Sandwell and West Birmingham Hospitals NHS
NHS Trust

Midland Metropolitan Hospital

Final Business Case

January 2016

Appendices Volume 1

Where EVERYONE Matters

right care right here

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case

APPENDIX 2a – PREVIOUS MMH BUSINESS CASE APPROVAL LETTERS

NHS
West Midlands

Email: paul.taylor@westmidlands.nhs.uk
Direct line: 0121 695 2429

St Chad's Court
213 Hagley Road
Edgbaston
Birmingham
B16 9RG
DX: 709310 Birmingham 25

Tel: 0121 695 2222
Fax: 0121 695 2427

30 January 2009

John Adler
Chief Executive
Sandwell & West Birmingham Hospitals NHS
Trust
City Hospital
Dudley Road
Birmingham
B18 7QH

Dear John

SHA Board Approval of the Towards 2010 Programme Acute Hospitals Development Outline Business Case (Submission Version 2)

I am pleased to confirm that the SHA at its board meeting on 27th January 2009 approved the above outline business case.

The approval was subject to the following actions for which I was given delegated responsibility:

- To review the OBC prior to the issuing of the OJEU notice to ensure it remains affordable and value for money. This is because there will be a delay of approximately a year whilst the land is purchased.
- To review the Public Sector Comparator on an annual basis to ensure it has been updated.
- 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.

I will now formally submit the outline business case to the DH for their approval.

Yours sincerely

Paul Taylor
Interim Director of Finance and Capacity

Richmond House
79 Whitehall
London
SW1A 2NS

Tel: *020 7210 5461*
Fax: *020 7210 5824*

John Adler
Chief Executive
Sandwell & West Birmingham NHS Trust

14 August 2009

Dear John,

DH approval of Outline Business Case:

I am writing to you to confirm the Department of Health's approval of the Outline Business Case to redevelop the Trust's sites onto a single new site in the Grove Lane area of Smethwick. This approval clears the way for the Trust to begin the process of negotiating the acquisition of the land that is necessary for the new buildings, and the process of applying for a compulsory purchase order, should this prove necessary.

There are however a number of important matters that I need to draw to your attention.

Firstly, the Treasury has not yet considered the Outline Business Case. Their reason for not doing so was because they considered that the scheme parameters, particularly scheme cost, would be firmer once the trust has made progress with negotiating the acquisition of land and when it has worked up its procurement documentation. Treasury officials have advised that they intend to consider the case immediately prior to launch of the procurement.

This means that approval of the Outline Business Case is not complete and the Treasury will require an updated business case when the Trust has completed the arrangements to acquire the land. DH will liaise with both the Trust and the Treasury on the timing and arrangements for procuring the Treasury's approval in due course.

Secondly, the Treasury may apply conditions to its approval over and above those applied by the Department of Health, which are summarised below:

1) The procurement documentation and any application for a compulsory purchase order will need to be approved by DH Capital Investment Branch/Private Finance Unit officials and DH Estates prior to procurement.

2) In developing the scheme further, the Trust should note that 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 precipitate a requirement to have the Outline Business Case re-approved.

3) The plans must also remain affordable to the trust in revenue terms. The Trust should note in particular that the normalised revenue unitary charge of the scheme 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 Outline Business Case re-approved.

In the time between now and submission of the business case to the Treasury, the Trust should not just look carefully at scheme costs, but also continually update its income projections to ensure affordability. The trust should also ensure that the scheme is likely to remain within the financial parameters that Monitor may apply, should the Trust become an Foundation Trust.

Should, you or your team, require any further information concerning this approval, or on progressing the scheme in general, please refer to Ben Masterson on 0113 2545550 or ben.masterson@dh.gsi.gov.uk.

I would like to wish you and your team every success in the further development of this scheme.

Bob Alexander
Director of NHS Finance

cc David Flory
Peter Coates
Andrew Stubbings
Ben Masterson
Peter Spilsbury (West Midlands SHA)

Department of Health

Toby Lewis
Chief Executive
Sandwell and West Birmingham Hospital NHS Trust
First Floor, Trust Headquarters,
Health and Wellbeing Centre
Sandwell Hospital
B71 4HJ

22 July 2015

Dear Toby,

Approval of draft Appointment Business Case for the Right Care, Right Here Programme Acute Hospital Development (Midland Metropolitan Hospital)

I am writing to confirm approval that the draft Appointment Business Case (ABC) for the Midland Metropolitan Hospital redevelopment. This approval is subject to a number of specific approval conditions which are set out below.

The NHS Trust Development Authority, Department and HM Treasury based their reviews on the May 2015 Appointment Business Case (*Midland Metropolitan Hospital Appointment Business Case May 2015*, version 0.10). The ABC identifies a total capital construction cost of £291.8 million with a forecast £22 million unitary payment in the first full year of operation (at forecast 2019/2020 prices).

In reviewing the case, the NHS Trust Development Authority and the Department have identified the following specific conditions which apply to this approval:

i. The capital cost to be held within the £291 million figure set at OBC and this to be confirmed at fABC stage. This cost limit is based on the current scope, as at dABC. The Department recognises the Trust is considering specific additional investments which it agrees to consider when any business cases are available.

ii. Approval reconfirms that the Department's capital contribution of £100 million is on a gross basis and the Trust will benefit from agreeing a land sale

scheme with the TDA, which will then be considered by the Department with an assumption of Departmental support with minimal restriction

iii. The Department notes the on-going work on land disposals and the Trust's intention to consider disposal over coming years in a manner consistent with the Local Authority planning constraints in place at that time. The DH will wish to be kept updated on the Trust's proposals

iv. The forecast 'RCRH' related savings should be tracked and reported to the Programme Board

v. Prior to CBC approval, independent (e.g. internal audit) validation of the reconfiguration savings plan should be completed and shared. This should include consideration the Trust's CIPs to ensure there is no potential 'double counting' of savings

vi. In the period up to financial close, the Trust should inform approving bodies of any material potential changes in schemes scope or content to at an early stage.

vii. That the revised VfM sensitivity analysis be appended to the sABC.

viii. NHS England formally confirming the availability of £22.3 million of transitional support to the Trust at sABC stage.

ix. Provision of a satisfactory report on derogations before appointment of the preferred bidder.

x. There is enough flexibility in the plans to be consistent with the Five Year Forward View possibilities around new models of care and to allow for out-of-hospital elements of care to be provided from the new building.

xi. The NHS TDA is provided with the sABC and notified of any changes between the dABC and the sABC.

xii. Receive a positive report from NHSE that confirms the assumptions in the Right Care Right Here Partnership by sABC stage.

xiii. The NHS Trust should continue to ensure that activity planning assumptions are aligned with commissioner plans as much as possible and actual activity measured closely against assumptions in this case through the RCRH Programme Stakeholder Board, and that Commissioner support for the assumptions in the case is refreshed at the point of the Confirmatory Business Case.

xiv. The NHS Trust should develop detailed Project Initiation Documents for the downside mitigations [contained in this report] at the CBC stage. The NHS Trust should also ensure it has discussed the downside case and mitigations

at the NHS Trust Board, including appropriate involvement with staff-side representation on those mitigations involving changes to workforce terms and conditions.

xv. The NHS Trust obtains an independent view of the impairment of 10% of the new asset to ensure this is reflected accurately in the financial model by CBC stage.

xvi. The NHS Trust to provide evidence of the independent audit of the accounting treatment of the PF2 in the Trust's financial model by CBC stage.

xvii. The NHS Trust must ensure that the actions set out in the Estates Review are finalised, including a review of Soft FM costs, further examination of the operating costs for the Winter Garden area, and elaboration of the costings for non-MMH expenditure (particularly decant costs and double running costs) at sABC stage.

xviii. The NHS Trust should follow through on their commitment to include the estates content listed in Table 6 of the TDA Recommendation Report in their sABC.

xix. The NHS Trust will engage with the NHS TDA Clinical Directorate to make sure that QIAs are undertaken in line with the National Quality Board 'Quality Impact Assessment Tool' by CBC stage.

xx. The NHS TDA will undertake a workforce review in September in order to support the Trust with the learning from Phase 2 of their 'Safe and Sound' programme.

xxi. The NHS Trust should strengthen the engagement with the Local Education Training Board to understand the impact the change will have on both medical and non- medical trainees, to reduce the impact on these staff during the transformation. Evidence of this engagement should be available at CBC stage.

xxii. In relation to ICT systems, further assurance is required to demonstrate how wider ICT systems integrate with other systems for the purposes of patient quality and safety to include system integration, impact on quality and safety, clinical engagement, clinical knowledge and use of system and benefit realisation. The sABC should describe how the EPR and wider MMH schemes are technically congruent.

xxiii. Develop the commercial case to include information on the service requirements, charging mechanism, risk transfer, key contractual arrangements, any personnel implications e.g. TUPE and the accounting treatment at CBC stage.

xxiv. The NHS Trust should maintain the process for engaging with both the local and national health economy to develop robust mitigations to emerging risks and challenges.

xxv. The NHS Trust should ensure that it develops a framework to systematically measures actual performance against key assumptions in the financial model to ensure delivery is achieved.

xxvi. The NHS Trust to provider further evidence of the margin to be made on repatriation work and also to provide evidence of the commissioning intent and opportunity to repatriate this amount of activity back to the Trust.

xxvii. Develop full contingency arrangements for the project include operational and delivery risk.

In concluding their approval of the dABC, the TDA has proposed the following monitoring conditions:

xxviii. The NHS TDA should continue to Chair a monthly Stakeholder Board with representation from all of the approval bodies and the NHS Trust.

xxix. The NHS TDA will regularly perform CIP reviews to gain assurance that management of the CIP programme remains on track and that the Trust continues to identify schemes to meet efficiency requirements.

xxx. The affordability of the case is reliant on delivery of around a 9% EBITDA, and therefore reliant on the contribution of individual service lines. The NHS Trust is asked to ensure it uses service line reporting information and wherever possible, patient level costing information to inform financial performance management of service lines and target contribution.

xxxi. The NHS TDA will undertake some observations of the Workforce Committee and weekly progress meetings during the transformation programme. These observations will be used to evidence the good governance of the Trust's workforce planning to support the CBC approvals process.

xxxii. The NHS TDA will carry out on-going monitoring of both the operational workforce plan for 2015/16 and also the overarching 2020 Workforce Plan with increased scrutiny via the regular Integrated Delivery Meeting.

xxxiii. The NHS TDA will need to gain further assurance during 2015/16 of the nursing establishment and impact on fill rates and establishment during 'Safe and Sound Phase 2' and future transformation work.

It is important that the Trust are aware that in the event that any of the approval conditions are breached then DH may require re-approval of the business case causing delay to the procurement or its cessation.

Finally, I would like to thank your team for the hard work in producing the business cases, and in responding to the various requests for clarification of parts of it.

Yours sincerely

Andrew Baigent

Director, Group Financial Management

Copy list:
David Williams, DH
Pat Mills, DH

Ben Masterson, DH
Paul Townsend, DH
Lubna Azam, DH
Joe Clyne, DH
Bob Alexander, NTDA
Jill Robinson, NTDA
Giles Tinsley, NTDA

Department of Health

Quarry House
Quarry Hill
Leeds
LS2 7UE

T 0113 254 5550

www.dh.gov.uk

BY E-MAIL ONLY

Sandwell draft ABC Approval letter

Toby Lewis
Chief Executive
Sandwell and West Birmingham Hospitals NHS Trust
First Floor, Trust Headquarters
Health and Wellbeing Centre
Sandwell Hospital
B71 4HJ

7 August 2015

Dear Toby

Approval of Appointment Business Case for the Right Care, Right Here Programme Acute Hospital Development (Midland Metropolitan Hospital)

I am pleased to confirm that the Appointment Business Case (ABC) for the Midland Metropolitan Hospital has been approved. The Trust is now free to confirm the appointment of its preferred bidder for the project and I would like to congratulate you and your team on your success on reaching this important milestone.

The NHS Trust Development Authority ("TDA"), The Department and HM Treasury based their reviews on the specific Appointment Business Case submitted by the Trust on 21 July 2015. This final version of the ABC identifies a total construction cost of £296.95 million, with a forecast unitary payment of £22.272 million in the first full year of operation. The overall total capital cost of the scheme, including construction costs and bidder costs, but excluding VAT, is stated to be £305.08m. It is recognised that the unitary payment is subject to fluctuation as a result of matters beyond the control of the Trust and its preferred bidder (for example, movements in interest rates). It is, however, a condition of this approval that the total construction cost and the total capital value of the scheme do not exceed the amounts set out above.

Approval of the final version of the ABC will remain subject to the various conditions set out in the letter dated 22 July 2015 sent by my colleague Andrew Baigent, notifying you of the approval of the draft ABC, to the extent that those conditions have not already been fully satisfied. A full list of conditions, together with an update on their status, should be supplied at CBC stage.

It is recognised that the Trust has already made significant progress in addressing many of these conditions and both the Department and the TDA anticipate that a number of the conditions will already have been satisfied. In the limited time available it has not, unfortunately, been possible to agree a definitive summary of the current position, but I note that discussions are in progress between our respective organisations and the TDA to identify the conditions that have already been satisfied (and can therefore be discounted) and those that remain outstanding.

It is also a condition of this approval that the TDA monitoring conditions identified in The Department's letter of 22 July remain in place.

In reviewing the final version of the ABC, the TDA and the Department have identified the following additional specific conditions which apply to this approval:

(i) The total capital cost and total construction cost are not to increase beyond the figures set out above

(ii) The Trust should continue to ensure that activity planning assumptions are aligned with commissioner plans as much as possible. Actual activity should be measured closely against assumptions in the business case through the RCRH Programme Stakeholder Board, and Commissioner support for the scheme will need to be refreshed at Confirmatory Business Case stage.

(iii) The Trust should complete the relevant checklist documents for each of the approval bodies at CBC stage.

(iv) The projected Soft Facilities Management spend was found to be around 30% below expected levels. The Trust should complete further work on this to provide assurance that costs are accurately modelled, to the satisfaction of TDA and the Department. This work will need to have been completed before approval of the CBC.

(v) The Trust should continue to work constructively with the TDA during the 1:50 design process to make sure that the Trust's rationale for derogations from Health Building Note (HBN) standards is robust and well evidenced, and that the functionality of any derogated clinical spaces is optimised.

(vi) The capital contribution which the Department expects to make in support of the scheme is the sum of £100 million, less the value of the investment that the Department will make in the public equity contribution (currently estimated at £2.95m but this figure is subject to confirmation). Once the amount of the public equity contribution has been confirmed, the resulting revised amount of the capital contribution should be included in the Trust's financial modelling at CBC stage.

(vii) The Trust shall, as soon as reasonably practicable, obtain the approval of the TDA and the Department to its proposals for the sale of land which will be surplus following completion of the MMH scheme. It is recognised that the Trust will be entitled to retain the receipts of any sale of this surplus land. It is also recognised that the disposal of surplus land, and the creation of new housing, are matters of Government policy and accordingly are areas in which the TDA and the Department have an interest. The timing and manner in which this condition will be satisfied will be for further discussion between the Trust, the TDA and the Department.

(viii) The Trust should provide a detailed project plan for the period from appointment of the preferred bidder through to financial close, including the approvals process, and agree this with the approving bodies.

(ix) The appointment of the preferred bidder should be made in accordance with the terms of the final draft preferred bidder letter sent to the Department's Private Finance Unit for review on 31 July 2015, unless the Trust shall first have obtained the approval of PFU to any substantive changes.

Finally, I would like to thank your team for their hard work in producing the business case and in responding to the various requests for clarification of parts of it.

Yours sincerely

Ben Masterson

Head of Property

Deputy Director-Commercial Division

APPENDIX 2b – PLANNING APPROVAL

Sandwell Metropolitan Borough Council
Development Management Section
P.O. Box 2374
Council House
Freeth Street, Oldbury
West Midlands. B69 3DE

Application No.DC/15/58384

SANDWELL METROPOLITAN BOROUGH COUNCIL

PLANNING PERMISSION
TOWN AND COUNTRY PLANNING ACT 1990

THE TOWN AND COUNTRY PLANNING (APPLICATIONS) REGULATIONS 1988

Name and Address of Applicant	Name and Address of Agent
Carillion Construction Ltd Sandwell and West Birmingham Hospitals NHS Trust C/o Agent	Mr Antony Harding Turley 9 Colmore Row Birmingham B3 2BJ

Site:	Sandwell And West Birmingham Hospitals NHS Trust Proposed New Acute Hospital Site Grove Lane Smethwick
Particulars of Development:	Hybrid planning application for (a) the development of the Midland Metropolitan Hospital to comprise the erection of the hospital building (including car parking, ancillary retail uses, plant, radio antenna masts, receiver dishes, and chimneys), new and revised vehicular and pedestrian access, internal access roads and car parking, vehicular drop off/arrival areas, pedestrian and cycle routes, soft and hard landscaping, public art, CCTV, lighting, boundary treatments, underground services and sub-station, re-profiling and engineering works, SUDS, balancing pond, creation of new tow path and partial infilling of the Cape Arm Canal; and (b) outline application with all matters reserved, for three development zones consisting of uses covering Class D1 (non-residential institutions), Class D2 (assembly and leisure), C2 (residential institutions), Class B1(a) offices (b) research and development, car parking, access, pedestrian routes and landscaping (interim and permanent options).

Valid application received on: 3rd July 2015 amended on 18th September 2014

The Borough Council of Sandwell as local planning authority considered the application as described above on 23rd September 2015.
PLANNING PERMISSION IS GRANTED for the above described development proposed in the application numbered as shown above and in the plans and drawings approved as listed overleaf, subject to the following condition(s):-

Conditions

1. The development must conform with the terms of and the plans accompanying the application for permission and must remain in conformity with such terms and plans, save as may be otherwise required by (any of) the following condition(s), or approved amendment(s).

FULL PLANNING PERMISSION (Part A)

2. The development described as Part A must be begun not later than the expiration of 3 years from the date of this permission.

3. a) Before the development is commenced (excluding any site investigations, remedial measures, engineering operations or construction of foundations or building frame) details of the schedule of materials (including sample panels) to be used for the external surfaces of the development shall be submitted in writing and approved by the Local Planning Authority.

   b) The development shall be constructed in accordance with the approved schedule of materials.

4. a) Before the development is brought into use a scheme showing details of the height, type and position of all site boundary details (including any acoustic fencing identified within the noise assessments relating to plant and servicing not forming part of the building) to be erected on the site shall be submitted in writing and approved by the Local Planning Authority.

   b) The approved boundary details shall be erected prior to the hospital becoming operational.

5. a) The approved Landscaping Strategy (set out through the Landscaping Statement - June 2015) shall be implemented through a phasing strategy to be submitted in writing and approved by the Local Planning Authority prior to the hospital becoming operational.

b) The approved Landscaping Strategy once implemented shall be maintained in accordance with the Landscape Management and Maintenance statement at chapter 7 of the Landscaping Statement - June 2015)

6. a) In the event that contamination is found at any time when carrying out the approved development that was not previously identified an agreed process with the Local Planning Authority will be followed to undertake the appropriate remediation.

   b) Where remediation works have been carried out in pursuance with the preceding condition, a post remediation report shall be submitted in writing to and approved by the Local Planning Authority before the development is first occupied. The post remediation verification report should detail the remedial works undertaken and demonstrate their compliance. The report should be produced in accordance with CLR11 "Model Procedures for the Management of Land Contamination".

7. Piling or any other foundation designs and ground source heating and cooling systems using penetrative methods shall not be permitted other than with the express written consent of the local planning authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

8. a) Before the development is commenced (excluding any site investigations, remedial measures, engineering operations or construction of foundations or structural frame) details of 12 electric vehicle charging bays, each with an electric vehicle charging point, to be provided shall be submitted in writing and approved by the Local Planning Authority. The details shall include signs and bay markings indicating that bays will be used for parking of electric vehicles only whilst being charged.

   b) Before the hospital comes into operation, the electric charging points and bays shall be installed in accordance with the approved details and shall thereafter maintained for the life of the development.

9. Before the hospital comes into operational, details of the 50 car sharing spaces shall be submitted to and approved by the local planning authority and thereafter implemented as part of the car parking scheme.

10. Floor levels should be set at least 600mm above the 1 in 100 year flood level (inc. climate change) of 139.178 metres above Ordnance Datum or 150mm above finished ground levels, whichever is the higher value.

11. No development shall commence until full drainage details, incorporating sustainable drainage principles and an assessment of the hydrological and hydro geological context of the development, have been submitted in full to and approved by the local planning authority.

12. There must be no new buildings, structures (including gates, walls and fences) or raised ground levels within 5 metres of any side of the culverted Boundary Brook watercourse.

13. a) No development approved by this permission shall be commenced until a scheme for the provision and implementation of compensatory flood storage works to include 30% climate change allowances has been submitted to and approved in writing by the Local Planning Authority.

    b) The scheme shall be implemented in accordance with the approved programme and details in the preceding condition.

14. Development shall not commence until details of a safe exit route to land outside the 1 in 100 year flood plain, are submitted to and agreed in writing by the local planning. The scheme must not adversely affect the flood regime. This route must be in place before any occupancy of the building(s).

15. a) Before the development is commenced (excluding any site investigations, remedial measures or construction of foundations) a detailed proposal for dealing with pollutants from hardstanding to include appropriate CIRIA stage 3 methods of interception of pollutants from hardstanding shall be submitted in writing and approved by the local planning authority.

    b) The approved method statement shall be implemented before the development is brought into operation.

16. a) Before the development is commenced (excluding any site investigations, remedial measures or construction of foundations) a scheme for the disposal of foul and surface water shall be submitted in writing and approved by the local planning authority.

b) The approved scheme shall be implemented in accordance with the approved programme and details in the preceding condition.

17. The development hereby approved shall not be brought into operation until full design and construction details of the S38 and S278 works, as defined within the 'S278 and S38 Schedule' dated 18 September 2015, have been submitted to and approved in writing by the Local Planning Authority and are complete in accordance with such approved details.

18. The development shall not be brought into use until the cycle and pedestrian routes indicated within the Transport Assessment reference 113002-TA-01 Rev 4 and dated 8th June 2015, drawing no. TPS-SK-102 Rev D has been certified as complete by the Local Planning Authority.

19. Before the development is brought into use the secure cycle parking proposals shown on drawing nos. (Level 00 Floor Plan (Part C) (3/4) - MMH-A(20)00105 Rev 9 and Level 01 Floor Plan (Part B) (2/3) - MMH-A(20)01102 Rev 8) shall be implemented and retained as such.

20. Before the development is brought into use the approved car parking spaces shown on drawing nos (Level 00 Floor Plan (Part A) (1/4) - MMH-A(20)00103 Rev 9, Level 00 Floor Plan (Part B) (2/4) - MMH-A(20)00104 Rev 7, Level 00 Floor Plan (Part C) (3/4) - MMH-A(20)00105 Rev 9, Level 01 Floor Plan (Part A) (1/3) - MMH-A(20)01101 Rev 9, Level 01 Floor Plan (Part B) (2/3) - MMH-A(20)01102 Rev 8, Level 01 Floor Plan (Part C) (3/3) - MMH-A(20)01103 Rev 9 and Level 02 Floor Plan (Part B) (2/3) - MMH-A(20)02107 Rev 10 shall be implemented and retained as such.

21. a) Before the Hospital becomes operational, a Car Parking Management Plan will be prepared covering the Hospital's operation and to include mechanisms for monitoring and review, and shall be submitted in writing and approved by the Local Planning Authority.

    b) The management of car parking at the application site will be implemented in accordance with the approved Management Plan throughout the lifetime of the development.

22. a) Before the hospital becomes operational a detailed public art strategy for the external areas of the site including siting, scale, design and artist(s)' briefs shall be submitted in writing and approved by the local planning authority.

b) The approved art strategy shall thereafter be implemented and retained as such.

23. a) Before the development is commenced (excluding any site investigations, remedial measures, engineering operations or construction of foundations or building frame), a supplementary report shall be prepared in accordance with BS 4142:2014 and be shall be submitted in writing, quantifying the magnitude and extent of required noise mitigation measures (to achieve the Rating Level of proposed noise generating activities (to be cumulative and include that associated with the operation of all plant and machinery) when calculated as a 60 minute LAeq(60 min) between (07:00 - 23:00 hours) shall not exceed any relevant 60 minute background LA90(60 min) level by more than 5 dB on any day. It should also not exceed the background LA90(15 min) level between (23:00 - 07:00) on any day when measured as a 15 min LAeq(15 min). It shall provide a detailed specification of all proposed noise reduction measures to mitigate the unacceptable noise impacts identified in Section 8.107 of the Environmental Statement and shall reflect the 24 hour use of this facility.

b) The approved specification within the preceding condition shall thereafter be implemented and retained as such.

24. During the construction phases of the hospital development the following operations shall be limited to:-

(i) Construction working hours shall be restricted to Monday to Saturday, 07:30 to 18:30 with no working on Sundays or Bank Holidays.

(ii) All work outside these hours will be subject to prior agreement of, and/or reasonable notice to SMBC. Night-time working will be restricted to exceptional circumstances, and work internally within buildings.

(iii) Adherence to the codes of practice for construction working and piling in British Standard 5228:2009 and the guidance given therein to minimise noise emissions from the site.

(iv) Proper use of plant with respect to minimising noise emissions and regular maintenance. Where possible all vehicles and mechanical plant used for the purpose of the works will be fitted with effective exhaust silencers and be maintained in good efficient working order.

(v) Careful selection of inherently quiet plant where appropriate. Where possible all major compressors will be sound-reduced models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use. All ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers.

(vi) Unless directed otherwise, items of plant in intermittent use will be shut down in the intervening periods between work or throttled down to a minimum.

(vii) All ancillary plant such as generators, compressors and pumps will be as far as reasonably practicable, located away from sensitive receptors. Construction plant will be positioned so as to cause minimum noise disturbance and to maximise separation distances between plant and receptor locations. If necessary, acoustic barriers or enclosures will be provided.

(viii) Hoardings will remain around the site boundary alongside the public highway (allowing for gates and any access/egress features) during the construction phase.

(ix) Where a generator will be required for prolonged periods of time, consideration should be given to the use of a silent generator.

(x) All plant will comply with the latest EC noise emission requirements.

(xi) All audible warning systems, such as vehicle reversing sirens, will normally be set to as low a setting as is compatible with safety requirements.

(xii) Personnel will be instructed to reduce noise and vibration as part of their induction training and as required prior to specific work activities

(xiii) No employees, subcontractors and persons employed on the site will cause unnecessary noise from their activities e.g. excessive 'revving' of vehicle engines, music from radios, shouting and general behaviour etc;

(xiv) It is important that any items are placed into position carefully and not dropped, thereby minimising the levels of noise

generated. Good working practices can significantly influence construction noise levels.

25. Before the development is commenced (excluding any site investigations or remedial measures) details of vehicle routes used for loading/unloading (and the location of loading/unloading areas) shall be submitted in writing and approved by the local planning authority.

26. Before the hospital becomes operational, a lighting strategy and accompanying drawing showing the location of lighting shall be submitted to and approved by the Local Planning Authority. The lighting will subsequently be implemented in accordance with the approved strategy and drawing and retained as such.

27. The Training and Recruitment Strategy dated 29th June 2015 shall be implemented in accordance with the measures contained within the document.

OUTLINE PLANNING PERMISSION (Part B)

28. Approval of the details of layout, scale, appearance, access and landscaping of the site denoted as outline (described as Part B) within Drawing Number MMH-A(90)XX004 Rev6 shall be obtained from the local planning authority in writing before any development of that part of the scheme is implemented.

29. Application for any reserved matters shall be made not later than the expiration of five years beginning with the date of this permission.

30. The outline permission hereby permitted shall be begun not later than whichever is the later of the following dates:-

    a) The expiration of five years from the date of this permission; or
    b) The expiration of two years from the final approval of the reserved matters or, in the case of approval of different dates, the final approval of the last such matter to be approved.

31. A Transport Statement, the scoping of which shall be agreed in writing and approved by the local planning authority shall be provided for each development zone as part of the reserved matters applications.

32. There must be no new buildings, structures (including gates, walls and fences) or raised ground levels within 5 metres of any side of the culverted Boundary Brook watercourse.

33. a) A Noise impact assessment in accordance with BS 4142:2014, (and BS8233:2014 for residential elements) for each zoned development proposed, in order to control noise impacts derived from any proposed activities shall be submitted in writing and approved by the local planning authority as part of the reserved matters applications.

    b) A detailed specification of all proposed noise reduction measures to mitigate any unacceptable noise impacts and shall reflect respective hours of operations identified from the preceding condition 33 a).

34. The Rating Level of proposed noise generating activities (to be cumulative and include that associated with the operation of all plant and machinery) when calculated as a 60 minute LAeq(60 min) between (07:00 - 23:00 hours) shall not exceed any relevant 60 minute background LA90(60 min) level by more than 5 dB on any day. It should also not exceed the background LA90(15 min) level between (23:00 - 07:00) on any day when measured as a 15 min LAeq(15 min).

35. The development zones for outline part of the development shall be limited to the parameters set out on Drawing Number MMH-A(90)XX004 Rev6 and the Design and Access Statement reference MMH-A(90)XX101_12 PLANNING ISSUE in the indicative masterplan

36. Floor levels should be set at least 600mm above the 1 in 100 year flood level (inc. climate change) of 139.178 metres above Ordnance Datum or 150mm above finished ground levels, whichever is the higher value.

37. A updated Flood Risk Assessment and SuDs Strategy shall be submitted in writing and approved by the local planning authority.

Reasons

1. To ensure that any development undertaken under this permission shall not be otherwise than in accordance with the terms of the application, on the basis of which permission is being granted, except in so far as other conditions may so require.

2. Pursuant to section 91 of the Town and Country Planning Act 1990

3. To ensure the satisfactory appearance of the development.

4. To ensure the satisfactory appearance of the development and safeguard the amenity of the residents from undue noise and disturbance.

5. To enhance the appearance of the development.

6. To ensure a safe form of development that poses no unacceptable risk of pollution or harm to persons or the environment in or around buildings and in the interests of public safety and environmental management.

7. Piling or any other foundation designs and ground source heating and cooling systems using penetrative methods can result in risks to potable supplies from, for example, pollution / turbidity, risk of mobilising contamination, drilling through different aquifers and creating preferential pathways. Thus it should be demonstrated that any proposed piling or ground source heating and cooling systems will not result in contamination of groundwater.

8. In accordance with the approved Air Quality Strategy and to conform with the provisions of Policy ENV8 (Air Quality) of the Black Country Core Strategy.

9. To conform with the provisions of Policy ENV8 (Air Quality) of the Black Country Core Strategy.

10. To reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution in accordance with Policy ENV5 : Flood Risk, Sustainable Drainage Systems and Urban Heath Island with the Black Country Core Strategy.

11. To reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution in accordance with Policy ENV5 : Flood Risk, Sustainable Drainage Systems and Urban Heath Island with the Black Country Core Strategy.

12. To maintain access to the watercourse for maintenance or improvements and provide for overland flood flows.

13. To reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution in accordance with Policy ENV5

Flood Risk, Sustainable Drainage Systems and Urban Heath Island with the Black Country Core Strategy.

14. To provide safe access and egress during flood events in accordance with the Government's Planning Policy Statement 25: Flood Risk, Appendix G, and reduce reliance on emergency services.

15. To prevent pollution of the water environment.

16. To ensure that the development is provided with a satisfactory means of drainage and to reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution in accordance with Policy ENV5 : Flood Risk, Sustainable Drainage Systems and Urban Heath Island with the Black Country Core Strategy.

17. To ensure that the development conforms with the provisions of Policy TRAN 2 'Managing Transport Impacts of New Development' within the Black Country Joint Core Strategy.

18. To ensure that the development conforms with the provisions of Policy TRAN 2 'Managing Transport Impacts of New Development' and TRAN4 'Creating Coherent Networks for Cycling and for Walking' within the Black Country Joint Core Strategy.

19. To ensure that the development conforms within the provisions of Policy TRAN4 'Creating Coherent Networks for Cycling and for Walking' within the Black Country Joint Core Strategy and Sandwell's Cycling Supplementary Planning Guidance.

20. To ensure the provision of adequate off-street facilities in the interests of the convenience and safety of users of the highway.

21. To ensure the provision of adequate off-street facilities in the interests of the convenience and safety of users of the highway.

22. To enhance the appearance of the development and to ensure that the development accords with the principles of Policy ENV3 'Design Quality within the Black Country Joint Core Strategy and SAD Policy DM5 'The Borough's Gateways' within the Site Allocations and Delivery Development Plan Document.

23. To protect the amenities of nearby properties from undue noise and disturbance.

24. To safeguard the amenities of nearby residential property from undue noise and disturbance.

25. To safeguard the amenities of nearby residential property from undue noise and disturbance.

26. In the interests of public safety.

27. In accordance with the provisions of Policy EMP5 of the Black Country Joint Core Strategy and SAD Policy EMP2 of the Site Allocations and Delivery Development Plan Document.

OUTLINE PLANNING PERMISSION (Part B)

28. Pursuant to Section 92 of the Town and Country Planning Act 1990

29. Pursuant to Section 92 of the Town and Country Planning Act 1990

30. Pursuant to Section 92 of the Town and Country Planning Act 1990

31. In the interests of highway safety

32. To maintain access to the watercourse for maintenance or improvements and provide for overland flood flows.

33. To safeguard the amenities of nearby residential property from undue noise and disturbance.

34. To safeguard the amenities of nearby residential property from undue noise and disturbance.

35. To define the permission and ensure the satisfactory appearance of the development in relation to the full permission and the surrounding context and in accordance with Policy ENV3 Design Quality.

36. To reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution in accordance with Policy ENV5 : Flood Risk, Sustainable Drainage Systems and Urban Heath Island with the Black Country Core Strategy.

37. To reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution in accordance with Policy ENV5 Flood Risk, Sustainable Drainage Systems and Urban Heath Island with the Black Country Core Strategy.

Date ....25 SEP 2015.. Signature .....

Area Director - Regeneration and Economy

N.B.

1. **THIS IS A PLANNING PERMISSION ONLY. IT IS NOT AN APPROVAL:-**
   (A) UNDER THE BUILDING REGULATIONS (WORK WHICH REQUIRES SUCH APPROVAL MUST NOT START UNTIL IT HAS BEEN OBTAINED): OR
   (B) UNDER ANY OTHER STATUTORY PROVISION
2. **YOUR ATTENTION IS DRAWN TO THE NOTES OVERLEAF.**

APPROVED PLANS AND DRAWINGS:-

Plan Description	Reference	Version
Concept Plan/3D Images	MMH420-AL-MP-X-0-007	02
Concept Plan/3D Images	MMH420-AL-MP-X-0-001	04
Landscaping Plan	MMH420-AL-HW-X-1-001	01
Landscaping Plan	MMH420-AL-SW-X-1-001	01
Landscaping Plan	MMH420-AL-SW-X-1-002	01
Roof Plan	MMH-A(90)XX002	16
General	MMH-A(90)XX004	6
Site/Block Plan	MMH-A(90)XX005	8
Location Plan	MMH-A(90)XX006	8
Roof Plan	MMH-A(90)XX010	8
Planning Layout - Proposed	MMH-A(90)XX011	4
Planning Layout - Proposed	MMH-A(90)XX012	4
Floor Plan - Proposed	MMH-A-(20)00103	9
Floor Plan - Proposed	MMH-A-(20)00104	7
Floor Plan - Proposed	MMH-A-(20)00105	9
Floor Plan - Proposed	MMH-A-(20)00106	9
Floor Plan - Proposed	MMH-A-(20)01101	9
Floor Plan - Proposed	MMH-A-(20)01102	8
Floor Plan - Proposed	MMH-A-(20)01103	9
Floor Plan - Proposed	MMH-A-(20)02106	9
Floor Plan - Proposed	MMH-A-(20)02107	10

Floor Plan - Proposed	MMH-A-(20)02108	10
Floor Plan - Proposed	MMH-A-(20)03106	8
Floor Plan - Proposed	MMH-A-(20)04105	8
Floor Plan - Proposed	MMH-A-(20)05102	8
Floor Plan - Proposed	MMH-A-(20)06102	8
Floor Plan - Proposed	MMH-A-(20)07102	8
Floor Plan - Proposed	MMH-A-(20)08102	8
Floor Plan - Proposed	MMH-A-(20)09102	8
Floor Plan - Proposed	MMH-A-(20)10101	9
Roof Plan	MMH-A-(27)XX101	8
Sectional Detail Plan	MMH-A-(20)XX114	5
Sectional Detail Plan	MH-A-(20)XX115	5
Elevation Plans - Proposed	MMH-A-(20)XX026	6
Elevation Plans - Proposed	MMH-A-(20)XX027	6
Elevation Plans - Proposed	MMH-A-(20)XX028	6
Elevation Plans - Proposed	MMH-A-(20)XX029	6
Elevation Plans - Proposed	MMH-A-(20)XX015	6
Elevation Plans - Proposed	MMH-A-(20)XX016	6
Elevation Plans - Proposed	MMH-A-(20)XX017	6
Elevation Plans - Proposed	MMH-A-(20)XX018	6
Concept Plan/3D Images	MMH420-AL-MP-X-0-006	02
General	47073245-MEP-400	CD4
General	47073245-MEP-401	CD4

NOTE FOR APPLICANT

Applicant Engagement Statement

In dealing with this application the local planning authority has worked with the applicant in a positive and proactive manner in compliance with paragraphs 186 and 187 of the National Planning Policy Framework.

The following Policies And Proposals Contained Within Sandwell Council's Development Plan Are Relevant to the Determination of this Application:

HOU5 Education and Health Care Facilities

Policy
New health care facilities and pre-school, school and further and higher education facilities should be:

- Well designed and well related to neighbourhood services and amenities;
- Well related to public transport infrastructure and directed to a Centre appropriate in role and scale to the proposed development and its intended catchment area. Proposals located outside Centres must be justified in terms of relevant national policy;
- Wherever possible, best located to address accessibility gaps in terms of the standards set out in Policy HOU2, particularly where a significant amount of new housing is proposed;
- Where possible, incorporate a mix of compatible community service uses on a single site.

New and improved facilities will be secured through a range of funding measures. Where a development would increase the need for education and health care facilities to the extent that new or improved facilities would be required, planning obligations or levies will be secured as detailed in Site Allocation Documents, Area Action Plans and Supplementary Planning Documents.

Where housing site allocations are proposed through Site Allocations Documents or Area Action Plans which would require new or improved facilities, sites and potential funding mechanisms will be identified to deliver these.

New and redeveloped education facilities should include maximum provision for community use of sports and other facilities.

The existing network of education and health care facilities will be protected and enhanced. The physical enhancement and expansion of higher and further educational facilities and related business and research will be supported where it helps to realise the educational training and research potential of the Black Country. Proposals involving the loss of an education or health care facility will be permitted only where adequate alternative provision is available to meet the needs of the community served by the facility.

EMP5 Improving Access to the Labour Market

Policy
Planning obligations will be negotiated with the developers and occupiers of major new job creating development to secure initiatives and/or contributions towards the recruitment and training of local people. The training schemes should offer help particularly to disadvantaged groups, so that they may obtain the necessary skills to increase their access to job opportunities.

TRAN2 Managing Transport Impacts of New Development

Policy
Planning permission will not be granted for development proposals that are likely to have significant transport implications unless applications are accompanied by proposals to provide an acceptable level of accessibility and safety by all modes of transport to and from all parts of a development including, in particular, access by walking, cycling, public transport and car sharing. These proposals should be in accordance with an agreed Transport Assessment, where required, and include implementation of measures to promote and improve such sustainable transport facilities through agreed Travel Plans and similar measures.

TRAN4 Creating Coherent Networks for Cycling and for Walking

Policy
Joint working between the four local authorities will ensure that the Black Country has a comprehensive cycle network based on integrating the four local cycle networks, including common cycle infrastructure design standards

Creating an environment that encourages sustainable travel requires new developments to link to existing walking and cycling networks. The links should be safe, direct and not impeded by infrastructure provided for other forms of transport. Where possible, existing links including the canal network should be enhanced and the networks extended to serve new

developments. New developments should have good walking and cycling links to public transport nodes and interchanges.

Cycle parking facilities should be provided at all new developments and should be located in a convenient location with good natural surveillance, e.g. in close proximity of main front entrances for short stay visitors or under shelter for long stay visitors. The number of cycle parking spaces required will be determined by local standards in supplementary planning documents.

ENV3 Design Quality

Policy
Each place in the Black Country is distinct and successful place-making will depend on understanding and responding to the identity of each place with high quality design proposals. Development proposals across the Black Country will deliver a successful urban renaissance through high quality design that stimulates economic, social and environmental benefits by demonstrating that the following aspects of design have been addressed through Design and Access Statements reflecting their particular Black Country and local context:

1. Implementation of the principles of "By Design" to ensure the provision of a high quality network of streets, buildings and spaces;

2. Implementation of the principles of "Manual for Streets" to ensure urban streets and spaces are designed to provide a high quality public realm and an attractive, safe and permeable movement network;

3. Use of the Building for Life criteria for new housing developments, to demonstrate a commitment to strive for the highest possible design standards, good place making and sustainable development, given local circumstances;

4. Meeting Code for Sustainable Homes Level 3 or above for residential development and Building Research Establishment Environmental Assessment Method (BREEAM) Very Good or above for other development, or the national requirement at the time of submitting the proposal for planning permission, to demonstrate a commitment to achieving high quality sustainable design;

5. Consideration of crime prevention measures and Secured By Design principles.

6. Including design features to reduce the urban heat island effect such as tree cover, green roofs and the inclusion of green space in development.

ENV5 Flood Risk, Sustainable Drainage Systems and Urban Heat Island

Policy
The Black Country Authorities will seek to minimize the probability and consequences of flood risk by adopting a strong risk-based approach in line with PPS25. Development will be steered to areas with a low probability of flooding first through the application of the sequential test. The Exception test will then be required for certain vulnerable uses in medium and high probability flood areas.

Proposals for development must demonstrate that the level of flood risk associated with the site is acceptable in terms of the Black Country Strategic Flood Risk Assessment and its planning and development management recommendations as well as PPS25 depending on which flood zone the site falls into and the type of development that is proposed (see PPS25, table D1: Flood Zones to explain appropriate uses in flood zones).

To assist in both reducing the extent and impact of flooding and also reducing potential urban heat island effects, all developments should:

- Incorporate Sustainable Drainage Systems (SUDs), unless it would be impractical to do so, in order to significantly reduce surface water run-off and improve water quality. The type of SUDs used will be dependent on ground conditions;
- Open up culverted watercourses where feasible and ensure development does not occur over existing culverts where there are deliverable strategies in place to implement this;
- Take every opportunity, where appropriate development lies adjacent to the river corridors, or their tributaries or the functional floodplain, to benefit the river by reinstating a natural, sinuous river channel and restoring the functional floodplain within the valley where it has been lost previously;
- On sites requiring a Flood Risk Assessment, reduce surface water flows back to equivalent greenfield rates;
- Create new green space, increase tree cover and/or provide green roofs;

No development will be permitted within a groundwater SPZ1 which would physically disturb an aquifer, and no permission will be granted without a risk assessment demonstrating there would be no adverse effect on water resources.

ENV7 Renewable Energy

Policy
Proposals involving the development of renewable energy sources will be permitted where the proposal accords with local, regional and national guidance and would not significantly harm the natural, historic or built environment or have a significant adverse effect on the amenity of those living or working nearby, in terms of visual, noise, odour, air pollution or other effects.

All non-residential developments of more than 1,000 square metres floor space and all residential developments of 10 units or more gross (whether new build or conversion) must incorporate generation of energy from renewable sources sufficient to off-set at least 10% of the estimated residual energy demand of the development on completion. The use of on-site sources, off-site sources or a combination of both should be considered. The use of combined heat and power facilities should be explored for larger development schemes. An energy assessment must be submitted with the planning application to demonstrate that these requirements have been met.

The renewable energy target may be reduced, or a commuted sum accepted in lieu of part or all of the requirement, only if it can be demonstrated that:
- a variety of renewable energy sources and generation methods have been assessed and costed;
- achievement of the target would make the proposal unviable (through submission of an independently assessed financial viability appraisal); and
- the development proposal would contribute to achievement of the objectives, strategy and policies of the Core Strategy.

ENV8 Air Quality

Policy
New residential or other sensitive development, such as schools, hospitals and care facilities, should, wherever possible, be located where air quality meets national air quality objectives.

Where development is proposed in areas where air quality does not meet (or is unlikely to meet) air quality objectives or where significant air quality impacts are likely to be generated by the development, an appropriate air quality assessment will be required. The assessment must take into account any potential cumulative impacts as a result of known proposals

in the vicinity of the proposed development site, and should consider pollutant emissions generated by the development.

If an assessment which is acceptable to the local authority indicates that a proposal will result in exposure to pollutant concentrations that exceed national air quality objectives, adequate and satisfactory mitigation measures which are capable of implementation must be secured before planning permission is granted.

WM5 Resource Management and New Development

Policy

Resource Efficiency and New Development – General Principles

All new developments should:

- address waste as a resource;
- minimise waste as far as possible;
- manage unavoidable waste in a sustainable and responsible manner, and
- maximise use of materials with low environmental impacts.

Where a proposal includes uses likely to generate significant amounts of waste, these should be managed either on-site or as close as possible to the source of the waste.

Resource and waste management requirements should also be reflected in the design and layout of new development schemes. Wherever possible, building, engineering and landscaping projects should use alternatives to primary aggregates such as secondary, and recycled materials, renewable and locally sourced products, and materials with low environmental impacts. Where redevelopment of existing buildings or structures and/ or remediation of derelict land is proposed, construction, demolition and excavation wastes (CD&EW) should be managed on-site where feasible and as much material as possible should be recovered and re-used for engineering or building either on-site or elsewhere (see MIN2). Consideration should also be given to how waste will be managed within the development once it is in use.

Major Development Proposals

Planning applications for major development (as defined in the Town and Country Planning (Development Management Procedure) Order) should include supporting information explaining what material resources will be used in the development, and how and where the waste generated by the

development will be managed. This should cover the following, where applicable:

- Construction waste management – resource efficiency targets, tonnages of CD&EW generated by type, methods of management, and what proportion will be managed on-site/ off-site;
- Secondary and recycled aggregate production – tonnages of aggregate produced from re-used or recycled CD&EW generated by the development;
- Responsible sourcing of building, engineering and landscaping materials – use of materials with low environmental impacts, use of alternatives to primary aggregates, renewable, and locally sourced materials;
- Provision for on-site management of waste – details of the provision to be made for management of waste within the development once it is in use, such as waste management systems and storage of non-recyclable and recyclable waste.

Supporting information may include a site waste management plan (SWMP) where one has been prepared. Alternatively, information may be included within a waste audit, design and access statement, or planning statement.

Area Action Plans, regeneration frameworks, Masterplans linked to phased planning applications and other plans for areas of major change within the Growth Network should adopt a holistic approach towards resource management. They should include a resource management strategy for the area as a whole, and a strategy for managing the CD&EW generated by the proposals, including contaminated soils (where present) on site or as close to the site as possible (for example at temporary "hub" sites).

Plans should also adopt a "whole life" approach towards resource management and consider how waste generated by the end users of the proposed developments will be managed. Where new provision for waste management is needed, this should be integrated into the proposals for the area (see WM4).

SAD EMP 2 - Training and Recruitment

Where development proposals come forward for employment generating uses obligations for training and recruitment of local people for both the end use and the supply chain will be negotiated which respond to barriers to employment and training particularly those identified in the Neighbourhood Employment and Skills Plans.

SAD EOS 4 - Community Open Space

Community Open Spaces are open spaces which are physically accessible and publicly available. These are shown on the Policy Map.

The Council will seek the provision of Community Open Space at a minimum ratio of 2 hectares per 1000 population, and will seek to ensure that at least 1 hectare of Community Open Space is provided within walking distance (0.4 km) of all the Borough's residents.

Quality Community Open Space is seen as an integral part of quality living space, and should be provided as part of new housing developments where such spaces are not currently available within easy access* of the development. Where provision locally is adequate in terms of quantity, greater emphasis will be placed on improving the quality of existing nearby Community Open Space.

SAD EOS 9 - Urban Design Principles

The Council will assess all applications for new development in accordance with policy ENV3, Design Quality, of the Black Country Core Strategy.

The Council will reject poor designs, particularly those that are inappropriate in their locality, for example, those clearly out of scale with or incompatible with their surroundings.

Particular regard will be paid to how the development relates to the street, its relationship with the public realm, the ease with which the public are able to move through and around the development, and the nature and height of any buildings and their effect on the surrounding urban area.

NOTES

Unstable or Contaminated Land

Responsibility and subsequent liability for safe development and secure occupation rests with the developer and/or landowner. Although the local planning authority has used its best endeavours to determine the application on the basis of the information available to it, this does not mean that the land is free from instability or contamination.

In cases where the question of stability or contamination has been a material consideration, resolution of this issue does not necessarily imply that the requirements of any other controlling authority would be satisfied, and the **granting of planning permission does not give a warranty of support or stability or of freedom from contamination.**

Appeals to the Secretary of State

If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town & Country Planning Act 1990.

If you want to appeal, then you must do so within 12 weeks of the date of this notice in the case of a householder application and within six months of the date of this notice in any other case, using a form which you can get from The Planning Inspectorate,3/17 Eagle Wing, Temple Quay House, 2 The Square, Temple Quay, Bristol. BS1 6PN.

The Secretary of State can allow a longer period for giving notice of an appeal, but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The Secretary of State need not determine an appeal if it seems to him that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions it imposed, having regard to the statutory requirements, to the provisions of the General Permitted Development Order 1995 or any of the relevant Development Order and to any Directions given under such Order(s).

In practice, the Secretary of State is unlikely to refuse to consider appeals solely because the local planning authority based its decision on a Direction given by him.

Purchase Notices

If either the local planning authority or the Secretary of State for the Environment Transport and the Regions refuses permission to develop land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor

can he render the land capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the Council in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town & Country Planning Act 1990.

LABC SANDWELL BUILDING CONSULTANCY Sandwell Metropolitan Borough Council

Notes for applicants who intend to carry out work to which the Building Regulation apply:

Now that you have your Planning Permission, you will also need to consider applying for Building Regulation approval. This is basically a technical exercise to ensure that your project complies with current national building standards and that your health and safety (and that of members of your household) is not compromised.

Sandwell Council's Regeneration and Economy Directorate also provides a Building Control Service and if your scheme requires Building Regulation approval, I would ask you to contact my Building Control Section on 0121 569 4054/4055 if you require further information concerning the Building Regulations process or visit our website at **www.sandwell.gov.uk** for guidance and forms.

The Council's in-house Building Control Team can offer the following services:

- Assessment of plans and any structural calculations – plans and details will be checked by our Team of qualified surveyors to check for compliance with the Building Regulations.

- Next day site inspection service (providing you book your inspection prior to 5.30 pm)

- In order to ensure that your building work meets minimum safety standards our Surveyors will carry out a pre-scheduled number of site inspections dependent on your project. We understand the importance of you (and your contractor) having on-site advice available throughout the duration of your project.

Impartial and independent advice – as a team within the Council, Building Control does not have any contracts or links with architects or contractors and therefore, our primary concern is that your project meets current construction standards and that health and safety is given the highest priority.

thinkSandwell

Sandwell Metropolitan Borough Council's Employment & Skills

Sandwell is recognised as being within an area which has high levels of worklessness and low skills. As a key responsibility to counteract this, the Council's Regeneration and Economy's 'Think Sandwell' team endeavour to maximise enterprise and employment opportunities from all new investment identified in the borough.

As part of all planning decisions we require applicants to consider the Councils ethos of employment and skills creation opportunity wherever possible under the Community Benefits and Social Value Act 2012.

Working with Think Sandwell enables the endorsement of community benefits linked to targeted recruitment and employment, helping to sustain the boroughs economic, social and environmental considerations.

Contacts:

Further enquiries in regard to the community benefit initiative within Sandwell please contact Karen_richards@sandwell.gov.uk Community Benefit Coordinator – 0121 569 2104/M: 07929353338
and Paul_smith@sandwell.gov.uk Senior Manager - Sector Development - 0121 569 3309 / M: 07979591982.

APPENDIX 3a – ESTATES STRATEGY

Sandwell and West Birmingham Hospitals NHS
NHS Trust

Estates Strategy 2013/14 - 2019/20 2015/16 Annual Update

ESTATES STRATEGY 2013/14 – 2019/20
2015/16 ANNUAL UPDATE

CONTENTS

1.0 INTRODUCTION

A patient's first impression of healthcare services is formed by the appearance of healthcare buildings and facilities. Services should be delivered in safe and suitable environments. Patients and staff need to feel safe, secure and comfortable. Healthcare buildings should ensure good functionality, meet expectations in terms of privacy and dignity, provide good access to all, reduce infection and minimise accidents.

In line with guidance (Developing an Estate Strategy) this strategy has been developed on a framework asking three fundamental questions across a range of criteria, as follows:

- Where are we now?
- Where do we want to be?
- How do we get there?

2.0 AIMS OF AN ESTATE STRATEGY

The Trust's Strategic Objectives are summarised:-

To support these objectives the Estates Strategy document:-

- Reviews the current key estate issues of the Trust
- Sets out how the clinical services will be supported by a safe, secure and appropriate environment.
- Ensures that capital investments support service strategies and plans.

3.0 OBJECTIVES

1. To analyse the estate condition and its performance.

2. To identify costs to achieve Estatecode Condition B for key facets of Condition Survey.

3. To prioritise capital investment in estate statutory compliance issues.

4. To support compliance with Care Quality Commission registration

5. To achieve year-on-year improvement on performance in line with the Trust approved Carbon Management Plan

6. To demonstrate value for money through the completion of the Estates Return Information Collection (ERIC) system by benchmarking against other large acute Trusts and to demonstrate compliance through the completion of the Premises Assurance Model (PAM) self-assessment.

7. Maintain Patient Led Assessments of the Care Environment (PLACE) standards year on year to achieve a minimum of 90% compliance level across all criteria for all sites.

8. To have a formal system of control to ensure a robust Development Control Plan (DCP) to support clinical services.

4.0 TIMESCALE

This is the 2015/16 annual review of the 2012/13 – 2019/20 Estates Strategy. This timescale has been chosen as it encompasses planned MMH opening date and the timescale for community facilities schemes that cannot be commenced prior to MMH opening. This strategy identifies the areas of land for disposal but does not include the schemes to support disposal as they are planned to be outside of this timescale. The strategy will be reviewed on an annual basis as part of the Trust's business planning process.

5.0 ESTATE PERFORMANCE – ACHIEVING OBJECTIVES 1, 2 & 3

5.1 Where are we now?

Much of the Trust estate is of a significant age and does not comply with Department of Health guidelines or aspirations for 40% of the NHS estate to be less than 15 years old by 2010. As can be seen from Table 1 overleaf, (Building Age and Asset Profile) 71% of City Hospital is over 30 years old, however a more significant statistic is that 46% of City Hospital is over 67 years old. Over 90% of Sandwell Hospital is over 30 years old; furthermore 38% of Sandwell Hospital is over 40 years old.

Compliance with Department of Health requirements is dependent upon the implementation of the Trust's long term strategic plan for the construction of the Midland Metropolitan Hospital as part of the Right Care, Right Here programme.

Table 1 – Building Age and Asset Profile as at 31st March 2015

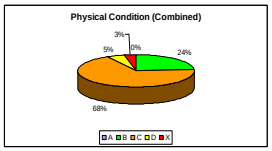
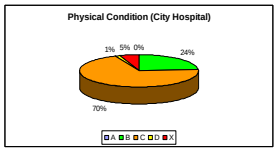
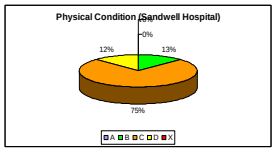
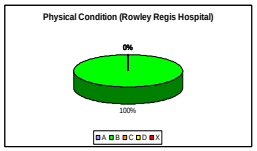
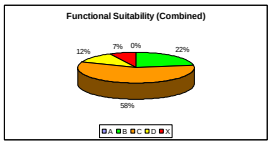
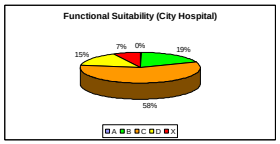
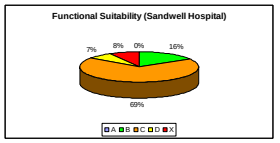
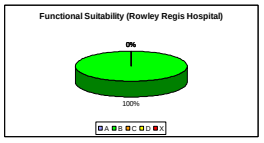
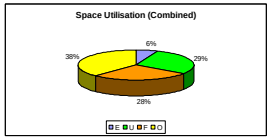
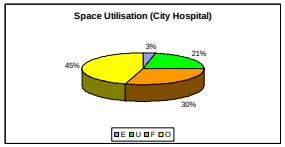
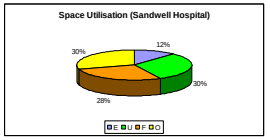
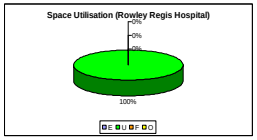
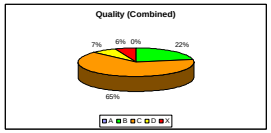
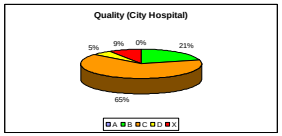
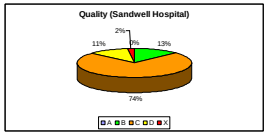
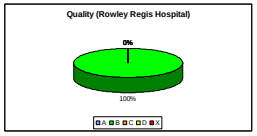
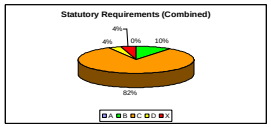
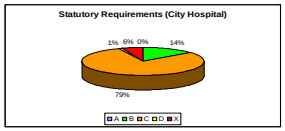
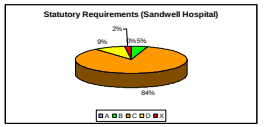
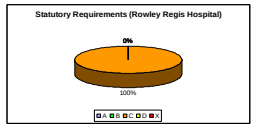
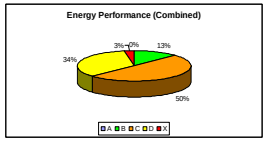
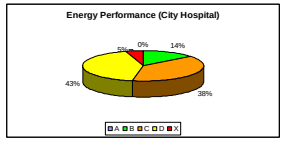
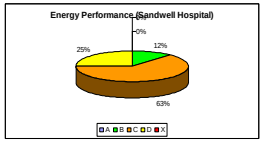
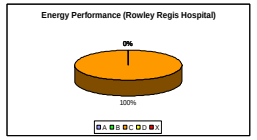
Age & Asset Profile	Unit	Sandwell	City	Rowley	Leasowes
Age Profile - 2005 to present	%	9.63	14.08	0	100
Age Profile - 1995 to 2004	%	0	6.91	0	0
Age Profile - 1985 to 1994	%	0	7.18	100	0
Age Profile - 1975 to 1984	%	51.72	7.8	0	0
Age Profile - 1965 to 1974	%	24.65	14.52	0	0
Age Profile - 1955 to 1964	%	0.2	2.34	0	0
Age Profile - 1948 to 1954	%	0	0.91	0	0
Age Profile - pre 1948	%	13.8	46.26	0	0
Age Profile - Total (must equal 100)	%	100	100	100	100
Building Asset Value by Age - 2005 to present	£	0	19,823,558	0	
Building Asset Value by Age - 1995 to 2004	£	0	8,671,351	0	0
Building Asset Value by Age - 1985 to 1994	£	0	3,703,174	12,645,075	0
Building Asset Value by Age - 1975 to 1984	£	64,555,097	4,763,401	0	0
Building Asset Value by Age - 1965 to 1974	£	3.105.862	6,769,133	0	0
Building Asset Value by Age - 1955 to 1964	£	0	2,895,786	0	0
Building Asset Value by Age - 1948 to 1954	£	0	384,821	0	0
Building Asset Value by Age - pre 1948	£	4,977,581	46,085,876	0	0
Total Building Asset Value	£	72,638,540	93,097,100	12,645,075	

Condition surveys of the two principle sites were undertaken in December 2002 by French Thorpe Consultancy supported by Malcolm Lamb Associates. The criteria that were used to assess the estate were those defined by Estatecode:

- Physical Condition
- Space Utilisation
- Statutory standards
- Energy performance
- Functional suitability

Desktop surveys were undertaken in August 2007 and the additional facet of Quality was included in June 2012 to identify areas where condition has deteriorated or improved via capital investment. The following pie charts summarise the performance for the categories. Note the 'Part Dangerous and Inoperable' areas are disused areas of the estate.

The findings of the survey are summarised graphically as follows (Ref 31st March 2012):-

	Trust	City	Sandwell	Rowley Regis
Physical Condition **Key** A = As new (built within last 2 years) B = Sound, operationally safe and exhibits only minor deterioration C = Operational but major repair/replacement needed soon, within 3 years for building elements and one year for engineering elements D = Runs serious risk of imminent breakdown X = Supplementary rating added to C or D to indicate that nothing but a total rebuild or relocation will suffice				
Functional Suitability **Key** A = Very satisfactory, no change needed B = Satisfactory, minor change needed C = Not satisfactory, major change needed D = Unacceptable in its present condition X = Supplementary rating added to C or D to indicate that nothing but a total rebuild or relocation will suffice				
Space Utilisation **Key** A = Empty or grossly under used at all times (excluding temporary closure) U = Under-used, utilisation could be significantly increased F = Fully used – a satisfactory level of utilisation O = Overstretched, overcrowded, overloaded and facilities generally overstretched				
Quality **Key** A = A facility of excellent quality B = A facility requiring general maintenance investment only C = A less than acceptable facility requiring capital investment D = A very poor facility requiring significant capital investment or replacement X = Supplementary rating added to C or D to indicate that nothing but a total rebuild or relocation will suffice				
Statutory Requirements **Key** A = Complies with all statutory requirements and guidance B = Action needed in the current plan to comply with statutory requirements and guidance C = Known contravention of one or more standards which falls short of B D = Dangerously below B standard X = Supplementary rating added to C or D to indicate that nothing but a total rebuild or relocation will suffice				
Energy Performance **Key** A = 35-55 GJ per 100 cubic metres B = 56-65 GJ per 100 cubic metres C = 66-75 GJ per 100 cubic metres D = 76-100 GJ per 100 cubic metres X = Supplementary rating added to C or D to indicate that nothing but a total rebuild or relocation will suffice				

The cost to Condition B for key facets, which is the Trust's Backlog Maintenance Level, has also been estimated:-

• City Hospital	-	87,148m^2	-	£42,577,161
• Sandwell Hospital	-	54,365 m^2	-	£37,397,840
• Rowley Regis Hospital	-	8,735 m^2	-	£134,659
• Leasowes Intermediate Care Centre	-	921m^2	-	£0
		---		---
		151,418m^2		**£80,106,660**
		=========		==========

The High and Significant Risk elements of this assessment equate to £1.8m which has been funded in the 2015/16 capital programme.

5.2 Where do we want to be?

Backlog of this magnitude has potential safety implications and may influence patient perception. This could also affect business with greater patient choice arrangements.

The issues of poor physical condition need to be addressed to maintain the building fabric and to ensure patient's expectations are met. This is assessed through the Patient Led Assessment of the Care Environment action team initiative (PLACE). A strategic objective for the Trust is to achieve 21st century facilities, achieving condition B for all facets of the survey through strategic capital investment and to achieve good or excellent standards for PLACE Assessments would meet this objective. However, this cannot be achieved without strategic investment; therefore, detailed risk assessments are undertaken in line with the Trust's formal risk assessment process and managed through the governance/risk management structure to ensure a safe facility.

5.3 How do we get there?

Issues associated with statutory compliance have to be managed through the Trust's risk management arrangements. These arrangements consist of the Estates and Facilities Governance Group, which meets on a monthly basis and reports through the Trust's Governance arrangements. The risk management process identifies a number of estates and facilities issues as red risks; these are reported with their control measures through the Trust's risk management arrangements. All risks are updated annually and implications identified through the business planning process. Continued investment into the estate is required in order to control the backlog position, maintain compliance with statutory standards and minimise risk.

To date specific funding has been made available to address the high and significant backlog issues. Wider condition survey related issues are addressed as part of the briefing process for capital investments.

5.4 2015/16 Capital Programme

The capital programme for the 2015/16 financial year includes £1.8m allocated to statutory standards and estates related improvement schemes. The £1.8m expenditure has been identified through a detailed risk assessment process and covers areas including:

- Fire Safety
- Asbestos Management
- Legionella precautions
- Electrical Safety

Other capital schemes to support the implementation of the Trust's Transformational Service Plans (TSPs) will also include elements of environmental improvements and statutory standards compliance works as well as facilitating the functional change required to deliver these TSPs.

However, to achieve condition "B" for all facets requires strategic investment. Notable capital schemes for 2015/16 are as follows:

- Theatre hygiene works
- Paperlite: New essential generation capacity at Sandwell
- Cardiology redevelopment at City
- Lift refurbishments at City and Sandwell

6.0 RISK MANAGEMENT AND GOVERNANCE - ACHIEVING OBJECTIVE 4

6.1 Where are we now?

The Estates division has a robust system of risk management managed through the division's Governance Group. Chaired by either the Director of Estates or the Head of Estates, this group meets monthly and reports through the Trust's Governance arrangements.

The standing agenda items are:

- Privacy and Dignity
- Disability Discrimination Act
- PLACE
- Compliance with HTMs, HBNs, Best Practice Guides
- Complaints and Litigation
- Statutory Enforcement Bodies
- Risk Management
- Consultation and Patient Involvement
- Staff Management
- Education and Training
- Governance Development
- External Publications
- HEFMA
- Divisional Health & Safety Meetings

All significant Estates related risk assessments are managed through the Trust's risk management processes. To provide Board assurance that the estate is suitable and safe the Estates department have commissioned external consultants to provide Board assurance. This builds on the external assurance provided to Audit Committee during the last financial year.

During summer 2014, Capita Symonds revisited the Estates department as a follow up to the audit completed in 2012 specifically to update the outstanding actions and undertake an audit of compliance against the Care Quality Commission Outcomes 10 & 11. The findings for this have been produced and an action plan completed and due for submission to audit committee early in 2015.

6.2 Where do we want to be?

The Trust needs to maintain progress on all of the above issues and provide its services in a safe, suitable and secure environment. This needs to be achieved in a transparent way and responsive to patient perception and views through surveys and complaints. The objective is to maintain compliance with Regulation 15 of the Care Quality Commission registration requirements and maintain the robust approach to Risk Management and Governance (Regulation 15 has now replaced previous Outcomes 8, 10 & 11 and encompasses all estates and facilities environmental issues).

6.3 How do we get there?

The Risk Management and Governance arrangements of the Trust provide a framework to meet the objective of maintaining a safe and secure environment.

The Risk Register is a statutory requirement and an aid in determining the prioritisation of funding for capital investment and informs ongoing service provision. The division will maintain its Risk Register and ensure the divisional "red risks" and associated control measures are notified to through the Trust's risk management arrangements.

The current risk assessment process is based around the long term strategic objectives to move to the Midland Metropolitan Hospital with the risks managed over a 5 year planning horizon.

Establishing external assurance of Estates has become an annual occurrence.

7.0 ENVIRONMENTAL PERFORMANCE – ACHIEVING OBJECTIVE 5

7.1 Where are we now?

As with previous years, the Trust has continued to demonstrate its commitment to Sustainability, minimising our impact on the environment and climate change and working to reduce carbon emissions.

We have robust governance for Sustainability with a well-established Sustainability Action Plan, Environment and Sustainability Policy, and Carbon Management Plan in place. The Trust also has a Sustainability Working Group with key managers across the Trust that meet monthly to discuss Sustainability and monitor progress towards the Sustainability Action Plan. We also have a Board Level lead to ensure that Sustainability issues have visibility and ownership at a high level in the organisation. Alongside the Sustainability Action Plan, the Trust has a Sustainable Travel Plan for all sites which focuses on staff travel to and from work and across our sites. The aim of the Travel Plans is to facilitate healthy and sustainable modes of travel (e.g. walking, cycling, public transport).

Our Trust believes that staff engagement is vital and that an environmentally sustainable NHS can only be delivered through the efforts of staff. We encourage staff to become a Sustainability Champion to help us disseminate information, run campaigns and also feedback ideas. Our Sustainability Champions help us towards energy saving and waste reduction targets, reducing our environmental impact whilst also saving money. We also run events and campaigns throughout the years, including our successful Sustainability Garden Party. The aim of these events is to engage staff, patients and visitors around the importance of being energy and water efficient, wasting less and travelling more sustainably.

7.2 Public Health Plan (2014-2017)

As part of the Trust Public Health Plan, we have committed to the following actions by 2017:

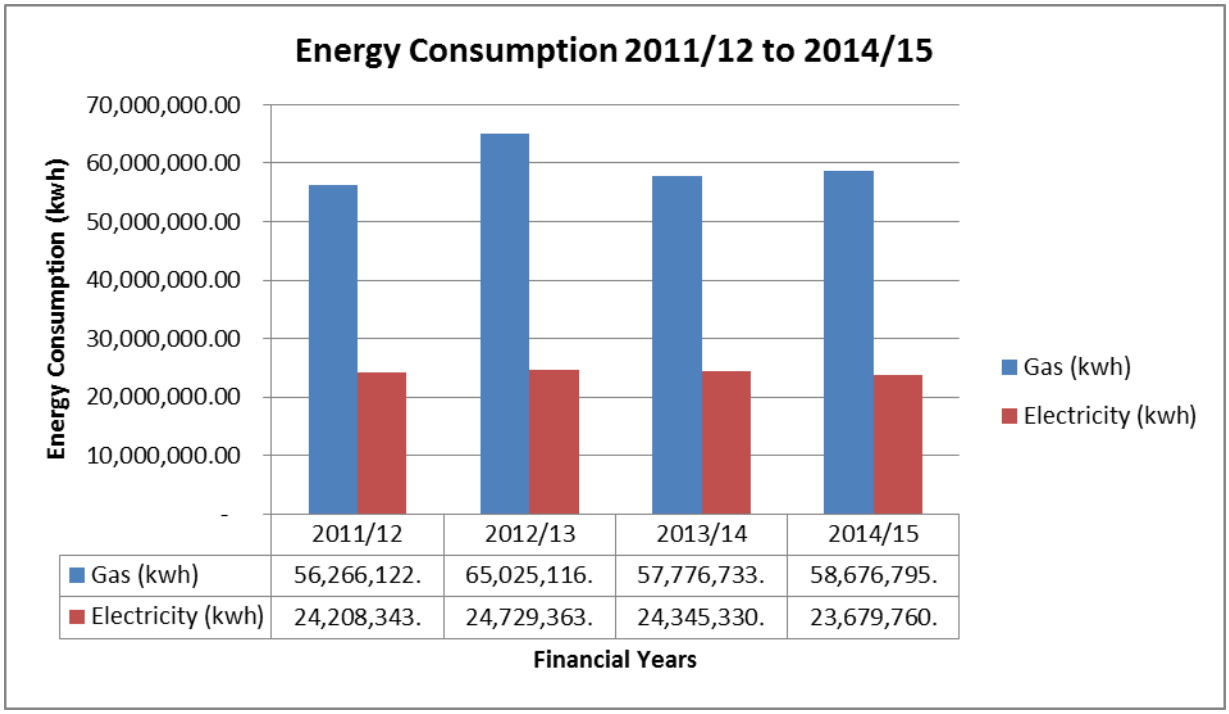
- Stabilise our energy usage at current levels (from a 2014 baseline)
- Cut landfill use by 5%, and
- Improve our NHS good corporate citizen assessment score by 10% or better

7.2.1 Stabilising Energy Consumption and Carbon Emissions

We have started to stabilise overall energy consumption. The figure below illustrates energy consumption between 2011/12 and 2014/15. We have achieved this through a number of schemes, including:

- Installing LED lighting and controls in areas across the Trust, whilst also improving the patient & staff environment

- Replacing gas boilers with more energy efficient models to reduce gas consumption
- An estates rationalisation programme has been completed, reducing energy consumption and therefore carbon emissions
- Photovoltaic solar panels installed on roofs of the Birmingham Midland Eye Centre (City Hospital) and Rowley Regis to generate renewable electricity and reduce consumption from the national grid
- Staff engagement and events around energy efficiency



	2011/12	2012/13	2013/14	2014/15
Gas (kwh)	56,266,122.	65,025,116.	57,776,733.	58,676,795.
Electricity (kwh)	24,208,343.	24,729,363.	24,345,330.	23,679,760.

*Monthly average data was used for some energy meters in 2014/15 as data not yet available from suppliers at the time of compiling this report.

7.2.2 Cutting Landfill Use

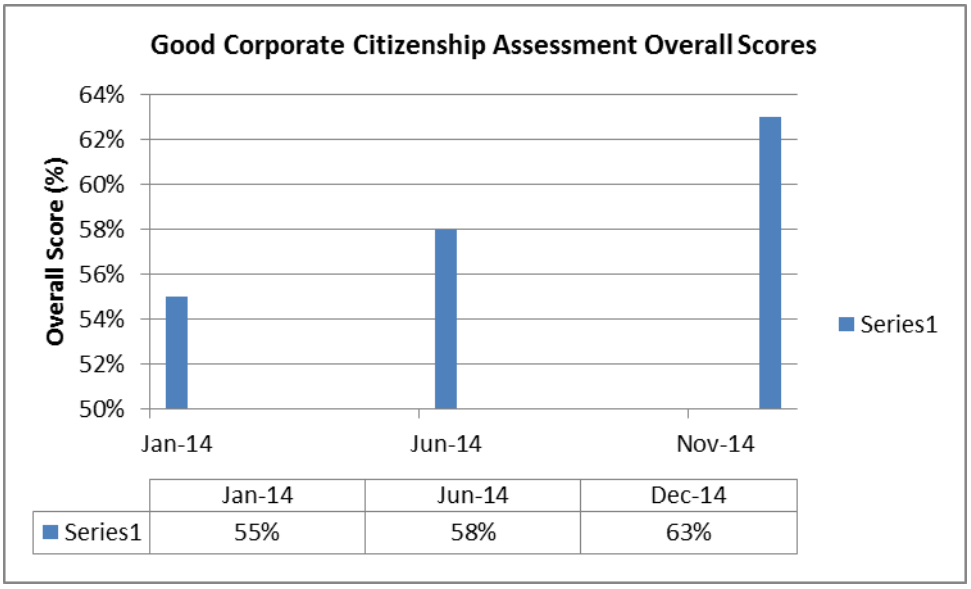
We are now working with a new waste contractor for the removal of general waste. This contractor has recently opened a Materials Recycling Facility (MRF) in the West Midlands. The Trust's general waste and recycling waste will be sent to this facility for recycling.

This MRF and new process at the Trust has simplified recycling, whilst increasing the amount of general waste sent for recycling (and reducing the amount of waste sent to landfill). We also have a mini recycling centres at City and Sandwell Hospitals. These processes have reduced the amount of waste vehicles travelling to the site, reducing our impact on the environment.

7.2.3 Improving Our NHS Good Corporate Citizen Assessment Score

The Trust reports on its Sustainability performance bi-annually through the NHS Good Corporate Citizen (GCC) self-assessment model. This self-assessment tool allows Trusts to measure their own performance against key sustainability themes and to map or benchmark their performance against others.

We are performing well against this target as illustrated in the figure overleaf.



Carbon Reduction Commitment (CRC)

There is a statutory requirement for the Trust to comply with Carbon Reduction Commitment (CRC). This scheme assesses the gas and electricity consumption of the Trust and calculates carbon emissions based upon consumption. The Trust is then obliged to buy carbon (in tonnes) from the Environment Agency (EA) and surrender the equivalent emissions back to the EA.

Due to regulatory changes and as the Trust is a member of the European Union Emission Trading Scheme (EUETS), we no longer need to include (and buy allowances for) carbon emissions generated from energy for our City Hospital site. We are also working to exclude the energy meters at Sandwell that are covered by the EUETS in the near future. The EUETS is a government scheme aimed at introducing carbon commodity that could be allocated and purchased, with organisations having the ability to trade surplus carbon if they had made savings. The Trust has so far been able to emit less carbon than allocated and accumulate a substantial 'bank' of carbon units.

Both the CRC and EU ETS rely upon individual meter points as a measure of energy consumption and carbon emission based upon this. We monitor, record and report these consumption figures on a regular basis via Excel spreadsheets and our carbon software.

Display Energy Certificates

All Trust buildings over 1,000m² and where there is access to the public, are required to display their energy performance/efficiency rating on a scale of A to G by use of Display Energy Certificates (DECs). The Trust has updated these for 2015/16 and they are on display at the main entrances to buildings included within the scheme. DECs have to be renewed annually.

There are seventeen buildings across the Trust that fall into the category of requiring a Display Energy Certificate. Due to the variety and different ages of the buildings the energy performance varies significantly. In summary most buildings fall with the mid-range of C to F. Display Energy Certificates are also accompanied by an Energy Advisory Report that contains recommendations for improvement in energy performance. The recommendations are being considered as part of the Carbon Management Plan identified above.

As can be seen in more detail in the ERIC Returns, generally the Trust is operating environmental related performance indicators below the lower quartile for both cost of energy and the carbon emissions per occupied floor area. The Trust is proactively monitoring its energy usage and implementing measures to reduce consumption.

8.0 ERIC AND PERFORMANCE INDICATORS – ACHIEVING OBJECTIVE 6

8.1 Where are we now?

Estates Return Information Collection (ERIC) Returns

The Trust has a mandatory requirement to submit information annually to the Department of Health on a whole range of hard and soft FM services. This information is provided in line with the Estates Return Information Collection requirements. Trusts are categorised according to their size and type. Sandwell and West Birmingham Hospitals NHS Trust is in the category of 'Large Acute Trusts" of which there are 38 such Trusts. Obviously the benchmarking information is more meaningful when provided in this way.

The returns are summarised for each service into quartiles, lower, median and upper. Any service that fall outside the upper and lower quartiles will be identified and further detailed analysis undertaken to understand the reasons why.

Premises Assurance Model (PAM)

The Trust has voluntarily completed the Premises Assurance Model which is a series of Self-Assessment Questions (SAQs) looking specifically at five key areas:

- Effectiveness
- Efficiency
- Patient Experience
- Safety
- Governance

Each SAQ has a one of six pre-determined responses to ascertain a level of compliance. The responses to the SAQs must be evidenced and are benchmarked against other Trusts on both regional and national levels. The resultant compliance data will rate each key area in with one of five scores ranging from outstanding to inadequate.

8.2 Where do we want to be?

For each element of service delivery evaluated within ERIC the objective remains to keep the cost of provision of those services within the benchmark between lower and upper quartiles and demonstrate value for money.

For each of the five key areas assessed under PAM Estates and Facilities are aiming for the minimum of a 'Good' rating and ideally be working towards the 'outstanding' rating.

8.3 How do we get there?

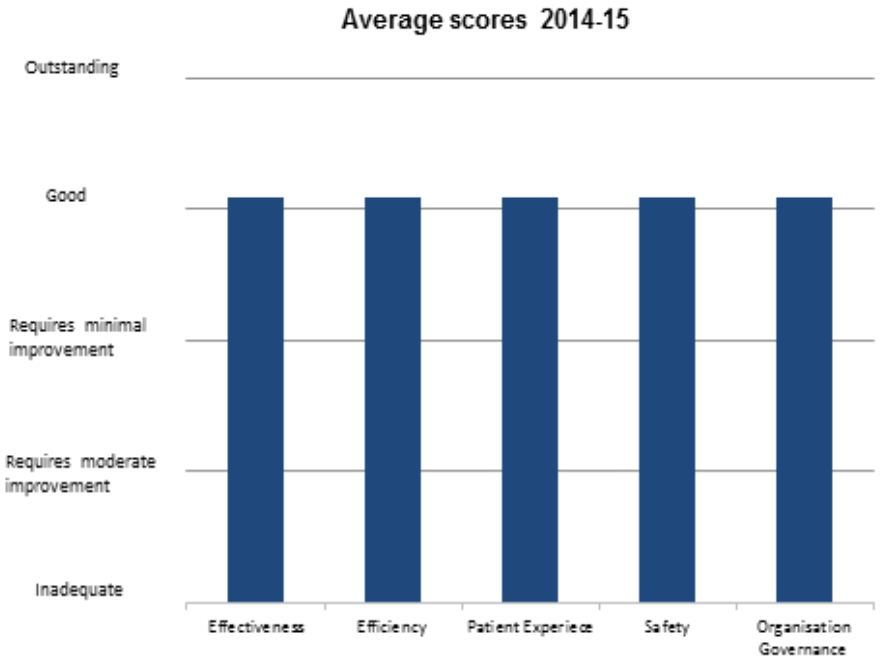
To inform the business planning process, the division will utilise the 2014/15 ERIC returns, factor in the current TSP plans and forecast its benchmark position. Areas outside of the benchmark will be reviewed and these are shown below.

Where appropriate, proposals will be developed to make changes to operational services to comply with objective.

To increase the level of compliance within PAM an action plan has been produced which identifies individual objectives across the five key areas which require improvement. PAM is a yearly self-assessment and as the action plan is completed, a re-evaluation will highlight a level of improvement.

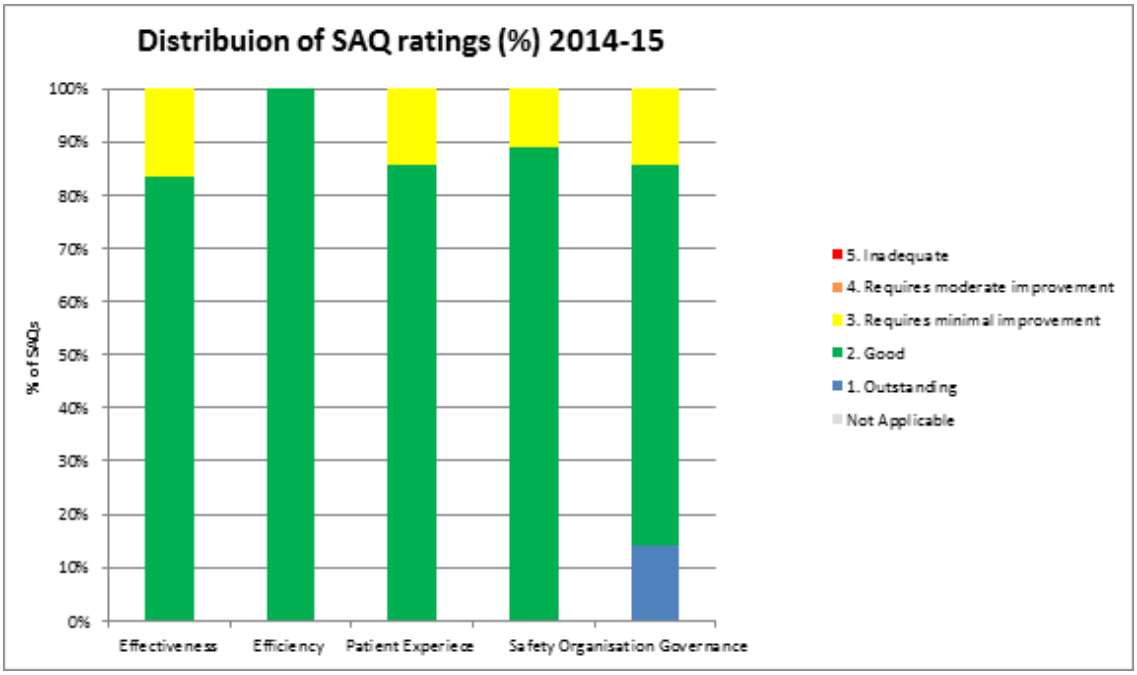
8.4 Summary of PAM Assessment

Of the 52 SAQs responded to, the distribution of the average scores is displayed in the chart overleaf:



The results depict a solid distribution of 'Good' ratings for the key areas. This provides assurance that the Estates and Facilities provision within the Trust are achieving a respectable level of compliance. Over the coming year through the completion of an action plan we aim to improve the scores and bring them closer to an outstanding

The final chart below further expands upon the average scores with the distribution of the ratings split out. The areas requiring minimal improvement will be of particular attention and picked up via the action plan.



9.0 PATIENT LED ASSESSMENTS OF THE CARE ENVIRONMENT (PLACE) – ACHIEVING OBJECTIVE 7

9.1 External PLACE Audits 2014

The audits for 2014 were undertaken between 24th April and 20th May 2014. Trusts and other participating organisations no longer determine the date(s) on which to undertake the assessments. The Health and Social Care Information Centre (HSCIC) has given Trusts and other organisations six weeks' notice of the week in which assessments at any particular hospital/unit are to be undertaken. Notification was received in relation to all of the assessment dates for our Trust and they were undertaken as detailed below.

- City Hospital – Thursday 8th May 2014
- Leasowes PCT – Thursday 15th May 2014
- Rowley – Thursday 24th April 2014
- Sandwell – Tuesday 6th May 2014
- City - Eye Hospital – Tuesday 20th May 2014

Feedback from the audits are that the overall standards are very good and the majority of the detailed checks have passed, there were a few qualified passes and a couple of failures that are being addressed.

The NHS Information Centre have published the results of the PLACE 2014 programme for Cleanliness, Food, Privacy and Dignity and Condition Appearance and Maintenance score for each hospital within the Trust.

Organisation Name	Site Name	Cleanliness	Food Overall	Ward Food	Organisation Food	Privacy, Dignity & Wellbeing	Condition, Appearance and Maintenance
Sandwell & West Birmingham	Leasowes Intermediate Care	100%	97.43%	98.78	94.97%	81.25%	98.31%
Sandwell & West Birmingham	Sandwell General Hospital	99.94%	96.18%	96.59%	94.97%	95.32%	98.13%
Sandwell & West Birmingham	City Hospital	99.83%	98.88%	100%	94.97%	94.46%	97.96%
Sandwell & West Birmingham	Birmingham & Midland Eye Hospital	99.36%	94.89%	94.83%	94.97%	91.07%	98.10%
Sandwell & West Birmingham	Rowley Regis Hospital	99.80%	97.73%	100%	94.97%	89.42%	99.06%

10.0 SUMMARY DISPOSAL AND PROCEEDS OF SALE – ACHIEVING OBJECTIVE 8

The Trust currently provides its services from an estate that covers over 80 acres and 170,000m^2 of buildings. There are currently a number of building areas that have been vacated and plans are developing to vacate further areas as the Trust improves its performance and implements the interim reconfiguration. The Estates division are developing plans to "right size" its estate by closing peripheral buildings through the Estate Rationalisation Transformation Savings Plan. However, until such time as the Outline Planning Application and Outline Business Case for the Midland Metropolitan Hospital have been approved and there is much more certainty about the future of the remaining estate, site disposal will be put on hold.

An Estates Terrier summary of the three existing sites is shown in Table 2 below:

General Information	City Hospital[(1)]	Sandwell Hospital[(2)]	Rowley Regis Hospital[(3)]	Leasowes Intermediate Care
Gross internal site floor area	98,2210 m^2	61,762m^2	8,735m^2	980m^2
Occupied floor area	87,148m^2	54,614m^2	8,735m^2	921m^2
NHS Estate occupied floor area	87%	100%	100%	100%
Site heated volume	202,763m^3	138,442m^3	22,760m^3	2,211m^3
Site building footprint	60,067m^2	27,790m^2	4,868m^2	980m^2
Site land area	19.47 hectares	8.14 hectares	2.76 hectares	0.84 hectares
Leased in land area[(2)] All Saints Way Car Park Hallam Street Car Park (2.66h) Unit 3, Church Lane, West Bromwich, (no details of land or buildings)	Nil	2.97 hectares	Nil	
Patient occupied floor area	59,940m^2	32,285m^2	5,990m^2	600m^2
Non-patient occupied floor area	27,207m^2	22,329m^2	2,745m^2	321m^2
Unoccupied floor area	11,063m^2	7,148m^2	Nil	59m^2
Main circulation area	7,300m^2	8,012m^2	832m^2	115m^2
Leased in floor area	Nil	Nil	Nil	Nil
Leased out floor area[(1)]	869m^2			Nil
Artificial Eye BHBN				
Leased out floor area[(2)]		60m^2		Nil
WRVS MRI 24 and 25 Hallam Close GP Deputising				Nil
Leased out floor area[(3)]			Nil	Nil
Temporary buildings and portacabins	540m^2	176m^2	Nil	Nil

11:0 DEVELOPMENT CONTROL PLANS 2015/16 – ACHIEVING OBJECTIVE 8

N.B. The Development Control Plans for 2015/16 at the time of updating this strategy were being finalised. The strategy will be updated once these are completed.

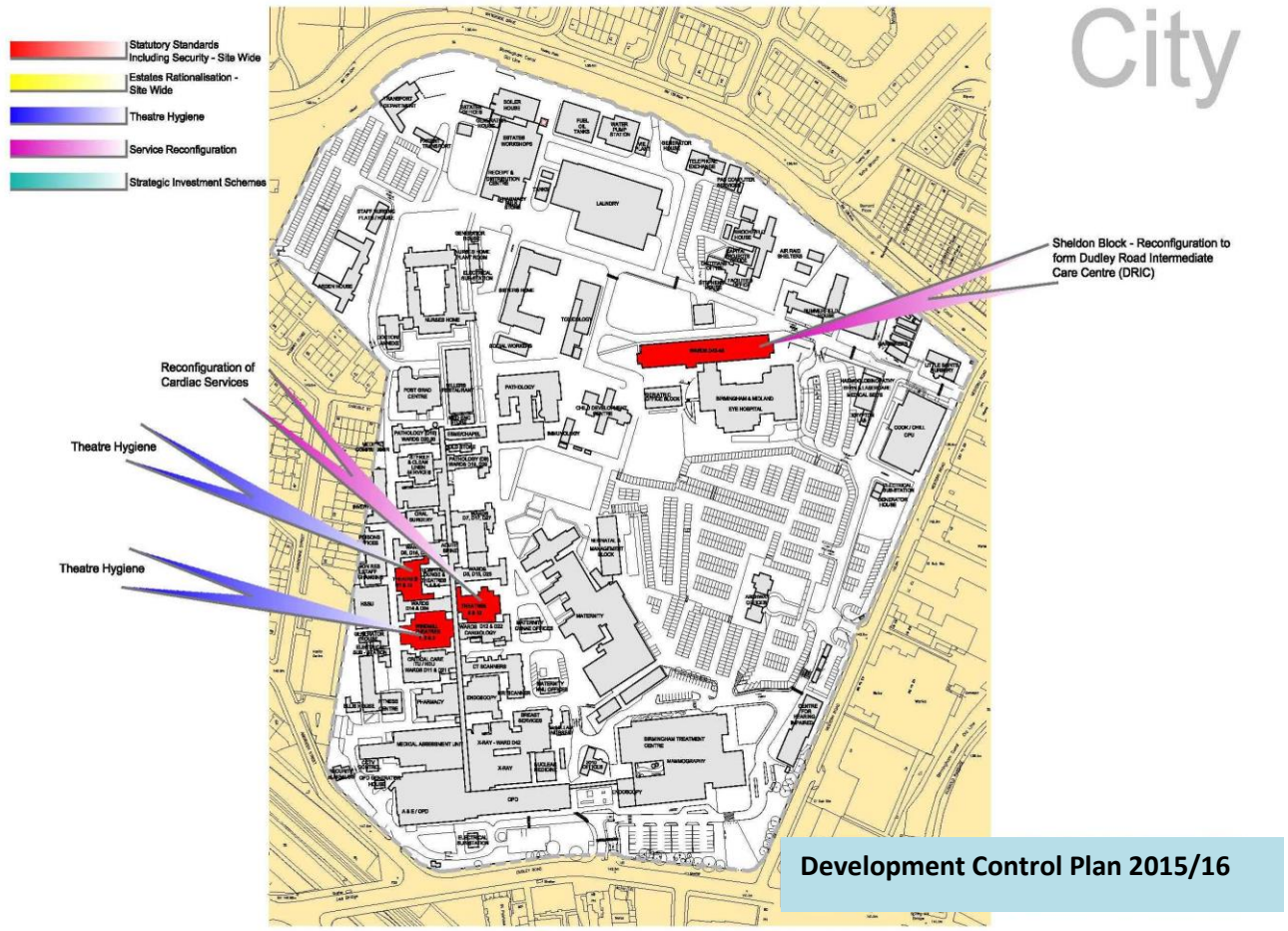
The Trust's Development Control Plan has to take into account clinical service requirements in the form of:-

- Clinical service developments
- Clinical service reconfigurations
- Clinical service Transformation Savings Plans
- Long Term clinical configuration

Estates related issues:-

- Condition of the estate
- Statutory Compliance issues
- Transformation Savings Plans - Estates Rationalisation Programme
- Long term estates plans

The following illustrations show the 2015/16 development control plans for each site:



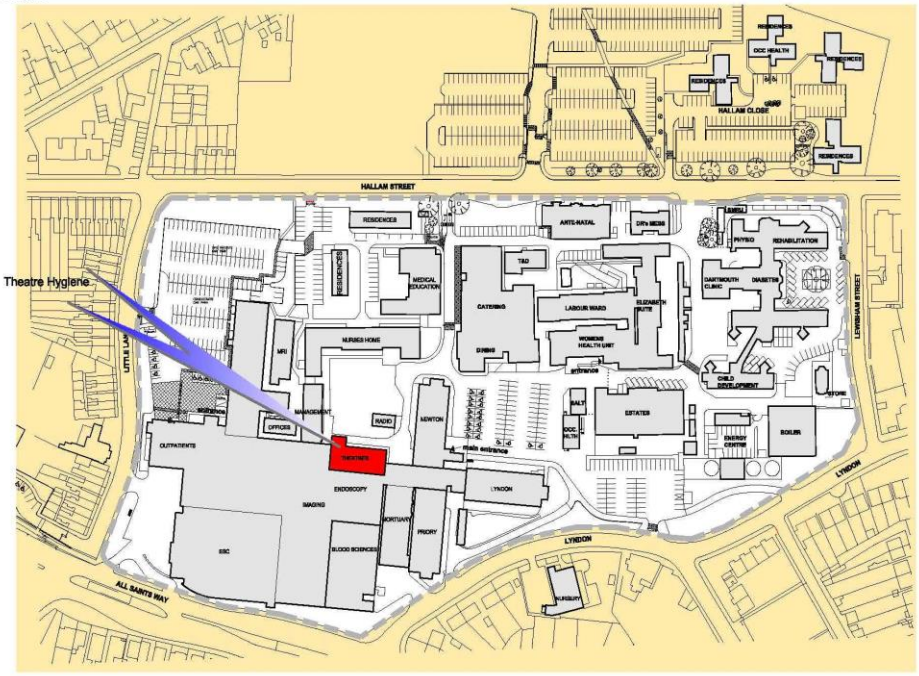
Development Control Plan 2015/16

Sandwell

Statutory Standards Including Security - Site Wide

Estates Rationalisation - Site Wide

Theatre Hygiene

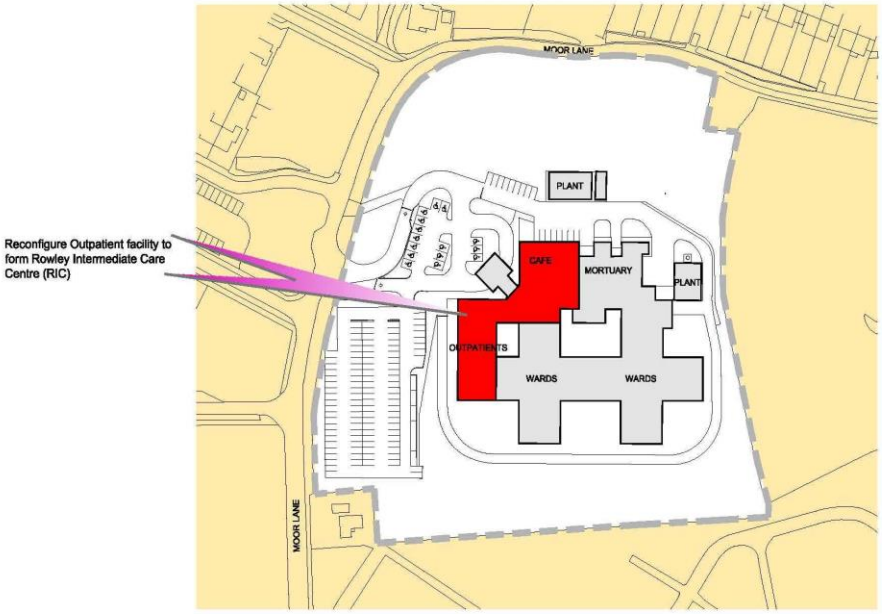


Development Control Plan 2015/16

Rowley

Statutory Standards Including Security - Site Wide

Service Reconfiguration



Development Control Plan 2015/16

12.0 STRATEGIC OPTIONS FOR ESTATE CHANGE

12.1 Where are we now?

Sandwell and the west of Birmingham have some of the highest levels of deprivation in the country. This is a major factor in determining the poor health of the diverse and disadvantaged communities. Local health and social care services face very challenging health needs that are a major cause for concern. For example:

- Men and women live three to four years less than the national average
- Infant mortality rates are high, in some parts they are twice the national average
- One in five people have a long-term illness that affects their daily life
- There is significant variation in health status within the area, and in general Black and Minority Ethnic groups have poorer health than others.

The need for major investment to develop and improve health and social care services to address these needs was formally recognised by the development of a Strategic Outline Case during 2003 and 2004. The Strategic Outline Case sets out a clear direction of travel to deliver a vision of improved physical, mental and social wellbeing for the population of Sandwell and the west of Birmingham and described the need to redesign the whole health and social care system by creating a major step change in service provision.

The Strategic Outline Case indicated a required rebalancing of capacity to reflect a substantial transfer of care into a primary care setting alongside a demanding performance improvement in acute hospital services. Substantial reductions in hospital lengths of stay are anticipated, with much of the consequent reduction in acute hospital capacity being re-provided in new services and facilities closer to people's homes. Investment in community health and social care services, as well as investment in acute hospital facilities, is seen as key to making the vision a success. This investment will also enable new models of care to be put in place in advance of any changes to acute hospital facilities.

The development of an Outline Business Case for all of the investment needed across the local health and social care system commenced under the auspices of the Right Care Right Here Partnership.

Milestones of progress;-

- The Strategic Outline Case was approved by the Department of Health in July 2004.
- Department of Health approved the Outline Business Case in August 2009 to enable application for Trust to activate a Compulsory Purchase Order. Caveats were made that HM Treasury would need to approve the Outline Business Case before procurement is initiated.
- Compulsory Purchase Inquiry completed in June 2010 and Secretary of State Health confirmed that the Compulsory Purchase Order can be made in January 2011.
- Right Care, Right Here review to the programme and subsequent scope review process leading to revision of size of the Midland Metropolitan Hospital and change to assumptions (Trust will now retain facilities on the City and Sandwell sites) - winter 2009/10. Driven by more adverse financial environment.
- Full update of the Outline Business Case approved by Trust Board in September 2010 and Strategic Health Authority in October 2010 – this addressed the new requirements to meet International Financial Reporting Standards to model partial indexation and to meet Monitor's Prudential Borrowing Ratios.
- General Vesting Declaration 1 activated in July 2011 – the most complex properties are now owned by the Trust (taking ownership to circa 50% of the total site).
- Detailed Department of Health scrutiny of the Outline Business Case and Long Term Financial Model (LTFM) during 2011 /12, approval not yet granted.
- Procurement documents completed by September 2011.
- General Vesting Declaration activated in June 2012 – secures all remaining areas of the site.

- HM Treasury review of Private Finance Initiative procurement route commenced with collection of evidence in December 2011, report pending.
- Outcome of HMT review announced, PF2 initiative launched, Trust project timescales re-established

Midland Metropolitan Hospital current programme to completion

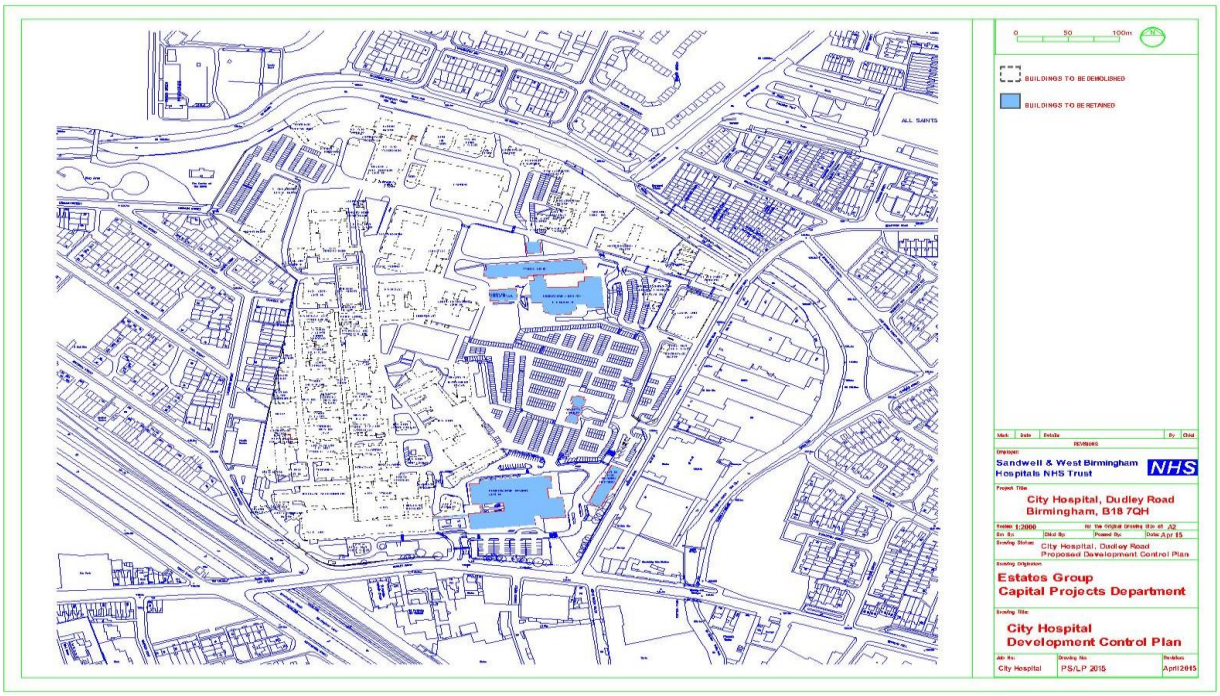
Milestone	When
Issue final ITPD	2 February 2015
Draft final bid submitted	2 April 2015
Closure of dialogue	25 June 2015
Final bid submitted	3 July 2015
Appoint Preferred Bidder	5 August 2015
Financial Close	9 December 2015
Construction commencement	4 January 2016
Construction completion	13 July 2018
Hospital fully open	8 October 2018

12.2 Right Care Right Here Community Facilities

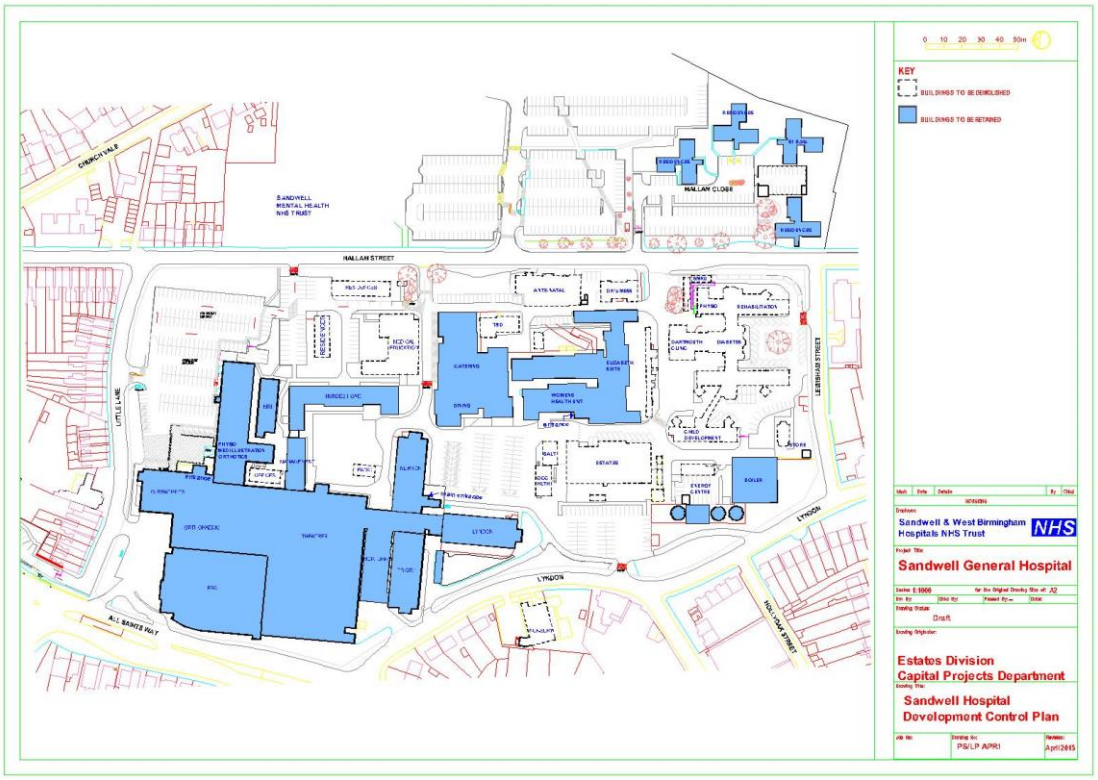
N.B. The Community Facilities Plans and associated implementation programmes are currently under review. The Strategy will be updated once these are completed.

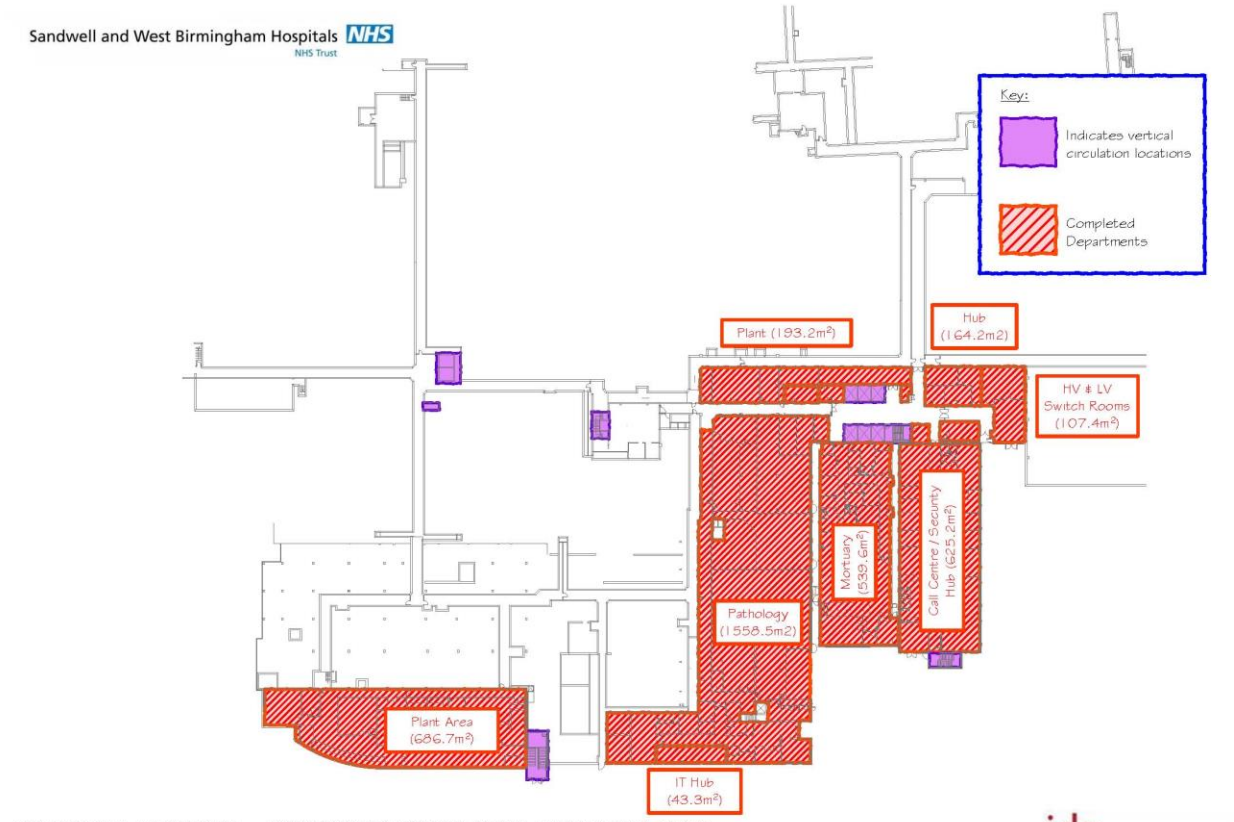
SWBH will continue to provide healthcare services from its Trust owned estate that comprises City, Sandwell, RRH and Leasowes Intermediate Care. These sites will be reconfigured to support relocation of acute inpatient services to MMH. Work has been undertaken to establish DCPs for each site. These are illustrated below:

City Hospital Site



Sandwell Hospital Site

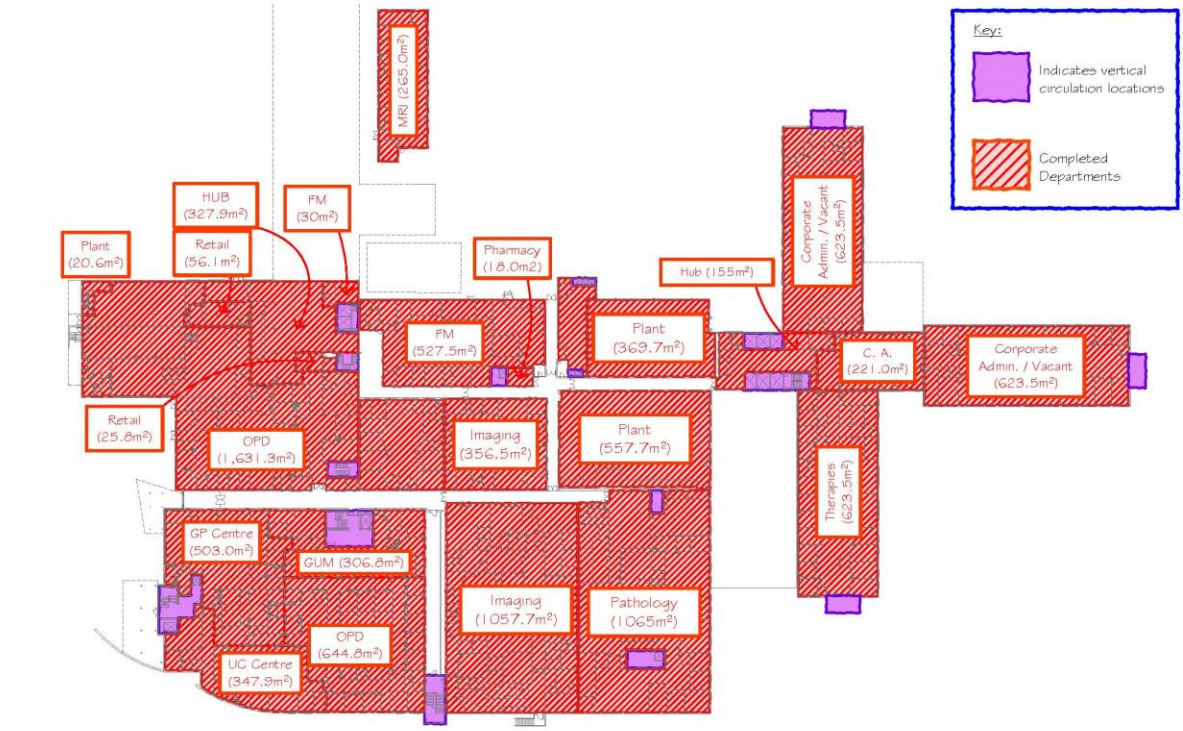




SANDWELL HOSPITAL - PROPOSED LOWER GROUND FLOOR PLAN
(REVISED 11.09.13)

idp MIDLANDS ARCHITECTS

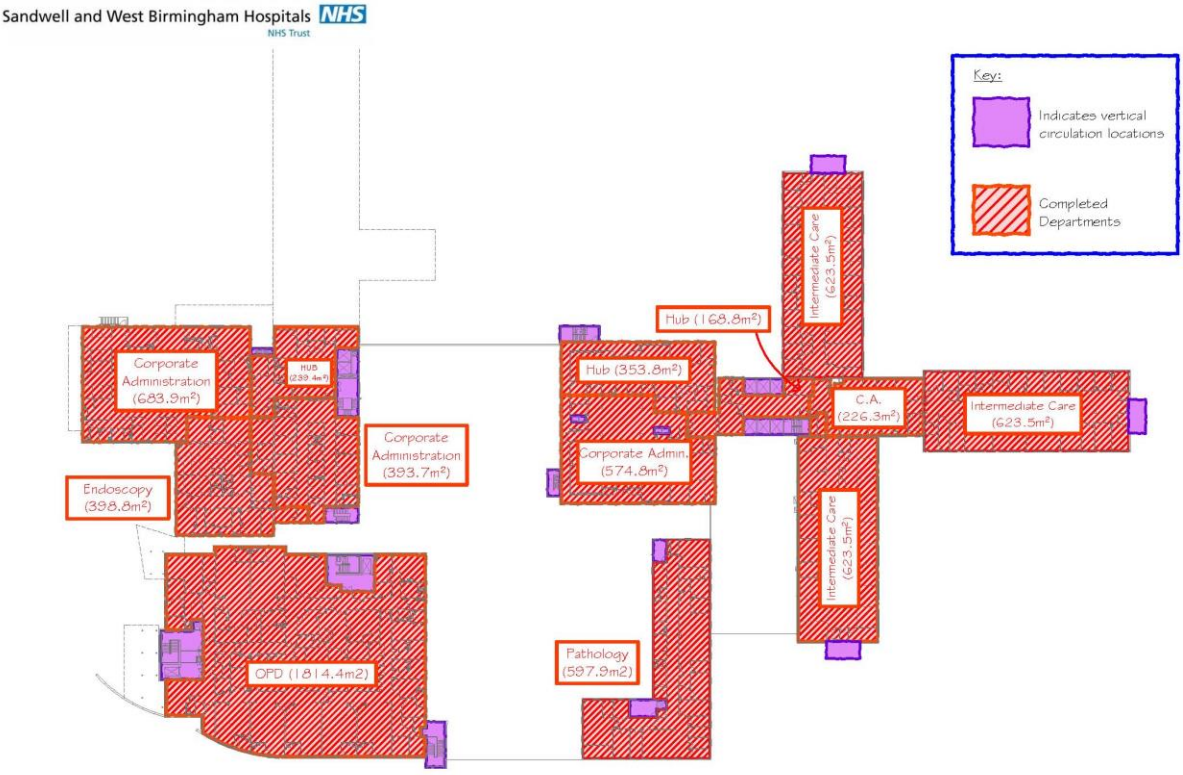
Sandwell and West Birmingham Hospitals NHS
NHS Trust



SANDWELL HOSPITAL - PROPOSED GROUND FLOOR PLAN
(REVISED 11.09.13)

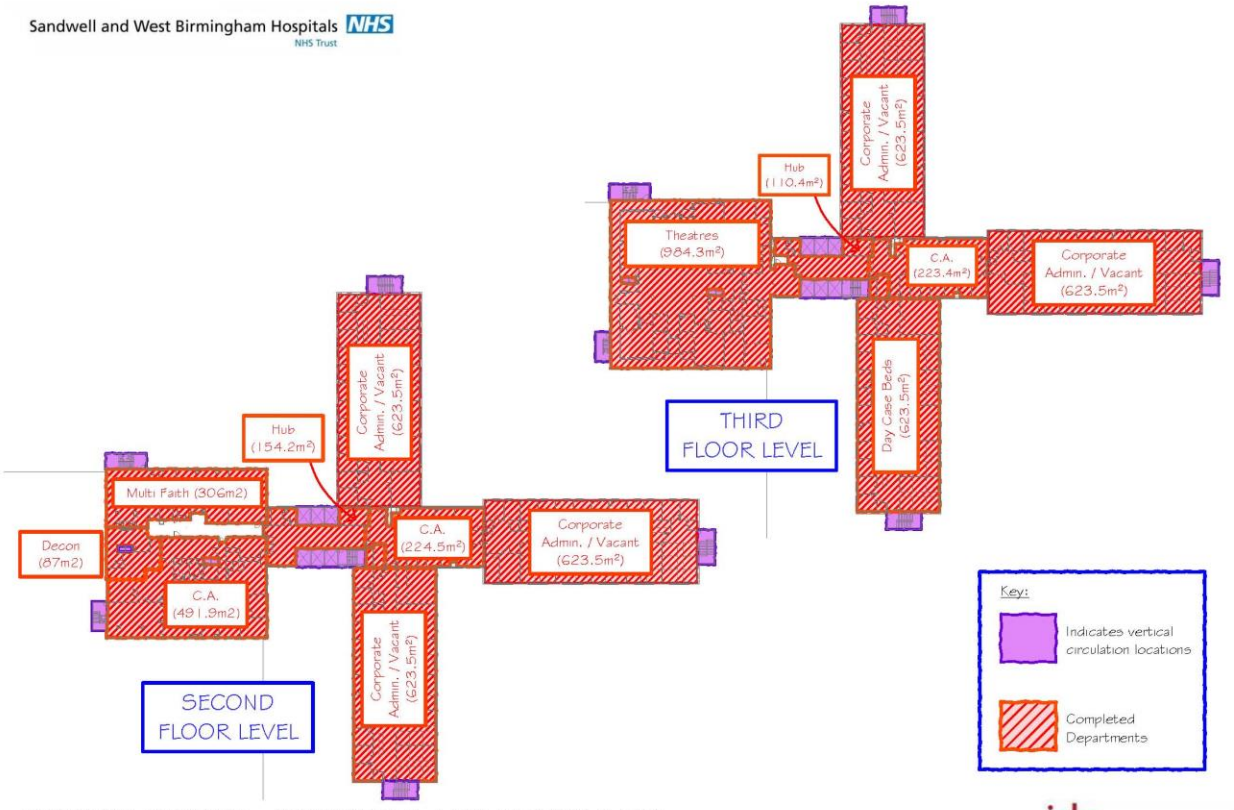
idp MIDLANDS ARCHITECTS

Sandwell and West Birmingham Hospitals NHS
NHS Trust



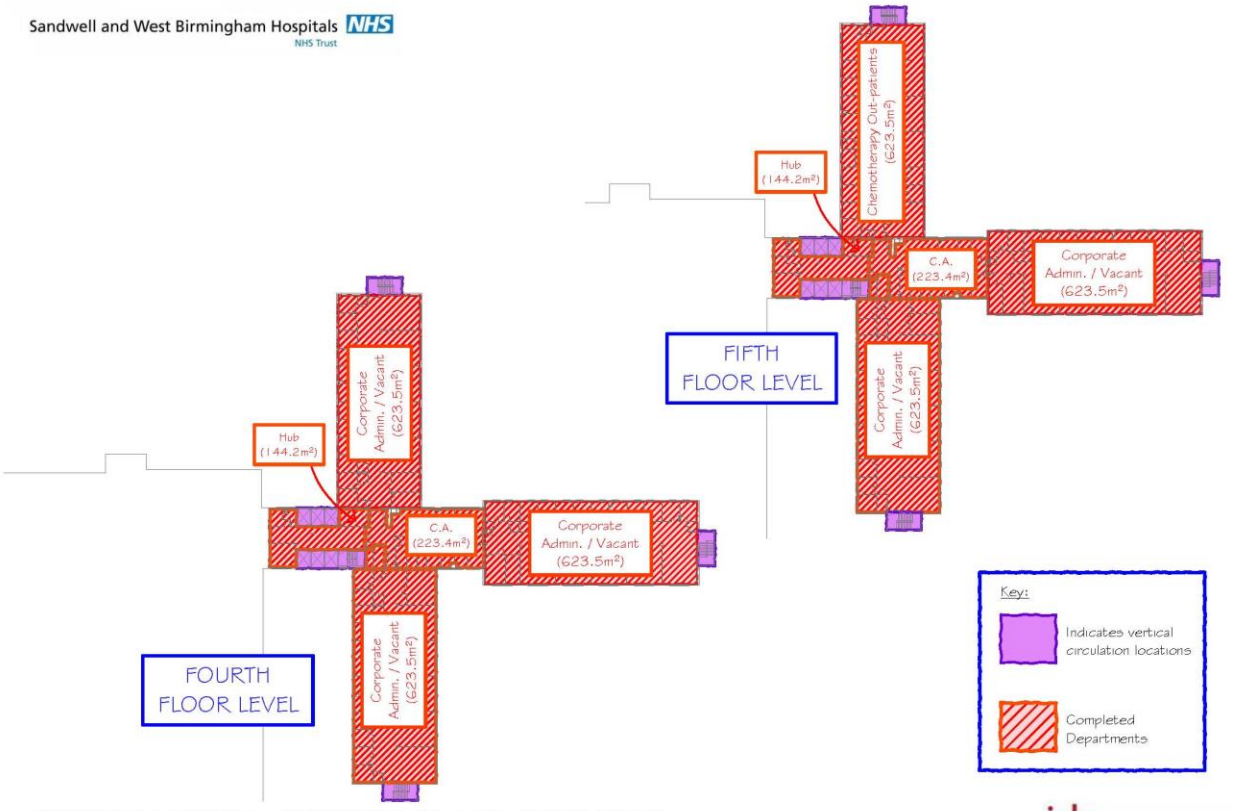
SANDWELL HOSPITAL - PROPOSED FIRST FLOOR PLAN
(REVISED 11.09.13)

idp MIDLANDS ARCHITECTS



SANDWELL HOSPITAL - PROPOSED 2nd & 3rd FLOOR PLANS
(REVISED 11.09.13)

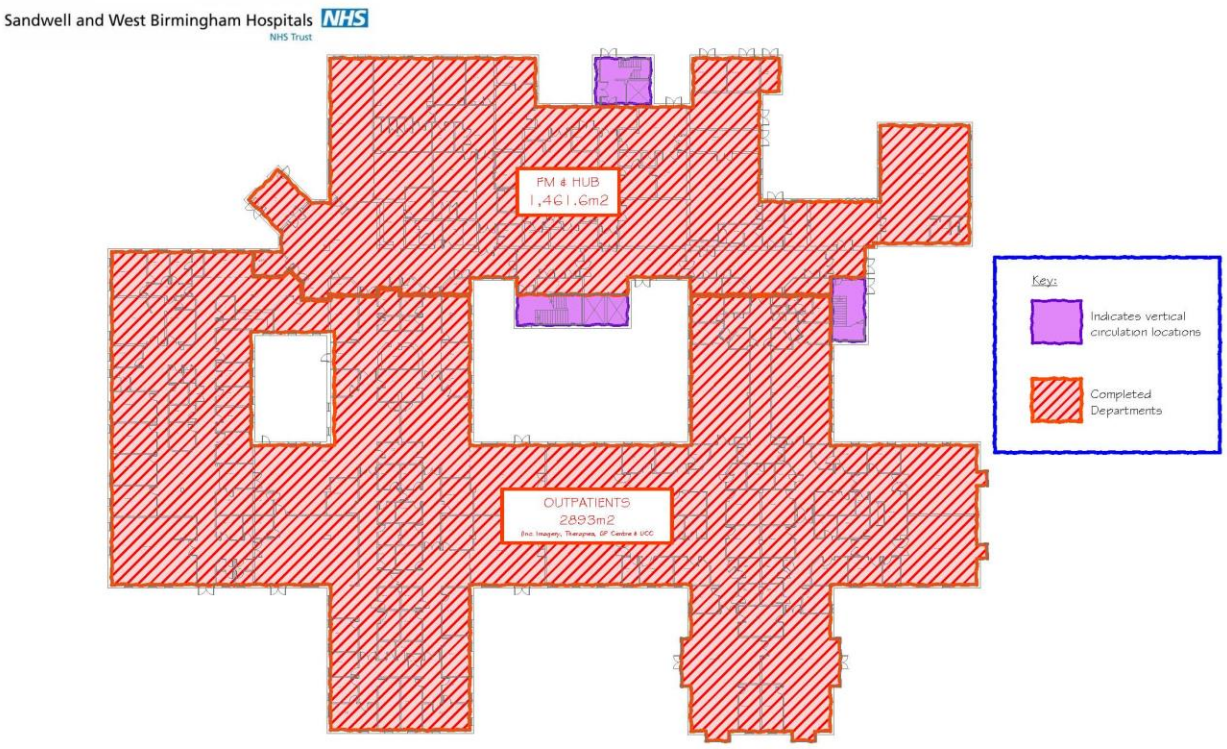
idp MIDLANDS ARCHITECTS



SANDWELL HOSPITAL - PROPOSED 4th & 5th FLOOR PLANS
(REVISED 11.09.13)

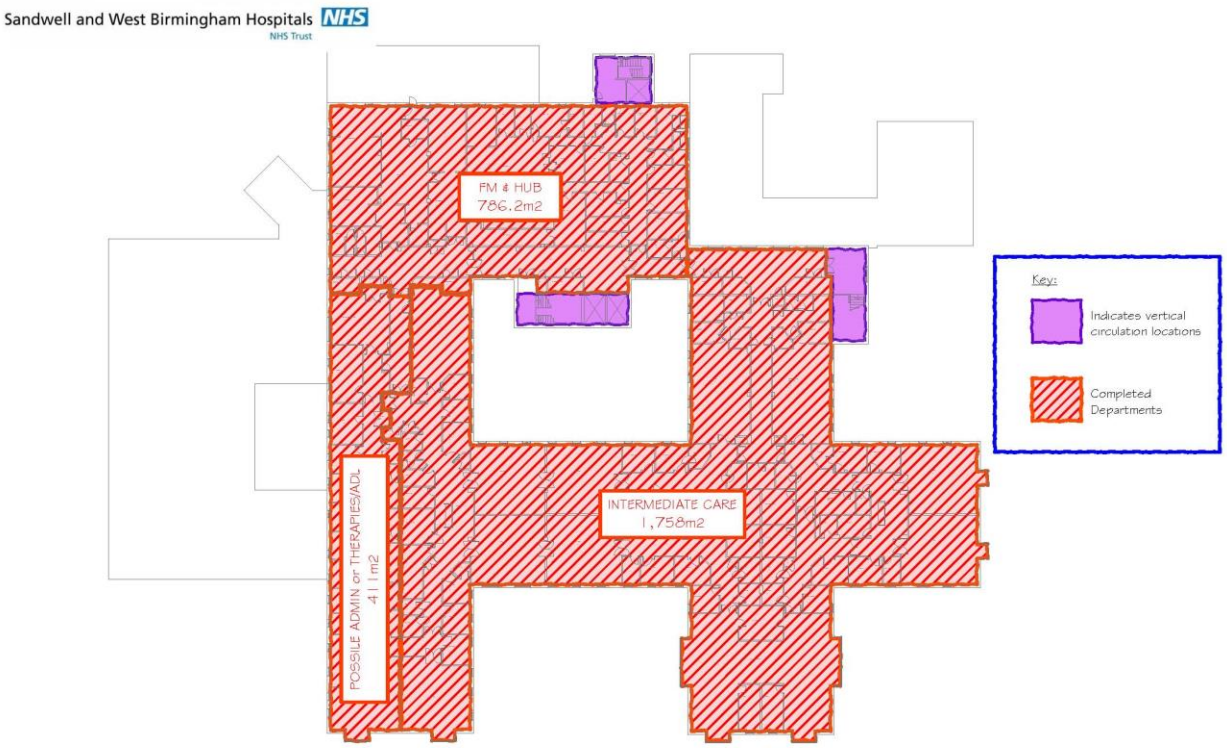
idp MIDLANDS ARCHITECTS

Rowley Regis Hospital Site



ROWLEY REGIS HOSPITAL - PROPOSED GROUND FLOOR PLAN
(REVISED 28.08.13)

idp MIDLANDS ARCHITECTS



ROWLEY REGIS HOSPITAL - PROPOSED FIRST FLOOR PLAN
(REVISED 28.08.13)

idp MIDLANDS ARCHITECTS

12.3 Non-Trust Community Estate

The Trust provides services from non-owned estate. Over the coming 12 months SWBH with its partners need to develop an estates strategy to support clinical services in the community. These partners will include CCGs, Local Authorities, NHS Property Services and Community Health Partnerships who all have an interest in ensuring the estate is optimised for clinical care.

Properties in which community facilities are currently delivered are detailed below. These are currently under review with the CCG.

Beeches Road Children's Centre, Beeches Road, West Bromwich, B70 6QE
Bradbury Day Care Centre, Wolverhampton Road,Oldbury B68 8DG
Burnt Tree Children's Centre, 20-25 Tividale Street, Tipton. DY4 7SD
Cape Hill CC, Cape Hill, Smethwick
Cape Hill Medical Centre, Raglan Rd, Smethwick B66 3NR
Central Clinic, Horsley Rd Tipton DY4 7NB
Cradley Heath Surestart, Valley Road, Cradley Heath, B64 7LR 01384 414747
Crocketts Lane School
Dr K Paramanathan, The Surgery, 348 Bearwood Road, Smethwick, B66 4ES
Edward Street Hospital, Edward Street, West Bromwich. B70 8NL
Friar Park Clinic, Friar Park Road, Wednesbury WS10 0JS
Gayton Road Community Centre,
Glebefields HC, St Marks Rd Tipton DY4 0SN
Great Barr Group Practice, 912 Walsall Road, Great Barr, Birmingham. B43 7QP
Great Bridge Children's Centre, Sheepwash Lane, Great Bridge, Tipton, DY4 7JF
Green Acres Childrens Centre, Brennand Road, Oldbury B68 0ST
Greets Green Childrens Centre, Wattle Road, West Bromwich, B70 9EZ
Haden Hill Leisure Centre, Barrs Road, Cradley Heath, B64
Hallam Street Hospital
Hateley Heath FETC, Huntingdon Road, Hateley Heath. B71 2RP
Heath Lane Hospital, Heath Lane, West Bromwich, B71 2BQ
Hillside Children's Centre, Pennyhill Primary School, Hollyhedge Road, Stone Cross, B71 3BU
Hill Top Medical Centre, (Dr Hanna/Sonday Surgery), 15 Hill Top Road Oldbury Warley. B68 9DU
Hollybush Medical Centre, 435 Hagley Road West, Quinton B32 2AD
Holly Lane Clinic: Holly lane, Smethwick B66 1QN
Hurst Road Community Centre, Hurst Road, Smethwick, B67 6ND
Independent Living Centre(Wheelchair Service), Oldbury Road, Smethwick B66 1JA
Jubilee Health Centre, 1 Upper Russell Street, Wednesbury, WS10 7AR
Langley Leisure Centre
Leasowes Intermediate Care Centre, Oldbury Rd, Smethwick B66 1JA
Lyng Centre, Frank Fisher Way, West Bromwich B70 7AW.
Mace St Clinic, Mace Street, Cradley Heath. B64 6HP
Malling Health Great Bridge, Unit 18 Black Country Park, Great Bridge Street, West Bromwich, West Midlands, B70 0EN
Malling Health Wednesbury, Wednesbury Leisure Centre, High Bullen, Wednesbury, West Midlands, WS10 7HP
Malling Health, Western Road, Langley Rood End, Oldbury, West Midlands B69 4LV 0121 612 3630

Meadows Sports College, Dudley Road East, Oldbury, B69 3BU
Mesty Croft Clinic, Alma Street, Wednesbury. WS10 0BQ
Neptune Health Park, Sedgley Rd West, Tipton DY4 8LT
Oldbury Health Centre, Albert Street, Oldbury, B69 4DE
Orchard School, Causeway Green Road, Oldbury B68 8LD
Popes Lane (TDC) Popes Lane, Oldbury, B69 4PJ
Portway Lifestyle Centre, Newbury Lane, Oldbury, B
Regis Medical Centre, Darby Street, Rowley Regis, B65 0BA
Rood End Children's Centre, Greenwood Avenue, Oldbury, B68 8TE
Rowley Children's Centre (Springfield) Dudley Road, Rowley Regis B65 8JY
Rowley Regis Hospital, Moor Lane, Rowley Regis B65 8DA
Rowley Learning Centre.(inc St Michaels, Westminster School and PRU)
Rowley Village Surgery, Rowley Village, Rowley Regis. B65 9AF
Sai Surgery, Slater Street, Great Bridge, DY4 7EY
Sandwell General Hospital B71 4HJ
SGS House, John's Lane, Tividale, B69 3HX
Sherwood House Surgery, 9 Sandon Road, Edgbaston. B17 8DP
Smethwick Library, High Street, Smethwick B 66 1AA
Smethwick Medical Centre, Regent Street, Smethwick. B66 3BQ
Spires Health Centre, Victoria Street, Wednesbury, WS10 7EH
Stone Cross Clinic, Jervoise Lane, Stone Cross. B71 3AR
Stone Cross Medical Centre, 291 Walsall Road, West Bromwich, B71 3LN
Stoney Lane Day Centre, Summer Street, West Bromwich, B71 4JA
Surestart Friar Park, Mesty Croft and Woods, Priory Family Centre, Dorsett Road, Wednesbury WS10 0JG
Surestart Nursery, Capehill and Windmill Lane, Corbett Street, Smethwick B66 3PX
Swanpool Medical Centre
Tanhouse Centre, Hamstead Road, Great Barr, B43 5EL
Tipton Surestart, 24 Ridgeway Road, Tipton, DY4 0TB
Tipton Swimming Centre. Alexander Road, Tipton, DY4 8TA
The Brambles, Yew Tree Estate(annexe of Hillside Children's Centre), Bramley Road, Walsall, WS5 4LE
Thimblemill Leisure Centre,
Thimblemill Library, Thimblemill Road, Smethwick B67 5RJ
Tividale Children's Centre, Ashleigh Road, Tividale, B69 1LL
Uplands Manor Primary School
Victoria Health Centre: Suffrage Street, Smethwick B66 3PZ
Warley Medical Centre, Ambrose House, Kingsway, Oldbury B68 0RT
Wednesbury North Children's Centre, Woden Road North, Wednesbury, WS10 9LX
Wellman Building, Dudley Road East, Oldbury, B69 3DE 0121 569 7273
Whiteheath Clinic, Badsey Road, Whiteheath B69 1EJ
Yew Tree Healthy Living Centre, Redwood Rd., WS5 4LB
YMCA

APPENDIX 3b – RETAINED ESTATE PROGRAMME

Sandwell and West Birmingham Hospitals NHS
NHS Trust

Retained Estate Service Development and Investment Plans

Purpose of Paper

This paper provides a summary of the investments currently planned over the 2015/2017 period on the Trust's Sandwell General Hospital and Rowley Regis Community Hospital sites.

The Trusts City Hospital site is the subject of a separate paper requested by the Department of Health, a copy of this paper is attached for information.

Each of 3 the hospital sites will be developed to provide a range of intermediate care, rehabilitation and specialist inpatient and outpatient services. Collectively they will support the Midland Metropolitan Hospital enabling the MMH hospital to focus on the delivery of Acute Care Services.

Appendix 1 provides details of the range of inpatient and outpatient services which will be provided across the Trust by 2019/2020.

Development Control Plans (DCPs) are being prepared/updated for each of the sites. The Trust holds the freehold title for each of the sites.

The investment in and development of each of the sites is informed by and aligned to the Trusts service and business strategies and plans.
Where appropriate public consultation exercises have or will be undertaken with local communities and other key stakeholders to enable views to be captured and considered and to inform service development and investment decisions.

Funding for the investments forms part of the Trust's Long Term Financial Model (LTFM) and the Trust's Capital Programmes.

Many of the investments involve the reconfiguration, adaptation and refurbishment of the estates necessary to support the development and delivery of effective clinical services, enhance the patient experience and the working environments of staff.

Where practicable statutory standards and backlog maintenance liabilities/ works will be addressed at the same time as any investment or development project to maximise the scope for economies of scale and minimise the impact of works on services.

Subject to the scale of service development/change, and or level of investments planned, business cases will be prepared to secure approval in line with the Trust's SFI's/SO's and delegated approval limits.

Rowley Regis Hospital Site

No services provided from this Community Hospital will transfer to the Midland Metropolitan Hospital when it opens in October 2018.

A public consultation exercise was undertaken by the Trust March - April to enable the local community and other key stakeholders shape and inform the service developments planned for the hospitals during 2015/16 and 16/17.

The service developments planned for 2015/16 reflect this process and are summarised below:

Planned Service Developments	**Estimated Cost £**
Refurbishment of the reception, pharmacy and amenity areas	150,000
Relocation of phlebotomy services	70,000
Transfer of ophthalmology outpatient service from Sandwell Hospital	350,000
Adaptation to increase community outpatients and inpatient services	150,000
Adaptation to increase musculo-skeletal services	50,000
Additional car parking capacity	75,000
TOTAL ESTIMATED COST	£845,000

Sandwell General Hospital Site

Post-MMH Sandwell General Hospital will continue to provide a range of intermediate, rehabilitation, specialist, diagnostic, neurophysiology, and urgent care inpatient and outpatient services.

The site will also become the main site for the Trust's Pathology, Pharmacy services and its non-clinical management and administrative services / departments.

These include Finance/Performance, Human Resources & Organisational Development, Facilities and the Trust's Academic, Research & Education department all of which are currently located on the City Hospital site. The Trust's Headquarters is already located on the Sandwell General Hospital site.

Plans have already been confirmed to take forward the transfers in 2015/16 of the following departments:

Planned Service Developments	**Estimated Cost £**
Transfer of Finance & Performance and Human Resource & Organisational Development services from City Hospital.	800,000
Planning to support the transfer of Pathology and Pharmacy services from City Hospital.	150,000
TOTAL ESTIMATED COST	£950,000

The transfer of Finance and Performance will enable the Trust's Brookfield House unit to be declared surplus and form part of any future site rationalisation and disposal of the City Hospital site.

The transfer of HR & OD services will release space for clinical use in the Sheldon Unit which will form part of the Trust's retained estate on the City Hospital site and

During 2015/16 plans will also be prepared to enable the relocation of pathology and pharmacy services from the City site to Sandwell. The actual adaptation and refurbishment works to enable transfers will be phased over a two year 2015/16 and 2016/17 periods.

During September-December 2015 a space utilisation survey will be completed of the Sandwell Hospital site informed in part by the knowledge of which services will be transferring to MMH. This work will enable a detailed site DCP and Master Plan to be developed enabling the strategic space planning to take place which minimises the scope for efficiency and minimises inefficiencies.

Alan Kenny
Director of Estates/New Hospital Project Director
28th May 2015

Sandwell & West Birmingham Hospitals NHS Trust

City Hospital Site – Potential Land Disposals

Purpose of Paper

This paper responds to the request for further information from the NHS England's Project Appraisal Unit with regard to the future use of the Trusts existing City Hospital site. Specifically further information with regard to programme and costs for developing the Trust "retained estate" and the potential disposal of any surplus estate.

For completeness the paper updates the City Hospital Site – Potential Land Disposals paper prepared at the request of the Department of Health - Procurement Investment & Commercial Division and issued on the 14/05/2015. The paper summaries the;

- Current position with regard to the Trusts City Hospital site, and
- Provides an updated programme of the key tasks which need to be managed associated with the retained estate, and obtaining the most beneficial planning consent for the redevelopment of the site prior to any land disposals being completed.

Current Position

The City Hospital site is located within the administrative boundary of Birmingham City Council (BCC).

The Acute services currently provided from the site will transfer to the Midland Metropolitan Hospital (MMH) when it opens in October 2018.

The site occupies circa 20 hectares. A retained estate of circa 8 hectares which accommodates the Birmingham Treatment Centre, Birmingham & Midland Eye Hospital and Sheldon Unit will be retained by the Trust to provide an integrated/intermediate health care hub. As a consequence, a site of up to 12 hectares may be declared surplus and available for disposal. Appendix A outlines both the planned retained and surplus estates on the existing City Hospital site.

Services which will not transfer to MMH, or remain on the retained City Hospital estate will transfer to the Trusts Sandwell General Hospital site.

BCC has recently completed a consultation exercise on its Draft, Unitary Development Plan and Master Plan for the Greater Icknield area which encompasses the City Hospital site. Both plans are scheduled to be adopted by BCC during the summer.

The plans will provide the planning policy and criteria against which any planning application for redevelopment of the site will be determined. Both plans emphasis and respond to the need for residential development in Birmingham.

The City Hospital site is identified as a major site for residential re-development. Tentative discussions held with BCC's planning department have provided greater clarity and certainty with regard to redevelopment of the site, which previously had not existed; e.g. it has been indicated that a residential development of between 600 – 625 units on a 12 hectare site would be welcomed and supported by BCC. BCC currently seeks developers to provide up to 30% of any residential development to be allocated for affordable / social housing units to be managed by a registered housing association, (270 units if 600 were built).

There now exists an opportunity which has previously not existed for the Trust, with confidence to prepare a planning application and secure approval for the residential redevelopment of the future surplus estate on its City Hospital site. This will inform the work to be undertaken by the Trust and its advisors.

Programme and Key Tasks

In securing a planning approval for residential re-development, ensuring the retained estate needs of the Trust are provided for, (specifically utilities infrastructure and service development projects), and the scope for site rationalisation is maximised a range of key tasks will need to be managed. These include the;

- Preparation of a Development Control Plan for the site, confirming the extent of both the retained and surplus estate, and
- Prepare and submit an outline planning application for the residential redevelopment of the site.

  Given the scale of development the application will require a Development Control Plan to be prepared to confirm scale/density and mass of development mix of units and for a full Environmental Impact Assessment (EIA) to be undertaken and submitted as part of any planning application.

  Negotiations will also be required with regard to any s106, s278, or Community Infrastructure Levy conditions, attached to any approval notice; these would typically include the level of affordable/social housing to be provided and contribution to/funding of social infrastructure, e.g. educational facilities, highways & public transport works.

  The Trust is currently in discussions with its Planning Advisors to consider next steps and the appointment of design team members to prepare a planning application and supporting documentation, e.g. Site Master Plan and EIA surveys. Costs associated with these works are estimated at £350,000 - £400,000. It is currently estimated that the earliest date an outline planning approval would be secured by would be December 2016.

- Investment in the site infrastructure works, (utilities), and other projects associated with the retained estate to enable it to operate as a standalone intermediate / integrated health care hub site.

  The Trust is already working with the Carbon Energy Fund to confirm the extent of the works required, delivery options, delivery programme and investment costs associated the necessary works.

  The latest outline project programme is attached this indicated that works would be completed to the retained estate in autumn 2017.
  Costs (capital and revenue) will be confirmed over the summer capital costs are currently estimated at £1.5 - 2m.

- Confirm plans to de-commission the surplus estate site enabling vacant possession of the site to be available as required in any contract for sale agreed with a developer.

The key tasks will have a material impact on any programme and costs for the investment needed in the retained estate, in preparing the surplus estate for sale, and the value of potential sale receipts. A broad outline programme for managing the key tasks is provided below.

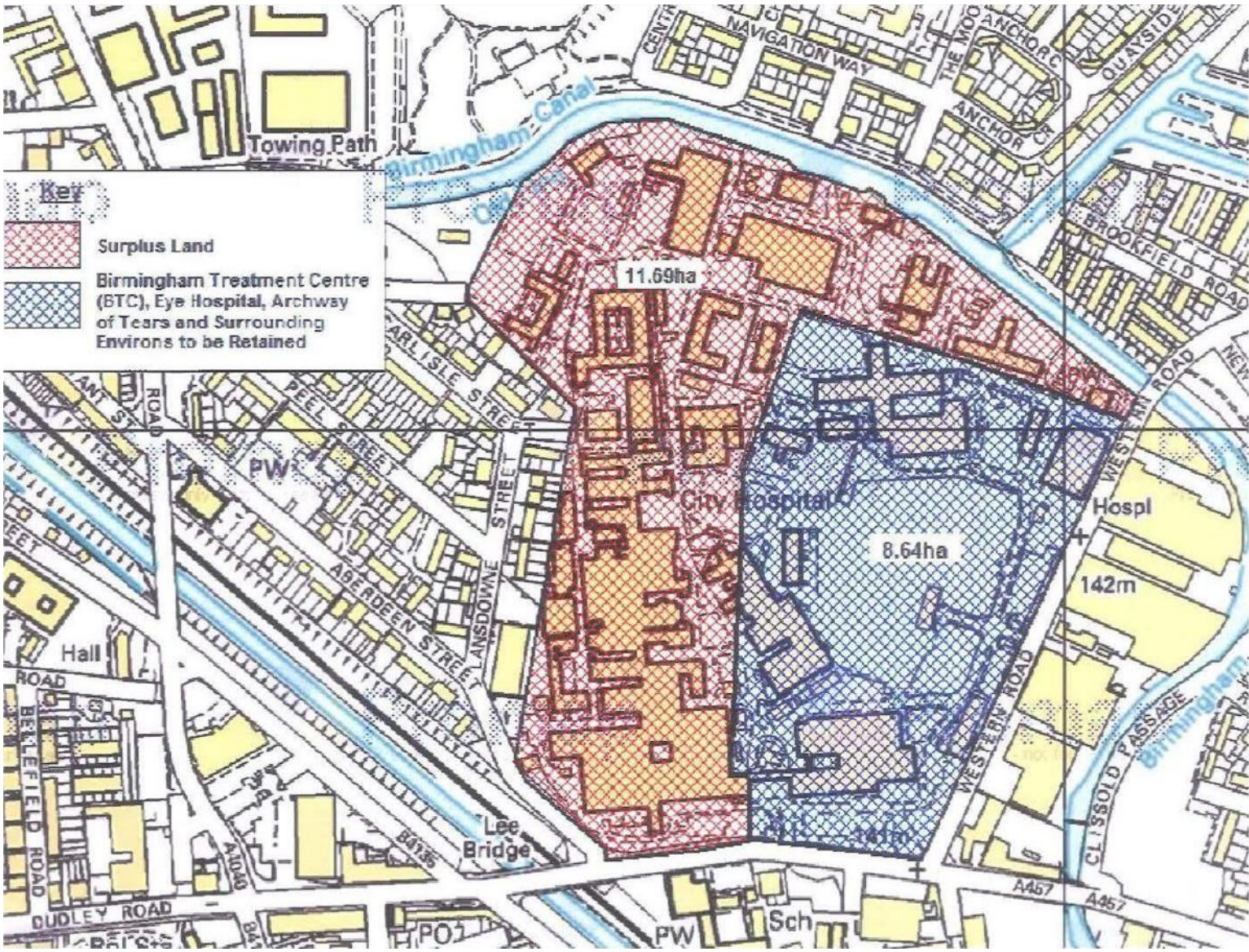
Key Task	Estimated Cost	Estimated Programme	
		Start Date	Completion Date
Paper to Trust Board	-	July 2015	
Prepare and secure outline planning approval	400,000 exec vat	July 2015	December 2016
Investment required in retained estate infrastructure	£1.5 – 2m depending on preferred option	July 2015	October 2017
Confirm preferred disposal option, invite tenders/bids for sale, negotiate sale of surplus estate	Tbc	Tbc	
Commission MMH		July 2018	October 2018
Decommission City Hospital site to provide vacant possession	Tbc	October 2018	
Prepare Business Case to Trust Board for approval	-	Tbc	

The Trust has been advised that an outline planning approval should be secured, and any conditions attached clarified, prior to any professional valuations and estimates of potential sale receipts being sought. This advice has been shared with the Department of Health.

Further advice re the disposal options against which the any future sale may be progressed and completed will be considered after planning approval and valuation advice has been obtained.

Alan Kenny
Director of Estates & New Hospital Project Director. 28/05/2015.

Appendix A


Key
Surplus Land
Birmingham Treatment Centre (BTC), Eye Hospital, Archway of Tears and Surrounding Environs to be Retained
11.69ha
8.64ha
Towing Path
Birmingham Canal
NAVIGATION WAY
THE MOORINGS
ANCHOR CR
QUAYSIDE
BROOKFIELD ROAD
CARLISLE STREET
PEEL STREET
LANSDOWNE STREET
ABERDEEN STREET
WESTERN ROAD
CLISSOLD PASSAGE
City Hospital
Hospl
142m
Lee Bridge
BELLEFIELD ROAD
DUDLEY ROAD
A4040
B4135
A457
PW
PO
Sch
Hall

APPENDIX 5a – ACTIVITY, PERFORMANCE AND CAPACITY ASSUMPTIONS

Sandwell and West Birmingham Hospitals NHS Trust

Midland Metropolitan Hospital and Community Facilities Project

ACTIVITY, PERFORMANCE & CAPACITY ASSUMPTIONS

Version 3.1

CONTENTS

1. INTRODUCTION

The purpose of this paper is to summarise assumed activity, performance indicators and capacity for the Midland Metropolitan Hospital (Midland Met) and also for the services it is planned the Trust will provide in its Community Facilities.

2. BACKGROUND

The *Right Care, Right Here (RCRH) Programme* developed a jointly owned forecast of future activity for the local health economy in the form of an Activity and Capacity Model. The aim was for the model to provide future forecasts of activity and capacity that would be used by partners to underpin future health care development and associated business cases. In this context the model has been used as the basis for activity assumptions for planning the Midland Met. In doing this the Trust has developed further and made amendments to the RCRH Activity and Capacity Model (see below).

The Activity and Capacity Model (A&C model) makes forecasts about activity for the population of Sandwell and West Birmingham Hospitals (SWBH) NHS Trust (a catchment of circa 530 000 people in Sandwell and western Birmingham) regardless of commissioner.

The activity the model covers is all consultant inpatients, day cases, outpatient attendances, A&E attendances and the Trust's community services including elements of community service provision that will change as a result of clinical service redesign and more care moving from acute hospital to community locations. The model functions at HRG level.

This has been supplemented by additional analysis and modelling for Pathology and Imaging.

The Model starts from a baseline of contracted activity and produces a year by year forecast for ten years in detail.

The local health economy previously agreed a set of assumptions that form the basis of the modelling. These still underpin the model although with some adjustments (see below) and include:

- Assumptions about activity demand including Population Growth
- Assumptions about planned health care changes including admission avoidance, improved productivity in line with peers, shifts in location, alternative pathways
- Assumptions about future provider of health care services including cessation of services, alternative providers, virtual clinics, repatriation .

Further more detailed analysis has then been undertaken to predict capacity requirements in Midland Met and Trust Community Facilities for example theatre minutes.

The *RCRH* Activity and Capacity Model was first developed in 2004 for the Programme Strategic Outline Case and has then been developed through a series of versions. In summary the most recent versions have been:

- *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) formed the basis of the LTFM submitted in November 2013 as part of the assurance work and preparation for proceeding to the procurement phase for Midland Met. All modelling in V5. was based on 10/11 out-turn. The model assumed Midland Met becomes fully operational from October 2018.

- *Version 5.7b (2014).* Included the activity related to agreed LTFM service development income. This was defined in discussion with Sandwell and West Birmingham CCG (S&WB CCG) and included:

    - Activity growth in community as a result of transfer from acute services to community services in order to provide care closer to home. This includes extending our community service offering to the wider S&WB CCG resident population.
    - Repatriation of elective inpatient work particularly for S&WBCCG that is currently undertaken in neighbouring acute Trusts.
    - Review of emergency inpatient and A&E catchment loss assumptions and based on our on-going joint redesign of pathways with GPs, new integrated service offerings etc., a reduction from the previous 11% assumption (in selected specialties) to a net 3% loss.
    - A repatriation of births from neighbouring Hospitals in the Black Country as a result of our birthing service returning to Sandwell MBC area with the opening of Midland Met, resulting in new, improved facilities and babies delivered by us having a Sandwell birth certificate.

- *ABC Version 1(2015).* This provides an update of version 5.7b in a new model. It has been updated to include 2014/15 forecast outturn and uses the contract plan for 2015/16 (as at February 2015) as its base year.

The approved OBC (June 2014) updated in line with the ABC version 1 activity and capacity model, is and remains the Trust plan. This and the updated LTFM includes income for service developments.

We will ensure that our LTFM is updated on a rolling basis. We will also review quarterly our productivity assumptions in line with our Board resolution on Midland Met.

Table 1: Summary of Changes Between V5.7b and ABC V1

Activity Including Repatriation

Activity Type/Capacity/Productivity Measure	2019/20 V5.7b MMH	V5.7b Community Facilities	V5.7b Total	2019/20 ABC V1 MMH	ABC V1 Community Facilities	ABC V1 Total	Variance MMH	Variance Community Facilities	Variance Total
Spells									
Elective IP	7,876	-	7,876	8,142	-	8,142	266	-	266
Daycases	14,230	31,188	45,418	7,006	37,961	44,967	(7,224)	6,773	(451)
Emergencies inc Intermediate Care	59,349	2,171	61,520	56,917	3,303	60,221	(2,432)	1,132	(1,300)
Intermediate Care							-	-	-
Total Spells	**81,455**	**33,359**	**114,814**	**72,065**	**41,265**	**113,329**	**(9,390)**	**7,906**	**(1,484)**
Outpatients									
New	35,239	161,864	197,103	31,361	163,381	194,742	(3,878)	1,517	(2,361)
Review	46,114	298,441	344,555	27,888	317,857	345,745	(18,226)	19,416	1,190
Total Outpatients	**81,353**	**460,305**	**541,659**	**59,249**	**481,239**	**540,488**	**(22,104)**	**20,933**	**(1,171)**
OPPROC **	16,846	30,266	47,111	18,008	43,158	61,166	1,162	12,892	14,055
OP Virtuals				1,928	22,214	24,142	1,928	22,214	24,142
Maternity AN	9,914	630	10,544			-	(9,914)	(630)	(10,544)
Maternity PN	6,728	447	7,174	18,739	-	18,739	12,011	(447)	11,565
Maternity Pathway	16,642	1,076	17,718	18,739	-	18,739	2,097	(1,076)	1,021
A&E and UC Attendances									
A&E	137,402	29,491	166,893	127,652	32,151	159,803	(9,750)	2,660	(7,090)
Urgent Care	-	72,258	72,258	36,628	38,639	75,266	36,628	(33,619)	3,008
Total A&E and UC Attendances	**137,402**	**101,749**	**239,151**	**164,280**	**70,789**	**235,069**	**26,878**	**(30,960)**	**(4,082)**
SCHS Contacts									
Base	-	770,182	770,182	0	806,542	806,542	0	36,360	36,360
Developments	-	156,903	156,903		74,263	74,263	-	(82,640)	(82,640)
Total Contacts		**828,200**	**927,085**	**0**	**880,805**	**880,805**	**-**	**(46,280)**	**(46,280)**
Capacities									
Beds - modelled capacity	**697**	**73**	**769**	**669**	**148**	**817**	**(27)**	**75**	**48**
Beds- planned capacity**	**666**	**158**	**824**	**669**	**148**	**817**	**3**	**(10)**	**(7)**
Theatres									
Elective IP	7.0	-	7.0	7.0	-	7.0	-	-	-
Daycases	-	11.0	11.0	-	11.0	11.0	-	-	-
Emergencies	4.0	-	4.0	4.0	-	4.0	-	-	-
Maternity	2.0	-	2.0	2.0	-	2.0	-	-	-
Total	**13**	**11**	**24**	**13**	**11**	**24**	**-**	**-**	**-**
Performance Measures									
New to review ratios*	**1.31**	**1.84**	**1.75**	**0.89**	**1.95**	**1.78**	**(0.42)**	**0.10**	**(0.32)**
Daycase rates	**64%**	**100%**	**85%**	**46%**	**100%**	**85%**	**-18%**	**0%**	**-18%**
Overall Average LOS	**3.10**	**17.08**	**3.54**	**3.08**	**17.01**	**3.69**	**(0.02)**	**(0.07)**	**(0.09)**
Average LOS Elective inpt MMH	***2.81***			***2.71***			***(0.10)***	**-**	**(0.10)**
Average LOS Emergency inpt MMH	***3.31***			***3.13***			***(0.18)***	**-**	**(0.18)**
Occupancy Rates	**85%**	**95%**	**89%**	**87%**	**95%**	**88%**	**0**	**-**	**0.02**

Notes

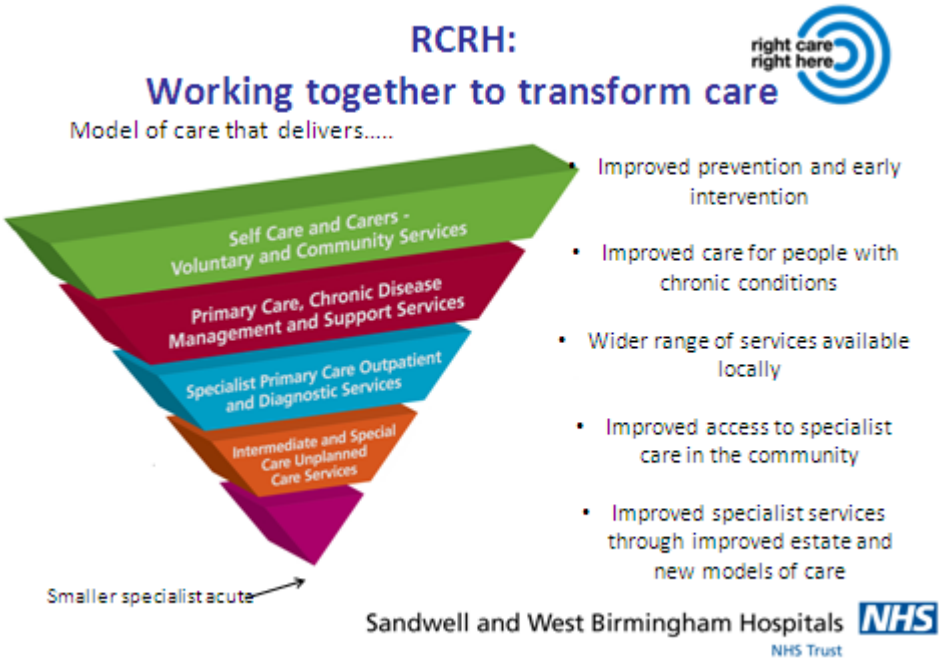
*** V5.7b - Following review of modelled future beds in 2014 decision made to provide 30 acute beds modelled to MMH as Intermediate Care by lowering modelled day of transfer to Intermediate Care**

**** OP New to review ratio excludes maternity pathway contacts**

3. SERVICE MODEL

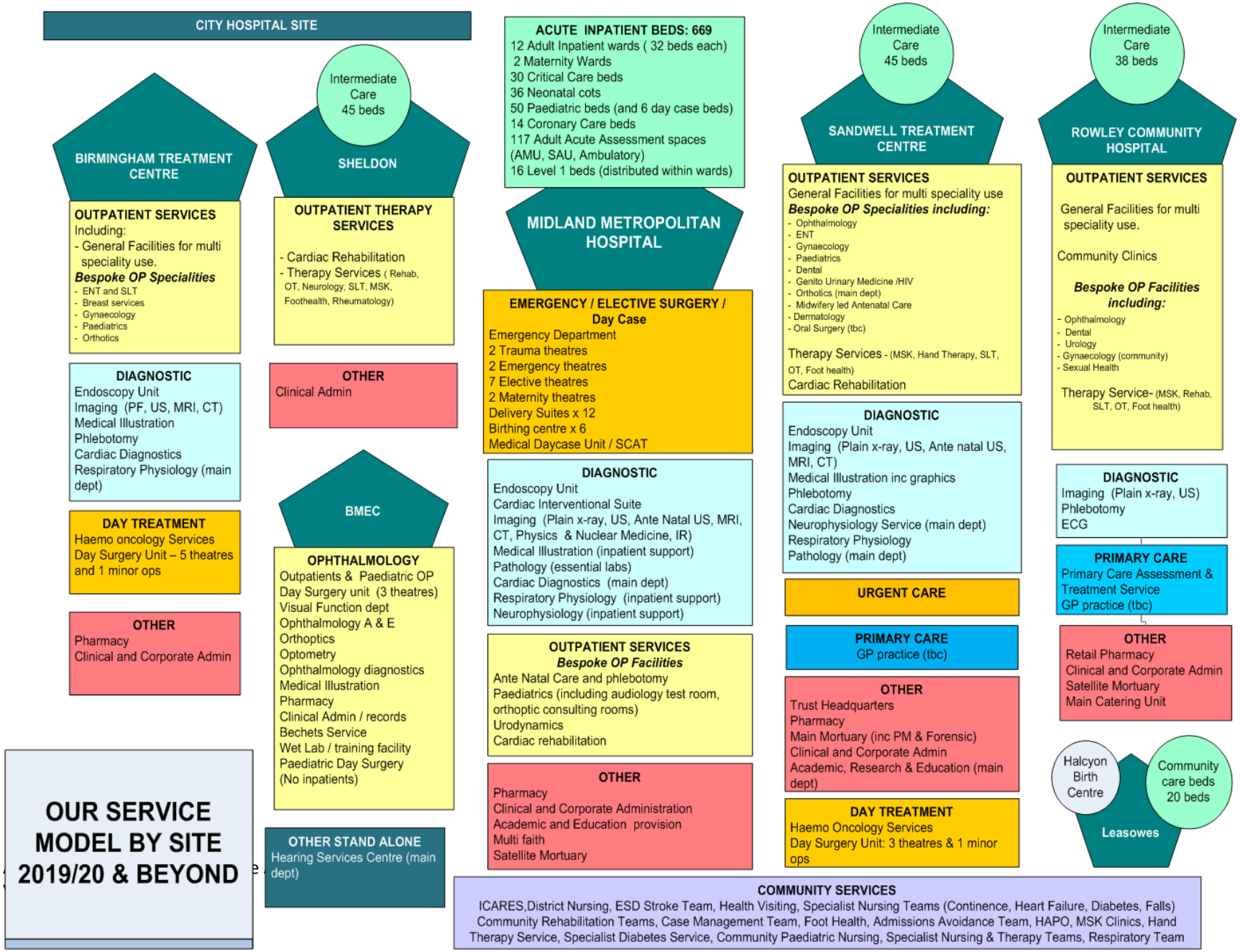
The objective of the *RCRH Programme* is to deliver redesigned acute, primary, community and social care services in the Sandwell and West Birmingham areas. The *RCRH Vision* is summarized in figure 1 below.

Figure 1: RCRH Vision



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 a new single site Acute Hospital (Midland Met) operating at maximum productivity.

Within this context we will provide services in community locations and support services in primary care as well as providing services within Midland Met. The planned location of services is summarised below.


CITY HOSPITAL SITE
BIRMINGHAM TREATMENT CENTRE
OUTPATIENT SERVICES
Including:
- General Facilities for multi speciality use.
Bespoke OP Specialities
- ENT and SLT
- Breast services
- Gynaecology
- Paediatrics
- Orthotics
DIAGNOSTIC
Endoscopy Unit
Imaging (PF, US, MRI, CT)
Medical Illustration
Phlebotomy
Cardiac Diagnostics
Respiratory Physiology (main dept)
DAY TREATMENT
Haemo oncology Services
Day Surgery Unit – 5 theatres and 1 minor ops
OTHER
Pharmacy
Clinical and Corporate Admin
Intermediate Care 45 beds
SHELDON
OUTPATIENT THERAPY SERVICES
- Cardiac Rehabilitation
- Therapy Services (Rehab, OT, Neurology, SLT, MSK, Foothealth, Rheumatology)
OTHER
Clinical Admin
BMEC
OPHTHALMOLOGY
Outpatients & Paediatric OP
Day Surgery unit (3 theatres)
Visual Function dept
Ophthalmology A & E
Orthoptics
Optometry
Ophthalmology diagnostics
Medical Illustration
Pharmacy
Clinical Admin / records
Bechets Service
Wet Lab / training facility
Paediatric Day Surgery
(No inpatients)
OTHER STAND ALONE
Hearing Services Centre (main dept)
ACUTE INPATIENT BEDS: 669
12 Adult Inpatient wards (32 beds each)
2 Maternity Wards
30 Critical Care beds
36 Neonatal cots
50 Paediatric beds (and 6 day case beds)
14 Coronary Care beds
117 Adult Acute Assessment spaces (AMU, SAU, Ambulatory)
16 Level 1 beds (distributed within wards)
MIDLAND METROPOLITAN HOSPITAL
EMERGENCY / ELECTIVE SURGERY / Day Case
Emergency Department
2 Trauma theatres
2 Emergency theatres
7 Elective theatres
2 Maternity theatres
Delivery Suites x 12
Birthing centre x 6
Medical Daycase Unit / SCAT
DIAGNOSTIC
Endoscopy Unit
Cardiac Interventional Suite
Imaging (Plain x-ray, US, Ante Natal US, MRI, CT, Physics & Nuclear Medicine, IR)
Medical Illustration (inpatient support)
Pathology (essential labs)
Cardiac Diagnostics (main dept)
Respiratory Physiology (inpatient support)
Neurophysiology (inpatient support)
OUTPATIENT SERVICES
Bespoke OP Facilities
Ante Natal Care and phlebotomy
Paediatrics (including audiology test room, orthoptic consulting rooms)
Urodynamics
Cardiac rehabilitation
OTHER
Pharmacy
Clinical and Corporate Administration
Academic and Education provision
Multi faith
Satellite Mortuary
Intermediate Care 45 beds
SANDWELL TREATMENT CENTRE
OUTPATIENT SERVICES
General Facilities for multi speciality use
Bespoke OP Specialities including:
- Ophthalmology
- ENT
- Gynaecology
- Paediatrics
- Dental
- Genito Urinary Medicine /HIV
- Orthotics (main dept)
- Midwifery led Antenatal Care
- Dermatology
- Oral Surgery (tbc)
Therapy Services - (MSK, Hand Therapy, SLT, OT, Foot health)
Cardiac Rehabilitation
DIAGNOSTIC
Endoscopy Unit
Imaging (Plain x-ray, US, Ante natal US, MRI, CT)
Medical Illustration inc graphics
Phlebotomy
Cardiac Diagnostics
Neurophysiology Service (main dept)
Respiratory Physiology
Pathology (main dept)
URGENT CARE
PRIMARY CARE
GP practice (tbc)
OTHER
Trust Headquarters
Pharmacy
Main Mortuary (inc PM & Forensic)
Clinical and Corporate Admin
Academic, Research & Education (main dept)
DAY TREATMENT
Haemo Oncology Services
Day Surgery Unit: 3 theatres & 1 minor ops
Intermediate Care 38 beds
ROWLEY COMMUNITY HOSPITAL
OUTPATIENT SERVICES
General Facilities for multi speciality use.
Community Clinics
Bespoke OP Facilities including:
- Ophthalmology
- Dental
- Urology
- Gynaecology (community)
- Sexual Health
Therapy Service- (MSK, Rehab, SLT, OT, Foot health)
DIAGNOSTIC
Imaging (Plain x-ray, US)
Phlebotomy
ECG
PRIMARY CARE
Primary Care Assessment & Treatment Service
GP practice (tbc)
OTHER
Retail Pharmacy
Clinical and Corporate Admin
Satellite Mortuary
Main Catering Unit
Halcyon Birth Centre
Community care beds 20 beds
Leasowes
OUR SERVICE MODEL BY SITE 2019/20 & BEYOND
COMMUNITY SERVICES
ICARES,District Nursing, ESD Stroke Team, Health Visiting, Specialist Nursing Teams (Continence, Heart Failure, Diabetes, Falls)
Community Rehabilitation Teams, Case Management Team, Foot Health, Admissions Avoidance Team, HAPO, MSK Clinics, Hand Therapy Service, Specialist Diabetes Service, Community Paediatric Nursing, Specialist Nursing & Therapy Teams, Respiratory Team

The development of a new single acute site at Midland Met will bring together clinical teams from the two current acute hospitals within our Trust and will result in:

- A greater critical mass of services within larger clinical teams so reducing professional isolation and enabling the delivery of high quality care through greater sub-specialisation, robust 24 hour senior cover and on-going service development.

- Emergency and inpatient services being available 24 hours, 7 days a week, and the majority of other services being operational for at least 12 hours a day during the week and for some time at the weekend thereby offering patients greater choice of appointment times and making efficient use of facilities and equipment.

For the Trust the activity and capacity implications of the *RCRH* vision are summarized in table 2 below.

Table 2: RCRH Activity and Capacity Implications for SWBH

	SWBH in Midland Met	**SWBH in Community Facilities**	**Other Providers**
Outpatient Attendances: Based on a Trust Majority (including planned diagnostics) provided in community facilities by a mixture of secondary care specialists, community teams and primary care professionals.	*13%* *(Antenatal & Paediatrics)*	74% will be provided by SWBH in community locations 24% being Ophthalmology outpatient attendances taking place in Birmingham Midlands Eye Centre (BMEC). 4% being attendances in community facilities provided via virtual clinics	6% will be provided by new providers in community locations 7% will be absorbed in to primary care as part of routine working in primary care.
Beds & Length of Stay: Significant reductions in length of stay and acute beds. Increase in intermediate care.	Circa 670 beds Average length of stay of 3.08 days	Circa 148 beds Average length of stay of 17.01 days	
Catchment Loss: As the result of	3% adult emergency inpatient admissions	None assumed	Emergency catchment loss primarily flows to: • Walsall

change in acute hospital location. Catchment loss spread across several years.			• UHBT • DGoHFT • HEFT
Emergency Department: Shift of low cost HRGs from ED to Urgent Care.	70% total ED & Urgent Care attendances	30% total ED & Urgent Care attendances delivered in Urgent Care Centre at STC and in BMEC (45%)	Excludes Urgent Care activity in existing primary care Urgent Care Centres (i.e. Parsonage Street and Summerfield)
Day Case Rate: 85% Increased day case rate including extended recovery.	48% including: • children's day surgery * • Medical Day Case Unit • Interventional Cardiology	100% • Day surgery in BTC, BMEC & STC • Medical day cases (including chemotherapy) in BTC & STC	

*service model for Children's day surgery under review and may result in some of this activity being undertaken in BMEC and BTC.

4. SUMMARY OF ACTIVITY, PREFORMANCE & CAPACITY CHANGES

Table 3 below summarises the main changes identified by the model for the period up to the opening of Midland Met. It includes all activity that will be delivered by the Trust, including activity delivered outside of Midland Met.

Table 3: Projected Trust Activity in 2019/20 by Location

Category	Type	MMH	Community Facilities	Total
Admitted Patient Care	Elective Inpatients	8,142	0	8,142
	Day Cases	7,006	37,961	44,967
	Emergencies (inc intermediate care)	56,917	3,303	60,221
	Occupied Bed Days	211,535	51,257	262,793
Outpatients	New Outpatients	31,361	163,381	194,742
	Review Outpatients	27,888	317,857	345,745
	OP with Procedure	18,008	43,158	61,166
	Virtual Outpatients	1,928	22,214	24,142
	Maternity	18,739	0	18,739
Other	A&E Attendances	127,652	32,151	159,803
	Urgent Care	36,628	38,639	75,266
Capacity	Beds	669	148	817
Community	Contacts	0	880,805	880,805

The model also includes a set of shared assumptions about the likely speed of transition to the new models of care and therefore changes in activity volumes and location of activity.

5. ADMITTED PATIENT CARE

5.1 Key Activity Assumptions

Figure 2 below shows the key assumptions that have been applied to admitted patient care in the period of major change up to the opening of Midland Met.

Figure 2: Activity Modelling Assumptions – Admitted Patient Care

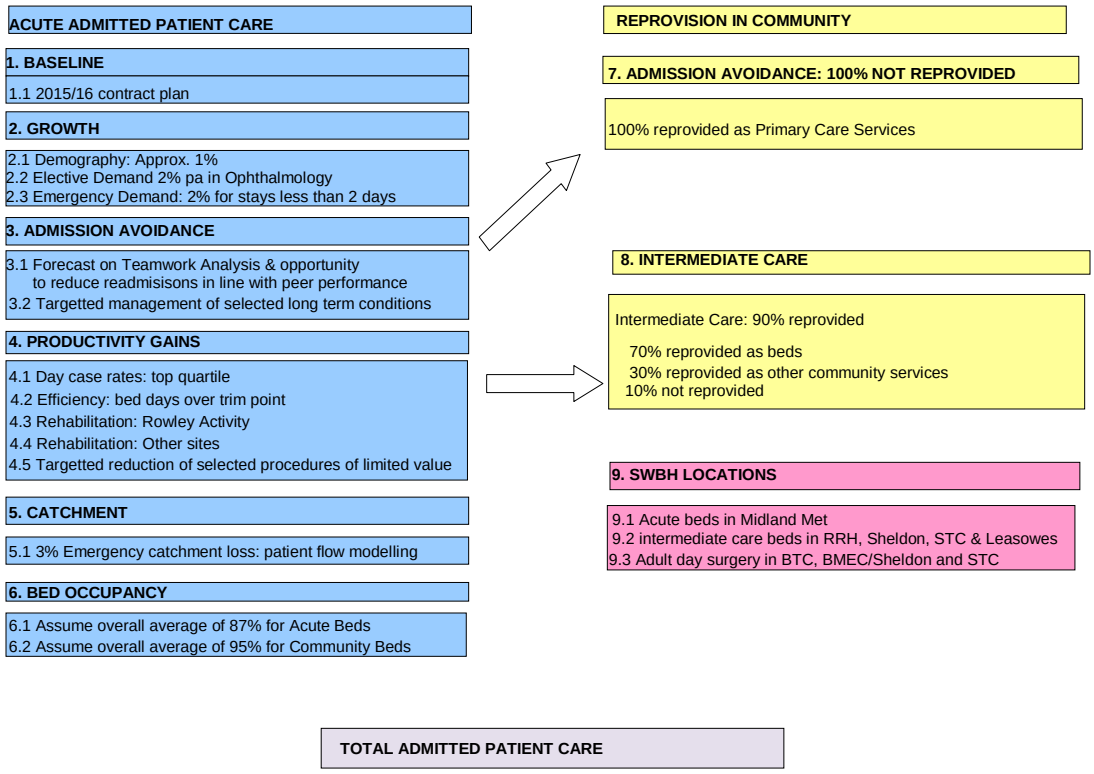


Table 4 below sets out the key assumptions applied within the model for admitted patient care in each of the modelling periods i.e. up to the opening of Midland Met and afterwards.

Table 4: Admitted Patient Care

Assumption	To Opening of Midland Met (2016/17-2017/18)	After Opening of Midland Met (2018/19-2023/24)
Growth in Demand	Impact of ONS forecast levels of population change in Birmingham and Sandwell on demand. Approx. 1% a year. ***Elective (Inpts & Day Cases)*** 5% a year additional growth up to 2016/17 in elective demand in, Ophthalmology in recognition of current access rates, reduction in	Impact of ONS forecast levels of population change in Birmingham and Sandwell on demand. Approx. 1% a year. ***Elective (Inpts & Day Cases)*** 2% a year additional growth in elective demand in Ophthalmology.

	waiting times and increased patient presentations as electives not emergencies. ***Emergency*** 1% a year additional growth in emergency spells with a length of stay less than 2 days.	 ***Emergency*** 1% a year additional growth in emergency spells with a length of stay less than 2 days.
Admission Avoidance	HRG level assumptions about impact of admission avoidance based on previous Teamwork consultancy review of evidence. 100% to primary care not re-provided in acute facilities. Readmission rates reduced to peer upper quartile.	Existing admission avoidance continues. In addition there will be some further increase in the proportion of short stay hospital activity that can be dealt with in the community.
Productivity Gains	***Day case rates:*** modelled at 85% (average). The majority of this undertaken in the community. ***Efficiency:*** improved hospital efficiency reduces length of stay by equivalent of 58% excess bed days. Re-provided in the community. ***Intermediate Care:*** 90% of bed days over 14 days for patients staying longer than 28 days converted to Intermediate Care. 90% reprovided in community (70% beds, 20% community equivalents). A further 5% of patients staying 21-29 days move at day 10, 90% reprovided as above.	 Continued gradual reductions in length of hospital stays as a result of further incremental improvements in patient pathways.
Catchment	***3 % reduction in non elective inpatient admissions (net of repatriated activity from agreed service developments):*** Applied : 25% of loss in 2017/18,	***3 % reduction in non elective inpatient admissions (net of repatriated activity from agreed service developments):*** Applied : 50% of loss in 2018/19 25% of loss in 2019/20 Based on postcode level modelling of patient flows predicting catchment of new acute hospital. The majority of this activity is lost to Walsall (with some to Dudley, HEFT and UHBFT). The modelling assumptions have previously been shared with Walsall

		Hospitals NHS Trust. ***Catchment stable after 2020/21***
Bed Occupancy	Average future bed occupancy of 87% (lower for specialist and assessment beds; higher for generic beds).	Bed occupancy stable after opening of Midland Met.

5.2 Productivity Assumptions

5.2.1 Length of Stay and Day Case Rates

The Trust average length of stay assumptions post opening of Midland Met (2019/20) are:

- MMH Inpatient Average Length of Stay: 3.08 days
  - Elective Inpatient Average Length of Stay: 2.71 days
  - Emergency Inpatient Average Length of Stay: 3.13 days
- Intermediate Care Inpatient Average Length of Stay: 17.01 days

In order to determine the bed capacity required in the adult acute assessment a 0.5 day length of stay has been added to all adult emergency admissions (excluding Obstetrics) with an otherwise 0 day length of stay. The average length of stay assumptions for the adult acute assessment unit are:

- 0.5 days for emergency adults with an overall length of stay of 0 days in MMH
- 1 day for emergency adults with an overall length of stay of 1-2 days in MMH
- 1. day for emergency adults with an overall length of stay of more than 2 days in the acute hospital.

The following table sets out the 2019/20 average length of stay, current average length of stay for our acute services (excludes intermediate care) and how this has reduced in recent years.

Table 5: Average Length of Stay for Acute Services

	2011/12	**2012/13**	**2013/14**	**2014/15**	**2019/20**
Acute Care	4.2 days	3.8 days	3.54	3.61	3.08 days

The table below, sets out the average length of stay for intermediate care for 2019/20 compared to current performance and current benchmarks.

Table 6: Average Length of Stay for Intermediate Care

Intermediate Care	**SWBH 2013/14**	**SWBH 2014/15**	**Benchmark 2014**	**SWBH 2020/21**
Leaseowes	34.07	22.61		
Henderson	40.6	29.6		
Intermediate Care			28*	17.01**

(Source: *National Audit of Intermediate Care 2014; ** ABC Version 1)

This shows the current position is better or slightly above the national benchmark and that the 2020/21 modeled position is lower than the 2014 average benchmark by 11days requiring the Trust position to reduce by 25-43%.

5.2.2 Occupancy

In order to find a balance in managing peaks and troughs in demand for inpatient admission the overall bed occupancy for MMH has been modelled at 87%. This is in line with findings from the National Bed Inquiry which concluded that levels greater than 87% create problems in handling peaks in demand particularly for emergency admissions. However it is recognised that services with high levels of emergency demand and/or requiring bespoke bed types that cannot be provided by other more generic areas will require a lower average occupancy in order to accommodate peaks in demand and maintain a smooth patient flow. As a result within the overall 87% occupancy there are variations with bespoke bed areas and high emergency demand areas having a lower occupancy than more generic areas. Table 7 below shows the occupancy rates by area.

Table 7: New Acute Hospital Bed Occupancy (2019/20)

Area	**Occupancy %**
Generic Adult Wards	90
Adult Acute Assessment Unit	85
Maternity	88
Neonatal Unit	75%
Children's Inpatient Unit	75%
Critical Care Unit (ICCU)	75%
MMH	***87%***

(Source: ABC Version 1: all Clinical Groups Summary)

The bed occupancy for intermediate care beds is assumed to be 95 %.

5.2.3 Theatres

a) Theatre Minutes

Within the *RCRH* A&C model theatre minutes have been assigned to HRGs with a procedure. These minutes are cutting times (knife to skin to recovery) and were initially based on a bench mark exercise undertaken by Teamwork Consultancy. The theatre minutes have subsequently been tested with local clinicians and have been used along with number of cases per each relevant HRG to derive demand for theatre time.

b) Theatre Utilisation

In order to identify theatre capacity assumptions have been made about utilisation, cancellation rates, session times and sessions per week. In Version 5.7 these were updated in line with Transformation Plan assumptions (maintained in v5.7b). In summary these are:

Table 8: Theatre Performance Assumptions

Theatre Type	Sessions/Week	Weeks/Year	Utilisation Rate 2020/21
Inpatient Elective Theatres	10	42	83%
Day Case Theatres (Community Facilities)	10	48	83%
Maternity Theatres*	14	52	60%
Emergency Theatres**	14	52	70%

*2 maternity theatres required as a minimum to cover peaks in demand.
**includes 2 trauma theatres which have planned/urgent sessions and 2 general emergency theatres which have to be available 24/7 (2 of each required to cover peaks in demand).

The Trust's current (2014) utilisation for elective theatres (day case and elective) is 75% so a significant improvement is required to achieve the 83% modeled for 2020/21.

5.3 Capacity

5.3.1 Beds

The table below summarises inpatient beds within MMH and intermediate care and compares these to acute beds open within the Trust in 2014/15.

Table 9: Inpatient Beds

	2014/15	2019/20 Planned Capacity	Other Comments
Critical Care (levels 2 &3)	30 funded beds (32 physical bed spaces)	30	2014/15: Bed numbers vary as staffed on points basis.
Children's	51	50	2014/15: In addition: 5 medical day case beds; 9 surgical day case beds open 2-3 days per week; ability to open up to 12 winter/flexible beds) 2019/20: Includes Assessment Unit, adolescent beds (up to the age of 16) & capacity for children in all specialties. In addition there are 6 day case spaces.
Neonatal	29 funded cots (37 physical cot spaces)	36	Some transitional care will take place on the maternity wards (see below).
Maternity	44 (inc. transitional care, HDU beds on Delivery Suite,	60* (inc. transitional care, HDU beds on Delivery Suite, antenatal & post natal care)	2014/15: In addition - 6 ADAU spaces & 6 discharge lounge spaces 2019/20: *includes circa 10 transitional care beds although actual no. vary according to demand and flexible

	antenatal & post natal care)		use with maternity beds In addition there is a Foetal Medicine & Antenatal Day Assessment Unit (6 spaces) & Transfer Lounge (6 spaces – can be flexed to beds at peak demand)
Adult Acute Assessment	103 Medical (includes 21 trollies) 21 Surgical	117 (94 medical & 23 surgical)	2019/20: Reduced capacity to reflect direct admission from ED or ambulance to a number of specialties including stroke, trauma (fractured neck of femur), interventional cardiology etc. Also move to ambulatory pathways and use of chaired area and consult/exam rooms for this. Adult Acute Assessment will comprise: Medical Assessment Unit with: • 56medical assessment beds • 14 medical monitored beds • 24 trollies medical ambulatory assessment (in addition to a chaired area for up to 30 patients) Surgical Assessment Unit with: • 6 beds and 17 trollies
Medical Adult Beds	318	224 (inc. 14 CCU beds)	2014/15: Includes extra beds across medicine and surgery opened in 2013/14 & 2014/15 but planned to reduce by 2017/18. Includes 51 '*ready to go'* beds. Some temporary additional winter beds (circa 30) were opened in 2014/15 but have not been included in the total number. 2019/20: Capacity reflects earlier transfer to intermediate care beds.
Surgical Adult Beds	208	152	In addition there will be an Emergency Gynaecology Assessment Unit (6 trolley spaces) and Emergency Pregnancy Assessment Unit (6 trolley spaces)
Sub Total	***804***	***669***	
Intermediate Care	42	148	
SWBH Total	**846**	**817**	

Within the medical and surgical bed numbers are 16 level 1 beds distributed across a number of wards.

A decision was made to group adult beds in Midland Met by condition rather than traditional specialty in order to facilitate delivery of new service models. This was done by analysing the admitted patient care by HRG Chapter. The beds derived from this analysis were then grouped into units of 32 and where one group of conditions required less than 32 beds consideration was given to the most appropriate co-location with other groups of conditions. This process was also used in determining how the 32 bed units should be grouped - primarily in clusters of 3 (in line with the design vision). It should be noted that at an operational level there will be some flexibility in use of these beds.

5.3.2 Theatres

The number of theatres in 2019/20 was derived using the theatre cases for 2019/20, analysed by emergency, maternity, inpatient elective and day case procedures. The performance assumptions outlined previously (cutting minutes, utilisation rates, etc) were applied. For emergency and dedicated specialist theatres (e.g. maternity) a rounding up of capacity was made to ensure capacity and availability to deal with demand. The elective inpatient analysis also included the day cases that will take place in Midland Met (i.e. 23 hour stay surgery).. The table below shows theatre capacity in Midland Met, BTC, BMEC and Sandwell Treatment Centre and compares this to the current position.

Table 10: Theatre Capacity

	2014/15	**2019/20**	**2019/20 - Other**
Emergency (including trauma)	3	4	Includes: 2 Trauma; 1 Laproscopic 1 General
Elective Inpatient	10	*7*	Includes: 2 Orthopaedic 2 Laproscopic 1 IR capacity 1 Ophthalmic &ENT capacity I gynae-oncology
Maternity	2	2	In Delivery Suite
Sub-total	***15***	***13***	***Midland Met (2019/20)***
BTC	6	5	& 1 minor op
BMEC	4	3	
Sandwell	3	3	& 1 minor op
Sub-total	***13***	***11***	***Community (2019/20)***
Total	**28**	**24**	

5.3.3 Birthing Rooms

The Trust currently provides all high risk maternity care on one site (City Hospital). This provision includes a Delivery Suite and a co-located midwifery led birthing centre (Serenity Birthing Centre). In addition there is a stand- alone midwifery led birthing centre (Halcyon Birthing Centre) in a community location. High risk maternity care will transfer to Midland Met including the Delivery Suite and co-located midwifery led birthing centre and the Halcyon Birthing Centre will remain in its current location. The number of births is forecast to increase to circa 6285 by 2019/20.

Table 11: Birth Capacity

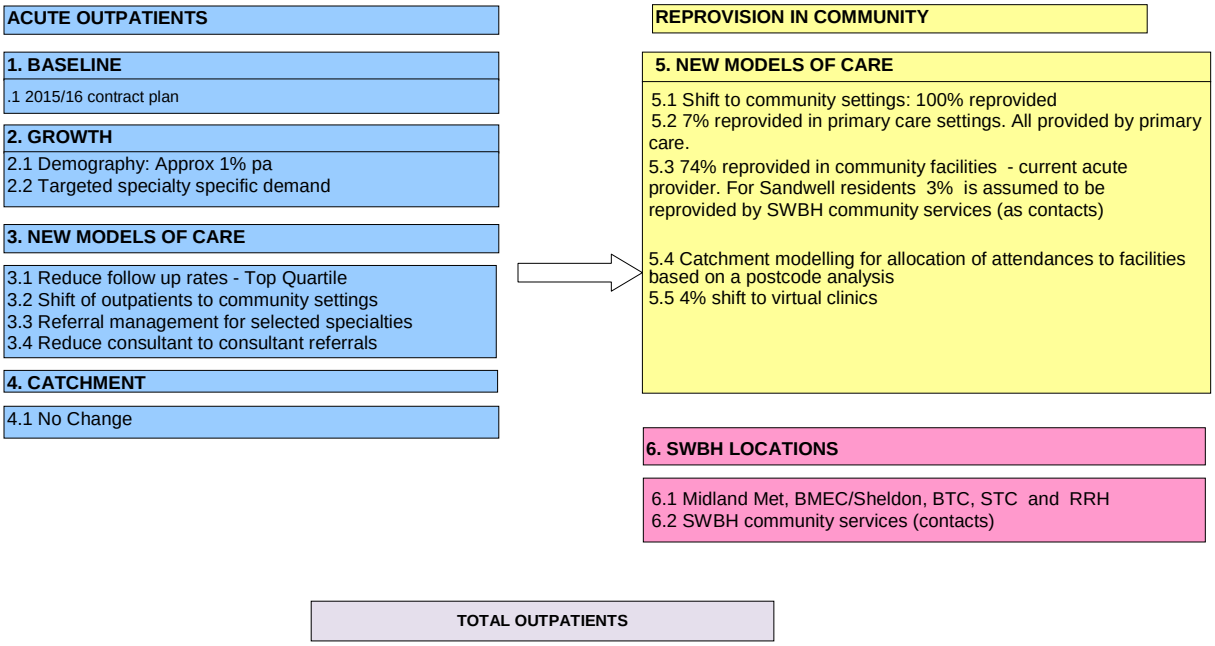
Capacity	2013/14	2019/20 Midland Met	Key Performance Factors	2019/20 Community Sites	2019/20 Total
Birth Rooms	20 (12 high risk & 8 midwifery led)	18 (12 high risk & 6 midwifery led)	In addition within Delivery Suite there are: 6 Induction spaces	3 birth rooms in Halcyon Birthing Centre (stand alone midwifery led centre)	21

6. OUT PATIENT CARE

6.1 Key Activity Assumptions

Figure 3 below shows the key assumptions that have been applied to outpatient care in the period of major change up to the opening of the Midland Met.

Figure 3: Outpatients



The table below sets out the key assumptions applied within the model for outpatient care in each of the modelling periods i.e. up to the opening of Midland Met and afterwards.

Table 12: Outpatient Care

Assumption	To Opening of Midland Met (2016/17-2017/18)	After Opening of Midland Met (2018/19-2023/24)
Growth	Impact of ONS forecast levels of population change in Birmingham and Sandwell on demand. Approx. 1% a year. Variations in additional growth in elective demand by specialty in recognition of current access rates, reduction in waiting times and increased patient presentations as electives not emergencies. OP Growth 16/17-17/18 130 – Ophthal Outpatients 5%	Impact of ONS forecast levels of population change in Birmingham and Sandwell on demand. Variations in additional growth in elective demand by specialty: . 2% a year in Ophthalmology
New Models of Care	***Follow-up rates:*** reduction of new to follow-up ratio to England top quartile (as at 2012/13) ***Referral Management:*** attendances reduced by 0.4% in selected specialities as a result of improved referral management. 60% reduction in consultant to consultant referrals based on improved referral systems. ***Shift to community:*** major shift of activity to the community. Activity re-provided in a range of settings according to specialty including primary care and community facilities. ***Shift to virtual clinics:*** shift of activity into alternative consultation methods other than direct face to face appointments.	

6.2 Productivity Assumptions

6.2.1 New to Review Ratios

Within the *RCRH a*ctivity and capacity modelling assumptions, outpatient new to review ratios were modelled on the top quartile for England. These have subsequently been reviewed to be in line with the ratios in our Transformation Plan. Table 13 summarises the new to review ratios at a Trust level.

Table 13: Trust New to Review Ratio

Location	2014/15	2019/20
Midland Met	2.4	0.89
Community Facilities	n/a	1.95
Trust Total	***2.4***	***1.78***

NB: All outpatient activity in 2014/15 (apart from community service contacts) is recorded as acute but from 2018/19 activity undertaken in BTC, STC, RRH, BMEC/Sheldon (including Tertiary Ophthalmology outpatients) shows as Community Facilities in the A&C model.

6.2.2 Outpatient Throughput

In order to identify the outpatient capacity requirements assumptions were made about length of appointment times, numbers of sessions per week, etc. Whist there is some variation between specialties, in summary for Trust provided outpatients, in 2019/20 these assumptions are:

Midland Met:

- 16 sessions per week (8am – circa 8 pm Monday to Friday & Saturday morning)
- Each clinic held 49 weeks/year
- New outpatient appointments – 30 minutes
- Review outpatient appointments – 20 minutes

Community Facilities:

- 10 sessions per week
- Each clinic held 46 weeks/year
- New outpatient appointments range 15-60 minutes
- Review outpatient appointments range 10– 60 minutes

(NB: upper end of these ranges primarily reflect times for tertiary Ophthalmology appointments).

6.3 Locations and Capacity

Following a further review with our Clinical Leadership Executive all adult outpatient clinics (apart from high risk and consultant led maternity) will be provided in our Community Facilities. The table below shows planned specialty outpatient locations.

Table 14: Outpatient Locations in 2019/20

Specialty	MMH	BTC	STC	RRH	BMEC	City(Sheldon)	Victoria H/C	Neptune H/C	Other Community Locations
SURGERY A									
Breast		✓							
General Surgery		✓	✓	✓					
T&O (inc Fracture Clinic✓)		✓✓	✓✓	✓					
Gastro Intestinal		✓	✓	✓				✓	
Urology		✓	✓						
Vascular Surgery		✓	✓						
Plastic Surgery		✓	✓						
SURGERY B									
ENT		✓	✓	✓					✓
Ophthalmology			✓	✓	✓				✓
Behcets						✓			
Oral Surgery			✓						
Dental			✓	✓					
WOMENS AND CHILD HEALTH									
Gynaecology		✓	✓	✓					✓
Gynae-oncology		✓	✓						
Antenatal	✓		✓						✓
GUM/HIV			✓						
Paediatrics	✓	✓	✓						
MEDICINE AND EMERGENCY CARE									
Cardiology		✓	✓	✓					
Neurology		✓	✓				✓		
Rheumatology		✓	✓	✓			✓	✓	✓
Respiratory		✓	✓						
General Medicine		✓	✓						
Gastroenterology		✓	✓	✓					
Diabetes				✓					✓
Endocrine		✓							
Elderly Care		✓	✓	✓					
Oncology		✓	✓						
Immunology		✓	✓	✓				✓	
Paediatric Immunology	✓	✓	✓						
Haematology		✓	✓	✓					
Dermatology			✓						

NB: Currently the Trust also provides consultant outpatient clinics in a number of other community locations (see below) and this is expected to continue:

- Ashfurlong Health Centre (Sutton Coldfield)
- GP practices/health centres

The table below summarises outpatient capacity in terms of the generic and bespoke consulting rooms but there will also be a range of other supporting rooms such as counselling and treatment rooms (not specified).

Table 15: Outpatient Consulting Rooms

Specialty	SWBH 2014/15	2019/20 Midland Met	2019/20 Community	Community Locations	2014/15 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 & 4 rooms SGH 6 cubicles & 2 rooms City	0	Use of generic adult rooms		16	Use of generic adult rooms
Breast	5 BTC	0	5	Bespoke accommodation: BTC	5	5
ENT	6 BTC 5 SGH	0	3 STC 6 BTC	Bespoke accommodation: BTC & 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	Bespoke accommodation: STC	6	6

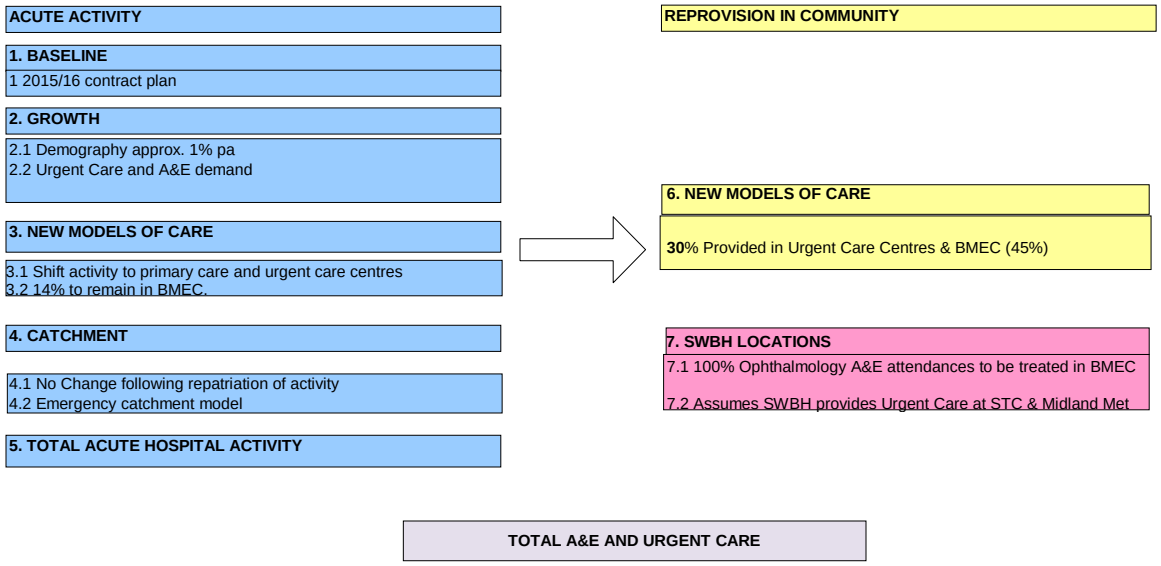
Antenatal	5 City 3 SGH	7	6	Bespoke accommodation for Midwifery led antenatal clinics: STC	8	13
Fetal Medicine	1 City	0	0		1	Use of antenatal clinic
Respiratory	5 SGH	0	5	Bespoke accommodation: STC	5	5
Oncology	6 BTC (at SGH use generic adult rooms)	0	6 BTC 4 STC	Bespoke accommodation: BTC & STC (adjacent to chemotherapy day units)	6 BTC & use of generic adult rooms	10
Ophthalmology	27 BMEC 5 SGH Archer Ward	1*	39 BMEC 6 STC 4 RRH	Bespoke accommodation: BMEC, BTC & STC	32 & 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
SWBH Total	**191**	**15**	**194**		**191**	**208**

*co-located with stroke ward

7. A&E AND URGENT CARE

Figure 4 below shows the key assumptions that have been applied to Accident and Emergency and Urgent Care services in the period of major change up to the opening of MMH.

Figure 4: Activity Modelling Assumptions – A&E and Urgent Care



The table below sets out the key assumptions applied within the model to A&E and urgent care centre activity in each of the modelling periods i.e. up to the opening of Midland Met and afterwards.

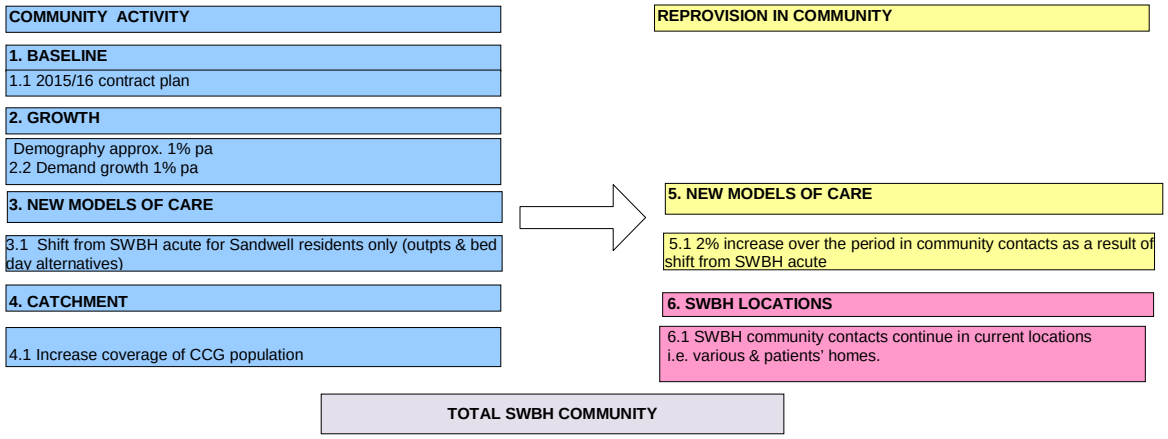
Table 16: A&E and Urgent Care

Assumption	To Opening of Midland Met (2016/17-2017/18)	After Opening of Midland Met (2018/19-2021/22)
Growth	Impact of ONS forecast levels of population change in Birmingham and Sandwell on demand. Approx. 1% a year. 2% pa growth in A&E and 1% pa growth in urgent care attendances prior to changes in location or model of care.	Impact of ONS forecast levels of population change in Birmingham and Sandwell on demand.
New Models of Care	Assumed that in future 51% of low cost A&E HRGs (VB 09Z & VB112) re-provided as urgent care.	Ophthalmology A&E attendances will be treated in the Eye A&E in BMEC.
Catchment	A&E 5% catchment loss. Applied : 25% of loss in 2017/18	A&E 5% catchment loss. Applied : 50% of loss in 2018/19 25% of loss in 2019/20 Catchment stable after 2020/21. ***Catchment loss offset by agreed repatriation of activity in line with service development plan.***

8. COMMUNITY SERVICES

Figure 5 below shows the key assumptions that have been applied to SWBH Community Services (excluding maternity) in the period of major change up to the opening of Midland Met.

Figure 5: Activity Modelling Assumptions – SWBH Community Services



The table below sets out the key assumptions applied within the model to SWBH community activity in each of the modelling periods i.e. up to the opening of Midland Met and afterwards.

Table 17: SWBH Community

Assumption	To Opening of Midland Met (2016/17-2017/18)	After Opening of Midland Met (2018/19-2023/24)
Growth	Impact of ONS forecast levels of population change in Sandwell on demand. Approx. 1% a year.	Impact of ONS forecast levels of population change in Sandwell on demand. Approx. 1% a year.
New Models of Care	***Efficiency:*** improved hospital efficiency reduces acute length of stay. A small proportion of beddays reprovided as community bed day alternatives with SWBH community services providing 100% of this for Sandwell residents. ***Shift to community:*** shift of outpatient activity to the community. 10% of this assumed to be provided by new community provider (as opposed to acute service in community location) with SWBH community services providing 3% of this for Sandwell residents.	Applies to all residents not just Sandwell
Catchment	Increase in coverage of S&WB CCG population.	Increase in coverage of S&WB CCG population up to opening of Midland Met in 2018/19.

Table 18: SWBH Community Services Activity

The table below shows the activity trajectory for our community service including community development activity.

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2023/24
Community Services	720,759	723,980	747,777	769,130	790,252	806,542	823,224	840,307	857,803	875,721	875,721
Community Developments	-	-	21,218	31,827	53,045	74,263	95,481	106,090	106,090	106,090	106,090
Community Total	720,759	723,980	768,995	800,957	843,297	880,805	918,705	946,397	963,893	981,811	981,811

9. DIAGNOSTICS

Additional modelling work has been undertaken outside of the *RCRH* Activity and Capacity Model with service leads to identify diagnostic capacity requirements for Midland Met and community facilities. For Imaging and Pathology this work was undertaken in liaison with commissioners to forecast changes in activity including GP direct access demand. The diagnostic capacity by site is summarised below.

Table 19: SWBH Diagnostic Capacity Planned for 2019/20

Department	Midland Met	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 Interventional Radiology Suite (with x 2 flourscopy, barium and 1 ultrasound 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 Stress ECHO TOE room 2 ECHO rooms 1 Ambulatory monitoring room 1 ECG rooms 1 Pacing room3 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

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
Audiology	1 Audiometery test room 1 Evoked response audiology test room (located in Children's OPD)	3 Audiology testing rooms	N/A	4 Adult test room 2 Paediatric test room	1 Audiology room	1 Audiology testing room
Phlebotomy	3 Phlebotomy rooms (4 spaces in antenatal OPD; 1 room in Children's OPD)	6 Phlebotomy rooms	N/A	N/A	5 Phlebotomy rooms	3 Phlebotomy rooms
Colposcopy	N/A	1 Colposcopy room	N/A	N/A	1 Colposcopy room	N/A
Endoscopy	3 Endoscopy Rooms	3 Endoscopy Rooms	N/A	N/A	3 Endoscopy Rooms 1 Oesophageal Lab	N/A
Breast Screening	N/A	3 plain film x-ray rooms 3 Ultrasound rooms plus Mobile units	N/A	N/A	N/A	N/A
Visual Functions	N/A	N/A	6 Glaucoma rooms 2 OCT/CCT rooms 2 Visual fields rooms 1 Diagnostic room 2 OCT rooms 1 Colour Vision/Dark adaption room 1 Visual fields room 1 Ultrasound room	N/A	8 Diagnostic rooms	N/A

			2 OCT rooms 1 UBM room 1 Biometry room			
Orthoptic	1 Ophthalmic examination room 1 Orthoptic examination room 1 Dark Room (Adjacent to specialist Surgical ward) 1 Orthoptic examination room (Children's OPD)	N/A	9 Orthoptic clinic/examination rooms 1 Dark Room	N/A	6 Orthoptic clinic/examination rooms 1 Dark Room	1 Orthoptic clinic/examination rooms
Optometry	N/A	N/A	6 Optometry rooms	N/A	1 Optometry Room	1 Optometry room
Urodynamics	1Urodynamic treatment room with en-suite WC	N/A	N/A	N/A	N/A	N/A
Antenatal Ultrasound	4 in Antenatal OPD 2 in Foetal Medicine & ADAU 1 in EGAU/EPAU	N/A	N/A	N/A	2 Ultrasound rooms 2 Phlebotomy rooms	N/A
Neonates	1 ROP room	N/A	N/A	N/A	N/A	N/A
Dental	N/A	N/A	N/A	N/A	N/A	1 Occlusal x-ray room
Therapies - Physio and OT	4 Therapy Rooms 2 ADL Kitchens Cognitive Therapy Room	N/A	N/A	15	13	9
Speech & Language Therapy	Access to therapy rooms	Access to consult exam rooms	N/A	Access to consult exam rooms	2	
Foot Health	N/A	N/A	N/A	3	4	3
Orthotics	N/A	2	N/A	N/A	4	N/A

9.1 Imaging

Table 20 below summarises the activity changes between 2011/12 (outturn) and 2019/20 by modality and the split between Midland Met and community facilities.

Table 20: Trust Imaging Activity by Modality

	2014/15	2019/20		
Type of Scan	**Forecast Outturn**	**Midland Met**	**Community Facilties**	**Total**
CT	33,787	18,413	20,443	38,856
Medical Illustration	31,479	-	25,734	25,734
MRI	23,185	12,333	14,330	26,663
Medical Physics	9,788	7,744	-	7,744
Radiology (Plain Film)	208,708	97,269	113,023	210,293
General Ultrasound	58,950	26,380	30,652	57,032
Angiography	5,183	4,930	-	4,930
Fluroscopy	1,046	1,148	-	1,148
Bone Density	2,160	-	2,011	2,011
Mamography	315	-	245	245
Obstetric Ultrasound	35,654	34,659	-	34,659
Other	5,246	-	4,563	4,563
Total Imaging Scans	**415,502**	**202,876**	**211,001**	**413,877**

In order to derive the required capacity the following utilisation assumptions were made for Trust provided Imaging services in 2019/20:

Midland Met:

- 16 sessions per week (8am – 8 pm Monday – Friday & 8am – 12pm Saturday)
- Utilisation rate 85%

Community Facilities:

- 10 sessions per week
- Utilisation rate 85%

Activity throughput assumptions were made for each modality based on national evidence and local clinical knowledge. These are outlined in the following table.

Table 21: Imaging Throughput by Modality for 2019/20

	Throughputs	
Imaging Modalities	**Acute**	**Community**
Angiography	4,000	4,000
Breast	4,000	4,000
MRI	6,000	6,000
CT	8,000	8,000
Fluroscopy	4,000	4,000
Nuclear Medicine	2,500	0
Obs Ultrasound	6,000	4,000
Radiology (Plain Film)	20,000	12,500
US Gen	6,000	5,000
Neurophysiology	1,500	1,500

9.2 Pathology

The table below summarises the activity changes between 2011/12 (outturn) and 2019/20 by modality and the split between Midland Met and community facilities.

Table 22: Trust Pathology Activity

	2014/15	2019/20		
Test Type	Forecast Outturn	Midland Met	Community Facilities	Total
HISTOPATHOLOGY	39,015	17,265	20,061	37,326
MICROBIOLOGY	308,854	149,326	173,510	322,837
HAEMATOLOGY	970,955	477,207	554,495	1,031,702
CYTOPATHOLOGY	181	91	105	196
CLINICAL CHEMISTRY	4,057,694	2,007,800	2,332,978	4,340,778
BLOOD BANK	75,441	68,517	2,118	70,635
IMMUNOLOGY	127,913	61,872	71,894	133,766
TOXICOLOGY	398	185	215	400
Total Tests	5,580,452	2,782,262	3,155,378	5,937,640

10.GOVERNANCE PROCESS TO MONITOR PROGRESS

It is important that progress against the A&C Model trajectories is monitored in order to ensure the Trust is on track 'to fit into' Midland Met and our Community Facilities and to allow time to implement mitigating actions if there is a significant variance from the trajectories.

Governance Process

In terms of a governance process to monitor progress the following has been agreed:

- Progress is overseen by the Clinical Leadership Executive via the Midland Met and Reconfiguration CLE Committee.
- The A&C Model trajectories inform the Trust's Plans (including productivity, CIPs) Trust and Clinical Group level Annual Plans take the activity and capacity levels in the A&C Model 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 Midland Met and Reconfiguration CLE Committee with an assurance report to the Configuration Board Committee quarterly.
- Additional reviews are undertaken at key project milestones including appointment of preferred bidder and financial close.
- A formal review of progress with demand figures, bed numbers and outpatient supply is concluded no later than 15 months before the opening of Midland Met. 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

The key activity and capacity measures it is proposed to monitor through this governance process are:

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

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
- Actual performance – current year

11. DOCUMENT HISTORY

Document Location:

Version	Date	Location
Version 3.1	Jan 2016	Will be included in the 2016 published FBC for Midland Met as an Appendix
Version 3	Apr 2015	Will be included in the 2015 ABC for Midland Met as an Appendix
Version 2	Feb 2014	Will be included in the 2014 OBC Update pre Procurement as an Appendix
Version 2 draft 1	Sept 2013	*MMH Project Assurance Briefing Report for CEO 19 & CEO12* and *MMH Project Assurance Briefing Report for CEO 11, Board AH & Board AG* as part of MMH Project Assurance Report
Version 1	Sept 2010	*Activity, Performance & Capacity Assumptions* in OBC Update Version 4.1 as Appendix 5b *Sensitivity Analysis: Activity, Performance, Capacity & Finance (version 2)* in OBC Update Version 4.1 as Appendix 5c

Revision History:

Version	Date	Author	Summary of Changes
V3.1	Jan 16	Jayne Dunn Deputy COO - Transformation	Service model diagram updated – change in STC Urgent Care location & colour to show Trust provided service.
V3 draft 3	Apr 15	Jayne Dunn Deputy COO - Transformation	Updated to reflect further consistency check with ABC model v1 and updated clinical service model.
V3 draft 2	Apr 15	Jayne Dunn Deputy COO - Transformation	Updated to reflect further outputs from ABC Model v1 and consistency with updated clinical service model.
V3 draft 1	Mar 15	Jayne Dunn Deputy COO - Transformation	Updated to reflect outputs from ABC Model v1.
V2 draft 8	Feb 14	Mike Sharon Director of Strategy and Organisational Development	Updated and agreed with CEO for submission to DoH and inclusion in OBC.
V2 draft 7	Feb 14	Jayne Dunn Redesign Director Right Care Right Here	Updated to reflect activity related to LTFM service development income as agreed with S&WBCCG
V2 draft 3-6	Jan 14	Jayne Dunn Redesign Director Right Care Right Here	Updated to reflect agreed MMH option without generic adult OPD
V2 draft 2	Nov 13	Jayne Dunn Redesign Director Right Care Right Here	Updated to include opening of MMH in 2018
V2 draft 1	Sept 13	Jayne Dunn Redesign Director Right Care Right Here	First draft of version 2 updated to take account of : • Revised A&C model (version 5.7adjusted) • Scenario modeling In preparation for Board assurance and approval to progress to MMH procurement in line with PF2.
V1	8/09/10	Jayne Dunn Redesign Director Right Care Right Here	Version used for OBC Update
V1 draft 2	8/9/10	Jayne Dunn Redesign Director Right Care Right Here	Updated to take account of changes from further validation of activity and capacity data in line with the sensitivity analysis and comments from the SHA review.

V1 draft 1	30/7/10	Jayne Dunn Redesign Director Right Care Right Here	First draft to capture what is already agreed for the RCRH Programme, OBC and OBC refresh - service model and Activity and Capacity Model version 5.3.

APPENDIX 5b – CLINICAL SERVICE MODEL

Sandwell and West Birmingham Hospitals NHS Trust

Midland Metropolitan Hospital Project

CLINICAL SERVICE MODEL for 2020

Version 4.1

CONTENTS

1. PURPOSE

This document provides a blueprint for the development of our clinical service model for 2020 post opening of the Midland Metropolitan Hospital (Midland Met). It supports our Clinical Strategy and forms part of the Midland Met Project.

The document has been developed by our clinical leads across a number of versions to describe how our clinical service offering will be delivered in Midland Met when it opens in 2018 and how we will provide clinical services in our Community Facilities and other locations. Our transition to this future service model will be incorporated in our integrated change plan.

This version of the clinical service model will be used to inform the 2015 ABC for Midland Met. It varies from the previous version in that it captures:

- Outputs from the updated Activity and Capacity Model (ABC version 1)
- Outputs from the Midland Met competitive dialogue process.

2. BACKGROUND

We are developing a new model of patient care in line with the vision agreed by our local health economy under the *Right Care, Right Here Programme*. Within this service model we will deliver clinical services in multiple locations including:

- Patient's own homes
- Primary care and health centre settings
- The Trust's own Community Facilities i.e: Rowley Regis Hospital (RRH), Sandwell Treatment Centre (STC), Birmingham Treatment Centre (BTC), Birmingham and Midlands Eye Centre (BMEC) and the adjacent Sheldon Block and Leasowes intermediate care facility.
- The new Midland Met.

In summary 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 Midland Met (the new single site acute hospital) operating at maximum productivity.

For the Trust the implications of this vision can be summarised as:

- The vast majority of outpatient attendances and planned diagnostics will be provided outside of the acute hospital in community locations by a mixture of secondary care specialists and primary care professionals. This will include a new model of care for Long Term Condition management.

- A significant reduction in the average length of stay in the acute setting supported by new intermediate care bed capacity in community locations and community services.

- Increased community-based urgent care and out-of-hours services to provide alternatives to attending the acute hospital Emergency Department.

- Increased day surgery rates with the majority of day surgery being provided in dedicated day surgery units in three community locations (BTC, STC and BMEC).

- Better physical environments for service users and staff which encourage more rapid recovery and provide greater privacy and dignity.

- The development of Midland Met, a new single site acute hospital, with a reduced number of beds but a greater critical mass of services within larger clinical teams so reducing professional isolation and enabling the delivery of high quality care through greater sub-specialisation, robust 24 hour senior cover and on-going service development. Emergency and inpatient services will be available 24 hours, 7 days a week, and the majority of other services will be operational for extended hours during the week and for some time at the weekend.

Table 1 below summarises these implications in terms of split of activity and capacity between Midland Met, Community Facilities and other providers.

Table 1: Activity and Capacity by MMH, Community Facilities and Other Providers

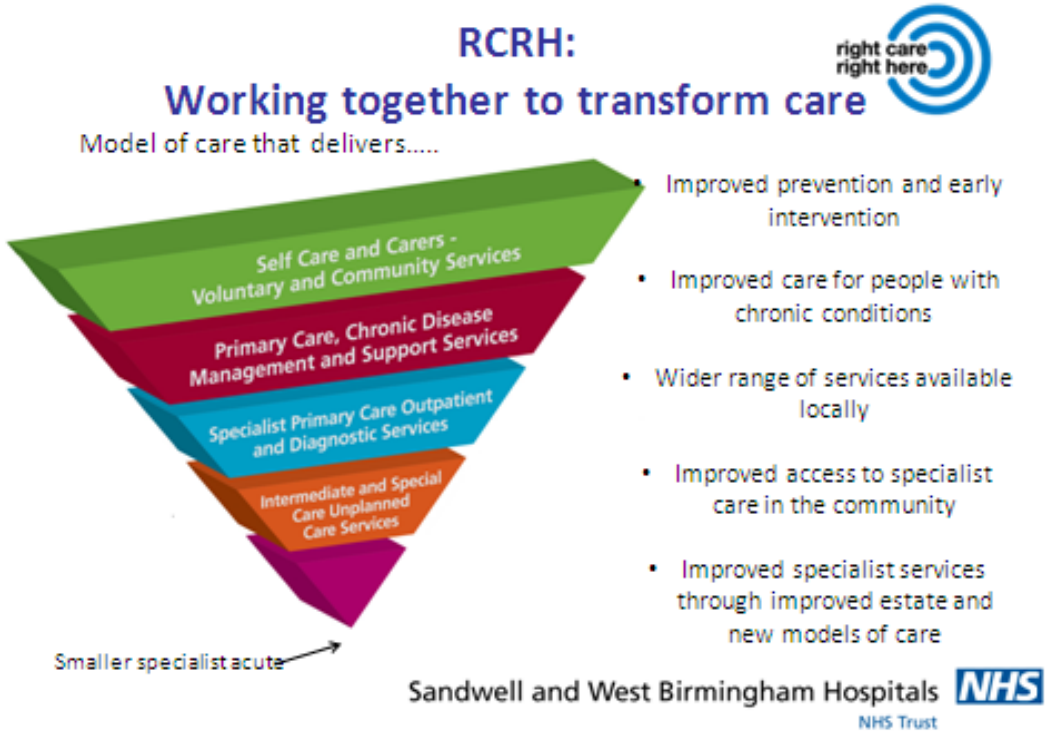
	SWBH in Midland Met	**SWBH in Community Facilities**	**Other Providers**
Outpatient Attendances	*13%* *(Antenatal & Paediatrics)*	74% will be provided by SWBH in community locations 24% being Ophthalmology attendances in BMEC 4% being attendances provided via virtual clinics	6% will be provided by new providers in community locations 7% will be absorbed in to primary care as part of routine working in primary care.
Beds & Length of Stay	Circa 670 beds Average length of stay of 3.08 days	Circa 148 beds Average length of stay of 17.01 days	
Catchment Loss	3% adult emergency inpatient admissions	None assumed	Emergency catchment loss primarily flows to: • Walsall • UHBT • DGoHFT • HEFT
Emergency Department	70% total ED & Urgent Care attendances	30% delivered in Urgent Care Centres (STC) & BMEC (45 % in BMEC)	Excludes Urgent Care activity in existing primary care Urgent Care Centres (e.g. Summerfield)
Day Case Rate 85%	48% including: • Children's day surgery * • Medical Day Case Unit • Interventional Cardiology	100% • Day surgery in BTC, BMEC & STC • Medical day cases (including chemotherapy) in BTC & STC	

*service model under review in terms of clinical support required to deliver some children's day surgery in BMEC and BTC

3. STRATEGIC VISION

3.1 RIGHT CARE RIGHT HERE PROGRAMME

We are a key partner along with the CCG, local authorities, mental health care providers and others in the *Right Care Right Here Partnership (RCRH)* which seeks to deliver an ambitious redevelopment of local health services. The objective of the *RCRH Programme* is to deliver redesigned acute, primary, community and social care services in the Sandwell and West Birmingham areas. The *RCRH Vision* is summarized in figure 1 below.



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 Midland Met the new single site acute hospital operating at maximum productivity. Lead clinicians from the Trust along with lead community and primary clinicians have been involved throughout the Programme in developing the *RCRH* vision and in identifying the high level service model required to deliver this vision. Following a successful public consultation, implementation of the RCRH Programme is underway with a growing range of traditional secondary care services now being provided via new models of care and in community locations.

Work from the *RCRH Programme* has informed the development of our Clinical Strategy and future clinical service model including how we will provide services across Midland Met, Community Facilities, other community and primary care settings.

3.2 OUR STRATEGY

Our ambition is to become renowned as the best integrated care organisation in the NHS and to be a key active partner in improving the health and wellbeing of the population we serve. A key role for us is to help 'keep people well.' We undertake this role in several ways including:

- Preventing illness through medical and lifestyle means i.e. *health promotion*
- Delivering planned health care such as surgery for conditions requiring diagnosis and treatment but not on an emergency basis i.e. *elective care*
- Providing care and support to people with long term health conditions such as Diabetes and Rheumatology to allow as much of this care to be undertaken outside of an acute hospital setting in a planned way and in partnership with other health and social care providers in order to promote self- management, maintain well- being and minimise the need for unplanned hospital admissions i.e. *integrated care*
- Provide rapid assessment and treatment 24 hours a day, seven days a week for people when they are acutely unwell i.e. *emergency care.*

We currently provide community services for people resident in the Sandwell area. This creates an exciting opportunity for providing truly seamless care for people with long term conditions and the complex problems of ageing through the integration of our acute and community services and further integration with services provided by other partners to these people and in particular primary care and social services. Our ambition includes the expansion of this opportunity into the West Birmingham area of our catchment population either through partnership with Birmingham Community Health Trust or through the expansion and development of our own community services.

Our strategy is to strengthen our position as provider of the highest quality integrated and seamless services to our local population both in hospital and closer to home.

We will drive innovative solutions to achieving the best possible health outcomes for our population. Our aims, the intentions of our commissioners and the funding outlook for the NHS means that in general terms that our secondary care activity will reduce slightly, while our community based services will grow. However, in a small number of targeted areas, where we believe our position and market conditions permit, we intend to grow our activities for example, in Ophthalmology.

Specifically, to meet these challenges, we will:

- Sustain a broad range but reducing volume of secondary care services that are of the highest quality and efficiency
- Ensure that those services are seamlessly integrated with our primary and social care partners
- Provide an increasingly wide range of community based services that help patients avoid having to use hospital services
- Build on our existing areas of specialist work that is provided to a wider population
- Be a valued partner, driving innovation across our local health system
- Maintain and enhance our reputation for providing high quality teaching and research

Our six strategic objectives are designed to ensure we make progress towards the successful delivery of our Strategy, these are:

- Safe, High Quality Care

- Accessible and Responsive Care
- Care Closer to Home
- Good Use of Resources
- 21st Century Facilities
- An Engaged, Effective Organisation

Each year we will develop our Annual Priorities to support the delivery of these objectives.

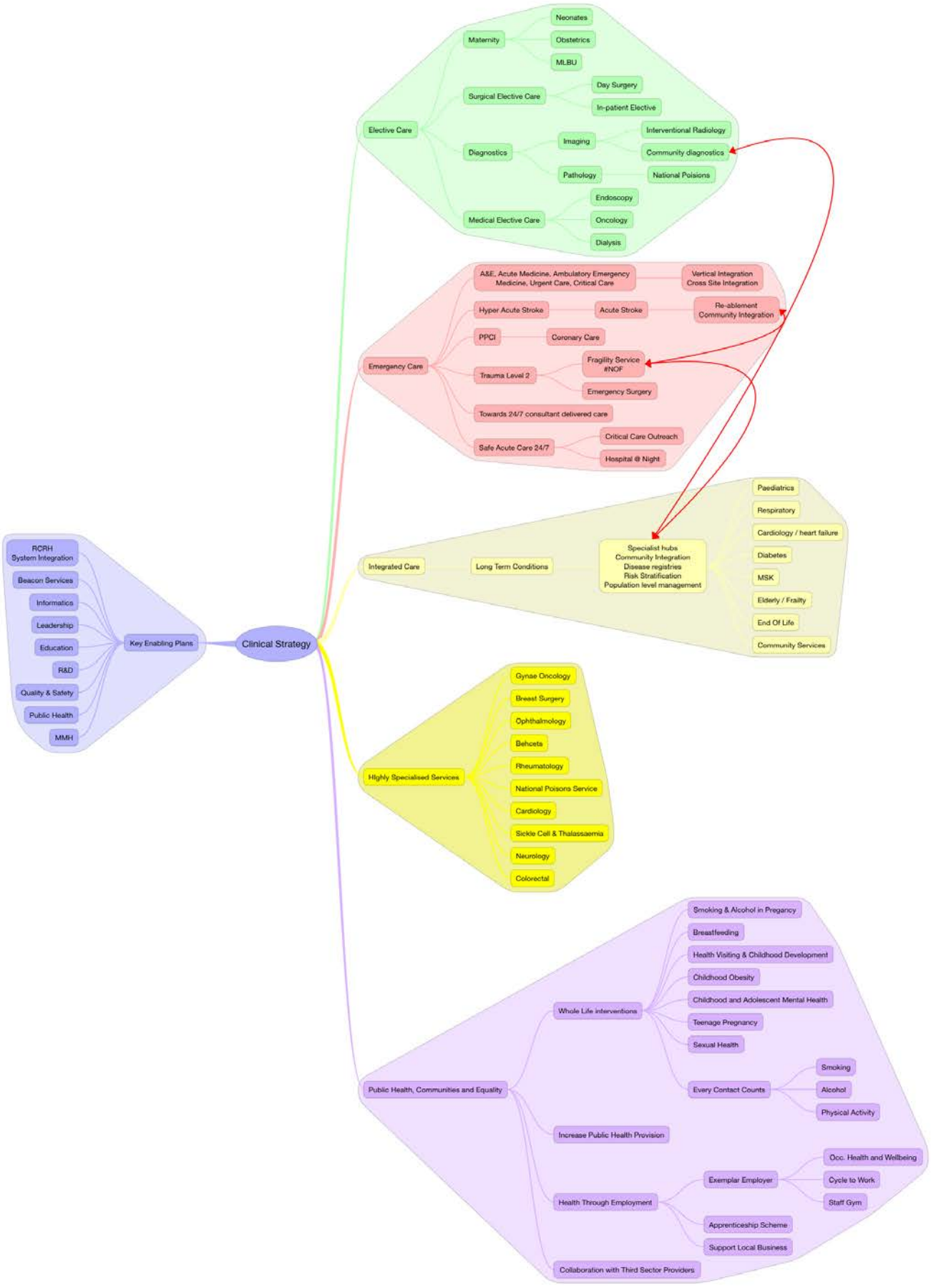
3.3 OUR CLINICAL STRATEGY

We will deliver consistently high quality, safe and improved care to our patients, working with our partners to transform the health and wellbeing of the people we serve and to provide integrated care for our patients with long term conditions.

Our Clinical Strategy outlines at a strategic level our thinking and aspirations for the future shape of our clinical services in order to deliver our strategic ambition and objectives and to maintain and develop further high quality and safe clinical services.

The clinical service model we will deliver post opening of Midland Met and described in this document is in line with our Clinical Strategy.

The key features of our Clinical Strategy are summarised in the diagram below.


Clinical Strategy
Elective Care
Maternity
Neonates
Obstetrics
MLBU
Surgical Elective Care
Day Surgery
In-patient Elective
Diagnostics
Imaging
Interventional Radiology
Community diagnostics
Pathology
National Poisons
Medical Elective Care
Endoscopy
Oncology
Dialysis
Emergency Care
A&E, Acute Medicine, Ambulatory Emergency Medicine, Urgent Care, Critical Care
Vertical Integration Cross Site Integration
Hyper Acute Stroke
Acute Stroke
Re-ablement Community Integration
PPCI
Coronary Care
Trauma Level 2
Fragility Service #NOF
Emergency Surgery
Towards 24/7 consultant delivered care
Safe Acute Care 24/7
Critical Care Outreach
Hospital @ Night
Integrated Care
Long Term Conditions
Specialist hubs
Community Integration
Disease registries
Risk Stratification
Population level management
Paediatrics
Respiratory
Cardiology / heart failure
Diabetes
MSK
Elderly / Frailty
End Of Life
Community Services
Highly Specialised Services
Gynae Oncology
Breast Surgery
Ophthalmology
Behcets
Rheumatology
National Poisons Service
Cardiology
Sickle Cell & Thalassaemia
Neurology
Colorectal
Public Health, Communities and Equality
Whole Life interventions
Smoking & Alcohol in Pregancy
Breastfeeding
Health Visiting & Childhood Development
Childhood Obesity
Childhood and Adolescent Mental Health
Teenage Pregnancy
Sexual Health
Every Contact Counts
Smoking
Alcohol
Physical Activity
Increase Public Health Provision
Health Through Employment
Exemplar Employer
Occ. Health and Wellbeing
Cycle to Work
Staff Gym
Apprenticeship Scheme
Support Local Business
Collaboration with Third Sector Providers
Key Enabling Plans
RCRH System Integration
Beacon Services
Informatics
Leadership
Education
R&D
Quality & Safety
Public Health
MMH

THE HEALTH OF OUR POPULATION

Working with our local community partners and with external agencies, we will take all necessary steps to transform the health and well-being of the population that we serve.

The people in our catchment area suffer deprivation amongst the worst in the country: West Birmingham is 10th and Sandwell 12th worst of 326 English authorities for deprivation & the ranking is getting worse year on year.

The likelihood of death under the age of 75 and chronic ill health from multiple long term conditions is again extremely high with our population having a high number of excess years of life lost with over half being the result of 6 diagnoses: Pneumonia, COPD, Alcoholic Liver Disease, Stroke, Lung Cancer and Coronary Heart Disease.

Within our population:

- 25% of the population smoke
- 15% drinking at increasing risk
- 5% drinking at high risk levels
- 25% of men & women are obese (BMI 30+)
- More than 70% do not eat 5 fruit/vegetables a day
- 60% of men do not meet physical activity levels
- 70% of women do not meet physical activity levels

All these injurious habits are more common in our community than in England as a whole, again among the worst in the country, and are clearly associated with high levels of social deprivation.

More than half of the contacts we make are with people with two or more long term conditions. It makes sense to reduce the number of people requiring our interventions by addressing the causes not the consequences of poor health. We need to address both the habits already established and the social determinants of poor health in our community. The Department of Health has come to the view that hospitals are well placed to deliver clinical health promotion around the recognised risk factors, and contribute to the health of their local community as well. This rings true: *we know who we need to target, and we already see many of them and their families regularly*.

Our Public Health Plan looks at how we address risk factors in our patients, their families, our staff, our membership and the local population as a whole. In addition it shows how we will help to improve the social determinants of disease by contributing to our local community.

4. CLINICAL SERVICE DESCRIPTION

To facilitate delivery of our future clinical service model our Strategy includes transformation of the estate in which we deliver our clinical services. A key component of this is building Midland Met which we expect to open in 2018, along with developing our Community Facilities, namely: the BTC, BMEC and Sheldon Block, RRH, STC and Leasowes intermediate care facility. We will also continue to develop the range of community services we provide in people's homes and through other community and primary care facilities.

Our aspiration is that patients attending our services for investigation or treatment, whether for planned elective care or unplanned acute care, will have excellence in clinical care with rapid availability of clinical expertise at all points of their individual care pathways. At the same time where quality, safety and outcome are improved by care closer to home we will deliver in community settings and will integrate our services both internally and with our external partners in order to provide seamless care.

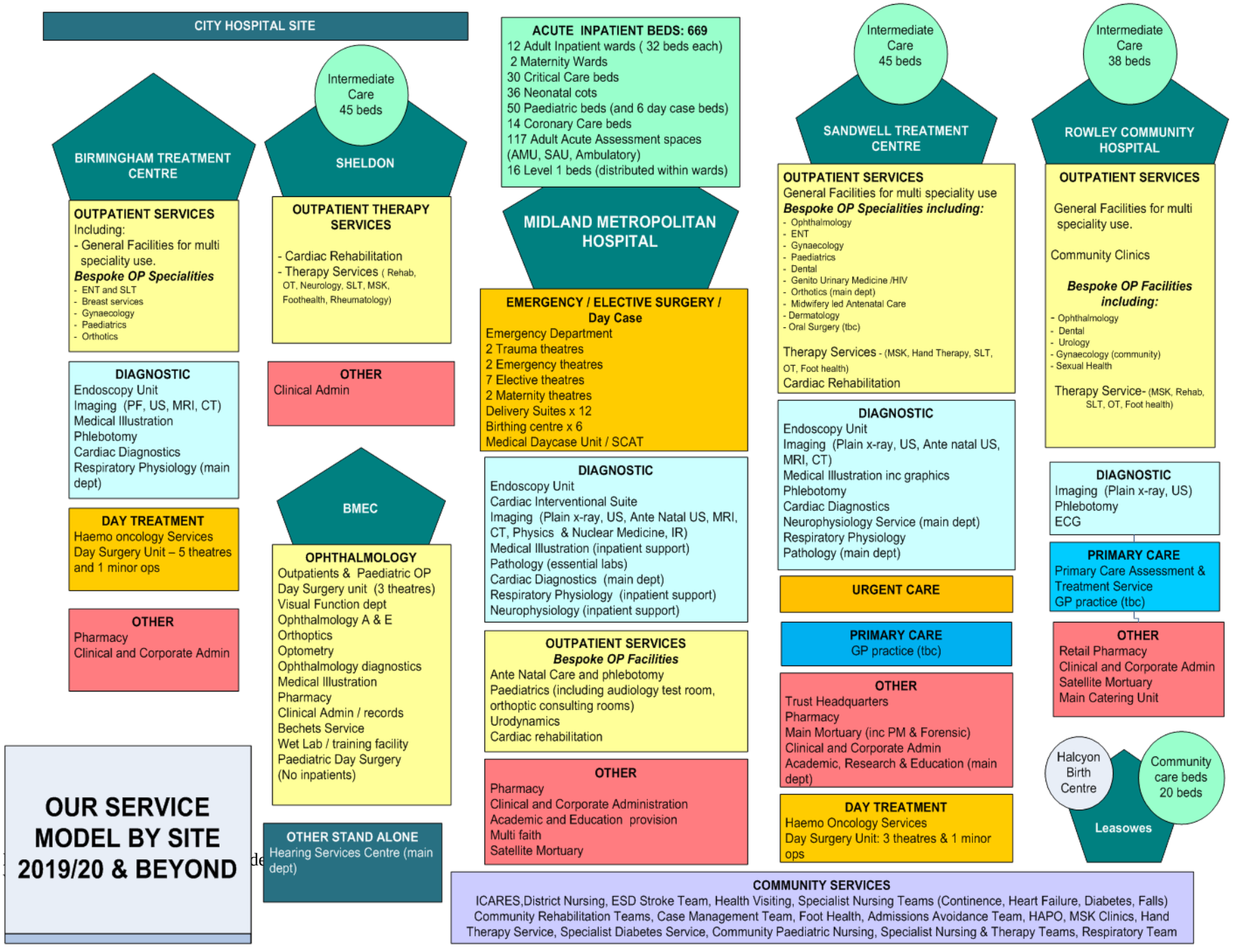
Midland Met will be a single site acute hospital in a modern purpose built facility and will allow us to centralise emergency and specialist inpatient care on one site with a critical mass of patients and staff that will enable development of skills and a greater level of senior on site cover throughout the day and seven days a week. This will facilitate 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 senior clinicians with 7 day consultant delivered service in most acute specialities. Extended hours of specialists 7 days a week will be an expectation. Sub-specialty expertise across the entire range of non-acute specialties will be available to in-patients in a timely fashion.
- Within medical specialties there will be an emphasis on generalism as a priority (as outlined by the RCP *Future Hospital* , 2013).
- High-level diagnostic support, including imaging and pathology, immediately 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 will be provided by experienced clinicians with sufficient time to lead and supervise staff and standards.

This will also mean:

- A greater proportion of patients attending Midland Met 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; and
- We will continue to provide and develop a range of more specialist services to our local population and also to the wider population within the West Midlands and in some cases further afield. This includes our Gynae-oncology, specialist Ophthalmology, Sickle Cell and Thalasseamia and specialist Rheumatology services.

The diagram below summarises where our clinical services will be provided following the opening of Midland Met.


CITY HOSPITAL SITE
BIRMINGHAM TREATMENT CENTRE
OUTPATIENT SERVICES
Including:
- General Facilities for multi speciality use.
Bespoke OP Specialities
- ENT and SLT
- Breast services
- Gynaecology
- Paediatrics
- Orthotics
DIAGNOSTIC
Endoscopy Unit
Imaging (PF, US, MRI, CT)
Medical Illustration
Phlebotomy
Cardiac Diagnostics
Respiratory Physiology (main dept)
DAY TREATMENT
Haemo oncology Services
Day Surgery Unit – 5 theatres and 1 minor ops
OTHER
Pharmacy
Clinical and Corporate Admin
Intermediate Care 45 beds
SHELDON
OUTPATIENT THERAPY SERVICES
- Cardiac Rehabilitation
- Therapy Services (Rehab, OT, Neurology, SLT, MSK, Foothealth, Rheumatology)
OTHER
Clinical Admin
BMEC
OPHTHALMOLOGY
Outpatients & Paediatric OP
Day Surgery unit (3 theatres)
Visual Function dept
Ophthalmology A & E
Orthoptics
Optometry
Ophthalmology diagnostics
Medical Illustration
Pharmacy
Clinical Admin / records
Bechets Service
Wet Lab / training facility
Paediatric Day Surgery
(No inpatients)
OTHER STAND ALONE
Hearing Services Centre (main dept)
ACUTE INPATIENT BEDS: 669
12 Adult Inpatient wards (32 beds each)
2 Maternity Wards
30 Critical Care beds
36 Neonatal cots
50 Paediatric beds (and 6 day case beds)
14 Coronary Care beds
117 Adult Acute Assessment spaces (AMU, SAU, Ambulatory)
16 Level 1 beds (distributed within wards)
MIDLAND METROPOLITAN HOSPITAL
EMERGENCY / ELECTIVE SURGERY / Day Case
Emergency Department
2 Trauma theatres
2 Emergency theatres
7 Elective theatres
2 Maternity theatres
Delivery Suites x 12
Birthing centre x 6
Medical Daycase Unit / SCAT
DIAGNOSTIC
Endoscopy Unit
Cardiac Interventional Suite
Imaging (Plain x-ray, US, Ante Natal US, MRI, CT, Physics & Nuclear Medicine, IR)
Medical Illustration (inpatient support)
Pathology (essential labs)
Cardiac Diagnostics (main dept)
Respiratory Physiology (inpatient support)
Neurophysiology (inpatient support)
OUTPATIENT SERVICES
Bespoke OP Facilities
Ante Natal Care and phlebotomy
Paediatrics (including audiology test room, orthoptic consulting rooms)
Urodynamics
Cardiac rehabilitation
OTHER
Pharmacy
Clinical and Corporate Administration
Academic and Education provision
Multi faith
Satellite Mortuary
Intermediate Care 45 beds
SANDWELL TREATMENT CENTRE
OUTPATIENT SERVICES
General Facilities for multi speciality use
Bespoke OP Specialities including:
- Ophthalmology
- ENT
- Gynaecology
- Paediatrics
- Dental
- Genito Urinary Medicine /HIV
- Orthotics (main dept)
- Midwifery led Antenatal Care
- Dermatology
- Oral Surgery (tbc)
Therapy Services - (MSK, Hand Therapy, SLT, OT, Foot health)
Cardiac Rehabilitation
DIAGNOSTIC
Endoscopy Unit
Imaging (Plain x-ray, US, Ante natal US, MRI, CT)
Medical Illustration inc graphics
Phlebotomy
Cardiac Diagnostics
Neurophysiology Service (main dept)
Respiratory Physiology
Pathology (main dept)
URGENT CARE
PRIMARY CARE
GP practice (tbc)
OTHER
Trust Headquarters
Pharmacy
Main Mortuary (inc PM & Forensic)
Clinical and Corporate Admin
Academic, Research & Education (main dept)
DAY TREATMENT
Haemo Oncology Services
Day Surgery Unit: 3 theatres & 1 minor ops
Intermediate Care 38 beds
ROWLEY COMMUNITY HOSPITAL
OUTPATIENT SERVICES
General Facilities for multi speciality use.
Community Clinics
Bespoke OP Facilities including:
- Ophthalmology
- Dental
- Urology
- Gynaecology (community)
- Sexual Health
Therapy Service- (MSK, Rehab, SLT, OT, Foot health)
DIAGNOSTIC
Imaging (Plain x-ray, US)
Phlebotomy
ECG
PRIMARY CARE
Primary Care Assessment & Treatment Service
GP practice (tbc)
OTHER
Retail Pharmacy
Clinical and Corporate Admin
Satellite Mortuary
Main Catering Unit
Halcyon Birth Centre
Community care beds 20 beds
Leasowes
OUR SERVICE MODEL BY SITE 2019/20 & BEYOND
COMMUNITY SERVICES
ICARES,District Nursing, ESD Stroke Team, Health Visiting, Specialist Nursing Teams (Continence, Heart Failure, Diabetes, Falls) Community Rehabilitation Teams, Case Management Team, Foot Health, Admissions Avoidance Team, HAPO, MSK Clinics, Hand Therapy Service, Specialist Diabetes Service, Community Paediatric Nursing, Specialist Nursing & Therapy Teams, Respiratory Team

4.1 EMERGENCY AND URGENT CARE

We will provide safe, robust, high quality emergency assessment and treatment 24/7 with access for unselected emergencies. At the same time we will work in partnership with primary care and other colleagues to develop and promote appropriate alternative pathways and services for those patients who do not require the facilities and expertise of an Emergency Department.

This means:

- A greater focus on seven day working with a priority to deliver consistent standards of emergency and inpatient services 24 hours a day, 7 days a week.
- An intense focus on providing safe acute inpatient care 24/7
- A reduction in attendances at our Emergency Departments through increased provision of community-based urgent care and out-of-hours services and the development of new ways of delivering care to patients with long term conditions.
- Concentration of Emergency Inpatient Services.

When Midland Met opens we will deliver all emergency and acute inpatient care on one site. Until then we will continue to provide EDs, Medical Assessment Units and Paediatric Assessment Units at both City and Sandwell Hospitals with 24/7 access for unselected emergencies. In the interim we will continue to develop our emergency services to ensure early, senior assessment and decision making is available with onsite consultant presence for extended hours in key areas. We are also committed to continue work with our commissioners and primary care colleagues to develop and promote alternative services for patients currently attending ED who could appropriately be managed in an urgent care setting.

4.1.1 Emergency Department & Urgent Care

When Midland Met opens:

- 70% of emergency attendances will take place in the Emergency Department (ED) and collocated Urgent Care Centre within Midland Met. The majority of these patients will have injuries and conditions requiring the level of specialist assessment, diagnosis and treatment that will only be available in an acute setting. Other patients will be seen in the Urgent Care Centre. 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.
- 30% of patients requiring urgent care but not a full ED service will be able to attend one of the community-based urgent care services, open 12 hours a day, 7 days a week, at STC, RRH, BMEC (for patients with eye injuries or conditions) or be managed in primary care through an out-of-hours service. Currently a number of different models of care are being developed including primary care led Urgent Care Centres in community locations, GP workstreams in the ED, a primary care assessment and treatment model attached to intermediate care beds. These models vary in detail and so we will work with partners to develop them further over time.

Key features of the ED in Midland Met will include:

- A dedicated children's area (10 spaces and 1 triage room) where children and adolescents attending the department will be assessed, diagnosed and treated (apart from those who are critically ill) by staff with the appropriate training and experience in caring for children. An ambulance navigator who will meet patients arriving by ambulance and signpost them to the appropriate area within ED. This will be the resus room, children's area or the rapid assessment cubicles (10 spaces)
- Initial triage and assessment areas for adults (2 rooms)
- A minors area for adults (8 cubicles)
- A separate area for adults with major illness (25 rooms)
- A dedicated area for critically ill patients (adults and children)requiring resuscitation and stabilisation (10 spaces)
- Some dedicated Imaging facilities (2 rooms)and near patient testing
- Dedicated rooms for mental health assessment (2 rooms).
- In addition there is a collocated Urgent Care Centre (2 rooms)

Workforce planning implications relating to our future ED provision:

- For urgent care there will be a requirement for an increase in the development and utilisation of advance practitioner roles i.e. nurses, AHP, technical, and an increase in GP input i.e. GPwSI.
- A higher proportion of the patients attending the ED will have injuries and conditions requiring clinical teams to have a high level of seniority present, specialist assessment, diagnosis and treatment skills leading to a richer skill mix requirement and additional skills training packages24/7 on site consultant presence will be required in the ED. The Trust currently has on site consultant presence; Mon-Fri 08.00– 22.00hrs (with a second on site consultant 10.00 – 18.00 hrs) and Sat-Sun on site consultant 6 hours per day substantive with a further 6 hours per day for the winter months.
- 7-day working for therapists and diagnostic staff to ensure rapid assessment and diagnosis or on-going treatment
- Potential for increasing the number of new roles/advanced practitioners e.g. emergency care practitioners and physician associates
- Pathways for mental health assessment will require specialist staff /teams.

A significant number of patients attending the ED will require further assessment by specialty teams and/or admission:

- For adults the flow will primarily be from the ED to the adult Acute Assessment Unit which will be located immediately adjacent (horizontal) to the ED.
- Some adult patients will be admitted directly from an ambulance or ED to a specialist area. For example, these will include:
- Patients with clear symptoms of a heart attack will be taken directly to the Interventional Cardiology Suite
- Patients with a fractured neck of femur will be taken directly to a musculoskeletal ward
- Patients with FAST positive symptoms indicating a likely stroke will be taken directly to the CT scanner suite and then onto the Stroke Unit.
- Children and adolescents will transfer from the dedicated children's area in the ED to the Paediatric Assessment Unit which will be part of our Children's Inpatient Unit.
- Other areas that patients may be directly transferred to include the Critical Care Unit, Operating Theatres, Delivery Suite, Coronary Care Unit.

4.1.2 Adult Acute Assessment Unit (AAU)

The central aim of the adult Acute Assessment Unit (AAU) will be rapid assessment, diagnosis, treatment and discharge or stabilisation before onward referral to the appropriate specialist team if a longer admission is required. This area consists of the Acute Medical Unit (AMU), Ambulatory Medical Assessment Area (AMAA) and Surgical Assessment Unit (SAU). This approach will be a key element in improving clinical safety, quality, and patient experience whilst at the same time reducing length of stay within Midland Met. This service will be driven by experiences senior decision makers present on the AAU.

In order to determine the bed capacity required in the adult acute assessment a 0.5 day length of stay has been added to all adult emergency admissions (excluding Obstetrics) with an otherwise 0 day length of stay. The average length of stay assumption for the adult AAU is:

- 0.5 days for emergency adults with an overall length of stay of 0 days in MMH
- 1 day for emergency adults with an overall length of stay of 1-2 days in MMH
- 1.5 days for emergency adults with an overall length of stay of more than 2 days in the acute hospital.

The AAU will have 117 beds/trollies and will be divided into an Acute Medical Unit (AMU) and Surgical Assessment Unit (SAU).

The AMU will be further subdivided into three zones – an ambulatory medical assessment area (AMAA) (24 trollies and a 20-30 chair waiting area for patients waiting for results etc), a level 1 monitored bed zone (14 beds) and a zone for on-going care up to 48 hours length of stay (56 beds)

- The AMU will work on the basis that patients requiring a longer stay in hospital (i.e. over 48 hours) for further observation, investigation or treatment will be transferred to the appropriate specialty bed on a generic in-patient ward.

There will be a collocated 32 bed short stay medical ward.

Workforce planning implications relating to our future AMU provision:

It is envisaged that within Midland Met the AMU will have 7 day Consultants presence. Current provision is that or 13 hour presence with a hybrid service from acute and general physicians. The aim would be to provide 14 hour presence, 7 days service. We will continue our current work of developing the role of Consultant Physician in Acute Medicine in order to ensure rapid and senior level assessment, decision making and review. This is in line with national guidance and data revealing that the presence of Acute Physician's on AMU improve quality, decrease mortality and morbidity, decrease length of stay without an increase in re-admissions, as well as improve patient experience and journey.

We will continue where possible ahead of Midland Met opening to expand our current onsite Consultant cover for our medical assessment beds. Currently we have on site consultant presence; Mon-Fri 08.00-21.15 hrs (13 hours per day) and at weekends 07.30-13.00 hrs and 18.00-21.15 hrs (10 hours per day). This level of cover is provided on both our existing acute hospital sites. These consultants also cover the short stay medical wards.

Continuation of therapists working in the AMU 7-days a week.

4.1.3 Critical Care

There will be a hospital-wide, whole systems approach to critical care with services which extend beyond the physical boundaries of the critical care unit and support the full range of specialties. The service will aim to ensure seamless management of the patient journey maintaining the highest

levels of clinical care, patient privacy and dignity, improved communication regarding complex patient interventions and collaborative inter-disciplinary working.

The service will provide:

- ***Level 2 care*** to patients who require more detailed observation or intervention including support for a single failing organ system, post-operative care or 'stepping down' from higher levels of care and ***level 3 care*** for patients who require advanced respiratory support along or basic respiratory support along with support of at least two organ systems in an Integrated Critical Care Unit (ICCU). This will have 30 beds and a planned occupancy rate of 75% to ensure capacity to accommodate peaks in demand.

- ***24/7 Critical Care Outreach Service***, providing assessment and support from the critical care team to patients requiring or with the potential to require critical care and before transfer to the ICCU, in all areas of the Midland Met.

- ***Children requiring level 3 critical care*** may be accommodated on the ICCU for stabilisation prior to transfer to a Paediatric Intensive Care Unit in another hospital. Children requiring level 2 or 1 care will be cared for on the children's inpatient unit, managed by the Paediatric team with support from the critical care team.

Level 1 adult care (for patients stepping down from higher levels of critical care or for patients requiring a higher level of care but before requiring level 2 or level 3 critical care) will be provided in a number of designated generic inpatient wards (including respiratory, neurology & stroke, gastroenterology) to recognise the specific specialty management required for particular conditions and interventions e.g. non-invasive ventilation. Level 2 care for maternity patients will be provided in Delivery Suite (4 beds). This approach has the benefit of retaining experience and skills for caring for these patients with staff working on the generic adult inpatient wards.

Workforce planning implications relating to our future critical care provision:

- Extended hours consultant on site presence in Critical Care
- 24/7 critical care outreach service

4.1.4 Interventional Cardiology

The Interventional Cardiology service within Midland Met will provide:

- Diagnostic and interventional procedures for patients presenting with acute coronary syndrome.
- Insertion of temporary or permanent pacemakers and other cardiac devices.
- A range of other procedures in the treatment of heart disease e.g. PTMC, reveal, pericardiocentesis.
- Procedures may be undertaken on an elective, urgent (within hours to days) or emergency basis. Many of the elective and urgent cases will be undertaken on an ambulatory basis (day case or outpatient) but may also be undertaken on an inpatient basis.
- Emergency cases will be undertaken on an inpatient basis and will include direct admission of STEMI patients to the Interventional Cardiology Suite from the ambulance service or Emergency Department allowing rapid intervention in cases where speed of intervention is key to a successful clinical outcome.
- Cases undertaken on a day case or outpatient basis will be accommodated on the Interventional Cardiology Suite. Cases undertaken on an inpatient basis will be admitted to the co-located Cardiology ward. Our Coronary Care Unit will be within the Cardiology ward.

Workforce planning implications relating to our future Interventional Cardiology provision:

- The new service model will require extended on site specialist middle grade medical cover.
- The redesign of clinical pathways and the co-location of the interventional cardiology suite, cardiology ward and cardiac diagnostics in the new Midland Met will enable new ways of working that will create the opportunity for greater workforce efficiency and the potential for new roles such as a generic cardiac catheter laboratory practitioner.
- The Trust is planning to reconfigure its interventional cardiology onto one site (City Hospital) in 2015 which will enable the clinical team to start delivering the new service model ahead of the opening of Midland Met.

4.1.5 Adult Inpatient Wards

Within Midland Met adult inpatients (apart from those requiring care in one of the specialist areas) will be accommodated on generic inpatient beds. The majority of emergency admissions will be admitted to these beds via the adult AAU as described above and the majority of elective surgical inpatients will be admitted following surgery via the Operating Theatre Department (including the central admissions area) as described under Elective Care. An important element of the new service model is a reduced length of stay and these pathways facilitate delivery of this by streamlining the admissions process and initial assessment and treatment. In addition early senior medical assessment and decision making is essential to the pathways and a reduced length of stay. The Trust average length of stay assumptions post opening of Midland Met are:

- Midland Met Inpatient Average Length of Stay: 3.08 days
    - Elective Inpatient Average Length of Stay: 2.71 days
    - Emergency Inpatient Average Length of Stay: 3.13 days

Other key aspects of the adult inpatient service model include:

- The activity and capacity analysis has identified the need for 376 generic adult inpatient beds. These will be accommodated in 32 bed wards with a generic design and located in clusters of 3 in order to facilitate future flexibility in use. There will be 12 generic adult inpatient wards in addition to AAU and the maternity wards (within the Gynaecology ward there are 24 beds and a co-located EGAU).
- Level 1 adult care will be provided in a number of designated generic inpatient wards to recognise the specific specialty management required for particular conditions and interventions e.g. non-invasive ventilation.
- The generic wards will have 50% single rooms with en-suite bathrooms and the remaining 50% of beds will be in bays of 4. This arrangement will improve patient privacy and dignity, will facilitate infection control and will offer patient choice between a single room and a bay of 4 beds in line with feedback from public engagement work.
- The occupancy assumption for these beds is 90% which when combined with the planned lower occupancy for specialist areas and acute assessment beds gives an overall occupancy of 87%.
- The need for robust discharge planning started at the point of admission and clear pathways across the health economy to facilitate the smooth transfer of patients to other services outside of Midland Met.
- The mix of general adult beds on each ward has been decided on the basis of groups of conditions that have similar pathways and nursing and medical care requirements and is summarised in the table 2 below.

Workforce planning implications relating to our future adult inpatient ward provision:

- Increased use of advanced practitioner roles to undertake tasks currently being undertaken by junior doctors in training
- 12 hour consultant on site presence in a number of specialties including emergency anaesthetics, general surgery, trauma & orthopaedics, stroke
- 7 day ward rounds on all wards by Consultants
- Within medical specialties a focus on generalism ' whole care of patient' which will enable workforce to transfer skills and knowledge and to provide holistic care
- Frequent medical in reach and rounds to surgical wards in order to provide seamless care and advice
- Skills development packages required to ensure that staff retain essential skills to continue to provide specialist care for particular conditions and interventions e.g. hyper stroke care, non-invasive ventilation
- Additional skills and competency requirements for staff to manage patients with higher levels of acuity and more multiple conditions than currently
- Staffing profiles to reflect new ward configuration and lay-out i.e. 32 bedded wards and 50% single rooms
- Detailed ward staffing rotas have been developed based on service/pathway demands with agreed shift patterns, registered to non-registered ratios and administrative support requirements to ensure that the wards can be safely staffed when the Midland Met opens.
- The Association of UK University Hospitals dependency (AUKUH) tool has been used to determine levels of patient acuity.
- The Safer Staffing Tool and NICE guidance for benchmarks on mandatory minimum nurse staffing levels, ward layout style, and professional judgement have been used to determine levels of dependency and safe staffing rotas.

Table 2: Midland Met Inpatient Beds by Condition Group

Condition Groupings	Specialties	Bed Numbers
Medicine	Respiratory: Includes 4 level 1 beds & 10 isolation rooms	32
Medicine	Acute Elderly: Includes acute elderly & mental illness	32
Medicine	GI: Includes medical, acute GI bleeding,4 level 1 beds	32
Medicine	Haematology oncology, Haemoglobonopathy Dermatology & Rheumatology	32
Medicine	Stroke & neurology Includes 4 level 1 beds	32
Medicine	Short stay, frail elderly, poisons (monitored beds)	32
Musculoskeletal	Orthopaedics & Trauma	64
Maternity	Ante- and post-natal, HDU (level 2). In addition there is a Foetal Medicine & Antenatal Day Assessment Unit (6 spaces) & Transfer Lounge (6 spaces – can be flexed to beds at peak demand)	60
Gynaecology & Gynaeoncology	In addition a collocated EGAU (6 spaces) & EPAU (6 spaces)	24
Surgical Specialties	Long stay, Colorectal Surgery includes 4 level 1 beds	32
Surgical Specialties	Short stay, Urology, ENT, Interventional Radiology, Plastic Surgery, Breast Surgery & Ophthalmology	32
Cardiology	Includes 14 CCU beds & cardiology step down beds	32
Sub Total		***436***
Adult Acute Assessment	All adult emergency inpatients (except maternity, fracture of femur, stroke, & acute chest pain): • 56medical assessment beds • 14 medical monitored beds • 24 trollies medical ambulatory assessment (in addition to a chaired wait) • 23 Surgical Assessment Unit trollies/beds	117
Critical Care (ICCU) level 2 & 3	All adult	30
Neonatal	Intensive Care, High Dependency and Special Care	36
Children	Includes Paediatric Assessment Unit, Adolescents, High Dependency. In addition there are 6 day case spaces.	50
Sub Total		***233***
Total		**669**
Condition Groupings	**Specialties**	**Bed Numbers**

Condition Groupings	Specialties	Bed Numbers
Medicine	Respiratory: Includes 4 level 1 beds & 10 isolation rooms	32
Medicine	Acute Elderly: Includes acute elderly & mental illness	32
Medicine	GI: Includes medical, acute GI bleeding,4 level 1 beds	32
Medicine	Haematology oncology, Haemoglobonopathy Dermatology & Rheumatology	32
Medicine	Stroke & neurology Includes 4 level 1 beds	32
Medicine	Short stay, frail elderly, poisons (monitored beds)	32
Musculoskeletal	Orthopaedics & Trauma	64
Maternity	Ante- and post-natal, HDU (level 2). In addition there is a Foetal Medicine & Antenatal Day Assessment Unit (6 spaces) & Transfer Lounge (6 spaces – can be flexed to beds at peak demand)	60
Gynaecology & Gynaeoncology	In addition a collocated EGAU (6 spaces) & EPAU (6 spaces)	24
Surgical Specialties	Long stay, Colorectal Surgery includes 4 level 1 beds	32
Surgical Specialties	Short stay, Urology, ENT, Interventional Radiology, Plastic Surgery, Breast Surgery & Ophthalmology	32
Cardiology	Includes 14 CCU beds & cardiology step down beds	32
Sub Total		***436***
Adult Acute Assessment	All adult emergency inpatients (except maternity, fracture of femur, stroke, & acute chest pain): • 56medical assessment beds • 14 medical monitored beds • 24 trollies medical ambulatory assessment (in addition to a chaired wait) • 23 Surgical Assessment Unit trollies/beds	117
Critical Care (ICCU) level 2 & 3	All adult	30
Neonatal	Intensive Care, High Dependency and Special Care	36
Children	Includes Paediatric Assessment Unit, Adolescents, High Dependency. In addition there are 6 day case spaces.	50
Sub Total		***233***
Total		**669**

4.2 ELECTIVE CARE

As much care as possible will be planned along agreed, easy to navigate care pathways based on best clinical practice.

To deliver this elective care will:

- Be based on agreed pathways that are understood by patients and are based on best clinical practice
- Be easy to navigate – all involved will know where they are on the pathway
- Respect the diversity of our patients and seek to respond appropriately to the full range of patient needs
- Be organised, thereby not wasting patient or clinical time or resources
- Provide planned care as locally as possible – only where clinically necessary will services be concentrated in more specialist centre.

This will mean:

- Appropriate and probably fewer referrals made along agreed care pathways (triaged within primary care with routine diagnostics undertaken and appropriate alternative services considered prior to referral to secondary care).
- A higher conversion of referrals to treatment/surgery.
- Our consultants and other specialist clinical staff increasingly supporting primary care through new means such as advice and guidance (as alternatives to outpatient appointments).
- One stop approach to appointments with the majority of these being delivered in our Community Facilities.
- Reduction in elective inpatient surgery and increase in day case surgery. Adult day surgery will be provided in dedicated facilities in the BTC, STC or BMEC for (Ophthalmology).
- A focus on pre-operative assessment, preparation and scheduling of planned surgery.
- Reduced stay in hospital for the minority of patients that do require elective inpatient surgery. We will achieve this by admitting patients on the day of surgery and rolling out Enhanced Recovery Programmes across all elective specialties.
- High quality, timely and appropriate diagnostic investigations delivered primarily within our Community Facilities.

Workforce planning implications relating to our future elective care provision:

- Staff working across acute and community locations (Midland Met and community facilities)
- Routine 7 day and extended hours working in most specialties
- New Role requirements including an increase in advanced practitioners, extended/advanced roles i.e. nurses and AHP, in musculoskeletal conditions
- New ways of working related to enhanced recovery roles

4.2.1 Operating Theatres - Inpatient

All operating theatres in Midland Met (apart from the 2 dedicated maternity theatres in Delivery Suite) will be located in one operating theatre department comprised of 11 theatre suites, a central admissions area and central stage 1 recovery area, in order to facilitate flexibility and maximise productivity.

Key elements of the service model include:

- A Central Admissions Area for patients admitted for elective surgery in order to facilitate patient flow through theatres. All patients admitted for elective inpatient surgery will have received a pre-operative assessment and the majority will be admitted on the day of surgery direct to the central admissions area where the final pre-operative reviews and checks will take place. Patients will be taken from the central admissions area into the operating theatre suite. This patient flow is a key element in the reduction of average length of stay in Midland Met. The model for pre-operative assessment needs further development at a speciality level but will include assessment in primary care or a Community Facility.

- The small number of patients for elective inpatient surgery admitted to Midland Met prior to the day of surgery (for clinical reasons) will be admitted to a generic inpatient ward but will then be transferred to the central admissions area on the day of surgery.

- Children's day surgery is planned to take place in MMH to ensure on-site back up support from a full Paediatric service. Children admitted for day surgery will be admitted to the Children's Inpatient Unit prior to surgery and will return there after stage 1 recovery (which will take place in the Operating Theatre Department) for stage 2 recovery and discharge. A clinical review is underway to identify elements of children's day surgery that could safely and appropriately take place in BMEC and possibly the BTC.

- All surgery requiring an overnight stay will take place in Midland Met.

- The planning assumption is that the elective theatres will operate over a 42 week year, 10 sessions per week with a 83% utilisation rate.

- The majority of patients admitted for emergency surgery will be admitted pre-operatively via the adult SAU to a generic inpatient ward. Prior to surgery they will be transferred to the central admissions area and from there to the operating theatre suite. This flow will help to reduce delays and maximise use of the emergency theatre capacity. There will be some exceptions to this – notably critically ill patients who will be taken directly to the operating theatre suite.

4.2.2 Day Surgery

All adult day case surgery will take place in dedicated facilities in our Community Facilities (STC, BTC and BMEC). These facilities will be open 12 hours a day allowing for an extended recovery (but not overnight stay) so facilitating the higher day case rate. There will also be dedicated minor operating facilities in these sites for procedures not requiring a full operating theatre suite. This model will support the separation of planned from emergency surgery for most of our elective operating so reducing the risk of delays to planned surgery. It will also provide local access for many patients.

For some specialties where specialist skills, equipment and facilities are required day surgery may be concentrated on one site e.g. Breast Surgery in the BTC.

The table below summarises our future theatre provision.

Table 3: Future Theatre Provision

	2019/20	2019/20 - Other
Emergency (including trauma)	4	Includes: 2 Trauma; 1 Laproscopic & 1 General
Elective Inpatient	7	Includes: 2 Orthopaedic; 2 Laproscopic; 1 IR capacity; 1 Ophthalmic &ENT capacity & I gynae-oncology
Maternity	2	In Delivery Suite
Midland Met Sub-total	***13***	
BTC	5	& 1 minor op
BMEC	3	
Sandwell	3	& 1 minor op
Community Sub-total	***11***	
Total	**24**	

4.2.3 Outpatients

Once Midland Met is open, apart from high risk antenatal clinics all adult outpatient clinics will be held in our Community Facilities, supported by diagnostic provision to facilitate delivery where possible on a one stop basis. Table 4 below summarises the planned future locations for our outpatient provision.

In addition our future service model includes a shift in provision of outpatient care from consultant based services in acute hospital settings to care delivered by other health care professionals in community settings and primary care with direct access to secondary care expertise. This will involve our consultants and other specialist clinical staff working alongside primary care colleagues to deliver alternative services. With increased sophistication of technology, we will continue to increase the use of alternatives to traditional referral and follow up with electronic advice and guidance for GPs and patients, self-monitoring, telemedicine using Skype and similar technologies and patient held records.

To deliver this we will also be expanding and developing our community services for example Community Muskuloskeletal services.

As a result of these changes we are planning a significant reduction in our outpatient attendances and in particular review attendances. This will result in a new to review ratio of 1.78 (compared to 2.4 in 2014/15).

Table 4: Outpatient Locations in 2019/20

Specialty	MMH	BTC	SGH	RRH	BMEC	City(Sheldon)	Victoria H/C	Neptune H/C	Other Community Locations
SURGERY A									
Breast		✓							
General Surgery		✓	✓	✓					
T&O (inc Fracture Clinic✓)		✓✓	✓✓	✓					
Gastro Intestinal		✓	✓	✓				✓	
Urology		✓	✓						
Vascular Surgery		✓	✓						
Plastic Surgery		✓	✓						
SURGERY B									
ENT		✓	✓	✓					✓
Ophthalmology			✓	✓	✓				✓
Behcets						✓			
Oral Surgery			✓						
Dental			✓	✓					
WOMENS AND CHILD HEALTH									
Gynaecology		✓	✓	✓					✓
Gynae-oncology		✓	✓						
Antenatal	✓		✓						✓
GUM/HIV			✓						
Paediatrics	✓	✓	✓						
MEDICINE AND EMERGENCY CARE									
Cardiology		✓	✓	✓					
Neurology		✓	✓				✓		
Rheumatology		✓	✓	✓			✓	✓	✓
Respiratory		✓	✓						
General Medicine		✓	✓						
Gastroenterology		✓	✓	✓					
Diabetes				✓					✓
Endocrine		✓							
Elderly Care		✓	✓	✓					
Oncology		✓	✓						
Immunology		✓	✓	✓				✓	
Paediatric Immunology	✓	✓	✓						
Haematology		✓	✓	✓					
Dermatology			✓						

4.2.4 Diagnostics

The majority of our diagnostic activity will be undertaken in our Community Facilities however an element will be provided in Midland Met to support acute inpatient activity with an expectation that it is available 7 days a week over extended hours and where appropriate 24/7 to provide diagnostic investigations for rapid assessment and treatment of emergency patients.

Our diagnostic services support specialties in providing quality and timely patient care and work proactively with specialties where revised service models are required. They are integral to supporting a number of speciality service and care pathway redesigns.

We will pursue opportunities for our diagnostic departments to provide high quality diagnostic services directly to primary care clinicians who in turn will use the results to avoid referral to a secondary care service or where this is clinically appropriate make the referral to the most appropriate specialist with the diagnostic results available on referral.

Some of the larger diagnostic service models are described here whilst table 5 summarises future diagnostic provision by site.

Imaging

The majority of outpatient Imaging will be provided in our community facilities including MRI and CT at BTC and STC. We will also continue to provide support for some Imaging diagnostics (primarily plain X-ray and ultrasound) in other community and primary care locations.

Within Midland Met the majority of services will be centralised in the Imaging Department to ensure efficient use of facilities and staff, but with satellite services in agreed areas (ED and antenatal clinic) to ensure fast access and a smooth patient flow. The Imaging service will continue to include the specialist services of Nuclear Medicine and Radiopharmacy.

Key aspects of the service model will include:

- A likelihood of change in the mix of modalities used with a higher percentage of MRI and CT compared to plain X-ray.
- Routine 7 day and extended hours working will be introduced along with a robust 24/7 service (including reporting) to support emergency patient pathways where timely Imaging is essential (e.g. stroke, TIA, trauma etc).
- For some of our more specialist services we will work in partnership with other providers to ensure a critical mass of technology, equipment and patients to enable our specialists in these fields to maintain and enhance their skills and where appropriate an extended hours service for our patients.

Workforce Planning Implications:

- Working across acute and community locations - Midland Met, community facilities and some primary care settings.
- Joint working with another hospital for key specialist areas including Interventional Radiology and Neuroradiology
- Routine 7 day and extended hours working – including on site consultant presence
- 24/7 on site working for some modalities (e.g. CT)
- New ways of working relating to changes in modalities will require additional skills
- Introduction of a Managed Equipment Service may change Trust workforce requirements, possible staff transfer.
- We have introduced a range of new and extended roles (e.g. Advanced Radiographers and Sonographers, Imaging Department Assistants) and will develop these further

Pathology

Our main Pathology Department will be located at STC in refurbished accommodation (the first phase of this was completed in 2013/14). Within Midland Met there will be an integrated essential laboratory that will provide an onsite service for emergency and urgent specimens. This will include the blood bank. A dedicated transport system will be required to the main Department.

The design and operational policy of the Pathology Department will allow for greater integration between specialities within Pathology and shared use of equipment and staff. Work will continue to explore options for providing a joint service with other providers of Pathology services in line with national guidance.

The Trust's main mortuary, including the forensic mortuary, will continue to be located within the newly refurbished department at STC (currently Sandwell General Hospital). All post mortem work will take place here. There will be an onsite mortuary at Midland Met for holding bodies prior to transfer to the main mortuary or a Funeral Director.

Workforce Planning Implications:

- Working across acute and community locations – Midland Met and STC
- Routine 7 day and extended hours working – including on site consultant presence
- 24/7 on call/on-site service for key functions
- New ways of working – joint services with other providers, new investigations/range of tests requiring additional skills.

Cardiac Diagnostics

The main base for this specialty will be Midland Met in order to support the acute cardiology pathways. This service will be provided 7 days a week with an on-call out of hours provision. The service will also be provided in all of our Community Facilities to support the outpatient work of most specialties and also facilitate direct access for GPs.

Respiratory Physiology

The main base for this service will be the BTC but there will also be service provision at STC. There will be a service to support inpatient activity only at the new Midland Met.

Neurophysiology

The main base for this service will be STC with some service provision at BTC. Currently the department provides a service to support other local Acute Hospitals on in-reach basis and this is planned to continue.

Endoscopy

Outpatient and day case endoscopy services will be provided at BTC and STC. The exception to this is bronchoscopy which will be provided at Midland Met to enable the best use of specialist facilities and allow for isolation of patients with TB and other conditions where isolation is appropriate. There will also be an inpatient endoscopy service provided at Midland Met which will include (as present) an out of hours on call provision.

Workforce Planning Implications:

- Further development of consultant nurse and nurse endoscopist roles.
- The Endoscopy service also includes decontamination and this creates the requirement for us to continue to employ specially trained staff.

- There is a requirement to extend the provision of 7-day working and where appropriate 24/7 cover.
- The service model will require clinical staff to work across acute and community locations.

Table 5: Diagnostic Services by Site in 2020

Department	Midland Met	BTC	BMEC	Sheldon Block/City site	STC	RRH
Imaging	Plain x-ray Ultrasound MRI CT Fluoroscopy room Interventional Radiology Gamma Cameras	MRI CT Dexa Scanner Plain x-ray Ultrasound			MRI CT Plain x-ray Ultrasound rooms	Plain x-ray Ultrasound
Cardiac Diagnostics	✓	✓			✓	✓
Respiratory Physiology	✓ Testing for Inpatients	✓			✓	
Neurophysiology	✓ Testing for inpatients				✓	
Audiology	✓ Paediatrics requiring anaesthesia	✓		✓	✓	✓
Phlebotomy	✓ Antenatal & paediatric	✓			✓	✓
Colposcopy		✓			✓	
Endoscopy	✓ Inpatients&Bronchoscopy	✓			✓	
Breast Service		✓				
Visual Functions			✓		✓	
Orthoptic	✓ for children & stroke		✓		✓	✓
Optometry			✓		✓	✓
Urodynamics	✓					
Antenatal Ultrasound	✓				✓	
Neonates	✓					
Dental						✓
Therapies - Physio and OT	✓ for Inpatients			✓	✓	✓
Speech & Language Therapy	✓ for Inpatients	✓		✓	✓	
Foot Health				✓	✓	✓
Orthotics		✓			✓	

4.3 INTEGRATED CARE

Working in partnership we will provide a new integrated approach to care for people with long term conditions ensuring improved continuity, services which keep people well and out of hospital and care closer to home whenever possible.

In the UK, 15% of the entire working age population have a chronic illness or disability, termed a long term condition (LTC) and there are a growing number of people who suffer with more than one LTC. People who are diagnosed make up 31% of the population but account for 52% of GP appointments and 65% of outpatients appointments. There is therefore, a fundamental need to change the way services are delivered in order to provide a more holistic and integrated approach that can enable rapid diagnosis of those developing a LTC and care planning along a patient-centred pathway to ensure the best possible health outcomes.

We will continue to deliver and transform our clinical services within the context of the vision agreed by our local health economy under RCRH. A key element of this will be to work in partnership with our primary care, social care and community colleagues, and others, to develop and implement care pathways for people with LTCs that enhance self-care with support and ongoing monitoring close to people's homes from health and social care professionals in primary, social and community care. People with LTCs require rapid, accessible and credible alternatives to hospital admission for significant exacerbations of their condition and we will work with primary care, community and social care partners to deliver such alternatives.

The aspiration of our local health economy is to develop an integrated support model based on local services to fully meet identified health population needs. This vision of integrated care requires a major step change in service provision across the health economy through service redesign and with a re-balancing of capacity to reflect a greater focus on delivering care in community and primary care settings and services in acute hospital settings operating at maximum productivity. We will work with local partners in delivering opportunities resulting from the Better Care Fund.

Our lead clinicians have worked with clinical colleagues from primary care and commissioners in developing the RCRH vision, in identifying the high level service model required to deliver this vision and redesigning a number of care pathways. The CCG has confirmed its commitment to RCRH and has identified the opportunity to accelerate implementation of redesigned care pathways.

The implications of this vision for our services can be summarised as:

- A shift in provision of outpatient care from consultant based services in acute hospital settings to care delivered by other health care professionals in community settings and primary care with direct access to secondary care expertise. (described in elective care)
- A reduction in emergency admissions for people with long term conditions and in the average length of stay in the acute hospital setting and an increase in our intermediate care beds.
- A growth in our community services**.**

4.3.1 Intermediate Care Beds

To support the reduced acute inpatient care and bed capacity we will develop our intermediate care bed capacity and community services delivered in people's own homes.

We will run a new style of intermediate care, building on the model currently developed on Henderson ward in Rowley Regis Hospital with a focus on reablement so that as many people as possible are able to return to their usual place of residence following a hospital admission or a step up from home to one of these beds instead of an acute hospital admission. This new model of care will also deliver a reduced length of stay in intermediate care beds to an average of 17.01 days.

Once Midland Met opens we will provide intermediate care beds in the following locations:

- Rowley Regis Hospital – 38 beds
- STC – 45 beds
- Sheldon Block - 45 beds
- Leasowes – 20 beds

4.3.2 Community Provision in People's Own Homes

We will also develop and increase our community service provision for the Sandwell population in people's own homes as an alternative to admission to an acute or intermediate care bed. Again we will work with colleagues in primary care, social services and other community providers (particularly in Birmingham) to develop other services. We will also support our primary care colleagues as they develop their referral centres and risk stratification approach to the management of patients with long term conditions so that more patients can be cared for safely and appropriately within primary care and closer to home. In doing this we will build on our early supported discharge team model (for stroke), our integrated care community service (I-Cares) and early work with primary care teams on virtual wards. The virtual ward model will become the default position for all long term conditions management and will include primary care, community, consultants and urgent care staff to avoid more admissions.

Our ambition includes expanding the coverage of these services to a wider proportion of our local population in order to facilitate improved pathways and in time to provide the majority of community services for this population.

Workforce planning implications:

- Routine 7 day and extended hours working – community teams
- 24/7 on call/on-site service for key functions
- New Roles – extended roles for nurses and therapists e.g. enhanced assessment skills, independent prescribing, integrated working/shared competencies between therapists and nurses as far as is sensible, enhanced band 3 and 4 roles with appropriate training
- New ways of working – greater integrated working with primary care and social care as well as acute, change in skill mix more band 4s (with agreed enhanced training methodology)
- Integrated staffing where appropriate with shared competences based in locality teams
- Therapists and nurses with advanced assessment skills to request and review diagnostic tests
- Physiotherapy Independent Prescribers in key clinical areas to include stroke, neurology, respiratory and musculoskeletal

- More nurse non-medical prescribers
- Case Managers for LTC
- 30-40% more specialist therapy staff to provide stroke and complex neurology for the rehabilitation delivery including acute/community/Early Supported Discharge.

4.4 HIGHLY SPECIALISED SERVICES

Our specialist services will remain at the leading edge of clinical innovation.

We deliver a range of specialist services which have a regional and national reputation and are known for their innovation in clinical care and clinical outcomes. They take referrals from outside of our local population and are underpinned by strong clinical leadership, governance and research. They contribute to our delivery of safe, high quality care and to the recruitment and retention of excellent clinical staff both within these services but also more widely within our Trust. As such they support our strategic objectives of Safe, High Quality Care and being an Engaged, Effective Organisation. In summary our specialist services are:

	Current Service	**Future Development**
Gynaecology Oncology	We provide Gynaecology Oncology services for the West Midlands and for some procedures a wider population.	We will continue to develop our expertise in advanced radical surgery receiving referrals from other specialist Gynae-oncology centres. We aim to be recognised as a Supra-Regional Centre. Inpatient provision will be in MMH but outpatient and day case provision based in BTC.
Ophthalmology	We provide specialist Ophthalmology for adults and children. Users of our services come from a catchment that is significantly wider than the Birmingham and Black Country boundary. We provide the regional emergency Vitro Retinal service.	We will promote our eight sub-specialities. Our children's services and some adult services are part of the specialist commissioned portfolio. BMEC will remain the main base for Ophthalmology with a small inpatient provision in Midland Met.
Behçet's Syndrome Centre	We are one of three designated national centres. We provide the service in partnership with specialists based at University of Birmingham Hospitals NHS Foundation Trust.	The Centre was established in 2012/13 and will continue to embed and develop the service. The Centre will remain in Sheldon Block/BMEC post Midland Met opening
Sickle Cell & Thalassaemia Service	We are a specialist adult haemoglobinopathy unit caring for the Birmingham patients & receiving national referrals. We train health professionals at a regional level.	We will develop the service further as a regional centre and strengthen the transition of young people to adult services. We aim to offer a 'one stop' high quality service to adults with major haemoglobin disorders. We will continue to widen the range of training opportunities. Midland Met will become the main base for the service.

Cardiology	We have a well established Cardiovascular Research Department. We undertake a broad range of clinical and laboratory based research and as a consequence we are an early implementer of treatments. We have strong links with the University of Birmingham.	We will continue to build on our regional and national reputation for research. Our inpatient and interventional service will be based in Midland Met but outpatients will be delivered in our Community Facilities. In 2015/16 (ahead of Midland Met opening) we intended to consolidate our Interventional Cardiology service and CCU on one site at City Hospital.

We will develop these services further including the academic, research and education elements. In delivering these Specialist Services we recognise the importance of partnership working with other acute providers, clinical networks and commissioners to ensure an integrated approach to care for patients as they move between services along a care pathway.

In addition a number of our diagnostic services have a regional or national reputation and provide services to other Trusts. These include Radio-pharmacy, Neurophysiology and Toxicology. We will support the further development of these.

4.5 MATERNITY AND CHILDREN'S SERVICES

We will continue to deliver a wide range of services to women and children. Many of these will follow the pathways described above.

4.5.1 Children's Services

Children, young people and their families have specific needs and requirements that are quite separate to those of adults and so we will provide services for children from designated facilities by staff trained and experienced in caring for children. Our paediatric team will also have an overview of services for children in areas throughout Midland Met .

Children's Inpatient Services

Within Midland Met there will be an integrated children's inpatient unit (with 50 beds) accommodating all children requiring specialist assessment and admission (apart from level 3 critical care or neonatal care) and 6 day case spaces. The staff within the Children's Unit will provide a safe, family centred environment for the child and their family. Children, young people and their families will be cared for by appropriately registered and/or experienced staff who have the skills and knowledge to meet their specific needs in a sensitive, efficient manner. Our children's inpatient service will be supported by Paediatric consultant on site presence 12 hours a day in line with national policy.

The patient flows will be:

- All children and adolescents requiring emergency specialist assessment or admission (apart from those requiring critical care) will be assessed in the Paediatric Assessment Unit and then if required admitted to a collocated inpatient bed. These children will arrive via the Emergency Department or directly as a result of a GP or children's community nurse referral, self referral against an agreed pathway (for children with long term conditions) or referral from a specialist outpatient appointment.

- Children admitted for elective care will be admitted directly to the children's inpatient beds.

- There will be a day case area within the children's inpatient unit for medical or surgical day cases.

- There will also be a dedicated adolescent area (for up to the age of 18 years) within the Unit. Adolescents between their 16th and 18th birthdays who are not working (i.e. are in full time education) being admitted under a speciality other than paediatrics will be offered a choice of a bed on an adult ward or within the adolescent area.

- The planned occupancy for the children's inpatient unit is 75% to accommodate the usual seasonal variations seen in the admission of children.

With regard to services for young people going through the transition between childrens' and adult services, i.e. from circa 16 years to 23 years and typically young people who have long term conditions and/or conditions requiring regular inpatient admission the proposed service model is:

- Admission to a single room on a generic adult ward with the appropriate speciality beds. Apart from adolescents between their 16th and 18th birthdays who are not working (i.e. in full time education) and choose to be admitted to the adolescent area of the children's inpatient unit (as above).
- Dedicated nursing staff from the adolescent unit will provide outreach support to these young people admitted to an adult generic ward.
- These young people will receive outpatient care in joint clinics (held by a paediatrician and the relevant adult specialist) in either the children's outpatient department or relevant adult outpatient area in dedicated time slots.

Children's Outpatient Services

Paediatric outpatient clinics will be held in BTC and STC in dedicated facilities. There will also be a dedicated children's outpatient department in Midland Met for more complex outpatient clinics (e.g. allergy challenges) and those requiring a multi-specialty team.

Community Children's Services

We will continue to provide a community children's service to Sandwell residents. Community Children's services are provided within a prevention/intervention continuum with the concept of a tiered model of service provision.

These services include:

- children therapies,
- health visiting,
- safeguarding service for the Trust
- paediatric acute community team and
- family nurse partnerships.

Workforce planning implications:

- development of a safeguarding children's department and infrastructure
- maintaining Health Visitor workforce critical mass (including trainees) to reduce caseloads

- develop an integrated workforce plan and review duplication of work to maximise outcomes and realise benefits
- increased on site cover out of hours by consultants in line with Facing the Future RCPCH standards
- work more collaboratively with adjoining Trusts, social care and other agencies to develop robust child protection rota
- dealing with children living beyond health complexities in the home and being managed within the normal streams of health and social care needs for daily living.

4.5.2 Neonatal Services

The aim of the neonatal service is to reduce infant morbidity and mortality and to maximise long-term health and well-being through the provision of safe research based care ensuring that babies admitted to the neonatal unit receive appropriate levels of care which is delivered in line with national (BAPM/DOH) and local (SWMNN) standards of care. An additional aim is to give continuous encouragement, support and education to parents to enable babies to reach optimum health and well being. This is achieved via a specialist team that provides support to babies and families in the antenatal period, immediately after delivery and in the post natal period through liaison with the obstetric service, care on the neonatal unit, on an outpatient basis and via a community liaison service.

We will continue to provide a designated (by SWMNN) level 2 neonatal service caring for babies from 26 weeks gestation. The neonatal unit within Midland Met will have 36 cots/incubators comprising of intensive care, high dependency and special care cots and transitional care rooms. Babies will be nursed in the type of cot/incubator most appropriate for the level of care required.

Babies will primarily be admitted to the neonatal unit from the delivery suite with an immediate adjacency being essential to ensure rapid and easy admission and enable neonatal staff to attend the delivery suite to assess and treat babies immediately after delivery. Some babies will be transferred from the postnatal beds on the generic inpatient ward or from other hospitals.

Workforce planning implications:

- A detailed staffing rota has been developed, based on discussions with Clinical Leaders for Midland Met. This took account of the latest recommendations from professional/regulatory bodies (British Association Perinatal Medicine - BAPM) on staffing ratios for the care of Neo-Nates, with a long term view of achieving recommended BAPM staffing levels.
- We currently employ a number of Neonatal Advanced Nurse Practitioners and it is anticipated that the requirement for this role will increase in the future to maintain compliance with BAPM standards and to undertake tasks currently performed by junior doctors

4.5.3 Maternity Services

Maternity services will provide safe, individualised evidence based maternity care to women and their babies in a clean woman friendly environment, while at all times treating women as individuals, respecting their privacy, dignity, culture and religious beliefs. The needs of the family will also be considered and birth at this Trust will be celebrated as a family event. We have one of the highest normal birth rates and 'normalisation' of birth is led by a consultant midwife.

Antenatal
Routine midwifery led clinics will be held in community locations including STC. All high risk consultant led antenatal clinics will be held in an antenatal clinic department in Midland Met. This will include ultrasound facilities. Women will be assessed as low or high risk with low risk women being booked for a midwifery led birth in either the Birthing Suite at Midland Met or the Halcyon Birth Centre or if they choose and clinically appropriate a home birth. This risk assessment is repeated throughout a woman's pregnancy and ensures the birth is booked to the most appropriate place.

Community Midwifery
We will continue to provide community midwifery services to the resident population of Sandwell and West Birmingham even if women then choose to deliver their babies in another Trust. We will continue the work with the CCG to review and reduce community midwifery caseloads in line with national guidance. Our community midwifery team will continue to include and develop a number of specialist roles to reflect the needs of our catchment population.

Delivery Suite
Women will arrive in the delivery suite in Midland Met, ambulant from home, from antenatal clinic, antenatal ward or day assessment service or be brought in by ambulance. Key elements of the patient flow will be:

- An initial assessment of all women arriving on the delivery suite. This may result in discharge home, admission to a maternity bed or admission to one of the areas below in the delivery suite.
- Mothers with straightforward pregnancies who wish to labour utilising active birth and minimal interventions in home life surroundings will receive care in a midwifery led birth centre (with 6 birthing rooms).
- Mothers with complex pregnancies will receive care in our high risk delivery rooms but may also require admission to the induction of labour room, a high dependency room (2) or bereavement suite (2 rooms)
- There will be two dedicated operating theatres for women who require caesarean sections or other birth related surgery.

Maternity Wards
Within the Midland Met there will be 60 maternity inpatient beds accommodated across 2 generic ward templates running as one unit (including 4 HDU beds in Delivery Suite). In addition there be a transfer lounge for women due to be discharged, with 6 spaces that could be flexed to 4 beds in peak demand . There will also be an Antenatal Day and Foetal Medicine Assessment Unit with 6 spaces.

Workforce planning implications:

- There will be a minimum of 96 hour onsite consultant Obstetric cover and extended on site consultant obstetric anaesthetist presence.
- Ongoing review of community midwifery caseloads to meet national requirements.
- Possible increase in Consultant midwife role and specialist midwives becoming increasingly competent in dealing with physical and mental health issues of the service user e.g. depression, obesity, hypertension and addressing the challenges of the increasing diversity needs of service users.

5. DELIVERY OF THE CLINICAL SERVICE MODEL

Our clinical services are organised and managed in 7 Clinical Groups each overseen by a triumvirate management team of Clinical Group Director, Clinical Group Director of Operations and Clinical Group Director of Nursing (or equivalent). These are:

- Medicine and Emergency Care
- Surgery A
- Surgery B
- Women and Children's Services
- Imaging
- Pathology
- Adult Community and Therapy Services.

Development of specialty specific strategies and action plans to deliver the future clinical service model will be led by our Clinical Groups and monitored through our integrated change plan. This will also encompass delivery of our cross cutting enablers (including clinical information systems and electronic patient records) with these being integral and essential to the delivery of our clinical service model.

This paper has not attempted to describe the detailed activity and capacity plans nor estates transformation that also underpin the clinical service model as these are presented in other papers.

DOCUMENT HISTORY

Document Location:

Document Location:

Version	Date	Location
Version 4.1	Jan 2016	Will be included in the 2016 published FBC for Midland Met as an Appendix
Version 4	Apr 2015	Will be included in the 2015 ABC as an Appendix
Version 3	Feb 2014	Will be included in the 2014 OBC Update pre Procurement as an Appendix
Version 2	Sept 2010	in OBC Update Version 4.1 as Appendix
Version 1	Dec 2008	in OBC Version 4.1 as Appendix 5c

Revision History:

Version	Date	Author	Summary of Changes
V4.1	Jan 16	Jayne Dunn Deputy COO - Transformation	Service model diagram updated – change in STC Urgent Care location & colour to show Trust provided service.
V4 Draft 4	27/4/15	Jayne Dunn Deputy COO - Transformation	Updated to as a result of consistency check with final draft of ABC and comments from Medical Director – Roger Stedman
V4 Draft 3	24/4/15	Jayne Dunn Deputy COO - Transformation	Updated to include comments from workforce planning team – Brenda Jumi
V4 Draft 2	16/4/15	Jayne Dunn Deputy COO - Transformation	Updated to include comments from Dr S. Clare – clinical lead for RCRH
V4 Draft 1	25/4/15	Jayne Dunn Deputy COO - Transformation	Updated for ABC
V3	10/3/14	Jayne Dunn Redesign Director Right Care Right Here	Version used in the OBC Update version 4.7 to ensure congruency with OBC
V3 draft 1	14/2/14	Jayne Dunn Redesign Director Right Care Right Here	Reformatted & updated to reflect: • Changes to Trust clinical service portfolio including provision of Community Services for Sandwell residents • MMH Architecture Design Refresh • Version 5.7 b A&C model and in preparation for the 2014 updated OBC
V2	8/9/10	Jayne Dunn Redesign Director Right Care Right Here	Version used in the OBC Update
V2 draft 2	8/9/10	Jayne Dunn Redesign Director Right Care Right Here	Updated to take account of changes from further validation of activity and capacity data in line with the sensitivity analysis and comments from SHA review
V2 draft 1	29/7/10	Jayne Dunn Redesign Director Right Care Right Here	Move to Version 2 following value engineering work. Draft 1 – amendments made to reflect output of RCRH Programme Review and New Acute Hospital Project Value Engineering work
Version 1	Dec 2008	Jayne Dunn 2010 Implementation Director	Version used in the OBC
0.02	11/12/08	Jayne Dunn 2010 Implementation Director	Second draft to take account of comments from NAH Clinical Board and Core Team
0.01	6/11/08	Jayne Dunn Implementation	First draft to capture what is already agreed for the Towards 2010 Programme (model of care and activity

		Director with Gayna Deakin Deputy Director of Workforce	model), the new hospital operational policies, the functional brief and the top down workforce projections.

APPENDIX 6a – COST IMPROVEMENT PROGRAMME

Cost Improvement Plan (CIP) April 2015 – March 2020

1. Track record and approach:

1.1 The Trust has a track record of delivering sound finances as demonstrated through 9 consecutive years of reported surplus and delivery of 2014/15 ahead of plan. This reflects resolute commitments at Board, executive and clinical group level. It also reflects a strong architecture of support to achieve difficult changes, and to work across teams to deliver transformational savings.

1.2 During the Outline Business Case, the Trust Development Authority undertook a review of our project management and programme management model. This concluded that we had in place the right processes to support delivery, identify and escalate risk. Our central PMO, which reflects Monitor guidance, is supported by a multi-professional Change Team. That change team combines staff with significant experience of our organisation with external insourced consultants experienced in CIP execution.

2. From transactional to transformational change:

2.1 In the next five years, in common with the NHS as a whole, the scale of challenge needed by the Trust deepens further. Whilst it may appear that the investments sought by the Trust are the reason for the challenge, in reality the opposite is the case. It is not feasible to conceive of success in meeting our obligations without investments in workforce reform, IT infrastructure and clinical configuration. Since OBC, the Trust has made material strides in respect of workforce reform and IT infrastructure.

2.2 We have completed the first stage of changes to our wte and successfully delivered a sharp change in agency expenditure. Control over our workforce levers is being demonstrated, and from April 2015 we bring together into one team transactional HR, workforce planning, communications and training into a single Organisational Development directorate. A Board level director has been appointed to lead this team, with experience in an organisation, Birmingham City Council, who have seen a massive workforce reshaping in recent years.

2.3 During April 2015, we complete the restructure of the IT department, under a director who joined the Trust in September 2014. This will put in place the right structure and bandwidth to be able to implement the ambitious technology agenda that the Trust has. Consistent with the end of the national IT programme, the organisation is well advanced with its EPR business case and implementation plans. The IT OBC passed internal approvals in April 2015 and is now with the Trust Development Authority. Funds for this development were included explicitly in the Midland Met OBC, and are retained in the ABC. The distributed service model required by our integrated care agenda depends crucially on technology, including better use of mobile technology by community based staff. The Trust is a pilot site for this work with our community IT provider TPP. We are part of the Your Health Connected programme across Birmingham and the Black Country which is currently in live test phase to create a single patient record.

2.4 In 2014-2015, the Trust also made extensive progress with our service reconfiguration agenda, demonstrating once again our capability to achieve site change. We have moved services into Rowley Regis hospital, as well as extending services in both Leasowes and Sheldon. We are currently in the final stages of public engagement to reconfigure our surgical and cardiac acute services between sites. Our prior work on stroke is showing distinctive service benefits as the team are now ranked in the top 8% in the UK based on sentinel audit data.

2.5 These are important indicators of the current capability to deliver our forward agenda. We have the PMO rigour which has been evidenced in past delivery, now matched by clear leadership for workforce and IT, but we retain the capacity to see our traditional reconfiguration strength bring benefit. It is the ability to succeed on all these fronts which underpins our forward look. Whilst the per annum CIP challenge in 2015-2020 is in line with prior delivery, the cumulative effect is daunting. Increasingly we will not see similar scales of change in every service, but will need to make deeper more transformational changes in whole service and pathways.

2.6 The development of joint work with other agencies is crucial to that. The Trust works well with the CCG and Local Authorities. We have strong partnerships with a number of GP groupings within our

system, including the vanguard site. And we have now developed an alliance across local acute providers – ourselves, Walsall and Dudley Group of Hospitals acting together. This provides a foreseeable basis for efficiency in non-clinical functions, but also joint working in specialist and sub-specialist care models. A population of over 1 million people is covered by the partnership. In the latter years of our financial plans, this is a relevant consideration.

3. Delivery of 2014/15 position – success since OBC

3.1 The Trust exceeded its overall planned I&E surplus for 2014/15 and within that achieved its planned cost reduction target of £20.6m, 4.5% of outturn operating expenditure. Some £8.7m of the total savings arose from non-recurrent benefits including release of balance sheet flexibility of £3.2m. The full year effect of savings identified in 2014/15 exceeds the £20.6m requirement going forward. The PYE/FYE differences reflect the successful work in Q1 and Q2 to remedy some control issues in developing CIP. With additional Board oversight, and some external consultancy input, we addressed those issues. This provides a strong basis for forward action.

2014/15 CIP Achievement	CIP £000s
Clinical services non-pay efficiencies	874
Community Service Efficiency	318
Corporate Services | Facilities	4,863
Diagnostics	1,007
External marketing of clinical services	189
Medical Workforce Efficiency	1,146
Other schemes covered by FYE of in year schemes	5,001
Outpatient Efficiency	65
Patient Flow | Bed Day Utilisation	983
Procurement	647
SLR Improvement	373
Strategic IT Enablement	74
Theatre Productivity	78
Use of non-recurrent flexibilities	3,175
Workforce Efficiency	1,811
Total CIP	**20,604**

3.2 Key changes within the year have included:

- **Control of agency expenditure:**
  Since autumn 2014, the organisation has gripped its spend. HCA agency has fallen sharply as new Trust-wide models for supporting patients needing additional, 'special' care have been implemented consistently. Meanwhile, a preference for bank over agency use in our wards and community teams have shown financial, as well as other, benefits. The key challenge in 2015-16 is to apply those lessons to trainee medical and consultant rotas. This work will be led by the COO.
- **Further rationalisation of medicines expenditure:**
  The Trust has a well-established control model, with good clinical support, for assessing new medicines and addressing compliance issues at individual and directorate level. This underpins confidence in the future growth assumptions within the wider ABC.
- **Addressing best value in non-pay spend:**
  We have made further headway in tackling non-pay costs within particularly estates, and parts of facilities. This reflects local control improvements, as well as the drive of the Board's FIC to reduce tender waivers and secure year on year improvements in cost, including for outsourced maintenance contracts.
- **Tackling corporate performance in central functions:**

Significant progress has been made in addressing spend and control issues in clinical functions where budgets are held centrally, for example health records, postage, interpreting and tissue viability expenditure.

- **Improvements in the management of premium costs for WLI:**
  Although there is a major remaining scale of opportunity, 14-15 has seen us establish central controls which are effective in identifying, pre-approving, and substituting for premium costs. Spend has reduced in qtrs. 3 and 4, and the Board agreed capacity plan for 15-16 provides a basis for forward confidence.

4. Scale of opportunity

4.1 Consistent with our approach in prior years, 2014-15 saw the Trust embark on an analysis exercise aimed at ensuring that the two-three year forward look at sufficient efficiency opportunities to meet the long term requirements of our approved ten year Long Term Financial Model. This helped us to devise the following approach to where we would target savings:

	2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	Total £m
Pay Themes						
Assistant Grades	1.81	1.28	1.12	1.53	0.96	6.70
Clinical Restructuring	4.09	6.86	6.47	7.27	4.51	29.19
Mgt delayering & restructuring	3.44	0.20	0.17	0.24	0.15	4.19
Non-consultant doctors	0.21	0.22	0.20	0.27	0.17	1.07
Other premium payments	0.78	0.74	0.43	0.59	0.37	2.92
Scheduling	0.67	0.00	0.00	0.01	0.00	0.68
Technology	0.62	0.62	0.54	0.70	0.44	2.92
Admin Restructure	1.18	2.33	2.12	1.23	1.57	8.44
Staff management & rostering	1.54	1.71	1.13	0.85	0.84	6.07
Non Clinical Restructure	1.19	1.07	0.97	0.97	0.61	4.81
Medical restructuring	0.52	0.80	0.80	0.07	0.04	2.23
Pay Total	*16.05*	*15.82*	*13.96*	*13.73*	*9.66*	*69.23*
Non Pay Themes						
Non pay – clinical reductions	2.17	0.51	1.50	0.82	0.86	5.87
Non pay - Drugs	0.32	0.17	0.50	0.27	0.29	1.55
Non pay – non clinical reductions	0.70	0.37	1.09	0.60	0.63	3.39
Procurement - clinical	0.56	0.47	1.37	0.76	0.79	3.95
Procurement – non clinical	0.29	0.15	0.44	0.24	0.26	1.39
Non Pay Total	*4.04*	*1.68*	*4.90*	*2.69*	*2.82*	*16.14*
RCRH						
Medical & surgical bed reductions	1.32	1.80	2.25	1.55	0.00	6.91
Outpatients	0.38	0.42	0.04	0.01	0.00	0.85
Theatre utilisation	0.10	0.00	0.00	0.34	1.23	1.66
A&E bed removal	0.00	0.00	0.00	0.00	0.31	0.31
Review of On Call	0.00	0.00	0.00	0.00	1.93	1.93
Review of Junior Medical Bandings	0.00	0.62	0.62	0.80	0.66	2.70
Reduce Premium Rate Working	0.00	0.12	0.13	0.17	0.17	0.58
Clinical Transformation Total	*1.80*	*2.96*	*3.03*	*2.87*	*4.29*	*14.95*
Other						
Site based change	0.00	0.00	0.00	5.17	3.58	8.75
EPR	0.00	0.00	0.49	0.74	1.23	2.46
Other Total	*0.00*	*0.00*	*0.49*	*5.91*	*4.81*	*11.21*
Non Commissioner Income						
Services Provided to NHS bodies	0.44	0.20	0.20	0.20	0.20	1.24
Services Provided to Non NHS bodies	0.02	0.00	0.00	0.00	0.00	0.02
Patient Related Income	0.07	0.00	0.00	0.00	0.00	0.07
Non Patient Related Income	0.01	0.00	0.00	0.00	0.00	0.01
Non Commissioner Income Total	*0.54*	*0.20*	*0.20*	*0.20*	*0.20*	*1.34*
Commissioner Income						
Service Development	0.62	0.00	0.00	0.00	0.00	0.62
Commissioner Income Total	*0.62*	*0.00*	*0.00*	*0.00*	0.00	*0.62*
Grand Total	23.05	20.67	22.58	25.41	21.78	113.48

4.2 We have focused intensively since OBC on our long term workforce model, which is outlined elsewhere in this document. In addition we have looked at operational and clinical performance opportunities focused on the next two years. The results of that work are shown below:

The Tartan Rug – SWBH is an average organisation

Core Indicators	Women's & Child Health			Medicine & Emergency Care			Surgery A				Surgery B	
	Gynaecology, Gynaeoncology GUM	Maternity & Perinatal Medicine	Paediatrics	Emergency & Acute Medicine	Admitted Care	Scheduled Care / Long term	General, Breast & Plastics	Trauma & Orthopaedics	Theatres, Vascular & Urology	Anaesthetics & Critical Care	Ophthalmology	ENT and Oral Surgery
Average Length of Stay	1.2	2.6	1.5	4.7	3.8	1.8	1.4	3.8	1.2	0.1	0.3	0.6
Risk Adjusted Length of Stay Index 2013	75	156	114	106	105	92	81	97	63	86	77	81
Day Case Rate	55%	34%	54%	58%	80%	100%	85%	60%	70%	100%	94%	81.5%
Basket of 25 Day Case Rate	86%	-	-	0%	20%	0%	79%	81%	56%	-	98%	52%
Readmissions 28 days	12%	3%	8%	14%	11%	8%	8%	6%	6%	1.5%	2%	3%
Outpatient DNA Rate	10%	8%	15%	16%	11%	11%	9%	11%	10%	12%	12%	15%
Outpatient New to Follow-up Ratio	1:1.0	1:1.1	1:2.7	1:2.5	1:2.5	1:3.5	1:1.8	1:1.4	1:1.6	1:0.91	1:2.9	1:1.0
Data Quality	95.4	97.5	91.3	94.8	94.5	97.3	96.4	96.3	97.9	99.0	98.6	97.3
Complication Rate Attributed	2%	0.04%	0.02%	0.21%	0.59%	0.22%	2.4%	1.6%	0.96%	0%	0.76%	1.3%
Complication Rate Treated	4%	0.18%	0.31%	1.10%	1.5%	0.62%	4.7%	4.7%	1.5%	0.25%	2.1%	1.6%
Misadventure Rate	0.41%	0%	0.01%	0.01%	0.03%	0.03%	0.07%	0%	0.26%	0%	0.37%	0.14%
Mortality	0.26%	0.16%	0.05%	3.27%	2.82%	2.4%	0.65%	0.6%	0.1%	0.6%	0.02%	0.12%
Risk Adjusted Mortality Index 2013	57	0	17	92	81	87	91	68	26	121	54	67
SHMI - In-Hospital 2013	40	57	48	71	73	75	69	51	12	337	46	36

The Tartan Rug summarises from CHKS reports the Trust's overall performance (relative to peers) against 14 core indicators.

It is generally shows an average performance (58% of areas within the inter-quartile range) with some areas of top quartile performance and a small number of areas of performance within top 5%.

Standing out as below peer averages are:

- 28 day readmission rates
- Outpatient DNA rate

Key	Score
Lower 5%	11%
Lower Quartile	11%
Inter Quartile Range	58%
Upper Quartile	11%
Upper 5%	8%
No Data	2%

CAPITA CHKS

Commercial in confidence

5

4.3 The Trust was supported in this work by KMT and Capita. And the work reflects CHKS comparison against an agreed high performing peer group, used by the Trust in other work, for example our quality account benchmarking exercises.

4.4 The challenge for the Trust is to convert average performance into excellent delivery. That operational conclusion is consistent with our overall financial self-analysis, and for that matter our quality analysis, where we do well, but not outstandingly well. As such there is forward synergy between our operational, quality and financial forward plans, where we have room for improvement. Other parts of the ABC set out the efficiency indices, workforce plans, and profitability requirements of our case.

5. Long term savings scale and scope

5.1 The 10 year LTFM sets out where savings will be made.

CIP Categories	2015/16	2016/17	2017/18	2018/19	2019/20
Pay	14.9	13.3	15.0	13.4	11.8
Non Pay	4.9	4.2	3.7	2.6	2.1
RCRH	1.2	3.0	3.1	3.3	4.3
Site based change				5.2	3.6
Total	**21.0**	**20.5**	**21.9**	**24.5**	**21.7**

5.2 The translation of these aims into our 39 directorates, and 8 Groups, takes place on a two yearly cycle. The Board and FIC oversee the proportional allocations. The reformed emphasis on directorate-level performance within the Trust over the last eighteen months prepares the way for Groups to allocate differential local targets, where historically a standard percentage gain would have been expected organisation wide. As a general rule, and certainly through into 2016-2017, the 'ask' of corporate functions is higher than the frontline requirement. From October 2015, we introduce a service-line recharging regime into the Trust for the first time. This is intended to make inroads in 2016-2017 into demand side reform for services such as pathology, imaging and patient transport. This refresh of our approach is consistent with the challenge looking forward in which we need to achieve major cross cutting service change.

5.3 The pay challenge is significant. A 17% change vs. 2014 base-line is required, equivalent on average cost, to a major shift in our pay costs. Historically, we have capped our pay costs, but not been able to cut them. Our future success depends on being able to do so. That is why in October 2014 we commenced our Safe and Sound workforce change project, designed to tackle our 14-16 obligations. The final stage of that commences consultation on April 30 2015. Encouragingly, the work to date has achieved three major goals, consistent with our long term vision:

- Reduced our pay spend in corporate functions and key clinical services
- Focused overwhelming attention on people management, in areas like appraisal, sickness and training
- Begun to tackle our historic dependence on agency, bank and overtime costs

5.4 The non-pay challenge too is a very sizeable task. Medicines costs are already well controlled. Estate costs have been the focus of work during 2014-15. It is our goods and services costs that form the basis for work in the next two years. We have a well-developed Oracle system in place, which, other Trusts have found, is a strong basis for both control and reporting. We are completing a review, led by our Finance Director, of the procurement function, including our historic purchasing support arrangements. This is intended during 15-16 to allow us to set a clear course for contract coverage vs. spend (where we want rapidly to achieve 85%+), volume rationalisation (where our estate gives scope for centrally held stores), and increased local purchasing driving price advantage. In short order there remain opportunities where local decision making within the Trust can be reduced and standardised, as all teams begin to prepare for a single site acute model and accordingly care pathways are reviewed and standardised too.

5.5 Income change is very modest within our forward look, and typically reflects new products within extant markets. We have in place both a tender response team for local authority contracting and a primary care liaison function to help to work directly with a very devolved GP purchasing landscape in SWB. We have also completed an audit of all provider to provider contracts, both where we are supplier and commissioner, and are working through a schedule of preparation for change in those

areas. Our pathology function in particular has led the way in gaining income from local partners, alongside our occupational health service. Both through joint work with Dudley and Walsall and through commercial ventures, we expect to gain some leverage in selling corporate functions and clinical specialist functions to other providers in the West Midlands.

5.6 Finally, we intend to complete the reform of our own corporate services. This is well reflected in our 2015-2016 Board approved Annual Plan. This will see us set delivery benchmarks for corporate functions that serve the Trust, drawn explicitly from what we believe an outsourcing market and peer best practice (upper decile) can offer. Our instinct is always to retain provision in house, where we can meet stretching standards whilst maintaining local employment and the flexibility of in house synergies. But during the year ahead, we will, for instance, migrate to single help desk functions, as well as a single business intelligence front end.

6. 2015-2016 – our extant plan

6.1 We have a well-developed plan for the coming twelve months. The key components of change are:

1. Implementing in full our capacity plan:

   This plan tracks efficiencies in outpatients, theatres and use of beds, as well as having a support component (which is well advanced) in radiology. The modelling tools used are taken from the DH's Intensive Support Team. This work demonstrates the specialty level implementation scope for the broader efficiencies identified above. It illustrates how a standard working year can be applied to theatres to reduce our costs and improve utilisation rates, consistent with further cancelled surgery reductions. During 14-15 we moved many specialties to annualised job plans. Outpatient change is overseen through a programme board chaired by the Chief Executive. Changes in DNA rates, arising from our implementation this summer of partial booking and improved text reminders with our introduction of better data front end collection through deploying book-in kiosks, will be crucial to the ambulatory change work. Our bed base changes flow from three actions – moving to a comprehensive acute medicine front end, which we implemented during 13-14; site reconfiguration in surgery, which takes place in August 2015; and reducing sharply delayed transfers of care. The work sees us reduce zero LOS admissions, become more consistent in our application of Estimated Dates of Discharge, and tackle extended stays through addressing DTOCs consistently. The latter work builds on success in Sandwell and seeks to mimic it in Birmingham.

2. Cutting our sickness rates and through that reducing bank and agency usage:

   Of our eight Groups, only one has sickness rates below 4%. Six of seven have seen rises in the last three years in sickness, and surgery has sickness rates above 5%. There is a clear scale of opportunity to reduce sickness and thereby reduce organisational stress and spend. The Board have made public the priority that this represents, and indeed it forms a core part of our CQC inspired Improvement Plan. Our focus in Q1/2 will be on the basics – return to work interviews, referral to stage support once certain attendance thresholds are breached. Our longer term work reflects our investment in line management, our revised appraisal policy which is being implemented presently, and our high profile approach to employee wellbeing, which features prominently in the current work being developed by NHS Employers.

3. A further cut of 300k per month in agency use:

   This mirrors what we achieved in the latter part of 2014-2015. Further gains are needed from tackling hard to recruit to areas of the Trust, like neonates, district nursing and critical care. The controls we deployed remain in effect, and as our recruitment improves will see spend cut. This work, like the wider work in 2 and 4 is scrutinised both by our Workforce and our Quality and Safety Committee.

4. Implementing the final phases of our Safe and Sound workforce programme

We do not aim for any compulsory redundancies, but we do have in place a major redeployment programme. This is intended to reshape our workforce into the long term state that we need. Changes within that programme are detailed elsewhere in the ABC, but the 15-16 heart of the work is ensuring that our workflow changes, consulted upon in October and with a final trail through in April, are actually causing change to happen. And are not simply giving rise to new increases in temporary staffing.

5. Executing controls within non-pay which tackle variation

Building on the Trust's use of Oracle, and reasonable contract coverage, we will further restrict our catalogue, and seek to narrow options held by local managers. These price benefits need to be coupled with greater volume control. That has been successfully done in some areas in 14-15 and the lessons from that work will be rolled out Trust-wide.

In delivering the above we have over 300 individual schemes for delivery in 2015/16. These have been developed with directorates and are monitored through the PMO. We have agreed a review of these will take place with the NTDA in line with their routine scrutiny of annual plans.

We have some mitigation plans in place should they be needed as in 14-15, based on use in early quarters of flexibilities. This reflects the inevitable challenges on execution at scale from month 1. Our full year plan is phased into budgets, with a relatively even distribution from month 5 onwards. We would expect in addition our investment to kick in from that period.

6.2 The governance model for 2015-2016 CIP is operationally led. Bi-monthly performance reviews for each Clinical Group with the full executive take place, with an escalation system in place to the Chief Executive and Board. An electronic system (TPRS) to track delivery is well embedded and produces weekly milestone reports. "Stand-up" scheme reviews are in place across the PMO, operations and finance.

6.3 Our emphasis remains on directorate and Group I&E balance. Teams not able to execute those disciplines face additional scrutiny, support, and some differences in their ability to operate without executive approval. The intention is to create a series of positive local incentives to meet financial duties. This includes preferential access to investment capital for teams delivering compliance.

7. 2016-17 – our emerging plan

7.1 For the year after this, we have in place some key themes, which will underpin the development of our CIP plan. This is precisely the process used in prior years. We recognise that the challenge steepens in coming years and as such an explicit focus on 16-17 through 15-16 will be reported to the Board's FIC.

7.2 We would expect 16-17 to be based on a series of CIP themes – focused again on pay, non-pay and efficiency. The ten key projects below will generate around 70% of the ask we envisage:

- **Corporate reform**: Implementing changes associated with merged back office functions, including joint work with Dudley and Walsall.
- **Job plan review**: Changes to working practices consistent with achieving no more than an 11 PA contract, and in the overwhelming majority of cases a 10 PA measure.
- **Full implementation of voice technologies**: Reducing administration costs based on implementation during 2015-16 of this procured solution.
- **Achieving bed state expected for 2018 by the end of 2016-17**: This is consistent with a bed trajectory review across RCRH in 2017.
- **Management restructure**: We committed to our current operating structure from 2015 to 2015. We would expect during 2016 to make changes to our functions and tiers.

- **Elimination of agency use beyond A&E**: Notwithstanding continued emergency care pressures, and our spend reduction plans for 15-16, successful work on vacancies and sickness in this year will allow us to implement additional changes in 16-17.
- **Hospital at night**: Work is ongoing presently on the rota changes we would want to implement with Midland Met. A phased introduction of those changes feasible without a single site will take place in 16-17. This is consistent with our recent investment in night nursing.
- **Medicines wastage**: The introduction of medicines security in 2015, allied to our work on bedside lockers, creates opportunity to reduce repeat prescribing and make better use of patient's own medicines. We continue to work to tackle poli-pharmacy issues for older patients.
- **Demand side change**: The introduction of recharging internally creates the chance to change referrer behaviour across labs and test requests, while plans to introduce a fee-based PTS service allow us to look again at our demand side modelling for that cost.
- **Imaging MES**: We will transfer services into a managed supplier contract from early 2016-17. This reflects our decision to hold imaging outside of either PFI, but also our determination to have a single supplier in place as our Sandwell In-Health contract comes to an end.

8. Across 2015 – 2020 – the overall approach

8.1 Consistent with our workforce plans, the largest single changes over the five year period are in pay spend. We expect to see:

- Real terms reductions in our overall establishment, achieving through redeployment and workflow redesign
- Skill mix changes to undertake roles at different grades, implemented through turnover
- Technology substitution e.g. voice recognition or potentially use of robots in pharmacy and portering
- Cross-organisational working, in particular in back office functions, facilitated by our wider acute partnership

8.2 Over the coming two year period we will drive down agency use, turnover, and sickness rates. Together these remain expenditure in excess of £15m per annum. The scale of opportunity is significant.

8.3 Our emphasis on training, the development of existing staff, and an involved engaged workforce is central to this work. The promise to existing, and remaining, employees is critical, as is the offer to new starters. That is why we are working hard to make clear the distinctive qualities of the organisation and the distinctive clarity of our vision and implementation philosophy. With the additional certainty of Midland Met approval, our evident commitment to technology and training, and our good track record in improving patient care, we have a very attractive offer to the local labour market.

8.4 Non-pay spend can be reduced by operating as one Trust, and by ensuring cross team and cross directorate purchasing consistency. As we move to use scanning technologies to track use, we will increasingly be able to work with individual employees on patterns of consumption, and focus hard on tackling unwarranted variation. The clinical leadership model we have in place for medicines will be applied in other areas of purchased spend.

8.5 The year in which we bring Midland Met on line (18-19) will clearly be both financially and operationally challenging. The gradual build-up of the Right Care-Right Here reserve of non-recurrently committed spend in intervening years will provide a cushion not traditionally seen in other schemes. Our estate costs, and some of our clinical efficiencies, can only be achieved through site change, and these provide a strong basis for knowing how we will make the transition to our UP.

8.6 Although from 2015-16 we have in place a resolutely PbR based contract with commissioners, we will retain through RCRH, our tradition of joint work with partners. This will help us as we bring in new currencies for innovations such as paper based clinics, video facilitated outpatients, and increasingly procedure led clinics. Of course, we would expect defrayed and diverted work to be typically among the less complex care that we provide, and in line with national expectations, we would expect our retained average casemix to become more complex than trend. Work to ensure we adequately capture multiple complexity continues as an audit priority.

8.7 Our longer term plans do not rest on significant commercial income streams. With Midland Met we retain the flexibility to commercialise our asset. We have taken tentative steps in that direction on our sites currently, always mindful of the demography of both patients, visitors and staff. Our private practice current state and ambitions are well within extant and foreseeable national policy. More relevantly we would expect to be providing support functions to emerging GP groupings in future, as well as potentially to third sector providers.

8.8 The overall themes are reflected in the table below.

Category	Theme	Schemes
Pay	Assistant grades	Systematic review of all clinical departments and specialist nurses to make optimal use of assistant grades.
	Clinical Restructuring	Review of staffing ratios (excluding medical staff)
	Management delayering & restructuring	Review of management structures to ensure that they are fit for purpose and efficient. Includes review of spans of control, and consolidation of disparate corporate functions
	Non-consultant doctors	Review middle grades against future requirements.
	Other premium payments	Review of need to pay premium payments including waiting list initiatives, overtime, enhancements and on-call
	Scheduling	Improved scheduling to ensure prompt clinic start and finish times and optimal use of theatres
	Technology	Use of technology to improve productivity and reduce waste. Includes: EpR, introduction of robots, automated pharmacy, digital systems for medical secretaries, video conferencing, telehealth and mobile working (particularly in the community)
	Administration Restructure	Review of administration arrangements e.g. medical secretaries.
	Staff management & rostering	Reduction in sickness and absence and use of agency staffing.
	Non clinical restructuring	Review of estates and facilities arrangements
	Medical restructuring	Review of job plans to ensure consistency
Non-pay	Procurement - clinical	Review of clinical procurement expenditure to reduce both unit cost and volume required.
	Procurement – non clinical	Review of non-clinical procurement expenditure to reduce both unit cost and volume required.
	Non pay – non clinical reductions	Productivity improvement in systems and processes resulting in fewer goods being purchased e.g. EpR.
	Non pay – clinical reductions	Reduction in volume of clinical supplies being required through the elimination of waste.
	Non pay - Drugs	Review of drugs usage and cost to reduce waste and unit cost.
RCRH	Med & surgical bed reductions	Ongoing reduction in length of stay, shift to community settings and increasing day case ratio resulting in reduced bed requirement.
	Outpatients	'Year of Outpatients' programme to improve quality and productivity across the Trust.
	Theatre utilisation	Review of theatres to improve throughput per list.
	Reconfiguration to single site	In preparation for moving into MMH some acute services will reconfigure to a single site earlier e.g. emergency surgery
	Review of On Call	Review on call arrangements to reduce duplication.
	Junior Medical Bandings	De-duplication of rotas with move to single site.
	Reduce Premium Rate Working	Review requirement for premium rate working, including through service reconfiguration.
Income	Services Provided to NHS bodies	Development of additional income streams from clinical services e.g. pathology.
	Services Provided to Non NHS bodies	Development of additional income streams to other public sector bodies.
	Patient Related Income	Development of additional income streams from NHS patients and private care
	Service Development	Repatriation
Site based change	Hard & soft FM	Review opportunities for additional efficiencies.

APPENDIX 7a – ECONOMIC APPRAISAL FROM OBC

Sandwell and West Birmingham Hospitals NHS Trust

Midland Metropolitan Hospital Project

Economic Appraisal Undertaken for the OBC Approved in August 2009

28 February 2014

DOCUMENT CONTROL SHEET

VERSION	DATE	COMMENTS
1.0	28/02/2014	Chapters extracted from OBC Approved in August 2009 by A Graham

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 Introduction

1.1.1 The two chapters presented in this document come from Version 2.00 of the OBC which was approved by the Department of Health in August 2009. This approval led to the acquisition of the land at Grove lane through an NHS Compulsory Purchase Order. The Trust now owns this land and has secured vacant possession.

1.1.2 The economic case has been updated in Version 4.6 of the OBC which seeks approval for procurement of the Midland Metropolitan Hospital through the PF2 approach..

2 Development of Options

2.1 Long List

2.1.1 The range of potential options available to the Trust for the future delivery of acute services is considerable, but the options that need to be considered by the Trust are reduced by the decisions of the commissioners as part of the overall models of care envisaged within the RCRH Programme. The service models have discounted the option of not having a local acute hospital and referring all secondary and tertiary care work to other adjacent providers;

2.1.2 The scale of acute facilities required within the area is determined by the level of devolution planned to community and primary care. Given this, the Trust considered 6 potential Options at the long-listing stage:

- Do nothing;
- Do minimum;
- New build / refurbish City Hospital;
- New build / refurbish Sandwell General Hospital;
- Redevelop both City Hospital and Sandwell General Hospital Sites; and
- New build on a brownfield site.

Discounted Options

2.1.3 Initial consideration of the above options discounted the following as not being viable:

Do Nothing

2.1.4 An option to “do nothing”, i.e. maintain the status quo was considered and discounted on the grounds that it does not meet the requirements of the RCRH Programme capacity requirements and is not able to deliver the appropriate models of care. In addition to this, it will not address the backlog maintenance issues associated with the existing estate and does not ensure compliance with statutory standards regarding buildings.

Redevelop both City Hospital and Sandwell General Hospital Sites

2.1.5 This option could be delivered in 2 different ways:

- Redeveloping the existing City Hospital and Sandwell General Hospital sites, without changing the existing service configuration was discounted on the grounds that there is a lack of critical mass to sustain services, particularly with the transfer of services to a community setting under the RCRH Programme, and therefore the option is clinically unsustainable.
- The Option of redeveloping both of the existing City Hospital and Sandwell General Hospital sites was considered to be similar to the Do Minimum Option in terms of the clinical services once completed, but more costly in capital cost terms as it does not focus on retention and refurbishment of the existing estate. It would also involve more disruption and significantly longer timescales than the Do Minimum Option to implement. It was on these grounds that this option was discounted.

2.2 Shortlisted Options

2.2.1 Based on the above consideration, 4 options were shortlisted for detailed development and evaluation, as follows:

Option 1 – Do Minimum

2.2.2 Under this option, both City Hospital and Sandwell General Hospital sites would remain operational. Clinical service configuration would change across the sites changing to ensure sustainability, with non-clinical accommodation remaining unchanged. Sandwell General Hospital would act as the main emergency site, and comprise A&E, medical and surgical emergencies, the main Critical Care Unit and Women's & Children's services. In turn, City Hospital would effectively become an elective site, focussing on medical and surgical planned care, with day surgery and some outpatients.

2.2.3 This disposition of services between the 2 sites would require the minimum capital investment to meet RCRH Programme capacity requirements, whilst minimising risk, and ensuring compliance with statutory standards. It was agreed that this option would be retained for evaluation purposes, and to be used as a benchmark from which to measure the other options to be considered as part of the options appraisal work.

Option 2 – New Build / Refurbish City Hospital Site

2.2.4 The proposal for option 2 incorporates a new 8-storey build adjacent to the BTC (which would be retained in line with the devolved model of care agreed with the PCTs). The Emergency Services Centre at Sandwell General Hospital would remain available for other uses, for example, a Community facility. All other buildings at both the City Hospital and Sandwell General Hospital sites would be demolished. The new development would be undertaken in multiple phases, over a 60-month period. The remaining land on the City and Sandwell Hospital sites not required for NHS purposes will be disposed of for commercial redevelopment.

Option 3 – New Build / Refurbish Sandwell General Hospital Site

2.2.5 Under this option, a new 8-storey building is proposed, fronting Hallam Street. The BTC on the City Hospital site would be retained, with the Emergency Services Centre on the Sandwell General Hospital retained for other purposes, for example, a Community facility. As with option 2, all other buildings on both sites would be demolished. The new development would be undertaken in multiple phases over a 72-month period. The remaining land on the City and Sandwell Hospital sites not required for NHS purposes will be disposed of for commercial redevelopment.

Option 4 – New Build on Grove Lane Site

2.2.6 The option to develop an 8-storey building on the Grove Lane site, involves a 36-month, single phase construction period. As with options 2 and 3, the BTC would be retained on the City Hospital site, and the Emergency Services Centre at Sandwell would be available for alternative healthcare purposes.

2.2.7 Further details on the way in which each of the above options would be delivered and the related site plans are included in the Estates Annex.

2.3 Site Selection Process

2.3.1 In 2005, the RCRH Programme commissioned a piece of work to assist in the site selection process for a new acute hospital and three new community facilities to serve the Sandwell and heart of Birmingham area. Section 1.3 and 4.2 of the Land Acquisition Business Case (available as an annex to this document) sets out the detail of how the Grove Lane Area was selected; this section outlines the process.

2.3.2 The process involved in selecting the acute hospital site followed a robust analysis involving:

- Site selection from a long list of 18 options following an evaluation of these sites;
- Selection of a shortlist of 4 sites followed by further analysis/evaluation; and
- Identification of the Smethwick area as the preferred location focussing initially on the Windmill Eye site and subsequently, following detailed review with SMBC, reaching agreement to progress the scheme at Grove Lane.

2.3.3 The initial site search work focussed on identifying a suitable site for the main acute facility, given the scale as known in broad terms at the time, and the critical importance of its location in relation to achieving effective accessibility.

2.3.4 A total of 18 sites were identified through research and discussions with representatives from:

- The two local planning authorities (Birmingham and Sandwell);
- The Sandwell Regeneration Company (RegenCo);
- South Black Country and Birmingham Regeneration Zone; and
- Black Country Investment and Black Country Consortium.

2.3.5 The vast majority of sites were located in the area between the existing City Hospital and Sandwell General Hospital sites.

2.3.6 Discussions with all third parties involved resulted in the acceptance that there was no single site within the catchment area suitable and immediately available to accommodate a new acute hospital. Therefore, with the exception of the two existing sites within NHS ownership (i.e. City Hospital and Sandwell General Hospital) land assembly would be a key issue and would impact heavily on the delivery programme. It was also clear that the NHS sites themselves had particular problems in accommodating a new hospital due to difficulties over phasing and disturbance to existing operational activities.

2.3.7 The long list of sites was then evaluated against a set of agreed and appropriately weighted criteria to reduce the number of sites to a manageable short list of core options. A two stage process was

undertaken to reduce the longlist to a shortlist of 4. The initial 'sieve' of the long list of identified sites was assessed against four 'core' factors:

- Size of site;
- Location and accessibility;
- Deliverability; and
- Regeneration impact.

2.3.8 As a result of this evaluation, four sites were identified as preferred:

- City Hospital, Birmingham;
- Windmill Eye, Smethwick;
- Lyng Industrial Estate, West Bromwich; and
- South of Birmingham Road (A41) Junction 1 M5.

2.3.9 Grove Lane was ranked 5th within the original longlist, and only excluded from the shortlist given its proximity to Windmill Eye.

2.3.10 The four shortlisted sites were then further assessed by technical specialists against a number of detailed criteria, as a result of which, it was agreed at the RCRH Partnership Board Meeting on 22nd August 2005 that the new acute facility should be located in the Windmill Eye area of Smethwick. It was upon this basis that formal consultation was undertaken, for the new acute hospital to be located in the Smethwick area.

2.3.11 Further work was then undertaken in conjunction with SMBC officers to determine the most appropriate site within the area. This evaluation initially identified a preference for development at Windmill Eye, an area identified for change in the Smethwick Area Framework.

2.3.12 A large part of the Windmill Eye site falls within the ownership of SMBC and the area had been identified for redevelopment as part of the Smethwick Town Plan and Housing Market Renewal programme. It was evident from the site analysis that the Victoria Park and Cape Hill District Centre were not appropriate for development. This led to a focus on the northern half of the site to accommodate a site of between 11 and 12.5 hectares (based on the forecasts then being made for the scale of facilities required within the acute hospital and the topography and planning conditions of that area).

2.3.13 This sub-area was divided into four parts for further evaluation, the results of which favoured the land adjoining Soho Way and the A4092 (referred to at the time as Option 4). Additional work was commissioned in relation to the potential deliverability of this option. It became apparent that there were practical issues in relation to achieving the relocation of such a large number of households (744 dwellings) which could lengthen the hospital programme timescales and increase project risk to an unacceptable degree.

2.3.14 As a consequence, it was agreed with SMBC that as an alternative solution the immediately adjacent Grove Lane industrial area should be considered, consistent with the original evaluation. A re-appraisal of the detailed evaluation against the same criteria and based upon the further information then available demonstrated that it was clearly preferred against the other options considered within the shortlist as set out in Table 1 below:

Table 1: Updated Site Appraisal

	City Hospital	Lyng Estate	Junction 1 M5	Grove Lane
Non-Financial Weighted Benefit Score	513	527	536	669
Rank	4	3	2	1
Difference (%)	24.4%	21.2%	19.8%	-

3 Evaluation of Options

3.1 Status of this Section

3.1.1 In examining whether to reconfirm the scheme in 2013 the Trust Board has discussed, in 2 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.

3.1.2 The Trust has concluded that the case for change remains overwhelming and that only a new build acute hospital can deliver change at the pace required. In addition the Trust has reviewed the original option appraisal to assess whether Grove Lane continues to be preferred option - This update is presented in Chapter 6 of Version 4.6 of the OBC.

3.1.3 The updated capital costs of option 4 (the preferred solution) have not been presented in this document, but are detailed in Section 8 of Version 4.6 to show change in capital costs since the OBC was approved at version 2 in 2009.

3.2 Economic Appraisal Including Financial Valuation of the Benefits

3.2.1 During DH review of OBC Version 4.4 HM Treasury adjusted the standards required for approval to include a financial valuation of the benefits within the economic appraisal. An updated economic appraisal of the preferred solution and the 'do minimum' was therefore undertaken, in line with new guidance, using a 'do nothing' scenario as a baseline position. This work strongly supported the preferred solution: New Build on Grove Lane.

3.3 Public Consultation Exercise

3.3.1 Public consultation on the RCRH proposals took place from 20th November 2006 until 16th February 2007. This was undertaken in accordance with Section 11 of the Health and Social Care Act 2001 (which has recently been updated with Section 242 from April 2008), The consultation centred on changes to health and social care provision in Sandwell and western Birmingham, including the building of a new acute hospital in Smethwick. Meetings with staff and community groups continued until 17th March 2007 and responses received up to this date were included in the analysis.

Pre-Consultation

3.3.2 Prior to formal consultation, a large number of informal pre-consultation events took place. These included:

- Meetings with interested groups;
- Briefing sessions for MPs and Councillors;
- Briefing of the Joint Overview and Scrutiny Committee;
- Briefing of the three Patient and Public Involvement (PPI) Forums (acute Trust and two PCT Forums); and
- Staff briefings via team brief, newsletters, email, payslip attachment and informal meetings.

Formal Consultation

3.3.3 Consultation documents, summaries and easy read versions were produced and material could be requested in other languages, large print, Braille and audio. The responses and notes from public and staff were analysed by an independent research organisation, Quad.

3.3.4 1,800 individuals, organisations and groups, including MPs, councillors, schools, universities, libraries, places of worship, patient support groups, community groups, GP surgeries and options were written to and offered meetings. Consultation was carried out by the Trust, HoBtPCT and SPCT, with Executive and Non-Executive Directors attending meetings supported by members of the organisations communications and PPI teams.

Consultation Activities

3.3.5 Consultation activities included:

- More than 200 meetings attended over the consultation period;
- Engagement with groups that had traditionally been difficult to engage with;
- Participation in public debates held by the Birmingham Mail and BBC Radio WM;
- Focus groups;
- Regular press briefings, press releases and interviews;
- Advertorial on the consultation, including response form were printed in local free press – 98,000 circulation in Sandwell, 243,000 circulation in Birmingham;
- Staff engagement through internal communications mechanisms;
- Engagement with local authority and mental health staff; and
- Monthly stakeholder update.

The Outcome of Consultation

3.3.6 The consultation was analysed by Quad Research at the University of Warwick. The consultation documents and full report by Quad is presented in ***Appendix 2c*** of OBC Version 4.6.

3.3.7 The outcomes of the consultation are summarised below:

- 601 single responses to the consultation;
- Nearly 2,000 people known to have attended public meetings;
- 323 participants in a series of focus groups;
- 23 group responses;
- Formal responses from key stakeholders;
- Two petitions;
- 73% in support of proposals; and
- Plans for ongoing consultation and involvement developed.

3.3.8 A report on the Public Consultation was considered by the RCRH Agency Board on 26th March 2007, and it was unanimously agreed that the preferred way forward was to develop a new acute hospital in the Smethwick area as a key component of the overall changes in healthcare provision in the local health communities.

3.4 Non-Financial Appraisal

3.4.1 In April 2007, the Trust undertook a formal non-financial appraisal exercise, involving all key stakeholders, evaluating the 4 options upon which the OBC is based, as they stood at that time. 23 stakeholders took part in the evaluation, representing the Trust, SPCT, HoB tPCT, local Patient Forums, BCC, SMBC and local Voluntary Groups. The evaluation involved a wide range of key stakeholders, and followed a standard approach to non-financial appraisals, i.e.:

- Stage 1 : Criteria selection;
- Stage 2 : Weighting of criteria to reflect their relative importance;
- Stage 3 : Consideration of the options and scoring against the agreed criteria; and
- Stage 4 : Analysis of the results and sensitivity testing to establish the robustness of the conclusions.

3.4.2 The results of the appraisal exercise showed a clear preference from those involved in the process for Option 4. Subsequently, and to ensure that the evaluation process was as robust as possible, the original non-financial appraisal work was revisited in February 2008. The Trust invited senior clinical and management staff to look at the following areas:

- The criteria against which the options were scored;
- The weightings for the criteria; and
- The scores.

The Options

3.4.3 In revisiting the appraisal work, it was agreed that the re-evaluation would take place against the options as they stood at that time (i.e. February 2008), not as they were when the original evaluation exercise took place (April 2007). This would ensure that the scoring took into account the detailed design development work that had been undertaken to help further refine the options and how the services will be delivered under each of them. Therefore, at a high level the options remained the same as previously, i.e.:

- Option 1 – Do Minimum;
- Option 2 – New Build / Refurbish on City Hospital Site;
- Option 3 – New Build / Refurbish at Sandwell General Hospital Site; and
- Option 4 – New Build on Grove Lane.

3.4.4 However, since the original work, Option 1 had been developed and described as having a "hot" (i.e. emergency) site on the current SGH site and a "cold" (i.e. elective) site on the City Hospital site. It was agreed therefore that for the purposes of the appraisal exercise, a variant of this based on the reverse of the proposal would also be scored, to see what difference if any, this may have on the scoring. Therefore Option 1 was scored against the following scenarios:

- Option 1A – emergency services located at SGH / elective services at City Hospital; and
- Option 1B – emergency services located at City Hospital / elective services at SGH.

Evaluation Criteria

3.4.5 The evaluation criteria previously used had been based on that used within the overall RCRH Programme and as outlined in its SOC as the basis upon which evaluations would be evaluated. The Trust therefore agreed to the continued use of these criteria, i.e.

- Better access to services;
- Improved clinical quality of services;
- Improved environmental quality;
- Developing existing services and/or providing new services;
- Improved strategic fit of services including regeneration;
- Meeting national, regional and local policy imperatives;
- Meeting teaching, training and research needs;
- Making more effective use of resources; and
- Ease of delivery.

Weightings

3.4.6 A review of the previously agreed weights acknowledged that although the weighting of 9% for "Ease of Delivery" appeared low, aspects of this criterion would also be inherent in the scoring of other criteria (for example the Clinical Quality and Environmental Quality of the various options would be impacted during the transition phase by the nature of the works proposed). It was therefore concluded that the weighting of 9% was valid. On this basis, it was agreed to use the same weightings as those previously used, and as follows in Table 2 below.

Table 2: Criteria and Weights - Non Financial Appraisal Update

Criteria	Weightings	Rank
Better access to services	15%	2
Improved clinical quality of services	18%	1

Improved environmental quality	11%	4
Developing existing services and/or providing new services	9%	=6
Improved strategic fit of services including regeneration	9%	=6
Meeting national, regional and local policy imperatives	6%	9
Meeting teaching, training and research needs	10%	5
Making more effective use of resources	14%	3
Ease of delivery	9%	=6

The Scores

3.4.7 Having agreed the criteria and weighting would be as previously used, the updated options were scored on a group basis, with raw scores allocated between 1-100 against each of the criteria. The detailed scores are available on request and can be summarised as follows:

Table 3: Overall Results - Non-Financial Appraisal Update

	Option 1 – Do Minimum 1A – SGH Hot / CH Cold 1B – CH Hot / SGH Cold		Option 2 – Build / Refurb. City Hospital	Option 2 – Build / Refurb. SGH	Option 4 – New Build Grove Lane
	1A	1B			
Raw Score	455	460	700	665	760
Weighted Score	51.1	51.75	76.93	72.59	84.3
Rank	=4	=4	2	3	1
% Difference	-39%	-39%	-9%	-14%	-

3.4.8 The above shows that Option 4 – New Build on Grove Lane remained the significantly preferred option with a weighted score of 84.3, with Option 2 – City Hospital behind by 9% on 76.93, Option 3 marginally behind with 72.59, and Option 1 (both 1A and 1B) a clear fourth with scores of 51.1 / 51.75 respectively.

3.4.9 Sensitivity tests were also undertaken to examine whether changes to the weightings applied to the criteria could result in changes to the preferences. This showed that although the absolute scores would change, the ranking and relative differences between the options remained unchanged.

3.4.10 On the above basis, the update to the original non-financial appraisal work again identified Option 4 as being the preferred option over Options 2, 3 and 1 in that order. A full report outlining a more detailed description of the process, scores and analysis, including an explanation for the differentials in scoring is available on request.

3.5 Financial Appraisal

3.5.1 A full financial appraisal of the short-listed options has been undertaken to assess their revenue cost impact and to identify which option represents the best value for money (VfM). Details of the analysis is available on request.

Methodology and Key Assumptions

3.5.2 The Trust has established a comprehensive financial modelling tool to ensure that the integrity of links to the Trust's existing financial plan and budgets for 2008/09 and to its Long Term Financial Model (LTFM) are maintained and reflected in all options.

3.5.3 The appraisal has encompassed the following elements:

- Assess the capital cost impact of each option;
- Identify baseline revenue budgets;
- Assess the revenue cost impact of the activity and capacity model forecasts under each of the options;
- Estimate the on-going capital lifecycle cost implications;
- Consolidate all cost components into an economic appraisal of each of the options;
- Consider the economic impact of risk;
- Identify the option that represents the best value for money; and
- Carry out sensitivity testing to assess the robustness of the preferred option, economically.

3.5.4 The price base used throughout the financial appraisal is 2008/09.

Capital Costs

3.5.5 The capital costs of the options have been assessed by the Trust's capital cost consultants, using a base MIPS index of 515 Variation of Price (VOP) index for approval purposes, based upon NHS Estates Quarterly Briefing Vol 17.1. Outturn costs reflect a start on site in Q2 2012 and a MIPS index of 638 VOP, with inflation from that point assessed on the basis of movements in the Price Adjustment Formula for Building and Specialist Engineering Works to a Public Sector Average Building (APSAB) index. The outturn costs have then been discounted back to current 2008/09 prices using the Gross Domestic Product (GDP) deflator of 2.5% per annum.

3.5.6 The resulting capital costs are summarised below.

Table 4: Summary of Capital Costs for Options

Capital Costs	Option 1 Do Minimum £000	Option 2 City Site £000	Option 3 SGH Site £000	Option 4 Grove Lane £000
At MIPS 515:				
Departmental costs	94,926	124,428	124,428	124,428
On-costs	41,555	109,708	108,635	109,169
(Location adjustment)	(9,554)	(16,390)	(16,314)	(16,352)
Sub-Total Works costs	126,927	217,746	216,749	217,245
Fees	19,039	27,218	27,094	27,155
Equipment	3,511	3,511	3,511	3,511
Non Works	580	17,339	29,591	5,371

Capital Costs	Option 1 Do Minimum £000	Option 2 City Site £000	Option 3 SGH Site £000	Option 4 Grove Lane £000
Land Acquisition	0	0	0	19,739
Planning Contingencies	9,003	15,949	16,617	15,197
Value Added Tax (VAT)	19,443	44,260	46,347	44,154
Optimism Bias	35,308	50,469	52,618	44,717
Total Capital Cost at MIPS 515	213,811	376,492	392,527	377,089
Total Capital Cost at Outturn	286,171	494,342	526,150	483,983
Total Capital Cost at "Current"	247,690	435,147	455,157	431,985
Capital Costs (Net of Land Sales):				
At MIPS 515	209,812	353,014	370,666	347,729
At Outturn	282,171	470,864	504,290	454,623
At "Current"	243,690	411,669	433,297	402,625

3.5.7 Capital cost estimates incorporate:

- NHS Estates Quarterly Briefing Volume 17.1;
- Departmental costs at the same level for the "development" Options 2, 3 and 4, based on a sign brief area of 87,123m^2;
- Departmental costs for Option 1 based on over 50% of the works being refurbishment in nature;
- On-costs at:
  - 43.78% Option 1;
  - 88.17% Option 2;
  - 87.31% Option 3; and
  - 87.74% Option 4;
- Professional Fees at 12.5% for Options 2, 3 and 4 and 15% for Option 1;
- A 6% provision for planning contingencies under all options;
- Optimism Bias, reflecting the different site constraints, construction periods and refurbishment elements, but net of a mitigation factor of 43% (for all options) at:
  - 19.78% Option 1;
  - 15.48% Option 2;
  - 15.48% Option 3; and
  - 14.41% Option 4;
- Land Acquisition costs only apply to Option 4 and reflect the figure included within the separate Land Business Case;
- VAT is included at a rate of 17.5% for all elements with the exception of:
  - Professional Fees, which are zero rated;
  - Land Acquisition (Option 4 only), where some elements of cost are zero-rated, and thus the VAT chargeable is equivalent to a rate of 11.18%; and

- Option 1, under which elements of capital spend would qualify for VAT recovery and have been costed accordingly at a net VAT rate equivalent to 14%.

Revenue Costs

Approach and Methodology

3.5.8 The Trust has developed activity and financial models in partnership with local PCTs to assess in detail a view of future activity projections across the local health economy. To support the activity modelling the Trust has developed a bespoke Income and Cost Model which takes the Trust's current Financial Plan for 2008/09 and predicts the annual financial consequences of the service changes outlined above by department. This therefore provides the core cost assessment for comparison to an income judgment derived directly from the activity modelling.

3.5.9 The Income and Cost Model assesses separately the financial impact of those services which will be based within the acute hospital in the future, and those services which will be provided by the Trust in alternative community-based settings. The approach and methodology used within the Trust's model is considered in more detail below.

Acute Hospital Services

3.5.10 The expenditure modelling has been based on the following approach:

- An analysis of the Trust's existing costs based on the Trust's existing budgets within its financial plan for 2008/09, including a full subjective analysis;
- The identification of the key determinants of the future levels of cost (Cost Drivers). For clinical and clinical support costs, cost drivers have been based on future levels of patient activity, including:
  - Admitted Patient Care episodes (Medical, Surgical, Maternity, Paediatrics);
  - Outpatient Attendances;
  - OBDs;
  - Theatre Minutes;
  - Numbers of Scans and Tests;

3.5.11 These have been supplemented by cost drivers associated with the revised building space, which have been used as the basis for Facilities Management (FM) cost projections;

- The application of a Variability Factor to each cost heading to reflect the extent to which each cost is expected to vary in line with changes in its identified key cost driver;
- An assessment of the capital charges on both the capital investment and on the retained assets under each option.

3.5.12 The resultant revenue cost projections have been subject to extensive review within the Trust and with the two local PCTs, supplemented by detailed bottom-up cost assessments undertaken with service managers for key departments/budgets, including:

- Medical Staffing;
- Nurse Staffing;
- Pathology;

- Imaging;
- Critical Care;
- A & E;
- Therapies; and
- FM Services.

3.5.13 As a result of these reviews, the initial cost projections were increased by £3m to take into account the more detailed assessments of the likely future requirements.

3.5.14 A detailed analysis of the forecast recurring revenue costs for the acute hospital related services in 2017/18 under each option is shown in Table 5 below.

Table 5: Summary of Revenue Costs for Options

Revenue Costs	Option 1 Do Minimum £000	Option 2 City Site £000	Option 3 SGH Site £000	Option 4 Grove Lane £000
Baseline Costs 2008/09:				
Clinical Services	222,650	222,650	222,650	222,650
Non-Clinical Services	49,459	49,459	49,459	49,459
FM Services	30,224	30,224	30,224	30,224
Other Support Services	16,006	16,006	16,006	16,006
Capital Charges	25,601	25,601	25,601	25,601
Gross Baseline Costs	**343,940**	**343,940**	**343,940**	**343,940**
Forecast Recurrent Costs 2017/18				
Clinical Services	174,598	168,392	168,392	168,392
Non-Clinical Services	36,913	34,913	34,913	34,913
FM Services	19,767	18,512	18,512	18,512
Other Support Services	1,764	1,764	1,764	1,764
Capital Charges	31,618	39,498	40,411	37,823
Gross Forecast Costs	**264,659**	**263,079**	**263,992**	**261,404**
Revenue Cost Change				
Clinical Services	(48,052)	(54,258)	(54,258)	(54,258)
Non-Clinical Services	(12,546)	(14,546)	(14,546)	(14,546)
FM Services	(10,457)	(11,712)	(11,712)	(11,712)
Other Support Services	(14,242)	(14,242)	(14,242)	(14,242)
Capital Charges	6,017	13,897	14,810	12,222
Gross Cost Change	**(79,281)**	**(80,861)**	**(79,948)**	**(82,536)**
Option Differential	+3,255	+1,675	+2,588	-

Revenue Costs	Option 1 Do Minimum £000	Option 2 City Site £000	Option 3 SGH Site £000	Option 4 Grove Lane £000
Rank	**4**	**2**	**3**	**1**

3.5.15 The financial analysis confirms that Option 4 has the lowest recurring annual revenue cost, and has a cost which is £1.675m lower than Option 2.

Services to be Provided by the Trust in Community Settings

3.5.16 An assessment has also been made of the costs associated with those services which are likely to be provided by the Trust outside of the new acute hospital. This assessment has been based upon a combination of:

- The Trust's current costs of delivering those services; and
- Cost estimates prepared by the local PCTs.

3.5.17 The financial impact of these services will be the same under all of the options and have not been included within the financial and economic analysis for the acute hospital. The income and expenditure associated with these services have, however, been factored into the overall affordability of the project.

Economic Analysis

3.5.18 All four short-listed options have been fully evaluated in line with the requirements of the NHS Capital Investment Manual and the HM Treasury (HMT) Green Book in order to determine which option is likely to represent the best value for money over the full operational life of the facilities.

3.5.19 A soft copy of the Generic Economic Model (GEM) is available separately. Details of the economic analysis are available on request.

3.5.20 Key parameters underpinning the economic analysis are:

- A full 60-year period of new operations is reflected. Since the new facilities under Option 4 are deliverable within a shorter period, the full appraisal for Option 4 covers 67 years, compared to 69 years for Options 1, 2 and 3;
- An alternative period appraisal has also been undertaken to assess the economic impact over a 30-year period of new operations;
- The discount rate for years 0 to 30 is 3.5%, and 3% for subsequent years;
- VAT is excluded from all cash flows; and
- The price base (and Year zero) is 2008/09.

3.5.21 The source of the cash flows for the various cost elements of each option is described below.

Capital Costs

3.5.22 Capital cash flows in respect of new and refurbishment works reflect costs at "current" levels, derived by discounting annual outturn cash flows by a 2.5% GDP deflator. They include Optimism Bias, but

contingencies are excluded. For Option 4, land acquisition costs of £14.689m (exclusive of VAT and compensation costs) are also included within capital cash flows.

Land Sale Receipts

3.5.23 Land sales receipt estimates reflect site valuations and assessments undertaken by the Trust's advisers in October 2007, in respect of the current City and Sandwell hospital sites, and assume a mainly residential use. The proportions of each of the current sites available for disposal under each of the options, together with an estimate of the net land sale proceeds, are set out in Table 6 below:

Table 6: Estimated Net Land Sales Receipts

Net Land Sale Receipts	Option 1 Do Minimum	Option 2 City Site	Option 3 SGH Site	Option 4 Grove Lane
% City Land Sold	18.3%	73.1%	100.0%	100%
% Sandwell Land Sold	0.0%	100.0%	0.0%	100%
Net Land Sale Proceeds (£m)	(£4.0m)	(£23.478m)	(£21.860m)	(£29.360m)

Opportunity Costs

3.5.24 Opportunity Costs have been included, based on the existing book value of the land on the City and Sandwell sites, at £29.360m for all options.

Residual Values

3.5.25 Three elements of potential residual value have been assessed:

- Land – based on estimated open market values for alternative use applied to the estimated area of each site retained;
- Retained Estate – only applicable for Option 1 and calculated with reference to the current value, remaining life and consequent potential lifecycle replacement cycle, for each of the main blocks on the City and Sandwell sites; and
- Value of new facilities constructed – derived from the initial capital cost of works and fees elements, adjusted for annual lifecycle spends and implied depreciation. (This element has only been included in the Alternative appraisal, since new assets are assumed to be fully utilised after 60 years of operation).

3.5.26 The residual values for the Full and Alternative appraisal periods are set out in Table 7 and Table 8 below:

Table 7: Estimated Residual Values - Full Period

Residual Value Appraisal Period 69 Years Options 1 to 3 and 67 Years Option 4	Option 1 Do Minimum £m	Option 2 City Site £m	Option 3 SGH Site £m	Option 4 Grove Lane £m
Land Value	(38,240)	(12,080)	(14,190)	(9,950)

Retained Estate	(54,515)	0	0	0
New Facilities	0	0	0	0
Total Residual Value	**(92,755)**	**(12,080)**	**(14,190)**	**(9,950)**

Table 8: Estimated Residual Values - Alternative Period

Residual Value Appraisal Period 39 Years Options 1 to 3 and 37 Years Option 4	Option 1 Do Minimum £m	Option 2 City Site £m	Option 3 SGH Site £m	Option 4 Grove Lane £m
Land Value	(38,240)	(12,080)	(14,190)	(9,950)
Retained Estate	(116,379)	0	0	0
New Facilities	(132,426)	(218,118)	(217,821)	(215,428)
Total Residual Value	**(287,045)**	**(230,198)**	**(232,011)**	**(225,378)**

Lifecycle Costs – Building & Engineering

3.5.27 The cost of maintaining the building and engineering assets during the economic appraisal period (reflecting 60 years of "new" functionality for the proposed facilities) has been assessed in conjunction with professional advisers, as follows:

- All figures are at 2008/09 cost levels, exclusive of VAT and no assessment has been made of the impact of future inflation on cost levels;
- The lifecycle cost driver for each option is based on the value of initial new works and fees (including Optimism Bias, but excluding contingencies);
- The assessment is based on standard building and engineering component lives expressed as a proportion of initial works costs;
- Cyclical "refurbishment" is assumed to be some 8.5% more expensive than the initial capital costs, as a result of the likely need to decant (works would be major in nature) and the higher on-costs attributable to refurbishment work; and
- 60% of new build works relate to building fabric, with the remaining 40% relating to engineering plant.

3.5.28 Building asset life proportions are assessed as shown in Table 9 below.

Table 9: Building and Engineering Asset Component Lives

Component Replacement Cycle	Building %	Engineering %
60 Years	75%	38%
30 Years	1%	20%
25 Years	1%	15%
20 Years	15%	13%
15 Years	2%	7%
10 Years	5%	7%

5 Years	1%	0%
Total	**100%**	**100%**

3.5.29 In addition, for Options 2, 3 and 4, an allowance has been included for annual spends on irregular maintenance based on an average cost of £2 per m^2. Under Option 1, a separate assessment has been made of the lifecycle cost implications of the Retained Estate and this is included within the economic analysis.

Lifecycle Costs - Retained Estate (Option 1 only)

3.5.30 The lifecycle cost implications for the Retained Estate have been estimated for each of the main blocks on both sites on the following basis:

- Establish existing capital value and remaining life;
- Use the existing capital value as the lifecycle cost driver; and
- Apply the "standard" lifecycle profile from 2008/09, but at a start point in the cycle that reflects the remaining life of the block.

Lifecycle Costs – Equipment

3.5.31 The Trust has a well-developed Draft Equipment List which indicates that the overall value of equipment needed for the new hospital is valued at £49.6m, excluding VAT. A detailed replacement cycle has been developed to reflect:

- Type of equipment;
- Asset Life;
- Value of equipment currently in use;
- Value of equipment planned for procurement in advance of the hospital development; and
- Equipment provision within the hospital development costs.

3.5.32 The resultant equipment lifecycle profile has been applied to all options, and in economic terms equates to an Equivalent Annual Cost (EAC) provision of £4.8m.

Revenue Costs

3.5.33 The economic analysis includes the projected annual revenue costs set out in Table 5: Summary of Revenue Costs for Options above. Based on a detailed financial appraisal, costs have also been profiled from the baseline position, to reflect the differential timing of the delivery of the new facilities under each option.

Risk Element of Options

3.5.34 The economic assessment of the four options also includes a consideration and an evaluation of the differential impact of the risks that could arise. This element of the appraisal has been considered in detail within the Land Business Case, with the focus being on the risks surrounding land assembly and land disposal.

3.5.35 Details of the risk analysis are available on request.

3.5.36 The approach to this analysis is in line with HMT and DH guidance and systematically quantifies the risks through the following stages:

- Identification and agreement of the risks to be appraised;
- Confirmation of the most appropriate driver for each risk;
- Assessment of the potential range of variability for each of the risks; and
- Identification of the probability of the risk emerging.

3.5.37 A standard 3-point probability distribution has been used, assessing the minimum, most likely and maximum risk to quantify the impact. The results are summarised in Table 10 below:

Table 10: Economic Impact of Risk (Full Appraisal Period)

Net Present Cost (NPC) of Risk	Option 1 Do Minimum £m	Option 2 City Site £m	Option 3 SGH Site £m	Option 4 Grove Lane £m
NHS Consultation	6.41	11.33	11.84	0.0
Planning Costs	0.37	2.62	2.19	2.58
Site Acquisition Costs	0.0	0.0	0.0	(0.22)
Site Development Costs	0.07	0.84	0.79	4.15
Sale Valuations	0.05	0.28	0.28	0.35
Land Holding	0.0	0.0	0.0	0.28
Project termination	0.0	0.0	0.0	0.09
Judicial Review	0.29	0.48	0.51	0.68
Total All Risks – NPC	**7.19**	**15.55**	**15.61**	**7.91**
Total All Risks - EAC	**0.26**	**0.57**	**0.57**	**0.29**

3.5.38 Having said this, the factors examined within the risk appraisal do consider all those elements that vary between the Options.

Summary of Economic Analysis

3.5.39 A summary of the economic analysis outputs is shown in Table 11 to Table 13 below, which shows a clear overall preference for Option 4.

Table 11: Economic Cost of Options (Excluding Risk)

Economic Impact Appraisal Period 69 Years Options 1 to 3 and 67 Years Option 4	Option 1 Do Minimum £m	Option 2 City Site £m	Option 3 SGH Site £m	Option 4 Grove Lane £m
NPC	6,886.7	6,745.7	6,764.2	6,670.8
EAC	251.3	246.1	246.8	245.5
EAC Variance	+5.8	+0.6	+1.3	-

Rank	4	2	3	1

Table 12: Economic Cost of Risk

Economic Impact	Option 1 Do Minimum £m	Option 2 City Site £m	Option 3 SGH Site £m	Option 4 Grove Lane £m
NPC	7.2	15.5	15.6	7.9
EAC	0.3	0.6	0.6	0.3
Rank	1	3	4	2

Table 13: Economic Cost of Options (Including Impact of Risk)

Economic Impact Appraisal Period 69 Years Options 1 to 3 and 67 Years Option 4	Option 1 Do Minimum £m	Option 2 City Site £m	Option 3 SGH Site £m	Option 4 Grove Lane £m
NPC	6,893.9	6,761.2	6,779.8	6,678.7
EAC	251.6	246.7	247.4	245.8
EAC Variance	+5.8	+0.9	+1.6	-
Economic Switch Values	(5.8)	(0.9)	(1.6)	0.9
Rank	4	2	3	1

Summary of Financial Appraisal

3.5.40 In terms of affordability, the financial appraisal indicates that Option 4 has the lowest recurring annual revenue cost. The economic appraisal confirms that Option 4 is the preferred option, by an EAC margin of £0.9m over the 2nd ranked, Option 2.

3.6 Sensitivity Testing

3.6.1 Details of the sensitivity analysis undertaken are available on request, and are summarised below.

Economic Switch Values

3.6.2 The results of the economic appraisal have been subjected to a standard sensitivity test to assess the level of cost change required (independently within 3 key cost areas, and differentially between options), sufficient to trigger switch values and make Option 4 not preferred. This analysis confirms that there are no realistic circumstances under which Options 1 or 3 would be preferred over Option 4.

3.6.3 For Option 2 to be preferred over Option 4, cost increases of the following magnitude would be necessary within Option 4 (or alternatively, broadly corresponding cost reductions in Option 2):

- Additional capital costs of £29m (8%); or
- Additional lifecycle costs of £83m (24%); or
- Additional revenue costs of £0.8m (0.4%).

3.6.4 It is judged to be very unlikely that capital or lifecycle costs would increase, differentially, sufficient to trigger switch values in favour of Option 2. Although the revenue change needed appears to be relatively small, revenue cost projections are founded on identical assumptions for both options, and it is extremely unlikely that a scenario in which Option 4 costs rose (and Option 2 costs did not) would arise.

Specific Capital Sensitivities

3.6.5 In addition, for Options 4 and 2, specific sensitivities have been run to further test the robustness of the margin in favour of Option 4 if different capital cost assumptions were to be applied to all of the following:

- Land Acquisition – 10% higher (Option 4 only);
- On-costs – 10% higher in Option 4 and 10% lower in Option 2; and

3.6.6 Off-site and S.106 works – 10% higher in Option 4 and 50% lower in Option 2.Table 14 below confirms that even if all these changes were to arise, the net capital impact would be £29m, in line with the base case (capital) headroom of £37m needed to trigger the EAC switch value.

Table 14: Specific Capital Sensitivities - Options 2 and 4

Capital Cost Change	Option 2 Reduction £m	Option 4 Increase £m	Net Change £m
Land Acquisition: 10%	0.0	2.0	2.0
On-Costs: 10%	(13.2)	13.0	26.2
Off-site costs: 10%	(0.4)	0.4	0.8
Total Change	**(13.6)**	**15.4**	**29.0**

3.6.7 The sensitivity testing confirms that Option 4 represents the best value for money of the four options.

3.7 Overall Conclusions

3.7.1 Option 4 is clearly preferred in Non-Financial terms, and also represents the best value for money. As can be seen in Table 15 below combining the impact of both appraisals further confirms the preference for Option 4, as represented by the economic cost per benefit point.

Table 15: Combined VFM and Non-Financial Scores

	Option 1 Do Minimum	Option 2 City Site	Option 3 SGH Site	Option 4 Grove Lane
EAC (£000) Pre-Risk Adjustment	251,287	246,142	246,818	245,516
EAC (£000) Impact of Risk	264	572	574	291
EAC (£000) (Risk Adjusted)	251,551	246,714	247,392	245,807
Weighted Benefit Score	51.75	76.93	72.59	84.30
EAC per Benefit Point (£000)	4,861	3,207	3,408	2,916

Rank	4	2	3	1
Margin (%)	66.7%	10.0%	16.9%	-

3.7.2 On this basis, Option 4 has a 291-point (10.0%) margin over Option 2 and is confirmed as the PSC.

APPENDIX 8a – REVENUE COSTS

Additional Revenue Costs Compared to Base LTFM Position

Option Appraisal : Do Nothing

	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	Therafter
	0	1	2	3	4	5	6	7	8	9	
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Clinical Costs											
A&E	-	-	-	-	-	1,366	1,366	1,366	1,366	1,366	1,366
CRITCARE	-	-	-	-	1,107	1,107	1,107	1,107	1,107	1,107	1,107
DIRECT CLINICAL SERVICES	-	-	-	-	-	244	407	407	407	407	407
MATERNITY	-	-	-	-	-	-	-	-	-	-	-
MEDICAL STAFF Rotas & On Call	-	-	-	-	-	2,671	4,452	4,452	4,452	4,452	4,452
OPD MEDICAL RELATED	-	-	-	-	-	- 37	- 61	- 61	- 61	- 61	- 61
OPD PAEDS RELATED	-	-	-	-	-	- 62	- 104	- 104	- 104	- 104	- 104
OPD SURGICAL RELATED	-	-	-	-	-	- 64	- 106	- 106	- 106	- 106	- 106
OTHER DIAGNOSTIC SERVICES	-	-	-	-	-	164	273	273	273	273	273
PATHOLOGY	-	-	-	-	-	392	653	653	653	653	653
THEATRES	-	-	-	-	-	-	-	-	-	-	-
THERAPIES	-	-	-	-	32	65	108	108	108	108	108
WARDS MEDICAL	-	-	-	-	517	1,723	1,723	1,723	1,723	1,723	1,723
Sub Total	-	-	-	-	1,656	7,569	9,817	9,817	9,817	9,817	9,817
Non Clinical Costs											
Soft FM Saving Unrealisable						2786.0	2786.0	2786.0	2786.0	2786.0	2786.0
Management & Administrative Costs Associated with Two Main Clinical Sites					0.0	741.6	1483.2	1483.2	1483.2	1483.2	1483.2
Sub Total	-	-	-	-	-	3,528	4,269	4,269	4,269	4,269	4,269
Building Running Costs											
Building &Engineering Related					151.0	151.0	151.0	151.0	151.0	151.0	151.0
Energy & Utilities					351.0	351.0	351.0	351.0	351.0	351.0	351.0
Sub Total	-	-	-	-	502	502	502	502	502	502	502
Transitional Costs											
Decant Contingency	-	-	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	-
Non Recurring Expenses	-	1,412	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	-
Project Costs (replacing PFI scheme)	950	1,000	1,000	1,000	1,000	-	-	-	-	-	-
Sub Total	950	2,412	3,500	3,500	3,500	2,500	2,500	2,500	2,500	2,500	-
Total Additional Cashflows Identified	950	2,412	3,500	3,500	5,658	14,098	17,088	17,088	17,088	17,088	14,588

Additional Revenue Costs Compared to Base LTFM Position

Option Appraisal : Do Minimum

	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	Therafter
	0	1	2	3	4	5	6	7	8	9	
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Clinical Costs											
A&E						1,366.0	1,366.0	1,366.0	1,366.0	1,366.0	1,366.0
CRITCARE					1,106.8	1,106.8	1,106.8	1,106.8	1,106.8	1,106.8	1,106.8
DIRECT CLINICAL SERVICES						244.2	407.1	407.1	407.1	407.1	407.1
MATERNITY						-	-	-	-	-	-
MEDICAL STAFF Rotas & On Call						2,671.2	4,452.0	4,452.0	4,452.0	4,452.0	4,452.0
OPD MEDICAL RELATED						- 36.9	- 61.4	- 61.4	- 61.4	- 61.4	- 61.4
OPD PAEDS RELATED						- 62.4	- 104.0	- 104.0	- 104.0	- 104.0	- 104.0
OPD SURGICAL RELATED						- 63.9	- 106.4	- 106.4	- 106.4	- 106.4	- 106.4
OTHER DIAGNOSTIC SERVICES						163.9	273.1	273.1	273.1	273.1	273.1
PATHOLOGY						392.0	653.3	653.3	653.3	653.3	653.3
THEATRES					-	-	-	-	-	-	-
THERAPIES					32.3	64.6	107.7	107.7	107.7	107.7	107.7
WARDS MEDICAL					516.9	1,723.0	1,723.0	1,723.0	1,723.0	1,723.0	1,723.0
Sub Total	-	-	-	-	1,656	7,569	9,817	9,817	9,817	9,817	9,817
Non Clinical Costs											
Soft FM Saving Unrealisable						2786.0	2786.0	2786.0	2786.0	2786.0	2786.0
Management & Administrative Costs Associated with Two Main Clinical Sites					0.0	741.6	1483.2	1483.2	1483.2	1483.2	1483.2
Sub Total	-	-	-	-	-	3,528	4,269	4,269	4,269	4,269	4,269
Building Running Costs											
Building &Engineering Related					151.0	151.0	151.0	151.0	151.0	151.0	151.0
Energy & Utilities					351.0	351.0	351.0	351.0	351.0	351.0	351.0
Sub Total	-	-	-	-	502	502	502	502	502	502	502
Transitional Costs											
Inability to Deliver Clinical Ransformation Savings					-	-	-	-	-	-	-
Inability to Deliver Non Clinical Ransformation Savings					-	-	-	-	-	-	-
Dual Running Implications											
Sub Total	-	-	-	-	-	-	-	-	-	-	-
Total Additional Cashflows Identified	-	-	-	-	2,158	11,598	14,588	14,588	14,588	14,588	14,588

Additional Revenue Costs Compared to Base LTFM Position
Option Appraisal : City Site

	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	Therafter
	0	1	2	3	4	5	6	7	8	9	
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Clinical Costs											
A&E											
CRITCARE											
DIRECT CLINICAL SERVICES											
MATERNITY											
MEDICAL STAFF Rotas & On Call	-	-	-	-	-	5,818	5,818	5,818	5,818	-	-
OPD MEDICAL RELATED											
OPD PAEDS RELATED											
OPD SURGICAL RELATED											
OTHER DIAGNOSTIC SERVICES											
PATHOLOGY											
THEATRES											
THERAPIES											
WARDS MEDICAL	-	-	-	-	-	1,723	1,723	1,723	1,723	-	-
Sub Total	-	-	-	-	-	7,541	7,541	7,541	7,541	-	-
Non Clinical Costs											
Soft FM Saving Unrealisable	-	-	-	-	-	2,786	2,786	2,786	2,786	-	-
Sub Total	-	-	-	-	-	2,786	2,786	2,786	2,786	-	-
Building Running Costs											
Building &Engineering Related											
Energy & Utilities											
Sub Total	-	-	-	-	-	-	-	-	-	-	-
Transitional Costs											
Decant Contingency	-	-	-	-	-	3,000	3,000	3,000	3,000	-	-
Non Recurring Expenses	-	1,400	1,500	1,500	2,000	2,000	3,000	4,000	3,000	-	-
Project Costs (replacing PFI scheme)	-	-	-	-	-	-	-	1,000	1,000	-	-
Dual Running	-	-	-	-	-	-	-	-	-	5,239	-
Sub Total	-	1,400	1,500	1,500	2,000	5,000	6,000	8,000	7,000	5,239	-
Total Additional Cashflows Identified	-	1,400	1,500	1,500	2,000	15,327	16,327	18,327	17,327	5,239	-

Additional Revenue Costs Compared to Base LTFM Position
Option Appraisal : Sandwell Site

	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	Therafter
	0	1	2	3	4	5	6	7	8	9	
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Clinical Costs											
A&E											
CRITCARE											
DIRECT CLINICAL SERVICES											
MATERNITY											
MEDICAL STAFF Rotas & On Call	-	-	-	-	-	5,818	5,818	5,818	5,818	-	-
OPD MEDICAL RELATED											
OPD PAEDS RELATED											
OPD SURGICAL RELATED											
OTHER DIAGNOSTIC SERVICES											
PATHOLOGY											
THEATRES											
THERAPIES											
WARDS MEDICAL	-	-	-	-	-	2,786	2,786	2,786	2,786	-	-
Sub Total	-	-	-	-	-	8,604	8,604	8,604	8,604	-	-
Non Clinical Costs											
Soft FM Saving Unrealisable	-	-	-	-	-	2,786	2,786	2,786	2,786	-	-
Sub Total	-	-	-	-	-	2,786	2,786	2,786	2,786	-	-
Building Running Costs											
Building &Engineering Related											
Energy & Utilities											
Sub Total	-	-	-	-	-	-	-	-	-	-	-
Transitional Costs											
Decant Contingency	-	-	-	-	2,500	5,000	5,000	5,000	5,000	-	-
Non Recurring Expenses	-	1,400	1,500	1,500	2,000	2,000	3,000	4,000	3,000	-	-
Project Costs (replacing PFI scheme)	-	-	-	-	-	-	-	1,000	1,000	-	-
Dual Running	-	-	-	-	-	-	-	-	-	5,239	5,370
Sub Total	-	1,400	1,500	1,500	4,500	7,000	8,000	10,000	9,000	5,239	5,370
Total Additional Cashflows Identified	-	1,400	1,500	1,500	4,500	18,390	19,390	21,390	20,390	5,239	5,370

APPENDICES OF THE CHANGES APPLIED TO OPTION 4 GROVE LANE AFFORDABILITY TO DELIVER OPTION 1 DO MINIMUM

Annual Amendments for Do Minimum 2019/20 Onwards

ProvexGroup	RKVIEWGRP	Proposed Change	Value of Impact	Used in Update 13/14 Differential Between Options Do Nothing & Do Minimum				
			£	Clinical	Non Clinical	Building	Transition	Total
CAPITAL CHARGES	CAPITAL CHARGES	Reduction generated by revised residual value calcs	- 2,999,885					
CAPITAL CHARGES TOTAL			**- 2,999,885**					
CLINICAL SERVICES	A&E	Bed Blocking as a Consequence of reduced flexibility as all Elective beds are on Cold site. Plus 6 more Consultants?	263,117	1,366,000				1,366,000
	CLINICAL TRANSITION SAVINGS	Reduced ability to deliver Clinical Transition Savings	2220000				-	-
	CRITCARE	One Additional Bed required on each of the 2 site's	1,027,776	1,106,802				1,106,802
	DIRECT CLINICAL SERVICES	Hospital at Night Services required on 2 Site's	378,000	407,065				407,065
	MATERNITY	MLU Costs from 16/17	632,000	-				-
	MEDICAL STAFF Rotas & On Call	Two Consultant led rota's would be required	1,516,154	4,452,000				4,452,000
	OPD MEDICAL RELATED	Reduction in cost as Outpatients will be from 3 Sites not 4.	- 57,056	- 61,443			-	61,443
	OPD PAEDS RELATED	Reduction in cost as Outpatients will be from 3 Sites not 4.	- 96,549	- 103,972			-	103,972
	OPD SURGICAL RELATED	Reduction in cost as Outpatients will be from 3 Sites not 4.	- 98,831	- 106,430			-	106,430
	OTHER DIAGNOSTIC SERVICES	ECG 24/7 Service	253,598	273,097				273,097
	PATHOLOGY	Increase for Blood bank	606,674	653,321				653,321
	THEATRES	1 additonal theatre 24/7 on call rota	1,469,737	-				-
	THERAPIES	Increase in costs as a consequence of 2 site working.	100,000	107,689				107,689
	WARDS MEDICAL	1 x 32 bedded ward staffing	1,600,000	1,723,025				1,723,025
CLINICAL SERVICES TOTAL			**9,814,619**	**9,817,154**	**-**	**-**	**-**	**9,817,154**
FM SERVICES	PFI ESTATES BUILDING RELATED	Based on Square Meterage and current Trust Price as per ERIC returns	- 66,658		- 71,784		-	71,784
	PFI ESTATES ENERGY & RATES	Refurbishment Inefficiencies	325,977		351,042			351,042
	PFI ESTATES ENGINEERING RELATED	Based on Square Meterage and current Trust Price as per ERIC returns	87,012		93,703			93,703
	PFI ESTATES GENERAL RELATED	Refurbishment Inefficiencies	131,024		141,099			141,099
	PFI ESTATES GROUNDS RELATED	Based on Square Meterage and current Trust Price as per ERIC returns	- 11,129		- 11,984		-	11,984
	PFI RELATED CATERING	Catering Charge of ! Additional ward and reinstatement of Staff catering Costs	2,044,515		250000			250,000
	PFI RELATED EBME	Based on Square Meterage and current Trust Price as per ERIC returns	- 159,316					
	PFI RELATED TRANSPORT	Reinstatement of Transport Workshop	768,672					
FM SERVICES TOTAL			**3,120,098**	**-**	**752,075**	**-**	**-**	**752,075**
NON CLINICAL SERVICES	DUAL RUNNING FORECAST	Reducting in the Transitional Support required to cover Duel Running costs as the speed of Service change will be slowed down as a result of Refurbishment.	- 4,350,000					-
	MANAGEMENT EXEC&GENMGT RELATED	Increase in Management Costs resultant from working Across 2 site's.	1,377,256		741,577			741,577
	NON CLINICAL TRANSITION SAVINGS	The consequential knockon effect of the lack of centralisation, will reduce the amount of Transitional savings that can be achieved.	1,815,000				-	-
NON CLINICAL SERVICES TOTAL			**- 1,157,744**	**-**	**741,577**	**-**	**-**	**741,577**
OTHER SUPPORT SERVICES	EXCLUDED FUNCTIONS	Re instatement of Nursery facilities	500,000					
	OTHER SUPPORT SERVICES	Infrastructutre of Outpatient Services	371,422					
OTHER SUPPORT SERVICES TOTAL			**871,422**					
GRAND TOTAL			**9,648,510**	**9,817,154**	**1,493,652**	**-**	**-**	**11,310,806**

APPENDIX 8b – EXTERNAL HEALTH BENEFITS

Sandwell and West Birmingham Hospitals NHS Trust

MMH Project

EXTERNAL HEALTH BENEFITS QUANTIFICATION
February 2014

Version 2.3

1. Introduction

The purpose of this paper is to discuss the update to the quantifications of health benefits in support of the update of the Economic Appraisal and Benefits Quantification work for the 2014 MMH OBC update (for DoH and HMT appraisal).

2. Background

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.

2.1 Approach

A workshop was 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.

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.

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 addition, statistics used in the analysis have been updated where new information was available.

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.

3. Summary of the Service Model Assumptions

The characteristics of the service model are summarised below to show how benefits will be realised for each option.

3.1 The Grove Lane Solution

This results in full delivery of the *RCRH Programme* model of care to achieve the following:

- Consolidation of A&E, all acute inpatients and supporting services on one site
- Greater critical mass of services within larger clinical teams so reducing professional isolation and enabling the delivery of high quality care through greater sub-specialisation
- Robust 24 hour senior cover
- Consequent earlier diagnosis and treatment of emergencies e.g. thrombolysis for stroke
- Patients requiring a more complex assessment before discharge will have it in a more appropriate intermediate care setting (i.e. not an acute hospital) with a team of multidisciplinary staff trained to undertake such assessments

- Increase in day case rates resulting in increase in minimally invasive surgery with a reduction in recovery time.
- Adult day case surgery being undertaken in community locations in the BTC, BMEC and Sandwell and so closer to home
- Full implementation of outpatient care pathways as a result of the Trust being able to release senior clinical time to work with and support primary care in developing and delivering new care pathways
- Improved care pathways will result in fewer patients requiring outpatient appointments (especially follow up appointments) and a greater proportion of those that do require such appointments being able to have these in a location closer to home with required diagnostic tests being available at the same time (one stop approach)

3.2 Do Minimum Solution

The *RCRH Programme* model of care can only be partially implemented as outlined below:

- Development of a 'hot' and 'cold' sites releasing some senior clinical time
- The 'cold' site will still have elective inpatients which will require some onsite 24 hour medical cover which limits resources available to provide senior 24 hour cover on the 'hot' site
- Consequent reduced ability to achieve greater sub-specialisation, 24 hour senior cover and on-going service development
- Retaining Sandwell as a 'hot' site will impact on bed capacity for intermediate care on the Sandwell site
- Reduced ability to deliver improvements to outpatient pathways because it will not be possible for the Trust to release as many medical staff to work with and support primary care in developing and delivering new care pathways

3.3 Do Nothing Solution

It is assumed that the service model for 'Do Nothing' would remain the same as it is now.

4. Assumptions

The assumptions used in developing the benefits quantification fall into those that cut across all benefits and those that apply to individual benefits. The evidence/source for individual benefit assumptions can be found in the detailed spreadsheet in Appendix X.

4.1 Cross Cutting Assumptions

In summary the cross cutting assumptions are:

- Future years activity based on activity levels in the *RCRH* Activity and Capacity Model (version 5.7b)
- Option 1 - Do Minimum build period is 6 years (Do Minimum Option)
- Option 4 – New Build on Grove Lane Site build period is 28 months (Grove lane Option).

4.2 Benefit Description and Modelling Assumptions

The table below summarises the health benefits that have been quantified for this economic appraisal and outlines the sources of data and assumptions used in the analysis.

Benefit	Benefit Description	Source of Data and Assumptions used to Quantify the Benefit
Transport Costs	The majority of patients will have a reduced distance to travel as an outcome of the service model and provision of care closer to home with lower costs to them and reduced time away from work.	2012/13 outpatient activity by site by top 10 post codes of patients attending. 2012/13 day case, A&E, emergency inpatient and elective inpatient activity by site. Travel distances and time to each site from the post codes used, obtained from Google maps. GDP saving based on average GDP per capita per annum and used to derive an hourly GDP rate. Traded carbon value per CO_2e
Unexpected Hospital Mortality Ratios	As a result of consolidation of A&E, all acute inpatients and supporting service on one site there will be a reduction in unexpected deaths in hospital with associated improved life expectancy for these patients. This will generate a human cost saving for society.	Trust Hospital Standardised Mortality Ratio (HSMR) of 92.8 as at October 2013. Trust current average age of death of 74.1 years (from Trust data for 2012/13). Average national life expectancy of 85.15years. Human cost saving based on the difference between the Trust's current average age of death and average national life expectancy (11.05 years) with cost per Quality Adjusted Life Year (QALY) of £30,000 and average UK QALY applied. Future HSMR under Grove Lane solution assumed to improve to 88 (within the national top quartile in 2012/13). Future HSMR under 'Do Minimum' and 'Do Nothing' options assumed to remain as now (within the national upper quartile in 2012/13).
Discharges to Nursing and Residential Care Homes	Enhanced assessment in intermediate care will reduce the number of people discharged from hospital into a long term residential care or nursing home setting. The benefit is that this will result in a lower level of cost associated with caring for these patients in their own homes with community support as opposed to residential care setting.	Numbers of patients discharged from the Trust to a residential care home for the first time (as opposed to discharged back to a residential care home as usual place of residence) in 2012/13. Numbers of patients discharged from the Trust to a nursing care home for the first time (as opposed to discharged back to a residential care home as usual place of residence) in 2012/13. Assumes reduction of 20% in the numbers of patients discharged to a residential care or nursing home for the first time (as opposed to discharged back to a residential care or nursing home as usual place of residence) under Grove Lane solution. The 20% reduction is based on evidence based work undertaken by the Intermediate Care Work Stream within the *RCRH Programme*. Reduction of 10% in the numbers of patients

		discharged to a residential care or nursing home for the first time (as opposed to discharged back to a residential care or nursing home as usual place of residence) under the 'Do Minimum' option as a result of some improvement to the patient pathway Numbers of patients discharged from the Trust to a residential care or nursing home for the first time under 'Do Nothing' assumed to remain as now. Average life expectancy in a residential care or nursing home is assumed to be 30 months based on evidence from Department of Health (2008, '*Making a strategic shift to prevention and early intervention; A guide', page 80).* Cost savings released by caring for a patient in their home with supporting community services compared to caring for a patient in a residential care home assumed to be £4 500 per annum based on evidence from Department of Health (2008, '*Making a strategic shift to prevention and early intervention; A guide', page 85).* Cost saving assumed to be greater when compared to caring for a patient in a nursing home based on greater staffing ratios.
Did Not Attend Rates	The new service model for outpatients (with fewer review attendances and care closer to home) will result in a lower level of patients not attending appointments (DNAs) with an associated increase in income to the Trust from these appointments.	Existing Trust DNA rate for new and follow up appointments using 2012/13 actual data. National average cost per DNA for new and follow up appointments. Assumes reduction in blended (across new and follow up appointments) DNA rate to 6% in line with national upper quartile under Grove Lane solution. Assumes reduction in blended DNA rate to 10.5% under 'Do Minimum' DNA rates under 'Do Nothing' assumed to remain as now (i.e. 13.1%).
Increased Day Case Rates	Increase in day case rates resulting in fewer patients requiring elective inpatient surgery (and associated increased time in hospital and recovery rates). This will result in patients of working age returning to work sooner with an associated reduction in lost GDP.	Use of current (2012/13) day case rate (80%) and percentage of day case patients of working age i.e. between the ages of 18 and 67 years (65.2%). Assumed future day case rate of 86%. Assumes reduction in recovery time for patients undergoing day case surgery of an average of 4 weeks. This will allow patients to return to work 20 days earlier than if they had elective inpatient surgery. GDP saving based on average GDP per capita per annum and used to derive a daily GDP rate.

		Increase in day case rates to 86% with associated reduced recovery time assumed under Grove Lane solution and 'Do Minimum'. The difference between the two options is an assumed earlier implementation date for the Grove Lane solution. Day Case rates under 'Do Nothing' assumed to remain as now (i.e. 80%).
Stroke Thrombolysis Time	Consolidation of A&E, all acute inpatients and supporting service on one site will facilitate an increased 24/7 on site senior medical cover with earlier diagnosis and treatment. This will result in an increase in eligible patients receiving thrombolysis within 60 minutes leading to a reduction in deaths and an increase in the number of people able to return to independent living. This will generate a human cost saving for society. The consolidation of services will also release capacity in the senior stroke team to work more closely with public health and primary care colleagues to raise awareness in the public about the importance of early presentation with symptoms of a suspected stroke (FAST positive symptoms). *	Use of Trust data on the current number of patients admitted with a stroke as a main diagnosis. Percentage of patients eligible for thrombolysis who receive it within 60 minutes (April -December 2013). Trust current average age of death of 74.1 years (from Trust data for 2012/13). Average national life expectancy of 85.15 years. Assumed human cost saving based on the difference between the cost of Trust current average age of death and average national life expectancy (11.05 years) with cost per Quality Adjusted Life Year (QALY) of £30,000 and average UK QALY applied. Assumed improvement under Grove Lane option to 20% of eligible patients admitted with a stroke receiving thrombolysis within 60 minutes (in line with national standard) Assumed improvement under 'Do Minimum' to 10% of eligible patients admitted with a stroke receiving thrombolysis within 60 minutes (in line with regional standard) Assumed thrombolysis rate within 60 minutes to remain as now (6.2%) under 'Do Nothing'. Reduction in deaths and increase in individuals remaining independent (assumptions based on work undertaken by the Public Health Department in relation to improvement in stroke care, for the Heart of Birmingham PCT showing that improved thrombolysis within 3 hours, using some national guidance around improvements from 1 -20 %, could result in 40 deaths being prevented and 16 individuals remaining independent). Human cost saving applied to assumed number of prevented deaths and people remaining independent.
Heart Disease Mortality and Morbidity	Consolidation of A&E, all acute inpatients and supporting service on one site will facilitate an increased 24/7 on site senior medical cover with earlier diagnosis and treatment.	Use of current incidence of heart disease in the local population and percentage of people with heart disease of working age. Assumption of a 50% reduction in people of

	It will also release capacity in the senior Cardiology team to work more closely with primary care colleagues in developing and delivering new care pathways (in line with *RCRH Programme*) to deliver significant health improvements. Earlier diagnosis and treatment for heart disease will result in a reduction in the number of people with heart disease of working age unable to work because of the heart disease. This will generate a greater contribution to GDP.	working age with heart disease unable to work on implementation of the improved heart disease care pathways as part of the *RCRH Programme* with an assumption that full implementation will occur over a 10 year period. Average GDP per capita per annum. Assumed full implementation of improved heart disease care pathways under Grove Lane solution Assumed partial implementation of improvement in heart disease care pathways under 'Do Minimum' delivering 67% of the anticipated benefits of full implementation Assumed partial implementation of improvement heart disease care pathways under 'Do Nothing 'delivering 33% of the anticipated benefits of full implementation as a result of the ongoing work of the *RCRH Programme*.

*From April 2013 the Trust provides stroke services on one site (Sandwell) and whilst improvements in performance have been seen the numbers of patients thrombolysed and the time to thrombolysis still do not meet best practice. This is partly the result of late presentation of patients and therefore a reduced number being eligible for thrombolysis and partly due to the workload of the out of hours on site medical cover.

5. Outcomes

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.

Sandwell & West Birmingham Hospitals NHS Trust
Summary of External Benefits Quantification
Appraisal Timeline: 65 Years

External Benefit Considered	DO NOTHING		DO MINIMUM		Option: Grove Lane	
	NPC £000's	EAC £000's	NPC £000's	EAC £000's	NPC £000's	EAC £000's
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 daycase rate	0	0	- 140,821	- 5,206	- 164,126	- 6,068
Public Health Benefits - Strokes	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 Health External Benefits	-	-	- 325,133	- 12,021	- 793,555	- 29,339

Further to this analysis, the Trust then considered the remaining two options:

- new build on City site and
- new build on the Sandwell site.

The conclusion reached was there was not a significant difference between these options compared to the Grove Lane solution. The table below contains the more detailed considerations:

External Benefit Considered	Consideration of the City and Sandwell sites
Transport	Marginal impact given location and associated travel distances but not material

Mortality	No difference between the new build options, all main acute services on one site
Discharges to nursing homes	No difference between the new build options
DNA reduction	There is no change to the OPD solution in that outpatients are spread across the existing sites
Day case	As with DNA, the community sites will be maintained for day case surgery
PHB- Stroke	The main acute clinical services would all be on one site and therefore no difference in the benefits anticipated for stroke
PHB- Heart Disease	The main acute clinical services would all be on one site and therefore no difference in the benefits anticipated for heart disease

The conclusion reached was that there may be a marginal difference in a few indicators but would not materially affect the health benefits and therefore the Grove Lane NPC should be used for the City and Sandwell new build options.

Appendix 1

DOCUMENT HISTORY

Document Location:

Document Location:

Version	Date	Location
Version 2.3	2014	OBC Update Version 4.5 as Appendix
Version 1	2011	OBC Version 4.4 as Appendix 5 of Appendix 8g

Revision History:

Version	Date	Author	Summary of Changes
V2.3	27/2/14	Jayne Dunn Redesign Director Right Care Right Here	Further update following review of benefits with the Medical Director and agreed change to hospital mortality ratio for single site options.
V2. 2	25/2/14	Kelly Eaves Partner- Delloitte	Updated with: • Insertion of summary table of outputs following update to model and revised calculations within it • Conclusion following consideration of Sandwell and City single site options
V2.1	18/2/14	Jayne Dunn Redesign Director Right Care Right Here	Move to Version 2 as part of 2014 OBC update. Draft 1 – amendments made to reflect current (2012/13) performance
Version 1	March 2011	Jayne Dunn Redesign Director Right Care Right Here	To support the Economic Appraisal and Benefits Quantification work for the OBC Version 4.4