

Medium Term Projects in the Programme - Four to Six years	
Clinical Facility, Hospital Zone, or function	**Potential Cost**
Project 5: **Transport & Parking** (Note this project is subject to the outcome of the initial transport assessment and has therefore been included in the medium term Projects)	£0.2m to £0.3m
Project 6: **Orthopaedic Wards** (Note: in this illustrative option the renewal of Orthopaedic Wards cannot be undertaken until after conclusion of the Women's and Children's project and whilst they are considered High priority they are listed here in medium term)	£6.3m to £8.3m
Project 7: **Day Patient Unit**	£3.7m to £5.0m
Project 3b: **Medical Specialist Group - Construction** (Note: this project is treated in two parts, an initial feasibility study as short term, followed by a relocation as medium term)	£7.6m to £10.1m
Project 8: **Private Wing**	£5.1m to £6.6m
Project 9: **Equipment Library**	£3.6m to £4.6m
Internal HSC Staff costs	£1.1m
Forecast Total £millions of Medium Term Projects	£27.6m to £36.0m

Figure 16 Costing summary of Medium Term Projects

3.29 The Options Summary for the Long term aspects of service provision and renewal, priced in accordance with methodology described in 3.32 later, are indicated below:

Long Term Projects in the Programme - Seven to Ten Years	
Clinical Facility, Hospital Zone, or function	**Potential Cost**
Project 10: **Emergency Department**	£4.1m to £5.4m
Project 11: **Pharmacy**	£1.9m to £2.5m
Project 12: **Pathology**	£3.7m to £4.5m
Internal HSC Staff costs	£0.7m
Forecast Total £millions of Long Term Projects	£10.4m to £13.1m

Figure 17 Costing summary of Long Term projects

3.30 The workshops considered one potential illustrative set of conclusions of this exercise and confirmed that the following four Options should be shortlisted for assessment within the Programme Business Case:

- Option 1 Do Nothing
- Option 2 Short Term Projects Only
- Option 3 Short Term and Medium Term Projects
- Option 4 Short, Medium and Long Term Projects

3.31 The table below represents the weighted and unweighted scores of the options against the nonfinancial assessment criteria:

Investment Objectives, Critical Success Factors and Benefits Appraisal									
Results		**Unweighted Results**				**Weighted Results**			
		Options				**Options**			
Criteria	**Weight**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
IO1	25%	2	3	3	4	0.45	0.70	0.83	1.08
Ranking						4th	3rd	2nd	1st
IO2	20%	2	3	3	4	0.36	0.56	0.67	0.87
Ranking						4th	3rd	2nd	1st
IO3	15%	1	3	3	4	0.18	0.45	0.50	0.65
Ranking						4th	3rd	2nd	1st
IO4	20%	2	3	3	3	0.32	0.53	0.67	0.67
Ranking						4th	3rd	1st	1st
IO5	10%	2	3	4	4	0.20	0.27	0.37	0.43
Ranking						4th	3rd	2nd	1st
IO6	10%	1	3	3	4	0.12	0.30	0.33	0.37
Ranking						4th	3rd	2nd	1st
CSF 1	30%	1	3	3	4	0.36	1.00	1.00	1.10
Ranking						3rd	2nd	2nd	1st
CSF 2	25%	2	3	3	3	0.40	0.83	0.75	0.83

Ranking						3rd	1st	2nd	1st
CSF 3	20%	2	3	3	4	0.36	0.60	0.67	0.73
Ranking						4th	3rd	2nd	1st
CSF 4	15%	2	3	4	3	0.27	0.45	0.55	0.50
Ranking						4th	3rd	1st	2nd
CSF 5	10%	3	3	3	4	0.26	0.27	0.33	0.37
Ranking						4th	3rd	2nd	1st
B1	25%	3	3	3	4	0.65	0.67	0.75	0.92
Ranking						4th	3rd	2nd	1st
B2	25%	2	3	3	4	0.60	0.67	0.75	0.92
Ranking						4th	3rd	2nd	1st
B3	20%	3	3	3	3	0.52	0.60	0.60	0.67
Ranking						3rd	2nd	2nd	1st
B4	20%	2	3	3	3	0.36	0.60	0.67	0.67
Ranking						3rd	2nd	1st	1st
B5	10%	2	3	4	4	0.18	0.33	0.37	0.37
Un-Weighted Scores:		30	47	53	**60**				
Ranking		4th	3rd	2nd	**1st**				
Weighted Total Scores:						5.59	8.83	9.80	**11.13**
Ranking						4th	3rd	2nd	**1st**

Figure 18 Options Criteria Scoring Summary

Capital Cost Methodology

3.32 This section provides an economic cost appraisal of the four shortlisted options described in above. The economic appraisal focuses on estimating the capital costs in accordance with the Health Premises Cost Guide, in keeping with Her Majesty's Treasury (HMT) Green Book guidance, the illustrative costs are derived from functional area estimates of each of the projects (based on Health Building Note Guidance but with cognisance of site limiting factors) and priced against the Health Care Premises Cost Guide (HPCG) as assessed by the UK specialist consultant.

3.33 The range of potential costs for the illustrative scheme is assessed by considering the relative influence of the Building Cost Information Service (BCIS) location factor. This costing methodology was presented to and approved by the Hospital Modernisation Programme board and the SRO and the Finance Business Partner in October 2018, the detailed cost forecast for the illustrative scheme is included in Appendix B

3.34 The economic costs for each option have been quantified on an outturn cost basis using several key assumptions and principles as follows;

- The Illustrative schemes for each project are priced using the Health Premises Cost Guide (HPCG) based upon the forecast areas required for each scheme as assessed by the UK consultant and in accordance with the Health Building Note and Health Technical Memorandum, the analysis of these costs is included in Appendix B;
- Benchmarked costs for abnormal costs, external works and design team fees are added;
- All costs are at a constant price basis.
- The base price year is 2018 and construction;
- Costs are not currently inflated;
- The costs do not include historic costs for visibility purposes;
- Location factors were assessed as a range of potential outcomes following the BCIS index, the Hospital Modernisation Programme Board approved this assessment, and it has been submitted to the Policy and Resources Committee for their approval; a summary of the impacts of Location Factor and the methodology of assessment is included in Appendix C;
- Optimism bias & contingency are included as assessed and approved by the Hospital Modernisation Programme board and a breakdown of this assessment is included in Appendix D;
- For assessment purposes all options and projects do not currently include Internal Staff costs, expected to be circa £368k per annum (covering Project Director, project management, project support, finance and data analysis and project communications) these costs will be added to all funding requests, and to Project Level business cases on a pro-rata basis;
- No provision has been included for VAT or GST.

3.35 The capital cost for each option is set out below:

Capital Costs and Ranking	Option 1	Option 2	Option 3	Option 4
	£M	£M	£M	£M
Capital Cost	£0	£34.3 to £44.3	£61.9 to £80.3	£72.3m to £93.4m
Option ranking	1st	2nd	3rd	4th

Figure 19 Option Cost Summary

Value for Money Assessment

3.36 In making value-based decisions HM Treasury Guidance recognises the value and usefulness of monetising qualitative scores to establish a clearer basis for understanding the relationship between project cost and the evaluated benefits.

3.37 This is achieved by using the Capital Cost and the Weighted Benefit Scores resulting from the nonfinancial benefits appraisal to calculate a Capital Cost per Weighted Benefit Point. The lower the cost per benefit point, the more cost effective is the option. This analysis of the cost and benefit associated with each option is set out below:

Options VFM Test	Option 1	**Option 2**	Option 3	Option 4
	£M	**£M**	£M	£M
Capital Cost	£0	£34.3 to £44.3	£61.9 to £80.3	£72.3m To £93.4m
Weighted Benefit Score	5.59	8.83	9.80	**11.13**
Capital per Weighted Benefit Point	0	£3.88 to £5.02m / per	£6.30m to £8.19m / per	£6.50m to £8.39m /per
Ranking	4th	**1st**	2nd	3rd

Figure 20 Option Value for Money Test

Application for Funding and the Next Stages

3.38 This programme business case defines the Illustrative outcome for the Hospital Modernisation Programme, its assessment is intended to provide the direction of travel in considering how best the HMP can support Health and Social Care's Transformation Programme in pursuit of the strategic goals in the Partnership of Purpose.

3.39 It should be noted that the delivery of the maximum benefits, both weighted and non-weighted, from the options is offered by Option 4 and therefore on a non-financial assessment basis Option 4 is the most beneficial.

3.40 Given that this PBC requests funding in principle for the whole scheme and specific funding for the Short Term Projects, Option 2 shows the current best value for money, the next stages must include a Development Control Plan to provide a concluding analysis on the economic and financial viability of these latter projects and resolve the Modernisation Programme in sufficient detail to articulate budget requests for the following MTFP(s). The next stage will be to seek approval of Outline and Full business case(s) via the governance route defined in the Management Case and request funding to progress the series of projects in the Programme over time.

3.41 The States of Guernsey requires a single point estimate for funding approvals and that this funding request sits within the current MTFP. Figure 21 below indicates the required funding annualised to progress option 2 (only the short term projects) and conclude the development control plan for the whole programme, for which subsequent funding will be sought via separate Business Cases in subsequent Medium Term Financial Plan cycles.

3.42 The costs in Figure 21 do not include the construction or full design costs for Project 3: Medical Specialist Group relocation as the illustrative scheme will require a feasibility study to define and agree it. Therefore, only the cost of the feasibility study is included as this stage.

3.43 The costs in Figure 21 include the ongoing internal costs required by the HSC project team to deliver the programme with the external Strategic partner.

Option		Year 0	Year 1	Year 2	Year 3	Year 4
1	Short Term Schemes	£1,580,320	£10,906,227	£15,096,057	£12,523,789	£2,316,690
2	Internal HSC Costs	£368,236	£368,236	£368,236	£368,236	£368,236
3	Total Per Annum	**£1,948,556**	**£11,274,463**	**£15,464,293**	**£12,892,025**	**£2,684,926**
4	Grand Total					**£44,264,263**

Figure 21 Funding Request

3.44 The costs in Figure 21 require a total funding request of **£44.3m** spread over 3 to 5 years, this will include the work required to carry out the Short Term Projects, complete the development control plan, conclude the feasibility study for the Medical Specialist Group's potential relocation and finalise the business case and funding requirements for the remainder of the programme, that will be all subject to separate Outline and Full business cases on a by project, or group of projects, basis.

Clinical Outcome Measurement

3.45 This programme revolves around a series of projects across the hospital with the aim of bringing the current hospital up to the required regulatory standards and provide a modern, flexible, and efficient hospital campus for future demands.

3.46 These assessments will be utilised in the subsequent project level business cases developed to OBC and FBC stages.

3.47 To support the future clinical outcome measurement of the projects defined in this Programme Business Case the following information was assessed:

- ED Attendance, Discharge and waiting times – 2014 to 2018
- Clinical Scorecard - Maternity & Children's Hospital Services Year 2017 & 2018
- Theatre cancellation reasons 2015_2018
- Theatre procedure comparison with BADS 2015 & 2016
- Theatre Postponements 2017 & 2018
- Annual ICU Audit Report 2015_2017
- Equipment Library Business Case Inc. add- V0l 8 Final draft
- Pharmacy Transformation Programme to include Organisational Skill Mix Review

3.48 The available data has been reviewed and analysed to appraise what measurable benefits could be identified, each of which are outlined in the following sections of this paper.

At this stage, we have not developed a detailed demand and capacity model for any part of the programme as that level of granularity will need to be undertaken as part of each individual project within the Programme Business Case (PBC).

3.49 The following areas identified in the review of the PBC have been excluded from Clinical Outcome Measurement as these have no modelling information available to support the benefit of undertaking these projects; they are both have financial assessment criteria included in the Finance Case.

- Proposal to relocate the Medical Specialist Group (MSG) onto the Princess Elizabeth Hospital (PEH) campus
- The establishment of a Private wing that has separate entrance and suitable facility for private patients

Project based assessment of Clinical Outcomes

3.50 The following provides an overview of each of the projects identified within the PBC and identifies clinical outcomes for each of the elements to support the continuation of the programme. Within the programme historical data has been analysed to understand the current utilisation of services associated with the proposed projects. This includes data up to October for 2018, meaning the instances referenced in the report are incomplete for the whole of the 2018 period.

Women's and Children's Project

3.51 The main benefit of this project is to reduce the distance between the maternity ward and theatres, as the current patient route includes reliance on lift transport. Increasing the risk on an emergency section outcome, which has been highlighted numerous times by the Nursing Midwifery Council. This project also includes the establishment of a separate adolescent unit within PEH. Its objectives include:

- To reduce time and distance from theatres.
- To develop a future women's and children's unit adjacent to theatres to reduce risk.
- Establish a suitable adolescent unit.
- Establish a facility to support dual trained qualified staff for the paediatric and neonatal units for efficiencies.

3.52 The National Institute for Health and Care Excellence (NICE) Performing caesarean section pathways (2018) states that a category 1 caesarean section and category 2 caesarean section should be undertaken as quickly as possible after making the decision, particularly for category 1. These guidelines also specify a decision-to-delivery interval to measure the overall performance of the obstetric unit which the following timescales;

- 30 minutes for category 1 caesarean section
- Both 30 and 75 minutes for category 2 caesarean section

In 2017 there were 5 patients who breached the NICE guidelines of a Category 1 caesarean section within 30 minutes.

In 2018 there have already been 4 patients who breached the NICE guidelines of a category C-section within 30 minutes and 19 who breached the 75minutes guideline for category 2 caesarean section.

Any category 1 breach is fully investigated and the result of this has identified the distance and location of theatres as one cause. The provision of a dedicated maternity theatre adjacency to the maternity unit should measurably reduce these breaches and risks to mother and baby whilst also improving privacy and dignity. A dedicated theatre within the maternity ward was assessed but ruled out due to the high cost of a theatre only for maternity use.

Adolescent unit

3.53 The benefit of the adolescent unit is to provide dedicated space for adolescents aged between 14yrs to 18yrs, providing age specific accommodation to this age range. It will also be designed to be suitable for use as a Child and Adolescent Mental Health Service (CAMHS), specifically designed to provide a safe and secure (ligature free) inpatient facility for patients suffering from mental health conditions. When not in use for this purpose it will provide a flexible inpatient provision for younger inpatients between the ages of 14 and 18 years with general medical conditions.

3.54 Reviewing the data provided it has been possible to identify through coding a requirement for one CAMHS place per year between 2015 and 2018. However, there have been increased episodes in 2017 and 2018, currently requests of up to four referrals are being received on a weekly basis. A lack of clinical coding of admissions during this period may not provide an accurate reflection of the position.

Dual trained paediatric and neonatal staff

3.55 Due to the Islands remote location from mainline specialised neonatal units the PEH provides limited care facility for neonatal patients, any babies requiring intensive or high dependency care will be transferred to specialist hospitals in the mainland for their clinical safety There is a fluctuation in the number of neonates each month requiring stabilising within the PEH NICU unit to be transferred to the UK or care within the local unit to be discharged and as a result there is a benefit for cross training of staff so that the specialised nurse can support both NICU and the paediatric ward.to increase efficiencies and staff retention which the proposed re location will support.

Project Clinical Outcomes based on Increasing Demand

3.56 To accommodate the increasing demand within the PEH it is necessary to increase capacity specifically in the following areas:

- Theatre suite merging the current day unit theatres
- Critical Care Unit
- Day Patient Unit
- Admission and Discharge Unit
- Equipment Library

Objectives of Demand based Clinical Outcomes

3.57 To expand capacity and flexibility for these areas and prevent the risk of postponement of elective surgery due to lack of capacity in the critical care unit or theatre.

To be able to merge theatre and DPU staff for efficiencies.

To support the development of day surgery reducing length of stay within the hospital, improving patient outcomes and recovery which is essential for the aging population.

Critical Care Unit

3.58 Critical care is provided when someone is seriously ill and requires intensive treatment and close monitoring. Critical care is often provided to assist patients after major surgery to help recovery or provide close monitoring due to the nature of the surgery.

3.59 There are currently seven beds in the PEH with an annual utilisation of 81.8%. In 2017 22.2% of all critical care beds were planned surgical admissions with admissions from theatre providing 34.6% of all admissions to critical care.

3.60 In the past three years, there has been a consistent cancellation of planned surgical procedures as no critical care bed was available. It equates to around 6% of all surgery cancellations across the board (inclusive of both elective and day case surgery) and approximately 23% of elective surgery cancellations so far in 2018; 96 elective surgeries cancelled in total. When the data is looked at in focus, during certain months (including winter pressures) the lack of Critical Care beds has been the cause of up to 60% of elective theatre cancellations; of ten elective theatre cancellations in January six were caused by a lack of critical care beds. By virtue of a Critical Care bed being required, these cancellations may also represent the more urgent and complex surgery including cancer pathways, where cancellation have the most significant impact.

3.61 The purpose of an increase in the critical care unit is to enable improved service and measurably reduce postponement of surgical procedures.

Day Patient Unit

3.62 To support the development of enhanced day surgery pathways and reducing length of stay within the hospital, a review of the types of surgery undertaken as elective surgery or requiring an inpatient stay over 23 hours has been assessed against the British Association of Day Surgery (BADS) recommendation's.

3.63 The data has shown that with further theatre capacity and with adjustment to treatment plans, additional conversion to day surgery could be achieved resulting in a reduction in bed stays (overnight stays) by over 500 bed stays per annum as well as improving patient outcomes.

Orthopaedic Ward

3.64 To relocate the orthopaedic surgical ward adjacent to the general surgical ward into an area that is suitable for the requirements for orthopaedic surgery.

3.65 To allow separate areas for trauma and elective orthopaedic surgery currently difficult to achieve which is now mandatory within the NHS to prevent infection.

This will also give flexibility to prevent movement of patients between bed bays or wards which currently frequently occurs.

3.66 Provision of a dedicated fit for purpose Orthopaedic ward will ensure that orthopaedic patients receive care in a setting which meets current best practice guidance relating to separation of elective and trauma

orthopaedic patients. This is not always possible currently due to the lack of appropriate beds and flexibility of the hospital design, whilst ensuring close proximity to theatres. This project is also aimed to improve patient safety by reducing the risk of post-operative infections and enable dedicated, skilled orthopaedic staff to support patient's recovery.

3.67 In the past three years, there has been a consistent cancellation of planned surgical procedures due to a lack of appropriate surgical or critical care beds. This equates to approximately 55% of all elective surgery cancellations so far in 2018. When the data is looked at in a focus for orthopaedic beds, bed shortages equate to approximately 20%, or approximately 19 out of 96, of all elective surgery cancellations up to October 2018. The problem related to surgical bed shortages during certain months (specifically during winter pressures) have been the cause of between 80% and 100% of elective theatre cancellations. Improvements in adjacency and flexibility will measurably support better surgical bed capacity and reduce theatre cancellations.

Pharmacy

3.68 To improve and expand current pharmacy facilities to support an automate pharmacy (automation – will be reviewed as a separate project outside of this programme).

3.69 To reduce risks with the current condition of the facilities and improve efficiency and productivity with automation designed to further reduce prescribing errors.

3.70 According to research in the Pharmaceutical Journal, The Wirral Hospitals NHS Trust reported a 50% reduction of dispensing errors in the four months after implementing a pharmacy robot. Similarly, in a separate study, the number of items dispensed per pharmacy technician per hour rose from 10 to 15 or more after implementation at Arrow Park Hospital.

Emergency Department (ED)

3.71 Expansion of ED and develop and overnight admission unit into the vacated space by the current Day Patient Unit.

3.72 To support the current increase and future demands of the ED department that are now undertaking extensive tests on patients in order to reduce admissions and bed stay. An overnight unit for assessments will allow this to take place in a more suitable environment overnight prior to either discharge or admission.

3.73 In the last 5 years between 5 and 7% , from a total of between 16,000 and 18,000 per annum, of ED attendances are admitted, this is the highest proportion of discharges from the ED. whilst it is not yet understood if patients have a lengthy inpatient stay, an overnight assessment unit is anticipated to reduce the number of patients admitted. It is anticipated that the introduction of a short stay assessment unit would reduce breaches and improve patient privacy and dignity.

3.74 The project would expect to provide a measurable benefit against these baselines

Pathology

3.75 To expand the current Pathology services and evaluate the merging of the PEH and states laboratory services for clinical efficiencies.

3.76 To improve conditions within the current facility allowing the appropriate space the equipment requires and evaluate improvement in efficiencies if location of both laboratories was undertaken.

3.77 Lord Carter's 2008 and 2016 reports into pathology optimisation recommend the consolidation of pathology laboratories to maximise existing capacity and savings from economies of scale. This recommendation is endorsed by international and NHS evidence that sustainable pathology services resulting from consolidation and modernisation increase both quality of service for patients and efficiency. This project will provide modernisation, efficiencies and quality improvements for patients as well meeting current guidance in the NHS and internationally.

Equipment Library

3.78 To establish a dedicated and appropriate space for the Medical Equipment library and its servicing department within the main hospital.

3.79 To maximize efficiency for procurement by safe controlled sharing and servicing of medical equipment.

3.80 To ensure all equipment is serviced, ready for use and immediate support provided to breakdowns when time can be critical to patient outcomes.

3.81 Improvements to the existing equipment storage will support patient safety within the PEH. The Emergency Care Research Institute (ECRI), have stated that health technology hazards can come in many forms. "They can be caused by inappropriate human-device interaction, such as incorrect reprocessing techniques, improper device maintenance, and poor recall management. They can also be problems that are intrinsic to the devices themselves: ease-of-use issues, design flaws, quality issues, and failure of devices to perform as they should, can all contribute to device-related events" (Szczerba, 2015).

3.82 The Department of Health (DoH) Medicines and Healthcare Products Regulatory Agency (MHRA) is responsible for monitoring and alerting users to faults, issues, and recalls of medicines and healthcare products. This includes medical equipment and devices.

3.83 The first hospital to design for patient safety, St Joseph's in Wisconsin, USA included an equipment library and informed procurement processes where orders are controlled and risk-assessed. The equipment used throughout the hospital and the storage locations for the equipment were standardised and contribute to improved patient safety within the hospital (NPSA, 2006).

3.84 The inclusion of an equipment library, and equipment decontamination facility will improve patient safety within the PEH. The development of an Equipment Committee would also provide a potential reduction in procurement activity and ensure procurement standardisation throughout the hospital further improving patient safety.

Economic Case Summary

3.85 This Economic Case has defined the method of how projects were long-listed, short-listed, prioritised, and assessed to define the Hospital Modernisation Programme.

3.86 This Economic Case has defined a set of Clinical Measures that will form the basis of future Outline Business cases.

3.87 This Economic Case has concluded on a preferred option of Essential Projects for which funding will be sought from the States of Guernsey.

4

4.0 The Commercial Case

4.0 The Commercial Case

4.1 The Commercial Case sets out the procurement arrangements for the PEH Modernisation Programme's projects and key activities. It is considered at a broad level within the Programme Business Case (PBC), however more detail will be included within each project as they progress into a series of more detailed business cases.

4.2 There are two key areas of procurement associated with the PEH Modernisation Programme;

- Procurement to secure external consultants as a Strategic Partner who specialise in the field of Health Care Planning; Design; Cost, Risk and Project Management to ensure accurate scoping and build of the projects and give expert support to the internal team.
- Procurement to appoint, where possible local, contractors to undertake the building and or refurbishment work require by the programme.

4.3 The programme consists of a minimum of twelve projects, each grouped according by priority, dependency, and importance. The staged approach to the ongoing development envisages following the approval of the PBC;

- Appointment of a Strategic Partner;
- Detailed design and assessment of the projects encompassed in this PBC;
- Creation and approval by the Health and Social Care (HSC) Modernisation Programme Board of a Development Control Plan, showing the staged delivery of each of the projects in the programme;
- And subsequent creation and approval of an Outline Business Case (OBC) and Full Business Cases (FBC) for each project or group of projects forming the programme prior to the commencement of construction works.

4.4 Each OBC and FBC will be in the Five Case Format and will provide a detailed analysis of the projects contained within it to be submitted for approval. The twelve projects are expected to be grouped into a series of OBC and FBC's as is relevant to the progression of the Development Control Plan.

Procuring Specialist Resource

4.5 The Hospital Modernisation Programme will require external specialist resource where a skills gap exists within the HSC programme team or to minimise impact on normal business. The following specialist resource is likely to be required for;

- Specialist Health Care Planner (Able to: plan hospital layouts/services in accordance to NHS guidelines)
- Specialist Health Care Architect (Able to: design hospital layouts in accordance to NHS guidelines)
- Construction Cost Advice (Able to: provide detailed hospital construction costs, benchmarking, contract procurement and contract management)

- Business Case Support and analysis expertise (Able to: obtaining hospital data, develop appropriate analysis to determine future needs)
- Engineering; structural, mechanical, electrical, civils and specialist (Able to: design an appropriate new building/refurbish existing areas ensuring these are properly provided with services needed both now and, in the future,)
- Senior Finance Accountant (Able to: ensure programme remains on budget, costs are allocated to their proper centres, etc.)

4.6 The table below indicates provisional milestones for the specialist resource procurement route.

Key Milestone	Completion Date
Completion of Expressions of Interest (EoI) process	August 2019
Completion of Invitation to Tender (ITT) process and vendor selection	November - January 2019
Contract negotiation completed	January – February 2019
Strategic Partner - Contract approved and signed	April 2019 following approval by the States
PEH Hospital Modernisation PBC, Policy Letter and funding proposal approved by the States	March –April 2019

Figure 22 Key Project Milestones

Procurement Route

4.7 There are a range of options to secure additional resource for the PEH Modernisation Programme required in addition to the Strategic Partner. The route chosen will depend on the type of resource required, the nature of the work and the associated value. The three main routes are;

Internal Resource

4.8 Where there is internal resource able to effectively deliver a programme /project role or output, the programme will prioritise this route. This may involve seconding staff from within the organisation via an open recruitment process or using resource from internal resource teams such as the Change & Transformation Resource Team (CTRT).

4.9 The recruitment and selection process for secondments would require input from the Programme Director for the service areas affected within the programme.

4.10 Using internal resource should promote greater value-for-money by ensuring the organisation is well positioned for any future change and that knowledge and expertise is kept within the organisation. These advantages will need to be balanced against any impact on business-as-usual work.

Contract Resource

4.11 Where necessary, the contract market will be explored when the required skills are not available internally and the resource need is only temporary. As part of this route, the States of Guernsey may directly advertise the necessary role – through the CTRT. A recruitment process will be carried out in both cases, including interviews with candidates.

4.12 The, Senior Responsible Officer (SRO) and Programme Director, will be involved in recruitment and selection and will need to approve any contract.

Consultancy Resource

4.13 Where specialist expertise is required that cannot be obtained internally or resourced from the contract market, then a consultancy firm will be used. The States of Guernsey Consultancy Framework will be utilised as part of this route. The Consultancy Framework is a structured agreement for management consultancy services that sets out contract terms; it includes a diverse range of fully-vetted suppliers appointed via a competitive tendering process. There are a range of disciplines covered under the framework.

4.14 A market testing exercise will take place with suppliers on the relevant tender submitted to ensure that the programme's requirements are achievable and that the market has the capability and appetite to undertake the work by way of seeking 'expressions of interest' for projects/s. The specification for the work will then be released to suppliers for their response. The standard framework agreement will be used, with the requirements inputted based on the tender specification and the selected response.

Evaluation and Selection Process

4.15 Evaluation criteria will be developed in detail as part of the final procurement strategy and the development of the specification. It is anticipated that evaluation criteria will be split between quality and price and will as a minimum include the following elements;

- Fit with capability requirements,
- Ease of customisation and future flexibility,
- Integration with existing services and other States services,
- Previous experience,
- Knowledge transfer and support requirements,
- Benefits for the local economy, and

- Initial and ongoing costs.

4.16 An evaluation panel will be established (using members of the programme board and specialist procurement advisors) to ensure that the selection process is comprehensive and considers different perspectives on programme/project needs and will define the selection criteria for consultants and contractors.

4.17 The selection criteria will be formulated by considering the programmes objectives, which brings a focus on tenderers having to demonstrate a capability of delivering a complex construction project in a remote location, involving an appropriate level of on-Island resources, and ensuring a high-quality facility is delivered.

4.18 The first selection criteria will be based upon the results of the Expression of Interest (EOI) questionnaire and will include selection criteria relating to the following themes.

EOI Evaluation Theme	Evaluation Approach
Company Information	PASS / FAIL
Declarations and Conflicts of Interest	PASS / FAIL
Insurances	PASS / FAIL
Financial Status and Legitimacy	PASS / FAIL
Experience and Capability	SCORED
Environmental Management	SCORED
Cost of Deployment (day-rates)	SCORED

4.19 The EOI process will identify companies that can demonstrate their experience and track record of delivering works of a similar scale and complexity as well as meet other due diligence criteria. The EOI process will be open to all applicants and will be conducted on the Channel Islands Tender Portal, with the assistance of the central Procurement Team.

4.20 At this point the intention is that an Invitation to Tender (ITT) will include, as a minimum, selection criteria relating to the following themes:

ITT Evaluation Theme	Evaluation Approach
Health and Safety	Scored
Island Interface and use of Supply-Chain	Scored
Resource, Management and Delivery	Scored

Figure 23 ITT Evaluation Themes

4.21 Following the ITT evaluation, each tenderer will be invited to an interview to answer a series of predefined questions to assess their ability to deliver the contract to meet the procurement strategy objectives.

4.22 Careful consideration has been given to ensure the most appropriate tender evaluation scoring ratios factoring in current levels of detailed design information available, the relative importance of each element while maximising the innovation, build ability, and value for money.

4.23 The ITT scoring ratios will be:

Quality – 60%	Price – 40%
Written response – 40%	Unit Rates for Project Team
Interview – 20%	

Figure 24 ITT Scoring Ratios

Contract Development and Approval

4.24 A draft contract will be included within the ITT package, however final contract terms and duration will be developed as part of the commercial negotiations with the preferred supplier.

4.25 The procurement approach and preferred solution will be approved and signed off by the programme board, prior to seeking the approval of Policy and Resource Committee who will have delegated authority for some projects. Where a project exceeds the agreed threshold, we will need to approach the States of Deliberation with our Final Business Case submission.

Appointment of the Strategic Partner

4.26 The Invitation to Tender (ITT) document has been issued for the Strategic Partner defining in detail the approach to this procurement.

Procuring contractors to support the programme

4.27 There are several potential contractor issues that may occur as part of the PEH Modernisation programme, these include;

- Capacity and capability requirements,
- Ability to deliver/resource projects on time and within budget,
- Previous experience,
- Knowledge transfer and support requirements (e.g. between our Estates team and the contractors),
- Not achieving the required benefits, and
- Unexpected revenue impact.

4.28 The procurement process required will depend upon specific projects within the programme and the level of funding allocated. The procurement route will be described in detail for each project within the project's OBC and FBC, remaining aligned to the relevant States of Guernsey procurement rules.

4.29 It is expected that a detailed procurement strategy for the procurement of the contractors will be part of the works for the Strategic Partner and will be included within the Development Control Plan.

Risk Transfer

4.30 The management of risks is fundamental to the successful delivery of this programme and associated project's. Through this process, a programme risk register has been developed and managed by the Hospital Modernisation Governance Board, noting that all forthcoming projects will also have specific risk registers developed and monitored and reported on, each project will as it develops have a detailed risk register that will be closely monitored and risks escalated to the Programme Risk Register.

4.31 The general principle is that risks should be passed to 'the party best able to manage them' or where it is established responsibility lies, subject to value for money. The purpose of the contracting strategy is to strike the balance between risk allocation and contractor incentivisation.

4.32 An initial assessment of risks and allocation of responsibility between client and contractor has been undertaken and a summary of this can be found in the figures below;

Risk Category	Potential allocation		
	States of Guernsey	Strategic Consulting Partner	Shared
1. Design risk			✓
2. Construction and development risk			✓
3. Transition and implementation risk			✓
4. Availability and performance risk			✓
5. Operating risk	✓		
6. Variability of revenue risks	✓		
7. Termination risks	✓		
8. Technology and obsolescence risks			✓
9. Control risks			✓
10. Residual value risks	✓		
11. Financing risks	✓		
12. Legislative risks			✓

Figure 25 Risk Transfer Matrix

Outline arrangements for risk management

4.33 The risk management procedure adopted by States of Guernsey follows guidance outlined in the draft Programme Execution Plan is supported by the external specialist advisors.

4.34 A programme Risk Register was established at the beginning of the programme, this was updated by the Programme Governance board and will be developed through each subsequent project stage. The register operates on industry standard principles by recording:

- A description of each risk and the scope of its potential impact upon the project scored in the range 1 – 5 with 5 representing the greatest impact;
- A summary review of the probability of each risk occurring scored in the range 1 – 5 with 5 representing the highest probability; and
- Risk mitigation actions to be undertaken in the next stages of the PBC.

4.35 To assist judgment of the relative effects of each risk boundaries have been established for each score graduation as set out below:

				Consequence / Impact			
			Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**
			1	2	3	4	5
Likelihood	Almost Certain	5	5	10	15	20	25
	Likely	4	4	8	12	16	20
	Moderate	3	3	6	9	12	15
	Unlikely	2	2	4	6	8	10
	Rare	1	1	2	3	4	5

Figure 26 Risk Scoring Matrix

4.36 A full risk register has been developed on this basis to provide a comprehensive list of all risks to the programme.

4.37 Each risk has been categorised and assigned an impact, likelihood, and appetite score that has been utilised to develop an overall residual risk score. The Risk Register is a live document and will evolve during the procurement and indeed over the course of the programme. The full Risk Register is included in Appendix E

4.38 Each risk will be allocated to an individual or individuals who will be responsible for managing the risk. A mitigation plan will be developed to prevent the risks from escalating into issues.

- All risks have been scored to establish a risk profile this will later be added to the contingency budget or the optimism bias calculation. These sums will later be included in the overall cost for the programme. A summary of risks is identified below:

Short Title	Risk Description	Cause	Control Adjusted Risk Score
Asbestos	The risk that the discovery of unknown asbestos causes delays and extra cost.	Disturbance of asbestos that was not identified in survey.	20
2020 Election	The risk that the political landscape changes resulting in a change in political support and direction.	2020 election change of politicians on HSC Committee.	12
Treasury / Portfolio	The risk that capital funding is not supported in the next portfolio 4-year period resulting in non-completion of the programme.	Capital fund in agreed in four yearly tranches and we are presently half way through this period.	12
Exchange rate	The risk of Brexit causing devaluation of sterling and therefore influencing the currency exchange rates and resulting in higher than predicted capital expenditure.	Currency fluctuations larger than planned for because of Brexit or global market shocks.	12
Planning/Building Control	The risk that Planning/Building Control may restrict and limit most efficient use of the site which will impact the Development Control Plan and subsequently restrict future expansion and flexibility in the programme	Planning/Building Control object to changes that HSC submit. Future DCP is unknown at present Objection by neighbouring properties or politicians.	12
Allocated Budgets	The risk that the costs for essential projects within the programme may exceed the allocated budget resulting in delay.	Unpredicted overspends on essential projects impacting total Capital funds which would impinge on subsequent projects.	12
Stakeholders/partners	The risk that some stakeholders are vocal in their objection to the programme resulting in reputational damage and delays to the programme.	Stakeholder may wish to change a specification or the way the works are implemented.	9

Programme Sign-Off	The risk is that the Modernisation Programme cannot meet the sign-off deadlines to achieve the policy letter submission date for the States, resulting in a delay to the commencement of the programme.	Short timescales/ambitious programme/complex sign-off	8
Project resources and expertise	The recruitment of the required expertise for the programme may not be available.	Due to limited on-island availability of resources and access to off island suppliers is limited.	6
Staff Morale	The risk that HSC staff may be change averse to the programme objectives resulting in a delay to the programme.	Lack of workforce engagement.	6
Media Management	The risk of negative media impact resulting in organisational reputational damage.	Poor publicity.	4

Figure 27 High level programme risks

4.39 Risk evaluation and scoring was led by the States Risk Officer and involved all members of the workshops. Members of the Programme Board will undertake regular assessments of the risk register throughout the programme and where required through each project to ensure that risks have been actively managed and mitigated through good planning and design.

4.40 The Risk register will continue to be maintained throughout the procurement and delivery phase. In each case, a nominated Project Manager will be assigned as the owner of each risk and allocated the responsibility of ensuring that the agreed mitigation defined in the Risk register is fully implemented.

4.41 Following approval of the PBC and as part of their initial appointment the Strategic Partner will develop in conjunction with the Programme Director a Programme Execution Plan (PEP) that will include, amongst other matters, the ongoing responsibilities of all parties in the management of Risks and the enhanced methodology of their assessment, reporting and mitigation.

Commercial Case Summary

4.42 This Commercial Case defines the outline procurement approach of the PEH Modernisation programme for the Strategic Partner, Supporting Resources and Construction Contractors, it affirms that at this stage the procurement is underway and on programme. The development of a detailed Procurement Strategy will form part of the next stage of the programme and will be the responsibility of the Strategic Partner.

4.43 This Commercial Case defines the live approach to Risk Management on the PEH Modernisation programme, affirms that it is appropriate for the stage of development of the programme and that this

approach will be developed in the subsequent stages in an ongoing evolution of the Project Execution Plan.

4.44 This Commercial Case forms the foundation for the development of subsequent Commercial aspects of the Outline and Full Business Cases that will be developed following the approval of the PBC, agreement of a Development Control Plan, and creation of project-based assessments of the programme.

5

5.0 The Financial Case

5.0 The Financial Case

5.1 This Programme Business Case (PBC) seeks the approval of the States of Deliberation (States) for investment of capital funding at an estimated cost of a range of £72.3million to £93.4million for all the projects identified within the 2018 workshops that were facilitated by Policy and Resources to be completed over a period of 10 years in order to support future requirements and developments to support Health and Social Care's Partnership of Purpose objectives

5.2 This capital cost is detailed within the Economic Case of the PBC but only at a high financial strategic level to give the predicted financial range over the ten-year period that will be required to support the programme. Each individual project within the programme will require a detailed project level business case with options and a full capital and revenue costs that will need sign off by Policy and Resources or the States depending upon total cost and delegated authority before proceeding.

5.3 To assess the revenue impact to this programme each project has been evaluated for the current service level and the proposed development and any impact to staff and services that may affect the revenue cost of running the clinical area. Not all potential revenue impacts have been modelled as at this stage there is insufficient development of each project for a detailed assessment, therefore the revenue financial components will be added in full detail for each option to the future business cases as they proceed within the programme.

Revenue Implications

5.4 For each component of the individual projects it has been considered whether the new service or location would result in a change to pay costs, non-pay costs and facilities and estates costs in that service area.

5.5 In some cases, it has not been possible to estimate even an outline impact on pay or non-pay but an indication that these challenges exist has been flagged and may require extensive modelling when the implications are better understood.

5.6 The revenue assessment included in the PBC is in order to demonstrate the potential revenue impacts of each project and the programme and whilst some costs are based upon current evidence and projections they will require full validation in later business case approvals.

5.7 The level of Hospital service design in the PBC limits the ability to provide cost benefits and cost savings realised by the transformation of the Hospital and each project or group of projects will be subject to an outline and a full business case, within which will be a fully developed cost revenue model, demonstrating both the rising costs and the actual cost benefits to be delivered. These full business cases may be used in identifying any revenue impact within the normal annual MTFP process but will not also actually request the funding as any revenue impact will follow the prioritisation process of HSC annual budget evaluation.

5.8 Although projects are still in the planning phases initial consultation does identify there may be a need for an increase in single rooms in future designs to give improved flexibility and dignity to the patient. There is no conclusive evidence to support an increase in registered nursing staff unless there is an overall

increase in bed numbers, however, it is thought single rooms may affect the requirements of unregistered staff to support and the housekeeping costs.

5.9 Changes in maintenance regimes during and beyond the programme have been assessed on the basis of their impact on backlog maintenance. As older facilities are replaced with newer ones the impact of these changes will be seen in the reduction in costs of repairing, with the high cost of repair of the older buildings being replaced with more structured planned maintenance regimes. An example of this is the ongoing management of asbestos in theatre plant rooms.

5.10 Some additional maintenance costs during transition may be incurred but these have been included in the non-works costs estimates of the capital projects.

5.11 Single rooms with en-suite bathrooms do increase cleaning costs and an attempt has been made to estimate these. A paper published in 2015 reported on the development of a single room hospital in an NHS Trust and this has been referenced to calculate these costs as there is no other evidence to source at present. The study revealed an increase in cleaning costs of 42.62% when moving from a 100% multi-bedded facility to 100 single rooms. The increase was higher when changing from 50% single 50% multi-bedded to 100% single beds. 42.62% has been used as an indication for increased cleaning costs for some areas, however, the study also stated, "*While this is clearly a considerably higher annual cost for a trust, spread over the lifetime of a hospital in relation to medical costs, which may be 20 times higher, this would be marginal*".

Women's and Children Project

5.12 The Women's and Children's project consists of the following components and the revenue implications have been considered for each one;

- relocation of Maternity Ward to closer proximity to theatre;
- relocation of Paediatric Ward to maintain proximity to Maternity including a ligature free room to accommodate CAMHS patients;
- creation of adolescent unit within the Paediatric unit for older children that would be more comfortable in an adolescent setting; and
- relocation of NICU to maintain proximity to Maternity and Paediatrics.

Relocation of Maternity Ward

5.13 The primary reason for the relocation of the Maternity ward is to reduce clinical risk due to the location of the ward in proximity to the theatres. The relocation provides an opportunity to improve the service to the service users.

5.14 It is not the intention to increase the number of staffed beds on the Maternity Ward but to increase the number of single rooms to allow delivery to take place in the rooms and to allow privacy and dignity to the mothers and babies. The birth rate in still declining in Guernsey and the population of 18-64-year-old is also forecast to decrease modestly year on year.

5.15 There is no plan to increase the staff FTE in the Maternity ward, however, improved pathways will help to improve patient satisfaction and improve delivery of service. Single room designs can increase the ratio of nurse: bed requirements but this is not predicted for the maternity ward. At the PEH there are currently 3 single rooms used for patients. The number of single rooms may increase but the occupancy rate for the maternity ward in 2017 was approximately 69% which allows a change to the layout of the ward whilst retaining the capacity for high demand periods.

5.16 Relocating the maternity ward will greatly eliminate the risk of exceeding the 30 minutes 'decision to delivery' recommendation for Category 1 Caesarean Sections but the total reduction of the risk will require an anesthetists and theatre nursing staff to be available onsite 24/7 for these emergency procedures. This has not been costed as part of this Programme and a separate business case external to this Programme would be required to obtain the necessary funding. It is recognised that reducing this risk by location and staffing support could save significant costs for continuing care to mother and child due to poorer outcomes and/or litigation.

Relocation of Paediatric Ward

5.17 The relocation of the Pediatric Ward would provide opportunity to change the layout and improve the service to children and adolescents. The Pediatric ward are requesting additional FTE as part of a separate business case to create a Paediatric Assessment Unit as an extension to the current service. When the ward is fully established to the agreed FTE the proposed new layout could be accommodated without additional establishment. There is a recognition there may be additional training costs for specialist training on how to treat CAMHS patients.

5.18 Due to there being no clinical coder at the PEH for a significant amount of time between 2016-2018 it is very difficult to obtain accurate data for that period. However, statistics collected by the ward from Jan to Oct 2018 recorded 218 beds days for CAMHS patients. This means that on average the ward is supporting a CAMHS patient 70% of the time, and we know that CAMHS demand is growing both within the Bailiwick and elsewhere.

Creation of adolescent unit within the Paediatric unit

5.19 The creation of an adolescent unit with 2 beds and a seating area is proposed to give a more suitable environment for this age group. If the Paediatric ward is appropriately staffed for business as usual, no additional staff are required.

Relocation of NICU

5.20 NICU would need to continue to be relocated close to both the Paediatric and the Maternity units. It is proposed to cross train staff to be able to work across both the NICU and pediatric ward so additional training costs may arise, however, the need for bank staff and overtime will decrease due to the flexibility and efficiency of dual trained staff.

5.21 Figure 28 below shows the revenue costs for the Women's and Children's project

	Pay costs (per annum)	**Non-pay costs** (per annum)	**Overheads** (per annum)
Relocation of Maternity Ward	No change	None forecast	Small increase in housekeeping
Relocation of Paediatric Ward	Training costs	None forecast	None forecast
Creation of adolescent unit within the Paediatric unit	No change	None forecast	Small increase in housekeeping
Relocation of NICU	Training costs	None forecast	None forecast

Figure 28 Revenue Costs for Women and Children

Theatre, Critical Care and Day Patient Unit

5.22 This project consists of the following components and the revenue implications have been considered for each one:

- Merging of theatre suite and Day Patient Unit theatres including Endoscopy.
- Creation of an additional theatre or the space given to allow one in the future
- Increase in the number of critical care beds
- Improving patient flow in the Day Patient Unit by creating a new admission and discharge unit to admit all patients and to accommodate those patients able to recover in a less acute environment.

5.23 To accommodate an additional theatre, increase the number of critical care beds and improve the Day Patient Unit a new purpose-built wing is proposed as a possible solution.

5.24 An assumption that a purpose built new wing is the preferred option is made here to provide an indication of the impact on utility and housekeeping costs.

5.25 The merging of the theatre suites should not result in increased staff but should allow more flexibility and efficiency. An additional main theatre would enable more surgical sessions to be allocated; Orthopaedic surgery would benefit from this the most and would help prevent future backlogs building up, as per the current climate, and would allow some procedures currently done off-island to be brought back on island. The financial benefits from this will be quantified following additional informed modelling at a later stage.

5.26 The requirement for an additional theatre will be assessed prior to the commencement of the project business case. For completion, the costs for an additional theatre have been included.

5.27 The increase in the number of critical care beds from 7 to 10 by 2021 and to 12 by 2031 will necessitate an increase in the staffing FTE on the ward. An increase in the number of beds was recommended

following the modelling of bed capacity planning for 2021 & 2031 as part of the 'Annual Audit of the ICU 2017' to cope with increasing demand and to prevent frequent cancellation of surgical procedures. The CCU will require a space to accommodate 12 beds over a period of time and pay costs for these have been calculated over this period of time. The nurse: bed ratios for critical care are 1:1 for level 3 beds and 1:2 for level 2 beds. The use of the increased beds in CCU are dependent upon adequate medical cover which is being reviewed as part of the Royal College of Anesthetists an aesthetic review which is currently underway considering differing models of care to provide 24/7 Registered Medical Officer cover to the rest of PEH, which may be a team of advanced nurse practitioners.

5.28 A shortage of critical care beds could necessitate critically ill patients being sent off-island. The average cost of an emergency medical charter flight to the UK in 2018 was £4,000.

5.29 The Day Patient Unit does not anticipate any increase to staffing levels because of the Modernisation of the PEH Programme, however, improvements to the flow of patients from admission to discharge would enable an increase to the number of day cases per day.

5.30 Through these changes to the Day Patient Unit it is also envisaged that several occupied bed days can be avoided on the inpatient wards by increasing day patient procedures. Specific procedures undertaken by the PEH have been identified that provide opportunity to reduce the length of stay from 1 or 2 days to zero (day case). The average cost per day of a general surgical bed day was between £625 and £780 in 2015, the most recent financial information available in a granular format, (excluding indirect services e.g. theatre, pathology etc. and surgeons theatre time); if unnecessary bed days could be removed this could result in significant savings.

5.31 Figure 29 below illustrates the opportunities available to do more day cases. More recent data is not possible due to incomplete clinical coding.

Procedure	BADS target for day cases	PEH actual 2015
Primary Repair of Inguinal Hernia repair	83%	32%
Laparoscopic cholecystectomy	60%	21%
Circular stapling haemorrhoidectomy	80%	52%

Figure 29 Opportunities for increasing day cases

5.32 Housekeeping and utility costs will increase because of the increased footprint of a new extension. The impact has been calculated assuming an increase in the size of the campus by 4500m^2. Estates costs are not expected to increase because of the additional areas; new and revamped clinical areas should require less attention; however, technological advances and new equipment warranties would mean the demand for estates work would not diminish therefore no decrease to revenue cost. However, during the transition period it is foreseen that additional staff will need to be in place to manage this. This cannot be quantified until it is known which projects are going ahead and the order of the projects.

5.33 Figure 30 below shows the revenue costs for the changes to the Theatre suite, CCU and DPU.

	Pay costs (per annum)	Non-pay costs (per annum)	Overheads (per annum)
Merging of theatre suite and Day Patient Unit theatres including Endoscopy.	No change	No change	Housekeeping and utilities calculated as part of the additional sqm created by the new wing
Creation of an additional theatre	Increase to nursing costs £450k – dependent upon additional time slots for surgeons. Additional Consultant costs have not been calculated.	Increase to Medical Supplies £500k to £850k	
Increase in the number of critical care beds	Increase to nursing costs £1.2m by 2021 rising to £1.6m in 2031	Increase £138k by 2021 rising to £230k by 2031 (medical supplies and drugs)	
Improving patient flow in the Day Patient Unit	Training costs	Unable to quantify as no modelling done on increased number of procedures	
Proposed New Wing to accommodate 5 main theatres, increased CCU capacity and Improved DPU department	See above	See above	Housekeeping increase within the range of £63k to £230k Utilities increase within the range of £110k to £220k Estates increase pay costs unquantified to cover transition period

Figure 30 Revenue Costs for Theatre, CCU & DPU

Equipment Library

5.34 The Modernisation Programme includes a project to establish a full equipment library facility within the PEH development to ensure medical equipment is logged, serviced and maintained and to ensure equipment is safely stored and adequately shared between departments. This will allow more efficient

use of equipment and prevent the current individual storage by departments which often results in increased procurement costs.

5.35 The new facility does not increase the staffing FTE and, therefore, there is no impact to revenue costs predicted through implementing these proposals.

Transport and Parking

5.36 There are unlikely to be any revenue implications from this project. The current travel strategy being funded by Environment and Infrastructure will support a new transport and parking facility at the hospital aimed at reducing parking pressures which will prevent missed appointments and stress to service users.

Staff Facilities

5.37 The proposal to improve staff facilities has been discussed within this PBC. However, due to the recognition from exit interviews feedback and the present low retention rate this project has been supported by property services and is now being funded by a separate capital route outside of this Programme.

5.38 The new proposals do not impact revenue costs; however, they may assist with retention of staff due to poor staff facilities being referenced in exit interviews, which will inadvertently save on recruitment costs and improve staff morale.

Private Wing

5.39 Victoria Wing, the current private patient facility, is outdated and the private patient service currently offers little more in addition to that offered to contract patients. The medical wards are more modern due to a more recent refurbishment and consist of some single rooms and, therefore, are superior in many ways to those on the private ward. In addition, incentives are offered to patients by insurance companies and employers to not use their private health insurance cover.

5.40 There is very little data available to HSC on the number of people living on island with private health insurance. The Channel Islands Competition & Regulatory Authorities review of primary healthcare published in 2015 found just under half of surveyed respondents were covered by some form of insurance cover for all or part of their primary care costs. This does not signify how many would have secondary healthcare cover.

5.41 It is thought that a refurbished ward with an increased service offering for private patients would incentivise patients to utilise their private health insurance more readily in the future. However, due to the lack of data, it is difficult to estimate the maximum private patient income that can be derived from this. In addition, there is no current business plan indicating the potential income generation that could be achieved with a specific focus on increasing private patient income. Therefore, for the purposes of this business case a conservative one-off 10% growth has been used in the estimated completion year with no growth for subsequent years.

5.42 The revenue cost impact of a newly refurbished ward should not result in increased pay costs as there is currently unused capacity on this ward (occupancy rate in 2017 was 62%) and half of the occupied beds days in 2017 were used by contract patients. Other wards would have to accommodate those contract patients and modelling shows the surgical ward should have capacity for this.

5.43 Figure 31 shows the revenue implications for a revamped Private Patient Wing:

	Pay costs (per annum)	Non-pay costs (per annum)	Overheads (per annum)	Income (per annum)
Refurbish Private Patient ward	No change	No change	No increase as current layout all single rooms and no plan to increase no. of beds.	Increase of £780k

Figure 31 Revenue implications for upgraded Private Patient Facility

MSG Relocation to PEH Campus

5.44 The MSG accommodation is currently located within 1km of the PEH campus and there are benefits in retaining this proximity.

5.45 The proposal is for HSC and MSG to identify and agree a future location for the Medical Specialist Group onto the PEH campus. The re-location would offer a flexible location to meet their future needs that will also support joint working with the hospital and support patient centered care by remaining near the hospital allowing joint appointments to be developed.

5.46 Subsequently, the project will deliver a new facility based on this agreement.

5.47 To support the new location a commercial arrangement will be agreed between HSC and the MSG about tenancy. It is not possible at present to identify any real financial benefits in the short to medium term.

Orthopaedic Ward

5.48 The changes to the Orthopaedic ward have many clinical benefits including reducing the risk of infection from the mix of trauma and elective patients on the same ward. Infection increases the length of stay of some patients. The average cost per day of a Trauma and Orthopaedic bed day was between £630 and £750 in 2015 (excluding indirect services e.g. theatre, pathology etc. and surgeons theatre time); if unnecessary bed days could be removed this could result in significant savings.

5.49 A move to a 50-100% single room format is proposed and this may necessitate an increase in the nurse: bed ratio, however, more research needs to be done on whether single room layouts increase nursing FTE. The potential cost of this has not been reflected in the revenue calculations shown in Figure 33. A single room format allows the PEH more flexibility on the type of patient that can be admitted to a room.

The use of bays can prevent a patient from being admitted due to the available beds being within a bay occupied by the opposite gender or due to the risk of infection from the mix of trauma and elective orthopaedic patients on the ward. Larger hospitals have separate wards for Trauma and Orthopaedic but due to a small population the business case proposes single rooms as a solution to the issues raised.

5.50 The current ward is 15 beds, however, due to the ageing population the number of beds will need to increase. There are, also, plans to bring some Orthopaedic procedures, currently done off-island, back to Guernsey. A modest number of joint revisions (2 per week) was factored into the model. The model predicted a minimum of 22 beds would be required by 2034. This is without considering additional theatre slots being allocated to the orthopedic surgeons and without consideration to the current lengthy waiting list. The introduction of a re-enablement approach which supports early discharge for service users by supporting them in their own home with community teams should partially mitigate the need for additional beds, however, this project is in the early stages and the benefits cannot presently be quantified.

5.51 To provide an estimate of the impact of increasing beds the nursing requirement for 22 beds was calculated and is shown in Figure 32 below with the other associated revenue costs.

	Pay costs (per annum)	Non-pay costs (per annum)	Overheads (per annum)
Relocate the Orthopaedic Ward	Increase to nursing costs £425k by 2031	Increase to medical supplies of £25k by 2031	Possible increase in housekeeping due to single rooms of approx. £67k. The increase in Housekeeping due to the larger footprint.

Figure 32 Revenue Costs for New Orthopaedic Ward

Pharmacy

5.52 This PBC only seeks approval in principle to improve and expand current pharmacy facilities to support automation, however, automation of pharmacy will be reviewed as a separate project outside of this Programme. No revenue implications have been considered for this PBC however, potential efficiencies and savings will be identified in the separate business case.

Emergency Department

5.53 Expansion of the ED is planned to provide an overnight admission unit area for acute patients requiring investigations; this area would be used overnight and should enable investigations to be completed without the need to admit the patient. This will help mitigate the need for additional beds in the future. Modelling for future capacity showed the need for an additional 40 medical/rehabilitation beds if interventions are not implemented to mitigate the growing demand from the over 65 years population.

5.54 The unit would also include a dedicated area designed for mental health and intoxicated patients reducing the risks to patients and staff.

5.55 Revenue costs are not expected to change because of this project.

Pathology

5.56 The expansion of the current Pathology service could incorporate the merging of the PEH facility with the States Analyst laboratory. The States Analyst Laboratory is currently housed in a States of Guernsey owned property. The efficiencies from merging the two facilities have not been identified for this PBC as this would be a separate business case, therefore, no revenue implications have been calculated.

Finance Case summary

5.57 It has been difficult to calculate the revenue impact in many of the areas due to the uncertainty of the precise detail for each project. Therefore, estimate figures of the revenue implications for each project, based on the information available, have been provided. Further extensive modelling and research is required when preparing the business cases for each of the projects. The requirements for each individual project will be reassessed and detailed business cases will be prepared for each of the projects that will include more accurate revenue cost implications and income projections, the summary of the potential revenue impacts of this PBC are included in figure 33 below.

5.58 There are many clinical benefits of the PBC highlighted in the Financial case, proposed Clinical Outcome Measures in the Economic Case and throughout the PBC. The hospital requires physical restructuring to be able to manage additional demand and at the same time become more flexible and efficient to help mitigate the growing costs associated with an ageing population. Other projects will accommodate some of this demand within the community but the PEH must be prepared for increasing demand. The costs of sending and treating patient's off-island will increase disproportionately with the ageing population if we are unable to provide adequate beds within the PEH.

5.59 In the UK a PBC would ordinarily be used to demonstrate affordability and seek approval for associated capital and revenue spend. Due to jurisdictional difference between the States of Guernsey and the UK this PBC is not seeking revenue or capital funding approval for the estimated Hospital Modernisation costs as set out in this Finance Case. This is due to:

- The capital funding costs will be subject to Propositions in the Policy letter requesting capital funding be drawn down on the basis of approved Full Business Cases as delegated to Policy and Resources committee or subject to a capital vote.
- The impact on revenue costs and / or revenue savings is yet to be substantially modelled but is a core consideration and will be further defined as the business case develops and the TOM project, both supporting the PoP, funded by the Transformation & Transition Fund, progresses.

5.60 The PBC will facilitate the avoidance of costs in the future. Increasing the number of CCU and Orthopaedic beds will prevent surgical cancellations and the further use of off-island providers. Single rooms allow

more flexibility which, also, reduces surgical cancellations and reduces the risk of infection. Relocating the Maternity ward reduces risk to the mother and child; poor outcomes lead to more expensive continuing care costs and possible litigation.

Project	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Women's and Children	£0	£0	**£50,000**	£50,000	£50,000	£50,000	£50,000	£50,000	£50,000	£50,000	£50,000	£50,000
Theatres	£0	£0	£0	£0	**£1,400,000**	£1,400,000	£1,400,000	£1,400,000	£1,400,000	£1,400,000	£1,400,000	£1,400,000
CCU	£0	£0	**£1,470,000**	£1,470,000	£1,470,000	£1,470,000	£1,470,000	£1,470,000	£1,470,000	£1,470,000	£1,470,000	£1,920,000
DPU	£0	£0	£0	£0	£0	£0	**£55,000**	£55,000	£55,000	£55,000	£55,000	£55,000
Equipment Library	£0	£0	£0	£0	£0	£0	**£0**	£0	£0	£0	£0	£0
Transport and Parking	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Staff Facilities	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Private Wing	£0	£0	£0	£0	£0	**-£780,000**	-£780,000	-£780,000	-£780,000	-£780,000	-£780,000	-£780,000
MSG Relocation	£0	£0	£0	£0	£0							
Orthopaedic Ward	£0	£0	£0	£0	**£80,000**	£80,000	£80,000	£515,000	£515,000	£515,000	£515,000	£515,000
Pharmacy	£0	£0	£0	£0	£0	£0	**£0**	£0	£0	£0	£0	£0
Emergency Dept.	£0	£0	£0	£0	£0	£0	£0	£0	**£0**	£0	£0	£0
Pathology	£0	£0	£0	£0	£0	£0	£0	£0	**£0**	£0	£0	£0
Backlog Maintenance	-£735,000	-£735,000	-£735,000	-£735,000	-£735,000	-£735,000	-£735,000	-£735,000	-£735,000	£0	£0	£0
Annual Cost or Saving	-£735,000	-£735,000	£785,000	£785,000	£2,265,000	£1,485,000	£1,540,000	£1,975,000	£1,975,000	£2,710,000	£2,710,000	£3,160,000

Figure 33 Summary of Revenue by Project

Notes for Figure 33

i.Figures are in Nominal terms
ii.Pay costs include 20.7% for employer pension and social insurance contributions
iii.Pay costs include enhancements of 21% for registered nurses
iv.Pay costs include enhancements of 24% for unregistered nurses
v.No inflation included
vi.No vacancy factors

6

6.0 The Management Case

6.0 The Management Case

6.1 The States of Guernsey recognise the importance of effective programme and project management in the delivery of capital schemes and has a governance system to support this. The scale and complexity of the PEH modernisation programme must ensure it aligns with the Partnership of Purpose future direction of health care delivery.

6.2 Key areas of focus within the programme will be:

- Ensuring the modernisation programme maintains alignment with the PoP;
- Ensuring the benefits realisation plan is delivered through the development of the projects;
- Close financial monitoring for the entire programme, and particularly when several projects are in process;
- Adoption of appropriate governance controls at each stage of the project;
- Strong stakeholder engagement throughout the programme and each project; and
- Maintaining the safe operation of the hospital throughout the process.

6.3 The Programme will be supported by the development of a Programme Management Office (PMO) of appropriately experienced and qualified individuals. This approach will ensure that the modernisation programme is coordinated with the wider activities and projects of HSC. Team structures for each stage of the Programme and each project will develop and include keys areas of focus as identified above, to ensure effective programme and project management.

Management arrangements

Programme Management Office (PMO)

6.4 The PMO will provide:

- Streamlining reporting by adopting common reporting standards for all projects in the programme;
- Project level assurance for all projects in the programme;
- Programme-wide assurance confirming project status and driving co-ordination of programme expectations as they relate to each project;
- The PMO has the responsibility for coordinating the demands of the PEHs modernisation programme on service transformation, including the interrelationships between the transformation plans delivered within the hospital, and the hospitals dependency on transformation plans delivered outside the Hospital; and
- The PMO must ensure that business as usual is maintained at all times within the acute hospital as the programme develops and proceeds.

6.5 The PEH Modernisation Programme has established a Programme Governance Board as indicated below, to which the PMO will report into. The Programme Governance Board will report regularly through the Transformation Governance Board up to the HSC Committee (Programme Sponsor) and Policy and Resource:

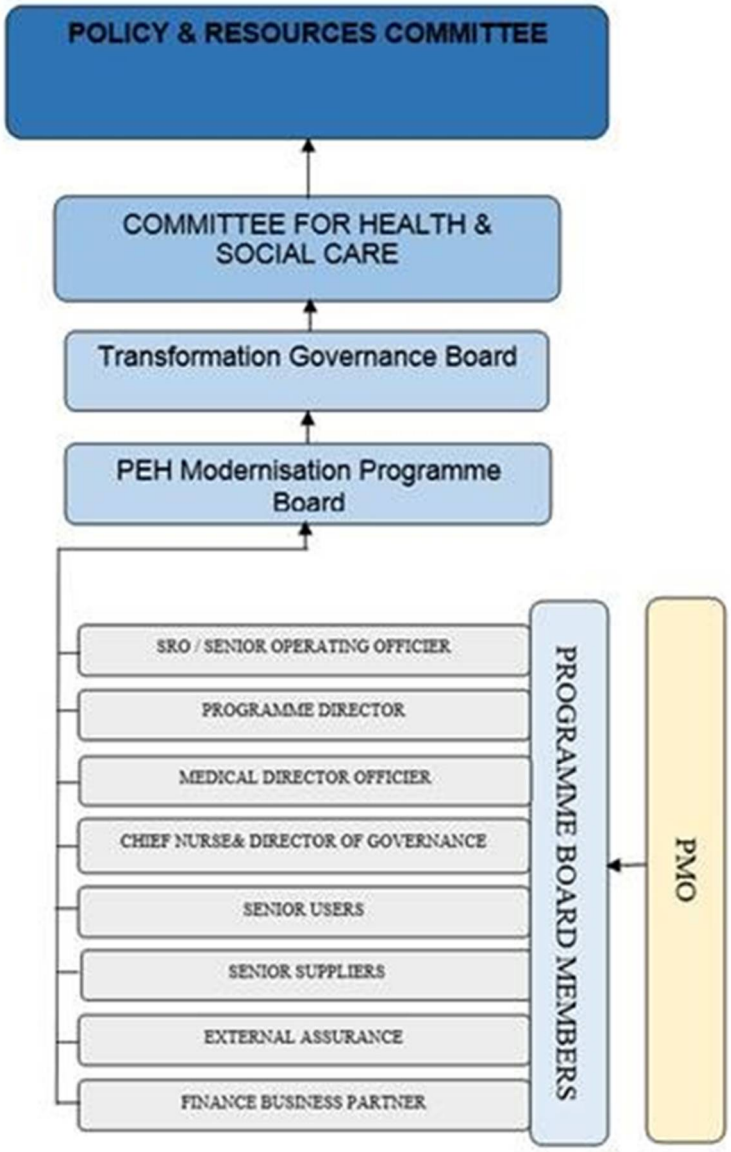


Figure 34 High Level Organigram

6.6 **Project Governance Arrangements**: To ensure full transparency and accountability, the following governance structure will be followed to link the delivery of the PEH modernisation programme to the States of Deliberation acting as 'The Investment Decision Maker'. This is set out diagrammatically below:

Figure 35 Programme Governance Relationships

Programme and Project Assurance

6.7 An external assurance/critical partner for HSC will be appointed to the Programme Governance Board from the Capital Portfolio Team. The role of the HSC external assurance/critical partner will test whether the objectives of the programme and projects are being delivered and in addition the benefits realisation plan is being monitored for successful delivery. Key to this assurance role is the impartiality someone outside of the HSC and programme will bring. The independence of the assurance/critical partner will be able to review and test whether the right people are involved (or plan to be involved) and if the programme remains aligned to the organisational and states strategy. In addition, Gateway reviews will take place between the programme stages to ensure that the programme and projects are on track and fulfilling the objectives they identified.

6.8 All initiatives funded from Major Capital are subject to the Programme/Project Assurance Review process (PAR). This is designed to ensure that the initiatives have continued merit and business justification. The first review is a PAR-0 review of the Programme Business Case; this was undertaken in October 2018 and has informed the updates made to the PBC herein. PAR reviews are intended to assess whether the programme is strategically aligned, fully researched, and have effective management structures in place. Reviews will be conducted for the programme's constituent projects as they develop. The level of review will depend on the funding required in each case, for example a project requiring under £2m of funding will be subject to an internal review whereas anything over £2m will require independent, external input.

Key Roles and Responsibilities

6.9 The PEH modernisation programme supports the Committee for Health and Social Care Partnership of Purpose; the future model of health and Care for the Bailiwick. Its coordination is therefore important and is recognised within the programme's overall governance. This arrangement has been designed to embed the hospital modernisation programme seamlessly within the overall HSC transformation programme such that its delivery can complement other active health developments with management harmonised where appropriate and necessary.

The Senior Responsible Officer (SRO)

6.10 The Senior Operating Officer will act as the Senior Responsible Officer (SRO) for the programme. As the Chair Person of the Programme Governance Board the SRO provides direction and leadership and will be accountable for ensuring that the programme maintains its focus on its agreed business objectives and confirmed benefits and ensures that risk continues to be effectively managed.

The Programme Director

6.11 The Programme Director is responsible for the day-to-day decision making on behalf of the SRO and setting high standards for delivery of the programme to ensure that the programme meets targets and objectives, as agreed. The Programme Director will also ensure each project has challenged its current physical pathways and established new pathways that support the PoP. The Programme Director is also responsible to ensure BAU is maintained at all times without risk to staff or service users.

The Programme Manager

6.12 The Programme Manager will coordinate the individual projects to ensure they meet their targets and do not cause conflict within other projects or the overall programme. The Programme Managers will report directly to the Programme Director.

The Clinical Advisors

6.13 Internal clinical advisors from within existing clinical teams and, where required, external consultants, will be appointed to the PEH modernisation programme to support and advise the Programme Director in achieving the best brief, design, and delivery approach to the programme.

Project Managers

6.14 Will be accountable to the Programme Manager and Programme Director.

6.15 The Project Managers will ensure that;

- Delivery objectives are met;
- Issues and change management processes are managed in line with policy;
- Project standards are maintained;
- The project plans and budgets are managed effectively;
- Business as usual for the hospital is maintained;
- Project risks and issues are identified and communicated immediately to the Programme Managers and Director.

6.16 Given the scale of the programme, a team of Project Managers will be in place to exercise the above control within various projects of the programme. Project Managers will interact across the programme to ensure that the overall performance is maintained. They will engage with the core team to coordinate their activity and to record progress. In addition, the table below shows the roles and advisor input required for the PEH modernisation programme.

Resource Area	Advisor
Programme/ project	Programme Director Programme Manager Project Manager to be allocated for each project Programme Support Officer
Technical	Specialist Health Care Planner Specialist Health Care Architect Business Cost analysis expertise Change Manager Financial and Data expertise Procurement expertise Health and Safety Infection control Internal clinical advisors
Legal	Legal advice from St James Chambers during the programme will be sought, as required.
Assurance	An independent reviewer will be appointed.

Figure 36 Proposed programme roles

Core Team

6.17 The Core Team controls the day-to-day management requirements of the projects within the programme. The Core Team is made up of the roles identified above and may also include technical or specialist skills who, under the direction of the Programme Director, will carry out detailed work to support the projects.

6.18 The duties of the Core Team will include:

- Planning and delivering the overall process;
- Developing and maintaining project plans;
- Co-ordinating working groups and evaluation teams as required;
- Monitoring progress and reporting to Programme Board;
- Managing issues and risks as they arise in line with the issue/risk management policy and escalating those above threshold;
- Managing project advisors, ensuring that their contribution is well understood, and that the HSC obtains best advice and value;
- Managing risks in line with project risk management strategy; and
- Ensuring effective development and delivery of the Engagement and Communications Plan

User Groups

6.19 To ensure user involvement, a series of user groups will be used to both comment, steer, and sign off hospital design and service pathways and to link this design process to the wider transformation and Partnership of Purpose.

6.20 The groups will have sufficient support to receive their feedback in line with the programme objectives and ensure that designs are efficient, practical and in line with latest best practice and meet transformation objectives.

6.21 To support these user groups, the programme Director will:

- Ensure full understanding of their objectives
- Facilitate feedback to the all projects and the overall programme;
- Steer comments and act as 'interpreter' with the design delivery team; and
- Ensure teams are aware of latest guidance, research, and best practice.

6.22 The key service user groups will be:

- Wards and in-patient services;
- Technical departments including theatres, day-case, and imaging;
- Ambulatory services including outpatients and therapies; and
- Facilities management including catering, distribution, and cleaning.
- Disability and special needs service users.

Knowledge transfer

6.23 The Core Team reporting to the Programme Board will develop a process to ensure communication from the operational and project team to the user groups and vice versa, facilitated by the Programme Director.

Contract Management Plan

6.24 The Detailed Procurement Strategy will be developed on approval of the PBC and is being led by the HSC Procurement department. However, in line with expectations of the industry and other healthcare projects it is advised that the use of the NEC (National Engineering Contracts) suite of contracts is adopted as it offers a robust, tried and tested approach to contract management, setting out within its framework, the procedures and measures required to deliver a successful contract in a collaborative and proactive manner.

Use of special advisers

6.25 Specialised UK health care advisers will be used on the modernisation programme to different degrees throughout the programme to ensure that the delivery team is supported with expert direction for each project. Project Advisors will be appointed on terms that will enable their advice to continue to support the delivery team throughout the life of the projects. Advisor input throughout the programme will be coordinated through the Core Team. This will ensure that their resource is used in a timely and cost-effective manner and that the remaining detail needed to execute the project is appropriately developed.

Art coordination

6.26 As each project within the Modernisation Programme proceeds the core membership of each project will include HSC's Culture, Arts and Health Manager who works closely with the psychology team and a graphic designer.

6.27 Their role will be to ensure we create a welcoming environment that is relaxing for patients, family, visitors and staff with the aim of reducing stress, anxiety and aggression, also add quality to our visual communication, as

often notices are cluttered with information for both staff and service users which impacts on our ability to take that information in and is therefore ineffective.

The overall programme will also include a 'Way Finding Systems' within the PEH using new signs and fonts to aid readability for a variety or users including those with dyslexia, learning disabilities, dementia, visual impairment and where English is not their first language. This will also align our current signage to avoid confusion and support the overall approach to the redesign of way finding and signage within the PEH.

6.28 Consideration to technology of a HSC App which includes a site map of hospital is being considered.

6.29 Each department within the projects will be colour coded and an icon created linking icons and colour coding to the relevant floor within the hospital that will feature in all entrances and exits for direction as well as being used when contacting service users for their appointments.

Summary Project Plan

6.30 A detailed Programme for delivery of the main PEH Modernisation will be further refined during the programme and at key gateways, checkpoints and/or approvals. It includes the key milestones for the project delivery including approvals. The Milestone programme below provides the short and long-term view of next steps for the PEH Modernisation programme.

Milestone	Start Date	End Date
PAR review 0 undertaken	Sep 2018	Oct 2018
Submit PBC for formal approval to HSC Committee	Dec 2018	Feb 2019
Submit PBC for formal approval to by Policy and Resource Committee	Jan 2019	Feb 2019
Establishment of Programme Board	Oct 2018	Oct 2018
Terms of Reference and Stakeholder Engagement Plan approved	Nov 2018	Nov 2018
Submit PBC for formal approval by States of Deliberation	Mar 2019	Apr 2019
Award contract to successful external Consultants	Mar 2019	Apr 2019

Figure 37 High Level Programme Management

Management case Summary

6.31 The PEH Modernisation Programme will be managed in an open and collaborative manner, identifying key roles and responsibilities, and communicating these clearly for all to understand.

6.32 The Management Structure will be developed as the projects are progressed with the team expanding to support the outputs of the Programme.

6.33 The programme will follow Managing Successful Programmes (MSP) method with agile techniques to ensure that its diverse project dossier can be managed appropriately to deliver agreed outputs. Gateway reviews will take place between stages to ensure the programme and projects are on target and independent programme assurance reviews (PAR) will be undertaken to ensure the programme is strategically aligned, fully researched, and has effective management in place.

Appendix A
PAR 0 Review

STATES OF GUERNSEY

States of Guernsey Programme Assurance Review (PAR) PAR 0: Strategic Assessment

Version number: Final Submitted

Date of issue to SRO: 3rd October 2018

SRO: Matt Jones, Senior Operating Officer, Committee *for* Health & Social Care

Department: Committee *for* Health & Social Care

Business Unit (if applicable):

PA Review dates: 25/09/2018 – 27/09/2018

PA Review Panel – Lead Reviewer:
Ian Howard, Assistant Director – Strategic and Business Analysis, Betsi Cadwaladr University Health Board

PA Review Panel – Team Members:
Jude Michel, Finance Manager, Finance Projects Team, States of Guernsey
Ben Martin, Portfolio Officer, Portfolio Team, States of Guernsey

Summary of Report Recommendations

The Review Team makes the following recommendations which are prioritised using the definitions below.

Ref. No.	Recommendation	Critical/ Essential/ Recommended
1.	The business case should contain a clear definition of its scope, making it clear how it supports the delivery of the Partnership of Purpose while also focusing on a range of specific issues which need to be addressed in the short (1-3 years) to medium (4-6 years) term. [p.6]	Essential – prior to the submission of the case to the States of Deliberation
2.	The case should be explicit that the physical solution which has been costed is illustrative and not definitive, and that the development control plan for the site will be created as part of the next phase of the programme. [p.7]	Essential – prior to the submission of the case to the States of Deliberation
3.	A further exercise should be undertaken to establish the relative priority of the issues being addressed by the business case. This should form the basis of a robust brief to inform the design solution. [p.8]	Recommended
4.	The next draft of the business case should include more specific metrics, including a “before and after” picture for affected services. [p.9]	Essential – prior to the submission of the case to the States of Deliberation
5.	The capital costing methodology and assumptions need to be clearly stated and tested by the Governance Board. There needs to be absolute clarity over the ultimate responsibility for sign off of capital costings. [p.10]	Critical – prior to the submission of the case to the States of Deliberation
6.	The estimated programme and project capital costs should be presented as a range. [p.10]	Recommended
7.	The Programme Director and Finance Business Partner for Health & Social Care should agree on an appropriate revenue costing model for the Programme Business Case. [p.10]	Essential – prior to the submission of the case to the States of Deliberation
8.	The Governance Board needs to meet regularly and give appropriate priority to the programme. [p.11]	Essential

Critical (Do Now) – To increase the likelihood of a successful outcome it is of the greatest importance that the programme/project should take action immediately

Essential (Do By) – To increase the likelihood of a successful outcome the programme/project should take action in the near future.

Recommended – The programme/project should benefit from the uptake of this recommendation.

Background

The aims of the programme:

The aims of the Princess Elizabeth Hospital (PEH) Re-Profiling Programme as stated within the business case presented (v0.9) are as follows:

- To optimise the delivery of health and care services for the Bailiwick of Guernsey.
- To optimise patient flow ensuring they are treated in the most appropriate environment.
- To optimise good and measurable outcomes for the people of Guernsey.
- To accommodate future proofing with a vision for future innovations in health care and changes in regulation of care.

The driving force for the programme:

The main driving forces behind the programme relate to the clinical needs for services within the hospital and issues with the estate infrastructure. It is also intended to fit in with the strategy for Health & Care – the Partnership of Purpose.

Current position regarding the States of Guernsey Programme Assurance Reviews:

This is the first Programme Assurance Review for the PEH Re-profiling programme.

Purposes and conduct of the PA Review

Purposes of the PA Review

This is a programme-only Review that sets the programme in the wider policy or corporate context. This Review investigates the direction and planned outcomes of the programme, together with the progress of its constituent projects. It can be applied to any type of programme, including policy and organisational change. The Review is repeated throughout the life of the programme from start-up to closure; an early review is particularly valuable as it helps to confirm that the way forward is achievable, before plans have been finalised.

Appendix A gives the full purposes statement for a PAR 0.

Conduct of the PA Review

This review was carried out from 25th September 2018 to 27th September 2018 at the Health & Social Care Corporate Headquarters building. The team members are listed on the front cover.

The people interviewed are listed in Appendix B.

The Review Team would like to thank the Programme Team for their support and openness, which contributed to the Review Team's understanding of the Programme and the outcome of this Review.

Findings and recommendations

1: Policy and business context

The programme is set within a clear policy context, provided by the Partnership of Purpose: Transforming Bailiwick Health and Care. This is stated in the terms of reference of the HSC Hospital Re-Profiling Governance Board, which highlight the interdependencies with other programmes such as the HSC Transformation Programme and the development of Community Hubs.

At present this is less clearly articulated in the draft business case, which would benefit from showing a stronger link between the policy context and the specific proposals. This point is expanded on below.

2: Business Case

The business case is at an early draft stage, and circulation so far has been limited to the HSC Hospital Re-profiling Governance Board and few other key internal stakeholders. The Review Team's main observations are as follows:

Strategic Context & Scope of the Programme

The programme's immediate aim is to resolve a set of specific challenges on the PEH site in terms of the quality of service provision and the physical estate. Its focus is therefore on addressing a range of short-to-medium-term issues. This problem-solving approach seems sensible given the pressing nature of some of the issues and the fact that elements of the overall strategy for Health & Care which will have significant implications for acute care, such as the exact nature and location of the community hub and potential links with Jersey, are still under development. It is, however, important that the business case is set in the context of the strategy, and demonstrates how it supports the delivery of the Partnership of Purpose.

It is also important that the scope is stated clearly in the case. The case must avoid giving the impression that the programme of proposed projects will resolve all acute care issues requiring capital for the next 10 years, particularly as we are given to understand that there are elements of the site that are not affected by these projects and will require essential maintenance work in the medium-term.

RECOMMENDATION 1: The business case should contain a clear definition of its scope, making it clear how it supports the delivery of the Partnership of Purpose while also focusing on a range of specific issues which need to be addressed in the short (1-3 years) to medium (4-6 years) term.

The prioritisation of projects linked to a physical design solution

At its core, the business case: outlines a range of issues; describes how they have been prioritised into three categories (must, should, could); and presents a costed solution (with a timetable) for how these can be resolved. This solution is inextricably linked to a specific physical reconfiguration plan for the site, which includes a series of departmental moves and the building of a new wing.

There are various interlinked issues with this approach, related to the physical design solution proposed and the need for further prioritisation before the programme is regarded as deliverable.

Starting with the physical design solution, we understand that this approach has been developed by hospital management with support from Gleeds, who have used it to produce the estimated capital cost of the programme. It is clear, based on the interviews, that this design solution is not fully understood or signed up to by all members of the Governance Board. For example not everyone is convinced that the new wing is necessary, or that where refurbishment is proposed it is clearly a better solution than a new build. This may be because the current design solution has not been fully communicated, or because there are issues of substance that require debate. Also the design solution is not fully worked through, with important questions remaining about how big the new wing can be/has to be and how many storeys it could have. The Governance Board may benefit from setting some time aside to fully understand and debate the thinking behind the design solution.

It is also important to be clear about the status of the design solution. The review team see it as a very useful starting point, which gives a level of confidence that there is a feasible physical solution and allows an estimate to be made of the capital costs. The actual solution, and a full site development plan, need be established as part of the next phase of the programme with the guidance of professional healthcare planners and architects.

RECOMMENDATION 2: The case should be explicit that the physical solution which has been costed is illustrative and not definitive, and that the development control plan for the site will be created as part of the next phase of the programme.

This point is particularly important because the sequence of projects is inextricably linked to the physical solutions, making it very difficult to agree which cases should proceed first. The currently identified list of essential projects are all due to start in the first phase (Years 1-3) at a cost of £75m. The £75 million includes £35 million for the development of a new wing in a specific location as the solution to the current issues identified with critical care, day patients, theatres, and admissions & discharges.

We understand that a spend of £75 million in the timescale proposed is not achievable within current capital constraints, and that even if capital availability was not an issue the programme may not be physically deliverable in that time period.

We have been told that the Governance Board therefore needs to undertake a further prioritisation of the schemes before recommending to the States of Deliberation which cases should be developed first.

At present this exercise would have to focus on the relative priority of the issues being addressed. It could not be converted into a clear programme of business cases until the design solution is finalised, as different projects may need to be bundled together depending on the physical design, as is the case with the new wing in the current indicative design. A clear prioritisation that goes beyond the current "must", "could" and "should" lists would, however, give a robust brief to inform the design solution.

RECOMMENDATION 3: a further exercise should be undertaken to establish the relative priority of the issues being addressed by the business case. This should form the basis of a robust brief to inform the design solution.

There appears to be a good basis for reaching agreement about this prioritisation, in that throughout the interviews there has been a strong and consistent message that the main clinical priorities are maternity and the critical care unit. In addition the need to boost private patient income has been emphasised, as has the relocation of MSG onto the PEH Campus which may result in revenue savings as well as having other benefits. We note that the relocation of MSG is currently presented in the case as a "could deliver" or "add on" project. It is possible that the analysis from the workshops may be confusing project timescale (the current MSG lease does not expire for several years) with relative priority.

The review team also has the following observation about the current economic option appraisal, which is based on the prioritisation exercise carried out in the workshops: the conclusion of the appraisal is that the preferred way forward includes all of the "must do" and "should do" projects but not the "could do" projects. The reasoning on which this is based is questionable, as there is very little difference between the capital costs per weighted benefit point of the options. A sensitivity analysis would bring this out. Also the outcome of the option appraisal is not followed through in the conclusion to the case, which does not refer to the preferred way forward but gives a range of costs from a maximum of £95 million that combines the "must", "should" and "could" projects to a minimum of £75 million that is only the "must do" projects. The next phase of prioritisation suggested above may be a better subject for the option appraisal in the business case than the analysis already done in the workshops, which could be presented as background to the case.

<u>Decisions Being Sought through the Programme Business Case</u>

While it is not directly stated in the current version of the business case, we have been told that two main decisions are being sought when this case is presented to the States of Deliberation:

Firstly, the intention is to gain approval in principle for the overall programme from the States of Deliberation. This means achieving a shared understanding of the scope of the programme, its benefits, the indicative costs and a potential timeline for delivery. It does not mean gaining a firm commitment to the full capital allocation, which will be agreed through individual business cases presented as part of the programme.

Secondly, the intent is to gain specific approval from the States of Deliberation to develop the first set of project business cases, based on the initial capital and revenue estimates for those cases set out in the programme business case.

As outlined above, agreement on a first set of business cases may not be possible until further work is undertaken on the design solution with external expert support. Depending on what is driving the timetable to take the case to the States of Deliberation, it may make sense to seek approval in principle to the programme in the first instance with a recommendation about specific projects coming at a later date.

Objectives, Benefits and Metrics

There is a general lack of metrics throughout the business case. This means that it does not communicate a sense of the order of magnitude of the problems identified, and whether the solutions represent value for money. For example how often is the 4-hour target breached, how often are operations cancelled and for what reasons? In particular it would be beneficial to have a 'before and after' picture for the affected services which should include both quantitative and qualitative measurements.

RECCOMENDATION 4: the next draft of the business case should include specific metrics, including a "before and after" picture for affected services.

Capital Costs

This report has already referred to the fact that the capital costs have been estimated by Gleeds, based on a specific design solution and using the actual cost of delivering the Phase V project on the site. We also understand that this is Gleeds' view of the maximum cost.

The methodology and assumptions in the costing (e.g. number of theatres, number of critical care beds, and cost per m^2) need to be clearly stated and tested with the Governance Board. There also needs to be absolute clarity for who has ultimate responsibility for signing off the capital costings within the business case.

At this stage the costs for both the programme and individual projects would be better presented as a range, to reflect the high levels of uncertainty over a long and complex programme and the fact that no detailed design work has yet been undertaken. Also there have been discussions during the course of the review over

other elements of the costing methodology, in particular the approach to contingency, optimism bias and the 'Guernsey Factor'. The decision on the methodology should be made by the Governance Board and applied consistently throughout the programme.

RECOMMENDATION 5: The capital costing methodology and assumptions need to be clearly stated and tested by the Governance Board. There needs to be absolute clarity over the ultimate responsibility for sign off of capital costings.

RECOMMENDATION 6: The estimated programme and project capital costs should be presented as a range.

Revenue consequences

Currently the programme business case does not address revenue issues. It states that these will be explored as part of the individual project business cases. However an understanding of the potential order of magnitude of revenue costs and/or savings is essential to make an informed decision about the programme as a whole.

It is recognised that this will be high-level and indicative, with some 'broad brush' assumptions which will change over time. However some key metrics can be identified – for example Estates costs and savings, the cost of increasing the number of critical care beds, increases in private patient income and reduced rental costs for the MSG.

RECOMMENDATION 7: The Programme Director and Finance Business Partner for Health & Social Care should agree on an appropriate revenue costing model for the Programme Business Case.

3: Governance, Programme Management and Stakeholder Engagement

The Governance Board would appear to have appropriate membership, given the recent decision to add the Head Hospital Services, and coherent terms of reference. We note that the Governance Board is currently chaired by the Programme Director. Given the complexity and importance of the programme, consideration should be given to the SRO undertaking the role of Chair in line with common programme management practice.

We also note that the board has only met once. Programmes like this need to be driven by the senior strategic leadership of the organisations involved, particularly in the early stages when key judgements are made. The SRO in particular will need to have sufficient time to fulfil this role. In practice this is very difficult to achieve given the competing demands on these people's time and there is no simple solution to

this, although the potential for some backfill has been mentioned as a possibility. Nevertheless the programme needs to be given an appropriate level of priority, and it is important that the Governance Board now meets regularly and makes the key decisions required at the formative stage of the programme.

RECOMMENDATION 8: The Governance Board needs to meet regularly and give appropriate priority to the programme.

Reference has been made during the review to a request for additional programme management resource and external support. The specific proposal has not been examined as part of this review process. However the review team would support the need for additional expertise to take the programme and individual projects forwards, in particular the need for Health Service Planners/Architects to work with the programme to produce a Development Control Plan and a sequence for the projects. Dedicated project management support will be needed to deliver the projects.

In terms of stakeholder engagement there seems to be strong buy-in among senior decision makers, managers and clinical leads as shown by the facilitated workshops. There also appears to be general agreement around the range of specific issues that the programme sets out to address. A draft Communication Plan and Stakeholder Engagement document has been produced and this needs to be developed into a full plan. The importance of early public engagement should not be underestimated and we support the Governance Board's decision to engage with the SRO of States of Guernsey Solid Waste Strategy Programme which has recent experience regarding communication for a large scale programme.

The next PA Review

The Programme Business Case needs to be seen as a live document as the programme develops. This is particularly important over the next year or so as it will be used as the vehicle for making significant strategic decisions. Exactly when the next PA review should take place depends on various factors, including the speed of progress in developing a prioritised programme, but we would recommend that a further review is undertaken in no more than 12 months' time.

APPENDIX A

Purposes of the PAR 0: Strategic Assessment

- Review the outcomes and objectives for the programme (and the way they fit together) and confirm that they make the necessary contribution to the overall strategy of the organisation and its senior management
- Ensure that the programme is supported by key stakeholders
- Confirm that the programme's potential to succeed has been considered in the wider context of States of Guernsey policy and procurement objectives, the organisation's delivery plans and change programmes, and any interdependencies with other programmes or projects in the organisation's portfolio and, where relevant, those of other organisations
- Review the arrangements for leading, managing and monitoring the programme as a whole and the links to individual parts of it (e.g. to any existing projects in the programme's portfolio)
- Review the arrangements for identifying and managing the main programme risks (and the individual project risks), including external risks such as changing business priorities
- Check that provision for financial and other resources has been made for the programme (initially identified at programme initiation and committed later) and that plans for the work to be done through to the next stage are realistic, properly resourced with sufficient people of appropriate experience, and authorised
- After the initial Review, check progress against plans and the expected achievement of outcomes
- Check that there is engagement with the market as appropriate on the feasibility of achieving the required outcome
- Where relevant, check that the programme takes account of joining up with other programmes, internal and external
- Evaluation of actions taken to implement recommendations made in any earlier assessment of deliverability.

APPENDIX B

Interviewees

Name	Role
Jan Coleman	Programme Director
Matt Jones	Senior Responsible Officer, Senior Operating Officer Committee *for* Health & Social Care
Mark De Garis	Chief Secretary, Committee *for* Health & Social Care
Deputy Heidi Soulsby	President Committee *for* Health & Social Care
Dr Peter Rabey	Medical Director
Professor Juliet Beal	Chief Nurse & Director of Clinical Governance
Clive Martin	Estates Manager
Dr Gary Yarwood	Chairman Medical Specialist Group
Keith Davies	Finance Business Partner, Committee *for* Health & Social Care
Geraint Ap Sion	Portfolio Director, Policy & Resources Committee
Georgina Hayes	Programme Manager Community Hub Programme
Dermot Mullen	Head of Hospital Services

Appendix B
Cost Forecast

Redacted

Appendix C
Location Factor Assessment

Hospital Modernisation Programme – Programme Business Case
Location Factor Assessment

- BCIS is the Building Cost Information Service of the Royal Institution of Chartered Surveyors (RICS). It is described by RICS as ‘the leading provider of cost and price information to the construction industry and anyone else who needs comprehensive, accurate and independent data.’

- Cost and price information is collected by BCIS from across the UK construction industry, then collated, analysed, modelled, interpreted and made available to the industry to facilitate accurate cost planning.

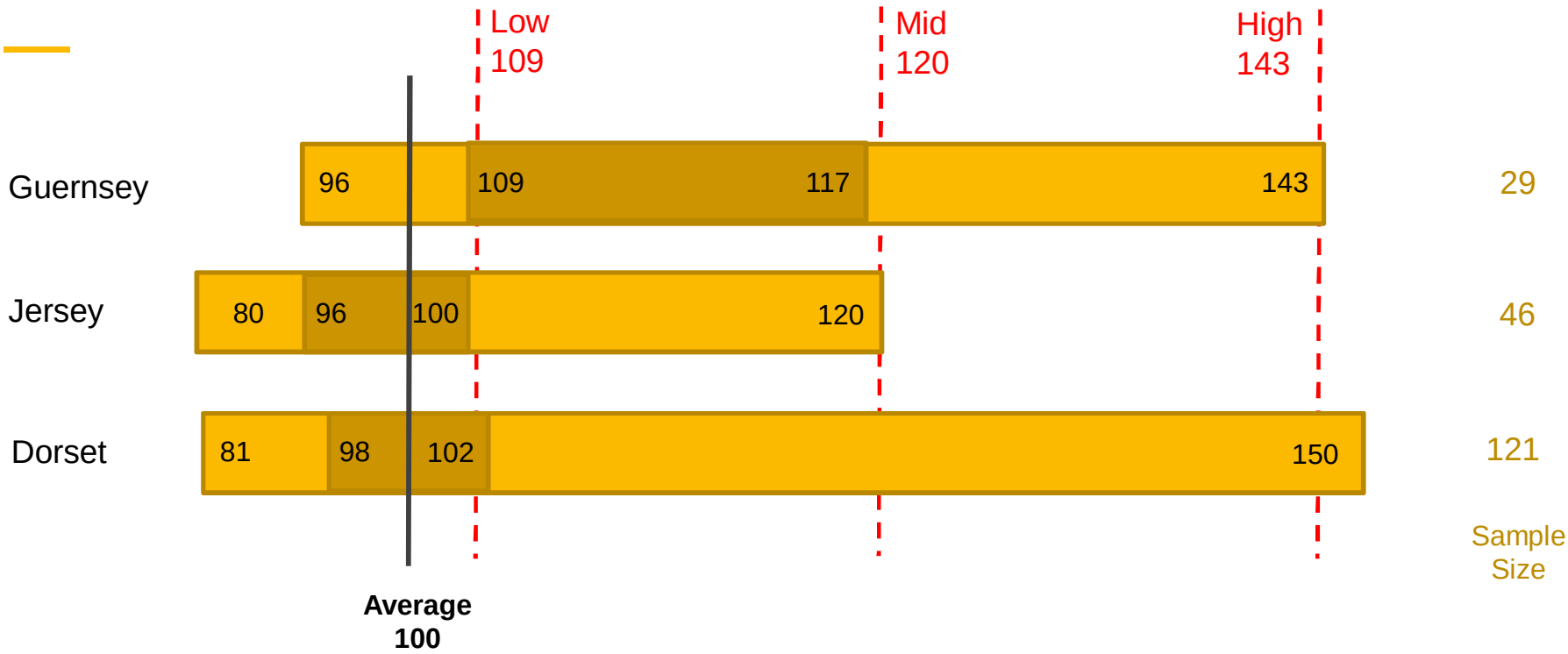
- Location factor indices compare the construction costs of multiple projects across the UK & Channel Islands.

- These factors are used to assess the future costs of projects at an early stage of estimating.

- For the Hospital Modernisation Programme – Programme Business Case we have undertaken the attached assessment of the range of location factors that should be used to account for the potential outcomes of cost estimates for the various projects prior to completion of the Development Control Plan and more detailed design facilitating more accurate estimation of costs.

- The Location Factor will not be explicit in the costing but will be included in the construction costs (to prevent inflation of market prices)

Hospital Modernisation Programme – Programme Business Case
Location Factor Assessment



90% Certainty

100% Certainty

Recommended Range

Considering the BCIS Location Factor indices published in September 2018, we have assessed three comparisons; Guernsey, Jersey & Dorset. These show a 100% certainty range between 80-150 and a 90% certainty range between 96-117

The PBC requires a range of costs be expressed, our recommendation is the range be between **109-143**, with a mid point of **120**.

Hospital Modernisation Programme – Programme Business Case
Location Factor Assessment

Areas	Low	Mid	High
Guernsey	60,466,565	77,787,717	89,675,962
Jersey	50,388,804	62,986,006	75,583,207
Dorset	51,018,664	84,716,177	94,479,008
Recommended	68,654,746	75,583,207	89,675,962
Internal Costs	3,682,360	3,682,360	3,682,360
PBC Total	72,337,106	79,265,567	93,358,322

If these factors were applied to the current projects within the Hospital Modernisation Programme the range of outcomes would be as per the table above.

Given the early stage of cost estimating & design and the requirement of the PAR reviewer to include a range of cost estimates then the recommended range of between **£68.7m & £89.7m** should be included (£72.3 & £93.4 incl. Internal Costs)

Appendix D
Optimism Bias Calculation

GA Optimism Bias Estimator: Buildings Projects

HMP PBC

- ( ) Standard Buildings
- ( ) Non Standard Buildings
- ( ) Both Standard & Non-Standard

Upper Bound Optimism Bias

	Non-Standard Buildings		Standard Buildings	
	39	51	4	24
	Works Duration	Capital Exp'ture	Works Duration	Capital Exp'ture

Risk Area Contribution

	Mitigation of OB *	OBC	Non-Standard Buildings		Standard Buildings	
Procurement						
[x] Complexity of Contract Structure		50%			1	0
[x] Late Contractor Involvement in Design		0%			3	2
[x] Poor Contractor Capabilities		50%			4	9
[x] Government Guidelines		50%			0	0
[ ] Dispute & Claims Occurred					4	29
[x] Information Management		30%			0	0
[ ] Other					0	0
Project Specific						
[x] Design Complexity		0%			3	1
[ ] Degree of Innovation					1	4
[x] Environmental Impact		50%			0	0
[ ] Other					0	0
Client Specification						
[x] Inadequacy of the Business Case		60%			31	34
[x] Large No. of Stakeholders		20%			6	0
[x] Funding Availability		50%			8	0
[x] Project Management Team		20%			0	1
[ ] Poor Project Intelligence					6	2
[ ] Other					0	0
Environment						
[x] Public Relations		30%			8	2
[ ] Site Characteristics					5	2
[x] Permits / Consents / Approvals		30%			9	0
[ ] Other					0	0
External Influences						
[x] Political		30%			0	0
[x] Economic		30%			0	11
[x] Legislation / Regulations		0%			9	3
[x] Technology		30%			0	0
[ ] Other					0	0

** At 100%, or if deselected, the OB has been fully Mitigated, at 0% all OB remains Unmitigated*

Unmitigated Optimism Bias

Non-Standard Buildings		Standard Buildings	
Duration	Capex	Duration	Capex
		2%	8%

Risk and Mitigation Commentary -

HMP PBC

Procurement

Complexity of Contract Structure	Contract structure will be based upon currently well developed best practice and as such will not be unduly complex.
Late Contractor Involvement in Design	The design is based upon a high level appraisal completed by specialist Hospital design advisors. Contractor involvement at this early site selection stage would not have been beneficial given the limited degree of design material developed. Contractor will be involved following the development of the 1:200 design consistent with UK best practice
Poor Contractor Capabilities	Contractor selection has not yet taken place. Market conditions and project composition suggest that there will a high degree of confidence in securing a competent contractor but limited local capacity will need to be managed in the design process. Consideration in the design of off-site fabrication and appropriate design for local technical capabilities will reduce the impact of potential risks
Government Guidelines	Compliance with SoG guidelines within the Procurement will be defined and agreed within the detailed procurement strategy and whilst SoG do not have to comply with EU regulation the best practice principals contained therein are adhered to. SoG have confirmed that the project will be based on current UK healthcare best practice in hospital design. Construction delivery will also follow formal SoG Building regulation and planning guidance again modelled on UK convention.
Not currently applicable	
Information Management	Project Information is currently developed by specialist advisors working in association with HSC officers.
Not currently applicable	

Project Specific

Design Complexity	Whilst service relocation, refurbishment and demolition works are required to allow the development of the Programme the existing natuure of the site allows for significant survey and design works to take place ahead of the construction and much of the construction is remodelling rather than new build. Some spatial risk also remains in that current area reduction targets may not be achieved in all functional areas.
Not currently applicable	

Environmental Impact	The solution is not considered to present any specific environmental impact over an above that of the existing hospital. However, the construction on or adjecent to a live hospital site means that good design will be required to minimise the impact of its scale on its immediate neighbours, staff, patients and the public.
Not currently applicable	
Client Specification	
Inadequacy of the Business Case	Being the subject of a Programme Business Case the project will be informed by significant project design and health planning consideration prior to commencement of works on site. The Programme Business Case has been subject to an independent review prior to submission to HSC Governance board and the SoG However, there remains a risk that the development of service delivery models, specifications and user requirements will result in spatial and specification increases but this is managed by the project board.
Large No. of Stakeholders	A significant number of stakeholders are involved given the significance of the hospital to the HSC and the people of Guernsey. A stakeholder engagement plan has been approved by the Project Governance board
Funding Availability	Funding remains outside the scope of the project but controlled by the Project SRO. Project costs will be met fully by the HSC until formal approval is sought from the P&R commitee and the SoG with the project only proceeding once ministerial funding approval has been secured. On this basis the funding risk is considered to be low given that the project will not otherwise progress.
Project Management Team	The SoG project management team is experienced at delivering major capital projects and has the support of project team experience from a specialist advisor expertise engaged to both support PBC delivery and is in the process of appointing a Strategic Design Partner
Not currently applicable	

Not currently applicable	
Environment	
Public Relations	The project is eagerly anticipated by many stakeholders many of whom will be pleased with the redevelopment of the existing hospital site. Others however in close proximity to the new hospital and its construction site will need to be supported by a sympathetic approach by HSC to minimise the impact wherever possible.
Not currently applicable	
Permits / Consents / Approvals	Early planning consultation has been completed, the site is an existing hospital and much of the planned work is within the envelope of the exisiting buildings, where extensions or new build elements are required the planners have been positive about building height (in the centre of the site) The feasiblity study for the potential relocation of the MSG will need to take cognisance of planning impacts of potential locations. The outcome of the Travel Study will need to be incorporated into final design proposals.
Not currently applicable	
External Influences	
Political	SoG funding in principle has be indicated by the P&R committee but the PBC is yet to be completed for issue to the SoG
Economic	The current economic recovery within the UK and to a lesser extent within Europe appears to have tailed off with a slight fall in inflationary pressure being recently recorded, Brexit remains a signifcant risk but spending on infrastructure will continue to be supported.
Legislation / Regulations	The project remains exposed to regulatory change both in the UK and UK NHS as well as within the States of Guernsey
Technology	Whilst Healthcare technology continues to develop many of the solutions anticipated by the project remain mainstream within the UK NHS.
Not currently applicable	

Appendix E
Risk Register

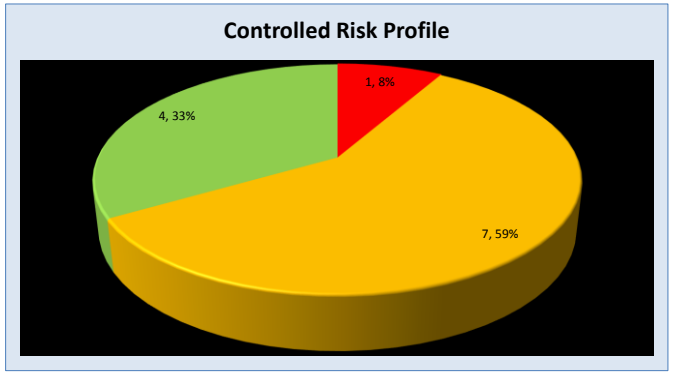
Ref	Short Title	Risk Description	Cause	Control Adjusted Risk Score	Risk Owner / Lead
12	Asbestos	The risk that the discovery of unknown asbestos causes delays and extra cost.	Disturbance of asbestos that was not identified in survey.	20	Coleman, Jan
14	2020 Election	The risk that the political landscape changes resulting in a change in political support and direction.	2020 election change of politicians on HSC Committee.	12	Jones, Matthew
15	Treasury / Portfolio	The risk that capital funding is not supported in the next portfolio 4 year period resulting in non-completion of the programme.	Capital fund in agreed in four yearly tranches and we are presently half way through this period.	12	Coleman, Jan
19	Exchange rate	The risk of Brexit causing devaluation of sterling and therefore influencing the currency exchange rates and resulting in higher than predicted capital expenditure.	Currency fluctuations larger than planned for as a result of Brexit or global market shocks.	12	Davies, Keith
20	Planning/Building Control	The risk that Planning/Building Control may restrict and limit most efficient use of the site which will impact the Development Control Plan and subsequently restrict future expansion and flexibility in the programme	Planning/Building Control object to changes that HSC submit. Future DCP is unknown at present Objection by neighbouring properties or politicians.	12	Coleman, Jan
31	Allocated Budgets	The risk that the costs for essential projects within the programme may exceed the allocated budget resulting in delay.	Unpredicted overspends on essential projects impacting total Capital funds which would impinge on subsequent projects.	12	Coleman, Jan
26	Stakeholders/partners	The risk that some stakeholders are vocal in their objection to the programme resulting in reputational damage and delays to the programme.	Stakeholder may wish to change a specification or the way the works are implemented.	9	Coleman, Jan
32	Location Factor Indices	The risk of applying a Guernsey Location Factor indices to construction build costs may risk artificially inflating tender costs. This too could impact fees proposed by consultants.	Applying Guernsey specific indices to UK standard prices.	9	Coleman, Jan
28	Programme Sign-Off	The risk is that the Modernisation Programme cannot meet the sign-off deadlines to achieve the policy letter submission date for the States, resulting in a delay to the commencement of the programme.	Short timescales/ambitious programme/complex sign-off	8	Coleman, Jan
6	Project resources and expertise	The recruitment of the required expertise for the programme may not be available.	Due to limited on-island availability of resources and access to off island suppliers is limited.	6	Nickols, Glenn
9	Staff Morale	The risk that HSC staff may be change averse to the programme objectives resulting in a delay to the programme.	Lack of workforce engagement.	6	Coleman, Jan

Colour Code
High
Medium
Low

Risk Reporting as at 11 January 2019

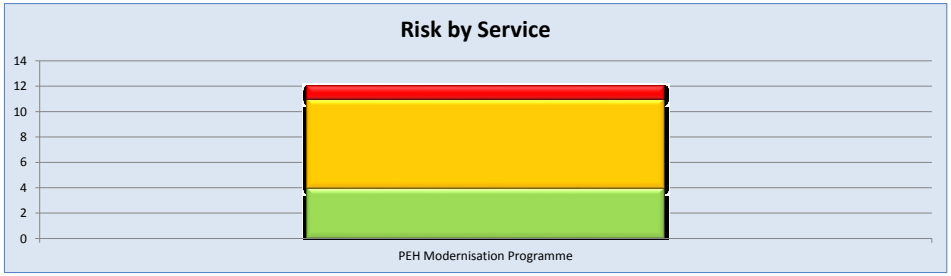
Risk Profile

Likelihood	Consequence / Impact					
	Insignificant	Minor	Moderate	Major	Catastrophic	Totals
Almost Certain	0	0	0	0	0	0
Likely	0	0	0	0	1	1
Moderate	0	1	1	5	0	7
Unlikely	0	1	1	1	0	3
Rare	0	0	0	0	0	0
Totals	0	2	2	6	1	11

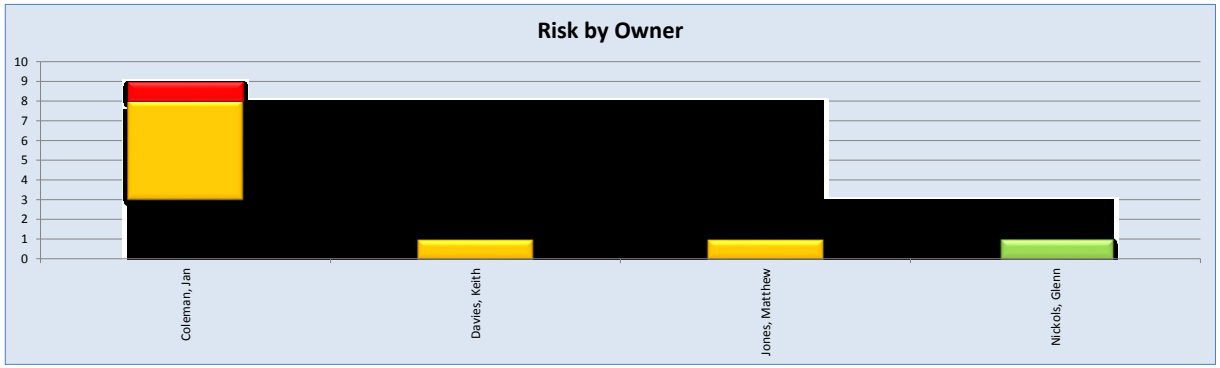


Risk v's Appetite

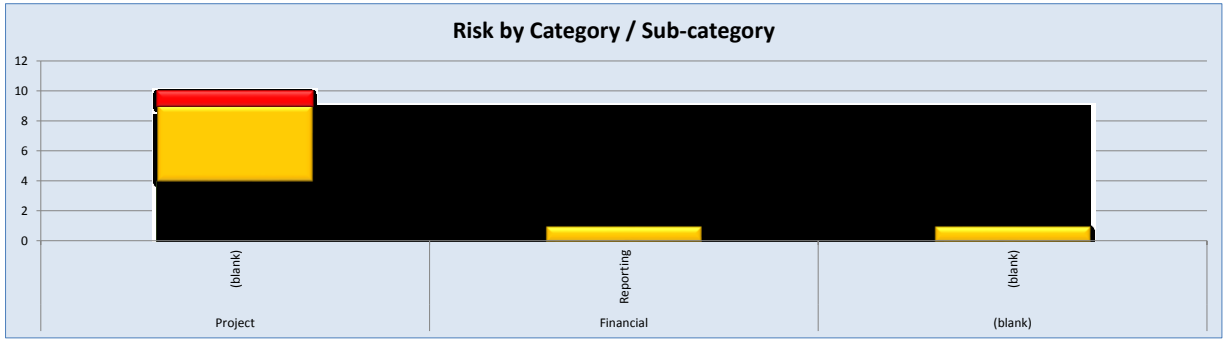
Risk	Appetite		
	Low	Medium	High
High	1	0	0
Medium	3	3	1
Low	3	1	0



Calculation ...
- High
- Low
- Medium



Calculation ...
- High
- Low
- Medium



Risk Map

Likelihood							
	5 -	Almost Certain					
	4 -	Likely					12 Asbestos
	3 -	Moderate		9 Staff Morale	26 Stakeholders/partners 32 Location Factor Indices	14 2020 Election 15 Treasury / Portfolio 19 Exchange rate 20 Planning/Building Control 31 Allocated Budgets	
	2 -	Unlikely		10 Media Management	6 Project resources and expertise	28 Programme Sign-Off	
	1 -	Rare					
			1- Insignificant	2 - Minor	3 - Moderate	4 - Major	5 - Catastrophic
			Consequence / Impact				

Risk v's Appetite Map

Risk Exposure	Low	Medium	High
High	12 Asbestos		
Medium	15 Treasury / Portfolio 20 Planning/Building Control 31 Allocated Budgets	19 Exchange rate 26 Stakeholders/partners 32 Location Factor Indices	14 2020 Election
Low	28 Programme Sign-Off 6 Project resources and expertise 10 Media Management	9 Staff Morale	

Risk Appetite