Sandwell and West Birmingham Hospitals NHS
NHS Trust

Midland Metropolitan Hospital

Outline Business Case

August 2014

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Sandwell and West Birmingham Hospitals NHS Trust

Midland Metropolitan Hospital Project

Outline Business Case

13 August 2014

DOCUMENT CONTROL SHEET

VERSION	DATE	COMMENTS
Version 0.1	28th June 2007	Shell document produced by DSAN
Version 0.2	4th July 2007	Updated by MCON following comments received from Jean Holderness
Version 0.3	10th July 2007	Updated following internal review
Version 0.4	24th July 2007	Updated to include references to OBC checklist
Version 0.5	6th August 2007	Updated to show responsibilities and date for 1st draft to be prepared for 1st internal review
Version 0.6	24th September 2007	Updated to show lead authors for each section, and re-ordering of headings
Version 0.7	26th November 2007	Updated to show amends agreed following internal review on 12th November 2007
Version 0.8	28th May 2008	Updated to reflect any changes agreed at the 13th December 2007 Project Team review including any changes to authors. Authors highlighted
Version 0.9 AKA Version 1.0	19th June 2008	Updated by MCON following timescale paper being produced post 12th June Project Team
Version 2.0	23rd July 2008	Updated by MCON with contributions to create 2nd draft for QA review on 11th Aug 2008
Version 2.1	3rd August 2008	Reviewed by MDAV/PELK
Version 2.2	4th August 2008	Updated by MCON with Workforce sections and issued to QA Team on 5th August for review on 11th August
Version 2.3	20th August 2008	Updated by MCON following QA on 11th August and issued to Trust
Version 2.4	18th September 2008	Updated by PELK to include financial & economic sections
Version 3.0	22nd September 2008	Updated by ABIG, MCON and DSAN with contributions from Project Team members following SHA review and outstanding sections
Submission V1.0	3rd November 2008	Updated by MCON, ABIG,PELK and MDAV with responses to V3.0 comments from SHA and internal QA comments
Submission V1.1	28th November 2008	Updated following Project Board meeting of 27th November 2008
Submission V1.2	10th November 2008	Updated by ABIG, PELK, DWHET & MCON following SHA comments on 5th December 2008
Submission V2.0	7th January 2009	Updated by MCON & ABIG to prepare for submission to SHA & DH
Update V2.1	27th July 2010	Update by ABIG and LJON for review by SHA/DH/HMT. First update version for Project Team review
Update V3.00	11th August 2010	OBC Update prepared by ABIG & LJON for review by SHA.
Update V3.1	9th September 2010	OBC Update prepared by ABIG and LJON following review by SHA
Update V4.0	17th September 2010	OBC Update moves to V4.0 prepared by ABIG and LJON to

		address Trust, PCT and SHA comments
Update V4.1	24th September	Updated by ABIG to include changes to commissioner support letters and TFF following request from Rob Bacon. This version issued to Trust Board and SHA for approval.
Update V4.2	5th November 2010	Updated by ABIG and MBHA in response to DH comments
Update V4.3	11th November 2010	Updated by ABIG for further DH comments
Update V4.4	5th April 2011	Updated by ABIG to reference economic appraisal to include valuation of benefits for HMT.
Update V4.4	25th October 2011	Updated by ABIG – small formatting changes.
Update V4.5	November 2013	Chapters 11 &12 updated by A Graham (previously known as ABIG) for Board approval for issue to TDA
Update V4.5	14th February 2014	Full refresh ready for team review.
Update V4.5	28th February 2014	Congruence re check versus issued LTFM
Update V4.6	3rd March 2014	Update by A Graham for CEO errata and refreshed economics
Update V4.7	10th March 2014	Update by D Lewsley for further errata
Update V4.8	19th March 2014	Update by D Lewsley for further errata
Update V4.9	7th July 2014	Update by D Lewsley to paragraphs 1.10.18 and 1.10.19 and small formatting changes
Update V5.0	13th August 2014	Publication Version

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1 Executive Summary

1.1 Introduction

1.1.1 This Outline Business Case (OBC) sets out the case for the development of a new acute hospital in the Grove Lane area of Smethwick to replace the current Sandwell General and City Hospitals. The hospital will be developed as part of the wider changes to health and social care being undertaken by the Right Care, Right Here (RCRH) Programme.

1.1.2 A Strategic Outline Case for the overall RCRH Programme was approved by the Secretary of State in July 2004. Since that time Sandwell and West Birmingham Hospitals NHS Trust (The Trust), local commissioners and other partner organisations have continued to develop their plans. A formal public consultation in 2006/07 showed strong public support for the proposals.

1.1.3 The changes proposed fit closely with the Health and Social Care Act 2012, the recommendations of the Francis report, the Keogh Report, Better Care aims and the plans of local Clinical Commissioning Groups (CCGs). The RCRH Programme will result in shift of care away from the acute hospital into community settings; investment in new community and primary care facilities; and development of a new single-site acute hospital to be called the Midland Metropolitan Hospital (MMH) proposed in this OBC.

The Trust

1.1.4 The Trust currently provides acute, specialist and community services from two teaching hospitals and a range of community facilities. It is an ambitious and high performing organisation with a proven track record of achieving financial, performance and quality targets. Table 1 below outlines key facts about the Trust.

Table 1: The Trust: Key Facts

Population served	530,000
Annual turnover	£420 million (2012/13)
Number of sites	Two acute sites and three main community locations
Current CQC Rating	Intelligent Monitoring Level 4 (inspection pending 2014/15)
Current TDA Rating	Level 2 (top 25% of acute care providers in the sector)

1.1.5 The Trust provides acute and specialist services from City Hospital in Birmingham and Sandwell General Hospital in West Bromwich. Emergency care, including A&E services is provided at both sites. In addition, the Trust provides comprehensive community services to over 300,000 people in the Sandwell area from more than 150 locations. Of these three are registered through the Trust. Those being:

- Rowley Regis Community Hospital;
- Leasowes Intermediate Care Centre; and
- Halcyon Midwife-led Birth Centre.

1.1.6 The Trust is a teaching hospital Trust of the University of Birmingham. It also delivers undergraduate and specialist education for nurses and professions allied to medicine for the University of Birmingham, the University of Wolverhampton and Birmingham City University.

1.1.7 City Hospital was built in 1887 as the Infirmary for the Birmingham Workhouse. Most of the estate, including the main inpatient facilities, still dates from this time. More recent additions include the £35m Birmingham Treatment Centre which provides state of the art facilities for one-stop diagnosis and treatment. Specialist services / departments at City Hospital include:

- The Birmingham and Midland Eye Centre (BMEC), a supra-regional specialist facility;
- The Pan-Birmingham Gynaecological Oncology Centre;
- The Sickle Cell and Thalassaemia Centre; and
- The regional base of the National Poisons Information Service.

1.1.8 Sandwell General Hospital's main clinical facilities were rebuilt in the 1970s. In 2005 a new £18m Emergency Services Centre opened on the Sandwell site, incorporating a comprehensive A&E facility, Emergency Assessment Unit and Cardiac Care Unit.

1.1.9 Both main acute sites are in poor condition and the Trust has one of the highest backlog maintenance levels in the NHS in England (at a cost of £130m).

1.1.10 The Trust is continuing its Foundation Trust (FT) application in parallel with the development and approval of this business case. Financial plans have been aligned by embedding the impact of the MMH in the long term financial model (LTFM). Current indications suggest a good prospect of successful authorisation over the coming 18 months.

1.1.11 Following the Health and Social Care Act (2012) the Trust now provides services for three main Clinical Commissioning Groups (CCGs):

- NHS Sandwell and West Birmingham CCG (accounts for circa 75% of Trust activity);
- NHS Cross City CCG (accounts for circa 13% of Trust activity); and
- NHS Birmingham South and Central CCG (accounts for circa 5% of Trust activity).

1.1.12 Sandwell and West Birmingham Clinical Commissioning Group (SWB CCG) is responsible for a population of 530,000, largely drawn from the Sandwell and Heart of Birmingham geographical areas. A key benefit of the new commissioning arrangements for the Trust is that their configuration has been organised around the catchment population the Trust serves. This is maintained in the proposed Unit of Planning arrangements across Sandwell, Solihull and Birmingham.

1.2 Status of the Business Case

1.2.1 The Strategic Health Authority (SHA) approved version 2 of the OBC on 27th January 2009 and the Department of Health (DH) approved it on 14th August 2009.

1.2.2 This approval cleared the way for the Trust to begin the process of negotiating the acquisition of the land for the MMH and the process of applying for an NHS Compulsory Purchase Order (CPO). CPO was required to ensure that clear route to title was achieved for the land, which had multiple owners and interests, making full voluntary acquisition difficult to achieve. Following a successful CPO process the Trust now owns the land on the Grove Lane site.

1.2.3 Approval by HM Treasury (HMT) was deferred until route to land title had been achieved. Now that the Trust owns the land and as requested by the DH this document has been updated for HMT review prior to launch of the procurement through the Government's Private Finance 2 (PF2).

1.2.4 The National Trust Development Authority (TDA) approved the scheme in January 2014.

1.2.5 Table 2 below outlines the outcomes against the conditions of approval specified by the DH and SHA in 2009.

Table 2: Conditions of the Approval Granted in August 2009

Conditions of the Approval Granted by the DH	
Approval Condition	**Outcome**
The procurement documentation will need to be approved by the Private Finance Unit and Department of Health Estates. The estates approval role has now passed to the Trust Development Agency (TDA).	Private Finance Unit review of the procurement documentation is underway.
The capital cost should not vary, in real terms, from the current estimates of £432 million for construction and £22 million for land. Any increase of 10% or more would require the OBC to be re-approved.	There has been a reduction in the MMH capital cost since the approval in August 2009 £353 at current costs. Land acquisition costs are projected to be within thresholds.
The plans must remain affordable to the Trust in revenue terms. The normalised revenue unitary charge must not exceed 12.5% of the Trust's turnover and a real-terms increase of 5% or more in the revenue costs of the scheme would precipitate a requirement to have the OBC re-approved.	The plans continue to be affordable as outlined in Section 10, The Unitary Charge does not exceed 12.5% of the Trust's turnover. The revenue costs have not increased by more than 5%.
The Trust should update its income projections to ensure affordability.	The Trust has updated its income projections to ensure affordability.
The Trust should ensure that the scheme is likely to remain within the financial parameters that Monitor may apply.	The Trust is developing the financial model in the format required by Monitor and has applied the assessments that would be applied by Monitor. See Section 9.
Conditions of The Approval Granted by the Strategic Health Authority	
Approval Condition	**Outcome**
To review the OBC prior to issue of the OJEU notice to ensure that it remains affordable and value for money.	The TDA has approved the OBC. Government review pending prior to OJEU.
To review the public sector comparator on an annual basis to ensure that it has been updated.	The Public Sector Comparator has been updated for revised activity assumptions and other changes.
To review the qualitative assessment of the scheme at key stages in the lifecycle of the project to ensure the continued value for money of the scheme.	The qualitative Value for Money assessment has been reviewed twice since the 2009 approval and is still valid despite changes made to the scheme.

1.2.6 The Trust has met the conditions laid down by the SHA and DH. The procurement documents are now well developed. The Trust is ready to post an OJEU notice to initiate the procurement through the new PF2 route when approval has been granted.

1.3 Strategic Context

The Population

1.3.1 The total population served by Sandwell and West Birmingham (SWB) CCG will continue to increase over the next 20 years. It is estimated that the population will grow by approximately 6% over that time period. In the Birmingham population there will be an increase of 16% in the number of children and young people.

1.3.2 The Trust delivers services to a population that has significantly higher than average black and minority ethnic (BME) rates.

1.3.3 The Heart of Birmingham area of SWB CCG has the largest (68%) black and minority ethnic population in England, with the largest group being of Pakistani origin. There is a further increase in the BME population predicted to 2016 (40% increase in Pakistani and Bangladeshi population and a 130% increase in the number of Black Africans to 18,000).

1.3.4 The Sandwell population of SWB CCG is also becoming more ethnically diverse and the make-up of its population is changing. In the ten years between 1991 and 2001, the BME population increased by 6% to 20%, with the rate of growth being most pronounced amongst the Asian communities. It is estimated that by 2025, people from BME communities will make up 30% of the Sandwell population in the SWB CCG.

1.3.5 Such diversity is associated with specific health needs and, in general terms, higher levels of ill health. Implications for the Trust are that:

- Services need to be culturally sensitive and accessible to all;
- Areas of health promotion or lifestyle management may need to be tailored for the specific needs of this group;
- Plans for the future need to ensure that the Trust has facilities which are appropriate for different religious beliefs and which make interpreting services available where necessary; and
- The Trust will deliver services to people with increased levels of prevalence for certain conditions such as diabetes, eye disease and cardiovascular disease

1.3.6 The Trust serves some of the most deprived areas in England. As expected for a population with high levels of deprivation, life expectancy for both men and women is significantly lower than the England average. Men have a life expectancy of 75.9 years for Birmingham as a whole and 74.3 years for men in Sandwell, in comparison to an England average of 77.9 years. Female life expectancy in Birmingham is 81 years, compared to 80 in Sandwell, and 82 years for the England average. It is important to note that these figures are for Birmingham as a whole, and that indicators for the heart of Birmingham area are assumed to be significantly worse as a result of the high levels of deprivation.

1.3.7 Health indicators in Birmingham and Sandwell are generally poor when compared with England as summarised in

1.3.8 Table 3 below.

Table 3: Health Indicators

Indicator	Birmingham	Sandwell	England Average
Infant deaths	8.25	8.46	4.84
Deaths from smoking	248.10	280.50	206.80
Early deaths: heart disease and stroke	96.80	110.90	74.80
Early deaths: Cancer	123.20	135.10	114.00
People diagnosed with diabetes	5.12	5.63	4.30
Adults who smoke	22.50	27.50	22.20
Hospital stays due to alcohol	1,940	2,180	1,580
Obese adults	26.80	29.10	24.20
Obese children	10.80	12.90	9.60
Teenage pregnancies (under 18s)	52.10	59.10	40.90

National Policy, Standards and Guidance

1.3.9 The Trust has considered national policy, strategy and guidance to ensure continuing alignment with the wider strategic context. The impact of the Health and Social Care Act 2012, the recommendations of the Francis Report and subsequent guidance have been taken into account in this version of the OBC. National clinical standards, evidence based care and benchmarking data have also been considered in the development of the RCRH and MMH service models. Funding restraints and changes to the Monitor Compliance Regime have informed prudent planning assumptions.

1.3.10 Table 4 below summarises the response to key themes that arise from this work.

Table 4: National Policy, Standards and Guidance: Key Themes

Theme	RCRH and MMH Alignment
High Quality, Safe Care Increased focus on the need to change the culture of the NHS to provide consistently high quality, safe care that meets rising patient expectations as a result of the Francis Enquiry, Berwick and other reports.	Concentrating a critical mass of specialist expertise on one specialist site to facilitate right care, at the right time, at the right place. Supporting the delivery of high quality, safe care through better building design, clinical adjacencies, consistent environments, easy to clean surfaces etc. Improved working environment and more sustainable teams working together and developing a sense of professional pride and high quality.
Funding Restraints The need for the NHS and social service departments to make step change improvements in efficiency and productivity as a result of continuing funding pressure on health and social care budgets.	Efficiencies gained from moving to a single site acute hospital, reduction in duplication and focussing investment in clinical rather than back office services. Productive clinical environments support improvement in length of stay and other improvements in efficiency. OBC modelling is integrated into the LTFM to ensure that the long term planning horizon is understood and efficiency improvements required prior to the opening of the MMH will be delivered to plan.

Theme	RCRH and MMH Alignment
Sustainable Clinical Care Drive to ensure that services are clinically safe and sustainable needs to be led by clinicians underpinned by local engagement.	Concentration of acute inpatient services on a single site. Bringing teams together on one site to help cover rotas in specialties with limited supply in key professional roles. Development of excellent children's care by concentrating expertise on one site and providing for the specific needs of children and younger people. Improvement in reputation gained from new facilities support recruitment and retention of key staff.
Prevention and Reducing Health Inequalities Continuing drive to reduce inequalities and improve population health supported by partnership working in the Health and Well Being Boards.	RCRH rebalancing of resources to focus on prevention and health improvement. Partnership working through RCRH has been strong over the last decade. Engagement of representative service users has improved MMH plans.
Integrated Care The need to provide care that is more integrated around the needs of patients, offering care closer to home when appropriate and delivered seamlessly across organisational boundaries.	RCRH facilitates a devolved model of care that shifts services closer to patients' homes. RCRH model of care for patients with long term conditions to ensure that their conditions are managed effectively to avoid hospital admission. A smaller acute footprint allowing resources to be diverted to keeping people well and out of hospital. Opportunity to use the opportunities offered by the Better Care Fund to build on these achievements.
Patient Choice and Competition Responding to increasing public expectations supported by growing sources of information to guide their choices.	RCRH will provide choice of a range of community facilities. MMH will provide a significantly improved acute care environment for patients and their carers - this will encourage them to choose the new hospital. Patients will be able to choose a single room or a 4 bedded bay. Improvements to patient experience, privacy and dignity will be facilitated by the new facilities.

The RCRH Programme

1.3.11 The RCRH Programme (previously known as 'Towards 2010') is governed by a Partnership Board with representation from the current partner organisations:

- Sandwell and West Birmingham Clinical Commissioning Group (SWB CCG);
- Black Country Partnership NHS Foundation Trust (BCP FT);
- Birmingham Community Healthcare NHS Trust (BCH);
- Sandwell and West Birmingham Hospitals NHS Trust (SWBH);
- Birmingham City Council (BCC);
- Sandwell Metropolitan Borough Council (SMBC); and
- Birmingham and Solihull Mental Health NHS Foundation Trust (BSMHFT).

1.3.12 The RCRH programme recently celebrated 10 years of strong partnership with all partners continuing to strongly support the changes proposed. SWB CCG confirms that it will:

'Accelerate RCRH, providing care in the community and treating hospitals as specialist providers'

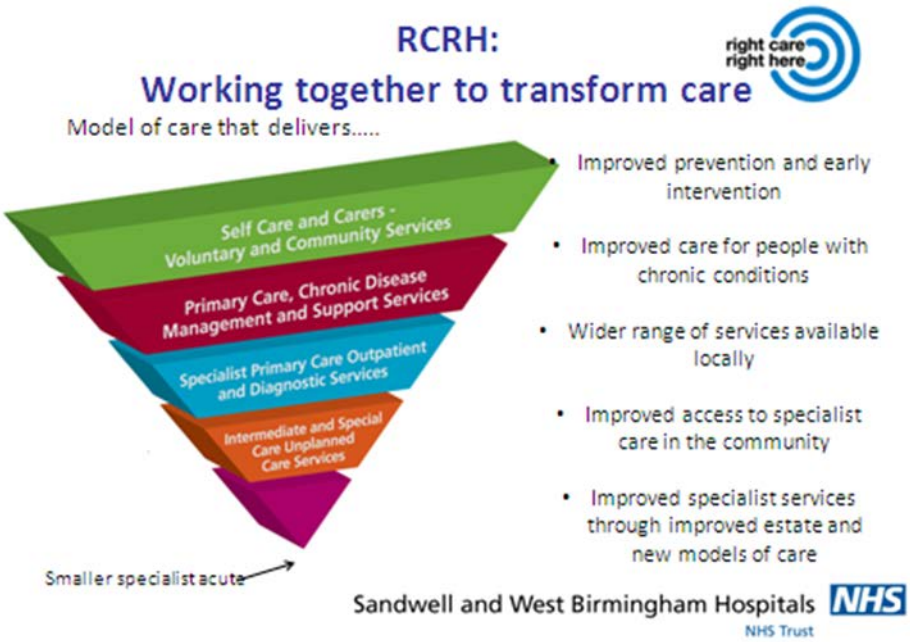
SWB CCG Integrated Plan

1.3.13 The CCGs and local authority Health and Wellbeing Boards have written letters of endorsement for the MMH as part of the wider RCRH Programme.

RCRH: Service Model

1.3.14 The RCRH Programme has developed a new model of care for the local population which can be summarised by the inverted triangle presented in Figure 1 below.

Figure 1: RCRH Model of Care



1.3.15 The model of care includes interdependent components that deliver:

- Improved prevention and early intervention;
- Improved care for people with long term conditions;
- A wider range of services available locally;
- Improved access to specialist care in the community; and
- Improved specialist services through improved estate and new models of care.

1.3.16 The Trust is developing a new model of patient care in line with the RCRH vision outlined above. Within this service model the Trust will deliver clinical services in multiple locations including:

- Patient's own homes;
- Primary care and health centre settings;

- The Trust's community facilities including Rowley Regis Hospital, Sandwell Treatment Centre, Birmingham Treatment Centre, Birmingham and Midlands Eye Centre, the adjacent Sheldon Block and Leasowes Intermediate Care Facility; and
- A new single site acute hospital: the MMH.

1.3.17 Where quality, safety and outcome are improved by care closer to home the Trust will deliver care in community settings and will integrate services both internally and with external partners in order to provide seamless care.

1.3.18 The RCRH vision will be enabled by:

- Transformation of the estate – including development of primary care facilities, community facilities and a new acute hospital - the MMH;
- Development of information management and technology (IM&T) functionality that will facilitate pathways of care across all healthcare settings; and
- A redesigned workforce that is able to deliver high quality care across reconfigured services and in a range of different settings.

RCRH: Activity Forecasts

1.3.19 The RCRH Programme has developed a jointly owned activity and capacity model for the local health economy. The model forecasts activity for the Trust's catchment area of circa 530,000 across all commissioners.

1.3.20 Table 5 below presents forecast Trust activity in 2019/20. The Trust will deliver activity in the MMH, the Trust's community Facilities, other community settings and in patients' own homes

Table 5: Trust Activity in 2019/20 by Location

Category	Type	MMH	Community	Total
Admitted Patient Care	Elective Inpatients	7,876	0	7,876
	Day Cases	14,230	31,188	45,418
	Emergencies (including intermediate care)	59,349	2,171	61,520
	Occupied Bed Days	215,450	25,916	241,366
Outpatients	New Outpatients	35,239	161,864	197,103
	Review Outpatients	46,114	298,441	344,555
	OP with Procedure	16,846	30,265	47,111
	Maternity	16,642	1,076	17,718
Other	A&E Attendances	137,402	29,491	166,893
	Urgent Care	0	72,258	72,258
Capacity	Beds	666	158	824
Community	Contacts	0	927,085	927,085

RCRH: Transformation of Healthcare Facilities

Primary Care Facilities

1.3.21 Both Sandwell and Heart of Birmingham Teaching Primary Care Trusts (PCTs) completed a comprehensive set of capital developments designed to improve the primary care estate. The final few developments are now being completed by the CCGs.

Community Facilities

1.3.22 There has been a change in approach since the August 2009 approval. A Scope Review Process was undertaken in 2010 due to changes in the RCRH activity model. This work identified services that do not need to be delivered from an acute hospital. It was also agreed that that the Trust would own and develop the community facilities for RCRH.

1.3.23 The services that do not need to be provided in the acute hospital will be delivered from the Trust's community facilities that will be developed on current hospital sites. The buildings to be kept and developed (as required) for the Trust's community facilities are:

- The Birmingham Treatment Centre (BTC) on the City Hospital site;
- Part of Sandwell General Hospital, which will become the Sandwell Treatment Centre (STC).
- Rowley Regis Hospital (RRH);
- Sheldon Block on the City Hospital site;
- The Birmingham and Midlands Eye Centre (BMEC), which will continue to accommodate all Ophthalmology services with the exception of inpatient elective care; and
- Leasowes Intermediate Care Centre.

The development / refurbishment required will be delivered through the Trust's capital programme.

1.3.24 The community facilities will provide accommodation for a range of services including:

- Urgent care;
- Outpatients and diagnostics;
- Day surgery and day services;
- Intermediate care beds;
- Specialist community services; and
- Primary care.

1.3.25 The exact mix of services provided in each of the facilities will vary according to local circumstances. A range of provider organisations including the Trust, primary care and community service providers will operate from the community facilities.

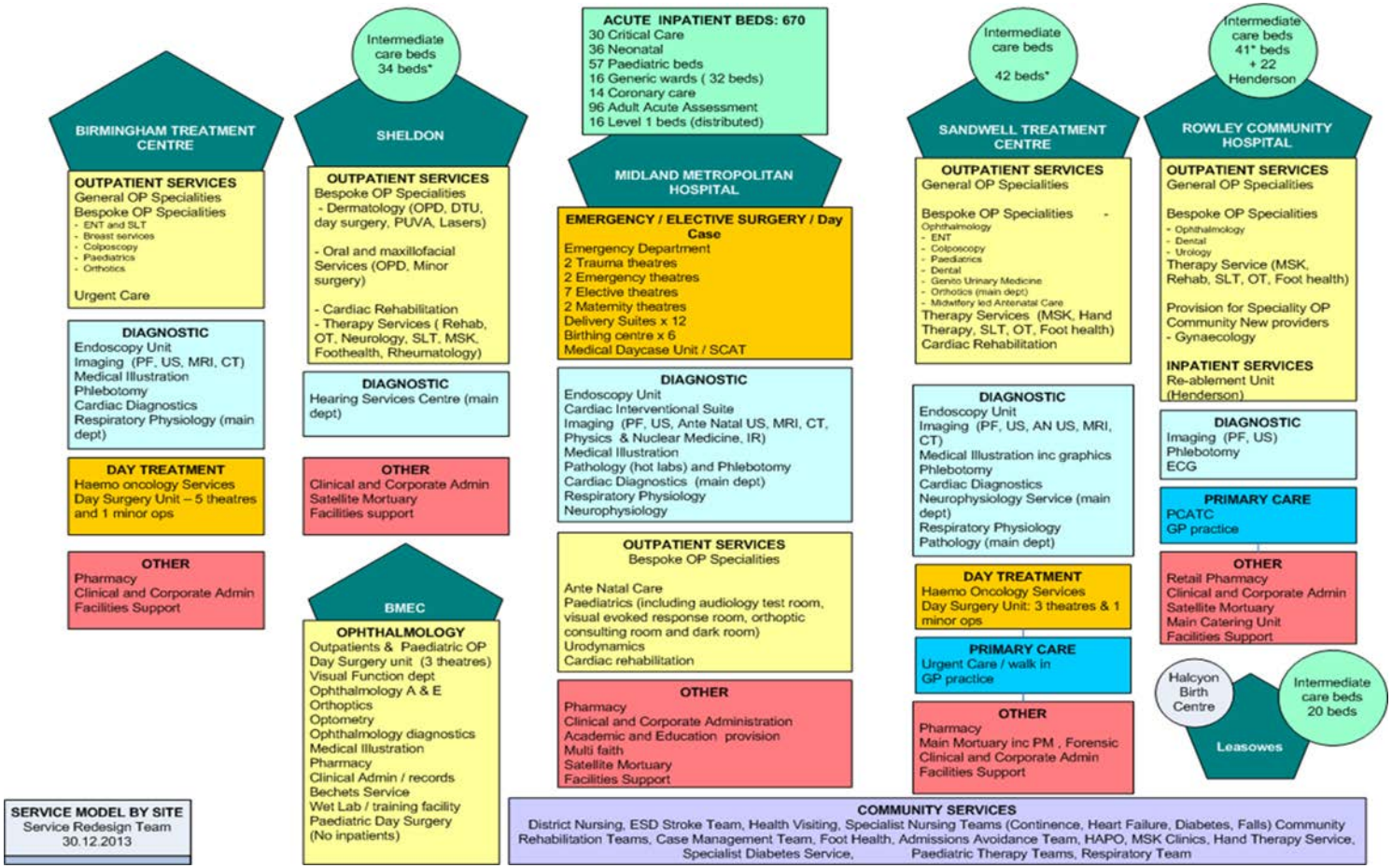
The New Acute Hospital

1.3.26 The new hospital will provide modern purpose built facilities in which to deliver acute care. As a single site acute hospital it will allow consolidation of acute emergency and inpatient services with a critical mass of patients, staff and equipment. This will enable delivery of:

- High quality care 24/7 and 365 days per year.
- Continuity of care through multidisciplinary teams working to pathways and protocols agreed by expert led teams.
- Initial assessment and treatment of patients requiring emergency care by experienced clinicians with consultant presence on site 24/7 in the most acute specialities, and on-site 12 hours, 7 days a week for a number of others.
- Sub-specialty expertise across the entire range of specialties available to in-patients in a timely fashion.
- High-level diagnostic support, including imaging and pathology available 24/7.
- Separation of acute unplanned and elective patient flows with individuals responsible for elective care of patients not being simultaneously responsible for the delivery of emergency care.
- Leadership at the point of care delivery e.g. wards, departments and theatres provided by experienced clinicians with sufficient time to lead and supervise staff and standards.

1.3.27 A summary of where services will be provided in the new model of care is presented in Figure 2 below.

Figure 2: RCRH Facilities Model



1.4 The Case for Change and Objectives

1.4.1 Based on the analysis undertaken by the Trust and the RCRH Programme, there is a clear case for change:

- The poor health in the area the Trust serves requires new models of care to deliver the improvements required;
- Major changes in primary care are being delivered that will lead to a requirement for fewer acute hospital beds and a reduction in the outpatient and diagnostic capacity in the acute hospital;
- Sustaining top quality, acute services for a population of around 530,000 will only be possible in the future from a single acute centre. This is because of the cost of duplicating specialist clinical teams across sites, problems with recruitment and the difficulties of maintaining senior clinical cover for two hospitals.
- The current hospital buildings are ageing and unsuitable. Significant investment is required to provide facilities that facilitate high quality and safe standards of care; support privacy and dignity and provide best patient experience.
- The demand from patients and GPs for care closer to home and patient choice require significant change in the way that acute hospital services are delivered in the future.

1.4.2 The MMH project objectives are to:

- Move to a single acute hospital site;
- Develop a new high quality hospital building;
- Implement a new model of care;
- Deliver the best possible quality of care; and
- Develop staff and provide an optimal working environment.

1.5 New Model of Care

1.5.1 The implications of the RCRH vision for the Trust are that:

- The majority of outpatient attendances and planned diagnostics will be provided outside the acute setting in community locations by a mixture of secondary care specialists and primary care professionals.
- A greater proportion of inpatient length of stay will be provided in the Trust's intermediate care beds.
- A significant reduction in average length of stay, reducing in the new acute hospital to 3.1 days and within the intermediate care beds to 17 days.
- A catchment loss for A&E and emergency inpatient activity related to the change in location of acute services to be delivered in the new hospital.
- Increased community-based urgent care and out-of-hours services to provide alternatives to attending the Emergency Department.
- Increased day surgery rates (to 85%) with the majority of adult day surgery being provided in dedicated day surgery units in the BTC, STC and BMEC.

- Better physical environments for service users and staff which will encourage more rapid recovery and provide greater privacy and dignity.
- The development of a new single site acute hospital is required allowing consolidation of acute emergency and inpatient services.

1.5.2 The impact of the RCRH model of care is presented in Table 6 below.

Table 6: Impact of the Model of Care

	New Acute Hospital	Trust Community Facilities	Other Providers
Outpatient Attendances	13% (Antenatal and Paediatrics)	71% provided by Trust in community locations 23% being Ophthalmology attendances in BMEC	7% provided by new providers in community locations with the Trust's community services providing 75% of this activity for Sandwell residents 9% absorbed as part of routine working in primary care
Beds & Length of Stay	Circa 670 beds Average length of stay: 3.1 days	Circa 158 beds Average length of stay: 17.08 days	
Catchment Loss	3% A&E attendances and adult emergency inpatient admissions	None assumed	Emergency catchment loss primarily flows to: Walsall UHBT DGoHFT HEFT
Emergency Department	58% total ED & Urgent Care attendances	30% delivered in Urgent Care Centres at STC & RRH 12% delivered in BMEC	Urgent care activity in primary care Urgent Care Centres (i.e. Summerfield)
Day Case Rates: 85%	Children's day surgery Medical Day Case Unit	Adult day surgery in BTC, BMEC & STC Medical day cases (including chemotherapy) in BTC and STC	

1.6 The Economic Case

1.6.1 Version 2 of the OBC approved by the Department of Health (DH) in August 2009 contained a comprehensive economic appraisal across four options to determine which option was the preferred solution.

1.6.2 The four options considered were:

- Option 1: Do Minimum;
- Option 2: City Site re-development;

- Option 3: Sandwell Site re-development; and
- Option 4: A new build on the Grove Lane Site.

1.6.3 It was demonstrated that Option 4, the Grove Lane solution, represented the best economic solution to achieve the goals of the project.

1.6.4 Following approval of the OBC in August 2009 the DH approved the decision to pursue a Compulsory Purchase Order (CPO) to facilitate acquisition of the Grove Lane site. The Trust now owns the entire site.

1.6.5 In examining whether to reconfirm the scheme in 2013 the Trust Board has discussed, in a series of workshop settings, whether the original option appraisal in 2009 remains valid. In doing that specific consideration has been given to:

- The changed financial circumstances for public services notwithstanding the strong performance of the Trust in recent years;
- Revised population expectations including changes in the migrant patterns of the area;
- Enhanced expectations of care integration with local GP practices; and
- Considerably revised expectations of critical mass of acute care service infrastructure.

1.6.6 The conclusion was that the case for change remains overwhelming and that only a new build acute hospital can deliver change at the pace required.

1.6.7 The Trust has reviewed and refreshed the economic appraisal of the original four options and a Do Nothing option. The results of this work re-confirm Grove Lane as the most economic and preferred option.

1.7 Project Timetable

1.7.1 The key milestones leading to placement of an OJEU notice are set out in Table 7 below:

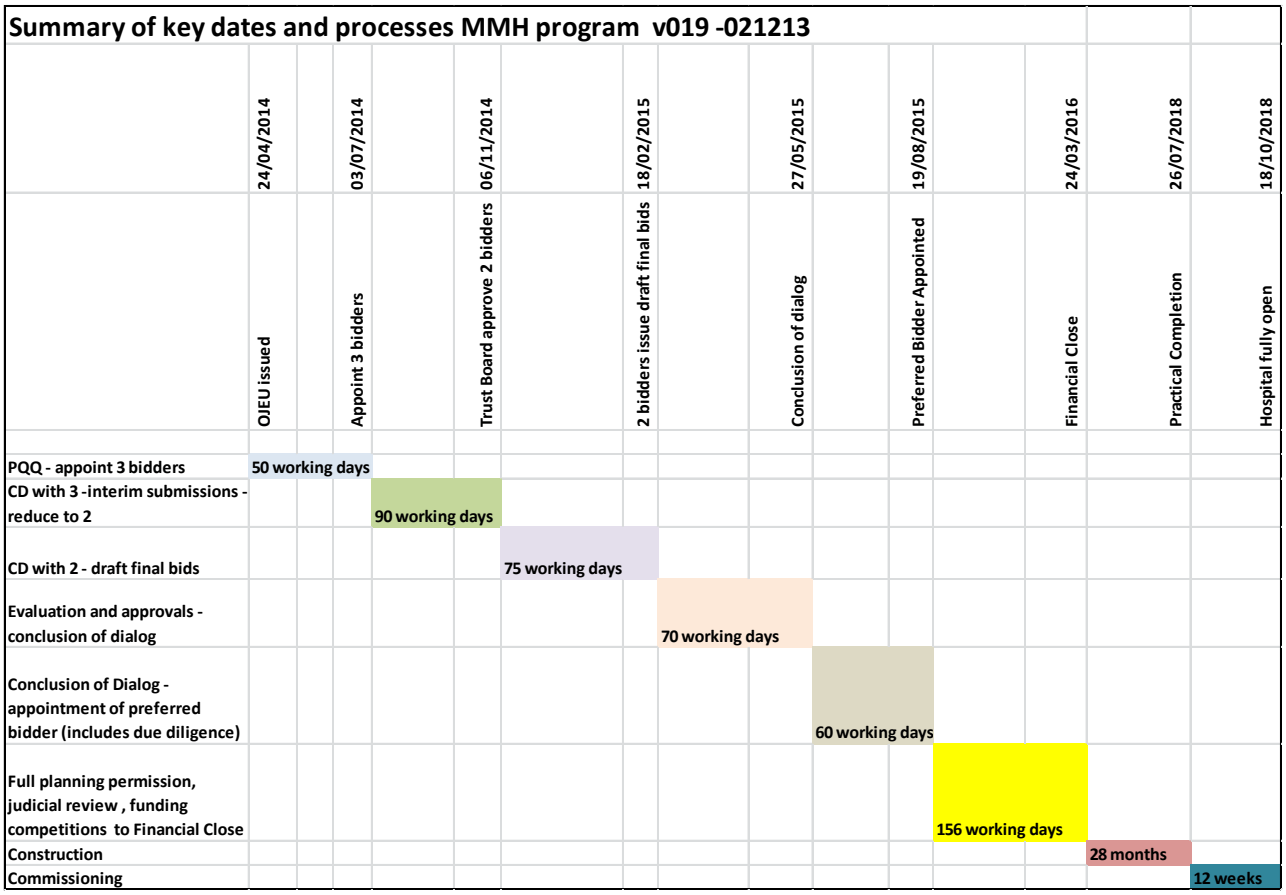
Table 7: Key Milestones to OJEU

Milestone	Date
Outline Planning Consent granted	October 2008
SHA Approval of OBC version 2 (to enable land acquisition)	January 2009
DH Approval of OBC version 2 (to enable land acquisition)	August 2009
SHA approval of OBC Update at version 4.1	October 2010
Route to land title through CPO confirmed	December 2010
Land owned by the Trust	September 2012
Refreshed Outline Planning Consent	June 2013
Trust Board approval of LTFM	October 2013
Trust Board approval of MMH	November 2013
Vacant possession of the Land	November 2013
CCG and Health and Wellbeing Committee endorsement	January 2014
NTDA approval of MMH	January 2014

Issue PIN	February 2014
Introductory meetings	March 2014
DH and HMT approval of OBC and procurement documentation	April 2014
OJEU Notice	April 2014

1.7.2 Following Government approval the Trust will initiate the procurement of the MMH by the placement of an OJEU notice. Figure 3 outlines the programme to opening of the MMH and outlines the Competitive Dialogue procurement process.

Figure 3: Key Dates and Processes to Opening of the MMH



1.8 The Proposed Solution

The Service Solution

1.8.1 The activity and capacity model, informed by high levels of clinical engagement, formed the basis for calculating the clinical facilities required. The following key components are planned for the proposed solution - MMH.

1.8.2 A total of 666 beds, including:

- A 30 Bed Critical Care Unit (Level 2 and 3);

- 96 space Adult Acute Assessment Unit;
- 36 Neonatal Cots; and
- A 56 bed Children's Unit.

There will be 14 Generic Wards of 32 beds each, including:

- 14 Coronary Care Beds; and
- 16 distributed higher dependency monitored beds (Level 1);

1.8.3 13 Operating Theatres, made up of:

- 2 Trauma Theatres;
- 2 Emergency Theatres (including laparoscopic equipment);
- 2 Maternity Theatres in Delivery Suite; and
- 7 Elective Theatres;

1.8.4 Bespoke outpatient clinics for:

- Children;
- Urodynamics; and
- Antenatal services.

1.8.5 The following key issues were also considered when developing the MMH Specification and Operational Policies:

- Adjacencies between departments to facilitate patient flows;
- Separating flows of public and ambulatory patients, inpatients and goods from the point of entering the hospital until at least the entrance into departments;
- Ease of access for patients;
- Future flexibility in use of space;
- Responding to national, regional and local policy;
- Improving efficiency of service provision;
- Dealing with major incidents and business continuity; and
- Provision of the facilities and support required to develop the more specialist services (that have a regional or national profile) provided by the Trust, in a way that integrates them with other services within the hospital but also retains their specialist identity.

1.8.6 An Architectural Design Review was undertaken in 2013/14. This work has ensured that departmental 1:200 designs have been recently updated with clinicians to ensure readiness for the procurement process.

The Site and Planning

1.8.7 The site identified at Grove Lane for the MMH comprises of an area of 6.76 Hectares bounded by the Grove Lane dual carriageway to the west, London Street to the north, Cranford Street to the north east, Cape Arm canal to the east, Grove Street to east and old Grove Lane to the south west.

1.8.8 The Grove Lane site falls within the Smethwick Area Action Plan which was adopted in 2008. The Area Action Plan will contribute to Sandwell Metropolitan Borough Council's Local Development Framework, which provides the spatial planning strategy for the area.

1.8.9 There has been extensive engagement with planning officers from Sandwell Metropolitan Borough Council, the wider public, Trust employees, landowners to be affected by the proposals, and local MPs/Councillors through a range of Public Consultation events.

1.8.10 Sandwell Metropolitan Borough Council granted outline planning approval on 29th October 2008. The application was unopposed, which is an indicator of strong local support for the development. The conditions attached to outline planning are fully reflected in the Public Sector Comparator design and capital costs.

1.8.11 The original outline planning approval was valid for six years from the date it was granted. To ensure that it remained valid through the procurement programme, the Trust undertook a renewal process and the outline planning approval was renewed on 19th June 2013 and remains valid for six years from that date.

1.8.12 The location of the MMH hospital site and site plan is presented in Figure 4 below.

Figure 4: Location of MMH and Site Plan

1.9 Design

The Design Vision

1.9.1 A Design Vision has been developed by a group chaired by the Design Champion, the Chair of the Trust. The vision developed by this group reflects the requirement to create a landmark hospital, which will be an asset to the local community and support local regeneration. The key elements of the Design Vision are that the hospital will be:

- Inspiring;
- Non-threatening;
- Confidence inspiring;
- Uncluttered;
- Light and airy;
- Clean without being clinical; and
- Well integrated into its setting and locality.

Design Brief

1.9.2 The service model is underpinned by a set of detailed operational policies covering all of the departments in the MMH. These have informed the development of Planning Policy and Design Descriptions (PPDDs) which specify the requirements of the new hospital. This work has enabled the endorsement of clinical and operational adjacencies for the overall design of the MMH and form basis for the design specification.

Public Sector Comparator Design Solution

1.9.3 The Public Sector Comparator (PSC) is a design developed so that the costs of a conventional approach to delivering the scheme via a design and build contract can be compared to determine if PF2 is value for money (VfM).

1.9.4 Key features of the PSC design solution are as follows:

- A significant percentage of the total solution uses generic design, for example standard rooms, standard ward layouts, standard theatre layout etc. This approach ensures flexibility for future use;
- Natural topography maximised;
- 32 bed wards arranged in clusters of 3 (96 beds);
- Support hubs arranged to feed ward clusters and clinical areas;
- Separation of patient, visitor and goods flows; and
- Clinical adjacencies maximised.

1.9.5 The Development Control Plan (DCP) was developed to respond to the design brief and the 6.76Ha site at Grove Lane. The DCP illustrates the following features:

- A new seven storey acute hospital building developed to accommodate the required clinical facilities based on the activity and capacity model;
- 2 towers separated by a central atrium;
- Separation of primary access points, therefore separating patient, visitor, staff and goods flows;
- Use of the natural topography of the land;
- Integration with the existing environment; and
- Visitor car parking below the building and a new multi storey car park to the north.

1.9.6 Bidders for the project will be asked to respond to the PSC design and develop improvements and innovation to ensure the best possible design and value for money.

Regeneration

1.9.7 Due to the link between ill health and socio-economic factors, the RCRH Programme has focused on its contribution to economic regeneration as well as on direct healthcare delivery. The MMH will act as a catalyst for regeneration and will improve the local environment. The Trust has been working closely with partners on a range of initiatives to provide opportunities for local businesses to benefit from the acute hospital development as well as provide employment for local people.

1.10 The Financial Case

Introduction

1.10.1 Changes to the financial case since the OBC was approved in August 2009 include the impact of:

- Reduction in the size of the scheme as a result of the Scope Review Process in 2010 and subsequent adjustments;
- Decision to retain and continue to own parts of the City and Sandwell Hospitals estate;
- Change in funding for PF2 including the assumption of Public Dividend Capital (PDC);
- Change to efficiency assumptions and expectations under Monitor's Compliance Regime; and
- Delivery of a level 3 Risk Rating under the "Continuity of Service Risk Rating" metric.

1.10.2 The financial models and assumptions used in support of the Long Term Financial Model (LTFM) derive much of their input from the RCRH activity trajectories which are integrated with the Trust's operational plans. The Trust plans to maintain its surpluses and develop reserves to support the period of change. By utilising these resources on a non-recurrent basis the Trust will be able to fund any additional costs during the transition. From 2018/19 the costs associated with the MMH and in particular the PFI unitary payment, are included within the model and are funded from within internally generated sources.

1.10.3 The LTFM demonstrates that the MMH is recurrently affordable and that the overall cost improvement plan (CIP) requirement is marginally greater than current Monitor CIP assumptions. The model assumes revised PF2 funding mechanisms along with £100m of PDC support that would need to be agreed through DH and HMT approvals.

Capital Costs

1.10.4 The updated outturn capital approval value reflects a start on site date of April 2016 with inflation from that point assessed on the basis of movements in the Price Adjustment Formula for Building and Specialist Engineering Works to PUBSEC index. Practical Completion is scheduled for a handover in August 2018. Capital costs are presented in the table below.

Table 8: Capital Costs

	Item	OBC updated 19/12/13 using SoA version 10; 79,828 m^2		
			£	£/m^2
1	Construction costs (works cost)			
a	Main hospital building		187,921,775	**2,354**
b	Multi-storey car park		9,963,735	
2	Sub-total (at PUBSEC 173)		197,835,511	
3	Fees (contractor's proportion)			
a	Design team fees	10.00%	19,788,551	**235**
b	Building regulations and planning fees		part of non-works costs	
4	Sub-total (at PUBSEC 173)		217,674,062	**2,589**

	Item	OBC updated 19/12/13 using SoA version 10; 79,828 m^2		
			£	£/m^2
5	Inflation to outturn	15.61%	33,972,252	
6	Subtotal (at PUBSEC 200)		251,646,314	**2,994**
7	Fees (Trust's proportion)	2.50%	4,947,138	
8	Sub-total		256,593,452	
9	Non-works costs		5,370,650	
10	Land costs		0	
11	Equipment costs		3,198,575	
12	Sub-total		265,162,677	
13	Planning / contingency	3.92%	10,403,569	
14	Sub-total		275,566,246	
15	Optimism bias	6.71%	18,481,940	
16	Sub-total		294,048,186	
17	Inflation to outturn (on items 7, nine, 19 and 15)	1.82%	5,335,322	**13.70%**
18	**Total project cost (excluding VAT)**		**299,403,509**	
19	VAT	17.85%	53,446,892	
20	**Total project cost (excluding VAT)**		**352,850,401**	

Capital Charge Implications

1.10.5 Capital charges for the existing estate are forecast to reduce commensurate with the intended disposal of most of the City Hospital site and some of the Sandwell Hospital site. This is compensated by the depreciation charge for MMH reflecting the capital cost of the new hospital and the need to equip the new facilities to appropriate standards. In calculating the capital charges within both the PSC and PF2 options, a judgement of a 15% impairment of the initial MMH capital build cost has been included. This is consistent with Trust past experience in District Valuer (DV) valuations of significant capital builds including the BTC and the Emergency Care Facility at Sandwell Hospital.

1.10.6 Depreciation within the affordability assessment has been calculated based upon an impaired asset value of £249m and PDC interest calculations have been undertaken assuming a publicly funded scheme.

Capital Programme

1.10.7 There are many competing pressures within the Capital Programme. The Trust is seeking to invest beyond traditional funding levels generated by depreciation in most years. This investment requirement reflects the following needs:

- Substantial retained estate refurbishment for the Trust's community faclities;
- Investment in the IM&T strategy (complimented by circa £14 in revenue implementation);
- Completing the acquisition of the Grove Lane site;

- Routine equipping needs;
- Minimising the investment required for statutory standards estate work; and
- Initiating an imaging managed service contract to alleviate pressure on the Capital Programme;

Approach to Affordability Modelling

1.10.8 The affordability modelling starts from a refreshed baseline of the Trust's operational forecast outturn for 2013/2014 based upon final service delivery plans and LDP agreements with CCGs. The process has been developed to dovetail with Monitor's Long-Term Financial Model (LTFM) such that five LTFMs have been developed:

- A version which presents the PSC position with capital funding assumed to come fully through the PDC mechanism;
- A version that translates the effect of the PF2 process and reflects affordability under PF2 conditions;
- A Downside PF2 Position;
- A Mitigated Downside PF2 Position; and
- A sensitivity demonstrating the impact on affordability if PDC support is not available.

1.10.9 The Trust has a well-developed activity and capacity model which enables granular interpretation of future activity behaviour to create future patterns of activity. From this an assessment of future income streams and capacity requirements is generated.

1.10.10 Cost and workforce models are developed by taking a granular view of the Trust forecast outturn and modelling an assessment of how different areas will change with changes in assumed activity and capacity. Developments and efficiency are then layered on top of this baseline.

1.10.11 The affordability assessment process has included an evaluation of how each currently provided function might change for acute and / or community services. This has been achieved by the application of cost drivers (e.g. activity change, income, space, bed days, theatre minutes, and outpatient minutes), which most accurately forecast the likely long term impact on each function or service. Consideration is also given to the nature of current service costs and how these might vary with changes in service provision.

1.10.12 Specialised costs such as capital charges have been assessed separately to reflect both the impact of the MMH and the costs of developing and operating the community facilities.

Activity and Income

1.10.13 The tables below show activity (derived from the activity and capacity model) and income in 2019/20 split between MMH and community facilities.

Table 9: Activity Split between MMH and Community Facilities

	Activity		
	MMH	**Community Facilities**	**Total**
Outpatients	114,841	491,648	606,489

	Activity		
	MMH	Community Facilities	Total
Electives	22,106	31,188	53,294
Emergencies	59,349	2,171	61,520
A&E	137,402	101,749	239,151
Total	**333,698**	**626,756**	**960,454**

Table 10: Income Split between MMH and Community Facilities

	Income (£,000s)		
	MMH	Community Facilities	Total
Outpatients	12,735	54,520	67,255
Electives	27,202	22,096	49,298
Emergencies	77,160	14,426	91,586
A&E	12,515	7,231	19,746
OCL	74,526	27,207	101,733
Total	**204,137**	**125,481**	**329,618**

Costs Underpinning PSC Affordability

Characteristics of the Affordability Model

1.10.14 The overall projections demonstrate that the Trust maintains a bottom line surplus, after adjusting for technical issues, across the period.

1.10.15 This position includes the following key features:

- In order to afford the forecast unitary charge and generate support for transitional costs, an internal cost improvement programme has been developed which exceeds expected national efficiency requirements and the impact of activity cessation. In the intermediate years, the savings are set aside to deal with non-recurrent transitional costs so that, by 2018/19 they can be fully released to meet the affordability demands of the project.
- Under a publicly funded PSC where the cost of borrowing is not so significant this leads to a significantly increased surplus.
- The PF2 solution model assumes £100m support is granted through PDC in support of funding the scheme and this is paid over to the Special Purpose Vehicle at defined completion stages which maximises risk transfer.
- In 2013/14, the Trust remains on track to deliver a surplus of at least £4.6m consistent with original financial plans.

- Future modelling forecast surpluses of around 1% of turnover are successfully maintained across the period. Under PSC conditions this rises from 2018/19 but remains broadly stable under PF2 conditions.

PSC Affordability

1.10.16 The headline statement of Comprehensive Income is presented in Table 11 below under PSC conditions. The surpluses generated in the later years reflect a level of CIP delivery across the timeline to accommodate affording MMH under PF2 conditions.

Table 11: Statement of Comprehensive Income (PSC)

Statement of Comprehensive Income	Forecast 2013/14 £m	Forecast 2014/15 £m	Forecast 2015/16 £m	Forecast 2016/17 £m	Forecast 2017/18 £m	Forecast 2018/19 £m	Forecast 2019/20 £m	Forecast 2020/21 £m	Forecast 2021/22 £m	Forecast 2022/23 £m
Income										
NHS Clinical income	390.9	389.2	389.9	391.6	392.6	395.6	406.2	418.8	432.0	443.0
Non NHS Clinical income	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other Operating income	39.6	39.9	38.8	38.8	38.6	38.1	37.7	37.8	38.1	38.3
Total Operating Income	**431.0**	**429.5**	**429.2**	**430.9**	**431.7**	**434.2**	**444.3**	**457.1**	**470.5**	**481.7**
Expenditure										
Pay	(289.9)	(284.8)	(278.0)	(271.3)	(265.2)	(258.0)	(258.1)	(266.6)	(273.9)	(277.4)
Non Pay	(115.1)	(119.7)	(124.3)	(128.0)	(132.4)	(138.7)	(142.4)	(146.0)	(150.6)	(157.6)
Total Operating Expenses	**(405.1)**	**(404.5)**	**(402.3)**	**(399.3)**	**(397.5)**	**(396.7)**	**(400.5)**	**(412.6)**	**(424.6)**	**(434.9)**
Operational Surplus	**25.9**	**25.0**	**26.9**	**31.6**	**34.2**	**37.5**	**43.8**	**44.6**	**45.9**	**46.8**
Profit / loss on asset disposal	(0.2)	-	-	-	-	-	-	-	-	-
Impairment losses	-	-	-	-	(66.3)	(98.3)	-	-	-	-
Depreciation	(14.0)	(14.4)	(14.8)	(15.6)	(15.9)	(14.0)	(15.8)	(16.7)	(17.0)	(16.4)
Total interest receivable / (payable)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Total interest payable on loans / leases	(2.2)	(2.1)	(2.1)	(2.2)	(2.1)	(2.2)	(2.2)	(2.0)	(2.2)	(2.0)
PDC Dividend	(5.0)	(5.6)	(5.8)	(7.5)	(9.5)	(11.0)	(12.1)	(12.3)	(12.4)	(12.5)
Non Operating Costs	(21.3)	(22.0)	(22.7)	(25.3)	(93.7)	(125.3)	(29.9)	(30.9)	(31.5)	(30.7)
Surplus / (deficit) before tax	4.6	3.1	4.1	6.3	(59.5)	(87.9)	13.9	13.7	14.5	16.1
Add back technical adjustments	-	-	-	-	66.3	98.3	-	-	-	-
Revised Surplus / (deficit) before tax	**4.6**	**3.1**	**4.1**	**6.3**	**6.8**	**10.4**	**13.9**	**13.7**	**14.5**	**16.1**
Net Margin %	**1.08%**	**0.71%**	**0.97%**	**1.46%**	**1.58%**	**2.40%**	**3.12%**	**3.00%**	**3.07%**	**3.34%**

1.10.17 The years to the MMH opening in 2018/2019 have non-recurring expenditure covering transition and restructuring contingencies. Post MMH opening a contingency for dual running exists over a three year time horizon. This contingency is funded by the major capital investment revenue relief support offered to PF2 schemes. Under PSC conditions the tapering income benefit is excluded.

PF2 Affordability

1.10.18 The PF2 affordability assessment was developed using a forecast unitary charge of c£27m in the first full year of concession, at forecast 2019/2020 prices. The shadow unitary charge calculated on the assumptions below was £26.1m. This creates some potential headroom in our affordability model.

- A capital build cost of circa £285m;
- Capex based on GIFA of c 80,000 m^2 including c 6000m^2 of expansion space;
- Hard FM cost of c £31 per m^2;
- Lifecycle cost of c £20 per m^2;
- A 30 year concession;

- Receiving the £100m PDC support on a non-repayable basis;
- Index-able element of circa 35%, indexed at 2.5% per annum from a base of 2013-2014.

PSC Position

1.10.19 The PSC position is as follows:

- The capital scheme for approval purposes in £353m. When discounted for VAT, non-works costs and equipment (which are covered elsewhere in the affordability assessment), the capital value of the works cost is £285m consistent with the PF2 model;
- The GIFA is c 80,000 m^2 including circa 6,000 m^2 of expansion space;
- Hard FM and Lifecycle unit costs are consistent with the PF2 model;

PF2 Affordability

1.10.20 Table 12 below presents the Statement of Comprehensive Income under PF2 conditions incorporating the "ceiling" unitary payment calculations, PF2 taper relief support and a contribution of £100m Public Dividend Capital. The position reflects that the Trust is able to maintain a trading surplus of around 1% of turnover post MMH opening.

Table 12: Statement of Comprehensive Income (PF2)

Statement of Comprehensive Income	Forecast 2014/15 £m	Forecast 2015/16 £m	Forecast 2016/17 £m	Forecast 2017/18 £m	Forecast 2018/19 £m	Forecast 2019/20 £m	Forecast 2020/21 £m	Forecast 2021/22 £m	Forecast 2022/23 £m
Income									
NHS Clinical income	389.2	389.9	391.6	392.6	395.6	406.2	418.8	432.0	443.0
Non NHS Clinical income	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other Operating income	39.9	38.8	38.8	38.6	46.8	44.7	43.1	41.6	40.1
Total Operating Income	**429.5**	**429.2**	**430.9**	**431.7**	**442.9**	**451.3**	**462.4**	**474.0**	**483.5**
Expenditure									
Pay	(284.8)	(278.0)	(271.3)	(265.2)	(258.0)	(258.1)	(266.6)	(273.9)	(277.4)
Non Pay	(119.7)	(124.3)	(128.0)	(132.4)	(139.9)	(142.9)	(146.3)	(151.0)	(156.0)
Total Operating Expenses	**(404.5)**	**(402.3)**	**(399.3)**	**(397.5)**	**(397.8)**	**(400.9)**	**(413.0)**	**(424.9)**	**(433.3)**
Operational Surplus	**25.0**	**26.9**	**31.6**	**34.2**	**45.1**	**50.4**	**49.4**	**49.1**	**50.1**
Profit / loss on asset disposal	-	-	-	-	-	-	-	-	-
Impairment losses	-	-	-	(66.3)	(44.0)	-	-	-	-
Depreciation	(14.4)	(14.8)	(15.6)	(15.9)	(14.0)	(15.8)	(16.7)	(17.0)	(16.4)
Total interest receivable / (payable)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total interest payable on loans / leases	(2.1)	(2.1)	(2.2)	(2.1)	(18.6)	(23.4)	(23.2)	(23.3)	(23.1)
PDC Dividend	(5.5)	(6.5)	(7.8)	(7.6)	(6.0)	(5.2)	(5.4)	(5.5)	(5.4)
Non Operating Costs	(21.9)	(23.4)	(25.5)	(91.8)	(82.5)	(44.3)	(45.2)	(45.8)	(44.8)
Surplus / (deficit) before tax	3.1	3.5	6.0	(57.6)	(37.4)	6.1	4.2	3.3	5.3
Add back technical adjustments	-	-	-	66.3	44.0	-	-	-	-
Revised Surplus / (deficit) before tax	**3.1**	**3.5**	**6.0**	**8.7**	**6.5**	**6.1**	**4.2**	**3.3**	**5.3**
Net Margin %	**0.73%**	**0.81%**	**1.40%**	**2.01%**	**1.48%**	**1.35%**	**0.91%**	**0.70%**	**1.10%**

PF2 Affordability Compared to PSC Affordability

1.10.21 Table 13 below illustrates the variant affordability position presented in the first full year of the new service model, 2019/2020 between the PSC and PF2 positions.

1.10.22 Income remains stable with the exception of PF2 taper relief support, but costs move between categories denoting the provision of hard FM services moving from the Trust to the PF2 provider. Below EBITDA interest charges increase in line with the PF2 service provision, but this is partially offset by a reduction in the public dividend payment as the scheme will be largely privately financed. A surplus of £6.1m is modelled under PF2 conditions, which is circa 1.4% of turnover.

Table 13: PF2 Affordability Compared to PSC

Statement of Comprehenisve Income	PSC Forecast £ms	PFI Forecast £ms	Variance Forecast £ms
Protected/Mandatory Clinical Revenue			
Total	**406.2**	**406.2**	**-**
Non Protected/Non Mandatory Clinical Revenue			
Total	**0.5**	**0.5**	**-**
Other Operating Revenue			
Education and Training	17.9	17.9	-
Research & Development	0.9	0.9	-
PFI Specific revenue	-	7.0	7.0
Other Operating Revenue	18.9	18.9	-
Other Operating revenue, Total	37.7	44.7	7.0
Operating Revenue and Income, Total	**444.3**	**451.3**	**7.0**
Operating Expenses			
Employee Benefit Expenses	(258.1)	(258.1)	**-**
Drug expenses	(34.6)	(34.6)	**-**
Clinical supplies and services expenses	(45.0)	(45.0)	**-**
Shared services expenses	-	-	**-**
CNST Premium	(9.7)	(9.7)	**-**
Other expenses	(44.9)	(41.6)	**3.3**
Secondary Commissioning Expenses	-	-	**-**
PFI operating expenses	(8.3)	(12.0)	**(3.7)**
Operating Expenses, Total	**(400.5)**	**(400.9)**	**(0.4)**
Surplus/(Deficit) from operations	43.8	50.4	**6.6**
Surplus/(Deficit) from operations margin	0.1	0.1	**0.0**
Adjustment for donated asset income	(0.1)	(0.1)	**-**
EBITDA	**43.7**	**50.3**	**6.6**
EBITDA margin	10%	11%	**0.0**
Non-Operating revenue			
Non-Operating revenue, Total	-	-	**-**
Non-Operating expenses			
Impairment Losses (Reversals) net	-	-	**-**
Total Depreciation & Amortisation	(15.8)	(15.8)	**(0.0)**
Interest expense on overdrafts and working capital facilities	0.2	0.1	**(0.0)**
Total interest payable on Loans and leases	(2.2)	(23.4)	**(21.2)**
PDC Dividend	(12.1)	(5.2)	**6.9**
Other Non-Operating expenses	-	-	**-**
Non-Operating expenses, Total	**(29.9)**	**(44.3)**	**(14.4)**
Surplus (Deficit) before Tax	13.9	6.1	**(7.8)**
Tax expense/ (income)	-	-	**-**
Net Surplus/(Deficit)	**13.9**	**6.1**	**(7.8)**
Net margin	3.1%	1.4%	**-1.8%**

Cost Improvement Savings

1.10.23 Strong financial performance has been maintained over the last three years achieving statutory financial targets and delivering circa £65m of cost improvement savings. Detailed savings plans have been prepared for 2014/15 and 2015/16. Robust delivery and performance management processes have been put in place to ensure achievement of savings. This is based on a cross cutting approach mapping workstreams across Divisions to ensure a whole systems approach. Table 14 presents savings anticipated by workstream.

Table 14: Savings Schemes by Workstream (as at November 2013)

TSP Schemes by Workstream	2014/15		2015/16	
	Total WTE	Total £000	Total WTE	Total £000
Medical Workforce Efficiency	6.5	£615	5.0	£1,082
Patient Flow & Bed Day Utilisation	60.3	£2,046	39.0	£1,597
Urgent Care	0.0	£0	6.2	£370
Theatre Productivity	2.9	£250	4.5	£260
Outpatient Efficiency	5.6	£765	9.9	£623
Community Service Efficiency	25.9	£736	11.1	£900
Workforce Efficiency	116.0	£6,007	83.0	£7,597
SLR Improvement	0.3	£4,580	0.0	£2,475
Diagnostics	1.7	£509	7.6	£677
Estates Rationalisation	0.7	£30	1.4	£254
Strategic IT Enablement	10.5	£255	22.5	£686
Procurement	0.0	£3,052	0.0	£1,404
Corporate Services & Facilities	25.3	£1,808	28.7	£2,137
Other	0.0	£0	0.0	£0
Workstream not identified	0.0	£500	0.0	£0
TOTAL IDENTIFIED	255.70	£21,154	218.90	£20,063
Schemes not identified		-£354		-£63
Trust target		**£20,800**		**£20,000**

Implied Efficiency

1.10.24 The Trust is required to form its own view of future inflation trends / indices. Guidance is typically issued at the end of quarter 3 each year indicating expectations for the forthcoming year. The inflation / deflation assessments must deliver an overall implied efficiency rate consistent with national expectations. The Trust is working to long range implied efficiency levels as directed by Monitor in April 2012 for the period to 2016/2017. The case has been built upon assumptions generated ahead of the latest guidance for 2014/2015 which reduced efficiency assumptions for 2014/15 to a net 4%.

The 12.5% Test

1.10.25 The test seeks to confirm that estates costs do not exceed 12.5% of the Trust annual normalised income. The precise definition of costs to be included in this metric has not been independently stated therefore, two measures have been developed in consideration of the test.

Firstly, to assess the proportion of the full unitary charge compared to normalised turnover, and secondly, to include the unitary charge, non-MMH depreciation, PDC dividend and estates hard FM costs in comparison to normalised turnover. In both instances the Trust is able to meet the test successfully.

Continuity of Service Risk Rating (CsRR)

1.10.26 The Trust is able to secure a minimum Risk Rating of at least 3 in its base case affordability position. This is achieved in the early trajectory years by strong performance against the Capital Service Capacity component of the test. As the MMH PF2 scheme is introduced performance against this component deteriorates placing a greater emphasis on the liquidity position.

1.10.27 The liquidity position improves across the timeline to strengthen the underlying rating. This is generated by annual cash backed surpluses across each year of the trajectory. The position does not rely upon a working capital facility under FT conditions. The Trust estimates a working capital facility of circa £30m. If this were to be included into the metric the liquidity position would be greatly strengthened as would the overall rating position. The Trust is not relying on this facility to meet the rating assessment.

Table 15: Continuity of Service Risk Rating in the Base Case LTFM

CSRR in the base case PF2 LTFM	Outturn 2013/14	Forecast 2019/20	Forecast 2020/21	Forecast 2021/22	Forecast 2022/23
Liquidity ratio (days)					
Current assets	56.2	51.9	56.5	57.1	61.9
Inventories	3.6	3.3	3.3	3.3	3.3
PFI prepayments and assets held for sale	0.0	0.0	0.0	0.0	0.0
Current liabilities	-55.5	-56.2	-59.2	-58.5	-56.3
Days	360.0	360.0	360.0	360.0	360.0
Operating expenses	-405.1	-400.9	-413.0	-424.9	-433.3
Fully committed Working Capital Facility					
Liquidity ratio (days) - opening liquidity	**-2.6**	**-6.9**	**-5.3**	**-3.9**	**1.9**
Capital servicing capacity (times)					
Interest payable (-ve)	-2.2	-23.4	-23.2	-23.3	-23.1
Debt repayment (-ve)	-3.3	-3.2	-3.0	-3.5	-3.4
PDC dividend (-ve)	-5.0	-5.2	-5.4	-5.5	-5.4
PDC repayment (-ve)	0.0	0.0	0.0	0.0	0.0
Surplus/(deficit) from operations	0.0	0.0	0.0	0.0	0.0
Adjustment for donated asset income	0.0	0.0	0.0	0.0	0.0
EBITDA	25.8	50.3	49.3	49.0	50.0
Interest receivable (+ve)	0.1	0.1	0.1	0.1	0.1
Surplus available	25.9	50.4	49.4	49.1	50.2
Capital servicing capacity (times)	**2.5**	**1.6**	**1.6**	**1.5**	**1.6**
Scoring (uses opening liquidity)					
Liquidity ratio score	**3**	**3**	**3**	**3**	**4**
Capital servicing capacity score	**3**	**2**	**2**	**2**	**2**
Overall Continuity of Service Risk Rating (CSRR)	**3**	**3**	**3**	**3**	**3**

Sensitivity including Downside

1.10.28 Three forms of sensitivity analysis have been undertaken to assess the impact of different behaviour to planned against the base case assumptions:

- Activity and capacity sensitivity assessment to demonstrate appropriate mitigations through the expansion and reduction strategies;
- Sensitivity analysis consistent with the conditions required for the FT application; and
- Sensitivity if £100m PDC support is unavailable.

1.10.29 Under mitigated downside conditions the Trust is able to demonstrate a risk rating of 3 by the end of the ten year period with cash balances and I&E surpluses remaining resilient.

1.10.30 A scenario has been considered in the absence of £100m PDC support for MMH. In this case the shadow unitary payment is forecast to increase by circa £9m through increased interest charges

based upon the need for the PF2 provider to secure greater funds upfront during the construction stage.

Affordability Conclusions

1.10.31 The affordability conclusions are that:

- Surplus margins increase across the period to £5.3m or around 1.2% of turnover under PF2 conditions.
- The affordability position presented under PSC conditions appears favourable compared with PF2; however, once consideration is given to the risk transfer and VfM conclusions, the PF2 funding mechanism is preferable.
- Implied efficiency levels are at Monitor Assessor Case levels and include prudent assumptions in respect of inflationary pressure on both income and expenditure.
- Efficiency savings represent a challenge and require significant service transformation for delivery purposes. Cost Improvement Savings are £20m and £18m for the years 2014/15 and 2015/16 respectively on a 2013/14 price base with further savings required from transformational RCRH change.
- RCRH transition is embedded within financial strategy.
- Modest development funding of approximately 1% of turnover per annum is incorporated within the financial projections, as agreed in principle with main commissioners.
- The base case is showing a consistent CsRR of at least a 3 across the planning period. A rating of 3 is the minimum required at application stage of the FT process.
- Cash balances remain positive during the planning period and grow significantly.
- Reserves have been established to support service reconfiguration.
- The Trust is sighted on priorities for significant investment through its Capital Programme to enable service delivery.
- The MMH will be built using the PF2 funding scheme with an assumed contribution of £100m PDC funding.
- A downside sensitivity suggests the unavailability of PDC funding will increase the unitary charge by circa £9m.

1.11 Workforce

Current Workforce

1.11.1 Table 16 below presents the current workforce profile. The analysis is generated from the Electronic Staff Record (ESR) and is a snapshot of staff in post on 30th November 2013.

Table 16: Current Workforce Profile

Staff Category	Number	WTE	Full Time %	Part Time %	Male %	Female %	Average Age	Sick-ness %
Consultants	289	271.45	88.78	11.22	70.57	29.43	49	0.96
Other Medical	517	491.98	94.11	5.89	53.50	46.50	33	0.84
Nursing/Midwifery	2184	1979.32	96.59	23.41	7.25	92.75	41	5.25

Staff Category	Number	WTE	Full Time %	Part Time %	Male %	Female %	Average Age	Sick-ness %
AHPs	430	378.75	74.98	25.02	21.03	78.97	37	3.25
Healthcare Scientists	520	464.68	80.27	19.73	36.99	63.01	41	4.27
NCAs / Support	1160	1005.43	66.83	33.18	15.03	84.97	42	6.59
Admin and Estates	2191	1784.08	61.77	38.23	27.17	72.83	45	4.17
Managerial	169	164.51	93.61	6.39	35.74	64.26	46	2.55
Total	**7460**	**6540.19**	**73.70**	**26.30**	**23.47**	**76.53**	**42**	**4.47**

Note: this data does not include students, bank or agency staff and vacancies.

The Future Workforce

1.11.2 The move to the MMH will provide the opportunity to bring staff together to:

- Concentrate specialist expertise to meet Royal College / other national standards and deliver sustainable services;
- Improve recruitment to groups with supply issues;
- Develop new models of care facilitating the design of new roles and skill mix;
- Reduce costly duplication across sites;
- Work more efficiently through the use of improved environments and technology; and
- A whole range of benefits delivered in stages between now and when the MMH opens.

RCRH Workforce Changes

1.11.3 The RCRH model of care means change to ways of working across MMH and community sites and the adoption of new patterns of employment e.g. seven-day working.

1.11.4 There will be some areas of whole time equivalent (WTE) growth e.g. theatres, critical care and ophthalmology but overall workforce numbers and pay costs will reduce as a result of:

- Acute hospital bed reductions;
- RCRH / MMH planned changes and redesign;
- The move of all acute inpatient services to a single site, and
- The transfer of Hard FM estates staff to the PFI provider.

Workforce Reductions Associated with National Efficiencies

1.11.5 The Trust's LTFM requires a reduction of circa £79m on annual pay spend between now and 2018/19. The greatest impact of this change is generated by national efficiency requirements and transformational change under the RCRH service model assumptions.

1.11.6 The assumed WTE reduction associated with the £79m reduction in workforce costs is 1,739 WTEs by 2019/20. It is assumed that a proportion of the workforce cost reduction will be achieved by reducing unit labour costs as well as by reducing headcount.

1.11.7 The LTFM also assumes that in future there will be service growth with a value of 1% per annum and an associated increase in WTEs associated with RCRH / MMH service changes. This growth in total creates a need to employ an estimated 471 additional staff between 2014/15 and 2018/19 of which the new investment in growth employs 295 WTE.

1.11.8 Overall workforce movements to the end of 2018/19 create a reduction of 1,267 WTE.

Future Workforce Profile

The future workforce profile is presented in Table 17 below.

Table 17: Workforce Profile

	Outturn	Future Years								
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
	Wtes	Wtes	Wtes	Wtes	Wtes	Wte's	Wtes	Wtes	Wtes	Wtes
Base Position										
Consultants	279.4	286.8	286.5	280.9	279.3	270.3	267.0	266.6	264.7	261.5
Junior Medical Staff	474.1	466.1	453.1	438.3	424.6	408.3	414.7	405.8	398.2	387.6
Nursing - Acute	2,454.2	2,487.4	2,384.1	2,236.8	2,113.2	1,985.9	1,980.0	1,953.1	1,893.3	1,849.8
Nursing - Community	517.0	492.1	479.2	458.4	433.8	408.7	380.3	367.1	356.6	336.9
Scientific / Prof & Tech	1,118.8	1,082.7	1,040.9	1,001.7	958.4	934.7	907.2	892.0	874.6	850.5
Non Clinical	2,083.5	1,973.5	1,859.2	1,738.7	1,622.3	1,430.4	1,340.6	1,285.7	1,245.7	1,181.1
Agency	121.1	73.5	57.9	53.3	50.2	46.8	40.3	35.6	32.9	29.8
Sub Total	**7,048.0**	**6,862.1**	**6,560.9**	**6,208.2**	**5,881.7**	**5,485.1**	**5,330.1**	**5,206.0**	**5,066.0**	**4,897.3**
Developments										
Consultants	-	1.8	3.9	6.3	9.8	12.1	14.2	16.4	19.8	23.0
Junior Medical Staff	-	1.9	4.4	7.3	11.2	14.1	16.5	19.1	23.0	27.4
Nursing - Acute	-	16.2	34.1	54.7	84.0	103.2	119.0	138.0	167.5	187.5
Nursing - Community	-	-	19.2	40.8	67.8	96.9	126.8	156.1	189.2	222.7
Scientific / Prof & Tech	-	8.1	17.1	27.6	42.4	52.2	60.3	70.0	84.8	95.0
Non Clinical	-	2.6	5.5	8.9	13.6	16.7	19.3	22.4	27.2	30.2
Agency	-	-	-	-	-	-	-	-	-	-
Sub Total	**-**	**30.6**	**84.2**	**145.5**	**228.9**	**295.3**	**356.1**	**422.0**	**511.5**	**585.8**
Combined										
Consultants	279.4	288.5	290.4	287.3	289.1	282.5	281.2	283.0	284.5	284.5
Junior Medical Staff	474.1	468.0	457.5	445.5	435.8	422.3	431.2	424.9	421.2	415.0
Nursing - Acute	2,454.2	2,503.7	2,418.1	2,291.5	2,197.2	2,089.1	2,099.0	2,091.1	2,060.8	2,037.3
Nursing - Community	517.0	492.1	498.3	499.3	501.6	505.6	507.1	523.2	545.8	559.5
Scientific / Prof & Tech	1,118.8	1,090.7	1,058.0	1,029.3	1,000.8	986.9	967.5	962.0	959.4	945.5
Non Clinical	2,083.5	1,976.1	1,864.8	1,747.6	1,635.9	1,447.2	1,359.9	1,308.1	1,272.9	1,211.3
Agency	121.1	73.5	57.9	53.3	50.2	46.8	40.3	35.6	32.9	29.8
Sub Total	**7,048.0**	**6,892.7**	**6,645.0**	**6,353.7**	**6,110.6**	**5,780.4**	**5,686.2**	**5,627.9**	**5,577.5**	**5,483.0**

Addressing the Workforce Challenge

1.11.9 The Trust has undertaken significant work to address the workforce challenge. In summary savings will be made in three areas:

- Savings as a result of delivery of the RCRH activity reductions and efficiencies;
- Delivery of a long term workforce change programme; and
- An annual CIP programme.

1.11.10 Although the changes required are challenging the pressures involved are not significantly different to other acute NHS trusts.

1.11.11 To ensure effective delivery it is likely, that the Trust will need to break new ground, develop new approaches and adopt a robust approach to programme management. The Workforce Delivery Committee, which reports to the Clinical Leadership Executive will lead the process and Assurance will be provided to the Trust Board through the Workforce and Organisational Development Committee.

1.12 The Commercial Case

The PF2 Contract

1.12.1 The main acute hospital construction will form the basis of the PF2 contract.

1.12.2 In the OBC approved by the DH in August 2009 a separate research and education block (on the same site) was included in the PFI contract. However, the 2013 Architectural Design Review (ADR) process resulted in transfer of these activities to community facilities that will be developed on retained estate. Education facilities will now be included close to clinical / operational services in the MMH building.

1.12.3 The Trust does not believe it will get any benefit from asking the private sector to include refurbishment and maintenance of the community facilities on retained estate within a private finance deal and indeed will lose flexibility by doing so. Therefore the Trust will exclude these from the scope of the PF2 contract.

1.12.4 Consideration has been given to the level of services to be provided within the PF2 contract. Based on obtaining best value for money the approach will be to include Hard Facilities Management services to maintain the fabric of the buildings and estate and ensure their lifecycle replacement for the duration of the PF2 Contract.

1.12.5 Car parking and security will be retained in house given the close co-operation of core clinical functions and the security service, and the synergies between security and car parking. Soft Facilities Management services will be excluded from the PF2 contract with the exception of retail / hospitality and vending catering services. Equipment management services may be procured separately.

Compliance with Standard Form

1.12.6 The Trust confirms that the Project Agreement developed for the MMH is based on the DH PFU Standard Form Version 3 contract published in August 2003 and updated to take account of:

- Changes made by the PFU in August 2004 and February 2007 (SF3);
- Compliance with Standardisation of PFI Contracts Version 4 (SoPC4) (March 2007) and the subsequent addendum on refinancing; and
- HMT standardisation of PF2 Contracts (December 2012).

1.12.7 The procurement documents and draft contract have been amended in line with the new PF2 requirements.

Competitive Dialogue

1.12.8 The procurement will be undertaken through the Competitive Dialogue procedure in line with European procurement law. The timetable for this has been adjusted to 18 months as required by PF2. This will allow faster progress to be made and will reduce the costs incurred by bidders.

Value for Money (VfM) of PFI

1.12.9 The Trust has considered alternative forms of funding and considers that PF2 is likely to provide the best value for money. HMT and DH require that the Trust is able to demonstrate that a PF2 procurement provides better value for money when compared to a conventional funding route. The preferred scheme PF2 value for money assessment must be satisfied as part of the approvals process

1.12.10 The qualitative assessment has been updated and adjusted for known PF2 factors. The Trust is satisfied it demonstrates that a PF2 procurement can develop a viable contracting structure, provide overall benefit to patients, staff and commissioners, and that it is achievable given current market appetite.

1.12.11 The quantitative VFM assessment was concluded in December 2013. Two scenarios were modelled as follows:

- PF2 – No capital contribution – NPV of unitary charge is £409.7m
- PF2 – £100 capital contribution – NPV of unitary charge is £392.1m

1.12.12 Table 18 below shows the NPVs of the project cost of each procurement route and the NPV of the risk retained in each instance following the workshops to refine and scrutinise the model. The updated results below demonstrate that:

- The PF2 option without a capital contribution has a lower risk adjusted NPV than the PSC option and therefore offers better value for money.
- The PF2 option with a £100m capital contribution has a lower risk adjusted NPV than the PSC option and therefore offers better value for money.

Table 18: VFM Quantitative Assessment

Option	NPV of project cost	NPV of risk retained by Trust £m	Total risk adjusted NPV
PF2 (no capital contribution)	409.7	18.3	428.0
PF2 (capital contribution, recognition of £100, divided by 3)	392.1	18.3	410.4
PSC	323.2	105.4	428.6

1.12.13 The modelled risk retained by the Trust for each option is as follows:

- PSC – NPV of risk retained is £105.4m
- PF2 – No capital contribution – NPV of risk retained is £18.3m
- PF2 – £100 capital contribution – NPV of unitary charge is £18.3m

1.12.14 The qualitative and quantitative assessments confirm that procuring the new hospital using PF2 represents value for money when viewed alongside the public sector comparator (PSC). Whilst this is the case both with and without a PDC contribution of £100m, the solution with £100m PDC delivers the highest level of VfM and continues to feature as part of the base case modelling for affordability and sustainability purposes.

1.13 The Management Case

1.13.1 The Trust places particular importance on effective project management arrangements across all its development activities.

The Chief Executive Officer (Senior Responsible Owner for this project) and Director of Finance and Performance both have considerable experience of delivering large PFI schemes. The Trust's Chairman has significant experience in property management. This level of capability will ensure strong leadership for the project.

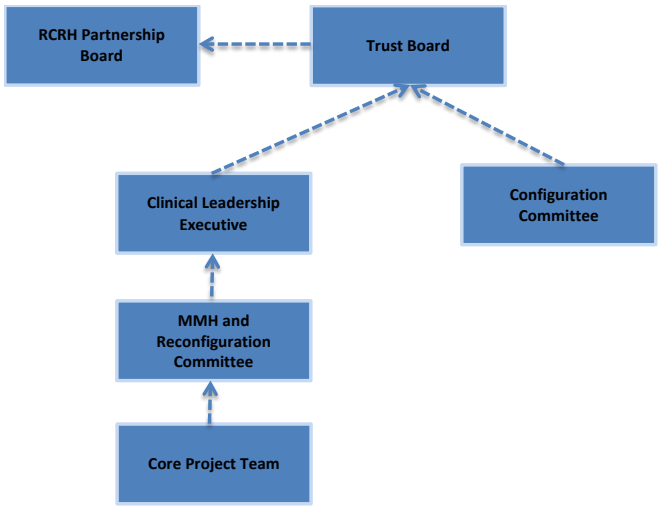
1.13.2 The Trust's in-house team has significant experience of projects of this type and will be supported by a team of experienced external advisors. A detailed budget for the procurement stage of the project has been agreed and is presented within the LTFM.

1.13.3 A Gate One Gateway Review was undertaken for this project achieving a Green rating indicating that the project was in a good position to move forward at that stage. A Gate Two Review was undertaken in November 2010 achieving an Amber / Green status. A repeat Gate Two is currently being undertaken to seek guidance prior to the initiation of the procurement.

1.13.4 A comprehensive project management approach was put in place for this project prior to the OBC Phase of the project. These arrangements and structures have been refined and expanded for the Procurement Phases of the Project.

The project governance structure has been updated for the procurement stage of the project (see figure below). This structure ensures that all decision making will be embedded in Trust process.

Figure 5: Governance Structure



1.13.5 The Configuration Sub-Committee is chaired by the Trust Chair.

1.14 Conclusion

1.14.1 This Outline Business Case sets out the case for the development of a new acute hospital – the MMH - on the Grove Lane site, to be delivered through the Government's PF2 procurement process.

1.14.2 The plans prepared for the delivery of this project are robust; the services proposed are affordable, value for money and meet the requirements of patients. They will deliver the following significant benefits to the local area:

- Improved quality and sustainability of clinical services resulting in improved clinical outcomes, reduced mortality and ability to deliver excellent clinical care;
- More effective use of staff resources, ensuring that staff are trained to deliver a new sustainable model of care, are productive and satisfied with their experience at work;
- More effective patient flows to maximise use of resources and improve patient experience;
- Improved accessibility of services for the local population, so that patients can access a good range of local services, with faster access to treatment, at times convenient to them;
- Improved flexibility and quality of accommodation which will improve the patient and staff experience, maintain the best environment for clinical care and provide greater privacy and dignity for patients;
- Improved ability to develop / sustain services and respond to commissioning intentions, so that the Right Care, Right Here vision is achieved and new services can develop and be sustained over time;
- Financial benefits from services which are affordable, financially sustainable in the long-term and achieve budget forecasts;
- Improved customer care so that that patients are treated with respect, are involved in decisions about their treatment and can be confident in the quality of their care; and
- Contribution to local community regeneration as new developments are built around the hospital, the local community has opportunities to find work in the hospital and surplus sites are used as a catalyst for major regeneration projects.

1.14.3 The Strategic Health Authority approved the OBC at Version 2 in January 2009 and the Department of Health approved the document in August 2009. This allowed the Trust to proceed with acquisition of the land at Grove Lane which it now owns. The Trust now has vacant possession of the land and is preparing it for the procurement.

1.14.4 In line with the conditions of the 2009 approval this document has been fully updated to show the current position to enable approval by the Government prior to initiation of the procurement.

1.14.5 The Trust has been working closely with the Clinical Commissioning Groups to ensure on-going support for the scheme underpinned by a shared activity and capacity model.

1.14.6 The Trust Board approved the scheme in November 2013.

2 Introduction

2.1 Purpose of the Outline Business Case (OBC)

2.1.1 This Outline Business Case (OBC) sets out the case for the redevelopment of acute hospital services as a fundamental component in the overall delivery of the local health economy's Right Care, Right Here (RCRH) vision, and in particular, the development of a new acute facility on a brownfield site in Smethwick.

2.1.2 The purpose of this OBC is to seek Government approval to initiate procurement of the new hospital through the government's PF2 approach.

2.1.3 This chapter of the OBC charts the Trust's journey starting from the current status of the project, summarised in the next section, stepping back in stages over time through previous achievements, all the way back to the initiation of the project with an approved Strategic Outline Case (SOC) in 2004.2014: Current Status

The Proposed Scheme in 2013/14

2.1.4 This OBC presents a balanced, detailed and robust case for the merits of the project.

2.1.5 The Trust Board reviewed the scheme in considerable detail during 2013/14 to enable approval of:

- A 10 year Long Term Financial Model (LTFM), which takes account of revised national guidance to October 2013, as well as the Better Care Fund policy;
- A detailed long term analysis of the Trust's workforce needs, which takes account of key safety recommendations (including the Keogh report on urgent and emergency care), but is also aligned to the financial position that the Trust and all public services face; and
- An updated estates strategy which outlines how the scheme is embedded in investments in primary care infrastructure as well as the non-Private Finance refurbishment of some of the Trust's current estate.

2.1.6 During 2013/14 the Trust has sought and obtained the continued support of the Health and Wellbeing Boards and Clinical Commissioning Groups (CCGs). All involved recognise the need to take account of current policy and practice, but also to produce a flexible solution for the future which is able to adapt as needs change.

2.1.7 In January 2014 the scheme was approved by the National Trust Development Authority.

The Change to Private Finance 2 (PF2)

HM Treasury (HMT) initiated a review of the Private Finance Initiative (PFI) approach and published the results in 'A New Approach to Public Private Partnerships' (December 2012).

2.1.8 This work responded to the following perceived weaknesses which were causing considerable public concerns:

- The procurement process has often been slow and expensive for both the public and the private sector;
- PFI contracts have been insufficiently flexible during the operational period;
- There has been insufficient transparency on the future liabilities created by PFI projects;

- Some projects have transferred inappropriate risks to the private sector resulting in a higher risk premium being charged to the public sector; and
- Equity investors in PFI projects were perceived to have made windfall gains, and this led to concerns about value for money.

2.1.9 It is acknowledged that PFI did provide a number of benefits including the private sector's project management skills, innovation and risk management expertise. For example: ensuring buildings are delivered to a high quality, on time and budget and that assets are maintained to a high standard throughout their lives.

2.1.10 In response a new approach has been developed known as Private Finance 2 (PF2) which builds on the strengths of PFI to make the following improvements:

- Access to wider sources of equity and debt finance to improve value for money;
- Increased transparency of the liabilities created by long term projects and the equity returns achieved by investors;
- Reduction in time taken and cost of the procurement process; and
- Greater flexibility in the provision of services.

The taxpayer will become a shareholder in projects and share in the ongoing investor returns.

Review of the Project for PF2

2.1.11 The Trust has made all the necessary adjustments required to the draft contract to ensure an effective implementation of PF2 and ensure that lessons are learned from previous projects.

2.1.12 The project plan has been adjusted to deliver the procurement within new recommended timescales to minimise cost and make rapid progress to financial close.

Update to the Activity and Capacity Model

2.1.13 Overall RCRH Programme objectives remain the same with some increase in ambition as understanding of what is possible in terms of activity transfer has grown over time. Updates to the activity modelling have been undertaken to update the baseline and show further changes agreed with commissioners in January 2014.

Architectural Design Review

2.1.14 An Architectural Design Review (ADR) was undertaken in parallel with the review of the scheme for PF2 during 2013/14. This process has ensured that departmental 1:200 designs have been recently updated with clinicians to ensure readiness for Competitive Dialogue. It involved the following engagement activities:

- Open sessions for staff.
- FT members' sessions.
- Boot Camps for each department consisting of 2-3 meetings to develop and agree the departmental layout in the form of 1:200 drawings.
- Monthly updates to the Clinical Leadership Executive. Issues were presented to allow senior clinical engagement in managing these and also in agreeing the whole hospital layout.

2.1.15 Examples of improvements in the scheme developed through the engagement process are:

- Two dedicated maternity theatres that will now be provided within the delivery suite to reduce journey times minimising risks to mothers and babies;
- Location of Delivery Suite next to a ground floor entrance;
- Development of a bespoke antenatal clinic for high risk mothers in line with best practice and co-location of this with delivery suite;
- Location of the Children's Inpatient Unit on the ground floor, away from any adult inpatient areas and with access to outside space;
- Revised provision for morbidly obese patients to ensure that all areas can manage these patients;
- Bespoke design of the adult Acute Assessment Unit to facilitate rapid assessment, diagnosis and treatment of emergency patients;
- All adult outpatient clinics (apart from high risk and consultant led antenatal clinics) to be held in Community Facilities and therefore closer to home;
- Co-location of all cardiac services allowing improved patient journeys, shared flexible use of specialist staff and facilities;
- Creation of a small Cardiac Rehabilitation facility for high risk patients;
- Creation of overnight accommodation for relatives needing to remain on site with high risk patients;
- Revised location of the Mortuary to improve privacy and dignity and create discrete access for relatives;
- Reviewed neighbourhood hub design to improve flows, support facilities, storage and include electronic drug dispensing at ward level. This will improve direct patient care and discharge processes by timely dispensing of drugs and pharmacists physically based at ward level.

2.1.16 The scheme has reduced in size from 87,123 m^2 at OBC approval in August 2009 to 79,828m^2 at current OBC version.

2.1.17 Table 19 below outlines the changes made since August 2009.

Table 19: Changes since the OBC Approval in August 2009

Service Area	Changes Proposed	Rationale / Benefits
Ophthalmology	The emergency department, adult day cases and outpatients will stay at the Birmingham and Midlands Eye Centre (BMEC).	The identity of this specialist regional service is maintained by preserving the dedicated facility. Facilities are of a good standard.
Pathology / Mortuary	Removal of Pathology from the scheme (except for an essential lab and body store) and developed in Sandwell Treatment Centre (STC).	This provides flexibility for future service developments.
Inpatient Beds and Neonates	Reduction of 32 adult generic beds (1ward) Removal of central adult level 1 unit (16 beds) A reduction of 10 neonatal cots	Reduction in capacity in line with the activity and capacity model.

Service Area	Changes Proposed	Rationale / Benefits
Adult Acute Assessment Unit	Creation of a bespoke unit (instead of 3 generic ward templates).	This facilitates rapid assessment, diagnosis and treatment of emergency patients and is the model adopted during 2013/14.
Operating Theatres	Reduction in the number of operating theatres by 1 elective theatre.	Reduction in capacity in line with the activity and capacity model and changed productivity expectations.
Pharmacy	Removal of Aseptic Suite from the scheme and continue to provide and develop in STC/BTC with an in-reach service to MMH.	The facility primarily supports chemotherapy day case and outpatient work which will continue to be provided in STC and BTC.
Outpatients	Only Antenatal outpatients and Children's outpatients to be developed at MMH.	The success of the early projects transferring outpatient activity out of the acute hospital has demonstrated that the model is effective and improves the patient experience. The updated facility model delivers operational benefits from consolidating outpatients within community facilities and maximising the utilisation of these buildings.
Cardiac Rehabilitation	The majority to be delivered in Sheldon Block and existing space at STC. Only a small facility to be developed in MMH for high risk patients.	Allows this service to be developed as part of the community rather than acute model, which is appropriate for a rehabilitation service.
Clinical support services	Respiratory physiology, Neurophysiology, Orthotics, Urodynamics and Medical Illustration to be delivered from STC / BTC with smaller support facilities remaining in the acute hospital.	Removes services which do not need acute facilities from the scheme whilst ensuring that a service can still be provided for inpatients.
Administration and training	Removal of corporate administration facilities from the scheme (this refers to office accommodation for back office functions rather than clinical / operational staff). These facilities to be provided on community sites on retained estate.	Allows flexibility to support change in the future as the Trust develops new approaches e.g. working from home, the sharing of flexible workspaces and the commissioning of shared services to deliver back office functions.
Research and Academic Facilities	Removal of the separate research and academic facility from the scheme. This facility will primarily be provided on the STC site. A small facility will be created within MMH for those activities that need to take place at MMH.	Allows flexibility to support change in the future as the Trust develops new approaches. Facilities at Sandwell Treatment Centre are of a good standard.

2.2 2009 - 2013: Land Acquisition

2.2.1 Plans for the acquisition of the land required for the new hospital were the subject of a separate Land Acquisition Business Case, approved by the NHS West Midlands Strategic Health Authority (SHA) on 25th November 2008. This presented the case for commencing the procurement of land before the submission of the OBC so that:

- The potential for private treaty acquisitions could be explored;
- The application for additional borrowing by the Trust to fund such acquisitions could be supported; and

- The preparation of plans for the use of compulsory purchase powers could be facilitated should these be required.

2.2.2 Subsequent to this approval it was determined that an OBC for the MMH would need to be approved by the DH prior to the Secretary of State (SoS) approval to initiate the Compulsory Purchase Order (CPO) process. CPO was required to ensure that clear route to title was achieved for the land, which had multiple owners and interests making full voluntary acquisition difficult to achieve. Following approval of the OBC in August 2009 the Trust initiated the application for use of its CPO powers in September 2009.

2.2.3 The CPO process went smoothly with few objections, which were withdrawn by the time of the CPO Inquiry in June 2010. The SoS confirmed that the CPO could be made in January 2011.

2.2.4 In the meantime the Trust continued with voluntary land acquisitions in line with Estatecode. Approximately 30% of the Grove Lane site, at a cost of £5.7m, had been purchased by September 2010.

2.2.5 The CPO was exercised over 3 General Vesting Declarations. The Trust continued to negotiate vacant possession during 2013 and the last occupant left the site on 6th January 2014.

2.3 2010: Scope Review Process

RCRH Programme Review

2.3.1 Due to changes in the NHS financial environment a review of the RCRH Programme was undertaken in 2010. The aims of the review were to:

- Review the objectives of the programme;
- Review clinical models and care pathways;
- Scale up service redesign;
- Update best practice and commissioning intentions;
- Ensure affordability in the light of emerging changes in financial context; and
- Develop changes to the activity model in line with the findings of the review.

2.3.2 The conclusion of the review was that the changes involved in the RCRH model of care continue to be absolutely essential to delivering the improvements in quality and efficiency required in the challenging times ahead. The need for a new single site acute hospital within the RCRH Model of Care was reasserted.

2.3.3 A reduction in the numbers of capital developments in primary care were agreed, to deliver economies of scale and fully utilise the remaining facilities.

Change to the RCRH Activity Model

2.3.4 A revised activity and capacity model supporting affordable best practice was developed. Revision to growth; productivity and admission avoidance assumptions (aligned to benchmarking) was built into the new plans to secure financial viability.

2.3.5 Best practice commissioning intentions were captured e.g. procedures of limited clinical value were removed and reduction in caesarean section rates to national best practice. Day case rates were modelled at top quartile, the majority of this being undertaken in the community. Increase in the take up of intermediate care and urgent care had been assumed. Transfer to alternative providers e.g. GPs with a specialist interest, has been modelled.

The Scope Review Process

2.3.6 The following issues led to the decision to review the scope of the new hospital project:

- Changes to the RCRH activity model resulting in the requirement to review capacity;
- Discussion with clinicians indicating that there may be benefits in delivering more services outside the acute setting; and
- Change in funding conditions resulting in likely increases to the Unitary Charge which could have challenged scheme affordability.

2.3.7 The approach involved engagement with the Clinical Executive Team and key departments to consider which services need to be provided in an acute hospital environment and which could be removed from the scheme. This work identified a number of opportunities both to reduce the size of the scheme but also to provide additional flexibility and other benefits to the Trust.

2.3.8 The outcome of the Scope Review Process was that the Trust proposed to retain some estate on all of the current hospital sites to develop facilities to accommodate community and acute services that will no longer transfer to the new hospital.

2.4 2009: Department of Health Approval

2.4.1 The SHA approved version 2 of the OBC on 27th January 2009 and the DH approved it on 14th August 2009. This approval cleared the way for the Trust to begin acquiring the land for the new hospital site and initiated the application for the Compulsory Purchase Order (CPO). Approval by HMT was deferred until route to land title had been achieved.

Conditions of Approval Granted in August 2009

2.4.2 The SHA and DH approval letters are presented at ***Appendix 2a*** and ***Appendix 2b***. Table 20 below summarises the conditions of the approvals granted by the DH and SHA.

Table 20: Conditions of Approval in August 2009

Conditions of the Approval Granted by the DH	
Approval Condition	**Outcome**
The procurement documentation will need to be approved by the Private Finance Unit and Department of Health Estates. The estates approval role has now passed to the Trust Development Agency (TDA).	The TDA has approved this version of the OBC. Private Finance Unit review of the procurement documentation is underway.
The capital cost should not vary, in real terms, from the current estimates of £432 million for construction and £22 million for land. Any increase of 10% or more would require the OBC to be re-approved.	There has been a reduction in the MMH capital cost since the approval in August 2009 £353 at current costs. Land acquisition costs are projected to be within thresholds.

Conditions of the Approval Granted by the DH	
Approval Condition	**Outcome**
The plans must remain affordable to the Trust in revenue terms. The normalised revenue unitary charge must not exceed 12.5% of the Trust's turnover and a real-terms increase of 5% or more in the revenue costs of the scheme would precipitate a requirement to have the OBC re-approved.	The plans continue to be affordable as outlined in Section 10, The Unitary Charge does not exceed 12.5% of the Trust's turnover. The revenue costs have not increased by more than 5%.
The Trust should update its income projections to ensure affordability.	The Trust has updated its income projections to ensure affordability.
The Trust should ensure that the scheme is likely to remain within the financial parameters that Monitor may apply.	The Trust has updated the financial model in the format required by Monitor and has applied the assessments that would be applied by Monitor. See Section 10.
Conditions of The Approval Granted by the Strategic Health Authority	
Approval Condition	**Outcome**
To review the OBC prior to issue of the OJEU notice to ensure that it remains affordable and value for money.	The TDA has approved the OBC. Government review pending prior to OJEU.
To review the public sector comparator on an annual basis to ensure that it has been updated.	The Public Sector Comparator has been updated for revised activity assumptions and other changes.
To review the qualitative assessment of the scheme at key stages in the lifecycle of the project to ensure the continued value for money of the scheme.	The qualitative Value for Money assessment has been reviewed twice since the 2009 approval and is still valid despite changes made to the scheme.

Facilities Planned in 2009

2.4.3 At OBC approval in August 2009 delivery of the new models of care planned through RCRH would have been supported by three major sets of capital developments comprising:

- Comprehensive redevelopment of the primary care estate through the construction of 51 new health centres by Sandwell and Heart of Birmingham PCTs.
- Development of five new community facilities. Three of the sites would have used refurbished estate which is currently owned by the Trust, although responsibility for ownership and development of the sites in future had not been determined at this time;
- A new single-site acute hospital for the area on a brownfield site in Smethwick.

2.5 2007: Public Consultation

2.5.1 Proposals for the way forward were taken to public consultation during the period of 20th November 2006 to 16th February 2007. A copy of the consultation document and results is attached as ***Appendix 2c.*** The response to the consultation was strongly positive, with those in favour of the proposals outnumbering those against by a factor of six to one. Since then there has been continuing engagement activity with the local population. Details of these activities are presented in Chapter 12. Additional consultations were undertaken during the planning application in 2008 and the Compulsory Purchase Order (CPO) Inquiry in 2010 which continued to indicate ongoing public support.

2.6 2005: Development of the RCRH Programme

2.6.1 Since the approval of the SOC in July 2004 the Trust and its two major commissioners at that time (Sandwell PCT and Heart of Birmingham Teaching PCT), developed more detailed plans for delivering the RCRH vision.

Early Years of the Partnership

2.6.2 The RCRH Programme was developed through a ground breaking approach to partnership working which has maintained exceptionally high levels of stakeholder support. The RCRH Partnership Board was formally established in March 2005. The Partnership and Programme were originally called 'Towards 2010'. The name was changed in March 2009 to 'Right Care, Right Here' (RCRH).

2.6.3 The core partner organisations originally included:

- Heart of Birmingham Teaching PCT (HoB tPCT);
- Sandwell PCT (SPCT);
- Sandwell and West Birmingham Hospitals NHS Trust (the Trust);
- Birmingham City Council (BCC);
- Sandwell Metropolitan Borough Council (SMBC);
- Birmingham and Solihull Mental Health NHS Foundation Trust (BSMHFT);
- Sandwell Mental Health NHS and Social Care Trust (SMHSCT)
- Sandwell Community Healthcare Services (Sandwell PCT Provider Arm); and
- Heart of Birmingham Teaching PCT Provider Arm

Developing the RCRH and New Hospital Plans

2.6.4 The RCRH programme continued to develop plans to improve health and social care services across the whole of the Sandwell Metropolitan Borough and the heart of Birmingham City, along with those adjoining areas served by the Trust, covering a total residential population of around 620,000 people.

2.6.5 It was agreed that the Trust would develop an OBC for the development of acute hospital services and a new facility to replace the City and Sandwell General Hospitals.

2.7 2004: Strategic Outline Case Approval

2.7.1 The SOC described the need to redesign the health and social care system by creating a major step change in service provision and set out the required investment across the whole range of health and social care settings.

2.7.2 The SOC, which was approved in July 2004, set out three potential solutions:

Do Minimum

2.7.3 Models of care remaining largely unchanged, with some improvement in length of stay and day case rate.

Medium Devolution of Services

2.7.4 Changes in models of care and service provision to meet National Services Framework (NSF) targets, policy guidance and existing benchmarks, with a primary focus on:

- Moving episodes of care out of an acute hospital setting;
- 30% of outpatient services delivered from primary care settings;
- An emphasis on the provision of intermediate care beds and rehabilitation in the community;
- Improved management of chronic and enduring health conditions;
- More health and social care delivered in community settings;
- Development of services to promote good health and reduce admission to hospital; and
- People supported to stay in their own homes longer.

Maximum Devolution of Services

2.7.5 A more far-reaching approach to the delivery of services within local communities across the full range of care groups:

- Minimum of 50% of outpatient services delivered from primary care settings with consideration given to how this could be done differently to offer greater choice and convenience;
- More opportunity for and a wider range of local diagnostic services, including Computerised Topography (CT) and Magnetic Resonance Imaging (MRI) scanning;
- Re-design of out of hours services and diversion of emergency services to deliver more appropriate responses;
- Development of community based beds for low level unscheduled care;
- Greater focus on self-management, empowering service users to manage their own health and health care, promotion of independence and development of supporting services; and
- Greater creativity in the way staff work across organisations and facilities to deliver managed care.

2.7.6 The maximum devolution model assumed a greater level of impact from improvements in primary and community services i.e. greater levels of admission avoidance and even greater levels of productivity gain in the acute hospital. The capacity and physical solutions required for each of the three solutions are presented in Table 21 below:

Table 21: SOC Project Capacity Requirements at 2004

	Do Minimum	Medium Devolution (Single Site)	Maximum Devolution
Bed Capacity			
Acute Hospital	1,211	1,058	969
Primary & Community Care	138	288	288
Total	**1,349**	**1,346**	**1,257**

Physical Solutions: Acute	The primary care and hospital estate is brought up to DH Estates condition B. A volume of facilities adequate to meet the service access targets and take account of additional service demand as a result of demographic change is provided.	A single site acute hospital of 129,400m^2 and 1058 beds. The hospital could be located on the City, Sandwell or a new brownfield site.	A single site acute hospital of 115,100m^2 and 969 beds. The hospital could be located on the City, Sandwell or a new brownfield site.
Physical Solutions: Community	Retention of as much of the existing estate on the City and Sandwell Hospital sites as is practical for the new models of care. Existing accommodation would be refurbished; where there is a shortfall it would be met by alteration and extending into adjoining accommodation. Any overall shortfall is met by new-build accommodation. Site 1 is an 85,700m^2 hospital with 661 beds, and site 2 a 76,600m^2 hospital with 547 beds	Three community facilities of 7,000 m^2 with 50 beds and treatment and diagnostic facilities, along with 10 (516m^2) local resource facilities or equivalent providing bases for community and primary care staff. One of the community facilities could be located on the Sandwell site if the acute hospital were located on either the City or a brownfield site.	Three community facilities of 7,400m^2 with 50 beds and treatment and diagnostic facilities, along with 10 (722m^2) local resource facilities providing bases for community and primary care staff. One of the community facilities could be located on the Sandwell site if the acute hospital were located on either the City or a brownfield site.

Facilities Planned in the SOC

2.7.7 The SOC assumed the development of:

- Ten local resource facilities, or equivalent, providing bases for community and primary care staff;
- Three community facilities containing beds, treatment and diagnostic facilities; and
- A new acute hospital.

2.7.8 A comparison of the solutions anticipated in the SOC, OBC approved in August 2009 and current OBC is not straightforward because:

- Activity projections in the SOC were based upon a 2003/04 baseline and were produced for the period up to 2012/13;
- The OBC approved in August 2009 uses 2005/06 as its baseline starting point and projections were made up to 2015/16;
- The current OBC update uses the 2013/14 period as its baseline and projections have been made up to 2022/23; and
- At the SOC stage, detailed activity projections were only undertaken for in-patient activity.

2.7.9 A comparison of the projected levels of in-patient activity and capacity for the Trust's existing catchment is set out in Table 22 below:

Table 22: Comparison of SOC and OBC Inpatient Activity and Capacity

	S0C (2004) 2012/13	OBC (2009) 2015/16	OBC (2014) 2019/20
Acute Hospital Activity	**FCEs**	**Spells**	**Spells**
Elective In-Patients	12,946	9,356	7,876
Non-Elective in-Patients	89,297	54,810	61,520
Day Cases	46,871	37,719	14,230
Total Acute Hospital	**149,114**	**101,885**	**83,626**
Community facilities (including day cases)	1,907	30,942	33,359
Total	**151,022**	**132,827**	**116,985**

Bed Capacity			
Acute Hospital	969	723	666
Community facilities	288	265	158
Total	**1,257**	**988**	**824**
Community Contacts	0	0	927,085

2.7.10 The reduction in projected total number of acute beds compared to the SOC is due primarily to:

- Reduction in the catchment population as a result of anticipated patient flows to neighbouring hospitals;
- Changes in demographic forecasts and growth rates for elective and non-elective admissions;
- Changes in demand as a result of admission avoidance and decommissioning of procedures of limited value; and
- Changes as a result of efficiency and productivity gains.

2.8 Towards our 2020 vision

2.8.1 This OBC explains what will happen over the coming years if the scheme is granted permission to proceed in 2014. In summary:

- Between April 2014 and 2016 the Trust will undertake procurement and final specification alongside site clearance and demolition.
- Between 2016 and 2018 construction will take place. The Trust will have a period of time to commission the new building after its practical completion by the construction partner.
- A transfer plan for the precise timing of service changes to enable the move into the new site will be developed. Transfer will take place in summer and autumn 2018.
- The non-private finance investment in the City and Sandwell community facility sites will take place both before and after the opening of the new acute hospital. The Trust has already completed significant non-clinical estate rationalisation. All current capital plans are managed in congruence with the vision set out in this OBC.

2.8.2 Because the Trust sits as part of a wider network of care within the RCRH partnership we have confidence that we can deliver the changes in the pattern of care on which the new model depends. This includes changes in how outpatient care is delivered to enhance quality and release time as well as changes in bed numbers and use.

2.8.3 The scheme contains physical, if unfunded space, in the new acute hospital and the non-private finance facilities should the intervening years see plans not come to fruition. This would place financial pressure on the local health and social care system. However, the availability of mitigation space is an important part of the risk profile of the project.

2.8.4 The MMH, with its transfer of care into community facilities and centralisation of specialist acute care, is a means to deliver the broader strategy of the health and social care system, and the Trust. It is not an end in itself. The Trust's long term vision reflects ambitions for 2020 and will be informed by the five year plans currently being developed by commissioners. The MMH is a necessary but not a sufficient condition for success.

2.8.5 By 2020 the Trust will want to be able to provide outcomes that are distinctively excellent, building on the current position with the lowest Hospital Standardised Mortality Ratio (HSMR) of acute hospitals in Birmingham. That ambition depends on tackling sepsis - the Trust has an extensive programme to do this and is investing in technology to help identify risk at onset.

2.8.6 By 2020, the Trust aims to be exceeding the Francis goals approved by the Board in December 2013. These goals update the long term quality model approved in 2012/13, which depends on the MMH opening. These eight goals include the ambition to see patient satisfaction, as reported in the Friends and Family test, consistently at or above 80%, rather than around 65% as is current and is the West Midlands norm.

2.8.7 In 2013/14 the Trust agreed the first phase of a Public Health Plan. Managing demand in the system over the lifetime of the PF2 contract demands action not simply to rebalance the acute / community health economy, but to tackle the antecedents of disease in the local community. Our 2020 ambition must see the Trust meeting trajectory in reducing smoking, tackling the harms of excess alcohol, improving diet, reducing physical inactivity and addressing mental health issues in local communities. The Trust continues to work with the local Health and Wellbeing Boards with those goals in mind.

2.8.8 As part of the journey to Foundation Trust authorisation, the Trust is renewing the long term planning documentation for the Trust. This treats, as a fixed point, the current approved clinical, estate, workforce and financial strategies, each of which have been renewed during 2013/14. The review focuses on the sufficiency of all actions needed to deliver the 2020 ambitions. Clinical engagement in that ongoing process is vital. The clinically-led ambition of the Trust's Board will be further enhanced by the 2014 - 2016 partnership for leadership development with the Hay Group.

2.8.9 The 2020 ambitions cannot be delivered without a partnership with patients. Healthwatch sits as a partner at the Trust Board table. An extensive engagement network with local partners is already in place. The Trust's Chairman chairs a new Board Committee which seeks to develop community partnerships further as the Trust works towards operating with a governing body.

2.8.10 The Trust's vision is to be renowned as the best integrated care organisation in the NHS. The merit of that case is clear and reflects longstanding local agreement and recent national policy. The jury assessing our success will be our patients.

3 Strategic Context

3.1 Introduction

3.1.1 This Chapter outlines the factors that come together to provide strategic context for the project including the:

- Needs of the population served by the Trust;
- National context including policy, emerging guidance and financial conditions;
- Local context including commissioning requirements, the objectives of the Health and Wellbeing Boards and competition from other provider organisations;
- RCRH vision for improving care in the local health and social care economy; and
- The Trust's current status, vision for the future and strategic objectives.

3.1.2 A concluding section summarises how the Trust's planning is consistent with, and has to some degree anticipated, national and local context to serve the specific needs of the local population through the RCRH Programme.

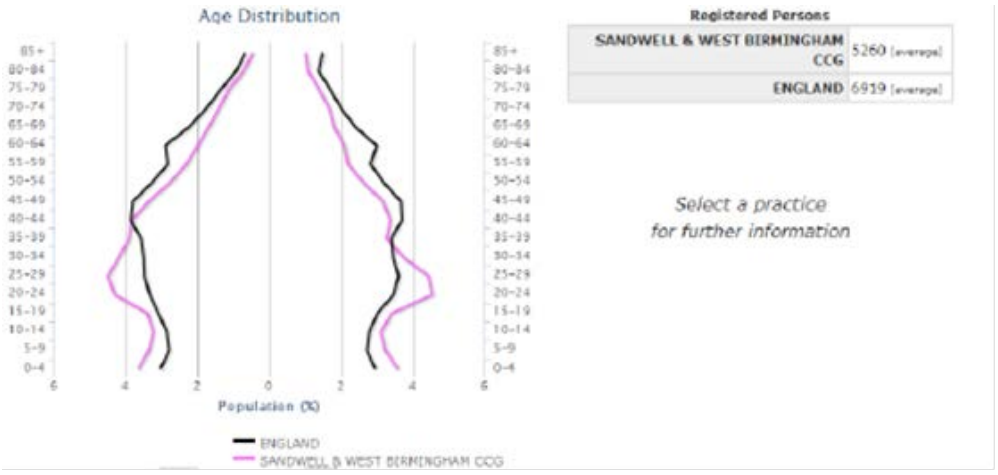
3.2 The Population Served by the Trust

3.2.1 This section outlines the needs of the population that the Trust serves.

Demographic Change

3.2.2 The total population served by SWB CCG will continue to increase over the next 20 years. It is estimated that the population will grow by approximately 6% over that time period, but in the Birmingham population there will be an increase of 16% in the number of children and young people. The increase in people over 65 years of age will be markedly lower than England (approximately only a third of the England trend). This is highlighted by the population pyramid presented in **Error! Reference source not found.** Figure 6 below.

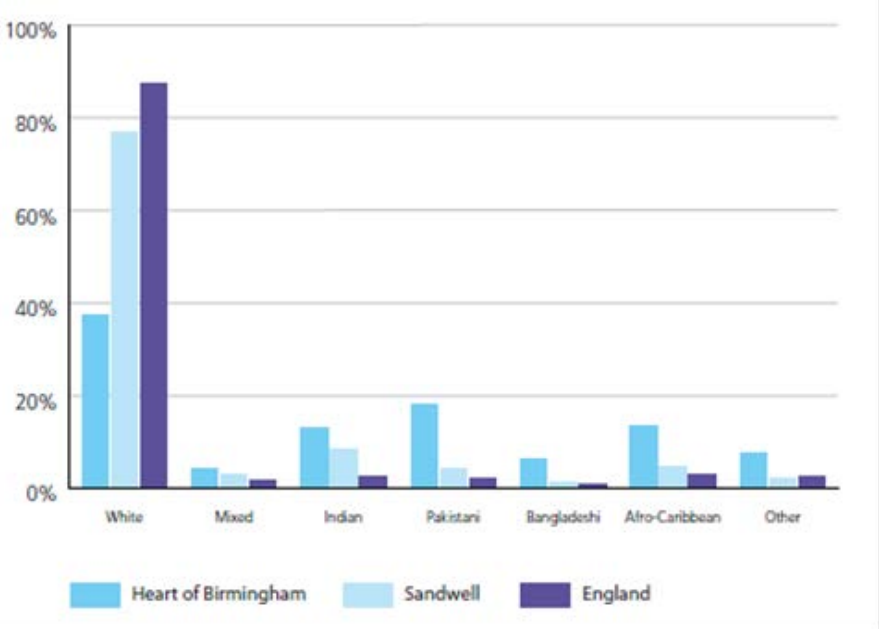
Figure 6: SWB CCG Population Pyramid



Ethnicity

3.2.3 The Trust delivers services to a population that has significantly higher than average black and minority ethnic (BME) rates. Figure 7 **Error! Reference source not found.** shows how rates compare with England as a whole. Such diversity is associated with specific health needs and, in general terms, higher levels of ill health. All other ethnic groups have a higher than average representation when compared to the rest of England as illustrated in below:

Figure 7: Ethnicity in Birmingham and Sandwell Compared to England



3.2.4 The Heart of Birmingham area of SWB CCG has the largest (68%) black and minority ethnic population in England, with the largest group being of Pakistani origin. There is a further increase in the BME population predicted to 2016 (40% increase in the Pakistani and Bangladeshi population and a 130% increase in the number of Black Africans to 18,000).

3.2.5 The Sandwell population of SWB CCG is also becoming more ethnically diverse and the make-up of its population is changing. In the ten years between 1991 and 2001 the BME population increased by 6% to 20%, with the rate of growth being most pronounced amongst the Asian communities. It is estimated that by 2025, people from BME communities will make up 30% of the Sandwell population in the SWB CCG.

3.2.6 The implications for the Trust are that:

- Services need to be culturally sensitive and accessible to all;
- Health promotion or lifestyle management may need to be tailored for the specific needs of this group;
- Plans for the future need to ensure that the Trust has facilities which are appropriate for different religious beliefs and which make interpreting services available where necessary; and
- The Trust will deliver services to people with increased levels of prevalence for certain conditions such as diabetes, eye disease and cardiovascular disease.

Deprivation

3.2.7 The population served by the Trust is dominated by high levels of deprivation. When ranked on the deprivation score (IMD) - of 354 English local authorities, Birmingham is the 9th and Sandwell is the 12th most deprived. Not unexpectedly, there are a significant number of wards in the worst 20% nationally.

3.2.8 The most deprived areas of Sandwell have a life expectancy of 10.1 years lower for men and 5.9 years lower for women in than in the least deprived areas. For the Birmingham population of SWB CCG, the corresponding figures are comparable with a 10.3 years and 5.6 years gap respectively.

3.2.9 The overall Birmingham unemployment rate (as measured by the percentage of population claiming job seekers allowance) is 12.6%, more than double that of the UK at 5.6%, with electoral wards in the Birmingham area being the most severely affected at over 20%. Sandwell's rate is currently 7.2%. Such social and economic deprivation has an adverse impact on health at all levels. The Trust therefore serves a population with lower life expectancies and higher than average rates of mortality and disease.

Health Status

3.2.10 As expected for a population with high levels of deprivation, life expectancy for both men and women is significantly lower than the England average. Men have a life expectancy of 75.9 years for Birmingham as a whole and 74.3 years for men in Sandwell, in comparison to an England average of 77.9 years. Female life expectancy in Birmingham is 81 years, compared to 80 in Sandwell, and 82 years for the England average. It is important to note that these figures are for Birmingham as a whole, and that indicators for the heart of Birmingham area are assumed to be significantly worse as a result of the high levels of deprivation.

3.2.11 Table 23**Error! Reference source not found.** below gives a summary of key health and lifestyle indicators per 100,000 population. With the exception of the numbers of adults who smoke in Birmingham, all the figures are significantly worse than the average for England.

Table 23: Key Health and Lifestyle Indicators

Indicator	Birmingham	Sandwell	England Average
Infant deaths	8.25	8.46	4.84
Deaths from smoking	248.10	280.50	206.80
Early deaths: heart disease and stroke	96.80	110.90	74.80
Early deaths: Cancer	123.20	135.10	114.00
People diagnosed with diabetes	5.12	5.63	4.30
Adults who smoke	22.50	27.50	22.20
Hospital stays due to alcohol	1,940	2,180	1,580
Obese adults	26.80	29.10	24.20
Obese children	10.80	12.90	9.60
Teenage pregnancies (under 18s)	52.10	59.10	40.90

3.2.12 Additional analysis of key health conditions shows that:

- Incidence rates for some cancers are significantly higher for the local population than for the rest of the West Midlands;
- Levels of prevalence for certain health conditions are projected to increase largely in line with the national average rates for the heart of Birmingham area, but at a higher rate for Sandwell which is projected to have the highest rates of stroke, CVD, CHD and hypertension in the local health economy; and
- Birth rates for the local populations are higher than the England average, with Sandwell having the highest rate within the West Midlands (77.6 live births per 100,000), and Birmingham the third highest (73.3).

The Population Served by the Trust: Conclusion

Population growth, local diversity, high levels of deprivation and consequent poor health means that there is a need to rebalance resources, to shift activity away from the acute setting and invest in services that will improve the health of local people and reduce health inequalities.

3.3 National Context

3.3.1 This section summarises national policy and guidance as well as other factors that need to be taken into account in the Trust's plans for its future services and facilities

The Health and Social Care Act 2012

3.3.2 The Health and Social Care Act 2012 has resulted in a range of measures designed to modernise the NHS. An overview of the impact of the act is presented below.

Changes to Organisational Structure

3.3.3 The act resulted in changes to organisational structures when the new health and care system became fully operational in April 2013.

3.3.4 Clinical Commissioning Groups (CCGs), made up of doctors, nurses and other professionals are now commissioning services using their knowledge of local health needs. The Trust has continued to work closely with leading GPs and clinical leaders during the transition from PCT to CCG commissioning.

3.3.5 Highly specialist commissioning, together with the commissioning of primary care, is undertaken by NHS England. The Trust is actively managing the changes arising from this transition by working closely with the NHS England Birmingham and Black Country Local Area Team.

3.3.6 The creation of new agencies, such as Healthwatch place patient input, involvement and experience at the heart of healthcare, with this now being a key area of focus in all aspects of planning. This is reinforced by a demand for a greater degree of care delivered closer to home and an increase in multi-agency services with any organisational boundaries invisible to the patient.

3.3.7 Local councils have taken on new roles in promoting public health. Health and Wellbeing Boards bring local organisations together to work in partnership. The Trust continues to engage with partners through the RCRH Partnership Board and will continue to support the aims of the new Health and Wellbeing Boards by providing services that will reduce poor health in the local area.

3.3.8 The NHS Trust Development Agency (TDA) supports Trusts in their transition to Foundation Trust (FT) status. The TDA has taken over the approval functions previously held by the Strategic Health Authority for NHS Trusts and has approved this OBC pending review by the DHA and HMT.

Cross Cutting Themes of the Act

3.3.9 The cross cutting themes of the act include the following:

- Improving quality of care; with strong focus on clinical outcomes and safety;
- Tackling inequalities in healthcare with focus on inclusion and reducing health inequalities;
- Promoting better integration of health and care services;
- Choice and competition to drive up standards and responsiveness to patients needs supported by regulatory reform;
- Reconfiguration of services driven by clinicians who know the health needs of their patients best underpinned by local engagement, partnership working and effective local authority scrutiny; and
- Focus on education and research.

The Francis Report

3.3.10 The Francis Inquiry report (February 2013), examined the causes of the failings in care at the Mid Staffordshire NHS Foundation Trust between 2005 and 2009 and makes 290 recommendations, including the need for :

- Openness, transparency and candour throughout the healthcare system (including a statutory duty of candour), fundamental standards for healthcare providers; and
- Improved support for compassionate, committed care and stronger healthcare leadership.

3.3.11 A number of other reports including: the Berwick Report, ‘A Promise to Learn a Commitment to Act’, (August 2013), driving patient safety and ‘Compassion in Practice’ (December 2012) – the Vision for nurses, midwives and care-staff, have built on the recommendations of the Francis Report to embed a new focus on quality, safety and compassion in healthcare.

The Keogh Report

3.3.12 The Keogh Report: ‘Transforming Urgent and Emergency Care Services in England, End of Phase One Report’ (November 2013), was commissioned in response to concern that A&E Departments, associated acute hospital services and ambulance services are under intense, growing and unsustainable pressure.

3.3.13 The report describes the following vision:

- People with urgent but non-life threatening needs should receive highly responsive, effective and personalised services outside of hospital. These services should deliver care in, or as close to, people’s homes as possible, minimising disruption and inconvenience for patients and their families.
- People with more serious or life threatening emergency needs should be treated in centres with the very best expertise and facilities in order to reduce risk and maximise their chances of survival and a good recovery. Getting the out of hospital services right will relieve pressure on hospital based emergency services to enable delivery of this part of the vision.

3.3.14 The proposals emphasise that the NHS must:

- Provide better support for people to self-care;
- Help people with urgent care needs get the right advice in the right place, first time;
- Provide highly responsive urgent care services outside of hospital so that people no longer choose to queue in A&E;
- Ensure that those people with more serious or life threatening emergency care needs receive treatment in centres with the right facilities and expertise to maximise chances of survival and good recovery; and
- Connect all urgent and emergency services together so that the overall system becomes more than just a sum of its parts.

The Better Care Fund

3.3.15 The Better Care Fund (previously referred to as the Integration Transformation Fund) was announced in June as part of the 2013 Spending Round. It provides an opportunity to transform local services so that people are provided with better integrated care and support. A substantial level of funding will be provided to help local areas manage pressures and improve long term sustainability. The Fund will be an important enabler to take the integration agenda forward at scale and pace, acting as a significant catalyst for change. The Better Care Fund provides an opportunity to improve the lives of some of the most vulnerable people in society, giving them control, placing them at the centre of their own care and support, and, in doing so, providing them with a better service and better quality of life. The Fund will support the aim of providing people with the right care, in the right place, at the right time, including through a significant expansion of care in community settings.

Financial Environment

3.3.16 Funding constraints and real terms tariff reductions lead to the requirement for high levels of cost improvement plans (CIPs) compared with historic levels. Funding constraints for commissioners will add to the pressures being felt locally.

3.3.17 This is reflected in the changes to efficiency assumptions and expectations under Monitor's Compliance Regime along with the requirement to deliver a level 3 Risk Rating under Monitor's Continuity of Service Risk Rating metric.

3.3.18 This results in the Trust needing to make significant savings leading up to the new hospital opening and to realise financial benefits when the facility opens.

National Context: Conclusion

National context dictates that significant change driven by clinical leaders and supported by public engagement will be required to meet the higher standards of care expected in future.

Investing in integrated care and shift of activity away from the acute setting will be central to future plans supported by development of high quality, safe and sustainable services for patients requiring acute care in hospital.

3.4 The Local Health and Social Care Economy

3.4.1 This section describes the local health and social care economy outlining the objectives of local partners and commissioners as well as summarising the impact of competition from other providers in the area.

The Local Councils

3.4.2 The Trust delivers services to a core population of circa 530,000 which is served by two local authorities:

- Sandwell Metropolitan Borough Council; and
- Birmingham City Council.

3.4.3 The borough of Sandwell spans a densely populated part of the Black Country and the West Midlands conurbation, encompassing the urban towns of Blackheath, Cradley Health, Oldbury, Rowley Regis, Smethwick, Tipton, Tividale, Wednesbury and West Bromwich.

3.4.4 Bordering Sandwell to the east is the Heart of Birmingham area of the City of Birmingham. This area includes some of the poorest, most deprived neighbourhoods as well as the affluent shopping and business districts of the City Centre. The Trust predominantly serves the Handsworth Wood, Ladywood, Aston, Lozells, Nechells, New Oscott, Perry Barr and Soho wards in the Heart of Birmingham area.

The Commissioning Organisations

3.4.5 The Local Area Office of NHS England covers both the Birmingham and Black Country health economy areas. This benefits the Trust, as it is now geographically at the heart of this one body as opposed to being on the periphery of two separate clusters.

3.4.6 Following the Health and Social Care Act (2012) the Trust now provides services for three main Clinical Commissioning Groups (CCGs):

- NHS Sandwell and West Birmingham CCG (accounts for circa 75% of Trust activity);
- NHS Cross City CCG (accounts for circa 13% of Trust activity); and
- NHS Birmingham South and Central CCG (accounts for circa 5% of Trust activity).

Sandwell and West Birmingham CCG

3.4.7 Sandwell and West Birmingham Clinical Commissioning Group (SWB CCG) is responsible for a population of 530,000, largely drawn from the Sandwell and Heart of Birmingham geographical areas. A key benefit of the new commissioning arrangements for the Trust is that the configuration has been organised around the catchment population the Trust serves.

3.4.8 SWB CCG includes all but three of the practices that sit within the Trust's natural boundary. The three remaining practices, which have a practice population of around 28,000, are part of the NHS Cross City CCG, which accounts for circa 13% of the Trust's activity. The configuration of local practices is presented in Table 24 below.

Table 24: Local GP Practice Configuration

	Local Consortium	Number of Practices	Approx. list Size	No. of practices in top 20 referrers to SWBH
SWB CCG	Healthworks	10 12	54,000 77,000	0 7
	Black Country Commissioning Group	20	112,000	5
	Sandwell Healthcare Alliance	31	127,000	6
	Pioneers for Health (P4H)	10	46,000	0
	Intelligent Commissioning Forum (ICOF)	27	107,000	0
NHS Cross City Clinical Commissioning Group		1 2	4,000 24,000	0 2
Total		**113**	**551,000**	**20**

3.4.9 The strategic priorities for Sandwell and West Birmingham CCG are to:

- **Initiate** – intervening early to prevent illness and being proactive in providing care, using high quality information and empowering patients to make choices and manage their care;
- **Integrate** – putting the patient at the centre of everything, improving communications to ensure seamless transitions between primary, secondary and community care, and across health and social care;
- **Innovate** – scaling up good practice, changing the way we do things to deliver more with less, creating new models of delivery to provide more care in community settings;
- **Improve** – focusing on the quality and safety of services in all parts of the system, ensuring that this is reflected in the patient experience, valuing and acting on their feedback; and,
- **Influence** – playing a full role in local partnerships to affect the wider determinants of health, engaging directly with patients and our communities to facilitate change.

3.4.10 Given the nature of the health needs of the SWB CCG population, five domains or high level outcomes have been identified:

- Preventing people from dying prematurely;
- Enhancing the quality of life for people with long-term conditions;
- Helping people recover from ill health or following injury;
- Ensuring people have positive experiences of care; and
- Treating and caring for people in a safe environment and protecting them from avoidable harm.

3.4.11 A further key priority for SWB CCG includes building on the successful partnership arrangements as part of the RCRH Programme. SWB CCG has not only confirmed commitment to the programme, but has also expressed an intention to accelerate this work. The CCG recognises that the RCRH Programme is critical to the successful delivery of the objectives of the local health economy.

3.4.12 Other key CCG priorities include improving the quality of clinical services commissioned, increasing efficiency of all providers and decreasing dependency on the acute sector. These priorities are aligned to delivery of the RCRH strategy.

Local Health and Wellbeing Boards

3.4.13 The local Health and Wellbeing Boards for Sandwell and Birmingham have identified their priorities for improving health. There is significant congruence in their priorities, particularly those focussed around:

- Early years and adolescent health;
- Long term conditions and integration of care;
- Frail elderly and dementia;
- Alcohol;
- Healthy and sustainable communities; and
- Maximising the capability of individuals to lead healthy lives.

3.4.14 The Trust is responding to these local challenges through the development of a Public Health Plan supported by local partners that contributes to the local Health and Wellbeing priorities.

3.4.15 In addition to the specific commitments the Trust gives to improving health and wellbeing, the plans for a new hospital will support the physical regeneration of a large part of the area. Construction and procurement of local products / services will also create local jobs.

Other Providers in the Local Area

3.4.16 There are five other general acute hospital trusts (including three NHS Foundation Trusts) within the Birmingham and Black Country area, three of which also provide community health services. There are also three specialist NHS Foundation Trusts and a large Community Services Trust. The types of services provided by these organisations are presented in Table 25 below.

Table 25: NHS Organisations in Birmingham and the Black Country

Organisation	Acute Service Provider	Community / Health and Social Care Provider	Catchment Area
Dudley Group of Hospitals NHS Foundation Trust (DGH)	✓	✓	Dudley
Heart of England NHS Foundation Trust (HEFT)	✓	✓	Birmingham Solihull
University Hospital Birmingham NHS Foundation Trust (UHB)	✓		Birmingham
Walsall Healthcare NHS Trust (WHT)	✓	✓	Walsall
Royal Wolverhampton Hospitals NHS Trust (RWT)	✓	✓	Wolverhampton
Birmingham Community Healthcare NHS Trust		✓	Birmingham

Organisation	Acute Service Provider	Community / Health and Social Care Provider	Catchment Area
Black Country Partnership NHS Foundation Trust (SMHSCT)		✓	Sandwell Dudley, Walsall
Birmingham and Solihull Mental Health NHS Foundation Trust			Birmingham and Solihull
The Royal Orthopaedic Hospital NHS Foundation Trust	✓		West Midlands Specialist Trust
Birmingham Children's Hospital NHS Foundation Trust	✓		West Midlands Specialist Trust
Birmingham Women's NHS Foundation Trust	✓		West Midlands Specialist Trust

3.4.17 The following organisations are considered to be the main competitors:

- Dudley Group of Hospitals NHS Foundation Trust (DGoH);
- Heart of England NHS Foundation Trust (HEFT);
- University Hospital Birmingham NHS Foundation Trust (UHB); and
- Walsall Healthcare NHS Trust.

3.4.18 Additionally, the Trust faces competition for services in particular parts of the catchment from Birmingham Children's Hospital NHS Foundation Trust, Birmingham Women's Healthcare NHS Foundation Trust and the Royal Orthopaedic Hospital NHS Foundation Trust.

3.4.19 The Trust has undertaken an assessment of the potential impact of competitors' plans for future service development see Table 26 below.

Table 26: The Impact of Competitors' Plans

Dudley Group NHS Foundation Trust		
Profile	**Future plans**	**Trust response**
Based in the Black Country, DG comprises three hospital sites, with one inpatient hospital (Russell's Hall) located near the centre of Dudley and two outpatient hospitals (Corbet and Guest) located in Stourbridge and Dudley respectively, serving a population of 400,000. Acquired the majority of Dudley adult community services in April 2011. Awarded FT status in 2008. Monitor financial risk rating: three. Governance rating - Green	Services are potentially vulnerable where referring practices are closer to the Dudley border (Rowley Regis and Tipton) given proximity of DG. New inpatient facility at Russell's Hall Hospital which provides modern facilities for patients.	Future plans seek to make maximum use of Rowley Regis and to develop strong links with GPs and the CCG in that area. Pursue long-term intention to build MMH. Ensure delivery of high standards of care in order to retain activity where vulnerable at the borders. Lower market share for obstetric services where we face competition from DG in the West, Walsall in the north and Birmingham women's NHS foundation trust in the South. Interim reconfiguration plans to maintain outpatient access to specialties on both sites.
University Hospitals Birmingham NHS Foundation Trust		
Profile	**Future plans**	**Trust response**
Well-established NHS Foundation Trust located towards the south of Birmingham providing secondary and tertiary services to a population of just over 530,000. New £545m Queen Elizabeth Hospital opened in June 2010 with services transferring from Selly Oak Hospital and the old Queen Elizabeth Hospital. The Trust is a regional centre for Cancer, Trauma, Burns and Plastics, and has the largest solid organ transplantation programme in Europe. Monitor finance risk rating: 3. Governance rating: Green.	New hospital opened which slightly reduces general acute bed capacity. Became a Trauma Centre in 2012 with SWBH having transferred inpatient vascular surgery to UHB in 2012. Existing links with SWBH for provision of tertiary services (e.g. Renal, Complex Cancer, Head and Neck). Look to increasingly provide services to patients from Redditch as a result of the Worcestershire Joint Services Strategic Review. Outlined an intention to work closely with GPs to develop an integrated care model of delivery. As part of Keogh review, UHB is a 'buddy' trust to George Elliot NHS Hospital Trust and Burton Hospitals NHS Foundation Trust.	Seeking to further strengthen links with Birmingham GPs and provide more integrated care following the acquisition of Sandwell community services. Seek to maintain and where sensible develop existing partnerships in provision of tertiary services.

Heart Of England NHS Foundation Trust		
Profile	**Future Plans**	**Trust response**
Well established and successful NHS Foundation Trust operating from three hospital sites: Birmingham Heartlands Hospital, Solihull Hospital and Good Hope Hospital. Provides services to the east and north of Birmingham, South Staffordshire, Solihull, and parts of Warwickshire. The population served is approximately 750,000. Acquired the majority of Solihull Adult Community Services in April 2011 Monitor finance risk rating: 4. Governance rating: Red.	Trust has begun a review of inpatient and surgical services across its three sites with a view to ensuring long-term clinical and financial sustainability which could have implications for SWBH.	Number of practices in Aston towards the east where HEFT is a competitor; however, the geography of the city means that populations are less likely to be willing to move east-west in search of services than to move north-south, which limits the risk of significant flows eastwards away from the Trust. The Trust has had some success in providing outreach services for HEFT catchment population e.g. Dermatology and Audiology. Seek to protect and expand these services for those practices with populations living closest to our catchment population.
Walsall Health Care NHS Trust		
Profile	**Future plans**	**Trust response**
District General Hospital providing a full range of secondary care services to a population of around 260,000. Walsall Healthcare NHS Trust was formed on 1st April 2011 following the integration of Walsall Hospitals NHS Trust and NHS Walsall Community Health. Construction is now complete on the £170m redevelopment of the new Walsall Manor Hospital. Applying to become an NHS FT. Has existing links with Trust in some areas (e.g. Vascular, Breast Screening).	New hospital now opened which provides state of the art, modern facilities for patients. Walsall is a relatively small organisation with a number of existing links to the Trust, including Vascular Service, Breast Screening and Interventional Radiology. Trust plans to increase maternity services, partly in response to The Trust's reconfiguration plans.	Pursue long-term intention to build MMH. Number of practices towards the north of the border where Walsall is a clear competitor for services. Seeking to actively strengthen relationships towards this end of our patch. Planning to maintain and develop existing service links with Walsall as a basis for future joint working as opportunities arise.

Royal Orthopaedic Hospital NHS Foundation Trust		
Profile	**Future Plans**	**Trust response**
A small, specialist teaching NHS FT offering planned orthopaedic surgery across the Midlands area. Achieved NHS FT status in 2007. Monitor finance risk rating: 4. Governance rating: Green.	A new £8m Outpatient Department has been opened and the re-development of the old outpatient unit to become a centre for ambulatory care (day cases) has been completed. The Trust will aim to continue the development of services through outreach. It also intends to respond actively to tenders supporting triage and local services and continue the development of physiotherapy services across the market. The Trust will utilise the opportunities that arise from a reduction in available NHS funding for orthopaedics by gradually building up its on-site private patient activity. To support work on addressing current emergency issues, identifying opportunities where capacity they can offer as an elective unit can help relieve pressures faced by other providers.	The Trust has created an Orthopaedic Action Team in order to ensure optimum efficiency and productivity for T&O services is delivered and maintained. Service has developed five year strategy for MSK services which will look to respond to threats and opportunities identified as part of the assessment of the external environment.
Birmingham Women's NHS Foundation Trust		
Profile	**Future Plans**	**Trust response**
A specialist NHSFT offering Maternity, Gynaecology, Foetal Medicine, Neonatal Intensive Care, Genetics and Fertility Medicine services to a population of around 50,000 patients a year. Achieved NHSFT status in 2008. Monitor finance risk rating: 3. Governance rating: Green	Exploring options to revitalise estate to deliver state of the art facilities and increased capacity to respond to demand. Potential for adjacencies with Birmingham Children's Hospital. New dedicated home birth team to help provide capacity for up to 240 or 3% homebirths in next 3 years. Pursuing opportunities to build on the fee paying market share for fertility services. In partnership with a private provider to extend existing catalogue of genetic tests to market in Europe.	SWBH closely involved in the Birmingham and Solihull Maternity Network capacity review which is evaluating regional birth rate trends and local capacity of available birthing centres. Continue to promote and raise the profile of SWBH service, having received an award from the Royal College of Midwives in 2013. Unit currently working towards CNST level 3. Possibility of collaboration over clinical genetics.

3.4.20 There are also a number of established private sector providers of acute services within the local area. These providers are not considered to pose a significant threat to the organisation on the basis of their respective size and scale:

- BMI: The Priory Hospital, Edgbaston;
- Optegra Eye Hospital, Aston;
- BMI: The Edgbaston Hospital, Edgbaston; and

- Edgbaston Health Harmonie.

3.4.21 The market assessment for community services reveals a more competitive and dynamic market for community compared with acute services. As community services are traditionally smaller in scale and provided at lower volumes, barriers to market entry and exit tend to be lower. The application of guidance on Any Qualified Provider to community services will increase the number of competitors in the market. Several NHS, independent and third sector providers are competitors for delivering community services. Competitors in this sector include:

- The newly created Birmingham Community Healthcare Services NHS Trust. (This organisation is working towards becoming one of the first Community Foundation Trusts in the country).
- Dudley Group NHS Foundation Trust;
- Walsall Healthcare NHS Trust; and
- Heart of England NHS Foundation Trust

3.4.22 GPs are also providers of some types of community services in primary care.

3.4.23 Known non-NHS competitors for the delivery of community services include:

- Murray Hall Community Trust – Palliative Care and Community Wellbeing;
- Bartholomew Lodge Nursing Home – Intermediate Care;
- Birmingham St Mary's Hospice – Palliative Care; and
- BUPA – Continuing Care.

There are opportunities to work in partnership with these organisations in the delivery of services.

Competition and Acute Market Share

3.4.24 The Trust is in the centre of a complex and competitive local healthcare market, reinforcing the need for a robust approach to business development. The situation also provides opportunities for the Trust to encourage a greater flow of patients from the local population.

3.4.25 A summary of market share by CCG is summarised in Table 27 below.

Table 27: Market Share

		OP: new attendances	Non-elective admissions	Elective admissions
SWB CCG	Activity	261,602	49,451	43,805
	% of Trust total	75	76	70
	% SWB CCG total	80	64	70
Cross City	Activity	46,529	6885	9,472
	% of Trust total	13	11	15
	% Cross city total	15	6	11
South Birmingham CCG	Activity	16,120	2653	3074
	% of Trust total	5	4	5

	% South Birmingham total	17	8	13
Walsall CCG	Activity	4347	711	1298
	% of Trust total	1	1	2
	% Walsall CCG total	7.9	6.1	9.3
Dudley CCG	Activity	4735	676	1082
	% of Trust total	1	1	2
	% Dudley CCG total	4	1	2

The Local Health and Social Care Economy: Conclusion

The Trust maintains strong alignment with local context including the need to develop services that prevent poor health, integrate care, develop care closer to home and increase focus on quality & safety.

Healthy competition from a range of other providers requires proactive shift of activity to community services and development of sustainable, high quality, acute and specialist services.

3.5 Right Care Right Here (RCRH) Programme

3.5.1 This section summarises the implications of the RCRH objectives and model of care on the plans of the Trust.

The RCRH Partners

3.5.2 The Trust is a key member of the RCRH Partnership. All partners have shown exceptional levels of commitment over the 10 years of the programme.

3.5.3 The current RCRH partners are:

- Sandwell and West Birmingham Clinical Commissioning Group (SWB CCG);
- Sandwell and West Birmingham Hospitals NHS Trust (The Trust);
- Black Country Partnership NHS Foundation Trust (BCP FT);
- Birmingham Community Healthcare NHS Trust (BCH);
- Birmingham and Solihull Mental Health NHS Foundation Trust (BSMHFT).
- Birmingham City Council (BCC); and
- Sandwell Metropolitan Borough Council (SMBC).

RCRH Objectives and Outcomes

3.5.4 The RCRH objectives are to:

- Redesign services to meet the needs of the local populations;
- Ensure that people have the opportunity to benefit from healthier lifestyles;

- Expand services in community settings, bringing appropriate elements of care closer to home and integrating provision such that patients experience seamless care pathways;
- Develop new highly specialised acute hospital services to be provided in the MMH;
- Procure, build and commission the MMH on a brown field site in Smethwick; and
- Maximise opportunities for regeneration in the local area.

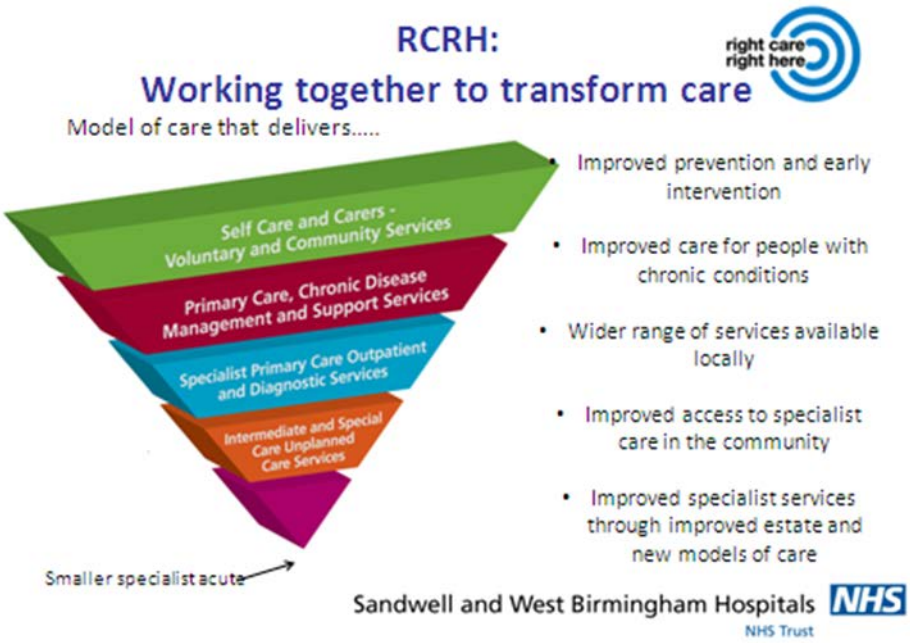
3.5.5 The expected outcomes of the RCRH Programme are significant. Local people will have improved physical, mental and social well-being through:

- Prevention of ill health and promotion of healthy lifestyles through education and leisure activities;
- Earlier treatment of specific conditions to improve life expectancy and chance of recovery;
- Development of a single pathway of care and integration of services - with agencies working together facilitated by information sharing;
- Support to enable people to stay in their own homes;
- Delivery of care closer to people's homes;
- Re-organisation of services to reduce professional isolation, achieve greater critical mass, deliver better quality of care and achieve long term clinical sustainability;
- Better physical environments for service users and staff to encourage more rapid recovery and provide greater privacy and dignity;
- Involvement of local people as active participants in the development of services which are culturally sensitive and convenient;
- More effective use of staff resources and greater diversity in the workforce that reflects local communities; and
- Integration of health plans with local regeneration developments.

Overview of the RCRH Model of Care

The RCRH Programme has developed a new model of care for the local population summarised in Figure 8 below.

Figure 8: The RCRH Approach



3.5.6 The model of care includes interdependent components that deliver:

- Improved prevention and early intervention;
- Improved care for people with long term conditions;
- A wider range of services available locally;
- Improved access to specialist care in the community; and
- Improved specialist services through improved estate and new models of care.

3.5.7 Implementation of the RCRH Programme has now been underway for some years with a growing range of traditional secondary care services now being provided via new models of care in community locations.

3.5.8 The Trust is developing a new model of patient care in line with the RCRH vision outlined above. Within this service model the Trust will deliver clinical services in multiple locations including:

- Patient's own homes;
- Primary care and health centre settings;
- The Trust's community facilities including Rowley Regis Hospital, Sandwell Treatment Centre, Birmingham Treatment Centre, Birmingham and Midlands Eye Centre, the adjacent Sheldon Block and Leasowes Intermediate Care Facility; and
- A new single site acute hospital.

3.5.9 This vision requires a major step change in service provision across the health economy through service redesign and investment with a re-balancing of capacity to reflect a greater focus on delivering

care in community and primary care settings and clinically sustainable acute hospital services operating at maximum productivity.

3.5.10 Where quality, safety and outcome are improved by care closer to home the Trust will deliver care in community settings and will integrate services both internally and with external partners in order to provide seamless care.

3.5.11 The RCRH vision will be enabled by:

- Transformation of the estate including development of primary care facilities, community facilities and development of a new acute hospital (see Section 5);
- Development of information management and technology (IM&T) functionality that will facilitate pathways of care across all local healthcare settings (see Section 8); and
- A redesigned workforce that is able to deliver high quality care across reconfigured services and in a range of different settings (see Section 10).

Right Care Right Here Programme: Conclusion

The RCRH Programme requires the Trust to shift care out of acute facilities to enable investment in prevention and care closer to home.

The RCRH model of care proposes a single site new acute hospital to deliver high quality sustainable clinical services.

3.6 Sandwell and West Birmingham Hospitals NHS trust

Overview

3.6.1 Sandwell and West Birmingham Hospitals NHS Trust (the Trust) is an integrated care organisation. The Trust is dedicated to improving the lives of local people, to maintaining an outstanding reputation for teaching and education and to embedding innovation and research. Table 28 outlines key facts about the Trust.

Table 28: Key Facts about the Trust

Population served	530,000
Annual turnover	£420 million (2012/13)
Number of sites	Two acute sites and three main community locations
Current CQC Rating	Intelligent Monitoring Level 4 (inspection pending 2014/15)
Current TDA Rating	Level 2 (top 25% of acute care providers in the sector)

3.6.2 The Trust provides acute and specialist services from City Hospital in Birmingham and Sandwell General Hospital in West Bromwich. Emergency care, including A&E services is provided at both sites. In addition, the Trust provides comprehensive community services to over 300,000 people in the Sandwell area from more than 150 locations. Of these three are registered through the Trust. Those being:

- Rowley Regis Community Hospital;

- Leasowes Intermediate Care Centre; and
- Halcyon Midwife-led Birth Centre.

3.6.3 In April 2011 the Trust acquired Sandwell PCT's Community Services Provider Arm, which means that it is now the provider of community based care for most (circa 60%) of its local catchment population. This provides the opportunity to shape outside hospital services as part of the RCRH model of care.

3.6.4 The Trust is a teaching hospital Trust of the University Of Birmingham. It also delivers undergraduate and specialist education for nurses and professions allied to medicine for the University of Birmingham, the University of Wolverhampton and Birmingham City University. A number of clinical specialties have a long and distinguished record of contribution to academic research.

The Trust's Strategic Objectives

3.6.5 The Trust has developed a vision which presents an ambitious view of the future for the organisation. This vision is accompanied by a set of values that will underpin all the Trust does and a set of strategic objectives. The vision, values and objectives pull all of the work on the Trust's future direction together into a single clear set of statements as described in the sections below.

Trust Vision

3.6.6 The Trust has set the following vision for the future of its services

'We will become renowned as the best integrated care organisation in the NHS.'

3.6.7 In the short term, over the next two years, this means that the Trust will:

- Relentlessly improve the quality of care provided to patients, achieving ever higher levels of safety, effectiveness and patient satisfaction;
- Recruit, engage and develop passionate and committed people;
- Integrate specialist community services with acute services to ensure that pathways focused on prevention and swift rehabilitation are developed;
- Integrate district nursing, community midwifery and health visiting services as closely as possible with primary health care teams to ensure that patients receive a comprehensive proactive health promoting service;
- Work with partners to actively identify and care for patients who are most at risk of hospital admission, developing virtual wards to keep patients out of hospital and swiftly able to be discharged;
- Actively build on the success of the Trust's acute specialist services;
- Meet all statutory and regulatory obligations;
- Ensure that plans will be based on a sophisticated understanding of the health needs of local communities driven by active dialogue and engagement; and
- Explore new contractual and funding partnerships to create a system with clear and comprehensive incentives to keep patients well and out of hospital.

3.6.8 In the longer term, 2020 ambitions, mean that:

- The Trust will consistently deliver safe, reliable care that patients value highly;

- Patients will say that they do not perceive organisational barriers to accessing the care they seek;
- Staff engagement and leadership programmes will be recognised as among the best in the NHS;
- The Trust will be widely recognised as a ground breaking organisation that takes responsibility for meeting the health and wellbeing needs of the population - providing and organising care in a systematic way;
- The Trust will make innovative use of analytics and technology to make services more accessible and responsive;
- The Trust will develop a more comprehensive set of services to manage the health of the local population working with local communities, the voluntary and statutory sectors;
- The population will hold and use its own integrated health record;
- The Trust will invest more in alternatives to hospital care, reducing the acute services footprint so that the MMH will be a new smaller centre for the most acute inpatient treatment;
- The MMH will be open to provide the highest quality acute specialist services from pleasant, clean, fit for purpose facilities; and
- The Trust will drive innovation in the local health economy, using membership of the West Midlands Academic Health Science Network and building on research strengths and position as a large employer to create local employment opportunities.

Trust Values

3.6.9 The Trust has developed a set of values that underpins everything it does as an organisation. These values (see table below) reflect the things that are most important to the Trust and that it believes are most important to its patients, their relatives and their carers.

Table 29: Trust Values

The Trust will be	What this will mean to patients, carers, relatives and staff
Caring and Compassionate	The Trust sees patients, their carers and relatives as individuals and listens to their needs The Trust cares for patients, their carers and relatives as they want it to The Trust will treat all the patients with dignity and respect
Accessible and Responsive	The Trust's services are accessible to all The Trust identifies and responds to the diverse needs of the patients and communities that it serves The Trust involves patients in decisions about their care.
Professional and Knowledgeable	The Trust demonstrates high levels of competence and professionalism in all that it does The Trust provides safe, high-quality services The Trust pursues opportunities for innovation in the way it provides services
Open and Accountable	The Trust is open about what it does The Trust is accountable to patients and local people for the decisions in takes and the services it provides
Engaging and Empowering	The Trust values the experience and knowledge of all its staff and listens to their ideas The Trust works together across boundaries to provide the very best care The Trust provides an environment in which staff can flourish and grow

3.6.10 Combined with the Trust's vision for the future delivery of healthcare to the distinct and diverse population that it serves, the Trust's values have helped it to develop a set of long term strategic objectives.

Strategic Objectives

3.6.11 The Trust's strategic objectives are presented in the table below.

Table 30: The Trust's Strategic Objectives

Strategic Objective	Description
Safe, high quality care	We will provide the highest quality clinical care. We will achieve the goals of safety, clinical effectiveness and patient experience set out in our quality strategy.
Accessible and responsive care	We will provide services that are quick and convenient to use and responsive to individual needs. They will be accessible to all ages and demographics. Patients will be fully involved in their design.
Care closer to home	Working in partnership with primary and social care we will deliver an increasing range of seamless and integrated services across hospital and community settings.
Good use of resources	We will make good use of public money. On a set of key measures we will be among the most efficient trusts of our size and type.
21st Century Infrastructure	We will ensure our services are provided from buildings fit for 21st century healthcare. We will make the most effective use of technology to drive improvements in quality and efficiency.
An engaged, effective organisation	An engaged and effective NHS organisation will underpin all we do. We will become an NHS foundation trust at the earliest opportunity. We will develop our workforce, promote education, training and research, and make the most effective use of technology to drive improvements in quality and efficiency.

Range of Services

3.6.12 The Trust provides a full range of secondary care services for the local population, some more specialist services to a wider population and, following the Transforming Community Services programme, comprehensive community services in Sandwell.

3.6.13 City Hospital was built in 1887 as the Infirmary for the Birmingham Workhouse. The majority of the estate, including the main inpatient facilities, still dates from this time. More recent additions include the £35m Birmingham Treatment Centre which provides state of the art facilities for one-stop diagnosis and treatment. It includes an Ambulatory Surgical Unit with six theatres, extensive imaging facilities, an integrated breast care centre and teaching accommodation. Specialist services / departments at City Hospital include:

- The Birmingham and Midland Eye Centre (BMEC), a supra-regional specialist facility;
- The Pan-Birmingham Gynaecological Oncology Centre;
- The Sickle Cell and Thalassaemia Centre; and
- The regional base of the National Poisons Information Service.

3.6.14 Sandwell General Hospital's main clinical facilities were rebuilt in the 1970s. In 2005 a new £18m Emergency Services Centre opened on the Sandwell site, incorporating a comprehensive A&E facility, Emergency Assessment Unit and Cardiac Care Unit.

3.6.15 Rowley Regis Community Hospital was opened in 1994 and provides continuing care and rehabilitation services. It also has a range of outpatient and diagnostic facilities.

3.6.16 Clinical directorates serve as the main focus for both operational management and planning, supported by a clinical group management structure which integrates performance, business, quality and financial management with operational delivery. The seven groups are as follows:

- Medicine and Emergency Care;
- Women and Child Health;
- Imaging;
- Surgery A (General Surgery, Trauma and Orthopaedics, Urology, Vascular), Anaesthetics and Critical Care;
- Surgery B (BMEC, Oral and Maxillo-facial surgery, ENT and Audiology);
- Pathology; and
- Community and Therapies.

Table 31 below gives an overview of services across the acute sites.

Table 31: Services by Site

	Service	City	Sandwell	Rowley
WOMEN AND CHILD HEALTH	Paediatrics	OP and PAU	✓	
	Obstetrics	✓		
	Midwifery led care	Serenity birth centre and OP	OP	
	Neonatal	IP (level 2 units) and OP		
	Gynaecology	✓	DC and OP	OP
	Gynae- oncology	✓	OP	
	Genito-urinary Medicine/ HIV		OP	
	Children's therapists		✓	OP
	Health Visiting			
	Family planning			OP
SURGERY A	General surgery	DC and OP	✓	OP
	Breast surgery	✓		
	Trauma and orthopaedics	SAU, DC and OP	✓	
	Vascular surgery (I P at UHB)	DC and OP	DC and OP	
	Urology	✓	TC and OP	OP
	Plastic surgery	✓	✓	OP
	Paediatric surgery	TC and OP	✓	
	Emergency surgery	SAU	✓	
SURGERY B	Ophthalmology	✓	DC and OP	OP
	Behcet's	OP		
	Ear, nose and throat	✓	OP	OP
	Oral surgery	DC and OP	OP	
	Dental surgery (Host)		DC and OP	OP
	Audiology	DC and OP	OP	OP
	New-born hearing	✓		
MEDICINE	Emergency medicine	A&E and MAU	A&E and MAU	
	Acute medicine	IP and OP	✓	
	Elderly care	✓	✓	OP and DC
	Stroke (Including TIA)		✓(Including HASU)	
	Neurology	OP	✓	OP
	Cardiology	✓	✓	OP
	Gastroenterology	✓	✓	OP
	Respiratory	✓	✓	
	Dermatology	✓	DC and OP	

	Service	City	Sandwell	Rowley
	Diabetes and renal	IP and OP	IP and OP	OP
	Lipid clinic		OP	OP
	Rheumatology and immunology	✓	✓	OP
	Haematology (non-oncology)	✓(sickle cell and thalassemia unit)	OP	OP
	Haematology (oncology)	DC and OP	✓ (level 2b care)	
	Anticoagulation	OP	OP	OP
	Oncology	OP and chemo (DC)	OP and chemo (DC)	
CLINICAL SUPPORT	Anaesthetics & pain	DC and OP	DC and OP	
	Critical care	IP and OP	IP and OP	
	Imaging	✓	✓	OP (ultrasound and x-ray
	Pathology	Some laboratories	Main laboratories	
COMMUNITY SERVICES	Phlebotomy	IP and OP	IP and OP	IP and OP
	Intermediate care and re-enable meant			IP
	Foot health	OP	OP	OP
	Musculoskeletal service	OP	OP	OP
	Community TB team		OP	
	Nutrition and dietetics	IP and OP	IP and OP	OP
	Icares		In reach	
	Primary care assessment and treatment centre			OP
	Physiotherapy and occupational therapy	IP and OP	IP and OP	IP and OP
	Speech and language therapy	IP and OP	IP and OP	IP and OP
	Palliative care	IP support	IP support	
	Continence	OP	OP	

3.6.17 A broad range of community services in Sandwell are provided from four main community sites including rehabilitation at the Leasowes Intermediate Care Centre, a range of outpatient activity from the Lyng Centre for Health and Social Care and Rowley Regis Hospital and midwife-led births delivered at the Halcyon Birth Centre.

Activity

3.6.18 Table 32 below provides an overview of acute activity changes between 2006/07 and 2012/13.

Table 32: Activity Overview

Activity	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	% variance (2011/12 - 2012/13)
Elective admission	59,728	59,736	64,056	65,205	62,145	58,534	57,308	-2.10%
Emergency admission	65,076	67,317	69,494	62,854	61,163	57,404	59,246	3.20%
Outpatients (new)	130,154	134,319	155,584	158,084	157,812	195,612	208,624	6.70%
Outpatients (review)	372,370	365,007	380,578	434,540	445,064	487,928	481,921	-1.20%
Outpatients-total	502,514	499,326	536,162	592,624	602,876	683,540	690,545	1.00%
A&E attendances	212,231	232,017	226,871	224,811	218,211	210,094	196,248	-6.60%

3.6.19 Activity delivered at each of the three hospitals is indicated in Table 33 below.

Table 33: Activity by Site 2012/13

Activity	City Hospital	Sandwell Hospital	Rowley Regis	Total
Elective Admissions	34,430	22,878	0	57,308
Emergency Admissions	35,570	23,676	0	59,246
Outpatients (total)	472,482	204,211	13,852	690,545
Outpatients (A&E)	122,497	73,751	0	196,248

3.6.20 Table 34 below shows activity by specialty in 2012/13.

Table 34: Activity by Specialty (20012/13)

Speciality	Elective inpatients	Day cases	Elective and day cases	Emergency admissions	Outpatient attendances
General surgery	949	6,335	7,284	4,607	17,479
Urology	1,461	5,007	6,468	1,108	18,650
Breast surgery	93	533	626	59	9839
Colorectal surgery	3	92	95	9	33
Vascular surgery	134	313	447	118	3927
T&O	1,534	1,813	3,347	3,058	33,285
ENT	709	1,005	1,714	819	20,243
Ophthalmology	647	8,249	8,896	1,008	140,741
Oral surgery	37	2,625	2,662	14	5806
Plastic surgery	476	1,425	1,901	425	9384
A&E	7	3	10	51	3495
Pain management	10	1,896	1,896	22	6900
General medicine	182	3,031	3,213	19,663	5293
Gastroenterology	133	725	858	1,890	14,266

Speciality	Elective inpatients	Day cases	Elective and day cases	Emergency admissions	Outpatient attendances
Clinical haematology	304	2,591	2,895	260	16,222
Diabetic medicine					17,119
Cardiology	462	1,671	2,133	1,772	28,021
Anticoagulation					66,748
Stroke Medicine				440	
Dermatology	49	1,920	1,969	126	29,218
Respiratory medicine	80	330	410	964	10,663
GUM					7715
Medical oncology	247	2,137	2,384	3	7579
Neurology	67	270	337	202	11,845
Rheumatology	29	2,449	2,478	36	21,226
Paediatrics	448	206	654	7,710	15,246
Elderly care	34	35	69	4,708	5818
Obstetrics				5,917	51,557
Gynaecology	833	1,393	2,226	1,901	16,148
Gynae-oncology	625	230	855	191	3423
Clinical oncology	67		67	4	6512
Midwife episodes	2		2	2,097	11,934
Others	186	1,226	1,412	64	74,210
Total	**9,808**	**47,500**	**57,308**	**59,246**	**690,545**

Quality and Safety

3.6.21 The Trust Board regularly reviews all key quality indicators, considers a monthly integrated quality report, and has recently approved a new five year Quality and Safety strategy to formalise and provide a local framework for quality and safety. The vision for 'Safe, High Quality Care' is that all clinical care is measured appropriately for safety, effectiveness and patient experience, and that increasing attention is given to the outcomes of care. Information on quality and safety is acted upon rapidly and effectively to ensure continual improvement.

3.6.22 The four key objectives articulated in the Quality and Safety strategy are to:

- Improve patient safety, clinical effectiveness and patient experience;
- Ensure the right quality mechanisms are in place so that standards of quality and safety are understood, met and effectively demonstrated;
- Provide assurance that quality and safety outcomes and benefits are being realised, and take action if quality or safety is compromised; and
- Promote the continuous improvement in the quality and safety of services provided.

3.6.23 The Quality and Safety strategy includes three ambitious Trust-wide quality priorities covering safety, clinical outcomes and patient experience which drive year-on-year improvement. These were selected

to have the highest possible impact on improving patient care across the organisation. The top three quality and safety related priorities are presented in Table 35 below.

Table 35: Top Three Quality and Safety Related Priorities

Patient Safety	To reduce adverse events which result in avoidable harm	=	We do no harm to patients
Clinical effectiveness	To reduce avoidable mortality and morbidity	=	Fewer patients dying and fewer having complications
Patient experience	To increase the % of patients who would recommend the Trust to family and friends	=	Improve patient satisfaction

3.6.24 Specific, measurable quality improvement goals will be set out each year through the annual planning process. Performance will be reported through public Board reports and through the Quality Account.

Research

3.6.25 The Trust is committed to delivering high quality research to improve patient care and treatment. It has a long history of delivering research in the fields of cancer, cardiology, diabetes, rheumatology, ophthalmology and neurology. More recently, there has been increased research activity in other disciplines including Gastroenterology, Stroke, Dermatology and Paediatrics. Research teams at the Trust have developed large, well-characterised clinical cohorts from the local ethnically mixed patient population in order to support on-going research activity.

3.6.26 The research portfolio includes a range of both academic and commercially funded studies, and also supports undergraduate and postgraduate student educational projects. The Trust has strong ties with local universities and hosts a number of academic units which deliver both basic and translational research (so applying findings to influence practice and improve outcomes). Income streams include the Department of Health through the National Institute for Health Research (NIHR), clinical research networks, research councils, charities, and commercial companies.

Education

3.6.27 The Trust's hospitals are part of the University of Birmingham Teaching Programme and are responsible for training 300 medical students every year, including military trainees. Quality of training has been consistently rated as excellent, following visits from both the West Midlands Workforce Deanery and the Royal Colleges.

3.6.28 Trainee nurses from both Wolverhampton and Birmingham City Universities are based in the Trust and at any one time up to 300 students are working to complete their adult nursing course across all three sites at both degree and diploma levels. Placements are also offered to a range of trainee clinical scientists and Allied Health Professionals (AHPs) as part of their undergraduate and post-graduate studies including: Audiology, Pharmacy, Biomedical Sciences, Physiotherapy, Dietetics, Speech and Language Therapy, Occupational Therapy, Radiology (both diagnostic and therapeutic), Clinical Physics, Clinical Physiology and Medical Physics.

Public Health Plan

3.6.29 The Trust has developed its first Public Health Plan to improve health across the Sandwell and West Birmingham Health Economy. It has been developed in consultation with local stakeholders and sets out how the Trust proposes to improve the health and wellbeing of its patients, visitors, our staff, Trust

members and the local community. By taking a co-ordinated approach the entire organisation will be able reinforce consistent health-promoting messages.

Finance

3.6.30 The Trust has a forecast level of annual income in 2013/14 of £430m which will generate a surplus of £4.6m. Table 36 shows that the Trust has a history over the last three years of strong financial performance, achievement of statutory financial targets and delivery of circa £65m of cost improvement savings.

Table 36: Summarised Statement of Comprehensive Income Position

	2009/10 £m	2010/11 £m	2011/12 £m	2012/13 £m
Clinical income	345.3	337.6	383.1	386.0
Nonclinical income	39.5	49.3	41.1	37.9
Total income	384.8	386.9	424.1	423.9
Operating expenses	(354.4)	(363.6)	(401.5)	(397.7)
EBITDA	30.4	23.3	22.7	26.1
Surplus (deficit) from operations margin	*7.9%*	*6%*	*5.4%*	*6.2%*
Non-operating income	(0.1)	(0.2)	(0.2)	(0.0)
Non-operating expenses	(59.4)	(30.4)	(18.3)	(26.9)
Surplus/(deficit)	(28.6)	(6.9)	4.6	(0.3)
IPAQ technical adjustment - impairment losses (reversals)	36.6	9.8	(2.2)	4.5
Replace surplus/(deficit)	7.9	2.9	2.4	4.2
Replace surplus margin	*2.1%*	*0.7%*	*4.6%*	*1.0%*

Performance

3.6.31 The Trust has a strong track record of performing well against the national standards for acute hospital trusts including achieving national targets. Table 37 below provides more detail on the Trust's performance on key targets over the period 2011/12 to 2013/14.

Table 37: Summary of Performance against Targets

	Measure	20/11/12	2012/13	2013/14	2013/14 Target
Access metrics					
Cancer two weeks GP referral to first outpatient	%	94.8	94.7	94.5	=>93.0
Cancer two weeks GP referral to first outpatient (breast symptoms)	%	95.8	95.9	95.5	=>93.0
Cancer 31 date diagnosis to treatment for all cancers	%	99.5	99.5	99.2	=>96.0
Cancer 62 day urgent GP referral to treatment for cancers	%	86.9	87.1	87.9	=>85.0
Emergency care four hour waits	%	95.38	92.54	94.38	=>95.0

	Measure	20/11/12	2012/13	2013/14	2013/14 Target
Referral to treatment time non-admitted <18 weeks	%	93.2	93.7	92.0	=>90.0
Referral to treatment time non-admitted <18 weeks	%	97.5	98.6	96.8	=>95.0
Referral to treatment time incomplete pathway <18 weeks	%	97.2	95.3	93.7	=>92.0
The acute diagnostic waits > six weeks	%	0.99	0.88	0.62	<1.00
Cancelled operations	%	0.6	0.7	1.0	=<0.8
Cancelled operations (breach 28 day guarantee)	%	0.002	0.004	0.028	0.000
Delayed transfers of care	%	5.2	2.9	3.3	=<3.5
Outcome metrics					
MRSA bacteraemia	No.	2	1	1	0
C Difficile	No	95	37	27	<46
Mortality reviews	HSMR	66.9	72.9	79.1	=>80.0
Hospital standardised mortality rate	SHMI	90.5	88.9	93.2	<100
Summary hospital level mortality index	%	96.8	95.9	98.1	<100
Caesarean section rate	%	22.2	23.6	25.3	=<25.0
Patient safety thermometer - harm free care	No.		94.2	93.7	=>92.0
Never events	No.		2	4	0
VTE risk assessment (adult IP)	%	92.4	90.8	94.5	=>95.0
WHO safer surgery checklist	%		99.2	99.7	=>98.0
Quality Governance Metrics					
Mixed Sex Accommodation Breaches	No.			83	0
Patient Satisfaction (FFT) - Response Rate (IP Wards and Emergency Care)	%			21.0	
Patient Satisfaction (FFT) - Score (IP Wards and Emergency Care)	No			56	
Staff Sickness Absence	%	3.90	4.38	4.26	=<3.15
Staff Appraisal	%	70.5	69.2	79.9	=>95.0
Medical Staff Appraisal and Revalidation	%		77.0	84.0	=>95.0
Mandatory Training Compliance	%	71.9	86.4	86.6	=>95.0
Commissioning for Quality & Innovation (CQUIN)					
VTE Root Cause Analysis	%			100	100
NHS Safety Thermometer - Reduction in Pressure Sores	No.			On Track	Base less 10%
Dementia - Find, Investigate and Refer	No.			Not met to date	Meet 3 components
Dementia - Patient Stimulation				Compliant	Comply
Safe Storage of Medicines	%			46	90
Use of Pain Care Bundles	%			On Track	Improve on base

	Measure	20/11/12	2012/13	2013/14	2013/14 Target
Use of Sepsis Care Bundles	%			On Track	Improve on base
Community Risk Assessment & Advice	%			On Track	Improve on base
Recording DNAR Decisions	%			On Track	Improve on base
Clinical Quality and Outcomes					
Stroke Care Patients who spend > 90% stay on Stroke Unit	%	85.9	85.6	91.8	=>83.0
Stroke Care Patients admitted to an Acute Stroke Unit < 4 hours	%	68.7	59.1	73.7	=>90.0
Stroke Care - Patients receiving a CT Scan < 1 hour of presentation	%	37.5	52.0	67.9	=>50.0
Stroke Care Admission to Thrombolysis Time (% within 60 minutes)	%			18.2	=>85.0
Stroke Care Swallowing Assessments within 24 hours of admission	%			98.0	=>98.0
TIA (High Risk) Treatment within 24 hours of presentation	%	53.2	69.8	72.6	=>60.0
TIA (Low Risk) Treatment within 7 days of presentation	%	30.4	75.9	85.7	=>60.0
MRSA Screening Elective	%	56	60	85	=>80.0
MRSA Screening Non Elective	%	55	65	80	=>80.0
Inpatient Falls Reduction - Acute	No.		737	379	<660
Inpatient Falls Reduction - Community	No.			73	<144
Hip Fractures - Operation within 24 hours	%	66.4	75.7	89.5	=>85.0
Patient Experience					
Complaints Received - Formal and Link	No.	834	724	648	
Patient Average Length of Stay	Days	4.2	3.8	3.6	=<4.3
Coronary Heart Disease - Primary Angioplasty (<150 minutes)	%	88.4	91.2	92.8	=>80.0
Coronary Heart Disease - Rapid Access Chest Pain (<2 weeks)	%	99.1	95.7	98.7	=>98.0
GU Medicine - Patients Offered Appointment <48 hours	%	100	100	100	=>98.0

The Estate

3.6.32 The Estates Strategy was updated in September 2013 (see ***Appendix 3a***). The strategy identifies significant issues with the suitability of large parts of the Trust's current estate. Parts of City Hospital, including the main hospital building, are over 100 years old and the Trust has one of the highest backlog maintenance levels in the NHS in England. The Estates Strategy sets out these issues in more detail.

3.6.33 There have, however, been some fairly recent capital developments in the Trust's hospitals. In 2005 the Trust opened a £18.7m Emergency Services Centre at Sandwell Hospital (following the

destruction of the former A&E by fire) and the £30m PFI-financed Birmingham Treatment Centre (BTC) at City Hospital also opened in that year.

3.6.34 Detailed condition surveys of the two main sites were undertaken in 2002. A desktop update of the surveys was carried out in August 2007 and the surveys were updated again in June 2012 to identify where condition had deteriorated due to age or improved as a result of capital investment in the estate. Backlog maintenance figures are amended annually to take account of any capital investment required for the High and Significant risk items from revised risk assessments and an allowance for inflation.

3.6.35 Table 38 below identifies the estimated cost to achieve Estatecode Condition B at 31st March 2013. The Trust has used DH methodology for measuring risk in relation to substandard assets so that investments can be prioritised. The DH definition of Condition B is: 'Sound, operationally safe and exhibits only minor deterioration'.

Table 38: Cost to Achieve Condition B

Risk Level	Cost (£)		
	Sandwell	City	Trust
High Risk	0	0	0
Significant risk	1,415,000	1,825,000	3,430,000
Moderate risk	38,126,562	43,617,055	82,250,017
Low risk	3,779,969	6,265,212	10,973,383
Total backlog	43,321,531	51,707,267	96,653,400
Risk adjusted	3,161,105	3,903,427	7,638,640

3.6.36 The Trust aims to reduce its backlog maintenance levels through the development of the new hospital. The strategy also summarises the following plans:

- Upgrade to some parts of the existing accommodation to manage High and Significant estates risks on current sites;
- Reconfiguration of the City Hospital site to support the acute, community and primary care services not transferring to the MMH; and
- Reconfiguration of the Sandwell Hospital site to support the acute, community and primary care services not transferring to the MMH.

3.6.37 The build-up of expenditure to meet this strategy can be found in the Capital Plan presented in Section 9. The services that will be provided from the reconfigured retained estate sites are outlined in Section 5.

The Trust's Current Status and Strategic Objectives: Conclusion

The Trust's successful track record of delivery despite the unsustainable configuration of services across two acute hospital sites and the poor condition of its estate means that it is in a good position to move forward.

The organisation's strategic objectives are in alignment with national and local context.

3.7 Conclusion of the Strategic Context

3.7.1 Table 39 summarises and brings together the themes explored in this section to demonstrate how the RCRH vision for change and Trust plans for the future continue to align with national and local strategic context to provide for the needs of the local population.

Table 39: Strategic Themes

Strategic Themes	RCRH and MMH Alignment
High Quality, Safe Care Increased focus on the need to change the culture of the NHS to provide consistently high quality, safe care that meets rising patient expectations as a result of the Francis Enquiry, Berwick and other reports.	Concentrating a critical mass of specialist expertise on one acute site to facilitate right care, at the right time, at the right place. Supporting the delivery of high quality, safe care through better building design, clinical adjacencies, consistent environments, easy to clean surfaces etc. Improved working environment and more sustainable clinical teams working together and developing a sense of professional pride in delivering high quality care
Funding Restraints The need to make step change improvements in efficiency and productivity as a result of continuing pressure on resources.	Reduction in number of patients accessing expensive acute care unnecessarily. Efficiencies gained from moving to a single site acute hospital, reduction in duplication and focussing investment in clinical rather than back office services. Productive clinical environments support improvement in length of stay and other improvements in efficiency. OBC modelling is integrated into the LTFM to ensure that the long term planning horizon is understood and efficiency improvements required prior to the opening of the MMH will be delivered to plan.
Sustainable Clinical Care Drive to ensure that services are clinically safe and sustainable needs to be led by clinicians underpinned by local engagement.	Concentration of acute inpatient services on a single site. Bringing teams together on one site to help cover rotas in specialties with limited supply in key professional roles. Development of excellent children's care by concentrating expertise on one site and providing for the specific needs of children and younger people. Improvement in reputation gained from new facilities support recruitment and retention of key staff.
Prevention and Reducing Health Inequalities Continuing drive to reduce inequalities and improve population health supported by partnership working in the Health and Well Being Boards.	RCRH rebalancing of resources to focus on prevention and health improvement. Partnership working through RCRH has been strong over the last decade. Engagement of representative service users has improved MMH plans.
Integrated Care The need to provide care that is more integrated around the needs of patients, offering care closer to home when appropriate and delivered seamlessly across organisation boundaries.	RCRH facilitates a devolved model of care that shifts services closer to patients' homes. RCRH model of care for patients with long term conditions to ensure that their conditions are managed effectively to avoid hospital admission. A smaller acute footprint allowing resources to be diverted to keeping people well and out of hospital. Opportunity to use the opportunities offered by the Better Care Fund to build on these achievements.

Strategic Themes	RCRH and MMH Alignment
Patient Choice and Competition Responding to increasing public expectations supported by growing sources of information to guide their choices.	RCRH will provide choice of a range of community facilities. MMH will provide a significantly improved acute care environment for patients and their carers - this will encourage them to choose the new hospital. Patients will be able to choose a single room or a 4 bedded bay. Improvements to patient experience, privacy and dignity will be facilitated by the new facilities.

3.7.2 The conclusion of the Strategic Context is that the Trust's future plans continue to align with national policy, the strategic objectives of SWB CCG and the long term plans for RCRH. The future health of the population the Trust serves is dependent on local partners continuing to deliver their joint plans to shift care out of acute settings, invest in care closer to home and improve the quality and clinical sustainability of services for patients requiring acute care.

3.7.3 Having demonstrated strategic alignment the next section of this document builds on this to demonstrate a strong case for change.

4 Case for Change, Project Objectives and Benefits

4.1 Introduction

4.1.1 The previous sections of this document outline local health needs, strategic context, and the development of a new model of care agreed by the local health economy. The conclusions are that there is a need to develop a new system of healthcare that addresses the changing needs of patients and enables delivery of high quality services. This section:

- Outlines the case for the development of the MMH as part of the wider RCRH model of care; and
- Presents the project objectives and a summary of the benefits anticipated.

4.2 The Case for Change

4.2.1 The Trust has developed ambitious plans with its partners in the RCRH Programme including the development of the MMH. These plans align closely with Trust objectives including to 'ensure our services are provided from buildings fit for 21st century healthcare' (see Section 3). The case for this change is presented under five main headings:

4.2.2 Poor health in the area SWBH NHST serves;

- Major changes in primary care;
- Sustaining top quality acute services;
- Old and unsuitable hospital buildings; and
- Care closer to home and patient choice.

The following sections detail the evidence supporting the case for change.

Poor Health in the Area SWBH NHST Serves

4.2.3 The areas of Birmingham and Sandwell that the Trust serves have some of the highest levels of deprivation and poorest levels of health in the UK. Poor health has persisted in the area for many years and is improving more slowly than in the rest of England.

Health indicators

4.2.4 Chapter 3 outlines the impact of deprivation on the health of the population served by the Trust showing that the Trust's catchment has poor life expectancy, high levels of infant mortality and a high level of households with one or more persons with a long term illness. These outcomes require major change in the way health and social care services are provided. Health indicators demonstrate the following:

- Low overall levels of life expectancy;
- Early deaths from heart disease and strokes;
- High level of deaths from smoking;
- High levels of hospital stays due to alcohol;
- High levels of low birth weight babies; and
- High levels of infant mortality.

Long Term Conditions

4.2.5 There are a high percentage of households with one or more persons with a limiting long term condition. The current default for these patients is to access acute services for their care resulting in higher than expected use of non-elective care.

The Need to Rebalance Resources

4.2.6 Redesigning services to focus on prevention and health promotion will be essential to improving outcomes for the community. The RCRH strategy is to invest in prevention of ill health which means that it will be necessary to move specialist expertise and resource from the acute sector into primary care.

4.2.7 In order to support this shift, there needs to a rebalancing of resources resulting in the need for a smaller, but more effective and highly specialised acute facility. This means that length of stay will need to be shorter to maintain patient flows through reduced capacity. It follows that this more concentrated acute care requires appropriate facilities suitable for the needs of 21st century healthcare. Achieving this across two hospital sites would be very expensive for infrastructure provision including modern theatres and diagnostics and for specialist staffing.

4.2.8 The RCRH Programme model of care summarised in Chapter 3 will ensure that patients are able to access:

- Health promotion services;
- Services supporting self-care and care at / closer to home to avoid unnecessary admission to hospital; and
- 21st century healthcare provided in a single site, new acute hospital when they do require admission to an acute hospital.

Conclusion

The poor health of the residents in the Trust's catchment area makes the case for change in the model of care to focus on prevention. The RCRH Programme has developed plans to deliver these changes. A new single site acute hospital is central to successful delivery of these plans.

Major Changes in Primary and Community Care

4.2.9 Major investments in buildings and services in primary and community care have already delivered and development is continuing. Examples of changes already being implemented are:

- Development of primary care facilities;
- Development of intermediate care services;
- Expansion of hospital at home schemes;
- Transfer of outpatient services to community settings; and
- Development of urgent care services to reduce pressure in the A & E departments.

4.2.10 The shape and size of the local acute hospital service will need to change in response to this because:

- Specialist expertise will be required in the community as well as in the acute environment. It will be difficult to provide sustainable highly specialist cover on two acute sites as well as a range of community facilities in the new model.
- Planned developments in community and primary care will result in the requirement for fewer acute hospital beds and reduction in outpatient and diagnostic capacity in the acute hospital.

4.2.11 Section 5 on departmental functionality outlines the activity assumptions underpinning the capacity of the MMH.

Conclusion

Major changes in Primary and Community Care make the case for development of a new acute hospital with capacity aligned to the activity model agreed by the RCRH Programme.

Sustaining Top Quality Acute Services

4.2.12 Following the recommendations of Keogh (as outlined in Section 3) the Trust is concerned about the stability of current acute care configuration which is sustained by a very high proportion of temporary staff. This situation is not sustainable in the longer term and the Keogh recommendations would be impossible to implement in current configuration.

4.2.13 There is increasing evidence that large, more specialist units, deliver better outcomes than smaller units unable to specialise sufficiently. For example: the importance of improving clinical outcomes through greater sub-specialisation with appropriate critical mass has been highlighted in: 'Getting it Right First Time' (Tim Briggs, September 2012). The main reasons for change in this area are:

- The changing way in which doctors are trained;
- The effect of the Working Time Directive on working hours;
- Strong evidence that specialist centres are more effective because they concentrate clinical expertise where it is needed to improve sustainable cover across services; and
- The challenge of attracting and retaining the best staff in a competitive market.

4.2.14 It is becoming increasingly difficult to provide top quality, sustainable acute hospital services for a population of circa 530,000 in a relatively small geographical area from two hospitals that are only 4-5 miles apart. This section provides examples of the impact of this issue on the Trust and makes the case for developing a new single site hospital.

Specialist Services

4.2.15 The Trust has already made changes to some specialist services e.g. paediatrics, neo-natal services, stroke services and surgery. These reconfigurations will improve the sustainability of the services pending the opening of the MMH. Further changes will be required to ensure sustainability of quality services in the longer term. For example:

- Maintaining a 24 hour Primary Cardiac Intervention Service with direct admission to the interventional cardiac suite will be difficult to do on two sites given the range of staff involved. This would impact on affordability or quality of services.

- Future development of specialist services depends on having a critical mass of staff to ensure specialist cover and maintain an effective multidisciplinary team.

Critical Care

4.2.16 Step up and down arrangements for patients requiring critical care are currently quite limited with resultant risks to quality of care. Patients requiring level 1 care are therefore either accommodated in the Critical Care Unit longer than clinically required or transferred to a general ward earlier than is ideal. It is proposed to introduce defined Level 1 Care beds on appropriate wards and extended hours of operation for the Critical Care Outreach Team to address this. Development of these services across two sites would require significant investment in difficult to recruit staff. This would present issues around affordability and may not be achievable.

Consultant Led Services

4.2.17 Development of 7 day per week / 24 hour consultant led services in the Emergency Department, Adult Acute Assessment Unit and other key areas would improve speed of senior assessment and quality of care. To achieve this on two sites will require significant increase in consultant numbers, which will not be affordable. In addition, recruiting to specialist medical posts in A&E is likely to be difficult. Meeting national standards and requirements will be more difficult across two sites, whereas on a single site the Trust will comfortably match expectations.

Separation of Clinical Specialties across Sites

4.2.18 There is strong scientific evidence that surgical outcomes are substantially better when procedure rates exceed 100 per annum. For example a specialist interventional cardiologist should have the opportunity to perform a minimum of 100 Percutaneous Cardiological Interventions per year Delivering the service across 2 sites requires more interventional cardiologists making it difficult to maintain minimum levels.

4.2.19 Interim reconfiguration was approved in the context of the change being a medium term plan to improve clinical specialisation and sustainability - the long term plan being to bring it all onto one site in the MMH. If plans for the new hospital do not progress this would result in long term separation of specialties across sites with the following impact:

- The on-going requirement to transfer patients who require inpatient admission in paediatrics, emergency general surgery, trauma and gynaecology;
- Practical problems organising training for junior doctors;
- The requirement for clinicians to maintain cover across sites in the context of the reconfigured services; and
- The risk involved when acutely ill patients may be on one site while the specialist team is undertaking clinical care on the other.

4.2.20 The average journey time between the two hospitals is 20 – 30 minutes but can be quite a bit longer. This has impact on patients travelling by ambulance, relatives and also on staff, putting pressure on the working day.

4.2.21 Where the Trust has restructured to focus specialities onto one of the sites this has sometimes caused more issues with clinical adjacencies further complicating the situation outlined below.

4.2.22 In some of the very acute specialities such as critical care, anaesthesia and emergency surgery the Trust has to divert scarce consultant resource away from elective care because of the need to staff 24 hour cover rotas on two sites. The activity does not always justify this.

Duplication of Departments across Two Sites

4.2.23 Duplication of departments across two sites reduces the efficiency and sustainability of services due to staffing requirements and skill mix as well as the running costs of expensive equipment. Examples of departments that would benefit from integration onto one site are:

- Interventional Imaging;
- Pharmacy;
- Inpatient Operating Theatres;
- Critical Care;
- Emergency Department;
- Acute Adult Assessment; and
- Cardiology (CCU and Cardiac Catheter Labs in particular).

Conclusion

The examples above demonstrate the case for the move to a single site acute hospital to sustain top quality acute services.

Old and Unsuitable Hospital Buildings

4.2.24 Many of the buildings at both City and Sandwell Hospitals are old and unsuitable for the provision of 21st century healthcare.

Age of the Estate

4.2.25 Much of the existing estate is of significant age and does not comply with the DH aspiration for 40% of the NHS estate to be less than 15 years old by 2010. Table 40 below shows the age profile of City, Sandwell and Rowley Regis Hospitals.

Table 40: Building Age Profile

Age profile	Sandwell %	City %	Rowley %
2005 to present	0	21.29	0
1995 to 2004	0	9.31	0
1985 to 1994	0	3.98	100
1975 to 1984	88.87	5.12	0
1965 to 1974	4.28	7.27	0
1955 to 1964	0	3.11	0
1948 to 1954	0	0.41	0

Age profile	Sandwell %	City %	Rowley %
pre1948	6.85	49.5	0
total	**100**	**100**	**100**

In summary:

- More than 70% of the City Hospital site is more than 30 years old;
- More than 90% of Sandwell Hospital site is more than 20 years old; and
- Almost 50% of the City Hospital site was built pre 1948.

Some of the Trust's clinical services are housed in sub-optimal portacabins and other 'temporary' buildings.

Backlog Maintenance

4.2.26 The Trust has one of the largest backlog maintenance problems in the country. The current estimated cost to achieve Estatecode condition 'B' is in the region of £130 million. When compared to other large acute Trusts outside of London the Trust lies well above the upper quartile. Significant investment has been utilised from the Capital Programme to address High and Significant Risk backlog and minimise risk to the organisation. It is accepted that the Trust will continue to have very high backlog maintenance levels until the MMH is open. The emphasis will continue to be to keep High and Significant Risk backlog to a minimum.

Condition Surveys

4.2.27 Condition surveys have been undertaken across the range of categories defined in Estatecode. These include Physical Condition, Statutory Compliance, Energy Performance and Space Utilisation. Overall the outcome of all of these criteria is that the Trust is in need of complete modernisation and improvement and the only way to realistically achieve this is through the development of a new acute hospital.

Management of Asbestos

4.2.28 The presence of asbestos, whilst managed in accordance with statutory regulations, still presents major problems for refurbishments and major new works. The need to carry out destructive / invasive surveys to determine the full extent of its presence presents operational difficulties for clinical and non-clinical services.

Engineering Infrastructure

4.2.29 The age of the engineering infrastructure, including services and medical gases, means that although they are serviceable, they will need long term replacement. The age and construction of much of the engineering services does not allow easy adaptation and expansion to facilitate the development of new and improved clinical services.

Energy Performance

- 72% of the City Hospital site requires improvement to increase energy performance; and
- 77% of Sandwell Hospital site requires improvement to increase energy performance.

Functional Suitability

- At City Hospital, only 29% is deemed acceptable with over 70% being either tolerable or intolerable; and
- At Sandwell Hospital, only 18% is deemed tolerable with approximately 70% being either tolerable or intolerable.

4.2.30 The following sections outline the clinical impact of poor functional suitability.

Empty Buildings

4.2.31 Since the publication of the OBC in August 2009 ten medium / small buildings on the City Hospital site and the old Maternity Unit at Sandwell Hospital have been closed for the following reasons:

- Poor condition and utilisation;
- Vacant facilities following clinical reconfigurations; and
- The need to make estates efficiencies.

Closure of the buildings has provided savings and increased estate efficiency in the short term, but results in an unsightly hospital environment. It will not be appropriate to continue to hold empty buildings in the long term.

Lack of flexibility

4.2.32 The age and piecemeal construction of the hospitals has resulted in lack of flexibility – there is very little generic space that could be used to support changes in services and models of care over time. This means that changes to service require expensive and suboptimal capital developments that have to fit in around existing buildings. This limits the potential for future service development as well as the potential for new technology and innovation.

Care Environment

4.2.33 Patient Led Assessments of the Care Environment (PLACE) audits were held between April and June 2013. Feedback from the audits is that overall standards are very good and the majority of the detailed checks were passed. The audits covered cleanliness, food, privacy and dignity and condition appearance and maintenance. The Trust has to work really hard to ensure that standards are maintained in unsuitable buildings. Facilities can look untidy and dirty just because of the fabric of the buildings. This can impact on patient confidence and puts pressure on domestic staff.

4.2.34 The Trust has developed an Art in Hospital Strategy prior to the opening of the new hospital. The Art Steering Group has facilitated a number of community and staff engagement art projects and commissioned some collections of art loan pieces from 'Painting in Hospitals'. This artwork has enhanced some of the corridors and clinical areas in both City and Sandwell Hospitals. However, it is difficult to place / hang pictures in many areas because of poor lighting, engineering pipes and other issues that affect the aesthetic.

Fragmented Adjacency of Departments

4.2.35 Ad hoc development of the hospitals over the years has resulted in a number of poor adjacencies between departments. The impact of this has been reduced since OBC approval in August 2009 through rationalisation of the estate and by moving several services to more central locations. This includes the Sickle Cell and Thalassemia (SCAT) Centre and services for older people previously

located in the Sheldon Building. However, there are still a number of issues caused by fragmented adjacency

- To transfer an emergency patient from A&E to theatres or critical care entails taking patients along public corridors. This is particularly difficult at City Hospital where the route is along the main spine corridor. This increases the length of the patient journey, with consequent clinical risk, and provides no privacy or dignity. Figure 9 below shows the length of the corridor and the lack of separation between patients being transferred, visitors and deliveries / FM services.

Figure 9: City Hospital Main Spine Corridor

- The length of the spine corridors causes problems for patients and visitors needing to walk long distances, particularly if they have mobility problems or are unwell.
- Access to wards from the adult emergency assessment units on both sites is also along public corridors.
- Maternity and Rheumatology are also disconnected from the corridor on the City Hospital site. Ambulance transport is therefore required to access main hospital services with potential for clinical risk.

4.2.36 The impact of poor adjacency is:

- Less than ideal patient journeys;
- Increased cost for porters or use of ambulances; and
- Increase in clinical risk

Inpatient Facilities

4.2.37 Outdated ward configurations have been improved as much as possible in the current estate; however, they are no longer suitable for modern care. Figure 10 below shows an example of an unsuitable ward configuration.

Figure 10: Unsuitable Ward Configuration

Current ward templates are such that the number of single rooms that can be designed into the space available is insufficient to deliver a service. This limits the improvement possible in the current estate. The current percentage of single room accommodation available across the two hospital sites is less than 15% which is not ideal, particularly given the prevalence of serious infectious diseases such as TB in the local population. These rooms are widely dispersed across the existing estate which makes it more expensive to bring them up to the standards likely to be required over the next ten years.

4.2.38 The impact of this is:

- Poor privacy, dignity and patient experience;
- Only a minority of patients have the choice of a single room – this may have particular impact on some groups of patients and limits choice to all patients admitted;
- Infection control is hampered by the lack of isolation facilities;
- Poor ability to use space flexibly due to issues with access to toilet facilities; and
- Large bays in typical wards are difficult to clean without major impact on bed availability.

Fragmentation of Inpatient Theatres

4.2.39 Inpatient theatres are spread between two sites in configurations which reduce efficiency both in terms of space utilisation and staffing. In addition, at Sandwell Hospital theatres are split across 2 floors with 4 theatres on the first floor and 4 theatres on the third floor. This fragmented configuration reduces the Trust's ability to implement the following modernised service improvements:

- The development of a central admissions unit for elective surgical cases;
- Integrated recovery facilities;
- Effective staffing structures and skill mix; and
- Flexibility in use of staff and equipment.

Lack of Dedicated Departmental Facilities

4.2.40 There is currently a dedicated Medical Day Case Unit on the city hospital site but not at Sandwell with the result that treatments take place across many different unsuitable ward and outpatient environments. The impact of this is:

- Patients are admitted to wards unnecessarily reducing efficient use of ward resources;
- Reduced ability to share recovery areas with other departments (Medical Day Case Unit and Interventional Radiology share in the preferred solution);
- Reduced potential for development of effective skill mix across clinical areas; and
- Reduced ability to respond to the increase in demand over time for day case rather than inpatient treatments.

Poor Functional Performance within Departments

4.2.41 Many departments are no longer suitable for the provision of modern services, for example:

- The Medical Admissions Unit at City Hospital is hampered by poor access arrangements and movement around the department is limited by pillars and disjointed circulation space;
- Lack of training and meeting facilities close to working departments means that staff have to leave the department for routine continuing professional development, departmental meetings etc.; and
- Changing facilities are often not available making implementation of a uniform policy more difficult.

Movement around Hospital Sites

4.2.42 Way finding especially at City Hospital is made difficult by:

- Distance between buildings;
- The existence of many entrances across the site; and
- The fact that car parking is spread across a wide area.

The impact of this is:

- Poor patient and visitor experience caused by anxiety when they are unable to find departments;
- Patients find walking between departments difficult because of the distances involved; and
- Long walks across uneven terrain in all weather conditions from car parks and bus stops.

Lack of a Clear Main Entrance

4.2.43 The Hospitals do not have clear main entrances, particularly at City Hospital, but present a sprawling, disjointed and untidy front door. Figure 11 shows the difficulty for patients trying to find the main corridor at City Hospital. The car park is some distance away and the signage can often be hidden by delivery vehicles.

Figure 11: Entrance to the Main Spine Corridor at City Hospital

4.2.44 This has the following impact on the Trust:

- Poor way finding as described above;
- Inability to concentrate resources such as wheelchairs, payphones etc.
- Inability to focus customer care resources where help is needed;
- Poor image for the Trust resulting in potential lack of confidence from patients and their families;
- Limited ability to present patient information and health messages;
- Limited ability to host community activities, exhibitions etc.; and
- Reduced ability to enhance well-being through the use of airy, comfortable places for service users or staff to wait or meet.

Poor Working Environments

4.2.45 Staff are still working in poor clinical environments with impact on morale and ability to provide best patient care. Some examples of this are presented below:

- Lack of single rooms make it operationally more difficult to manage infection control;
- A&E at City Hospital has developed in an ad hoc basis within available space. Layout does not lend itself to efficient patient flow or organisation.
- The Medical Assessment Unit at City Hospital is in an area with disjointed layout as described above, poor facilities and no natural daylight; and
- The Trust has difficulty in maintaining national standards for patient flow and segregation in Endoscopy due to size and lay out constraints.

Integration of Health Plans with Regeneration Developments

4.2.46 Full integration of health plans with local regeneration developments is not possible under current circumstances because the poor condition of current estate does nothing to improve local neighbourhoods. The Trust cannot support wider regeneration objectives without making substantial changes.

Conclusion

Due to the condition of the current estate the provision of a suitable environment for patients and staff will require investment in new hospital facilities. This provides the case for the development of a new high quality hospital building.

Care Closer to Home and Patient Choice

Reasons for Developing Care Closer to Home

4.2.47 Many patients prefer to receive care closer to home as has been evidenced by evaluation of the RCRH exemplar projects. They value the convenience and find venues easy to get to. Other reasons for moving care closer to home or community settings are:

- Acute hospitals are not ideal environments for the frail or elderly because the expertise of clinical staff may often be focused on the short term management of acute patient care;
- The expertise for planning and delivering rehabilitation and the management of long term needs may not be as well developed in acute hospitals as it is in community environments; and
- On-going management of long term conditions when the acute treatment is completed should be managed by the GP / community team who should know the patient well.

Delivery of Care Closer to Home

4.2.48 Patients and GPs increasingly expect care to be provided as close to home as possible. Responding to this, where clinically possible, will strengthen the Trust's links with primary care and the population that the Trust serves in an area where patients have real choices about where to go for specialist treatment. Effective development of community services is the essential component of care closer to home. For example:

- Limited out of hours community respiratory service means that patients with long term respiratory conditions, who have an acute episode out of hours, are more likely to present to A&E, and then get admitted for further assessment;
- Patients with a fractured neck of femur currently stay in hospital longer than necessary because of a lack of rehabilitation service in community locations or at home; and
- Many patients requiring end of life care are currently admitted to hospital due to a lack of hospice beds or home support services.

4.2.49 Development of these services is dependent on achieving shift of activity out of acute care. In addition, implementation of a new model of care across the interface with acute services is a very important enabler of this change. It will not be possible to deliver 'care closer to home' with current acute bed capacity and the current approach to clinical care. The reasons for this are as follows:

- Current acute capacity supports a higher level of activity than the model predicts – failure to reduce acute activity will reduce the resources available for delivery of community services;
- Current variation in acute assessment processes and poorly developed streaming can mean that patients are admitted unnecessarily. This means that care that could have been managed in patients' own homes defaults to acute admission; and
- Current variation in care and discharge processes means that patients are not yet consistently having the opportunity to access early discharge to a community setting or to their own homes.

Patient Choice

4.2.50 Extension of patient choice and the range of providers mean that the Trust will need to be able to respond to patients' needs and involve them in decisions about their care. The Trust will need to ensure that it responds to patient requirements in a highly competitive market place because patients in the Trust's catchment area have easy access to a number of other local hospitals. The Trust will be responding to patient choice by:

- Delivering services that offer care closer to home;
- Ensuring that the patient experience is supported by providing the best quality services in the best facilities; and
- Delivering the best customer care with staff that are focused on patient centred care.

Conclusion

The preference for care closer to home and expansion of patient choice makes the case for delivering new services closer to home, building state of the art hospital facilities; and developing a high quality workforce.

4.3 The Conclusion of the Case for Change

4.3.1 The overall case for change draws on the need to respond to changing local health needs with modernised services as described by the RCRH Programme. The following issues make the case for change for the new acute hospital:

- Poor health in the area it serves;
- Major changes in primary care;

- Sustaining top quality acute services;
- Old and unsuitable hospital buildings; and
- Care closer to home and patient choice.

4.3.2 The Project Objectives have been developed in response to the case for change presented above. Delivery of these objectives will ensure achievement of the RCRH Programme outcomes and wider Trust objectives. The case for change has been made and objectives formed to ensure that change is delivered and benefits are fully realised.

4.4 Project Objectives

4.4.1 The project objectives are presented in the paragraphs below.

4.4.2 To move to a single acute hospital site to:

- Ensure sustainable and safe delivery of specialist clinical care;
- Enhance capacity for future service development; and
- Deliver effective use of acute resources through best use of estate, equipment and staff.

4.4.3 To develop a new high quality hospital building to:

- Replace old estate with well-designed, modern, high quality facilities;
- Improve flows and adjacencies to improve clinical care, safety and patient experience;
- Provide a hospital which is welcoming to members of the local community and supports local regeneration;
- Provide a hospital that will support effective delivery of a new evidence based model of care;
- Provide a safe, clean environment where patients and staff can be confident that risk is minimised; and
- Ensure that the Trust is able to support environmental sustainability objectives.

4.4.4 To implement a new model of care to:

- Focus delivery on acute hospital care in a fit for purpose new building;
- Deliver the acute components of the vision for RCRH facilitating the wider model that will enable care closer to home;
- Make best use of whole health economy resources;
- Enable effective response to change in NHS policy; and
- Maximise opportunity for technological innovation.

4.4.5 To deliver the best possible quality of care to:

- Provide continual improvements in clinical outcome;
- Ensure that patients have convenient, timely access to care;

- Ensure that patients have the best possible experience in hospital; where they can be involved in decisions about their own treatment and experience compassionate thoughtful care from staff; and
- Support privacy and dignity for patients in an environment that helps it happen.

4.4.6 To develop staff and provide an optimal working environment to:

- Ensure that staff are enabled to deliver high quality patient focused care;
- Deliver high standards of education, training and research; and
- Provide an excellent staff experience ensuring good morale and retention of the Trust's best staff.

4.4.7 Meeting the objectives presented above will help the Trust realise the set of benefits outlined below.

4.5 Benefits Sought

4.5.1 The key benefits to be secured from the MMH project are summarised below:

- **Improved quality and sustainability of clinical services** - resulting in improved clinical outcomes, reduced mortality and ability to deliver excellent clinical care;
- **Improved customer care** - so that that patients are treated with respect, are involved in decisions about their treatment and can be confident in the quality of their care;
- **More effective use of staff resources** - ensuring that staff are trained to deliver a new sustainable model of care, are productive and satisfied with their experience at work;
- **More effective patient flows** - to maximise use of resources and improve patient experience;
- **Improved accessibility of services for the local population** - so that patients can access a good range of local services, with faster access to treatment, at times convenient to them;
- **Improved flexibility and quality of accommodation** - which will improve the patient and staff experience, maintain the best environment for clinical care and provide greater privacy and dignity for patients;
- **Improved ability to develop / sustain services and respond to commissioning intentions** - so that the RCRH vision is achieved and new services can develop and be sustained over time;
- **Financial benefits** - from services which are affordable, financially sustainable in the long-term and achieve budget forecasts; and
- **Contributions to local community regeneration -** as new developments are built around the hospital and the local community have opportunities to find work in the hospital.

4.5.2 These benefits and associated measures will be used as the basis for evaluating the project.

5 RCRH Model of Care and Requirements of the Project

5.1 Transformation of the Estate for RCRH

New Local Health Centres

5.1.1 Both Sandwell and Heart of Birmingham Teaching PCTs completed a comprehensive set of capital developments designed to improve the primary care estate as set out in their Strategic Service Development Plans (SSDPs) and in line with the objectives for RCRH. The final few developments are now being completed by the CCGs. Progress with this in Sandwell is summarised in the slides presented at ***Appendix 5a***: 'Premises Development Plans in Sandwell'.

The Community Facilities

5.1.2 Services that do not need to be provided in the new acute hospital will be delivered from the Trust's community facilities that will be developed on retained estate. The principles behind these decisions agreed with the Trust's Clinical Leadership Committee were to:

- Ensure the vision for the RCRH Programme is maintained;
- Transfer additional appropriate out patient, day case and support services to community facilities;
- Deliver acute inpatient care on a single site hospital;
- Accommodate corporate administration functions on the community sites; and
- Plan future service locations with the departments involved.

5.1.3 The buildings to be kept and developed (if required) for the Trust's community facilities are:

- The Birmingham Treatment Centre (BTC) on the City Hospital site;
- Part of Sandwell General Hospital, which will become the Sandwell Treatment Centre (STC).
- Rowley Regis Hospital (RRH);
- Sheldon Block on the City Hospital site;
- The Birmingham and Midlands Eye Centre (BMEC), which will continue to accommodate all Ophthalmology services with the exception of inpatient elective care; and
- Leasowes Intermediate Care Centre.

The development / refurbishment required will be delivered through the Trust's capital programme.

5.1.4 The community facilities will serve populations of about 150,000 and provide accommodation for a range of services including:

- Urgent care;
- Outpatients and diagnostics;
- Day surgery and day services;
- Intermediate care beds;
- Specialist community services; and
- Primary care.

5.1.5 The exact mix of services provided in each of the facilities will vary according to local circumstances. A range of provider organisations including the Trust, primary care and community service providers will operate from the community facilities.

The New Acute Hospital Facility

5.1.6 A new acute hospital is the final part of the set of facilities that will support the RCRH model of care. The Trust's aspiration for the hospital is that patients attending services for investigation or treatment will receive excellent care with timely availability of clinical expertise at all points of their individual care pathways. It will provide modern purpose built facilities in which to deliver acute care. As a single site acute hospital it will allow consolidation of acute emergency and inpatient services with a critical mass of patients, staff and equipment. This will enable delivery of:

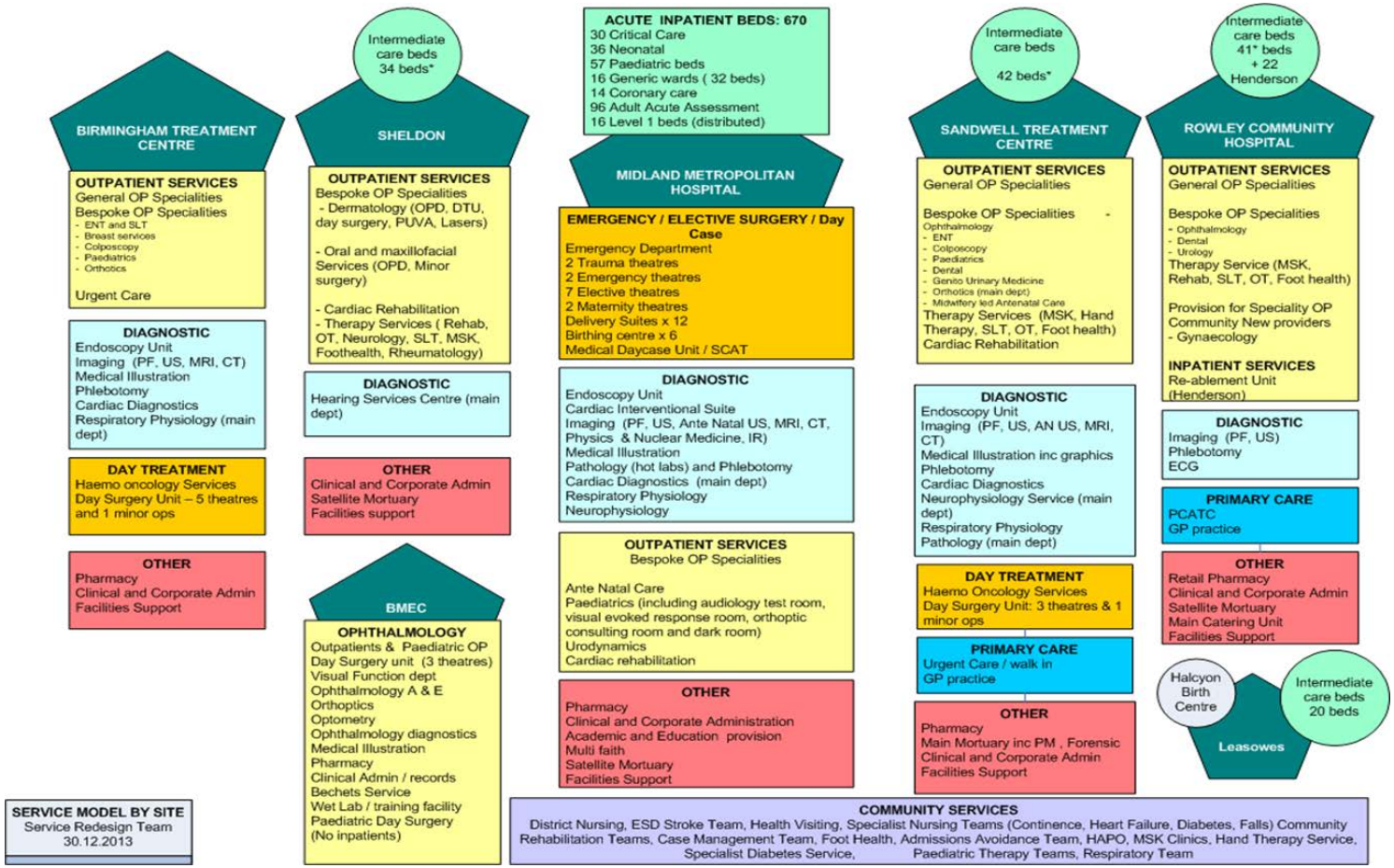
- High quality care 24/7 and 365 days per year;
- Continuity of care through multidisciplinary teams working to pathways and protocols agreed by expert led teams;
- Initial assessment and treatment of patients requiring emergency care by experienced clinicians with consultant presence on site 24/7 in the most acute specialities and on-site 12 hours, 7 days a week for a number of others;
- Sub-specialty expertise across the entire range of specialties available to in-patients in a timely fashion;
- High-level diagnostic support, including imaging and pathology available 24/7;
- Separation of acute unplanned and elective patient flows with individuals responsible for elective care of patients not being simultaneously responsible for the delivery of emergency care; and
- Leadership at the point of care delivery e.g. wards, departments and theatres will be provided by experienced clinicians with sufficient time to lead and supervise staff and standards.

5.1.7 This will also mean :

- A greater proportion of patients attending the acute hospital will be acutely unwell, have complex conditions or require specialist assessment.
- The smooth transfer of patients to a community location or primary care once this level of acute care is no longer required will be essential.
- Clear patient pathways that cross organisations and professional groups will be essential to ensure seamless patient care without duplication or gaps and to ensure patients receive the right service in the right place at the right time.
- Smooth, timely flow of information, ideally in the form of an integrated health care record, between professionals and across locations and providers will be important.
- Changes to the workforce will be required to ensure staff with the right competencies are available at the right time in the right place.
- The Trust will continue to provide and develop a range of more specialist services to the local population, to the wider population within the West Midlands and in some cases further afield. This includes Gynae-oncology, specialist Ophthalmology, Sickle Cell and Thalassaemia and specialist Rheumatology services.

5.1.8 A detailed breakdown of activities being provided by the Trust at each of these facilities is presented in the Service Model presented at ***Appendix 5b***. Figure 12 below summarises the services that will be offered at each of the locations to support the RCRH model of care.

Figure 12: Model of Care



Health Impact Assessment (HIA)

5.1.9 An HIA of the RCRH Programme was undertaken in October 2006 (report available separately). Positive impacts were identified in relation to 11 broad determinants of health:

- Employment and economy;
- Education;
- Transport;
- Housing;
- Visual amenity (environment);
- Crime;
- Lifestyle;
- Pollution;
- Family and social cohesion; and
- Health inequalities.

5.1.10 The results demonstrate that there are a significant number of opportunities for improving the health and well-being of people in the area. Outcomes are linked to wider regeneration objectives.

5.2 New Patterns of Activity for RCRH

5.2.1 The RCRH Programme has developed a jointly owned Activity and Capacity Model which is used by the partners to underpin future healthcare development. It makes forecasts about activity for the Trust's catchment area across all commissioners.

5.2.2 The RCRH Activity and Capacity Model was originally developed in 2004 for the SOC and has since been developed through a series of versions. In summary the most significant versions have been:

- Version 4.2 (2008) formed the basis of the first version of the OBC (2008).
- Version 5.1 (2010) developed by the RCRH Programme as part of a wider review linked to change in financial conditions within the NHS. Version 5.1 included revised forecast activity and capacity for the MMH.
- Version 5.3 (2010) developed by the Trust following a value engineering exercise for MMH to recognise the changes in version 5.1 and also given the changes to NHS financial conditions to reduce the size of MMH and improve affordability. In particular this resulted in a change in the split of activity between MMH and the Trust's future community facilities (retained estate).
- Version 5.7 adjusted (2013). Over the last few years the Trust has amended the Activity and Capacity Model to support its LTFM submissions. Version 5.7 adjusted (V5.7a) forms the basis of the LTFM submitted in November 2013 as part of the assurance work and preparation for proceeding to the procurement phase for MMH. All modelling in V5.7 is based on 10/11 outturn. The main adjustment has been to identify the difference between the 2013/14 contracted (LDP) plan and the modelled activity for 2013/14 in the earlier version 5.7 and then to apply the % difference to the future years trajectory. The model assumes MMH becomes fully operational from October 2018.

- The LTFM approved by the Board, updated to include revised activity detail provided by the relevant CCGs (version 5.7b).

5.2.3 The current version of the model starts from a baseline of actual activity in 2012/13 and produces a detailed year by year forecast over the ten years to 2022/23.

5.2.4 ***Appendix 5c*** presents comprehensive detail about the assumptions underpinning the activity assumed for the Trust. This includes productivity, length of stay, day case rates, bed occupancy, theatre minutes and utilisation, outpatient new to review ratios and throughput etc. It has also been supplemented by additional analysis and modelling for Pathology and Imaging.

5.2.5 The model produces activity projections for the Trust aligned to location as presented in Table 41 below.

Table 41: Projected Trust Activity in 2019/20 by Location

Category	Type	MMH	Community	Total
Admitted Patient Care	Elective Inpatients	7,876	0	7,876
	Day Cases	14,230	31,188	45,418
	Emergencies (including intermediate care)	59,349	2,171	61,520
	Occupied Bed Days	215,450	25,916	241,366
Outpatients	New Outpatients	35,239	161,864	197,103
	Review Outpatients	46,114	298,441	344,555
	OP with Procedure	16,846	30,265	47,111
	Maternity	16,642	1,076	17,718
Other	A&E Attendances	137,402	29,491	166,893
	Urgent Care	0	72,258	72,258
Capacity	Beds	666	158	824
Community	Contacts	0	927,085	927,085

5.2.6 The model produces trajectories for how activity will change over the years to the opening of the new hospital as summarised in the below.

Table 42: Activity Trajectory

Activity Trajectories	Actual 31/03/11	Actual 31/03/12	Actual 31/03/13	Forecast 31/03/14	Forecast 31/03/15	Forecast 31/03/16	Forecast 31/03/17	Forecast 31/03/18	Forecast 31/03/19	Forecast 31/03/20	Forecast 31/03/21	Forecast 31/03/22	Forecast 31/03/23
Elective	62,145	58,534	57,310	50,339	51,094	51,236	51,127	51,720	52,543	53,291	53,908	54,549	55,074
Non elective	61,163	57,404	59,280	60,930	61,115	61,441	62,081	61,763	61,207	61,521	62,523	63,297	63,908
Outpatients	602,876	683,540	690,550	712,634	674,055	629,116	612,247	596,149	600,559	606,489	610,831	614,976	620,978
A&E and Urgent Care	218,211	210,094	196,250	212,787	221,276	226,056	231,922	235,454	236,984	239,150	242,351	243,816	246,134
Other clinical - Non Tariff	-	5,024	6,684	16,491	17,160	18,081	18,093	18,067	18,084	18,019	17,946	17,886	18,033
Community Contacts	-	636,500	717,180	735,944	771,013	797,946	835,553	871,837	906,354	927,085	935,514	943,917	953,356

5.2.7 The activity and capacity model has been used to calculate bed, theatre, outpatient, imaging, endoscopy, cardiac intervention room and birthing room capacity. It also informs the income assumptions presented in the LTFM as presented in Section 9.

5.3 Delivering the RCRH Changes

Maintaining Best Practice

5.3.1 The Partnership Board has ensured that the RCRH changes have been delivered in line with best practice service reconfiguration standards throughout the life of the programme. The key strands of this are outlined below and the detailed approach is presented in ***Appendix 5d***:

- Involvement of clinicians and commissioners to ensure that change is clinically led;
- Public and patient engagement through a well-resourced process including informal engagement activities and formal public consultation to ensure that services will be fit for purpose;
- The clinical evidence base has been considered at every stage to ensure that best clinical outcomes and safe care will be delivered; and
- The need to develop and support patient choice has been taken into account to ensure that patients can access services that are most suitable.

RCRH Programme Road Map

5.3.2 The road map presented at Figure 13 below gives an overview of progress through the years of the RCRH Programme.

Progress Made So Far

5.3.3 The early years after approval of the SOC and the public consultation focussed around RCRH exemplar projects that have informed delivery of longer term service redesign and demand management. Service redesign will continue during the procurement and construction of the facilities to make sure the Trust is ready for the move to the new hospital. New primary care facilities were also developed during the early / middle years of the programme and these buildings are now almost complete.

5.3.4 Interim service reconfigurations were undertaken to ensure that sustainable services can be delivered pending development of the new hospital. Improvements to patient care have been delivered for the medium term but, as outlined in the case for change, the new hospital will be required to resolve all remaining issues for the long term.

5.3.5 As outlined in Chapter 2 the need to acquire the land through CPO has necessitated a longer than standard OBC development and approval process. The Trust hopes to initiate the procurement through the placing of an OJEU notice in April 2014.

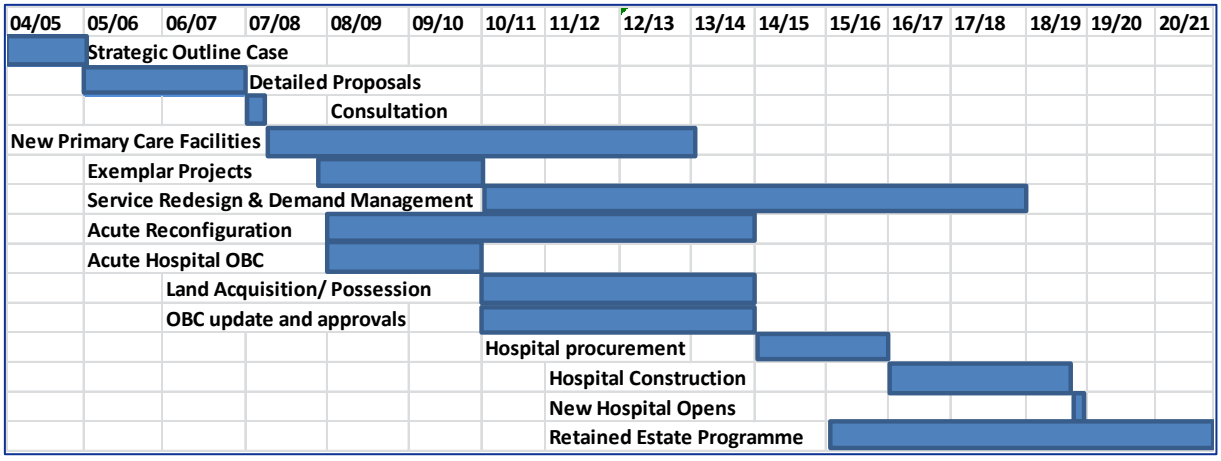
Plans to Opening the New Hospital

5.3.6 The changes in delivery of healthcare will run in parallel with the construction and commissioning of the new hospital and the Trust's Community Facilities. The final set of activity changes will be

associated with the opening of the hospital including the expected loss of catchment to other providers as the acute site moves location.

5.3.7 The STC will be the final facility to be completed following the move of acute services, including A&E, to the MMH. The new models of care will become fully operational during this period and the last few services will move to their final locations as the facilities are commissioned.

Figure 13: RCRH Roadmap



Ensuring Delivery to Plan

5.3.8 As outlined above activity trajectories have been agreed with partners. Ambitious targets have been set for service changes and improvements in performance. It is important that progress against trajectory is monitored to ensure that the Trust is on track to move into the new hospital and the refurbished community facilities. This will allow time to implement mitigating actions if there is a significant variance from plan.

5.3.9 A governance process to monitor delivery has been agreed. Progress is overseen by the Clinical Leadership Executive via the MMH and Reconfiguration CLE Committee. The following measures will ensure delivery:

- The v5.7b trajectories inform the Trust's Transformation Plan which is currently being refreshed into an Integrated Transformation Programme;
- Trust and Clinical Group level Annual Plans take the activity and capacity levels in v5.7b trajectories into consideration;
- Bi-annual review of progress against trajectory at Clinical Group and Specialty level is undertaken at Clinical Group performance review meetings;
- Monitoring reports at a Trust level are presented to the MMH and Reconfiguration CLE Committee with an assurance report to the Configuration Board Committee bimonthly;
- The Executive will report whole system progress to deliver the trajectories along with any material future system planning documents to the Trust Board on a quarterly basis from April 2014; and
- Additional reviews are undertaken at key project milestones including appointment of preferred bidder and financial close,

5.3.10 A formal review of progress with demand figures, bed numbers and outpatient supply will be concluded no later than 15 months before the opening of the new hospital. The results of this should trigger mutual provider and commissioner formal re-confirmation of the safety of those assumptions for the due date, together with any actions agreed to mitigate risk. This overall assessment of risk will be made publically available.

Key Activity and Capacity Measures

5.3.11 Activity and capacity measures have been proposed for the monitoring process as presented below:

- Emergency Care: A&E attendances and Non-elective admissions;
- Elective Care: Elective admissions and day cases;
- Outpatients: first attendances and review attendances;
- Bed Capacity: bed days (split emergency, elective and intermediate care) and bed numbers; and
- Community Contacts: outpatient and bed alternative contacts.

5.3.12 Monitoring for each of the above measures will include:

- LTFM / RCRH trajectory – at least current year and end point (2019/20);
- LDP / Contract trajectory – current year; and
- Actual performance – current year.

5.3.13 The February 2014 review against trajectory paper to the MMH and Reconfiguration CLE Committee is presented at ***Appendix 5e*** to show the detail and analysis being monitored by the Trust.

5.4 Implications of the RCRH Vision for the Trust

5.4.1 The RCRH vision means that:

- The majority of outpatient attendances and planned diagnostics will be provided outside the acute hospital in community locations by a mixture of secondary care specialists and primary care professionals.
- A greater proportion of inpatient length of stay will be provided in the Trust's intermediate care beds.
- A significant reduction in average length of stay, reducing in the acute hospital to 3.1 days and within the intermediate care beds to 17 days.
- A catchment loss for A&E and emergency inpatient activity related to the change in location of the acute hospital.
- Increased community-based urgent care and out-of-hours services to provide alternatives to attending the Emergency Department.
- Increased day surgery rates (to 85%) with the majority of adult day surgery being provided in dedicated day surgery units in the BTC, STC and BMEC.
- Better physical environments for service users and staff which will encourage more rapid recovery and provide greater privacy and dignity.
- The development of a new single site acute hospital is required allowing consolidation of acute emergency and inpatient services.

5.4.2 The impact of the RCRH model of care is presented in Table 43 below.

Table 43: Impact of the RCRH Model of Care

	SWBH in MMH	SWBH in Community Facilities	Other Providers
Outpatient Attendances	13% (Antenatal and Paediatrics)	71% provided by us in community locations 23% being Ophthalmology attendances in BMEC	7% provided by new providers in community locations with our community services providing 75% of this activity for Sandwell residents 9% absorbed as part of routine working in primary care
Beds & Length of Stay	Circa 670 beds Average length of stay: 3.1 days	Circa 158 beds Average length of stay: 17.08 days	
Catchment Loss	3% A&E attendances and adult emergency inpatient admissions	None assumed	Emergency catchment loss primarily flows to: Walsall UHBT DGoHFT HEFT
Emergency Department	58% total ED & Urgent Care attendances	30% delivered in Urgent Care Centres at STC & RRH 12% delivered in BMEC	Urgent care activity in primary care Urgent Care Centres (i.e. Summerfield)
Day Case Rates: 85%	Children's day surgery Medical Day Case Unit	Adult day surgery in BTC, BMEC & STC Medical day cases (including chemotherapy) in BTC and STC	

5.5 Departmental Capacity: Acute Hospital and Community Facilities

5.5.1 In order to develop an understanding of capacity requirements it has been necessary to consider the level of throughput possible given the planned case-mix of the Trust and a set of performance and productivity assumptions.

5.5.2 ***Appendix 5c*** presents the activity / performance / capacity parameters underpinning the functional requirements. These models have been used as the starting point for discussing capacity with lead clinicians within the Trust and for developing the functionality of the new acute hospital and the community facilities.

5.5.3 The tables below summarise the functionality requirements of significant departments within the new acute hospital and the community facilities, comparing these with current provision and highlighting any key performance factors or other issues.

Table 44: Inpatient Beds

	2013/14	2019/20 Planned Capacity	Other Comments
New Acute Hospital			
Critical Care (levels 2 &3)	32 physical beds but circa 30 funded	30	Bed numbers vary as staffed on points basis
Children's	62 (includes 5 winter / flexible beds)	56	Includes Assessment Unit, adolescent beds (up to the age of 16) and capacity for children in all specialties (including day cases)
Neonatal	37 physical cots but 29 funded	36	Some transitional care will take place on the maternity wards (see below)
Maternity	42 (includes 4 transitional care), 6 couches in ADAU and 6 chairs in discharge lounge	64* (includes transitional care, antenatal day assessment, antenatal and post natal care and transfer lounge)	* includes circa 10 transitional care beds although actual number vary according to demand and flexible use with maternity beds
Adult Acute Assessment	120** Medical (includes 21 trollies)	96** (80 medical & 16 surgical)	** Reduced capacity to reflect direct admission from ED or ambulance to a number of specialties including stroke, trauma (fractured neck of femur), cardiology requiring immediate intervention, Ophthalmology etc.
Medical Adult Beds	374***	192**** (including 14 CCU beds)	*** includes 100 extra beds across medicine and surgery opening in 2013/14 but planned to reduce by 2017/18. (48 beds in 2015/16; 36 beds in 2016/17; 32 beds in 2017/18) **** Capacity reflects earlier transfer to intermediate care beds.
Surgical Adult Beds	195 (including SAU)	192*****	***** includes Emergency Gynaecology Assessment Unit (8 trolley spaces)
Sub Total	**874**	**666**	
Community Facilities			
Intermediate Care	42	158	
Trust Total	**916**	**824**	

Bed Capacity Modelling Methodology

5.5.4 To derive the bed groupings the future adult bed days were analysed by HRG and HRG Chapter and then grouped on the basis of conditions that were agreed with clinical leads to give the bed numbers in Table 45 below. It should be noted that generic wards are planned as units of 32 beds, arranged in clusters of 3 so at an operational level there will be some flexibility in use of these beds.

Table 45: Inpatient Beds by Condition Grouping

Condition Groupings	Specialties	Bed Numbers from A&C Model
Respiratory	Includes 4 level 1 beds and 10 isolation rooms	32
Acute Elderly	Includes acute elderly and mental illness	32
GI	Includes medical, acute GI bleeding, poisons unit beds, 4 level 1 beds	32
Musculoskeletal	Orthopaedics and Trauma	64
Haematology, oncology and Rheumatology	Haematological oncology, complex inpatient chemotherapy cases, other Haematology (e.g. sickle cell disease), Rheumatology	32
Maternity	Includes obstetrics ante and post-natal, antenatal Day Assessment Unit and Transfer Lounge	64
Gynaecology and Gynae-oncology	Includes EGAU	32
Surgical Specialties	Colorectal Surgery includes 4 level 1 beds	32
Surgical Specialties	Male Urology, ENT, Interventional Radiology, Vascular Surgery, Male Plastics, Ophthalmology	32
Short Stay Surgery	Includes dermatology	32
Adult Acute Assessment	Includes all adult emergency inpatients (except maternity, fracture of femur, stroke, & acute chest pain) sub divided into: - 40 medical assessment beds - 20 medical monitored beds - 12 chairs & 8 trollies medical ambulatory assessment - 16 Surgical Assessment Unit trollies/beds	96
Stroke and neurology	Includes 4 level 1 beds	32
Cardiology	Includes 14 CCU beds & cardiology step down beds	32
Sub Total		**544**
Critical Care (ICCU) level 2 and 3	All adult	30
Neonatal	Intensive Care, High Dependency and Special Care	36
Children	Includes Paediatric Assessment Unit, Adolescents, High Dependency	56
Sub Total		**122**
Total		**666**

Operating theatre capacity requirements are presented in Table 46 below.

Table 46: Operating Theatres

	2013/14	2020/21	2020/21 - Other
Emergency (including trauma)	3	4	Includes: 2 Trauma; 1 Laproscopic 1 General
Elective Inpatient	10	7	2 Orthopaedic 2 Laproscopic 1 IR capacity 1 Ophthalmic &ENT capacity I gynae-oncology
Maternity	2	2	In Delivery Suite
Sub-total	**15**	**13**	**New Hospital (2020/21)**
BTC	6	5	& 1 minor op
BMEC	4	3	
Sandwell	3	3	& 1 minor op
Sub-total	**13**	**11**	**Community (2019/20)**

5.5.5 Outpatient capacity is summarised in Table 47 below.

Table 47: Outpatients - Consulting Rooms

Specialty	The Trust 2013/14	2019/20 New Acute Hospital	2019/20 Community	Community Locations	2013/14 Total	2019/20 Total
Generic Adult	35 BTC 21 SGH 5 RRH	0	35 BTC 36 STC 9 RRH	BTC, STC & RRH will have suites of generic adult consulting rooms for use by all specialties (apart from those requiring bespoke accommodation)	61	80
T&O	4 cubicles and 4 rooms SGH 6 cubicles and 2 rooms City	0	Use of generic adult rooms		16	Use of generic adult rooms
Breast	5 BTC	0	5 BTC		5	5
ENT	6 BTC 5 SGH	0	6 BTC 3 STC	Bespoke accommodation: BTC and STC	11	9
Oral Surgery	3 City	0	4	Bespoke accommodation: STC & RRH	3	4
Dental	3 SGH	0	2	Bespoke accommodation: STC & RRH	3	2
Diabetes	6 City 7 SGH	0	Use of generic adult rooms		13	Use of generic adult rooms
Dermatology	6 Sheldon	0	6 Sheldon	Bespoke accommodation: Sheldon	6	6
Antenatal	5 City 3 SGH	7	6 STC	Bespoke accommodation for Midwifery led antenatal clinics	8	13
Foetal Medicine	1 City	0	0		1	Use of antenatal clinic

Specialty	The Trust 2013/14	2019/20 New Acute Hospital	2019/20 Community	Community Locations	2013/14 Total	2019/20 Total
Respiratory	5 SGH	0	5 STC	Bespoke accommodation: STC	5	5
Oncology	6 BTC (at SGH use generic adult rooms)	0	6 BTC 4 STC	Bespoke accommodation: BTC & STC (adjacent to chemotherapy day units)	6 BTC And use of generic adult rooms	10
Ophthalmology	27 BMEC 5 SGH Archer Ward	1*	39 BMEC 6 STC 4 RRH	BMEC	32 and Archer Ward	49
Paediatrics	6 BTC 6 SGH	6	6 BTC 6 STC	Bespoke areas: BTC & STC	12	18
Urodynamics	1 BTC	1	0		1	1
GUM	8 SGH	0 HIV 1clinic / week	6 STC	Bespoke accommodation: STC	8	6
Trust Total	**191**	**15**	**194**		**191**	**208**

5.5.6 For the majority of specialities all adult outpatient activity will be undertaken in community facilities with no outpatient activity in the MMH. The exception to this is Maternity where all consultant and high risk antenatal outpatient activity will be undertaken in the MMH. Low risk and midwifery led outpatient activity will continue to be offered in community locations.

5.5.7 Imaging capacity is presented in Table 48 below.

Table 48: Imaging

Department	New Acute Hospital	BTC	BMEC	Sheldon Block	STC	RRH
Imaging	2 Plain Film x-ray 2 Plain Film x-ray in ED 4 Ultrasound rooms 2 MRI 2 CT 2 Fluoroscopy room 1 IR (angiography)room 1 Dual function procedure room 4 Gamma Cameras	1 MRI 1 CT 1 Dexa Scanner 2 Plain x-ray rooms 4 Ultrasound rooms	N/A	N/A	1 MRI 1 CT 2 Plain Film x-ray 3 Ultrasound rooms (1 to be used as a vascular room)	1 Plain Film x-ray 2 Ultrasound rooms
Cardiac Diagnostics	1 Exercise tolerance testing room 3 ECHO rooms 1 Ambulatory monitoring room 2 ECG rooms 1 Device testing room 3 Cath Labs	1 Exercise stress testing room 1 Ambulatory monitoring room 2 ECG rooms	N/A	N/A	1 Exercise stress testing room 2 ECG rooms 1 Ambulatory monitoring room 1 Device testing room	1 ECG/ECHO room
Respiratory Physiology	1 Respiratory testing 1 Sleep diagnosis/therapeutic assessment room	4 Respiratory testing rooms	N/A	N/A	2 Respiratory testing rooms 1 Sleep room	N/A

Department	New Acute Hospital	BTC	BMEC	Sheldon Block	STC	RRH
Neurophysiology	1 Nerve Conduction Studies 1 EEG Recording room	N/A	N/A	N/A	1 Ambulatory EEG room 2 NSC/EMG rooms 2 EMG/NCS & EP rooms 4 EEG sleep rooms	N/A

5.5.8 Table 49 presents the other Trust capacity requirements.

Table 49: Other Facilities

Service	2013/14	2020/21 New Acute Hospital	Key Performance Factors	2020/21 Community Sites	2020/21 Total
Endoscopy	7	2	16 sessions per week and 24 hour access for emergencies	6 endoscopy rooms: 3 in BTC 3 in STC 10 sessions per week	8
Cardiac Interventional rooms	2 and access to interventional imaging room	3	16 sessions per week and 24 hour access for emergencies	None	3
Birth Rooms	20	18 (12 high risk and 6 midwifery led)	In addition within Delivery Suite there are 6 Induction spaces	3 birth rooms in Halcyon Birthing Centre (stand-alone midwifery led centre)	21

5.6 Scope of the New Acute Hospital Project

5.6.1 Inside scope:

- All services that the Trust and commissioners have agreed should be provided in an acute setting; and
- The development of the new acute hospital.

5.6.2 Outside scope:

- All services that the Trust and commissioners have agreed should be provided outside an acute setting; and
- The development of the community facilities on the Trust's retained estate – these facilities will be developed through the Trust's capital programme.

5.7 New Hospital Design Brief

5.7.1 The specification for the new acute hospital can be split into two parts: the Design Vision and the Functional Content; the two coming together to form the core of the Design Brief. The aim of the Design Brief is to describe the Trust's aspirations and expectations as well as providing a clear framework for the development of a design.

Design Vision

5.7.2 The Trust developed the Design Vision with a Design Group chaired by the Trust Design Champion. The group included members of the Trust, Local Government and PCT partners led by the Design Champion, Sue Davis, who was the previous Trust Chair.

5.7.3 The Design Vision developed by this group reflects the requirement to create a landmark hospital, which will be an asset to the local community and will support local regeneration. The design should be enduring and take account of the diverse needs of the population it serves.

5.7.4 The key elements of the Design Vision are that the hospital will be:

- Inspiring;
- Non-threatening;
- Confidence inspiring;
- Uncluttered;
- Light and airy;
- Clean without being clinical; and
- Well integrated into its setting and locality.

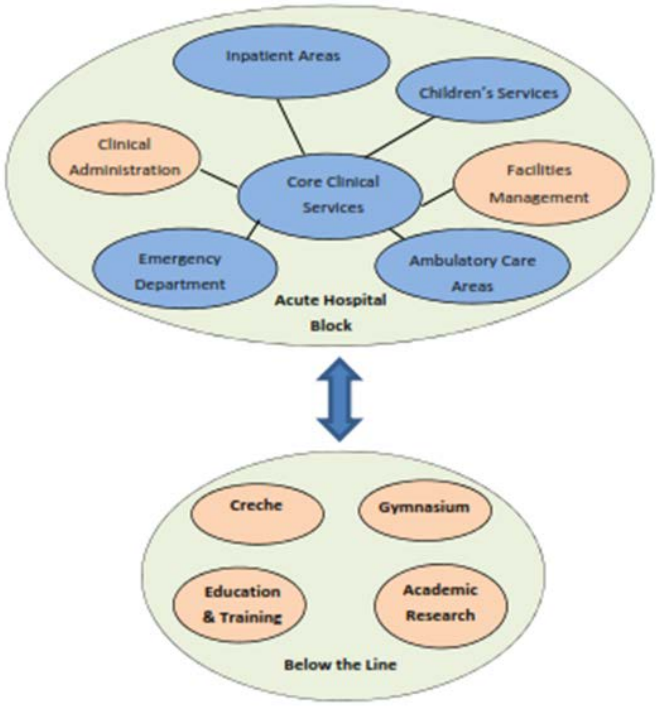
The Functional Content

5.7.5 The Trust has developed a Functional Brief which consists of the Whole Hospital Operational Overview and individual Departmental Planning Policies and Design Descriptions (PPDDs).

5.7.6 The Trust has established a philosophy of “zoning” to facilitate co-ordination of associated services ensuring that physical adjacency will support the patient journey.

5.7.7 Space for a crèche, gymnasium; research and training facilities is included in the site plan. However, they are not included in brief for the PF2 bidders and are therefore presented below the line in the model summarised in below:

Figure 14: Design Solution



5.8 New Hospital Clinical Requirements

5.8.1 The Activity and Capacity Model (version 5.7b) has formed the basis for calculating the clinical facilities required within the new hospital. The following summarises the key components required for the acute hospital:

5.8.2 A total of 666 beds, including:

- A 30 Bed Critical Care Unit (Level 2 and 3);
- 96 space Adult Acute Assessment Unit;
- 36 Neonatal Cots; and
- A 56 bed Children's Unit.

There will be 14 Generic Wards of 32 beds each, including:

- 14 Coronary Care Beds;
- 16 distributed higher dependency monitored beds (Level 1);

5.8.3 13 Operating Theatres, made up of:

- 2 Trauma Theatres;
- 2 Emergency Theatres (including laparoscopic equipment);
- 2 Maternity Theatres in Delivery Suite; and

- 7 Elective Theatres;

5.8.4 Bespoke outpatient clinics for:

- Children;
- Urodynamics; and
- Antenatal services.

6 Updated Economic Case

6.1 Introduction

6.1.1 Version 2 of the OBC approved by the Department of Health (DH) in August 2009 contained a comprehensive economic appraisal across four options to determine which option was the preferred solution. ***Appendix 6a*** presents the development and evaluation of options undertaken at that time along with a subsequent economic update undertaken in March 2011.

6.1.2 The four options considered were:

- Option 1: Do Minimum;
- Option 2: City Site re-development;
- Option 3: Sandwell Site re-development; and
- Option 4: A new build on the Grove Lane Site.

6.1.3 It was demonstrated that Option 4, the Grove Lane solution, represented the best economic solution to achieve the goals of the project.

6.1.4 Following approval of the OBC in August 2009 the DH approved the decision to pursue a Compulsory Purchase Order (CPO) to facilitate acquisition of the Grove Lane site. The Trust now owns the entire site.

6.1.5 In examining whether to reconfirm the scheme in 2013 the Trust Board has discussed, in a series of workshop settings, whether the original option appraisal in 2009 remains valid. In doing that specific consideration has been given to:

- The changed financial circumstances for public services notwithstanding the strong performance of the Trust in recent years;
- Revised population expectations including changes in the migrant patterns of the area;
- Enhanced expectations of care integration with local GP practices; and
- Considerably revised expectations of critical mass of acute care service infrastructure.

6.1.6 The conclusion was that the case for change remains overwhelming and that only a new build acute hospital can deliver change at the pace required.

6.1.7 The Trust has reviewed and refreshed the economic appraisal of the original four options and a Do Nothing option. The results of this work are set out below and confirm Grove Lane as the most economic and preferred option.

6.2 Non-Financial Appraisal

Approach

6.2.1 The original non-financial appraisal was undertaken after the public consultation in April 2007. The outcome of this work is presented in ***Appendix 6a***.

6.2.2 In February 2014 the Trust and its advisors undertook a review of each option to consider the changes to the options and to identify which, if any, of the scores and weightings should be revised. The main

difference to the 2009 option appraisal is that the new build options would include less new build and additional retained estate at Sandwell and at City. The table below details the evaluation criteria and the team's considerations.

Table 50: Changes to the Non-Financial Appraisal

Evaluation Criteria	Conclusions from the workshop
Better Access	The team was content with the relative scores. Access would change marginally as some services would be retained at City and Sandwell sites. The Grove Lane solution offers better access than the other two sites. Therefore the team considered if the Grove Lane option should be slightly scored down because overall the access would be marginally worse. However the team decide the changes are relatively minor and would affect mobile patients and limited visitors as it is mainly outpatients which would be affected and thus the score did not need to change.
Clinical Quality	The team did not think the scores should change for clinical quality.
Environmental Quality	As with Better Access, the changes involve marginally more retained estates at City and Sandwell. Thus for the new build options the environmental quality criteria may be marginally lower. The team decided the changes are relatively minor and would not affect the score.
Development of existing services Strategic Fit, including regeneration	The team did not think the scores should change for strategic fit or regeneration.
National, regional and local policy	The team did not think the scores should change for policy.
Teaching, Training, Research	The Trust has removed the research centre from the main scheme and will retain space on the new sites. The centre will be developed but perhaps at a delay. The team did not think the scores should change for research.
Effective Use of Resources	The changes are likely to lead to more staff being based at the retained estate than previously assumed, some of which will be working on multiple sites. This could marginally affect the use of resources but the team did not think that it was a material difference overall and thus did not alter the score.
Ease of Delivery	Retaining additional services on City and Sandwell sites will mean additional refurbishment resulting in more double running costs and decanting of services over a longer period of time. Again, in the scheme of the project this was deemed to be marginal and thus the team did not alter the scoring.

6.3 Financial Appraisal

Approach

6.3.1 A Do Nothing option is non-viable in the long-term. It serves however as a baseline to assess the net benefit of each option. This option will therefore be known as Option 0.

6.3.2 All five options have been developed by applying technical guidance consistent with the Treasury Green Book, and Generic Economic Model (GEM) Investment Appraisal Guidance. In particular the following is of note:

- The base year and price base is 2013/2014;
- Prices quoted exclude VAT;
- Cash flows are discounted by 3.5% per annum to year 30 and 3% per annum thereafter;

- Affordability cash flows have been amended to exclude capital charges and provisions for redundancy costs;
- Although, build / refurbishment timelines are different a 66 year appraisal period has been used, which reflects the re-development period plus 60 years of operation; and
- An alternate period of 36 years is also included.

Cash Flows

6.3.3 There are a number of steps involved in arriving at a preferred economic option. Traditional discounted cash flows across the following categories are considered for each option:

- **Opportunity Costs**: these are costs identified for areas which may be used for alternative means, (i.e. what opportunity has been foregone by using this resource in the option being considered). In most NHS cases, opportunity costs are restricted to land values.
- **Capital Outlays:** for new builds or refurbishment (net of vat and discounted by a 2.5% GDP deflator) are applied by year of spend.
- **Land or building sales** - recorded in the year(s) in which they are estimated to be realised.
- **An estimate of the residual value of an asset** - at the end of the lifespan to represent an estimate of an assets value at that time, i.e. 36 and 66 years.
- **Capital and revenue lifecycle costs** - of maintaining estate assets.
- **The Trust's capital programme** - for new and replacement assets.
- **Revenue cost cash flows** - across clinical, non-clinical and estates costs across the lifetime. For non-Grove Lane options, the Grove Lane revenue streams have been taken as a baseline and adjusted for dysfunctional expenditure incurred in the alternative options.
- **Transitional costs** - declared separately and consider non recurrent or ad-hoc spends.
- **Externalities** - require an assessment of lost activities to the host provider and consideration to where this work goes in future.

6.3.4 An adjustment is made for the assessment of risk relevant to each option and sensitivity is considered against criteria of each option.

6.3.5 The sum of these discounted results creates a net present cost (NPC) and an Equivalent Annual Cost (EAC) by option. A ranking occurs with the lowest NPC receiving the preferred option status.

Revenue Cost Forecasts

6.3.6 The Grove Lane option revenue costs have been driven from the cost projections in the Trust's LTFM. Capital charges and restructuring costs have been removed in line with guidance.

6.3.7 All other options have been considered to assess the degree to which they might be different to the LTFM expected position. Typically areas considered include:

- Additional revenue costs due to needing to maintain two acute sites;
- The additional build timeline leading to savings not being realised as quickly as hoped;
- Different transitional costs, for project management, decanting, soft FM, and non-recurring costs;
- Additional ward requirements;

- Different dual running assumptions;
- Revenue lifecycle estimates over a 65 year lifespan; and
- Beyond the ten year LTFM time horizon, a stable 1% growth has been applied to all revenue costs in all options.

6.3.8 ***Appendix 6b*** presents the revenue costs by option.

Capital Cost Forecasts

6.3.9 Capital cashflow is specific to each option and include:

- Estimates for new capital build;
- Major refurbishment estimates;
- Land acquisition and disposal;
- Capital lifecycle trajectories;
- Internal replacement capital programme forecasts; and
- Internal new and replacement equipment requirements.

6.3.10 Each option has been considered discretely. External advisors have updated new capital build forecasts and refurbishment in the Do Minimum option which takes account of circa £130m of backlog maintenance as well as a capital build over a significant timeline.

Residual Value Calculations

6.3.11 An estimate of the value of new build assets has been included to discount costs over 36 and 66 years. Due to time limitations it has not been possible to model retained estate residual values or equipment lifecycle replacement residual values. Land residual values have also been calculated adjusted for additions and estimated disposals.

Transition Costs

6.3.12 Non-recurring, project and dual running forecasts have been modelled. Also, where revenue forecasts are different to the LTFM position the differences are reflected in this section to allow them to be identified discretely.

Externalities

6.3.13 In each option a headlines review has considered how different the outflow of activity to other providers might be as catchment activity loss might change depending upon the site of the main acute hospital.

6.3.14 Different build timelines affect the timing of activity changes. A delay in realising some changes has been applied to some options. In do nothing the activities have been repatriated to the Trust, rather than other providers.

6.4 Options in More Detail

Option 0: Do Nothing

6.4.1 Although, the Do Nothing option is non-viable in the long-term, it serves as a baseline assessment of the costs needing to be incurred. It demonstrates the forecast costs for which no additional quantitative benefits will accrue. All subsequent options costs and benefits are assessed against this outcome. The core assumptions for Do Nothing are:

- Revenue costs are based upon 2013/2014 costs as presented within the Trust's LTFM and then adjusted to reflect differences for this option.
- The Trust has a major backlog maintenance need which would need to be addressed as well as a refurbishment across a long timeline at circa £15m additional investment per annum.
- Small capital investments are included within the Capital Programme representing schemes which will take place irrespective of option chosen.
- The lifecycle replacement trajectory would bring forward the need for earlier significant additional lifecycle expenditure. Adopting consistent Trust accounting practices would see most of this cost being incurred against capital resources and the remaining adding to the Trust's revenue cost base.
- Equipment replacement is consistent with capital programme routine maintenance investment levels. Priorities will be formed from these stable investment levels.
- The land owned by the Trust, valued at April 2013, is determined as an opportunity cost as, technically, this land may be used for alternative purposes.
- The residue of land the Trust is committed to purchase at Grove Lane is included and then sold later in the timeline.
- Building asset residual values have been calculated for new builds taking new asset values, adding capital additions, deducting depreciation to arrive at a view of the building values at the end of both appraisal periods, years 36 and 66.

Option 1: Do Minimum

6.4.2 This option involves significant refurbishment of both the City Hospital site and the Sandwell Hospital site. The refurbishment would take place over a longer time period as service provision continues on the sites being redeveloped. This would inevitably slow down the delivery of the Right Care Right Here service model as hospital facilities would not be in place to enable the full service delivery.

6.4.3 Services would be delivered by splitting emergency care and elective inpatient care between City and Sandwell Hospital sites. Once the full model of care is operational, activity volumes undertaken will be consistent with the Grove Lane option.

6.4.4 This would create a three year delay in the roll out of the full service model with full delivery not occurring until 2021/2022 at the earliest.

6.4.5 The general approach to assessing the cash flows inherent within this option is consistent with the Do Nothing Option. Additional characteristics specific to Do Minimum are detailed below:

- The Do Minimum option considers to what extent the approach would change the costs identified under Grove Lane. A full list of these annual changes is included within ***Appendix 6b***. and includes for example:
  - Additional bed capacity on the Sandwell site to allow for peaks in demand;
  - Additional critical care beds, one per site, are required; and
  - Additional tiers of medical staffing cover are required to enable safe practice.

- Additional Soft FM needs have been included recognising the two site strategy.
- Refurbishment costs of both sites are significant and cover an extended timeline.
- New capital expenditure and associated revised lifecycle estimates have been considered and included within the modelling.
- New residual building values will be derived through alternative refurbishment costs and revised lifecycle estimates.
- A small element of land within the City site will be sold as well as the Grove Lane site.

6.4.6 The Do Minimum option delivers the service model but in a dysfunctional manner with annual revenue costs being significantly greater.

Option 2: New Build on the City Hospital Site

6.4.7 The characteristics of this option are similar to Grove lane although capital forecast costs are higher and build time would be 2-3 years longer.

6.4.8 This would mean the Trust is unable to realise efficiencies from a single acute site and will have to:

- Incur additional on call and 24/7 medical staff cover;
- Lose soft FM savings;
- Keep greater bed coverage for longer; and
- Land sales would apply to Grove Lane and part of the Sandwell site.

Option 3: New Build on the Sandwell Hospital Site

6.4.9 This option is similar to Option 2 in outline. However, capital costs are greater and timelines are one year longer. Decanting costs are greater due to the complexity inherent with the build as Sandwell is a very confined site.

Option 4: New Build on the Grove Lane Site

6.4.10 The details of this option are presented in Chapter 7, which outlines how the Midland Metropolitan Hospital will be supported by community facilities developed on retained estate. The characteristics of this option are:

- The purchase of land by Compulsory Purchase Order to build the Midland Metropolitan Hospital;
- A new build discounted capital expenditure consistent with GEM principles;
- Limited refurbishment of retained hospital estate;
- New medical and IT equipment required in preparation for the new acute hospital;
- Lifecycle costs are charged 30% to capital and 70% to revenue;
- Detailed revenue cost modelling has been included in the economic modelling;
- Transition costs have been included recognising that one off costs will be incurred as the option gets closer to fruition and dual running costs are forecast as Grove Lane becomes operational;
- Consideration has been given to activities, currently being provided by the Trust, which will, under future service models, be delivered by third parties e.g. GPs; and

- Significant disposal of land occurs when large parts of City and Sandwell sites are sold.

6.5 Risk Assessment

6.5.1 An exercise has been undertaken to update the risk assessment underpinning the economic appraisal. The risks identified in the OBC approved by the DH in August 2009 were re-examined for this appraisal. This included:

- An updated assessment of cost drivers;
- A review of the likelihood of events occurring; and
- An assessment of a revised timeline of occurrence.

Risks Associated with Delay

6.5.2 Options 1, 2 and 3 are associated with two to three year delay in service model delivery depending on the option. This is because of revisions that will be required to reconfiguration plans already consulted on and implemented. These were consulted upon in the context of being interim changes until the opening of a single site new acute hospital.

6.5.3 The plans for emergency surgery reconfiguration were approved by the Secretary of State following referral to the Independent Reconfiguration Panel. This approval included a recommendation that the NHS West Midlands Strategic Health Authority, Heart of Birmingham and Sandwell Primary Care Trusts and Sandwell and West Birmingham Hospitals NHS Trust should ensure that plans for future healthcare provision, including buildings, are delivered as rapidly as possible.

6.5.4 This is a conservative estimate for delay considering the complexity of the changes required to the model and the strength of local support for the Grove Lane solution. It will involve the following detailed work:

- For the Do Minimum there is a requirement to develop new reconfiguration plans to achieve a clinically effective ‘hot’ and ‘cold’ site model.
- For new build on the City / Sandwell sites there will be a requirement to seek new planning consents.
- For all options there will be a requirement to repeat a consultation process that previously strongly supported the Grove Lane solution, with the potential for public concern.
- There will be a requirement to resolve issues and concerns caused by not following the plans put forward to support the compulsory purchase order which was approved following an unopposed inquiry indicating public support for the Grove Lane solution.
- There will be a requirement to develop new delivery plans and business cases to initiate the new solutions.

6.5.5 These delays would have an inevitable impact upon capital costs. It would also create local concerns about the sustainability of services. This risk is shown in the following tables as NHS Consultation.

Table 51 and Table 52 below present a summary of the risk analysis.

Table 51: EAC of Risk Retained Under Each Option

	Option 0	Option 1	Option 2	Option 3	Option 4
Risk Category	**EAC £000**	**EAC £000**	**EAC £000**	**EAC £000**	**EAC £000**
NHS Consultation	717.7	1,152.5	1,225.4	534.7	350.4
Scale of Facilities	0.0	0.0	0.0	0.0	0.0
Planning Costs	81.2	158.7	175.6	121.7	0.0
Acquisition Costs	0.0	0.0	0.0	(16.4)	0.0
Site Development Costs	2.3	36.0	20.8	102.2	124.7
Sale Valuations	2.5	15.3	15.5	19.3	0.2
Land Holding	0.0	0.0	0.0	6.0	6.0
Project termination	0.0	0.0	0.0	3.9	0.0
Judicial Review	58.4	79.2	99.1	65.7	0.0
Total	**862.1**	**1,441.6**	**1,536.4**	**837.1**	**481.3**

Table 52: NPC of Risk Retained Under Each Option

	Option 0	Option 1	Option 2	Option 3	Option 4
Risk Category	**EAC £000**	**EAC £000**	**EAC £000**	**EAC £000**	**EAC £000**
NHS Consultation	19,411.9	31,172.0	33,143.6	14,462.1	9,476.8
Scale of Facilities	0.0	0.0	0.0	0.0	0.0
Planning Costs	2,195.4	4,291.5	4,749.6	3,291.8	0.0
Acquisition Costs	0.0	0.0	0.0	(443.0)	0.0
Site Development Costs	62.0	974.8	562.0	2,764.0	3,372.0
Sale Valuations	68.6	412.9	419.7	521.8	5.1
Land Holding	0.0	0.0	0.0	163.0	163.0
Project termination	0.0	0.0	0.0	105.0	0.0
Judicial Review	1,578.6	2,141.0	2,681.6	1,776.2	0.0
Total	**23,316.5**	**38,992.3**	**41,556.5**	**22,640.9**	**13,016.9**

6.6 Benefit Scores

Non-Financial Benefit Scores

6.6.1 As outlined in Section 6.2 the non-financial benefits have been updated. The table below shows the raw scoring by option by criteria as well as the two sets of weights assigned to each criterion.

Table 53: Raw Scores and Range of Weights

Criteria Covered	Weight %	Option 0 Do Nothing	Option 1a Do Minimum SGH Hot / CH Cold	Option 1b Do Minimum CH Hot / SGH Cold	Option 2 Build / Refurb. City	Option 3 Build / Refurb. SGH	Option 4 New Build Grove Lane
Better Access	15%	55	55	60	60	55	70
Clinical quality	17-19%	35	45	45	85	80	90
Environmental quality	13-8%	30	45	40	85	80	90
Development of existing services	8-9%	65	70	70	90	90	90
Strategic fit, incl. regeneration	8-10%	25	30	30	70	70	90
National, Regional and local policy	7-6%	50	60	60	90	90	90
Training, Teaching and Research	12-7%	60	60	60	80	80	80
Effective use of resources	14-15%	70	70	70	90	90	90
Ease of delivery	7-11%	20	20	25	40	15	70
Total	15%	410	455	460	690	650	760

6.6.2 The table below shows the average weighted scoring by option by criteria.

Table 54: Average Weighted Scores

Criteria Covered	Option 0 Do Nothing	Option 1a Do Minimum SGH Hot / CH Cold	Option 1b Do Minimum CH Hot / SGH Cold	Option 2 Build / Refurb City	Option 3 Build / Refurb SGH	Option 4 New Build Grove Lane
Better Access	8.2	8.2	8.9	8.9	8.2	10.4
Clinical quality	6.2	7.9	7.9	15.0	14.1	15.8
Environmental quality	3.6	4.7	4.2	8.9	8.3	9.4
Development existing services	5.7	6.2	6.2	7.9	7.9	7.9
Strategic fit, incl. regeneration	2.3	2.8	2.8	6.5	6.5	8.3
National, Regional, local policy	3.1	3.7	3.7	5.5	5.5	5.5
Training, Teaching, Research	5.7	5.7	5.7	7.6	7.6	7.6
Effective use of resources	10.1	10.1	10.1	13.0	13.0	13.0
Ease of delivery	2.7	1.8	2.2	3.6	1.3	6.2
Total	**47.62**	**51.05**	**51.71**	**76.87**	**72.51**	**84.28**

6.6.3 The resultant outcome clearly demonstrates the significant variance between the Do Nothing, Do Minimum and Grove Lane solutions and reflects the view that investment in the Grove Lane option will generate significantly higher non-financial benefits.

6.6.4 The benefit point scores are critical to the choice of the preferred option as they affect the ranking and relative by benefit point option scores significantly.

6.6.5 Table 55 below shows the ranking and the percentage difference between the options, showing Grove Lane option as the highest in terms of qualitative score.

Table 55: Results Based on Average Weighted Scores

	Option 0 Do Nothing	Option 1a Do Minimum SGH Hot / CH Cold	Option 1b Do Minimum CH Hot / SGH Cold	Option 2 Build / Refurb City	Option 3 Build / Refurb SGH	Option 4 New Build Grove Lane
Average Score	47.62	51.05	51.71	76.87	72.51	84.28
Rank Order	5	5	4	2	3	1
Difference	-44%	-39%	-39%	-9%	-14%	0%

6.6.6 As discussed in section 6.2, there were a few criteria where the team felt the performance of the options against some of the criteria had changed but not materially. However, for completeness, a sensitivity analysis was undertaken which:

- For access: reduced the score for the Grove Lane option from 70 to 68;
- For environmental quality: reduced the score for the 3 new build options by 2 points each;
- For effective use of resources: reduced the score for all 3 new build options by 2 points each.

6.6.7 The table below shows the ranking and the percentage difference between the options as a result of this sensitivity, showing no material change to the score and no change to the ranking or the percentage difference between the scores.

Table 56: Non-Financial Appraisal Sensitivity Analysis

	Option 1a Do Minimum SGH Hot / CH Cold	Option 1b Do Minimum CH Hot / SGH Cold	Option 2 Build / Refurb City	Option 3 Build / Refurb SGH	Option 4 New Build Grove Lane
Average Score	51.05	51.71	76.37	72.01	83.48
Rank Order	5	4	2	3	1
Difference	-39%	-38%	-9%	-14%	0%

6.6.8 A further stress test is to consider how much the Grove Lane scores would need to reduce in order for the next best solution which is the refurbishment and new build on the City site. Each score on the Grove Lane option would need to be reduced by 10% in order for the preferred option to switch to the City site (1% difference in average score).

6.7 Resultant Impact on Ranking

6.7.1 Once the Non-financial benefit scores are considered against the economic results a revised ranking is generated. The EAC by Benefit Point clearly changes the ranking demonstrating the Grove Lane solution to be the preferred option. The margin of preference is significant, with Grove Lane achieving a 68.5% lower EAC by Benefit Point compared with the next best option: Do minimum.

6.7.2 Taking the economic GEM results the table below demonstrates the relative economic position and relative ranking.

Table 57: Economic Cost of Options (Including Impact of Risk)

Economic Impact Appraisal period 66 years All Options	Option Do Nothing £m	Option 1 Do Minimum £m	Option 2 City Site £m	Option 3 Sandwell Site £m	Option 4 Grove Lane £m
NPC	16,315.4	16,747.6	16,608.7	16,638.0	16,479.1
EAC	599.1	614.8	611.5	613.0	607.2
EAC Variance	+0.0	+15.7	+12.4	+13.9	+8.1
Rank	1	5	3	4	2

6.7.3 The table demonstrates Do Nothing as the preferred option, with Grove Lane second.

6.7.4 The next table considers the impact of the qualitative benefit scores on the option ranking over 66 years.

Table 58: Combined Economic and Non-Financial Scores (Over 66 Years)

Economic Impact Appraisal period 66 years All Options	Option Do Nothing	Option 1 Do Minimum	Option 2 City Site	Option 3 Sandwell Site	Option 4 Grove Lane
EAC (£000)	599,081.7	614,812.6	611,470.9	612,962.3	607,221.2
Benefit Point	47.6	51.0	76.9	72.5	84.3
EAC per Benefit Point (£000)	12,581.10	12,044.52	7,954.31	8,453.71	7,204.79
Rank	5	4	2	3	1
Margin (%)	74.6%	67.2%	10.4%	17.3%	0.0%

6.7.5 The table below considers the impact of the qualitative benefit scores on the option ranking over 36 years.

Table 59: Combined Economic and Non-Financial Scores (Over 36 Years)

Economic Impact Appraisal period 36 years All Options	Option Do Nothing	Option 1 Do Minimum	Option 2 City Site	Option 3 Sandwell Site	Option 4 Grove Lane
EAC (£000)	532,386	545,388	543,444	544,612	539,577
Benefit Point	47.6	51.0	76.9	72.5	84.3
EAC per Benefit Point (£000)	11,180.5	10,684.5	7,069.4	7,511.1	6,402.2
Rank	5	4	2	3	1

Economic Impact Appraisal period 36 years All Options	Option Do Nothing	Option 1 Do Minimum	Option 2 City Site	Option 3 Sandwell Site	Option 4 Grove Lane
Margin (%)	74.6%	66.9%	10.4%	17.3%	0.0%

6.7.6 Both results show Grove Lane to be the preferred option by a margin of circa 10% compared with Option 2, City site development.

6.8 Quantification of Health Benefits

6.8.1 The next step demonstrates that sufficient health and regeneration benefits are delivered to offset the additional net present costs incurred compared with either a Do Nothing or D Minimum.

6.8.2 In 2011 the Trust undertook an exercise to quantify selected non-financial external health benefits for each of the Do Nothing, Do Minimum and Grove Lane options. In February 2014, the Trust convened a workshop to review this analysis.

Approach

6.8.3 The 2011 workshops were held to identify which of the benefits identified in the Benefits Realisation Plan had already been quantified and included within the revenue cash flows in the economic appraisal. It was agreed that these would be excluded to avoid 'double count' of benefits. The excluded benefits are primarily those resulting in internal efficiencies such as reduction in length of stay, reduced capacity etc.

6.8.4 For the remaining health benefits a method of quantification was identified focusing on the benefit to the individuals and the wider economy rather than to the Trust. The exception to this was the reduced level of Did Not Attend (DNA) rates which had not previously been included in the affordability model.

6.8.5 A number of meetings and discussions were then held with the Trust's Medical Director, senior clinicians and the Directors of Public Health to confirm the measures, the level of benefit anticipated between the options and to identify potential sources of evidence. In looking at the level of benefits anticipated the Trust's ability to contribute to the RCRH Programme outcomes was also considered. This is because of the strong interdependencies between the wider RCRH Programme and the project.

6.8.6 The detailed work on quantifying the health benefits is presented at ***Appendix 6c.*** The outcome of the work on the economic analysis is presented below.

External Health Benefit Outcomes

6.8.7 The outcome of this analysis is contained in the table below and which shows a NPC of the benefits from the Grove Lane investment amounts to £796m whereas the Do Minimum shows £325m with the Do Nothing being zero, given zero investment.

Table 60: Summary of External Health Benefit Quantification

External Benefit Considered	Do Nothing		Do Minimum		Option 2: City Option 3: Sandwell Option 4: Grove Lane	
	NPC £000s	EAC £000s	NPC £000s	EAC £000s	NPC £000s	EAC £000s
Transport related services	0	0	-7,793	-288	65,285	2,414
Reduction in mortality rate	0	0	-	-	-100,296	-3,708
Reduction in discharges to nursing homes	0	0	-52,515	-1,942	-122,411	-4,526
Reduction in DNA costs	0	0	-31,946	-1,181	-103,262	3,818
Increased day case rates	0	0	-140,821	-5,206	-164,126	6,068
Public health benefits: Stroke	0	0	-92,023	-3,402	-368,623	13,629
Increased public health benefits: reduced levels of heart disease	0	0	-35	-1	-122	5
Total External Health Benefits	**-**	**-**	**325,133**	**12,021**	**793,555**	**29,339**

6.9 Quantification of Regeneration Benefits

6.9.1 The position is strengthened further if the impact of regeneration benefits is incorporated into the case.

6.9.2 Regeneration benefits were also presented in the Benefits Realisation Plan. Understanding of the impact of these benefits to the local community has been developed further and can be summarised as follows:

- The direct and indirect creation of additional jobs within an area of higher than average unemployment.
- The re-skilling of a portion of the local labour force.
- Increased economic activity in the local construction industry and support services.
- The project enables developers to generate enhanced property rental values that would otherwise have been unachievable in this area. Hence re-enabling an active local property market to meet pent up demand for quality building stock.
- A decreased level of unemployment in the local economy due to the attraction of inwards investment by companies that would otherwise have located elsewhere.
- The project enables developers to generate enhanced property rental values that would otherwise have been unachievable in this area. Hence ensuring the supply of suitable modern buildings to the area.
- A decreased level of unemployment in the local economy due to the attraction of inwards investment by companies that would otherwise have located elsewhere.
- Post construction benefits profiled to 20% in Construction +1 to rising 20% p.a. until 100% of benefit is realised in Construction + 5 years.
- The opportunity cost of investment in regenerative terms.

6.9.3 This work was first undertaken for the OBC approved in August 2009. The analysis has been updated for assumptions about land sales, accepted economic norms and impact on the wider Smethwick regeneration plans.

6.9.4 Detailed analysis is available separately.

6.10 Impact of Incorporating the External Health and Regeneration Benefits

6.10.1 Table 61 draws the external health and regeneration benefits together and extends the economic option appraisal to determine the options with the greatest Net Present Value (NPV). This shows the option which generates the best economic outcome when comparing all costs and benefits identified.

6.10.2 The table below reflects this outcome and clearly demonstrates the NPV of the Grove Lane option is the preferred outcome against a do nothing baseline.

6.10.3 Grove Lane has a net benefit of £1,116m.

Table 61: Impact of Incorporating External Health and Regeneration Benefits

External Benefit Considered	Do Nothing		Do Minimum		Option 2		Option 3		Option 4: Grove Lane	
	NPC £000s	EAC £000s	NPC £000s	EAC £000s	NPC £000s	EAC £000s	NPC £000s	NPC £000s	NPC £000s	NPC £000s
Appraisal Outcome	16,316,745	599,130	16,750,199	614,909	16,613,532	611,650	16,642,457	613,129	16,482,198	607,335
Variance to Do Nothing	-	-	433,453	15,778	296,786	12,520	325,712	13,998	165,453	8,204
External Health Benefit Quantification	0	0	-325,133	-12,021	-793,555	-29,339	-793,555	-29,339	-793,555	-29,339
Health Benefits Compared to Additional Costs	0	0	108,320	3,758	-496,768	-16,820	-467,843	-15,341	-628,102	-21,135
Ranking on NPV Position	**5**		**4**		**2**		**3**		**1**	
Consideration of Regeneration Benefit Impact	0	0	14,060	520	10,756	398	325	12	-488,347	-18,055
Net Cost and All Benefits Position	0	0	122,381	4,277	-486,012	-16,422	-467,518	-15,329	-1,116,449	-39,190

NPV Position Between then Preferred Option and the Second Choice

6.10.4 Drawing these options together it can be concluded that the Option 4 NPV is circa 1% favourable to the Option 2 NPV. This is strengthened to 4% of NPV once Regeneration Benefits are taken into account.

6.11 Conclusions of the Economic Case

6.11.1 This review and refresh of the economic case reconfirms the original conclusion that option 4: Grove Lane is the appropriate preferred option.

7 The Proposed Solution: The Midland Metropolitan Hospital

7.1 Overview

7.1.1 The case for change has been made for a new single site acute hospital to replace City and Sandwell Hospitals. The Option Appraisal in Chapter 7 concluded that development of the hospital on the Grove Lane site will provide the best value for money.

7.1.2 The proposed solution is therefore based on this option. This chapter presents proposals for the development of a new acute facility, to be called the Midland Metropolitan Hospital, which will be built on the Grove Lane site.

7.1.3 The following elements of the proposed solution are outlined in this chapter:

- The MMH service solution;
- The physical or estates solution;
- Design standards;
- Regeneration and urban renewal;
- The facilities management solution;
- The IM&T strategy; and
- The equipment strategy.

The approach to equality impact assessment of the proposed solution is outlined, including the approach to on-going review at key stages of the project.

7.2 The MMH Service Solution

Capacity Modelling and Clinical Engagement

7.2.1 The activity and capacity model, informed by high levels of clinical engagement, forms the basis for an understanding of the clinical facilities required. Chapter 5 outlines the capacity requirements for the MMH.

7.2.2 The service model is underpinned by a set of detailed operational policies covering all of the departments in the MMH. These have informed the development of Planning Policy and Design Descriptions (PPDDs) which specify departmental requirements in the new hospital.Each of the PPDDs and operational policies has an identified clinical lead who has worked with clinical colleagues and operational staff in developing the documents. This work has been co-ordinated throughout the process via clinical leadership groups including the current Clinical Leadership Executive.

7.2.3 The Architectural Design Review (ADR), undertaken with clinicians during autumn 2013 provided the opportunity for update to the clinical brief for the MMH prior to commencing the procurement phase of the project.

7.2.4 The Trust's Medical Director has confirmed clinician support for the OBC for the MMH development. (The letter is presented at ***Appendix 7a***).

Other Factors Influencing Development of the Service Solution

7.2.5 The following key issues were also considered when developing the Operational Policies and PPDDs:

- Adjacencies between departments to facilitate patient flows;
- Separating flows of public and ambulatory patients, inpatients and goods from the point of entering the hospital until at least the entrance into departments;
- Ease of access for patients;
- Future flexibility in use of space;
- Responding to national, regional and local policy;
- Improving efficiency of service provision;
- Dealing with major incidents and business continuity; and
- Provision of the facilities and support required to develop the more specialist services (that have a regional or national profile) provided by the Trust in a way that integrates them with other services within the hospital but also retains their specialist identity.

The Functional Make-up of the MMH

7.2.6 The functional make up and operations of MMH can be divided into the following areas, each of which are summarised below:

- Emergency and Urgent Care;
- Admitted Patient Care – Specialist Services;
- Admitted Patient Care – Generic Adult Inpatients;
- Outpatients;
- Diagnostics;
- Clinical Support Services; and
- Non-clinical Support Services.

Emergency and Urgent Care

7.2.7 Circa 30% of patients requiring urgent care will be able to attend one of the community-based urgent care services or be managed in primary care through an out-of-hours service. A further 17% of emergency attendances will be for ophthalmic conditions which will take place in the Eye Emergency Department at BMEC. As a result a smaller percentage of emergency attendances will take place in the Emergency Department (ED) within MMH. These patients will typically have injuries and conditions requiring the level of specialist assessment, diagnosis and treatment that will only be available in an acute setting.

7.2.8 Most patients attending the ED will be assessed, diagnosed, treated and discharged from the ED by the team of clinical staff based within the Department. To facilitate this there will be some dedicated Imaging facilities and near patient testing within the Department.

7.2.9 A significant number of patients will require further assessment by specialty teams and / or admission. The flow for adult patients will primarily be from the ED to the adult Acute Assessment Unit which will be located immediately adjacent (vertical or horizontal) to the ED. For children and young adolescents the flow will be from the dedicated children's area in the ED to the Paediatric Assessment Unit which is part of the Children's Inpatient Unit.

Admitted Patient Care – Specialist Services

7.2.10 A number of specialist services are required to support the patient pathway for admitted care including the adult Acute Assessment Unit (AAU), Critical Care, Interventional Cardiology, Coronary Care, Operating Theatres, Children's inpatient services, Delivery Suite and Neonatal services. In many cases patients will need interventions and care in more than one of these services and so easy, quick access between services is central to rapid assessment and diagnosis or on-going treatment. These services will be operational or at least accessible 24 hours a day.

7.2.11 The adult AAU will comprise of a Surgical Assessment Unit and a Medical Assessment Unit (with ambulatory, assessment and monitored bed zones).

7.2.12 The Delivery Suite and Neonatal Unit will be co-located and adjacent to the antenatal clinic with ground floor access. The Delivery Suite will have a low risk, midwifery led birth centre collocated with a high risk consultant led area including 2 dedicated operating theatres, high dependency beds and a dedicated bereavement suite.

7.2.13 The Children's Inpatient Unit will include a Paediatric Assessment Unit (PAU), day case area and adolescent area as well as inpatient Paediatric beds including high dependency care. The Unit will be located away from adult inpatient facilities and will be adjacent to the Children's Outpatient Department.

Admitted Patient Care – Generic Adult Inpatients

7.2.14 Adult inpatients (apart from those requiring care in one of the specialist areas above) will be accommodated in generic inpatient beds. The majority of emergency admissions will be admitted to these beds via the adult AAU (with 96 assessment spaces) and the majority of elective surgical inpatients will be admitted following surgery via the Operating Theatre Department (which includes the central admissions area).

7.2.15 An important element of the new service model is a reduced length of stay facilitated by new pathways which include a streamlined admissions process, early initial diagnosis, assessment and treatment. These will be supported by early senior medical assessment and decision making with 24/7 on site consultant presence in key specialties.

7.2.16 In the MMH there will be 384 generic adult inpatient beds. These will be accommodated in 12 wards each with 32 beds. The wards will be based on a generic design and primarily located in clusters of 3 in order to facilitate future flexibility in use. In addition there will be 64 maternity beds located across 2 wards (in a generic ward design with a co-located Antenatal Day Assessment Unit).

7.2.17 The generic wards will have 50% single rooms with en-suite bathrooms and the remaining 50% of beds will be in bays of 4 (each bay having a dedicated bathroom). This arrangement will improve patient privacy and dignity, facilitate infection control and offer patient choice between a single room and a bay of 4 beds in line with feedback from public engagement work.

Outpatients

7.2.18 The majority of outpatient attendances will be provided outside the MMH in the Trust's community facilities and will be delivered by a mixture of secondary care specialists, community staff and primary care professionals. This includes specialist Ophthalmology attendances which will continue to be provided at BMEC. The aim will be to provide rapid access with a one stop approach, and where required, follow up in the community or primary care. Many staff will work in multiple locations across

the MMH, the Trust's Community Facilities and other community locations including primary care and patient's homes.

7.2.19 Within the MMH the main outpatient services delivered will be in the Antenatal Clinic (for high risk women and consultant care) and the Children's outpatient department.

7.2.20 There will also be a Medical Day Case Unit in MMH for the provision of day cases that need to be delivered on an acute hospital site with the full clinical back up this offers. Examples include biologic infusions, Sickle Cell and Thalassemia treatments.

Diagnostics

7.2.21 Diagnostic services are key to the rapid assessment, diagnosis and treatment of patients in all specialities and settings and so need to form part of the patient pathway at the right time and in the right place. Where possible a one stop approach will be developed.

7.2.22 Diagnostic services, as far as possible, will be provided in the Trust's Community Facilities as well as in the MMH. The Trust will be a provider for many of the community based services. The exceptions to this service model will be where specialist equipment and technology is required but with insufficient demand to justify duplicating this in multiple locations or where there is only a small team of staff with specialist skills (for example: Bronchoscopy and Nuclear Medicine will be based in the MMH and Breast Surgery services in the BTC).

7.2.23 The Trust's main pathology service will continue to be based in STC with an 'essential laboratory' (including Blood Bank) in the MMH to support emergency and urgent inpatient care.

Clinical Support Services

7.2.24 The majority of clinical support services will be located in the Community Facilities as most patients access these on an ambulatory basis. They will provide an in-reach service to inpatients in the MMH (where appropriate this will include some bespoke accommodation). There will however be some clinical support services with their main base in the MMH because their service has a significant contribution to inpatient pathways. These include Pharmacy and Cardiac Diagnostics. These services will provide an outreach service to the Community Facilities. The main mortuary will continue to be located in STC (adjacent to the main pathology department) with a body store located in the MMH to support emergency and inpatient care.

Non Clinical Support Services

There are a range of non-clinical services within the MMH. Some of these closely support clinical services and are therefore located adjacent to the relevant clinical service in hubs or admin zones. Others do not so directly support clinical services and are located further away from clinical areas e.g. receipts and distribution centre.

Research and Education

7.2.25 Research and education are important to the Trust's future success and the wider health economy. We have a good track record for delivery of research and education and they play a significant part in attracting the best staff, with consequent impact on quality of care and reputation as well as attracting related income. The main base for these departments will be at STC. However, high quality facilities for the elements that relate to inpatient care will provided in the MMH. These facilities will be developed in a way that gives a clear identity to research and education.

7.2.26 When the MMH opens, the Trust expects to provide most of the essential research and education facilities in retained estate with small satellites for essential services in the MMH.

7.2.27 As a separate initiative the Trust will explore the delivery of a separately funded and procured education and research building on the MMH site.

7.3 The Physical Solution

7.3.1 The MMH is central to delivery of the Estates Strategy agreed by Trust Board in September 2013. This section summarises the proposed design solution for the acute hospital facility.

7.3.2 The Estates Annex and appendices provided comprehensive detail of the proposed solution for the scheme at the DH approval in August 2009. This document has not been updated for revisions to the PSC. However, Schedule 8 of the Project Agreement and associated appendices provide detailed description of the PSC and technical specification of the preferred solution.

The Site

7.3.3 Chapter 6 outlines how the Grove Lane site was selected. Subsequent to the selection process the site boundary was developed through an iterative process reconciling land take costs, buildability, access and master planning issues.

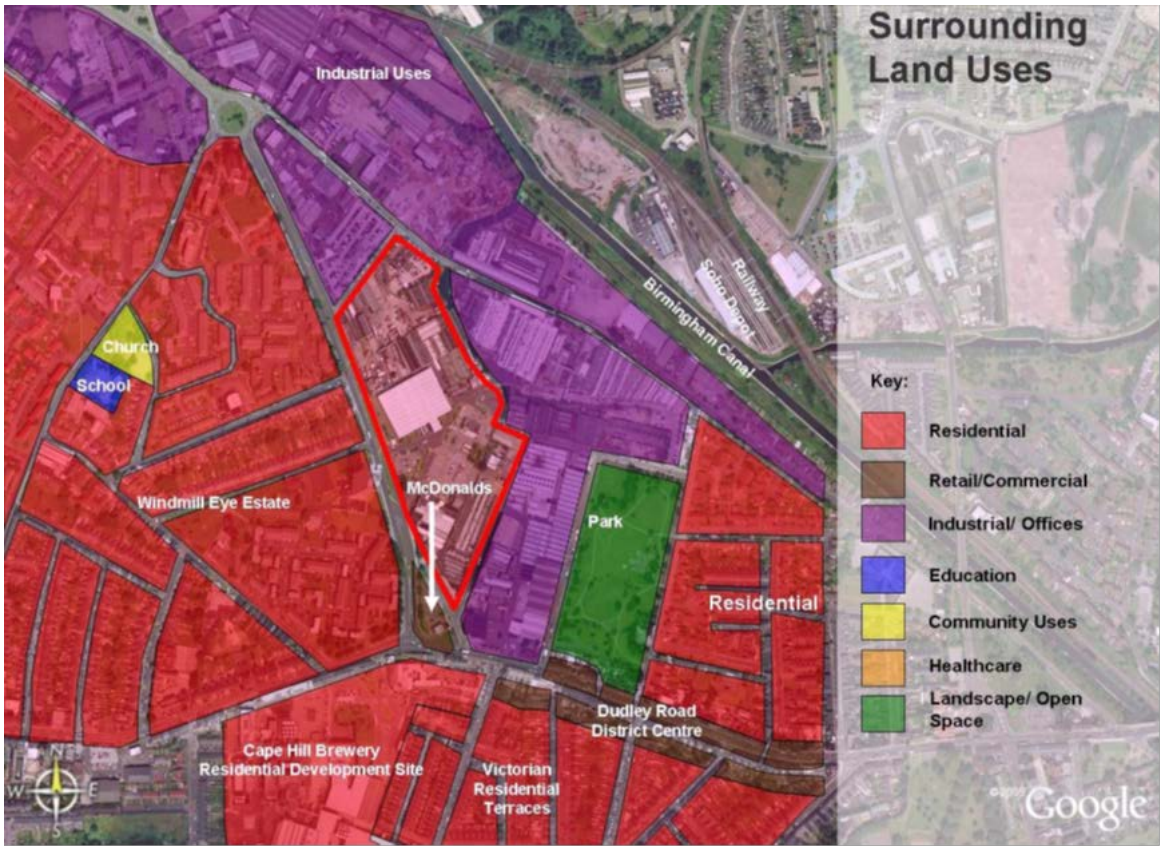
7.3.4 The site identified at Grove Lane for the MMH comprises of an area of 6.76Ha bounded by the Grove Lane dual carriageway to the west, London Street to the north, Cranford Street to the north east, Cape Arm canal to the east, Grove Street to east and old Grove Lane to the south west.

7.3.5 The Grove Lane site falls within the Smethwick Area Action Plan (AAP). The AAP will contribute to SMBC's Local Development Framework (LDF), which provides the spatial planning strategy for the area. The Estates Annex provides detail of the process, which led to an independent examination of the AAP held in June 2008. The AAP was adopted in December 2008.

7.3.6 The AAP identifies the Grove Lane site for employment use to accommodate new health and ancillary uses for the Trust. The details of the Grove Lane site are identified in the 'Grove Lane site Analysis' in the Estates Annex Appendices.

7.3.7 The site selected can therefore be developed as a stand-alone development in the context of local regeneration which will be continuing in parallel across the AAP. A map showing the location of the Grove Lane site and surrounding land uses is presented in Figure 15 . Comprehensive plans and maps are presented in the Estates Annex.

Figure 15: Grove Lane Site



7.3.8 Through this approach the new hospital will act as the catalyst for the regeneration of the wider Grove Lane area and will provide local people with improved access to new acute hospital services, as well as providing them with employment opportunities. The remainder of the AAP is likely to be developed as a mixed use scheme including residential.

7.3.9 The site when identified had multiple owners, none of whom were NHS bodies. It was clear that the Trust needed to establish a clear route to acquisition to enable the development to progress.

Land Acquisition

7.3.10 To ensure that the new acute hospital was procured in line with the Trust's development programme, it was agreed to pursue the approval of a Land Acquisition Business Case in advance of the main OBC for the hospital. A Land Acquisition Business Case was developed to make the case for affordability of the land, and the new hospital, as well as outlining the case for land assembly via a Compulsory Purchase Order (CPO), should this be necessary.

7.3.11 The Trust required that an approved Land Acquisition Business Case as well as outline planning permission (including the expiry of the 3 month judicial review) would be in place to facilitate voluntary land acquisition. The Land Business Case was approved in November 2008 (This document forms an annex for the OBC).

7.3.12 Subsequent to this approval it was determined that an OBC for the new acute hospital would need to be approved by the DH prior to the Secretary of State (SoS) approval to initiate the CPO process.

Following approval of the OBC in August 2009 the Trust initiated the application for use of its CPO powers in September 2009.

7.3.13 The CPO process went very smoothly with few objections, which were withdrawn by the time of the CPO Inquiry in June 2010. The SoS confirmed that the CPO could be made in January 2011.

7.3.14 In the meantime the Trust continued with voluntary land acquisitions in line with Estatecode. Approximately 30% of the Grove Lane site, at a cost of £5.7m, had been purchased by September 2010.

7.3.15 The CPO was exercised in three General Vesting Declarations (GVDs). GVD1 was made on 5th July 2011 and GVD2 was made on 31st May 2012. GVD1 and GVD2 together gave the Trust title to the site on which the MMH will be built. GVD3 was made in January 2014 to allow the Trust to acquire a strip of land giving access from Heath Street. This has facilitated the demolition process.

7.3.16 The Trust continued to negotiate vacant possession during 2013 and the last occupant left the site on 6th January 2014. There will be on-going negotiations to complete the compensation payments but the overall cost of the land including demolitions is in line with the projections made in the Land Business Case.

Preparation of the Site

7.3.17 The site will need to be prepared prior to handover to the PF2 partner. This will involve the demolition of existing structures to ground floor slab level, following above ground remediation, including asbestos removal. Demolition has begun on that part of the site where the structures are unsafe. Demolition of the remainder of the site is expected to commence in April 2014 and to take five months.

7.3.18 This will leave a clear site such that the surveys required under PF2 can be completed and warranted and contamination risk can be passed to the private sector as proposed under PF2.

7.3.19 Retained Estate

7.3.20 The Estates Strategy has been updated to show the approach to developing the community facility model described in Chapter 5. Development will be managed through the capital programme. A programme of capital investment has been planned pending further detailed work as presented at ***Appendix 7b***.

7.3.21 It will still be possible to release the remaining land / buildings for primary care use if required. The land not being used for health purposes will be released for investment in regeneration projects. This is part of the comprehensive regeneration strategy described in below.

Planning

7.3.22 A wide range of survey information and analysis for the Grove Lane site has informed the Trust's design development. The Estates Annex presents the surveys and reports undertaken.

7.3.23 There has been extensive engagement with planning officers from SMBC, the wider public, Trust employees, landowners to be affected by the proposals and local MPs/Councillors through the Public Consultation events.

7.3.24 On completion of the Public Consultation an outline planning application complete with Design and Access Statement was submitted to SMBC on the 4th April 2008. This outline planning application was for the redevelopment of the Grove Lane site to provide a new acute hospital (Use Class C2) and

supporting education, research and administration centre (Use Class B1 (a) and (b), together with a gym (D2), crèche (D1) and car parking.

7.3.25 SMBC granted outline planning approval on 29th October 2008. The conditions attached to outline planning are contained within the Estates Annex and are fully reflected in the Public Sector Comparator design and capital costs.

7.3.26 The original outline planning approval was valid for six years from the date it was granted. To ensure that it remained valid through the procurement programme, the Trust undertook a renewal process and the outline planning approval was renewed on 19th June 2013 and remains valid for six years from that date.

The Public Sector Comparator (PSC)

7.3.27 The PSC expresses the design vision and objectives and establishes the required quality and practical achievement of the proposed solution.

7.3.28 It has been developed in line with the Design Brief Framework for PFI Public Sector Comparators at OBC Stage, October 2004, Department of Health. The output of this work is illustrated in detail within the Estates Annex and the Trust's PSC.

7.3.29 The PSC has a schedule of accommodation totalling 79,828 m^2.

7.3.30 The functional content of the MMH has been established through extensive engagement to determine the following:

- The Design Vision;
- The Design Brief; and
- The Design Solution.

Design Vision

7.3.31 Section 5 outlines how the Design Vision has been captured through the facilitation of the Design Vision Group chaired by the Design Champion.

Design Brief

7.3.32 The Design Brief has been captured through the development of Planning Policies and Design Descriptions (PPDDs) for each activity within the new acute hospital. The PPDDs have been developed through extensive engagement with clinical and operational leads. A key output of the PPDD engagement is the endorsement of clinical and operational adjacencies. This product has enabled the development of the massing of the new acute hospital which is outlined level by level in the 1:500 design drawings.

7.3.33 The PPDDs have further enabled the Trust to determine the PSC design at a micro level in the development of the generic rooms that in turn shape the design at a departmental level. Generic room designs are presented in the Functional Brief.

7.3.34 The PPDD documents and PSC outputs will form the basis of the Trust's Design Specification within the Invitation to Participate in a Competitive Dialogue (ITPD) documents.

Design Solution

7.3.35 The Design Solution was captured in line with Appendix 2 of the DH publication 'The Design Brief Framework for PFI Public Sector Comparators at OBC Stage'.

7.3.36 Key features of the design solution are as follows:

- A significant percentage of the total solution uses generic design, for example standard rooms, standard ward layouts, standard theatre layout etc. This approach ensures flexibility for future use;
- Natural topography maximised;
- 32 bed wards arranged in clusters of 3 (96 beds);
- Support hubs arranged to feed ward clusters and clinical areas;
- Separation of patient, visitor and goods flows; and
- Clinical adjacencies maximised.

The Development Control Plan (DCP)

7.3.37 The DCP was developed to respond to the Trust design brief and the 6.76Ha site at Grove Lane. The DCP illustrates the following features:

- A new seven storey acute hospital building developed to accommodate the required clinical accommodation based on the activity and capacity model;
- 2 towers separated by a central atrium;
- Separation of primary access points, therefore separating patient, visitor, staff and goods flows;
- Use of the natural topography of the land;
- Integration with the existing environment; and
- Visitor car parking below the building and a new multi storey car park to the north.

7.3.38 The DCP has been analysed for feasibility of construction and site works. The works will be undertaken in a single phase, with sub phases for different site features.

7.3.39 The key PSC products can be seen in the Appendices to the Estates Annex.

Sensitivity Analysis and Expansion / Reduction Strategy

7.3.40 Sensitivity analysis has been undertaken for the activity and capacity model. This work has informed the Trust's Expansion / Reduction Strategy.

7.3.41 ### Expansion Strategy

7.3.42 The most recent Architectural Design Review (ADR) has identified expansion space within the MMH sufficient for up to an additional 96 adult generic beds (using the generic ward template). In addition some additional bed capacity could be created though further improved productivity in length of stay and / or additional bed days provided in intermediate care or contacts in the community (as an appropriate alternative to admission or step down from acute care). The generic ward design within MMH will enable easy change in use of ward between specialties.

7.3.43 In relation to specialist areas:

- **Critical Care:** within the ADR there is soft expansion space that could be used for additional critical care bed capacity possibly through a central Level 1/ step down area.
- **Neonatal Unit:** if additional capacity was required the first option would be transfer of cases within the Neonatal Network (as is current practice). There would also be the option to use the 4 transitional care rooms as single cot nurseries either on a temporary or permanent basis.
- **Children's Inpatient Unit:** there is flexibility in capacity between inpatient beds, the Paediatric Assessment Unit and day case area (all co-located on the unit).
- **Delivery Suite:** there is flexibility in capacity within Delivery Suite between high risk delivery rooms, the birthing centres and the bereavement rooms (as is current practice).

7.3.44 In relation to Operating Theatres:

- **For emergency cases**: the capacity already exists within the emergency theatres planned for MMH as demand for these was rounded up to ensure adequate 24/7 capacity and hence there is a lower utilisation rate.
- **For elective cases**: there is some flexibility within the planned capacity as there was a rounding up rather than down of number of theatres compared to the number indicated by the modelling work (to allow flexibility for longer lists as complexity of surgery increases e.g. in Gynaecology Oncology and to ensure the required range of specialist theatres). Additional capacity of 49 elective sessions per week can be created by introducing routine three session days Monday-Friday and two sessions on a Saturday.

7.3.45 The ADR allows for some soft expansion space within the MMH between the Operating Theatre Department and Critical Care Unit that could be used to create additional capacity in either department including support accommodation such as recovery spaces for additional theatre lists.

7.3.46 In relation to outpatient clinics

- Additional capacity for antenatal clinics and paediatric clinics can be created through planning routine weekend sessions (3 additional sessions per room per week in each department).
- The remaining outpatient activity is planned to be provided in Community Facilities. If however, there was a change in service model resulting in the need to provide additional adult outpatient clinics in the MMH some of the expansion space could be converted to outpatient rooms rather than beds.

7.3.47 In relation to other areas:

- Most Imaging modalities and Endoscopy (apart from Nuclear Physics and Bronchoscopy) are also provided in the Community Facilities (BTC and STC) and so additional capacity for these can be created by transferring any routine work from MMH to these sites and increasing their capacity by use of 3 routine sessions per day Monday to Friday and up to 4 routine sessions at the weekend. Within MMH there is also the option of increasing from a 16 session routine working week up to 22 sessions (3 session days on Saturday and Sunday).
- Within Interventional Cardiology and Bronchoscopy (only delivered in MMH) there is the option of increasing capacity from a 16 session routine working week up to 22 sessions (3 session days on Saturday and Sunday).

- If further temporary capacity is required there is the option of commissioning mobile or temporary facilities and locating these in the planned temporary facility docking station on the ground floor of MMH adjacent to the facilities area.

7.3.48 Within the future Community Facilities the following expansion capacity is planned:

- Additional theatre sessions from increasing day case theatres from 10 sessions per week to 16 sessions per week.
- Additional outpatient clinics from increasing routine sessions from 16 sessions per week to 19 sessions per week.

Reduction Strategy

7.3.49 If the MMH capacity was too great the Trust could use its estate flexibly. In the scenario where clinical space in the acute hospital was surplus, and there really was no clinical function that could be delivered from it, the space could be converted to corporate administration offices to allow relocation of corporate functions from Trust estates allowing a consequent disposal.

7.4 Design Standards

7.4.1 The PSC solution has been designed taking into account appropriate design standards, guidance and review processes.

Consumerism

7.4.2 The Functional Brief specifies Trust requirements and means of implementation in response to the NHS consumerism agenda.

7.4.3 NHS policy and guidance on provision of single rooms has been considered. The Trust has engaged with staff and the local community on the subject of preference for single rooms in the new hospital. A series of focus groups were well attended by a good representation of local stakeholders. The outcome of these events was the local stakeholders would prefer the Trust to offer 50% single rooms and 50% four bedded bays to support choice for admitted patients and their families. This has been illustrated in the development of the 1:200 ward designs.

BREEAM

7.4.4 BREEAM is the Building Research Establishment Environmental Assessment Method for buildings and large scale developments. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe environmental performance of buildings and communities. A BREEAM Assessment was undertaken in November 2008. The PSC achieved a BREEAM score of 78.7% achieving a rating of Excellent.

AEDET / Design Quality Indicators

7.4.5 AEDET previously assisted Trusts in determining and managing their design requirements from initial proposals through to post project evaluation. It formed the key agenda for design reviews, being used as a benchmarking tool, and formed part of the guidance for PFI. Going forward the Trust will adopt the Design Quality Indicator process offered by the Construction Industry Council.

7.4.6 AEDET consisted of an assessment against 10 criteria under the three headings of Build Quality, Functionality and Impact. An AEDET review of the Trust's PSC was carried out on 2nd September

2008 with representatives present from the Trust and their advisors, NHS Strategic Estates Advisors and the Commission for Architecture and the built Environment (CABE).

7.4.7 The PSC was reviewed against the 3 basic sections and 10 assessment criteria with the exception of those areas where the appraisal called for more detail than is developed at PSC stage, e.g. the assessment of the buildings' internal and external finishes. It should be noted however that this detail is presented within the Trust's construction requirements.

7.4.8 The Trust PSC achieved an average AEDET score of 4.6 out of a possible 6. This is a good outcome for this stage of the project.

7.4.9 Going forward the Trust has a structured approach planned to ensure design quality using Design Quality Indicators supported by Construction Industry Council and utilising current technology systems for Building Information Modelling BIM.

Design Review Panel (DRP) and CABE

7.4.10 The NHS Design Review Panel was set up by the DH in 2001 to review major investment proposals throughout their development to assist in improving the quality of the NHS estate.

7.4.11 An initial Design Review Panel (DRP0) was held in May 2007 to review the outline design proposal, highlighting key areas that were targeted for consideration by the Trust.

7.4.12 The second Design Review Panel (DRP1) was held on 13th February 2008, with the PSC design assessed against key areas in line with the NHS Design Review Panel Guidance, December 2007.

7.4.13 The recommendations arising out of these reviews have been reviewed and responded to by the Trust. The Estates Annex outlines the Trusts response to the issues raised.

7.4.14 The fundamentals of the design have not changed since DRP1 and the work required to refresh the PSC has been minimal: a revised 1:500 to reflect the revised clinical adjacencies arising from the re-massing and additional 1:200s produced to provide the Trust with a greater level of buy-in at a departmental level.

7.4.15 The Trust worked closely with the CABE (Commission for Architecture and the Built Environment) enabler and the local authority in the development of the area action plan for Grove Lane site.

7.4.16 From 1999-2011, CABE was the government's advisor on architecture, urban design and public space. It was created to help decision-makers and professionals to create great buildings, places and spaces, and inspire public demand for good design. In April 2011 CABE merged with the Design Council.

Health Building Notes (HBN)

7.4.17 The Estates Annex and appendices reference the approach taken to HBN conformance. This has been developed further in the Invitation to Participate in Dialogue (ITPD) with a schedule of HTM and HBM derogations.

7.4.18 In addition to the above, the PPDDs list specific standards to individual departments and these standards are to be complied with.

Sustainable Development

7.4.19 The Trust is committed to ensuring that the new development is environmentally sustainable to the maximum extent possible without compromising the overall need to deliver an affordable solution. Consideration will be given to up-to-date techniques, materials and policies that promote this approach. The Estates Annex details the Trust approach to this, but the following sections outline some of the measures being developed:

Energy Use of the Facilities

7.4.20 The Trust will raise the profile of operational energy and environmental management in order to improve performance in these areas. As the impact of the new facility will be influenced by both the activities of those operating the building and those occupying the building, it is recognised that the minimisation of such impacts will be as a result of partnerships. An energy use performance target will be set for a maximum of 42GJ/100m^3.

Travel Plans for the New Hospital

7.4.21 The Trust's Travel Plan investigates the potential for providing alternative means of transport to and from the site in order to reduce reliance upon the car and sets actions and targets for the minimisation of pollution and congestion. It is supported by a detailed transport assessment, including staff surveys and makes recommendations on travel to work.

7.4.22 The RCRH Programme has formed a Transport Group which aims to develop effective transport routes to the MMH and other healthcare facilities. The Trust will liaise with local public transport providers and the local authority to ensure good accessibility from all town and community centres in the catchment area.

Water Use of the Facilities

7.4.23 Water consumption will be minimised as much as possible given that clinical risks and requirements are to be a clear priority.

Materials Used in Construction

7.4.24 The Trust aims to use materials and construction techniques that are classified as "A rated" in the "Green Guide to Specification". Use of recycled 'aggregate' materials (crushed masonry for example) for use in foundations and under road surfaces is also to be incorporated where possible and where such materials can be found within a sensible distance for transport.

Land Use and Ecology

7.4.25 Whilst the Trust recognises that the current use of the proposed site is urban / industrial the Trust aims that the site should be developed to benefit the people, environment and ecology in the locality.

Pollution

7.4.26 The development will limit the emission of carbon dioxide through the significant use of low / zero carbon energy technologies (LZC). LZC should deliver no less than a 30% reduction of carbon dioxide emissions. Operational pollution will be reduced through the application of good practice design of the site, buildings and services. [pending update from Schedule 8 part 3]

Operational Waste Management

7.4.27 The MMH will support minimisation of waste and maximal recycling. Dedicated facilities will be incorporated for storage and collection of recyclable material in conjunction with adequate segregation.

7.5 Regeneration and Urban Renewal

7.5.1 The development of a new hospital in this area would have substantial regenerative and health benefits which are mutually supportive. It represents a big step forward in the achievement of the Council's policy objectives set out in the Smethwick AAP to regenerate the Grove Lane area of Smethwick.

7.5.2 A detailed report on the many regeneration opportunities provided by the MMH can be provided if required (this report provides part of the proof of evidence for the CPO public Inquiry). A number of the significant social, economic and environmental regeneration benefits of the scheme are outlined below:

7.5.3 The health and social benefits are that:

- The MMH will provide improved delivery of acute health services in Sandwell and West Birmingham;
- The RCRH programme has established links with the Learning and Skills Council, colleges and local partnerships to develop initiatives to train local people for health employment;
- The flagship building will become the civic heart of the area and a point of pride for the community;
- The MMH will act as a catalyst for new, mixed use regeneration helping to inspire new confidence in the area and major new public and private investment; and
- The regeneration potential of the City Hospital site will be maximised as a 'gateway' link to Jewellery Quarter.

7.5.4 The economic, regeneration and skills benefits are summarised below:

- Working with partners across the borough, the Project Team will consider the inclusion of a Community Benefit Conditions Clause in accordance with best practice that maintains value for money during procurement (this provides an understanding and commitment from all parties to ensure that local people will be given equal opportunities of training and employment).
- To optimise the employment and training benefits arising from significant investment that will take place in the program.
- Temporary jobs will be created in the demolition and remediation of the site, and in the subsequent construction of the MMH with estimated impact of circa 500 full time construction jobs.
- The hospital will directly employ skilled and unskilled people who will be relocated from the existing sites thus creating a concentration of health professionals within the Grove Lane area of Smethwick.
- New health activity in the area is likely to demand locally produced goods and services which will result in indirect jobs. Using a conservative multiplier it is anticipated that the new hospital could generate in the region of 220 jobs indirectly and 440 induced jobs.

- A new hospital will add an additional dimension to the mixed use development proposed on these sites. It will provide a catalyst for new types of economic activity associated with hospital research and services.
- The hospital may attract related economic activities and need for key worker housing.
- The development of a new acute hospital at Grove Lane will release land at City and Sandwell Hospitals for comprehensive regeneration to provide major new investment opportunities.

7.5.5 The environmental benefits are summarised below:

- The hospital will be one of Sandwell's most significant development projects and will help to transform a largely derelict and run down part of the Borough.
- The MMH makes efficient use of land opening up a run down private industrial area for public use.
- The majority of existing buildings are not appropriate for modern industrial use, and a large part of the site is derelict with a low density of employment. A new hospital will regenerate the site and bring it back into productive use.
- The MMH will be set within a landscaped context and will provide a high quality building of design that will dramatically improve the visual appearance of the area.
- The position of the MMH next to the canal will enable public access to this part of the waterways network, which was previously inaccessible.
- The site will be permeable and accessible whilst ensuring security for staff, visitors and patients.
- The proposals include a substantial area of public realm, which will be available to staff, visitors and patients.
- A key regenerative benefit will be the comprehensive remediation of a large area, rather than piecemeal remediation of individual sites.
- Public transport access to the site will be catered for with dedicated bus and taxi drop-off facilities located directly adjacent to the main entrance.

Trust Activities to Support Regeneration

7.5.6 Since the OBC approval in August 2009 the Trust has actively worked with partners to maximise the regeneration benefits of the MMH, which will act as a catalyst for development in the area. The following activities have taken place:

- The Trust has participated in a workshop on the vision for regeneration for the RCRH Programme. A vision group has since formed and continues to coordinate work with the two councils and other stakeholders to ensure joined up approaches to regeneration.
- The Trust ran an event for regeneration group professionals, the councils and other interested parties to develop plans for ensuring that the impact of the new hospital will be to realise real benefits for local communities. This event was led by the Chair of the Trust and resulted in the development of an action plan. Work has already begun in response to the plan and there is a high level of commitment for joint working in the future.
- Members of the team have presented at and participated in activities for the residential led neighbourhood regeneration of the Windmill Eye estate, which is adjacent to the Grove Lane site.
- Members of the team are involved in the Western Growth Corridor regeneration programme.

7.5.7 The Trust is working with 'Find it in Sandwell' and 'Find it in Birmingham' on innovative new ways of ensuring that the new hospital will provide opportunities for local businesses before, during and after the construction phase of the project. This involves the linking of the new acute hospital website to the 'Find it' sites to lead local companies expressing an interest in the scheme to the 'Find it' web pages. They can then register on the sites and access training to help them prepare their business for the new opportunities. The website will then provide a resource for the PF2 bidders (and eventually Project Co) to identify highly capable local companies to provide products and services for the scheme.

7.5.8 Working with the 'Find it' initiative the Trust plans to run a supply chain engagement event to ensure that local companies continue to be involved and to provide opportunities for them to link with architects and potential PF2 partner organisations.

7.5.9 The Regeneration Action Plan is presented at ***Appendix 7c***.

7.5.10 The RCRH Partnership Board has now agreed a vision for regeneration and the Vision Group has completed a detailed mapping exercise of regeneration initiatives, over the next 20 years

7.5.11 Corporate Citizen Checklist

7.5.12 A Good Corporate Citizen Checklist has been completed which makes reference to how the project will support sustainable development and tackle health inequalities. This self-assessment tool addresses:

- Transport;
- Procurement;
- Facilities Management;
- Employment and Skills;
- Community Engagement;
- New buildings.

7.5.13 The results of the self-assessment and action plan are available upon request.

Specification and Evaluation of Regeneration Objectives

7.5.14 The Trust will develop a brief statement of requirements in the bid deliverables, which will ensure that PF2 bidders actively work to generate opportunities for:

- Local employment and apprenticeships;
- Work for local companies in the PFI supply chain for provision of products and / or services; and
- Other benefits for the local community.

In turn the Trust will work with local partners to ensure that local companies and colleges are able to respond to demand when products, services and workforce are required.

7.6 The Facilities Management (FM) Solution

In House Soft FM Services

7.6.1 The Trust's preferred solution for Soft FM is in accordance with PF2. Management of services will stay within the hospital where there are strong interdependencies with clinical services for example:

- Domestic/ ward services;
- Patient catering;
- Portering;
- Postal services and Receipt and Distribution services (due to the close operational links and shared capacity with Portering); and
- Security (and therefore also car parking due to synergies between the two services).

7.6.2 Pest control may be managed outside the PFI contract as an Elective Service (see Section 11 for this new category that has been developed for PF2).

7.6.3 The PSC Design Brief addresses the operational requirements of these services.

Outsourced Soft FM Services

7.6.4 The Trust may outsource the following services that do not have strong interdependencies with clinical services however it will not do so through the PF2 contract:

- Retail Catering; and
- Linen and Laundry Services (the Trust will continue to out sources this service).

Hard FM

7.6.5 The Trust's preferred solution for Hard FM is that it will be provided by the PF2 partner to maintain the estate and ensure lifecycle for the duration of the contract. The scope of this provision is detailed in Section 11.

7.7 The Information Management and Technology (IM&T) Solution

7.7.1 This section presents the Trust's IM&T requirements for the MMH including the connections to the Trust's community facilities.

7.7.2 The Informatics Strategy (presented at ***Appendix 7d***) sets out a five-year framework for transforming IM&T capability and capacity in the Trust. It aims to show how information and new technologies can be used to achieve high quality and safe patient care. It also outlines how IM&T will support the delivery of integrated care.

The Strategic Vision

7.7.3 The Vision for Health Informatics is presented below:

- The Trust will embark on incremental transformation, replacing priority system first. By adopting this approach the Trust recognise that there will be a requirement to replace systems during the migration to the integrated solution in order to maintain patient services.

- The Trust will consolidate and integrate clinical and non-clinical systems to support the delivery of safe patient care and support the Trust meeting both clinical and strategic business objectives.
- The Trust will build on existing investment to achieve a connected and integrated electronic patient record which will operate in a paperlite environment.
- The Trust will develop an incremental improvement plan that will result in the development of an integrated solution for the Trust. The Trust will not embark up a “rip and replace” system replacement approach.
- Our procurements and deployments will be clinically led to ensure that the technology deployed enables service transformation.
- The Trust will maintain the existing level of functionality within core systems. It should be noted that a number of core systems will reach their contract expiry date in 2013 and will need to be re-procured; the Trust will procure those systems in line with the overarching principles.
- Certain core systems are not considered fit for purpose, these will be replaced in line with the core principles.
- The Trust will endeavour to reduce the number of standalone departmental systems and focus on the integration and/or replacement for these systems via the EPR solution.

7.7.4 The Trust recognises that some specialist departmental systems will be retained and these have been identified as part of this of strategy. Given the evolving nature of service and systems this will continue to be reviewed.

The Current Situation:

The EPR: Progress to date

7.7.5 Historically, delivery of the Trust’s IM&T Strategy was based upon the deployment of the NHS Connecting for Health (CfH) national application and associated health systems.

7.7.6 The Trust’s electronic patient record (EPR) is currently comprised of the CSC iPM PAS solution with iCM providing clinical functionality. Various departments have stand-alone systems installed as part of CfH which currently contribute to the EPR e.g. Radiology, Maternity and Theatres.

7.7.7 The Trust has also developed the Clinical Data Archive (CDA) which is a repository of clinical reports, letters and clinical results. The EPR has been closely integrated with other key systems, such as Radiology, Pathology and the clinical letter system. This has been crucial to supporting improved working practices and greater efficiencies.

7.7.8 As a result of the Trust’s alignment with national policy, the change in central funding and the expiry of a number of core systems the Trust is now in a position to refresh and agree its own strategic direction which meets patient, clinical and business needs.

7.7.9 Whilst this provides a number of opportunities, it also requires Trust commitment to invest in new systems and developments over the next five years. The funding for this investment is shown in the LTFM supporting this OBC. IM&T is acknowledged to be a major enabler for the successful transition to the services to be delivered from the MMH.

Paper Records

7.7.10 The Trust currently maintains paper health records through the Medical Records service. Circa 100 staff are involved in the distribution and collection of these documents. On-site medical records

libraries on both sites currently store patient records which are transferred to Iron Mountain when they have been inactive for more than 2 years.

7.7.11 There are approximately 2 million case notes in the Trust with the majority held off-site. Although medical records are barcoded and tracked, in some cases records become displaced for a period of time and are therefore not available for clinical colleagues. Much of the information held on paper is duplicated on many of the clinical systems or on shared network drives across the organisation.

7.7.12 The Trust also stores a significant volume of research documentation both on site and at Iron Mountain. Paper records are also stored by corporate services including the Executive, HR, Training and Estates departments. These departments are gradually moving to paperlite systems but there is some way to go before paper can be replaced by electronic systems.

7.7.13 The impact of this is that the Trust continues to manage data security risks, problems arising through loss of documents and storage problems pending full transition to a paperlite operating model.

The Strategic Plan

Migration to a Full EPR

7.7.14 The Trust plans to build upon existing systems to deliver the enhanced capability required of the full EPR within capital and revenue targets.

7.7.15 The Trust's strategy is to continue to consolidate the clinical systems into a single Electronic Patient Record (EPR) solution to enable better integrated care records and reduce the complexity of managing multiple systems and interfaces. The Trust will invest in new technologies and system capabilities that complement this approach.

7.7.16 Once such a solution is fully deployed it is anticipated that it would be the primary clinical platform for the next 10 – 15 years and would enable the Trust to drive workflow and pathway redesign across departments and the wider healthcare community.

7.7.17 The Informatics Strategy (presented at ***Appendix 7d***) provides a 'roadmap' to a fully integrated EPR model prior to the opening of the MMH in 2019.

Migration to a Paperlite Operating Model

7.7.18 The scanning and indexing of selected paper based records (new and historic) will enable immediate retrieval of those electronic records at the point of need. Robust indexing of records will ensure that they are securely linked to a patient where applicable and full audit capabilities are available to ensure that data security breaches and errors are mitigated.

7.7.19 A document management solution that combines data held electronically across multiple systems supplemented by an electronic view of paper based records will provide significant benefits. By maintaining a mixed economy of paper and electronic documentation the need for paper records is reduced over time, which will provide savings for the Trust and support the migration to a paperlite operating model by the time the MMH opens.

Impact of the Strategy on the Design of the MMH

7.7.20 Significant progress to a paperlite operating model is assumed for the MMH health records. The approach to this is described in the MMH operational policy for Medical Records. Minimal space for holding medical records has been planned into the scheme.

7.7.21 The Trust has already made significant progress in the transition to agile working to improve the efficiency of the office working process and maximise the utilisation of current estate. Migration to this way of working will continue until the MMH opens. The impact of this will be the transfer to voice over IP (VOIP) and the development of agile desktop functionality.

7.7.22 There will be a requirement to support connectivity between the MMH and the Trust's community facilities.

7.7.23 The infrastructure to be developed by Project Co will need to have sufficient capacity to support incremental growth of functionality and implementation of new technology over time.

Trust Requirements Specified in the PF2 Contract

7.7.24 The management of IM&T services and systems has a very different risk profile to the rest of the services being considered in delivering a PF2 Project. The future requirements and systems of the Trust are extremely difficult to forecast for the duration of a PF2 Contract (around 30 years) and therefore impossible to price on any realistic basis. Given this, the only aspect of IT services proposed to be included within the PF2 Contract is the network infrastructure within the facilities including the relevant connections to the external environment.

7.7.25 Project Co will work with the Trust to design the network infrastructure. The design will enable the provision of one fully converged IP network and will support delivery of the Trust's Informatics Strategy. This network will support the Trust's information systems as well as the Building Management Services (BMS) for Project Co. This will allow otherwise discrete systems to operate as an integrated whole, this benefit outweighs the risk of the Trust managing the network used for Project Co systems.

7.7.26 Project Co will be responsible for the supply, installation, and lifecycle of the network infrastructure. In addition, a short term hardware maintenance service will also be provided as an elective service.

7.7.27 The Trust will be responsible for the procurement, installation, maintenance and lifecycle of the hardware / equipment needed to enable voice and data transmission across the network infrastructure.

Internal Fixed Cable Networking

7.7.28 The configuration of network cabling and components will depend on the design of the building; however certain minimum requirements would need to be met as follows:

- Core network components will be dual connected to provide alternate routing;
- Physical network cabling to operational areas should be provided from more than one location so that, in the event of failure of one network location, an entire operational area is not impacted; and
- Networks should have sufficient bandwidth and resilience to support images, VoIP, data and wireless mobile technologies and communications.

Wireless Network

7.7.29 Full wireless access to the single integrated network has been specified in the IM&T Specification. Arrangements for testing the wireless network after commissioning have been specified in Schedule 8 of the Project Agreement to ensure that good levels of performance are maintained when the MMH is fully operational.

Incoming Network

- Incoming network services will be provided through diverse routes (primary N3 links etc.) to reduce the risk of duct damage / building work etc. causing complete failure of service.
- Robust high capacity network links will be required to Trust's community facilities from the new MMH site prior to opening. These links will be required to support clinical care between these sites.

Not Included in the Scope of the PF2 Contract

7.7.30 IT software / platforms / systems and other hardware and peripheral requirements, such as PCs and servers will be funded from the Trust's capital programme. These will therefore be excluded from the PFI contract.

7.7.31 The main computer rooms will be located on retained estate at City and Sandwell hospitals. Project Co will not therefore be responsible for the development of a computer room on the MMH site. However, the IM&T specification indicates the requirement for small local computer hub rooms near to key areas and departments.

7.7.32 There has been significant investment within IM&T to ensure that the Trust will have fully integrated systems and this will continue to support year-on-year growth to meet expectations and future requirements.

7.8 Equipment Strategy

7.8.1 The MMH Equipment Working Group, originally formed in June 2007, was set up to ensure the Trust has fully equipped facilities when the MMH is completed. An equipment strategy was developed which detailed the approach to procurement of both medical and non-medical equipment.

7.8.2 Annex B 'NHS Equipment Classifications of 'The Design Development Protocol for PFI Schemes' still makes reference to the traditional equipment classifications, groups 1 to 4.

7.8.3 However, these classifications are not appropriate for the Trust to provide sufficient clarity as to the responsibilities for procurement, installation, commissioning, maintenance and life cycle replacement of equipment.

7.8.4 The Trust's approach has been to define equipment into more detailed classifications to reflect the proposed responsibilities. These classifications are shown in the Equipment Responsibility Matrix (ERM). The ERM, presented in ***Appendix 7e***, outlines the responsibility for the procurement, transfer, fit, maintenance, and lifestyle for each category in the classification matrix.

7.8.5 A very detailed equipment spread sheet has been developed which has been created on a room by room basis in line with the Schedule of Accommodation (SoA) and Planning Policies and Design Descriptions (PPDDs). This identifies all of the equipment requirements for the MMH. The equipment requirements are broken down as follows:

- Equipment suitable and capable of transfer to new facility without further investment;
- Equipment suitable and capable of transfer to new facility but requiring replacement / investment prior to transfer; and
- Equipment that will be required new at the time of moving into new facility.

7.8.6 The ERM will be populated with the equipment requirements identified.

7.9 Equality Impact Assessment (EIA)

7.9.1 An EIA is a careful examination of a proposed policy, project or service to see if it could affect some groups unfavourably.

Trust EIA Framework

7.9.2 The Trust has developed a framework (presented at Appendix ***7f***) to tackle discrimination in a proactive way, ensuring that equality considerations are consistently integrated into day-to-day business through EIA. This ensures legal compliance, but also helps to ensure that Trust services best support the healthcare needs of the local population.

Work Undertaken Prior to OBC approval in August 2009

7.9.3 The Trust initiated an EIA process to ensure that the MMH is delivered without disadvantaging or excluding patients, staff or other stakeholders. At OBC Stage the detail of the project is not completely developed and therefore EIA can only work with factors already known. EIA should therefore be managed as an on-going process throughout the life of the project.

7.9.4 An EIA workshop was undertaken in June 2008 to identify what work was required to ensure that all aspects of equality are considered in developing the proposals and ensure that there is no adverse impact from what is being proposed. Stakeholders from the project, local equality interest groups, local organisations and the public were invited to the workshop to explore the project proposals in relation to the six strands of the equality framework:

- Age;
- Gender;
- Race;
- Disability;
- Sexual Orientation; and
- Religious belief.

7.9.5 Consideration of the needs of the following groups was recommended by the Group:

- Young people in transition from childhood to adulthood;
- People with mental health problems;
- People with learning disabilities;
- Obese service users;
- Deprivation; and
- People with transgender issues.

7.9.6 The workshop undertook an initial screening exercise which identified areas which will require detailed assessments. Recommendations were grouped under the following headings:

- Workforce planning;

- Transport;
- Design;
- Care pathways;
- Security;
- Change in demographics;
- Interpretation / communication services;
- Confidence in the Right Care Right Here model of care; and
- The Design Brief Review.

EIA Full Screening Assessment and Action Plan

7.9.7 A full screening assessment and action planning was then undertaken 2009. The action plan included the following actions and outcomes which are presented in the table below.

Table 62: EIA Action Plan

Action	Outcome
Undertake an equality impact assessment on the Transport Plan	This work is the responsibility of the RCRH Transport Group
The RCRH Programme will run awareness raising campaigns as required on mainstreaming of the Urgent Care Projects	This work transferred to the RCRH programme communications team as the facilities were opened
Complete an equality impact screening assessment of all Operational Policies before sign off	All of the operational policies are supported by EIAs
A process for public and staff involvement in the development of the design for the new hospital will be developed. This will involve a range of equality interest group stakeholders	The Competitive Dialogue process will include opportunities for wider engagement as specified in the ITPD
Develop an approach / policy for management of transitional age patients ensuring that their health and other needs are met	Transitional age patients have been considered in the development of operational policies and PPDDs
Change in age demographics will be modelled into each activity and capacity model update. Ethnicity forecasts will be reviewed at each version to determine changes that might impact on underlying assumptions	Change in demographics are considered in each update to the activity and capacity model
Develop an operational policy to describe how the multi-faith centre will work. This will provide clarity regarding the function of the centre and provide opportunities for engagement with facility users	An operational policy has been developed and applied to current services
Undertake Equality Impact Assessment on regeneration plans as they develop	Regeneration plans have been developed and specified in the ITPD
Equality Impact Assessment on workforce plans and transition plans will be undertaken when this work is available. Maintain good levels of communication as plans are being developed	This has been undertaken through the transformation planning process and will continue through the programme as part of the whole approach.

7.9.8 There was also considerable work undertaken with disabled groups to consider whether needs would be sufficiently met.

Updated Equality Impact Assessment

7.9.9 The work outlined above is now significantly out of date. A screening assessment using the new EIA framework has been undertaken to present an up to date assessment. This document is presented at ***Appendix 7f***

8 The Financial Case

8.1 Introduction

8.1.1 The Financial Case from the OBC approved in August 2009 is presented in ***Appendix 8a*** for information and to show the financial assumptions made at this time. Changes since then include:

- Reduction in the size of the scheme as a result of the Scope Review Process in 2010 and subsequent adjustments;
- Decision to retain and continue to own parts of the City and Sandwell Hospitals estate;
- The change in funding for PF2 including the assumption of Public Dividend Capital (PDC);
- Changes to efficiency assumptions and expectations under Monitor's Compliance Regime; and
- Delivery of a 3 Risk Rating under the "Continuity of Service Risk Rating" metric.

8.1.2 The current financial plan has been prepared recognising the 2013/14 Monitor Compliance Regime. This approach creates the discipline required to achieve successful compliance with Monitor's criteria for well performing, financially viable and sustainable service delivery.

8.1.3 The Trust will seek to ensure a healthy balance sheet is maintained as well as delivery of a cumulative surplus on income and expenditure to allow flexibility in the coming years. Consequently, there is an intention to stabilise annual operational surpluses and to ensure they are cash backed. This approach will assist the Trust in funding the MMH, coping with unforeseen circumstances, enabling a period of consolidation and also providing flexibility as emerging clinical innovation requires. The financial planning parameters also include a tight non PF2 internal capital programme covering MMH equipment and refurbishment of the buildings that will become the Trust's community facilities.

8.1.4 The financial models and assumptions used in support of the LTFM derive much of their input from the RCRH activity trajectories which are integrated with the Trust's operational plans. The Trust plans to maintain its surpluses and develop reserves to support the period of change. By utilising these resources on a non-recurrent basis the Trust will be able to fund any additional costs during the transition. From 2018/19 the costs associated with the MMH and in particular the PFI unitary payment, are included within the model and are funded from within internally generated sources.

8.1.5 The LTFM demonstrates that the MMH is recurrently affordable and that the overall CIP requirement is marginally greater than current Monitor CIP assumptions. The model assumes revised PF2 funding mechanisms along with £100m of PDC support that would need to be agreed through DH and HMT approvals.

8.2 MMH Capital Costs

8.2.1 The estimated capital costs of the proposed solution have been re-assessed by the Trust's capital cost consultants, using a base PUBSEC index of 173 for approval purposes. PUBSEC refers to the tender price index of public sector building contracts in the public sector in Great Britain. It measures the movement of prices and publishes indices on a quarterly basis.

8.2.2 A revised Schedule of Accommodation (SoA) has been developed which has identified a Gross Internal Floor Area (GIFA) of 79,800 m^2.

8.2.3 The updated outturn costs reflect a start on site date of April 2016 with inflation from that point assessed on the basis of movements in the Price Adjustment Formula for Building and Specialist

Engineering Works to PUBSEC index. Practical Completion is scheduled for a handover in August 2018. Table 63 below summarises the key components of the capital cost forecast for MMH taken from the latest OB Form. The OB forms are presented in ***Appendix 8b***.

Table 63: MMH Capital Forecast

	Item	OBC updated 19/12/13 using SoA version 10; 79,828 m^2		
			£	£/m^2
1	Construction costs (works cost)			
a	Main hospital building		187,921,775	**2,354**
b	Multi-storey car park		9,963,735	
2	Sub-total (at PUBSEC 173)		197,835,511	
3	Fees (contractor's proportion)			
a	Design team fees	10.00%	19,788,551	**235**
b	Building regulations and planning fees		part of non-works costs	
4	Sub-total (at PUBSEC 173)		217,674,062	**2,589**
5	Inflation to outturn	15.61%	33,972,252	
6	Subtotal (at PUBSEC 200)		251,646,314	**2,994**
7	Fees (Trust's proportion)	2.50%	4,947,138	
8	Sub-total		256,593,452	
9	Non-works costs		5,370,650	
10	Land costs		0	
11	Equipment costs		3,198,575	
12	Sub-total		265,162,677	
13	Planning / contingency	3.92%	10,403,569	
14	Sub-total		275,566,246	
15	Optimism bias	6.71%	18,481,940	
16	Sub-total		294,048,186	
17	Inflation to outturn (on items 7, 9, 19 and 15)	1.82%	5,335,322	**13.70%**
18	**Total project cost (excluding VAT)**		**299,403,509**	
19	VAT	17.85%	53,446,892	
20	**Total project cost (excluding VAT)**		**352,850,401**	

Capital Charge Implications

8.2.4 Capital charges for the existing estate are forecast to reduce commensurate with the intended disposal of most of the City Hospital site and some of the Sandwell Hospital site. This is compensated by the depreciation charge for MMH reflecting the capital cost of the new hospital and the need to equip the new facilities to appropriate standards. In calculating the capital charges within both the PSC and PF2 options, a judgement of a 15% impairment of the initial MMH capital build cost has been included. This is consistent with Trust past experience in District Valuer (DV) valuations of significant capital builds including the BTC and the Emergency Care Facility at Sandwell Hospital.

8.2.5 Depreciation within the affordability assessment has been calculated based upon an impaired asset value of £249m and PDC interest calculations have been undertaken assuming a publicly funded scheme. Table 64 below analyses forecast depreciation movements by site in 2013/14 and from 2017/18 to 2019/20.

Table 64: Depreciation by Site

Site	Asset Type	2013/14		2017/18	2018/19	2019/20
		£000s		£000s	£000s	£000s
BMEC Sheldon	Buildings	(423)		(465)	(467)	(471)
	Information Technology	(8)		(133)	(167)	(200)
	Plant and Machinery	(23)		(244)	(269)	(319)
	Subtotal	**(454)**		**(842)**	**(903)**	**(989)**
BTC	Buildings	(523)		(622)	(646)	(663)
	Information Technology	(12)		(23)	(23)	(23)
	Plant and Machinery	(4)		(7)	(7)	(7)
	Subtotal	**(538)**		**(651)**	**(675)**	**(692)**
City Hospital	Buildings	(2,679)		(3,077)	(484)	(510)
	Dwellings	(10)		(10)	0	0
	Furniture and Fittings	(148)		(201)	(200)	(199)
	Information Technology	(1,032)		(278)	(13)	(13)
	Intangible Assets	(234)		(6)	0	0
	Plant and Machinery	(4,055)		(2,442)	(1,064)	(1,025)
	Transport and Equipment	(122)		(7)	(7)	(4)
	Subtotal	**(8,280)**		**(6,021)**	**(1,768)**	**(1,751)**
MMH (Grove Lane)	Buildings	0		0	(3,104)	(4,154)
	Information Technology	0		(2,226)	(2,651)	(2,809)
	Plant and Machinery	0		(480)	(797)	(1,032)
	Subtotal	**0**		**(2,706)**	**(6,552)**	**(7,994)**
Rowley Regis	Buildings	(357)		(404)	(391)	(406)
	Information Technology	(7)		(131)	(164)	(197)
	Plant and Machinery	(35)		(7)	(28)	(74)
	Subtotal	**(400)**		**(542)**	**(582)**	**(678)**
Sandwell	Buildings	(2,616)		(3,196)	(1,859)	(1,950)
	Dwellings	(31)		(31)	0	0
	Furniture and Fittings	(6)		(6)	(6)	(6)
	Information Technology	(229)		(399)	(447)	(513)
	Intangible Assets	(31)		(9)	0	0
	Plant and Machinery	(1,196)		(1,405)	(1,154)	(1,239)
	Transport and Equipment	(178)		(125)	(78)	(28)

	Subtotal	**(4,288)**		**(5,173)**	**(3,545)**	**(3,736)**
TOTAL	Buildings	(6,598)		(7,765)	(6,952)	(8,155)
	Dwellings	(40)		(40)	0	0
	Furniture and Fittings	(155)		(208)	(207)	(205)
	Information Technology	(1,288)		(3,190)	(3,464)	(3,754)
	Intangible Assets	(265)		(16)	0	0
	Plant and Machinery	(5,313)		(4,586)	(3,318)	(3,696)
	Transport and Equipment	(300)		(132)	(85)	(31)
	Total	**(13,960)**		**(15,936)**	**(14,025)**	**(15,841)**

8.2.6 Table 65 below shows the change in estate footprint in 2013/14 and 2019/20.

Table 65: Change in Area by Site

Site		**City**	**Sandwell**	**Rowley**	**BMEC /Sheldon**	**BTC incl. Archway**	**Grove Lane MMH**	**Total**
Area (m^2)	**2013/14**	65,727	60,726	8,736	11,761	12,600	0	159,550
	2019/20	1,254	28,000	8,000	11,736	12,600	79,828	141,418
Change in area	**Area (m^2)**	-64,473	-32,726	-736	-25	0	79,828	-18,132
	%	-98%	-54%	-8%	0%	0%	-	-11%

Impairment

8.2.7 The existing fixed asset bases of the City, Sandwell and Rowley sites are reduced via impairment to reflect the change in area. A proportion of this write down is charged to the Trust Revaluation Reserve and the balance forms a charge against expenditure in 2017/2018 (circa £66m).

8.2.8 City and Sandwell site land assets are retained within the ten year assessment timeline but the long term objective will be to sell this land for third party re-development.

8.2.9 The impairment value (presented in Table 66 below) in 2018/2019 reflects the reduction in asset valuation based upon the PF2 scenario. In this case, the construction cost is assessed at a lower value to the PSC as the PF2 contractor is able to reclaim VAT.

8.2.10 In the PSC scenario the outturn scheme cost is circa £352.8m (see Table 63 above and the OB forms in ***Appendix 8b***) and thus the impairment valuation is greater at circa £98.3m, (28% of the adjusted outturn cost).

Table 66: Forecast Impairments by Site

	Site	2017/18 £,000	2018/19 £,000
Impairment Charges to the Expenditure Position	City Hospital	(36,507)	0
	MMH (Grove Lane)	0	(43,977)
	Rowley Regis	(598)	0
	Sandwell	29,179)	0
	TOTAL	**(66,283)**	**(43,977)**
Impairment Charges to the Revaluation Reserve	City Hospital	(7,522)	0
	MMH (Grove Lane)	0	0
	Rowley Regis	(439)	0
	Sandwell	(3,825)	0
	TOTAL	**(11,786)**	**0**

Trust Capital Programme

8.2.11 There are many competing pressures within the Capital Programme. The Trust is seeking to invest beyond traditional funding levels generated by depreciation in most years. This investment requirement is reflected by:

- Substantial retained estate refurbishment;
- Investment in the IM&T strategy (complimented by circa £14 in revenue implementation);
- Completing the acquisition of the Grove Lane site;
- Routine equipping needs;
- Minimising the investment required for statutory standards estate work; and
- Initiating an imaging managed service contract to alleviate pressure on the Capital Programme;

Table 67 below summarises the Trust's Capital Investment Plans across the next ten years.

8.2.12 Under PSC conditions, where the Trust would be wholly responsible to manage any estate risk, a contingency of £5m has been added annually to the PSC programme to reflect contingency against risk events.

Table 67: Capital Investment Plan

Maximum Capital Investment Trajectory	2013/2014 MMH Modelled	2014/2015 MMH Modelled	2015/2016 MMH Modelled	2016/2017 MMH Modelled	2017/2018 MMH Modelled	2018/2019 MMH Modelled	2019/2020 MMH Modelled	2020/2021 MMH Modelled	2021/2022 MMH Modelled	2022/2023 MMH Modelled	Modelled Timeline
Land	2,886	2,015	2,458	1,483	446	0	0	0	0	0	9,288
Capitalised Salaries & Slippage	500	500	500	500	500	500	500	500	500	500	5,000
Statutory Standard	4,370	3,000	3,000	1,600	1,600	550	550	550	550	550	16,320
Strategic Investment	4,280	0	0	0	0	0	0	0	0	0	4,280
Contingency	1,986	1,500	1,400	1,584	750	750	5,000	5,000	5,000	5,625	7,970
Sub Total	**14,022**	**7,015**	**7,358**	**5,167**	**3,296**	**1,800**	**1,050**	**1,050**	**1,050**	**1,050**	**42,858**
Community Estate Refurbishment	-	2,000	3,287	2,087	2,087	2,739	7,877	6,218	-	-	26,295
Site Demolitions	-	780	780	780	1,830	780	-	-	1,050	-	6,000
City Site Demolitions before Sale.	-	-	-	-	-	-	-	-	-	-	-
Sub Total Retained Estate	**-**	**2,780**	**4,067**	**2,867**	**3,917**	**3,519**	**7,877**	**6,218**	**1,050**	**-**	**32,295**
IM&T Investment Routine	1,834	2,000	2,000	2,000	2,000	2,000	1,800	2,000	2,000	2,000	19,634
IM&T-EPR & MMH	0	3,492	5,560	2,020	4,030	640	0	0	0	0	15,742
Sub Total IM&T	**1,834**	**5,492**	**7,560**	**4,020**	**6,030**	**2,640**	**1,800**	**2,000**	**2,000**	**2,000**	**35,376**
Medical Equipment	4,650	3,000	3,000	3,000	3,509	2,931	4,050	4,050	4,050	4,350	36,590
MMH Specifics (Including Imaging)	-	-	-	-	16,000	2,000	-	-	-	-	18,000
Discount for Imaging MES	-	-	-	-	(16,000)	-	-	-	-	-	(16,000)
Sub Total Medical Equipment	**4,650**	**3,000**	**3,000**	**3,000**	**3,509**	**4,931**	**4,050**	**4,050**	**4,050**	**4,350**	**38,590**
Revised Capital Programme Position	**20,506**	**18,287**	**21,985**	**15,054**	**16,752**	**12,890**	**14,777**	**13,318**	**8,150**	**7,400**	**149,119**

The depreciation forecasts, outlined in Section 10.2.5, include the consequences of the Trust's internal Capital Programme.

8.3 Approach to Affordability Modelling

The Affordability Assessment Process

8.3.1 The affordability modelling starts from a refreshed baseline of the Trust's operational forecast outturn for 2013/2014 based upon final service delivery plans and LDP agreements with CCGs.

8.3.2 The process has been developed to dovetail with Monitor's Long-Term Financial Model (LTFM) such that five LTFMs have been developed:

- A version which presents the PSC position with capital funding assumed to come fully through the PDC mechanism; and
- A version that translates the effect of the PF2 process and reflects affordability under PF2 conditions.
- A Downside PF2 Position;
- A Mitigated Downside PF2 Position; and
- A sensitivity demonstrating the impact on affordability if PDC support is not available.

8.3.3 The Trust has a well-developed activity and capacity model which enables granular interpretation of future activity behaviour to create future patterns of activity. From this an assessment of future income streams and capacity requirements is generated.

8.3.4 Cost and workforce models are developed by taking a granular view of the Trust forecast outturn and modelling an assessment of how different areas will change with changes in assumed activity and capacity. Developments and efficiency are then layered on top of this baseline.

8.3.5 The affordability assessment process has included an evaluation of how each currently provided function might change for acute and / or community services. This has been achieved by the application of cost drivers (e.g. activity change, income, space, bed days, theatre minutes, and outpatient minutes), which most accurately forecast the likely long term impact on each function or service. Consideration is also given to the nature of current service costs and how these might vary with changes in service provision.

8.3.6 Specialised costs such as capital charges have been assessed separately to reflect both the impact of the MMH and the costs of developing and operating the community facilities on retained estate.

Factors Influencing Affordability

8.3.7 The key factors influencing the affordability model in relation to acute services are summarised below:

- A&E services reduce in line with RCRH activity predictions and the introduction of Urgent Care Centres within retained estate which relocates significant attendances. The Emergency Departments at City and Sandwell Hospitals have received significant new investment in 2013/2014. This investment will be maintained across the timeline until the two A&E functions merge within MMH. Thereafter economies of scale are modelled to reduce direct costs across medical staffing and nursing areas.

- Critical care services are predicted to remain stable, but with enhanced support for outreach functions.
- Rehabilitation / stroke and intermediate care services are provided in community retained estate based facilities.
- The costs associated with admitted patient care services change in line with activity projections.
- Elective inpatient spells reduce reflecting CCG plans to avoid procedures of limited value and the Trust's targeting of current 2 day length of stay patients as day cases.
- From MMH opening in 2018/2019 most surgical day cases with the exception of ophthalmology cases remain at Sandwell or the BTC and are thus no longer provided within an acute setting.
- Medical day cases are provided from a number of sites rather than all categorised as acute activity.
- Maternity and Paediatrics spells are excluded from the assessment of catchment loss.
- The planned reductions in length of stay reduce the forecast bed requirements within the acute hospital and this is reflected within the cost projections. The Trust has made a significant investment in additional medical beds during 2013/2014 and this investment is forecast to taper down over the next few years as length of stay and improved models of care impact on bed provision.
- A significant reduction in the costs associated with outpatient services as the majority of outpatient activity transfers to retained estate locations (only 15% will remain in an acute setting);
- Diagnostic services are predicted to grow as demand increases and trends move towards an enriched case mix and an increasing range of tests/scans, although significant imaging work will also be undertaken within retained estate facilities.
- Non-clinical support functions are modelled to fit within the new service configuration recognising efficiencies that will be achieved through service integration within one acute hospital site;
- The costs of hard and soft FM services have been individually modelled taking into account the reduction in the overall space requirement for acute hospital services compared to the current position and including an updated assessment of energy and rates costs.
- The Trust is planning a major new investment in IM&T infrastructure and support over the next few years to update PAS systems and move towards a paperlite operating model. This features in both additional revenue costs in operational expenditure and significant provision within the capital programme.

8.3.8 The key factors influencing the affordability model in relation to services provided in the retained estate are:

- The provision of a significant majority of outpatient activity in retained estate facilities;
- The transfer of the majority of surgical day case activity to the community facilities based on the City Hospital and Sandwell Hospital sites;
- Pathology main laboratories and all direct access work undertaken from a retained estate setting;
- Outpatient ophthalmology, dermatology and oral surgery will be fully provided from Sheldon and BMEC locations;
- The provision of Community Services from retained estate and community based locations;
- In-patient facilities for intermediate care are provided by the Trust within Sheldon, Sandwell and Rowley facilities; and

- Fixed estate related costs relevant to the facilities in use.

8.4 Activity & Income

Patient Related Activity & Income

8.4.1 Sandwell and West Birmingham CCG together with the two Birmingham CCGs make up 80% of the Trusts clinical income. Sandwell & West Birmingham CCG is 65%, Birmingham Cross City CCG (11%), Birmingham South & Central CCG (4%), with the balance from other CCGs. This is an important metric in terms of securing strategic alignment and/or support from commissioning bodies. A high level summary of activity by CCG is presented in Table 68 below.

Table 68: High Level Summary of Income and Activity by CCG

	Sandwell & West Birmingham CCG		Bham Cross City CCG		Bham South & Central CCG		All Other CCGs		ALL CCGs Total	
Category	£m		£m		£m		£m		£m	
	13/14	18/19	13/14	18/19	13/14	18/19	13/14	18/19	13/14	18/19
INCOME										
A&E Incl Urgent Care	13.8	15.8	2.6	2.8	1.1	1.1	1.9	2.0	19.4	21.7
Day Cases	18.3	22.3	4.0	4.6	1.3	1.6	5.6	6.7	29.2	35.2
Elective IP	15.2	13.2	3.0	2.4	0.9	0.7	3.4	2.3	22.6	18.7
Elective Sub total	*33.4*	*35.6*	*7.0*	*7.0*	*2.3*	*2.3*	*9.0*	*9.0*	*51.8*	*53.9*
Non Electives	75.9	76.9	10.6	10.6	3.7	3.8	8.6	6.8	98.8	98.1
OCL	35.2	45.7	9.0	11.1	1.8	2.4	42.9	37.6	88.9	96.7
OP First	14.9	13.8	4.0	3.8	1.2	1.2	4.1	3.9	24.2	22.7
OP Follow Up	19.6	14.6	5.2	4.1	1.7	1.4	6.8	5.8	33.3	25.9
OPPROC	3.8	4.4	0.9	1.0	0.3	0.4	0.5	0.6	5.6	6.4
Maternity - Total	13.0	13.8	1.9	2.0	0.5	0.5	0.1	0.1	15.5	16.4
Outpatient Sub total	*51.4*	*46.7*	*12.0*	*10.9*	*3.7*	*3.5*	*11.5*	*10.4*	*78.6*	*71.4*
Community (TCS)	28.6	42.0	1.4	1.6	0.0	0.0	9.0	10.6	39.1	54.2
TOTAL INCOME EXCLUDING MFF	**238.3**	**262.6**	**42.6**	**43.9**	**12.6**	**13.1**	**83.0**	**76.4**	**376.6**	**396.0**
Adjustments to the above										
MFF	7.1	4.5	1.3	0.8	0.4	0.3	1.2	1.7	10.0	7.3
Adjustment for Drugs (re LAT)	3.9	3.9	-	-	-	-	(3.9)	(3.9)	-	-
Developments	2.8	-	0.5	3.0	0.1	0.9	0.9	7.9	4.3	11.7
TOTAL INCOME	**252.1**	**271.1**	**44.3**	**47.7**	**13.2**	**14.2**	**81.2**	**82.1**	**390.9**	**415.0**
Tariff Deflator	-	(14.4)	-	(2.6)	-	(0.8)	-	(1.6)	-	(19.4)
INCOME AFTER TARIFF DEFLATOR	**252.1**	**256.6**	**44.3**	**45.1**	**13.2**	**13.4**	**81.2**	**80.5**	**390.9**	**395.6**
CCG share as a percentage of Total Clinical Income Total for S&WB and Bham CCGs		**65%**		**11%**		**3% 80%**		**20%**		100%
	000's		000's		000's		000's		000's	
Activity										
A&E Incl Urgent Care	151.7	172.4	28.3	29.9	11.4	12.1	21.4	22.6	212.8	237.0
Day Cases	24.9	28.3	5.7	6.2	1.9	2.1	7.7	8.2	40.2	44.8
Elective IP	6.7	5.1	1.4	1.0	0.6	0.4	1.4	1.3	10.1	7.8
Elective Sub total	31.6	33.5	7.1	7.2	2.5	2.5	9.1	9.4	50.3	52.5
Non Electives	47.1	48.0	6.6	6.3	2.4	2.3	4.9	4.6	60.9	61.2
OCL	8.7	9.7	1.8	1.9	0.5	0.6	5.5	5.9	16.5	18.1
OP First	129.7	124.7	35.8	34.8	9.8	9.5	26.9	26.5	202.2	195.5
OP Follow Up	286.9	211.5	69.3	51.2	19.9	16.4	74.8	62.0	450.9	341.0
OPPROC	30.4	33.6	6.1	6.5	2.3	2.4	3.9	4.1	42.7	46.6
Maternity - Total	14.1	14.7	2.1	2.2	0.4	0.4	0.2	0.2	16.8	17.4
Outpatient Sub total	461.1	384.4	113.3	94.6	32.4	28.7	105.8	92.8	712.6	600.6
Community (TCS)	524.5	688.4	21.5	22.7	0.5	0.5	189.4	194.9	735.9	906.4
TOTAL ACTIVITY	**1,224.7**	**1,336.3**	**178.6**	**162.7**	**49.8**	**46.6**	**336.1**	**330.3**	**1,789.1**	**1,875.8**

8.4.2 Activity modelling addresses the following factors:

- Amendments to model results across the future timeline, reflecting latest LDP contract performance (2013/14) compared with historic modelled expectations for this period. In effect, restating the activity baseline and thus any impact across the future nine year period.
- Some growth in activity as a result of increasing demand for the Trust's population, i.e. assumption of increased demand for short stay emergencies and as a result of demographic change.

- An anticipated transfer (loss) of activity (especially outpatient activity) to new primary care-based provider organisations. However a proportion is assumed to be retained by the Trust, but in a community rather than an acute setting.
- A loss of catchment to other local acute providers reflecting the change in location due to transfer to the MMH new hospital.
- The provision by the Trust of a range of services (outpatients, diagnostics, day surgery, urgent care and intermediate care) in settings outside of an acute hospital. Many of these services will be covered by national PBR arrangements (e.g. outpatients, day surgery) and where appropriate national tariff has been used to forecast future income. Others (e.g. intermediate care, urgent care) have been the subject of local discussions and the Trust's base case includes income assumptions agreed with the Trust's main commissioners.
- The development of alternative treatment pathways in community services to avoid hospital bed days and outpatient follow up attendances within the acute setting. This is a service model which is intended to grow over time to avoid work in the acute setting and enable on-going treatment closer to patients' homes. This mirrors national and local commissioning strategies.
- The inclusion of community services integrated within the Trust should lead to long-term investment in this area as an enabling strategy to change/reduce demand on secondary care.
- The inclusion of health economy wide QiPP schemes to reflect commissioning intent, e.g. improving new to review follow up ratios, decommissioning of certain elective procedures and minimising the impact of future emergency admissions by targeting reductions in average length of stay.
- Modest development growth for new service provision. This covers service areas where the Trust is confident, and has received commissioner agreement that resources will be targeted, e.g. Health Visitor growth, Behçet's Centre, Gynae-oncology and Stroke. In addition the Trust will be seeking, with support from its host commissioner, to repatriate some activities currently delivered by alternative providers.

The Picture in 2019/2020

8.4.3 The tables below summarise the activity and income split between MMH and the Trust's community facilities.

8.4.4

Table 69: Activity Split between MMH and Retained Estate

	Activity		
	MMH	**Community Facilities**	**Total**
Outpatients	114,841	491,648	606,489
Electives	22,106	31,188	53,294
Emergencies	59,349	2,171	61,520
A&E	137,402	101,749	239,151
Total	333,698	626,756	960,454

Table 70: Income Split between MMH and Retained Estate (Excluding Community Services)

	Income (£,000s)		
	MMH	Community Facilities	Total
Outpatients	12,735	54,520	67,255
Electives	27,202	22,096	49,298
Emergencies	77,160	14,426	91,586
A&E	12,515	7,231	19,746
OCL	74,526	27,207	101,733
Total	204,137	125,481	329,618

8.4.5 By the first full year of site reconfiguration (2019/2020) the pie charts below demonstrate the proportions of point of delivery (POD) activity and income undertaken in acute and retained estate settings.

Figure 16: MMH Activity and Income

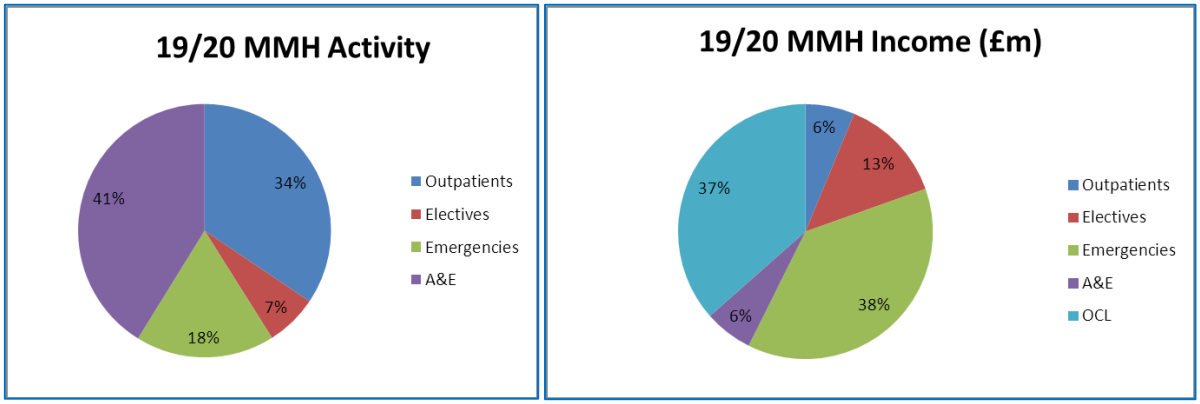
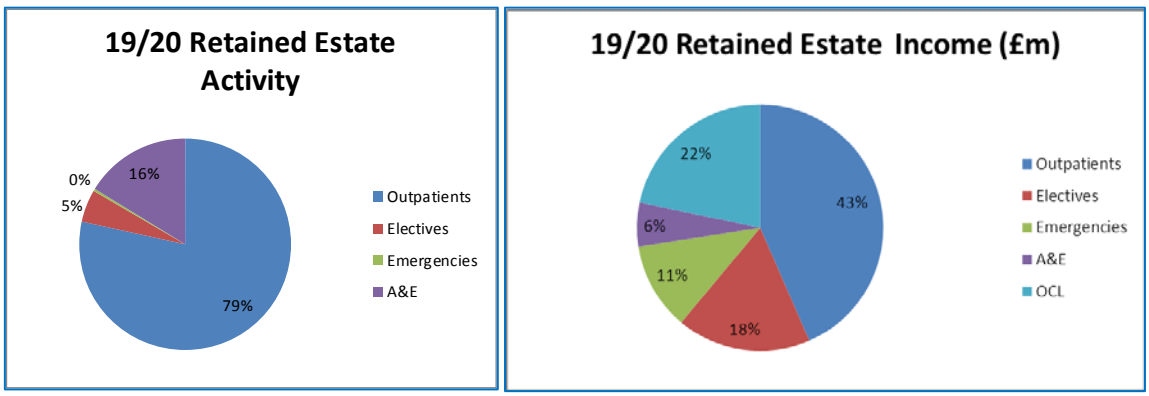


Figure 17: Retained Estate Activity and Income



8.4.6 The total activity and income trajectory expressed at point of delivery level (POD) is outlined in Table 71 below.

Table 71: Total Activity and Income Position

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Baselines (before Developments)	Activities	Activities	Activities	Activities	Activities	Activities	Activities	Activities	Activities	Activities
Elective	50,339	51,094	51,236	51,127	51,720	52,543	53,291	53,908	54,549	55,074
Non elective	60,930	61,115	61,441	62,081	61,763	61,207	61,521	62,523	63,297	63,908
Outpatient	712,634	674,055	629,008	611,996	595,734	600,109	606,038	610,381	614,525	620,528
A&E	212,787	221,276	226,056	231,922	235,454	236,984	239,150	242,351	243,816	246,134
Other clinical - Tariff	-	-	-	-	-	-	-	-	-	-
Service Developments included in above:										
Acute										
Spells		614	1,172	2,007	2,874	3,826	4,249	4,249	4,249	4,249
A&E Attendances		2,323	3,669	5,993	8,316	10,639	11,985	11,985	11,985	11,985
Outpatients		2,796	4,480	7,276	10,073	13,042	14,744	14,744	14,744	14,744
Community	-	30,484	52,740	85,257	116,341	143,585	156,903	157,770	158,449	160,033
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s
Electives	53,804	52,163	50,948	49,631	48,798	48,731	49,298	50,046	50,947	51,714
Non elective	93,886	93,050	93,324	94,043	92,744	91,149	91,586	93,155	94,807	96,236
Outpatient	80,960	76,177	71,581	69,384	67,028	66,619	67,255	68,125	69,042	70,083
A&E	20,087	20,239	20,227	20,274	20,046	19,690	19,746	20,128	20,368	20,676
Community Core Contacts	39,111	40,062	39,727	41,982	44,360	46,880	47,134	45,242	43,327	41,357
Other Contract Lines	103,047	102,578	104,323	101,654	100,132	98,135	101,733	107,944	114,241	120,522
Sub Total	390,895	384,269	380,130	376,969	373,109	371,203	376,752	384,640	392,733	400,588
Service Developments	-	4,888	9,720	14,640	19,523	24,444	29,449	34,200	39,244	42,368
Patient Related Income	**390,895**	**389,157**	**389,850**	**391,609**	**392,632**	**395,647**	**406,200**	**418,840**	**431,977**	**442,956**
MMH Related	950	950	-	-	-	-	-	-	-	-
Cummulative Position	**391,845**	**390,107**	**389,850**	**391,609**	**392,632**	**395,647**	**406,200**	**418,840**	**431,977**	**442,956**
Cat C Income	39,132	39,438	39,323	39,258	39,110	38,512	38,115	38,297	38,530	38,771
Trust Wide Position	**430,977**	**429,545**	**429,173**	**430,866**	**431,741**	**434,160**	**444,316**	**457,137**	**470,507**	**481,727**

8.4.7 Key activity movements by POD have been analysed into categories which summarise the trajectory behaviour into themes including,

- Demography & Growth;
- Cessation Of Services;
- Re-provision Of Services;
- Efficiency;
- Other Adjustments; and

- Tariff Adjustments.

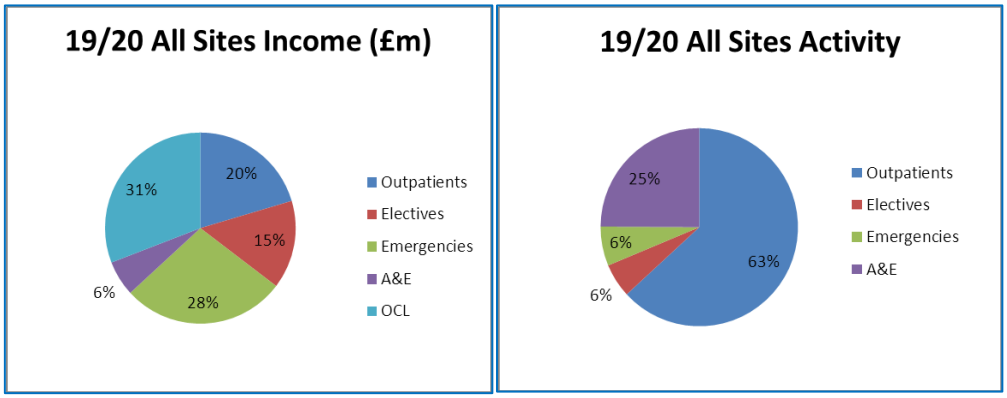
Table 72 below presents these movements by point of delivery to illustrate the annual trajectory changes predicted to occur until 2020/2021.

Table 72: Activity Movements

Activity Movements		2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
		000s	000s	000s	000s	000s	000s	000s
	Baseline	57.3	50.3	51.1	51.2	51.1	51.7	52.5
Elective	Demography & Growth	1.2	1.1	1.1	0.6	0.3	0.5	0.6
	Cessation Of Services	-1.0	-0.9	-0.9	-0.9	-	-	-
	Reprovision Of Services	0.0	-	-	-	0.0	0.0	-0.0
	Efficiency	-1.6	-0.2	-0.1	-0.1	-0.1	-	-
	Other Adjustments	-0.0	0.5	-0.2	-0.2	-0.2	-0.0	-0.0
	Tariff Adjustments	-5.6	-	-	-	-	-	-
	Growth - Sdev	-	0.3	0.3	0.5	0.5	0.3	0.2
	Total	**50.3**	**51.1**	**51.2**	**51.1**	**51.7**	**52.5**	**53.3**
	Baseline	59.3	60.9	61.1	61.4	62.1	61.8	61.2
Non elective	Demography & Growth	0.8	0.9	0.9	1.0	1.0	1.0	1.0
	Cessation Of Services	-0.1	-0.0	-0.0	-0.0	-	-	-
	Reprovision Of Services	1.5	-0.3	-0.2	-0.2	-1.3	-2.1	-1.1
	Efficiency	-0.4	-0.4	-0.5	-0.4	-0.3	-	-
	Other Adjustments	-0.2	-0.3	-0.0	-0.0	-0.0	-0.0	0.1
	Tariff Adjustments	-	-	-	-	-	-	-
	Growth - Sdev	-	0.4	0.2	0.4	0.4	0.6	0.3
	Total	**60.9**	**61.1**	**61.4**	**62.1**	**61.8**	**61.2**	**61.5**
	Baseline	690.6	712.6	674.1	629.1	612.2	596.1	600.6
Outpatient	Demography & Growth	13.1	14.5	14.3	13.9	5.5	4.8	4.9
	Cessation Of Services	-	-	-	-	-	-	-
	Reprovision Of Services	-19.2	-27.2	-29.2	-28.9	-21.4	-2.4	0.0
	Efficiency	-15.1	-27.0	-31.7	-	-	-	-
	Other Adjustments	37.6	-1.8	-0.1	-4.7	-2.9	-0.9	-0.7
	Tariff Adjustments	5.6	-	-	-	-	-	-
	Growth - Sdev	-	2.8	1.7	2.8	2.8	3.0	1.7
	Total	**712.6**	**674.1**	**629.1**	**612.2**	**596.1**	**600.6**	**606.5**
	Baseline	196.3	212.8	221.3	226.1	231.9	235.5	237.0
A&E	Demography & Growth	2.7	3.1	3.4	3.5	3.5	3.9	3.2
	Cessation Of Services	-	-	-	-	-	-	-
	Reprovision Of Services	-	-	-	-	-2.2	-4.3	-2.2
	Efficiency	-	-	-	-	-	-	-
	Other Adjustments	13.9	3.1	0.1	0.1	-0.1	-0.3	-0.2
	Tariff Adjustments	0.0	-	-	-	-	-	-
	Growth - Sdev	-	2.3	1.3	2.3	2.3	2.3	1.3
	Total	**212.8**	**221.3**	**226.1**	**231.9**	**235.5**	**237.0**	**239.1**
	Baseline	**717.2**	**735.9**	**771.0**	**797.9**	**835.6**	**871.8**	**906.4**
Other block or Cost and Volume contract	Demography & Growth	18.8	4.6	4.7	5.1	5.2	7.3	7.4
	Growth - Sdev		30.5	22.3	32.5	31.1	27.2	13.3
	Cessation Of Services	-	-	-	-	-	-	-
	Reprovision Of Services	-	-	-	-	-	-	-
	Efficiency	-	-	-	-	-	-	-
	Other Adjustments	-	-	-	-	-	-	-
	Tariff Adjustments	-	-	-	-	-	-	-
	Total	**735.9**	**771.0**	**797.9**	**835.6**	**871.8**	**906.4**	**927.1**

8.4.8 Overall point of delivery activity excluding, community services, provided by the Trust is represented in Figure 18 below.

Figure 18: All Sites Activity and Income 2019/20



Non-Patient Related Income

8.4.9 Non-patient related income is largely divided into two categories:

- Education and training related, including national levies; and
- General Category C income for activities or services provided by various departments within the Trust.

8.4.10 Each area has been individually considered to determine the likely impact of the planned changes on individual income streams. Training income streams have been assumed to generally remain stable across the period, while Category C income accruing to service departments fluctuates depending on individual circumstances. For example, income for some services like catering and the nursery is judged to cease as service provision will cease. Other areas such as diagnostics are assumed to grow in line with national trends. The Category C Income profile is presented in Table 73 below.

Table 73: Category C Income

2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
39,132	39,438	39,323	39,258	39.110	38,512	38,115	38,297	38,530	38,771

8.5 Costs Underpinning PSC Affordability

Characteristics of the Affordability Model

8.5.1 The overall projections demonstrate that the Trust maintains a ‘bottom line’ surplus, after adjusting for technical issues, across the period.

8.5.2 This position includes the following key features:

- In order to afford the forecast unitary charge and generate support for transitional costs, an internal cost improvement programme has been developed which exceeds expected national efficiency requirements and the impact of activity cessation. In the intermediate years, the

savings are set aside to deal with non-recurrent transitional costs so that, by 2018/19 they can be fully released to meet the affordability demands of the project.

- Under a publicly funded PSC where the cost of borrowing is not so significant this leads to a significantly increased surplus.
- The PF2 solution model assumes £100m support is granted through PDC in support of funding the scheme and this is paid over to the Special Purpose Vehicle at defined completion stages which maximises risk transfer.
- In 2013/14, the Trust remains on track to deliver a surplus of at least £4.6m consistent with original financial plans.
- Future modelling forecast surpluses of around 1% of turnover are successfully maintained across the period. Under PSC conditions this rises from 2018/19 but remains broadly stable under PF2 conditions.

PSC Affordability I&E Forecast

8.5.3 The headline statement of Comprehensive Income is presented in Table 74 below under PSC conditions. The surpluses generated in the later years reflect a level of CIP delivery across the timeline to accommodate affording MMH under PF2 conditions.

Table 74: Statement of Comprehensive Income (PSC)

Statement of Comprehensive Income	Forecast 2013/14 £m	Forecast 2014/15 £m	Forecast 2015/16 £m	Forecast 2016/17 £m	Forecast 2017/18 £m	Forecast 2018/19 £m	Forecast 2019/20 £m	Forecast 2020/21 £m	Forecast 2021/22 £m	Forecast 2022/23 £m
Income										
NHS Clinical income	390.9	389.2	389.9	391.6	392.6	395.6	406.2	418.8	432.0	443.0
Non NHS Clinical income	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other Operating income	39.6	39.9	38.8	38.8	38.6	38.1	37.7	37.8	38.1	38.3
Total Operating Income	**431.0**	**429.5**	**429.2**	**430.9**	**431.7**	**434.2**	**444.3**	**457.1**	**470.5**	**481.7**
Expenditure										
Pay	(289.9)	(284.8)	(278.0)	(271.3)	(265.2)	(258.0)	(258.1)	(266.6)	(273.9)	(277.4)
Non Pay	(115.1)	(119.7)	(124.3)	(128.0)	(132.4)	(138.7)	(142.4)	(146.0)	(150.6)	(157.6)
Total Operating Expenses	**(405.1)**	**(404.5)**	**(402.3)**	**(399.3)**	**(397.5)**	**(396.7)**	**(400.5)**	**(412.6)**	**(424.6)**	**(434.9)**
Operational Surplus	**25.9**	**25.0**	**26.9**	**31.6**	**34.2**	**37.5**	**43.8**	**44.6**	**45.9**	**46.8**
Profit / loss on asset disposal	(0.2)	-	-	-	-	-	-	-	-	-
Impairment losses	-	-	-	-	(66.3)	(98.3)	-	-	-	-
Depreciation	(14.0)	(14.4)	(14.8)	(15.6)	(15.9)	(14.0)	(15.8)	(16.7)	(17.0)	(16.4)
Total interest receivable / (payable)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Total interest payable on loans / leases	(2.2)	(2.1)	(2.1)	(2.2)	(2.1)	(2.2)	(2.2)	(2.0)	(2.2)	(2.0)
PDC Dividend	(5.0)	(5.6)	(5.8)	(7.5)	(9.5)	(11.0)	(12.1)	(12.3)	(12.4)	(12.5)
Non Operating Costs	(21.3)	(22.0)	(22.7)	(25.3)	(93.7)	(125.3)	(29.9)	(30.9)	(31.5)	(30.7)
Surplus / (deficit) before tax	4.6	3.1	4.1	6.3	(59.5)	(87.9)	13.9	13.7	14.5	16.1
Add back technical adjustments	-	-	-	-	66.3	98.3	-	-	-	-
Revised Surplus / (deficit) before tax	**4.6**	**3.1**	**4.1**	**6.3**	**6.8**	**10.4**	**13.9**	**13.7**	**14.5**	**16.1**
Net Margin %	**1.08%**	**0.71%**	**0.97%**	**1.46%**	**1.58%**	**2.40%**	**3.12%**	**3.00%**	**3.07%**	**3.34%**

8.5.4 The years to the MMH opening in 2018/2019 have non-recurring expenditure covering transition and restructuring contingencies. Post MMH opening a contingency for dual running exists over a three year time horizon. This contingency is funded by the major capital investment revenue relief support offered to PF2 schemes. Under PSC conditions the tapering income benefit is excluded.

8.5.5 Table 75 below summarises the impact of these contingencies and presents a normalised view of surplus if these elements were discounted from the annual positions to arrive at an underlying

assessment of financial performance. PF2 taper relief is removed under PSC conditions but introduced under PF2 conditions. The position reflects a strengthening normalised position across the timeline under PSC conditions.

Table 75: Normalised I&E Position

Normalised I&E Position	2014/15 £m	2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	2020/21 £m	2021/22 £m	2022/23 £m
Net Surplus / (Deficit)	**3,068**	**4,148**	**6,300**	**(59,476)**	**(87,864)**	**13,885**	**13,709**	**14,467**	**16,108**
PFI Project Support and Taper Relief	(950)	-	-	-	-	-	-	-	-
Transition	1,412	2,223	1,867	1,250	-	-	-	-	-
MMH Orientation / Backfill	-	-	-	-	2,000	-	-	-	-
Restructuring Reserve	-	-	1,000	4,000	-	-	-	-	-
Section 106 Infrastructure for MMH	-	-	1,750	2,250	-	-	-	-	-
Contingency Bed Flexibility/ Winter Pressures	-	-	1,500	1,500	750	2,000	-	-	-
PFI Project Costs	1,422	2,029	1,453	1,618	1,708	1,258	-	-	-
Dual Running Costs	-	-	-	-	5,239	5,370	5,504	3,500	1,750
Fixed Asset impairments	-	-	-	66,283	98,274	-	-	-	-
Normalised Net Surplus / (deficit)	**4,952**	**8,400**	**13,870**	**17,425**	**20,107**	**22,513**	**19,213**	**17,967**	**17,858**
Normalised Net Surplus Margin	*1.2%*	*2.0%*	*3.2%*	*4.1%*	*4.7%*	*5.2%*	*4.5%*	*4.2%*	*4.2%*

Pay Forecast

8.5.6 The table below presents the pay forecast trajectory by major staff group incorporating the impact of cost improvement efficiencies, service developments, and new ways of working including RCRH behavioural change. Pay cost also includes an annual assessment of incremental drift (circa 1% of annual pay spend) and an estimate of future annual pay awards consistent with the Foundation Trust Application process.

8.5.7 Average costs per WTE rise over the period consistent with inflationary assumptions, but overall WTEs drop by circa 1,600 across the timeline recognising the efficiency challenge over the long term.

Table 76: Average Cost per WTE

	10 Year Timeline: PAY SPEND V Workforce									
	LTFM Modelled Future Years									
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
	£ms	£ms	£ms	£ms	£ms	£ms	£ms	£ms	£ms	£ms
Pay Forecast Expenditure	**(289.9)**	**(284.8)**	**(278.0)**	**(271.3)**	**(265.2)**	**(258.0)**	**(258.1)**	**(266.6)**	**(273.9)**	**(277.4)**
Analysed Across Pay Headings										
Consultants	(42.4)	(43.7)	(43.9)	(44.3)	(45.0)	(45.0)	(46.6)	(48.4)	(50.5)	(52.4)
Junior Medical Staff	(31.8)	(31.9)	(31.5)	(31.2)	(30.9)	(29.9)	(30.9)	(31.5)	(32.3)	(32.8)
Nursing - Acute (Inc HCA Support)	(89.2)	(90.5)	(88.9)	(86.7)	(85.4)	(84.7)	(86.1)	(92.1)	(95.5)	(97.7)
Nursing - Community	(18.5)	(17.6)	(17.1)	(16.3)	(15.4)	(14.5)	(13.4)	(13.3)	(13.2)	(12.7)
Scientific / Prof & Tech	(42.0)	(41.5)	(40.7)	(40.0)	(39.6)	(39.9)	(39.9)	(40.9)	(42.2)	(42.8)
Non Clinical	(56.9)	(54.3)	(51.7)	(48.8)	(45.0)	(40.3)	(37.8)	(37.2)	(37.1)	(36.0)
Agency	(9.3)	(5.3)	(4.3)	(4.1)	(3.9)	(3.8)	(3.3)	(3.2)	(3.1)	(2.9)
Total Pay Spend	**(289.9)**	**(284.8)**	**(278.0)**	**(271.3)**	**(265.2)**	**(258.0)**	**(258.1)**	**(266.6)**	**(273.9)**	**(277.4)**
Wte's including Developments	**7,048**	**6,893**	**6,645**	**6,354**	**6,111**	**5,780**	**5,686**	**5,628**	**5,577**	**5,483**
Forecast Average Cost Per Wte (£,000s)	**(41.1)**	**(41.3)**	**(41.8)**	**(42.7)**	**(43.4)**	**(44.6)**	**(45.4)**	**(47.4)**	**(49.1)**	**(50.6)**

Operational Non Pay Forecast

8.5.8 The operational non-pay trajectory is outlined in Table 77 below. Clinical non-pay costs are forecast to rise due in part to inflation but also recognising volume changes in high cost drugs in particular. Non pay efficiencies are assumed as part of the cost improvement programme. Other expenses rise over the timeline as this contains:

- Support for IM&T development;
- Restructuring contingencies;
- Reserve contingencies; and
- Section 106 enabling costs.

Table 77: Operational Non-Pay Forecast Expenditure

	10 Year Timeline: PAY SPEND V Workforce									
	LTFM Modelled Future Years									
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
	£ms	£ms	£ms	£ms	£ms	£ms	£ms	£ms	£ms	£ms
Operational Non Pay Forecast Expenditure	(115.1)	(119.7)	(124.3)	(128.0)	(132.4)	(138.7)	(142.4)	(146.0)	(150.6)	(157.6)
Drug expenses	(29.8)	(30.4)	(31.2)	(31.8)	(32.5)	(33.6)	(34.6)	(36.7)	(39.1)	(40.7)
Clinical supplies and services expenses	(42.0)	(43.1)	(43.7)	(44.0)	(44.3)	(45.2)	(45.0)	(46.3)	(47.6)	(48.9)
Secondary Commissioning Expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shared services expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CNST Premium	(7.2)	(7.6)	(8.0)	(8.5)	(8.9)	(9.3)	(9.7)	(10.1)	(10.5)	(10.9)
Other expenses	(34.0)	(35.9)	(38.0)	(41.3)	(43.3)	(42.4)	(44.9)	(45.1)	(48.1)	(52.8)
Provision for bad debts	(0.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PFI specific expenses										
Operating charge element of Unitary Payment	(1.1)	(1.2)	(1.3)	(1.0)	(1.7)	(1.4)	(1.6)	(2.3)	(2.0)	(2.6)
Release of PFI deferred asset	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Expenses	(1.0)	(1.4)	(2.0)	(1.5)	(1.6)	(6.9)	(6.6)	(5.5)	(3.5)	(1.8)
Total Operational Non Pay Spend	(115.1)	(119.7)	(124.3)	(128.0)	(132.4)	(138.7)	(142.4)	(146.0)	(150.6)	(157.6)

The PFI elements within the table refer to the existing PFI scheme for the BTC and an estimate for project team costs and subsequent dual running costs for the PSC/PF2 project.

8.6 Approach to PF2 Affordability

8.6.1 This section moves on to consider the impact of PF2 on affordability and draws a comparison between PF2 and PSC positions.

Unitary Charge based Upon Partial Indexation and IFRIC 12 Consequences

8.6.2 The Unitary Charge modelled within the affordability position represents a ceiling in total costs against which the refreshed Public Sector Comparator assessment is measured. Therefore, the results contained within the LTFM represent the maximum considered affordable. The refreshed PSC position is slightly different to the ceiling assessment but in overall terms the modelled unitary charge falls well within the ceiling considered affordable.

The Maximum Affordable Unitary Charge

8.6.3 The PF2 affordability assessment has been developed creating a forecast unitary charge of c£27m in the first full year of concession, at forecast 2019/2020 prices. This assessment comprised of,

- A capital build cost of circa £285m;
- Hard FM cost of c £31 per m^2;
- Lifecycle cost of c £20 per m^2;
- A 30 year concession;
- Receiving the £100m PDC support on a non-repayable basis;
- A GIFA of c74,000 m^2;
- Funding terms consistent with recent PFI deals; and
- Index-able element of circa 35%, indexed at 2.5% per annum from a base of 2013-2014.

The Refreshed PSC Position and Impact on Unitary Charge

8.6.4 The following changes have occurred in the refreshed PSC position:

- The capital scheme for approval purposes in £353m, however, when discounted for VAT, non-works costs and equipment (which are covered elsewhere in the affordability assessment), the capital value used in the calculation of the unitary payment is £285m.
- The GIFA has increased to 79,828 m^2 but this includes circa 6,000 m^2 of expansion space;
- Hard FM and Lifecycle unit costs are consistent but cover a greater floor area;
- Funding terms and build schedules assume improvements compared to the “ceiling” assessment; and
- The revised shadow unitary charge is forecast to be £26.1m creating some headroom from the modelled position.

8.6.5 Table 78 below presents the Statement of Comprehensive Income under PF2 conditions incorporating the ceiling unitary payment calculations, PF2 taper relief support and a contribution of £100m Public Dividend Capital.

The position reflects the Trust is able to maintain a trading surplus around 1% of turnover post MMH opening.

Table 78: Statement of Comprehensive Income (PF2)

Statement of Comprehensive Income	Forecast 2014/15 £m	Forecast 2015/16 £m	Forecast 2016/17 £m	Forecast 2017/18 £m	Forecast 2018/19 £m	Forecast 2019/20 £m	Forecast 2020/21 £m	Forecast 2021/22 £m	Forecast 2022/23 £m
Income									
NHS Clinical income	389.2	389.9	391.6	392.6	395.6	406.2	418.8	432.0	443.0
Non NHS Clinical income	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other Operating income	39.9	38.8	38.8	38.6	46.8	44.7	43.1	41.6	40.1
Total Operating Income	**429.5**	**429.2**	**430.9**	**431.7**	**442.9**	**451.3**	**462.4**	**474.0**	**483.5**
Expenditure									
Pay	(284.8)	(278.0)	(271.3)	(265.2)	(258.0)	(258.1)	(266.6)	(273.9)	(277.4)
Non Pay	(119.7)	(124.3)	(128.0)	(132.4)	(139.9)	(142.9)	(146.3)	(151.0)	(156.0)
Total Operating Expenses	**(404.5)**	**(402.3)**	**(399.3)**	**(397.5)**	**(397.8)**	**(400.9)**	**(413.0)**	**(424.9)**	**(433.3)**
Operational Surplus	**25.0**	**26.9**	**31.6**	**34.2**	**45.1**	**50.4**	**49.4**	**49.1**	**50.1**
Profit / loss on asset disposal	-	-	-	-	-	-	-	-	-
Impairment losses	-	-	-	(66.3)	(44.0)	-	-	-	-
Depreciation	(14.4)	(14.8)	(15.6)	(15.9)	(14.0)	(15.8)	(16.7)	(17.0)	(16.4)
Total interest receivable / (payable)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total interest payable on loans / leases	(2.1)	(2.1)	(2.2)	(2.1)	(18.6)	(23.4)	(23.2)	(23.3)	(23.1)
PDC Dividend	(5.5)	(6.5)	(7.8)	(7.6)	(6.0)	(5.2)	(5.4)	(5.5)	(5.4)
Non Operating Costs	(21.9)	(23.4)	(25.5)	(91.8)	(82.5)	(44.3)	(45.2)	(45.8)	(44.8)
Surplus / (deficit) before tax	3.1	3.5	6.0	(57.6)	(37.4)	6.1	4.2	3.3	5.3
Add back technical adjustments	-	-	-	66.3	44.0	-	-	-	-
Revised Surplus / (deficit) before tax	**3.1**	**3.5**	**6.0**	**8.7**	**6.5**	**6.1**	**4.2**	**3.3**	**5.3**
Net Margin %	**0.73%**	**0.81%**	**1.40%**	**2.01%**	**1.48%**	**1.35%**	**0.91%**	**0.70%**	**1.10%**

PF2 Affordability Compared to PSC Affordability

8.6.6 Table 79 below illustrates the variant affordability position presented in the first full year of the new service model, 2019/2020 between the PSC and PF2 positions.

8.6.7 Income remains stable with the exception of PF2 taper relief support, but costs move between categories denoting the provision of hard FM services moving from the Trust to the PF2 provider. Below EBITDA interest charges increase in line with the PF2 service provision, but this is partially offset by a reduction in the public dividend payment as the scheme will be largely privately financed. A surplus of £6.1m is modelled under PF2 conditions, which is circa 1.4% of turnover.

A comparison of PF2 to PSC in the first full year of the service model (2019/2020) is presented in Table 79 below.

Table 79: PF2 Affordability Compared to PSC

Statement of Comprehenisve Income	PSC Forecast £ms	PFI Forecast £ms	Variance Forecast £ms
Protected/Mandatory Clinical Revenue			
Total	**406.2**	**406.2**	**-**
Non Protected/Non Mandatory Clinical Revenue			
Total	**0.5**	**0.5**	**-**
Other Operating Revenue			
Education and Training	17.9	17.9	-
Research & Development	0.9	0.9	-
PFI Specific revenue	-	7.0	7.0
Other Operating Revenue	18.9	18.9	-
Other Operating revenue, Total	37.7	44.7	7.0
Operating Revenue and Income, Total	**444.3**	**451.3**	**7.0**
Operating Expenses			
Employee Benefit Expenses	(258.1)	(258.1)	**-**
Drug expenses	(34.6)	(34.6)	**-**
Clinical supplies and services expenses	(45.0)	(45.0)	**-**
Shared services expenses	-	-	**-**
CNST Premium	(9.7)	(9.7)	**-**
Other expenses	(44.9)	(41.6)	**3.3**
Secondary Commissioning Expenses	-	-	**-**
PFI operating expenses	(8.3)	(12.0)	**(3.7)**
Operating Expenses, Total	**(400.5)**	**(400.9)**	**(0.4)**
Surplus/(Deficit) from operations	43.8	50.4	**6.6**
Surplus/(Deficit) from operations margin	0.1	0.1	**0.0**
Adjustment for donated asset income	(0.1)	(0.1)	**-**
EBITDA	**43.7**	**50.3**	**6.6**
EBITDA margin	10%	11%	**0.0**
Non-Operating revenue			
Non-Operating revenue, Total	-	-	**-**
Non-Operating expenses			
Impairment Losses (Reversals) net	-	-	**-**
Total Depreciation & Amortisation	(15.8)	(15.8)	**(0.0)**
Interest expense on overdrafts and working capital facilities	0.2	0.1	**(0.0)**
Total interest payable on Loans and leases	(2.2)	(23.4)	**(21.2)**
PDC Dividend	(12.1)	(5.2)	**6.9**
Other Non-Operating expenses	-	-	**-**
Non-Operating expenses, Total	**(29.9)**	**(44.3)**	**(14.4)**
Surplus (Deficit) before Tax	13.9	6.1	**(7.8)**
Tax expense/ (income)	-	-	**-**
Net Surplus/(Deficit)	**13.9**	**6.1**	**(7.8)**
Net margin	3.1%	1.4%	**-1.8%**

8.7 Cost Improvement Savings (CIP) 2013/2014

8.7.1 Historically the Trust has a track record of delivering efficiency requirements consistent with planning assumptions. The Trust is on track to deliver a cost improvement programme (CIP) of circa £20m in 2013/2014 across a number of transformational themes, as identified in Table 80 below.

Table 80: CIP Analysis by Theme

CIP Theme	Forecast Outturn: M8 2013/14 £000
Community Service Efficiency	1,380
Corporate Services	525
Diagnostics	48
Estates	256
IT Enablement	90
Medical Workforce	1,256
Outpatients	646
Patient Flow	762
Procurement	3,472
SLR Improvement	5,320
Theatres	192
Urgent Care	43
Workforce	5,643
Other	352
Total	**19,975**

Cost Improvement Savings Future Years

8.7.2 For future years the cost improvements modelled within the trajectory are presented in Table 81 below at subjective cost heading. The Trust has developed detailed plans for 2014/2015 and 2015/2016 under the umbrella transformational schemes approach.

Table 81: CIP by Year and Type

CIP savings by year and type, 2013/14 to 2022/23									
Value at 2013/14 prices (£m)	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**
Pay - Consultants	0.7	1.0	1.1	1.2	1.2	1.2	0.8	0.8	0.8
Pay - Junior Medical	1.0	1.1	1.3	1.3	1.4	1.4	0.9	0.9	0.9
Pay - Nursing, Midwifery and Health Visitors	3.1	3.0	3.5	3.6	3.6	3.7	2.4	2.4	2.4
Pay - Nursing, Midwifery and Health Visitors	1.5	1.3	1.5	1.5	1.6	1.6	1.0	1.0	1.0
Pay - Scientific, Therapeutic and Technical	2.0	1.8	2.1	2.1	2.1	2.2	1.4	1.4	1.4
Pay - Non Clinical	3.7	3.5	3.8	3.9	3.9	4.0	2.6	2.6	2.6
Pay - Agency (Consultants)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pay - Agency (Junior Medical)	0.5	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Pay - Agency (Nursing, Midwifery and Health Visitors)	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pay - Agency (Scientific, Therapeutic and Technical)	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Pay - Agency (Non Clinical)	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pay - TOTAL	**13.1**	**11.7**	**13.8**	**13.9**	**14.0**	**14.4**	**9.4**	**9.4**	**9.4**
Non Pay - Drugs	1.5	1.3	1.5	1.5	1.6	1.6	1.0	1.0	1.0
Non Pay - Clinical Supplies and Services	1.5	1.3	1.5	1.5	1.6	1.6	1.0	1.0	1.0
Non Pay - General Supplies and Services	0.6	0.6	0.7	0.7	0.7	0.7	0.4	0.4	0.4
Non Pay - Establishment Expenditure	0.5	0.6	0.7	0.7	0.7	0.7	0.5	0.5	0.5
Non Pay - Premises and Fixed Plant	0.5	0.5	0.6	0.6	0.6	0.6	0.4	0.4	0.4
Non Pay - Other	0.6	0.1	0.2	0.4	0.4	0.4	0.3	0.3	0.3
Non Pay - TOTAL	**5.2**	**4.3**	**5.2**	**5.4**	**5.5**	**5.6**	**3.6**	**3.6**	**3.6**
Income improvements contributing to TSP target	**1.7**	**2.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL TSP savings at 2013/14 prices (£m)	**20.0**	**18.0**	**19.0**	**19.3**	**19.5**	**20.0**	**13.0**	**13.0**	**13.0**

8.7.3 Table 82 below reflects the current emerging assessment of savings plans for the next two years split across transformational themes. The values identified demonstrate the Trust is well sighted on the next two years challenge and has cogent plans in place to deliver change.

Table 82: Transformational Plans by Workstream

TSP Schemes by Workstream	2014/15		2015/16	
	Total WTE	Total £000	Total WTE	Total £000
Medical Workforce Efficiency	6.5	£615	5.0	£1,082
Patient Flow & Bed Day Utilisation	60.3	£2,046	39.0	£1,597
Urgent Care	0.0	£0	6.2	£370
Theatre Productivity	2.9	£250	4.5	£260
Outpatient Efficiency	5.6	£765	9.9	£623
Community Service Efficiency	25.9	£736	11.1	£900
Workforce Efficiency	116.0	£6,007	83.0	£7,597
SLR Improvement	0.3	£4,580	0.0	£2,475
Diagnostics	1.7	£509	7.6	£677
Estates Rationalisation	0.7	£30	1.4	£254
Strategic IT Enablement	10.5	£255	22.5	£686
Procurement	0.0	£3,052	0.0	£1,404
Corporate Services & Facilities	25.3	£1,808	28.7	£2,137
Other	0.0	£0	0.0	£0
Workstream not identified	0.0	£500	0.0	£0
TOTAL IDENTIFIED	255.70	£21,154	218.90	£20,063
Schemes not identified		-£354		-£63
Trust target		**£20,800**		**£20,000**

The forecast plans presented within organisational group structure are reflected in Table 83

Table 83: Savings Targets by Clinical Group

Clinical Group	2014/15 Target £000	2015/16 Target £000
Medicine & Emergency Care	3,157	4,534
Surgery A	2,346	3,876
Surgery B	1,904	1,282
Women & Child Health	2,932	2,766
Community & Therapies	783	1,055
Imaging	1,286	763
Pathology	1,571	1,149
Corporate	5,788	3,997
Trust	1,032	578
Total	**20,800**	**20,000**

8.8 Key Affordability Ratios

Inflation Assumptions

8.8.1 Tariff assumptions within the LTFM suggest a period of deflation will continue until 2019-2020 as part of the delivery of annual efficiency. Thereafter, tariff will stabilise and start to increase towards the end of the trajectory.

8.8.2 Pay-related inflation is modelled at relatively low levels, reflecting current trends. The Trust assumes the national pay award will grow but remain below the underlying rate of RPI until 2019-2020. Thereafter pay awards may increase more in line with a circa 2.5% RPI expectation. Other pay increases associated with incremental uplift and consultant discretionary awards are modelled as cost pressure adjustments and therefore do not feature in the inflationary calculations, but do feature in consideration of the implied efficiency. This typically adds circa 1% per annum to the annual pay bill.

8.8.3 Although the Health Service Cost Index (HSCI), suggests minimal inflationary pressure on drugs (September 2013 compared with September 2012) the Trust has modelled a growth of 5% per annum. This is additional to a volume growth of 2-3% built into baseline income forecasts. Taken together, this represents a material annual increase in income and cost to cover inflation, volume and latest NICE prescribing guidance.

8.8.4 Other areas of non-pay cover a broad spectrum of non-pay costs with differing component judgments of cost inflation. For example,

- Medical and Surgical purchases are running at an annual rate of circa 4% growth,
- Utilities, a growth of circa 8%; and
- X-ray films, a reduction of circa1%.

8.8.5 The Trust has modelled a blended position which takes these elements into account. Future years assumptions predict reductions in non-pay cost inflation, although, levels remain relatively high.

PFI-estimated inflation has been applied to the unitary charge for expenditure in respect of the BTC, as contractually the Trust is obliged to pay RPI indexation each year. Future RPI levels of between 3 and 2.5% have been modelled for the Unitary Payment (UP).

The actual Inflation indices used in developing the base case of the Trust's LTFM are presented in Table 84 below.

Table 84: Inflation Indices used for the LTFM Base Case

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Income									
Elective	-2.10%	-1.50%	-1.30%	-1.30%	-1.00%	0.00%	0.25%	0.50%	0.50%
Non Elective	-2.10%	-1.50%	-1.30%	-1.30%	-1.00%	0.00%	0.25%	0.50%	0.50%
Outpatients	-2.10%	-1.50%	-1.30%	-1.30%	-1.00%	0.00%	0.25%	0.50%	0.50%
A&E	-2.10%	-1.50%	-1.30%	-1.30%	-1.00%	0.00%	0.25%	0.50%	0.50%
Other Clinical Non Tariff	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Block Cost & Volume (Community Services)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Income - Private Patients	-2.10%	-1.50%	-1.30%	-1.30%	-1.00%	0.00%	0.25%	0.50%	0.50%
Other Income - Education & Training	-2.10%	-1.50%	-1.30%	-1.30%	-1.00%	0.00%	0.25%	0.50%	0.50%
Other Income - Research & Development	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Income - Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Expenditure									
Pay	1.00%	1.00%	1.30%	1.30%	1.50%	2.50%	2.50%	2.75%	2.75%
Drugs	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Clinical Supplies & Services	5.50%	4.00%	4.00%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Shared Services	5.50%	5.50%	5.25%	5.00%	4.75%	4.00%	4.00%	4.00%	4.00%
CNST Premium	5.50%	5.50%	5.25%	5.00%	4.75%	4.00%	4.00%	4.00%	4.00%
Other Costs	5.50%	5.50%	5.25%	5.00%	4.75%	4.00%	4.00%	4.00%	4.00%
PFI Indexation	3.00%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Capex Inflation	3.00%	3.00%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

Implied Efficiency

8.8.6 The Trust is required to form its own view of future inflation trends / indices. Guidance is typically issued at the end of quarter 3 each year indicating expectations for the forthcoming year. The inflation / deflation assessments must deliver an overall implied efficiency rate consistent with national expectations. The Trust is working to long range implied efficiency levels as directed by Monitor in April 2012 for the period to 2016/2017.

8.8.7 The case has been built upon assumptions generated ahead of the latest guidance for 2014/2015 which reduced efficiency assumptions for 2014/15 to a net 4%. The inflation assumptions outlined above, plus cost pressures including PF2 elements creates an implied efficiency trajectory as outlined in Table 85 below.

Table 85: LTFM Implied Annual Efficiency Assessment (Base Case)

2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
4.9%	4.2%	4.2%	4.2%	3.9%	3.6%	3.2%	3.2%	3.2%

The 12.5% Test

8.8.8 The test seeks to confirm that estates costs do not exceed 12.5% of the Trust annual normalised income. The precise definition of costs to be included in this metric has not been independently stated therefore, two measures have been developed in consideration of the test.

8.8.9 Firstly, to assess the proportion of the full unitary charge compared to normalised turnover, and secondly, to include the unitary charge, non-MMH depreciation, PDC dividend and estates hard FM costs in comparison to normalised turnover. In both instances the Trust is able to meet the test successfully. Table 86 below demonstrates the components of the test and the result of the two approaches.

Table 86: 12.5% Test

Calculation of 12.5%	13/14	19/20	20/21	21/22	22/23
	£000s	£000s	£000s	£000s	£000s
Turnover:					
Recurrent	430,977	451,316	462,387	474,007	483,477
Non Recurrent	-	-	-	-	-
Total	**430,977**	**451,316**	**462,387**	**474,007**	**483,477**
Maximum value of estates costs (12.5% of Total Turnover)	*53,872*	*56,414*	*57,798*	*59,251*	*60,435*
Maximum value of estates costs (12.5% of Recurrent Turnover)	*53,872*	*56,414*	*57,798*	*59,251*	*60,435*

Total Estates Costs

Group 1 : PFI Specific Costs					
PFI Interest	2,115	23,353	23,183	23,312	23,104
Capital Repayment	1,029	3,207	3,037	3,514	3,419
Facilities Management (Operating Charge)	1,100	5,363	6,087	5,872	6,577
Total PFI Charges	**4,244**	**31,923**	**32,307**	**32,698**	**33,100**
Expressed as a % of turnover	***0.98%***	***7.07%***	***6.99%***	***6.90%***	***6.85%***
In Excess of recommended 12.5%	-	-	-	-	-

Group 2 : Estates Costs Excl Soft FM					
PFI Interest	2,115	23,353	23,183	23,312	23,104
Capital Repayment	1,029	3,207	3,037	3,514	3,419
Facilities Management (Operating Charge)	1,100	5,363	6,087	5,872	6,577
Depreciation Excluding MMH Build	13,405	11,164	12,054	12,368	11,745
PDC Dividend	5,027	5,203	5,441	5,521	5,445
Estates Building Related	956	367	367	367	367
Estates Engineering Related	2,561	1,176	1,176	1,176	1,176
Estates General Related	564	169	169	169	169
Estates Grounds Related	192	171	171	171	171
Total Group 2 : Estates Costs Excl Soft FM	**26,949**	**50,173**	**51,685**	**52,470**	**52,173**
Expressed as a % of turnover	***6.25%***	***11.12%***	***11.18%***	***11.07%***	***10.79%***
In Excess of recommended 12.5%	-	-	-	-	-

Continuity of Service Risk Rating (CsRR)

8.8.10 The Trust is able to secure a minimum Risk Rating of at least 3 in its base case affordability position. This is achieved in the early trajectory years by strong performance against the Capital Service Capacity component of the test. As the MMH PF2 scheme is introduced performance against this component deteriorates placing a greater emphasis on the liquidity position.

8.8.11 The liquidity position improves across the timeline to strengthen the underlying rating. This is generated by annual cash backed surpluses across each year of the trajectory. The position does not rely upon a working capital facility under FT conditions. The Trust estimates a working capital facility of circa £30m. If this were to be included into the metric the liquidity position would be greatly strengthened as would the overall rating position. The Trust is not relying on this facility to meet the rating assessment.

Table 87: Continuity of Service Risk Rating in the Base Case LTFM

CSRR in the base case PF2 LTFM	Outturn 2013/14	Forecast 2019/20	Forecast 2020/21	Forecast 2021/22	Forecast 2022/23
Liquidity ratio (days)					
Current assets	56.2	51.9	56.5	57.1	61.9
Inventories	3.6	3.3	3.3	3.3	3.3
PFI prepayments and assets held for sale	0.0	0.0	0.0	0.0	0.0
Current liabilities	-55.5	-56.2	-59.2	-58.5	-56.3
Days	360.0	360.0	360.0	360.0	360.0
Operating expenses	-405.1	-400.9	-413.0	-424.9	-433.3
Fully committed Working Capital Facility					
Liquidity ratio (days) - opening liquidity	**-2.6**	**-6.9**	**-5.3**	**-3.9**	**1.9**
Capital servicing capacity (times)					
Interest payable (-ve)	-2.2	-23.4	-23.2	-23.3	-23.1
Debt repayment (-ve)	-3.3	-3.2	-3.0	-3.5	-3.4
PDC dividend (-ve)	-5.0	-5.2	-5.4	-5.5	-5.4
PDC repayment (-ve)	0.0	0.0	0.0	0.0	0.0
Surplus/(deficit) from operations	0.0	0.0	0.0	0.0	0.0
Adjustment for donated asset income	0.0	0.0	0.0	0.0	0.0
EBITDA	25.8	50.3	49.3	49.0	50.0
Interest receivable (+ve)	0.1	0.1	0.1	0.1	0.1
Surplus available	25.9	50.4	49.4	49.1	50.2
Capital servicing capacity (times)	**2.5**	**1.6**	**1.6**	**1.5**	**1.6**
Scoring (uses opening liquidity)					
Liquidity ratio score	**3**	**3**	**3**	**3**	**4**
Capital servicing capacity score	**3**	**2**	**2**	**2**	**2**
Overall Continuity of Service Risk Rating (CSRR)	**3**	**3**	**3**	**3**	**3**

Sensitivity including Downside

8.8.12 Three forms of sensitivity analysis have been undertaken to assess the impact of different behaviour to planned against the base case assumptions:

- Activity and capacity sensitivity assessment to demonstrate appropriate mitigations through the expansion and reduction strategies;
- Sensitivity analysis consistent with the conditions required for the FT application; and
- Sensitivity if £100m PDC support is unavailable.

8.8.13 This section focuses on the sensitivity analysis that has been prepared for the FT application. A series of downside scenarios have been considered and separate mitigations developed to demonstrate resilience to adverse economic conditions. The headline results can be seen Table 88 below which starts from a base case; identifies the impact of pure unmitigated downside and the repairs the position for a mitigated downside position. Under mitigated downside conditions the Trust is able to

demonstrate a risk rating of 3 by the end of the ten year period with cash balances and I&E surpluses remaining resilient.

8.8.14 ***Appendix 8c*** explains the approach to downside modelling and considers in more depth the risks generated from the Trust's Risk Register and mitigation available to the Trust under these circumstances.

Table 88: Sensitivity Analysis: Headline Results

I&E impact	2014/15 £m	2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	2020/21 £m	2021/22 £m	2022/23 £m
Base surplus	3.1	3.5	6.0	8.7	6.5	6.1	4.2	3.3	5.3
Base Cash	22.6	18.6	24.1	33.0	35.5	39.9	40.4	45.1	53.9
Base Case CsRR	3	3	4	4	3	3	3	3	3
Downside surplus	0.0	(2.6)	(5.9)	(9.2)	(18.1)	(26.9)	(35.1)	(43.4)	(48.3)
Downside Cash	18.9	8.1	1.4	(8.3)	(31.1)	(61.1)	(101.0)	(142.9)	(187.5)
Downside CsRR	3	2	3	3	3	1	1	1	1
Mitigated surplus	0.1	1.0	3.9	1.6	(6.0)	(0.4)	6.8	11.8	13.0
Mitigated Cash	20.6	15.4	19.5	22.3	13.2	19.1	29.2	34.4	45.0

Sensitivity Unitary Charge

8.8.15 A scenario has been considered in the absence of £100m PDC support for MMH as shown in Table 89 below. In this case the shadow unitary payment is forecast to increase by circa £9m through increased interest charges based upon the need for the PF2 provider to secure greater funds upfront during the construction stage.

Table 89: Affordability Based on a Non-PDC Support Option

Model Iterations	Forecast 2013/14 £m's	Forecast 2014/15 £m's	Forecast 2015/16 £m's	Forecast 2016/17 £m's	Forecast 2017/18 £m's	Forecast 2018/19 £m's	Forecast 2019/20 £m's	Forecast 2020/21 £m's	Forecast 2021/22 £m's	Forecast 2022/23 £m's
Headlines from No PDC Support Option										
I&E Position	4.6	3.1	4.0	7.7	11.5	6.6	0.9	(0.9)	(1.9)	0.1
Cash Position	26.8	21.7	18.2	25.4	37.0	36.0	34.5	29.1	27.4	29.6
CsRR Position	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**2.0**	**3.0**	**2.0**	**2.0**	**2.0**

Sensitivity: Estate Backlog Maintenance

8.8.16 Approval for the scheme will significantly reduce the value of backlog maintenance for the Trust's estate. The backlog maintenance is currently estimated at £130m and this will reduce to £30m.

8.9 Affordability Conclusions

8.9.1 The affordability conclusions are that:

- Surplus margins increase across the period to £5.3m or around 1.2% of turnover under PF2 conditions.

- The affordability position presented under PSC conditions appears favourable compared with PF2; however, once consideration is given to the risk transfer and VfM conclusions, the PF2 funding mechanism is preferable.
- Implied efficiency levels are at Monitor Assessor Case levels and include prudent assumptions in respect of inflationary pressure on both income and expenditure.
- Efficiency savings represent a challenge and require significant service transformation for delivery purposes. Cost Improvement Savings are £20m and £18m for the years 2014/15 and 2015/16 respectively on a 2013/14 price base with further savings required from transformational RCRH change.
- RCRH transition is embedded within financial strategy.
- Modest development funding of approximately 1% of turnover per annum is incorporated within the financial projections, as agreed in principle with main commissioners.
- The base case is showing a consistent CsRR of at least a 3 across the planning period. A rating of 3 is the minimum required at application stage of the FT process.
- Cash balances remain positive during the planning period and grow significantly.
- Reserves have been established to support service reconfiguration.
- The Trust is sighted on priorities for significant investment through its Capital Programme to enable service delivery.
- The MMH will be built using the PF2 funding scheme with an assumed contribution of £100m PDC funding.
- A downside sensitivity suggests the unavailability of PDC funding will increase the unitary charge by circa £9m.

9 The Workforce

9.1 Introduction

9.1.1 This section presents the workforce impact of the MMH and the wider NHS context. It demonstrates how the Trust will ensure that the workforce is capable of providing high quality, safe and sustainable services when the new hospital opens.

9.1.2 The objectives of this section of the OBC are to:

- Present the current workforce position and context;
- Summarise the workforce changes required to deliver the new models of care;
- Evaluate the impact of financial constraints on the workforce;
- Present the Trust's workforce projections from 2014/15 to 2018/19;
- Describe the steps taken for workforce assurance;
- Outline the Trust's workforce planning and delivery approach;
- Present the approach to staff engagement; and
- Draw conclusions.

9.2 Current Position and Environment

9.2.1 The Trust is one of the largest employers in Birmingham and the Black Country. In November 2013 there was an establishment of 7,252 whole time equivalents (WTE) providing acute services to Sandwell and western Birmingham and community services to Sandwell residents.

Staff Profile

9.2.2 Table 90 below presents the current workforce profile. The analysis is generated from the Electronic Staff Record (ESR) and is a snapshot of staff in post on 30th November 2013.

Table 90: Current Workforce Profile

Staff Category	Number	WTE	Full Time %	Part Time %	Male %	Female %	Average Age	Sick-ness %
Consultants	289	271.45	88.78	11.22	70.57	29.43	49	0.96
Other Medical	517	491.98	94.11	5.89	53.50	46.50	33	0.84
Nursing/Midwifery	2184	1979.32	96.59	23.41	7.25	92.75	41	5.25
AHPs	430	378.75	74.98	25.02	21.03	78.97	37	3.25
Healthcare Scientists	520	464.68	80.27	19.73	36.99	63.01	41	4.27
NCAs / Support	1160	1005.43	66.83	33.18	15.03	84.97	42	6.59
Admin and Estates	2191	1784.08	61.77	38.23	27.17	72.83	45	4.17
Managerial	169	164.51	93.61	6.39	35.74	64.26	46	2.55
Total	**7460**	**6540.19**	**73.70**	**26.30**	**23.47**	**76.53**	**42**	**4.47**

Note: this data does not include students, bank or agency staff and vacancies.

Gender and Age Profile

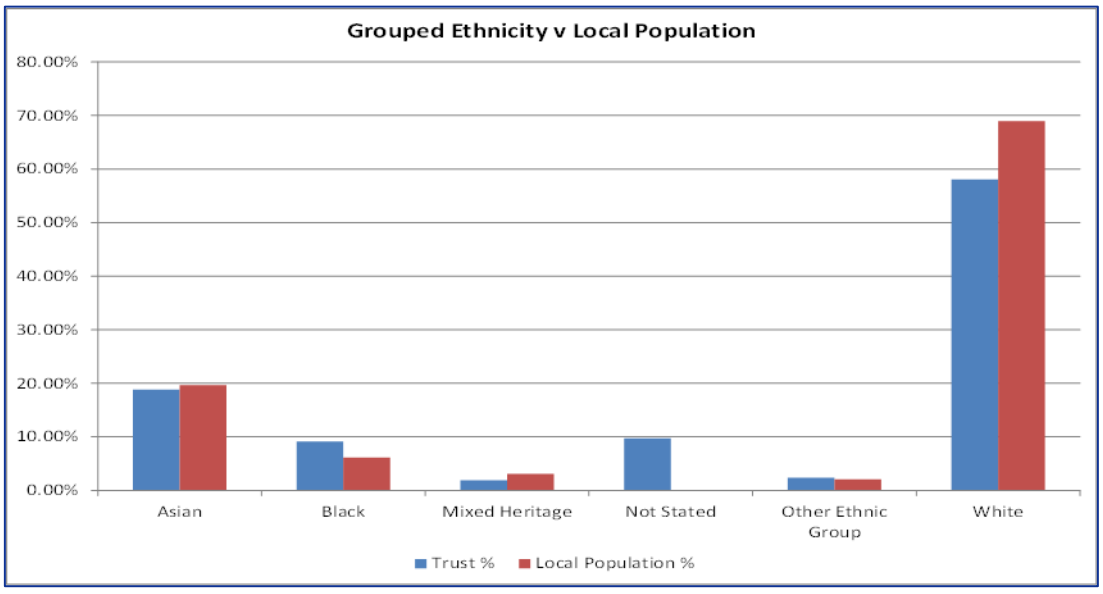
9.2.3 The gender of the workforce mirrors what is found in most NHS provider organisations with females being the predominant gender of the total workforce (76%). This is the case in all of the staff groups with the exception of consultant medical staff where 71% of the workforce is male and junior medical staff where the gender breakdown is roughly equally split.

9.2.4 An analysis of age profiles shows a typical spread of staff in each age bracket across the entire workforce peaking at the 46-50 years old bracket. There are fewer members of staff in the lower and higher brackets.

Diversity

9.2.5 The following graph in Figure 19 illustrates that when the Trust's ethnicity profile is compared with the ethnicity profile of the local population, Asian staff are proportionately represented, white staff are under-represented, black staff are over represented, mixed heritage staff are under-represented and the 'Other' ethnic group appears to be reasonably represented / slightly over-represented.

Figure 19: Staff Ethnicity



9.2.6 The Trust is not complacent and continues to focus on the composition of its workforce profile to ensure that over time the composition more closely reflects the local population across its pay bands and occupational groups.

9.2.7 The percentage of the workforce not stating their ethnic origin has reduced from 18% to 10% over the last four years, as a result of our annual census for updating staff records coupled with improving the quality of data for new starters.

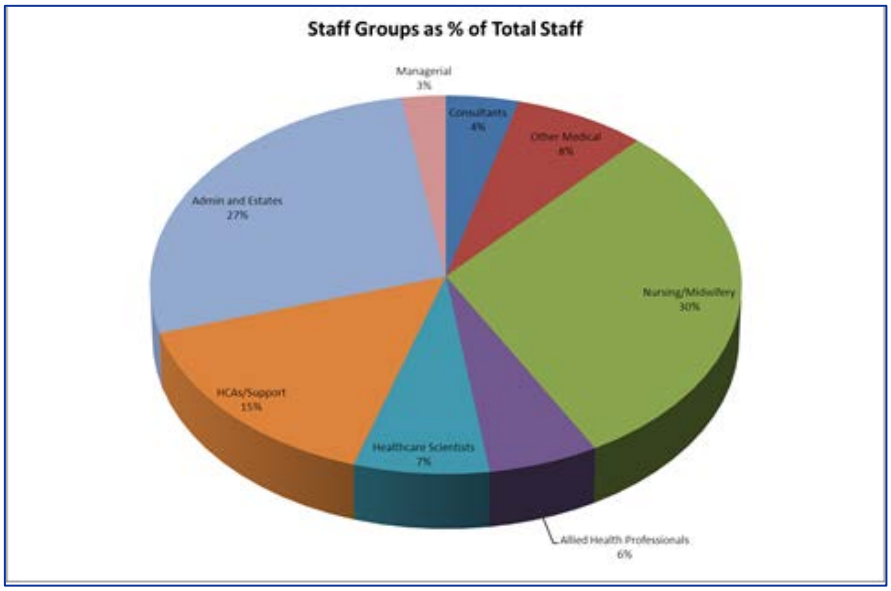
Staff Groups

9.2.8 Approximately 70% of staff are employed in clinical roles. Nurses and midwives make up the highest percentage of the overall workforce (30%), followed by administration and estates (27%), HCAs /

support staff (15%), medical staff (12%) and allied health professionals and healthcare scientists (6% and 7% respectively). Managers make up around 3% of the total workforce.

9.2.9 Figure 20 below shows a graphical representation of the workforce by staff group.

Figure 20: Workforce by Staff Group



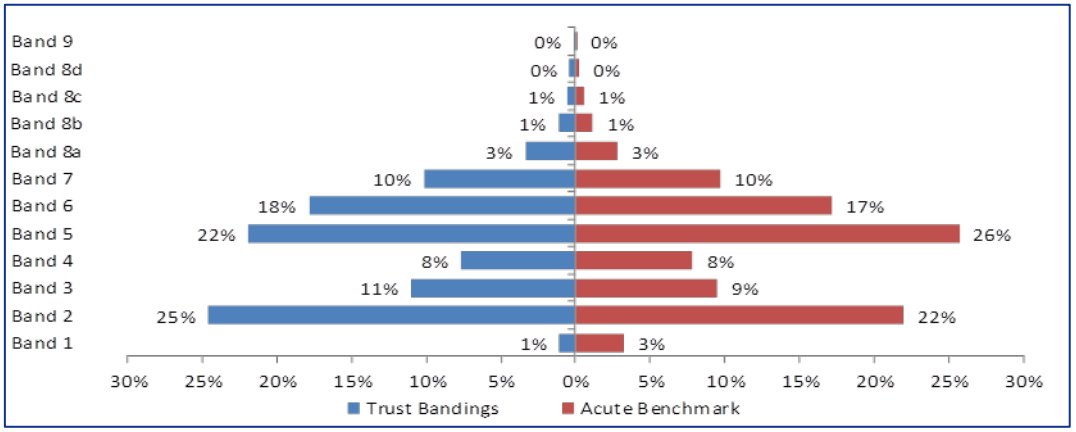
Skill Mix Analysis

9.2.10 Data from the Trust's Workforce Dashboard has been used to populate this section and, where possible, a comparison has been made with the West Midlands Productive Workforce Metrics to benchmark performance.

9.2.11 88% of the current workforce is employed on Agenda for Change (AfC) terms and conditions with the remainder being Trust Directors and medical staff. The majority of the workforce (83%) is paid on AfC band 7 or below. The Trust employs around 1,324 WTE band 5s (20%) and approximately 1,404 staff on band 2 (20%).

9.2.12 When compared with the regional acute benchmark group the Trust's AfC banding profile matches overall, although the Trust's profile is slightly richer in bands 1 - 4 and has slightly fewer band 5 posts. This is in line with plans to increase the use of band 4 support worker roles to areas outside of nursing. Figure 21 presents Trust's AfC banding profile compared with the acute benchmark.

Figure 21: Trust Banding Compared with Benchmark



9.2.13 The Trust has further scope for the creation of new and redesigned roles to:

- Improve workforce productivity;
- Achieve financial savings through the redesign of skill mix;
- Improve quality by finding solutions for those roles that are difficult to recruit to; and
- Ensure that the skills and experience of staff are fully utilised.

Examples of this are the rolling out of the assistant practitioner role to staff groups other than nursing, e.g. in pathology, and further embedding the Trust's apprenticeship strategy.

9.2.14 The Trust is further strengthening systematic workforce planning within clinical groups at service level to develop a greater understanding of the workforce planning implications of future service changes. This includes introducing a framework to plan and deliver:

- Alternative skill mix solutions and role redesign;
- Acute to community shift;
- 7-day working;
- Integration of clinical teams; and
- Adoption of new technology.

This work continues in addition to wider corporate service efficiencies and employment policy review.

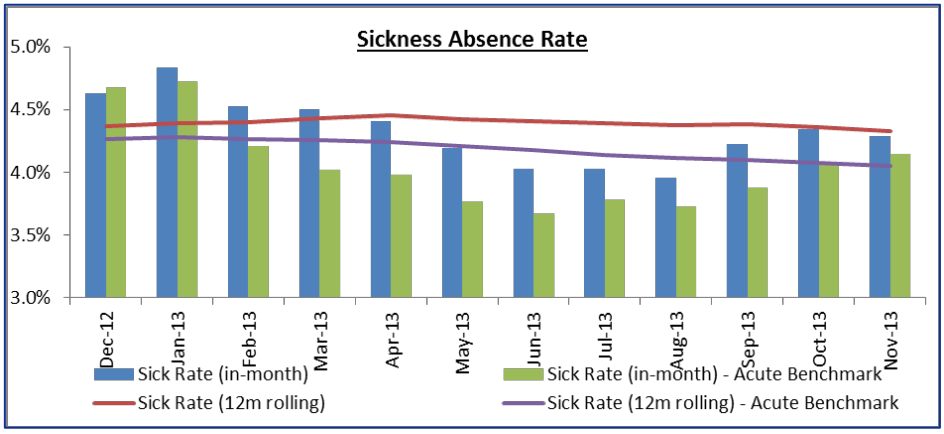
Workforce Key Performance Indicators

Sickness Absence

9.2.15 The Trust monitors performance in relation to sickness absence, staff turnover, agency spend, staff appraisal, mandatory training and vacancies.

9.2.16 Performance over the past 12 months has shown a slightly worsening trend and is slightly above the Acute Benchmark average (see Figure 22 below). The Trust's rolling sickness absence figure for January 2014 is 4.39% and shows an improved position on the previous month.

Figure 22: Staff Sickness



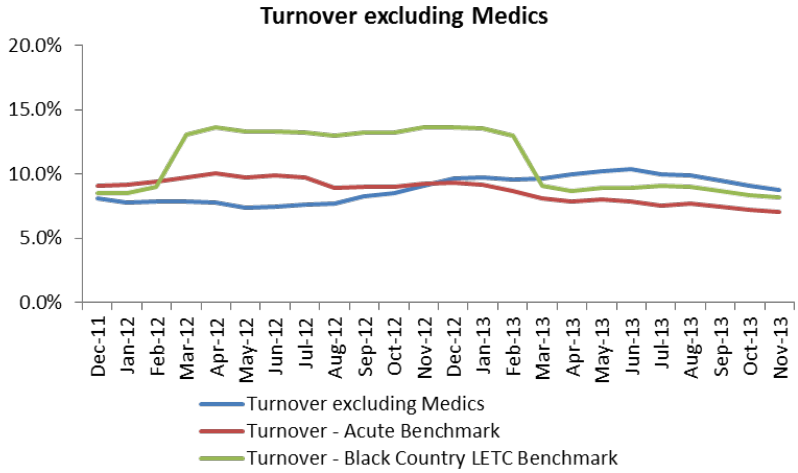
9.2.17 In common with most acute Trusts the main reasons reported for being absent from work are related to stress and anxiety followed by musculoskeletal conditions. The Trust has in place a robust health and well- being strategy that comprises a comprehensive programme of activities aimed at helping our staff to stay healthy, including, health screening, managing and reducing stress, smoking cessation, increasing physical activity, eating healthily and weight reduction.

9.2.18 In light of performance being off-trajectory the Trust's sickness absence management action plan has been reviewed and strengthened.

Staff Turnover

9.2.19 Staff turnover (excluding medical staff) has fallen year on year since 2008/09, when it ran at 11.04%, to the latest reported position of 8.7% (January 2014). The percentage leavers figure is below historical average of around 10-11%. Staff turnover (9.50%) is above the leaving rate when compared with our benchmark groups (7.5% and 8.7%). This will, in part, be influenced by the Trust's workforce reduction programme. Figure 23 below presents staff turnover against acute and Black Country benchmarks.

Figure 23: Staff Turnover



Appraisal

9.2.20 The Trust's current internal appraisal compliance target is 100% by 31st March 2014. The compliance rate is steadily improving and is currently running at 86%. The roll-out of ESR Manager Self-Serve (MSS) will enable more accurate and timely compliance reporting and increase the level of confidence in the quality of our data.

Mandatory Training

9.2.21 Several interventions, including a review of frequency intervals for attendance with subject experts and a radical review of access to training and methods of delivery, have been put into place to improve compliance with Mandatory Training levels. 86% of staff are up-to-date with their mandatory training against the Trust's target to reach 95% compliance by the end of March 2014. Improved access is being facilitated through e-learning and other measures to minimise time away from the work place.

Staff Experience

9.2.22 The overall staff engagement score as determined by the NHS staff survey is 3.73 (3.67 in 2012) and is in line with the national average for acute trusts. Results indicate that there is much more for us to do in developing our leaders and managers and motivating our staff. In overall terms the majority of indicators show no change since 2012. None of the indicators showed a significant decline and several of the quality and safety indicators showed a significant improvement in the following areas:

- Recommendation of the Trust as a place to work or receive treatment (up by 0.19 points);
- Satisfaction with the quality of work and patient care able to deliver (up by 7%);
- Staff witnessing potentially harmful errors in last month (down by 8%);
- Staff experiencing harassment, bullying or abuse from patients/relatives in the last 12 months (down by 11%); and
- Good communication between senior management and staff (up by 6%)

9.2.23 Ranking of the Trust's key findings compared to all acute trusts in 2013 is summarised in Table 91:

Table 91: NHS Staff Survey Results

Ranking	Number of key findings
Best 20%	9
Better than average	10
Average	6
Worse than average	1
Worst 20%	2

9.2.24 The Trust appears in the best 20% for staff satisfaction with the quality of care , work pressure, well-structured appraisal, staff working extra hours, staff suffering from work related stress, staff witnessing potentially harmful errors, near misses etc., staff experiencing physical violence from patients, staff experiencing harassment / bullying from patients / relatives good communication between senior management and staff.

9.2.25 These results are being triangulated with key data sources and the findings of in house real time monthly staff surveys. The staff survey action plan will be agreed and monitored by the Trust's Patient and Staff Engagement Committee chaired by the Chief Executive.

Vacancies

9.2.26 The Trust has done a substantial amount of work since July 2013 to maintain an establishment position within the Electronic Staff Record system with the aim of enhancing the process for vacancy management. As at end January 2014, 187 posts were identified as being unfilled (circa 2% of the total workforce).

Time to Hire (recruitment)

9.2.27 On average the time from a vacancy arising to a staff member taking up post is 18 weeks. We have plans in place to reduce this to meet our standard of 12 weeks as follows:

- Detailed KPIs for recruiting managers
- e-DBS functionality to reduce the time the standard pre-employment checks take to process
- Launch of NHS Jobs2 in March 2014 will automate and track the vacancy approval process and make the recruitment and selection process more efficient.

Hard to Fill Posts

9.2.28 The Trust actively reports progress against recruitment / supply issues. Table 92 below summarises current problems and the actions being taken to address them.

Table 92: Action to Address Hard to Fill Posts

Post:	Action to Address
Interventional Radiology	Imaging Clinical Group developing plans with UHB.
Sonographers	Emerging problem exacerbated by a couple of local Trust's increasing pay bands. Detailed workforce plans developed to support commissioning requirements for Health Education West Midlands. Recruitment and retention strategy in development, to include reviewing sonography bank rates.
Emergency Care Consultants & Acute Physicians	Enhanced recruitment process for Consultants to 'sell' the organisation as an employer of choice. Focus initially on hard to fill specialities. HR and medical staffing departments working with Clinical Groups to review workforce composition with respect to role of Physician's Assistants and Advanced Clinical Practitioners, band 8a roles, in response to the known shortage of Emergency Care Doctors.
Midwives	No longer considered to be a major risk area but will be closely monitored.
Health Visitors	Due to number of Student Health Visitors, Health Visitors vacancies are likely to be filled by 2014.

Post:	Action to Address
Staff Nurses	Becoming increasingly hard to recruit to band 5 Staff Nurses as the Trust is competing with a number of neighbouring Trust's many of whom are increasing their qualified to unqualified nurse ratio. Targeted recruitment to support to the medicine clinical group to actively support filling vacant posts. Current conversion rate of job offers to commencement (April '13 to November 2013) is 75%. Active review of medicine clinical group Staff Nurse retention rates to establish why nearly 40% of leavers over the previous twelve months have been employed by the organisation for less than two years.

9.2.29 A range of recruitment strategies have been adopted to secure the supply of staff in these difficult to recruit areas, including international recruitment and working with recruitment agencies (head hunting). The Trust is engaging with the work of the emerging Local Education and Training Councils to actively address priorities relating to the security of staff supply, and specifically with the West Midlands LETB that is reviewing the regional position in relation to medical staffing shortage hotspots.

9.2.30 This approach, plus the development of improved working conditions in the MMH, will help recruitment and retention more generally.

Benchmarking Current Position

9.2.31 External support has been commissioned to help understand the Trust's workforce efficiency position relative to national and regional peers. In summary, this benchmarking shows:

- The workforce profile in terms of distribution of pay bands and size appears typical with comparator trusts;
- Over the last seven years growth of the consultant workforce has been in line with national trends;
- The average consultant PA level per WTE is slightly below the national average at 10.89;
- Agency and sickness expenditure is relatively high and offers scope to reduce costs and improve quality of care; and
- The Trust has a higher consultant and medical staff to bed ratio than the Keogh trusts.

9.3 Workforce Changes Required by RCRH and MMH Models of Care

9.3.1 The clinical service strategy and MMH service vision will require the acute services workforce to be smaller and more highly specialised. Investment and development in community services will result in a growth in the community workforce. This sets the context against which the Trust will be re-profiling the workforce between now and 2018/19.

9.3.2 Development of Community Services will involve the integration of clinical pathways supported by staff that will need to help patients navigate complex healthcare systems rather than default to admission via A&E and that will support safe early discharge from hospital.

Change to Ways of Working

9.3.3 Change to ways of working mean that in future many of the Trust's clinical teams will be:

- Working across acute hospital and community settings;
- Treating the highest acuity patients in the MMH;
- Working more autonomously and delivering a more complex caseload to patients in community settings;
- Working in more flexible ways across traditional professional groups and organisational boundaries;
- Up skilling to take on extended roles;
- Required to use new technology to deliver clinical care and non-clinical services; and
- Working in new patterns of employment e.g. 24/7 on-site presence, seven-day working and delivering routine services in the evening and at weekends.

Changes Required to Support Clinical Sustainability

9.3.4 The Trust has already achieved significant benefits from single site working through the clinical service reconfigurations. The new single site MMH will build on this to enable the Trust to support long-term clinical sustainability and 24/7 working to achieve:

- Emergency and inpatient services being available 24 hours a day, seven days a week;
- The majority of other services being operational for at least 12 hours a day during the week and for some time at the weekend, therefore offering patients greater choice of appointment;
- A greater critical mass, within larger teams, to reduce professional isolation and concentrate clinical expertise to enable the delivery of high quality care through greater sub-specialisation;
- Robust 24-hour on-site presence including consultant cover in emergency medicine, acute medicine, intensive care, obstetrics and obstetric anaesthesia; and
- Extended working hours until 10 p.m. seven days a week as the norm in emergency anaesthetics, paediatrics, surgery, trauma and orthopaedics, imaging, pathology, general medicine cardiology stroke and obstetrics.

9.3.5 The changes outlined above will result in significant changes to how staff work, the hours they cover and the skills they will need. Some of these groups are currently in short supply and so change will need to be managed sensitively to ensure that staff can be recruited and retained in the period leading up to the MMH opening.

Overall Workforce Reduction

9.3.6 The long-term workforce plan and trajectory is set out in the next section and includes total WTE movements over time including national efficiencies.

9.3.7 This section focuses on describing the workforce change and pay cost reductions resulting from moving to the future RCRH / MMH service model. It will also outline the workforce change implications and the workforce modelling programme.

9.3.8 Long-term forecasts predict a net reduction of 417 WTEs driven by RCRH activity and efficiency changes largely due to site reduction. The waterfall charts below illustrate the grouped areas for which WTEs are modelled to reduce (593 WTEs) and those for which WTEs are modelled to increase (176 WTEs) and come back to the modelled overall net position (417 WTEs) by 19/20.

Areas of Workforce Reduction

9.3.9 Principally the workforce numbers / pay costs will reduce as a result of:

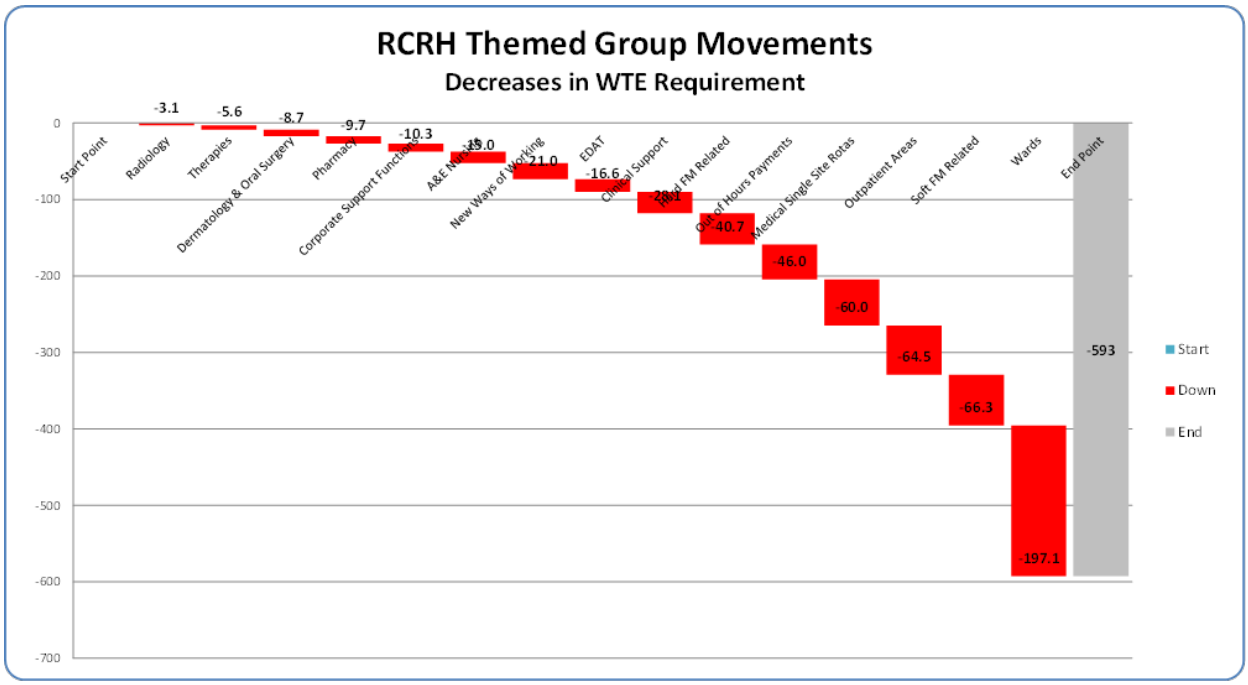
- Acute hospital bed reductions;
- RCRH / MMH planned changes and redesign;
- The move of all acute inpatient services to a single site, allowing a single emergency front door, single assessment units and single out of hours rotas leading to the requirement for fewer WTEs; and
- The transfer of Hard FM estates staff to the PFI provider.

9.3.10 In several areas WTEs will decrease, including the area grouped as 'wards' which relates to staffing reductions associated with a drop in bed numbers and outpatient areas which relate to WTEs reducing where clinical activity is assumed to be delivered by other providers and / or activity is no longer being provided.

9.3.11 Hard FM related WTE reduction is associated with the transfer of estates staff to the PFI provider when the MMH opens. Other departmental WTE reductions e.g. portering, domestics, pharmacy etc. are driven by efficiencies associated with RCRH / MMH changes i.e. reduction in floor area, admission avoidance and reduction in length of stay. These WTE movements relate specifically to RCRH reductions.

9.3.12 The workforce reductions outlined above are illustrated in the waterfall chart presented in Figure 24 below.

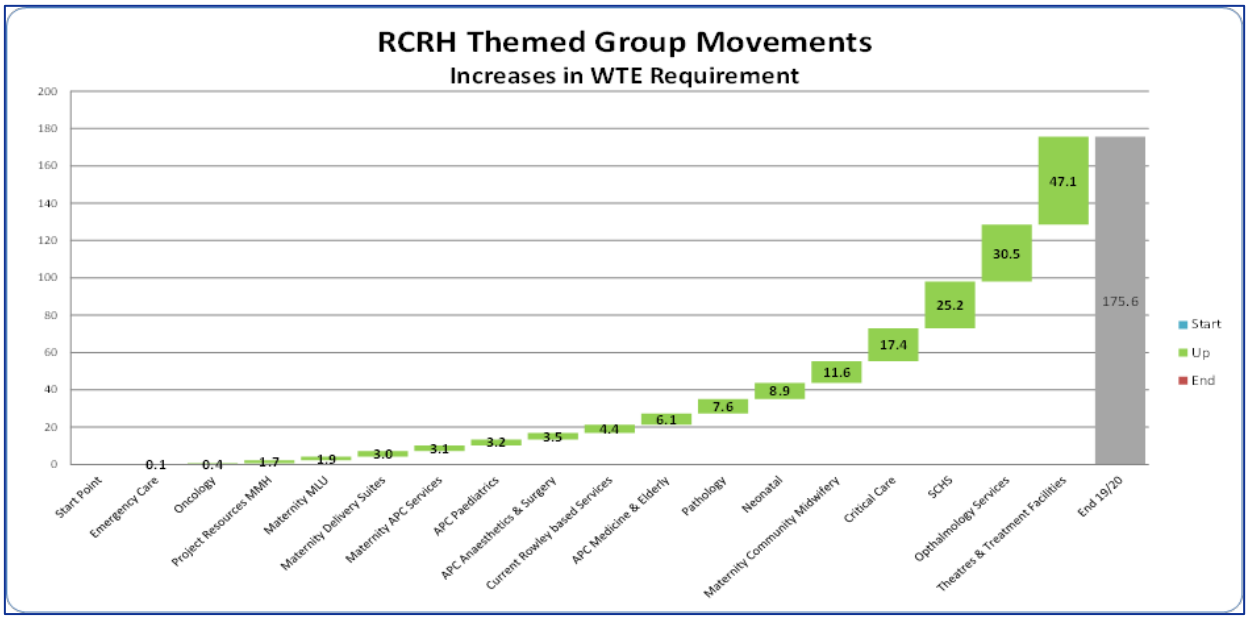
Figure 24: RCRH Workforce Reductions



Areas of Workforce Growth

9.3.13 The next waterfall chart (Figure 25 below) illustrates where clinical activity changes result in a number of areas of growth and therefore a corresponding increase in WTEs in clinical and non-clinical services, including theatres, critical care and ophthalmology.

Figure 25: RCRH Workforce Growth



9.3.14 Table 93 below illustrates the assumed pay cost reduction benefits of operating from a single acute hospital site combined with the WTEs reductions driven by RCRH activity changes. In total £25m of savings are planned to be released as a result of the activity and physical infrastructure changes. The rationale for this and the associated pay reduction is explained in further detail in Table 93 below.

Table 93: Rationale for Right Care, Right Here Pay Reduction Assumptions

Right Care, Right Here and Single Site Working Benefits	**Rationale**	**Value £000s**
Radiology services	Activity driven reductions and consolidation of services on a single site	128
Therapies		237
Dermatology and oral surgery		364
Pharmacy services		409
Corporate service functions		432
A&E nursing	Reduction in nurse staffing associated with running a single emergency front door	630
New ways of working	Consolidation and integration of services and the estate redesigned related workforce redesign	882
Investment in ED workforce (EDAT)	Emergency Department additional staffing resource no longer required once running a single emergency Department	736

Right Care, Right Here and Single Site Working Benefits	Rationale	Value £000s
Clinical support	Activity driven reductions and consolidation of services on a single site	1,222
Hard FM related	Estate staff transfer to PFI provider (TUPE)	1,708
Out of hours payments	Reduction in duplicate on-call non-medical rotas due to moving to a single acute hospital site	1,932
Medical single site rota	Reduction in number of out of hours medical rotas currently in operation	2,520
Outpatient areas	Reduction in clinical activity and scheduling efficiencies	2,708
Soft FM related	Consolidation of services to a smaller single site acute hospital requiring a reduction in catering, portering, security and domestic services	2,786
Wards	Reduction in acute hospital beds	8,319
Total		**25,011**

9.3.15 The changes will need to be addressed at the same time as developing efficiencies to meet the financial challenge as presented in the next section.

9.4 The Broader Financial Context

9.4.1 The Trust's long term strategic plans and LTFM require a reduction of circa £79m on annual pay spend between now and 2018/19. The greatest impact of this change is generated by national efficiency requirements and transformational change under the RCRH service model assumptions.

9.4.2 National efficiency assumptions have been modelled in the LTFM. The assumed efficiency is circa 5% in 14/15 and circa 4.2% in 15/16 (consistent with Monitor expectations).This represents a national efficiency CIP requirement for the next two years of £37.5m in total over the period, allowing for inflation.

9.4.3 The assumed WTE reduction associated with the £79m reduction in workforce costs is 1,739 WTEs by 2019/20. It is assumed that a proportion of the workforce cost reduction will be achieved by reducing unit labour costs as well as by reducing headcount. The resultant workforce profile is presented in Table 94 below.

9.4.4 The LTFM also assumes that in future there will be service growth with a value of 1% per annum and an associated increase in WTEs associated with RCRH / MMH service changes. This growth in total creates a need to employ an estimated 471 additional staff between 2014/15 and 2018/19 of which the new investment in growth employs 295 WTE.

9.4.5 Overall workforce movements to the end of 2018/19 create a reduction of 1,267 WTE.

Table 94: Workforce Profile

	Outturn	Future Years								
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
	Wtes	Wtes	Wtes	Wtes	Wtes	Wte's	Wtes	Wtes	Wtes	Wtes
Base Position										
Consultants	279.4	286.8	286.5	280.9	279.3	270.3	267.0	266.6	264.7	261.5
Junior Medical Staff	474.1	466.1	453.1	438.3	424.6	408.3	414.7	405.8	398.2	387.6
Nursing - Acute	2,454.2	2,487.4	2,384.1	2,236.8	2,113.2	1,985.9	1,980.0	1,953.1	1,893.3	1,849.8
Nursing - Community	517.0	492.1	479.2	458.4	433.8	408.7	380.3	367.1	356.6	336.9
Scientific / Prof & Tech	1,118.8	1,082.7	1,040.9	1,001.7	958.4	934.7	907.2	892.0	874.6	850.5
Non Clinical	2,083.5	1,973.5	1,859.2	1,738.7	1,622.3	1,430.4	1,340.6	1,285.7	1,245.7	1,181.1
Agency	121.1	73.5	57.9	53.3	50.2	46.8	40.3	35.6	32.9	29.8
Sub Total	7,048.0	6,862.1	6,560.9	6,208.2	5,881.7	5,485.1	5,330.1	5,206.0	5,066.0	4,897.3
Developments										
Consultants	-	1.8	3.9	6.3	9.8	12.1	14.2	16.4	19.8	23.0
Junior Medical Staff	-	1.9	4.4	7.3	11.2	14.1	16.5	19.1	23.0	27.4
Nursing - Acute	-	16.2	34.1	54.7	84.0	103.2	119.0	138.0	167.5	187.5
Nursing - Community	-	-	19.2	40.8	67.8	96.9	126.8	156.1	189.2	222.7
Scientific / Prof & Tech	-	8.1	17.1	27.6	42.4	52.2	60.3	70.0	84.8	95.0
Non Clinical	-	2.6	5.5	8.9	13.6	16.7	19.3	22.4	27.2	30.2
Agency	-	-	-	-	-	-	-	-	-	-
Sub Total	-	30.6	84.2	145.5	228.9	295.3	356.1	422.0	511.5	585.8
Combined										
Consultants	279.4	288.5	290.4	287.3	289.1	282.5	281.2	283.0	284.5	284.5
Junior Medical Staff	474.1	468.0	457.5	445.5	435.8	422.3	431.2	424.9	421.2	415.0
Nursing - Acute	2,454.2	2,503.7	2,418.1	2,291.5	2,197.2	2,089.1	2,099.0	2,091.1	2,060.8	2,037.3
Nursing - Community	517.0	492.1	498.3	499.3	501.6	505.6	507.1	523.2	545.8	559.5
Scientific / Prof & Tech	1,118.8	1,090.7	1,058.0	1,029.3	1,000.8	986.9	967.5	962.0	959.4	945.5
Non Clinical	2,083.5	1,976.1	1,864.8	1,747.6	1,635.9	1,447.2	1,359.9	1,308.1	1,272.9	1,211.3
Agency	121.1	73.5	57.9	53.3	50.2	46.8	40.3	35.6	32.9	29.8
Sub Total	7,048.0	6,892.7	6,645.0	6,353.7	6,110.6	5,780.4	5,686.2	5,627.9	5,577.5	5,483.0

Addressing the Workforce Challenge

9.4.6 The Trust has undertaken significant work to identify how we will address the workforce challenge. At a strategic level we will achieve this through the delivery of three key themes:

- Savings as a result of delivery of the RCRH activity reductions and efficiencies;
- Long term workforce change programme; and
- An annual CIP programme, as part of wider QIPP plans that include tactical approaches to saving costs as an addition to the long term workforce redesign.

9.4.7 The execution plan for delivering the workforce challenge will be as follows:

- Configuration driven changes (e.g. OPD and admission avoidance) will be run by clinical groups;
- Seven day services will be run centrally as a successor to the Winter Programme;
- A five year transition path, including PF2 TUPE will be corporately managed and run;
- Corporate services reform will be delivered in 2 phases of change in 15/16 and 17/18 following the implementation of the electronic record which will achieve efficiencies in medical records and administration process; and

- A centrally run grading shift programme, with group triumvirates central to delivery, will run in 2 phases of change in 15/16 and 17/18.

9.4.8 The intention is to release £34m of savings between 2014/15 and 2018/19 in addition to the £25m released through the RCRH planned changes. It has been derived through a comprehensive analysis of the opportunities to reduce workforce costs within existing nationally agreed terms and conditions including Agenda for Change. It is also informed by benchmarking of best practice with other Trusts, where this is available, for example: a comparison of local agreements such as Pay Protection agreements and benchmarking of corporate services costs.

9.4.9 In addition to the RCRH / MMH workforce changes and long term workforce redesign the Trust will, year on year, continue the development of a detailed rolling two year CIP programme. The detail for 2014/15 and 2015/16 is contained within a separate document.

9.4.10 The Trust has a good record of delivering close to 100% of its planned CIP programme. Table 95 below summarises the value of savings planned by the three key change themes.

Table 95: Value of Savings by Theme

Theme	Value (£m)
Right Care Right Here/MMH service redesign	25
Transformational Change work Programme	34
Rolling CIP Programme requirement in future years	20
TOTAL	**79**

9.5 Workforce Change Programme

9.5.1 The Trust has significant experience of managing change successfully and delivering large-scale workforce redesign through:

- Trust merger;
- Large-scale workforce reduction programs; and
- Clinical service reconfigurations.

9.5.2 The delivery of the Trust's Strategic Workforce Plan is governed by the Trust's Workforce Delivery Committee. Trust Board oversight is achieved through the Workforce and Organisational Development Assurance Committee. The Workforce Transformation Programme will deliver significant workforce redesign and associated pay savings as follows:

- Skill mix and role redesign;
- Improvement in corporate function efficiency;
- Review of employment policy / improving medical workforce efficiency;
- Managing pay progression; and
- Review of the cost of service developments.

Table 96 below presents the Workforce Change Programme.

Table 96: Workforce Change Programme

Change Theme	Value (£m)	Change Programme
Altering skill mix and role redesign	11	Reducing 35% of AfC bands down one band Converting 20% of non-training grade doctors and 12.5% of consultant PAs to AfC 8b mid-point Outpatient skill mix review
Improving efficiency in corporate functions	12	Reduce corporate function (non-clinical) pay costs by 20%
Review of employment policy / improving medical workforce efficiency	6	Reducing job plans of more than 12 Pas Re-calibrate A/B supplement allocation Shifting to 7 day working Shifting to 24/7 on-site consultant presence Opportunities for workforce flexibility / efficiency through current AfC T&Cs Revise sickness policy Reduce turnover rate Revise protection policy Revise special leave policy Review bank rates Review agency contracts Review of local on-call agreement
Managing pay progression	3	Manage AfC pay progression to reduce costs pressure relating to incremental drift Reduction in Clinical Excellence award payments
Review of the cost of service developments	2	The LTFM assumes £26m of service developments over the six year period. It is assumed that margin on these service developments can be increased by 10%
Total	**34**	

9.5.3 This program plans to release £34m of the savings between 2014/15 and 2018/19 in addition to the £25m release through the RCRH planned changes.

9.5.4 The plans have been derived through a comprehensive analysis of the opportunities to reduce workforce costs within nationally agreed terms and conditions including Agenda for Change. It is also informed by benchmarking best practice with other trusts where this is available, for example:

- A comparison of local agreements such as Pay Protection agreements; and
- Benchmarking of corporate services costs.

Annual CIP Program

9.5.5 In addition to the Workforce Transformation Programme outlined above the Trust will continue the development of a detailed rolling two-year CIP programme. The Trust has a good record of delivering close to 100% of its planned CIP program.

The Trust's Change Plan

9.5.6 The CIP program is driven by the Trust's overarching Transformation Programme which has adopted a across cutting approach. Savings opportunities are structured around agreed themes with delivery facilitated by a management system which monitor's the progress of key workstreams. Operational rigour is maintained by analysing targets at workstream and accountable group / directorate level.

9.5.7 In addition to the Workforce Transformation Programme there are a further eight programmes addressing specific service transformation workstreams such as Diagnostics, Estates, and Procurement etc.

9.5.8 A robust suite of management systems has been created to manage the complex set of steps aimed at delivering the necessary efficiencies. The Trust has its own bespoke Transformation Plan Reporting System (TPRS) which captures all aspects of the CIP programme including workforce reductions and changes in skill mix.

9.5.9 The TPRS system enables workforce changes to be identified by CIP project and progress towards delivery to be monitored. It prompts the completion of quality and safety impact assessments which are reviewed by the Chief Nurse and Medical Director prior to implementation.

Management of Change

9.5.10 Robust processes are in place for the effective management of organisational change and the Trust has a fairly healthy employee relations climate. The Human Resources team ensures that line managers are skilled and supported to manage workforce changes and constantly review the range of staff support mechanisms. Over the past 12 months the following schemes have run successfully to reduce the Trust's pay costs:

- Dis-establishment of vacant posts;
- Review of management structures;
- Voluntary redundancy and MARs;
- Flexible working /reduction in hours;
- Redeployment; and
- Compulsory redundancy.

9.5.11 More radical change is being planned across the Trust's Workforce Change Programme to achieve the levels of savings required as the Trust moves towards the MMH opening e.g.:

- Consideration of the move to shared services / outsourcing / rationalisation of administrative services;
- Making greater use of IT to release staff time; and
- Exploiting Agenda for Change flexibilities to ensure greatest potential for efficiency.

Workforce Assurance

9.5.12 The OBC includes a LTFM which presents the profiled income / expenditure position over a 10 year timeframe. This has been developed on a 'top down' basis, taking historical expenditure as a baseline with a set of assumptions on key drivers for future healthcare demand and supply.

9.5.13 A Workforce Assurance Exercise was commissioned to validate the staffing profiles generated by the LTFM. It was agreed that this would be undertaken from a 'bottom up' perspective and would be based on dialogue with clinical leaders.

9.5.14 A set of detailed bottom up workforce planning assumptions and staffing models was developed with significant clinical and service lead input. It was aggregated by service line to assure the Trust that it will be able to safely staff the MMH and continue to deliver safe high quality services post opening. The work used national / international benchmark information for each service, local comparators, review against regulatory / professional body guidance on staffing levels and emerging best practice.

9.6 Delivering the Workforce Changes

9.6.1 Delivery of the workforce changes is absolutely essential to the successful transition to the MMH model of care. A new Board level Workforce Director will be appointed in the spring to lead the changes required.

Programme Management

9.6.2 Re-designing the workforce and making the efficiencies required by the LTFM will drive significant change across the years of the project requiring careful planning and focus on delivery. Detailed plans will be agreed to support year by year delivery of the workforce profile which will continue to be refined as care pathways are developed.

9.6.3 Progress against plan and management of delivery risks will be monitored by the Workforce Delivery Committee which reports to the Clinical Leadership Executive. Assurance will be provided to the Trust Board through the Workforce and Organisational Development Committee.

Resources

9.6.4 Workforce planning resources have been identified in the MMH budget, which also holds contingency resource for the use of advisors.

Training

9.6.5 The Trust is committed to ensuring that staff have the skills, behaviours and attitude to deliver high quality services. Identifying the skills development requirements to provide high quality care and to equip staff for new ways of working to deliver new models of care is a high priority. As such the Trust is enhancing the appraisal and training needs analysis process in addition to ensuring that skills development requirements are an essential component of service and pathway redesign.

Leadership

9.6.6 The Trust's ability to succeed depends largely on its leadership capability and capacity and being able to attract and develop the best leaders at all levels. Significant resources are therefore invested into leadership development.

9.6.7 Action Centred Leadership (ACL) was introduced to the Trust in 2011 and was launched by the creator of ACL Professor John Adair. To date over 600 Trust leaders have attended the team leader level programme and 85 have attended the operational leader level. We have 8 staff trained as accredited trainers at the team leader level and 2 staff trained as trainers at the operational leader level.

9.6.8 Evaluation of the programme has taken place and shows that attendees are able to give real examples of how applying the model is enhancing their leadership practice. A leadership competency framework has been developed based on ACL functions. This framework underpins the leadership development programme which will be enhanced over the next 3 years by the introduction of 360 degree appraisal, development centres, coaching and development programmes. The Trust is appointing a strategic partner to support this development during February 2014.

9.6.9 The Trust is also introducing a leadership development programme for newly appointed consultants, staff grade and specialist doctors. This will introduce this staff group to the Leadership competency framework and provide a development programme that enables them to fully engage in the leadership and management at service level.

Employee Relations

9.6.10 Central to the effective implementation of workforce change is the ongoing partnership and dialogue with staff representatives through the Trust's employee relations structure. The recognised trade unions continue to have a vital role to play in the success of the Trust and the future large scale workforce change programme through the development and consistent application of employment policy and practice, in the effective management of change, and in raising issues and concerns on behalf of the workforce. The Trust has a good employee relations climate and recognises that this has contributed to the many improvements for our patients and staff over the years.

Staff Engagement

9.6.11 The Trust is clear about the association between positively engaged staff and positive patient experience. Staff engagement can also influence organisational outcome measures such as staff absenteeism, turnover, patient satisfaction, mortality and infection rates.

9.6.12 In September 2013, the Trust introduced 'Your Voice' a system of monthly staff surveys to ask staff in every area of the Trust their views (approximately 2,500 staff) at least quarterly to provide regular, team level feedback that can be acted upon and measured. Teams are mobilised to key actions and results are widely publicised on the Trust's intranet.

9.6.13 The Trust's pioneering approach for staff engagement, called Listening into Action (LiA) is a key vehicle for increasing levels of staff engagement. This is used to involve staff at all levels and from all areas around any particular challenge to deliver better outcomes for patients and for staff and to effectively manage change. The success of this programme has been recognised nationally as the winner of the prestigious 2012 Health Service Journal Award in Staff Engagement. Since 2008, when LiA was introduced, there have been a number of significant improvements in the Trust's NHS Staff Survey results, indicating that staff are more engaged and satisfied at work. This approach will continue to be used as part of a range of engagement methodologies to support all changes that will be required to prepare for, open and run the MMH.

9.6.14 The Trust also has the following in place:

- Employee awards;
- Executive 'walk-abouts';
- CEO monthly 'Hot-Topics' and
- An in-house magazine that keeps staff involved and informed. It also provides staff with 'your right to be heard' where they can write anonymously on any matters of interest or concern and receive a published response from the Trust's leaders.

Working to improve the lives of the local community

9.6.15 As a very large employer with many staff living locally the Trust can play a big role in local health through tackling unemployment and social deprivation by investing in the development of future generations. Learning Works (an award winning initiative situated adjacent to the proposed MMH site) is designed to support and enable the local, ethnically diverse, population to access learning and employment. This facility is a central part of the Trust's work experience and apprenticeship framework linking to plans for developing the band 1-4 workforce. This is a significant part of overall workforce redesign plans.

9.7 Conclusion

9.7.1 A significant amount of work has been undertaken to test whether the Trust can provide safe staffing levels between now and when the MMH opens in 2018/19. Although the changes required are challenging the pressures involved are not significantly different to other acute NHS trusts.

9.7.2 In addition, it should be emphasised that the move to a single site, state of the art hospital, will provide the opportunity to bring staff together to:

- Concentrate specialist expertise to meet Royal College / other national standards and deliver sustainable services;
- Improve recruitment to groups with supply issues;
- Develop new models of care facilitating the design of new roles and skill mix;
- Reduce costly duplication across sites;
- Work more efficiently through the use of improved environments and technology; and
- A whole range of benefits delivered in stages between now and when the MMH opens.

9.7.3 To ensure effective delivery it is likely, that the Trust will need to break new ground, develop new approaches and adopt a robust approach to programme management. The Workforce Delivery Committee, which reports to the Clinical Leadership Executive will lead the process and Assurance will be provided to the Trust Board through the Workforce and Organisational Development Committee.

10 Commercial Case for Private Finance 2 (PF2)

10.1.1 This section has been updated to:

- Reflect the changes made as a result of the Scope Review Process undertaken in 2010;
- To detail the changes made for PF2 in 2013 and the commercial implications of this procurement route; and
- Reflect changes made to the scheme in 2013 during the update for PF2.

10.2 The Scope of the PF2 Contract

10.2.1 The Trust has carefully considered the factors influencing the scope of facilities and services to be incorporated into the PF2 Contract. The main driver has been to deliver best value for money and this section of the OBC summarises the conclusions reached.

10.2.2 The scope has been reviewed twice since DH approval in August 2009:

- The Scope Review Process, completed in September 2010 for change to the RCRH activity model, resulted in change to the size of the scheme but did not significantly change the level of services included in the contract.
- The PF2 Review Process in 2013 ran in parallel with a second review of the scheme. The outcome of these activities led to additional changes to the configuration of the scheme and includes some minor changes to the level of services to be included in the contract.

Buildings

10.2.3 The main acute hospital construction will form the basis of the PF2 contract. A separate research and education block to be included in the PFI contract was planned in the OBC approved by the DH in August 2009. Planning permission was granted for a landmark building.

10.2.4 However, the 2013 review process resulted in transfer of these activities to community facilities that will be developed on retained estate. Education facilities will now be included to support training that needs to be located close to clinical / operational services in the acute hospital building.

10.2.5 The Development Control Plan (DCP) shows space for a landmark building that could contain research, education and other facilities in the future.

10.2.6 The Trust will be retaining a presence on all four of its current sites as outlined below:

- At the City Hospital site services will be provided within the current Birmingham Treatment Centre (BTC), the Birmingham and Midland Eye Centre (BMEC) and the Sheldon Block.
- At Sandwell General Hospital the Trust will retain ownership of a part of the estate, including the relatively new Emergency Services Centre.
- At the Rowley Regis community facility the Trust will retain ownership of the whole estate which will be used both by the Trust and others for the provision of Community Services for the local area.
- At Leasowes Intermediate Care Centre (transferred to the Trust through ‘Transforming Community Services’), the Trust will continue to provide Intermediate Care for the local community.

10.2.7 The BTC was procured through a separate PFI Project. The project agreement was entered into on 19th December 2002, with practical completion on 20th July 2005. The contract duration is 30 years from practical completion. There are no perceived benefits from seeking to incorporate this within the new PF2 Project, and therefore the Trust will continue with the existing arrangements for the BTC.

10.2.8 Some parts of the retained estate require some refurbishment to accommodate the services planned and to bring them up to the required standards for NHS buildings. The Trust has developed a plan for how this refurbishment may be completed over time, utilising internally generating funding.

10.2.9 The Trust does not believe it will get any benefit from asking the private sector to include refurbishment and maintenance of the retained estate within a private finance deal and indeed will lose flexibility by doing so; therefore the Trust will exclude these from the scope of the PF2 contract.

Hard FM Services

10.2.10 The general approach to Hard FM is that these services will form part of the requirements on the Trust's PF2 partner, to maintain the fabric of the buildings and estate and ensure their lifecycle replacement for the duration of the PF2 Contract. Detailed work has been undertaken relating to certain aspects of the Hard FM service to define the optimal approach. The conclusions following this work are as follows in Table 97 below.

Table 97: Hard FM Services Scope

Service	Commentary	Conclusion
Routine & Ad Hoc Security Patrols / Response	The security service operates in close co-operation with the clinical functions of the Trust to deliver those elements of the service that directly relate to patient and visitor safety. Given the importance of direct control of this service, it is proposed to exclude this function from the requirements of the Trust's PF2 Partner. This service is also best delivered in combination with the management of car parking. Whilst it would be possible to include the car park management within the PF2 Contract, and thereby obtain a guaranteed level of car park income through the Contract, the Trust prefers to maintain control of both car parking and security because of the operational dependencies between them.	Exclude from PF2 Contract, and consequently also exclude the delivery of the Car Park Management service.
Operation of Switchboard / Helpdesk	The switchboard service acts as the first point of contact for members of the public to the Trust's services. It also provides a range of other functions for the Trust related to the clinical operations (maintenance of telephone directory; on-call status / contacts; emergency response; etc.).	Exclude from PF2 Contract (apart from the physical switchboard equipment which will be included)

Service	Commentary	Conclusion
IT	The management of IT services and systems has a very different risk profile to the rest of the services considered in delivering a PF2 Project. The future requirements and systems of the Trust are extremely difficult to forecast for the duration of a PF2 Contract (around 30 years), and therefore extremely difficult to price on any realistic basis. Given this, the only aspect of IT services proposed to be included within the PF2 Contract is the network infrastructure within the facilities including the relevant connections to the external environment. The technical solution for the building will include one integrated network which will be managed by the Trust. The Trust will be required to host building management systems for the PF2 partner.	Include Network Infrastructure and IT hub rooms. Exclude all other IT requirements.

10.2.11 Based on this analysis, the overall approach to Hard FM is summarised in Table 98 below.

Table 98: Hard FM Services - Summary of Scope

Service	Incl. in PFI	Excl. from PFI
Building and Grounds		
Building Maintenance (Planned, Reactive and Statutory)	✓	
Building Life-cycle	✓	
Grounds / Gardens	✓	
Pest Control	✓	
External Window Cleaning	✓	
Car Parking		
Physical infrastructure	✓	
Car Park Management		✓
Security		
Physical security of buildings	✓	
Routine Patrols		✓
Ad Hoc Patrols / Response		✓
Switchboard / Helpdesk		
Physical switchboard		✓
Operators		✓
Energy Management		
Tracking and reporting energy consumption	✓	
Identifying energy saving opportunities	✓	
IT		
Infrastructure	✓	
Computer rooms	✓	

Service	Incl. in PFI	Excl. from PFI
End-user Equipment and Systems		✓
Utilities Management	✓	

Changes to the Contract for PF2

10.2.12 In the new PF2 Contract there are now two further categories of services:

- **Minor Maintenance Obligations:** There is flexibility as to whether or not certain types of minor maintenance are included in the PF2 Contract, e.g. internal wall finishes, ceiling finishes, interior door and window repair, lighting consumables, graffiti removal and other minor maintenance. The Trust will be including these within the PF2 Contract.
- **Elective Services:** The Trust can choose to add elective services to the PF2 Contract on an annual or one-off basis (this includes grounds and gardens; snow clearing and window cleaning). The Trust has adjusted the contract to ensure that such services could be included during the term and will reflect this in the procurement documentation to ensure that they are in scope. The Trust would intend to elect to include window cleaning, snow and ice clearance and pest control as an elective service.

Soft FM Services

10.2.13 A detailed review of the alternatives available for inclusion / exclusion of Soft FM services has been undertaken. The conclusion of this work is that the best value solution would be to exclude Soft FM services from the scope of requirements. This is in line with PF2 which states that such services should be managed by the Trust or through other service providers on short term contracts. A copy of the analysis undertaken is included as ***Appendix 10a.*** Retention of Employment arrangements will not therefore be required.

10.2.14 Operational policies for Soft FM services in the new hospital have been developed to support the design process.

10.2.15 The Development Control Plan includes space for a crèche and staff gym. Project Co is not required to submit bids to provide these facilities or services.

10.2.16 The Trust would like to include pest control as an Elective Service (see above). PF2 classes it as a Soft Service which would therefore normally fall outside of the Contractor's obligations. However, the Trust believes that, in the context of this project, there are both practical and value for money reasons for seeking delivery by Project Co.

Equipment

10.2.17 The OBC approved by the DH in 2009 did not include medical equipping within the Project Agreement. Only fixtures and fittings normally associated with a building contract were to be included within the contract.

10.2.18 Imaging equipment will be provided by a separate Medical Equipment Service (MES) contract outside of the PF2 contract to ensure effective management of the capital programme across PF2 and retained estate facilities.

10.2.19 The Trust will retain responsibility for all other equipment, with any specific requirements on the PF2 partner being defined through an Equipment Responsibility Matrix (a summary document is presented

at ***Appendix 7e)***. Decisions on the best method of procurement for equipment (lease / buy / managed contract) will be made as part of the development of the Equipping Plan for the new hospital.

Sterile Services

10.2.20 The Trust has an agreement with an external provider to deliver sterile services as part of the local collaborative agreement in conjunction with other Trusts in the local area. This contract runs for a period of 15 years, with an option for a further 5 years, and there are no advantages in seeking to change this arrangement. Consequently, Sterile Services will be excluded from the scope of the PF2 Contract.

10.3 Approach to Phasing

10.3.1 The PSC solution is a single phase build. The Grove Lane site is constrained and the likely massing of the new build in the PSC would not support moving clinical services whilst construction is on-going. This leads the Trust to expect that bidder solutions will also be single phase; but is open to multi-phase proposals which can be shown to be both clinically viable and better value for money.

10.3.2 The Trust requires beneficial access to the hospital prior to practical completion for some specific installation including Trust and MES provided fixed medical equipment and commissioning tasks related to major clinical equipment and installation of wireless network infrastructure.

10.3.3 Project Co will be required to complete all standard form commissioning activities prior to practical completion. All other Trust commissioning activities will take place after practical completion including the commissioning of the integrated IT network. Support service personnel will move into the building directly after practical completion to undertake these activities.

10.3.4 The Trust's plan is to start moving the clinical activity from both current hospitals within the ten week period after practical completion / handover. This is likely to be accomplished by moving activity from Sandwell Hospital first and then from City Hospital a few weeks later.

10.4 Approach to Interim Services / Early Transfer of Staff

10.4.1 From Section 10.2 above, it can be seen that the scope of services being provided by Project Co will probably be limited to the Hard FM (Estates related services). The Trust will retain ownership and management of some retained estate on its four current sites. It will therefore retain some of its current Hard FM staff to provide Estates Services to these sites.

10.4.2 The remainder will transfer to the Private Sector Provider. The Trust is aware that the provider will require a period prior to commencement of service to train the staff in its processes and methodology. The Trust proposes to transfer staff under TUPE legislation three months before the commissioning and opening of the new hospital to allow this training to take place. The Trust does not therefore require any interim service provision.

10.5 Shadow UP

Shadow UP Assessment

10.5.1 In order to assess the likely value for money and affordability of the proposed PF2 scheme in the OBC, there is a requirement to estimate the likely cost of the Trust's Public Sector Comparator (PSC) if funded by a PF2 scheme. In order to assess this, the Trust's inputs are fed through a high level financial model which estimates a likely unitary payment. This is referred to as the shadow tariff.

10.5.2 It is important to stress that the PF2 provider may make significantly different assumptions when structuring their solution and as such the shadow tariff may be materially different from bids actually received. The bids received will, of course, be based on the PF2 provider's own assessment of cost (based on their design solution), timetable, financial structure and risk.

10.5.3 Currently, the financial market is volatile and the post-preferred bidder funding competition will not be held for another few years. The Trust will monitor the market and developments which take place over this time period to consider the impact on the deliverability and affordability of the project.

10.5.4 Consequently the shadow tariff is intended for use in assessing the likely value for money and affordability of the scheme for OBC purposes and should not be relied upon for any other purpose.

10.5.5 The shadow Unitary Charge contained within the affordability judgment represents an assessment of the likely liability at financial close, based on robust project costs (e.g. capital and lifecycle) developed from detailed service and design considerations coupled with funding terms currently seen in the financial markets on other PPP schemes and as agreed with the DH. As such the Trust would not expect the outcome to be materially different.

10.5.6 This section outlines the outcome of the Shadow UP Assessment. The main assumptions, agreed by the Trust, are that:

- Capital expenditure (including contingencies and optimism bias but excluding VAT), lifecycle, hard FM for the PSC as estimated by the Trust's QS are based upon forecast out-turn prices;
- Insurance, bid and management costs and funding costs (including 50 bps buffer) as estimated by the Trust's financial advisor; and
- Concession length of 30 years from Practical Completion in accordance with Standard Form.

10.5.7 Table 99 below presents the shadow UP assessment completed for the OBC approved in August 2009 in the first column and the current position in the second column (2013/14).

Table 99: Shadow UP Assessment

Model Inputs	Value £000s	Value £000s
	2008/09	2013/14
Construction		
Capex (including contingency and optimism bias but excluding VAT, land and equipment)	393,899	285,277
SPV Bid Development	7,000	7,895
SPV Costs during construction	400	933
Insurance during construction	3,940	2,000
Operating Costs		
Lifecycle (23% of Capex) total		47,842 real
	90,597	80,238 nominal
Hard FM (per annum)	2,555	2,392
Utilities	Pass through	---
Soft FM	Excluded	---
Insurance (per annum)	1,107	400

Model Inputs	Value £000s	Value £000s
	2008/09	2013/14
SPV Costs (per annum)	400	431
Funding Terms	Bank	Bond
Gearing	91%	78% bond
		10% Mezzanine
Swap Rate	4.30%	3.31%
Buffer	0.50%	0.50%
Bank Margin (construction)	1.50%	2.1% bond / 5% mezz
Bank Margin (operations)	1.30%	2.1% bond / 5% mezz
Unitary Payment (first full year payment)	**34,400**	**24,747 13/14** **25,879 18/19 (full UP but only part year payment)** **26,123 19/20 (first full year payment)**
Internal Rate of Return (IRR) %	**14.50%**	**13.0%**

The current position includes changes made in the 2010 and 2013 scope reviews, changes made to adjust for PF2 and funding terms based on the most recent NHS deal closed.

10.5.8 The 2008 shadow tariff model assumed a bank solution as the most likely source of funding at the time. Since then the private placement bond market has become interested in the scheme and the 2013 model is based on such a solution.

10.6 VfM Assessment

10.6.1 There are a number of different options available to fund capital developments in the NHS and each may be more applicable to certain types of projects than others. The main options are:

- Cash surpluses;
- Borrowing from FTFF (when FT);
- Public Dividend Capital (PDC) or Loan from Department of Health (via ITFF);
- Borrowing from other sources (bank, pension fund, council);
- Borrowing via project finance, possibly with European Investment Bank;
- Charitable fundraising; and
- Mixed financing economy (obtain funding from a number of sources).

10.6.2 Each source of funds brings different issues to consider:

- Availability (given SWBH status, project size);
- Applicability (project size, type of project);
- Deliverability (guarantees, alternative use);
- Cost of funds; and

- Value for Money of the solution.

10.6.3 The Trust has considered alternative forms of funding ***(see Appendix 10b)*** and considers that PF2 is likely to provide the best value for money.

10.6.4 HMT and DH require that the Trust is able to demonstrate that a PF2 procurement provides better value for money when compared to a conventional funding route. The preferred scheme PF2 value for money assessment must be satisfied as part of the approvals process.

10.6.5 Previous DH guidance specified that, in line with HMT requirements:

- The value for money test is largely brought forward to the OBC stage;
- Qualitative aspects of the PF2 route are to be considered; and
- HMT standardised templates were used to perform the quantitative analysis.

Qualitative Assessment

10.6.6 The qualitative assessment undertaken for the OBC approved in August 2009 assessed the viability, desirability and achievability of the PFI procurement route, compared to the alternatives. These aspects are described as:

- **Viability:** can the service elements be stated in clear output terms and can the effectiveness of the service delivery be measured and monitored? Can operational flexibility be maintained over the lifetime of the contract at an acceptable cost?
- **Desirability:** is PFI(2) likely to involve better risk management, significant risk transfer and better incentives for delivery on time and cost? Is PFI(2) likely to involve greater innovation?
- **Achievability:** is there evidence that the private sector is capable of delivering the required outcome? Is there likely to be sufficient market appetite for the project? Is there / will there be sufficient client-side capability to manage the procurement process and appraise on-going performance against agreed outputs?

10.6.7 The qualitative assessment has been updated and adjusted for known PF2 factors. The revised document, completed in October 2013, is presented in ***Appendix 10b***.

10.6.8 The Trust is satisfied this demonstrates that a PF2 procurement can develop a viable contracting structure, provide overall benefit to patients, staff and commissioners, and that it is achievable given current market appetite.

Quantitative Assessment

10.6.9 The quantitative VFM position assessment work was concluded in December 2013. The methodology adopted in the workshops was consistent with previous workshops held. All risks were considered and where a significant amount of risk was deemed to be transferred the risks were revisited and, where necessary, reassessed taking into account any insight gained from experiences of the Trust and the Trust's advisors. These discussions enabled a revised overall picture of the risk adjusted costs of each procurement route to be created for comparison.

10.6.10 For each of the outlined risks a consistent approach to analysis was applied. For the risks that sit with the PSC any costs arising will be borne by the Trust.

10.6.11 During the Board consideration of risk transfer it noted that if a risk associated with design, construction or poor project management crystallises adding just 10% of the capital cost this would leave the trust trying to secure £28m to cover the exposure. Should an error of this magnitude arise the Trust would be responsible for funding the rectification – an amount significantly above the delegated capital level.

The Procurement Routes

The Public Sector Comparator (PSC)

10.6.12 The PSC is the conventional approach to delivering the scheme via a design and build contract procured by the Trust. The costs of the PSC cover the construction, 30 years of FM and lifecycle and associated costs of undertaking the project. An assessment of the potential cost of undertaking the project as a traditional procurement was undertaken and these figures were also used as the base for the PSC option in the HMT Quantitative model.

10.6.13 The NPV of the PSC cash flow is £323.3m

Private Finance 2 (PF2)

10.6.14 The PF2 route is based upon delivering the same facilities and services as the PSC however under a 33 year contractual obligation (covering the construction period and 30 years of operation). The input costs were provided by the Trust with QS/Technical adviser input and translated into an annual unitary charge by the Trust's financial advisers, Deloitte. Two scenarios were modelled as follows:

- **PF2 – No capital contribution** – NPV of unitary charge is £409.7m
- **PF2 – £100 capital contribution** – NPV of unitary charge is £392.1m

Updated Quantitative VFM position as at December 2013

10.6.15 The updated quantitative VFM is summarised in ***Appendix 10b*** and the model is available separately.

10.6.16 Table 100 below shows the NPVs of the project cost of each procurement route and the NPV of the risk retained in each instance following the workshops to refine and scrutinise the model. The updated results below demonstrate that:

- The PF2 option without a capital contribution has a lower risk adjusted NPV than the PSC option and therefore offers better value for money.
- The PF2 option with a £100m capital contribution has a lower risk adjusted NPV than the PSC option and therefore offers better value for money.

Table 100: VFM Quantitative Assessment

Option	NPV of project cost	NPV of risk retained by Trust £m	Total risk adjusted NPV
PF2 (no capital contribution)	409.7	18.3	428.0
PF2 (capital contribution, recognition of £100, divided by 3)	392.1	18.3	410.4

PSC	323.2	105.4	428.6

10.6.17 The modelled risk retained by the Trust for each option is as follows:

- PSC – NPV of risk retained is £105.4m
- PF2 – No capital contribution – NPV of risk retained is £18.3m
- PF2 – £100 capital contribution – NPV of unitary charge is £18.3m

PFI/PF2 Changes

10.6.18 In undertaking the qualitative risk assessment the project team were mindful to ensure that the key changes between PF2 and PFI were reflected and the quantitative model adjusted accordingly. The changes reflect the retention of risks by the Trust where they are more appropriately managed by the public sector than the private sector.

10.6.19 The following highlights the key changes and adjustments made:

- **Non NHS specific legislative/regulatory changes** – under PFI this risk sat with the Contractor however under PF2 this risk now sits with the Trust. The quantitative model has been adjusted so that this risk sits with the Trust under both the PSC and PF2 option.
- **The Trust is responsible for soft FM services** - therefore all risks relating to soft FM delivery have been removed from the quantitative assessment.

Equity

10.6.20 One of the key differences between PF2 and PFI is the level of equity taken by the public sector. The benefits of this are twofold:

A. The greater level of equity gives the public sector greater input and control of the project throughout its life as a result of the increased level of ownership. The public sector will have a seat at the SPV board and have input into the direction of the project and key decisions.

B. The public sector will receive an income stream from the dividend paid. This will effectively reduce the UP (and the resultant PF2 VFM NPV). This income stream has been modelled based upon the shadow UP model and gives rise to an improvement in the overall VFM position. The actual amount realised will differ depending on bidder solutions, funders engaged and the levels of equity return, all of which are not finalised at this stage. However, comfort can be gained that this income stream will only improve the overall VFM position for both PF2 options.

Wider benefits of PF2

10.6.21 The Board also considered the wider benefits of PF2 where it is effectively utilised which are:

- Incentive for desired standards to be met;
- Avoidance of cost of delays before the facility becomes operational;
- Avoidance of cost overruns;
- Competitive tension in competitive dialogue drives superior design and keener price;

- Interface between construction, operation and long term maintenance built in to the overall solution with strong incentive to maintain high standards over the life of the contract;
- Mature market and experienced contractors capable of delivering projects of this nature;
- Standardised contracts help specify best practice; and
- Risk transferred to the party best placed to manage the risk.

10.6.22 A summary of the wider benefits of pursuing a PF2 procurement route for reference are presented in ***Appendix 10b.***

Conclusion of the VFM Assessment

10.6.23 The qualitative and quantitative assessments confirm that procuring the new hospital using PF2 represents value for money when viewed alongside the public sector comparator (PSC). Whilst this is the case both with and without a PDC contribution of £100m, the solution with £100m PDC delivers the highest level of VfM and continues to feature as part of the base case modelling for affordability and sustainability purposes.

10.7 PF2 Conformance

10.7.1 The Trust confirms that the Project Agreement developed for the MMH is based on the DH PFU Standard Form Version 3 contract published in August 2003 and updated to take account of:

- Changes made by the PFU in August 2004 and February 2007 (SF3);
- Compliance with Standardisation of PFI Contracts Version 4 (SoPC4) (March 2007) and the subsequent addendum on refinancing; and
- HMT standardisation of PF2 Contracts (December 2012).

10.7.2 Schedule 18 (Payment Mechanism) will conform to the new PF2 standard payment mechanism.

10.7.3 A comparison has been undertaken between the MMH contract, already updated for SoPC4, and the new PF2 drafting. Amendments have been made to the contract to ensure that PF2 drafting is fully taken account of but the original ordering / numbering of the health standard form contract has been retained. This ensures compliance with PF2 without loss of a structure which is familiar to the health sector.

10.7.4 The Trust expects to commission comprehensive surveys of the site before commencing the procurement and these will be made available to and novated to bidders as is now required by PF2. The Trust does not anticipate any early works acknowledging that this approach has been discouraged.

10.7.5 Any changes proposed by bidders to underlying contract drafting principles will have to be justified on a project specific basis as the Competitive Dialogue process progresses and ultimately before Conclusion of Dialogue. Bidders will be made aware that any project specific derogations must be both capable of justification and be minimised.

10.7.6 In addition, the following Schedules adopt the SF3 versions published by the PFU for use on health PFI schemes adjusted where necessary to take account of the required PF2 drafting:

- Schedule 1 (Definitions and Interpretation);
- Schedule 2 (Completion Documents);

- Schedule 6 (Funders' Direct Agreement);
- Schedule 8, Part 2 (Construction Matters, Safety During Construction);
- Schedule 10 (Review Procedure);
- Schedule 11 (Collateral Agreements);
- Schedule 14 (Service Requirements) i.e. the Trust's Service Level Specifications;
- Schedule 15 (Independent Tester Contract);
- Schedule 17 (Market Testing Procedure);
- Schedule 20 (Deed of Safeguard);
- Schedule 21 (Insurance);
- Schedule 22 (Variation Procedure);
- Schedule 23 (Compensation on Termination);
- Schedule 24 (Hand back Procedure);
- Schedule 25 (Record Provisions);
- Schedule 26 (Dispute Resolution Procedure);
- Schedule 27 (Project Co Information);
- Schedule 28 (Certificates);
- Schedule 29 (Refinancing); and
- Schedule 34 (Insurance Proceeds Account Agreement).

10.7.7 The Trust has adopted the use of the PFU's alternative wording for Clause 30 (TUPE and Employment Matters) proposed for use in schemes where RoE does not apply, but staff transfers are expected (i.e. hard facilities management only schemes) that is set out at Appendix 1 to SF3.

10.7.8 At present the Trust does not intend to deviate from the standard form Project Agreement as updated to take account of PF2. Clearly, as the project progresses through the procurement phase there may be circumstances where such deviation may be beneficial. These will be discussed with approval bodies at the appropriate time.

10.8 Market Soundings

10.8.1 The ability of the Trust to secure value for money through a PF2 procurement will be influenced by the ability to attract sufficient credible bidders to generate and maintain meaningful competition throughout the procurement process. Accordingly, the Project has been carefully marketed to attract potential bidders.

10.8.2 The Trust has been meeting with potential bidders over the last few years to assess market interest and develop good relationships. The Project Director and Commercial Manager have met with any interested parties that made contact. These organisations included bidders that have historically bid for the larger PFIs as well as investment companies who would lead the bid process or provide equity investment. These discussions have been helpful in the exchange of information and tend to show that market interest is being maintained.

10.9 Pre-Market Engagement

10.9.1 The move to PF2 as the procurement approach for the MMH requires the Trust to complete the competitive stage of the Competitive Dialogue process in less than 18 months which is considerably shorter than was previously anticipated. HMT guidelines on 'lean procurement' under PF2 propose the use of significant pre-market engagement prior to issue of the OJEU notice to ensure that bidders will enter the process well prepared. This process has been incorporated into the overall programme.

Objectives of the Pre-Market Engagement Plan

10.9.2 The objectives will be to:

- Present the prequalification process to ensure the bidders can prepare;
- Enable discussion about scope and commercial issues to ensure that the project is attractive to bidders;
- Enable discussion about public sector equity funding;
- Explain proposed design methodology, including tight, prescriptive timescales so that bidders can resource it; and
- Discuss proposed Bid Deliverables and evaluation criteria at each stage.

The aim is to assist bidders to be well prepared prior to the entering the process allowing the overall procurement programme to be reduced.

Pre-Market Engagement Process

10.9.3 It is proposed that a Project Initiation Notice (PIN) will be posted in the Official Journal of the European Union 3 – 4 weeks prior to the formal OJEU notice. The PIN will present a brief project description and give notice of engagement events / opportunities including the following:

- Half day introduction to the project supported by a brochure and questionnaire to seek comments;
- Opportunity to book a two hour meeting for the potential bidder project team and the MMH project team; and
- A final event to confirm timelines, scope, procurement methodology and information from HMT on proposed public sector equity stakes.

10.9.4 Careful planning will be required to ensure alignment with approval timescales so that the final meeting takes place after HMT approval and announcement of equity participation percentages.

10.10 Post OJEU Open Day

10.10.1 The Trust will host an open day following publication of the OJEU notice at which the Trust Board will provide a detailed description of the project, covering for example:

- The Case for Change;
- PSC functional content and design;
- Project specific issues; and
- Procurement process and timetable.

10.10.2 The Trust also plans to run a supply chain engagement event. All parties who have made contact with the Trust will be invited to attend as well as local companies that may be interested in bidding for work as part of the supply chain. This will provide an opportunity for the Trust to actively support development of networks between potential bid teams and local business. It will also provide opportunities to maintain general contact with bidders. The event will be organised by 'Find it Sandwell' who have established effective publicity and have experience in running such events.

10.11 Work for the Pre-Procurement Stage

Adjustments for PF2

10.11.1 The procurement documentation has been updated for compliance with PF2. Some of the PF2 guidance is still being developed by HMT. The Trust has been working closely with PFU to develop the following for the scheme pending the publication of final guidance:

- Value for Money (VfM) assessment;
- New payment mechanism; and
- New output specifications for Hard FM services.

Review Process during 2013

10.11.2 The 2013 review process has been undertaken as a result of the following drivers:

- Changes for PF2;
- The appointment of a number of new Board members; and
- The changed context since the last SHA approval in October 2010.

10.11.3 Workshops were held with Trust Board members and the new Chief Executive Officer (Senior Responsible Owner) to review the MMH proposals after PF2 was announced. The questions generated provided the opportunity to review project assumptions and provide assurance that proposals had been subject to robust scrutiny.

10.11.4 An Architectural Design Review (ADR) was commissioned to re-engage with clinical teams that had also changed significantly since the last iteration. This work has progressed well using the 'Boot Camp' type approach proposed for the procurement.

10.11.5 In August 2013 this fundamental review of design engaged senior clinicians and the management of the organisation. It allowed the Trust to meet both clinical and financial expectations and has deepened understanding of the community facility requirement outside the PF2 contract.

10.11.6 This work has resulted in an exemplar design which the Trust Board regards as a key mitigation against procurement cost and timeframe risk.

10.11.7 The Review for PF2 and the ADR has produced:

- An updated PSC design;
- Updating of a range of project documents for PF2 and other changes; and
- New / adjusted contract documents.

10.11.8 This work will be formally signed off prior to uploading to the procurement portal (hosted by E-Box) ready for OJEU.

Procurement Documents

10.11.9 The documents to be finalised and approved are:

For Pre-Qualification:

- Pre-Qualification Questionnaire;
- Memorandum of Information; and
- OJEU notice.

For Volume One of the ITPD:

- Project scope and overview; and
- Overview of the procurement process.

For Volume Two of the ITPD:

- Architectural design strategy including clinical and functional requirements and clinical and support service output specifications;
- Technical information regarding construction works and building and engineering services to be provided; and
- Approach to equipment installation.

For Volume Three of the ITPD:

- The Project Agreement and schedules including:
  - Construction requirements and service level specifications; and
  - A calibrated payment mechanism.

For Volume Four of the ITPD:

- Procurement process and timetable;
- Evaluation criteria and strategy; and
- Bid deliverables;

Additional documents to be kept in the data room:

- Equipment Strategy;
- IT strategy;
- Soft FM strategy;
- Arts strategy; and
- Whole hospital policies.

10.12 Competitive Dialogue

10.12.1 The legal basis under which the procurement is to be concluded is the EU procurement regime (set out in Directive 2004/18/EC (the Directive) pursuant to the Public Contracts Regulations 2006 (SI 2006/5) (as amended) using the Competitive Dialogue procedure. PF2 guidance has been developed to support delivery of a 'lean procurement process'.

Trust Capability and Approach

10.12.2 The Trust has experience of major procurement projects having concluded the Birmingham Ambulatory Care Centre PFI project in December 2002. Project management and governance arrangements have been established for Phase Two, The Procurement Phase, of the Project as described in the next section

10.12.3 The following sections outline the Competitive Dialogue approach.

Preparation for Phase Two: The Procurement Phase

10.12.4 Section 12.11 of this document outlines the outstanding work for the Procurement Phase of the project. This work will be completed and approved prior to OJEU. The Invitation to Participate in Dialogue (ITPD) has been written and will be further developed to reflect the Trust's position on project specific issues (for example, site, planning, contamination, employment matters, IM&T, medical equipment etc.).

10.12.5 The ITPD sets out the Trust's approach and its evaluation criteria to facilitate reducing the number of bidders at the various stages of the Competitive Dialogue process. The Trust will ensure that such criteria can be applied in full and not selectively.

10.12.6 The ITPD includes the following volumes:

- Volume 1: Project Scope;
- Volume 2: Design Specifications;
- Volume 3: Commercial Proposals; and
- Volume 4: Bidder deliverables and Evaluation.

10.12.7 The draft Project Agreement and schedules will be prepared to support Volume 3 of the ITPD. The Project Agreement (and standardised Schedules) will be based on the DH standard form suite of documents (version 3, as amended July 2004, February 2006, November 2006 and for PF2).

10.12.8 The OJEU Notice, Memorandum of Information (MoI) and Pre-Qualification Questionnaire (PQQ) will be prepared and approved by the Trust Board before issue.

10.12.9 The content of the ITPD (together with the form of Project Agreement and Standard Form Schedules, Service Level Specifications, Payment Mechanism and any other key documents) will be reviewed and signed off by the PFU prior to placement of the contract notice in the Official Journal of the European Union (OJEU).

Prequalification

10.12.10 A contract notice will be placed in the OJEU to invite expressions of interest from potential bidders. Those expressions will be streamed by a pre-qualification evaluation process.

10.12.11 The PQQ will be accompanied by a MoI. This will provide potential bidders with a comprehensive insight into the project including, but not limited to:

- Strategic context, purpose and structure;
- An outline of the project scope and levels of service;
- An outline of the procurement process; and
- Next steps for potential bidders.

10.12.12 The MoI will build on information presented at the pre-market engagement events, to enable bidders to make an informed decision about whether they wish to register their interest in the project.

10.12.13 The PQQ submissions will be carefully evaluated by the Trust in terms of economic, financial and technical capacity with the aim of creating a short list of three viable bidders. The Trust Board will approve the shortlist of bidders and those short listed will be invited to participate in the Competitive Dialogue stage of the procurement process.

Competitive Dialogue Process

10.12.14 The ITPD will be formally submitted to the shortlist of successful bidders to open the Competitive Dialogue process.

Competitive Dialogue to Two Bidders

10.12.15 The Trust accepts that a reduction in the number of bidders to two is prudent because of the significant cost of seeking final bids from more than two bidders (both from the Trust's and bidders' perspectives). The Trust will therefore aim to reduce to two bidders as quickly and effectively as possible.

10.12.16 This stage will start with clarification of the process and agreement of a timetable for bidder meetings. The Core Project Team, with their advisors and users as required, will be available to meet with bidders to enable them to develop their commercial, financial and design solutions.

10.12.17 The Trust will request an interim submission from bidders on their design and commercial proposals. Bidders will respond to a series of pre-bid deliverables as outlined in Volume 4 of the ITPD. The Trust will evaluate interim submissions using a weighted assessment process. A mid-term evaluation report will be prepared for Trust Board approval of the two bidders selected.

10.12.18 ITPD Volume 4 will detail each stage from issue of the ITPD to the selection of two bidders.

Two Bidders to Conclusion of Dialogue

10.12.19 A series of further stages will continue the dialogue process with two bidders to develop the deliverables required for final bids as outlined in the ITPD. This process will be accelerated to ensure that the 18 month programme specified by HMT can be achieved. Bidders will continue to develop their scheme and to have meetings with the Trust Team and users. Consultation will be widened to involve departmental clinical leads and other stakeholders as required to achieve certainty around design solutions and price.

10.12.20 Bids will be submitted in draft form near the end of Competitive Dialogue. Bidders will be required to respond to the final bid deliverables set out in Volume 4 of the ITPD.

10.12.21 The Trust understands the importance of the call for final bids and closing of dialogue given the limits imposed by the Directive on the level of bid development after such election has been made (and, beyond that, the tighter limits imposed following the appointment of the Selected Bidder).

10.12.22 A draft Appointment Business Case (ABC) will be approved by DH and HMT prior to Closure of Dialogue to ensure that bid development is closed at this point.

10.12.23 Should the case arise that only one competitive bidder remains at the end of the dialogue phase, the Trust would consult with its advisers, H M Treasury (recognising the policy set out in: "Strengthening Long Term Partnerships") and the Department's PFU before proceeding with any such a decision.

Evaluation of Final Bids

10.12.24 The Trust will issue an Invitation to Submit Final Bids (ITFB) to those bidders remaining at the Conclusion of Dialogue. There will be an opportunity to clarify and fine tune final bids provided this does not involve changes to the basic features of the bid. The Trust will undertake an evaluation process to identify the bidder that has offered the most economically advantageous tender.

10.12.25 Final DH approval of the ABC will be required, ensuring that thresholds remain within those agreed at Conclusion of Dialogue, prior to appointment of the Preferred Bidder. A Preferred Bidder letter will be issued to confirm the appointment.

Preferred Bidder to Financial Close

10.12.26 Clarifications will be made following appointment provided there are no substantial changes to the bid which would distort competition.

10.12.27 Full planning approval will be completed during this stage, having undertaken full consultation during the previous stage. The expiry of the judicial review period will need to be complete prior to Financial Close.

Funding Competitions

10.12.28 One of the key initiatives that define PF2 is the opportunity for the government and third parties to participate in large infrastructure projects as equity investors. HMT have set up an organisation called Infrastructure UK which will invest in and manage the shareholding on behalf of other government departments such as the Department of Health.

10.12.29 The expectation is that, as part of the OBC approval process, HMT will express an interest in taking a percentage of whatever equity Project Co proposes as part of its funding structure.

10.12.30 Once the Preferred Bidder is appointed they will run a third party competition amongst interested parties identified as wishing to take equity stakes in projects like this e.g. Pension Funds. The return that the third party is willing to accept for their equity investment will define the rate that the Infrastructure UK will accept.

10.12.31 The Preferred Bidder will then run a debt funding competition with the selection of the preferred funder requiring approval by the Trust. The process will be managed by the Preferred Bidder’s financial advisors with oversight by the Trust, its advisors, PFU and HMT. The funder’s due diligence advisors will be selected jointly by the Trust and selected bidders early in the Competitive Dialogue process

and will complete due diligence reports at key stages of the procurement. The advisors will be novated to the Preferred Bidder and then ultimately to the preferred funder following formal appointment.

Confirmatory Full Business Case Approval

10.12.32 A Confirmatory Full Business Case will be approved by DH, if within the thresholds agreed at ABC, to reach Financial Close.

11 The Management Case

11.1 Project Management

11.1.1 The Trust places particular importance on effective project management arrangements across all its development activities, and has significant in-house experience.

11.1.2 A comprehensive Project Management approach was put in place by the Trust for this project prior to entering the OBC Phase of the project, and these arrangements and structures will continue with suitable refinement and expansion into the Procurement and Implementation Phases of the Project.

11.1.3 Details of the Project Structure are set out in the Project Execution Plan for the Procurement Phase of the project included as ***Appendix 11a.*** This document has been updated ready for OJEU to ensure that all participants are aware of their roles and responsibilities and understand the project approach.

Capability and Best Practice

11.1.4 The Chief Executive Officer (Senior Responsible Owner for this project) and Director of Finance and Performance both have considerable experience of delivering large PFI schemes. The Trust's Chairman has significant experience in property management. This level of capability will ensure strong leadership for the project.

11.1.5 The Project Team is supported by a fully resourced Project Office, of appropriately experienced and qualified individuals. Details are set out within the Project Execution Plan in ***Appendix 11a.***

11.1.6 The project will be managed in line with best practice ensuring that roles and responsibilities are clearly defined. Decision making will be transparent and will be documented to ensure a robust audit trail is maintained.

Roles and Responsibilities

The Senior Responsible Owner (SRO)

11.1.7 The Chief Executive Officer undertakes the SRO role for this project. The SRO is personally accountable for the success of the project ensuring that the project meets its objectives and delivers benefits. The SRO will ensure that the project maintains business focus in a changing healthcare context and that risks are managed effectively.

The Project Director

11.1.8 The Project Director is responsible for day to day decision making on behalf of the SRO and setting high standards for delivery of the project.

The Project Manager

11.1.9 The Project Manager coordinates the activities of the Core Project Team on a day to day basis and is responsible for ensuring that:

- The Competitive Dialogue process runs smoothly;
- Requests for information, issues and changes are managed appropriately;
- Project standards are maintained; and

- The project budget is managed effectively.

A full time Project Manager has been appointed for this project.

Governance Arrangements

The Trust Board

11.1.10 The Trust Board is the investment decision maker for the project ensuring that the project has a viable and affordable business case. The Board will require evidence that the project can deliver value for money and best quality healthcare for the local community through effective management of the procurement process.

11.1.11 The project will be managed through two key Trust Sub-Committees to ensure that proper scrutiny / oversight is maintained during transition and to ensure effective alignment with planning across all the years of the project. This will avoid the risks of silo-working and ensure that new ways of working are developed well before MMH opening.

The Configuration Subcommittee

11.1.12 The purpose of the Configuration Committee is to provide the Board with assurance concerning strategic direction ensuring on-going alignment of the MMH and the programme of interim reconfigurations. The committee will hold the executive to account for delivering the estates strategy and the full business case. The LTFM is tracked by the Board's Finance Committee on a bimonthly basis

11.1.13 The membership will include:

- The Trust Chair (Chair) ;
- Three Non-Executive Directors;
- The Chief Executive Officer (SRO);
- The Medical Director;
- The Director of Finance and Performance Management;
- The Director of Estates and New Hospital Project; and
- The Chief Operating Officer.

A quorum will be at least 6 members, of which there must be at least one Non-Executive Director.

11.1.14 The full terms of reference are presented in the PEP. A brief summary of the MMH related duties of the Committee are presented below. The Committee will:

- Oversee the competitive dialogue process ensuring that best practice is carried out in line with EU regulations;
- Approve project plans and monitor progress against plan;
- Approve and sign off the key outputs and decisions at each stage of the project;
- Review and act on factors affecting the successful delivery of the project;
- Review serious issues, which have reached threshold level, considering requirement for changes to the project scope, budget or timescale if required;

- Broker relationships with stakeholders within and outside the project to maintain positive support for the acute hospital development; and
- Maintain awareness of the broader perspective advising the SRO on how it may affect the project.

11.1.15 The Configuration Subcommittee will delegate authority, to the MMH and Reconfiguration Committee of the Clinical Leadership Executive and Core Project Team to ensure that the project meets its objectives.

MMH and Reconfiguration Committee

11.1.16 The MMH and Reconfiguration Committee is a committee of the Clinical Leadership Executive comprising a group of SWBH Executive Directors and representatives of the seven Clinical Groups who manage the operational services of the Trust. They will provide leadership within the organisation to ensure successful delivery of the project and assurance to the Clinical Leadership Executive and Trust Board about the project. The group will provide guidance to the Project Director and ensure that Trust resources will be available to support the project. The group will:

- Provide leadership, mandate and focus within the Trust ensuring that Clinical Group objectives will drive effective delivery of the competitive dialogue process;
- Provide advice to the Project Director, Configuration subcommittee and Trust Board, raising any concerns and providing expert opinion to support decision making;
- Resolve issues at organisational level when the Core Project Team requires assistance;
- Resolve issues which impact on SWBH involving senior external stakeholders, the press; Government, arm's length bodies etc.;
- Provide assessment of serious issues;
- Manage changes to the project where required ensuring tight control of cost;
- Ensure that project plans are achievable and facilitate delivery as required; and
- Review the risk register on a quarterly basis / at key milestones, advise the Configuration subcommittee prior to approval and help the Core Project Team mitigate risks at organisational level.

11.1.17 The membership of the MMH and Reconfiguration Committee will include:

- Chief Executive Officer (Chair);
- All Executive Directors;
- The Commercial Manager;
- Redesign Director; and
- Representatives of each Clinical Group.

11.1.18 Issues exceeding the delegated authority of the MMH and Reconfiguration Committee will be referred to the Clinical Leadership Executive or the Trust Board.

Core Project Team

11.1.19 The Core Project Team is the group of individuals with appropriate and complementary professional, technical or specialist skills who, under the direction of the Project Director and coordinated by the Project Manager, are responsible for carrying out the work detailed in the project plan.

11.1.20 The Core Team is responsible for:

- Planning and delivering the Competitive Dialogue and bid evaluation process and all other activities to financial close;
- Developing, maintaining and implementing project plans;
- Co-ordinating working groups and evaluation teams as required;
- Monitoring progress and reporting to the MMH and Reconfiguration Committee and Configuration Subcommittee;
- Managing issues as they arise in line with the issue management policy and escalating those above threshold to the MMH and Reconfiguration Committee;
- Managing change control;
- Managing project advisors, ensuring that their contribution is well understood and that the Trust 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

11.1.21 The Core Team membership includes the:

- Director of Estates and New Hospital Project;
- Commercial Manager;
- Redesign Director for RCRH;
- Head of Estates;
- Deputy Director of Workforce;
- Deputy Director of Nursing;
- Senior Project Accountant; and
- Project Manager.

11.1.22 The Core Team will meet weekly, or as required, to co-ordinate the work required by the project. It reports to the MMH and Reconfiguration Committee.

11.1.23 The Core Team will coordinate the Design Groups and other working groups as required by the Competitive Dialogue Process.

Working Groups

11.1.24 The working groups shown in Table 101 below will be formed prior to Phase Two of the Project. Terms of Reference will be established with the groups at initiation. These groups will report to the MMH and Reconfiguration Committee through the Core Project Team.

Table 101: Working Groups

Working Group	Responsible for:
Design Group	Functional design at 1:500, 1:200 and 1:50 User consultation
	Architectural design, massing, materials, quality of internal spaces, art and way finding AEDET review Town planning
	Engineering Sustainability Energy use
	IM&T Strategy IM&T design Converged network management
Facilities Management Group	Facilities management strategy Schedule 14 Soft FM management
Finance Group	Financial modelling Funding competition Business case development
Equipping and Commissioning Group	Equipment responsibility Equipping strategy Room data sheets
Commercial Group	Project Agreement and Schedules Project specific variations Commercial deal Payment Mechanism

Project Advisor Group

11.1.25 The project advisors are listed in Table 102 below.

Table 102: Project Advisors

Advice requirement	Company
Legal advisors	Pinsent Masons
Financial Advisors	Deloitte
Co-ordination of technical advice	Capita Consulting
Health Planning	Capita Consulting
Facilities Management	Capita Consulting
Equipping	MTS
Architecture	IBI Nightingales
Town Planning	IBI Nightingales

Engineering	Hulley & Kirkwood
Traffic & Transport	Hulley & Kirkwood
Quantity Surveying	Cyril Sweett Limited (incorporating Nisbet)
Life Cycle Analysis	Cyril Sweett Limited (incorporating Nisbet)
Health & Safety	Cyril Sweett Limited (incorporating Nisbet)
Costing Services	Cyril Sweett Limited (incorporating Nisbet)
Insurance	Willis Ltd.

11.1.26 Project advisors have been appointed on a terms of reference which includes all work required from pre-OJEU to Financial Close. The tender documentation outlines the work programme and deliverables anticipated. The Core Team and work streams will co-ordinate delivery of work or advice as required.

11.1.27 The project advisors will meet with the Core Team as required to:

- Plan and co-ordinate work across working groups;
- Maintain communication;
- Report on progress and issues; and
- Provide advice as required.

11.1.28 Membership will include the Core Team and a lead from the Technical Team, Legal Team and Finance Team. Other advisors will be invited as required.

The Clinical Leadership Executive

11.1.29 The Clinical Leadership Executive maintains an overview of the clinical brief, and the activity and financial parameters set by the MMH and Reconfiguration Committee. It provides clinical leadership in relation to the design process and will inform evaluation of bidders' proposals in the PF2 process. The Clinical Leadership Executive includes the management teams of the Trusts seven Clinical Groups and the Executive Directors of the Trust.

Land Acquisition Group

11.1.30 A Land Acquisition Group was formed during Phase One of the project to acquire the land required to build the hospital. This group will continue to meet until the final amounts due for the land acquired under compulsory purchase have been agreed and paid. This group is responsible for:

- Completing purchase of land required for the hospital site;
- Arranging agreed demolition works on the land acquired;
- Ensuring that this work is completed to timeframe achieving path to land before initiation of the procurement process; and
- Managing budget in line with the capital programme.

11.1.31 Membership of the group includes the:

- Director of Estates and the New Hospital Project;

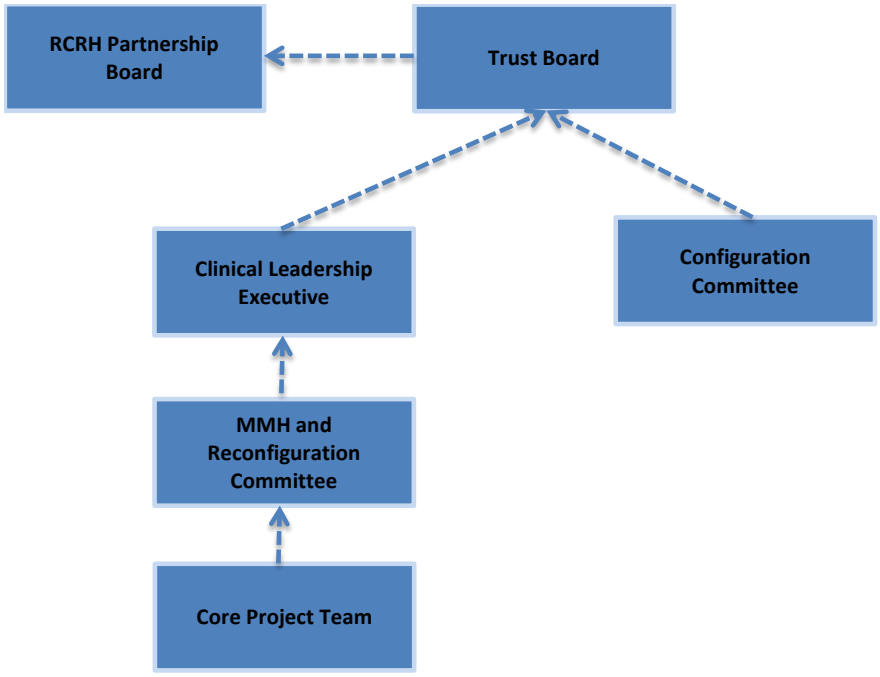
- Director of Finance;
- Head of Estates;
- Commercial Manager; and
- Legal, land and other advisors as required

The Project Structure

11.1.32 The Project Structure and the terms of reference of all groups will be reviewed prior to initiation of Phase Two of the Project and at the end of each stage until Financial Close.

11.1.33 The project structure is shown in Figure 26 below:

Figure 26: Project Structure



Project Resources

11.1.34 Table 103 below presents the staff funded by the project.

Table 103: Posts Funded by the Project

Staffing	WTE
Project Director	0.8 WTE
Commercial Manager	1 WTE
Project Manager	1 WTE
Workforce Lead	1 WTE
Accountants / Commercial	3 WTE
Redesign Director: RCRH	0.4 WTE

Staffing	WTE
Service Development Managers	2 WTE
Head of Estates	0.65WTE
Project Managers Capital Projects	1WTE
Equipping Manager	1 WTE
Estates Managers	2 WTE
Facilities Managers	1 WTE
Project Administrators:	2 WTE

11.1.35 The Trust has established a specific budget for the remaining stages of the Project as set out Table 104 below.

11.1.36 The budget will be managed by the Project Director, with clear delegated powers within the overall budgetary arrangements of the Trust. Regular (bi-monthly) reports on progress against budget are made to the Configuration Committee of the CLE, and any corrective action required is agreed through that mechanism.

Table 104: Project Budget

MMH /Community Facilities	13/14	14/15	15/16	16/17	17/18	18/19	19/20
	£	£	£	£	£	£	£
Pay							
Project Office	368875	368875	368875	316875	317000	317000	317000
Human Resources	76000	106000	106000	166000	166000	106000	106000
Finance	180000	180000	180000	130000	130000	130000	130000
Redesign	205000	315000	270000	170000	170000	350000	440000
Estates	271000	366000	366000	306000	441000	506000	400000
Total Pay	**1100875**	**1335875**	**1290875**	**1088875**	**1224000**	**1409000**	**1393000**
MMH Project Office Non Pay							
Engagement and Comms	20000	30000	20000	10000	10000	30000	30000
Boot Camp expenses	50000	50000	50000				
Market Engagement	30000						
Misc (stationery,printing,travel etc)	40000	40000	40000	40000	40000	40000	40000
Sub-Total Project Office NonPay	**140000**	**120000**	**110000**	**50000**	**50000**	**70000**	**70000**
Advisor Costs							
OBC							
Development of workforce model	20000						
Development of activity model	30000						
External Assurance	50000						
Update Outline Planning Permission	50000						
Business Case Production	15000	15000	15000				
PSC refresh	750000						
Sub-Total - OBC advisor costs	**915000**	**15000**	**15000**	**0**	**0**	**0**	**0**
PFI PROCUREMENT							
Insurance Advisor		3000	900				
Estates & Technical Against Tender	131000	300000	188000	104000	39000	39000	
Estates & Technical Out of Scope							
Legal Advice Against Tender	20000	100850	80000				
Legal Advice Outside Scope	96100	100850	80000				
Corporate Finance Advice Against Tender	20000	109850	60000				
Corporate Finance Advice Outside Scope	94700	109850	60000				
Business, Finance, Activity & Project Management	500		4800				
IT Advisor	20000	20000	20000				
Regeneration Advisor	5000	5000	5000				
Warranty of Title -legal costs			50000				
Independent Tester				50000	100000	150000	
Due Diligence Advisors							
Bidder Costs							
Advisor Contingency	97925	200000	160925	150000	150000	150000	150000
Sub-Total - PFI Procurement advisor costs	**485,225**	**949,400**	**709,625**	**304,000**	**289,000**	**339,000**	**150,000**
Total Advisor Costs	**1,400,225**	**964,400**	**724,625**	**304,000**	**289,000**	**339,000**	**150,000**
Total Non Pay	**1,540,225**	**1,084,400**	**834,625**	**354,000**	**339,000**	**409,000**	**220,000**
Total Pay and Non Pay	**2,641,100**	**2,420,275**	**2,125,500**	**1,442,875**	**1,563,000**	**1,818,000**	**1,613,000**

11.2 Project Assurance

Integrated Assurance and Approvals Plan

11.2.1 The MMH has been identified as a 'Major Project' by the Major Projects Authority (MPA) within the Cabinet Office. It is mandatory for all Major Projects to have an Integrated Assurance and Approvals Plan (IAAP). Integrated assurance and approval is the planning, coordination and provision of assurance activities and DH / HMT approval points through the life of the project. The IAAP is presented in ***Appendix 11b***. The MPA undertakes quarterly monitoring of the project.

Gateway Review

11.2.2 The Right Care, Right Here Programme has undertaken regular Gateways Reviews and a Strategic Health Authority Review to oversee the programme.

11.2.3 The MMH Gateway Review process was initiated with a Risk Potential Assessment (RPA) in 2008 which indicated a score of 51. This put the project within the high risk threshold. A copy of the RPA is attached at ***Appendix 11c***.

11.2.4 **A Gate One** Review was undertaken for this project in November 2008 and was rated at Green.

11.2.5 **A Gate Two** was undertaken in December 2010 to determine whether the team was ready for the Procurement Phase of the project. The Delivery Confidence for this review was Amber Green. An action plan was prepared (***Appendix11d***) and reviewed to ensure delivery. All actions have been completed. A second Gate Two is planned prior to OJEU to review readiness in the light of PF2 and overall change in context.

11.2.6 **A Gateway 3a** review will be completed prior to submission of the ABC and a **Gateway 3b** review will be completed before submission of CBC. These reviews will investigate the Business Case, governance arrangements for the investment decision and implementation plans leading to Financial Close.

Internal Audit

11.2.7 Since the OBC was approved in August 2009 internal audit have reviewed the management of project advisors on the project. The outcome of this is that a policy for management of the advisors was developed.

Trust Board Assurance

11.2.8 New members were appointed to the Trust Board during 2013, including a new Chief Executive Officer. The Board therefore undertook a review of project assumptions during the period of update for PF2. This enabled robust project validation to be undertaken including a clinical review of the PSC design in a series of 'boot camp' workshops using the methodology planned for the streamlined Competitive Dialogue process. This process has provided assurance for the Board to support the approval process.

11.3 Procurement

11.3.1 The procurement of this project will be undertaken through the new PF2 framework, using a Competitive Dialogue process. Details of the scope of the procurement and the processes envisaged are included in Section 12.

11.4 Project Plan

11.4.1 The key milestones already achieved for the project are set out in Table 105 below showing the aim to issue an OJEU notice in April 2014.

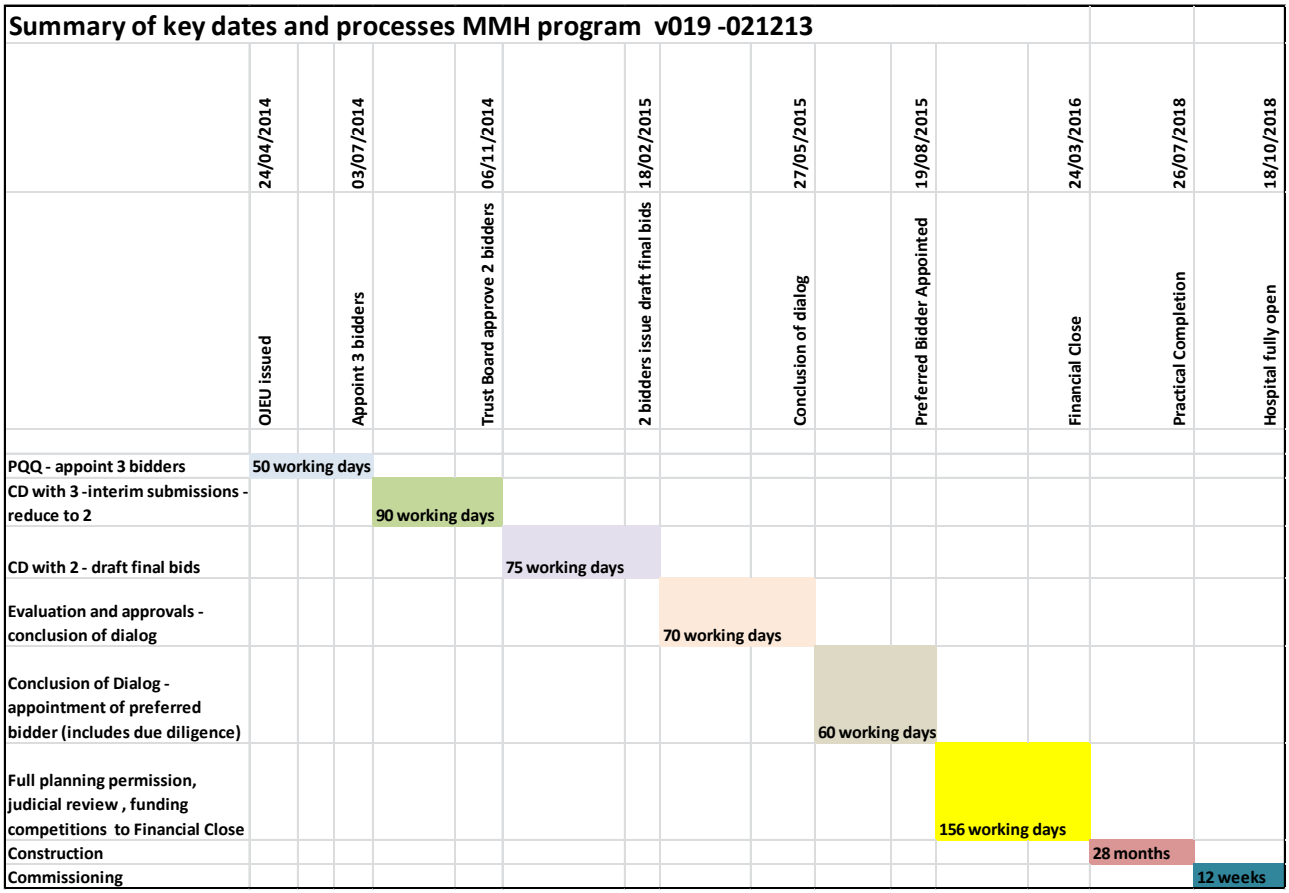
Table 105: Key Milestones to OJEU

Milestone	Date
Outline Planning Consent granted	October 2008
SHA Approval of OBC version 2 (to enable land acquisition)	January 2009
DH Approval of OBC version 2 (to enable land acquisition)	August 2009
SHA approval of OBC Update at version 4.1	October 2010
Route to land title through CPO confirmed	December 2010
Land owned by the Trust	September 2012
Refreshed Outline Planning Consent	June 2013
Trust Board approval of LTFM	October 2013
Trust Board approval of MMH	November 2013
Vacant possession of the Land	November 2013
CCG and Health and Wellbeing Committee endorsement	January 2014
NTDA approval of MMH	January 2014
Issue PIN	February 2014
Introductory meetings	March 2014
DH and HMT approval of OBC and procurement documentation	April 2014
OJEU Notice	April 2014

11.4.2 A project plan for the Procurement Phase has been agreed, and is appended to the Project Execution Plan. The key milestones are consistent with the overall timetable for the overall RCRH Programme. A more detailed project plan for the procurement phase will be developed once approval for the OBC has been secured.

11.4.3 The key dates and processes for the next phase of the project are presented in Figure 27 below.

Figure 27: Key Dates and Processes



11.5 Risks

11.5.1 A risk register was established at the beginning of the project. The register records:

- A description of each risk and the scope of its potential impact;
- The probability of each risk occurring (with a score of between 1-5, 5 being the highest, 1 the lowest);
- The level of impact (with a score of between 1-5 as above); and
- Risk management arrangements to minimise the probability and / or impact.

11.5.2 Risk workshops involving all members of the Core Project Team and lead Directors have been undertaken regularly throughout the project. As a result all of the risks have been actively managed at each stage.

11.5.3 The risk register for the procurement stage of the project has been reviewed by the team and risks are being actively managed in readiness for OJEU.

11.6 Stakeholder Engagement and Communications

Engagement Activities During the OBC Phase:

11.6.1 A wide range of engagement activities have taken place during the on-going development of the OBC.

11.6.2 Staff, the community, land owners, MPs and Counsellors were involved in the preparation for Outline Planning Permission. The consultation was reported in a Statement of Community Involvement and submitted as part of the outline planning application.

11.6.3 Since then the public and staff have been involved in discussions about many subjects supporting development of the Design Brief including:

- The design of the atrium and waiting areas;
- Approach to art in Hospital;
- Presentation of civic pride;
- Approaches to way finding;
- Approach to welcoming design;
- The overall Design Brief; and
- Ward Configuration and preference for single rooms versus 4 bedded bays.

The perspectives gained from this engagement have been incorporated into Volume 2 of the ITPD and the Design Brief.

11.6.4 Other things discussed with staff and the public have included:

- The Acute Hospital Brochure;
- How we can maintain effective communication;
- Transport and Access; and
- The hospital name.

Collaborative Work during the OBC Stage

11.6.5 A collaborative relationship has been developed with Sandwell Borough Council and Birmingham City Council to support engagement with local businesses. This has been facilitated by a series of engagement events and the launch of the ‘Find it in Sandwell / Birmingham’ websites.

Communications Channels

11.6.6 Regular communications are maintained with staff and the public. The channels used for internal communications are:

- CEO weekly message to all staff;
- Corporate Team Brief;
- ‘Hot Topics’ (the monthly team discussion forum);
- Focus groups and events;
- ‘Heartbeat’ (the Trust Magazine);

- Staff Communications (daily staff briefing);
- The intranet; and
- The RCRH Newsletter.

11.6.7 Public facing media / channels used for communications are:

- The RCRH Newsletter;
- The Acute Hospital Brochure;
- The website;
- Press releases;
- Public meetings / focus groups;
- Trust Members newsletter;
- 'GP Focus' (GP magazine);
- A DVD which explains the RCRH Programme to the public
- Twitter and Facebook; and
- Stakeholder update.

Engagement Activities Planned for the Procurement Phase:

11.6.8 The objectives of stakeholder engagement are to:

- Provide opportunities for staff, patient and public involvement in the design process;
- Engender a sense of public ownership;
- Ensure representation from a wide cross-section of the workforce and community;
- Ensure staff and the public are kept informed about progress with the new hospital; and
- Monitor, review and evaluate the effectiveness of communications and engagement activity.

11.6.9 The key plans for on-going stakeholder engagement are:

- Staff involvement in the 'Boot Camps' before OJEU and during Competitive Dialogue;
- Involvement of stakeholders, community, patient and public representatives in workshops and focus groups to comment on the design development for the new hospital;
- Comprehensive use of internal communications mechanisms to keep staff informed;
- Work with the RCRH Communications and Engagement Group and contribution to the RCRH website, newsletter and other communications and engagement activities;
- Regular briefing of MPs and Councillors;
- Use of community networks;
- Press and local media opportunities, adverts, newsletters etc.; and
- Developing links with wider clinical workforce, including primary care, mental health and GPs.

Overview and Scrutiny Committees

11.6.10 Regular presentations have been made to both Overview and Scrutiny Committees (OSCs). The approach to this has been a joint presentation led by the RCRH Programme in which regular updates on the progress of the acute hospital development are also presented. Feedback from the OSCs has been positive and the Trust and other partners have been keen to respond to questions / requests for information.

12 Commissioner and Council Support

12.1 Commissioner Support

12.1.1 The MMH is central to the delivery of the RCRH Programme. The programme was previously hosted by Sandwell PCT and strongly supported from inception by Heart of Birmingham PCT. A strong partnership has developed since approval of the SOC in July 2004 and both PCTs have supported the development of the agreed local health economy activity and capacity model. GPs were involved in the programme from the beginning and continue to support the work of the programme.

12.1.2 Since the Health and Social Care Act (2012) the CCGs have continued to support the RCRH Programme and the case for development of the MMH.

12.1.3 Trust now provides services for three main CCGs:

- NHS Sandwell and West Birmingham CCG (accounts for circa 75% of Trust activity);
- NHS Cross City CCG (accounts for circa 13% of Trust activity); and
- NHS Birmingham South and Central CCG (accounts for circa 5% of Trust activity).

12.1.4 SWB CCG is the single largest commissioner for the Trust and is represented on the RCRH Partnership Board. All three of the CCGs continue to support RCRH and the development of the MMH.

12.1.5 At OBC stage it is a requirement that each of the Trust's lead commissioners sign a Commissioner Support Letter. The Trust has engaged with the three CCGs in preparation for the approval of the OBC and they have confirmed approval at this stage.

12.1.6 The lead CCG, SWB CCG, confirms:

'Support for the Trust's configuration proposals, specifically the business case for the Midland Metropolitan Hospital and associated investments on other sites. These proposals are consistent with our strategy of shifting resource to prevention and primary and community services, reducing dependence on secondary care. This is supported by public consultation in 2006 - refreshed by re-engagement in 2011.'

12.1.7 SWB CCG also confirms the activity trajectories, which are reflected in their future financial forecasts, and comment that the scheme is essential to sustainability of acute care, quality and safety. The CCG emphasises the need to integrate care capability and increase provision in the community in line with RCRH assumptions. SWB CCG has agreed to work alongside the Trust in the execution of the business case.

12.1.8 The other two CCGs have also written to confirm their continued support for the MMH as part of the wider strategic plans of the Trust. They also endorse the intention to provide a greater range of services within community settings, and of the move to create acute services which offer specialist expertise on seven day a week basis.

12.1.9 The CCG support letters are presented in ***Appendix 12a*** and the PCT support letters are presented at ***Appendix 12b*** demonstrating the long term support from commissioners from the early days of the MMH Project.

12.2 Support from the Local Health and Wellbeing Boards

12.2.1 The RCRH Programme has facilitated the support of local stakeholders throughout the years of the programme. Sandwell Metropolitan Borough and Birmingham City Councils are both represented on the RCRH Partnership Board and have worked closely with the Trust on many aspects of the MMH Project. Their continued support is evidenced by the support letters from the Local Health and Well Being Boards presented at ***Appendix 12c.***

12.2.2 The Sandwell Health and Wellbeing Board strongly supports the RCRH Programme and the plans for the MMH. Sandwell Metropolitan Borough Council has written to strongly support the strategic case for the new hospital commenting that:

'For over 11 years the commissioners and community health interests who make up the newly constituted Health and Wellbeing Board have contributed to the goals of a fully integrated health and social care system. We believe the programme is the most visionary and ambitious programme towards integrated public health, health care and social care, which exists in the country, but we also believe it to be pragmatic, inclusive of professional, patient and community interests and affordable within the funds available to the health and social care system in Sandwell and Western Birmingham.'

12.2.3 Birmingham City Council has written to set out support for the RCRH programme as key to the future of health and social care in the local population commenting that in 2013 we have celebrated ten years of a partnership that will be fundamental to multi-agency integration within our Better Care Fund proposals.

12.3 Conclusion

12.3.1 The endorsement letters from the CCGs and the local Health and Wellbeing Boards demonstrate a high level of support for RCRH and specifically the development of the MMH. They are all actively involved in the RCRH Programme and see the benefits for their local communities. They also point to on-going public support for the scheme. The lead commissioner SWB CCG also commits to working closely with the Trust to ensure delivery of the business case.

12.3.2 Reappraisal of the financial and activity model has taken place in 2013 /14 to ensure congruence with Better Care Fund expectations. The RCRH model anticipates a substantial shift of activity to community settings.

13 Post Project Evaluation (PPE)

13.1.1 PPE will be undertaken in four stages:

- Stage One involves the preparation of the PPE Plan. A first draft of this document has been completed for the project which is presented in ***Appendix 13a.***
- Stage Two will be completed on completion of the facility and involves an evaluation of the construction and commissioning stage of the project.
- Stage Three is an initial PPE of the service outcomes six to twelve months after the facility has been commissioned. This will involve evaluation of whether the project has met objectives and whether benefits are being realised.
- Stage Four is a follow up review to assess long term service outcomes two years after the facility has opened.

Evaluation should continue over the longer term to monitor outcomes and plan further improvements.

13.1.2 A Steering Group will be set up to manage the PPE process. The objectives of this group will be to:

- Oversee on-going development of the PPE during the Procurement Phase of the project;
- Sign off the PPE prior to approval of the CBC ;
- Commission evaluation at Stages Two, Three and Four;
- Appoint and brief the Evaluation Teams;
- Receive and test evaluation reports prior to Trust Board review;
- Submit evaluation reports to the local stakeholders and DH;
- Make recommendations on action planning in response to evaluation; and
- Publish outcomes as required.

13.1.3 Frequency of meetings will depend on the stage of the evaluation. At stage one the group will meet infrequently at key stages of the project to guide the project team in the ongoing development of the PPE. During Stage Two, Three and Four a series of meetings will be convened to oversee each PPE review.

13.1.4 The membership of the Steering Group will change over time but will be reconvened at each stage to include all Executive Directors, a representative from the RCRH Partnership Board, a patient representative and representatives from the governing body of the Foundation Trust. It will be chaired by the Non-Executive Director who chairs the audit committee.

13.1.5 Resource will be committed from the Trust's Change Management Team to coordinate each review. The Evaluation Teams will be appointed from outside the organisation to facilitate objective assessment. The Steering Group may consider peer review from other organisations with experience in PFI development or may prefer to commission consultancy support.

13.1.6 The Gateway Review process at Gate 5 will form part of the PPE.

13.1.7 The methodology advised in the DH guidance will be used to ensure best practice. The tools of the PPE will include a section of the following:

- Questionnaires;

- Analysis of activity, workforce and other quantitative reports; and
- Structured interviews.

13.1.8 A report will be written to take the information requirements of all stakeholders into account. Action planning will follow the review to ensure changes delivered by the project are mainstreamed to ensure full benefits realisation.

13.2 Benefits Realisation Process

13.2.1 Benefits realisation is an on-going process led by responsible Directors. Each lead will take responsibility for realisation of the targets for each of their indicators. This involves measurement, review and action planning to ensure full delivery of the benefits. Overall progress will be reviewed at Post Project Reviews.

13.2.2 It is acknowledged that considerable clinical and management effort is required to fully realise benefits following the completion of the project – the Trust is committed to ensuring all of the benefits are achieved. Overall responsibility for ensuring that the benefits of the Project are achieved lies with the Trust Board.

Benefits Realisation Plan

13.2.3 A draft benefits realisation plan has been prepared (see ***Appendix 13b***). This has been updated since the DH approval in August 2009 and will require review over the course of the project to ensure ongoing alignment with Trust objectives. The Trust Board resolution on approving the OBC commits the Trust to review the RCRH indicators quarterly at its Board Subcommittee. In due course a similar approach will be taken for each of the benefits categories.

13.2.4 Some targets have already been identified; others will need to be agreed following base lining activities undertaken during the year leading up to the MMH opening.

13.2.5 The PPE Plan outlines how the project will be evaluated. The effectiveness of benefits realisation is one of a range of things that will be evaluated at agreed intervals beyond the end of the project. Key stakeholders including commissioners, public health representatives and community stakeholders will be involved in benefits reviews at stage three and four of post project review.

13.2.6 The benefits realisation plan identifies, against each benefit:

- The benefit description;
- The indicator(s) used to measure the benefit;
- Who will have lead responsibility for ensuring the delivery of the benefit;
- Assumptions made about action to be taken to ensure the benefit is realised;
- The projected timescale for realisation of the benefit; and
- How the realisation of the benefit will be monitored and measured.

13.2.7 Table 106 below shows the measures selected to assess whether benefits agreed are being realised. The full Benefits Realisation plan can be found at ***Appendix 13b.***

Table 106: Benefit Measures

Benefit Category A: Improved Clinical Quality and Sustainability of Clinical Services	
Benefit Description	**Indicator**
Reduction in hospital acquired infections	MRSA rates C Difficile rates
Consistent standards of care are maintained with few errors and untoward incidents	Reduced serious untoward clinical incidents
Improved integration means that patients will receive seamless care and support tailored to their needs.	Better Care Indicators
Patients will be able to die in place of choice	Reduction in number of patients who die in hospital having chosen to die in a different setting
Improved clinical outcomes	Patient reported outcome measures (PROMs): Patient Generated Index sampling Disease specific questionnaires
Reduced requirement for overnight hospital stay	Combined percentage of day case and 23 hour stay
Faster admission to hospital when required	Time from decision to admit
Ability to deliver excellent acute services	Aggregated results of peer review (across two year periods)

Benefit Category B: Improved Customer Care	
Benefit Description	**Indicator**
Patients and visitors will be treated with respect	Patient satisfaction measures
Patients will feel that their privacy and dignity has been maintained	Patient satisfaction measures
Patients will feel that they have received the best possible treatment	Patient satisfaction measures
Patients can be confident that treatment will be completed as planned	Hospital cancelled procedure rate
Improved information for patients	Patient satisfaction measures
Patients and visitors can find their way around the hospital with ease	Patient satisfaction measures
Communication with patients from different ethnic groups will be improved	Increased take up of interpretation services

Benefit Category C: More Effective Use of Staff Resources	
Benefit Description	**Indicator**
Staff will be satisfied with their experience at work	Staff satisfaction measures Sickness rates
Improved extended scope nursing and AHP skills	Number of accredited nurse / AHP consultants and Extended Scope Practitioners
Staff will have improved knowledge and skills	Number of staff with National Vocational Qualification (NVQ) grade 3 / 4 Personal development review rates

Benefit Category C: More Effective Use of Staff Resources	
Benefit Description	**Indicator**
Improved teamwork	Staff satisfaction measures
Improved workforce Productivity	Income per WTE Consultant productivity indicator

Benefit Category D: Improved Patient Flows	
Benefit Description	**Indicator**
Patients will experience effective integrated care avoiding unnecessary admissions and delayed transfers.	Better care indicators
Patients will experience well planned, timely care with few delays and smooth discharge	Patient satisfaction measures
Patients will not need to stay in hospital any longer than required by their medical condition	Average length of stay
Expensive facilities will be fully utilised to support smooth patient flows	Theatre utilisation MRI and CT utilisation
That improved patient flows will result in financial efficiencies	Cost / income differential per spell

Benefit Category: E: Improved Accessibility of Services for the Local Population	
Benefit Description	**Indicator**
Patients will easily be able to access good local acute services	Percentage of patients within the Trust's catchment area treated in the new hospital
Patients will experience faster access to treatment	Average referral to treatment time
Patients will be able to access services at times convenient to them	Increase in number of evening clinics Patient satisfaction measures

Benefit Category F: Improved Flexibility and Quality of Accommodation	
Benefit Description	**Indicator**
Patients will experience improvement in the hospital environment	Patient satisfaction measures
Staff will experience improvement in the hospital environment	Staff satisfaction measures
The new hospital will be a high quality building	Hospital condition survey
The new hospital will meet all statutory requirements	Statutory compliance standards survey
The hospital will record *'excellent'* on facility stakeholder reviews	PEAT PPI / LINKs visits
The hospital facility will provide the best possible environment for clinical care	Number of peer reviews recording excellent outcome in relation to facility
The facility will be flexible to change in use	Facility utilisation rates

Benefit Category F: Improved Flexibility and Quality of Accommodation	
Benefit Description	**Indicator**
There will be minimal interruption to hospital services for maintenance and repairs	Service failure points review
Ability to contribute to reduced carbon emissions	Kg CO^2

Benefit Category G: Improved Ability to Develop / Sustain Services and Respond to Commissioning Intentions	
Benefit Description	**Indicator**
Achievement of the local health community vision for *Right Care, Right Here*	Length of stay OP activity targets Planned admission activity targets Emergency admission activity targets
Ability to introduce new service developments	Number of new services introduced to Directory of Services
GPs will be satisfied with range of services provided	GP satisfaction measures
Improved academic and research services and facility	Number of nationally accredited research projects per year

Benefit Category H: Financial Benefits	
Benefit Description	**Indicator**
Forecast PFI UP will be delivered at Financial Close	UP
Variations to PFI Project Agreement limited to maximum of 5%	Forecast Capital Cost within PFI Project
Equipping requirements of the New Hospital delivered within agreed capital costs	Price adjusted Capital Equipping Budgets
Achievement of Budget Forecasts for New Hospital	Price adjusted Revenue Budgets
Achievement of Energy Budgets for New Hospital in real terms	Price adjusted energy costs
Forecast changes in Trust Income will be delivered	Price adjusted Trust Income
Improved hard and soft FM unit costs	Actual costs

Benefit Category I: Local Area Regeneration	
Benefit Description	**Indicator**
The local area environment will regenerate around the new hospital	Hectares under development
The diversity of the hospital workforce will be enriched	Workforce ethnicity compared to local community mix
Construction related jobs and opportunities for local people	Number of local jobs created in construction
Supply chain opportunities for local contractors and SME's in consequence to the construction and facility management	Number of supply chain companies registering contract opportunities

14 Conclusion

14.1.1 This Outline Business Case has set out the case for the development of a new acute hospital – the MMH - on the Grove Lane site, to be delivered through the Government's PF2 framework.

14.1.2 The conclusions reached by this document are that:

- The project aligns with national strategic context and will support delivery of local strategic plans for the RCRH Programme;
- There is a strong case for change;
- Development and evaluation of options supports the development of the MMH on the Grove Lane site;
- The proposed solution will provide 21st century facilities and is affordable; and
- The PF2 procurement route is achievable for this development and represents good value for money.

14.1.3 In summary, the plans prepared for the delivery of this project are robust; the services proposed are affordable and meet the requirements of patients. They will deliver the following significant benefits to the local area:

- **Improved quality and sustainability of clinical services** resulting in improved clinical outcomes, reduced mortality and ability to deliver excellent clinical care;
- **Improved customer care** so that that patients are treated with respect, are involved in decisions about their treatment and can be confident in the quality of their care;
- **More effective use of staff resources**, ensuring that staff are trained to deliver a new sustainable model of care, are productive and satisfied with their experience at work;
- **More effective patient flows** to maximise use of resources and improve patient experience;
- **Improved accessibility of services for the local population,** so that patients can access a good range of local services, with faster access to treatment, at times convenient to them;
- **Improved flexibility and quality of accommodation** which will improve the patient and staff experience, maintain the best environment for clinical care and provide greater privacy and dignity for patients;
- **Improved ability to develop / sustain services and respond to commissioning intentions,** so that the *Right Care, Right Here* vision is achieved and new services can develop and be sustained over time;
- **Financial benefits** from services which are affordable, financially sustainable in the long-term and achieve budget forecasts;
- **Contribution to local community regeneration** as new developments are built around the hospital and the local community have opportunities to find work in the hospital.

14.1.4 The Land Business Case was approved in November 2008 and forms an annex to this document. The SHA approved the OBC at Version 2 in January 2009 and the DH approved the document in August 2009 to secure approval to activate a compulsory Purchase Order (CPO).

14.1.5 The Trust now owns the Grove Lane site, has secured vacant possession and prepared the site in readiness for the procurement process.

14.1.6 In line with the conditions of the SHA and DH approvals this document has been fully updated to show the current position to enable approval by DH and HMT prior to initiation of the procurement.

14.1.7 Local commissioners and stakeholders endorse this project as a key enabler for the RCRH Programme.

14.1.8 The Trust Board approved submission of the updated OBC to the National Trust Development Agency (TDA) in November 2013. The scheme was presented to the NHS TDA Capital Investment Group on the 15th of January 2014 and was approved without conditions. It was subsequently approved by the TDA Board on 23rd January 2014. The Board paper is presented at ***Appendix 14a*** and the approval letter is presented at [add when available]

14.1.9 Approval is requested from the Department of Health and HM Treasury to enable this much needed development of service to take place.

15 Appendices

Appendix Number	Document Name	Document Status Changes Since 2009 Approval
2a	SHA Approval Letter	Unchanged
2b	DH Approval Letter	Unchanged
2c	RCRH Consultation Documents	Unchanged
3a	Estates Strategy	Updated
5a	Premises Development Plans in Sandwell	New
5b	Service Model	Updated
5c	Activity, Performance & Capacity Assumptions	Updated
5d	Service Reconfiguration Standards	Unchanged
5e	Review Against Trajectory: February 2014 report to Trust Board	New
6a	Economic Case from OBC Approved in August 2009	New
6b	Revenue Costs	Updated
6c	External Health Benefits	Updated
7a	Medical Director's Support Letter	Updated
7b	Community Facilities Capital Programme	New
7c	Regeneration Action Plan	Updated
7d	Informatics Strategy	Updated
7e	Equipment Responsibility Matrix	Updated
7f	Equality Impact assessment	Updated
8a	Superseded Finance Chapters	New
8b	OB Forms	Updated
	LTFM available separately – not presented in appendices	Updated
8c	LTFM Downside Analysis	New
10a	Soft FM Services Review	Unchanged
10b	VfM Assessment	Updated
	VfM model available separately – not presented in appendices	Updated
11a	Project Execution Plan	Updated
11b	Integrated Assurance and Approvals Plan (IAAP)	New
11c	OGC Risk Potential Assessment	Unchanged
11d	Gateway Review 1 Action Plan	Unchanged
12a	CCG support letters	New
12b	PCT support letters	Unchanged
12c	Support letters from the local Councils	New
13a	Post project evaluation	Unchanged

Appendix Number	Document Name	Document Status Changes Since 2009 Approval
13b	Benefits realisation plan	Updated
14a	TDA Board Paper	New
14b	TDA Approval Letter	New
	Glossary of terms	Unchanged