



Reconfiguration of Calderdale and Huddersfield NHS Foundation Trust Hospital Services

Full Business Case



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1 | Executive Summary >>

1 | Executive Summary

>> 1.1 Introduction

Calderdale and Huddersfield NHS Foundation Trust (CHFT) provides hospital services at Calderdale Royal Hospital (CRH) and at Huddersfield Royal Infirmary (HRI). The distance between the two hospitals is approximately five miles. For several years the Trust has experienced a number of interconnected clinical, operational and financial challenges. Significant risks have been identified if there is no change to the current configuration of services. In 2014 the Trust developed a Strategic Outline Case (SOC) and an Outline Business Case (OBC) describing proposals for the reconfiguration of hospital services across the two sites that would mitigate these risks.

On the 14th January 2015, the Trust was placed under an enforcement undertaking by its then regulator Monitor (now NHS Improvement). As a result the Trust was required to produce a Turnaround Plan and was authorised by Monitor to use Ernst & Young to produce a five year strategic and sustainability plan which was approved by the Trust Board in December 2015 and submitted to Monitor and to Greater Huddersfield and Calderdale Clinical Commissioning Group (CCGs). During 2016 the CCGs led the Right Care, Right Time, Right Place formal public consultation on the proposals for the future configuration of hospital and community services in Calderdale and Huddersfield. Subsequently the CCGs made the decision to progress the proposed changes to a Full Business Case (FBC). In April 2017 NHS Improvement (NHSI) and NHS England (NHSE) confirmed support for the Trust to develop a Full Business Case for the reconfiguration of hospital services.

The purpose of this Full Business Case is to:

- 1. provide a plan for improving the quality and safety of hospital services provided by the Trust;
- 2. eliminate the Trust's underlying deficit;
- 3. make best possible use of the total Trust estate including the existing Private Finance Initiative (PFI);
- 4. contribute to improvement of the wider system affordability and sustainability;
- 5. secure NHS Improvement, NHS England, and Department of Health Treasury approval to progress a proposed capital funding option to implement estate developments that will enable the reconfiguration of hospital services.

>> 1.2 Strategic Context

People in Calderdale and Greater Huddersfield are living longer lives, however, more people are likely to have multiple long term conditions thereby increasing the demand on the health and social system.

Nationally there has been a rapid rise in demand for hospital nurses and difficulties in recruiting consultants in several specialties. Growing shortages of qualified clinical staff has resulted in increased use of agency and other temporary workers to fill vacancies, and this has increased NHS expenditure. At CHFT the current dual site configuration of services exacerbates the challenge of being able to recruit and retain staff and is placing a heavy reliance on agency staff equating to over £20m last financial year. Reconfiguration of the Trust's services will address these challenges, reduce the overall workforce capacity required and diminish the current reliance on temporary staffing.

The national NHS provider deficit is significantly higher than was planned and the National Audit Office report on Financial Sustainability from 22 November 2016 indicates that the NHS is financially unsustainable. CHFT has a significant underlying deficit and is reliant on financial support from the Department of Health to provide the cash to pay creditors and staff. Structural costs associated with the dual site configuration of services (which require higher workforce expenditure) and the high finance costs of the PFI are key factors driving the underlying deficit.

The cost of commissioning services is not affordable to the CCGs in Calderdale and Greater Huddersfield.

Nationally the increasing demand for services and financial stress is having an impact on access to NHS services and quality of care. CHFT has delivered a high level of performance against national access targets during 2016/17. However the sustainability of this is fragile as it is reliant on continued high agency staff use and cost.

Collaborative work across West Yorkshire to develop and implement sustainability and transformation plans (STP) is taking place. The proposed reconfiguration of hospital services in Calderdale and Huddersfield described in this FBC is included in the West Yorkshire STP as one of the potential solutions that could contribute to closing financial, care and quality gaps in West Yorkshire.

>> 1.3 Clinical Case for Change

There is a compelling clinical case for the reconfiguration of the Trust's services in order to improve the safety and quality of services and to ensure the sustainable provision of acute and emergency services in the future. The current dual site model of hospital services provided by CHFT does not, and cannot, meet national guidance. Reconfiguration of CHFT hospital services is required to co-locate acute and emergency services for adults and children on a single hospital site and planned (elective) services for adults on the other site.

The key drivers for change are:

- The Trust is not able to provide a sustainable clinical model of provision across two Emergency Departments (EDs);
- The Trust is not able substantively to recruit to meet the medical rotas of the two sites.
- The Trust is not compliant with many standards for Children and Young People in Emergency Care settings;
- Too many planned operations are cancelled as surgeons need to respond to meet the needs of emergency patients;
- Patients experience inter-hospital transfers and a number of moves between wards that can result in a longer length of stay in hospital and increased risk of a poor experience and outcomes;
- The Trust carries a high risk in terms of the condition and reliability of its buildings at HRI. The age
 and condition of the estate means that they are not clinically fit for purpose. Without a significant
 capital injection in backlog maintenance and a plan for a rebuild of the whole site in the next
 10-15 years, there is a high risk of failure of critical estate services and the consequent impact on
 service delivery.

A number of external independent clinical reviews of the Trust (e.g. the Royal College of Physicians) have recommended that staying the same is not possible unless there is a major injection of both permanent staffing and financial resources beyond that which is known to be available from Government, and on that basis, service reconfiguration is needed.

>> 1.4 Future Hospital Services Model

The proposed model of care for the future provision of hospital services in Calderdale and Greater Huddersfield described in this FBC is consistent with the model that has been endorsed by the Yorkshire and Humber Clinical Senate, and was publically consulted on during 2016. The model will ensure clinical service adjacencies that optimise the quality of hospital patient care and address the challenges and sustainability issues described in the clinical case for change. The model proposes that planned services are delivered at one hospital and that emergency and unplanned services are provided at the other hospital with both sites providing urgent care.

NHSI and NHSE have advised the Trust and CCGs that a review of the clinical model during development of the FBC should be supportive of the clinical model that was consulted on, but that this could be amended if this improved quality, affordability and/or reduced timescales. Two variations to the clinical model that was consulted on are described and included in the Financial Case (i.e. the possibility that CHFT may be selected as the second vascular arterial surgery centre in West Yorkshire, and; the planned hospital providing increased out of area elective surgery activity). At the request of NHS England a third variation of providing an additional in-hours emergency service (A&E) at the planned hospital has also been described. However, this variation is not considered to be viable as there is low confidence in being able to recruit the additional staff that would be required, and therefore it would not deliver clinical and workforce benefits, it also does not appear to be financially viable.

>> 1.5 Capacity Plan and Implications

An assessment has been undertaken of the impact of the proposed clinical model on future activity and the required clinical capacity (beds, theatres etc.) at the future planned and unplanned hospitals.

The capacity modelling shows that by 2021/22 the future hospital model will require the following to cater for patient activity estimated to be 720,000 visits per annum.

- 738 beds across the two sites (674 at the unplanned care site and 64 at the planned care site)
- 20 theatres (12 at the unplanned site and 8 at the planned site).

The Trust currently has circa 843 beds and 18 theatres. The 105 bed reduction by 2021/22 is planned to be achieved through delivery of improved pathways that enable admission avoidance and reduction in length of stay. This includes CCG's care closer to home and quality, innovation, productivity and prevention (QIPP) assumptions.

>> 1.6 Workforce Plan and Implications

The Trust faces considerable workforce challenges which undermine the resilience of clinical services, staff satisfaction and wellbeing, and the Trust's finances. These challenges include non-compliance with Royal College of Emergency Medicine workforce recommendations, intense and fragile clinical rotas, and recruitment and retention challenges resulting in a heavy reliance on locum and agency staff. These challenges arise specifically due to the current dual-site service model. The reconfiguration of services will enable compliance with workforce standards. The Trust will then be in a better position to meet standards around 7-day working, and enable the delivery of specialty rotas. This should reduce workload pressure and stress on staff, and is likely to impact favourably on the Trust's ability to recruit and retain staff, thus reducing the current reliance on temporary staffing.

The workforce plan shows that over the next ten years (FY18 – FY27) the Trust's whole time equivalent (WTE) staff establishment will reduce by 479. Business as usual turnover of staff (15%) will be sufficient to achieve this reduction in wtes without the need for compulsory redundancies. The planned reduction in staffing is lower than the 966 wte reduction that was previously modelled in the Trust's five year strategic plan.

The change in the workforce profile will be enabled and achieved by the following:

- I. service reconfiguration and redesign;
- II. recruitment and retention to reduce agency spend;
- **III.** recruiting new professional roles (e.g. Physician Associates);
- IV. job evaluation to ensure clinically qualified staff are practising to the full extent of their education and training (instead of spending time doing something that could effectively be done by someone else);
- **V.** optimising the availability, utilisation and productivity of the entire workforce creating more time to care.

>> 1.7 Hospital Estate Plan

The Trust's current estate at Calderdale Royal Hospital and Huddersfield Royal Infirmary varies considerably between the two sites. CRH is a 1990s PFI development with limited backlog maintenance requirement, whilst HRI is a 1960s build that has time expired buildings with significant backlog maintenance requirements.

The previous five year strategic and sustainability plan determined there is an overwhelming benefit of reconfiguring services to implement the future proposed model of care. The choice between HRI and CRH as the unplanned care site is primarily financial, with CRH as the unplanned care site currently estimated to be providing the most positive financial impact.

The proposed estate option is for Calderdale Royal Hospital to be developed as the unplanned hospital with Huddersfield Royal Infirmary (Acre Mills) as the planned hospital. The expected estate cost to implement the future service model option is £298m. To proceed with the existing model the anticipated cost would be around £379m.

>> 1.8 Economic case

Assessment of the financial (net present cost and equivalent annual cost) and non-financial benefits of the proposed service and estate model compared to continuing the existing service model and, in relation to the capital funding source, has been undertaken.

Both NHS England and NHS Improvement have declared that no public money for capital is available. We have also been advised that the financing options available to support reconfiguration are limited by whether the capital spend is incurred against the national 'Capital Departmental Expenditure Limit ('CDEL'). The utilisation of PFI as a financing vehicle allows the Trust to access available resource without incurring capital cost against CDEL.

Continuing with the existing service model does not achieve this as this option is reliant on the Independent Trust Financing Facility (ITFF) as PFI cannot be utilised for backlog maintenance which would be required during the ten year period ahead of a new build HRI. (The new build at HRI could be funded via ITFF or PFI, in this FBC ITFF is the assumed funding vehicle).

The combined financial and non-financial economic appraisal demonstrates that the development of CRH as the unplanned hospital, with a planned hospital development at HRI (Acre Mill) provides economic value for money (VFM) advantage compared to continuing with the existing service model, and that PFI is the proposed option for capital funding.

>> 1.9 Financial Case

To implement the proposed service and estate model:

- the Trust would require capital spend on reconfiguration of £297.6m with this financed through PFI (£276.6m) and ITFF (£21m);
- this would enable the Trust to achieve financial surplus in Year 8 (2024/25) and maintain financial surplus at circa £6m per annum thereafter.

This compares to the existing service model option where:

- the Trust would require a capital spend of £94.5m for back-log maintenance and £379.5m for a new HRI build;
- this would enable the Trust to achieve financial surplus in Year 16 (2032/33) and maintain financial surplus at circa £6m per annum thereafter.

>> 1.10 Commissioner Affordability

Greater Huddersfield and Calderdale CCGs have QIPP and care closer to home plans to improve quality and reduce activity for the Trust and drive down the overall cost of healthcare spend. The Trust has shared and discussed the activity, growth and inflation assumptions of the FBC with Greater Huddersfield and Calderdale CCGs. This has identified differences on the assumed Trust clinical contract income levels when compared to the CCGs' five year plans. This is mainly due to a £11.5m difference on QIPP assumptions in FY18 that requires in-year resolution. The Trust is committed to supporting the CCGs to deliver a financially sustainable solution for the local health system and is working with commissioners to deliver these in-year QIPP savings. The affordability gap grows by £7m between FY18 and FY22 and it is assumed in this FBC that as the £7m is identified, costs will be removed at 100% rate.

>> 1.11 Conclusion and Recommendation

This FBC proposes a plan that will improve the quality and safety of hospital services; eliminate the Trust's underlying deficit in year 8 (FY25); and deliver economic and affordability benefits compared to continuing with the existing model of hospital care.

It is recommended that both NHS Improvement and NHS England support CHFT's FBC and request Department of Health and Treasury approval to progress implementation of the proposed service and estate model.

2 | Introduction >>

2 | Introduction

>> 2.1 Overview and Background

Calderdale and Huddersfield NHS Foundation Trust (CHFT) provides hospital services at Calderdale Royal Hospital (1990s PFI site in Halifax) and at Huddersfield Royal Infirmary (1960s Trust building in Huddersfield). The distance between the two hospitals is approximately 5 miles. The Trust also provides integrated community services for the Calderdale area.

Both hospitals provide accident and emergency services, outpatient and day-case services, acute inpatient medical services and level 3 intensive care for adults. Some services are delivered at one site only (e.g. stroke, cardiology, trauma, paediatrics, acute surgery, elective orthpaedics and maternity).

For a number of years CHFT has experienced clinical, operational and financial challenges associated with the dual site provision of services and significant risks have been identified if there is no change to the current configuration of services. These include:

Safety and Quality Risks

- Inability to maintain a sustainable model for delivery of ED and acute medical inpatient services and the recruitment and retention of staff in these areas;
- Inability to provide Paediatric services compliant with national safety standards (separate site working for paediatric medical and surgical care and no dedicated paediatric ED facility);
- Requirement for a high level of inter-hospital transfers that potentially compromises safety of care
- Inability to deliver optimal outcomes of care (e.g. SHMI) and maintenance of CQC 'requires improvement' status.

Financial Risks

- Inability to sustainably reduce the underlying deficit of the Trust and thereby increasing the deficit of the local and wider West Yorkshire health economy both of which are already strained.
- An indefinite requirement for interest-bearing loans and/or fee-bearing public dividend capital ('PDC') from the Department of Health to maintain the two sites in their current configuration;
- An increasing requirement for capital support for essential buildings works to maintain the 1960s Huddersfield Royal Infirmary building.

On the 14th January 2015, the Trust was placed under an enforcement undertaking by its then regulator Monitor (now NHS Improvement). As a result the Trust was required to produce a Turnaround Plan and was authorised by Monitor to use Ernst & Young to produce a five year strategic and sustainability plan which was approved by the Trust Board in December 2015 and submitted to Monitor and to Greater Huddersfield and Calderdale CCGs.

In February 2016 Monitor provided written feedback of their high level review of the five year strategic plan. The feedback confirmed that "Monitor has undertaken a high level review of the Trust five year strategic plan to provide early feedback in advance of the development of the FBC. Monitor will undertake a further detailed review on submission of the FBC (subject to confirmation of DH support and sufficient development of the FBC). We expect that the FBC document will be written in the 5-case model format".

During 2016 the CCGs led the Right Care, Right Time, Right Place formal public consultation on the proposals for the future configuration of hospital and community services in Calderdale and Huddersfield. Subsequently the CCGs made the decision to progress the proposed changes to a Full Business Case (FBC). In April 2017 NHS Improvement (NHSI) and NHS England (NHSE) confirmed support for the Trust to develop a Full Business Case for the reconfiguration of hospital services.

The five year strategic plan proposed a new model of hospital service delivery to consolidate the provision of emergency and unplanned services at Calderdale Royal Hospital (CRH) and provide planned hospital services at Huddersfield Royal Infirmary (HRI). The service model developed was agreed with Clinical Commissioners and endorsed by the Yorkshire and Humber Clinical Senate.

The plan clarified the financial implications of supporting reconfiguration of CHFT services compared to the 'as is' or base case. This showed that:

- the proposed option yielded a recurrent deficit of £9.5m from FY22 onwards. Whilst this represented an
 improvement of £18.0m against the base case deficit of £27.5m it did not return the Trust to a breakeven or
 surplus position over the forecast period.
- the proposed reconfiguration of services would require £200m additional capital investment compared to the 'as is' however this would yield a £18m revenue benefit per annum that would mean a potential financial payback of investment in 10-11 years. Also this would deliver significant wider economic benefits related to quality, safety and workforce resilience.
- continuing with the current operating model would require £156m capital investment (largely to address backlog maintenance) and this would not deliver any reduction in the underlying deficit or improvement of the quality and safety of service delivery.

Overall the Trust's five year strategic plan for the future configuration of hospital services was developed on the basis that it would:

- Improve the clinical quality and safety of service delivery;
- Redesign services so that the Trust is operationally viable across two sites;
- Reduce the Trust's underlying deficit and as a result improve both local and West Yorkshire system financial sustainability;
- Make best possible use of the total Trust estate and PFI.

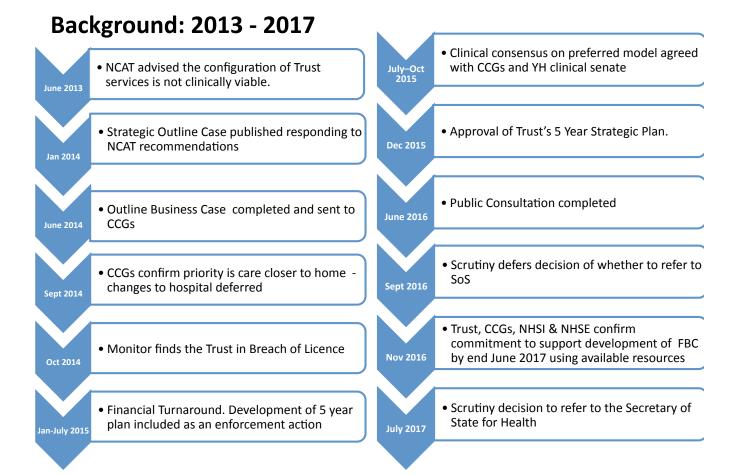
Using the Trust's five year strategic plan the CCGs developed a pre-consultation business case and subsequently led the Right Care, Right Time, Right Place formal public consultation on proposals for the future configuration of hospital and community services in Calderdale and Huddersfield. Public consultation concluded in June 2016 and in October the CCGs made the decision to progress the proposed changes to Full Business Case (FBC).

In November 2016 Calderdale and Kirklees Council Joint Health & Social Care Scrutiny Committee (JHSC) considered the findings of the public consultation and made nineteen recommendations requesting the CCGs and Trust provide further information.

On 21 July 2017 the JHSC agreed that maintaining the status quo is not an option and that they understand the clinical and quality case for change. However the JHSC voted 5 to 3 in favour of exercising its right to refer the proposed reconfiguration to the Secretary of State for Health on the grounds that:

- It is not satisfied with the adequacy of content of the consultation with the Joint Committee.
- The amended proposals presented to the Joint Committee are not consistent with the proposals originally consulted on by the CCGs in 2016.
- It considers that the proposal would not be in the interests of the people of Calderdale and Greater Huddersfield and hence not in the interests of the health service in the area.

A summary timeline of this extensive previous work is provided as follows:



>> 2.2 Advice and Support from NHSI and NHSE on Development of the FBC

In April 2017 NHS Improvement and NHS England Regional Directors for the North of England jointly reviewed the work previously undertaken and confirmed the following in a letter to the Trust and CCGs:

- 1. The status quo is not sustainable and the health economy will need to reconfigure to ensure clinical and financial sustainability. NHSI and NHSE will support the system to achieve these aims.
- 2. Public capital will not be available for the proposed model and therefore other options for funding will need to be explored.
- 3. NHSI and NHSE are supportive of the intent to pursue joint venture and PF2 options for capital and would need to understand the mechanisms to deliver solutions for both of these and any wider impact.
- **4.** The plans will need to be affordable for both the Trust and CCGs and as such the wider system health economy (affordability assumes delivery of NHS Constitution standards in a way consistent with the 5 year forward view delivery plan).
- 5. Any review of the plans should be supportive of the clinical model that has been consulted on but could be amended if this improves affordability and/or reduces timescales. Significant variation from the current proposed model may require consideration of whether further consultation is required.
- 6. The proposals will need to have an agreed timeline and plan on day one to deliver financial balance in the future as well as stretching and challenging plans to improve the position from now until then. Any changes might need to be accelerated so that a balanced position is achieved as soon as is practical.

NHSI and NHSE have also provided the Trust with specific direct input and support in development of this FBC as shown below:

Review of the clinical case for change and proposed future service model	Members of the Clinical Advisory Group: Chair - Joint Medical Director, NHS England – North (Yorkshire and the Humber) Programme Manager Clinical Strategy, NHS England - North (Yorkshire and Humber) Consultant in Public Health Specialised Commissioning, Public Health England, Yorkshire and the Humber Centre Deputy Director Healthcare, Public Health England, Yorkshire and the Humber Medical Director, Doncaster and Bassetlaw NHS FT and Council Member Acute Physician, County Durham & Darlington NHS FT Clinical Director Yorkshire and the Humber Clinical Networks Senate Manager, NHS England – North (Yorkshire and the Humber) Consultant Liaison Psychiatrist, York Liaison Mental Health Team and the Y&H MH clinical network lead
Development of activity and capacity models	Senior Economist, NHS Improvement Intelligence Analyst, NHS Improvement
Advice on Estates	NHS England Property Appraisal Unit Community Health Partnerships
Advice on PFI	Deputy Head, Private Finance Unit, Procurement, Investment and Commercial Division, Department of Health

>> 2.3 Purpose of the FBC

Building on the Trust's five year strategic plan and the advice provided by NHSI and NHSE this Full Business Case:

- refreshes the strategic, clinical, operational and financial case for change;
- confirms the proposed future model of hospital services;
- identifies potential sources of capital funding to enable implementation of the proposed changes and explores the commercial opportunities and process to progress different options;
- provides an appraisal of the potential funding options to identify a proposed funding option;
- assesses the impact of the proposed service model and funding option on the Trust's underlying deficit and longer term sustainability.
- describes the impact on the wider system affordability and sustainability.

The purpose of the FBC is to:

- provide a plan for improving the quality and safety of hospital services provided by the Trust;
- eliminate the Trust's underlying deficit;
- comply with the NHSI / Monitor Enforcement Notice placed on the Trust;
- make best possible use of the total Trust estate and PFI;
- contribute to improvement of the wider system affordability and sustainability;
- secure NHS Improvement and Treasury approval to progress the proposed funding option to implement the proposed estate development and reconfiguration of hospital services.

3 | Strategic Context >>

3 | Strategic Context

>> 3.1 Summary

This chapter outlines the 'as is' strategic context for the development of this FBC. It provides information in relation to:

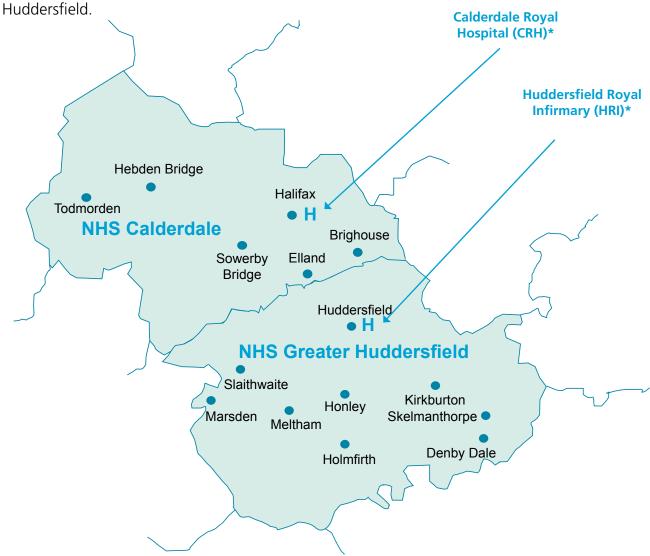
- the needs of the population served by the Trust;
- National policy and financial conditions;
- the West Yorkshire Sustainability and Transformation Partnership;
- the West Yorkshire Association of Acute Trusts;
- NHSE Specialised Service Commissioning;
- Calderdale and Huddersfield health and social care economy (local commissioning);
- CHFT's current service provision, strategic objectives and performance.

In summary the strategic context for this FBC is that:

- Our local people are living longer lives, however more people are likely to have multiple long term conditions thereby increasing the demand on the health and social system and those involved in the provision of care.
- Nationally there has been a rapid rise in demand for hospital nurses and difficulties in recruiting consultants in the mainstream specialties of emergency medicine, acute general medicine and diagnostic services. This has been further complicated with the enforcement of IR35. Growing shortages of qualified clinical staff has resulted in increased use of agency and other temporary workers to fill vacancies and this has increased NHS expenditure. At CHFT the current dual site configuration of services is exacerbating the challenges in being able to recruit and retain staff. Reconfiguration of the Trust's services will address these challenges and reduce the overall workforce capacity required and the current reliance on temporary staffing.
- The national NHS provider deficit is significantly higher than was planned and indicates that the NHS is currently both unaffordable and unsustainable. CHFT has a significant underlying deficit and is reliant on financial support from the Department of Health to provide the cash to pay creditors and staff. Structural costs associated with the dual site configuration of services (which require higher workforce expenditure) and the high finance costs of the PFI are key factors driving the underlying deficit.
- The cost of commissioning services is not affordable to the CCGs in Calderdale and Huddersfield and as a result they are not compliant with NHS business rules.
- Nationally the increasing demand for services and financial stress is having an impact on access
 to NHS services and quality of care. In 2016/17 CHFT has delivered a high level of performance
 against national access targets. However the sustainability of this is fragile as it is reliant on
 continued high agency staff use and cost. The CQC has rated the Trust as requires improvement.
 Nationally 43% of acute Trusts are rated as either 'inadequate' or 'requires improvement'.
- Collaborative work across West Yorkshire to develop and implement sustainability and transformation plans is taking place. The proposed reconfiguration of hospital services in Calderdale and Huddersfield described in this FBC is included in the West Yorkshire STP as one of the potential solutions that could contribute to closing the financial, care and quality gaps in West Yorkshire.

>> 3.2 The Population Served by the Trust

This FBC relates to the provision of hospital and community services in Calderdale and Greater



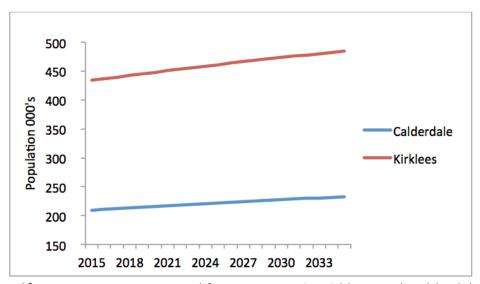
In Greater Huddersfield 80% of the resident population demand for hospital based services is referred to CHFT and in the case of Calderdale this is 88%.

The health economy does not operate in isolation or within defined boundaries and therefore changes to service provision in neighbouring localities (for example across West Yorkshire) may have an impact on the Trust's services and provision. Similarly changes made as part of this programme of work may also impact on neighbouring health economies.

3.2.1 Health Needs of the Population Served

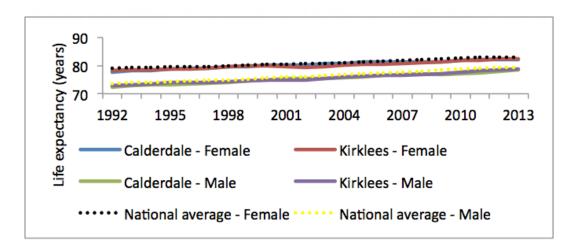
In Calderdale and Greater Huddersfield the size of the population and life expectancy is increasing. Many people now live well into their 80s and 90s. Lifestyles are also impacting on health needs. Smoking is still the UK's largest cause of preventable illness and early death, obesity is increasing and is associated with health issues such as diabetes and cardiovascular disease. Clinical Commissioning Groups and the two Councils in Calderdale and Kirklees have drawn up Joint Strategic Needs Assessments (JSNA) which identify common themes that drive the health needs of the local populations. These are:

Population Growth: The population for Kirklees is c. 434,000 and for Calderdale is c. 209,000, giving a combined population of c. 643,000 people. This is forecast to increase by 12% in Calderdale and 13% in Kirklees by 2037; which is consistent with England's expected population growth of 14%.



Forecast population in Kirklees and Calderdale. Source: Office of National Statistics, 2012 based subnational population projections for local authorities in England

Life expectancy: Average life expectancy in Kirklees and Calderdale has increased year-on-year.



Life expectancy in Kirklees and Calderdale, 1992 to 2013. Office of National Statistics, Life Expectancy at Birth and at Age 65, by Local Areas in England and Wales, 1991–93 to 2012–14 In 2012 there were 102,000 people aged 65 years and over (16% of the population). This is forecast to increase to 169,000 people over the age of 65 years by 2037 (23% of the population). These increases represent a compound annual growth rate of 2% for the 65 plus age group and 0.5% for the full population. This is a significant challenge, as the likelihood of having long term conditions increases with age and so does the likelihood of having multiple conditions, increasing the demand on the health system. The Kirklees Joint Strategic Needs Assessment (JSNA) 2013 reports that by the age of 55-64, one in four people had at least one of the long term conditions identified in the Current Living in Kirklees 2012 survey (e.g. diabetes, respiratory disease). Additionally, by the age of 75, almost two in three had two or more conditions. In Calderdale and Kirklees it is estimated there are circa 2,400 people and circa 4,200 people respectively living with dementia. Statistics show that more people in Calderdale are admitted to long-term residential care than in other parts of the country.

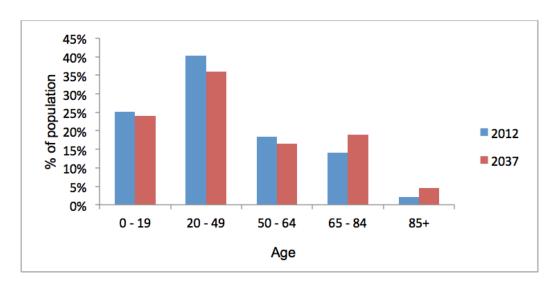


Figure 5: Forecast population ageing in Kirklees and Calderdale. Source: Office of National Statistics, 2012 based subnational population projections for local authorities in England

Levels of deprivation: There are high poverty and deprivation levels in Huddersfield along with higher rates of unhealthy eating and levels of exercise and higher disease burden. The infant mortality rate for Calderdale is significantly higher than the England average (7.7 per 1,000 live births compared to 4.6 per 1,000 live births).

Health profiles: The JSNA for the Greater Huddersfield area identified frailty, emotional welfare, obesity and cardio-vascular disease (CVD) as cause for specific concern locally. Priority areas for Calderdale in their JSNA include the management of long term conditions such as diabetes, asthma and epilepsy, mental health and the abuse of alcohol.

Lifestyle factors: Smoking prevalence and the harm caused by alcohol and obesity is increasing. There is rising childhood obesity and it is estimated that 40% of all illness in Calderdale can be attributed to lifestyle factors. In the Greater Huddersfield area, 52% of adults are overweight or obese and 20% of children are overweight or obese.

>> 3.3 National context

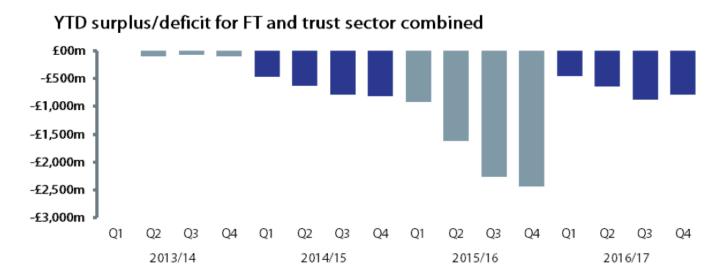
The following provides a summary of strategic issues at a national level that are impacting on the Trust and have been taken into account in developing this FBC.

NHS financial challenges:

In 2015/16 NHS Commissioners and Trusts reported a combined deficit of £1.85 billion. This was made up of Trust deficits of £2.45 billion, CCGs overspend of £15m, and NHS England under-spend of £614m. The majority of NHS trusts in England reported a deficit and were reliant on financial support (loans) from the Department of Health to provide the cash they need to pay creditors, staff and to fund essential building works.

In July 2016 NHS England and NHS Improvement described a financial 'reset' of the NHS detailing actions designed to support the NHS to achieve financial sustainability and improve operational performance (Strengthening Financial Performance & Accountability in 2016/17). £1.8bn of Sustainability and Transformation Funding (STF) was made available to support providers in reaching financial balance whilst improving performance and productivity of NHS services. Trusts were required to engage in service transformational change to: tackle paybill growth and reduce agency staff costs; implement Lord Carter's recommendations on back office and pathology consolidation; and address unsustainable services through collaboration with other providers. Specifically the financial reset, confirmed actions to support NHS providers in cutting the annual NHS provider deficit in 2016/17 to no more than £580m and deliver a balanced starting position for 2017/18 based on the full year effect of the measures taken.

The 16/17 year end outturn was £211m worse than the aggregate provider plan deficit of £580m and indicates that the NHS is currently both unaffordable and unsustainable.



Number of providers in deficit



(source: NHS Providers – 2016/17 Quarter 4 Finance and Performance)

Although there are increased resources available for the NHS in 2017/18 and 2018/19, the level of growth is significantly less than has previously been available to the NHS (3.6% in 16/17 compared to 1.3% for 17/18). Therefore, the expectation is that providers and commissioners will need to have a relentless focus on efficiency in 2017/18 and 2018/19.

The NHS capital environment is also very challenged with publically financed capital resources severely constrained at £360m. Provider capital plans need to be consistent with clinical strategy and clearly provide for the delivery of safe, productive services with business cases that demonstrate affordability and value for money. Providers are expected to continue to procure capital assets more efficiently, maximise and accelerate disposals and extend asset lives.

Increasing operational service pressures:

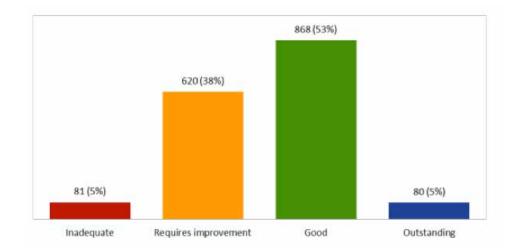
Increasing demand for services and financial stress is having an impact on access to NHS services and quality of care. During 2016/17 Trusts' performance against important NHS access targets has worsened.

A&E departments have seen exceptionally high numbers of attendances on a daily basis throughout the winter period and bed capacity constraints due to high occupancy rates and delayed transfers of care have resulted in many patients requiring admission waiting significantly longer in A&E departments for a bed. In December 2016, acute providers also had to open on average 2,600 escalation beds per day without extra funding to cope with the record level of emergency demand. High emergency admissions have also led to planned elective work being displaced or cancelled. In March 2017 85.1% (target 95%) of patients were seen within 4 hours in type 1 A&E departments.

Trusts continue to fail to achieve the national referral to treatment standard (RTT). At the end of March 2017 90.3% of patients waiting to start treatment (incomplete pathways) waited up to 18 weeks, thus not meeting the 92% standard. The number of patients waiting to start treatment at the end of March 2017 was 3.73 million patients and of those, 1,529 patients were waiting more than 52 weeks.

Increasing quality expectations:

In recent years there has been increasing scrutiny of Trusts, hospitals, departments and individual healthcare professionals. Rolling inspections by the Care Quality Commission (CQC), the Francis report, the Keogh Review, and the Seven Day Services review have all increased the focus on maintaining high standards of care at all times. This requires significant changes to health service culture and working practices in the context of a constrained funding environment. The CQC has inspected all acute hospital trusts in England. In March 2017 the CQC published their findings from the end of this programme of comprehensive inspections as summarised in the following diagram. This shows that just under half (43%) of all acute Trusts in England are currently rated as inadequate or requiring improvement.



(source: CQC ratings data as at 31 December 2016)

Clinical Workforce Challenges:

Since publication of the Francis Report there has been a rapid rise in demand for hospital nurses. Higher levels of patient activity and levels of sickness (acuity) in hospitals along with new requirements concerning safe and effective staffing levels has changed the national demand for nurses. There are also difficulties in recruiting consultants in the mainstream specialties of emergency medicine, acute general medicine, diagnostic services and psychiatry.

There is evidence that Brexit is having an impact on workforce supply. The number of EU nationals registering as nurses in the UK has fallen by 96 per cent since the referendum, with just 46 EU nurses registering with the Nursery and Midwifery Council in April 2017. There has also been a fall in the number of EU nationals taking jobs in the social care sector.

Growing shortages of qualified clinical staff has resulted in Trusts making increased use of agency and other temporary workers to fill vacancies. In 2016/17 NHS Improvement introduced new rules on agency workers to help providers address the impact of this trend on their costs.

A change to the IR35 tax system in April 2017 has resulted in some Trusts facing a struggle to attract temporary staff - particularly in hospital A&E departments (which account for almost a fifth of the NHS expenditure on locum doctors).

Pressure on Adult Social Care:

The combination of a growing and ageing population, increasingly complex care needs, reductions in funding to local government and increases in core care costs have placed adult social care services under increasing pressure. Councils have sought to protect social care budgets. However, as the scope for savings efficiencies has reduced they have had to manage social care funding pressures by implementing service reductions, smaller care packages, stricter eligibility criteria, and reducing the prices paid to providers in both the independent and voluntary sectors.

Due to reductions in social care services, more people who need care are not having their needs met. There is also evidence that care providers are facing quality challenges and the care provider market is shrinking and becoming increasingly fragile. Furthermore, in some areas a lack of suitable care provision is adding to pressures in the NHS.

In 2015 and 2016 the Government announced three new sources of funding for Councils with responsibility for adult social care. However even with this additional funding (from the Social Care Precept, Better Care Fund and the Adult Social Care Support Grant) it was estimated that social care faces a funding shortfall of at least £2.6 billion by 2019/20.

In March 2017, the Government announced an additional £2 billion funding for adult social care in England over the next three years with £1 billion available in 2017/18. The funding will be supplemented by measures to ensure Councils facing the greatest challenges are identified and supported, and to ensure more joined up working with the NHS.

NHS Priorities in 2017/18:

In March 2017 the *Next Steps on the NHS Five Year Forward View* was published. This confirmed that within the constraints of the requirement to deliver financial balance across the NHS, the 2017/18 national service improvement priorities for the NHS are:

- improving A&E performance
- strengthening access to high quality GP services and primary care
- Improving cancer services and mental health services.

The report stated that 'whilst the NHS and the Government remain committed to short waits for routine operations there is likely to be continued pressure on waiting times for routine care and some providers' waiting times will grow'. To deliver these goals, in 2017/18 it is expected that work is undertaken through partnerships of care providers and commissioners in an area (Sustainability and Transformation Partnerships) and that some of these partnerships will be able to go further and more fully integrate their services and funding to establish Accountable Care Systems.

>> 3.4 The West Yorkshire Sustainability and Transformation Partnership

In December 2015 joint planning guidance was issued by NHS England, NHS Improvement, the Care Quality Commission, Health Education England, the National Institute of Health and Care Excellence and Public Health England. This required that health and care systems work together to develop place based five year sustainability and transformation plans to meet the needs of local populations and reduce gaps in services related to:

- health and wellbeing;
- care and quality; and
- funding and efficiency.

Across England 44 geographical STP footprints were established. CHFT is a member of the West Yorkshire Sustainability and Transformation Partnership covering a population of 2.6 million people. The partnership includes: all of the six acute trusts (five in West Yorkshire plus Harrogate), the eleven CCGs, mental health and community providers, Yorkshire Ambulance Service, local authorities, primary care federations and Healthwatch organisations across West Yorkshire.

In October 2016 the West Yorkshire STP was completed and described the following vision:

- Every place will be a healthy place, with a focus on prevention and health inequalities;
- Work with local communities to build community assets and resilience for health;
- People will be supported to self-care as a standard offer, with technology a key to supporting people in their communities;
- Care will be person centred, simpler and easier to navigate;
- There will be joined-up community place-based services across mental and physical health and social care including close working with voluntary and community sector;
- Local services will merge into accountable care systems to help keep people well;
- Acute needs will be met through services that are "safe sized" with an acute centre in every major urban area, connected to a smaller number of centres of excellence providing specialist care;
- Actively engage people in planning, design and delivery of care;
- Move to a single commissioning arrangement between CCGs and local authorities;
- Share back office functions, where possible, to drive efficiencies to enable investment in services;
- Local services will merge into accountable care systems to help keep people well.

The West Yorkshire STP included local plans for: Bradford District and Craven, Calderdale, Harrogate and Rural District, Kirklees, Leeds and Wakefield. Nine West Yorkshire-wide priority areas for collaboration and transformation were also described: acute hospital collaboration, cancer, mental health, prevention 'at scale', primary and community care, specialised commissioning, standardisation of commissioning policies, stroke, and urgent and emergency care.

The STP confirmed that the demand for and cost of services in West Yorkshire, if unmanaged will drive a funding gap of £1.07bn by 2021 for health and social care. However by working together to redesign and reconfigure services the STP also identified solutions that could reduce the health and social care funding gap to £91m by 2021.

The proposed reconfiguration of hospital services in Calderdale and Huddersfield is included in the West Yorkshire STP as one of the potential solutions that could contribute to closing both the financial and care and quality gaps in West Yorkshire. The STP confirms that transformational capital funding will be required to enable service reconfiguration and to address long term structural and estate challenges in West Yorkshire.

>> 3.5 The West Yorkshire Association of Acute Trusts (WYAAT)

Established during 2016 the West Yorkshire Association of Acute Trusts (WYAAT) is a collaboration which brings together NHS trusts delivering acute hospital services from across West Yorkshire and Harrogate to drive forward the best possible care for patients.

Membership of WYAAT includes: Airedale NHS Foundation Trust, Bradford Teaching Hospitals NHS Foundation Trust, Calderdale and Huddersfield NHS Foundation Trust, Harrogate and District NHS Foundation Trust, Leeds Teaching Hospitals NHS Trust and Mid Yorkshire Hospitals NHS Trust. Formal governance arrangements to enable collective decision making (including a Committee in Common) and a shared PMO function have been established.

The vision of WYAAT is to create a region-wide efficient and sustainable healthcare system that embraces the latest thinking and best practice consistently delivering the highest quality of care and outcomes for patients. The purpose of the collaborative programme is to reduce variation and deliver sustainable services to a standardised model which is efficient and of high quality.

The five key areas of work of the WYAAT Collaborative Programme approach are shown below and these are all included in the West Yorkshire STP.

- 1. Developing a 'Centres of Excellence' approach to higher acuity specialties e.g. hyper-acute stroke, neurology, cancer, vascular, ENT, eliminating avoidable cost of duplication and driving standardisation.
- 2. Developing West Yorkshire and Harrogate standardised operating procedures and pathways across services, building on current best practice and using "Getting it Right First Time" (GIRFT) to drive out variations in quality as well as operational efficiency and facilitating safer free movement of bank staff across providers.
- **3.** Collaborating to develop clinical networks and creating alliances as a vehicle (e.g. hyper acute stroke, cancer etc.) which will protect local access for patients whilst consolidating skills (and therefore resilience) and reducing operational cost of duplicated facilities. Using GIRFT, outcome variation data and WYAAT work on sustainable services to identify the case for change for specific services, the model being based on the 'chain' concept.
- **4.** Developing workforce planning at scale to secure the pipeline of fit for purpose staff and improved productivity, managing workforce risk at system level, and supporting free movement of bank and agency staff under single shared Bank arrangements with the aim of reducing spend on agency and reduce the administration costs of the flexible workforce.
- **5.** Delivering economies of scale in back office and support functions e.g. procurement, pathology services, estates and facilities management, and other infrastructure e.g. IT. The default position being consolidation.

.WYAAT has agreed four priority work streams which are shown as follows:



>> 3.6 NHS England Specialised Commissioning

NHS England commissions 149 specialised services with a value of £15.6 billion (15% of NHS spending). Specialised services are provided in relatively few hospitals and accessed by comparatively small numbers of patients, but usually with catchment populations of more than one million. CHFT provides the following specialised services: vascular surgery and vascular interventional radiology services, neonatal intensive care, HIV, chemotherapy, bone anchored hearing aids (BAHA), cardiac MRI, and implantable cardiac devices.

From April 2017 many specialised services will continue to be commissioned by NHSE at a national level however NHSE will also start to work more closely with Sustainability and Transformation Partnerships to deliver benefits from more place-based commissioning on an STP footprint. Central to NHSE's approach to this is maintaining national service standards, outcomes and accountability for specialised services whilst also providing local flexibility in the design and delivery of these services.

The linking of Specialised Commissioning with STP footprints is intended to enable a whole system, pathway led, approach to provision and commissioning of services, particularly where transformational change is required. NHSE has undertaken specialised services sustainability audits in each of the STP footprints and the findings of these audits will inform STP work streams around future hospital configuration.

NHSE Review of Vascular Services

In 2016/17 NHSE undertook a review of vascular specialised services across Yorkshire and Humber. The recommendations arising from this for West Yorkshire were that:

- there should be two specialist arterial vascular services with one of the existing centres transitioning to a fully integrated 'spoke' service, in line with NHS England's service specification (currently there are three hospitals providing these services in West Yorkshire Leeds, Bradford and CHFT);
- Work will need to be undertaken between WYAAT and commissioners to agree:
 - **>** Location of arterial sites
 - > Safe and sustainable transition of arterial workload
 - > Provision of hub and spoke model and sustainability of clinical interdependencies
 - > Clinical leadership and workforce considerations

During 2017 this work has been led by WYAAT and it has been confirmed that clinicians across West Yorkshire want to work together as 'team vascular' and need organisational boundaries to be broken down to deliver the best model in the future. Specific agreements that have been reached related to this are:

- to develop a West Yorkshire vascular network working as a West Yorkshire team with sub specialist team(s);
- West Yorkshire needs two strong arterial centres which are well utilised this is not centralising service in Leeds;
- the case mix in the two centres will reflect the specialist tertiary service provision and Major Trauma Centre status of Leeds;
- governance will be based on parity of esteem between partner organisations and a Memorandum of Understanding covering governance, decision making, clinical model, workforce plan and operating principles will be agreed;
- work will start with joint appointments for the West Yorkshire service including the university;
- the network model will consider development of local services and potential spokes including partner Trusts in West Yorkshire;
- there will be a shared financial model with risk gain share;
- there is need to develop the process for identifying the location of the second arterial centre but also it is recognised there is need to start collaborative working to build trust and confidence.

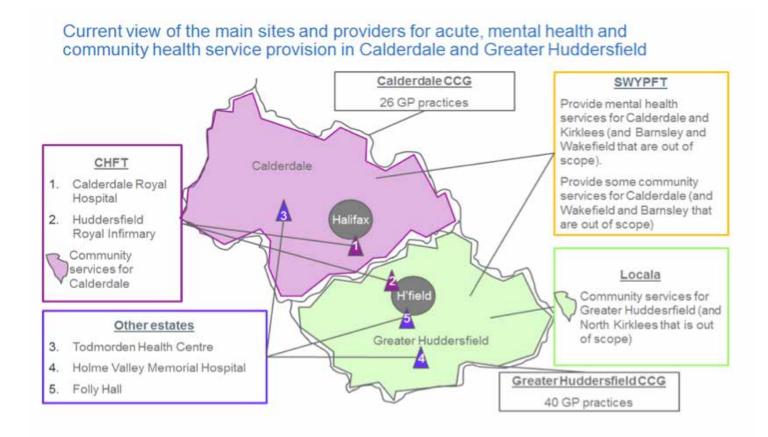
The outcome of the Specialised Commissioning review of vascular services and the WYAAT led response to this will have an impact on the future scope of vascular services provided by CHFT.

It is possible that Bradford Teaching Hospitals NHS Foundation Trust may be selected as the second vascular arterial site for West Yorkshire and CHFT would then be an integrated 'spoke' site for vascular services.

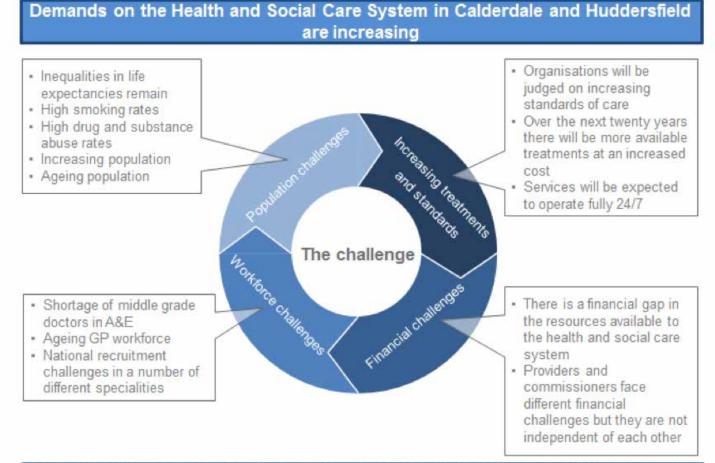
Conversely it is possible that CHFT may be selected as the second vascular arterial service site. If that was the case there would be additional clinical capacity requirements. On the grounds of not wishing to exclude the possibility of CHFT being selected as the second vascular arterial site this Full Business Case has considered and included these potential additional capacity requirements.

>> 3.7 The Calderdale and Huddersfield Health & Social Care Economy

NHS Calderdale CCG and NHS Greater Huddersfield CCG commission the majority of hospital and community health services for the Calderdale and Huddersfield population.



Both CCGs are facing significant challenges to ensure that the services commissioned are high quality, safe, sustainable and affordable.



Doing nothing is not an option. To meet the needs of the future, a radical change in the way in which services are currently delivered to the local population today is needed.

The cost of health and social care in Calderdale and Huddersfield is now more than £600 million a year and while that figure is set to continue to grow, increasing demand, inflation and the introduction of new drugs and treatments mean costs are increasing faster. For the CCGs, the local challenge across both Calderdale and Greater Huddersfield was quantified in the Commissioners Pre-Consultation Business Case as £59.7m between 2015/16 and 2021/22. The funding available to the CCGs will be insufficient to cover the rising demand for health services, the cost of inflation and any other future investments aimed at improving patient outcomes. Despite increasing resources available, growth in expenditure exceeds this.

NHS business rules require that CCGs deliver a 1% surplus or a 1% improvement on expenditure compared to 2016/17. Neither CCG is currently able to meet the business rules and has agreed financial recovery plans with NHSE. This means that the NHS in Calderdale and Huddersfield is currently both unaffordable and unsustainable.

Calderdale CCG's financial plan is a £0.4m deficit for 2017/18 and this assumes that the CCG will be able to deliver £11.5m of efficiency (QIPP) savings. The Greater Huddersfield CCG 2017/18 financial plan is for a deficit of £3.7m and this is based on assumed delivery of £13.5m QIPP savings. The QIPP plans are largely based on delivery of efficiencies associated with shifting services from acute care to communities and closer to patients' homes.

The CCGs have developed five year transformation plans to improve: the quality and safety of care; outcomes for patients, and; service affordability and sustainability. The plans comprise three interlinked pieces of work: Calderdale Care Closer to Home Programme; Greater Huddersfield Care Closer to Home Programme, and; the Hospital Services Programme.

Care Closer to Home

- In March 2015, Calderdale CCG published a detailed plan for 2015/16 which set out how the Care Closer to Home model would be delivered. In August 2015 the CCG received evidence about the early success of the care closer to home work, and subsequently Calderdale CCG, together with partners, was successful in its application to be a Multi-speciality Care Provider Vanguard site although the NHS England funding for this ceased prematurely a year later.
- During 2014 Greater Huddersfield CCG and North Kirklees CCG undertook a joint procurement exercise
 and in July 2015 appointed Locala Community Partnerships as the lead provider for Care Closer to Home.
 Delivery of the new Care Closer to Home service commenced on 1 October 2015 but in keeping with
 the broader health economy has challenges in maintaining quality linked to being able to recruit suitably
 qualified nursing staff.

Hospital Services Programme

• In parallel with the above, Calderdale CCG and Greater Huddersfield CCG developed proposals for the future configuration of Hospital Services. During 2016 the CCGs led the *Right Care, Right Time, Right Place* formal public consultation on proposals for the future configuration of hospital and community services in Calderdale and Huddersfield. In October 2016 the CCGs made the decision to ask the Trust progress the proposed changes to the FBC.

The Kirklees and Calderdale Health and Wellbeing Boards have both been proactive in considering the changes needed to improve health and wellbeing of the local population and reduce health inequalities. Both Boards have agreed local sustainability and transformation plans (and these are included in the West Yorkshire STP). The Calderdale and Kirklees local STPs share common themes of focusing on: preventative services; self-care; early intervention, and; using community assets to reduce the public need to visit hospital. The proposed reconfiguration of the hospital services provided by CHFT is included in both local STPs.

>> 3.8 Calderdale and Huddersfield Foundation Trust (CHFT)

3.8.1 Overview

The Trust was formed in 2001, combining Calderdale Royal Hospital and Huddersfield Royal Infirmary to deliver hospital services for the populations of Calderdale and Greater Huddersfield. Since then the Trust has expanded beyond hospital based services and also provides a range of community services in Calderdale. The

Trust achieved Foundation Trust status in 2006, which allowed the Trust to tailor its services and develop as the local health economy evolved. The Trust has approximately 843 inpatient beds, employs c.6,000 staff and the annual expenditure in 2016/17 was £366m.

The Trust is a 24/7 provider of a range of hospital services that includes: acute medicine, stroke, level 2 trauma, paediatrics, cardiology, interventional radiology, vascular surgery, critical care, obstetric services, orthopaedics, general surgery, gynaecology, and urology.

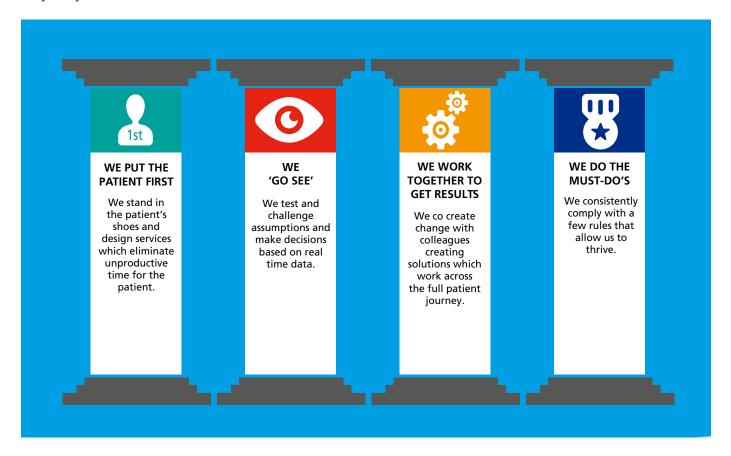
Some services are provided at both hospital sites whilst others are provided on a single site only as shown below.



3.8.2 CHFT Vision and Values

The Trust's Vision is strongly patient and clinically focussed, and provides the context for the current and proposed future clinical and operating models described in this FBC. The Trust's vision is: "Together we will deliver outstanding compassionate care to the communities we serve".

This vision is underpinned by the four fundamental behaviours which guide all Trust employees in the way they work:



3.8.3 CHFT Strategic objectivesThe key objectives of the Trust over the next five years are shown in the following diagram.



5 Year Strategy						
Our Vision	Together we will deliver outstanding compassionate care to the communities we serve					
Our behaviours	We put the patient first / We go see / We do the must dos / We work together to get results					
Our goals (The result)	Transforming and improving patient care	Keeping the base safe	A workforce for the future	Financial sustainability		
Our response	Our patients and the public will be involved in their treatment and we will use their feedback to develop services for the future	We will have achieved a CQC rating of outstanding	We will have a workforce of the right shape and size with the capability and capacity to deliver safe, high quality services	We will have implemented the five year plan		
	We will have commenced implementation of an agreed reconfiguration of integrated hospital and community services	We will be compliant with NHS Improvement standards	We will be widely recognised as an employer of choice through frowning our own and attracting talented people to join our team	We will be financially sustainable with the ability to invest for the future		
	We will meet all relevant 7 day working standards and our SHMI will be 100 or less	We will consistently achieve all national and local patient performance targets	Engaging our people and involving them in decisions that affect the Trust will be the norm	We will understand out markets and have a clear plan of how we grow our business		
	We will have a robust interoperable electronic patient record which is used by patients and clinicians alike	We will be fully compliant with health and safety standards				



3.8.4 CHFT Estate

The Trust is a large hospital and community multi-site organisation. Hospital services are provided from:

- Huddersfield Royal Infirmary and Acre Mill in Huddersfield.
- Calderdale Royal Hospital in Halifax.

Site name

Huddersfield Royal Infirmary



Site information

Trust owned site and building.

28 acre site with approximately 420 beds and 9 theatres. A new outpatient facility at Acre Mill opened in 2015 Estate is overall in poor condition with significant backlog of maintenance for time expired buildings of £95m.

Calderdale Royal Hospital



Ownership of the site and building is split between the Trust and the PFI provider.

19 acre constrained site with approximately 450 CHFT beds and 7 theatres.

SWYPFT have 54 inpatient acute psychiatric beds. The existing PFI arrangement at Calderdale runs until 2061. The revenue cost of this is circa £10m per annum, with an additional cost of £10m per annum for hard and soft facilities management. There is a break clause in 2031 which is associated with significant exit costs.

Acre Mill



The Trust with development partners Henry Boot undertook the development of Acre Mills which opened in 2015.

Located across the road from Huddersfield Royal Infirmary it is the base for outpatient appointments in Huddersfield.

Examples of properties where the Trust provides Community services in Calderdale:



St John's Health Centre



Broad Street



Todmorden Health Centre

Huddersfield Royal Infirmary

Huddersfield Royal Infirmary opened in 1965. The hospital offers a full range of day case and outpatient services and an accident and emergency department. It is also the specialist centre for emergency surgery, planned complex surgery and emergency paediatric surgery for the people of Huddersfield and Calderdale.

In 2013, the Trust commissioned a 6 facet survey from NIFES Consulting group that identified the extent of capital works required to bring HRI to condition B status in accordance with the Department of Health Estate code. The survey concluded that the estate is overall in poor condition with significant backlog of maintenance for time expired buildings. The survey identified statutory items across the site that required immediate remedial action in large parts of the estate as well as key factor impacting on operational performance.

A significant investment is required to resolve the functional suitability of the estate. This has been driven through changes in service provision and size of teams that has meant the parts of the current estate are too small or were constructed and designed for another function which does not provide a suitable layout and space for services.

Since the 6 facet surveys were carried out in 2013 there has been a further deterioration of the estates building and engineering service infrastructure and space/functional suitability. This has been compounded by significant constraints on capital investment for backlog maintenance due to financial pressures.

The Trust carries a high risk in terms of the condition and reliability of its building and engineering services infrastructure at HRI. The age and condition of the estate is such that without significant capital injection in backlog maintenance there is a high risk of failure of critical services such as power supply, heating, hot and cold water services and medical gas services.

It has been estimated that £95m would be required to bring the HRI estate to a category B level.

Calderdale Royal Hospital

Calderdale Royal Hospital opened in 2001. The hospital offers a full range of outpatient facilities as well as inpatient areas including Surgical, Medical, Maternity, ICU, Coronary Care and Children's wards. The Dales Unit on the Calderdale Royal Hospital site is occupied by South West Yorkshire Partnership Foundation Trust and includes three in-patient wards as well as a number of outpatient services.

The site was one of the first hospitals built through Private Finance Initiatives (PFI). The PFI arrangement runs until 2061 having been entered into over a 60 year term with a break clause after 30 years.

In 1998 the agreement to build a Private Finance Initiative (PFI) funded hospital in Calderdale was signed. Work commenced in January 1999 and the building was handed over to the Trust in March 2001. Parts of the old Halifax General Hospital buildings were retained and refurbished and in general these are used for office accommodation.

The hospital was built by the Catalyst Healthcare consortium, which then comprised the Lend Lease Corporation, Bovis Lend Lease Limited, ISS Mediclean Limited, the British Linen Bank Limited and the French bank Societe Generale. Bovis Lend Lease provided the design and construction services. As part of the PFI agreement the Special Purpose Company (SPC) has agreements in place with Engie for estates maintenance, life cycle and variation work and with iss for the provision of catering, cleaning, portering, security, car park management, switchboard and linen distribution. The Trust works closely with all parties to ensure close and open partnership working.

The revenue costs of the site include interest and hard and soft facilities management. The total revenue cost for FY17 is expected to be c£23m. The backlog maintenance is managed through the PFI contract and supported by regular capital lifecycle payments into the PFI provider.

There is are limited backlog maintenance issues of note and the building is assessed to be compliant to NHS Estates Code condition B.

3.8.5 Workforce

The Trust employs circa 6,000 staff and faces considerable workforce challenges which undermine the resilience of clinical services, staff satisfaction and well-being, and the Trust's finances.

The Trust is not currently able to substantively recruit to meet the rotas of the two sites. There are 77 wte vacancies in the medical and dental group, and 187 wte in the nursing and midwifery group. A number of recruitment processes have failed due to lack of applicants. Vacancy rates are driving unacceptable levels of agency and locum staffing costs. In 2016/17 total Trust agency spend was £23m.

Due to a national shortage of skilled people, the Trust has been seeking to maximise opportunities for recruitment and, more specifically, retention of staff. Both of these activities are directly affected by the current configuration and dual site rotas – this is more severe in certain specialties. The Trust is actively undertaking recruitment of qualified practitioners in the UK, the EU, and internationally. However, there are a number of other specific factors related to the dual site configuration of services at CHFT that are impacting on the ability to recruit and retain staff.

These include:

- Consultant staff are exiting the Trust in emergency medicine and other medical specialties. The reason given for their departure is the current configuration of Trust services across two sites, which compromises the quality of care, and constrains the opportunity for sub-specialisation. This also negatively impacts on workload and the frequency of on-call responsibilities.
- Dual site running, particularly in relation to out of hours rotas, increasing the reliance on junior and/ or temporary staff. The reliance on middle grade doctors results in less specialist input into patient care, thus not meeting NHS England standards. The widespread use of locums / temporary staff can lead to lack of continuity of care, and a negative impact on staff morale and sickness absence rates.
- Changes to the IR35 tax system in April 2017 has resulted in the Trust facing additional challenges to attract temporary staff. This has impacted on a number of services such as dermatology.

3.8.6 Finance

Historically the Trust has delivered a financial surplus. In 2014/15, CHFT submitted a plan to deliver surplus however by quarter 2 the Trust recognised this was not achievable and Monitor confirmed the Trust was in breach of its licence.

Through a formal turn-around and recovery process during 2014/15 the Trust delivered a revised deficit plan and also subsequently achieved the agreed (deficit) financial plan for 2015/16.

The Trust has delivered the 2016/17 control total - a year end deficit of £16m. After exclusion of a number of agreed items from the control total and application of the STF incentive payment the Trust has reported the 2016/17 final year end position as a deficit of £13.79m.

Achievement of the control total deficit in 2016/17 was after receipt of £12.7m national Sustainability and Transformation Funding (STF). Based on the assumption that this funding will not be available from 2019/20 onwards the full underlying deficit that the Trust needs to eliminate is c £27m. The Trust has previously worked closely with Monitor and PwC to assess the causes of the underlying deficit. This identified that structural costs associated with the dual site configuration of services (which require higher workforce expenditure) and the high finance costs of the PFI were key factors driving the underlying deficit. To secure future financial sustainability the Trust needs to implement reconfiguration of hospital services and optimise the utilisation of the Trust's PFI and non-PFI estate.

The Trust's control total for 2017/18 is £15.9m (after £10.1m STF funding) and this drives the total CIP required in 2017/18 to £20m (5.3% of Trust operating expenses). Over the past three years the Trust has a track record of delivering against the objectives that the organisation signs up to. It is in the context of historic delivery; long term strategic change enabled by these reconfiguration plans, and the future opportunities afforded the organisation by working collaboratively across the region, that the Trust will strive to achieve the £15.9m control total set by NHSI for 2017/18. However, the likelihood of achievement of this control total is considered by the Trust Board of Directors to be high risk.

3.8.7 Electronic Patient Record

The Trust Board approved in January 2015 to invest in an integrated electronic patient record capability in collaboration with Bradford Teaching Hospitals NHS Foundation Trust ('BTHFT') hosted remotely by Cerner. In April 2015 the Trust awarded the contract to Cerner and the preparatory work for implementation of Cerner's Millennium EPR system commenced. On the 1st May 2017 the system went live across the Trust.

This EPR implementation forms a major component of the Trust's IM&T-enabled Modernisation Programme. By comparison with most Trust's in England, CHFT's roll out of EPR has been "digitally deep" which means that reliance on existing paper based methods is comparatively light. Staff have been truly amazing and resilient to this change and we thank those patients whose care has been impacted for working with us. As EPR is embedded and its use optimised over the next few years it will enable the Trust to transform the delivery of clinical services. The intended quality, efficiency and financial benefits have been modelled and taken into account in this FBC.

The key benefits to be delivered over time include for example:-

- Patients (and clinicians)being able to see their information in one place;
- Improvement in patient care and safety;
- Reduction in variation of clinical working practices;
- Reduction in inappropriate ordering of tests and reduced number of tests;
- More efficient bed management;
- Reduction in pharmacy and drug costs;
- Efficiencies in administration processes;
- Increased clinical workforce productivity;
- Reduction in litigation risks and costs.

The EPR has also been developed so that it can share information across other systems such as those used in Primary Care and the community meaning that there will be patient quality and efficiency opportunities across the broader health footprint.

3.8.8 Performance

NHSI Single Oversight Framework Segmentation

In October 2016 NHSI implemented the Single Oversight Framework. Each trust is segmented into one of four categories that describe the level of support they need across the five themes of quality of care, finance and use of resources, operational performance, strategic change and leadership and improvement capability. NHSI have confirmed the Framework does not give a performance assessment in its own right.

CHFT is currently in segment 3 which is described as:

"Providers receiving mandated support for significant concerns: there is actual or suspected breach of licence, and a Regional Support Group has agreed to seek formal undertakings from the provider or the Provider Regulation Committee has agreed to impose regulatory requirements."

Care Quality Commission

In August 2016 the CQC published the findings of its inspection of the hospital and community services provide by CHFT. Overall, the CQC rated the trust as requires improvement.

Overall rating for this trust	Requires improvement	
Are services at this trust safe?	Requires improvement	
Are services at this trust effective?	Requires improvement	
Are services at this trust caring?	Good	
Are services at this trust responsive?	Good	
Are services at this trust well-led?	Requires improvement	

Detailed actions to immediately respond to all the CQC findings and recommendations have been implemented and the Trust is awaiting a further inspection visit from the CQC to assess the impact of these actions.

Access to Services

CHFT is currently amongst the top performing acute Trusts nationally for its overall performance on the Emergency Care Standard, Referral to Treatment (RTT) and Cancer standards. However this excellent performance is in the context of the Trust's total Agency expenditure in 2016/17 of £23m reflecting the difficulty in recruiting and retaining staff due to the onerous nature of current rotas. The sustainability of performance is fragile due to the need to reduce Agency expenditure levels significantly during 2017/18 and beyond. CHFT is also beginning to see an impact on access performance in early 2017 due to a reduction in the availability of temporary staff following the recent IR35 tax changes for locums which is a subject of discussion across the West Yorkshire health economy.

Maximum time of 18 weeks from point of referral to treatment (RTT) - patients on an incomplete pathway:

During 2016/17 the Trust has consistently achieved a higher level of performance against the national target that 92% of patients have a referral to treatment time of less than 18 weeks. Overall performance for the year 16/17 was 95.14%. In May 2017 the Trust's RTT performance for the percentage of incomplete pathways less than 18 weeks was 94.3% despite the EPR implementation.

Emergency care standard:

During 2016/17 CHFT has consistently been nationally ranked as one of the top twenty Trusts for performance to treat, admit or discharge 95% of Emergency Department attendees within 4 hours. The Trust achieved the 2016/17 STF performance trajectory agreed with NHSI for this target. The Trust's aggregate performance for the year was 94.2%. The Trust has been an active participant in the West Yorkshire A&E Accelerator Zone initiative and actions enabled by this resulted in the Trust achieving 97% performance in March 2017. In May 2017 the Trust's Emergency care standard performance was 85.1%.

Cancer waiting times:

Overall during 2016/17 national cancer standards were met by the at Trust level:

- the target that 93% or more of suspected cancers have a first outpatient appointment within two weeks was achieved.
- the target for referral to a specialist within two weeks for exhibited breast symptoms where cancer
 is not initially suspected was achieved in every month except April 2016.
- the 62 Day GP Referral to Treatment target of 85% was consistently achieved during 2016/17.
- the 62 Day Referral from Screening to Treatment of 90% was achieved in all but 3 months. Due to low number of patients a small number of breaches has a significant effect on performance.
- the maximum 6-week wait for diagnostic procedures target of 99% was consistently achieved during 2016/17.

In May 2017 performance against the two week wait from referral to date first seen standard reduced to 84%. This the first time in over 12 months that the Trust has not achieved the standard.

National safety metrics

The national safety metrics were devised to give an 'at a glance' view of the current performance of a Trust. The most recent performance for CHFT is shown below.

Metric	CHFT (year to date)	Target (year to date)
MRSA	2 cases	0 cases
Clostridium difficile	27 cases	21 cases
Hospital Standardised Mortality Rate (1 year rolling data January to December 2016)	101.55	100.00
Local SHMI – relative risk (1 year rolling data October 2015 to September 2016)	108	100

Management of quality

As part of its continued commitment to improving quality across the organisation, the Trust identified the following Quality Account priorities in 2016/17:

Improvement Domain	Improvement Priority	Were we successful in 2016/17?
Safety	Falls (Introduction of Safety Huddles)	Yes
Effectiveness	Implementation of Hospital out of Hours (HOOP)	Yes
Experience	Understanding the Community Experience	Yes

The previous areas shown and others form the Trust's wider quality strategy which is illustrated as follows:



4 | The Clinical Case for Change >>

4 | The Clinical Case for Change

>> 4.1 Summary

There is a compelling clinical case for the reconfiguration of the Trust's services to improve the safety and quality of services and to ensure the sustainable provision of acute, emergency and community services in the future. The current dual site model of hospital services provided by CHFT does not, and cannot, meet national guidance. Staying the same is not possible as highlighted already in this document. Reconfiguration of CHFT hospital services is required to co-locate acute and emergency services for adults and children on a single hospital site and planned (elective) services for adults on the other site.

The key drivers for change are:

- The Trust is not able to provide a sustainable clinical model of provision across two Emergency Departments (EDs).
- The Trust is not able to substantively recruit to meet the medical rotas of the two sites.
- The Trust is not compliant with many standards for Children and Young People in Emergency Care settings.
- Too many planned operations are cancelled as surgeons need to respond to meet the needs of emergency patients.
- Patients experience inter-hospital transfers and a number of moves between wards that can result in a longer length of stay in hospital and increased risk of a poor experience and outcomes.
- The Trust carries a high risk in terms of the condition and reliability of its buildings at HRI. The age
 and condition of the estate means that they are not clinically fit for purpose. Without a significant
 capital injection in backlog maintenance and a plan for a rebuild of the whole site in the next 10-15
 years, there is a high risk of failure of critical estate services and the consequent impact on service
 delivery.

A number of external independent clinical reviews of the Trust have recommended that staying the same is not really possible and service reconfiguration is needed.

This includes:

- The National Clinical Advisory Team;
- The Royal College of Physicians;
- Yorkshire and Humber Clinical Senate;
- NHS England and NHS Improvement.

Kirklees and Calderdale Joint Health Overview and Scrutiny Committee have also stated in their report that "the Committee accepts that the status quo is not an option and wishes to see improvements in the quality of services provided through hospitals, care closer to home provision and primary care".

The Case for Change has previously been described (in the documents listed below) and was fundamental to the *Right Care, Right Time, Right Place* formal public consultation led by the CCGs in 2016.

- 2014 Strategic Outline Case
- 2014 Outline Business Case
- 2015 Five Year Strategic Plan
- 2016 Calderdale and Greater Huddersfield CCGs Pre-Consultation Business Case

In April 2017 NHS Improvement and NHS England Regional Directors for the North of England confirmed that the 'status quo is not sustainable and the health economy will need to reconfigure to ensure clinical and financial sustainability'.

>> 4.2 Challenges of the current configuration of hospital services

As described in section 3.8 CHFT provides hospital services at Calderdale Royal Hospital (CRH) and Huddersfield Royal Infirmary (HRI). The Trust is a 24/7 provider of a range of hospital services that includes: acute medicine, stroke, level 2 trauma, paediatrics, cardiology, interventional radiology, vascular surgery, critical care, obstetrics, orthopaedics, general surgery, gynaecology, and urology.

Both hospitals provide accident and emergency services, outpatient and day-case services, acute inpatient medical services and level 3 intensive care for adults. Some services are delivered at one site only (e.g. stroke, vascular cardiology, trauma, paediatrics and maternity).

As a consequence of the dual site configuration of services the Trust is experiencing a number of challenges in ensuring delivery of consistent, safe, high quality care. These can broadly be divided into the following categories:

- Quality and safety
- Workforce
- Operational performance

4.2.1 Quality and Safety Challenges:

- For people that have a serious life-threatening illness or injury and need emergency services it is not possible to guarantee the consistent presence of senior doctors seven days a week. The Trust's high level of concern with regards to continued delivery of services has resulted in the Trust developing a contingency plan should there be an urgent need to temporarily close one of the ED sites on the grounds of safety. This has been shared with local CCGs, overview and scrutiny committees and NHS Improvement.
- The two emergency departments at Calderdale Royal Hospital and Huddersfield Royal infirmary are non-compliant with many of the standards for Children and Young People in Emergency Care settings with regards to having ready access to paediatric specialist trained staff. An additional challenge faced by the Trust due to the current configuration across both sites includes meeting the Royal College standard of a consultant paediatrician being present and readily available in the hospital during times of peak activity, seven days a week.
- Paediatric medicine and surgery are not co-located on the same hospital site. This means that currently children that have urgent medical and surgical needs do not receive shared care from a consultant surgeon and a paediatrician. It also means that if an urgent consultant paediatric opinion is required out of hours, a consultant paediatrician on call for Calderdale Royal Hospital may have to attend Huddersfield Royal Infirmary whilst also being on call for acute paediatrics and neonatology at Calderdale Royal Hospital.

- There is often a need for inter hospital transfer of patients due to not all the expertise needed to manage certain conditions being co-located (i.e. trauma, vascular and acute surgery, oncology and haematology are at Huddersfield and stroke, paediatrics and obstetrics are at Halifax). Also, for people with multiple medical problems when they are admitted to hospital too many people experience a number of moves between wards, a longer length of stay in hospital, and increased risk of a poor experience and outcomes.
- Some planned operations are cancelled as surgeons need to respond to meet the needs of emergency patients.

4.2.2 Workforce challenges:

Vacancy rates are driving unacceptable levels of agency and locum staffing costs. The Trust is not currently able to substantively recruit to meet the rotas of the two sites, and a number of recruitment processes have failed due to lack of applicants. Consultant staff are exiting the Trust in Emergency Medicine and other Medical specialties. The reason given for their departure is the current configuration of Trust services across two sites. This compromises the quality of care that can be provided, and impacts on workload and frequency of on-call responsibilities. The Friends and Family Test shows that in Q4 2016/17 63% of Trust staff would recommend the Trust as a place to work. This is lower than the Trust's percentage score in Q4 2015/16 and compares less favourably to the national average percentage score of other acute Trusts (66%, Q4 16/17).

Dual site running, particularly in relation to out of hours rotas, is increasing the reliance on junior and/or temporary staff. The reliance on middle grade doctors results in less specialist input into patient care, thus not meeting NHS England standards. The widespread use of locums / temporary staff can result in a lack of continuity of care, and a negative impact on staff morale and sickness absence rates. This is particularly challenging in emergency medicine, critical care, acute medicine, and radiology.

Further information on the workforce challenges that are associated with dual hospital site working and are experienced within services is provided below.

Emergency Medicine

The Trust is experiencing the effects of a national shortage of emergency doctors at both consultant and middle grade levels. The current consultant pool is stretched covering vacancies which the Trust is unable to recruit to. As a result, the two emergency departments are heavily reliant on cover from locum middle grade doctors.

The Trust risk register documents the risk of poor clinical decision making due to the dependence on locum middle grade doctors at weekends and on nights resulting in possible harm to patients, extended length of stay and increased complaints. Double running of emergency medical services leads to very thinly spread middle grade cover particularly out of hours and nights. It is also difficult to flex other staff including nursing and allied health professional staff across two emergency sites. There have been particular difficulties recruiting to middle grade posts in ED leading to a workforce gap of 6 WTE posts against an establishment of 10. The number of consultants across both sites is also below establishment. There is a gap of 3 consultants with 9 being in post compared to an establishment of 12 (FY17 plan).

This leaves the service heavily reliant on consultant locum cover. However despite this there is still insufficient locum cover to fill the consultant gap.

In recent months the Trust has experienced the resignation of Consultant grade staff in Emergency Medicine and other Medical specialties and the reasons given by individuals has been the current configuration of services across two sites.

More recently a change to the IR35 tax system in April 2017 has resulted in the Trust struggling to retain existing locums or attract additional temporary doctors and nurses to work in ED.

Acute Medicine

The Trust is currently unable to substantively recruit to meet the rotas of the two sites. A number of recruitment processes have failed due to lack of applicants who are put off by the physical working environment compared to other Trusts.

The turnover of medical staff in the Trust is increasing with Consultant staff exiting the Trust and giving reasons that their decision is due to the current configuration of Trust services across two sites and that this compromises the quality of care that can be provided and impacts on workload and frequency of on-call responsibilities.

The Trust is unable to deliver specialty-specific rotas. This means that specialist consultants are covering general medical on-calls.

The current on-call rotas for medical consultants is 1:5 which hinders recruitment and retention of the medical workforce further exacerbating challenges with operational delivery.

Radiology

The Trust has tried and failed to recruit, resulting in a service which is being stretched beyond capacity to meet the growing demand for diagnostics across both sites. To ensure that patient quality does not suffer, the Trust is incurring a significant cost pressure through outsourcing some of its radiology work to the private sector.

Critical Care

The provision of critical care at each site means that the Trust is not currently fully compliant with NHS England service specification for critical care which includes reference to workforce standards. It is also difficult to flex staff (according to the demand for critical care) across two units.

4.2.3 Performance Challenges:

In 2016/17 CHFT has been one of the top performing acute Trusts nationally for its overall performance on the Emergency Care Standard, Referral to Treatment (RTT) and Cancer standards. However there are a number of areas of operational performance that are not achieving national targets and dual site configuration of services is believed to be a key reason. This includes:

- The local Standardised Hospital Mortality Index (SHMI) relative risk (1yr rolling data) based on the latest official release for October 2015 September 2016 is 108 (compared to England average of 100).
- The 95% A&E four hour access target is not being achieved, overall full year performance for 2016/17 was 94%.
- There were 152 patients who were medically fit for discharge but remained as inpatients in February 2017.

The Trust's performance is also in the context of total agency expenditure in 2016/17 of £23m reflecting the difficulty in recruiting and retaining staff due to the onerous nature of current rotas. The sustainability of performance is therefore very fragile due to the need to reduce agency expenditure levels significantly during 2017/18 and beyond.

>> 4.3 External Review Findings and Recommendations:

Independent inspections and review of services have recognised the operational, quality, and workforce challenges described above. All of the reviews have recommended that reconfiguration of services is needed to improve outcomes and safety.

4.3.1 The National Clinical Advisory Team:

In June 2013 the National Clinical Advisory Team (NCAT) visited Calderdale and Huddersfield Foundation Trust and recommended that a one acute care site option was the best for the future safety, value and sustainability of health care. This change would enable an increased senior doctor (consultant) presence for extended hours over 7 days, minimise the use of locum middle-grade doctors and reduce the need for inter-hospital transfer of patients. The Team also strongly supported commissioners enhancing primary and community based services for the same high quality reasons and advised that NHS services of the future cannot be of high value to patients unless more care is delivered out of hospital. A full copy of the NCAT report has previously been published and is available on the Trust's website.

4.3.2 Royal College of Physicians Invited Service Review of the Care of Older People:

In February 2016 the Trust invited the Royal College of Physicians to review the care provided for elderly people at CHFT.

The review team reported that they were highly impressed by the level of commitment demonstrated by the care of the elderly teams at CHFT in attempting to provide high quality care to patients. However the review team agreed with staff that services for elderly people are overstretched and under resourced. They considered the consultant workforce, particularly in CRH, was fragile and this was because there has been an extended period of time in which the team has had to rely on locum consultants. It was the opinion of the review team that the fragility of the workforce had impacted negatively on the development of the service and resulted in elements of the service becoming outdated.

The review team concluded the care of the elderly team would very much benefit in the medium and long term of being located on a single hospital site. Staff working within the service also supported this view. The review team believe that the service would be able to better utilise their resources from a single site. The review team queried, whether the Trust and the service could afford to wait five years to move the care of the elderly services to one site and whether this needed to take place much sooner given the concerns over the fragility of the workforce.

4.3.3 Royal College of Physicians Invited Service Review of Respiratory Medicine Service:

In April 2016 the Trust invited the Royal College of Physicians to assess the Respiratory Medicine Service provided by CHFT.

The main focus of this review was to consider concerns over the respiratory team's elevated hospital standardised mortality ratio (HSMR) for chronic obstructive pulmonary disease (COPD) and community acquired pneumonia (CAP). The review team was asked to provide the Trust with an independent and external view on whether there is good governance within the respiratory team and whether the provision of care is appropriate. In addition, the Trust requested the review to identify any areas of concern as well as suggest improvements to the current pathways of care.

The review found that the Trust has some very good respiratory care and has made some innovative service developments e.g. endobronchial ultrasound. However, it recommended that services are now consolidated and improved before new ventures are taken on.

Overall, the review team found that the respiratory care service at the CHFT was under-resourced and understaffed. Currently there are five consultants working within the team (three substantive and two locums), but for a catchment area of around 420,000 it would be expected that there would be around seven or eight respiratory consultants. In addition, the review team found that the specialty team currently had around half the number of beds that would be expected for a unit of this size, which would be expected to be around 56 beds for a Trust of this size. It was found that because of these reasons patients with respiratory illnesses such as CAP and COPD were often treated on non-specialty wards. The review team concluded that these patients were probably less well served by not having their treatment on a specialty ward given by appropriately skilled staff.

The review team concluded that in an ideal situation the cardiology and respiratory services should be co-located on the same site so that the pathway for the breathless patient would be clearer, and patients with mixed cardio-respiratory disease could access both specialist services on one site. Overall, the review team were firmly of the opinion that the respiratory team would benefit from having inpatient services located on one site as they considered this would improve cover arrangements of patients (particularly at weekends), would facilitate a sharing of skill sets and a move to 7-day service.

4.3.4 Royal College of Obstetricians and Gynaecologists Invited Service Review of Maternity Services:

In July 2016 the Trust invited the Royal College of Obstetricians and Gynaecologists (RCOG) to review maternity services. There were a number of conclusions and recommendations from the review which included that a review of the model of access to the second acute maternity theatre should be undertaken.

4.3.5 Care Quality Commission:

In August 2016 the CQC published the findings of its inspection of the hospital and community services provide by CHFT. Overall, the CQC rated the trust as requires improvement. Detailed actions to immediately respond to all the CQC findings and recommendations have been implemented and the Trust is awaiting a further inspection visit from the CQC to assess the impact of these actions.

There were a number of the CQC findings (examples given below) that are relevant to this case for change, and the Trust believes would be more sustainably addressed in the longer term through the co-location of all acute and emergency services for adult and children on a single hospital site.

- Medical staffing numbers did not meet national guidance in the emergency departments across both sites.
- The accident and emergency departments' provision for paediatric patients was limited with only one paediatric qualified staff member on duty across both sites and limited facilities available for children and young people.
- The Trust should ensure that children are seen in an appropriate environment by staff that are suitably skilled, qualified and experienced.
- It was difficult to determine how the emergency service had planned services to meet the needs
 of local children and young people at Huddersfield Royal Infirmary. There was no clear rationale or
 model of care for the services provided on the paediatric assessment unit. The trust must review
 the model of care for the services provided on the paediatric assessment unit at Huddersfield Royal
 Infirmary.
- Staff shortages to both nursing and medical staff meant there was high usage of agency and locum staff.
- The Trust must review the provision of a second emergency obstetric theatre to ensure patients receive appropriate care.
- Critical Care nurse and medical staffing was good at the time of inspection however we found areas of non-compliance with intensive care standards for all staff groups. Recruitment and retention of nursing staff had been challenging for the unit and morale had suffered as a consequence.

4.3.6 Other External Review of the Clinical Case for Change:

In March 2017 the Joint Medical Director for NHS England (North) convened a forum of external clinical leaders (listed in section 2.2) to meet with the Trust and advise on the clinical case for change. Feedback from this confirmed that:

- The Trust has good outcomes across a range of key indicators but has one of the highest spends on agency staff in the country.
- Outcomes are likely to decline without service changes.
- There are two major drivers; firstly is the increasing subspecialisation in medicine with a decline in the ability of physicians and surgeons to care for patients with a wide range of disorders. Secondly, is the ability of the trust to attract and retain medics willing to work across two sites with frequent on call.
- A single acute care site will enable the trust to offer more attractive rotas and to better offer subspecialised care to patients when it is needed.
- To sustain and improve clinical outcomes in the longer term, manage workforce pressures and attract and retain the staff needed, a reconfigured service is needed.

>> 4.4 The Benefits of Reconfiguring Hospital Services

The current dual site model of hospital services provided by CHFT does not, and cannot, meet national standards. Reconfiguration of CHFT hospital services is required to co-locate acute and emergency services for adults and children on a single hospital site and planned (elective) services for adults on the other site. This would enable the Trust to sustainably address the quality, operational and workforce challenges described above and deliver a number of expected benefits that includes:

- Ensuring paediatric medicine and surgery are located on one site thus facilitating the provision of shared senior paediatric and surgical care for children and young people. This would enable more streamlined care and more efficient deployment of the paediatric workforce. It would also enable the Trust to conform with Royal College standards for Children and Young people in Emergency Care settings.
- A single critical care unit will enable the Trust in being better able to respond to the NHSE critical care workforce standards thus supporting the delivery of improved patient outcomes for critical and complex care patients.
- Avoiding the need to spread the senior medical workforce thinly across two sites will ensure that
 the Trust is able to improve access to senior medical decision making and offers a more substantial
 approach to reducing its above national average hospital mortality ratios.
- The reconfiguration of acute medicine onto one site, to support the activity of a single ED, would have the advantage of reducing inter-hospital transfers which currently take place frequently for acute medical admissions when one or other site has reached its maximum medical bed capacity. Eliminating transfers of medical patients will improve safety, optimise patient flow in ED, shorten waits to definitive care, reduce ED breaches of the four-hour target, and reduce the workload on the ambulance service which is currently responsible for providing these transfers.
- Providing planned services, including surgery, in a dedicated site that supports access to treatment, surgery or therapy input will minimize the risk of disruption from emergency cases.

- Consolidation into a single emergency department will enable the Trust to meet the Royal College
 of Emergency Medicine workforce recommendations and ensure compliance with patient to
 staffing ratios. This will improve the likelihood of survival and a good recovery for patients.
- A single emergency department, and separation into unplanned and planned services, will enable the Trust to leverage its workforce more efficiently and leave the Trust in a better position to meet standards around 7-day working in the future and the realisation of specialty rotas. In turn this will reduce workload pressures on staff and improve the resilience of services in areas such as acute medicine, critical care, paediatrics and radiology. This is also likely to impact favourably on the Trust's ability to recruit and retain staff and reduce current reliance on temporary staffing.
- Will enable mental health, primary care and social care services to target their hospital based service delivery more effectively as opposed to managing the spread of services across existing sites.
- As part of progressing the STP, reconfiguration helps to safeguard the provision of unplanned (blue-light) care in this part of West Yorkshire.

5 | The Future Hospital Services Model >>

5 | The Future Hospital Services Model

>> 5.1 Summary

The Trust and CCGs have agreed a model of care for the future provision of hospital services in Calderdale and Greater Huddersfield that will ensure clinical service adjacencies that optimise the quality of hospital patient care and address the challenges and sustainability issues described in the clinical case for change (section 4).

The agreed model of care (described in this chapter) proposes that planned hospital services would be delivered on one site and that emergency and unplanned hospital services would be provided on the other site. Both sites would offer urgent care.

The clinical model was endorsed by the Yorkshire and Humber Clinical Senate and public consultation on the model was completed in June 2016.

Three variations to the clinical model that was consulted on are described in this chapter and financial sensitivity testing of these is included in the Financial Case (section 12).

>> 5.2 The Clinical Model that was used in Public Consultation

The agreed model of care is that planned hospital services would be delivered at one hospital site and that emergency and unplanned hospital services would be provided on the other site. Both hospitals would offer urgent care twenty four hours a day and seven days a week.

The emergency and unplanned hospital

This hospital will specialise in providing treatment for people who have a serious or life threatening emergency care need and will provide accident and emergency services. major surgery, critical care, acute general and specialist medicine, inpatient paediatric services and complex maternity services. The hospital will bring together on one site the necessary acute facilities and expertise, twenty four hours a day and seven days a week to maximise people's chances of survival and a good recovery. Ambulance services will transport people with serious or life threatening conditions to the nearest appropriate emergency department. People who suffer a myocardial infarction or major trauma, and are picked up in an ambulance, will continue to be transferred directly to specialist services in Leeds.

The planned hospital

This hospital will provide scheduled support, treatments and surgery. It will also provide urgent care and minor injury services twenty four hours a day and seven days a week. The urgent care centre will offer walk-in access for people requiring treatments for things such as sprains and strains; broken bones; wound infections; minor burns and scalds. It has been determined that circa 50% of people that currently attend A&E could be treated in an urgent care centre.

An overview of the future hospital services model across two sites is shown below:





Planned Care Hospital – 24/7 urgent care centre, diagnostics (x-ray and bloods), planned medical & surgical day cases, endoscopy, breast services, ophthalmology, planned orthopaedic inpatient surgery, outpatient services, therapies, midwifery-led maternity unit.

Emergency & Unplanned Care
Hospital – adult and paediatric
emergency departments, 24/7 urgent
care centre, diagnostics (including CT/
MRI), obstetrics, inpatient paediatrics,
midwifery-led maternity unit, acute
endoscopy, critical care unit, complex
and unplanned surgery (for patients
who may need critical care after
surgery) inpatient acute medical
services (e.g respiratory, stroke,
oncology, cardiology).

Mental Health Liaison Services will be provided throughout both hospitals including ED and the Urgent Care Services. The CCGs currently commission these services from South West Yorkshire Partnership Foundation Trust (SWYPFT) and in the future hospital model of care this will continue to be an integral part of the model recognising that mental and physical health are inextricably linked. Similarly CHFT will continue to work very closely with specialist Child and Adolescent Mental Health Services (also provided by SWYPFT) and with Locala Community Partnerships.

The key features of the future clinical model are described as follows in relation to: urgent care, emergency and unplanned care, planned care, maternity care and paediatric care.

5.2.1 Key Features of the Future Urgent Care model are:

There will be a consistent 24/7 Urgent Care Centre (UCC) at both of the hospitals in Calderdale and Greater Huddersfield. All patients will be encouraged to use existing primary care access and 111 for initial access to urgent care. Urgent Care Centres will not be considered the right place to go in a medical emergency (when 999 should be used), but will have protocols in place with the ambulance service if such events occur.

The urgent care centres will be able to treat the following:

Minor injuries	Minor illnesses
Bites/stings	Allergy (including anaphylaxis)
Burns and scalds	Dermatological conditions
Contusion/abrasion	ENT conditions
Diagnosis not classifiable	Infectious disease
Dislocation/fracture/joint injury	Local infection
Foreign body	Ophthalmological conditions
Head injury	Psychiatric conditions
Laceration	Social problem (includes chronic alcoholism and homelessness)
Muscle/tendon injury	Soft tissue inflammation
Nerve injury	
Sprain/ligament injury	

The UCC will provide clinical triage for all "walk-in" patients and redirection if appropriate. Patients with life-threatening illness and injury will be taken by ambulance directly to the Emergency Department (or to a specialist emergency / trauma centre such as Leeds).

The centres will be led by a clinician with the knowledge and skills to undertake triage and autonomous decision making regarding the next steps in an individual's care. Diagnostic facilities (including Point of Care and X-Ray) to support triage and decision making will be available. Direct access to specialist support from the Emergency Department will be available to both UCCs (if on the other site this will be via technology).

All children will have clinical triage within 15 minutes to ensure a child is in the correct place to receive treatment. The UCCs will comply with the Royal College 'Standards for Children and Young People in Emergency Care settings'. Protocols will be in place for 111 and the Ambulance service to ensure that any children with injury or illness requiring emergency care is directed to the specialist Paediatric Emergency Department (paediatric surgery and acute inpatient medical care will be colocated with the Emergency Department).

The Urgent Care Centre(s) will manage children 5 years and older with minor injuries and those children considered to have minor illness after triage by 111. All other children will be redirected to the Paediatric Emergency Department. Children under 5 years old will automatically be directed to the Paediatric Emergency Department. In instances where children who are ill, have serious injury or are under five years old present at an UCC they will be quickly triaged, stabilised and if necessary transported to the Paediatric ED or the Tertiary centre as required.

5.2.2 Key Features of the Future Emergency and Unplanned Care Model:

There will be a single unified Emergency Department for Calderdale and Greater Huddersfield providing emergency/acute medicine and accident and emergency services. There will be a dedicated Paediatric Emergency Department for Calderdale and Greater Huddersfield which will have facilities that comply with the standards for Children and Young People in Emergency Care Settings.

Access to emergency care will be via triage, an urgent care centre or via an ambulance. Specialist emergency care will continue to be provided on a West Yorkshire basis. This means that, as happens now, certain specialisms, such as severe trauma, will be provided at specialist emergency care centres (such as Leeds) that are best skilled and equipped to deal with them.

The single unified Emergency Department will provide treatment for people who have serious or life threatening emergency care needs. The Department will bring together on one site all the necessary acute facilities and expertise 24/7 to maximise people's likelihood of survival and a good recovery. This will reduce or eliminate the need for people to transfer between sites.

There are key clinical interdependencies and relationships between ED, acute medical services and surgical services, and critical care. The on-site support specialties required by any one of these four services define the clinically recommended minimum range of services required for any 'emergency centre'. Therefore, in the proposed model the following services are collocated with the ED:

- Acute / general / elderly medicine
- Respiratory (including bronchoscopy)
- Obstetrics / gynaecology
- Neonatology (SCBU) / paediatrics (including surgery)
- Upper and Lower GI surgery (including acute endoscopy)
- Trauma & orthopaedics
- ICU / 24hr anaesthetics
- Urology
- Gastroenterology
- ENT
- Cardiology (including CCU)
- Hyper acute stroke services
- X-ray, USS, MRI, CT, other diagnostics 24/7
- Microbiology / haematology / biochemistry
- Occupational therapy
- Physiotherapy

5.2.3 Key Features of the Future Planned Care Model:

The planned care hospital will provide:

- Outpatient care for adults and children
- Day case surgery for adults
- Some inpatient orthopaedic surgery for adults
- Therapy services (physiotherapy, occupational therapy, speech therapy and dietetics)
- Endoscopy

Planned care will be delivered in Hospital only when it cannot be delivered elsewhere in the community. There will be continuing work to deliver an increasing proportion of appropriate planned treatments and surgery as day-cases or as out- patient procedures.

The planned care centre will aim to optimise the potential benefits of the separation of planned and unplanned surgery. This should eliminate disruption from non-elective activity and create an environment in which standardisation of care processes and their systematic audit is promoted leading to better outcomes for the patient and an improved patient experience.

Patients that require complex surgery or it is known that they will require critical care after surgery will be treated at the unplanned care site. The pre-operative assessment and selection of patients appropriate for receiving surgery on the planned site will mitigate the risk of complications and deterioration of patient at the planned site.

5.2.4 Key Features of the Future Maternity Model of Care:

Extended ante-natal, intra partum and post-natal care will be provided in the community where possible and choice will be offered in relation to where the birth takes place.

Midwifery led maternity services will be provided on both hospital sites.

Consultant led obstetrics and neo-natal care will provided on the same site as the Emergency Department.

5.2.5 Key Features of the Future Paediatric Model of Care:

Both hospitals will provide urgent care and will be able to treat children 5 years and older with minor injuries and those children considered to have minor illness after triage by 111. All other children will be redirected to the Paediatric Emergency Department. Children under 5 years old will automatically be directed to the Paediatric Emergency Department. In instances where children who are ill, have serious injury or are under five years old present at an UCC they will be quickly triaged, stabilised and if necessary transported to the Paediatric ED.

Inpatient paediatric medical and surgical services will be co-located at the hospital site that provides the Paediatric Emergency Department and the obstetric services reflecting the critical interdependencies between paediatric and maternity services and emergency care.

The paediatric services will work closely with and receive support from specialist Child and Adolescent Mental Health Services (CAMHS).

>> 5.3 Benefits of the Future Model

There is no degradation of any existing services anticipated as a result of the proposed model. Some services may experience a change in the location at which the service is delivered. However, there is anticipated to be significant associated improvements in quality as a result of the implementation of the model, particularly through the consolidation of all acute services onto the unplanned care site.

Without service reconfiguration, hospital services will not have the capacity and concentration of expertise to maintain current service delivery let alone being able to offer a consistent 7 day a week service and the changes in pathways and medical intervention that will deliver better outcomes.

The benefits of reconfiguration of services will be evidenced over time by: reductions in harm; reductions in mortality within services; a reduction in incidents and serious incidents; and improvements in patient experience. From a quality perspective, the case for change is a signal of the Trust's ambition to develop the capability to meet and surpass good standards of care and create the opportunity to move to 'best in class' standards for services and pathways. This will help to address the inequality of outcomes for patients living in different areas covered by the Trust's services.

The following is a list of the key benefits the reconfiguration will enable:

- Improve the quality of patient care as a result of the Trust being able to meet Royal College guidelines on senior medical cover.
- Improve the quality of patient experience through a more streamlined, efficient patient pathway as a result of acute services being co-located.
- Support development of urgent care centres which will be equipped to care for patients with minor injuries and / or illnesses in a more timely, efficient way, thus reducing the demands on the Trust Emergency Department.
- Realise the patient outcome benefits from co-location of acute services and consolidation of paediatrics with complex obstetrics through a more streamlined approach for providing senior medical oversight.
- Enable the Trust to meet the Royal College of Emergency Medicine guidance on senior medical workforce cover through consolidation of rotas.
- Enable the Trust to meet Royal College standards for Children and Young People in Emergency Care settings.
- Reduce the reliance on locum and temporary staff to cover vacancies and workforce pressures as a result of running two district general hospitals.
- Make the Trust a more attractive place to work thus improving the recruitment and retention of staff.

>> 5.4 Potential Variations to the Future Hospital Services Model

Three variations to the clinical model that was consulted on (and described above) are detailed as follows. Financial sensitivity testing of these variations is included in the Financial Case of this FBC (section 12).

CHFT as a Vascular Arterial Surgery and Interventional Radiology Hub Site

As described in section 3.6 NHSE has undertaken review of vascular specialised services across Yorkshire and Humber. The recommendations arising from this require a reduction in West Yorkshire from currently three hospitals (LTHFT, BTHFT and CHFT) providing specialised arterial vascular services to two hospitals (with one of the existing hospitals providing a fully integrated 'spoke' service).

On the grounds of not wishing to exclude the possibility of CHFT being selected as the second vascular arterial site this Full Business Case has considered and included the potential additional capacity requirements. This is one of the variants to the model consulted on that is tested in the Financial Case assessing the impact on the Trust's future viability based on assumed income and investment in workforce and estate facilities this would require. The services would be provided from the unplanned care hospital site.

CHFT as an Elective Hub Site

WYAAT has identified that all acute Trusts in West Yorkshire are experiencing significant pressure in delivering 18 week RTT and that there is reliance on outsourced private sector capacity or temporary staffing which is driving additional cost pressures. A workstream for releasing WYAAT providers capacity to undertake additional elective activity that is currently contracted to the private sector has been initiated.

The specific aims of this are:

- Delivering high quality clinical pathways and operational models to the 'best in class' including optimal performance and use of resources;
- Delivering nationally recognised excellence in terms of clinical outcomes and professional standards;
- Working as a group to develop processes to retain as much NHS activity as possible within the WYAAT Trusts by optimising the capacity and configuration for elective services with agreed risk/ gain share (using estate and workforce in a flexible model across the WYAAT footprint).

CHFT / WYAAT as a provider of additional elective activity (Hub) serving a larger catchment area is one of the variants to the model consulted on that is tested in the Financial Case assessing the impact of this on the Trust's viability based on assumed additional income and investment in workforce and estate facilities this would require. The services would be provided from the planned care hospital site.

Enhancing the Planned Hospital Model to offer In-hours ED service

Based on the suggestion of NHS England, the potential of the planned care hospital to provide Emergency Department services for adults between 9am and 6.30pm, seven days a week, is one of the variants to the model consulted on that is tested in the Financial Case. This variant has previously been rejected on the grounds that it cannot deliver the clinical and workforce benefits associated with the proposed consolidation of all emergency services at the unplanned hospital. The FBC provides assessment of the financial impact of this option.

6 | Capacity Plan and Implications >>

6 | Capacity Plan and Implications

>> **6.1 Summary**

This chapter provides an assessment of the impact of the Clinical Model on core future activity, based on the proposed service and patient flow changes and quantifies the required clinical capacity (beds, theatres etc.) that will be required at the future Planned and Unplanned Care Hospitals.

The key planning assumptions previously used in the Trusts 5 Year Strategic Plan have been reviewed and updated. A range of clinical and management colleagues across the Trust have been fully involved with the review to ensure ownership and engagement in the process and outputs. Using the updated planning assumptions detailed modelling of activity across the five years to 2021/22 has been completed. The Trust has been supported by a Senior Economist and an Intelligence Analyst at NHSI to do this work.

The modelling output is that by 2021/22 the future hospital model will require:

- 738 beds across the two sites (674 at the unplanned care site and 64 at the planned care site)
- 20 theatres (12 at the unplanned site and 8 at the planned site).

The Trust currently has circa 843 beds and 18 theatres.

The 105 bed reduction by 2021/22 is achieved through delivery of improved pathways that enable admission avoidance and reduction in length of stay, this includes CCG's QIPP assumptions. (The previously modelled 2021/22 bed requirement in the 5 Year Strategic Plan was 732.)

The additional 2 theatres required is associated with provision of one additional obstetric theatre, which responds to CQC recommendations, and the provision of a hybrid theatre for vascular services which is on the basis that it is possible that CHFT may be selected as the second vascular arterial surgery provider in West Yorkshire. (The previously modelled 2021/22 theatre requirement in the 5 Year Strategic Plan was 18).

» 6.2 Key Planning Assumptions for Activity, Productivity and Clinical Model

The detail below highlights the key assumptions that have been used to model the proposed option.

- All modelling has been based on the forecast activity for FY16/17 (as at month 9)
- Growth has been modelled in accordance with the Trust financial assumptions:1-2% annual activity growth per annum
- The starting bed baseline for modelling is from 1st April 2017
- All movements will occur in year 5 on the basis that reconfiguration will require a capital build
- Ambulances will go to the nearest emergency care centre (ECC)
- Patients not appropriate to be seen at the UCC are diverted to the next nearest ECC department based on travel time
- Walk-ins are assumed to continue to attend the emergency department they currently attend
- Patients attending the UCC that require admission or more acute treatment are transferred to the ECC

- Wherever patients attend an ECC that is where patients will be admitted.
- An additional 30 winter pressure beds have been included to provide resilience to manage seasonality variations. This is in line with the seasonal swing identified by the Medicine division.
- Significant delivery of commissioner QIPP will be realised (resulting in a 6% reduction in non-elective medical admissions per annum for three years starting from year 19/20)
- Length of stay (LOS) reductions to deliver upper quartile performance.
- Bed occupancy to be applied as follows:
 - > Medicine: 90%
 - ➤ Surgery: Utilise current occupancy level 86.4%
 - > FSS: 60% for paediatrics and maternity, 90% for gynaecology
- Current average theatre utilisation (i.e. reflecting current usage of theatres) and a 4 hours sessions
- Impact of EPR efficiency assumption to support reduced bed base, optimises bed utilisation and efficiency through improved treatment and care pathways.
- Impact of 25 rehab beds being provided in community rather that acute trust site
- Expansion of ambulatory care pathways reducing bed requirement in year 5 (21/22)
- Reconfiguration is anticipated to have a modest, but material, impact on neighbouring providers. (See separate table)
- No growth in elective market share is assumed in relation to the Trust's 'core' activity and capacity requirement.
 (There is a possible variation to the model that would result in growth of elective market share and this is
 described at section 6.9).
- 18 critical care beds in total (an increase of 5 beds from current provision with capacity to increase to 22 beds)

» 6.3 Modelling Outputs

The modelling was designed to provide the following outputs:

- Activity requirements
- Bed capacity requirements
- Number of theatre sessions required in order to inform theatre requirements
- The number of consultant vs midwife-led births at each site
- Breakdown of ECC vs UCC attendances (based on the minor injuries/ minor illnesses criteria)

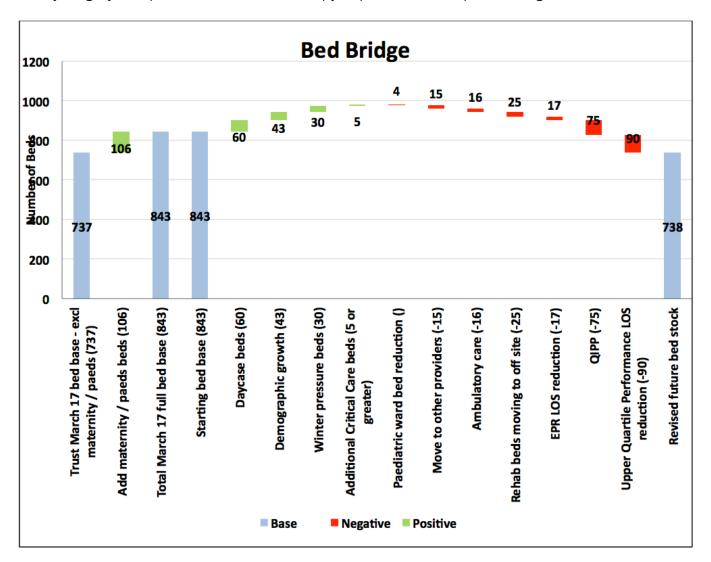
The above outputs have been utilised to prepare the cost model which identifies the total cost (revenue, capital, requirements and income) for the proposed option of CRH as the unplanned site and detailed in the economic case. A summary of the clinical activity requirement is shown in the following table.

Type of Activity	Site	Existing Model 2016/2017	Proposed Model 2021/2022
A&E and Urgent Care	CRH	77485	119374
		(A&E and urgent)	(A&E and urgent)
	HRI	73867	38685
		(A&E and urgent)	(urgent)
	Trust	151352	158059
Outpatients	CRH	219197	230378
	HRI	202655	212992
	Trust	421852	443370
Admissions	CRH	70278	80739
	HRI	50292	38892
	Trust	120570	119631
TOTAL		693774	721060

» 6.4 Bed Capacity Requirements

At present, there are circa 843 beds (*) located at the two sites. Modelling indicates that the Trust would require a total bed base of 738 beds if CRH was the unplanned care site. The graph below starts from the agreed starting bed base as of March 2017.

(*) for the purpose of modelling work all day case activity taking place in the trust has been assessed as 0.5 of a bed day for each day case (with the exception of Oncology and Haematology day cases where assessed a 0). This day case activity includes the high volume day case work within areas such as day surgery and procedure units, endoscopy departments and pain management.



Changes in CHFT bed numbers over the 5 years for CRH as the unplanned care site

Division	Unplanned Care	Planned Care	Total
Surgical (excluding critical care)	158	53	211
Critical care	18	0	18
Medical	331	5	336
Paediatrics (includes NICU)	67	0	67
Gynaecology	7	3	10
Maternity	63	2	65
Other (winter pressure beds)	30	0	30
TOTAL	674	64	738

Divisional – level beds required at each site in 21/22 (note: roundings included and therefore numbers do not exactly sum)

Impact on other providers in 2021/22

Travel times of patients were calculated to both the Calderdale and Huddersfield sites, along with other local emergency care providers based on patient postcodes. For all patients that arrived in an ambulance, the travel times were used to determine the closest Emergency Care Centre and it was assumed that patients currently being treated at the planned care site, would be treated at the nearest Emergency Care Centre in the future. These patients are also assumed to have their inpatient care (if required) at the same provider. The tables below show that the impact of reconfiguration at CHFT will result in activity shifts to neighbouring providers, leading to an increased total bed requirement across neighbouring trusts of 15 beds irrespective of which site option is selected.

Final Location	A & E	Emergency Admissions	Beds
Barnsley General Hospital	2861	971	12.3
Royal Blackburn Hospital	201	47	0.5
Bradford Royal Infirmary	152	44	0.5
The Royal Oldham Hospital	145	55	1.4
Pinderfields General Hospital	138	29	0.2
Leeds General Infirmary	117	26	0.3
Pontefract General Infirmary	38	13	0.0
St James's University Hospital	26	2	0.0
Trafford General Hospital	26	3	0.0
Fairfield General Hospital	19	4	0.0
Manchester Royal Infirmary	15	2	0.0
North Manchester	8	2	0.0
TOTAL	3746	1198	15.2

» 6.5 Theatre Requirements

The theatre requirements in 2021/22 that are predicted by the model are shown below. These are based on elective theatres operating two four hour sessions per day, 5 days per week over 49 weeks.

This includes one 24 hour emergency theatre ('CEPOD'), one trauma theatre and one emergency obstetrics and gynaecology theatre.

Estate option	Non-elective theatres		_		
Unplanned Care	6	4.5	1.5	0	12
Planned Care	0	3	4	1	8

Predicted future theatre breakdown as informed by the modelling

Note: The non-elective theatres at CRH include CEPOD, trauma, obs & gynae, vascular / hybrid, Acute. The CEPOD theatre refers to a dedicated 24 hour emergency theatre established in response to the National Confidential Enquiry into Patient Outcome and Death.

The table below shows the weekly theatre requirements.

Specialty / List Type	Unplanned day surgery	Unplanned inpatient	Planned day surgery	Planned inpatient
General Surgery	0.14	1.74	1	0.47
Urology	0.26	0.91	0.13	-
Orthopaedics	-	0.1	1.1	2.2
Ear, Nose & Throat	0.36	0.67	0.14	-
Ophthalmology	0.09	0.2	1.8	0.01
Maxillofacial	0.27	-	0.54	-
Surgery				
Plastic Surgery	-	-	0	-
Trauma	-	1.5	-	-
CEPOD	-	1	-	-
Acute	-	1	-	-
Vascular / Hybrid	-	1	-	-
Obstetric / Gynae	0.11	2.7	0.31	0.02
TOTAL	1.23	10.81	5.0	2.7

Weekly Theatre requirements

>> 6.6 Emergency and Urgent Care Attendances

The Clinical Model proposes there will be an urgent care centre co-located at each hospital site. The urgent care centres will operate 24 hours a day and be available to care for adults with minor injuries and illnesses and children over the age of 5 years with minor injuries only. The modelling indicates that total emergency attendances will not vary significantly under reconfiguration, even with the provision of the urgent care centres.

Site	Age Group	ECC Attendances	UCC Attendances	Total
Huddersfield Royal	Paediatrics		7,086	7,086
Infirmary	Adults		31,599	31,599
Total Huddersfield Royal Infirmary		0	38,685	38,685
Calderdale Royal Hospital	Paediatrics	20,562	8,013	28,574
	Adults	59,150	31,650	90,800
Total Calderdale R	oyal Hospital	79,711	39,662	119,374
TOTAL		79,711	78,347	158,059

Predicted emergency / urgent care activity with CRH as the unplanned care site in 2021/22

Please note that included in the attendances detailed above are some 18,673 attendances that will have initially presented at the UCC located on the planned site, but due to their clinical condition will need to be transferred across to the Emergency Care Centre at the Unplanned site. These patients are included in the ECC attendances above only. Further breakdown is as follows:

Age	Injury Type	Attendances at the ECC transferred from UCC at the Planned site
Under 5	Major	1273
	Minor Illness	788
	Minor injury	3393
Under 5 Total		5455
5 to 16	Major	1094
	Minor Illness	680
5 to 16 Total		1774
Adult	Major	11445
GRAND TOTAL		18673

>> 6.7 Births

In the outline model of care for hospital services, each site will continue to have a midwife-led birthing unit. Complex obstetrics will be cared for on the unplanned care site.

>> 6.8 Clinical Involvement in the Capacity Modelling

In developing this FBC there has been extensive engagement and involvement of clinical colleagues in the Trust. Meetings have taken place with every specialty to review the planning assumptions that were used in 2015/16 to produce the 5 Year Strategic Plan and these have been updated and modified as required to reflect specific changes in practice or learning since the Five Year Strategic Plan was produced. These changes are reflected in the planning assumptions detailed in section 6.2. Planning assumption summary sheets were produced for each specialty and these were signed off by clinical colleagues and at Divisional level. Similarly the outputs that the application of the planning assumptions generated (number of beds, theatres etc. on each site) were shared and discussed with clinical and Divisional colleagues.

This further clinical involvement has informed changes to the planning assumptions since the five year strategic plan. In all cases the reason for the change has been related to ensuring that the proposed future model will offer optimal safety, quality and outcomes for patient care. The changes are:

- the provision of some inpatient surgery activity has been moved to the unplanned site with the planned site offering an increased range of day case surgery;
- the assumption that patients with a length of stay greater than 10 days at the unplanned hospital could be transferred ('step-down') to the planned hospital was removed.

However the overall level of patient activity that will be delivered at the future planned hospital i.e. 290,569 patient visits per annum, has not significantly changed from the activity previously modelled for this in the five year strategic plan i.e. 290,800 patient visits per annum. (The term 'visits' includes a mix of attendances and admission activity.)

» 6.9 Capacity Implications of Potential Variations to the Future Service Model

The activity and capacity implications of two possible variations to the clinical model that was consulted on are provided as follows. Financial sensitivity testing of these variations is included in the Financial Case (chapter 12).

CHFT as a Vascular Arterial Service Hub Site

On the grounds of not wishing to exclude the possibility of CHFT being selected as the second vascular arterial site in West Yorkshire (see section 3.6) capacity modelling for this has been undertaken. This has determined that if CHFT is selected as an arterial surgery site there will be requirement for an additional 4.67 beds (based on 90% occupancy) and 5.69 additional 4 hour surgery sessions per week (based on 49 weeks per year) at the unplanned hospital site.

As described previously in this chapter the unplanned hospital includes an additional hybrid theatre that will accommodate the additional vascular surgery capacity.

Within the proposed estate development at CRH (see chapter 8) there is sufficient flexibility to provide the additional 5 beds that would be required if CHFT is selected as an arterial surgery centre.

CHFT as an Elective Surgery Hub Site

To model the possible additional elective activity that could be provided at the planned care hospital the following assumptions have been used:

- the total elective surgery activity that is currently provided by local Trust's was determined and uplifted for expected demographic growth between FY19 and FY42;
- an average tariff by the treatment specialty for this activity was determined;
- an assumption of what proportion of this activity might in future flow to CHFT from FY22 to FY42 was then applied. This started at 0.5% in FY22 and increased to 2% by FY42.
- an additional marginal cost at 70% was applied (increased pay and non-pay cost of delivering this extra activity), consistent with other financial modelling;
- no extra capital for this was applied within the modelling as it is assumed that this will be delivered
 within the existing estate footprint of the new planned hospital using out of hours and weekend
 working;
- this enabled an additional annual contribution (i.e. income net of cost) to be determined and the benefit of this has been applied as an upside in the financial case (chapter 12).

7 | Workforce Plan and Implications >>

7. Workforce Plan and Implications

>> 7.1 Summary

The Trust employs circa 6,000 staff and faces considerable workforce challenges which undermine the resilience of clinical services, staff satisfaction and wellbeing, and the Trust's finances. These challenges include non-compliance with Royal College of Emergency Medicine workforce recommendations, intense and fragile clinical rotas, recruitment and retention challenges resulting in a heavy reliance on locum and agency staff. These challenges arise in large part due to the current dual-site service model alongside national shortages. The reconfiguration of services will enable compliance with workforce standards. The Trust will then be in a better position to meet standards around 7-day working, and enable the delivery of specialty rotas. This should reduce workload pressure and stress on staff and is likely to impact favourably on the Trust's ability to recruit and retain staff, thus reducing the current reliance on temporary staffing.

This chapter describes: the workforce challenges the Trust is facing; the key initiatives that will address these challenges; the assumptions that have been used to develop the workforce plan; the workforce plan, and; the workforce benefits associated with the reconfiguration of services across the two hospital sites.

The workforce plan shows that over the next ten years (FY18 – FY27) the Trust's whole time equivalent staff establishment will reduce by 479 wte. The planned reduction in staffing is lower than the 966 wte reduction that was previously modelled in the Trust's five year strategic plan.

Business as usual turnover of staff (15%) will be sufficient to achieve this reduction in wtes without the need for compulsory redundancies. In addition the Trust's wte workforce establishment budgets include some provision for agency and temporary staffing. Therefore a proportion of the planned wte reduction can be achieved through a reduction in agency staffing rather than reduction of the permanent workforce.

The changes in the Trust's workforce over the ten year period will be enabled and achieved by the following:

- service reconfiguration and redesign;
- recruitment and retention;
- new professional roles;
- job evaluation;
- staff utilisation and productivity.

>> 7.2 Workforce Challenges

There is a local and national shortage in the supply of medical and nursing staff and the Trust's demand for these roles is increased by dual-site running. This increases the number of staff required and also affects the Trust's ability to attract and retain clinical professionals in key specialties. This puts significant pressure on the need for bank and agency staff (in 2016/17 total Trust agency spend was £23m); results in less specialist input to patient care, and; means the Trust is not compliant with a number of NHS England workforce standards.

Workforce Recruitment and Retention:

The turnover of medical staff is decreasing (from 16.32% in April 2016 to 10.99% in March 2017). However, whilst the Trust is improving its ability to recruit and retain staff, there is an underlying issue with the ability to fill workforce numbers and a number of recruitment processes have failed due to lack of applicants. Consultant staff in emergency medicine and other medical specialties have left the Trust. The reason given for their departure is that the current configuration of Trust services across two sites compromises the quality of care that can be provided, and impacts on workload and frequency of on-call responsibilities. The Friends and Family Test shows that in Q4 2016/17 63% of Trust staff would recommend the Trust as a place to work. This is lower than the Trust's percentage score in Q4 2015/16 and compares less favourably to the national average percentage score of other acute Trusts (66%, Q4 16/17).

Non-Compliance with Workforce Standards:

The Trust is not currently able to guarantee the consistent presence of senior doctors in the two emergency departments seven days a week. The Trust's high level of concern with regards to continued delivery of services due to workforce shortages has resulted in the need to develop a contingency plan should there be an urgent need to temporarily close one of the Emergency Departments on the grounds of safety.

The two Emergency Departments are also non-compliant with many of the standards for Children and Young People in Emergency Care settings with regards to having ready access to paediatric specialist trained staff. Paediatric medicine and surgery are not co-located on the same hospital site, and this means that currently children with urgent medical and surgical needs do not receive shared care from a consultant surgeon and a paediatrician. It also means that if an urgent consultant paediatric opinion is required out of hours, a consultant paediatrician on call for Calderdale Royal Hospital may have to attend Huddersfield Royal Infirmary, whilst also being on call for acute paediatrics and neonatology at Calderdale Royal Hospital.

>> 7.3 Addressing the Workforce Challenges

In January 2017 the Trust's 5-year Workforce Strategy was approved. The aim of the strategy is to ensure the Trust has 'a workforce of the right shape and size with the commitment, capability and capacity to deliver safe, efficient, high quality patient care'. The workforce strategy focusses on the following areas: recruitment and retention; workforce planning to improve staff availability; utilisation and effectiveness; reducing reliance on temporary staffing; improving attendance management; strengthening colleague engagement; organisational development and leadership.

The workforce challenges that have been highlighted above will mainly be addressed through the reconfiguration of clinical services across the two hospital sites. Whilst other initiatives that are not reliant on the reconfiguration of services will also have an impact on the size and capability of the Trust's workforce over the next ten years, we believe that service reconfiguration would allow the Trust to maximise the opportunity to strengthen workforce efficiency and sustainability.

Planned changes in the Trust's workforce profile will be enabled and achieved by the following:

Service Reconfiguration and Redesign

The reconfiguration of the Trust's services to the planned and unplanned hospitals and collaboration with other hospitals in West Yorkshire provides opportunity to improve the quality and resilience of clinical services and also the development of shared models of 'back-office' and support services. These changes will impact on the Trust's workforce profile.

Examples include:

- Commissioner led QIPP schemes and the development of Care Closer to Home will reduce admissions to hospital and enable reductions in hospital length of stay and bed capacity. This will reduce the workforce required in hospital.
- Collaboration with other hospitals across West Yorkshire will enable development of shared support services (e.g. pathology, pharmacy, estates and IM&T) that will realise efficiencies and enable reduction in workforce capacity.
- The clinical model of urgent care at the planned hospital does not assume that CHFT will be the proposed provider of these services and this could reduce the Trust workforce required.
- Changes in West Yorkshire models of provision of vascular services and elective surgery (associated with collaboration with other hospitals) will enable standardisation and efficiencies such as reduced length of stay to be delivered and could reduce the workforce required

Recruitment and Retention

Maximising the Trust's ability to recruit and retain clinical staff within key hospital and community specialties, coupled with the opportunity presented by a more attractive working environment will reduce reliance on Agency staffing. This will be enhanced following reconfiguration. The Trust is also interested in developing increased opportunities for the Trust's workforce in relation to research, education, training, and digital health that are likely to enable increased rates of recruitment and retention of staff.

New Professional Roles

The introduction of new roles across the Trust such as physician's associates, emergency care practitioners and advanced nurse practitioners will reduce reliance on non-consultant grade medical staff in areas of shortage and allow for better retention of clinical staff as new career structures are developed.

New apprenticeship routes across the Trust will contribute to the internal development of staff. This will increase the attractiveness of working for the Trust, fill a wide variety of positions with committed staff who want to develop within the Trust and provide an ongoing talent pool to fill vacancies as they arise. This will include the development of Associate and Assistant Practitioner roles as well as more traditional apprentice routes in administration, health and social care.

Job Evaluation

Effective workforce planning and competency-based job evaluation throughout the Trust will ensure that clinical professionals and their teams are supported in the most efficient and effective way. This will generate the opportunity for new roles to be created enabling skill and grade mix workforce changes. Important to this will be ensuring that clinically qualified staff are able to practice to the full extent of their education and training (instead of spending time doing something that could effectively be done by someone else).

Utilisation and Productivity

The opportunity to maximise workforce productivity will be enabled by a number of key initiatives following the introduction of the Cerner Millennium Electronic Patient Record. These initiatives are focussed upon standardisation of clinical practice and staff rostering and this will be further enhanced following service reconfiguration.

With regard to clinical rota resilience, rota frequency will reduce immediately with the consolidation of planned and unplanned services on to single sites thereby reducing the workload strain on staff and improving the resilience of services. Relevant services include ED, acute medicine, critical care, paediatrics and radiology.

In respect of the sub-specialisation of clinical services, the critical mass achieved through consolidation of unplanned patients and workforce onto one site will allow greater opportunities for sub-specialisation of the workforce. This will improve the attractiveness of employment in the Trust and enhance the quality and safety of clinical services for patients. Relevant services include paediatrics and trauma sub-specialisation in ED, and acute medicine.

>> 7.4 Key Assumptions Used to Develop the Workforce Plan

The following key assumptions have been used to quantify the workforce impacts of the above initiatives on the staffing base over the ten years of the planning period and the reconfiguration of the Trust's services into planned and unplanned sites.

The workforce staffing assumptions for 2017 – 2019 previously submitted to NHSI provide the starting point for modelling of workforce impacts. The FBC provides additional workforce plans for years 3 to 10.

In line with the capacity modelling outputs (detailed in chapter 6) the workforce capacity modelling takes account of a 105 bed reduction by 2021/22 delivered by improved pathways that enable admission avoidance and reduction in length of stay.

Consolidation of services onto a planned and un-planned site will generate efficiencies within the workforce. Specific savings will be made by a reduction in on-call intensity and medical rotas. There may also be some savings in clinical staffing numbers.

There will be a number of clerical staff released through delivery of benefits from the Electronic Patient Record (EPR) implementation process. This will be realised in years 2 & 3.

There will be some cost reduction achieved through retirement of experienced older staff members and appropriate re-banding of posts where it is safe to do so. Whilst this will not impact on headcount or wtes, there will be short-term savings on workforce costs.

Junior doctor ratios for the reconfigured sites will be based on national models.

In line with national best practice nurse staffing ratios will continue to be determined based on patient needs and acuity and professional judgement. All wards will have minimum nurse to patient ratios of 1:8 daytime and 1:10 night, with the exceptions of ITU; Level 2 = 1:2, Level 3 = 1:1 and Paediatric wards 1:4.

The use of a reviewed skills mix will be critical to the delivery of the new models of care across the planned and un-planned care sites. This will include the development of apprenticeships at all levels, as well as advanced practitioners.

The trust will work collaboratively with a variety of voluntary organisations to increase the opportunities for voluntary work and community involvement within the remodeled hospital sites. As part of the WYAAT collaboration we will review the delivery of support services such as estates and facilities, health informatics and various clinical networks to agree where economies of scale can contribute towards longer term cost savings.

As part of the WYAAT collaboration, and on the back of current work we will review the delivery of potential shared back office functions.

Calderdale and Huddersfield NHS Foundation Trust will continue to provide existing vascular services (including arterial surgery) and will continue to deliver stroke services. These two services are currently being reviewed across West Yorkshire. The vascular assumption is based on not wishing to exclude the possibility of CHFT being selected as the second vascular arterial site in West Yorkshire (see section 3.6).

A review of outpatient services will take place with the aim of delivering new models of care and reducing follow-up appointments through the introduction of fast-track access for existing patients in areas such as Gastroenterology, Respiratory, Diabetes and other long-term conditions. We will work with mental health, primary and social care and other local provider services to develop efficiencies in service provision.

We will work with other local provider organisations, including primary care to generate effective and efficient delivery of back-office functions for the whole of Calderdale and Huddersfield.

No redundancy costs have been included in reconfiguration costs in the financial case, despite the projected reduction in wtes arising from the reconfiguration. Instead it is assumed that business as usual turnover of staff, currently at 15%, will be sufficient to achieve the necessary reduction in wtes without the need for compulsory redundancies.

The workforce requirements relating to delivering the reconfiguration of clinical services, including double running costs, are non-recurrent, and as such do not contribute to the overall movement in wtes.

Delivery of the plan is dependent on the upskilling / reskilling of a number of people to fill new and developing roles across the organisation. Recruitment to new roles, such as physician associates is dependent on sufficient places being commissioned with local universities to fulfil the need within the Trust environment. The current plan allows for 12 PAs to be recruited for each of the next 3 – 4 years and discussions are being held with local higher education institutions (HEI) to ensure that this is sustainable and that the workforce can be released or recruited to fill these roles. There will be a similar requirement for emergency care practitioners (ECP) and operating department practitioners (ODP). Development of the nurse associate and nursing assistant at band 4 will also have a similar requirement, although these can, be delivered internally as a personal development route for staff through apprenticeships.

>> 7.5 The Workforce Plan

The two year workforce plan for FY18 – FY19 previously submitted to NHSI provides the starting point for modelling of workforce impacts. This showed a reduction in staff during the two period of 325 wte.

The table below describes additional changes in staffing wte over years 3 to 10 (i.e. FY20 – FY27), and highlights the main factors contributing to the changes in workforce. This shows a further reduction of 154 whole time equivalent staff.

Taken together the total planned reduction in whole time equivalent staff during the ten years (FY18 - FY27) is 479.

	Change in Whole time Equivalent Headcount								
	2019/20 Yr3	2020/21 Yr4	2021/22 Yr5	2022/23 Yr6	2023/24 Yr7	2024/25 Yr8	2025/26 Yr9	2026/27 Yr10	Total
Activity Growth (demographic and impact of reconfiguration at MidYorks)	68	46	46	44	43	42	42	42	352
Reduction in hospital beds (QIPP)	-53	-50	-47						-150
Urgent Care (if Trust not the preferred provider)			-13						-13
WYAAT Pharmacy collaboration	-1								-1
WYAAT Pathology collaboration	-5								-5
WYAAT Elective Surgery standardisation	-3	-3	-4						-10
Delivery of additional Elective Surgery			11	15	22	32			80
West Yorks Vascular collaboration			-4	-10					-14
Job Evaluation	-17	-17	-17	-17	-17	-17	-17	-17	-136
Productivity	-18	-19	-12	-18	-18	-18	-26	-26	-154
EPR, Standardisation, T/O, Rostering				-35	-41	-49			-125
TOTAL CHANGE	-28	-43	-40	-21	-11	-10	-1	-1	-154

Note: the table above contains roundings and therefore the figures do not exactly sum.

The financial impact of these changes over the ten years is a circa £30m reduction in the Trusts paybill. The modelling of this is included in the Financial Case (chapter 12).

>> 7.6 The Workforce Benefits of Reconfiguration

Having an effective and engaged workforce is one of the key drivers for reconfiguring services across the two hospital sites. As such there are a number of benefits that will be derived from the move to a planned and an unplanned care site. These are summarised below:

Royal College of Emergency Medicine recommendations / standards: the standards for Children and Young People in Emergency Care settings, Critical Care workforce standards and Emergency Department consultant and paediatric nursing cover recommendations will be satisfied through the consolidation of the unplanned service workforce on to one site. The reconfiguration will ensure paediatric surgery and medicine are provided from a single site, and therefore patients will benefit from improved shared care of surgeons and paediatricians.

Clinical rota resilience: rota frequency will reduce immediately with the consolidation of unplanned services and workforce on to one site thereby reducing the workload strain on staff and improving the resilience of services. Relevant services include ED, Acute Medicine, Critical Care, Paediatrics and Radiology.

Sub-specialisation of clinical services: the critical mass achieved through consolidating of unplanned patients and workforce onto one site will allow greater opportunities for sub-specialisation of the workforce improving the attractiveness of employment at the Trust and enhanced clinical services for patients. Relevant services include Paediatrics and Trauma sub-specialisation in ED, and Acute Medicine.

Skill mix / role improvements: the Advanced/Extended scope Practitioner role will be further refined and deployed in the Trust to reduce reliance on the middle-grade doctor workforce across many specialties including ED, acute medicine, and paediatrics. There would be an opportunity for Radiography staff to be trained to work across a number of areas, such as plain x-ray and acute head scanning, which would provide broader development opportunities. Also, through development of a new musculo-skeletal service the Trust will be able to better attract and retain highly experienced therapist roles.

Improving junior doctor training, oversight and supervision: junior doctor training and supervision is anticipated to improve for all clinical services being consolidated on to one site given the increased throughput of activity, and the increased non-locum consultant presence on site. This will also apply to other clinicians in training.

Recruitment, retention and locum reliance: it is anticipated that improvements in the key areas already described, such as rotas and extended roles, will improve the attractiveness of the Trust to future and existing staff. This will increase recruitment opportunities and reduce staff turnover. In turn, this will reduce the Trust's considerable reliance on locum and agency staff.

Long term sickness absence: the factors above allow for more effective service planning. This, together with other measures to support staff returning from absence, will help to reduce stress for staff and mitigate the Trust's long term sickness absence challenge.

Agency and Locum spend: in 2016 NHS Improvement introduced a cap on the amount any Trust could spend on Agency workers within the financial year. This cap has been revised for the 2017/18 financial year and the workforce plans take this into consideration, with an aim to achieve this in-year.

Quality of Care: the changes listed above will all contribute to delivery of improved outcomes for patients, will help to reduce length of stay and improve clinical compliance rates.

Continued improvements post reconfiguration: Most of the reconfiguration savings are achieved at the beginning of year five when the hospitals move to the planned and unplanned care sites. Following the move, there are opportunities to achieve additional cost savings and improvements in quality, impacting across the whole of clinical services which could not be achieved without the site reconfiguration. The reduction in on-call payments from robust single site medical rotas will release costs as will other improvements in consultant job-planning. There may also be opportunities to gain additional economies of scale in medical services where the use of advanced practitioners operating in new care pathways, can be used to fill difficult to recruit middle and junior grade doctors. This will reduce reliance on agency and locum staff and will be facilitated by senior clinical support being focused on one site to offer supervision and clinical mentoring. This will also further support those junior doctors developing their skills through the CESR (certificate of eligibility for specialist registration) route. We anticipate additional savings in years 6 to 10.

8 | Hospital Estate Plan >>

8 | Hospital Estate Plan

>> 8.1 Summary

The Trust's existing estate at Calderdale Royal Hospital and Huddersfield Royal Infirmary varies considerably between the two sites with CRH being a condition B 1990s PFI development with no backlog maintenance requirement whilst HRI is a 1960s build that has time expired buildings with significant backlog maintenance requirement to achieve condition B.

The proposed estate option is for Calderdale Royal Hospital to be developed as the unplanned hospital with Huddersfield Royal Infirmary (Acre Mill) as the planned hospital. The expected estate cost to implement the future service model option is £297m.

Continuing with the existing service model provided at CRH and HRI would require £95m of capital funding across years FY19-FY23 to meet the back-log maintenance requirements of the existing HRI site.

In addition the Trust has been advised (Lendlease Consulting Limited) that it would be required to build a new HRI after 10 years as the building is 'time-expired'. The cost of building a new HRI has been assessed as £379.5m.

» 8.2 The Trust's Hospital Estate

The Trust is a community and hospital multi-site organisation. It provides services from a number of buildings across the geographical CCG areas of Calderdale and Greater Huddersfield.

Acute hospital services are provided from two sites which are approximately 5 miles apart: Huddersfield Royal Infirmary (HRI) in Huddersfield and Calderdale Royal Hospital (CRH) in Halifax.

Pennine Property Partnership (a property joint venture of the Trust with Henry Boot Developments) undertook the development of Acre Mill (which is located across the road from HRI). Acre Mill was opened as an outpatient centre in 2015.

Both hospital sites contain clinical and non-clinical accommodation and this varies considerably in terms of type, age and quality.



Huddersfield Royal Infirmary



Calderdale Royal Hospital



Calderdale Royal Hospital has a gross floor area of 59,817m2 across a site with land area of 7.36 acres.

CRH is based in close proximity to Halifax town centre and opened in 2001. The hospital offers a full range of outpatient facilities as well as inpatient areas including Surgical, Medical, Maternity, ICU, Coronary Care and Children's wards. CRH has circa 450 beds and 9 theatres including 8 main theatres and an emergency Obstetrics theatre. The Dales Unit on the Calderdale Royal Hospital site is occupied by South West Yorkshire Partnership Foundation Trust and includes three in-patient wards as well as a number of outpatient services.

The site was one of the first hospitals built through Private Finance Initiatives (PFI). The PFI arrangement runs until 2061 having been entered into over a 60 year term with a break clause after 30 years.

In 1998 the agreement to build a Private Finance Initiative (PFI) funded hospital in Calderdale was signed. Work commenced in January 1999 and the building was handed over to the Trust in March 2001. Parts of the old Halifax General Hospital buildings were retained and refurbished and in general these are used for office accommodation. The hospital was built by the Catalyst Healthcare consortium, which then comprised the Lend Lease Corporation, Bovis Lend Lease Limited, ISS Mediclean Limited, the British Linen Bank Limited and the French bank Societe Generale. Bovis Lend Lease provided the design and construction services.

As part of the PFI agreement the Special Purpose Company (SPC) has agreements in place with Engie for estates maintenance, life cycle and variation work and with ISS for the provision of catering, cleaning, portering, security, car park management, switchboard and linen distribution. The Trust works closely with all parties to ensure close and open partnership working.

In 2005 the car parking facility was extended to include the South Car Park and barrier car parking was introduced to try to assist with access to the hospital for patients and visitors.

In 2010 a new Endoscopy Unit Was Completed And Two Years Later Saw The Development Of A New Angio Suite Incorporating State Of The Art Catheter Lab at Calderdale. In 2013 the installation of a new CT Scanner took place and a year later a new coronary care advanced pacing theatre opened. In 2015 the child development unit was completely refurbished to allow the merger of the services from Huddersfield and Calderdale.

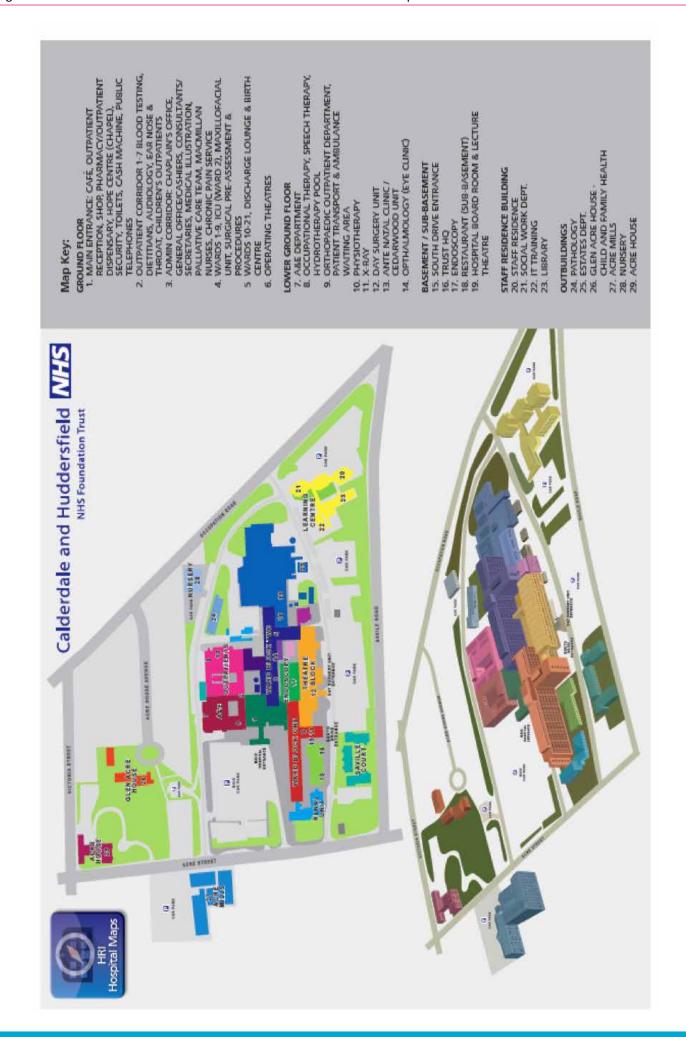
Through the Engie life cycle programme new chiller units were installed in the roof plant area in 2009 bringing improved efficiency and noise management by modern pump technology and controls. In the last 5 years Theatre operating lights; Passenger Lift cars; CCTV; Security Access systems; Fire detection; Doors & Windows have all received replacement and upgrade through Planned Life Cycle investment. The whole site is subject to planned replacement of flooring; fitted furniture and redecoration resulting in NHS Estates Code condition B being confirmed through 3rd party surveys and routine audit.

In January 2016 Engie began a medical gas plant replacement program which has seen the upgrade of 4bar medical air, 7bar surgical air and vacuum plant bringing new equipment and increased resilience to the site. This work also coincided With The Upgrade And Replacement Of Critical Ventilation Systems Incorporating Requirements Of The Most Recent Healthcare Technical Guidance.

The revenue costs of the site include interest and hard and soft facilities management. The total revenue cost for FY17 is expected to be circa £23m. The backlog maintenance is managed through the PFI contract and supported by regular capital lifecycle payments into the PFI provider.

CRH Backlog maintenance

Building maintenance is managed through the SPC and funded through regular planned lifecycle payments. There is limited backlog maintenance of note and the building is compliant to NHS Estates Code condition B.



Huddersfield Royal Infirmary has a gross floor area of 67,493m2 across a site with land area of 16.77 acres.

Huddersfield Royal Infirmary is about two miles from Huddersfield town centre. The main hospital first opened its doors in 1965 and since then many millions have been invested in the site to modernise and extend it.

The hospital offers a full range of day case and outpatient services; an accident and emergency department, and critical care. It is the centre for emergency surgery, planned complex surgery and emergency paediatric surgery for the people of Greater Huddersfield and Calderdale (these services are not currently provided at CRH). It also provides a full range of diagnostic services including magnetic resonance imaging (MRI).

Recent major developments have included the opening of a £3.4 million urology unit and investment in a £500,000 state-of-the-art CT (computerised tomography) scanner and suite.

Early in 2008 the new Huddersfield Family Birth Centre opened at the hospital, offering a warm and friendly environment for women and their partners.

In 2008 an £8 million pharmacy manufacturing unit opened on the site which produces pharmaceutical products for people across the country and is expected to continue to provide services in the future.

A new state of the art endoscopy unit was built in 2011 and the trust embarked on a scheme to replace the ageing calorifiers with plate heat exchangers which was completed in 2015. in 2016 we completed a full upgrade of services for oncology outpatients and day case patients in the newly named Greenlea Ward.

A full refurbishment of inpatient theatres was completed in 2017, bringing the main theatres into a full compliant state.

The Trust owns the Acre Mill site opposite Huddersfield Royal Infirmary and this new development for out patients' services was opened in 2015, freeing up valuable space on the main hospital site for expansion.

The Trust has upgraded many of the inpatient wards, giving us additional single rooms with en-suite facilities.

However although there has been significant investment, the core building is considered to be beyond its useful life and is time expired. Financial pressures have placed significant restraints on capital investment in recent years and as a result, the backlog of maintenance for time expired buildings requirement has grown.

HRI Backlog of maintenance for time expired buildings

Backlog maintenance, with regards to the HRI site, refers to the costs associated with time expired buildings. The cost described in this section is the minimum investment required to bring the estate to a category B level.

In 2015 the Trust commissioned a 6 facet survey from NIFES Consulting Group, this was updated by Lendlease Consulting in 2015. It identified the extent of capital works required to bring HRI to condition B status in accordance with the Department of Health Estate code.

The survey concluded that the Estate is overall in poor condition with significant backlog of maintenance for time expired buildings. The survey identified statutory items across the site that required immediate remedial action in large parts of the estate as well as key factor impacting on operational performance.

A significant investment is required to resolve the functional suitability of the estate. This has been driven through changes in service provision and size of teams that has meant the parts of the current estate are too small or were constructed and designed for another function which does not provide a suitable layout and space for services.

The 2015 survey estimated the costs to bring the estate to a level B at £95m.

Since the update to the 6 facet survey was carried out in 2015 there has been a further deterioration of the estates building and engineering service infrastructure and space/functional suitability. This has been compounded by significant national restraints placed on the Trust capital investment for backlog maintenance due to financial pressures.

The Trust now carries a high risk in terms of the condition and reliability of its building and engineering services infrastructure at HRI. The age and condition of the estate is such that without significant capital injection in backlog maintenance and a plan for a rebuild of the whole site in the next 10-15 years, there is a high risk of failure of critical services such as power supply, heating, hot and cold water services and medical gas services. The building and engineer service were designed in the 1960s and based on a demand and capacity model at that time. Since this time, further increase in load requirements have seen greater demand on system capacity and ability to provide the high levels of resilience required on an acute hospital site. Any additional load resulting from extensions to the building would result in further pressure on the system infrastructure.

Some of the major risks that could impact on the viability and operation of the site include:

- Corroded service pipework that could potentially fail expediting the required repairs could cause significant disruption to patient services and care due to the location of asbestos in the building.
- Roof repairs are required throughout the building there has been an increase in water leakage into the building and patient areas including wards and treatment areas.
- Power supplies require significant work although there have been improvements; there still remains further work required to secure a robust supply.
- Fire safety although improved, there still remains a significant investment requirement for compartmentation, fire detection and alarm systems.

- The vast majority of windows require replacements there are multiple instances of windows leaking and allowing a significant draft to penetrate into the building having a sever effect on the patient environment, comfort and experience.
- Asbestos removal –The Trust has strong management processes in place around the asbestos within the hospital infrastructure. The requirement for asbestos removal, should any infrastructure repairs be required, could have a major impact on the provision of patient services and care.
- The building cannot have any more holes drilled into floors to replace pipework. This is because it is making the fundamental structure unsafe, and structural engineers have advised us to not make any more holes. This means that we cannot replace pipework, and it is almost impossible to do the upgrade work required.
- "Concrete cancer" in a number of areas as water has seeped behind the stone façade. Concrete is crumbling away in these areas.

The 6 facet surveys where reassessed as part of the Cost Management Plan in support of the various estates reconfiguration options being assessed as part of this plan. The report produced by Lendlease Consulting Limited in November 2015, identified that £95m would be required with the vast majority required immediately. This would not however repair the structure of the building, which makes it time limited (10 years at most).

The backlog maintenance requirement is a key consideration in determining the capital investment required under each of the proposed estate options to deliver the future hospital services model.

» 8.3 Capital expenditure for CRH as the unplanned care site and Acre Mill as the planned care site

In 2015 as part of the Trust's five year strategic plan an estates option appraisal was undertaken. This determined that the proposed estate option for the future service model is for Calderdale Royal Hospital to be developed as the unplanned hospital and Huddersfield Royal Infirmary (the Acre Mills site) as the planned hospital.

In May 2017 Lendlease Consulting provided the Trust with a Feasibility Cost Model of the expected build costs for the future service model in the re-development of the CRH and Acre Mill sites. (This work was previously undertaken in 2015 but needed to be updated). The cost estimates were based on the gross internal floor areas derived from a schedule of accommodation prepared by a Healthcare Planner in discussion with the Trust on the required clinical activity and capacity for each of the options.

The estate cost model provides for:

Beds:

A total of 750 beds across the two sites. Within this total is included 18 ICU beds with the ability to increase this to 22 in future years. This total bed number of 750 is slightly more (12 beds) than the 738 identified as required in chapter 6. This is due to additional bed capacity being planned in ward units of 29 beds per ward resulting in additional beds rather than too few. This also provides sufficient flexibility to provide the additional 5 beds that would be required if CHFT is selected as an arterial surgery centre.

Theatres:

A total of 20 theatres (12 at CRH and 8 at Acre Mill). The Trust currently has 18 theatres across the two sites and the capacity of 20 includes an additional obstetric theatre and a hybrid theatre at CRH.

Car-Parking:

A cost allowance has been made to provide a mix of multi-storey (175 spaces) and surface (100) car parking spaces at Acre Mill, and 600 multi storey spaces at CRH. This allowance was based on a benchmark norm for car parking spaces. CRH currently has 787 car parking spaces. The proposed development would build an additional 600 space multi-story car park, and establish an additional 80 spaces at Dryclough Close (both subject to planning permissions). This would give a total of 1467 spaces. It is estimated that the development of the CRH site would result in a loss of 134 spaces. The net total parking spaces would therefore be 1,333 representing a growth of 546 compared to current (787).

In order to keep capital requirements to a minimum the plan assumes minimal change of existing buildings at CRH and an appropriate level of derogation to ensure compliance with the necessary statutory standards.

8.3.1 Total Build Development Costs for the Future Model

The development costs for the future model of unplanned care at CRH and planned care services provided at the Acre Mill site in Huddersfield is shown below (this does not include backlog maintenance of HRI during the development or income from the HRI sale / disposal).

Future Model	Forecast Out-turn Cost (£)
HRI Planned Site on Acre Mill	121,070,193
CRH Unplanned Site	176,547,597
Total	297,617,790

Estate Cost Summary of the Proposed Option

The cost summary below provides a high level overview of the cost components.

Element	FBC CRH	FBC HRI	FBC Total
	Cost (£)	Cost (£)	Cost (£)
HRI (Acre Mills)		£53,965,600	£53,965,600
CRH	£77,298,800		£77,298,800
Site infrastructure	£2,975,360	£3,989,420	£6,964,780
Traffic management	£115,948	£80,948	£196,897
External works	£700,120	£668,140	£1,368,260
Service diversions	£140,000	£90,000	£230,000
Access and logistics	£173,922	£121,423	£295,345
Car parking	£6,000,000	£1,950,000	£7,950,000
Links	£1,575,000	£75,000	£1,650,000
Sustainability	£686,756	£539,656	£1,226,412
Section 106/278	£772,988	£539,656	£1,312,644
Sub-total	£90,438,894	£62,019,843	£152,458,738
Preliminaries	£12,661,445	£8,682,778	£21,344,223
Fees	£12,372,041	£8,484,315	£20,856,355
Non works costs	£1,546,505	£1,060,539	£2,607,044
Equipment costs	£5,155,017	£3,535,131	£8,690,148
Planning contingency	£18,326,085	£12,567,391	£30,893,476
Optimism bias (13%)	£18,264,998	£12,525,500	£30,790,498
Sub-total	£158,764,985	£108,875,497	£267,640,482
Inflation	£17,782,612	£12,194,696	£29,977,308
VAT (Excluding Fees)	£32,835,112	£22,517,176	£55,352,287
VAT recovery	(£32,835,112)	(£22,517,176)	(£55,352,287)
Total	£176,547,597	£121,070,193	£297,617,790
Backlog maintenance	-	£11,818,000	£11,818,000
Total (including backlog)	£176,547,597	£132,888,193	£309,435,790
HRI disposal	-	-	(7,000,000)
Total capital requirement	£176,547,597	£132,888,193	£302,435,790

8.3.2 Phasing of Capital Costs

It may be that the Department of Health's approval and approach to funding could require phasing of build and capital costs. This is based on a three year construction period. The start year would be 2019.

» 8.4 Site Capacity for the Future Model

8.4.1 Calderdale Royal Hospital

Work has been undertaken (by the Trust and an external estates advisor) that has confirmed that whilst the CRH site is constrained it is of sufficient size to be able to accommodate the additional estate and clinical capacity to deliver the new clinical service model for unplanned and emergency services. A potential outline implementation plan for the new build has been developed that aims to keep any disruption of hospital operations to a minimum and also minimises third party and neighbourhood impact.

8.4.2 Acre Mill

The development of the planned care service hospital is based on new build on the Acre Mill site where the Trust owns sufficient land to accommodate the transition to the new estate and required clinical capacity. The main HRI site would be demolished and the land sold.

>> 8.5 Estate Costs of Continuing with the Existing Service Model

Continuing with the existing service model provided at CRH and HRI would require £95m of capital funding across years FY19-FY23 to meet the back-log maintenance requirements of the existing HRI site. In addition the Trust has been advised that it would be required to build a new HRI after 10 years as the building is 'time-expired' and it will not be possible to maintain the building beyond ten years.

The cost of building a new HRI has been assessed as £379m.

This has been determined using the gross internal floor areas required and the costs for the various functional areas that have been benchmarked against comparable healthcare schemes built over the past 5 years.

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9 | The Financial Case for Change >>

9 | The Financial Case for Change

>> **9.1 Summary**

This chapter summarises the national and local financial context for the FBC and highlights that the local health and care system is both unaffordable and unsustainable.

Financial modelling work under-taken in 2015 and described in the Trust's 5 Year Strategic Plan identified that a significant reduction of the Trust's under-lying deficit could be delivered by the reconfiguration of hospital services. However the work undertaken in 2015 did not return the Trust to a breakeven or a surplus position over the 5 year forecast period.

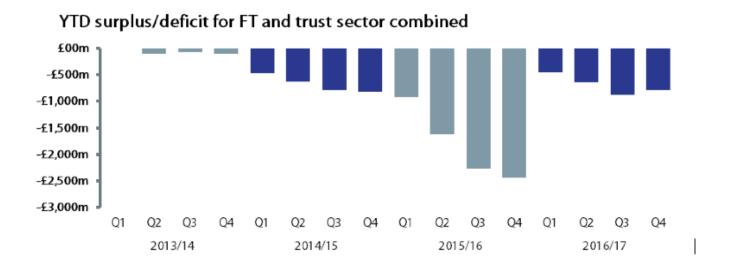
The 5 year strategic plan therefore generated a requirement to undertake further modelling of the financial impact of implementing the future service model with the aim of eliminating the Trust's underlying deficit.

» 9.2 Financial Context

9.2.1 National

People are living longer lives and more people are likely to have multiple long term conditions thereby increasing the demand on the NHS and social care system. Nationally there has been a rapid rise in demand for hospital nurses and difficulties in recruiting consultants in mainstream specialties. Growing shortages of qualified clinical staff has increased use of agency and other temporary workers to fill vacancies and increased NHS expenditure.

The 16/17 year end outturn was £211m worse than the aggregate provider plan deficit of £580m and indicates that the NHS is currently both unaffordable and unsustainable. According to the National Audit Office this autumn position would have been considerably worse if the £1.8bn of Sustainability transformation funding had not been available.



Number of providers in deficit



(source: NHS Providers – 2016/17 Quarter 4 Finance and Performance)

(source: NHS Providers – 2016/17 Quarter 4 Finance and Performance)

Although there are increased resources available for the NHS in 2017/18 and 2018/19, the level of growth is significantly less than has previously been available to the NHS (3.6% in 16/17 compared to 1.3% for 17/18). Therefore, the expectation is that providers and commissioners will need to have a relentless focus on efficiency in 2017/18 and 2018/19.

The NHS capital environment is also very challenged with capital resources severely constrained at £360m. Provider capital plans need to be consistent with clinical strategy and clearly provide for the delivery of safe, productive services with business cases that demonstrate affordability and value for money. Providers are expected to continue to procure capital assets more efficiently; maximise and accelerate disposals, and; extend asset lives.

9.2.2 Calderdale and Huddersfield Health and Social Care System

The cost of commissioning services is not affordable to the CCGs in Calderdale and Huddersfield and as a result they are not compliant with NHS Business rules. The total affordability challenge across both CCGs is circa £59m by 2021/22. Both CCGs have agreed financial recovery plans with NHSE. This means that the NHS in Calderdale and Huddersfield is currently both unaffordable and unsustainable.

9.2.3 CHFT

The Trust delivered the 2016/17 control total - a year end deficit of £16m. After exclusion of a number of agreed items from the control total and application of the STF incentive payment the Trust has reported the 2016/17 final year end position as a deficit of £13.79. Achievement of the control total deficit in 2016/17 was after receipt of £12.7m Sustainability and Transformation Funding (STF).

The Trust's control total for 2017/18 is £15.9m (after £10.1m STF funding) and this drives the total CIP required in 2017/18 to £20m (5.3% of Trust operating expenses). Over the past three years the Trust has a track record of delivering against the objectives that the organisation signs up to. It is in the context of historic delivery; long term strategic change enabled by these reconfiguration plans; and the future opportunities afforded the organisation by working collaboratively across the region that the Trust will strive to achieve the £15.9m control total set by NHSI for 2017/18. However, the Trust Board considers likelihood of achievement of this control total to be high risk in common with many other Trusts from across the country.

» 9.3 CHFT Underlying Deficit

Based on the assumption that Sustainability and Transformation Funding will not be available from 2019/20 onwards the full underlying deficit that the Trust needs to eliminate is circa £26m. The Trust is reliant on financial support from the Department of Health to provide the cash to pay creditors and staff.

The Trust has previously worked closely with Monitor and PwC to assess the causes of the underlying deficit. This identified that structural costs associated with the dual site configuration of services (which require higher workforce expenditure) and the high finance costs of the PFI at Calderdale Royal Hospital are key factors driving the underlying deficit. To secure future financial sustainability the Trust needs to implement reconfiguration of hospital services and optimise the utilisation of the Trust's PFI and non-PFI estate.

9.3.1 Work Undertaken in the five year Strategic Plan to Reduce the Deficit

In 2015 the Trust's five year strategic plan proposed a new model of hospital service delivery to consolidate the provision of emergency and unplanned services at Calderdale Royal Hospital (CRH) and provide planned hospital services at Huddersfield Royal Infirmary (HRI).

The plan clarified the financial implications of supporting reconfiguration of CHFT services compared to the 'as is' or base case. This showed that:

- the proposed option yielded a recurrent deficit of £9.5m from FY22 onwards. Whilst this represented an improvement of £18.0m against the base case deficit of £27.5m it did not return the Trust to a breakeven or surplus position over the forecast period.
- the proposed reconfiguration of services would require £200m additional capital investment compared to the 'as is' however this would yield a £18.0m revenue benefit per annum that would mean a potential financial payback of investment in 10-11 years. Also this would deliver significant wider economic benefits related to quality, safety and workforce resilience.
- continuing with the current operating model would require £156m capital investment (largely to

address backlog maintenance) and this would not deliver any reduction in the underlying deficit or improvement of the quality and safety of service delivery.

9.4 The Case for Change and Purpose of FBC

Plans for the reconfiguration of services need to be affordable for both the Trust and CCGs and have an agreed timeline to deliver financial balance in the future.

Both NHSE and NHSI have made it clear that public capital will not be available for the proposed model and therefore other options for funding needed to be explored.

The following chapters of this Full Business Case build on the work previously undertaken in the five year strategic plan and:

- identify potential sources of capital funding for the reconfiguration of the Trust's services;
- provide an economic appraisal to identify a proposed funding option;
- explore the commercial opportunities to progress the proposed funding option;
- model the impact of the proposed funding option on eliminating the Trust's underlying deficit, and; describes the impact on wider system affordability.

The modelling included in the following chapters of this business case shows that by implementing the future service model the Trust could achieve financial surplus in Year 8 (2024/25) and maintain financial surplus at circa £6m per annum thereafter.

10 | The Economic case >>

10 | The Economic case

>> **10.1** Summary

The 5 Year Strategic Plan developed in 2015 concluded that the most favourable economic and financial option for the Trust was the development of CRH as the unplanned hospital and HRI as the planned hospital (the detail of this appraisal is available on request).

The purpose of the economic case described in this chapter of the FBC is to assess the value for money of this future service model (i.e. CRH as the unplanned hospital, HRI as the planned hospital) compared to continuing with the existing service model and in relation to the capital investment funding routes available for delivery.

This Chapter includes:

- Identification and assessment of the potential available funding options for the capital build investment
- overview of the key features of private finance initiatives (including advantages and disadvantages)
- explanation of the economic appraisal / evaluation methodology that has been used
- the findings of the financial and non-financial appraisal / evaluation undertaken
- The conclusion of this chapter is that the development of CRH as the unplanned hospital, with a
 planned hospital development at HRI provides economic (VFM) advantage compared to continuing
 with the existing service model. It also concludes that PFI is the proposed option for funding the
 capital build investment required.

>> 10.2 Assessment of Potential Funding Options

In delivering the future service model option of CRH as the unplanned care site, with HRI being the planned site, evaluation is required of the funding options for the capital build costs. In tandem with experts from the Department of Health the Trust has given consideration to the following potential funding solutions:

- Public Dividend Capital (PDC) i.e. Treasury cash funded purchase;
- Independent Trust Financing Facility (ITFF) Loan funding through the Independent Trust Financing Facility (ITFF), as assumed within the 5 Year Strategic Plan;
- Public Works Loans Board (PWLB)/Bonds discussions have taken place with Calderdale Borough Council who would consider supporting a loan to fund the development;
- Private Finance Initiative (PFI)/PF2 private financing, similar to how Calderdale Royal Hospital was developed but under different terms and conditions than the original PFI agreement;
- PFI and Joint Venture (JV) this combines the PFI with a joint venture vehicle, established with CHFT membership on its board and alongside Henry Boot PLC, to raise funds in support of required developments.

The Trust has through discussions with the Department of Health and NHS Improvement, sought to evaluate the feasibility of these sources of funding and has set out an initial evaluation of each of these options. This is shown in the following table.

10.2.1 Financing Options Overview

	Existing Model	Public Dividend Capital	ITFF	PWLB	PFI	PFI & JV
Strategic Fit	×	✓	✓	✓	✓	✓
Efficiency of estate utilisation	*	•	V	•	~	•
Accounting treatment	×	*	×	×	✓	*
Flexibility	×	✓	✓	✓	✓	✓
Patient experience	×	✓	✓	✓	✓	✓
Timescales	*	✓	✓	✓	✓	✓
Pass/Fail	Fail	Fail	Fail	Fail	Pass	Fail

The key criteria differentiator within this assessment is 'Accounting Treatment' and the restrictions that the Treasury/Department of Health has on available capital resources to support the Trust's reconfiguration. It is clear that the financing options available to support reconfiguration are limited by whether the capital spend is incurred against the national 'Capital Departmental Expenditure Limit (CDEL) as the Trust has received a clear statement that funding options should be explored that do not incur expenditure against the CDEL budget.

On the basis of the above assessment of the financial options, the economic case provides an evaluation of PFI sourced funding alongside continuing with the existing service model. The Trust recognises that there are a number of delivery variations of a PFI contract and these are articulated in detail within chapter 11 - the Commercial Case.

10.2.2 Key Features of Private Finance Initiatives

Overview

Traditionally Public Private Partnership (PPP) projects which underpin PFIs have been used by governments to deliver infrastructure through utilisation of private finance to fund both construction and ongoing capital replacement requirements and enabling the public sector access to the discipline, skills and expertise of the private sector.

With limited capital in the health financing system and the requirement to deliver new or significantly refurbished estate and associated capital spending, PPP infrastructure funding is a viable option given the restrictions on balance sheet classification and rebalancing the financial position of the NHS. It potentially offers a practical delivery vehicle to assist and drive the level of investment required to transform the health estate and support new models of care. That said and for the avoidance of doubt, the public at large are skeptical about PFIs in this health economy because of the perceived impact of existing PFI arrangements.

Under a PPP structure, rather than funding the capital expenditure directly (e.g. from cash reserves or borrowing), the entity wishing to create the asset contracts with a third party (usually an entity specifically set up for the purpose – the Special Purpose Vehicle or SPV) for it to procure, design, build, finance and maintain the capital infrastructure. The procuring authority then pays an availability charge to use the asset (the unitary charge). The SPV is usually responsible for maintaining the asset (supply of hard facilities management – hard FM) for which it earns a further charge and may also supply services such as cleaning, catering, laundry etc. (soft FM) which are also incorporated in the unitary charge.

The objective of PPPs is to provide a better allocation of risk between the procuring authority and the SPV delivering the serviced asset. Early deals were also off balance sheet and the provision of services alongside the availability of the asset allowed recovery of VAT on construction and the unitary charge. This went some way to offsetting the higher cost of borrowing the SPV had to pay to raise finance relative to traditional government sources.

In December 2012 the government launched 'PF2 – A new approach to public private partnerships'. PF2 incorporating a range of changes to improve the previous Private Finance Initiative (PFI) model. Notable differences include:

- The government takes a minority equity stake in schemes (albeit pari passu) with private investors;
- Excluding services such as catering and cleaning which are procured separately on shorter contracts to facilitate flexibility;
- Increased standardisation of contractual documentation and centralisation of procurement expertise;
- Set time limits for the procurement to drive down costs for both bidders and the procuring authority; and
- Greater transparency in respect of the future liabilities created by a deal and also public sector participation in windfall gains when private sector interests are sold into secondary markets.

Advantages and disadvantages of Private Finance Initiatives

In a typical PFI project, the private sector party is constituted as a Special Purpose Vehicle (SPV), which manages and finances the design, build and operation of a new facility. The financing of the initial capital investment (i.e. the capital required to pay transaction costs, buy land and build the infrastructure) is provided by a combination of share capital and loan stock from the owners of the SPV, together with senior debt from banks or bond-holders. The return on both equity and debt capital is sourced from the periodic charge, which is paid by the Trust from the point at which the contracted facility is available for use.

Advantages

- ✓ Accelerated Delivery: The procurement timetable for PF2 has been capped at 18 months from tender to completion.
- ✔ Public sector equity: The Government will take a minority equity stake in the delivery vehicle alongside the proposed private sector partner. The aim of this is to secure a more collaborative approach, better partnership working, and the ability of the Public Sector to participate in equity returns.
- ✓ Greater transparency: The Trust's partner will be obliged to provide forecasting information as well as costing data on an open book basis.
- ✓ Flexible service provision: Although hard FM services will be included in any procurement, soft FM services will not. This will allow the Trust to determine the best route to secure these services.
- ✓ Appropriate risk allocation: Improved value for money is achieved through a more appropriate allocation of risk and greater management of risk by the public sector.
- ✓ Limiting excess profits: The public sector has a greater entitlement to participate in refinancing gains and to share in lifecycling surpluses.

Disadvantages

- **★** Higher cost of finance than borrowing from direct government sources;
- * The prospect of delivering the asset using private finance may discourage a challenging approach to evaluating whether this route is value for money;
- Reduced contract flexibility the bank loans used to finance construction require a long payback period. This results in long service contracts which may be difficult to change;
- **★** The Trust pays for the risk transfer inherent in PFI contracts but ultimate risk lies with the Trust;
- **★** PFI is inherently complicated which can add to timescales and reliance on advisers;
- **★** High termination costs reflecting long service contracts;
- ★ Increased commercial risks due to long contract period and the high monetary values of contracts;
- **★** Public perception of PFIs is not generally positive.

>> 10.3 Appraisal / Evaluation Methodology

Continuing with the existing service model is non-viable in the long-term as it does not meet any of the core requirements of the Trust, nor is the finance available to support the required capital investment to sustain safe services. It serves however as a baseline to assess the benefit of the evaluated option. This option will therefore be known as Option A. Option A includes the receipt of capital funding for the back-log maintenance from the Independent Trust Financing Facility (ITFF) Loan. The future service model option will be evaluated under a PFI funding model.

In addition to the economic evaluation each option has been assessed against the following criteria as part of the non-financial evaluation:

Category	Investment Objective	Benefits criteria
Strategic Fit	Supports the delivery of the Trusts Vision, business and service strategy and aids delivery of the STP strategy/vision	Create inpatient capacity and supports the planned and unplanned clinical service strategy
Efficiency of estate utilisation	Utilising the surplus estate and potentially other owned assets and land to finance the development	Full utilisation of Estate, efficient use of sites and improvement in physical condition Flexibility and creativity in the use of the Estate
Accounting treatment	Impact of the accounting treatment both from an NHS wide perspective and Trust	Balance sheet impact and treasury capital budget.
Flexibility	Provide alternative sources of capital solutions	Flexibility in how schemes are delivered
Patient experience	Support the delivery of an improvement in the patient experience of services and clinical care	Continuous improvement in estate to provide new ways of working
		Improved quality of the environment for patients
Timescales	The timing of developments to support service delivery and reduced revenue impact	Extent of disruption and timing of when developments can commence

The above criteria will be scored on the following basis:

Detail	Score
Does not deliver any project benefits	0
Some/minimum benefits delivered	2
Less than half the benefits delivered	4
Around half the benefits are delivered	6
All project benefits delivered but some risk of failure	8
All project benefits delivered with no risk of failure	10

Each of the evaluated options has been based on:

- The base year and price year is FY18;
- Prices exclude non-recoverable VAT;
- Cash flows are discounted by 3.5% per annum;
- Although, build/refurbishment timelines are different a 65 year appraisal period has been used, which reflects the re-development period plus 60 years of operation; and
- An alternate period of 45 years is also included.

10.3.1 Cost

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

- Capital Outlays: for new builds or refurbishment are applied by year of spend.
- Land or building sales recorded in the year(s) in which they are estimated to be realised.
- An estimate of the residual value of an asset at the end of the lifespan to represent an estimate of an asset's value at that time, i.e. 60 years.
- Capital and revenue lifecycle costs of maintaining estate assets.
- The Trust's capital programme for new and replacement assets.
- Revenue cost cash flows across clinical, non-clinical and estates costs across the lifetime.
- Transitional costs declared separately and consider non-recurrent or ad-hoc spends.
- Externalities costs have been reflected within the evaluation for the impact of the case on other external parties.

The sum of these discounted results creates a Net Present Cost (NPC) and an Equivalent Annual Cost (EAC) by option. A ranking occurs with the lowest NPC receiving the proposed option status.

10.3.2 Revenue Costs

Revenue costs have been driven from the 2017/18 and 2018/19 operational plan submitted to NHSI in March 2017 for the base year and reflects activity changes for future modelled years. All other options have been considered to assess the degree to which they might be different to the baseline position. Typical areas considered include:

- Transition costs for reconfiguration non-recurring, project and dual running forecasts have been modelled. These costs are estimated at £10.1m;
- Project management costs across the Trust;
- Dual running staffing costs, backfill and training costs; and
- Revenue lifecycle estimates over a 65 year period.

10.3.3 Capital costs

Capital cash-flow is specific to each option and includes:

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

Each option has been considered discretely. External advisors have updated new capital build forecasts and refurbishment in the existing service option which takes account of £94.5m of backlog maintenance as well as a capital build over a significant timeline. In addition to the cost of backlog maintenance capital costs of £379.5m have been modelled in year 10, 11 and 12 for a new build at HRI to replace the existing infrastructure as addressing the backlog maintenance does not address the underlying condition of the asset infrastructure which the Trust has been advised would be beyond repair by FY27.

In both the existing service model option A and the future service model option B additional funding is required associated with the purchase of the existing CRH PFI. This is referred to as a bullet payment and is included in the analysis as funded through ITFF loan over a 25 year period.

10.3.4 Residual Value Calculations

An estimate of the value of new build assets has been included to discount costs over 45 and 65 years. Residual values for estate have been assumed to be equivalent to the value of land for each site. This assumption is consistent within both options.

10.3.5 Externalities

The impact on other organisations has been considered and modelled within the economic assessment. The key example of this is the impact on other providers as activity transfers to the Trust post reconfiguration.

The economic case excludes the impact on commissioners of QIPP delivery as the cost of enabling QIPP delivery is unknown at this point. This is excluded in both Option A and Option B and therefore does not become a differentiator within the economic assessment. Equally if QIPP delivery costs become known it is anticipated that they would be allocated by the same amount across each option.

>> 10.4 Non-financial Benefit Analysis

Each of the identified funding methods have been evaluated against the identified criteria, the summary of this assessment is detailed below:

Category	Existing Model	PFI
	Option A	Option B
Strategic Fit	2	8
Efficiency of actate utilication	2	6
Efficiency of estate utilisation	2	6
Accounting treatment	0	8
Flexibility	2	4
Patient experience	2	8
Patient experience	2	8
Timescales	2	6
	14	54

The basis for the scoring above is articulated throughout the FBC however the key summary justification for these scores is outlined below:

- Strategic Fit The delivery of Option B meets the clinical case for change and the strategic direction of
 the Trust to meet the needs of the local patients and vision of the West Yorkshire STP. The Existing Service
 Model option does not achieve the clinical case for change and will leave the Trust with unsustainable
 clinical services.
- Efficiency of estate utilisation The current configuration of estate does not effectively and efficiently utilise the estate resource. The delivery of Option B would allow the Trust to maximise the efficient use of its estate and improve the Trusts performance on the NHS Estates and Facilities dashboard, supporting the delivery of efficiencies identified as part of the Lord Carter of Cole's review of NHS efficiencies.
- Accounting treatment The utilisation of PFI as a financing vehicle allows the Trust to access available
 resource without incurring capital cost against the national Capital Expenditure Departmental Limit.
 Continuing with the existing service model does not achieve this as this option is reliant on ITFF funding
 as PFI cannot be utilised for backlog maintenance which would be required during the ten year period
 ahead of a new build HRI. (The new build at HRI in Option A could be funded via ITFF or PFI. In this FBC
 ITFF is the assumed funding vehicle).
- Flexibility Option B enables the Trust to flex the clinical workforce and estate footprint to best deliver services to our patients to meet our clinical direction. In Option A the Trust continues to operate in the status quo which limits the use of clinical staff and estate.
- Patient experience Option B will ensure that the patient receives the highest standard of patient
 care in estate surroundings fit for the 21st century. This advantage is offset by patient travel distance
 being impacted post reconfiguration. Continuing with the existing service model option reduces the
 opportunity of the Trust to deliver an improved patient experience.
- Timescales Utilising a PFI agreement for the delivery of the estate investment allows the Trust to access the discipline, skills and expertise of the private sector to deliver the project build. This skill set is offset by a potentially prolonged negotiation period for a PFI agreement to draw to close, which has been detailed further within the Commercial Case. Continuing with the existing service model option may be achievable in a short term however in considering the strategic aims of the Trust; this option does not deliver these aims.

Non-financial analysis conclusion

The conclusion from the non-financial analysis is that PFI funding for the development of the Calderdale Royal Hospital and Huddersfield site is the preferred option.

>> 10.5 Net Present Cost and Equivalent Annual Cost Analysis

The table below provides a summary of the Net Present Cost (NPC) and Equivalent Annual Cost (EAC) for each of the options under evaluation, assessed over 65 years.

£m	Existing Model	PFI
	Option A	Option B
Net Present Cost (NPC)	£10,880.9	£10,391.2
Equivalent Annual Cost (EAC)	£404.2	£386.0
EAC Variance	+18.2	+0.0
Rank	2	1

The table below provides a summary of the Net Present Cost (NPC) and Equivalent Annual Cost (EAC) for each of the options under evaluation, assessed over 45 years.

£m	Existing Model	PFI
	Option A	Option B
Net Present Cost (NPC)	£9,490.9	£9,079.4
Equivalent Annual Cost (EAC)	£405.3	£387.7
EAC Variance	+17.6	+0.0
Rank	2	1

Net Present Cost and Equivalent Annual Cost conclusion

The conclusion from the Net Present Cost and Equivalent Annual Cost assessment is to move to the future service model financed through PFI. This conclusion is drawn when assessed at both 65 years and 45 years.

>> 10.6 Combined Economic and Non-Financial Evaluation

The table below considers the impact of the qualitative and quantitative assessment.

£m	Existing Model	PFI
	Option A	Option B
EAC (65 years)	£404.2	£386.0
Non-financial benefits points	14	54
Cost per benefit point	£28.9	£7.1
Rank	2	1

The combined economic and non-financial evaluation demonstrates that the proposed option has a lower cost per benefit point in addition to a lower EAC and a higher non-financial benefit points score.

West Yorkshire Health Economy Benefits

The reconfiguration of services to provide planned and unplanned services across the HRI and CRH sites is aligned to the Sustainability and Transformation Plan for West Yorkshire and Harrogate (WYSTP).

The WYSTP covers all of the six acute trusts (five in West Yorkshire plus Harrogate) and the eleven CCGs and will be delivered by local health and care organisations working together across the region to support changes needed to improve services for the 2.6 million people who live here.

STP partners continue to work with staff, stakeholders and the public to build the plan, ensuring the involvement of as many stakeholders as possible in future conversations around the draft proposals. The STP aims to address the health and wellbeing gap across our local populations with a focus on supporting people to live longer; healthier lives and ensuring a good and equitable service for all, no matter where you live.

The draft proposals also stress the importance of improving people's health, through better coordination of services, whilst improving the quality of care received.

The STP builds on local plans that have been developed in each of the six local boroughs covered. They attempt to tackle long standing issues and improve care. They look at prevention, better coordinated services, preventing unnecessary hospital admissions and supporting people to stay well Service transformation through the reconfiguration of services across CRH and HRI forms a significant part of the WYSTP, where aims and objectives will not be achieved without the reconfiguration of the Trust's services.

>> 10.7 Conclusions of the Economic Case

It can be concluded that Option B is the preferred option. The previous analysis reaffirms the case for change set out within the Full Business Case (i.e. that the development of CRH as the unplanned hospital, with a planned hospital development at HRI provides economic (VFM) advantage compared to the existing service model and that PFI is the proposed option for funding).

11 | The Commercial Case >>

11 | The Commercial Case

>> **11.1 Summary**

The Economic Case (Chapter 10) concluded that private financing of the capital build investment required to develop CRH as the unplanned hospital and HRI as the planned hospital is the proposed funding option available to the Trust at this time.

The Commercial Case described in this chapter provides an assessment of the potential procurement options available to the Trust to secure private finance for the investment.

The choice of a procurement route must meet the Trust's needs, project requirements and ensure the optimal transfer of risk from the Trust. An important consideration relative to this is the Trust's current legal and contractual arrangements for the current PFI at Calderdale Royal Hospital. The Trust also wishes to ensure that the procurement strategy and contract(s) support the development of collaborative relationships between the Trust and its suppliers.

This chapter concludes that the most likely procurement routes are:

- The reconfiguration of the existing CRH building facilities will be procured by way of a variation of the existing PFI Project.
- The new build at CRH and new build at HRI will be procured via new PF2 arrangements. This could be via a single procurement or separate contracts for CRH and HRI.

Each of the procurement options described in this chapter has its own merits in terms of cost, quality, resource and ease of implementation. The broad approach and risks of each is described.

>> 11.2 The Capital Estate Investment Required

The Trust has considered the elements of capital that is required for the development. This requirement can be described as:

- Reconfiguration of the existing CRH site; infrastructure works required to the existing CRH building
 to integrate the existing site into the new build, including the expansion of hospital areas e.g.
 Emergency Department.
- New build works at CRH; capital build required to increase the estate footprint to accommodate the increase in activity from centralising unplanned care on the CRH site.
- New build works at HRI; capital build required to deliver the planned care activity and replace the ageing HRI estate.

>> 11.3 Potential Procurement Options

PFI funding has a number of delivery options that could arise through the procurement process. The options identified are:

- Option 1a: Procure a new PFI partner for the reconfiguration work of the existing CRH building
 and for the new build at CRH and HRI sites, retaining the existing PFI partner for the current CRH
 PFI.
- Option 1b: **Procure** a new PFI partner for the reconfiguration work of the existing CRH building **and** for the new build at CRH and a **separate** PFI partner for the HRI site, retaining the existing PFI partner for the current CRH PFI.
- Option 1c: **Variation** to the existing CRH PFI contract to procure the new build at CRH, and procure a **new** PFI partner for the development at HRI.
- Option 1d: **Variation** to the existing CRH PFI contract to procure the required reconfiguration work of the existing CRH building and procure a new PFI partner for the new build at CRH **and** HRI sites, retaining the existing PFI partner for the current CRH PFI.
- Option 1e: Variation to the existing CRH PFI contract to procure the required reconfiguration
 work of the existing CRH building and procure a new PFI partner for the new build at CRH and a
 separate PFI partner for the HRI site, retaining the existing PFI partner for the current CRH PFI.
- Option 1f: Variation to the existing CRH PFI contract to procure the new build at CRH and HRI site.
- Option 1g: **Variation** to the existing CRH PFI contract to procure the new build at CRH and HRI site whilst renegotiating the Trusts existing PFI contract to refinance and update the existing contract terms to align to the most up to date PFI contract terms.
- Option 1h: **Terminate** the existing CRH PFI contract and procure a new PFI for the existing estate, reconfiguration works and new CRH build, and a separate new PFI partner for the HRI site.
- Option 1i: **Terminate** the existing CRH PFI contract and procure a new PFI for the existing estate, reconfiguration works and new CRH and HRI build.

>> 11.4 Assessment of Procurement Options

The Trust has sought to understand the details of each option to ensure that they are feasible and has taken legal advice under legal professional privilege on this. The following table summarises assessment of each of the options.

Description	Initial Feasibility	Comments
Option 1a: Procure a new PFI partner for the reconfiguration work of the existing CRH building and for the new build at CRH and HRI sites, retaining the existing PFI partner for the current CRH PFI.	*	Reconfiguration work of the existing building at CRH cannot be done within a new joint PF2, but must be via the existing PFI arrangement for CRH.
Option 1b: Procure a new PFI partner for the reconfiguration work of the existing CRH building and for the new build at CRH and a separate PFI partner for the HRI site, retaining the existing PFI partner for the current CRH PFI.	*	Reconfiguration work of the existing building at CRH cannot be done within a new joint PF2, but must be via the existing PFI arrangement for CRH.
Option 1c: Variation to the existing CRH PFI contract to procure the new build at CRH, and procure a new PFI partner for the development at HRI.	×	Procurement legislation does not allow such a significant variation to the existing PFI contract to cover the capital costs within this business case.
Option 1d: Variation to the existing CRH PFI contract to procure the required reconfiguration work of the existing CRH building and procure a new PFI partner for the new build at CRH and HRI sites, retaining the existing PFI partner for the current CRH PFI.	V	Amend the red-line within the existing CRH PFI contract to enable build works to interface with the existing PFI building. Procure a new PF2 covering both CRH and HRI builds.
Option 1e: Variation to the existing CRH PFI contract to procure the required reconfiguration work of the existing CRH building and procure a new PFI partner for the new build at CRH and a separate PFI partner for the HRI site, retaining the existing PFI partner for the current CRH PFI.	•	Amend the red-line within the existing CRH PFI contract to enable build works to interface with the existing PFI building. Procure a new PF2 covering CRH and a separate PF2 for HRI build.
Option 1f: Variation to the existing CRH PFI contract to procure the new build at CRH and HRI site.	*	Procurement legislation does not allow such a significant variation to the existing PFI contract to cover the capital costs within this business case. In addition the initial procurement for CRH did not include within its scope build at the HRI site.
Option 1g: Variation to the existing CRH PFI contract to procure the new build at CRH and HRI site whilst renegotiating the Trusts existing PFI contract to refinance and update the existing contract terms to align to the most up to date PFI contract terms.	×	Procurement concerns of resetting the existing PFI contract without a new competition.

Description	Initial Feasibility	Comments
Option 1h: Terminate the existing CRH PFI contract and procure a new PFI for the existing estate, reconfiguration works and new CRH build, and a separate new PFI partner for the HRI site.	*	The termination of the existing PFI contract would create a charge against the Capital Departmental Expenditure Limit (CDEL) and therefore isn't feasible.
Option 1i: Terminate the existing CRH PFI contract and procure a new PFI for the existing estate, reconfiguration works and new CRH and HRI build.	*	The termination of the existing PFI contract would create a charge against the Capital Departmental Expenditure Limit (CDEL) and therefore isn't feasible.

>> 11.5 Procurement options that will be taken forward

The assessment above has informed the conclusion that only Options 1d and Option 1e offer viable procurement options. The explanation of this conclusion (based on legal advice) is provided below.

- 1. The variation of the existing CRH facilities will be procured by way of a variation of the existing PFI Project with Concessionco. The Trust has been advised that the most cost effective way of funding this would be through an ITFF loan. This has been modelled with a 25 year payback period.
- 2. Concessionco does not have exclusivity to carry out post-construction completion works variations or varied services under the terms of the existing PFI Project Agreement. The development of the New CRH and the New HRI by way of an amendment to the existing PFI (Project Agreement with Concessionco) is therefore unlikely to be permitted under procurement law. Consequently the development of the New CRH and New HRI will be procured via separate PF2 arrangements.
- **3.** The Trust has flexibility to deliver its proposals in respect of the New CRH and the New HRI outside the scope of its existing PFI arrangements at CRH and to procure both under a single procurement process which would:
 - > Avoid duplicating procurement costs;
 - ➤ Improve the likelihood of delivering both developments in accordance with a timetable determined by the Trust;
 - > Optimise the cost of private sector funding; and
 - > Create a single counterparty for the Trust to deal with.

However, it is possible for them to be procured separately and to follow different models. The procurement approach will therefore allow for flexibility and provide the opportunity for providers to bid for CRH, HRI or CRH and HRI.

>> 11.6 Key risks of the procurement options

Issue	Variation (existing CRH facilities)	PF2 (New CRH and New HRI)
Estimated Timeline	18 months, but timetable will be influenced by the length of time it takes to agree the terms of a procurement process.	Capped at 18 months from ITT to financial close.
Risk Transfer	Only achievable to the extent that the existing Project Agreement is updated to address weaknesses.	Will deliver an acceptable risk transfer position with which the market is familiar.
Balance Sheet Treatment	Deliver an off balance sheet position.	Deliver an off balance sheet position.
Procurement Position	Procurement compliance position is clear.	Procurement compliance position is clear.
Costs	Could be disproportionate to the value of the variation given the need to negotiate a new variation process and an amended Project Agreement.	Included within the FBC based on an estimate at £1m, non-recurrently.
Interface	Interface will be required with the New CRH. Terms will need to be agreed with both Concessionco and any new provider in respect of the New CRH.	Interface will be required with the Existing CRH. Terms will need to be agreed with both Concessionco and any new provider in respect of the New CRH.

>> 11.7 Scope of the PF2 contract (New CRH and New HRI)

The planned (HRI) and unplanned (CRH) hospital sites will form the basis of the PF2 contract(s).

The following is an extract from Treasury guidance setting out the approach to be taken to structuring PF2 contracts and the allocation of risks between the public and private sector. The Trust's approach will be in keeping with this guidance.

The Trust will carefully consider the factors influencing the scope of hard and soft facilities and services to be incorporated into the PF2 contract(s). The main consideration will be to ensure best value for money.

In developing its procurement approach the Trust will also take account of work across the West Yorkshire Association of Acute Trusts (as described in section 3.5) regarding the development of wider collaborative approaches to achieve efficiencies and economies of scale in the delivery of Estates & Facilities Management and Information Technology.

ALL SERVICES

Required by the Authority in order to operate the building effectively

SERVICES INCLUDED IN PF2 CONTRACT

Charged on a fixed monthly basis

MAINTENANCE

Maintenance Management Planned Maintenance Reactive Maintenance Statutory Maintenance

ENERGY MANAGEMENT

Tracking and reporting energy consumption, and identifying energy saving opportunities

HELPDESK

Provision of a central system to respond to requests and plan and monitor performance

LIFECYCLE RENEWAL

Planned replacement of assets to maintain the efficiency and appearance of the building

SERVICES WHERE THERE IS FLEXIBILITY ON WHETHER THEY ARE INCLUDED IN THE PF2 CONTRACT

MINOR MAINTENANCE OBLIGATIONS

Internal wall finishes, ceiling finishes, floor finishes, interior door and window repair, lighting consumables, graffiti removal and other minor maintenance

ELECTIVE SERVICES

Services which the Authority can choose to add to the PF2 on an annual or one-off basis such as:

Portable Appliance Testing Periodic Redecoration External Window Cleaning Snow and ice clearance Grounds Maintenance Handyman Service and Other minor maintenance obligations

THE SERVICES NOT INCLUDED IN THE PF2 CONTRACT

Managed directly by the Authority using other service providers on short term contracts, or by using its own resources.

SOFT SERVICES

Cleaning & Waste, Pest Control, Catering, Security, Laundry, Mail

MANA GEMENT SERVICES

Contract Management, Utilities Costs, Insurance, Business Rates

OTHER SERVICES

ICT Services, Reception, Telephony, Health & Safety, etc.

Extract from: HM Treasury, Standardisation of PF2 Contracts

>> 11.8 PF2 contract

The Trust will seek to adopt the standard terms and conditions of the PF2 contract from the Department of Health. Further legal and Department of Health input will be required following approval of this business case.

>> 11.9 Market Soundings

The ability of the Trust to secure value for money through a PF2 procurement will be influenced by the ability to attract sufficient credible bidders to generate and maintain meaningful competition throughout the procurement process. Accordingly, the Project will be carefully marketed to attract potential bidders. Whilst the Trust will offer the market the option of separate developments for New CRH and New HRI, it is anticipated that a combined PF2 agreement for both CRH and HRI will be more attractive to the market and offer the Trust favourable financial terms for the contract.

Pre-market engagement

PF2 as the procurement approach requires the Trust to complete the competitive stage of the Competitive Dialogue process in less than 18 months which is considerably shorter than was previously anticipated. Treasury guidelines on 'lean procurement' under PF2 propose the use of significant pre-market engagement prior to issue of the OJEU notice to ensure that bidders will enter the process well prepared. This process has been incorporated into the overall programme.

Objectives of the Pre-Market Engagement Plan

The objectives will be to:

Present the pregualification process to ensure the bidders can prepare;

- Enable discussion about scope and commercial issues to ensure that the project is attractive to bidders;
- Enable discussion about public sector equity funding;
- Explain proposed design methodology, including tight, prescriptive timescales so that bidders can resource it; and
- Discuss proposed Bid Deliverables and evaluation criteria at each stage.

The aim is to assist bidders to be well prepared prior to the entering the process allowing the overall procurement programme to be reduced.

Pre-Market Engagement Process

It is proposed that a Project Initiation Notice (PIN) will be posted in the Official Journal of the European Union 3 – 4 weeks prior to the formal OJEU notice. The PIN will present a brief project description and give notice of engagement events / opportunities including the following:

- Half day introduction to the project supported by a brochure and questionnaire to seek comments;
- Opportunity to book a two hour meeting for the potential bidder project team and the project team; and
- A final event to confirm timelines, scope, procurement methodology and information from HMT on proposed public sector equity stakes.
- Careful planning will be required to ensure alignment with approval timescales so that the final meeting takes place after HMT approval and announcement of equity participation percentages.

Post OJEU Open Day

The Trust will host an open day following publication of the OJEU notice at which the Trust Board will provide a detailed description of the project, covering for example:

- The Case for Change;
- PSC functional content and design;
- Project specific issues; and
- Procurement process and timetable.

The Trust also plans to run a supply chain engagement event. All parties who have made contact with the Trust will be invited to attend as well as local companies that may be interested in bidding for work as part of the supply chain. This will provide an opportunity for the Trust to actively support development of networks between potential bid teams and local business. It will also provide opportunities to maintain general contact with bidders.

Competitive Dialogue

The legal basis under which the procurement is to be concluded is the EU procurement regime (set out in Directive 2004/18/EC (the Directive) pursuant to the Public Contracts Regulations 2006 (SI 2006/5) (as amended) using the Competitive Dialogue procedure. PF2 guidance has been developed to support delivery of a 'lean procurement process'.

>> 11.10 Trust Capability and Approach

The Trust has experience of major procurement projects on a competitive dialogue basis with, for example, a significant contract for the Trust's Electronic Patient Record, across two Trusts with Bradford Teaching Hospitals NHS Foundation Trust as our partner.

Project management and governance arrangements will be established and the Trust will seek legal support to detail, plan and navigate through the Procurement approach post approval of the business case. A Final Business Case will be developed once the procurement process reaches financial close that will demonstrate the value for money of the final concluded procurement method.

12 | Financial Case >>

12 | Financial Case

>> 12.1. Introduction

The financial case within the 5 Year Strategic Plan was underpinned by the Trust's draft plan for FY17, presented to Monitor on 24 November 2015. The section below provides an overview of the key financial changes that have arisen since the approval of the 5 Year Strategic Plan, the key changes being:

- Sustainability and Transformation Funding;
- Electronic Patient Record (EPR); and
- Depreciation on backlog maintenance.
- Section 12.2 provides details of each of these changes and the implication of these on the 5 Year Strategic Plan.

The preparation of the 'Future Service Option' modelled within the financial case have been modelled based on the NHS Improvement Operational Planning and Contracting Guidance 2017-19 with assumptions made to evaluate the financial case over a 25 year period.

The Trust recognises its current deficit financial position and that the Existing Service model option leaves the Trust with an unsustainable clinical model and an inferior financial outlook when compared to the Future Service Option. The Future Service Option allows the Trust to transform its clinical model whilst improving the overall financial outlook for the Trust.

The financial models and assumptions used within the financial case are derived from the Trust's activity trajectories which are integrated within the Trust's operational plans.

The Future Service Option demonstrates a return on investment and enables the Trust to return to a cash generating financial position, an improving financial position when compared with continuing with the Existing Service model consideration.

>> 12.2 Financial case update on the 5 Year Strategic Plan

The 5 Year Strategic Plan modelled the financial implication of the Future Service option and outlined a deficit of £39.0m for FY17. The table below provides comparison of the Income and Expenditure FY17 5 Year Strategic Plan vs. the FY17 Actual:

£m	FY17 5 Year Plan	FY17 Actual
Income	361.2	373.3
Pay	(241.7)	(241.1)
Non Pay	(126.5)	(124.7)
EBITDA	(7.0)	9.45
Non-Operating Expenditure	(32.0)	(23.3)
Surplus/(Deficit)	(39.0)	(13.8)
Less items excluded from	-	(2.3)
Control Total		
Surplus/(Deficit)	(39.0)	(16.1)

12.2.1 Key I&E movements between five-tear strategic plan and actual for FY17

The financial values within the FBC are based on the actual income and expenditure for FY17. The key movements between the five year strategic plan and the FBC financial values are:

£m	FY17 5 Year Plan
FY17 5 Year Strategic Plan Surplus/(Deficit)	(39.0)
Sustainability and Transformation Funding	12.7
Electronic Patient Record (EPR)	5.0
Depreciation on backlog maintenance	5.2
FY17 Actual	(16.1)

Sustainability and Transformation Funding (STF)

As part of the Spending Review the Chancellor identified £10 billion for the NHS's future plan. Of this funding £1.8 billion has been identified to help trusts reduce their deficits and allow them to focus on transforming services to deliver excellent care for patients every day of the week. Receipt of this funding was contingent on the Trust delivering a number of conditions. NHS Improvement confirmed that the Trust met the set conditions for receipt of the monies and received £12.7m of STF income in FY17. For FY18 STF funding has been confirmed at £10.1m, subject to conditions and acceptance of a control total deficit of £15.9m. Consistent with the Trust's Operational Plan, receipt of STF monies have been assumed in FY19 at £10.1m. As per NHSI guidance no further STF funding is assumed.

Electronic Patient Record (EPR)

The 5 Year Strategic Plan included a possible £5.0m clinical income risk associated with the EPR implementation. This was due to a potential loss in productivity during the implementation of the new patient record system. This assumption was based on experience of other providers implementing a similar system. As the go-live date progressed into FY18 the income reduction did not materialise in FY17. The Trust continues to outline a potential income reduction/mitigation costs as part of the EPR programme.

Depreciation on backlog maintenance

The proposed option of CRH being the unplanned site included costs being incurred on HRI on backlog maintenance. This outlined £15.5m capital expenditure in FY17, depreciated over three years prior to the disposal of buildings on the HRI site. In finalising the FY17 plan this depreciation cost was removed as the Trust would seek to impair these costs at the point of HRI disposal. On this basis this depreciation was not within the FY17 actual expenditure. This treatment would result in asset impairment in FY22 for the HRI site.

12.2.2 Key Statement of Financial Position (SoFP) movements between 5 Year Strategic Plan and Actual for FY17

The table below provides comparison of the SoFP FY17 5 Year Strategic Plan vs. the FY17 Actual:

£m	FY17 5 Year Plan	FY17 Actual
Property, Plant and Equipment	248.6	239.0
Inventories	6.1	6.7
NHS Trade Receivables	3.2	7.2
Non NHS Trade Receivables	2.3	6.9
Other Current Assets	10.8	12.4
Cash and Cash Equivalents	(48.7)	1.9
Current assets	(26.3)	35.2
Total assets	222.3	274.2
Current Liabilities	(40.7)	(48.9)
Non-Current Liabilities	(115.5)	(139.0)
Total Liabilities	(156.2)	187.9
Net assets employed	66.1	86.3
Public dividend capital	115.7	116.2
Retained Earnings (Accumulated Losses)	(85.7)	(67.4)
Revaluation reserve	36.1	37.5
Total taxpayers' equity	66.1	86.3

Property, Plant and Equipment (PPE)

The key movement on PPE from the 5 Year Strategic Plan to the FY17 Actual was an impairment on the Trusts asset value alongside a reduction in the planned capital expenditure.

Cash and Cash Equivalents

The key variant within the Statement of Financial Position is on Cash and Cash Equivalents where the Trust's cash position is favourable to that modelled within the FBC. The key reason for this is the receipt of Sustainability and Transformation Funding of £12.7m, Electronic Patient Record costs of £5m and other minor movements in cash totaling £2.3m. In addition the revenue support funding is shown in liabilities rather than a negative cash position.

Non-Current Liabilities

Non-current liabilities requirements reflects a reduction in loan liabilities associated with the reduced cash requirements following receipt of STF funding.

» 12.3. Current financial performance - Month 3 FY18

The Month 3 planned position is a deficit of £8.00m on a control total basis, including year to date Sustainability and Transformation funding (STF) of £1.52m. This is in line with the plan submitted to NHS I. However, the financial position remains extremely precarious with activity and income below planned levels. EPR implementation continues to have a significant impact on both productivity and the capture of activity data. Additional workforce challenges including the adherence to IR35 guidance have impacted upon both performance and activity, which in turn have impacted upon the financial performance. Receipt of full STF funding has been assumed but year to date performance against the accident and emergency 4 hour standard has not been met which could lead to loss of STF funds. An appeal is in place citing exceptional circumstances relating to the introduction of EPR. After actions that are still being taken to capture and record activity that has been delivered, the underlying movement away from the year to date plan is £2.6m at month 3. Non recurrent measures have been taken to recover the year to date position but these are not sustainable and 50% of the Trust total contingency fund for 2017/18 has been allocated.

CIP of £2.15m has been delivered at month 3 against a plan of £2.32m, an underperformance of £0.17m. The Trust is forecasting full achievement of the £20m CIP target for the financial year. However there remains significant risk to delivery of this plan.

Total reported agency spend in June was £1.46m; as planned and in line with the NHS Improvement Agency Ceiling, however this value excludes agency expenditure capitalised as part of EPR implementation costs. The number of reported Agency Cap breaches remained very high, but was slightly lower than the level seen in May.

Capital expenditure to month 3 was £4.6m against a plan of £5.3m. The main area of spend to date was on EPR as planned.

Cash held at month 3 was £1.9m in line with plan.

The forecast continues to assume that the Trust will achieve its Control Total and secure the £10.1m STF allocation. However, the forecast assumes that activity returns to the planned level from July, with no further EPR related income losses. It also assumes that the remaining £3.2m of unidentified CIP is delivered. The risk of failing to achieve our target deficit of £15.9m therefore remains extremely high and further action is required to stabilise the financial position. Delivery of the financial plan has been escalated on the Trust risk register and is now the highest possible risk and highest recorded risk for the Trust. Delivery of the planned deficit with the current service configuration and estate remains extremely challenging.

>> 12.4. FY18 financial performance - Forecast

The Trust continues to forecast delivery of the planned deficit control total of £15.9m (excluding exceptional impairment costs).

The key risks associated with delivery of the FY18 plan are:

- Planned activity delivery and commissioner affordability: Planned activity levels differ from Commissioner contracts due to a different assessment of QIPP. If commissioners are successful in delivering these plans, the Trust will need to ensure that costs are reduced to compensate any associated loss of income.
- EPR: Any adverse revenue impact of EPR implementation and training will have to be included within the £15.9m Control Total. There remains a risk around loss of income and managing any costs that cannot be capitalised.
- CQUIN: The forecast assumes full delivery against CQUIN targets.
- CIP risk: The £20m CIP target has a delivery risk and the Trust forecast assumes delivery.
- Sustainability and Transformation Funding (STF): The Trust is awaiting final confirmation of the
 performance criteria and trajectory for the A&E 4 hour wait target. It is likely that the full 30%
 Access Target element of the STF funding will be reliant on achievement of this A&E target.
 Current guidance suggests that the Trust will be expected to maintain a level of performance at
 least as high as that achieved in FY17.

>> 12.5. Financial assumptions overview

12.5.1 Key assumptions underpinning the Financial Case

The Financial Case modelled is based on the Trust's FY18 and FY19 Operational Plan. The other key assumptions within the Financial Case are detailed below:

12.5.2 Key I&E assumptions

The key assumptions within the forecast are:

- That the Trust will achieve the necessary conditions to secure the £10.1m Sustainability & Transformation Fund (STF) allocation which is intrinsic to and contingent upon delivery of the planned deficit. This is consistent in 2018/19.
- That the Trust will achieve cost improvement savings of £20m for FY18 and £15.9m for FY19.
- That any adverse non recurrent revenue impact of the EPR implementation will either be capitalised or offset by additional savings in FY18.
- Against payment of £1m Apprentice Levy, £0.9m assumed to be recoverable through the Apprentice Levy fund.

12.5.3 Key Growth Assumptions

CHFT has undertaken an activity forecasting exercise to understand the likely impact of demographic growth. The table below shows the demographic growth assumptions used by the Trust. Non-demographic factors have also been incorporated. For FY18-FY23 the assumptions are based on the review performed by Interserve jointly for the Trust and Calderdale and Huddersfield Clinical Commissioning Group's (CCG's). The demographics are assumed to continue at the same rate from FY23-FY42.

Discussions have been held with the Trust's two main commissioners, Greater Huddersfield CCG (GHCCG) and Calderdale CCG (CCCG), to ascertain any material differences in forecasting assumptions. The Trust and CCGs' assumptions on activity growth appear to be materially consistent, with the main differences being in relation to QIPP.

Point of	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
delivery												
Year	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 25
Elective	1.33%	1.33%	1.33%	1.15%	1.15%	1.15%	1.15%	1.15%	1.15%	1.15%	1.15%	1.15%
Day case	1.28%	1.28%	1.28%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%
Non-elective	0.96%	0.96%	0.96%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%
Outpatient	1.09%	1.09%	1.09%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
A&E	0.73%	0.73%	0.73%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%	0.81%
Other tariff	1.02%	1.02%	1.02%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%
Non-tariff	1.02%	1.02%	1.02%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%
Community	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

The CCGs have identified £49m of income reduction associated with planned QIPP across the first five year period of the plan. However, within the financial plan the Trust has assumed QIPP and bed reduction CIP of £3.5m and £1.6m respectively in FY18 and a further £3m and £0.7m respectively in FY19, totaling £8.8m income reduction across the two years. A further £13.1m income reduction associated with QIPP has been assumed in FY20-FY22, this is based on a 6% reduction in non-elective medical admissions, shift to ambulatory care, reduction in acute based rehabilitation and the movement to upper quartile length of stay. Any QIPP delivered in addition to the QIPP described above is assumed to be delivered on the basis that the Trust can reduce costs at the same rate as the income reduction.

The Trust continue to work with its Commissioners to deliver QIPP and address the overall affordability of healthcare in Calderdale and Huddersfield.

12.5.4 Commissioner Affordability

The Trust has shared the activity, growth and inflation assumptions of the FBC with its two key commissioners for transparency and to ensure overall affordability of the FBC for the West Yorkshire healthcare sector. The following table sets out the clinical income values per commissioner over the five year period.

£m	FY17	FY18	FY19	FY20	FY21	FY22
Year	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
CHFT Greater Huddersfield CCG Income	123.7	124.4	125.2	125.5	126.9	125.4
CHFT Calderdale CCG Income	139.6	139.3	139.7	140.5	141.7	140.3
CHFT Clinical Income	263.3	263.7	264.9	265.5	268.6	265.7
Greater Huddersfield CCG	123.7	118.6	116.6	116.4	118.0	118.9
Calderdale CCG	139.6	133.6	131.2	128.6	128.9	128.3
CCG Clinical Income	263.3	252.2	247.8	245.0	246.9	247.2
Greater Huddersfield CCG variance	-	(5.8)	(8.6)	(9.1)	(8.9)	(6.5)
Calderdale CCG variance	-	(5.7)	(8.5)	(11.4)	(12.8)	(12.0)
Difference	-	(11.5)	(17.1)	(20.5)	(21.7)	(18.5)

For FY17 the Trust and Commissioners agreed a financial position for the year, reflecting the activity commissioned and provided for the year. The difference in assumptions between the Trust and its two main commissioners arise as a consequence of the financial constraints facing each of the commissioners. Each of the CCGs have QIPP plans to reduce activity for the Trust and drive down the overall cost of healthcare spend over the five year period. The Trust and commissioners have planned for different contract values in FY18 due to differences on QIPP assumptions. The financial impact of this difference is reflected throughout the five year period.

The Trust is committed to delivering a financially sustainable solution for the health sector in West Yorkshire. Through the Calderdale and Greater Huddersfield Transformation Group the Trust is working with commissioners to identify and deliver QIPP that delivers financial savings for the health system i.e. both the commissioners', and providers', expenditure is reduced through the delivery of the QIPP.

It is key to note that the commissioner affordability gap grows by £7m between FY18 and FY22. Over 50% of the overall affordability requires in year resolution. It is assumed that as the £7m is identified, costs will be removed at 100% rate.

12.5.5 Financial assumptions

The projections laid out in the Financial Case include a number of assumptions around how the Trust operates:

- **Pay/Non-pay split** where costs have not been able to be directly attributed to pay and non-pay categories, these have been split on a proportionate basis to pay/non-pay expenditure.
- **Marginal cost** the assumption has been that any growth or movement in activity, other than QIPP, will have a marginal cost impact of 70%.
- **QIPP** the Trust has assumed 80% marginal cost associated with activity lost through QIPP schemes for financial years FY20-FY22. Any QIPP delivered in addition to the identified schemes is assumed to have cost reduction equivalent to the value in income reduction.
- **Working capital** none of the options is assumed to have any significant impact on the Trust's working capital policy (i.e. payables and receivables days remain constant throughout the Plan period).

12.5.6 Economic assumptions

The Trust has also made a number of economic assumptions governing cost inflation and tariff deflation. These are presented below.

	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28- FY42
Year	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 25
Clinical Income	0.1%	0.1%	0%	1.0%	1.0%	0%	0%	0%	0%	0%	0%
Other Income	1.0%	2.0%	2.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Pay & Incremental drift	2.0%	2.0%	2.0%	3.0%	3.0%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
Drugs	1.0%	2.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
CNST	18%	18%	10%	10%	10%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Clinical Supplies & Other non-pay	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

The bases for these assumptions are as follows:

- **Clinical Income** tariff deflation has been assumed to be between 0% and 1.0% throughout the period FY18 to FY42, this is based on planning guidance for FY18-FY22;
- Other Income inflation based on planning guidance to FY22, continuing at 2% pa.;
- Pay inflation and Incremental drift pay inflation for all staff is assumed to rise to 2.0% per annum by FY20, increasing further to 3.0% by FY22 based on planning guidance for FY18-FY22;
- **Drugs** the figures presented above are for routine pharmacy drug issues and represent a cost pressure to the Trust. Inflation relating to high-cost drugs, which are pass-through in nature are off-set by corresponding income;

- Clinical Negligence Scheme for Trusts (CNST) inflation based on the Trust's historical experience of CNST increases, reducing to 10% pa. for FY20-FY22, reducing further to 3% from FY23; and
- Clinical Supplies & Other non-pay inflation based on planning guidance to FY22, continuing at 2% pa.

These assumptions were based on the information available to the Trust at the time of developing the Plan and are based on the NHS Improvement Economic Assumptions (published 23 March 2016). Any changes that may arise on these assumptions in the future will not materially impact the financial option appraisal since changes to such assumptions will impact the Existing Service model and Future Service Option materially equally.

12.5.7 Capital assumptions

Estimates for capital expenditure were obtained from the work undertaken by Lendlease Consulting for the costs associated with CRH and HRI. Capital expenditure estimates are based on the gross internal floor areas of the respective buildings, taken from the Schedule of Accommodation produced by the Healthcare Planner following confirmation of the proposed service changes under the Proposed Option.

Impairment of capital expenditure a 15% impairment of the expenditure on new works (i.e. capital expenditure excluding backlog maintenance) is assumed on completion of the works (in FY22).

Depreciation policy for capital expenditure

- Reconfiguration capital depreciated over 40 years;
- Backlog maintenance capital depreciated over 34 years (current average for HRI).

Asset disposals – the disposal of assets on the HRI site under the Future Service Option occurs in FY23. The disposal proceeds of £7m are based on external quantity surveyor reports. Losses on disposal are based on projected net replacement costs from the Trust's Fixed Asset Register (FAR). The £7m is assumed to fund further capital in FY23 and FY24.

Capital estimate inclusions – all of the below are pro-rated across the breakdown of capital provided by the Quantity Surveyor:

- Preliminary costs 14%;
- Professional fees 12%:
- Non-works costs 1.5%;
- Capital equipment costs 5%;
- Planning contingency 15%;
- Optimism bias 13%;
- Value Added Tax (VAT) 20%;

Revaluations – revaluations have been assumed to occur to the Trust's estate. The estate is first revalued five years after being brought on to the Statement of Financial Position, with the first revaluation occurring in FY26, and then annually thereafter to maintain the estimated market value of the estate.

Cash assumptions

Throughout each of the modelled options the Trust is reliant on Revenue Support Loan in the period prior to returning to financial surplus. This has been modelled with an interest charge of 1.5%, which is the current rate of the borrowing for the Trust for this facility. The Trust's Revenue Support Loan is assumed in the future service model Option B to be written off following the Trust's reconfiguration, in FY23. This is in FY33 in the existing service model Option A. The write off of revenue support loan is assumed to be through receipt of PDC.

Financing assumptions

Option A – ITFF funding

- Back-log maintenance of £94.5m funded through ITFF loan;
- New build HRI £379.5m in FY22-FY25;
- ITFF capital loan rate 1.40%;
- Loan term 25 years.

Option B – PFI & ITFF funding

- Back-log maintenance of £11.8m funded through Trust resources and ITFF loan of £8.1m in FY20 and FY21;
- Capital costs £297.6m capital cost for both sites, split between variation to the existing site at £21m (ITFF) and new capital works at £276.6m (PFI);
- ITFF loan for variation to existing estate (£21m) at CRH funded at 1.40% for 25 years;
- ITFF loan to fund Trust capital requirements of £4.6m across the business case, until FY32;
- The disposal of HRI for £7m in FY23 is assumed to fund Trust capital over FY23 and FY24;
- PFI Concession length 40 years, calculating repayments based on equal interest and principal ('EIP');
- Site area 46,213 M2 for both sites;
- Hard FM & Lifecycle costs Annual Hard FM costs of £23.30per m² and lifecycle costs of £27.57 per m² based on benchmark data;
- Operational start date April 2021.

>> 12.6. Summary Financial Expenditure

The summary financial impact of the Future Service Option is outlined in the table below:

£m	FY23	FY27	FY42
	Future	Future	Future
	Service	Service	Service
	Option B	Option B	Option B
	£m	£m	£m
Total Revenue	386.1	414.4	500.8
Total Operating Expenditure	(356.4)	(367.2)	(452.7)
EBITDA	29.7	47.2	48.2
Total Non-operating Expenses	(41.5)	(41.2)	(41.8)
Net Surplus / (Deficit)	(11.9)	6.0	6.4
Net Surplus / (Deficit) margin (%)	(3.1%)	0.0	0.0
FY23 Cumulative normalised Surplus / (Deficit)	(95.5)		
FY27 Cumulative normalised Surplus / (Deficit)		(81.7)	
FY 42 Cumulative normalised Surplus / (Deficit)			16.0

The total capital expenditure on the reconfiguration of services is £297.6m of capital expenditure (excluding back-log maintenance).

>> 12.7. Capital Costs

The table below is the capital expenditure plans submitted to NHS Improvement in March 2017, with the addition of the expenditure planned on the Option A strategic reconfiguration. Detailed capital planning has been performed by the Trust for FY18 and FY19, with FY20 and beyond identified against a single capital programme line.

£m	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 25
Estates and backlog maintenance	6.7	3.2	1.4	5.2	5.2							
Strategic Reconfiguration						297.6						
Information Technology	5.1	1.9	1.3									
EPR	7.4	3.4										
Equipment	3.4	3.3	1.2									
PFI — Lifecycle	1.4	1.5	1.5	1.6	1.7	0.3	0.0	0.0	0.0	0.4	0.6	0.7
Capital Programme		0.9	3.8	4.9	4.8	5.0	5.0	5.0	5.0	5.0	5.0	15.9
HRI disposal							(7.0)					
Total	24.0	14.2	9.2	11.7	11.7		(2.0)	5.0	5.0	5.4	5.6	16.6

Ongoing replacement and maintenance capital expenditure in FY20 and FY42 have been assumed to be £5m per annum, with the difference in available resource funded through ITFF loan.

12.7.1. Detailed Capital Plan – Future Service Model Option

The table below provides a detailed analysis of the costs associated with the Future Service option.

Element	FBC CRH	FBC HRI	FBC Total
HRI (Acre Mills)	Cost (£)	Cost (£) £53,965,600	Cost (£) £53,965,600
	(77 200 000	155,905,000	
CRH Site infractructure	£77,298,800	(2,000,420	£77,298,800
Site infrastructure	£2,975,360	£3,989,420	£6,964,780
Traffic management	£115,948	£80,948	£196,897
External works	£700,120	£668,140	£1,368,260
Service diversions	£140,000	£90,000	£230,000
Access and logistics	£173,922	£121,423	£295,345
Car parking	£6,000,000	£1,950,000	£7,950,000
Links	£1,575,000	£75,000	£1,650,000
Sustainability	£686,756	£539,656	£1,226,412
Section 106/278	£772,988	£539,656	£1,312,644
Sub-total	£90,438,894	£62,019,843	£152,458,738
Preliminaries	£12,661,445	£8,682,778	£21,344,223
Fees	£12,372,041	£8,484,315	£20,856,355
Non works costs	£1,546,505	£1,060,539	£2,607,044
Equipment costs	£5,155,017	£3,535,131	£8,690,148
Planning contingency	£18,326,085	£12,567,391	£30,893,476
Optimism bias (13%)	£18,264,998	£12,525,500	£30,790,498
Sub-total	£158,764,985	£108,875,497	£267,640,482
Inflation	£17,782,612	£12,194,696	£29,977,308
VAT (Excluding Fees)	£32,835,112	£22,517,176	£55,352,287
VAT recovery	-£32,835,112	-£22,517,176	-£55,352,287
Total	£176,547,597	£121,070,193	£297,617,790
Backlog maintenance	-	£11,818,000	£11,818,000
Total (including backlog)	£176,547,597	£132,888,193	£309,435,790
HRI disposal	-	-	(7,000,000)
Total capital requirement	£176,547,597	£132,888,193	£302,435,790

12.7.2 Impairment

The capital investment in new buildings typically costs more than the value of the building. The assumption used within the financial model is a reduction in asset value of 15%. In addition an impairment of the existing HRI site, recognising the anticipated lower valuation once the land is disposed of. The impairment for HRI of £75.2m is offset by an existing revaluation reserve for HRI of £23.6m.

£m	FY22
CRH Unplanned site	£26.6
HRI Planned site	£18.1
HRI existing site	£75.2
Total Impairment	£119.9
Revaluation reserve	(£23.6)
Impairment Charge to I&E	£96.3

The impairment charge arising from reconfiguration has been treated as an exceptional item within the financial model.

>> 12.8. Detailed Financial Expenditure - Affordability (Option B - Future Service Model Option)The activity, workforce and capital plans are modelled within the financial expenditure table below:

12.8.1 Income and Expenditure Account

£m	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 25
Clinical Revenue	332.8	334.7	337.7	330.6	335.0	332.1	341.8	349.3	358.6	362.9	367.4	442.0
Non Protected/Non Mandatory Clinical Revenue	10.9	7.0	7.1	7.1	7.3	7.4	7.5	7.6	7.7	7.7	7.8	9.2
Other Revenue	31.6	33.1	33.6	34.2	35.2	36.2	36.8	37.3	37.9	38.5	39.2	49.7
Total Revenue	375.3	374.7	378.4	371.9	377.4	375.8	386.1	394.3	404.2	409.2	414.4	500.8
Workforce Expenditure	(241.1)	(241.1)	(237.7)	(235.3)	(236.0)	(232.6)	(222.8)	(220.4)	(219.0)	(220.2)	(222.1)	(253.2)
Drugs	(32.9)	(35.3)	(34.9)	(35.8)	(36.8)	(37.8)	(38.8)	(39.9)	(41.0)	(42.1)	(43.3)	(65.3)
Clinical Supplies & Services	(32.7)	(32.8)	(32.1)	(31.8)	(31.5)	(29.0)	(30.2)	(31.1)	(32.4)	(32.6)	(32.8)	(38.5)
Other Expenses	(47.1)	(44.3)	(48.5)	(49.6)	(51.7)	(49.2)	(49.0)	(49.5)	(20.3)	(51.3)	(52.7)	(93.6)
PFI Operating Expenses	(12.0)	(12.2)	(12.5)	(12.7)	(13.0)	(15.3)	(15.6)	(15.9)	(16.2)	(16.1)	(16.3)	(3.1)
Total Operating Expenditure	(365.8)	(365.6)	(365.7)	(365.2)	(368.9)	(363.9)	(356.4)	(356.8)	(358.8)	(362.3)	(367.2)	(452.7)
EBITDA	9.5	9.1	12.7	6.7	8.5	11.8	29.7	37.5	45.4	47.0	47.2	48.2
EBITDA Margin (%)	2.5%	2.4%	3.4%	1.8%	2.2%	3.2%	7.7%	9.5%	11.2%	11.5%	11.4%	%9.6
Gain/(loss) on asset disposals	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Impairment Losses (Reversals) net	1.0	(14.0)	0.0	0.0	0.0	(69.3)	0.0	0.0	0.0	0.0	0.0	0.0
Total Depreciation & Amortisation	(10.1)	(10.8)	(11.6)	(11.7)	(11.8)	(15.4)	(15.4)	(15.4)	(15.4)	(15.4)	(15.5)	(20.8)
Interest / Contingent Rent on PFI leases & liabilities	(10.8)	(11.0)	(11.1)	(11.2)	(11.3)	(23.7)	(24.4)	(24.9)	(24.9)	(24.9)	(24.9)	(12.9)
Interest payable on Loans	(1.1)	(1.6)	(1.9)	(1.8)	(2.1)	(5.6)	(1.9)	(0.9)	(6.0)	(0.0)	(0.8)	(0.3)
PDC Dividend	(2.5)	(1.8)	(1.0)	(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.3)	(8.1)
Other Non-Operating	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Non-operating Expenses	(23.2)	(38.9)	(25.4)	(24.7)	(25.0)	(137.8)	(41.5)	(41.0)	(41.0)	(41.0)	(41.2)	(41.8)
Net Surplus / (Deficit)	(13.8)	(58.8)	(12.7)	(18.0)	(16.5)	(126.0)	(11.9)	(3.6)	4.3	0.9	0.9	6.4
Net Surplus / (Deficit) margin (%)	(4%)	(%8)	(3%)	(2%)	(4%)	(34%)	(3%)	(1%)	0	0	0	0
Normalised (excluding impairments / Disposals)	(14.6)	(15.8)	(12.7)	(18.0)	(16.5)	(29.7)	(11.9)	(3.6)	4.3	0.9	0.9	6.4

Option B – Future Service Model Financial overview

Financial modelling of the Future Service model option shows the Trust return to financial surplus in FY25, with the surplus increasing further in FY26 as the benefits of reconfiguration are realised. The Trust plan to invest in transformation and developments as surpluses exceed 2% of revenue.

Revenue increases year on year by the growth in activity assumed along with the clinical income tariff increases. This is somewhat offset by QIPP delivery across the financial plan. The Trust's workforce expenditure decreases in FY18-FY27 through delivery of QIPP and CIP across the period, including delivery of skills mix to ensure the Trust has a workforce to meet the clinical requirements. PFI leases increases in FY22 as the new PFI buildings at HRI and CRH come into operation from 1 April 2021. Other changes in the income and cost base are driven by the economic assumptions.

Impairments arise in the financial plan in FY18 associated with the review of the carrying value of the Trust's Electronic Patient Record and in FY22 as a consequence of the estate reconfiguration. Impairment arises from the impairing the existing HRI site and both new capital builds on completion.

12.8.2. Cost Improvement Programme (CIP)

The Trust has strong governance processes for the planning, monitoring and delivery of CIP and a track record of achievement. This was confirmed by NHSI following their CIP 'deep-dive' visit to the Trust in June 2017.

The Trust allocates CIP targets to operational and corporate divisions using a range of national and local benchmarking data in a deliberate approach to ensure allocation of CIP targets is based on evidence of where there may be efficiency opportunity (as opposed to simply a pro-rata share of target to budgets). 'Portfolio' opportunities (cross cutting or transformational schemes that impact on more than one operational division or require external partnerships) are led by an Executive Director who is accountable for delivery.

Based on the targets allocated individual CIP schemes are progressed through detailed planning stages with weekly formal review of progress undertaken by the Trust's Turnaround Executive and monthly review at the Trust's Finance and Performance Committee.

In the three years FY15 to FY17 annual CIP delivery has ranged between £14m and £18m per annum resulting in a total of £46m efficiency savings realised across the three year period.

The FY18 CIP plan assumes the Trust delivers £20m in CIP and revenue generation schemes. It is in the context of successful historic delivery of CIP; long term strategic change enabled by the reconfiguration plans; and the future opportunities afforded the organisation by working collaboratively across the region that the Trust will strive to achieve the £15.9m control total set by NHSI for FY18.

The FY19 CIP plan assumes delivery of £15.4m CIP and internal, as well as West Yorkshire wide, planning will support this.

In addition to CIP delivery from FY19 the Trust will also deliver WYAAT and other savings as outlined below.

West Yorkshire Association of Acute Trusts (WYAAT) savings initiatives

WYAAT has agreed a key objective of collaborating to develop West Yorkshire and Harrogate standardised operating procedures and pathways across services, building on current best practice and using "Getting it Right First Time" (GIRFT) to drive out variations in quality as well as operational efficiency and facilitating safer free movement of bank staff across providers. Orthopaedics has been selected as one of the first areas to work on. The specific deliverables of this work are:

- Improved aggregate RTT performance;
- Increased orthopaedic activity and reduced subcontracting to non NHS providers;
- Achievement of optimal performance indicators e.g. day case rate, length of stay, cancelled operations, new to review out patient appointments, extended lengths of inpatient stay, conversion rates, cancelled/repeat out patient appointments;
- Reduce West Yorkshire reference cost for high volume elective orthopaedic procedures;
- Reduced total workforce and consumable costs (reduced use of bank and agency);
- Reduce the overall cost of orthopaedic services by between £4.2m and £9m.

As part of the 'Back-office' function review, the Trust is working with WYAAT colleagues to deliver financial and operational efficiencies across Information Technology services and Estates and Facilities services. It is anticipated through a shared delivery model financial efficiencies will be realised. This will assist the West Yorkshire Trusts in delivering Carter identified opportunities, align clinical, estate and IM&T services, increase development opportunities for staff whilst sharing best practice and drive standards of service up.

Reconfiguration benefits

WYAAT has identified that all acute Trusts in West Yorkshire are experiencing significant pressure in delivering 18 week RTT and that there is reliance on outsourced independent sector capacity or temporary staffing which is driving additional cost pressures. A workstream for releasing WYAAT providers capacity to undertake additional elective activity that is currently contracted to the independent sector has been initiated. The specific aims of this are:

- Delivering high quality clinical pathways and operational models to optimise performance and use
 of resources;
- Delivering nationally recognised excellence in terms of clinical outcomes and professional standards;
- Working as a group to develop processes to legally retain as much NHS activity as possible within the WYAAT Trusts by optimising the capacity and configuration for elective services with agreed risk/gain share (using estate and workforce in a flexible model across the WYAAT footprint).

The development of planned care site will enable the Trust to offer capacity to undertake additional elective work (repatriated from the independent sector and out of area) optimising utilisation of the planned care facilities out of hours and at weekends.

WYAAT has agreed to establish a West Yorkshire Vascular network that will provide a two arterial centre model for West Yorkshire, with centres and spoke sites that are attractive and sustainable. The network will deliver a number of qualitative and efficiency benefits (such as reduction in LoS, reduction in agency costs, reduction in re-admissions) enabled by:

- Set up of sub-specialty teams across organisational boundaries;
 - > Specialist Multi-Disciplinary Teams
 - > Representation from all organisations
 - > Fluidity of workforce
 - > Sharing of skills
- Joint appointments;
- Joint clinical governance and oversight;
- Collaboration in Research and Innovation;
- Collaboration in training and teaching.

Most of the reconfiguration savings are achieved at the beginning of year five, when the hospitals move to the planned and unplanned care sites. Following the move there are opportunities to achieve additional cost savings and improvements in quality, impacting across the whole of clinical services, which could not be achieved without the site reconfiguration. The reduction in on-call payments from robust single site medical rotas for example will release costs. There may also be opportunities to gain additional economies of scale in medical services, where the use of advanced practitioners can be used to fill difficult to recruit to middle and junior grade doctors, further reducing reliance on agency and locum staff. The ability to do this is enhanced and enabled by senior clinical support being focused on one site, to offer supervision and clinical mentoring. This will also further support junior doctors developing their skills through the Certificate of Eligibility for Specialist Registration (CESR) route. This will result in additional savings in FY23-FY27.

Other initiatives

From FY22 the local system will have embedded new ways of working in Greater Huddersfield and Calderdale across community and hospital services. This collaboration will enable efficiencies to be achieved in relation to administration, management, and property costs.

12.8.3. Cost Improvement Programme (CIP)

The table below outlines the required CIP across the period FY17 – FY42.

Em	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 25
	Actual	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan
Planned CIP	14.0 20.0		15.4	7.2	7.3	7.3	11.3	11.1	10.9	6.4	6.4	7.8
WYAAT & Other Strategic Opportunities			0.5	2.8	2.2	4.4		1 .3	1.5			
TOTAL – Planned efficiencies	14.0	20.0	15.9	10.0	9.5	11.7	15.9	12.4 12.4	12.4	6.4	6.4	7.8
Planned cumulative efficiencies	14.0	20.0	35.9	45.9	55.4	67.1	83.0	95.4	107.8	107.8 114.2	120.6	228.6
Efficiency % of Operating Expenditure	3.8%	3.8% 5.4% 4.3%		2.7%	2.5%	3.2%	4.4%	3.4%	3.4%	1.7%	1.7% 1.7%	1.7%

Between FY18 and FY42, CHFT will need to identify new cost reductions amounting to £228.6m to meet the CIP efficiency requirement.

12.8.4 Use of Resources (UoR) metrics – New compliance regime - Single Oversight Framework NHS Improvement

Governance rating were issued, these are brought together under the SOF. This considers 5 themes: Quality of Care; Finance and use of resources; Operational performance; Strategic change; Leadership and improvement capability. The Finance element of this system NHSI has now introduced the Single Oversight Framework (SOF). Where previously a separate Finance rating (the FSRR) and is the Use of Resources score and the constituent parts of this measure are described below.

- **Liquidity:** days of operating costs held in cash or cash-equivalent forms (cash in the bank less payables plus receivables, on the presumption these can be immediately converted into cash);
- Capital servicing capacity: the degree to which the organisation's generated income covers its financing obligations a measure of the Trust's ability to afford its debt - in this sense payments against debts include PDC payments, interest and loan repayments and PFI interest, PFI contingent rent and PFI capital repayments;
- **Income and expenditure (I&E) margin**: the degree to which the organisation is operating at a surplus/deficit (measured against the Control Total which excludes impairments, gains/losses on disposal and donated assets);
- plan and its actual I&E margin within the year (again measured against the Control Total which excludes impairments, gains/losses Variance from plan in relation to I&E margin: variance between a foundation trust's planned I&E margin in its annual forward on disposal and donated assets);
- Agency: measurement of actual agency usage against the original agency ceiling set by NHSI at the planning stage at £16.86m. A distance from target of greater than 50% results in the lowest rating of 4 against this metric.

	FY17	FY17 FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
	Actual	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan
Liquidity	4	4	4	4	4	4	4	4	4	4	4	4
Capital servicing capacity	4	4	4	4	4	4	4	4	4	4	4	8
I&E Margin	4	4	4	4	4	4	4	m	—	<u></u>	<u></u>	_
I&E Margin	_	—	<u></u>	—	_	—	_	<u></u>	—	_	—	_
variance												
Agency	4	—	—	~	—	—	—	~	—	—	.	—
Overall UoR	\sim	3	\sim	c	M	\sim	\sim	3	2	2	2	2
score												

The financial plan within the case improves the Trust's I&E Margin post reconfiguration as the Trust moves to financial surplus in FY25. The I&E surplus improves the I&E margin score from a current score of 4 to a 3 in FY24 and a 1 in FY25. This drives an overall improvement in the Use of Resources score to a 2 score in FY25. The Liquidity score remains at a score of 4 throughout the financial period, with the Capital Servicing Capacity score improving from a score of 4 to a 3 in FY33. This change is driven by the final payment on the existing CRH PFI. The financial plan assumes the Trust remains within the agency ceiling throughout the financial plan, therefore scoring a 1 throughout the plan.

12.8.5. Statement of Financial Position over 25 years (FY18 – FY42)

£m	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
	Yr 0	Yr 1	Yr 2	Yr3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 25
Property, Plant and Equipment	239.0	224.9	222.9	223.4	223.7	391.7	374.7	364.8	354.8	375.3	375.9	438.3
Inventories	6.7	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
NHS Trade Receivables	7.2	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Non NHS Trade Receivables	6.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Other Current Assets	12.4	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Cash and Cash Equivalents	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	7.2
Current assets	35.2	31.0	31.1	31.1	31.0	31.0	31.0	31.0	31.0	31.1	31.1	36.4
Total assets	274.2	255.9	254.0	254.5	254.7	422.7	405.8	395.8	385.9	406.4	407.0	474.7
Current Liabilities	(48.9)	(41.7)	(40.9)	(41.4)	(49.9)	(49.8)	(49.1)	(49.4)	(49.6)	(20.0)	(50.4)	(44.6)
Non-Current Liabilities	(139.0)	(139.0) (163.1) (174.6)	(174.6)	(192.6)	(200.8)	(518.6)	(374.7)	(368.0)	(353.5)	(337.7)	(321.8)	(147.6)
Total Liabilities	(187.9)	(204.8)	(215.6)	(234.0)	(250.8)	(568.4)	(423.8)	(417.4)	(403.1)	(387.6)	(372.2)	(192.2)
Net assets employed	86.3	51.2	38.4	20.5	3.9	(145.6)	(18.0)	(21.6)	(17.3)	18.7	34.7	282.5
Public dividend capital	116.2	116.2	116.2	116.2	116.2	116.2	255.7	255.7	255.7	255.7	255.7	255.7
Retained Earnings (Accumulated Losses)	(67.4)	(8.66)	(112.5)	(130.5)	(147.0)	(273.0)	(284.8)	(288.4)	(284.1)	(278.1)	(272.1)	(174.3)
Revaluation reserve	37.5	34.7	34.7	34.7	34.7	11.1	11.1	11.1	11.1	41.1	51.1	201.1
Total taxpayers' equity	86.3	51.2	38.4	20.5	3.9	(145.6)	(18.0)	(21.6)	(17.3)	18.7	34.7	282.5

reconfiguration arises as the debt is written off. As the Trust returns to financial surplus in FY25 the balance sheet position improves year on year. the SoFP arise in FY22 as the assets and liabilities associated with the new PFI are captured on the SOFP. The improvement in the SoFP post The Statement of Financial Position (SoFP) working capital is assumed consistent throughout the financial plan. The key movements within

12.8.6. Cash flow statement

£m	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
	Yr 0	Yr 1	Yr 2	Yr3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 25
Cash flows from operating activities	9.5	8.8	12.4	6.4	8.2	11.6	29.4	37.2	45.1	46.7	46.9	47.8
Cash generated from (used in) operations	(6.5)	0.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash generated from (used in) investing activities	(16.8)	(19.3)	(11.7)	(11.7)	(11.6)	(26.2)	2.0	(2.0)	(2.0)	(5.4)	(5.5)	(16.5)
Cash generated from (used in) financing activities	14.1	10.2	(3.2)	5.2	3.4	14.7	(31.4)	(32.2)	(40.1)	(41.3)	(41.3)	(30.4)
Increase/ (decrease) in cash and cash equivalents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0

The cash position of the Trust, detailed above shows the improvement in the cash position as a consequence of the Trust returning to financial balance in FY25.

FY23 sees an increase in cash used in financing activities, driven by the interest element of the PFI agreements and a reduction in the cash drawn down for Revenue Support Loan as the Trust returns to financial surplus and generates cash from operating activities.

12.8.7. Sensitivity Analysis

The Trust has considered variants to the business case as sensitivities based on the potential opportunities and risks that may arise within the local health economy. The following table highlights the bottom line deficit projections for the Future Service option. In the table below, the following non recurrent items have then been stripped out of these deficits to show the underlying (recurrent) deficit positions in each year:

- Impairments of £14m in FY18 and £96.3m in FY22;
- Non-recurrent costs of £10m.

Deficit £'m	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
Proposed option Deficit	(29.8)	(12.7)	(18.0)	(16.5)	(126.0)	(11.9)	(3.6)	4.3	6.0	6.0	6.4
Impairments	14.0	0.0	0.0	0.0	96.3	0.0	0.0	0.0	0.0	0.0	0.0
Non-recurrent costs	-	0.3	0.5	2.1	6.9	0.2					
Normalised (deficit)/ surplus	(15.8)	(12.4)	(17.5)	(14.4)	(22.8)	(11.7)	(3.6)	4.3	6.0	6.0	6.4

The downside and upside sensitivities bridge from the underlying financials are indicated above.

Downside sensitivities

The following downside scenarios have been considered by the Trust:

Downside 1 – Increase in dual running costs

The Trust has assumed non-recurrent transition costs of £10.1m associated with the reconfiguration. This is assumed are pay costs, consistent with the 5 Year Strategic Plan to support transitional project management. These costs are based on an initial assessment however this estimate could increase over and above, for the sensitivity this has been assumed to increase to £15m.

Downside 2 – Non-delivery of CIP target in 2017/18 and 2018/19

The Trust has delivery of CIP throughout the financial modelling, with the required CIP based on the 2017-19 Operational Plan and NHSI planning guidance where available. Tariff efficiencies are driving a 2% efficiency requirement however the Trust has planned CIP above this level for FY18 and FY19. The impact of delivering less CIP than planned in FY18 and FY19 has been modelled as a downside sensitivity.

Downside 3 – Failure to meet targets associated with Sustainability and Transformation Funding (STF)

The Trust has assumed receipt of STF in FY18 and FY19 of £10.1m and £10.1m respectively. Receipt of this funding is conditional to the Trust meeting criteria. £3m of the STF is associated with financial and operational performed in the final quarter of the year. Given this is both financially and operationally the most challenging period of the year it has been modelled that the conditions of this fund is not achieved in FY18 and FY19.

Downside 4 – Enhancing the Planned HRI Hospital model

Developing the planned care site to provide an Emergency Department for adults between 9am and 6.30pm seven days a week. The clinical case for change supports the reconfiguration to a planned and unplanned site to ensure sustainability in service. The downside case outlines the additional cost pressure upon the Trust from enhancing the HRI hospital model.

Downside 5 – Failure to decrease agency costs in line with trajectories
 The Trust historically has high levels of agency spend. In FY17 this was at £24m. For FY18 the
 Trust has planned to achieve its agency ceiling set by NHS Improvement, at £16.9m. Given the
 Trust's difficulty to attract staff within the current clinical configuration the Trust has modelled the
 incremental cost implication of employing agency staff in substantive positions.

£m	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
Normalised (deficit)/ surplus	(15.8)	(12.4)	(17.5)	(15.4)	(22.8)	(11.7)	(3.6)	4.3	6.0	6.0	6.4
Increase in dual running site costs		(0.2)	(0.3)	(0.7)	(4.5)	(0.1)					
Non-delivery of CIP target prior to reconfiguration	(3.0)	(5.0)									
Failure to achieve STF targets	(3.0)	(3.0)									
Enhanced HRI Hospital					(7.4)	(7.5)	(7.7)	(7.9)	(8.0)	(8.2)	(9.4)
Failure to achieve agency ceiling	(4.2)	(3.8)	(3.2)	(2.7)	(2.2)	(1.7)	(1.8)	(1.9)	(2.0)	(2.1)	(2.9)
Sub - total movement	(10.2)	(12.0)	(3.5)	(3.4)	(14.1)	(9.3)	(9.5)	(9.8)	(10.0)	(10.3)	(12.3)
Downside case surplus/ (deficit)	(26.0)	(24.4)	(21.0)	(18.8)	(36.9)	(21.0)	(13.1)	(5.5)	(4.0)	(4.3)	(5.9)

The table highlights the overall impact of the above downside sensitivities on the underlying financial position, increasing the cost base across the financial plan. The Trust's financial position in later years would be mitigated by less investment in developments, mitigating the downside case.

Upside sensitivities

The following downside scenarios have been considered by the Trust:

Upside 1 – Sustainability and Transformation Fund
 The Trust is currently in receipt of Sustainability and Transformation Fund (STF) monies for meeting targets set. This is planned at £10.1m in FY18 and FY19 as the monies have been received non-recurrently. A potential upside could be the receipt of STF monies beyond FY19.

- Upside 2 Increased CIP
 The Trust has forecast increased CIP delivery in FY23-FY25 post reconfiguration. A potential upside is that the Trust can sustain this level of CIP for five years post reconfiguration rather than the three years currently modelled.
- Upside 3 Independent Sector Patient Income (ISPI)
 Changes to Commissioning clinical thresholds, growth in regional and national waiting lists is likely to have an impact on the demand for independent healthcare. The Trust would seek to maximise utilisation of existing resources to meet the anticipated growth in independent sector patient income. For the purpose of the sensitivity independent sector patient income has been assumed to grow per annum, with this work being delivered through utilising three session days and 7-day services.

£m	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
Normalised (deficit)/surplus	(15.8)	(12.4)	(17.5)	(15.4)	(22.8)	(11.7)	(3.6)	4.3	6.0	6.0	6.4
Sustainability and Transformation Funding (STF)			10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	
Increased CIP for a further two years									5.0	5.0	
Independent Sector Patient Income		0.1	0.3	0.3	0.5	0.8	0.9	1.1	1.3	1.5	2.9
Sub - total movement	0.0	0.1	10.4	10.4	10.6	10.9	11.0	11.2	16.4	16.6	2.9
Upside case surplus (deficit)	(15.8)	(12.3)	(7.1)	(5.0)	(12.2)	(0.8)	7.4	15.5	22.4	22.6	9.3

The table highlights the overall impact of the above upside sensitivities on the financial position, improving the financial position to a surplus in FY24, a year earlier than within the financial plan. The table above shows surplus of £7.4m-£22.6m in years FY25-FY27 however the Trust would likely plan to invest in transformation and developments should the surplus exceed 2% of revenue.

» 12.9. Detailed Financial Expenditure - Affordability (Option A - Existing Service Model)

For comparison, the activity, workforce and capital plans for the Existing Model Option are modelled within the financial expenditure table below:

12.9.1. Income and Expenditure Account

fm	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY42
	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 25
Clinical Revenue	332.8	334.7	337.7	330.6	335.0	332.8	336.9	341.0	345.1	349.3	353.6	425.9
Non Protected/Non Mandatory Clinical Revenue	10.9	7.0	7.1	7.1	7.3	7.4	7.5	7.6	7.7	7.7	7.8	9.5
Other Revenue	31.6	33.1	33.6	34.2	35.2	36.2	36.8	37.3	37.9	38.5	39.2	49.7
Total Revenue	375.3	374.7	378.4	371.9	377.4	376.4	381.1	385.9	390.7	395.6	400.6	484.7
Workforce Expenditure	(241.1)	(241.1)	(237.7)	(235.1)	(235.2)	(228.7)	(227.6)	(228.3)	(229.0)	(229.7)	(230.4)	(251.8)
Drugs	(32.9)	(35.3)	(34.9)	(32.8)	(36.8)	(37.8)	(38.8)	(39.9)	(41.0)	(42.1)	(43.3)	(65.3)
Clinical Supplies & Services	(32.7)	(32.8)	(32.1)	(31.8)	(31.5)	(58.6)	(58.6)	(29.8)	(30.0)	(30.1)	(30.3)	(33.2)
Other Expenses	(47.1)	(44.3)	(48.5)	(49.6)	(20.7)	(51.7)	(51.7)	(52.5)	(53.3)	(54.0)	(54.8)	(86.6)
PFI Operating Expenses	(12.0)	(12.2)	(12.5)	(12.7)	(13.0)	(13.0)	(13.2)	(13.4)	(13.7)	(14.0)	(14.2)	0.0
Total Operating Expenditure	(365.8)	(365.6)	(365.7)	(365.0)	(367.1)	(360.7)	(360.9)	(363.9)	(366.9)	(370.0)	(373.1)	(440.2)
EBITDA	9.5	9.1	12.7	6.9	10.3	15.7	20.2	22.0	23.8	25.7	27.5	44.6
EBITDA Margin (%)	2.5%	2.4%	3.4%	1.9%	2.7%	4.2%	5.3%	5.7%	6.1%	6.5%	%6.9	9.2%
Gain/(loss) on asset disposals	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Impairment Losses (Reversals) net	1.0	(14.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Depreciation & Amortisation	(10.1)	(10.8)	(11.6)	(12.2)	(12.7)	(13.3)	(13.8)	(13.8)	(13.8)	(13.8)	(13.8)	(23.3)
Interest / Contingent Rent on PFI leases & liabilities	(10.8)	(11.0)	(11.1)	(11.2)	(11.3)	(12.1)	(12.3)	(12.3)	(12.3)	(12.2)	(12.2)	0.0
Interest payable on Loans	(1.1)	(1.6)	(2.1)	(2.2)	(2.7)	(3.1)	(3.4)	(3.6)	(3.6)	(3.6)	(3.6)	(3.5)
PDC Dividend	(2.5)	(1.8)	(1.0)	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(11.6)
Other Non-Operating	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Non-operating Expenses	(23.2)	(38.9)	(25.6)	(25.5)	(26.4)	(28.2)	(29.3)	(29.4)	(29.5)	(29.4)	(29.4)	(38.2)
Net Surplus / (Deficit)	(13.8)	(29.8)	(12.9)	(18.6)	(16.2)	(12.5)	(0.6)	(7.4)	(2.6)	(3.8)	(1.8)	6.4
Net Surplus / (Deficit) margin (%)	(4%)	(%8)	(3%)	(%5)	(4%)	(3%)	(5%)	(5%)	(1%)	(1%)	(%0)	0
Normalised (excluding impairments / Disposals)	(14.6)	(15.8)	(12.9)	(18.6)	(16.2)	(12.5)	(0.6)	(7.4)	(5.6)	(3.8)	(1.8)	6.4

Option A – Existing Service Model Financial overview

Irust has assumed receipt of revenue support loans to meet its obligations throughout the period. The existing service model option assumes surplus following the final repayment of debt on the existing CRH PFI. The Trust then maintains a steady financial surplus of between £5.9m The Trust continues to forecast a deficit from the current financial year (FY18) through to FY32 where, in FY33 the Trust returns to financial and £6.8m throughout the financial modelling. The cumulative deficit of the existing service model case is £137m from FY18 to FY42. The that the Trust is able to deliver 2% annual efficiencies year on year to meet the CIP requirements.

years FY19-FY23 to meet the back-log maintenance requirements of the existing HRI site. In addition the Trust would be required to build a The Existing Service Model option includes within the assumption that the Trust is in receipt of £94.5m of capital loans from the ITFF across new HRI capital after 10 years. The new HRI build is assumed to be funded from the ITFF in FY28-FY30 at a cost of £379.5m.

» 12.10. Financial affordability conclusion

The table below provides a comparison of the affordability compared to the Existing Service Model position.

12.10.1. Income and Expenditure Existing Service Model vs. Future Service Option

	•								
fm	FY23	FY23	FY23	FY27	FY27	FY27	FY42	FY42	FY42
	Existing Model	Proposed	Variance	Existing Model	Proposed	Variance	Existing Model	Proposed	Variance
	Option A	Option B	Option A	Option B	Option A	Option B	Option A	Option B	Option A
	Ęw	£m	£m	£m	Ęm	£m	Em	£m	Em
Total Revenue	381.1	386.1	5.0	400.6	414.4	13.8	484.7	500.8	16.1
Total Operating Expenditure	(360.9)	(356.4)	4.5	(373.1)	(367.2)	5.9	(440.2)	(452.7)	(12.5)
ЕВІТДА	20.2	29.7	9.5	27.5	47.2	19.7	44.6	48.2	3.6
Total Non-operating Expenses	(29.3)	(41.5)	(12.3)	(29.4)	(41.2)	(11.8)	(38.2)	(41.8)	(3.6)
Net Surplus / (Deficit)	(0.6)	(11.9)	(2.8)	(1.8)	0.9	7.8	6.4	6.4	(0.0)
Net Surplus I (Deficit) margin (%)	(2.4%)	(3.1%)	(0.7%)	(0.5%)	0.0	0.0	0.0	0.0	(0.0%)
FY23 Cumulative normalised Surplus / (Deficit)	(85.0)	(95.5)	(10.5)						
FY27 Cumulative normalised Surplus / (Deficit)				(103.6)	(81.7)	21.8			
FY 42 Cumulative normalised Surplus / (Deficit)				•			(0.99)	16.0	82.0

The Future Service option demonstrates a surplus in FY27 compared with a deficit in the Option A due to the additional savings available to the Trust post reconfiguration. Over the modelled 25 years the cumulative normalised deficit is £82m better within the Option B case.

12.10.2. Statement of Financial Position Existing Service Model vs. Future Service Option

£m	FY23	FY23	FY23	FY27	FY27	FY27	FY42	FY42	FY42
	Existing Model	Future Service	Variance	Existing Model	Future Service	Variance	Existing Model	Future Service	Variance
	Option A	Option B	Option A	Option A	Option B	Option A	Option A	Option B	Option A
	£m	Em	Em	£m	£m	Em	Em	£m	£m
Property, Plant and Equipment	291.4	374.7	83.3	288.1	375.9	87.8	605.2	432.0	(173.2)
Current Assets	31.0	31.0	0.0	31.0	31.1	0.0	34.4	35.5	1.1
Total Assets	322.5	405.8	83.3	319.1	407.0	87.8	9.6E9	467.5	(172.1)
Current Liabilities	(42.9)	(49.1)	(6.2)	(43.7)	(50.4)	(6.7)	(41.3)	(44.6)	(3.3)
Non-Current Liabilities	(297.6)	(374.7)	(77.2)	(282.0)	(321.8)	(39.8)	(260.5)	(156.7)	103.7
Total Liabilities	(340.4)	(423.8)	(83.4)	(325.7)	(372.2)	(46.5)	(301.8)	(201.4)	100.4
Net Assets employed	(18.0)	(18.0)	(0.1)	(9.9)	34.7	41.3	337.8	266.1	(71.7)
Public dividend capital	116.2	255.7	139.5	116.2	255.7	139.5	296.3	255.7	(40.6)
Retained Earnings (Accumulated (168.9) Losses)	(168.9)	(284.8)	(115.9)	(187.5)	(272.1)	(84.6)	(213.2)	(180.7)	32.5
Revaluation reserve	34.7	11.1	(23.6)	64.7	51.1	(13.6)	254.7	191.1	(63.6)
Total taxpayers' equity	(18.0)	(18.0)	(0.1)	(9.9)	34.7	41.3	337.8	266.1	(71.7)

greater cost than the asset investment in the Future Service. Option. This improved asset base if offset by greater accumulated losses as a consequence of the longer time required to return to financial surplus and an increase in non-current liabilities, reflecting the loan to Service Model option. This is as a consequence of the return to financial surplus being sooner, in FY25 when compared to the Existing Service Model option. By FY42 the SoFP is stronger in asset base due to the assumed investment in a new HRI hospital, which is at a The Future Service Option shows an improvement in the Statement of Financial Position (SoFP) when compared with the Existing build the new HRI in the Existing Service Model case.

12.10.3. Funding requirements Existing Service Model vs. Future Service Option

£m	Existing Model	Future Service	
	Option A	Option B	Variance
	£m	£m	
Independent Trust Financing Facility (ITFF)	531	65	(466)
Revenue Support Loan	142	116	(26)
PFI borrowing	-	276.6	276.6
Total funding requirement	673	457.6	(215.4)

The Future Service option requires £215.4m less funding support than the Existing Service Model option. The required funding is significantly met through PFI sources as opposed to Treasury loans.

>> 12.11. Conclusions of the Financial Case

It can be concluded that the Option B is the favourable option. The Future Service Option demonstrates overall affordability for the investment and enables the Trust to return to financial balance earlier than under the Existing Service Model case.

Whilst there is an increase in the overall capital cost of the build when compared to the 5 Year Strategic Plan, the financial plan demonstrates that savings enabled through reconfiguration present a favourable case compared to the Existing Service Model. Downside scenarios test the sensitivity of the plan however the Trust retains overall affordability within the financial plan.

The financial plan identifies differences on assumed clinical contract income levels when compared to the CCG's five year plans. This arises through QIPP assumptions in FY18. The Trust continues to work with the West Yorkshire healthcare system to ensure financial affordability for the health system.

The CIP is consistent with the national efficiency requirements reflecting assumptions of cost inflation and price deflation. The additional investment in the estate enables greater efficiencies to be realised in years FY23-FY25 through greater operational efficiency and transformation.

The modelled unitary payment will be refined as the Trust goes to market through procurement. This will be reflected within a Final Business Case.

13 | Management and Governance >>

13 | Management and Governance

>> **13.1 Summary**

The purpose of this section case is to describe the systems and processes that will be established to ensure the successful implementation of the proposed option for the configuration of the Trust's hospital services. This is structured across the following key areas:

Programme Management and Governance

how the programme will be managed including reporting and accountability arrangements and the use of special advisors

Programme Timeline

the key phases of work and the programme timeline

Risk Management

the approach to management of risk and the risk register

Benefits Realisation and Post Project Evaluation

arrangements for ongoing review of benefits

>> 13.2 Management and Governance

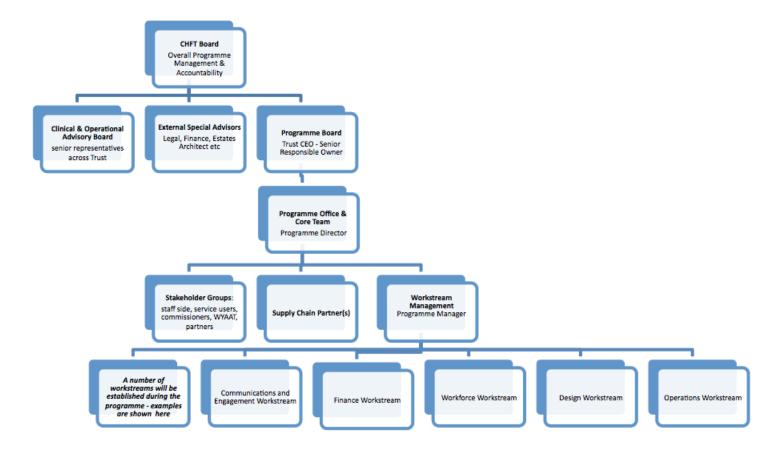
The Trust's management and governance of the programme will be aligned with best practice described in the Treasury recommended methodology for programme management i.e. Managing Successful Programmes (MSP). The over-arching programme management will focus on the delivery of the key financial and non-financial benefits and outcomes associated with the reconfiguration of hospital services.

PRINCE 2 project methodology will be used to manage underpinning project life cycles from start-up to closure to ensure project planning and monitoring are carried out rigorously. The project management will focus on delivery of the key enabling actions and outputs that support achievement of the overarching programme benefits and outcomes.

Subject to Treasury approval to implement the FBC an Integrated Assurance and Approval Plan (IAAP) will be developed. This will detail the planning, coordination and provision of assurance activities and Treasury approval points (gateways) throughout the programme.

13.2.1 Governance Structure

The following diagram provides an overview of the programme structure. The structure is designed to ensure there is one overall Senior Responsible Owner, one Programme Director and one Programme Manager each with the required authority and responsibility to manage the programme on behalf of the Trust. The programme structure is explained in more detail below.



CHFT Board will have overall responsibility and accountability for the programme ensuring that the project has a viable and affordable business case that will deliver value for money and best quality healthcare through effective management of the procurement process and implementation of the proposed configuration of services. The Board will seek assurance from the Senior Responsible Owner and Programme Board on any aspect of the programme that may pose a risk to successfully achieving the investment objectives and realisation of the expected benefits.

The **Programme Board** will be chaired by an independent chair. The Chief Executive / Senior Responsible Owner (SRO) and will lead the programme implementation. The Programme Board will have Non-Executive and Executive Directors (including the Programme Director) as members and also include representation from Trust senior clinicians and external specialist / technical advisors. Representatives from NHSE, NHSI, DH, CCGs and WYAAT will be invited to be members of the Programme Board as well as two patient representatives.

The Programme Board will approve and manage the programme plan and sign off the key outputs and decisions at each stage of the project including:

- Patient and staff communications and engagement
- the competitive dialogue process and procurement;
- review of all the key deliverables and the activities required to deliver them;
- the activities required to validate the quality of the deliverables;
- the resources and time needed for all activities and any need for people with specific capabilities and competencies;
- the dependencies between activities and any associated constraints when activities will occur;
- the points at which progress will be monitored, controlled and reviewed;
- the provision of regular reports, updates and assurance to CHFT Board, NHSI and Treasury;
- maintenance of a detailed risk register and mitigation of risk factors affecting the successful delivery of the project;
- maintenance of a benefits realisation register and monitoring of delivery.
- considering and recommending to the Trust Board any changes to the project scope, budget or timescale if required;
- review of serious issues, which have reached threshold level;
- broker relationships with stakeholders within and outside the project to maintain positive support for the programme;
- maintain awareness of the broader strategic perspective advising the SRO on how it may affect the project.

External Specialist Advisors – implementation of the proposed configuration will require a complex programme of work and the Trust will secure the necessary external specialist expertise and advice that is required. This will include for example: legal, procurement, project management, private finance, estates, architects, health planning, facilities management, equipping, town planning, engineering, traffic and transport, quantity surveying, life cycle analysis, health and safety etc. The external advisors will provide advice to the SRO, the Programme Director, the Programme Board, and the Trust Board and will advise and inform work undertaken by the project work stream groups.

Clinical & Operational Advisory Board – this will be a clinical and operational leadership committee comprising senior representatives of the Clinical Divisions who manage the operational services of the Trust; General Practice doctors; Directors of Social Care; and Executive Directors (DoN, MD, COO). They will provide leadership within the organisation to ensure successful delivery of the project and assurance to the Programme Board and the Trust Board about the project. The group will provide guidance to the Project Director and ensure that Trust operational resources will be available to support the project. The group will:

- Provide leadership, mandate and focus within the Trust ensuring that clinical objectives inform and drive effective delivery of the competitive dialogue process;
- Provide advice to the Programme Director, Programme Board and Trust Board, raising any concerns and providing expert opinion to support decision making;
- Support resolution of issues at organisational level when required;
- Support resolution of issues which impact on the Trust involving senior external stakeholders, the press; Government, arm's length bodies etc.;

- Provide assessment of serious issues;
- Ensure that project plans are achievable and facilitate delivery as required; and
- Review the risk register on a quarterly basis and / or at key milestones and advise the Programme Board prior to approval and help to mitigate risks at organisational level.

The **Programme Office and Core Team** will be led by the Programme Director and proactively drive delivery of the programme plan and critical path. It will provide programme management support to the work streams and will be responsible for the management of all programme management processes, including preparing and managing papers for governance arrangements, proactive risk and issue management and progress reporting.

The programme office will have sufficient resource capability and capacity available to effectively support the programme, recognising the scale, complexity and likely fast-paced nature of the programme. This will include a core team within the programme office with the necessary skills for:

- Planning and delivering the Competitive Dialogue and bid evaluation process and all other activities to financial close;
- Developing, maintaining and implementing project plans;
- Co-ordinating working groups and evaluation teams as required;
- Monitoring progress and reporting to the Programme Board and the Clinical and Operational Advisory Board;
- Managing issues as they arise in line with the issue management policy and escalating those above threshold to the Programme Board;
- Managing change control;
- Managing project advisors, ensuring that their contribution is well understood and that the Trust obtains best advice and value;
- Managing risks in line with project risk management strategy; and
- Ensuring effective development and delivery of the Engagement and Communications Plan

Key Stakeholder Groups – the programme office and core team will proactively work to ensure the engagement, involvement and coordination of key stakeholder groups input to the programme. Significant communication and engagement has taken place over the last two years. The programme will continue actively engaging with stakeholders through the next phases and during implementation. This will include for example:

- Calderdale and Kirklees Health and Wellbeing Boards ensuring that implementation of the he proposed changes are aligned with Health and Wellbeing Board's plans of how best to meet the needs of their local population and tackle local inequalities in health.
- Calderdale and Kirklees Joint Overview and Scrutiny Committee ensuring that implementation is consistent with the changes that have been consulted on.
- Greater Huddersfield and Calderdale CCGs (or subsequent Accountable Care Organisations) – ensuring that clinical commissioners are fully involved and informed of the implementation plans and progress.
- Patients, Public and local Healthwatch ensuring that patients are well informed about what changes are proposed, have a say in how they are to be delivered and, ultimately, are fully aware of which services will be delivered from which locations in the future.
- Other Providers communication and involvement of other providers that are impacted by the changes and/or are critical to implementation (e.g. ambulance services, mental health, primary care, WYAAT and neighbouring acute hospitals).

- **NHS staff** actively engaging with staff to ensure they are fully aware of the implementation plans and able to contribute to the plans promoting their central role in making these changes happen.
- **Clinicians** will be actively involved in the planning and implementation of service change to ensure patient safety is not compromised as changes are made
- Local Authorities work with partners in social care to co-design and begin to deliver the transformation to Out of Hospital services which is critical to the success of the reconfiguration programme

As part of the programme design and mobilisation phase the stakeholder engagement plan will be updated to provide a comprehensive view of planned events and activities throughout FBC implementation

Supply Chain Partner(s) – the success of the programme is reliant on effective supply chain partner(s) that will provide funding and estates solutions to enable implementation of the proposed configuration of hospital services. The Programme Office and Core Team will in accordance, with the 'partnering' principle, ensure there are regular meetings between senior managers in the Trust and supplier organisation(s). These meetings will formally monitor and report to the Programme Board the service streams and outputs which are being contracted for and progress against the implementation timescales which have been agreed for their delivery.

Project work streams will have a senior sponsor who will also be a member of the Programme Board. Whilst the sponsor will remain accountable for the work stream, it is expected that they will delegate responsibility for the day-to-day management of, and delivery against, the work stream plan and critical path, to a work stream lead. The Programme Manager (and other members of the Programme Office and Core Team) will support and monitor progress of the work streams against agreed milestones and report this to the Programme Board. The structural chart above shows an example of the range of work streams that may be required. This will vary at different stages of the Programme and other work streams will also be established.

13.2.2 Roles and responsibilities

The Chief Executive Officer (Senior Responsible Owner for this project), Director of Finance and the Trust's Chair will ensure strong leadership for the project. The Programme will be supported by a Programme Director and a fully resourced Programme Office and Core Team, of appropriately experienced and qualified individuals. The programme will be managed in line with best practice ensuring that roles and responsibilities are clearly defined. Decision making will be transparent and will be documented to ensure a robust audit trail is maintained.

The Senior Responsible Owner (SRO)

The Chief Executive Officer undertakes the SRO role for this project. The SRO is personally accountable for the success of the project ensuring that the project meets its objectives and delivers benefits. The SRO will ensure that the project maintains business focus in a changing healthcare context and that risks are managed effectively.

The Programme Director

The Programme Director is responsible for day to day decision making on behalf of the SRO and setting high standards for delivery of the project.

The Programme Manager

The Programme Manager will coordinate the activities of the Programme Office and Core Team on a day to day basis and is responsible for ensuring that:

- The procurement and engagement runs smoothly;
- Requests for information, issues and changes are managed appropriately;
- Project standards are maintained; and
- The project budget is managed effectively.

The Core Team will meet weekly, or as required, to co-ordinate the work required. It reports to the Programme Board.

» 13.3 Timeline

A high level overview of the programme timeline and key milestones up to 2021/22 is shown below. During this five year period the capital investment and estates build work will be completed enabling the opening of the planned and unplanned hospitals.

Full optimisation of the financial and quality benefits associated with the reconfiguration of hospital services will continue beyond year 5. The Trust will continue to programme manage and monitor the realisation of benefits beyond 2021/22.

							Pro	oject	t pla	an a	nd t	ime	line								
Phases	Summary	$\neg \neg$	2017/18		2018/19				2019/20				П	202	0/21		П	2021/		2	
	-	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Approval	Approval of FBC by Trust Board	\neg								П				П							П
	Approval of FBC by NHSI																				
	Scrutiny and wider engagement																				
Planning	Planning consent applied	$\neg \vdash$								П				П				П			П
	Outline Planning consent approved																				
	Full planning consent																				
	Appointment of legal and financial advisors																				
Procurement	Market engagement	\neg								П				П				П			П
	OJEU advert notice published																				
	Initiation to participate in dialogue																				
	Interim bids received sept																				
	Draft final bids																				
	Approval of Generic Appointment Business Case and Close	Dialog	ue																		
	Receipt of final bids																				
	Approval of Preferred bidder/bidders for CRH and HRI																				
	Financial Close																				
	Design work for new build																	_			
	Variation to contract with CRH PFI																				Ш
Construction	Construction work at CRH under variation of PFI																				
	Commence infrastructure works																				
	Commence main construction programme																				
	Practical Completion ready to hand over																				
	Marketing and Sale of surplus estate																				
Handover	Planned and Unplanned Hospitals Fully Open									Γ^{-}								Г			

>> 13.4 Risk Management

Programme Risks

The Programme Board will ensure that robust arrangements for the on-going management of risk during the key phases of the programme are established. This will include independent assessment and audit activities. Strategies for the active and effective management of risk will include:

- identifying possible risks in advance and putting mechanisms in place to minimise the likelihood of them materialising with adverse effects;
- having rigorous processes in place to monitor the risks, and access to reliable, up to-date information about the risks:
- having agreed actions to control or mitigate against the adverse consequences of the risks, if they should materialise;
- ensuring that decision-making processes during the programme are supported by a framework for risk analysis and evaluation.

To identify the specific risks the programme will use a number of approaches that will include:

- structured review meetings involving the programme board, the clinical and operational advisory board and the programme management team. This will encourage participation and ownership of the risks by key personnel;
- risk audit interviews conducted by experienced managers and/or external specialist advisers, with all those involved in the programme;
- risk workshops including all members of the project team and wider staff and stakeholder partners.

The following generic categories of risk will be considered to assist the identification of a comprehensive register of risks specific to the programme.

Generic Risks	Description
Patient Risk	The risk that patients are adversely impacted (for example in terms of patient experience, safety and outcomes of care) during transition and implementation of the proposed future service model.
Business risk	The risk that the Trust cannot meet its business imperatives (e.g. quality, safety, performance standards).
Reputational risk	The risk that there will be an undermining of patient and public /media perception of the Trust's ability to fulfil its business requirements – for example, adverse publicity concerning an operational problem.
Service risk	The risk that the new service model and estate solution is not fit for purpose.
Design risk	The risk that design cannot deliver the services to the required quality standards.

Generic Risks	Description
Planning risk	The risk that the implementation fails to adhere to the terms of the planning permission or that detailed planning cannot be obtained; or, if obtained, can only be implemented at costs greater than in the original budget.
Build risk	The risk that the construction of physical assets is not completed on time, to budget and to specification.
Project intelligence risk	The risk that the quality of initial intelligence (for example, preliminary site investigation) will impact on the likelihood of unforeseen problems occurring.
Decant risk	The risk arising in accommodation projects relating to the need to decant staff and patients from one site to another
Environmental risk	The risk that the project has a major impact on its adjacent areas.
Procurement risk	The risk that procurement fails to identify a supply chain partner and /or secure appropriate contractual arrangements.
Operational risk	The risk that operating costs vary from budget and that performance standards slip or that a service cannot be provided.
Demand risk	The risk that the demand for a service does not match the levels planned, projected or assumed.
Volume risk	The risk that actual usage of the service varies from the levels forecast.
Maintenance risk	The risk that the costs of keeping the assets in good condition vary from budget.
Technology risk	The risk that changes in technology result in services being provided using sub-optimal technical solutions.
Funding risk	The risk that the availability of funding leads to delays and reductions in scope as a result of reduced monies.
Residual value risk	The risk relating to the uncertainty of the values of physical assets at the end of the contract period.
Economic risk	The risk that project outcomes are sensitive to economic influences – for example, where actual inflation differs from assumed inflation rates.
Financial and Affordability risk	The risk that the project costs of transition and implementation exceed the budget plan for this. Also the risk that implementation of the proposed future model does not generate the anticipated level of efficiency savings.
Legislative risk	The risk that legislative change increases costs.
Policy risk	The risk of changes in policy direction leading to unforeseen change.

The key risks identified will be entered into a risk register. Each risk will be scored 1-5 in terms of its likelihood and the severity of its consequences this will be the inherent risk (i.e. risk exposure with no

mitigation). Once a risk has been scored, the controls and mitigation actions available will be analysed and a mitigation owner identified. The actions required to mitigate the risk will be identified in the risk register, with named responsible officers and information on progress. A residual score will also be included, showing how progress on mitigation has affected the level of risk.

On a monthly basis the Programme Board will review the risk register. All programme risks with a risk score of 15 or more (calculated by multiplying likelihood by consequence) will be escalated on a monthly basis to the Trust Board. The role of the Trust Board will be to assure itself that all risks are accurately identified and mitigated adequately.

Current Risks

Progress of the proposed reconfiguration of hospital services is currently included on the Trust's high level risk register and has a risk score of 20. The risk is related to not being able to progress service reconfiguration due to the requirements of the consultation process and as a consequence that there are delays in addressing important quality, safety and sustainability issues e.g.:

- patient safety risks associated with dual site services and not having critical clinical service adjacencies;
- compliance with emergency medicine standards;
- compliance with paediatric standards;
- compliance with critical care Standards;
- inability to meet 7 day working standards;
- difficulties in recruiting and retaining a medical workforce (continued and increased reliance on middle grades and locums);
- increased gaps in middle grade doctor rotas;
- delays in the Trust's financial recovery plan and continued reliance for a longer period on financial support from the Department of Health to provide the cash to pay creditors and staff;
- inability to contribute to improvement and achievement of the local and West Yorkshire system affordability;
- inability to sustain the condition and reliability of building and engineering services infrastructure at HRI;
- risk of negative impact on the Trust's reputation.

The Trust Board will continue to regularly review these risks and the interim necessary actions that are required to mitigate these risk as far as it is possible to do so.

>> 13.5 Benefits Realisation

The ultimate responsibility for the delivery of the programme benefits rests with the SRO for the project. The Programme Board will agree a benefits realisation strategy setting out arrangements for the identification of potential benefits, their planning, modelling and tracking. It will also include a framework that assigns responsibilities for the actual realisation of benefits throughout the key phases of the programme.

A Cost Benefit Analysis (CBA) methodology will be used during the programme and be based on best practice described in the Treasury's Green Book. The CBA will estimate the overall public value created by the programme including economic benefits to individuals and society; and wider social welfare/wellbeing benefits. It will also determine the financial impacts for the Trust and estimate the financial impacts across partner agencies affected. The Programme Board will receive regular update and review of the CBA.

All benefits will be entered into a benefits realisation register. For each benefit this will include the following information:

- Service feature (what aspect of the programme will give rise to the benefit to facilitate monitoring);
- Potential dis-benefits;
- Activities required (to secure benefit);
- Responsible officer;
- Performance measure:
- Target improvement (expected level of change);
- Full-year value;
- Timescale for realisation of the benefit.

On a monthly basis the Programme Board will review the benefits register. Any expected benefits that are 'off-track' will be escalated on a monthly basis to the Trust Board. The role of the Trust Board will be to assure itself that all benefits are accurately identified and their realisation is being effectively managed.

Some of the key programme benefits that will be included on the register include:

- 1. Improving the quality of patient experience through more streamlined, efficient patient pathways as a result of the reconfiguration of planned and unplanned services.
- 2. Realising patient outcome benefits from co-location of acute services and consolidation of paediatrics with complex obstetrics through a more streamlined approach for providing senior medical oversight.
- 3. Supporting the development of urgent care centres which will be equipped to care for patients with minor injuries and / or illnesses in a more timely, efficient way, thus reducing the demands on the Trust emergency department.
- **4.** Enabling the Trust to meet the Royal College of Emergency Medicine standards on senior medical workforce cover through consolidation of rotas.
- 5. Enabling the Trust to meet Royal College standards for Children and Young People in Emergency Care settings.
- 6. Reducing the reliance on locum and temporary staff to cover vacancies and workforce pressures as a result of running two district general hospitals.
- **7.** Making the Trust a more attractive place to work thus improving the recruitment and retention of staff.
- 8. Improving clinical rota resilience: rota frequency will reduce immediately with the consolidation of unplanned services and workforce on to one site thereby reducing the workload strain on staff and improving the resilience of services. Relevant services include emergency department, acute medicine, critical care, paediatrics and radiology.
- 9. Enabling sub-specialisation of clinical services: the critical mass achieved through consolidating of unplanned patients and workforce onto one site will allow greater opportunities for sub-specialisation of the workforce improving the attractiveness of employment at the Trust and enhanced clinical services for patients. Relevant services include paediatrics and trauma sub-specialisation in emergency department, and acute medicine.

- **10.** Improving skill mix / role improvements: Advanced/Extended scope Practitioner role will be further refined and deployed in the Trust to reduce reliance on the middle-grade doctor workforce across many specialties including ED, acute medicine, and paediatrics.
- 11. Improving junior doctor training, oversight and supervision: junior doctor training and supervision is anticipated to improve for all clinical services being consolidated on to one site given the increased throughput of activity, and the increased non-locum consultant presence on site. This will also apply to other clinicians in training.
- 12. Reducing long term sickness absence: the benefits above will allow for more effective service planning. This, together with other measures to support staff returning from absence, will help to reduce stress for staff and reduce the Trust's long term sickness absence challenge.
- 13. Improving the patient care and staff working environment.
- **14.** Elimination of estates backlog maintenance issues securing the longer term safety and viability of the Trust's estate.
- 15. Elimination of the Trust's deficit and enabling wider system affordability and resilience.

14 | Glossary

Abbreviation	Meaning
or Term	
A&E	Accident and Emergency Services - also known as emergency department or casualty deals with genuine life-threatening emergencies.
Amortisation	Amortisation - refers to recognising the cost of an asset over its useful economic life.
ANP	Advanced Nurse Practitioner - a registered nurse who has acquired the expert knowledge base, decision-making skills and clinical competencies for expanded practice.
Back-office	Back Office – support services such as finance, human resources, information technology, estates etc.
Bullet Payment	Bullet Payment – termination payment in relation to the existing PFI at CRH.
BTHFT	Bradford Teaching Hospital NHS Foundation Trust
CAP	Community Acquired Pneumonia - refers to pneumonia (any of several lung diseases) contracted by a person that has not recently been in contact with hospital services.
CCG	Clinical Commissioning Group - clinically-led statutory NHS bodies responsible for the planning and commissioning of health care services for their local area.
CDEL	Capital Department Expenditure Limit – a Treasury control total for public spending on capital.
CEPOD	Confidential Enquiry into Patient Outcome and Death – national review of the quality of the delivery of anaesthesia and surgery and the perioperative care of patients.
CESR	Certificate of Eligibility for Specialist Registration – a route to entry onto the Specialist Register for those doctors who have not followed an approved training programme.
CHFT	Calderdale and Huddersfield NHS Foundation Trust
CIP	Cost Improvement Plan – efficiency savings.
Concessionco	Concessionco – the existing PFI provider for CRH.
Condition B	Condition B – refers to the NHS estate rankings from A to D that are used to describe building compliance with mandatory fire safety requirements and statutory safety legislation. The ranking category of 'B' means there is compliance with all necessary mandatory fire safety requirements and statutory safety legislation with minor deviations of a non-serious nature.
COO	Chief Operating Officer – an Executive Director responsible for ensuring that the Trust delivers key operational and strategic objectives and actions.
COPD	Chronic Obstructive Pulmonary Disease - the name for a group of lung conditions that cause breathing difficulties.
CRH	Calderdale Royal Hospital
СТ	Computed Tomography - a body scan that uses X-rays and a computer to create detailed images of the inside of the body.

CQC	Care Quality Commission - an executive non-departmental public body of the Department of Health that regulates and inspects health and social care services in England.
Depreciation	Depreciation - method of allocating the cost of a tangible asset over its useful life.
Derogation	Derogation - an exemption from or relaxation of a rule.
DH	Department of Health – a Ministerial Department of the Government responsible for government policy on health and adult social care matters in England.
DoN	Director of Nursing - an Executive Director responsible for the strategic planning of nursing and for assessing, evaluating and setting nursing care standards and objectives for the Trust.
DTOC	Delayed Transfers of Care – a delayed transfer of care is when a patient is ready to be discharged from hospital and is still occupying a hospital bed.
EAC	Equivalent Annual Cost - the annual cost of owning, operating and maintaining an asset over its entire life.
EBITDA	Earnings Before Interest Tax Depreciation and Amortisation - net income with interest, taxes, depreciation and amortisation added back to it. EBITDA is used to analyse and compare profitability between Trusts because it eliminates the effects of financing and accounting decisions.
ECP	Emergency Care Practitioner – clinical staff that have additional academic qualifications, with enhanced skills in medical assessment and extra clinical skills over and above those of a standard paramedic, qualified nurse or other ambulance crew.
ED	Emergency Department - also known as Accident and Emergency or casualty deals with genuine life-threatening emergencies.
EPR	Electronic Patient Record - an electronic record of the health care of a single individual.
EU	European Union - a political and economic union of 28 member states located primarily in Europe.
FBC	Full Business Case – this term is used in Treasury guidance regarding the development of capital business cases. It is associated with a required framework and structure to be used to enable clear thinking about capital spending proposals and a structured process for appraising, developing and planning to deliver best public value. Business Cases are required to be developed at four sequential stages of planning – the strategic outline case, the outline business case, the full business case and the final business case.
FFT	Friends and Family Test – a national feedback tool that surveys people who use NHS services and staff working in the NHS to provide feedback on their experience. It asks people if they would recommend the services and offers a range of responses.

FY	Full Year – in this business case this refers to the 12 month period ending March.
GIRFT	Getting it Right First Time - a national programme, led by frontline clinicians, created to help improve the quality of medical and clinical care within the NHS by identifying and reducing unwarranted variations in service and practice.
GP	General Practitioner - a doctor based in the community who treats patients with minor or chronic illnesses and refers those with serious conditions to a hospital.
Hard FM	Hard Facilities Management – Hard facilities management refers to services required which relate to the physical fabric of a building and cannot be removed. They ensure the safety and welfare of employees and generally are required by law (e.g. fire safety, mechanical engineering, electrical systems).
HEI	Higher Education Institution – refers to a level of education that is provided by universities, community colleges, and other collegiate level institutions that award academic degrees or professional certifications.
НООР	Hospital Out of Hours - patient care that uses both a multi-professional and multispecialty approach to delivering care at night and out of hours.
HRI	Huddersfield Royal Infirmary
HSMR	Hospital Standardised Mortality Ratio - the ratio of the observed to expected in hospital deaths, multiplied by 100.
ICU	Intensive Care Unit - a department of a hospital in which patients who are dangerously ill are kept under constant observation.
ICT	Information and Communications Technology - refers to technologies that provide access to information through telecommunications. It is similar to Information Technology (IT), but focuses primarily on communication technologies. This includes the Internet, wireless networks, cell phones, and other communication mediums.
Impairment	Impairment – is the accounting treatment whereby the value of an asset is reduced to its current market value.
IR35	Inland Revenue 35 - a Government change in taxation rules to counter tax avoidance in the area of personal service provision.
IT	Information Technology - the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data.
I&E	Income and Expenditure – a record showing the amounts of money coming into and going out of an organisation
IM&T	Information Management & Technology – the distribution, organisation and control of technology.
ITFF	Independent Trust Financing Facility – a mechanism for the Government to provide loans to Trusts. Trusts in receipt of ITFF incur borrowing costs. These loans are repayable.

JHSC	Joint Health Scrutiny Committee - scrutiny is a function of local authorities and Joint health scrutiny means the coming together of more than one local authority to undertake this function.
JSNA	Joint Strategic Needs Assessment - the current and future health and care needs of local populations to inform and guide the planning and commissioning of health, well-being and social care services within a local authority area.
LoS	Length of Stay – how long a patient is admitted to hospital for.
LTFM	Long Term Financial Model – a strategic financial plan for a period longer than one year.
MD	Medical Director – an Executive Director with responsibilities such as leading the formation and implementation of clinical strategy, taking a lead on clinical standards, providing clinical advice to the board, and providing professional leadership and being a bridge between medical staff and the board.
MRI	Magnetic Resonance Imaging - a type of scan that uses strong magnetic fields and radio waves to produce detailed images of the inside of the body.
NCAT	National Clinical Advisory Team – provided a pool of clinical experts to support, advise and guide the local NHS on local service reconfiguration proposals to ensure safe, effective and accessible services for patients. NCAT has now ceased to exist and has been replaced with other mechanisms of service review.
NHSE	National Health Service England - oversees the budget, planning, delivery and day-to-day operation of the commissioning side of the NHS in England.
NHSI	National Health Service Improvement – the national regulator responsible for overseeing foundation trusts and NHS trusts, as well as independent providers that provide NHS-funded care.
NPV	Net Present Value - is the difference between the present value of cash inflows and the present value of cash outflows. NPV is used in capital budgeting to analyse the profitability of a projected investment or project.
OBC	Outline Business Case - this term is used in Treasury guidance regarding the development of capital business cases. It is associated with a required framework and structure to be used to enable clear thinking about capital spending proposals and a structured process for appraising, developing and planning to deliver best public value. Business Cases are required to be developed at four sequential stages of planning — the strategic outline case, the outline business case, the full business case and the final business case.
ODP	Operating Department Practitioner - a vital part of the multidisciplinary operating theatre team, providing patient-focused care during anaesthesia, surgery and recovery, responding to patients' physical and psychological needs.

Off Balance Sheet	Off Balance Sheet - is an accounting method where certain assets or liabilities are recorded in a way that does not recognise them on the organisations balance sheet.
pari passu	pari passu - a Latin phrase meaning "equal footing" that describes situations where two or more assets, securities, creditors or obligations are equally managed without any display of preference.
PDC	Public Dividend Capital - a form of long-term government finance which was initially provided to NHS trusts when they were first formed to enable them to purchase the Trust's assets from the Secretary of State.
PFI	Private Finance Initiative - a method of providing funds for major capital investments where private firms are contracted to complete and manage public projects. Under a private finance initiative, the private company, instead of the government, handles the up-front costs.
PF2	Private Finance Two – a new approach to public private partnerships, that follows the reform of the Private Finance Initiative (PFI).
PPE	Property, Plant and Equipment - is a term that describes an account on the balance sheet. The PP&E account is a summation of all a company's purchases of property, manufacturing plants and pieces of equipment to that point in time, less any amortisation.
PWLB	Public Works Load Board - a statutory body of the UK Government that provides loans to public bodies from the National Loans Fund.
QIPP	Quality, Innovation, Productivity and Prevention - the umbrella term used to describe the approach the NHS is taking at local, regional and national levels to reform its operations and redesign services in light of the economic climate.
RCOG	Royal College of Obstetricians and Gynaecologists - a professional association of people who work in the field of obstetrics and gynaecology, i.e. pregnancy, childbirth, and female sexual and reproductive health. The College promotes standards of care by a programme of research, publication, and review and is responsible for developing the framework and curriculum of post graduate training.
Red-line	Red-line – the site / land area at CRH that is included within the existing PFI agreement.
Revenue Support Loan	Revenue Support Loan – financial support from the Department of Health to provide the cash for ongoing business.
RTT	Referral to Treatment – this is a measure of how long patients wait for services. The waiting time starts from the point the hospital or service receives the referral and ends if a clinician or patient decides no treatment is necessary, or when the treatment begins.
SHMI	Summary Hospital-level Mortality Indicator - the ratio of the observed to expected deaths following discharge from hospital, multiplied by 100.

SOC	Strategic Outline Case - this term is used in Treasury guidance regarding the development of capital business cases. It is associated with a required framework and structure to be used to enable clear thinking about capital spending proposals and a structured process for appraising, developing and planning to deliver best public value. Business Cases are required to be developed at four sequential stages of planning — the strategic outline case, the outline business case, the full business case and the final business case.
SoFP	Statement of Financial Position - is another name for the balance sheet. It is one of the main financial statements and it reports an entity's assets, liabilities, and the difference in their totals.
Soft FM	Soft Facilities Management - refers to services which make the workplace more pleasant or secure to work in. They are not compulsory and can be added and removed as necessary (e.g. catering, cleaning).
SPC	Special Purpose Company - function as subsidiary entities for larger parent organisations and are typically used to finance new operations and capital at favorable terms.
SRO	Senior Responsible Owner - the visible owner of the overall change, accountable for successful delivery and is recognised as the key leadership figure in driving the change forward.
STF	Sustainability and Transformation Funding - a fund to support financial balance and also to enable new investment in key priorities.
STP	Sustainability and Transformation Plan - five year plans covering all aspects of NHS spending in England. Forty-four geographical areas have been identified as the geographical 'footprints' on which the plans are based.
Sub-specialisation	Sub-specialisation - a particular area of expertise within a specialism. For example vascular surgery is a subspecialty of the specialism of general surgery.
SWYPFT	South West Yorkshire Partnership Foundation Trust
UCC	Urgent Care Centre - a walk-in NHS service for patients whose condition is urgent enough that they cannot wait for the next GP appointment (usually within 48 hours) but who do not need emergency treatment at the emergency department (A&E).
VFM	Value for Money - the most advantageous combination of cost, quality, benefits and sustainability to meet requirements.
WTE	Whole Time Equivalent - The ratio of the total number of paid hours during a period divided by the number of available working hours in that period. The ratio units are whole time equivalent employees - one WTE is equivalent to one employee working full-time.
WYAAT	West Yorkshire Association of Acute Trusts – a collaborative association of the acute Trusts in West Yorkshire and Harrogate.

