

The Refurbishment of Ysbyty Glan Clwyd

Report of the Auditor General for Wales

September 2020



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Summary

- 1 Ysbyty Glan Clwyd (the hospital) is one of three district general hospitals serving North Wales. The hospital is situated in Bodelwyddan, near Rhyl, and opened in 1980. Betsi Cadwaladr University Health Board (the Health Board) oversees the provision of healthcare services in North Wales, employing around 18,000 staff and with an annual budget of approximately £1.6 billion. The Health Board was established in October 2009. Before that time, the Conwy and Denbighshire NHS Trust managed the hospital until 31 March 2009 and the North Wales NHS Trust took over between 1 April and 30 September 2009.
- 2 The hospital was designed and built in the 1970s. Despite increasing awareness at that time of the health risks associated with exposure to asbestos and the introduction of associated regulations, asbestos was still widely used as a fire retardant in buildings. The hospital's steel frame was encased in spray-applied asbestos.
- 3 There was an asbestos management plan in place at Ysbyty Glan Clwyd before the Health Board was established in 2009 and discussions had taken place about the possible construction of a new hospital on an adjacent site or the refurbishment of the existing hospital.
- 4 Following two asbestos-related incidents at the hospital in 2010, the need for action became considerably more urgent. The Health and Safety Executive (HSE) issued statutory Improvement Notices that required the Health Board to act without delay. The Health Board therefore applied to the Welsh Government for capital funding, using the required three-stage business case process.

- 5 In 2012, the Welsh Government approved a project for the Health Board to remove the asbestos and refurbish the hospital. The Welsh Government agreed a funding package for the project of £110.4 million, spread over eight financial years. The project was completed in 2019, almost to schedule, but at a cost of £170.8 million, almost 55% more than the original approved budget.
- 6 This report sets out a factual account of the key matters contributing to the significant increase in the cost of this large construction project from that agreed in 2012. The report presents these matters in the wider context of the Health Board's governance arrangements and the Welsh Government's arrangements for considering the approval of large capital projects within the NHS Wales. The report also sets out some of the steps taken by the Health Board and the Welsh Government to reduce the risk of similar issues occurring with future NHS Wales construction projects. As a factual account, the report draws no conclusion about the extent to which the project represents value-for-money to the public purse
- 7 Our work draws heavily on the previous findings of other auditors and consultants. **Appendix 1** sets out our audit approach and methods.

Key findings

- 8 The Health Board and its contractors have successfully completed the complex process of stripping asbestos and removing some 300,000 tonnes of contaminated waste from the site of a 'live' working hospital. At the same time, the project has enhanced facilities that will provide patients and staff with a better experience and environment. The additional facilities include:
- state-of-the-art operating theatres and departments;
 - a new emergency quarter;
 - new wards and the refurbishment of existing ones;
 - a new pathology department;
 - a new critical care unit;
 - refurbished x-ray and outpatient facilities; and
 - a new catering department.
- 9 Our review of the management of the programme of asbestos removal and refurbishment works at the hospital has found the following:
- the deadline set by the Health and Safety Executive (HSE) for the Health Board to provide an asbestos removal timetable created challenges for both the Health Board and the Welsh Government;
 - previous reviews have identified:
 - weaknesses in the preparation of the business cases, with concerns identified by advisors to the Welsh Government not being raised or addressed at the time the business cases were approved; and
 - significant deficiencies in the Health Board's governance and management of this project;
 - the project has cost the Welsh Government £53.2 million more than the £110.4 million funding awarded. The Health Board is providing the £7.2 million balance of the funding from its own resources;
 - the Health Board's concerns about the External Cost Advisor's input to the project until April 2017 have since been addressed; and
 - both the Health Board and the Welsh Government have taken action to strengthen their respective approaches to managing and approving capital projects.

Timeline of key events

A timeline of key events on the project that are referred to in this report.

January 2010

Asbestos-related incident in Wards 11 and 12 of YGC.

November 2010

Asbestos-related incident in YGC's main operating theatre suite, theatre recovery and associated corridors.

January 2011

Health Board approves Strategic Outline Case seeking capital funding for submission to WG.

April 2011

WG approves Strategic Outline Case.

July 2011

Health Board provides HSE with asbestos removal plan for YGC.

November 2011

Health Board approves Full Business Case for submission to WG.

February 2010

HSE issues two Improvement Notices to Health Board.



December 2010

HSE issues Improvement Notice to Health Board.

April 2011

HSE issues Improvement Notice requiring Health Board to prepare a plan, by 30 July 2011, for removing asbestos throughout YGC.

June 2011

Health Board approves Outline Business Case for submission to WG.

November 2011

HSE approves Health Board's plan for removing asbestos.



February 2012

WG notifies Health Board that Minister for Health and Social Services has approved the Full Business Case.



June 2013

WG issues revised guidance for capital planning and business case development.

January 2014

By January 2014, the overall budget for the YGC development programme is £110.4 million.

Supply Chain Partner issues Health Board with 'Potential notice to suspend all or part of the Contract Works'.

February 2014

WG's Internal Audit Service reports no evidence to suggest CEF did not discharge their function with monitoring the project.



July 2014

Health Board agrees a contract strategy for the remaining works with WG.

September 2014

SSU issues report to the Health Board on the project's wider governance processes.

October 2012

WG's Internal Audit Service provides a limited assurance audit opinion of WG's controls over business case appraisal, approval and prioritisation.

July 2013

Infrastructure Investment Board set up by WG.



February 2014

Health Board asks SSU to review progression of the project.

May 2014

Potential criminal offences referred to NHS Counter Fraud Service Wales.

July 2014

SSU issues a report concluding that Project Board, the Health Board and WG officials had all been misled about the project's financial performance





March 2016

WG confirms revised funding of £163.6 million for the scheme to take the project to completion.

June 2017

NHS Counter Fraud Service Wales submits full advice file to Crown Prosecution Service.

November 2017

Health Board arranges for an external review of the cost advice received from its External Cost Advisors to April 2017.



December 2018

NHS Counter Fraud Service Wales receive final legal advice from an independent Queen’s Counsel. No criminal charges were preferred.

March 2015

Health Board receives report from an external body commissioned to review and improve capital and project management processes.

April 2017

External Cost Advisor informs Health Board the project may need more funding.



September 2017

SSU issues report evaluating Health Board’s processes and procedures supporting the project.

September 2018

External review of cost advice reports to Health Board, noting deficiencies with the advice received.

February 2019

YGC refurbishment project completes at a total cost of £170.8 million.

Key:

YGC – Ysbyty Glan Clwyd

HSE – Health and Safety Executive

WG – Welsh Government

SSU – NHS Wales Shared Services Partnership’s Audit and Assurance Services Specialist Services Unit

CEF – Capital, Estates and Facilities, Department for Health and Social Services, Welsh Government

Main Report

The challenging programme of asbestos removal and improvement works at Ysbyty Glan Clwyd Hospital was successfully completed, broadly to time, and costing £170.8 million

In 2010, the Health and Safety Executive issued statutory Improvement Notices following asbestos-related incidents at Ysbyty Glan Clwyd, leading to an asbestos removal and hospital refurbishment project

- 10 Ysbyty Glan Clwyd was designed and built in the 1970s, when asbestos was widely used throughout the construction industry. The hospital's steel frame was cased in spray-applied asbestos. The presence of asbestos had been a known issue at the hospital for many years and an asbestos management plan was in place. However, in 2005, Conwy and Denbighshire NHS Trust confirmed to the HSE that asbestos management measures at Ysbyty Glan Clwyd could continue for only a limited time and that there was a need to address the permanent removal of the asbestos.
- 11 Discussions took place with the Welsh Government between 2007 and 2008 about the possible construction of a new hospital on an adjacent site or the refurbishment of the existing hospital. However, two separate asbestos incidents at the hospital in 2010 added significant urgency to the need for action to remove asbestos from the hospital building. Investigation by the HSE found that the asbestos on the structural steel work had deteriorated and, in many places, had fallen from the beams on to the top of the suspended tile ceilings above occupied areas of the hospital.
- 12 The HSE concluded that a suspended tile ceiling was not a suitable barrier between occupied areas of the hospital and an asbestos-contaminated ceiling void, and that the risk of further spread was significant and probable. The HSE also found that the ducting of the air moving system within the hospital, which was located within the asbestos-contaminated ceiling voids, was in poor condition with holes. The air moving system was switched off and sealed and the HSE issued statutory Improvement Notices to the Health Board. **Exhibit 1** summarises the events of 2010.

Exhibit 1: Asbestos-related incidents at Ysbyty Glan Clwyd during 2010

January 2010 incident

Area affected:

Wards 11 and 12 and that section of the corridor between the wards and located under the plant room at Ysbyty Glan Clwyd.



JAN

Incident:

A water leak in the plant room on the roof of the 'H block' leaks through the floor, saturating the asbestos covering the steel work in the ceiling void below. Asbestos slurry then leaks through the ceiling tiles between Ward 11 and Ward 12. Inspections also identified loose asbestos lying on top of ceiling tiles.



FEB

Health and Safety Executive response, 3 February 2010:

Improvement Notice 302430003 requires the Health Board to remove the asbestos within the ceiling voids or where this is not reasonably practicable to reduce the spread, by 30 April 2010.

Improvement Notice 302430074 requires the Health Board to carry out a visual inspection of the ceiling voids throughout the hospital to determine the extent of loose asbestos lying on top of the ceiling tiles by 11 June 2010.

November 2010 Incident

Area affected:

Main operating theatre suite, theatre recovery and associated corridors.



Incident:

High winds cause movement in the suspended ceiling above the main theatres corridor and damage occurs to the ceiling tiles. An inspection above ceiling level by an asbestos specialist reveals that the ceiling void is contaminated with asbestos debris and the fibre levels in the ceiling void exceed the permitted limits.



Health and Safety Executive response, 20 December 2010:

Improvement Notice 4234550 requires the Health Board to remove, repair, encapsulate or enclose asbestos or asbestos-containing materials in poor condition in the affected area.

Exhibit sources: Letters from the Health and Safety Executive to the Chief Executive, Betsi Cadwaladr University Health Board, dated 3 February 2010 and 20 December 2010.

- 13 As an interim arrangement, the Health Board implemented air monitoring throughout the hospital to ensure the safety of staff and visitors and subsequently updated the Asbestos Management Plan. The Health Board then considered a wide range of options of how best to fulfil its statutory obligations with regard to health and safety regulations. It decided that, at the same time as stripping asbestos from the hospital, it would also improve compartmentation to prevent the rapid spread of fire and modernise the hospital's facilities to support the organisation's clinical strategy and improve patient care.

The complex project to remove asbestos and refurbish the hospital was completed only a few months later than planned but the cost to the Welsh Government was significantly over the original approved budget

- 14 The scope of the project was to remove asbestos from, and redevelop, the original hospital, including the two-storey 'podium' building, the ward tower block, together with plant rooms and ancillary spaces. The redevelopment also included the extension and redevelopment of the Emergency Department to form a new 'Emergency Quarter' and the provision of new Mortuary and Pathology buildings, as well as the upgrading of all infrastructure necessary to support the redevelopment plans.
- 15 The work involved the removal of in excess of 300,000 tonnes of contaminated material, including asbestos, to the satisfaction of HSE, and resulted in the lifting of all HSE Enforcement Notices within the time deadlines set by the HSE.
- 16 The project also included the reinstatement and upgrade of all fire protection, compartmentation and safety measures to meet current Building Regulations and Fire Service requirements.
- 17 The work was completed in February 2019, only a few months later than planned, at a total cost of £170.8 million. However, the cost to the Welsh Government of the project has escalated from their original budget of £110.4 million to £163.6 million.

The timeline for providing an asbestos removal plan to the Health and Safety Executive created challenges for both the Health Board and the Welsh Government

The Health and Safety Executive set the Health Board a July 2011 deadline to provide an asbestos removal plan

- 18 The December 2010 Improvement Notice also set out the HSE's intention to serve another wider-ranging Improvement Notice requiring the Health Board to produce a detailed plan for the removal and/or repair of any asbestos or any substance containing asbestos in poor condition from the entire hospital.
- 19 The HSE's position was that the Health Board could no longer continue to manage the asbestos-related risks at the hospital without a formal strategic plan to remove asbestos from the main building, and that such a plan would need to be delivered within a timeline approved by the HSE. The HSE was prepared, if necessary, to use its Regulatory Powers of Enforcement to ensure that all asbestos-containing materials were removed.
- 20 By this time, some asbestos removal work was taking place and the Health Board had started to develop a business case to secure Welsh Government capital funding to remove the asbestos and refurbish the hospital. The Health Board advised the HSE that the business case process could take up to a year. However, the HSE indicated that it was not convinced that this was a reasonable timescale.
- 21 On 11 April 2011, the HSE issued an Improvement Notice requiring the Health Board to prepare a plan, by 30 July 2011, for the removal of asbestos throughout the hospital.

The Health and Safety Executive approved the Health Board's asbestos removal plan before the Welsh Government had agreed to fund the project

- 22 Welsh Government guidance¹ in place at the time of the Health Board's application to secure capital funding sets out an established process for developing and delivering capital investment programmes across NHS Wales.
- 23 Individual schemes for major capital investment require the Welsh Government's formal approval to proceed at three stages, described in **Appendix 2**:
- Strategic Outline Case;
 - Outline Business Case; and
 - Full Business Case.
- 24 **Exhibit 2** below sets out the key events during the Health Board's application to the Welsh Government for capital funding to carry out the asbestos removal and refurbishment project at Ysbyty Glan Clwyd.

1 Welsh Health Circular (2006) 001, **Developing and Delivering the Capital Investment Programme** and Welsh Health Circular (2007) 052, **Developing and Delivering the Capital Investment Programme**. Both sets of guidance were replaced by NHS Capital Planning Guidance issued on 18 June 2013.

Exhibit 2: timeline of key events in the business case submission and approval process

27 January 2011

Health Board approves the Strategic Outline Case seeking capital funding for submission to Welsh Government.

The Strategic Outline Case estimates the capital cost of the programme of work to be £76.8 million and the project will complete in 2018.

28 April 2011

Minister for Health and Social Services formally approves the Strategic Outline Case and authorises the Health Board to proceed to develop an Outline Business Case within a capital cost limit of £76.8 million.

27 July 2011

Health Board provides the Health and Safety Executive with an asbestos removal plan for the hospital.

24 November 2011

Health Board approves the Full Business Case for submission to Welsh Government.

11 April 2011

Health and Safety Executive issues an Improvement Notice requiring the Health Board to prepare a plan by 30 July 2011 for removing asbestos throughout the hospital.

23 June 2011

Health Board approves the Outline Business Case for submission to Welsh Government.

The Outline Business Case seeks capital investment of £89.9 million (excluding inflation). Additional costs are included for redevelopment of the hospital's Emergency Department and substantial further work on remodelling the hospital to improve patient care.

4 November 2011

Health and Safety Executive approves the Health Board's plan for removing asbestos from the hospital.

15 February 2012

Welsh Government notifies the Health Board that the Minister for Health and Social Services has approved the Full Business Case.

The scheme is authorised to proceed over a period of seven years with a capital cost of £89.9 million, plus a provisional assessment for post-contract inflation of £11.7 million.

- 25 In compliance with the HSE improvement notice, and soon after submitting its Outline Business Case to the Welsh Government, the Health Board issued an improvement plan to the HSE. The plan outlined a phased approach to removing the asbestos and set out the prioritisation criteria and the management arrangements in place to deliver this plan. Meanwhile, the Health Board continued to progress the business case and work with the Welsh Government to secure the necessary funding.
- 26 The HSE approved the Health Board's plan for the removal of asbestos on 4 November 2011, which was before the Health Board had approved and submitted the Full Business Case to the Welsh Government.
- 27 In approving the asbestos removal plan, the HSE confirmed that the proposed schedule for asbestos removal complied with the requirements of the Improvement Notice issued in April 2011. The HSE also acknowledged that the asbestos removal plan may and should vary over time, but that any significant delay in the timeline would be challenged.
- 28 At the outset, the HSE made it clear that it would issue individual Improvement Notices relating to each removal phase to ensure the completion of the overall plan by the target date.

The Welsh Government never formally approved the Health Board's Outline Business Case, submitted in June 2011

- 29 The Health Board did not receive formal approval of the Outline Business Case but was instructed by the Welsh Government to prepare and submit the Full Business Case.
- 30 The Welsh Government's Internal Audit Service reported in July 2014 that the Minister for Health and Social Services had rejected the Outline Business Case on the grounds that it did not include service delivery plans. Internal Audit also reported that the Welsh Government considered the Full Business Case without previously having approved the Outline Business Case because of the need for the Health Board to act on the HSE Improvement Notices.

The Health Board appointed the external contractors for the project once the Strategic Outline Case had been approved

- 31 Following the Welsh Government's approval of the Strategic Outline Case, the Health Board moved ahead to select the supply chain partner – the main contractor for the project – as well as external cost advisors and project managers. To do this, the Health Board used the Welsh Government's All Wales Capital Procurement Initiative, 'Designed for Life: Building for Wales' framework. This framework provides a list of supply chain partners, who deliver the design and construction requirements of projects, and also provides support frameworks for project management, construction supervisory and cost advisory services.
- 32 The Health Board appointed Laing O'Rourke as the supply chain partner. It also appointed Gleeds Cost Management Ltd as external cost advisor and Gleeds Management Services Ltd as the external project manager. The external cost advisory and project management roles were intended to supplement the Health Board's own in-house expertise and capacity.

There were weaknesses in the Health Board's and the Welsh Government's handling of the business cases

Scrutiny of the Outline and Full Business Cases by advisors to the Welsh Government raised concerns that the business cases were insufficiently prepared

- 33 The Capital, Estates and Facilities branch within the Welsh Government's Department for Health and Social Services is responsible for co-ordinating the review of Outline Business Cases and Full Business Cases for NHS Wales capital investment schemes.
- 34 NHS Wales Shared Services Facilities Services (Facilities Services)² provide expert advice to the Welsh Government to support the scrutiny of capital funding applications within NHS Wales. Officials in Capital, Estates and Facilities shared the Ysbyty Glan Clwyd Outline Business Case and Full Business Case with staff in Facilities Services so that they might comment on matters such as the costs, design and procurement models set out in the business cases.
- 35 The scrutiny process involved the completion of scrutiny grids that collated expert reviewers' comments on the business cases, the Health Board's responses to these comments, and then the reviewers' consideration and assessment of the Health Board's responses. Officials in Capital, Estates and Facilities then used the scrutiny grids to provide advice and recommendations to the Minister regarding business case approval.
- 36 The evaluation by Facilities Services found that both the Outline and Full Business Cases were insufficiently prepared, with significantly underdeveloped design and cost plans that were unrealistic and not fully defined. They assessed that the depth of project design and costing detail in both the Outline and Full Business Cases fell short of what would normally be required at these stages.

2 NHS Wales Shared Services Facilities Services was formerly known as Welsh Health Estates and is currently titled Specialist Estates Services. It provides advice and support to the Welsh Government and NHS Wales organisations on a wide range of issues related to the built environment in healthcare facilities.

Welsh Government advisors raised concerns with the Health Board's project team, but not all issues were escalated or considered more widely within the Health Board

- 37 Members of the Health Board's project team responded to the queries and concerns raised by Facilities Services during the scrutiny process, but some of the responses did not fully address the issues raised. There was no evidence of effective internal review and scrutiny of the business cases and the outcomes of the external scrutiny process were not shared with the Project Board or the Board of the Health Board.
- 38 The presentation of an executive summary of the Full Business Case did not inform the Board of the Health Board about the project's inadequate degree of preparedness as it stood at that time.

When approving the business cases, the Welsh Government did not sufficiently consider the risks associated with their advisors' concerns that project design and costings were underdeveloped

- 39 The Welsh Government had temporary arrangements in place for approving capital business cases when it reviewed the Ysbyty Glan Clwyd proposals. When the Health Board submitted its business cases to the Welsh Government in 2011, the substantive guidance in place at the time set out that each of the Strategic, Outline and Full Business Cases required the approval of the Capital Investment Board. The Capital Investment Board oversaw the Department for Health and Social Services capital programme at a strategic level and determined the priorities for capital investment.
- 40 However, the Capital Investment Board was no longer in place when the Health Board submitted its business cases for Ysbyty Glan Clwyd to the Welsh Government. Revised arrangements required Capital, Estates and Facilities to send business cases for endorsement by the Executive Directors Team within the Department for Health and Social Services, and then to the Minister for Health and Social Services for authorisation. The Terms of Reference setting out the Executive Directors Team's role in the business case approval process make clear that the role was intended as a temporary measure until a replacement Capital Advisory Group was established.

- 41 Welsh Government's Internal Audit Service confirmed to the Department for Health and Social Services in July 2014 that the revised arrangements in place at the time were followed correctly in submitting the Ysbyty Glan Clwyd Outline Business Case to the Minister and in briefing the Executive Directors Team on the Full Business Case before its submission to the Minister.
- 42 However, the internal audit review also identified that the submission to the Minister accompanying the June 2011 Ysbyty Glan Clwyd Outline Business Case made no reference to the concerns raised by Facilities Services about the project design and the level of cost information included in the plan. Furthermore, that review confirmed that neither the briefing to the Executive Directors Team supporting the November 2011 Ysbyty Glan Clwyd Full Business Case nor the resultant submission to the Minister made any reference to Facilities Services' repeated concerns.
- 43 The submissions did not, therefore, alert the Minister to the heightened risk that the project cost might be unrealistic, and how that risk might be mitigated in the context of the wider NHS Wales capital programme.

There were significant deficiencies in the Health Board's governance and management of this capital project

In January 2014, when it emerged that invoices for work completed previously had not been paid, the Health Board realised that the funding awarded by the Welsh Government was insufficient

- 44 By January 2014, the Welsh Government's approved funding of the project had increased from £101.6 million³, the sum approved in February 2012 for the main refurbishment and asbestos removal works, to £110.4 million. The overall budget for the hospital redevelopment programme now included additional business cases, approved separately and totalling £8.7 million, for diagnostic equipment, a second catheter laboratory and the critical care unit.
- 45 **Exhibit 3** shows a breakdown of the £110.4 million budget approved by the Welsh Government.

Exhibit 3: analysis of the project's approved budget of £110.4 million

	£ million
Main refurbishment	101.646
Catheter laboratory	2.943
Critical Care Unit	3.039
Pathology	0.422
CT scanner #1	0.400
CT scanner #2	1.927
Total	110.377

Exhibit source: Letters from Head of Capital, Estates & Facilities, the Welsh Government to the Acting Chief Executive, Betsi Cadwaladr University Health Board.

- 46 In January 2014 the Supply Chain Partner issued to the Health Board a 'Potential notice to suspend all or part of the Contract Works' because their invoices for November 2013 and December 2013, totalling £5.065 million, had not been paid.

3 The original funding package of £101.6 million included capital costs of £89.9 million and £11.7 million to cover inflation during the project's lifetime.

- 47 **Exhibit 4** sets out the forecast funding profile of the approved budget. The original funding (including inflation) available for the project during the 2013-14 financial year was £19.7 million. However, by the end of December 2013, the Supply Chain Partner had already issued the Health Board with invoices for payment totalling £23.57 million for the first nine months of the year. Effectively, the Health Board had no capital funds available to pay the Supply Chain Partner because it had already exceeded the project's allocation for 2013-14.

Exhibit 4: funding drawdown forecast for the project's approved budget of £110.4 million

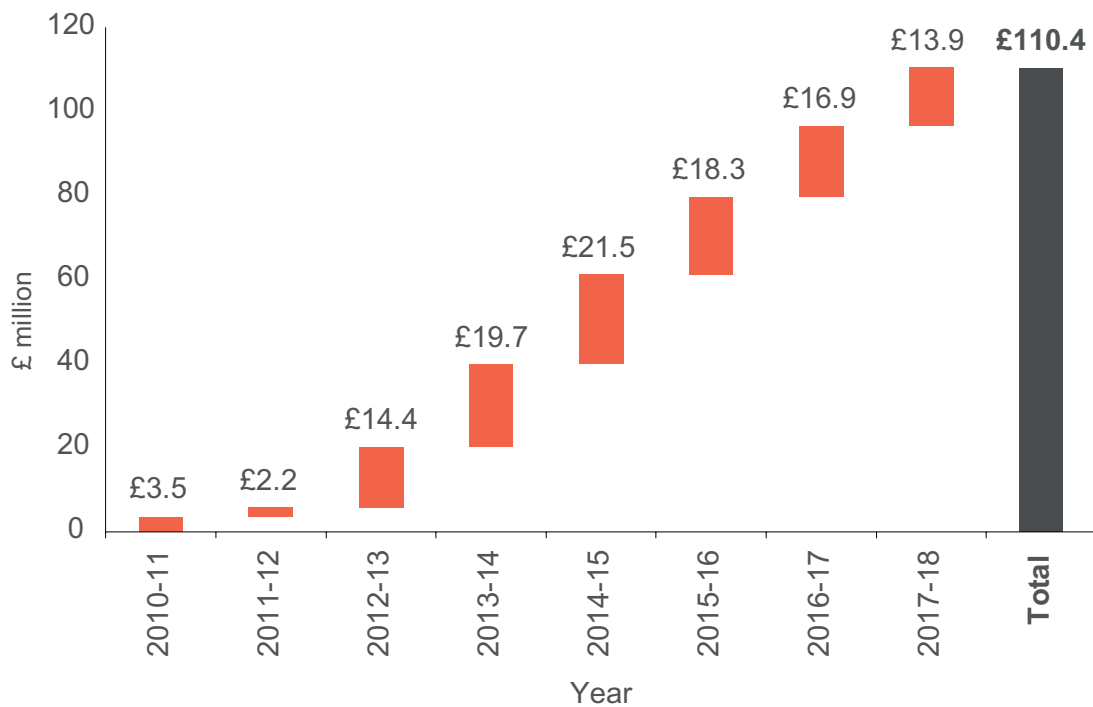


Exhibit source: Letters from Head of Capital, Estates & Facilities, the Welsh Government to the Acting Chief Executive, Betsi Cadwaladr University Health Board.

- 48 The Health Board paid the outstanding invoices on 31 January 2014 using additional capital funding provided to it by the Welsh Government. This funding had become available because of slippage within the 2013-14 NHS capital programme on projects in other health bodies. The Welsh Government had originally intended that this funding should be re-allocated to other projects.

- 49 Some of the cost over-run could be explained by the fact that aspects of the project were ahead of schedule. However, the discovery of invoices that had not been submitted for payment raised initial concerns about the reporting of the project's financial status and that the total agreed funding package of £110.4 million might be well below that required to complete the project.

Major discrepancies were identified in the reporting of financial information and so the Health Board referred these matters to NHS Counter Fraud Service Wales

- 50 The Health Board commissioned NHS Wales Shared Services Partnership's Audit and Assurance Services Specialist Support Unit (SSU) to conduct an audit review of:
- the Ysbyty Glan Clwyd capital project, including:
 - the Business Case process;
 - the translation of this into Welsh Government approvals;
 - subsequent increases in the annual capital funding allocation;
 - the contract award and contract management processes; and
 - the wider governance processes for the capital project including expenditure monitoring, control and reporting to both the Welsh Government and to the Health Board.
- 51 The Health Board agreed the audit brief in March 2014 and fieldwork began in April 2014. The SSU auditors issued their findings to the Health Board in July 2014, concluding that the Project Board, the Board of the Health Board and Welsh Government officials had all been misled about the project's financial performance against its capital budget.
- 52 In particular, the audit found that, for certain periods, there had been two different versions of the regular reports about the project's financial performance. The information presented at commercial meetings between the Supply Chain Partner, the external advisors and the Health Board showed correctly that anticipated spending was likely to exceed the approved project budget. However, these meetings operated outside the project's governance structure, with no defined reporting line internally to the Project Board. The information reported to the Project Board, the Board of the Health Board and to the Welsh Government conveyed a more favourable but false analysis of the project's financial position.

- 53 The July 2014 SSU audit report also identified instances of progress reports being amended to misrepresent the project's position to the Project Board. The amended reports avoided focusing on key risks and issues, such as affordability, which had been highlighted by the Supply Chain Partner and external advisors.
- 54 The SSU's September 2014 audit report states that, 'The project advisors, Supply Chain Partner and internal staff all pointed to the [project's] communication strategy as a primary reason for not disclosing financial concerns when they became prevalent – the consequence of a breach having been outlined to them as removal from the project.'
- 55 In February 2014 the Department for Health and Social Services requested a compliance review by the Welsh Government's Internal Audit Service of Capital, Estates and Facilities' records relating to the Ysbyty Glan Clwyd capital scheme. The review found 'no evidence to suggest that Capital, Estates and Facilities did not discharge their function' in relation to the monitoring of the scheme. The report indicated that the scheme was progressing as anticipated and that the problems that came to light in January 2014 appeared to arise as a direct consequence of the lack of disclosure from the Health Board of affordability problems.
- 56 In May 2014, prior to the finalisation of the SSU audit report, the Health Board referred the dual reporting matter to the NHS Counter Fraud Service Wales who began an investigation. Working in conjunction with North Wales Police, the investigation resulted in a number of arrests including Health Board staff and external partners.
- 57 While the Health Board investigation continued, two members of staff were subject to internal NHS disciplinary action. NHS Counter Fraud Service Wales submitted a full advice file to the Crown Prosecution Service on 23 June 2017, which was subsequently referred to Queens Counsel for advice in November 2018. In 2019, the Crown Prosecution Service decided against bringing any criminal charges against any individual or organisation in connection with the project. The Health Board also decided not to pursue civil proceedings against any of the parties involved.

Auditors issued a 'no assurance' opinion on the Health Board's arrangements for governing and managing the project

- 58 Following its July 2014 report that identified the inconsistent financial reporting, the SSU conducted a second audit focusing on wider issues around the control framework in place to deliver the project for the period to January 2014. The auditors reported to the Health Board's Audit Committee in September 2014, providing a 'no assurance' audit opinion about the Health Board's governance and management of the project. The report made 40 recommendations to the Health Board, of which 37 were classed as high priority. Of these 40 recommendations, 17 were specific to the Ysbyty Glan Clwyd project while the remainder were relevant to the project but also had broader implications for capital governance and the control environment.
- 59 The report's key findings concentrated on the submission of unrealistic business cases to the Welsh Government (see **paragraphs 33 to 36**), an understated target cost, an unauthorised contract strategy and an ineffective project governance framework.

The Health Board approved a 'Not to be Exceeded' cost in the Full Business Case but had not previously consulted the Supply Chain Partner and had significantly understated the project's financial requirement

- 60 Preferably, a Full Business Case for a 'Designed for Life: Building for Wales' project should include a Target Cost⁴ that has been agreed between the health board and the supply chain partner. Where this cannot be achieved, a case may be made to the approving bodies at the Full Business Case stage that they should agree a 'Not to be Exceeded' price⁵ instead of the Target Cost agreed.
- 61 A Target Cost requires a detailed build-up of cost supported by a suggested 80% design completion, with appropriate elements having been market tested and, importantly, signed off and agreed by the supply chain partner.
- 62 The Health Board included a 'Not to be Exceeded' cost of £89.9 million, excluding inflation, in the Full Business Case for the main refurbishment and asbestos removal works submitted to the Welsh Government in November 2011.
- 63 During their scrutiny of the Outline Business Case, Facilities Services recorded their concerns that the Health Board did not have enough time to complete the necessary work for it to submit the Full Business Case to the Welsh Government in November 2011, as planned. In particular, Facilities Services considered it impossible for the Health Board to agree a thorough brief and then design and market test the whole scheme to the level of certainty required in the time available.
- 64 When scrutinising the Full Business Case, Facilities Services noted that insufficient information had been provided to comment on the proportion of design completed and that the costs in the Full Business Case had not been substantiated and did not, therefore, fulfil the requirements for a Full Business Case.

4 The Target Cost is the contractual cost of the works, as determined by the operation of the main construction contract and scrutinised independently by the external cost advisor. The Target Cost in Designed for Life projects is subject to a pain/gain mechanism: if actual costs are below the Target Cost, the benefit is shared between the health board and supply chain partner, but if the Target Cost is exceeded, the additional cost is borne by the supply chain partner alone.

5 A Not to be Exceeded Cost is a cost cap agreed with the supply chain partner and included in a Business Case when the level of cost uncertainty does not permit the development of a full Target Cost. The cap is included in the Business Case and effectively informs the Welsh Government's approved budget.

- 65 The Health Board responded that it was committed to submitting a Full Business Case to the Welsh Government in November 2011 because of the HSE's timescales. The Health Board acknowledged that designing and market testing the project to the framework guidance of 80% would be challenging and proposed that it would agree a 'Not to be Exceeded' cost with the Supply Chain Partner in November 2011, based on 60% project design and market testing.
- 66 At the Capital Review Meeting between the Welsh Government and the Health Board on 17 January 2012, Facilities Services remained concerned that the project's cost estimates were not sufficiently robust. However, Facilities Services agreed to conclude their scrutiny of the business case on the condition that a 'Not to be Exceeded' cost agreement was in place with the Supply Chain Partner.
- 67 The September 2014 SSU audit report noted that the Welsh Government had agreed that the Full Business Case could be submitted on the basis of a 'Not to be Exceeded' figure.
- 68 The Health Board maintained that the 'Not to be Exceeded' cost included in the Full Business Case had been reviewed by the external cost advisor and agreed with the Supply Chain Partner prior to submission. Board minutes approving the Full Business Case submission refer to the 'Not to be Exceeded' cost as a 'guaranteed maximum price'.
- 69 However, in their September 2014 audit report, SSU say they were advised that the Supply Chain Partner did not have sight of the Full Business Case or the 'Not to be Exceeded' cost, and that the £89.9 million price was substantially lower than the Supply Chain Partner's own expectations. There was no contractual agreement of price between the Health Board and the Supply Chain Partner at that stage of the business case approval process.

The contract strategy set out in the approved business case was later changed without appropriate authorisation or notification

- 70 The Full Business Case outlined that the Health Board would agree a single contract with the Supply Chain Partner to carry out the whole programme of work. The contract for the engineering and construction work, including design responsibility, was an NEC3⁶ (Option C) contract. Option C is a Target Cost contract where the out-turn financial risks are shared between the client and the contractor in an agreed proportion. This form of contract supports a more collaborative approach to a project, than many other forms.
- 71 The first, and only, contract signed with the Supply Chain Partner in December 2012 was for the sum of £42.6 million. The 'YGC Redevelopment Stage 4 Contract: Contract 4A', commonly referred to as the '4A contract' related to the Mortuary, Pathology Department, Emergency Quadrant and asbestos removal.
- 72 However, a Health Board employee subsequently amended the strategy to a two-contract strategy. Neither the Health Board's Project Team, its Board nor the Welsh Government had approved the change and nor were they aware of it. The lead executive at the Health Board was unaware that the contract only represented part of the project and that the contract strategy had changed.

6 The initial New Engineering Contract (NEC) was published in 1993. Following a decade of extensive international use, the NEC3 contract suite was launched in 2005.

Ineffective project governance allowed the Project Board, the Board of the Health Board and the Welsh Government to be misled about the project's overall affordability and its financial performance against its capital budget

- 73 The September 2014 SSU audit report sets out a number of weaknesses in the Health Board's internal controls for the project, including:
- the Project Board met only in February and March 2012 and then quarterly through 2013, rather than monthly as planned in the Full Business Case.
 - no financial information, and limited performance information, was presented to the 2012 Project Board meetings. Financial and progress reports were introduced from March 2013 onwards, but offered very limited information. These reports were later identified as presenting an incorrect position, omitting key concerns and risks.
 - a number of key events were not subject to formal reporting or approval by the Project Board, including:
 - progression on site without design, Target Cost or contract;
 - the option to proceed with a 'Not to be Exceeded' cost, rather than a fully developed Target Cost;
 - sign-off of the Health Board's responses to the matters raised in the Welsh Government's scrutiny of the Business Case;
 - sign-off of the design;
 - change to the contract strategy;
 - agreement/acceptance of the Target Cost; and
 - approval to enter a part contract.
 - the visibility of the challenge and scrutiny from the Health Board's Finance function was limited and depended on information flowing from the Planning Department. The Finance function's membership of the Project Board lapsed after the approval of the Full Business Case.
 - there had been no specific training for members of the Board on capital expenditure and related processes.
 - there was no evidence of the Health Board introducing additional controls, or adapting controls, to reflect the fast-track nature of the project.

The project cost £170.8 million, with much of the additional funding coming from the Welsh Government

The Welsh Government approved additional funding of £53.2 million to complete the project

- 74 When it became apparent that the agreed funding package was insufficient, it had become impossible for the Health Board to enter into new contracts with the Supply Chain Partner because the company was no longer listed on the Designed for Life framework contract. The Health Board therefore sought legal advice and support from Facilities Services and subsequently agreed with the Supply Chain Partner a series of contract variations, known as Compensation Events, so that the contractor could continue to work on the project.
- 75 In July 2014 a contract strategy was agreed with Facilities Services and the Welsh Government, which supported five compensation events. They were based upon target costs, as agreed with the Supply Chain Partner. The first three were developed, reviewed and approved by the Welsh Government and were accommodated within the original budget of £110.4 million. Compensation Events 1, 2 and 3 were approved in August 2014, February 2015 and October 2015 respectively.
- 76 In March 2016 the Minister for Health and Social Services approved Compensation Events 4 and 5 to complete the hospital redevelopment work at Ysbyty Glan Clwyd, increasing the total funding envelope to £163.6 million.
- 77 The Welsh Government told us that it had been able to find the additional £53.2 million needed to finish the project from within its existing capital budgets and without any adverse effect on other existing or proposed plans within the NHS All Wales Capital Programme.

The Health Board is meeting the remaining cost of the project from its own resources

- 78 The project final out-turn cost is £170.8 million. As shown in **Exhibit 5**, total approved funding provided by the Welsh Government for the project is £163.6 million. The Health Board is funding the remaining sum of £7.2 million from its own resources.
- 79 When awarding the additional funding in March 2016, the Welsh Government informed the Health Board that any overspend against the approved sum would have to be found from within the Health Board's discretionary capital funding.
- 80 Up to April 2017 the Health Board had approved £3.1 million additional funding for the project from its discretionary capital allocation. To meet the total cost of the project, which turned out to need a further £4.1 million, the Health Board brokered additional capital from the Welsh Government in 2018-19, to be repaid over three years from 2019-20.
- 81 The Health Board has spent its own resources on the project for a number of reasons. These include:
- changes to the scope of works in order to meet operational and clinical requirements;
 - specifications for some works not being fully defined before the Welsh Government funding was awarded; and
 - taking advantage of the fact that the contractors were on-site in order to address some backlog maintenance issues.

Exhibit 5: the final out-turn cost of the project is £170.8 million

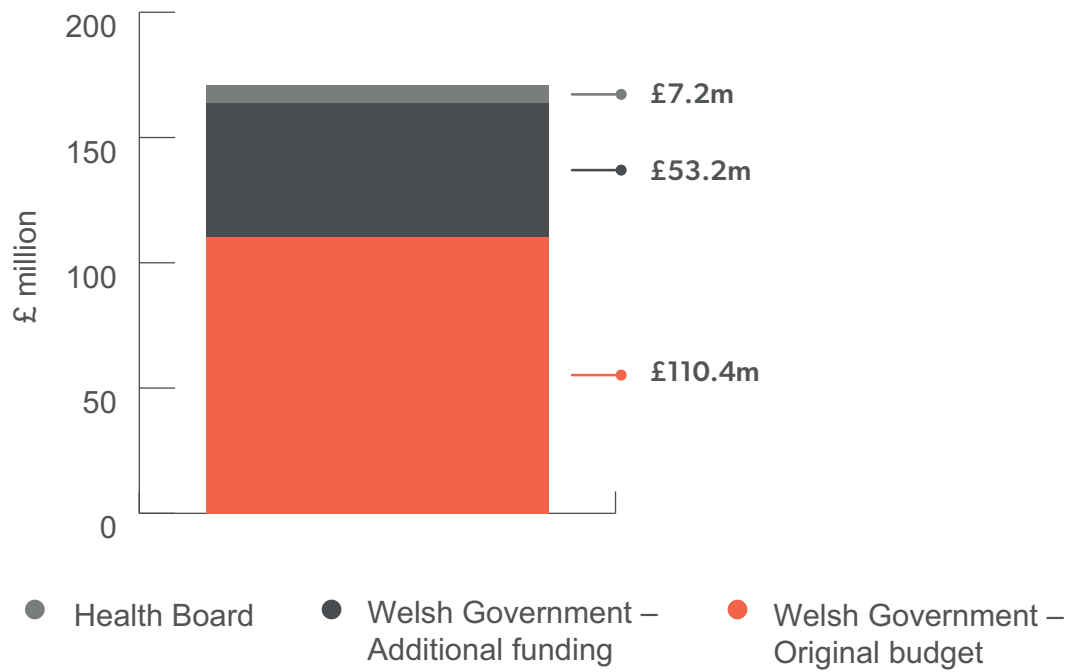


Exhibit sources: Letters from Capital, Estates & Facilities, the Welsh Government to Betsi Cadwaladr University Health Board, and information provided by the Welsh Government.

Deficiencies in the External Cost Advisor's input to the project were eventually resolved

The External Cost Advisor advised the Health Board of a potential further funding shortfall of £12.5 million

- 82 In August 2016, less than six months after the Welsh Government's final funding award to take the project to completion, the External Cost Advisor raised concerns with the Health Board about another potential increase in the project's estimated out-turn cost.
- 83 The Welsh Government had made it clear to the Health Board that it would provide no further capital or revenue funding for the project over and above the revised total funding envelope of £163.6 million agreed in March 2016; any overspend against the approved sum would
- 84 In May 2017, the External Cost Advisor confirmed an anticipated out-turn cost of £179.2 million. They reported that the project needed a potential additional £12.5 million to deliver its objectives after the Health Board had already allocated £3.1 million discretionary funding to the project. The Health Board, the External Cost Advisor and the Supply Chain Partner eventually reduced the additional costs, taking the total project cost to £170.8 million.

In September 2017, SSU auditors reported that there had been deficiencies in the External Cost Advisor's management of project costs

- 85 SSU carried out a further audit to evaluate the processes and procedures that the Health Board had put in place to support the progression of the project during the 2016-17 financial year. Fieldwork commenced in November 2016 and the audit report was issued in September 2017.
- 86 Positively, SSU reported that the project was achieving its quality aspirations and, broadly, was being delivered in line with the schedule agreed with the HSE. The audit evidenced 'certain areas where controls have been introduced or enhanced in relation to the prior audit'. The audit also found that cost information was now being produced regularly and distributed to appropriate parties, and that 34 of the 40 recommendations issued in September 2014 had been implemented, with just three outstanding and a further three recommendations only partially addressed.

- 87 However, the audit also found that deficiencies in the quality of cost reporting had hampered the Project Board in discharging its role effectively. These deficiencies related to the perceived inconsistency of the External Cost Advisor's advice, the clarity of information, poor turnaround of information, and poor quality of outputs and reports, with explanations and interpretations being difficult to understand.

An independent review identified deficiencies in the external cost advice received by the Health Board prior to April 2017

- 88 In November 2017, the Health Board commissioned an independent external review of the cost advice received from its External Cost Advisors up until April 2017. The commissioning of the review reflected the Health Board's concern about the potential increase in the estimated out-turn cost of the project of £12.5 million, and its dissatisfaction with the timeliness and clarity of the External Cost Advisor's response to its concerns.
- 89 The reviewers considered the documentation available within the Health Board and held discussions with Health Board project staff. A report presented to the Health Board's Finance and Performance Committee in September 2018 concluded that the External Cost Advisor had failed to deliver on certain aspects of its general obligations to the Health Board. The report also referred to certain deficiencies with information provided to the Health Board by the External Project Manager in their administration of the contract.
- 90 The report included recommendations for improving cost-reporting procedures for the remainder of the project, along with learning points for the Health Board to consider during future capital projects of a similar nature. At the same meeting, the Finance and Performance Committee considered a paper from management concentrating on lessons learnt and the actions to be taken.

Changes in key personnel resulted in a marked improvement in the quality of external cost advice after April 2017

- 91 The company providing external cost advice discussed the Health Board's concerns about the service provided on the Ysbyty Glan Clwyd project at Board level. This resulted in changes to the partner in charge of the project in April 2017 and the project lead in July 2017.
- 92 The Health Board noted a marked improvement in the External Cost Advisor's performance following these changes in personnel. More rigorous cost control brought about a reduction in the forecast out-turn cost and the quality of reporting also improved.

Both the Health Board and the Welsh Government have taken steps to strengthen their approaches to the management and approval of capital projects

The Health Board took action to strengthen its management of capital projects

- 93 Following the concerns raised in 2014, the Health Board took immediate steps to strengthen the management, governance and financial control of the project. The Health Board appointed a new Project Director and implemented a revised governance framework. The Finance Department undertook independent financial monitoring and provided regular reports to the Board of the Health Board and its committees.
- 94 As well as responding to the recommendations raised in the SSU audit reports, the Health Board set out to improve its project management arrangements by commissioning consultants to deliver two reviews and develop a Manual for Managing Capital Projects for the Health Board. One review focused on the Health Board's management of capital projects and was received by the Health Board in March 2015. The other review considered the processes for developing and managing business cases.
- 95 As a result of the reviews, the Health Board has implemented new governance arrangements, structures and processes. The Health Board's Audit Committee has also monitored the implementation of actions and recommendations arising from the SSU audits and other commissioned reviews.

The Welsh Government had already taken steps to improve its arrangements for approving business cases before the funding problems with the project at Ysbyty Glan Clwyd came to light

- 96 In October 2012, the Welsh Government's Internal Audit Service identified deficiencies in the control framework relating to the appraisal, approval and prioritisation of business cases under the NHS Capital Programme. The business case for the Ysbyty Glan Clwyd project was not among those tested as part of their audit work.
- 97 The internal auditors made eight significant recommendations to Welsh Government management, including the need for a Capital Advisory Group to oversee the management of the NHS Capital Programme. (As noted in paragraph 40, the former Capital Investment Board had ceased to exist by the time the business case for the Ysbyty Glan Clwyd project was considered.)

- 98 In response to this internal audit report, the Welsh Government's Department for Health and Social Services set up an Infrastructure Investment Board in July 2013. The Infrastructure Investment Board's remit included ensuring that all investments were consistent with the strategic direction of the NHS and its infrastructure investment objectives. A key role for the Infrastructure Investment Board was to provide formal advice and recommendations to the Minister for Health and Social Services regarding the approval of capital projects.
- 99 In 2013, the Welsh Government's Capital, Estates and Facilities team issued revised guidance for capital planning and the development of business cases. This guidance has since been replaced in March 2015 by the NHS Wales Infrastructure Investment Guidance (further updated in October 2018), which clarifies the Welsh Government's requirements in terms of:
- developing, appraising and approving business cases; and
 - project governance, highlighting Board responsibilities regarding the approval of business cases and the delivery of the infrastructure programme, and strengthening the audit and assurance processes around infrastructure schemes.
- 100 A review by the Welsh Government's Internal Audit Service in July 2014 of the Welsh Government's role in the application and approval process of the Ysbyty Glan Clwyd project noted that Capital, Estates and Facilities had made considerable improvements to controls operating over the management of the capital programme over the past year. Changes in senior staff and the management team, revised guidance and the introduction of the Infrastructure Investment Board had strengthened the control process. The report concluded that, had these controls been in place at the time of the submission of the Ysbyty Glan Clwyd business cases, the risk of non-compliance with capital procedures on the project would probably have been reduced.



Appendices

- 1 Our audit approach and methods**
- 2 Three stages of Welsh Government approval required for major investment proposals**

1 Our audit approach and methods

Scope

The scope of this report is confined to explaining how the Ysbyty Glan Clwyd refurbishment project eventually cost £170.8 million, a significant increase on the original £110.4 million funding package approved by the Welsh Government.

NHS internal auditors and consultants acting for the Health Board have produced several reports about various aspects of the Ysbyty Glan Clwyd refurbishment project over the past six years. However, these reports are not in the public domain and are generally detailed, complex and very technical in nature. Now that the constraint of possible legal proceedings has been removed, it is therefore timely that the Auditor General should produce a report that explains simply how this project came to cost the taxpayer more than originally approved.

Our report is made on a 'facts only' basis, and we have not therefore drawn conclusions or made recommendations arising from our audit work.

Methods

In undertaking the review, we:

- have drawn extensively on a range of internal audit reports and reports by independent consultants engaged by both the Health Board and the Welsh Government;
- made further enquiries of Health Board and Welsh Government officials based on our review of the key documents;
- met with executives from the Supply Chain Partner, External Cost Advisor and the Health and Safety Executive; and
- prior to publication, agreed the factual accuracy of our report with the Health Board, the Welsh Government and the named third parties.

2 Three stages of Welsh Government approval required for major investment proposals

Extract from Welsh Health Circular (2006) 001 **Developing and Delivering the Capital Investment Programme**

For major investment proposals there are three stages where formal approval to proceed is required. These are as follows:

At the outset a **Strategic Outline Case** (SOC) should be made which demonstrates clearly the need for the investment in service terms referenced to the relevant Strategic Outline Programme. The SOC will also develop a long list of options and conduct a robust option appraisal through to identification of the evidence-based, preferred way forward.



The **Outline Business Case** (OBC) develops the preferred option, tests its validity against other shortlisted options, sets out the procurement process, provides significant costed detail around risk and project management and details decisions made in order to reach that point.



The **Full Business Case** (FBC) reviews the content of the OBC; it will identify and explain any changes since the OBC and will reflect the detailed design and costing following joint working with the supply chain partner.



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