Sheffield Teaching Hospitals NHS

Foundation Trust

Estate Strategy

2017-2020

June 2017: V3

CONTENTS

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1.0 Introduction

Patients' first impression of health services are formed by the appearance of healthcare buildings and facilities. Services should therefore be delivered in well-designed environments. Patients and staff need to feel safe, secure and comfortable. Healthcare buildings should ensure good functionality, meet expectations in terms of privacy and dignity, provide good access for all, reduce infection and minimise accidents. Estate Strategies should be developed within the context of public expectations and government initiatives for the delivery of healthcare services (NHS Estates 2005). Whilst this guidance is 12 years old, it is still applicable.

The Estate Strategy provides a high level overview of the current estate and outlines a number of guiding principles which estate development plans will need to evaluate and deliver.

For the purposes of this Strategy the relevant period is 2017-2020, but the relatively protracted length of time taken to realise building programs along with the service life of the built environment, requires the consideration of strategic risk and strategic opportunity criteria over a significantly longer term.

Sheffield Teaching Hospitals has a large and complex estate and it is critical this important resource is used to deliver the key aims and objectives of the Corporate Strategy "Making a Difference". There are many competing and complex factors impacting upon the effectiveness of an Estate Strategy however there are a number of particular drivers which this strategy needs to address:

- Alignment with and enabling delivery of the Corporate Strategy.
- Being cognisant of the financial environment.
- Enabling the opportunities emerging from the Working Together Programme.
- Enabling the opportunities which emerge from the South Yorkshire and Bassetlaw Accountable Care System (the accountable care review).
- Enabling clinical change programmes.
- Enabling changes to working practices.
- Complying with environmental initiatives.
- Delivering ongoing programmes to improve the estate whilst ensuring it remains in a safe, sustainable and fit for purpose condition to meet the changing needs of patients, including care of the older people, people with dementia and immunosuppressed patients.

The development of the estate needs to keep pace with patient expectations, clinical innovation and changes.

Adaptation, redevelopment and rationalisation of the estate used for clinical care and patient related services, must be service led and professionally informed. Adaptation, redevelopment and rationalisation of the non-clinical estate and estate infrastructure must be sustainable and professionally informed.

This Estate Strategy is predicated upon the development of Clinical Directorate Strategies and Business Cases which set the direction of integrated and sustainable patient care pathways over the duration of the Strategy.

The Strategy outlines a number of developments and central initiatives which the Trust plans to progress.

2.0 Estate Strategy Mission Statement

The built environment cannot, in itself, deliver clinical excellence but contributes in providing an environment conducive to the wellbeing of patients and staff by providing safe, comfortable and efficient accommodation.

The Estate Strategy will develop best practice for the accommodation and its management to:

- Enable delivery of the best clinical outcomes
- Provide patient centred services
- Spend public money wisely

Whilst the Estate Strategy acknowledges that becoming a “provider of choice” is a product of the excellence of the clinical service, excellence can only be delivered if every component associated with that delivery embodies an ethos of excellence.

The objectives arising out of the Corporate Mission Statement have been adopted in the Estate Strategy as drivers for change in the creation of a healing environment.

The vision for the estate is one of a sustainable and effective facility that nurtures patient care through the delivery of a safe, quality environment and where the level of sophistication of the buildings matches the requirements of clinical acuity.

The Estate Strategy will align with the Corporate Strategy to ensure the estate personifies the Corporate Brand.

3.0 Profile of the Estate

The Estate is a large area that extends over multiple locations, which since merger in 2002, has comprised of, in the main, two separate campuses containing clinical and non-clinical accommodation which varies considerably in terms of type, age and quality.

In April 2011, Sheffield Community Services merged with Sheffield Teaching Hospitals; this involved the transfer of a number of community buildings to the Trust Estate.

The Current Estate:

The Central Campus:

- The Royal Hallamshire Hospital inclusive of the Jessop Hospital Wing and peripheral properties
- Weston Park Hospital
- Charles Clifford Dental Hospital

The Northern Campus:

- This is comprised of the Northern General Hospital Site

Trust Owned Community Buildings:

- Manor Clinic, 18 Ridgeway Road, S12 2ST
- Firth Park Clinic, 40 North Quadrant, S5 6NU
- Central Clinic, 1 Mulberry Street, S1 2PJ
- Woodhouse Clinic, 3 Skelton Lane, S13 7LY
- Heeley Dental Clinic, 25 Gifford Road, S8 0ZS

The Trust has tenancy rights in the following buildings:

- Beech Hill, Norfolk Park Road, S2 3QE
- 10 Beech Hill Road, S10 2SB
- Land adjacent to 16A Beech Hill Road, S10 2SB
- Norfork Park LIFT building
- Jordanthorpe LIFT building
- Darnall LIFT building
- 275 Glossop Road, S10 2HB
- Lightwood House, Lightwood Lane, S8 8BG
- Limbrick Centre, Limbrick Road, S6 2PE
- Wardsend Road, 45 Wardsend Road North, S6 1LX

- Michael Carlisle Centre – ARC, 75 Osborne Road, S11 9BF
- Michael Carlisle Centre – Froggatt Wing, 75 Osborne Road, S11 9BF
- Lower Ground Floor Suite, Cherrytree Business Centre, Union Road, S11 9EF
- Concord Sports Centre, Shiregreen Lane, S5 6AE
- Graves Health & Sports Centre, Bochum Parkway, S8 8JR

The current Trust estate has a land area of 46.97 hectares (116 acres), a gross internal area of: 409,617 M^2 and an asset value of £359M.

The total Estates and Facilities running costs in 2015/16 were: £109M.

The net usable space of the estate (which is the gross internal areas less: plant rooms, car parks, corridors, stair wells, lift lobbies, ducts, risers, switch rooms, roof spaces and entrances) is: 225,567M^2 (55%)

This means, as an average, across the Trust, each square metre of usable space costs £483.00/year.

Whilst the Trust has an increasing maintenance backlog burden, overall, the estate is in sound physical condition and operationally safe.

The Trust has no high risk backlog as defined by: A risk-based methodology for establishing and managing backlog (NHS Estates, 2004).

Figures 1&2 show the two main campuses.

Figure 3 shows the location of each campus and the location of buildings from where the Trust provides services.

The Trust's performance in terms of Estate and Facilities Management is benchmarked against other English NHS Acute Hospitals. Data is collected both annual by the Health and Social Care Information Centre (HSCIC) and also monthly by NHS Improvement.

The report by Lord Carter (2016) provided new metrics by which all English acute Trusts are benchmarked. The Estate and Facilities dashboard for 15/16 is provided in Figure 4. The dashboard provides metrics over a three year period.

4.0 Key objectives

The key objectives over the term of the strategy are as follows:

4.1 Estate Resource and Asset Management

To continue to consolidate and contract the non-clinical estate, increasing the utilisation of clinical space and improving the physical environment at our core locations across the city.

The key challenges for all our services will be to deliver the best possible experience for patients within the available resources.

Research and scientific studies clearly link the physical environment as a facet which influences and has the opportunity to improve patient and staff outcomes in four key areas: Reducing stress and fatigue whilst improving safety and outcomes.

The main design aspects to achieve these improved outcomes focus around:

- *Single-bed rooms*
- *Noise level reduction*
- *Providing patients with positive distractions*
- *Effective wayfinding systems*
- *Effective ventilation*
- *Improved lighting systems*
- *Ward layouts which reduce staff walking, increase patient care time and support staff activities.*

(Ulrich & Zimring 2004)

These design aspects are and will continue to be design considerations for all schemes. Improvements to wayfinding across the Trust, in particular at the Northern General site, along with the general upkeep and improvement of the clinical and non-clinical environments will continue as key objectives during the term of this strategy.

The ongoing challenge is to deliver all Estate services in an efficient way, to continuously examine them systematically to ensure they are efficient and make the best use of the available resources. This will include: the ongoing process of value engineering on every major scheme along with the review of procurement strategies to ensure best value and ensure public money is spent wisely.

4.2 Estate Infrastructure

The estate infrastructure needs to be robust, sustainable, fit for purpose and safe to meet the current and future requirements of the Trust.

The Trust has a clear infrastructure plan for the next three years, the following schemes are either already being progressed or will be progressed during the term of this strategy:

4.2.1 Royal Hallamshire Hospital and Jessop Wing Lifts. In 2017 the Trust commenced a modernisation programme for the main lift group at the RHH and also the four lifts serving the Jessop Wing.

The lifts to be modernised at the RHH are the core/main lift group lifts No's: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20 & 22. Last modernised pre-merger (1999). These lifts are the main public, patient movement and ward access lifts.

The modernisation programme is required to improve the efficiency, reduce waiting times, reduce energy consumption and retain the lifts in a reliable working condition.

The programme will take five years to complete.

4.2.2 Royal Hallamshire Hospital: Replacement of main high voltage emergency generators.

The main hospital emergency generators are the original generators installed when the RHH was opened in the 1970s.

The generators are unable to meet all the essential load requirements of the hospital to enable business as usual in the event of a loss of the incoming supply from the district network operator. Because of their age, spares are becoming obsolete.

The generators along with the associated controls and distribution switchgear will be replaced during the next three years.

The existing three generators are rated at 0.68MW each.

It is anticipated that three new generators will need to be rated between: 1.2-2MW each in order to meet the site essential electricity requirements and also provide a good degree of future proofing.

4.2.3 Northern General Hospital: Generator replacement programme.

The site currently has 12 generators.

The oldest is circa 1968, the majority date from 1977.

Parts are becoming obsolete and repairs becoming more extensive and expensive.

The associated local electrical infrastructure will also require replacement as part of this programme.

The main priorities are the four generators serving Huntsman, Firth, Brearley, Osborne and the Boiler house.

There is a case to consider in rationalising the number of generators which needs to be balanced between cost and resilience.

In conjunction with this programme the case for Combined Heat and Power (CHP) will also be reassessed.

4.2.4 Royal Hallamshire Hospital: Conversion of the steam system to a low temperature hot water system (LTHWS).

The Trust has reduced direct energy carbon emissions by 31% since 2008/09 (66005 tonnes C02 in 2008/09). During the term of this strategy the Trust intends to reduce the current annual emissions by a further 15%.

The Trust will achieve this by the conversion of the steam system which currently provides space heating and domestic hot water services at the RHH to a LTHWS.

In broad terms the scheme will consist of the following:

- The replacement of all the existing steam heater batteries in all the air handling units with batteries which use LTHW.
- The replacement of boiler house steam boilers with high efficiency condensing boilers to produce LTHW.
- A pipework system to distribute the LTHW from the condensing boilers to various air handling units.

On completion, the system will provide extensive heat recovery measures and hence further reductions in energy consumption, carbon emissions and also improve resilience.

4.2.5 Royal Hallamshire Hospital Outpatients department - Replacement of infrastructure services under level A and the heating system replacement. Scheme commenced in 2015.

All the services (water, draining, sewage, heating and domestic hot water) located under level A are some 60 years old and need to be replaced.

The heating distribution system is the original and is also in need of replacement which will be progressed during the term of this strategy.

4.2.6 Northern General Hospital Improvements and partial replacement of the cold water and fire hydrant infrastructure.

Most of the water mains are cast iron underground pipes. Leakage and isolation problems have increased in frequency. This scheme will result in the partial replacement of the existing distribution with medium-density polyethylene (MDPE) pipe along with the removal of redundant storage facilities and the replacement and installation of additional system valves to provide increased system resilience.

4.3 Site Development Plans

Having a high quality environment and facilities within the Trust is something that our patients and staff should be provided with. The principle development schemes which will ensure the Trust achieves this are as follows:

4.3.1 Central Campus - The Development of Weston Park Hospital

In August 2016, following a review of the service, the Specialised Cancer Services directorate launched its clinical strategy for the next five years. A significant enabler in implementing this strategy is the redevelopment of the Weston Park estate.

The objective is to develop a programme of work to address the current deficiencies in the estate and infrastructure within Weston Park, in particular estate capacity to undertake the clinical activity seen by the hospital on a day-to-day basis. There are a number of areas where demand is significantly greater

than the available capacity. This is particularly evident in the Outpatient and Chemotherapy day case units.

The estate developments identified range from aesthetic improvements to major infrastructure projects, including:

- Outpatient Redevelopment – to address flow and capacity issues within the outpatient department.
- Car Parking – to address capacity issues in the context of rising visitor numbers.
- Accommodation – both staff and visitor accommodation.
- Retail and Restaurant Services – to provide an improved patient and visitor experience and generate new income which will be used to improve patient services provided by the Trust.
- Diagnostic Functions – refurbish ancillary areas such as waiting and consultation rooms.
- Building Appearance – intention to clad the building to provide a more modern appearance.
- Day Case Facilities – potential to provide more capacity.
- Theatre – the provision to undertake surgical procedures.
- Pharmacy – both from an Aseptic and Dispensary point of view.
- Improvements to Office and Educational Facilities – staff recruitment and retention.

The scheme is still under development and has yet to reach full business case approval.

4.3.2 Northern Campus - Cataract Unit

The need for cataract surgery is widespread and directly related to the growth in the ageing population. Cataract surgery is the most common surgical operation undertaken in England. Locally just over 7,800 cataract operations were performed in neighbouring DGHs in South Yorkshire and North Derbyshire in addition to the 4,908 at STH.

In October 2015, the Board of Directors approved the business case for a new Cataract Centre on the Northern General site. The objective of this change was to centralise cataract services across the Trust from both a surgical and outpatient perspective. Presently, the provision of services is fragmented across multiple sites and buildings and rationalisation to one site will improve the care

pathway and patient experience. The development of this facility which is due to complete in 2018 will allow the delivery of the service in a more streamlined and efficient way.

The key change drivers are as follows:

- Capacity Vs growing demand
- Create efficient and clinically appropriate facilities for surgery
- The desire to improve patient experience and waiting times
- Enable a more efficient, integrated staffing model
- More efficient clinical pathways

4.3.3 Northern Campus - Frailty Unit

Frail older people represent a large and increasing proportion of acute admissions. Half of these patients, who were rapidly discharged from acute medical care, were re-admitted within the first 90 days following discharge. Screening and a Comprehensive Geriatric Assessment (CGA) process was determined to be needed for the acute care for elderly patients. The CGA is a multidimensional diagnostic process which requires integrated geriatric clinical care to provide better overall outcomes.

In 2017, the Board of Directors approved the business plan for the development of a new Frailty Unit on the Northern General site. The objective of this estate development is to provide a facility that is designed to facilitate the clinical pathway and model of care described above. The benefits to the patients are seen through shorter and more appropriate lengths of stay to suit the patient's needs. Patients who can be quickly and safely treated and managed are discharged in the minimum amount of time to a more conducive "home" setting in the community.

The change will provide the following benefits:

- Improve the speed and access to assessment
- Reduce the number of patients cared for outside specialty
- Reduce length of stay
- Improve patient safety and outcomes.

4.3.4 Central Campus - Q & A floor theatres

The Trust has a total of 48 operating theatres plus 1 local anaesthetic room sited across six separate areas. Ensuring the availability of appropriate theatre capacity represents significant operational and strategic challenges for the Trust. The current A floor theatre complex at the Royal Hallamshire Hospital needs modernisation.

To enable the modernisation programme, without the loss of activity while the works take place, four new theatres are under construction on Q Floor at Royal Hallamshire Hospital. This is the first phase and once commissioned works will commence to modernise the theatres on the A floor theatre complex.

The key drivers for this change are:

- A high quality theatre operating environment for the future
- Improved patient experience and operating environment
- Provision of sufficient operating capacity for the long term
- Accommodation that meets modern standards and regulations
- Facilities that maximise productivity through efficient design

4.3.5 Central Campus - Minor Operations Facility

Ensuring the availability of appropriate theatre capacity represents significant operational and strategic challenges for the Trust. As part of the Theatre Redevelopment Programme the Trust has reviewed options for both improving the quality of the theatre estate and increasing capacity.

Procedures undertaken within day case and inpatient theatres which would be effectively delivered in a 'Minor Ops' unit, would improve the patient experience and also remove work load pressures from the main operating theatre suites. As part of the option appraisal for the Q floor theatres business case, the utilisation of the entire Trust theatre stock was analysed. As a result, the Trust has developed estate plans for a minor procedure facility on the RHH site, due to be implemented in 2017. This unit will be a two-procedure room facility within the current Day Surgery Unit.

The key drivers for this change are:

- Improved patient experience and the ability to implement different models of care
- Releasing theatre capacity for more complex operations
- Enabling minor procedures to be performed more efficiently
- Facilities that maximise productivity through efficient design

4.3.6 Central Campus - Contact Centre

The development of a new solution for the contact centre is part of the outstanding outpatients programme to help develop high quality, continuously improving outpatient services. An effective Contact Centre will pave the way for a significant number of other transformation projects.

The intention is to locate the Contact Centre at the Royal Hallamshire Hospital.

The key drivers for this change are:

- Enable efficient and effective access for patients.
- The need to provide alternative contact centre technology for the Single Point of Access and GP Collaborative.
- A key strategic alignment with the Trust's Transforming Through Technology programme to be become paperless.
- During these engagement activities, it was noted that there was an opportunity to align the Single Point of Access and GP Collaborative with the remainder of STH.

4.3.7 Northern Campus - Improvements to entrance/exit onto Barnsley Road and Herries Road. The site entrances/exits will be improved.

<u>Schemes under consideration which have yet to receive full business case approval:</u>

4.3.8 Northern Campus - Additional Wards.

The Provision of two additional wards specially for decanting purposes will be provided to support the ward essential maintenance programme, ward refurbishment and deep cleaning programmes. These will be located on the Vickers corridor.

4.3.9 Northern Campus - Acute Palliative Care Unit

The Palliative Care service is currently provided from a stand-alone building on the Northern General site. In response to current challenges, the service has developed a vision for the future of specialist palliative care in STH, known as: Acute Palliative Care.

Proposals are being evaluated which vary in cost and ambition but, aim to provide an improved pathway of care and experience for patients, and their families, who are receiving palliative care.

4.3.10 Northern Campus - Trauma Ward

The Trust is a designated adult Major Trauma Centre (MTC). Service standards for MTCs are defined by NHS England and require acute service needs to be met at the front door including in the Emergency Department, Orthopaedics, Neurosurgery and Radiology and also the provision of defined ward/service and rehabilitation services. To meet the full requirements of the service standards requires the creation of a defined trauma ward and the provision of an acute phase rehabilitation service.

The Trust has developed a proposal for the creation of a specific Major Trauma Ward on the NGH site. The ward has been designed around the needs of the patients, with enough beds to cover peak demand and ancillary areas for the treatment and rehabilitation of this group of patients.

4.3.11 Northern Campus - Orthopaedic Fracture Clinic

The Orthopaedic Fracture Clinic is based in the Huntsman building at the Northern General Hospital. The service runs daily triage fracture clinics and also speciality follow up clinics. The unit assesses and treats more than 22,000 patients per year providing access to outpatient medical and nursing services and physiotherapy.

The Care Quality Commission (CQC) inspected the Fracture Clinic in December 2015. Concerns were raised around clinic environment and capacity for patients and families at times of maximum clinic usage.

The Musculoskeletal (MSK) Care Group are currently considering and presenting options for the relocation of the service from its current location to a facility co-located with the Orthopaedic Outpatient department.

4.3.12 Central Campus - Hyper Acute Stroke Services

The Working Together Partnership (South Yorkshire and Bassetlaw, Mid Yorkshire, and North Derbyshire) is leading on the reconfiguration of stroke services in South Yorkshire.

It is proposed that the number of Hyper Acute Stroke Units (HASU) in South Yorkshire reduce from five to two, with the service centralised to Sheffield Teaching Hospitals and Doncaster Royal Infirmary. It is anticipated that activity at STH will increase by approximately 250 additional HASU episodes; an increase of 26%. Plans are being developed to accommodate the additional capacity.

4.4 Working Together and South Yorkshire and Bassetlaw Accountable Care System (ACS)

The impact of these work streams will inevitably result in changes to service configuration across the region and the implications could be significant. Plans will need to be developed to accommodate the findings and assessed accordingly. Over the three year term there will be a need to incorporate the schemes which emerge from the Clinical Directorate Strategies either as a result of the above work streams or from local service improvement initiatives. Timelines and estate development plans will be progressively updated to ensure compatibility with service changes.

The review of NHS Property and Estates by Sir Robert Naylor (2017) concludes that across all the ACS Trusts the majority of the opportunity comes from land efficiency rather than building efficiency and is heavily skewed towards London.

The Naylor Review holds no immediate benefits or quick win savings for the Trust.

There is potential for saving across the ACS but this can only be achieved by service change, placed based systems of care which enables service provision from significantly less estate.

A number of community building used by the ACS across South Yorkshire and Bassetlaw are operated and managed by NHS Property Services and Community Health Partnership. Transferring this estate to the direct control and management of the ACS has the potential to enable service improvement, release cost savings (relating to administration) and improve utilisation of the community estate. This issue has been tabled at the ACS Strategic Estates Group as a proposal to assist the ACS in estate

transformation. The proposal is to evaluate the cost and benefits of this change across the entire ACS estate and, if appropriate, seek support from NHSI (NHS Improvement) to implement the change.

4.5 Ward Stock Essential Maintenance and Refurbishment Programmes

The programmes are subject to ongoing review and will be refreshed to ensure the accommodation is improved whilst it remains safe and fit for purpose. These programmes will be reliant on suitable and sufficient decant facilities on both campuses. At the Northern campus two new decant wards will be provided. At the Central campus two wards from the existing ward stock will be made available to enable the programmes over the term of this strategy.

4.6 Fire Safety

Fire safety is constantly under review by the Trust. An annual report is provided to the Trust's Healthcare Governance Committee which sets out the high and medium risks along with control measures and action plans to deal with the risks.

Fire safety measures at the Trust are designed to protect life and property. The Trust has established and embedded fire safety strategies which include:

- An approved organisational Fire Safety Policy, building strategies and fire safety risk assessments for the entire Trust estate.
- Comprehensive fully maintained automatic fire detection systems in all patient areas and appropriate systems throughout all other ancillary buildings monitored centrally 24/7 by the Trust switchboard.
- A high level of structural fire compartmentation throughout all inpatient areas that is regularly checked.
- A robust and well-practiced fire evacuation strategy for all buildings.
- A 'rapid response' Fire Response Team covering both Campuses.
- An extensive and comprehensive mandatory staff fire safety training program delivered by an in-house Fire Safety Team.
- Practical fire extinguisher training delivered to all new staff on induction and to existing staff.
- Fixed automatic fire suppression systems in high risk areas.
- Safe management of common parts.
- Regular and planned checks of all active and passive fire safety equipment by Estates maintenance staff and approved contractors.
- Assurance that there is no high risk external cladding on any Trust building.

5.0 Delivery Methodologies

The strategy requires clinical directorates to provide sustainable business cases for change which deliver the Clinical Service Strategies for the next three years and which provide the following:

- Situational analysis of the functional suitability of the estate. This requires consideration on aspects of functional suitability to determine the current position and deficiencies. This needs to include the strengths and weaknesses of the functionality of the estate in the context of the aims and objectives of the Corporate Strategy.
- Clear service improvement objectives which consider the existing estate along with new and developing service requirements to ensure that there is a mandate for the functional suitability of the estate to be developed.
- Business plans which set out the project plans to maintain or improve the functional suitability of the estate.
- Meeting operational policy requirements. Directorate and whole hospital policies, clinical and non-clinical, need to be available to inform assessments relating to the suitability of the estate.
- Anticipating future adaptability. Information relating to how adaptable the existing estate is in responding to change. The estate needs to be adaptable to meet the needs of changing models of care and patterns of treatment.

The following sets out a number of guiding principles which provide the direction of travel of the Estate Strategy over the next three years:

- Compliance with statutory and mandatory obligations remains the highest priorities for the delivery of a safe and viable estate. This is the baseline.
- To improve the quality of the estate to ensure a positive experience of care, in the right place enabling patients and their families to be treated with respect, dignity and care.
- To reduce the overall size of the estate, improve space utilisation to deliver financial and carbon savings to create a more sustainable organisation.
- To ensure estate development plans maximise the opportunities with community services in terms of service change, in particular, in moving care closer to home and estate rationalisation.

Over the term of this strategy there will be a need for the development of a number of Trust policies which address the following:

Space Utilisation: Space across the Trust needs to be viewed as a resource which incurs significant cost and liability. Directorates (clinical and corporate) need an incentive which

encourages the effective use of the estate. Where feasible, accommodation (offices, meeting rooms, exanimation and treatment rooms, outpatient facilities and some wards) should be shared to optimise utilisation. Dual use of circulation space should be exploited where this can be effective. New ways of working and a cultural change are required to address this.

Agile Working: The principle of agile working empowers people to work where, when and how they are required to with maximum flexibility and minimum constraints in order to optimise their performance. The Trust is rapidly developing information technology to further enable agile working and this should be promoted and developed.

Whole Life Assessment: A methodology which considers the cost of maintaining the premises for the whole of their operating life and which centres on effective use of the estate and value for money (VFM). This is currently done as part of the business case process and while significant improvements have been made over the term of the previous strategy further work is required to improve the assessment process.

The Estate Strategy recognises clinical practice as the key driver for the development of the physical estate. Clinical Directorate Strategies alongside professional Estates practice are required to inform the Estate Strategy.

Ensuring Outcomes

The 2016 NHS Premises Assurance Model (NHS PAM) was developed within the NHS. It is an update of the previous version (2014) and includes changes in policy, strategy, regulations and technology.

The NHS PAM is a management tool that provides NHS organisations with a way of assessing how safely and efficiently they run their estate and facilities services. It is a basis for:

- allowing NHS healthcare providers to assure Boards, patients, commissioners and regulators on the safety and suitability of estates and facilities where NHS healthcare is provided
- providing a nationally consistent approach to evaluating NHS estates and facilities performance against a common set of questions and metrics
- prioritising investment decisions to raise standards in the most advantageous way

The NHS PAM supports Boards, clinical leaders and Directors of Finance and Estates to make more informed decisions on the development of their estates and facilities services. It also provides important information to commissioners for use during the commissioning process and regulators in identifying risks.

A NHS PAM report is provided to Healthcare Governance Committee annually.

Data collated via the Estates Returns Information Collection (ERIC) return provides a number of Key Performance Indicators used by the Trust and NHSI to monitor progress of the Estate Strategy.

The Estate and Facilities Management dashboard (figure 4) enables benchmarking with peer organisations along with the concept of the model hospital as defined by Lord Carter (2016). The dashboard is subject to ongoing review both from within the Trust and by external agencies such as NHSI.

Proposals for new developments and progress on existing capital schemes will be continually assessed and monitored by the Trust Capital Investment Team on a monthly basis.

Proposals for service development and progress will be continually assessed and monitored by the Trust Business Planning Team.

Strategic Fixed Points

Site specific strategic planning and development for the next three years will be subject to the clinical change programmes which will provide functional parameters around the following fixed points:

- The secondary and tertiary services will continue to be delivered from a two site solution with the core activity for the Northern General site being Emergency Services and for the Royal Hallamshire site, Medical and Elective Surgical Services.

- A number of centres of excellence remain as identified clinical specialties within the Corporate Brand and comprise:

    - Weston Park Cancer Centre
    - Charles Clifford Dental Hospital
    - The Jessop Hospital Wing – Obstetrics and Maternity
    - South Yorkshire Regional Services (Cardiac & Thoracic, Renal and Vascular)

The Northern Campus will remain as the centre of acute tertiary clinical services in hosting emergency services and respective high acuity support.

For the Northern Campus the over-arching strategy will focus on;

- Rationalisation of the estate

- Consolidating core clinical services into the main body of the hospital
- Improvements to way finding
- Additional wards for decanting to support essential maintenance, refurbishments and deep cleaning programmes.

For the Central Campus initiatives will concentrate on;

- Reconfiguration of services to maximise productivity of the four new theatres which will open in March 2018.
- Refurbishment of the A floor theatres complex once Q floor theatres are operational.
- Accessibility and way finding.
- Rebalancing the mismatch of office accommodation and low tech outpatient facilities within a high tech environment.

For the community setting:

- To support initiatives to avoid unnecessary admissions and facilitate timely and appropriate discharge from secondary care.

6.0 Conclusion

The Estate Strategy has been developed to support the Corporate Strategy and clearly has to be flexible and responsive to both internal and external influences.

The Estate Strategy recognises clinical practice as being the driver for the development of the built environment whilst employing professional Estates expertise to challenge the type and size of space required. This will be underpinned by a number of central initiatives which will enhance services provided by the Trust and complement Clinical Directorate Strategies.

The Estate Strategy reaffirms this objective in the context of providing added value towards the provision of sustainable healthcare services.

7.0 References

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APPENDICES: Figures 1-4

Fig 1. - Northern Campus

Fig 2. - Central Campus

Fig 3. - Facility location and adjacency – Acute & Community Estate locations (North Sheffield)

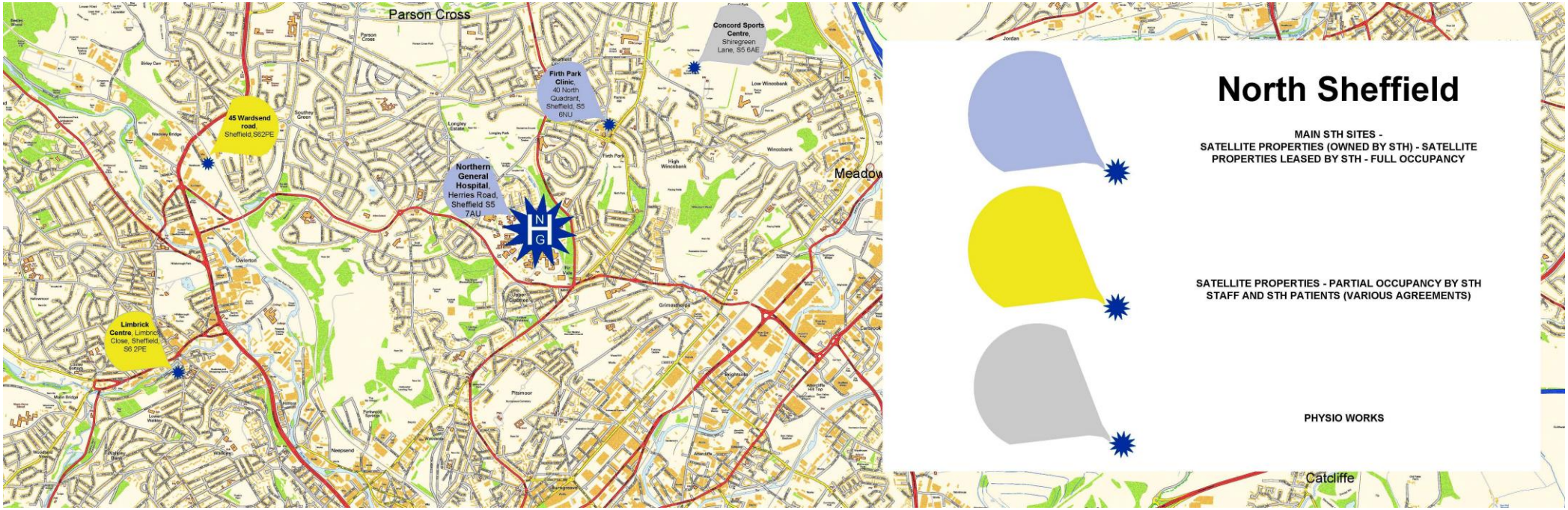


Fig 3a. - Facility location and adjacency – Acute & Community Estate locations (South Sheffield)

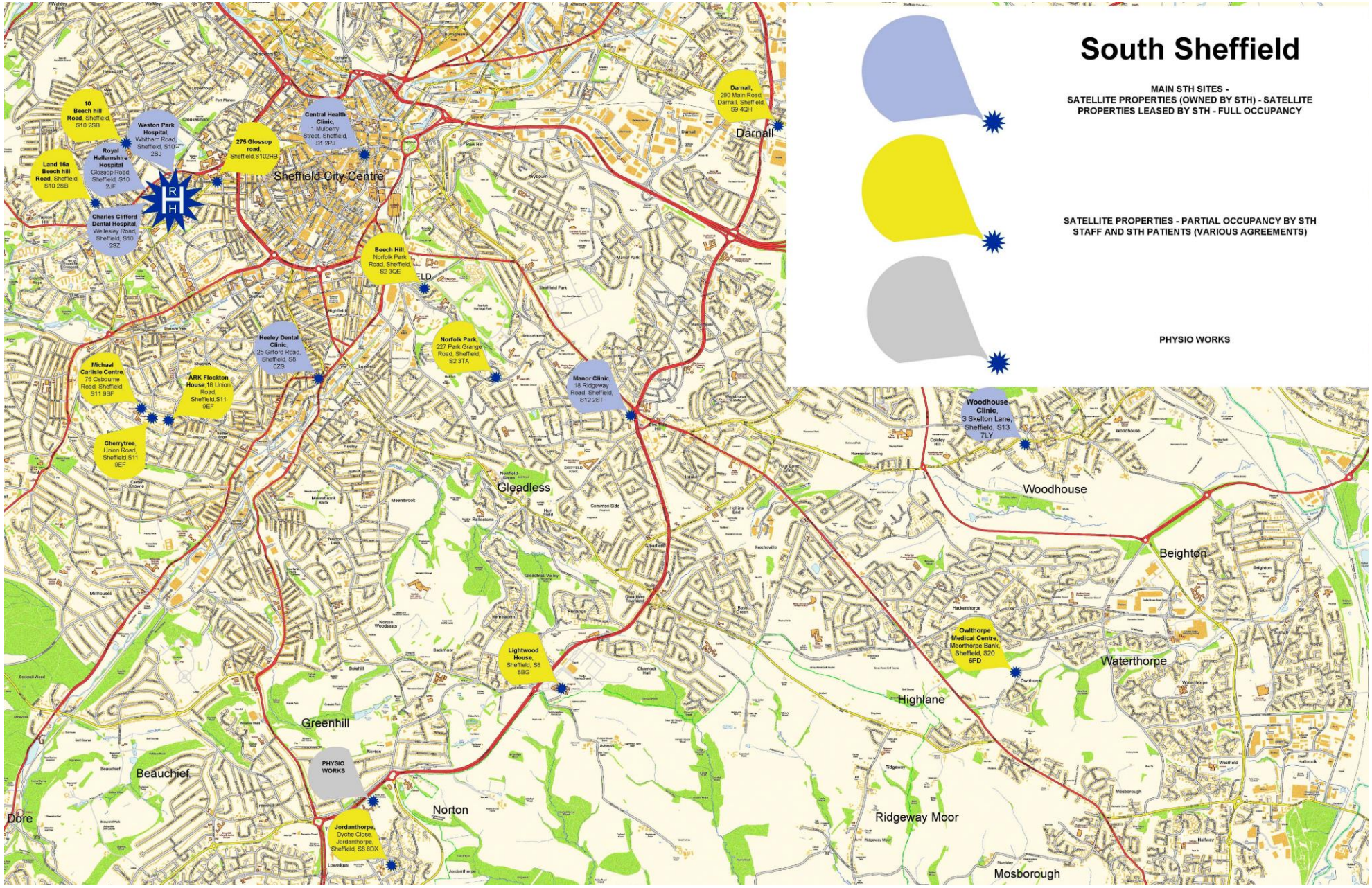


Fig 4. NHS ESTATES AND FACILITIES DASHBOARD 2015-16

NHS ESTATES AND FACILITIES DASHBOARD 2015-16

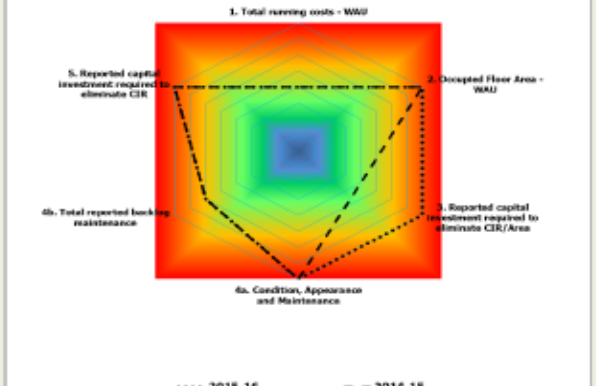
CODE	RHQ	TRUST NAME	SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST

TRUST OVERVIEW

Organisation type	ACUTE - TEACHING
Commissioning region	NORTH OF ENGLAND

		2015-16	2014-15
Total occupied floor area	m2	406,201	398,115
Total estates and facilities running costs	£	100,941,176	100,296,328
Potential total E & F running cost saving by moving to the trust type median	£	0	0
Potential targeted E & F running cost savings from individual cost elements	£	2,020,294	4,000,426
Amount of empty and underutilised space	%	0.8%	not collected
Potential cost savings from full utilisation of empty and underutilised space	£	621,352	not collected
% of occupied floor area operated under a PFI contract	%	3%	3%
% of occupied floor area under direct NHS management	%	97%	97%
E & F running cost of floor area operated under a PFI contract	£/m2	465.32	381.03
E & F running cost of floor area under direct NHS management	£/m2	249.37	247.62
Total trust income	£	1,006,507,000	1,002,148,000

Trust metrics plotted against the trust type median



METRICS SCORING METHODOLOGY	
Quartile 1	Blue
Quartile 2	Green
Quartile 3	Amber
Quartile 4	Red

WAU (Weighted Activity Unit) is a measure that utilises a cost-weighted output figure based on the Health Episode Statistics and Reference Cost data to provide a relative assessment of the activity in the trust. It is then adjusted by the market forces factors to reflect different cost levels nationally. Further details on WAU can be found in the Dashboard Guidance available on DH Exchange.

METRICS SOURCED FROM NATIONAL DATA

Domain 1 - Efficiency - Cost		TRUST METRIC 2015-16	Trend	2014-15	Trend	2013-14	2015-16 QUARTILES FOR ACUTE - TEACHING Lowest	Lower Quartile	Median	Upper Quartile	Highest
Total estates and facilities running costs / WAU	£ / WAU	427.74	↓	442.87	n/a	not collected	208.42	383.16	473.15	523.93	666.97
Total estates and facilities running costs / area	£ / m2	248.50	↓	251.87	↓	274.38	173.78	276.92	337.50	398.38	679.46
Total Hard Facilities Management costs - WAU	£ / WAU	95.91	↓	100.53	n/a	not collected	23.46	90.83	105.33	122.83	237.29
Energy costs	£ / Units	0.05	↓	0.09	↑	0.06	0.01	0.04	0.05	0.06	0.09
Building and engineering maintenance costs	£ / m2	26.24	↓	28.8	↓	29.12	16.46	26.26	33.20	40.76	89.88
Portering	£ / m2	6.24	↑	3.82	n/a	not collected	6.26	12.66	16.80	19.40	35.42
Water and sewage costs	£ / m2	2.99	↑	2.69	↑	2.46	2.14	2.76	3.04	3.58	4.84
Special and Clinical Waste costs	£ / tonnes	301.37	n/a	not collected	n/a	not collected	221.77	320.61	382.46	430.10	802.24
Total Soft Facilities Management costs - WAU	£ / WAU	176.68	↑	176.31	n/a	not collected	24.51	136.15	161.36	176.71	245.32
Laundry and linen costs	£ / item	0.31	↑	0.27	↓	0.28	0.11	0.21	0.26	0.39	0.90
Food costs	£ / meal	2.17	↑	2.13	↓	2.26	1.75	3.02	4.02	4.58	7.96
Cleaning costs	£ / m2	42.91	↑	38.94	↑	36.74	26.53	33.98	38.75	50.95	78.22

Domain 2 - Effectiveness - Productivity		2015-16	Trend	2014-15	Trend	2013-14	Lowest	Lower Quartile	Median	Upper Quartile	Highest
Occupied Floor Area - WAU	m2 / WAU	1.76	↓	1.77	n/a	not collected	0.87	1.19	1.37	1.47	1.79
Amount of empty space	%	0.8%	n/a	not collected	n/a	not collected	0.0%	0.0%	0.8%	2.2%	10.0%
Amount of underutilised space	%	0.0%	n/a	not collected	n/a	not collected	0.0%	0.0%	1.1%	1.7%	22.7%
Amount of non-clinical space	%	36.1%	↓	62.4%	↓	62.8%	10.5%	32.6%	36.9%	47.6%	61.8%
Total income earned per area	£ / m2	2,478	↓	2,517	↑	2,358	2,383	2,853	3,324	3,732	5,203
Estates and facilities staff sickness absence rate	%	7.0%	↑	6.7%	→	6.7%	1.0%	4.9%	5.5%	6.3%	9.1%
Amount of energy used	Units / m2	316.16	↑	223.3	↓	367.62	210.18	431.49	522.90	699.70	1,614.76
Portering	Beds/WTE	18.53	↓	20.59	n/a	not collected	5.05	7.58	9.09	11.30	18.52
Special and Clinical Waste - WAU	WAU ratio*	0.0096	n/a	not collected	n/a	not collected	0.0018	0.0076	0.0088	0.0100	0.0160
Laundry and linen - WAU	WAU ratio*	26.86	↓	28.83	n/a	not collected	25.89	28.70	33.33	38.15	46.62
Food service productivity	Meals / Beds / Day	3.77	↑	3.67	↑	3.48	2.19	3.31	3.45	3.75	5.16
Cleaning productivity	m2/WTE	460.38	↓	475.14	↓	510.98	306.81	601.90	675.90	727.88	1,074.78

Domain 3 - Safety		2015-16	Trend	2014-15	Trend	2013-14	Lowest	Lower Quartile	Median	Upper Quartile	Highest
Reported Critical Infrastructure Risk (CIR)/Area	£/m2	127.08	↑	46.17	↓	55.96	0.00	26.49	57.61	94.45	2,303.62
Reported Critical Infrastructure Risk	£	86,048,640	↑	19,107,440	↓	22,304,200	0	4,793,750	10,593,047	18,760,232	667,899,583
Fires recorded	No.	6	↓	7	→	3	0	2	3	5	23
False Alarms	No.	1	↑	0	→	0	1	90	174	205	471
Number of people injured resulting from fire(s)	No.	0	→	0	→	0	0	0	0	0	1
Number of patients sustaining injuries during evacuation	No.	0	→	0	→	0	0	0	0	0	0

Domain 4a - Quality - Patient Environment		2015-16	Trend	2014-15	Trend	2013-14	Lowest	Lower Quartile	Median	Upper Quartile	Highest
Condition, Appearance and Maintenance	%	92.70%	↑	85.88%	↓	91.33%	80.23%	92.70%	94.59%	96.66%	97.49%
Cleanliness	%	96.52%	↑	96.00%	↓	96.37%	90.37%	97.80%	99.14%	99.54%	99.91%
Food	%	88.27%	↑	88.92%	↓	91.09%	66.15%	83.11%	87.61%	90.34%	97.36%
Privacy, Dignity, Wellbeing	%	86.76%	↓	86.90%	↓	93.15%	71.77%	79.76%	86.57%	87.52%	94.70%
Condition, Appearance and Maintenance	%	92.70%	↑	85.88%	↓	91.33%	80.23%	92.70%	94.59%	96.66%	97.49%
Dementia	%	69.04%	↑	58.20%	n/a	not collected	57.27%	64.52%	75.90%	80.09%	88.10%
Disability	%	73.68%	n/a	not collected	n/a	not collected	61.18%	69.41%	77.82%	81.74%	92.06%

Domain 4b - Quality - Infrastructure		2015-16	Trend	2014-15	Trend	2013-14	Lowest	Lower Quartile	Median	Upper Quartile	Highest
Total reported backlog maintenance	£/m2	248.04	↑	164.56	↓	177.00	22.09	80.04	137.92	268.21	2392.65
Amount of functionally suitable space	%	100.00%	→	100.00%	→	100.00%	29.82%	83.81%	95.41%	98.87%	100.00%
Single bedded rooms	%	35.64%	↑	24.14%	↓	24.85%	1.37%	26.38%	30.64%	35.99%	48.02%
CO2 emissions	kg/m2	108.39	↑	42.61	↓	98.34	104.95	141.05	173.81	185.10	449.18

Domain 5 - Organisation Governance & Processes		2015-16	Trend	2014-15	Trend	2013-14	Lowest	Lower Quartile	Median	Upper Quartile	Highest
Capital investment required to eliminate CIR	£	86,048,640	↑	19,107,440	↓	22,304,200	0	4,793,750	10,593,047	18,760,232	667,899,583
Capital investment required to eliminate backlog	£	100,999,001	↑	65,315,666	↓	71,345,674	2814346	15,992,197	29,101,610	82,671,788	693,713,189
Capital spend as % of NBV of land and buildings	%	3.7%	↑	3.6%	↓	4.5%	0.0%	2.0%	3.7%	7.1%	14.2%
Income from areas leased out for retail sales	£/m2	104	↓	324	n/a	not collected	0	104	324	441	1,162
Income from other organisations (excluding retail sales)	£	8,301,853	n/a	not collected	n/a	not collected	0	270,379	1,925,216	5,606,465	26,633,251

Produced by: Estates and Facilities Management Efficiency Project Team, Department of Health

For further information please refer to the NHS Estates and Facilities Efficiency Dashboard Guidance document or contact the dedicated mailbox efmefficiencyteam@dh.gsi.gov.uk

Sources: ERIC 2015-16, 2014-15 and 2013-14, PLACE 2016, 2015 and 2014, Electronic Staff Records 2015-16, 2014-15 and 2013-14, Trust Financial Accounts 2015-16, 2014-15 and 2013-14

Version 2.0 January 2017

The Data source which generators the Trust metric are also provided

NHS ESTATES AND FACILITIES DASHBOARD 2015-16 - METRIC CALCULATIONS

CODE	RHQ	TRUST NAME	SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST

TRUST OVERVIEW

Organisation Type	ACUTE - TEACHING
Commissioning region	NORTH OF ENGLAND

		2015-16	2014-15
Total estates and facilities running costs	£	100,940,176	100,298,328
Potential total E & F running cost saving by moving to median	£	0	0
Potential targeted E & F running cost savings	£	2,050,294	4,000,426
Potential E & F savings as a % of total E & F running costs	%	0.0%	0.0%
Total Income	£	1,006,507,000	1,002,148,000
% of Hard and Soft FM services outsourced, by cost	%	4.6	3.6
Total occupied floor area	m2	406,201	398,115
Reported capital invested on new build	£	4,157,394	902,832
Reported capital invested on improving existing buildings	£	8,773,273	52,105,684
Reported capital invested on equipment	£	20,567,802	14,076,452
% of occupied floor area operated under a PFI contract	%	3%	3%
% of occupied floor area under direct NHS management	%	97%	97%
Full NHS FAM assessment in the last 12 months ?	Yes/No	Yes	No

Domain 1 - Efficiency - Cost		2015-16	Numerator	Denominator	Data Sourcing: Numerator Source	Data Sourcing: Denominator Source
Total estates and facilities running costs / WAU	£ / WAU	437.58	100,941,176	230,683.10	Total Running Cost (Hard + Soft + Finance) FM	WAU ratio
Total estates and facilities running costs / area	£ / m2	248.50	100,941,176	406,201	Total Running Cost (Hard + Soft + Finance) FM	Occupied Floor Area (m2)
Total Hard Facilities Management costs - WAU	£ / WAU	95.81	22,100,921	230,683.10	Total hard FM (estates) costs	WAU ratio
Energy costs	£ / Units	0.05	6,982,976	126,426,126	Total energy cost	Total Utility Energy (kWh)
Building and engineering maintenance costs	£ / m2	26.94	10,943,819	406,201	Total building and engineering maintenance costs	Occupied Floor Area (m2)
Portering	£ / m2	6.26	2,542,023	406,201	Total portering cost	Occupied Floor Area (m2)
Water and sewage costs	£ / m2	2.85	1,156,401	406,201	Water and sewage cost	Occupied Floor Area (m2)
Special and Clinical Waste costs	£ / tonnes	301.57	457,326	1,516	Special and clinical waste cost	Special and clinical waste weight (Tonnes)
Total Soft Facilities Management costs - WAU	£ / WAU	176.85	40,795,367	230,683.10	Total soft FM (Hotel Services) costs	WAU ratio
Laundry and linen costs	£ / item	0.30	1,952,270	6,195,365	Laundry and linen services cost	Laundry and linen pieces per annum
Food costs	£ / meal	2.17	4,476,051	2,061,674	In-patient food services cost	Total in-patient main meals requested
Cleaning costs	£ / m2	42.91	17,431,883	406,201	Cleaning services costs	Occupied Floor Area (m2)

Domain 2 - Effectiveness - Productivity		2015-16	Numerator	Denominator	Numerator Source	Denominator Source
Occupied Floor Area - WAU	m2 / WAU	1.76	406,201	230,683.10	Occupied Floor Area (m2)	WAU ratio
Amount of empty space	%	0.8%	3,286	406,201	Empty space (m2)	Occupied Floor Area (m2)
Amount of underutilised space	%	0.0%	0	406,201	Underutilised space (m2)	Occupied Floor Area (m2)
Amount of non-clinical space	%	56.2%	188,432	335,361	Non-clinical floor area	Clinical + Non-clinical floor area
Total income earned per area	£ / m2	2,478	1,006,507,000	406,201	Financial Accounts - Total Income	Occupied Floor Area (m2)
Estates and facilities staff sickness absence rate	%	7.0%	7.0%		NHS Electronic Staff Records	
Amount of energy used	Units / m2	311.16	126,426,126	406,201	Total Utility Energy (kWh)	Occupied Floor Area (m2)
Portering	Beds/WTE	18.52	1,585	86	Available Beds	Portern WTE
Special and Clinical Waste - WAU	WAU ratio*	0.0066	1,516	230,683.10	Special and clinical waste weight	WAU ratio
Laundry and linen - WAU	WAU ratio*	26.86	6,195,365	230,683.10	Pieces per annum	WAU ratio
Food service productivity	Meals / Beds / Day	3.77	2,061,674	1,497	Total in-patient main meals requested	Occupied beds * 365
Cleaning productivity	m2/WTE	468.88	406,201	866	Occupied Floor Area (m2)	Number of cleaning staff (WTE)

Domain 3 - Safety		2015-16	Numerator	Denominator	Numerator Source	Denominator Source
Reported Critical Infrastructure Risk (CIR)/Area	£/m2	137.98	56,045,645	406,201	High and Significant Risk Backlog Maintenance	Occupied Floor Area (m2)
Reported Critical Infrastructure Risk	£	56,045,645	56,045,645		High and Significant Risk Backlog Maintenance	
Fires recorded	No.	0	0		Fires recorded (No.)	
False Alarms	No.	1	1		False alarms (No.)	
Number of people injured resulting from fire(s)	No.	0	0		Number of people injured resulting from fire(s) (No.)	
Number of patients sustaining injuries during evacuation	No.	0	0		Number of patients sustaining injuries during evacuation (No.)	

Domain 4a - Quality - Patient Environment		2015-16	Numerator	Denominator	Numerator Source	Denominator Source
Condition, Appearance and Maintenance	%	92.70%	92.70%		Patient Led Assessment of the Care Environment (PLACE) - Trust level scores	
Cleanliness	%	99.52%	99.52%		Patient Led Assessment of the Care Environment (PLACE) - Trust level scores	
Food	%	88.27%	88.27%		Patient Led Assessment of the Care Environment (PLACE) - Trust level scores	
Privacy, Dignity, Wellbeing	%	86.76%	86.76%		Patient Led Assessment of the Care Environment (PLACE) - Trust level scores	
Condition, Appearance and Maintenance	%	92.70%	92.70%		Patient Led Assessment of the Care Environment (PLACE) - Trust level scores	
Dementia	%	88.24%	88.24%		Patient Led Assessment of the Care Environment (PLACE) - Trust level scores	
Disability	%	73.68%	73.68%		Patient Led Assessment of the Care Environment (PLACE) - Trust level scores	

Domain 4b - Quality - Infrastructure		2015-16	Numerator	Denominator	Numerator Source	Denominator Source
Total reported backlog maintenance	£/m2	248.64	100,999,081	406,201	Total of All Backlog Maintenance	Occupied Floor Area (m2)
Amount of functionally suitable space	%	100.0%	406,201	406,201	Functionally suitable floor area	Occupied Floor Area (m2)
Single bedded rooms	%	35.6%	563	1,583	Total Single bedrooms for patients	Available Beds
CO2 emissions	kg/m2	108.59	108.59		Calculation using formula given in ERIC Completion Notes	

Domain 5 - Organisation Governance & Processes		2015-16	Numerator	Denominator	Numerator Source	Denominator Source
Capital investment required to eliminate CIR	£	56,045,645	56,045,645		High and Significant Risk Backlog Maintenance	
Capital investment required to eliminate backlog	£	100,999,081	100,999,081		Total of All Backlog Maintenance	
Capital spend as % of NBV of land and buildings	%	3.7%	13,130,467	358,480,000	Capital Investment for New Build + Improving Existing Buildings	Financial Accounts - NBV Land & Buildings
Income from areas leased out for retail sales	£/m2	368	213,533	580	Income received for area leased out for retail sales (£)	Area leased out for retail sales (m²)
Income from other organisations (excluding retail sales)	£	8,701,918	8,701,918		Income from services provided to other organisations	

POTENTIAL SAVINGS CALCULATIONS

Cost Efficiency elements	Unit	Trust metric 2015-16	Potential Savings: Trust Type Median	Potential saving per unit	Potential saving £
Total estates and facilities running costs / area	£ / m2	248.50	337.50	0.00	0
Energy costs	£ / Units	0.05	0.07	0.00	358,725
Building and engineering maintenance costs	£ / m2	26.94	33.30	0.00	0
Portering	£ / m2	6.26	16.80	0.00	0
Water and sewage costs	£ / m2	2.85	3.04	0.00	0
Special and Clinical Waste costs	£ / tonnes	301.57	362.40	0.00	0
Laundry and linen costs	£ / item	0.30	0.35	0.00	0
Food costs	£ / meal	2.17	4.03	0.00	0
Cleaning costs	£ / m2	42.91	38.75	4.16	1,691,579

Data Source Key
Estates Returns Information Collection (ERIC) 2015-16
Trust Financial Accounts 2015-16
Weighted Activity Unit (WAU)
Patient Led Assessment of the Care Environment (PLACE) 2016
NHS Electronic Staff Records (ESR) 2015-16

Produced by: Estates and Facilities Management Efficiency Project Team, Department of Health
For further information please refer to the NHS Estates and Facilities Efficiency Dashboard Guidance document or contact the dedicated mailbox efmefficiencyteam@dh.gsi.gov.uk

Sources: ERIC 2015-16, 2014-15 and 2013-14, PLACE 2016, 2015 and 2014, Electronic Staff Records 2015-16, 2014-15 and 2013-14, Trust Financial Accounts 2015-16, 2014-15 and 2013-14
Version 2.0 January 2017