

# Oriel Outline Business Case

February 2020



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## Abbreviations

A&E	Accident & Emergency department
AMD	Age-related Macular Degeneration
BIM	Building Information Modelling
BRC	Biomedical Research Centre
BREEAM	Building Research Establishment Environmental Assessment Methodology
C&I	Camden and Islington NHS Foundation trust
CCG	Clinical Commissioning Group
CIP	Cost Improvement Plan
CQC	Care Quality Commission
DDA	Disability Discrimination Act
DHSC	Department of Health and Social Care
DMBC	Decision-Making Business Case
DQI	Design Quality Indicator
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
EIA	Equality Impact Assessment
FBC	Full Business Case
FM	Facilities Management
FRR	Financial Risk Rating
FTE	Full Time Equivalent
FY	Financial Year, e.g. FY19 means 2018/19
FYFV	Fiver Year Forward View
GIFA	Gross Internal Floor Area
GIRFT	Getting It Right First Time
GMP	Guaranteed Maximum Price
GSL	Government Soft Landings
HBN	Health Building Note
HTM	Health Technical Memorandum
HWB	Health and Wellbeing Board
I&E	Income and Expenditure
IMD	Index of Multiple Deprivation
IoO	Institute of Ophthalmology
JHOSC	Joint Health Overview and Scrutiny Committee
JDV	Joint Development Vehicle
JV	Joint Venture
LA	Local Authority
LTFM	Long Term Financial Model
MEC	Moorfields Eye Charity
NCL	North Central London

NHSE/I	NHS England and Improvement
NPSV	Net Present Social Value
OBC	Outline Business Case
OJEU	Official Journal of the European Union
OpCo	Operating Company
P22	ProCure 22
PCBC	Pre-Consultation Business Case
PDC	Public Dividend Capital
PEST	Political, Economic, Sociological and Technological analysis
PMO	Project Management Office
PropCo	Property Company
REF	Research Excellence Framework
RDCEC	Richard Desmond Children's Eye Centre
RIBA	Royal Institute of British Architects
RNIB	Royal National Institute for the Blind
RTT	Referral to Treat
SEP	Strategic Estates Partnership
SOC	Strategic Outline Case
SPV	Special Purpose Vehicle
STP	Sustainability and Transformation Partnership
QIPP	Quality, Innovation, Productivity and Prevention
UCL	University College London
WHT	Whittington Health NHS Foundation trust



## **1. Executive summary**

### **1.1 Introduction**

This Outline Business Case (OBC) sets out the case for investment in the relocation of Moorfields' ophthalmology services from their current location at City Road, to a new centre on the St Pancras Hospital site. This new centre will deliver integrated clinical, research and education services. The project is known as Oriel.

Oriel is a joint project between Moorfields Eye Hospital NHS Foundation Trust (Moorfields) and the University College London (UCL) Institute of Ophthalmology (IoO), referred to as 'the partners'. Moorfields and UCL IoO will occupy the building, and while the partners will split the capital and revenue costs according to area occupied, the vision for the project is that the two organisations be truly integrated. Moorfields Eye Charity (MEC) are an important contributor to the project, and have committed to raise capital and revenue funds for both Moorfields and UCL.

The total capital cost of the project to Moorfields is **£XXXm**.

This OBC follows the SOC (also called the Land Acquisition Business Case) which was approved by NHSI in January 2018, and the public consultation on the proposals which was undertaken from May to September 2019. A Decision-Making Business Case (DMBC) on the consultation was approved by commissioners on 12 February 2020.

**Trust Board approved the following on 27 February 2020:**

- **Approved version 1.0 of this OBC, for submission to NHSE/I and DHSC to undertake their assurance process.**
- **Approved the spend of £XXXm of fees prior to FBC approval.**

**Trust Board is now asked to approve this revised OBC (version 2.0), for submission to NHSE/I and DHSC's Joint Investment Committee.**

### **1.2 Strategic case**

#### **1.2.1 Strategic context**

A number of strategic drivers have been identified:

- **NHS Long Term Plan** – Oriel must meet the requirements of a changing service model re-emphasising the importance of; a focus on prevention and health inequalities; services for children and young people; better care for major health conditions; supporting staff; and mainstreaming digitally enabled care.
- **Service Transformation** – Oriel must deliver world class clinical services and meet the changing needs and expectations of our wide population base.



- Estates Transformation – A fit-for-purpose facility is required that enables better service configuration, meeting the needs and expectations of patients, carers and staff.

Plans for Oriel have been developed in the context of:

- National strategy, relating to:
  - NHS estates, including the Naylor report which challenges the NHS to bring forward disposal of high value estate and reinvest receipts into clinical improvements.
  - Ophthalmology (the Way Forward and Getting It Right First Time) which project increasing demand for services as the population ages, and make recommendations around improving care quality and productivity which Moorfields are unable to implement in the current City Road site.
  - The NHS overall, including the NHS Long Term Plan.
  - Research and innovation (International Research and Innovation Strategy and Life Sciences Industrial Strategy) which aim to maintain and build upon the UK's role as a global leader in science.
- Regional strategy, including:
  - Commissioner intentions across the 14 CCGs who commission over £2m p.a. of activity from City Road, and NHS England Specialised Commissioning.
  - The north central London (NCL) STP estates strategy, which describes support for the wider St Pancras Redevelopment. This involves Camden and Islington NHS Foundation Trust (C&I) inpatient services moving from St Pancras to the Whittington Hospital site, releasing land for development by a commercial partner (3 acres of the site) and the Oriel partners (2 acres).
- Moorfields organisational and clinical strategies, UCL strategy and the partners' joint research and education strategies.

### 1.2.2 Case for change

Moorfields and UCL IoO are at the forefront of research and treatment for ophthalmology nationally and internationally, providing globally-recognised research, excellent education and outstanding clinical care. Jointly the partners' aim is to continue to be world-leading in eye-disorder prevention and treatment using a translational model of 'bench-to-bedside' research and care. Translational research requires close working between clinicians and researchers to with the aim of increasing the scale and speed of progress from scientific discovery to clinical practice, improving clinical outcomes for patients.

Moorfields operates from a network of around 30 sites. The trust organises services across this network to deliver care closer to home where appropriate, while concentrating specialised services and the majority of research activities at City Road. The trust's strong clinical outcomes and research outputs are achieved despite the constraints of the buildings at City Road, most of which are around 125 years old. The case for change is as follows:

- **Poor patient experience arising from the estate** – current issues include challenging wayfinding presenting a particular issue for visitors with sight-loss, basement clinics with insufficient waiting space, outpatient clinics provided from

cubicles rather than rooms, and long travel distances between clinical areas (such as outpatients and diagnostics). These issues were echoed through the public consultation, through which 73% of survey respondents expressed their support for a new centre, and many people provided valuable insights into how Moorfields can provide an excellent patient experience in a new centre.

- **Risk of future service failure due to inability to support change and loss of staff** – the site is not capable of supporting the trust in the step-change it plans to implement in terms of an integrated (with the IoO) and digitally-focused campus for the long term future, which can keep pace with the rapidly changing field of ophthalmology. While some service improvements can be made in the current building (e.g. implementation of some virtual clinics) the trust is increasingly unable to compete with top institutions in responding in an agile way to emerging technologies or in providing modern, collaborative workspace for its staff. There is a real risk that the trust could lose its excellent clinicians and researchers if improvements are not made to the working environment. As the City Road site continues to deteriorate, and the partners' competitors continue to improve, the resulting loss of staff and status would mean the quality of clinical services will suffer, and the trust will not be able to maintain its excellent outcomes.
- **Significant investment will be required to keep the current buildings running** – key areas which will require investment in the near future include the building's façade, heating, water and ventilation systems. The estimated cost of this is over £XXXm (this is appraised in the Economic Case as the 'do minimum' option).
- **Inability to support future demand changes** – the most common eye conditions (cataracts, glaucoma and conditions affecting the retina) have a higher prevalence in older people and people suffering from diabetes. As the prevalence of these increases, so will demand for ophthalmology services. This is supported by commissioner-led demand modelling which projects a 3.1% annual increase in demand for outpatient services over the next 15 years before reprovisioning.
- **Opportunity to improve research through integration** – Moorfields and UCL IoO currently operate from separate buildings on the City Road campus, which does not facilitate collaborative working. Research is often undertaken in silos, making relatively little use of expertise and knowledge from other teams. Clinical trials are often undertaken with a 'research first' rather than a 'patient first' approach. Removing the physical boundaries to collaboration will encourage innovation and provide more patients with the opportunity to participate in research trials.
- **Opportunity to improve education through integration** – the current physical facilities at City Road limit the education and training which can be provided. A new joint eye care, research and education facility would support a significant increase in the number of students and clinicians training in ophthalmology and associated services, and increase the opportunities available to Moorfields staff.
- **Inefficiencies in service delivery** – a building designed around optimum patient flows will enable significant improvements in patient throughput, particularly in surgery and outpatients. Capacity modelling has demonstrated that services could be delivered from a smaller building than the current 56,000m<sup>2</sup> estate through more efficient service delivery.

It is important to recognise the value of the trust's current opportunity to purchase a site at St Pancras in a central London location, close to the main UCL campus as well as research institutions such as the Frances Crick Institute.

### 1.2.3 Constraints and dependencies

Key **constraints** for Oriel are that:

- The proposals must be delivered in line with the recommendations set out in the Decision Making Business Case (DMBC).
- The capital cost must not exceed the affordability envelope (detailed in the Finance Case).
- The revenue cost must remain financially sustainable (detailed in the Finance Case).

Key **dependencies** are:

- Moorfields' ability to purchase the Oriel portion of the St Pancras site from C&I in early 2021, and to gain vacant possession in 2022.
- Gaining town planning permission on the St Pancras site, in partnership with C&I's development partner.
- Achieving the land value and philanthropy targets set out in the Finance Case.
- Achieving OBC and FBC approval.
- Maintaining commitment to the project from UCL.
- UCL have been awarded capital funding from the UK Research Partnership Investment Fund (UKRPIF), which must be drawn down by March 2021. This must be linked to the purchase of the St Pancras site, which therefore must be completed in advance of this date.

## 1.3 Economic case

The purpose of the Economic Case is to perform an options appraisal based on the scope set out in the Strategic Case. The options appraisal in this OBC refreshes the appraisal undertaken in the SOC, using the opportunity to re-visit assumptions and reflect the updated HM Treasury Green Book guidance published in 2018.

### 1.3.1 Refresh of investment objectives and critical success factors

The investment objectives and Critical Success Factors (CSFs) have been refreshed to ensure they meet the needs of all the Oriel partners. A wide range of internal and external stakeholders have been engaged with to test the CSFs.

### 1.3.2 Appraisal of long list of options to determine shortlist

The HM Treasury Green Book options framework has been used to document the long list of options, appraise the long list against the CSFs, and validate the appraisal in a workshop with a wide range of internal and external stakeholders, including commissioners and patient representatives. The output is a shortlist of options that best meet the CSFs. This is set out in further detail in section 4.3.

The shortlisted options taken forward for economic appraisal are:

- Option 0: Business as usual (comparator).
- Option 1: Do minimum (a realistic investment programme to maintain City Road operations).
- Option 2: Redevelopment of City Road.
- Option 3: Build a new facility in the St Pancras area – 39,500 square metres.
- Option 4: Build a new facility in the St Pancras area – 43,000 square metres.

### 1.3.3 Economic appraisal of the shortlisted option

Economic appraisal of the shortlisted options has been conducted using the DHSC Comprehensive Investment Appraisal (CIA) Model following the requirements of the HM Treasury Green Book. This economic appraisal approach looks beyond an individual organisation and aims to consider instead the value of the preferred option to the UK as a whole. The measure of value to the UK as a whole is referred to as social value. Value is analysed into costs, benefits and risk.

Table 1 shows the risk adjusted Net Present Social Value (NPSV) for each shortlisted option, and the benefit-cost ratio, compared to the 'business as usual' option (Option 0). NPSV represents the total social value (all costs, benefits and risks for the option), adjusted to take into account of the time value of money (following Green Book rules on discounting). The appraisal covers a 60 year period, considered to be the useful economic life of the asset. All costs are uninflated with the base year as 2019/20.

**Table 1:** Summary of economic appraisal

[Redacted]

Options 3 and 4 have the highest incremental NPSV and benefit-cost ratio. Option 4 has been rejected on the basis of affordability.

Therefore, Option 3 has been selected as the preferred option.

### 1.3.4 Sensitivity analysis

Sensitivity analysis has been conducted to test the robustness of the selection of the preferred option. The assessment demonstrates that the selection of the preferred option is not sensitive to changes in any individual assumption.

The following scenario has been constructed as a downside scenario, where multiple assumptions have a less favourable impact:

- Sensitivity 1: Capital costs increase by 25%
- Sensitivity 2: City Road sales proceeds at the CBRE downside valuation
- Sensitivity 3: Reduced improved clinical outcomes benefit by 25%

- Sensitivity 4: Reduced NHS growth to the reprovision growth rate assessed by Edge Health as part of the DMBC
- Sensitivity 5: Reduced private patient growth to overall market growth rate of 2.5% p.a.

The impact of this on the economic case is summarised in the following table:

[Redacted]

This demonstrates that in this downside scenario, the conclusion of the economic appraisal remains the same, with the preferred option having a significantly positive NPSV and a benefits-cost ratio of 3.2.

### **1.3.5 Preferred option**

The option to build a new facility at the St Pancras site with an area of 39,500 square metres (Option 3) has been identified as the preferred option. Economic appraisal of the shortlist has demonstrated that this is the option with the highest NPSV and benefit-cost ratio, and this conclusion is not sensitive to reasonable changes in the assumptions used.

## **1.4 Clinical quality case**

### **1.4.1 Clinical pathways**

The clinical case for change was reviewed by the London Clinical Senate in November 2018, which noted “a clear, clinical evidence base to support the proposed move of the services at City Road to the new site at St Pancras Hospital”.

Moorfields has developed proposed clinical models for each of its core services (outpatients, A&E and urgent care, surgery and paediatrics), which form the basis of the design brief, IT and workforce plans. These have been developed by user groups, based on the needs of patients. Patient involvement in design development is planned through these user groups, and the patient-led Oriel Advisory Group.

The core principles underpinning the clinical pathways are:

#### **1) Patient Experience**

- Patient-centred: Users’ needs and perspective drive the design.
- Personalised care: Providing reassurance and reminders to improve patient experience, and additional and appropriate support to vulnerable patients.
- Empowered patients: Proactively educating patients and supporting self-care.
- Research driven: Considering all patients as potential research candidates.
- Great communication: Both face to face and virtually.

#### **2) Workforce**

- Flexible deployment: Staff roles will challenge traditional hierarchies and provide opportunities to take greater responsibility.

- Growth and learning: Encouraging continuous development.
- Supporting career development: Creating desirable roles and career pathways.
- Supporting wider workforce: Recognising the value of community staff.

### **3) Care delivery**

- Diagnostics first: Streamlined diagnostics and imaging.
- Standard bundles: Standardised diagnostic bundles, medication packages and approaches for routine pathways.
- Smart stratification: Stratification of patients into pathways, bundles and research opportunities.
- Use of technology wherever possible, to foster partnerships with community providers to provide seamless care across acute and community settings.
- Effective referral standards.

### **4) Supporting infrastructure**

- Increased automation to deliver quality care.
- Paperless: Improving data capabilities and reducing clerical administration.
- Flexible spaces: To future-proof the trust's ability to deliver services.
- World leading education and research: Acting as a role model nationally and internationally, and being a trailblazer for innovation.

## **1.4.2 Research**

Oriel is a catalyst for meaningful improvements in the way that research is conducted and the benefit this can bring for patients. It will enable progression of a translational model of 'bench to bedside' research, developing new treatments to a stage where they can be made widely available to patients more quickly. This will be facilitated through provision of a Translational Research Laboratory, and space for research in a clinical setting. Research facilities will be shared between Moorfields and UCL IoO, promoting partnership working.

## **1.4.3 Education**

Education facilities in Oriel will provide the partners with the opportunity to have state of the art learning facilities that match the future of learning and teaching. It will provide training rooms that facilitate student interaction and use of technology. Students in ophthalmology, optometry, nursing and other clinical groups will benefit from more exposure to clinical practice, which will improve the quality of their education. Oriel will also serve as a recruitment tool, providing an attractive place to work for the best graduates as well as more experienced staff from other trusts.

## **1.4.4 Workforce**

Workforce plans for Oriel build upon the service models and existing trust workforce strategy. The following principles set out the key workforce changes in Oriel:

- **Upskilling** – there is an ambition to upskill nursing and technical staff, thereby reducing the amount of consultant time required for certain tasks.
- **Ensuring an appropriate skill mix** – this will enable patient stratification so low-complexity patients can be seen by less senior staff, with senior oversight.



- **Improving efficiency** – staff will be able to spend more time undertaking core activities with the introduction of virtual clinics, and improved patient flow.
- **Increased automation** – this may reduce headcount in some areas. Plans include automation of patient check-in, theatre stock management and digital triage in A&E.
- **Care closer to home** – Moorfields has committed to continue to work with commissioners to move care into the Moorfields network and community settings.

#### 1.4.5 IT

The digital aspirations for Oriel are:

- **Delivery of truly patient-centred care** – ensuring that patients and staff are fully informed about care plans, and enabling the patient to actively engage with their care and self-manage their condition wherever possible.
- **Support improved service efficiency** – smoothing the patient journey through Moorfields' well defined and standardised clinical pathways.
- **Delivering more care in the community** – through virtual clinics and sharing information with other care providers.
- **Improving access to services** – for example, patients will be directed through the new centre using a combination of visual and intelligent audio guidance.
- **Collaboration and integration** – data will be available to clinicians as and when required across multiple devices. Data will be captured directly, close to its source and shared with the patient and other health professionals where appropriate.
- **Clinical image management and research** – infrastructure will be in place to support rapid and reliable access to clinical images.
- **Education** – infrastructure and applications (e.g. desk-top video conferencing, recorded consultations) will enhance the educational experience.

### 1.5 Finance case

The purpose of the Finance Case is to assess the affordability of the preferred option selected in the Economic Case, from the perspective of the trust's budget. For this purpose, affordability has been defined as:

- Cash balances above £5m in every year.
- Underlying surpluses (which excludes non-recurrent items e.g. relating to the transition to the new site) in every year.
- Adjusted surplus (the measure used by NHSI) by FY29.

#### 1.5.1 Summary of financial forecast

The following table summarises the forecast financial performance of the trust up to FY29.



**Table 2: Finance Case overview**

[Redacted]

Key points:

- By FY29 there are additional recurrent revenue costs of £XXXm – consisting of PDC (£XXXm), depreciation (£XXXm), lease costs (£XXXm), IT costs (£XXXm). The trust is forecasting an adjusted surplus of £XXXm in that year, with the costs of the new facility offset by CIP and margin on growth in activity.
- FY26 and FY28 show deficits due to the impact of transitional costs (excluded from the underlying surplus). There are no further transitional costs after this year, and the trust is forecast to report adjusted surpluses in FY29 onwards.
- The cash balance does not fall below £5m in any year.
- By FY29 all of NHSI's key risk metrics are forecast as a '1' (the lowest risk) or '2'.
- The conclusion of this is that the preferred option is considered affordable.

### 1.5.2 Source and application of capital funding

Figure 1 summarises the sources and application of capital funding for the preferred option.

**Figure 1: Sources and application of capital funding**

[Redacted]

Key points:

- Land purchase of £XXXm for 2 acres of St Pancras site. This is showing the cost net of the UCL contribution of £XXXm. It includes £XXXm in relation to Stamp Duty Land Tax.
- Design and construction costs based on RIBA stage 1 costs assessed by Gardiner and Theobald (G&T – the trust's cost consultants / quantity surveyors)
- City Road proceeds are based on the midpoint of CBRE's valuation (£XXXm for whole site) split between Moorfields and UCL on the basis of an expert determination.
- Charitable donations of £XXXm – over 50% of this has been committed to by donors.
- £XXXm of STP/PDC funding – approved by DHSC as part of the Phase 4 capital bids.
- £XXXm of Moorfields cash – as set out in the previous section, the cash balance remains positive throughout the period to FY29, and NHSI's liquidity risk rating does not fall below a '2' except in FY26 due to the impact on net current assets of the bridging loan.

### 1.5.3 Incremental impact of the preferred option compared to Business as Usual (option 0)

The forecast set out in section 1.5.1 is based on the preferred option. A forecast has also been prepared based on the Business as Usual option (BAU), in order to demonstrate the incremental impact on the Trust's finances of undertaking the preferred option. The difference between these forecasts is summarised in the following:

**Figure 2: Bridge of the preferred option and BAU adjusted surplus in FY29**

[Redacted]

This demonstrates that by final year of the financial model, FY29 (the second full year after opening the new facility), the preferred option will represent a £XXXm decrease in the adjusted surplus achieved by the trust compared to BAU.

The new facility is assumed to provide five years of additional NHS and private capacity compared to BAU, as well as additional efficiencies over a five year period, and this full benefit is therefore not reflected in the time period of the financial model. By FY30, taking into account these further benefits, the preferred option would represent a net benefit to the trust's surplus position, compared to BAU.

Therefore, the preferred option represents a net benefit to the surplus position of the Trust within three full years of the opening of the facility.

#### **1.5.4 Conclusion**

The Finance Case concludes that the preferred option is affordable.

This has been tested through sensitivity analysis, which demonstrates that the preferred option remains affordable in a downside scenario in which key risks and mitigations have been quantified (set out in further detail in section 6.5). The preferred option will be a net benefit to the Trust compared to the BAU option by the third full year after opening.

### **1.6 Commercial case**

#### **1.6.1 Procurement strategy**

Following workshops with UCL and Moorfields, expert procurement advice and extensive market engagement, the partners have selected a contractor procurement route with the following characteristics:

- **Design and build** was selected over traditional procurement as it enables transfer of design and construction risk to the same party upon contractor appointment, provides earlier cost certainty, and enables a shorter programme.
- **Two-stage** procurement was selected over single-stage as is anticipated, given the size and value, that main contractors will only consider a two stage tender route. This

has been confirmed through market feedback. In addition, this will encourage increased competition, transparency and innovation.

- **Official Journal of the European Union (OJEU)** has been selected over a framework route to allow full competition of the market place.

The **benefits** of this approach are:

- An OJEU tender will allow full competition of the market place.
- Main contractor market will be unlikely respond to a single stage tender.
- The proposed procurement route will retain competition until a fixed price is agreed.
- The programme allows the main contractors time to consider and integrate innovation and/or off site fabrication in the design.
- A contractor-led Stage 4 design places progression of detailed design with those responsible for delivery.
- Control of the programme up to contractual award, due to retained competition during second stage process, is maintained by the partners.

It is likely that the two contractors retained for the second stage of the tender will seek payment if not selected, to contribute towards the significant bidding costs incurred by the tendering contractors. This proposal is supported by Moorfields and UCL.

### **1.6.2 Delivery vehicle – enabling a partnership approach**

In order to support a true partnership approach to project delivery, which enables Moorfields and UCL to share potential risks and upsides and supports joint working in the new centre, the partners are proposing to establish a Joint Delivery Vehicle (JDV). This will separate the project from each organisation's 'business as usual' activities, ensuring it benefits from the level of resource and focus required for successful delivery, while retaining overall management oversight within the remit of each body's governance structure. The terms of the JDV will be confirmed after OBC approval. The following principles have been agreed:

- The JDV will be a Limited Liability Partnership.
- It will be c.70% owned by Moorfields and c.30% by UCL (exact split to be agreed).
- The JDV will run Hard and Soft FM services, to ensure consistency and efficiency.
- Governance will be designed to give the JDV sufficient independence to make key decisions, whilst ensuring each partner retains a level of control to assure their board (Moorfields) or council (UCL) that they can strategically manage their ownership, benefits and risks.

The proposals will be subject to formal legal advice and sign-off by the trust's external auditors. It will require NHSE/I approval in line with *Addendum to the transactions guidance – for trusts forming or changing a subsidiary (November 2018)*.

### **1.6.3 Facilities Management (FM) services**

Moorfields and UCL both have a range of outsourcing and in-house solutions for Hard and Soft FM. In Oriel, it is planned that these services will be procured and managed by the JDV. Details of this, including the procurement strategy, will be developed for FBC.

#### **1.6.4 Equipment strategy**

An equipment strategy has been developed by the trust's equipping advisors. Its objective is to ensure that the trust has fully equipped facilities, keeping pace with technological developments, whilst also securing best value for money once the development is completed. The capital cost in this OBC assumes that 40% of Moorfields' existing equipment will transfer, based on lifecycle replacements happening between now and 2026.

The equipment strategy will continue to be developed exploring the procurement options available, accommodating existing equipment and analysing forecasts of future activity taking account of clinical developments and technologies.

#### **1.6.5 Assurance of value for money**

The estimated capital cost of the scheme, which is based on the RIBA Stage 1 design, has been benchmarked against similar projects, including buildings containing health, research and science accommodation, in both a public and private setting. This analysis shows that the cost per m<sup>2</sup> of Oriel is very similar to the benchmark average of the sample.

The purchase price of the St Pancras site is based on a value appraisal undertaken by independent property advisors in line with RICS valuation guidance, and is considered to represent good value for money.

#### **1.6.6 Acquisition of the St Pancras site**

Moorfields and C&I have entered into an option agreement which gives Moorfields the ability to acquire 2 acres of the St Pancras site on pre-agreed terms at a price of £XXXm (excluding tax). This will be wholly owned by Moorfields, with a £XXXm lease premium paid by UCL IoO.

The partners have undertaken a pre-planning application process with LB Camden, who wrote to the trust in July 2019 stating their support for the key principles of the proposed scheme, subject to further development. The partners plan to submit a planning application for the site in September 2020.

#### **1.6.7 Disposal of the City Road site**

The City Road site will be sold subject to planning, in order to achieve best value while minimising the partners' exposure to risk and costs associated with planning. This strategy will give the partners a level of certainty on the disposal receipt, with receipt of funds when the town planning application is granted.

## 1.7 Management case

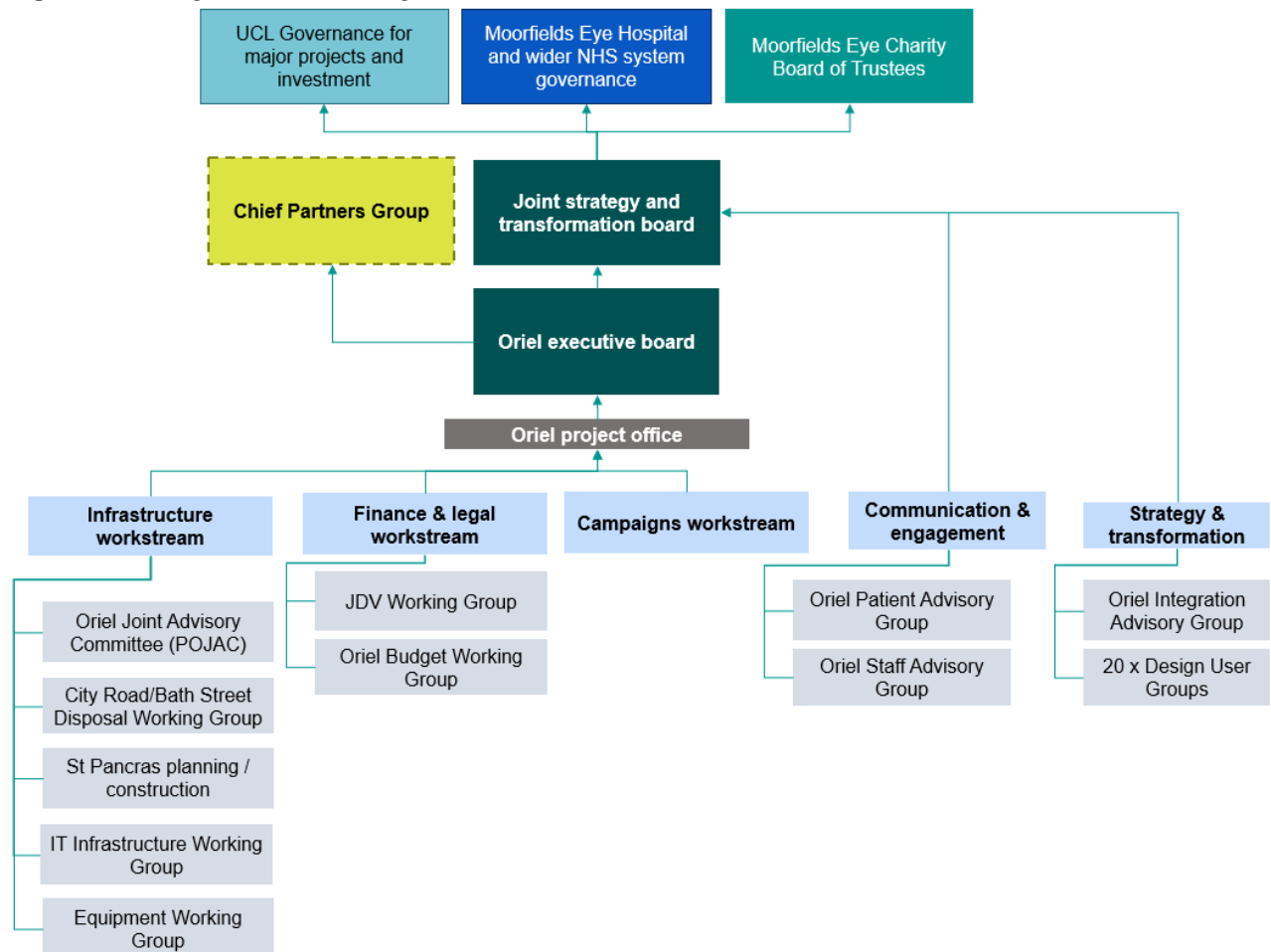
### 1.7.1 Project framework

The project governance has been established according to the principles of PRINCE2 and Managing Successful Programmes (MSP). The key governance principles for Oriel are:

- Oriel is a collaborative of three independent organisations; UCL (IoO), Moorfields Eye Hospital and Moorfields Eye Charity.
- The partnership will aim to harness the best of each individual partners' strengths – the sum of the whole is worth more than each part.
- The project will produce a single shared suite of project documentation (financial model, programme plan, risk register, benefits register etc), working to a single critical path, delivered by a joint project team. Organisation-specific business cases will be produced to align with the governance requirements of each.

The governance and reporting structure is set out in the figure below.

**Figure 3: Oriel governance arrangements**

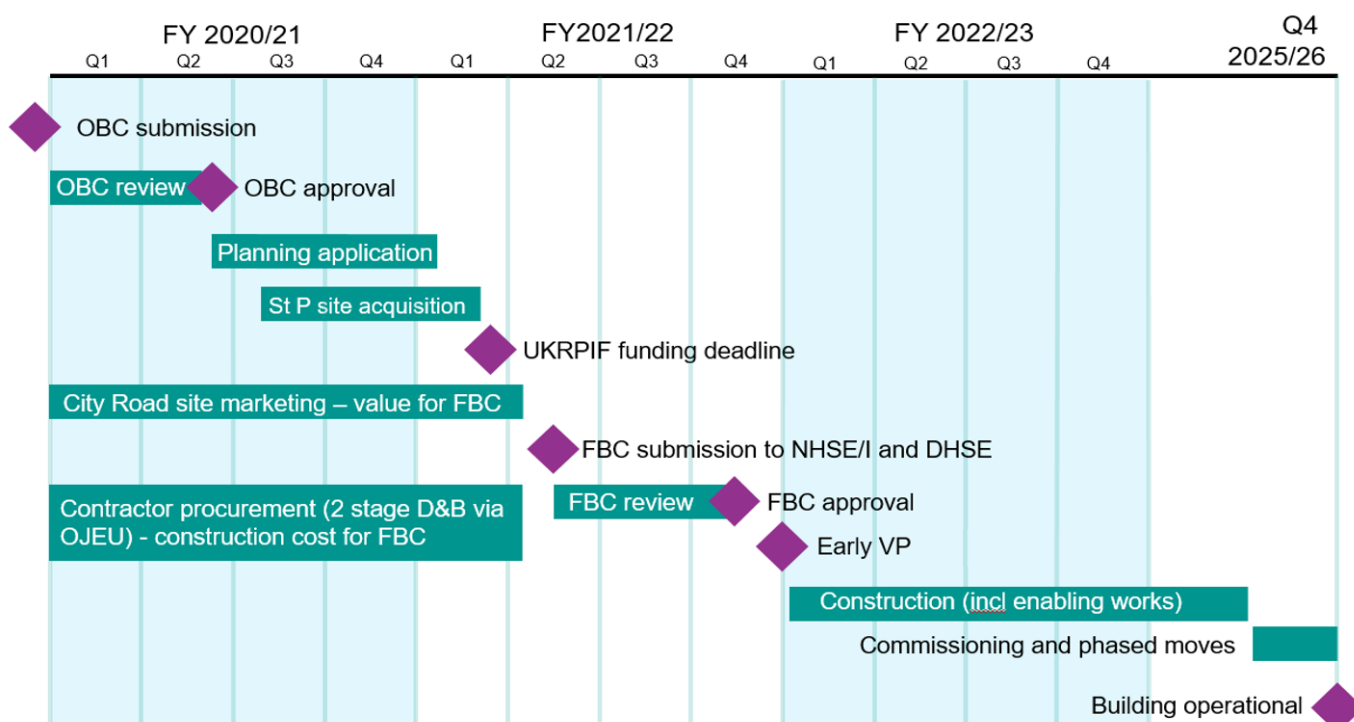


The project has established change control processes to ensure any material changes are signed off appropriately and controlled to ensure any cost and programme implications of proposed changes are understood and mitigated. Governance arrangements have also been set up to oversee organisational change, which is required in order to achieve maximum benefit from the investment.

### 1.7.2 Programme milestones

Key milestones are shown in the diagram below:

**Figure 4:** Oriel critical path



The interdependencies between these and C&I's delivery programme are monitored at monthly meetings with Moorfields, C&I, the Whittington and regulators.

### 1.7.3 Benefits

Oriel will deliver significant **benefits** including enhanced patient experience, more efficient service delivery, capacity for changing demand, and integration between research, education and clinical services. Critically, Oriel will enable Moorfields to remain at the very forefront of service delivery and clinical research, leading the way in developing new treatments and technologies for the benefit of the NHS and beyond, as well as flexing to respond to a changing clinical landscape.

The benefits realisation plan is included in Appendix 8A which sets out how each benefit will be measured. These have been identified through a benefits mapping exercise involving key clinical and non-clinical staff, and reflect the benefits quantified in the Economic Case where

possible. Most benefits have baseline and target data (which will be further developed for FBC), with a responsible owner identified. These individuals will be responsible for ensuring benefits are achieved. Progress will be monitored by the Oriel Executive Board, which will take appropriate corrective action should delivery be threatened.

### 1.7.4 Risk management

The project risk register is a live document in which risks are logged, scored based on their probability of occurring and their likely impact, and assigned a responsible owner and mitigating actions. The risks are reviewed regularly to ensure that all reasonable measures have been taken to mitigate them. The current top risks to Oriel are shown below. The full risk register is included at Appendix 8B.

**Table 3: Oriel top risks**

<b>Risk</b>	<b>Potential impact</b>	<b>Mitigation</b>	<b>Post-mitigation score</b>
Delay of Vacant possession at St Pancras by C&I	Programme delay and increased inflation costs.	<ol style="list-style-type: none"> <li>1. Negotiations ongoing with C&amp;I to achieve VP.</li> <li>2. Chief partners meeting monitors overall programme.</li> <li>3. Construction programme rescheduling</li> </ol>	16
Bids on City Road site not in line with site valuations	Project cannot meet its capital funding requirements.	<ol style="list-style-type: none"> <li>1. Pursued disposal as joint approach to maximise marriage value. Sensitivity analysis modelled.</li> <li>2. Ongoing engagement with town planners and property market.</li> </ol>	15
RPIF funding cannot be drawn down by deadline	Project unable to meet its capital funding requirements. Reputational impact	<ol style="list-style-type: none"> <li>1. Programme aligns with RPIF dates.</li> <li>2. Ensure agreement between Moorfields, C&amp;I and UCL to enable transaction.</li> </ol>	15
Philanthropic targets not met	Project unable to meet its capital funding requirements.	<ol style="list-style-type: none"> <li>1. Continued monitoring of progress by campaign workstream.</li> <li>2. Due diligence into all prospects and donors.</li> <li>3. Workshop with fundraising consultant.</li> </ol>	12
UCL business case approval delayed	Potential delay to project	<ol style="list-style-type: none"> <li>1. Consider de-scoping elements of the project.</li> <li>2. Create a robust business case aligning all elements (financial, academic, estates).</li> <li>3. Engage with BC approvers.</li> </ol>	12



### **1.7.5 Communication and engagement strategy**

Oriel has benefitted from significant stakeholder engagement to date, through the public consultation which captured the views of over 4,600 people. Pre-consultation and consultation activities have extended and strengthened relationships with patient and community representatives, particularly people associated with the sight-loss community. Around 450 people expressed a specific interest in staying involved with the Oriel programme, the Oriel Advisory Group of 17 members has agreed to continue working closely with the programme, and leading sight loss charities have offered their expertise to the next stages of design and planning.

Involvement of patients and the public will continue through the Oriel Advisory Group, user groups to develop designs, and wider engagement as required. Project updates will be shared through a variety of channels including the Oriel website, newsletters and Moorfields patient participation groups.

Stakeholders including commissioners, local authorities and local interest groups will continue to be engaged and informed of proposals, according to their relationship with the project.

A staff engagement strategy has been developed to ensure appropriate involvement in project planning, and widespread buy-in to proposals and new ways of working.

### **1.7.6 Project assurance and evaluation**

A peer review of the project was undertaken by Guys and St Thomas NHS Foundation Trust in late 2019. Their recommendations for the project are included at Appendix 8F.

Moorfields has undertaken a lessons learnt review of the Richard Desmond Children's Eye Centre (RDCEC) which was built in 2007, which is being factored into project delivery.

The trust is committed to undertaking a Post-Project Evaluation (PPE) after completion of Oriel, to learn lessons from the delivery and assess achievement of benefits, in line with best practice.

## **2. Introduction to the Outline Business Case (OBC)**

This Outline Business Case (OBC) sets out the case for investment in relocating Moorfields' ophthalmology services from their current location at City Road, to a new facility on the St Pancras Hospital site. This project is known as Oriel.

The scope of this project is to provide a new building at St Pancras, with associated equipment, staffing and organisational change, to deliver both local and specialised clinical services, education and research. This will provide a significantly improved clinical environment, designed specifically to meet the needs of people with sight-loss, and enable an expanded and patient-centred approach to research which will further contribute to development of new technologies for diagnosis and treatment of ophthalmic conditions. An improved education offering will attract high-calibre trainees and staff members to remain at Moorfields, as well as improving the overall supply of eye-care clinicians across London and the UK.

This is a joint project between Moorfields and UCL IoO (referred to as 'the partners'). In addition, Moorfields Eye Charity (MEC) have an important role, having committed to raise significant capital and revenue funding for both partners. While some areas of the new centre will be primarily designated to one or other party, and the costs of the building will be split accordingly, the vision for the project is that the two organisations will be truly integrated. Implementation of this from a commercial and financial perspective is set out in the Commercial Case (chapter 7).

The total capital cost of the project to Moorfields is **£XXXm**.

### **2.1 The journey so far**

In 2010 the leadership teams of the partner organisations established the re-provision project, to address the significant constraints imposed by the existing estate (described in chapter 3 of this OBC), with the aim of ensuring Moorfields and UCL IoO remain at the forefront of ophthalmic clinical care, research and education. Work was undertaken in 2012 and early 2013 with Moorfields executives and clinical leads to enable a decision to be made as to whether the partners would pursue an option to develop the City Road campus (the 'stay' option) or relocate elsewhere in North London (the 'go' option). A pre-feasibility report was developed in 2013 which concluded that the preferred option was the 'go' option, defined as relocating the partners to the Kings Cross / Euston / St. Pancras area. The St Pancras site was identified as an option at this stage. This decision was supported by the Moorfields trust board and membership council, and corroborated by UCL who favoured the St Pancras location due to its location near the UCL Bloomsbury campus.

Following this decision, a Land Acquisition Business Case was approved by Moorfields and UCL in 2014, which set out the case for identifying and purchasing up to two acres of land in the Kings Cross / Euston / St. Pancras area. This was refreshed in 2017, when the opportunity arose to acquire part of the Camden and Islington NHS Foundation Trust (C&I)

site in St Pancras, and represented the Strategic Outline Case (SOC). This SOC was approved by the Moorfields trust board in June 2017 and NHS Improvement (NHSI) in January 2018. UCL also received commitment from their Finance Committee to progress Oriel in October 2017. Due to a change in the government guidance around public consultation during the approval period, the Department of Health and Social Care (DHSC) reviewed the SOC but were unable to issue an approval in advance of the public consultation. In December 2019, DHSC confirmed that OBC review and approval could proceed without SOC approval.

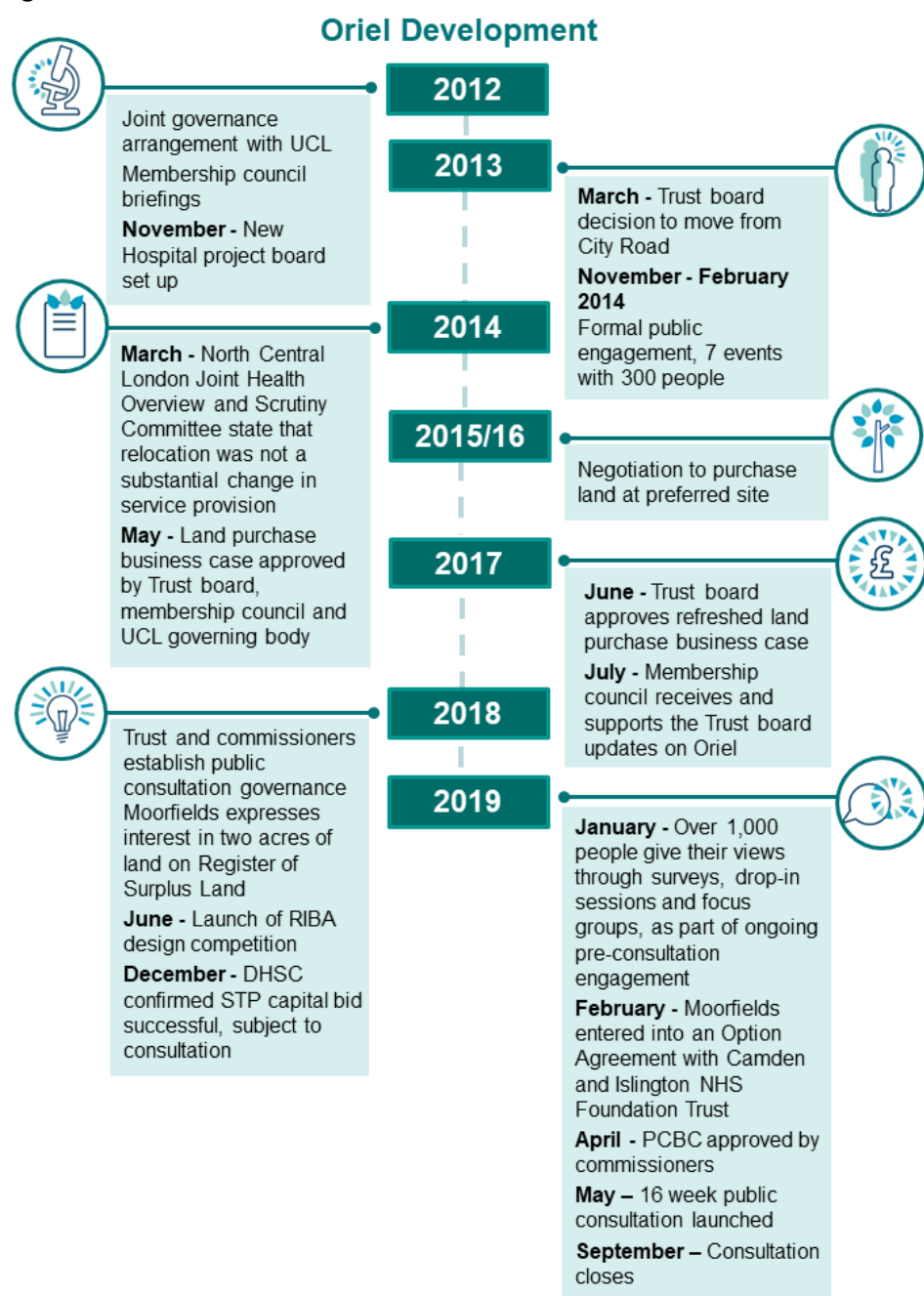
In order to secure Public Dividend Capital (PDC) funding for the scheme, the trust submitted a Wave 4 STP funding application to NHS England in 2018 for £XXXm of PDC, and a £XXXm bridging loan to be repaid once receipts for the City Road site have been received. This was approved by NHS England and DHSC in December 2018. Note, since this, the bridging loan requirement has increased to £XXXm.

Moorfields' commissioners submitted a Pre-Consultation Business Case (PCBC) to NHSE/I in February 2019 which set out the plans for public consultation on the proposals for Oriel. This was approved by NHS England (on behalf of Specialised Commissioning) and the Committee in Common (representing the 14 CCGs who commission over £2m p.a. of activity from Moorfields at City Road) on 24 April 2019. The public consultation commenced on 24 May 2019. The Decision-Making Business Case (DMBC), which collated feedback received as well as the Integrated Impact Assessment, system modelling and options appraisal validation, was approved by commissioners on 12 February 2020, on the basis of a series of recommendations. These are described in section 3.13.

UCL prepared a Business Case setting out the key drivers for the project and likely financial impact in 2017, which was approved by their Finance Committee in October 2017. This confirmed the university's commitment to the scheme, and committed funding to share the cost of the design process to RIBA stage 2. In addition, UCL submitted a bid to the UK Research Partnership Investment Fund (UKRPIF) at Research England for a capital contribution to the scheme, securing £XXXm funding towards their portion of the project.

The timeline for the project so far is summarised in the diagram below.

**Figure 5: Oriel timeline to date**



## 2.2 Changes from SOC to OBC

The key project changes since the SOC approval in January 2018 are:

- **Land acquisition:** The SOC was based on purchase of the Oriel portion of the St Pancras site by Moorfields Eye Charity (MEC). This OBC sets out plan for Moorfields to purchase the site with a lease-back to UCL. The MEC capital contribution to the scheme is set out in the Finance Case (section 6.3.1).

- Certainty of funding: Since the SOC was approved, Moorfields have successfully secured STP Wave 4 funding, and UCL have been awarded UKRPIF (Research Partnership Investment Fund) funding from NHS England. Further detail of the Moorfields capital funding sources are set out in the Finance Case (section 6.3.1).
- The public consultation has confirmed public and commissioner support for the scheme, on the basis of recommendations set out in section 3.13.

The three options shortlisted at SOC stage have been confirmed in the options refresh exercise and were brought forward for consideration at OBC stage:

- **‘Business as usual’** – address backlog maintenance and compliance.
- **Stay and redevelop at City Road.**
- **Preferred way forward** – move to St Pancras.

As more detailed work has been carried out in the development of the OBC, two further options have been identified for inclusion on the shortlist and quantitative appraisal:

- **Variant of Do nothing (BAU)** – this is a **do minimum option** which describes the minimum investment required at the City Road site in order for Moorfields to remain in occupation for the long term. This reflects additional works above and beyond the ‘mend and make do’ investment currently taking place on the site, and is described in more detail in Appendix 4B.
- **Variants of the preferred way forward** – the SOC identified a preferred way forward of a 43,000m<sup>2</sup> new facility on the St Pancras site. Design development within better-defined affordability constraints has identified two variants of this option:
  - 39,500m<sup>2</sup> new facility, which meets affordability requirements and accommodates all baseline clinical, research and education services.
  - 43,000m<sup>2</sup> new facility which represents an upside scenario. The larger size will accommodate space for commercial opportunities to expand private patients, research and education where it is clear the additional contribution will cover the additional capital cost. For example, there is an opportunity to form commercial partnerships with pharmaceutical and biosciences companies however at OBC stage negotiations are not sufficiently advanced to provide adequate certainty that this is a viable option.

Further detail is provided in the Economic Case (section 4.4).

### 3. Strategic case

#### Strategic Case – chapter summary

This Strategic Case chapter is split into three parts. **Part A – agreeing the strategic context** explains how Oriel will support, and is consistent with existing national, regional and local strategy. It provides an overview of the St Pancras redevelopment programme, of which Oriel is part.

**Part B – making the case for change** provides an overview of Moorfields and its services, as well as the partnership between the trust and UCL. It details the significant engagement undertaken with clinical leads, patients and staff, commissioners and others in developing the case for change, investment objectives and options.

It also sets out the case for change, as follows;

- Poor patient experience arising from the estate
- Risk of future service failure
- Inefficiencies in service delivery
- Significant investment will be required to keep the current buildings running
- Inability to support future demand changes
- Opportunity to improve research through integration
- Opportunity to improve education through integration

This section also outlines further considerations in the case for investment. The proposals have been subject to a public consultation, which confirmed the case for change and supports the move (with 73% of survey respondents agreeing that a new centre is needed).

Finally, Part B sets out the capacity requirements for the new centre.

Having established the requirement for investment, **Part C** determines the potential business scope and key service requirements. It goes on to identify the main benefits, strategic risks, constraints and dependencies.

Oriel will deliver significant benefits including enhanced patient experience, more efficient service delivery, capacity for changing demand, and integration between research, education and clinical services. Critically, Oriel will bring Moorfields to the very forefront of service delivery and clinical research, enabling it to remain a leader in developing new treatments and technologies for the benefit of the NHS and beyond, as well as flex to respond to a changing clinical landscape.

The aspirations of how Moorfields will improve clinical services through Oriel are described in Chapter 4 – Clinical Quality Case.

#### **Key supporting documents:**

- **Appendix 3A – Strategic context (detail)**
- **Appendix 3B – Commissioner-led demand modelling**
- **Appendix 3C – Demand and capacity modelling (detail)**



- **Appendix 3D – Moorfields’ response to consultation**
- **Appendix 3E – Letters of support**

## **PART A – AGREEING THE STRATEGIC CONTEXT**

### **Agreeing the strategic context – section summary**

This section outlines the context in terms of the national, regional and local policies relevant to this investment, and how the proposals align to existing policies and strategies. It also provides an overview of the St Pancras site redevelopment programme, of which this project forms one part.

Oriel aligns with the strategic context by delivering:

- Improved quality and effectiveness of clinical service.
- Improved patient experience, including service for private patients.
- Provision of services based on network structure with a new integrated Moorfields/UCL IoO facility at the centre.
- Specialised services concentrated in new central London hub, where clinically appropriate.
- Ongoing development of sustainable basic and translational research.
- Increased patient participation in research programmes.
- Significant benefits of close proximity to concentration of research, education and health care organisations including UCL Bloomsbury campus and London’s Knowledge Quarter.

### **3.1 National strategy**

The table below provides an overview of the key national strategies which have been used to inform development of Oriel. A full analysis of the national strategic context, supported by a detailed commentary on the most significant strategies, is included in Appendix 3A.

National policy highlights a need to deliver care efficiently and effectively, focusing on prevention and delivery of care in the most appropriate setting. Oriel will provide a fit-for-purpose new building designed around optimum patient flows to improve efficiency of patient care, and enabling the trust to continue to achieve excellent patient outcomes. The strategies listed below also promote research as a key mechanism to tackle the increasing prevalence of eye disease, improving quality of life for the UK population – a principle which is at the heart of the partners’ plans for Oriel.

**Table 4: Summary of national strategies relevant to Oriel**

<b>Strategy</b>	<b>Description</b>
<b>Ophthalmology strategies</b>	
The Way Forward (2017)	The 2017 Way Forward was commissioned by the Royal College of Ophthalmologists to identify current ways of working and schemes devised by



	<p>ophthalmology departments across the UK to meet the increasing demand for ophthalmic services. Part of this work involved assessing the anticipated increase in demand for ophthalmic services over the next 20 years in each of the high-volume areas of eye care.</p> <p>The findings of this have informed the activity projections upon which the Oriel functional content is based. Further detail of this work and its significance in relation to Oriel is provided in section 3.10.5.</p>
Ophthalmology Getting It Right First Time (GIRFT) (2019).	<p>GIRFT is a national programme led by frontline clinicians that is designed to improve the quality of care within the NHS through tackling unwarranted variations in care. The latest GIRFT report for ophthalmology identifies rapidly rising demand for ophthalmology services in a system that is struggling to keep pace. The ophthalmology workforce has not grown in line with demand, many hospital ophthalmology departments are cramped with little scope for expansion, and reliant on outdated or limited IT systems.</p> <p>The key recommendations in the 2019 ophthalmology GIRFT report are around improving referrals, use of primary and community care for routine care, and streamlining surgical practice. The City Road site is unable to respond to many of the recommendations set out in the ophthalmology GIRFT report due to:</p> <ul style="list-style-type: none"> <li>• Layout constraints which inhibit the trust's ability to provide a streamlined, time efficient ambulatory surgical care service at the City Road site (described further in section 3.10.3, case for change).</li> <li>• The site is still configured with Nightingale wards located some distance from operating theatres, which reduces the number of patients treated in a timely manner. Significant improvements in surgical efficiency cannot be achieved in the current physical configuration.</li> <li>• For glaucoma, age-related macular degeneration and diabetic retinopathy services, GIRFT has highlighted the use of virtual clinics and the need to consider the location of physical clinics. Given advances and the cost of technology, there is a strong case for hosting such clinics in an easily accessible hospital setting, therefore avoiding the potential duplication of expensive and highly technical equipment required to run such clinics effectively. The current building would require significant investment to provide the infrastructure required to implement virtual clinics (described further in section 3.10.2)</li> </ul> <p>The design of a purpose-built centre will incorporate these GIRFT recommendations to deliver an operationally-efficient and leading practice service is delivered.</p>
<b>Over-arching strategies</b>	
The NHS Long Term Plan (2019)	<p>NHS England's 10 year plan addresses the four key concerns about the NHS:</p> <ul style="list-style-type: none"> <li>• Funding.</li> <li>• Staffing.</li> <li>• Increased healthcare inequality between locations of the UK.</li> </ul>

	<ul style="list-style-type: none"> <li>Pressures from a growing and ageing population.</li> </ul> <p>The Long-Term Plan is set out in 7 chapters, each detailing a key theme to address these concerns. The ways in which Oriel will contribute to delivery of these is summarised in Appendix 3A and detailed throughout this OBC</p>
Naylor Review (2017)	<p>The Naylor review identifies the need to release value from built assets when these become surplus to requirements, particularly in high value areas such as London, for re-investment in clinical facilities. Oriel aligns with this strategy through disposal of its high value City Road site to release receipts to re-invest in a high quality new facility. Sir Robert Naylor has identified Oriel as a priority for London, and chairs a joint meeting to oversee the programme of works with C&amp;I and the Whittington.</p>
The Secretary of State's 4 Tests of service reconfiguration (December 2013)	<p>This guidance states that that proposed service changes should be able to demonstrate evidence to meet four tests:</p> <ul style="list-style-type: none"> <li>Strong public and patient engagement.</li> <li>Consistency with current and prospective need for patient choice.</li> <li>A clear clinical evidence base.</li> <li>Support for proposals from clinical commissioners.</li> </ul> <p>NHS England have introduced a fifth test concerning bed closures, which does not apply to Oriel which will have very few inpatient beds.</p> <p>The ways in which Oriel aligns with these is described in Appendix 3A, and through the commissioners' DMBC.</p>
UK Vision Strategy 2013-2018 (Vision 2020)	<p>The 3 key aims of the strategy are for:</p> <ul style="list-style-type: none"> <li>Everyone in the UK to look after their eyes and their sight.</li> <li>Everyone with an eye condition to receive timely treatment and, if permanent sight loss occurs, for early and appropriate support to be available and accessible to all.</li> <li>A society in which people with sight loss can fully participate.</li> </ul>
International Research and Innovation Strategy (2019)	<p>This national strategy aims to ensure that the UK remains a global leader in science, through attracting the top talent and providing a global hub for innovation. This will help realise the potential of life sciences to deliver global benefits and contribute to the UK economy. This strategy identifies collaboration as key to achieving excellence in the fields of science and technology.</p>
Life Sciences Industrial Strategy (2017)	<p>This document sets out proposals for how the UK can continue to capitalise on its strengths in the life sciences sector, both to encourage economic growth and to improve health outcomes for patients.</p> <p>Its aspirations are to build upon the UK's strong science base to further develop the industry into a globally-unique and internationally competitive life sciences ecosystem, supported by collaboration across industry, government, the NHS, academia, and research funders to deliver health and wealth. The strategy's five key themes are:</p> <ul style="list-style-type: none"> <li>Science: Maintaining strength and international competitiveness.</li> <li>Growth: Encourages companies to start and grow.</li> </ul>

	<ul style="list-style-type: none"> <li>• NHS: Collaboration between the NHS and industry, facilitating better care for patients through better adoption of innovative treatments and technologies.</li> <li>• Data: Using data and technology to support research and patient care.</li> <li>• Skills: Ensuring that the sector has access to a pool of talented people to support its aims.</li> </ul> <p>Oriel clearly fits into the Government's vision of maintaining innovative, world-leading, transformational and collaborative centres for the Life Sciences Sector in the UK. Oriel will be the world's first fully integrated ophthalmology and research centre and will enable the Moorfields / UCL IoO partnership to grow its status as a world leader in clinical care and research.</p>
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### 3.2 Regional strategy

The table below summarises the Regional Strategies that have been used to inform development of Oriel. Moorfields patients come from 109 CCGs, so there is no one regional strategy which is relevant to this nationally renowned provider. This section focuses on NCL, the STP in which the City Road and proposed St Pancras sites are located, and which is a significant commissioner of Moorfields activity. Further detail is provided in Appendix 3A.

NCL STP strategies focus on future-proofing the NHS estate in the context of a growing and ageing population. Oriel forms a key part of the NCL estates strategy, both due to its significant benefits to the region, and its strategic relationship with Camden and Islington NHS Foundation Trust (C&I) whose plans are set out in section 3.3. Commissioner support has been secured through approval of the DMBC and the letter of support at Appendix 3E.

**Table 5:** Summary of regional strategies relevant to Oriel

Strategy	Description
North Central London (NCL) STP	<p>In June 2017, NCL STP produced its Sustainability and Transformation Plan which details how it wishes to transform the way health and social care services are delivered in North London. This focuses on improving the health and wellbeing of the community and delivering the best care not only in London, but nationally.</p> <p>In order to achieve their vision that 'Local people deserve to be supported to live happier, healthier and longer lives', the NCL STP has outlined its programme of transformation:</p> <ul style="list-style-type: none"> <li>• Prevention.</li> <li>• Service transformation.</li> <li>• Productivity.</li> <li>• Enablers (e.g. digital, workforce, estates).</li> </ul> <p>In its planned care workstream to deliver these four elements, NCL STP plans to create a system where patient journeys are as efficient, safe and well managed as possible. The STP, together with clinicians and patients, are redesigning pathways using local and global examples of best practice.</p>

	<p>Moorfields is working with NCL on redesigning ophthalmology pathways to ensure they deliver the best model of care for patients. The trust launched its five-year strategy in July 2017 with a new purpose, 'working together to discover, develop and deliver the best eye care'. At the heart of this is the real need to work more closely and in a more integrated way with partners including the IoO, wider STP partner trusts and social services providers. It is this integration that lies at the heart of Oriel.</p> <ul style="list-style-type: none"> <li>• Working together means we collaborate with one another as individuals, with our patients and with other organisations.</li> <li>• Discovering the best eye care means we will focus on setting the agenda, being at the forefront for others to follow.</li> <li>• Developing the best eye care means we will practically apply our discoveries to benefit our patients, staff and the services we provide.</li> <li>• Delivering the best eye care means we will consistently provide an excellent, globally-recognised service.</li> </ul> <p>The NCL STP estates strategy sets out the strategic importance of the St Pancras redevelopment and Oriel.</p>
Wider commissioner plans	<p>The 14 CCGs, and NHS England Specialised Commissioning, who hold significant (&gt;£2m per annum) contracts with Moorfields for activity at City Road, have been closely involved in development of proposals through the development of the Decision Making Business Case (DMBC). Through this process, commissioners have confirmed their support for the proposals and its alignment with commissioning intentions. Commissioning intentions are described further in section 5.2.</p>
London Mayor's six tests	<p>The King's Fund and Nuffield Trust published a report<sup>1</sup> in September 2017 which recommended that greater city-wide leadership is needed to successfully implement the five NHS STPs for London. In response to this, the Mayor of London set six assurances the Mayor requires to give support to the STPs. Compliance with these when implementing service change is considered best practice:</p> <ul style="list-style-type: none"> <li>• Patient and public engagement.</li> <li>• Clinical support.</li> <li>• Impact on health inequality.</li> <li>• Impact on social care.</li> <li>• Hospital capacity.</li> <li>• Sufficient investment.</li> </ul> <p>The ways in which this proposal complies with these are set out in the DMBC.</p>
Medicity London Mayor's Office, 2014	<p>A collaboration between the Mayor of London and the three academic health and science centres to promote life sciences' investment and industry in the London region with the aim of being a world-leading, inter-connected region</p>

<sup>1</sup> Sustainability and transformation plans in London, an independent analysis of the October 2016 STPs (completed in March 2017)

	for life sciences research, development, manufacturing and commercialisation as a stimulus for greater economic growth.
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### 3.3 The St Pancras Redevelopment

Oriel is part of a wider programme of works in the NCL STP to make best use of the St Pancras site, maximising the capital value which can be realised and using it as an enabler to provide high quality facilities for Moorfields, UCL and Camden and Islington NHS Foundation Trust (C&I). This plan includes the following steps (further details of the programme included in section 8.5, Management Case):

- **Whittington Health NHS Trust (WHT)** are undertaking a series of non-clinical service relocations (due to complete June 2020) to vacate part of their site for use by Camden and Islington NHS Foundation trust (C&I).
- **Camden and Islington NHS Foundation Trust** have completed a public consultation and submitted an OBC for the re-location of inpatient beds from St Pancras Hospital to a new facility on the WHT site. Two new mental health community hubs will also be created in Islington and Camden, which will completely vacate the five-acre St Pancras site by July 2022.
- Up to two acres of the St Pancras site will be sold to **Moorfields Eye Hospital NHS Foundation Trust** for Oriel. C&I has appointed a development partner to optimise value from the remainder of the site. The trusts will work in partnership when developing plans for these sites, and submitting a town planning application (described in section 7.8).

This programme will realise significant benefits to patients across Camden and Islington through provision of high quality, modern facilities in more appropriate locations. It involves the release of significant amounts of high-value land to partially fund these developments. The impact of this wider project is set out in the Commercial and Management Cases – as implementation of Oriel is linked to WHT and C&I's town planning process, construction programmes and providing of vacant possession when planned.

### 3.4 Local strategy

#### 3.4.1 Moorfields organisational strategies

Oriel also enables the delivery of key Moorfields local strategies, driven by the organisation's core belief that 'People's Sight Matters', and its three core pillars of excellence; clinical services, research and education. The table below details the Moorfields strategies used to inform proposals for Oriel.

Oriel is a key enabler to Moorfields achieving its ambitions of delivering outstanding clinical care, patient experience and ensuring it can retain its position as a world-leading centre for ophthalmology well into the future.

**Table 6:** Summary of Moorfields strategies relevant to Oriel

Strategy	Description
Our Vision of excellence, 2017-2022	<p>The Moorfields organisational strategy sets out Moorfields' aim to provide the best care for patients now and in the future, and was developed with input from staff, patients and key partners. The strategy is based on 3 key pillars:</p> <ul style="list-style-type: none"> <li>• Clinical services.</li> <li>• Research.</li> <li>• Education.</li> </ul> <p>Moorfields' objectives are as follows: Ambitions:</p> <ul style="list-style-type: none"> <li>• We will pioneer patient-centred care with exceptional clinical outcomes and excellent patient experience.</li> <li>• We will be at the leading edge of research, making new discoveries with our partners and patients.</li> <li>• We will innovate by sharing our knowledge and developing tomorrow's experts.</li> <li>• We will collaborate to shape national policy.</li> </ul> <p>Enablers:</p> <ul style="list-style-type: none"> <li>• We will attract, retain and develop great people.</li> <li>• We will have an infrastructure and culture that supports innovation.</li> <li>• We will have a sustainable financial model.</li> <li>• We will be enterprising to support and fund our ambitions</li> </ul>
Trust workforce strategy (2019)	<p>The organisational workforce strategy considers the following questions, which reflect current workforce challenges, and the opportunities afforded by Oriel.</p> <ol style="list-style-type: none"> <li>1) How do we ensure that we have the staff with the skills capability and capacity to deliver world leading eye care?</li> <li>2) How do we develop the leadership and culture to enable the workforce to grow, thrive and perform at the highest levels?</li> <li>3) How do we ensure that every member of staff, volunteer and student feels welcome, valued and able to contribute to the success of Moorfields?</li> <li>4) How do we ensure that our workforce processes, practices and policies are efficient, aligned and provide best value?</li> </ol>
Quality and safety strategy 2017-2020	<p>The quality strategy sets out Moorfields' ambitions, pledges and practical next steps in delivering outstanding patient care. The strategy sets out what quality means at Moorfields, and will support Moorfields' staff to work together to embed a culture of quality, make positive changes and drive behaviours to deliver an outstanding patient experience.</p>
Clinical strategy	<p>The trust has developed clinical strategies for its four main sub-specialities (based on activity volume):</p> <ul style="list-style-type: none"> <li>• Medical retinal</li> </ul>



	<ul style="list-style-type: none"> <li>• Glaucoma</li> <li>• Cataract</li> <li>• A&amp;E and Urgent Care</li> </ul> <p>The key themes of these are to improve patient stratification, so patients are seen by the most appropriate clinician and only the most complex cases are assigned to the most experienced consultants; and increasing the services which can be delivered virtually. A network clinical strategy is under development, to look at the future of the remaining services provided by Moorfields.</p>
Emerging estates strategy (City Road)	<p>The emerging draft estates strategy sets out the trust's vision for the City Road site over the next 5 years. It has two areas of focus:</p> <p><b>1) City Road – Maintaining ‘Business as Usual’</b></p> <ul style="list-style-type: none"> <li>• Improve patient flows and focus clinical use at City Road.</li> <li>• Continue to manage, maintain and meet statutory and mandatory requirements at City Road.</li> <li>• Ensure City Road can continue to meet projected growth whilst the new site is designed and in time built.</li> <li>• To increase the clinical use percentage at City Road as part of improving efficiency and preparing for the eventual move.</li> </ul> <p><b>2) To feed into Oriel’s design and construction</b></p> <ul style="list-style-type: none"> <li>• Enable the team to inform and enhance the design and development of the new Oriel facility.</li> <li>• Ensure Estates and Facilities have a clear voice in its design – to ensure they can maintain, clean and service the new site.</li> </ul>

### 3.4.2 Moorfields and UCL Joint Strategies

Moorfields and UCL in partnership have developed joint strategies in order to ensure collaborative working when informing Oriel.

**Table 7: Moorfields and UCL joint strategies**

Strategy	Description
Research and Development Joint Strategy 2013-2020 (Moorfields and UCL IoO, 2013)	<p>The aim of the joint strategy is to outline a path for future research collaboratively between Moorfields and UCL IoO to ensure that the benefits for those at risk of eye disease are optimised, and that the continued pre-eminence of both parties continues. The strategy;</p> <ol style="list-style-type: none"> <li>1) draws on the strengths of working in partnership</li> <li>2) recognises the need to recruit and retain premier research talent</li> <li>3) sees the importance of a streamlined well-resourced environment</li> </ol>



Joint Education Strategy 2018-2023 (Moorfields Eye Hospital and UCL IoO, 2018)	In describing the partnership's approach to education, the joint strategy sets out the intention to ensure that UCL IoO and Moorfields remain the global leaders in vision and eye health education. The ambition is to train both a local and global workforce that can address the growing demand for eye care and research.
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## PART B – MAKING THE CASE FOR CHANGE

### Making the case for change – section summary

Following on from the strategic context, this section provides an organisational overview for Moorfields, including its vision and objectives, range of services currently provided and existing financial position.

It sets out the significant stakeholder engagement undertaken to develop the case for change, agree investment objectives and appraise options (further detailed in the Economic Case, chapter 4).

Finally, it sets out the spending objectives, existing arrangements and business needs.

## 3.5 Organisational overview

### 3.5.1 Ophthalmology as a specialised service

Moorfields is a specialist provider of ophthalmology services. Key features of this specialty include:

- Ophthalmology conditions are rarely life-threatening, however, eye symptoms and disorders are very common and can cause considerable distress and anxiety.
- Sight loss has a significant impact on the lives of those who experience it. As well as the emotional impact of sight deterioration, those affected often lose their ability to maintain their independence, retain employment, and participate in society.
- Many eye conditions are related to ageing, such as cataract, glaucoma and macular degeneration, and diabetes, e.g. diabetic retinopathy. The ageing population therefore places an increased pressure on services, and plans for Oriel need to be sensitive to the needs of this population.
- Ophthalmology patients are primarily ambulatory. Most patient attendances are in an outpatient (or similar) setting for screening, diagnosis and ongoing monitoring, or for a procedure such as surgery, injections or laser treatment after which patients can be discharged on the same day. 87% of surgical patients at Moorfields undergo surgery under local anaesthesia<sup>2</sup>, meaning post-operative complications requiring an overnight bed stay are rare. The City Road site has 6 inpatient beds that are used for

<sup>2</sup> Moorfields annual report 2018/19

observation and extended recovery when required. Patients with complex needs requiring overnight care attend neighbouring trusts who partner with Moorfields.

- Many eye conditions need long-term ongoing management to prevent blindness. 77% of outpatient appointments are follow-ups rather than first attendances<sup>3</sup>. Patients often have multiple contacts with services during a single visit, for example a patient may receive multiple diagnostic tests when they come to Moorfields as well as an appointment with a clinician.
- The most common procedure is cataract surgery, which is usually a quick and straightforward procedure, which takes place under local anaesthetic and which usually represents a cure of the condition.
- Unlike cataracts, most other conditions (such as Age-Related Macular Degeneration (AMD) and glaucoma) have no cure, and therefore require ongoing management. This often enables disease progression to be slowed, thereby maintaining patients' ability to maintain quality of life.
- As well as high-volume specialties such as glaucoma, medical retina and cataracts, ophthalmology is characterised by highly complex and specialised services such as ocular prosthetics, ocular oncology and corneal grafting.
- Ophthalmology is a field which experiences rapid service change. Research into new treatments, if successful, can radically change both a patients' chances of maintaining their sight, and the way that care providers need to operate. An example is shown below.

#### **Case study – Research in wet Age-Related Macular Degeneration (AMD)**

Wet AMD is a rapid-onset disease which causes irreversible sight loss. Until recently there was no treatment for this, and following diagnosis, patients were referred to counselling and support services.

In the past decade, treatment involving injections into the eye every 6 months have been shown to halt the progression of this disease. This treatment is now widely offered by Moorfields, significantly improving patient outcomes and quality of life, as well as increasing activity within this patient group.

Clinical trials in the last year have shown early signs of success with an injectable with improved efficacy in the treatment of wet-AMD, which would reduce the frequency with which patients need to attend hospital. This treatment did not pass clinical trial, so is undergoing further development. Research is also underway into injections to treat other eye conditions, as well as laser treatment and other new techniques.

The trust's current position is based on its world leading experts, many of whom are undertaking pioneering research for the benefit of Moorfields patients and the population

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<sup>3</sup> Moorfields annual report 2018/19

worldwide. While the trust does not foresee new treatment options which would significantly change how services are delivered in the next five years, Oriel must be flexible in order to continue to offer patients the best care available. The trust's ambition that Oriel must be flexible for future treatment options is wholly supported by clinicians.

### **3.5.2 Overview of Moorfields' clinical services**

This section provides an overview of Moorfields and its services.

Moorfields Eye Hospital NHS Foundation Trust is the leading provider of eye health services in the UK and a world-class centre of excellence for ophthalmic research and education. In 2007 Moorfields developed the world's largest children's eye centre, the Richard Desmond Children's Eye Centre, on its City Road site. More than half of UK-based ophthalmologists, and many overseas experts, have received their specialist training at Moorfields. The partnership also has one of the largest ophthalmic research programmes in the world.

Moorfields was given Vanguard status in 2014 as an acute care collaboration site, which has enabled it to share its experience of networked care. The trust has also led the establishment of the UK Ophthalmology Alliance, which brings together eye care professionals, patient groups and national ophthalmic bodies across the UK to improve efficiency and pathways, create quality standards and benchmark performance.

Moorfields services are commissioned by 109 CCGs across the UK, 14 of which commission over £2m of services from the City Road site annually. The largest commissioner of services at City Road is NHS England Specialist Commissioning.

Moorfields provides an expansive range of ophthalmic services from a network of around 30 sites, caring for high-volume patient groups with routine medical needs as well as those with rare and complex conditions requiring highly specialised care.

Moorfields is by far the largest provider of inpatient and outpatient acute ophthalmology services in England, over double the size of the second largest ophthalmic provider. In London, Moorfields has a c. 40% market share overall, and delivers 50% of the specialist ophthalmic care for the capital.

Moorfields demonstrates consistently strong clinical outcomes. Recent clinical audits confirm that clinical outcomes match the best published outcomes, for both high-volume as well as highly specialised procedures. In addition, the Moorfields A&E department has been achieving one of the best performances in England for years against the national 4 hour waiting time standard. The trust's performance in the referral to treatment (RTT) standard for incomplete waits in all pathways has continued to exceed the nationally set annual target of 92%. Cancer waiting times have improved year on year, with 96% receiving a first appointment within 2 weeks of an urgent GP referral. The Moorfields' City Road site was rated Outstanding in the last CQC inspection.

### **3.5.3 The Moorfields patient profile**

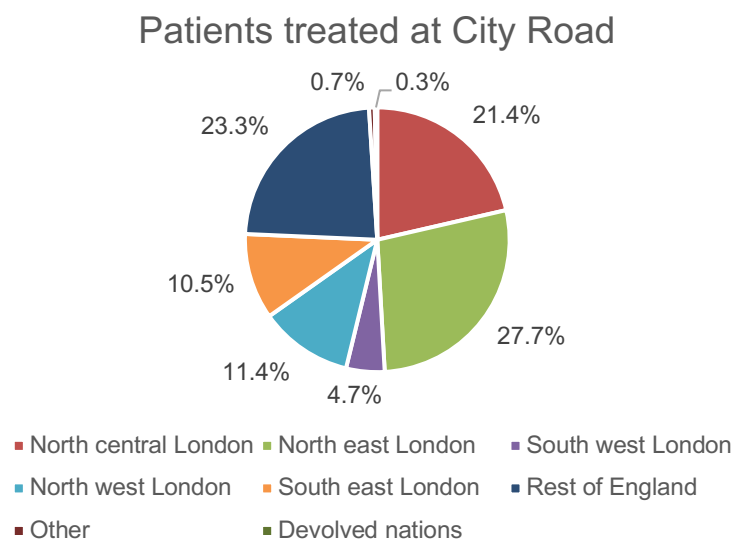
In 2018/19 Moorfields saw nearly 600,000 Outpatient attendances, c.350,000 of which were held at City Road. They saw almost 100,000 patients in A&E and undertook over 40,000 procedures<sup>4</sup>.

36% of Moorfields patients are aged over 65. This is significantly higher than the UK population, of whom 18% are aged over 65. City Road also sees a higher proportion of the younger patient base, due to its paediatrics centre and services for the most complex and rare eye conditions.

The City Road site offers a local service to the population of NCL and NEL, and specialist services to patients across London and the UK.

75% of patients seen at City Road travel from across London, with the remaining coming from elsewhere in England, as shown in the graph below. This is significantly higher than the patients seen elsewhere in the network, 90% of whom are based in London.

**Figure 6:** City Road patient home addresses



### 3.5.4 Research

Research is a core activity for Moorfields. The trust is recognised as a world-class centre of excellence in eye research and, together with its academic partner UCL IoO, forms one of the largest and the most productive ophthalmic partnerships in the world.

Moorfields' Clinical Research Facility (CRF) is based at City Road, which is where a significant proportion of Moorfields' research occurs. The network sites across London and the South East contribute significantly to the research activities, enabling researchers to access a broad patient base. Patients are offered the opportunity, where appropriate, to participate in clinical studies led by the trust. The partners' aspiration is to place clinical

<sup>4</sup> Moorfields annual report 2018/19

research at the heart of Oriel, expanding the number of patients offered the opportunity to participate in clinical trials. The trust also wishes to explore opportunities to partner with pharmaceutical companies looking to roll out later stage clinical trials to a large and diverse patient base. This would be an excellent opportunity to contribute further to national efforts to address the causes of blindness. The City Road site currently does not have the capacity to accommodate Moorfields and UCL's research aspirations.

In 2013, Moorfields and UCL IoO published their 'Joint Research and Development Strategy 2013-2020'. Section 3.7 gives additional background to the partnership between Moorfields and UCL. The opportunity to improve research at Moorfields is detailed in the case for change, section 3.10.6.

### **3.5.5 Training and education**

The Moorfields / UCL partnership provides ophthalmic training and education to undergraduate medical students, post-graduate specialty registrars and fellows, and academic clinical fellows and lecturers. Undergraduate teaching in ophthalmology is provided to c.1,250 medical students from Barts and the London School of Medicine and Dentistry, UCL and St. George's University of London. UCL Partners, of which Moorfields is a founding partner, is the lead provider responsible for organising post-graduate ophthalmic training across North London.

Moorfields is the largest provider of NHS-funded ophthalmology education and training. Moorfields and UCL IoO have jointly developed an Education Strategy for 2018- 2023, the vision of which is 'to be the global leader in the integration of research and education, underpinning an inspirational student experience, in vision and eye health education'. The trust and the IoO appointed a joint Director of Education in April 2018 to lead the implementation of this ambitious strategy to remain centre stage in developing tomorrow's clinical and research experts in support of world class eye care.

The challenges faced by the partners in delivering high quality education, and the opportunities for improvement, are detailed in the case for change, section 3.10.7.

### **3.5.6 Moorfield's Private**

Moorfields Private (MP) is the established private patient division of Moorfields, which operates from London and the UAE (Dubai and Abu Dhabi). MP makes a significant financial contribution to the trust's overall revenue (detailed in the Finance Case). All profits from MP are re-invested into the trust. MP draws its revenues from insurance companies, embassies, corporate sponsors and patients paying directly for their own treatment. It is a key recruitment tool to attract the best consultants to work at the trust, and contributes to Moorfields' reputation as an internationally recognised centre of excellence.

### **3.5.7 Trust income and financial position**

The trust's historic performance is shown in the Finance Case (section 6.2).

### 3.5.8 Trust clinical strategy

Moorfields has developed a clinical strategy for each of its four main sub-specialties (defined according to activity volume). These have been used as the basis for the clinical models, described in section 5.3. The sub-specialty strategies all identify the following drivers for change:

- a) **UK healthcare trends** including:
  - Shift of care to out-of-hospital settings.
  - Concentration of specialist services in centres of excellence.
  - Patient empowerment.
  - Clinical innovation.
- b) **Increasing demand.**
- c) **Common challenges within the NHS** including workforce challenges and financial pressures.

The strategies identify the following **trust-level strengths** that relate to all the services assessed:

- Consistently high quality of care.
- High patient satisfaction.
- Recognised leader in training workforce.
- Largest ophthalmology provider in London.

The clinical strategies support the view that there are clear advantages in the London region to having a dedicated eye hospital which is co-located with a clinical research function (i.e. UCL IoO). This enables the trust to take full advantage of clinical and technological advancements and innovation, as well as shaping the research of the future. The key overarching recommendations are:

- Developing new, standardised models of care.
- Implementing patient stratification to ensure patients are always seen by the most appropriate clinicians.
- Investing in digital solutions and artificial intelligence (AI).

## 3.6 The Moorfields estate

Moorfields operates a network of around 30 sites (including City Road). The viability of this network is dependent on the success of the City Road site and its collaboration with the UCL IoO. City Road provides a hub for ophthalmology expertise, providing highly specialised services for patients with the most complex conditions across the country. The wider London and UK population also benefit from the partners' ability to continue discovering and developing better ways to prevent, diagnose and treat eye disease.

### The City Road Campus

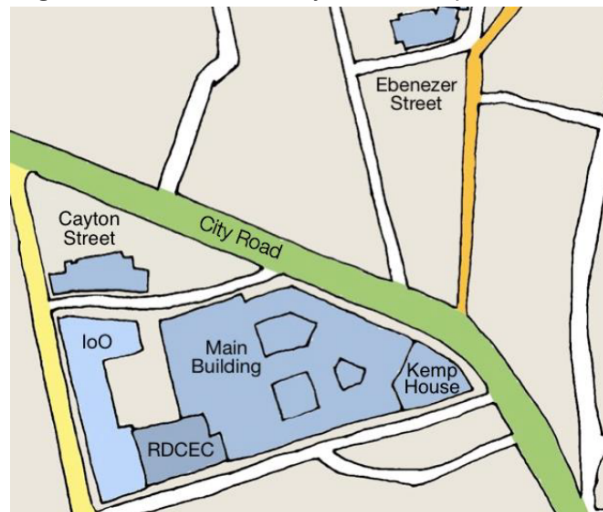


The City Road site is the central site, delivering local services to its catchment population, and the trust's most specialist and complex clinical services. City Road is served by Old Street London Underground station and bus links. Disabled access from the nearest tube station, Old Street, is poor as it is not possible to exit the station step-free directly to street level. The sites that are affected by this OBC are listed in Table 8.

**Figure 7: Location of City Road campus**



**Figure 8: Sites on the City Road campus**



**Table 8: Sites on City Road campus**

Organisation	Building	Tenure	Gross Internal Floor Area (GIA) (m2)
Moorfields	City Road (main hospital building)	Freehold	31,444
Moorfields	Richard Desmond Children's Eye Centre (RDCEC)	Freehold	5,119

Moorfields (Private)	Bath Street / Cayton Street	Leasehold	3,258
Moorfields	Ebenezer Street (administration)	Leasehold	2,189
Moorfields	Kemp House (administration)	Freehold	3,628
IoO	Bath Street	Freehold	10,800
<b>TOTAL</b>			<b>56,438</b>

The majority of the City Road site was built in the late 1800's, at a time when specialist eye care was provided in ways that vary considerably to how it is now undertaken (and how it will likely be undertaken in the future in an era of machine learning, stem cell therapies and other leading edge technology-focused treatments). It has been the subject of piecemeal modifications, refurbishments and upgrading works over a period of time, and the trust has worked hard to ensure the site remains safe, secure and provides patients with the best possible experience. However, the building is very inflexible and the trust is limited in how much the buildings can be modified in line with modern-day requirements (described in more detail in the case for change, section 3.10.1).

The City Road Campus estate is not supportive of the step-change the trust wishes to see in terms of an 'integrated' (with the IoO) and digitally-focused campus for this century and beyond.

The ageing infrastructure of the hospital is growing increasingly difficult and costly to maintain. Although the current condition-based backlog (a programme to bring the estate's condition to an acceptable standard) is at manageable levels, the site has significant 'impending' backlog. Many of the site's mechanical and electrical (M&E) systems are functional but now at the end of (or nearing the end of) their expected economic life and the fabric would also soon need considerable investment if these were to be maintained past the planned vacation of the site.

The current backlog is circa £XXXm but 'impending backlogs' that will impact the organisation in the next decade if Moorfields were to stay are estimated to require £XXXm investment to address (detailed in the Economic Case).

Significant investment is required to enable the trust to keep pace with medical and technological advances, continue to improve quality of care, and harness the full potential of Moorfields' relationship with the UCL IoO. A high level of investment is unlikely to enable Moorfields to remain a world-leading centre for ophthalmology, or represent value for money in an ageing building. Further details on the condition of the City Road site, and the impact of this on patients, are provided in the Case for Change (section 3.10).

The key issues associated with the City Road site are summarised in the table below.

**Table 9: Summary of estates issues at City Road**

Physical condition	The 100-year-old structural layouts significantly impact on space utilisation and functional suitability. Much of the infrastructure (including electrical, heating, medical gases, cooling and ventilation systems) is at, or nearing, the end of its expected economic life. The current hand-cut tiles that form the façade of the
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	City Road site are de-laminating from their fixings. Replacing these would be very expensive and disruptive to services.
Compliance and fire safety	While the site is statutorily compliant with fire regulations, there are areas for improvement, which would require significant investment to address. Areas of the site do not comply with HBN / HTM guidance including ventilation of theatre plant and CSSD, cold water storage tanks and lighting. The latest six-facet survey found that 39% falls below compliance standards (rated 'C' or 'D').
Space utilisation	The City Road campus is nearing capacity. The IoO is over-stretched and has had to turn down opportunities for research grants due to lack of space to undertake core research and education activities.
Functional suitability	The complex, cellular layout of the site and piecemeal adaptations means many rooms are compromised in terms of their functional suitability, for example: <ul style="list-style-type: none"> <li>• The theatres department struggles with waste storage and laundry processing and surgical trolley storage space.</li> <li>• Privacy and dignity is in places compromised (e.g. outpatient clinics configured as 'pods' rather than individual rooms).</li> <li>• Waiting areas are too small and have large structural columns.</li> <li>• The current layout does not typically allow smooth patient flows. Parts of the building have a 'warren' like feel and can be disorientating for visitors.</li> <li>• There is little scope for true integration between the clinical, research and teaching elements of Moorfields and IoO work.</li> <li>• Services are dispersed across the site, with little ability to flex. This leads to long patient journeys and difficulties in improving service efficiency.</li> </ul>
Quality	The site is not in line with modern healthcare standards. The age of the building means it is difficult to clinically clean, some patient areas do not have access to natural daylight, and navigation can be challenging. The site cannot be adapted as clinical technology and best practice changes.
Environmental sustainability	The building is not thermally efficient, and retrofitting insulation would be very costly. The main building was built in response to a very different clinical requirement, for example the building is heated as a whole and cannot be controlled in zones. As the hospital has very limited overnight stays, this is costly and energy inefficient.
Equality	Despite many adaptations for visually impaired people, strong links with patient advisory groups and compliance with the Equality Act 2010, access to the site from Old Street station is not step-free, and the site is not easy to navigate for both sighted and partially-sighted visitors. Some parts of the site are also not step-free.
Information Technology (IT)	IT is a key enabler for efficiency and service improvements. Upgrading IT infrastructure would be complex and costly due to the low ceilings, lack of floor void space and presence of asbestos in parts of the site. This limits the trust's ability to roll out modern imaging devices, virtual clinics, telemedicine and other innovative medical technology as it becomes available.

### 3.7 Partnership between Moorfields and UCL IoO

The partnership between Moorfields and UCL IoO forms the largest single site for eye research and eye care in the world. The collaboration between the two organisations informs the clinical focus of the joint applied research programmes, and provides access for scientific staff to a vast population of patients for research and clinical trials.

Moorfields, UCL IoO and Moorfields Eye Charity work together to improve the experience for patients, staff and students across a whole range of activities. The partnership principles are:

- **Committed to collaborate** - The partners will continuously evaluate the impact of their collaboration, reflecting on lessons learnt to continuously improve outcomes for all.
- **Effective and sustainable** - The partnership will operate in a way that delivers high quality education, research and clinical services within a sustainable system.
- **Harmonised and aligned** - The partnership's work will support a culture of openness, integrity and trust at all levels.
- **Joint strategy** - The partnership will have a shared ambition with long term aims and measurable plans for achieving them.
- **Autonomous and independent** - The partnership recognises that members will have independent objectives and respects the requirement to act autonomously outside of the joint strategy.
- **Flexible, resourceful and innovative** - The partners will proactively adapt and respond to emerging circumstances, embracing change while maximising effectiveness and productivity.

The partnership has a cycle of innovation from basic research, through clinical research, onto translational research and ultimately into clinical practice; improving the clinical outcomes for patients. Oriel will be designed to facilitate greater interaction between clinicians, researchers and patients by removing the physical barriers that currently exist and creating an environment where innovation will flourish. This will reduce the time taken to implement new treatments and therapies and increase the number of patients taking part in clinical trials, further improving their clinical outcomes.

The principles are underpinned by a commitment to education, knowledge sharing and training tomorrow's experts.

Further information on the partnership is included in Appendix 3A.

#### 3.7.1 Role of Moorfields Eye Charity

Moorfields Eye Charity (charity number 1140679) is an independent charity affiliated to support Moorfields Eye Hospital NHS Foundation Trust by providing financial support through grant-making for:

- New equipment.
- Pioneering research.

- Training of current and future healthcare professionals.
- Supporting the development of Moorfields' staff to ensure the care they provide is outstanding.
- Public education about eye health.
- Improving the experience for Moorfields patients and their families.

Moorfields Eye Charity's key strategic priority is to create a world class integrated care, teaching and research facility in partnership with Moorfields and its research partner, UCL. The Moorfields CEO, Medical Director and Director of Strategy are nominated trustees of the Moorfields Eye Charity, which strengthens the organisations' ability to work in partnership.

Alongside UCL's charitable arm, the Office Vice-Provost (Advancement) (OVPA), Moorfields Eye Charity has formally committed to raising £XXXm of funds to contribute towards Oriel and its research aims. The charity's contribution to the Moorfields portion of Oriel is detailed in the Finance Case. The CEO of Moorfields Eye Charity attends the joint Oriel Executive Board, and the trust and Charity work closely together to ensure project objectives and fundraising targets remain aligned.

### 3.8 Stakeholder engagement

The case for change, investment objectives and options have been developed with significant involvement from stakeholders, including:

**Table 10:** Stakeholder involvement in developing the OBC

Engagement undertaken	Description
Commissioner engagement	NHS England Specialised Commissioning and the 14 CCGs who commission over £2m of activity p.a. from City Road have been engaged throughout the development of proposals, and have led the public consultation process. Letters of support are included at Appendix 3E.
Pre-consultation engagement	Between 2013 and 2019 there were five phases of engagement, generating 1,700 responses. The feedback received was used to build the case for change, particularly in relation to the poor patient experience. The trust received detailed feedback from patients, staff and the public relating to the changes they would like to see at City Road. This indicated broad support for the proposal to move services from City Road to a new facility, to address the issues set out above.
Public consultation	The 16-week consultation received over 4,600 responses, and confirmed support for the proposal (with 73% of survey respondents agreeing that a new centre is needed). Further detailed feedback was received about the difficulties and anxiety associated with visiting the City Road site, which is reflected in section 3.10.1. The public consultation is described in section 3.13.



Options appraisal workshops	Workshops were held to develop the SOC, refreshing the options appraisal for the PCBC, and validate the outcome of the options appraisal following the public consultation. The purpose of these was to agree the critical success factors and options. These have involved representatives from: <ul style="list-style-type: none"> <li>• Moorfields trust executive</li> <li>• Moorfields trust senior clinical and operational leaders</li> <li>• UCL leaders in education and research</li> <li>• NCL CCGs to represent CCG commissioners</li> <li>• NCL STP</li> <li>• NHS England Specialised Commissioning</li> <li>• Patient groups</li> <li>• Local authorities</li> <li>• The voluntary sector</li> </ul>
Oriel governance	Through the governance structure described in the Management Case (section 8.1), Moorfields and UCL executives and clinical and operational leads have been involved in developing all aspects of the business case for Oriel.
Additional support	Letters or statements of support have been provided by: <ul style="list-style-type: none"> <li>• The Mayor of London (Appendix 3E)</li> <li>• LB Camden (Appendix 3E)</li> <li>• The trust Medical Director (Appendix 3E)</li> <li>• England's Chief Medical Officer (see below)</li> <li>• The London Clinical Senate following a review of the clinical case for change (see section 3.8.1 and 5.3)</li> </ul>

*"I am pleased to give my support to...Oriel...This will build on their [the trust and the Institute's] current expertise to the benefit of patients, health professionals and the wider system. I hope this will result in global developments to better understand and treat eye conditions, helping to transform the lives of people with even the most complex needs. It could also have a positive impact on the system by leading the development of new practice, new technologies and models of care."*

***Professor Dame Sally Davies, England's Chief Medical Officer (2010 – 2019)***

### **3.8.1 London Clinical Senate review**

The Oriel proposals were reviewed by the London Clinical Senate at a panel in November 2018. Following the Review Panel, the London Clinical Senate submitted a report on its findings to commissioners in which it confirmed that it found "that there was a clear, clinical evidence base to support the proposed move of the services at City Road to the new site at St Pancras Hospital."

The panel made recommendations to which commissioners have responded (summarised in the DMBC). Its report, and subsequent correspondence, was published by commissioners



as part of the formal consultation, which notes that all recommendations have now been addressed. They are available at [www.oriel-london.org.uk](http://www.oriel-london.org.uk).

### **3.8.2 Working with health and social care partners**

#### **Social care and integrated patient support offer**

Almost all of the trust's services are ambulatory, and those provided from City Road are a combination of secondary ophthalmic care for the local catchment population, or tertiary and specialist care provided on a national basis. Moorfields therefore does not experience the same challenges as a local acute or district general hospital, associated with bed blocking and requiring co-ordination with health and social care providers. The trust has Eye Care Liaison Officers (ECLOs) who direct patients to support services where required, including health and social care providers. When developing plans for Oriel, it has been noted that the wide range of support services can be difficult to navigate for patients. The importance of this service will be reflected in Oriel, and will be visible in the main entrance to offer patients support when they arrive or leave the building. This will promote events and patient support groups as well as services provided by the trust's charitable partners. ECLOs will have quiet spaces where they can offer support to patients immediately before or after an appointment. More information on integrated patient support services is provided in Appendix 5A (service models).

#### **Public health**

The trust continues to work with Local Authorities on ophthalmology public health initiatives such as National Eye Week. Moorfields works to raise awareness of the causes of preventable sight loss, and provides educational materials such as videos showing how to put in eye drops. The trust supports a campaign called Eye Heroes which runs workshops in school on the importance of regular eye tests, and works closely with charities such as the Moorfields Eye Charity (MEC), Royal National Institute for the Blind (RNIB) and the International Glaucoma Association.

The Know Your Drops campaign is a further example of how Moorfields is promoting public health. This was launched in August 2016 to give people practical advice on how to use eye drops correctly. This responded to a concern the trust identified that many people struggle to use eye drops, which therefore limits the effectiveness of their treatment. The trust ran over 60 roadshow events at Moorfields sites across London in the first year alone, helping over 1000 patients. Video tutorials and other educational materials are also available on the trust website.

#### **Moving care closer to home**

The Long Term Plan (2019) sets out the need to move more appointments from an acute Outpatient setting into the community. Moorfields already works closely with commissioners to ensure that care is provided in the most appropriate setting. The trust has a network of sites which deliver local services to local people (including City Road which delivers local services to the catchment population in North Central London). In some areas, Moorfields is

also working with commissioners to train local optometrists based on the high-street to provide screening, diagnostic and monitoring services. While proving successful in localities such as Bedford, health partners have found it challenging to replicate in Central London areas due to the relatively high turnover in key staff groups. The trust has strengthened its relationship with commissioners through the public consultation, and NHS England Specialised Commissioning and the 14 CCGs who commission over £2m of activity from City Road annually have confirmed that the plans for Oriel align with their commissioning intentions. The trust will continue to work closely with commissioners to ensure ophthalmology services in London are provided in the most effective and efficient way.

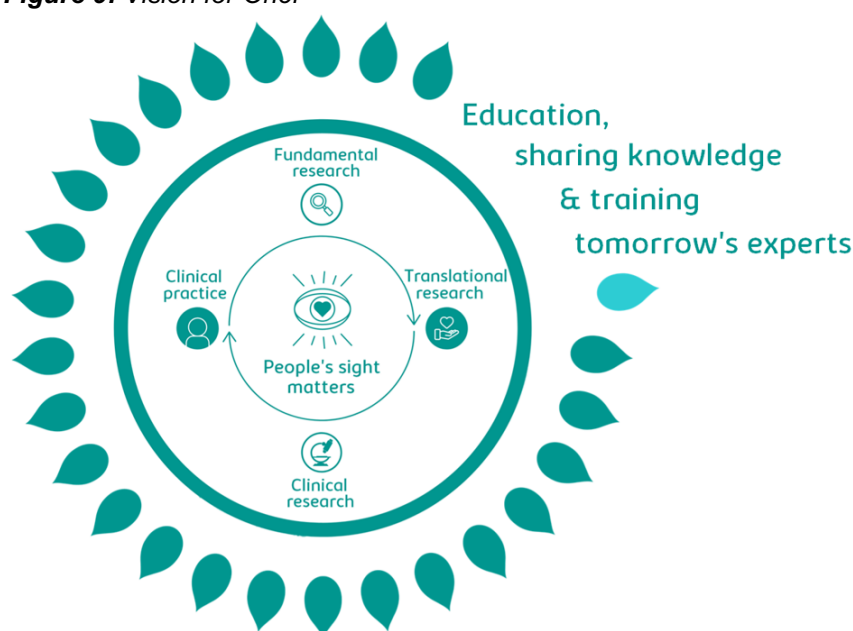
Many of the services provided at City Road are not appropriate or cost-effective to provide in the community, as they require specialist expertise and equipment. Oriel will enable the trust to deliver more appointments virtually, providing the infrastructure for digital image sharing and teleconferencing. The virtual clinic model in ophthalmology will free up consultant time, as patients will not need a face-to-face appointment with a consultant, and imaging results can be reviewed from anywhere. The demand modelling (described in section 3.11) demonstrates the limited scope for referral avoidance, and the high number of Moorfields appointments which are necessary follow-ups which cannot be avoided. This is a consequence of the number of City Road patients with long-term conditions which require regular monitoring.

### **3.9 Determining investment objectives**

**Vision:** The joint vision between UCL and Moorfields, which has been created for Oriel, is:

- We have a cycle of innovation from fundamental research, clinical research, translational research into clinical practice, improving outcomes for our patients.
- Oriel will allow greater interaction between clinicians, researchers and patients by removing the physical barriers.
- The principles are underpinned by a commitment to education, knowledge sharing and training tomorrow's experts.

**Figure 9: Vision for Oriel**



The following joint **investment objectives** have been developed for Oriel in support of this vision. These have been developed from the SOC and PCBC, in consultation with staff, commissioners and other key stakeholders from Moorfields and UCL:

**Table 11: Oriel investment objectives**

HMT investment objective category	SMART investment objective(s)
Effectiveness	<ol style="list-style-type: none"> <li>1. Improve clinical outcomes and experience as set out in the strategic benefits, contributing to improved patient reported outcomes and experience measures through an improved environment by 2026/27</li> <li>2. Maximise the opportunity to undertake and translate discovery research through experimental medicine studies and trials in patients, leading to new diagnostics and new therapies, and to maintain our world-leading partnership status – increased volume and quality of research publications, thereby maintaining the IoO's number one status (RAND Europe, 2015), through a 15% increase in the number of principal investigators at the IoO, and an additional 82 publications per year published by academics at IoO and MEH by 2031/32</li> <li>3. Increase in student numbers undertaking degree and training courses by an average of 60 more ophthalmology students per year by 2031/32</li> </ol>
Efficiency	<ol style="list-style-type: none"> <li>4. Enable clinical efficiencies, informed by GIRFT and Carter, working towards national targets of a 30% reduction in outpatient appointments from 2025/26 in collaboration with system partners.</li> </ol>
Replacement	<ol style="list-style-type: none"> <li>5. Premises and equipment suitable for use by the Oriel partners for at least 10 years from operation in 2025/26 with improved capacity for clinical treatment, research and education</li> </ol>
Economy	<ol style="list-style-type: none"> <li>6. Increased research income for the IoO of £20m over the first five years of operation (2026/27–2030/31); with an average of 20 additional grants awarded per year by 2031/32</li> </ol>
Compliance	<ol style="list-style-type: none"> <li>7. Full compliance with the following from 2026/27: <ul style="list-style-type: none"> <li>- Current statutory building requirements</li> <li>- Current health building design best practice</li> <li>- Equality Act 2010 accessibility requirements</li> </ul> </li> </ol>

### 3.10 Case for change – existing arrangements and business needs

The case for change is primarily a **replacement** case, as the current City Road site is no longer fit for purpose. Most of the City Road site is over 100 years old, with parts being around 125 years old. These have been the subject of incremental modifications, refurbishments and upgrading works over time, however the layout and the quality of the buildings limit the quality of care that can be provided. The sections below describe how continuing to operate from the City Road site presents major issues, along with how these issues can be addressed and the benefits that would bring (note, benefits are further detailed in the benefits realisation plan at Appendix 8A).

These are linked to the investment objectives, with the exception of objective 6 which relates solely to the UCL IoO.

#### 3.10.1 Poor patient experience arising from the estate

*This specifically relates to objectives 1 & 7 (Table 11).*

##### *Where are we now?*

The City Road site is not fit-for-purpose for patients with sight-loss, which has a negative impact on patient experience. While patients give positive feedback on the quality of the care they receive at Moorfields, the estate presents a number of issues:

- Many outpatient clinics are delivered from basement locations which have low ceilings, minimal natural light and insufficient seating in waiting areas. This can make the experience of visiting Moorfields more stressful than it needs to be.
- Support columns are located in the centre of the main outpatient corridors, and the building is confusing to navigate. The building contains many long, narrow corridors between disparate departments. The journey between consulting rooms and pharmacy, for example, involves significant walking and lift journeys between floors which can be confusing for patients. This is a particular issue for those with sight loss.
- Diagnostic tests cannot be co-located according to patient pathways due to the constraints of the building. This means patients often spend many hours in the building for a single appointment, with long waits between numerous contacts with different clinicians. Analysis of a typical patient journey was carried out for glaucoma, a significant and growing service line with primarily elderly patients. This journey takes up to three hours, largely as a result of the current estate restrictions which reduce flow and throughput.
- The building does not provide a welcoming environment for patients upon arrival.
- Clinic spaces are not designed for sight-impaired patients. There is an absence of natural light throughout all communal areas of the City Road site (with the exception of the Richard Desmond Children's Eye Centre). It is well established that lighting conditions affect visual function in nearly all chronic ophthalmic conditions.

*"I have helped older people for whom English is not their first language who were waiting for a long time without a drink or a visit to the toilet, because they were worried about missing their appointment."*

**Moorfields staff member  
(public consultation)**

- Many of the clinic rooms at City Road are arranged in 'pods' with several cubicles in which consultations take place, rather than closed rooms. This does not afford appropriate levels of privacy and dignity. These cubicles are c.9m<sup>2</sup> in size (on average), making access challenging and meaning that patients in wheelchairs are unable to comfortably attend their appointment with a relative or carer. These rooms are not compliant with HBN requirements.
- Some areas of the City Road campus do not have step-free access which creates difficulties for patients and staff. These are not compliant with the Equality Act 2010.
- The children and young people's waiting area in the A&E (which is in use out of hours when the Richard Desmond Children's Eye Centre is closed) does not offer a child-friendly environment.

*"People in a state of anxiety, fear, nervousness and isolation expect and anticipate rudeness. They expect systems and technology not to work and this becomes self-fulfilling."*

**Moorfields patient (public consultation)**

Many of these issues were noted by the CQC in their 2016 and 2018 reports.

Throughout the consultation, a recurring theme was that despite Moorfields' reputation for clinical excellence, patients frequently experience stress and anxiety associated with a visit to the City Road site. As well as affecting their experience, patients' anxiety can impact upon the efficiency and effectiveness of clinical services. For example, people talked about not being able to take in information during their consultation, or not turning up for appointments if they perceive a previous visit to be a bad experience.

### **Where do we want to be?**

Moorfields is committed to matching exceptional clinical outcomes with an excellent experience for all patients. The frequent suggestion during consultation was that the proposed new centre offers an important opportunity to create a national exemplar of inclusivity and accessibility.

*"I am 50 years old. I shouldn't always have to ask my mother to take me to my appointment."*

**Moorfields patient  
(public consultation)**

The aim is to provide patients with an uplifting, empowering environment which supports them in maintaining their independence (a key point raised through consultation), through an environment which is designed for their needs.

A fit-for-purpose environment would significantly improve throughput through the building, thereby reducing waiting times for patients. The analysis referred to above for a typical glaucoma patient could be reduced from three hours to an estimated one hour. This is just one example of how the trust might be able to improve patient throughput and experience dramatically.

### **How do we get there?**

Issues such as building layout, light levels and flow cannot be addressed without a new building. Oriel will be designed around the needs of all people including those with protected



characteristics, in particular sight loss, through ongoing engagement with charities and representative groups of service users.

A new building will be designed to modern standards, providing all appointments in closed rooms rather than ‘pods’, and being fully accessible for patients with all ability levels.

In addition, the use of technology to assist patient flows and wayfinding is a key opportunity to assist visually impaired patients. However, it is not structurally possible or economically viable to implement these improvements to patient journeys within the estate constraints at the City Road site.

### ***What will be the benefits?***

Improved patient experience is key to delivering the best care for people with sight loss, enabling them to engage effectively with services. The barriers to access have a particularly high impact with vulnerable patients such as elderly and low-income patients, and those with co-morbidities such as mental health conditions.

Staff satisfaction will also improve as staff are able to deliver care from a building which reflects the quality of the clinical service.

Improvements in efficiency will mean less waiting for patients, fewer members of staff seeing each patient, and more efficient service delivery.

### **3.10.2 Risk of future service failure due to inability to support change and loss of staff**

*This specifically relates to objective 5 (Table 11).*

### ***Where are we now?***

Moorfields has an international reputation for delivering world-class ophthalmology services, and for being at the cutting edge of developments in the field. This enables the trust to attract the best clinicians, improving its ability to deliver high quality services, and further push the boundaries of ophthalmology treatment and care.

Despite this, the site is not capable of supporting the trust in the step-change it plans to implement in terms of an integrated (with the IoO) and digitally-focused campus for the long term future, without significant investment. The key issue the estate now has is not related to its condition (although in places this could be improved) but its functional suitability. The site’s 100+ year old structure and floor heights do not allow space to be reconfigured, the flexibility to adapt to new technologies, or the space to accommodate modern IT infrastructure.

Ophthalmology is a rapidly changing field, and the trust risks not being able to accommodate new treatments or technologies as they are developed in the future.

With current clinical journeys extended by the estate structure resulting in overcrowding and delays, and the inability of the estate to support innovative service developments, staff morale can suffer. Modern, well designed facilities contribute towards high staff satisfaction,



and a modern, purpose-built facility would eliminate the need for staff to work around the ageing and constraining infrastructure they currently have to overcome on a daily basis.

Attracting and retaining motivated well-trained staff is essential to maintaining the current quality of care, and remaining a world leader in ophthalmology. Recruitment and retention of sufficient staff with the right skills and experience is increasingly difficult across the health sector. There is a real risk that the trust could lose its excellent clinicians and researchers if improvements are not made to the working environment. In attracting the best talent, Moorfields is competing with private providers, commercial pharmaceutical companies and globally recognised providers of ophthalmology services. As the City Road site continues to deteriorate, and the partners' competitors continue to improve, the resulting loss of staff and status would mean the quality of clinical services will suffer, and the trust will not be able to maintain its excellent outcomes.

City Road has been the subject of piecemeal adaptations over the years, however the trust is reaching the limits of how much it can continue to accommodate the advancing field of ophthalmology in the current estate.

### **Where do we want to be?**

Moorfields aspires to maintain a centre of excellence to see the most complex patients, as well as leading the way in efficiently treating routine conditions. Transforming the way services are delivered is essential to maintaining Moorfields' reputation.

The trust aspires to provide more technology-enabled services such as virtual glaucoma clinics, tele-ophthalmology across the medical retina service, digital triage in A&E and digital solutions to enhance the cataract patient pathway. This will improve efficiency as well as providing more care closer to home. The current building is not well placed to support the trust's technological aspirations for a smart hospital. High quality IT infrastructure is required to provide high signal strength WiFi, which would support increased use of mobile devices to facilitate patient flow and improve efficiency (described in more detail in the Commercial Case). It would be very difficult, disruptive and cost inefficient to try to install the infrastructure required to support mobile and highly automated services.

Commissioners have set out an outline model of care for ophthalmology services, which they plan to pursue through a London Ophthalmology Collaborative. This is described in section 5.2. Central to this model is the principle of system-wide working, with greater collaboration across primary, community, secondary and tertiary care settings. Oriel will enable Moorfields to support this through investment in digital infrastructure, development of the workforce and driving research and innovation.

In addition, the ability to deliver cutting-edge services supported by research, will make Moorfields an exciting place to work, with opportunities for expanded roles and career development. Enhanced roles would allow more efficient use of staff time and provide ways of managing workloads in ways that maintain the high quality of services to patients. A new facility would enable the development of new ways of working through a flexible environment that would change and accommodate new roles and treatments. Development of new roles

will enable the trust to offer career progression, and unique opportunities to staff. An ambitious, modern, and dynamic working environment, allied to excellent educational and research facilities, would be an important motivator in attracting the brightest and best in eye care.

It is critically important that Moorfields can keep pace with service developments, in order to provide patients with the latest in high quality care as soon as it becomes widely available, and support new care pathways. The current building does not have the flexibility to respond to this.

### *How do we get there?*

There are a number of service developments which Moorfields will be able to design into the new building, such as:

- Ability to deliver virtual clinics and new care pathways, thereby reducing the need for face-to-face appointments with clinicians, improving the efficiency of service delivery.
- Improved ability to undertake research with a 'patient first' focus (described further in section 3.10.6).

In addition, a new centre will have the flexibility to respond to as-yet-unknown developments. The ways in which flexibility has been incorporated into the design are detailed in the Clinical Quality Case, section 5.8. Outpatient rooms will be as generic as possible, co-located so they can accommodate changing patient pathways. Rooms will also be large enough to accommodate multiple and / or large items of equipment, as well as patients accompanied by a relative or carer.

### *What will be the benefits?*

In developing a centre which can respond to, and drive advancements in the field of ophthalmology, the trust will be able to maintain its ability to deliver excellent care well into the future. It will be able to attract and retain the top talent, driving research and clinical excellence. The new site will be technologically enabled, mitigating the risk of the site becoming obsolete and outdated.

### **3.10.3 Inefficiencies in service delivery**

*This specifically relates to objective 4 (Table 11).*

### *Where are we now?*

National strategy describes the need for all healthcare providers to improve their efficiency to manage increasing demand and provide patients with shorter waiting times for services.

Getting it Right First Time (GIRFT) for Ophthalmology makes a number of recommendations for improving the throughput of surgical pathways, which cannot be implemented due to:

- Layout constraints in theatres which inhibit the trust's ability to provide a streamlined, time efficient ambulatory surgical care service at the City Road site.
- Recovery in Nightingale wards located some distance from operating theatres, which reduces the number of patients treated in a timely manner.

- Inability to support the infrastructure required for virtual clinics, without significant investment in an ageing building.

The NHS Long Term Plan (2017) also recommends that 30% of outpatient appointments be delivered out of hospital – due to the specialised nature of Moorfields’ services at City Road, the most appropriate way of delivering this is to continue to provide patients with existing expertise through virtual clinics.

### ***Where do we want to be?***

Moorfields has identified opportunities to generate efficiency and financial benefits by developing new clinical models delivered from a flexible, fit for purpose building. Delivering significant improvements in operational efficiency requires optimal configuration of physical estate. Studies such as the typical glaucoma patient pathway have shown that patient journeys could be significantly reduced as a result of an optimal departmental layout. In addition:

- New theatres and an advanced day case environment designed for high-flow cataract surgery are expected to increase throughput from 6.5 cases per session to 10-12 cases per session.
- A more welcoming and navigable patient environment, together with a new outpatient appointment booking system, could reduce DNA rates from c.11% to 8%.
- The building will be designed to facilitate new pathways, such as diagnostic hubs which will enable delivery of tests in standardised ‘bundles’ in a one-stop-shop delivery, designed around patient pathways.

### ***How do we get there?***

Oriel will improve service efficiency through:

- Delivery of a building which is designed around optimum patient pathways, thereby ensuring that patients do not spend longer than they need to in the building, and that staff, equipment and the built environment is being fully utilised.
- Provision of a flexible space which could accommodate new ways of working, and evolve with services over the long term, while maintaining operational efficiency.
- Use of technology to support virtual clinics and telemedicine, enabling closer working with clinicians in the community and Moorfields network, improved access to care by patients, and space to be used more efficiently. Optometrists will be able to send scans to Moorfields clinicians instantly, for review remotely ensuring that inappropriate or unnecessary referrals are reduced.
- Online booking systems and dynamic scheduling which enable patients to book appointments at their convenience (thereby reducing the number of missed appointments or procedures).

### ***What will be the benefits?***

As described above, improved efficiency will enable Moorfields to make better use of resources, thereby improving financial performance as well as providing a better patient experience.

### **3.10.4 The estate will require significant investment in the future**

*This specifically relates to objective 5 (Table 11).*

#### **Where are we now?**

While backlog maintenance is currently relatively low at £XXXm, the majority of the heating, ventilation and domestic water system installations have exceeded their life expectancy. Major replacement will be required in the medium term to maintain the core hospital function. These systems are becoming increasingly difficult and costly to maintain.

The current hand-cut tiles that form the façade of the City Road site are de-laminating from their fixings, which would be very costly to correct, and would create substantive disruption to patients and the A&E entrance. There is a wide range of near end-of-life infrastructure that also would need to be systemically renewed if the plan was to stay in City Road for the longer term (even if a phased re-build of the site was to be planned as this would also take many years to achieve whilst maintaining clinical services). The site has aged infrastructure from piped services to electrical systems (where areas have not been substantially refurbished in the last decade) and cooling and ventilation systems. The RDCEC is also over a decade old and over the next decade will start entering significant 'lifecycle' reviewed investment needs.

The works required to bring the current building up to an acceptable standard are estimated at over £XXXm (detailed in the Economic Case). This investment would only delay the continuing deterioration of the building, and the risk of failure in the future.

#### **Where do we want to be?**

The Economic Case provides evidence to show that investment in maintaining the current City Road site does not represent good value for money. Moorfields wants to deliver services from a building in which its financial resources can be invested in meaningful improvements in care, and exciting developments to improve patient outcomes, rather than in the fabric of an ageing building.

#### **How do we get there?**

This requires a new, fit-for-purpose building.

#### **What will be the benefits?**

A modern, fit-for-purpose building will have zero backlog maintenance. Crucially, money spent on a new facility will be an investment in the future, rather than delaying ongoing deterioration in a building which cannot support modern service delivery.

### **3.10.5 Inability to support future demand changes**

*This specifically relates to objective 5 (Table 11).*

#### **Where are we now?**

Ophthalmology is one of the busiest specialties in the NHS – it represents the highest volume outpatient specialty in England, and cataract surgery is the most common operation offered on the NHS.

The Way Forward 2017 projected the following trends in the most prevalent eye conditions over the next 20 years, which particularly affect the older patient group:

- **Cataracts** – Over 35% of people over the age of 65 have visually significant cataracts. Demand for cataract services will rise by 25% over the next 10 years and by 50% over the next 20 years. Cataract surgery is already the most common surgical procedure carried out in the UK with over 400,000 procedures performed per year. This anticipated surge in demand for cataract services will require new approaches to referral, patient assessment, surgical flow and follow-up. Current pathways will not be capable of handling the anticipated future level of activity.
- **Glaucoma** – The monitoring and treatment of patients with glaucoma currently accounts for 20% of all ophthalmology hospital outpatient activity. Glaucoma cases are expected to rise by 44% over the next 20 years. It is also likely that as technology continues to improve, a progressively greater percentage of cases will be diagnosed, increasing the demand for services even further. It is likely that therapeutic delivery for glaucoma will shift from topical medications to surgically implantable long acting-medications; this will have an enormous impact upon how glaucoma is managed in the future.
- **Medical retina (including macular degeneration and diabetic eye disease)** – The incidence of age-related macular degeneration will increase in line with the ageing population. Cases of diabetic retinopathy are also predicted to increase. It is likely that more and more retinal disorders will become new indications for regular intravitreal injection therapy over the next few years.
- **Emergency eye care** – The number of people attending hospital for emergency eye care is increasing, as has been observed in other, non-ophthalmic, emergency activities. The number of attendances at the Moorfields A&E department have continued to grow, with >100,000 attendances in 2015/16, representing a doubling of patients in 10 years<sup>5</sup>. The scope to prevent and control these attendances is limited by the highly distressing nature of potential sight loss for patients, eliciting greater concern or caution which results in patients presenting at A&E or walk-in services for conditions which may ultimately transpire to be non-sight threatening.
- Demand for all services will increase as the UK population grows.
- As at September 2019, 7 out of 14 London trusts providing ophthalmology were performing under the national 92% 18 week RTT standard. Over 7,000 patients had been waiting more than 18 weeks to receive treatment.

The impact of these factors on ophthalmology activity within the City Road catchment population has been modelled by commissioners. The report detailing the methodology, stakeholder engagement and outputs of this is included at Appendix 3B. It involved clinicians and operational planning representatives from across providers and commissioners (across 40 1:1 interviews and three project-specific workshops), as well as historic activity data and established literature. The modelling has been accepted by the 14 CCGs, NHS England

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<sup>5</sup> Royal College of Ophthalmology – *The Way Forward in Emergency Eye Care (2017)*

Specialist Commissioning, and Moorfields, who have confirmed that it aligns to their expectations.

This detailed activity modelling work has shown the following projected growth rates across the different types of activity. The growth rates with reprovisioning represent the opportunity to provide some care in an alternative setting (note, this could be within the Oriel building on a different care pathway e.g. virtual clinics).

**Figure 10: Average annual activity growth (2018/19 to 2034/35)**

Annual growth	Outpatients	Inpatient and day case	Urgent and emergency
Before reprovisioning	3.1%	2.6%	2.9%
With reprovisioning	2.3%	2.6%	1.9%

In addition, as described in section 3.10.2, the estate lacks the flexibility to respond to future changes in service delivery models and technology.

#### **Where do we want to be?**

The ambition is to create a facility which is capable of supporting increasing demand for ophthalmology services, both through increased capacity (described in section 3.11), and a flexible building which can support new ways of working. This includes the trust's ability to deliver clinics virtually, thereby contributing to commissioner aspirations to re-provision activity.

In addition, additional capacity in Oriel could ease the pressure across London, particularly during winter when general acute trusts experience higher levels of unplanned care so are more likely to cancel elective ophthalmology activity.

#### **How do we get there?**

As stated above, additional capacity is required with the flexibility to accommodate new ways of working. For example, Oriel will provide two large theatres capable of facilitating research, a number of smaller theatres designed for high throughput, and procedure rooms. Providing this range of types of space will give Moorfields the flexibility to accommodate large equipment and complex procedures in future, while also making efficient use of space. Similarly, outpatient rooms will be co-located and standard sizes and layouts for maximum adaptability.

#### **What will be the benefits?**

The new building will have the ability to support increasing demand and changing service models.

### **3.10.6 Opportunity to improve research through integration**

*This specifically relates to objective 2 (Table 11).*

#### **Where are we now?**



Moorfields and UCL IoO currently operate from separate buildings on the City Road campus, which is not conducive to collaborative working. Teams work in labs and offices which are separate from each other, with no communal spaces to meet and discuss their areas of research. Research is therefore often undertaken in silos, making relatively little use of expertise and knowledge from other teams. In addition, the separation of the IoO and Moorfields buildings means collaboration between clinicians and researchers is minimal. Clinical trials are often undertaken with a 'research first' rather than a 'patient first' approach. Experience has shown that where small teams of clinicians and scientists work together to tackle problems, the results can be spectacular<sup>6</sup>.

The lack of integration between research and service delivery within the current facilities is also a barrier to increasing patient engagement and participation in research. Currently, under 5% of patients are able to participate in clinical research.

### *Where do we want to be?*

The partners' aim is to continue to be world-leading in eye-disorder prevention and treatment using a translational model of research and care. Key enablers to this will be enhanced facilities, optimised integration between university and healthcare space, and proximity to key departments within UCL and other collaborators.

A key aspiration for the partnership is to implement a model of bench-to-bedside translational medicine. The principles of translational research span the fields of research, education and clinical care. It is recognised as a highly effective process by leading global healthcare and research institutions. Translational research provides a continuum of innovative research, education and clinical care with the aim of increasing the scale and speed of progress from scientific discovery to clinical practice, improving clinical outcomes for patients.

While the partnership is ranked the world leader in the field of ophthalmology, it must constantly evolve in order to maintain this position in the light of an increasingly competitive global translational research arena. The partnership's estate at City Road significantly limits the ability of the partners to continue delivering excellence due to the constraints of estate layout, the location and separation of the buildings, and the lack of space for growth.

### *How do we get there?*

The design of the new building will foster development of interactions and relationships, leading to short-term problem-solving and long-term creation of future generations of investigators. The new building will also support administrative integration, improving efficiency and making it easier to lower barriers to discovery and innovation.

To deliver aspirations around translational research, the partners must remove the physical barriers that currently exist and create an environment where innovation will flourish. A

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<sup>6</sup> For instance: Moorfields More Flow surgical management of glaucoma – standard of care world-wide; Fundus autofluorescence imaging in most eye clinics; first gene therapy for eye disease; first human embryonic stem cell therapy on a patch for retinal degeneration

translational model will reduce the time taken to implement new treatments and therapies and increase the number of patients taking part in clinical trials, further improving their clinical outcomes. In addition, the new building will be configured to deliver education programmes to not only academic and healthcare professional communities, but also members of the public including patients and their carers.

The trust and UCL need additional physical capability to involve many more patients in research and clinical trials, and integrated facilities supporting close collaboration between research and clinical staff. Additional capacity would also be required to partner with commercial pharmaceutical companies, with associated revenue implications.

Re-location to St Pancras would also place the partners in closer proximity to the London Knowledge Quarter, located around King's Cross, the Euston Road and Bloomsbury. This incorporates the Farr, the Alan Turing Institute and the Crick, as well as the UCL Bloomsbury campus, providing IoO researchers with more immediate access to state-of-the-art technologies and an expanded network of expertise.

#### **What will be the benefits?**

Increasing patient participation in research would have a positive impact on patient outcomes and allow the more rapid progression of innovation in treatment into the mainstream for the benefit of all patients.

True integration between Moorfields and UCL IoO will maximise the opportunity to undertake and translate discovery research through experimental medicine studies and trials in patients, leading to new diagnostics and new therapies. The exact nature of these developments cannot be predicted, but investment will contribute to the ultimate goal of reducing sight-loss, with benefits both for patients and the health economy.

### **3.10.7 Opportunity to improve education through integration**

*This specifically relates to objective 3 (Table 11).*

#### **Where are we now?**

The current physical facilities at City Road limit the education and training which can be provided at Moorfields, meaning there is a risk of losing students through a lack of capacity and appropriate, modern resources. Current issues include:

- City Road is 2.3 miles from the main UCL campus, meaning students don't have direct access to study infrastructure such as the library, teaching and social facilities. This reduces the quality of the learning experience and leads to some duplication of facilities and resources to counter the physical separation. Improvements to the student experience, and economies of scale could be achieved from a base closer to UCL's main campus.
- There are currently constraints in providing the best education experience for students. Classroom spaces are small and not suited to modern teaching, with significant refurbishment unlikely to be possible at the current site due to cost and

space restrictions. Students don't have a central 'gathering' space where they could work together and collaborate – which is vital to their learning and development.

- Crucially, the current IoO and Moorfields' education spaces cannot accommodate any expansion. Courses are always over-subscribed, leading to the potential loss of many good quality students due to a lack of capacity.
- Lecture facilities at present are 'traditional', such as tiered lecture theatres or spaces that do not lend themselves to agile and flexible use. This style is no longer considered appropriate for modern teaching. Having a space where educators are able to apply the most modern teaching methodologies is essential to ensure Moorfields provides students of the future with the very best learning opportunities.
- Clinical and teaching facilities are in separate buildings, meaning learning opportunities in a clinical setting are not as effective as they could be.

### ***Where do we want to be?***

It is clear that there will be a need for an increase in the number of qualified and well-trained staff in all disciplines in the future, given the trends in likely demand for eye services. Expansion in capacity is vital if the supply of trained staff in the future is to be maintained. A new joint eye care research and education facility would support a significant increase in the number of under-graduates, post-graduates and clinicians training in ophthalmology and associated services, through increasing capacity, increasing opportunities to experience different clinical services and areas of research, and improving student experience. A new education and research centre would allow for the upskilling and professional development of all eye care clinical professionals.

### ***How do we get there?***

Oriel has a unique opportunity to combine clinical excellence and patient outcomes with outstanding, internationally recognised research and education. A purpose-built facility that allows the effective combination of service delivery, teaching and research will enable Moorfields and UCL to continue to achieve excellence across all three disciplines. A new building will allow an approach that is free from the constraints affecting City Road.

The design of Oriel bringing patient care, research, and education into one building is integral to the partners' ambition for education that is research-informed and clinically led. The bench-to-bedside research model will be embedded into the education model, ensuring that students have a seamless transition from lectures to the lab or 'real' clinical practice, in a setting and manner that will mirror their careers and patient care. It will also serve to illustrate and engage the workforce in seeing education as a continual process over their careers rather than just at the beginning. Consequently, the integration of these three pillars of activity – patient care, research, and education in one facility is essential for creating a future workforce that sees all three as aligning to address healthcare challenges and working successfully and effectively across their career.

### ***What will be the benefits?***

Oriel will enable the partners to improve the quality of their education offering, attract the highest calibre students, and increase the number of students and trainees. The benefits of this will be:

- Increased supply of qualified clinical and support staff to the wider NHS.
- Increased supply of qualified clinical and support staff at Moorfields, who are more likely to remain at the trust given the exciting opportunities to work at a modern, research-focused centre of excellence.
- Improved opportunities for existing Moorfields staff to develop their careers, thereby improving retention levels.
- Increased income.

### 3.11 Business need – capacity planning

This section provides an overview of the demand and capacity planning undertaken for Oriel. Full detail is provided in Appendix 3C.

#### 3.11.1 Demand modelling

Activity projections and capacity planning have been based on demand modelling undertaken by Edge Health on behalf of commissioners. This formed part of the Decision Making Business Case (DMBC), and looked at the next 15 years. Edge Health worked closely with clinicians and operational planning representatives from Moorfields as well as the wider ophthalmology system in London. The modelling was based on a range of information sources, including data from Moorfields and commissioners, established literature and over 40 1:1 interviews.

The workings behind this modelling are shown in Appendix 3B.

The demand modelling work has shown the following projected growth rates across the different types of activity. The figures ‘with reprovisioning’ show the scale of the opportunity to provide some activity from an alternative setting. This could be a different provider, location or delivery method (e.g. virtual clinics). Moorfields will continue to work with commissioners to understand their plans for re-provisioning to ensure that development of optimum pathways is supported, as well as ensuring the trust can plan for any service change.

**Figure 11: Average annual activity growth (2018/19 to 2034/35)**

Annual growth	Outpatients	Inpatient and day case	Urgent and emergency
Before reprovisioning	3.1%	2.6%	2.9%
With reprovisioning	2.3%	2.6%	1.9%

#### 3.11.2 Factors affecting capacity requirements

Demand modelling is set out in Appendix 3C. This models the impact of the following, to calculate the number of rooms required in Oriel to ensure sufficient capacity for future, while also making best use of capital funding:

- The **activity growth forecasts** set out in Figure 11. As models of care to re-provision activity have not been agreed, and commissioners have agreed that the demand forecasts align with their expectations, the trust has modelled demand before reprovisioning. It should be noted that re-provisioned activity could be delivered from Oriel under a different delivery model (such as virtual clinics). Oriel will be designed flexibly so future changes in demand and service model can be accommodated.
- Implementation of **virtual clinics** for some outpatient activity.
- **Efficiencies** as a result of co-location of A&E and urgent care.
- Provision of **diagnostic centres** where imaging will be clustered to provide the diagnostics appropriate to sub-specialty pathways.
- **Room utilisation** in outpatients of 85%.
- Improved efficiency in **theatres** to increase throughput of cataract day cases.
- Extended opening hours:

	Monday – Friday	Saturday	Sunday
Elective services	9 hours	4 hours	0 hours
A&E service	24 hours	24 hours	24 hours
Emergency surgery	Daily list	Daily list	Daily list

### 3.11.3 Capacity requirements

The demand modelling set out the numbers of each type of room which will be required in the year of Oriel opening, 5 years, and 10 years thereafter. This is shown in Table 12. The Schedule of Accommodation (SoA) has been developed to deliver an efficient and cost-effective design, while also ensuring the building has sufficient capacity for future. It should be noted that any capacity which is not used in the first years after opening could help alleviate system-wide capacity pressures.

As at September 2019, 7 out of 14 London trusts providing ophthalmology were performing under the national 92% 18 week RTT standard (note, data only available for 14 of 17 trusts). Over 7,000 patients were in breach of this target. Additional theatres in Oriel will relieve the system-wide pressure on ophthalmology capacity, particularly during winter when general acute trusts experience higher levels of unplanned care so are more likely to cancel elective ophthalmology activity. This will provide appropriate capacity to manage long term growth (10+ years).

**Table 12:** Current and planned room numbers

ROOMS	A&E Cubicles <sup>1</sup>	Urgent Care	Consult /Exam OPD Room <sup>2</sup>	Diagnostic (various sizes)	Visual Fields	Virtual Care Diagnostic Centre	Injection	Theatres (NHS)	Theatres (Private)	Minor Ops (theatre 9)
ADULT	22	6	143	23	6	2	4	8	2	1

CHILDREN	3	0	23	3	1	0	0	0	0
<b>Total current</b>	<b>25</b>	<b>6</b>	<b>166</b>	<b>26</b>	<b>7</b>	<b>2</b>	<b>4</b>	<b>8</b>	<b>2</b>
<b>Schedule of Accommodation (test to fit)</b>	<b>30</b>	<b>6</b>	<b>177</b>	<b>17<sup>3</sup></b>			<b>6</b>	<b>10</b>	<b>4<sup>4</sup></b>
<b>Demand and Capacity (D&amp;C) Forecast 2026/27</b>	<b>28</b>	<b>170</b>		<b>14<sup>5</sup></b>		<b>2.3</b>	<b>4.2</b>	<b>10</b>	<b>3</b>
<b>D&amp;C Forecast 2031/32</b>	<b>32</b>	<b>181</b>		<b>15<sup>5</sup></b>		<b>2.5</b>	<b>4.4</b>	<b>11</b>	<b>3</b>
<b>D&amp;C Forecast 2036/37</b>	<b>37</b>	<b>206</b>		<b>18<sup>5</sup></b>		<b>2.8</b>	<b>5.1</b>	<b>12</b>	<b>3</b>

<sup>1</sup>includes CDU & Isolation, excludes Triage cubicles

<sup>2</sup>includes treatment rooms, ocular prosthetics & pre-assessment

<sup>3</sup>this reflects the efficiencies which can be gained through providing diagnostic centres of various sizes, designed around diagnostic bundles

<sup>4</sup>while the D&C forecast shows requirement for 14 theatres, an activity review has been undertaken with clinical colleagues to identify activity (primarily high-volume cataracts) which could be undertaken in a minor ops theatre, thereby improving space efficiency.

<sup>5</sup>assumes 3 machines per room

This shows that the building will have capacity to 2031/32 under the current operating assumptions. Growth beyond this will be mitigated through extended opening hours.

### 3.12 This is a unique opportunity to secure the future of Moorfields and UCL IoO

While many of the issues faced at the City Road site are not currently critical, they will become so in the future. Moorfields and UCL IoO have a unique opportunity to provide a fully future-proofed cutting edge facility at St Pancras, with a real focus on research and education. The St Pancras site is available in 2022 as a result of projects underway by C&I and WHT. Moorfields has the opportunity to purchase two acres of the site directly without having to compete on the open market, which is likely to represent better value than purchasing land from a developer. It is unlikely that a site of this size, so close to the existing City Road site and a major public transport hub, will become available again.

Oriel will enable Moorfields to plan for the future, providing additional capacity which will become critically important in future years, and providing the flexibility to respond to future changes – something which is increasingly challenging in the existing City Road site. The running costs (including maintenance and infrastructure upgrades) and Carbon emissions of the building will be lower than current, as described in the Economic and Finance cases of this OBC.

Oriel represents a critically important opportunity to develop the research and education undertaken by the Moorfields / UCL IoO partnership. It will provide a state-of-the-art facility which will enable collaboration between researchers and clinicians, enable UCL to increase its research output for the benefit of more patients, and solidify the partnership's position as an internationally recognised centre of excellence for ophthalmology. The new site will support the whole of the trust, providing a catalyst for change across the network and



attracting the best staff and students to work and train at Moorfields. It will enable both Moorfields and UCL to maximise the benefits of their already highly successful partnership.

Moorfields and UCL IoO clinicians and researchers are committed to the World Health Organisation (WHO) and International Agency for the Prevention of Blindness (IAPB)'s Vision 2020: The Right to Sight<sup>7</sup>, which sets out the goal to eliminate the main causes of all preventable and treatable blindness. This was published in 1999 with the aim of achieving this by 2020. A report by the World Innovation Summit for Health (WISH) Eye Health Forum in 2018<sup>8</sup> highlighted the need for new models of care in order to keep pace with future challenges and continue to provide the best care for all, including promoting collaboration across different levels of care and research, virtual clinics and teleophthalmology, and harnessing technological advances (e.g. use of artificial intelligence, new drug delivery systems). The report sets out five evidence-based recommendations;

1. Prioritise this most precious sense by promoting early access to prevention, diagnosis and treatment
2. Invest in sustainable, universal eye health
3. Embrace the power of partnership and collaboration
4. Promote excellence in education and training
5. Utilise technology and innovation

Oriel will deliver a state-of-the-art, flexible building located in London's Knowledge Quarter<sup>9</sup> which enables Moorfields to continue to pursue these recommendations. Without this, Moorfields will be unable to continue to lead the way in providing excellent patient care, and exploring new treatment options to eliminate preventable sight loss.

Finally, the trust will not be able to maintain its high reputation and standards of care without significant investment in the medium term future, and it is highly unlikely that another opportunity like this will become available again.

### **3.13 Public consultation**

#### **3.13.1 Overview**

On 24 May 2019, a 16-week public consultation was launched to seek the views from as many people as possible about the proposal to move services from City Road to the St Pancras Hospital site. The consultation was led by NHS Camden CCG, on behalf of the 14 CCGs who each commission over £2m p.a. of activity from Moorfields' City Road site, in partnership with NHS England Specialised Commissioning who are the largest single commissioner of Moorfields services at City Road. These organisations, together with

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<sup>7</sup> <https://www.iapb.org/vision-2020/>

<sup>8</sup> Bright Future – a new vision for eye health, report of the WISH Eye Health Forum 2018

<sup>9</sup> <https://www.knowledgequarter.london/>

Moorfields, have overseen the consultation and development of the Decision-Making Business Case (DMBC).

The consultation team spoke to over 4,600 people, including 1,511 survey responses. They attended 99 meetings and events including discussion workshops run by Moorfields, and attendance at existing groups. They included specific workshops on key issues, such as accessibility. The consultation specifically sought the views of groups of people with protected characteristics and rare conditions, to ensure their views were captured on the proposal itself and any potential impact on equality.

Consultation feedback was independently analysed in a report which was published on the Oriel website for feedback before finalising. Commissioners are confident that robust conclusions can be drawn from the consultation because response rates were high, and consistent themes were heard throughout.

The key themes from the consultation feedback were:

- **Overall agreement** with the proposal to build a new centre at St Pancras – including 73% of survey respondents.
- **Maintaining the high quality of clinical care** at Moorfields is the highest importance.
- **Patients and public should be involved** in further development of proposals.
- A majority of people **support the St Pancras location**. Alternative sites suggested were evaluated by independent property experts and found to be unsuitable for Oriel. A slightly higher level of dissatisfaction with the proposals was expressed by people living in east London.
- **Accessibility** to and around the proposed St Pancras site is extremely important. Key concerns included the difficulties of navigating a busy open-plan area from a station with multiple exits. Suggestions were made as to how Moorfields could help people travel the last half mile to the St Pancras site, and navigate the building.
- Some aspects of **patient experience** could be improved now.

This is described in detail in the Decision-Making Business Case (DMBC) available at <https://oriel-london.org.uk/committees-in-common-documents/>.

This high level of support and valuable feedback on how the trust can best capitalise on the opportunity to improve patient experience and service through Oriel, provides further evidence of the need for a new centre.

In addition to the feedback received, the DMBC describes the following activities undertaken as part of the consultation:

- **System modelling:** This identified a forecast annual increase in demand for ophthalmology outpatient services of 3.1%, which could be reduced to 2.3% if activity is re-provisioned in alternative settings. This is described in section 3.11.
- **Options appraisal validation:** The options appraisal process is described in chapter 4. Following consultation close, the options appraisal was validated to identify any feedback that could change the preferred option. This involved two workshops with

patients and public representatives to review the critical success factors, and a review of alternative sites suggested during the consultation. It was concluded that the proposed relocation of Moorfields services from City Road to the St Pancras site remains the preferred option.

- **Integrated Health Inequalities and Equality Impact Assessment (IIA):**

Commissioners appointed an independent expert to undertake an IIA, to ensure the project does not have a disproportionate impact upon any groups with protected characteristics. The IIA found that Moorfields City Road service users are more likely than in other healthcare settings to have one or more of the protected characteristics. Users of services at the City Road site often have a long and trusted relationship with the teams located there. The analysis showed a number of protected characteristics, health inequalities and health impacts were not negatively impacted by this proposed relocation. A summary of the key impacts are:

- Most feedback supported the proposal to relocate.
- People felt that the new centre would benefit both patients and staff, in that a specialist and highly regarded hospital such as Moorfields needs 21st century purpose-built facilities providing a world class centre of excellence.
- The primary issue for people with protected characteristics is the complexity of navigating the last half mile.

### 3.13.2 Commissioner recommendations

The **recommendations** approved by NHS England LRET and the Committees in Common of the 14 CCGs were:

#### 1. Accessibility

The consultation clearly highlights accessibility both within the new site, and for the last half mile to the St Pancras site. To ensure this is addressed, Moorfields Eye Hospital should develop and implement a robust accessibility plan, which is co-designed by the Trust in partnership with sight loss charities, Oriel Advisory Group, patients, transport providers, local authorities, commissioners and voluntary organisations. The accessibility plan should be incorporated into the building master plan, planning application and the development of the Oriel Full Business Case.

#### 2. Working in partnership and programme governance

The Committee in Common would like to thank all statutory, non-statutory groups and members of the public who contributed to the consultation to provide such a wealth of information to inform the decision and future design of the proposed St Pancras site. They also commend the approach and valuable input of the Oriel Advisory Group and the network of other partners into the consultation process.

As such, the Committee recommends that the Oriel programme continues to actively involve the Oriel Advisory Group as well as the extensive range of stakeholders that have contributed to the consultation, in the development of the centre at the St Pancras site.

Given the St Pancras site development includes a range of stakeholders, the Committee recommends further consideration be given, with NHS England and Improvement, about

the need for formal programme governance, which brings together the multiple stakeholders involved in the St Pancras site development, including NCL STP representation to ensure there is robust strategic oversight of the development as a whole.

Governance for the Oriel development of the new St Pancras site will be through the joint governance mechanisms agreed by the Trust and UCL. The Trust will report progress of the development into the proposed St Pancras site governance.

### 3. Service Improvement

Feedback during the consultation identified improvements in patient experience that can be commenced prior to the proposed move. It is recommended that Moorfields review the feedback received during the consultation and address areas of improvement before implementation of Oriel where possible.

### 4. New Models of Care

The ophthalmology demand and capacity modelling highlighted the potential benefits of working collaboratively to ensure a coherent approach to the development and implementation of new models of care that improves care for patients and provides care closer to home. To realise this potential, it is recommended that post decision making:

- Commissioners **establish a London Ophthalmology Collaborative** to progress system-wide service redesign of eye care services across London, which would support:
  - Collaboration between system partners including Moorfields and relevant commissioners to develop coherence and standardisation in the pathways experienced by ophthalmology patients.
  - Delivering the aspiration relating to follow up outpatient appointments as set out in the NHS long term plan, where clinically appropriate.
  - Managing activity growth assumptions as outlined in the Ophthalmology Systems Modelling report to support a sustainable model of high quality eye care.
  - Determining potential for future collaboration between Western Eye Hospital and Moorfields to ensure the most effective model of eye care services.

The Collaborative will build upon the modelling work undertaken for the DMBC, and delivery of the NHS Long Term Plan. The proposed new building will be designed flexibly to adapt to changing models of care as this develops. It should be noted the proposed relocation is not dependent on the work to establish a London Ophthalmology Collaborative.

### 5. Workforce and transition

To optimise the benefits of the new centre as referenced in both the PCBC and DMBC, it is recommended that Moorfields:

- Develop an **organisational development programme** to integrate **clinical** services, research and education, which enable optimal use of the new facilities and enable

the Trust to realise the benefits of integrating research, education and innovation with clinical practice.

- Acknowledge and celebrate the history of the City Road site.

## **6. Reducing inequality**

To ensure that the negative impacts identified in the Integrated Health Inequalities and Equalities Impact Assessment (IIA) are mitigated as far as possible and the potential positive impacts are harnessed, a plan should be developed in response to each of the recommendations arising from the IIA.

### **3.13.3 Moorfields response to consultation**

In response to the feedback received from the consultation, Moorfields have committed to:

- Take lead responsibility for mitigating the challenges regarding accessible routes to Oriel, leading a multi-agency partnership to develop and implement an Accessibility Plan, as part of a FBC, and the design and planning application for the new site.
- Involve patients in the design of Oriel through involvement in user groups.
- Commission a major programme of customer service training and improvement during 2020, which will be informed by consultation feedback.
- Adopt the strong message from consultation feedback that the proposed new centre should be a place of inspiration for everyone who goes there, whether for work or for treatment, showing what is possible and how to make it happen.
- Involve patients and staff in developing a comprehensive transition plan in preparation for the move.
- Accept all of the recommendations for ensuring the design promotes health equality.

The full Moorfields response to the consultation is included at Appendix 3D.

## **PART C – POTENTIAL BUSINESS SCOPE AND KEY SERVICE REQUIREMENTS**

### **Potential business scope and key service requirements – section summary**

Having established the case for change, this section summarises:

- The scope of Oriel, including core, desirable and optional deliverables.
- The main benefits of Oriel.
- The main risks to project delivery.
- The project's constraints and dependencies.

## **3.14 Oriel scope and deliverables**

### **3.14.1 Scope of Oriel**

The **core** deliverables and essential changes, without which the project will not be judged a success are:

- Improved wayfinding within the building and patient environment, as advised by patient advisory groups.
- Outpatients, including diagnostics and imaging, patient support services such as counselling, advice and guidance, with separation for children and young people.
- Accident and Emergency department, open 24 hours a day with urgent care and rapid access pathways for non-emergency patients.
- Theatres for primarily day-case patients, with limited inpatient beds for patients requiring overnight observation.
- Research facilities including laboratories, Biological Research Unit (BRU) and eye bank.
- Education facilities including seminar and teaching rooms, library and skills lab.
- Joint working and collaboration space.
- Shared support spaces including pharmacy, FM and the main entrance.

The **desirable** deliverables which may be justified on a value for money basis are:

- Expanded private patients, research and education.
- Administration and office space.
- Retail space, which would generate a revenue stream for the trust.

The **optional** deliverables which may be justified on a value for money basis are:

- Expanded revenue-generation such as additional private patient capacity.

The **preferred option** (as described in section 4.7) is to provide these core deliverables from a new 39,500m<sup>2</sup> new build at St Pancras Hospital. The optional deliverables have been discounted at this stage due to the affordability envelope. Administration space will be provided in a separate building, which is reflected in the Finance Case.

Key **enablers** to this are:

- The purchase of two acres of land from Camden and Islington NHS Foundation Trust for the new building.
- The sale of the City Road site.
- Obtaining town planning permission for the development.
- Establishment of a Joint Development Vehicle (JDV) to deliver the project (described in section 7.2, Commercial Case).

In addition to estates deliverables, this project will:

- Design new service models to ensure services are provided in the most efficient way, in line with up to date best practice (as per section 5.3, Clinical Quality Case).
- Integrate clinical services, research and education (as per section 5.4 and 5.5, Clinical Quality Case).
- Develop workforce models and implementation plans to support these service models (as per section 5.6, Clinical Quality Case).
- Deliver an IT strategy which ensures patients have the benefit of technology (as per section 5.7, Clinical Quality Case).



Finally, this project involves disposal of all Moorfields and UCL owned sites at City Road. A key enabler to this is to obtain a PPA (pre-planning application) for the site, to enhance its sale value. This is described in detail in the Commercial Case (section 7.9).

### 3.15 Identifying the main benefits

The main benefits which will be derived from the Preferred Way Forward for Oriel are set out below. A Benefit Realisation Plan (BRP) is included at Appendix 8A which shows how the benefits to Moorfields and its patients will be measured. The benefits to the UK as a whole are quantified in the Economic Case (chapter 4).

**Table 13: Oriel benefits**

Investment objective	Benefit	Beneficiary	Benefit class	Measured in...
1. Improve clinical outcomes and experience as set out in the strategic benefits, contributing to improved patient reported outcomes and experience measures through an improved environment by 2026/27  7. Full compliance with the following from 2026/27: <ul style="list-style-type: none"> <li>Current statutory building requirements</li> <li>Current health building best practice</li> <li>Equality Act 2010 accessibility requirement</li> </ul>	Maintain current high standards in patient care	Moorfields Patients	Quantifiable Non-cash releasing	BRP (Benefits Realisation Plan, Appendix 8A)
	Improved patient satisfaction	Patients	Quantifiable	BRP Economic appraisal
	Increased earnings of partially sighted people in employment	Patients Society	Cash releasing	Economic appraisal
	Improving access to clinical services	Patients Society	Qualitative	BRP
	Increased staff satisfaction	Staff Moorfields	Quantifiable	BRP Economic appraisal
2. Maximise the opportunity to undertake and translate discovery research through experimental medicine studies and trials in patients, leading to new diagnostics and new therapies, and to maintain our world-leading partnership status – increased volume and quality of research publications, thereby maintaining the IoO's number one status (RAND Europe, 2015), through a 15% increase in the number of principal investigators at the IoO,	Greater access for patients to participate in research	Patients Moorfields UCL Society Wider NHS	Quantifiable	BRP
	Improved research output	Patients Moorfields UCL Society Wider NHS	Qualitative	BRP Economic appraisal

and an additional 82 publications per year published by academics at IoO and Moorfields by 2031/32				
3. Increase in student numbers undertaking degree and training courses by an average of 60 more ophthalmology students per year by 2031/32	Improving number of high-quality trainees	Moorfields Staff Wider NHS UCL	Quantifiable	BRP Economic appraisal
	Improved medical student satisfaction	Moorfields UCL	Quantifiable	BRP Economic appraisal
4. Enable clinical efficiencies, informed by GIRFT and Carter, working towards national targets of a 30% reduction in outpatient appointments from 2025/26 in collaboration with system partners.	Improved throughput in outpatients, theatres and A&E	Moorfields Patients	Non-cash releasing	BRP Economic appraisal
	Time saving for patients	Patients	Non-cash releasing	Economic appraisal
5. Premises and equipment suitable for use by the Oriel partners for at least 10 years from operation in 2025/26 with improved capacity for clinical treatment, research and education	Ability to adapt to future service change	Patients Moorfields Wider NHS	Qualitative	BRP
	Reduced CO2 emissions	Society	Non-cash releasing	BRP Economic appraisal
	Eliminate backlog maintenance	Moorfields	Non-cash releasing	BRP
6. Increased research income for the IoO of £20m over the first five years of operation (2026/27 – 2030/31); with an average of 20 additional grants awarded per year by 2031/32	Increased research and development income	Moorfields	Cash releasing	Economic appraisal Finance Case

### 3.16 Identifying the constraints

Constraints are the external conditions and agreed parameters within which the programme must be delivered, over which the project has little or no control. The key constraints to this project are that:

- the proposals must be delivered in line with the recommendations set out in the Decision Making Business Case (DMBC).
- the capital cost must not exceed the affordability envelope (detailed in the Finance Case).
- the revenue cost must remain financially sustainable (detailed in the Finance Case).

### 3.17 Identifying the dependencies

There are a number of dependencies outside the scope of the project upon which the ultimate success of the project is dependent. These fall into two categories:

Inter-dependencies with the St Pancras site redevelopment programme. These are:

- Achieving the benefits identified Oriel OBC is dependent on Moorfields' ability to purchase 2 acres of land from Camden and Islington NHS Foundation Trust (C&I) at the St Pancras Hospital site.
- Moorfields' ability to purchase of the St Pancras site is dependent on approval of the C&I OBC, on the basis of the preferred way forward (to sell 2 acres of the site to Moorfields).
- The Oriel programme is dependent on the ability to submit a planning application in September 2020, and securing vacant possession in order to commence construction in 2022.
- Achieving planning permission for the development of St Pancras is dependent on the Oriel partners working in partnership with C&I and their development partner to submit a single masterplan for the site to the London Borough of Camden.
- This is in-turn dependent on the enabling works underway by the Whittington Health Trust (WHT) to provide C&I with vacant possession for their new facility.

External dependencies outside the project environment. The project is dependent upon:

- Achieving the fundraising target set out in the Finance Case.
- Obtaining commissioner support for proposals.
- Ability to purchase the St Pancras site by 31 March 2021, thereby drawing down on £XXXm of funding from the UK Research Partnership Investment Fund (UKRPIF) grant awarded to UCL.
- Approval of OBC and FBC by trust board.
- Approval of OBC and FBC by NHS Improvement and NHS England, Department of Health and Social Care and Her Majesty's Treasury.
- Maintaining commitment to the project from UCL.

## 4. Economic case

### Economic case – chapter summary

This chapter describes the process undertaken to:

- Identify a long list of options.
- Prioritise these into a shortlist.
- Perform an economic appraisal following HM Treasury Green Book methodology and the DHSC's Comprehensive Investment Appraisal model to determine a preferred option.

The shortlist identifies five options:

- Option 0: Business as usual (comparator).
- Option 1: Do minimum (a realistic investment programme to maintain City Road operations).
- Option 2: Redevelopment of City Road.
- Option 3: Build a new facility at St Pancras – 39,500 square metres.
- Option 4: Build a new facility at St Pancras – 43,000 square metres.

The economic appraisal demonstrates that Options 3 and 4 have the highest net present social value and benefit-cost ratio. Option 4 is discounted due to affordability. Option 3 is therefore identified as the preferred option.

This is tested through sensitivity analysis which demonstrates that this conclusion is robust.

#### **Key supporting documents**

- **Appendix 4A: Stakeholder workshops summary**
- **Appendix 4B: Approach to costing do minimum option**
- **Appendix 4C: Quantified risk methodology**
- **Appendix 4D: Further breakdown of economic appraisal**
- **Appendix 4E: OB forms for each option**
- **Appendix 4F: DHSC Comprehensive Investment Appraisal Model**
- **Appendix 4G: Options framework further detail**

### 4.1 Introduction and methodology

This options appraisal in the OBC represents a refresh of the options appraisal undertaken in the SOC, using the opportunity to update assumptions and reflect the updated Treasury Green Book guidance published in 2018. The following steps have been followed:

- Step 1: The investment objectives and Critical Success Factors (CSFs) were refreshed to ensure they continue to meet the needs of all the Oriel partners. These

were tested through engagement with a wide range of internal and external stakeholders. **See section 4.2.**

- Step 2: The HM Treasury options framework was used to develop a long list of options. These were appraised against the CSFs, and validated in a workshop with a wide range of internal and external stakeholders, including commissioners and patient representatives. The output of this was a shortlist of options that best meet the CSFs. **See sections 4.3 and 4.4.**
- Step 3: The costs, benefits, and risks of the shortlisted options were identified. Using the Comprehensive Investment Appraisal (CIA) model, a value for money assessment was undertaken to identify the preferred option. **See section 4.5.**
- Step 4: Sensitivity analysis was conducted on the preferred option. **See section 4.6.**

## 4.2 Refresh of investment objectives and critical success factors

Critical success factors (CSFs) are the attributes essential for successful delivery of the project, against which the long list of options for the project have been appraised. These align with the investment objectives set out in the Strategic Case (section 3.9).

The CSFs for Oriel were developed by the project team and refined during stakeholder workshops described in Appendix 4A. These workshops ensured commissioner and patient representative perspectives were captured in the CSFs. They were attended by representatives from:

- Moorfields trust executive
- Moorfields trust senior clinical and operational leaders
- NCL (North Central London) CCGs to represent CCG commissioners
- NCL STP
- NHS England specialised commissioning
- Patient groups
- Local authorities
- The voluntary sector

The CSFs for Oriel are set out in Table 14.

**Table 14:** Critical success factors for assessment of the long list of options

HMT CSF category	CSF	Description
Strategic fit and business needs	Strategic fit	<p>Contributes to delivery of:</p> <ul style="list-style-type: none"> <li>• Priorities of the NHS Long Term Plan<sup>10</sup>, including moving to new service models in which patients receive care in the most optimal setting</li> <li>• Integrated care priorities of the STP and NHS England specialised commissioning</li> </ul>

<sup>10</sup> <https://www.longtermplan.nhs.uk>

		<ul style="list-style-type: none"> <li>• The Government's industrial strategy: Building a Britain fit for the future<sup>11</sup></li> <li>• UCL 2034 Strategy<sup>12</sup> and Brain Sciences Faculty Doctoral Strategy<sup>13</sup></li> <li>• Enables the Oriel partners to maximise integration and innovation in the delivery of research, education and clinical care</li> <li>• Improves the strength and effectiveness of existing clinical and academic networks</li> <li>• Improves accessibility and connectivity of the Oriel partners' hub to the partners' other sites</li> </ul>
	Creating the best possible patient experience	<ul style="list-style-type: none"> <li>• Improves clinical outcomes by integrating research with service delivery</li> <li>• Contributes to a reduction in health inequalities</li> <li>• Contributes to improving patient reported outcomes and experience measures through an improved environment</li> <li>• Enables a smooth clinical pathway from primary care referral to diagnosis/treatment to supported self-care</li> <li>• Facilitates transformation of clinical and research pathways through implementation of integrated care models and better use of technology</li> </ul>
	Accessibility	<p>Positive impact on:</p> <ul style="list-style-type: none"> <li>• Accessibility and safety for visitors and staff by and from public transport</li> <li>• Emergency access</li> <li>• Population-weighted average travel times for acute and specialist patients</li> <li>• Reduces patient and staff journey times in the building due to improved adjacencies</li> <li>• Full compliance with Equality Act 2010</li> </ul>
	Inventing and innovating together to be at the leading edge	<ul style="list-style-type: none"> <li>• Brings Moorfields and the IoO to the heart of the UCL Bloomsbury campus, improving collaboration and enabling resources to be shared with colleagues in other UCL and the Central London Knowledge Quarter</li> <li>• Enhances delivery of life changing research evidenced through increased rate of conversion of new therapies from trials to clinical care</li> <li>• Provides space for collaboration between health professionals, researchers and patients in an 'open innovation hub', allowing us to transform existing (and create new) strategic partnerships with industry and other higher education institutes</li> </ul>
	Educating people to be the very best	<ul style="list-style-type: none"> <li>• Enables the Oriel partners to equip staff and students with the knowledge and skills to be successful and to fulfil their ambitions</li> <li>• Enables world leading education, learning and development to take place in appropriate modern facilities</li> </ul>

<sup>11</sup> <https://www.gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future>

<sup>12</sup> <https://www.ucl.ac.uk/2034/>

<sup>13</sup> <https://www.ucl.ac.uk/gs/doctoral-education-strategy/faculty-strategies/Brain-Scs.html>



		<ul style="list-style-type: none"> <li>Provides opportunities for cross-departmental learning at UCL and within the Central London Knowledge Quarter</li> <li>Enables growth in education through greater capacity</li> </ul>
	Improving the experience for staff and students	<ul style="list-style-type: none"> <li>Contributes to attracting and retaining the best clinical and research expertise for our patients</li> <li>Contributes to improving staff and student welfare – and improving satisfaction measures through an improved environment and greater opportunities for learning and collaboration</li> </ul>
Potential value for money	Future flexibility	<ul style="list-style-type: none"> <li>Provides a development opportunity of up to 40–45,000m<sup>2</sup> space with efficient floorplate</li> <li>Ability to expand and contract space efficiently to suit changing demand</li> <li>Increases flexibility of facilities through modular design and construction standardisation</li> </ul>
	Economy and efficiency	<ul style="list-style-type: none"> <li>Improved adjacencies and integrated care models increase the flow of patients within clinical areas and enables better use of resources</li> <li>Enables greater use of technology to improve efficiency of services</li> <li>Enables collocation of activities to achieve economies of scale and scope</li> <li>Lower running costs from efficient and environmentally sustainable premises</li> <li>Increases opportunities for potential alternative income sources for Oriel partners</li> </ul>
Potential affordability	Affordability	<ul style="list-style-type: none"> <li>Capital available to achieve prescribed capacity and quality</li> <li>One-off costs (excluding capital and receipts) to implement changes</li> <li>Revenue expenditure requirement affordable within income</li> </ul>
Potential achievability	Deliverability	<ul style="list-style-type: none"> <li>Can be delivered and made operational by 2025/26, while maintaining current services</li> <li>Acceptable to stakeholders</li> </ul>

### 4.3 Long list of options

The long list of options was generated in accordance with the requirements of HM Treasury's Green Book<sup>14</sup>. Options were generated using the options framework, which systematically works through the available choices for what, how, who, when and funding. The five dimensions of the options framework are shown in Table 15.

**Table 15:** Overview of the options framework

Dimension	Description
1. Scoping options	<p>Choices in terms of coverage (the what)</p> <p>The choices for potential scope are driven by business needs and the strategic objectives at national, regional and local levels. In practice, these</p>

<sup>14</sup> Central government guidance on appraisal and evaluation

	may range from service scope to geographical, organisational and patient coverage. Key considerations at this stage are 'what's in?' 'what's out?' and service needs.
2. Service solution options	<p>Choices in terms of solution (the how)</p> <p>The choices for potential solution are driven by new technologies, new services and new approaches, and new ways of working, including business process re-engineering. In practice, these will range from services to how the estate of an organisation might be configured. Key considerations range from 'what ways are there to do it?' to 'what processes could we use?'</p>
3. Service delivery options	<p>Choices in terms of delivery (the who)</p> <p>The choices for service delivery are driven by the availability of service providers. In practice, these will range from within the organisation (in-house), to outsourcing, to use of the public sector as opposed to the private sector, or some combination of each category. The use of some form of public private sector partnership (PPP) is also relevant here.</p>
4. Implementation options	<p>Choices in terms of the delivery timescale (the when)</p> <p>The choices for implementation are driven by the ability of the supply side to produce the required products and services, value for money, affordability and service need. In practice, these will range from the phasing of the solution over time, to the modular, incremental introduction of services.</p>
5. Funding options	<p>Choices in terms of financing and funding</p> <p>The choices for financing the scheme (public versus private) and funding (central versus local) will be driven by the availability of capital and revenue, potential value for money, and the effectiveness or relevance/appropriateness of funding sources.</p>

A binary pass/fail assessment of the options in each dimension was made against the CSFs. Options were either discounted, shortlisted or identified as a preferred choice. Table 16 shows which CSFs were used to assess which dimension of the options framework.

**Table 16:** How the CSFs were used to assess the dimensions of the options framework

HMT CSF category	CSF	Scope	Service solution	Service delivery	Implementation	Funding
Strategic fit and business needs	1. Strategic fit	●	●	Unchanged from land		
	2. Creating the best possible patient experience	●	●			
	3. Accessibility		●			

HMT CSF category	CSF	Scope	Service solution	Service delivery	Implementation	Funding
	4. Inventing and innovating together to be at the leading edge	●	●			
	5. Educating people to be the very best		●			
	6. Improving the experience for staff and students	●	●			
Potential value for money	7. Future flexibility		●			
	8. Economy and efficiency	●	●		●	
Potential affordability	9. Affordability	●	●		●	●
Potential achievability	10. Deliverability	●	●		●	●

The assessment of the long list against the relevant CSFs is summarised in Table 17. This shows whether the option fails the CSFs and is therefore rejected, or passes the CSFs and is therefore carried forward. Under each domain a preferred way forward is identified which best meets the CSFs.

**Table 17: Overview of assessment of longlisted options against CSFs**

Options		Summary of assessment
<b>Scoping</b>		
<b>Clinical</b>		
1.1a	'Business as usual'	Carried forward as 'business as usual'
1.1b	Future system care mode	Carried forward as it is currently being developed and will need to be further considered at OBC
<b>Research and development</b>		
1.2a	'Business as usual'	Carried forward as 'business as usual'
1.2b	Future research and development model	Carried forward as 'preferred'
<b>Education</b>		
1.3a	'Business as usual'	Carried forward as 'business as usual'
1.3b	Future education model	Carried forward as 'preferred'
<b>Service solution</b>		
2.0	'Business as usual': all occupants remain in existing estate and works undertaken to enable premises usage for 50 years	Fails the majority of CSFs, however carried forward as 'business as usual'
2.1	Development of land between Moorfields and UCL IoO, City Road site	Discounted – fails four CSFs
2.2	Development of the easternmost end of the current hospital site bordering City Road	Carried forward as best option on current site
2.3	Development of the southernmost side of the City Road hospital site bordering Peerless Street	Discounted – does not allow integration of clinical and research services
2.4	Part new build and part refurbishment, City Road	Discounted – does not allow integration of clinical and research services

Options		Summary of assessment
2.5	Relocation to St Pancras Hospital	Carried forward as 'preferred'
2.6	Relocation to site A (18 Blackfriars Road)	Discounted – not affordable
2.7	Relocation to site B (Blythe House)	Discounted – fails five CSFs
2.8	Relocation to site C (ITV Centre)	Discounted – not affordable
2.9	Relocation to site D (Vauxhall – various)	Discounted – site fails CSFs 1 and 4; and not affordable
2.10	Relocation to site E (White City – various)	Discounted – site fails CSFs 1 and 4; and not affordable
2.11	Relocation to site F (Stratford – various)	Discounted – site CSFs 1 and 4
2.12	Relocation to site G (Elephant and Castle – various)	Discounted – site fails CSFs 1 and 4; and not affordable
<b>Service delivery</b>		
3.1	Traditional	Discounted
3.2	Design and build	Carried forward for further consideration at OBC
3.3	Design, build and operate	Carried forward as 'preferred'
3.4	Design, build, operate and finance	Carried forward for further consideration at OBC
3.5	Partnering	Discounted
3.6	ProCure21+ (replaced by ProCure22)	Carried forward for further consideration at OBC
3.7	Construction management	Discounted
<b>Implementation</b>		
<b>Refurbishment/build phasing</b>		
4.1a	All at once	Most economic way of delivering works – carried forward as 'preferred'
4.1b	Phased build	Carried forward – less economic but may be necessary for some build options
<b>Transition</b>		
4.2a	Big bang	Discounted – unacceptable risk to continuity of clinical services and too logistically complex to deliver
4.2b	Decoupled big bang	Discounted – unacceptable risk to continuity of clinical services; breaks clinical adjacencies; and too logistically complex to deliver
4.2c	Phased NHS; big bang UCL	Discounted – too logistically complex to deliver
4.2d	Big bang NHS; phased UCL	Discounted – unacceptable risk to continuity of clinical services; and too logistically complex to deliver
4.3e	Phased NHS; phased UCL	Likely to present the best balance of speed and continuity risk – carried forward as 'preferred'
<b>Funding</b>		
5.1	Local Improvement Finance Trust (LIFT)	Discounted – may be unaffordable because of repayment of principal
5.2	Public-Private Partnership (PPP)	Discounted – may be unaffordable because of repayment of principal
5.3	Public Dividend Capital (PDC)	Carried forward as the most affordable alternative source of financing
5.4	NHS prudential borrowing	Discounted – may be unaffordable because of repayment of principal
5.5	Local authority, including prudential borrowing	Discounted – may be unaffordable because of repayment of principal

Options		Summary of assessment
5.6	Energy efficiency financing (RE:FIT)	Discounted – may be unaffordable because of repayment of principal
5.7	Land receipts and internal financing	Carried forward as equally 'preferred' because there are no financing or repayment costs
5.8	Charitable donations	Carried forward as equally 'preferred' because there are no financing or repayment costs

From this assessment, a shortlist of three options emerges which is summarised in Table 18.

**Table 18: Overview of shortlisted options from options framework**

Dimension	Option 0: 'business as usual' <i>Baseline option</i>	Option 2: Stay at City Road and redevelop <i>Intermediate option</i>	Option 3: New build at St Pancras <i>Preferred way forward</i>
	<i>The baseline for measuring improvement and value for money</i>	<i>A realistic and achievable option that meets some of the essential requirements</i>	
<b>Scope</b>			
Clinical	'Business as usual'	'Business as usual' and future system care model need to be further considered at OBC	'Business as usual' and future system care model need to be further considered at OBC
Research and development	'Business as usual'	Future research and development model	Future research and development model
Education	'Business as usual'	Future education model	Future education model
<b>Service solution</b>	'Business as usual': all occupants remain in existing estate and works undertaken to enable premises usage for 50 years	Development of the easternmost end of the current hospital site bordering City Road	Relocation to St Pancras Hospital
<b>Service delivery</b>	n/a	Design and build	Design, build and operate (DBOF and ProCure 22 to be further considered at OBC)
<b>Implementation</b>			
Refurbishment/build phasing	'Business as usual' – backlog maintenance	Phased build	All at once
Transition	n/a	Transition phased according to individual build phases	NHS and UCL both phased over 6 months according to adjacencies
<b>Funding</b>	Internal financing; with PDC as most affordable alternative source. No option for land receipts or charitable donations.	Internal financing; with PDC as most affordable alternative source. No option for land receipts or charitable donations.	Land receipts, internal financing and charitable donations preferred; with PDC as most affordable alternative source

#### 4.4 Shortlist of options

These three options were shortlisted at SOC stage, and confirmed in the options refresh exercise described above for consideration at OBC stage. As more detailed work has been carried out in the development of the OBC, two variants of these options have been identified for inclusion on the shortlist:

- **Option 1 – Variant of Do Nothing (BAU)** option is a '**do minimum**' option which describes the minimum investment required at the City Road site in order for Moorfields to remain in occupation for the long term. This reflects additional works



- above and beyond the 'mend and make do' investment currently taking place on the site, and not considered to be operationally sustainable in the longer term.
- **Option 4** – *Variant on move to St Pancras* is a **larger facility** (43,000sqm compared to the preferred way forward of 39,500sqm) in an upside scenario. The larger size would provide space for commercial opportunities, such as expanding private patients, research and education where it is clear the additional contribution will cover the additional capital cost. For example, there is an opportunity to form commercial partnerships with pharmaceutical and biosciences companies, however at OBC stage negotiations are not sufficiently advanced to provide adequate certainty that this is a viable option.

The shortlist of options to be assessed at OBC, compared to the shortlisted options at SOC stage, are summarised in Table 19.

**Table 19:** Summary of shortlisted options at OBC stage compared to SOC

Shortlisted option	SOC	OBC	Rationale for change from OBC
'Business as usual' (BAU)	Address backlog maintenance and maintain compliance	<p>0. BAU option – continue investment at historic rates. Not realistic or sustainable.</p> <p>1. <b>Variant</b> 'Do Minimum' option of addressing additional investment requirements at City Road to remain in occupation for 60 years. Supporting information can be found at Appendix 4B.</p>	<p>The BAU option is the baseline for comparing all other options against.</p> <p>The do minimum option reflects a more realistic level of investment to maintain operations at the City Road site.</p>
Intermediate	46,200 sqm new build over 16 floors, phased build	2. Stay at City Road and redevelop - 46,200 sqm in a combination of redevelop and refurbish. Additional area built in compared to preferred way forward to reflect inherent space inefficiencies.	This is a realistic, more ambitious version of the do minimum, where the aim is to achieve the maximum potential of the existing site.
Preferred way forward	43,000sqm new build over 8-12 floors	<p>3. Move to St Pancras - 39,500sqm new build in line with affordability envelope. Off-site accommodation required for functions that cannot fit on site.</p> <p>4. <b>Variant</b> – Move to St Pancras - 43,000sqm new build, enabling commercial opportunities to be pursued.</p>	The variant option introduced in the OBC as a shortlisted option - only possible if the funding exists to support it as not

			affordable under current budget assumptions.
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#### 4.5 Economic appraisal of shortlisted options

An economic appraisal of the shortlisted options has been conducted using the DHSC Comprehensive Investment Appraisal (CIA) Model, in line with the HM Treasury Green Book. This economic appraisal approach looks beyond an individual organisation and aims to consider instead the value of options to the UK as a whole – referred to as ‘social value’. Value is analysed into costs, benefits and risk.

Table 20 shows the risk-adjusted Net Present Social Value (NPSV) for each shortlisted option, and the benefit-cost ratio. NPSV is the total social value (including all costs, benefits and risks for the option), adjusted to take into account the time-value of money (following Green Book rules on discounting). The appraisal covers a 60 year period, considered to be the useful economic life of the asset. All costs are uninflated with the base year as 2019/20.

As shown in Table 20, Options 3 and 4 have the highest incremental NPSV and benefit-cost ratio. The underpinning assumptions are explained in further detail below.

**Table 20:** Risk adjusted NPSV and benefit-cost ratio of shortlisted options

[Redacted]

The following sections explain each of the headings above and the key assumptions made under these. A further breakdown is provided in Appendix 4D.

#### **4.5.1 Economic costs of shortlisted options**

##### **Opportunity costs**

- There is an opportunity cost to continuing with City Road in its current use – this is demonstrated by the valuation of the site for private sector use by CBRE.
- This is included as a cost in the BAU (Option 0), Do Minimum (Option 1) and Redevelopment of City Road (Option 2) where City Road is retained.
- In Options 3 and 4, where City Road is sold and land on the St Pancras site is utilised instead, no opportunity cost is included, which represents an incremental benefit in these options compared to BAU.

##### **BAU capex**

- A level of business as usual capex is required in addition to construction related capex. This is to cover costs on network sites and for equipment costs across all sites.
- In Option 0, BAU capex is held at underlying historical maintenance rates of c.£XXXm per annum.
- In Option 1, the element related to building maintenance on City Road is reduced, as this is covered instead by the increased investment to address impending backlog and subsequent lifecycle costs.
- Options 2, 3 and 4 each include a significant capital investment to develop a new facility and the costing of this includes significant investment in IT and equipment. For this reason, these options include a reduction in BAU capex around the time of this investment (the capex of the investment is included within 'design and construction' capex).

##### **Design and construction capex (incl equipment)**

- The costs included here for each option are those as assessed by Gardiner and Theobald (G&T) as the quantity surveyors for the project. These costs are based on the RIBA Stage 1 design information. Cost forms for each option have been produced by G&T following NHS capital costing guidance – included as Appendix 4E.

##### **Lifecycle**

- Lifecycle cost estimates were prepared by G&T using benchmark data to create an indicative spend profile. G&T's benchmark data is based on extensive life cycle analysis used to formulate benchmark rates for each building element. From this, a range of projects similar in scope and nature to Oriel were selected.
- The benchmark data used is taken from comparator data from G&T's experience on similar developments either directly appointed and where G&T have modelled costs from first principles using detailed cost plans; or where G&T have undertaken previous benchmark reviews or published data from standard industry sources, such as BCIS.
- Lifecycle costs have been assessed by G&T for options 1, 2, 3 and 4.

##### **Revenue costs**

- Revenue costs include the NHS clinical, non-clinical and building running costs

- Options 0 and 1 have lower costs because NHS growth, and therefore clinical costs, are constrained by operational capacity.
- Options 3 and 4 allow for an additional five years of growth and therefore additional cost (and also benefit – see below). The demand and capacity modelling that supports this assumption is set out in 3.11.3. This concludes that there the new facility will reach capacity by the end of FY31.
- The cost of this increased growth is partially offset by cash releasing efficiencies assumed to be realised in the first five years after opening.
- Option 2 has the highest revenue cost because of additional running costs related to renting clinical space during the phased redevelopment of City Road. The assumption is that 14,500 sqm of space will be required for a 10 year period while construction work takes place on the City Road site. Revenue costs are also higher because cash releasing efficiency benefits are at 50% of option 3 and 4.
- The differences in running costs between the options is set out in further detail in appendix 4D.

#### **Transitional costs**

- These costs reflect double running and decant costs, and also the costs of the transformation programme to ensure organisational readiness for the move to the new facility.
- No costs of this nature are incurred in Business as Usual (Option 0) or Do Minimum (Option 1).
- Redevelopment of City Road (Option 2) has an increased level of costs as it requires three phases of decant.
- The St Pancras options (Options 3 and 4) have an additional provision for accessibility works on the new facility (a key priority which reflects feedback from the public consultation).

#### **Net contribution**

- Following HM Treasury CIA guidance, contribution is included from commercial sources of income – relating to private patient activity in London and the UAE.
- The schedule of accommodation for the new St Pancras facility includes capacity for London private patient activity. Additional London private patient growth is reflected in Options 2 to 4 due to utilisation of this additional capacity.
- Option 4 includes an assumption of commercial benefit from the additional 3,500 sqm of space. This offsets the additional capital cost of this option.

### **4.5.2 Economic benefits of shortlisted options**

Economists from Ernst & Young (EY) were engaged to conduct a detailed economic benefits identification and quantification exercise for Oriel. Their work is the basis of the economic benefits used in the shortlisted options appraisal.

- Improved clinical outcomes from Oriel will result in improvement in quality of life for patients who have been prevented from going blind. This has been quantified using the value of an eye sight Quality Adjusted Life Year (QALY) from an academic

literature review. Each QALY has been valued using the Green Book standard value of £60,000.

- Additional clinical capacity – as set out above, demand and capacity modelling (section 3.11.3) demonstrates that the new facility will provide (at least) five years of growth after opening, up to the end of FY31. The benefit of this activity has been valued using NHS tariff (in real terms) as a proxy for the health benefits that accrue as a result of this activity. The calculation is based on the additional activity that occurs in each option beyond the level of the Business as Usual option.
- Reduction in CO2 emissions from a new building compared to the existing City Road site. This has been quantified based on the planned CO2 emissions in the latest design, and the cost per tonne of CO2 from the National Grid.
- Patient time saving – calculated based on a study of glaucoma patients and the savings in time generated by more efficiency pathways in the new facility.
- Increased research output has a benefit to society as described in a Frontier economics paper for the department of business, innovation, and skills. Increased research output as a result of the enhanced collaboration between MEH and UCL has been assessed using a number of studies into the impact of collaboration in other countries.

The economic appraisal assumes that each of the options involving a significant capital investment can achieve these benefits (Options 2, 3 and 4) but that the other Options (0 and 1) do not. The timing of Option 2 means that the benefits achieved are slightly lower in that option compared to Option 3 and 4.

#### **4.5.3 Risk of shortlisted options**

Quantified risk has been assessed for each option and included in the CIAM. Following CIAM guidance, this risk has been adjusted to reflect contingency included in the initial capital costs so as not to double count risk.

The methodology for assessing risk is set out in Appendix 4C.

##### **Option 0: Business as Usual**

Business as Usual is presented for comparison purposes. It assumes underlying historical trends in maintenance expenditure. However, this is not considered a realistic option due to the level of impending backlog. An assessment of the investment required to maintain operations at the City Road site has been undertaken and this is represented in the Do Minimum (Option 1). The operational risk represented by continuing at BAU levels of capex has been quantified at between £XXXm and £XXXm per annum. In discounted terms, this equates to £XXXm of risk shown against Option 1. This is the option with the highest quantified risk.

##### **Option 1: Do minimum**

Design and construction risk is included in the contingency within capital costs as assessed by the trust's cost consultants. A number of additional risks are quantified here beyond this. This option has the lowest additional quantified risk given the simpler project this involves. However, it also has the lowest benefit-cost ratio.

### **Option 2: Redevelopment of City Road**

Design and construction risk are included in a 10% contingency (as part of the capital costs) and a 37% optimism bias. The significantly increased optimism bias over other options reflects key factors highlighted as relevant in the DHSC Comprehensive Investment Appraisal model, including:

- Length of build.
- Number of construction phases.
- That it is a redevelopment of an existing site as opposed to new build.
- Design complexity.

The quantified risk section of the CIAM includes risks in addition to this such as uncertainty in relation to the complexity of the decant plan and the disruption to services. These mean that option 2 has the highest level of additionally quantified risk – reflecting that this is the most complex construction project proposed.

### **Options 3 and 4: new facility at St Pancras – 39,500 square metres and 43,000 square metres**

Both options include 10% contingency and 15% optimism bias. Additional risks have been identified and quantified in the CIAM, not already included within those assumptions, relating to design, various factors that might cause delays, specific additional costs relating to construction and accessibility, and additional resources that might be required in the transition period. These are set out in further detail in the risk register provided in the management case and in the CIAM provided as appendix 4F.

#### **4.5.4 Conclusions of the economic appraisal**

[Redacted]

Options 3 and 4 have the highest NPSV and benefit-cost ratio. The incremental cost in these options represents both the additional capital required to build a new facility and also the additional revenue cost of delivering the additional activity, which in turn generates economic benefits.

The difference between the two options is an additional 3,500 sqm within the new facility to be utilised for commercial opportunities. The assumption in the economic model is that this space generates sufficient economic benefits to offset its cost – and this has been tested for reasonableness at a high level against the market rate for rental of the space. Depending on the usage, there may be further economic benefits to be realised, but this has not been included at this stage.

However, **Option 3 is selected as the preferred option.** While the additional capital cost of Option 4 (£XXXm, undiscounted) is justifiable on economic grounds, it is not considered affordable as the trust has not identified additional sources of capital funding. In addition, while the revenue and risk implications are acceptable in a base case, sufficient certainty as to the use of this additional space has not been identified at OBC stage.



Having discounted Option 4, the following section assesses the sensitivity of the selection of Option 3 as preferred option over Option 0 (business as usual).

## 4.6 Sensitivity analysis

A sensitivity analysis has been undertaken in order to assess how sensitive the conclusion of the economic appraisal is to changes in the underpinning assumptions, alongside the likelihood of such changes occurring.

This level of sensitivity can be represented in the switching analysis in Table 21. This shows the percentage change required in the underlying assumptions for the economic appraisal to reach a different conclusion.

This comparison is to Business as Usual (Option 0). Note that Option 2 and Option 4 are not considered affordable from a financial perspective, and therefore the relevant comparison is to BAU (Option 0) and Do Minimum (Option 1), which have the same NPSV.

**Table 21:** *Switching analysis*

[Redacted]

The table above shows that the conclusion that option 3 has a higher NPSV than Option 0 or 1 is not sensitive to changes in any individual assumptions. Very significant changes would be required in each category to reduce the incremental NPSV of option 3 by £XXXm.

Note, for example, that [redacted] would not affect the conclusions here.

### 4.6.1 Scenario analysis

The above sections explain why the conclusion of the economic appraisal is not considered to be sensitive to any one category of assumptions individually.

The following scenario has been constructed as a downside scenario, where multiple assumptions have a less favourable impact:

- Sensitivity 1: Capital costs increase by 25%
- Sensitivity 2: City Road sales proceeds at the CBRE downside valuation
- Sensitivity 3: Reduced improved clinical outcomes benefit by 25%
- Sensitivity 4: Reduced NHS growth to the reprovision growth rate assessed by Edge Health as part of the DMBC
- Sensitivity 5: Reduced private patient growth to overall market growth rate of 2.5% p.a.

The impact of this on the economic case is summarised in the following table:

[Redacted]

This demonstrates that in this downside scenario, the conclusion of the economic appraisal remains the same, with the preferred option having a significantly positive NPSV and a benefits-cost ratio of 3.2.

Note, this is aligned with the downside scenario used in the Finance case as follows:

- The capital risks used here are the same as those in the downside scenario in the Finance Case.
- The revenue risks in the Finance Case are included here where they impact economic benefits – otherwise, where they affect cost only, they have been excluded on the basis that there are cost reserves held within running costs that offset these sensitivities.
- The sensitivity here related to societal benefits (improved clinical outcomes) is not applicable in the Finance case.

#### **4.7 The preferred option**

The option to build a new centre at the St Pancras site with an area of 39,500 square metres (Option 3) has been identified as the preferred option.

Economic appraisal of the shortlist has demonstrated that Option 3 and 4 have the highest NPSV and benefit-cost ratio. However, Option 4 has a higher capital cost than Option 3, and has been discounted on the basis of affordability. This leaves Option 3, which has a significantly higher NPSV and benefit-cost ratio than Options 0, 1 or 2, as the preferred option.

This conclusion is not significantly sensitive to reasonable changes in the assumptions used.

## 5. Clinical Quality case

### Clinical Quality Case – chapter summary

The Clinical Quality Case provides an overview of clinical services at Moorfields, and the existing trust clinical strategies which underpin clinical pathway development. It describes commissioner intentions, commissioner involvement and support for the proposals, and the partnership approach the trust and commissioners will continue to take in designing the best model of care for ophthalmology which provides care from the most appropriate setting and delivers value for money for the NHS. It describes the review of the clinical case for change undertaken by the London Clinical Senate in November 2018, which noted “a clear, clinical evidence base to support the proposed move of the services at City Road to the new site at St Pancras Hospital”.

The chapter goes on to describe the clinical pathways developed for Oriel. These have been led by clinical and academic colleagues across Moorfields and UCL IoO who are among world leaders in the field of ophthalmology. They have been developed recognising the vast range of patients who visit Moorfields. The trust collected valuable insight from the sight loss community through the public consultation. This will be built upon through further user engagement, to develop proposals further. This will be done through the inclusion of patient representatives on user groups, and the Oriel Advisory Group.

Sections 5.3 to 5.5 of this chapter provide detailed descriptions of the future clinical pathways, as well as models for research and education. The benefits of each proposal are explained, along with the Oriel enablers required to deliver these. The clinical pathways are also supported by case studies showing how the patient experience will differ in Oriel.

This chapter also sets out the workforce strategy underpinning Oriel, and the changes in workforce required to deliver the pathways and financial model. It describes the IT aspirations, and the applications which will be rolled out across all sites for maximum trust benefit, as well as specifically in the new building.

Finally, the chapter describes the design principles, and how the new building will be designed to improve patient experience, accessibility, efficiency, environmental factors and other key areas.

#### **Appendices:**

- **Appendix 5A – Service models**
- **Appendix 5B – Workforce strategy**
- **Appendix 5C – IT in Oriel**
- **Appendix 5D – Design quality and compliance**
- **Appendix 5E – Schedule of accommodation**
- **Appendix 5F – 1:200 ‘test to fit’ designs**

## 5.1 Overview of Moorfields' services

The clinical services provided at Moorfields are described in the Strategic Case section

3.5.2. The key points to note are:

- Moorfields provides local services to people across London through its network and the City Road site. Most of its specialist services and clinical research trials are delivered from the City Road site.
- Moorfields delivers highly specialised services such as ocular oncology, prosthetics and corneal grafts which are provided at a very limited number of trusts.
- Ophthalmic services are primarily ambulatory – patients rarely require an overnight stay. The City Road site has six beds to accommodate patients requiring observation or travelling a long way for a procedure.
- Many eye diseases are long term conditions which require ongoing management – 77% of Moorfields' outpatient appointments are follow-ups<sup>15</sup>.
- Many Moorfields patients suffer from sight-loss and therefore have specific needs relating to accessing care.
- The field of ophthalmology has the potential to change significantly as new diagnosis and treatment options are developed. The need for flexibility in service provision is therefore key.
- Moorfields activity is commissioned by 109 CCGs and NHS England Specialised Commissioning. System-wide change in eye care services requires co-ordination between CCGs to provide a seamless integrated service offering for patients.
- The trust has a unique opportunity to improve patient experience and integration with research and education, with the benefits that this will bring.

The clinical services provided from City Road can be categorised as:

- Outpatients.
- Surgical (day case and inpatients).
- Emergency and urgent care.
- Children and young people's services (covering outpatient, surgical and emergency care for 0-16 year olds).

The clinical strategies for Moorfields' four main sub-specialties are described in section 3.5.8. These clinical strategies have been used as a basis for developing the clinical pathways for Moorfields services across its network, and will inform the building design for Oriel. The trust's plans for Oriel fully align to the clinical strategies, through the delivery of an integrated facility with enhanced digital capabilities, and capacity to accommodate increasing demand. The full benefit and opportunity for efficiency represented by these strategies cannot be fully realised without the new building.

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<sup>15</sup> source: 18/19 annual report, all specialties

## **5.2 Commissioning intentions and system-wide service models**

Moorfields services are commissioned by 109 CCGs (of which 14 hold contracts over £2m at City Road) and NHS England (NHSE) Specialised Commissioning (who commissioned over £13m of activity from City Road in 2018/19). This represents a relatively small proportion of the total commissioned activity for each of these CCGs and NHSE.

The NHS Long Term Plan set out priorities and changes to the way health services should be delivered, with a focus on integration. This provides an opportunity to design health services around resident's needs, rather than organisations. The Long Term Plan set the ambition that every part of the country should form an Integrated Care System (ICS) to accelerate the work of STPs in working across different care providers and commissioners.

Addressing the models of care for ophthalmology services forms part of the long term planning for the 14 CCGs and NHSE specialised commissioning. North central London STP, for example, have agreed work programmes between its 22 statutory bodies to work together to improve the healthcare of north central London. One of these work programmes is developing ophthalmology pathways across the STP, through an ophthalmology design group attended by clinicians, commissioners and providers. This is particularly focusing on delivery of first and follow-up appointments for low-complexity cataract, glaucoma and AMD (age-related macular degeneration) patients in the community, where appropriate.

CCGs and NHSE Specialised Commissioning have confirmed their support for the project through the public consultation at the Committees in Common in 12 February 2020. It is the joint ambition of commissioners and Moorfields to develop a facility that is able to meet the growing demand for ophthalmic services.

Demand modelling has been undertaken (described in section 3.10.5) in partnership with commissioners to establish likely activity growth. As part of this work, significant engagement and discussion was held with stakeholders from across the system involved in providing and commissioning eye care services (detailed in Appendix 3B). This set out a proposed model of care to create consistency and alignment between commissioner and provider organisations.

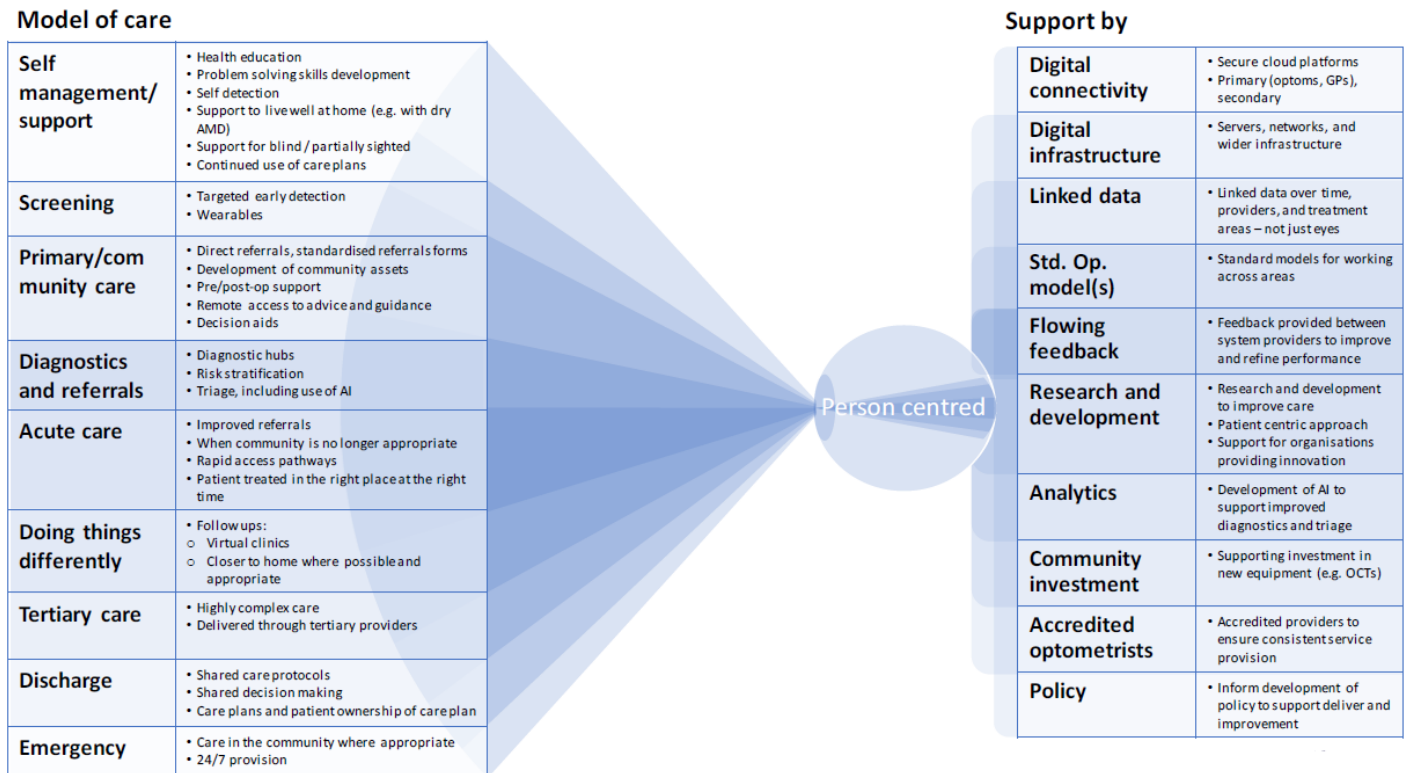
The outline model of care is shown in Figure 12. Central to this model is the principle of system-wide working, with greater collaboration across primary, community, secondary and tertiary care settings.

There are a number of insights from this:

- Future care requires seamless working throughout the system, from self-care through to tertiary and emergency care.
- Delivering this requires commitment and investment from all system commissioners and providers.
- Specific challenges exist in the form of technology, IT infrastructure and workforce.
- Pathways will only change if this investment made and new services commissioned.



**Figure 12: Outline model of care**



Commissioners and Moorfields are working together to ensure care pathways are optimised, utilising both the trust's network and a fit-for-purpose site at St Pancras. The Decision-Making Business Case (DMBC) recommended establishment of a London Ophthalmology Collaborative. Through this forum, Moorfields will continue to work with commissioners to design the best model of care for ophthalmology which provides care from the most appropriate setting and delivers value for money for the NHS.

The trust is already working with commissioners to upskill optometrists to provide screening and monitoring in some localities (Bedford and Croydon), however rolling this out across other areas is challenging due to the high turnover of the ophthalmology workforce in Central London. A central facility with the ability to support advancements in the field of ophthalmology, and to deliver care virtually, is required to efficiently deliver services which require expertise and specialised equipment.

### 5.2.1 Developing the Clinical Quality Case – clinical leadership and stakeholder engagement

The clinical and academic colleagues that work across Moorfields and UCL's IoO are among world leaders in the field of ophthalmology. As such, it is essential that their expertise and experience leads the design of Oriel to ensure it is innovative and fit for the future. The early stages of design undertaken to date have, therefore, involved many members of staff across both organisations as well as feedback from patients and carers received before and during consultation. A broad range of input has been sought from commissioners, ophthalmology service users and the public across London as part of the public consultation.

## Patient involvement

The clinical pathways have been developed recognising the vast range of patients who visit Moorfields, from patients who visit regularly over the long term, to low-complexity cataract patients, and A&E attendances with the potential to be any level of acuity. Common to all patients is the distressing nature of an eye condition, and the need for a reassuring and efficient service which directs them to the most appropriate clinician as quickly as possible, and provides them with holistic treatment, support to live and manage their condition or treatment plan and awareness of how they could be involved in research.

In order to ensure the plans remain patient-centred and reflect the specific needs of Moorfields patients, the trust has established an Oriel Advisory Group, with patients and public representatives with diverse needs from across and outside of London. The Group has been in place for over a year, and has provided valuable insight in preparation and throughout the public consultation process. Upon the completion of the public consultation programme, the Group now focuses on development of the designs and accessibility planning for Oriel, in particular addressing some of the feedback themes of the consultation. These include:

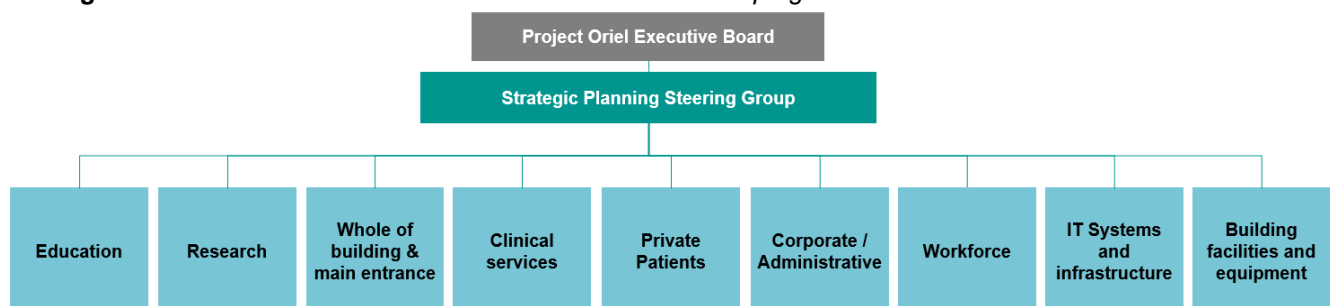
- The new building should represent an uplifting environment, which reduces anxiety and enables service users to be independent.
- Wayfinding should enable visually impaired visitors to navigate independently, both within the building and on the 'last half-mile' between transport hubs and the new centre.
- The new building is an opportunity to improve facilities for patients, as well as long-term service quality through integration with research and education.
- While the number one priority should be on the quality of medical care, the trust could do more to support patients holistically in living with their condition as well as treating it.

More information on the staff and patient Oriel Advisory Groups is included in the Management Case (section 8.2)

## Clinical involvement and leadership

To deliver the OBC and early designs for Oriel, the following workstreams have been established:

**Figure 13:** Clinical and non-clinical workstreams for developing OBC



Clinical teams have been integral to the development of the design. Within the clinical services workstream shown above, the following sub-groups have been set up to design the new models of care, agree the designs, equipment and IT proposals, and agree the content for the OBC:

**Table 22: Clinical sub-groups**

Clinical planning group	Membership	
Surgical	<ul style="list-style-type: none"> <li>• <b>Chief Surgeon and Consultant Ophthalmologist (chair)</b></li> <li>• Theatre manager</li> <li>• Ophthalmologists and Ophthalmic Surgeons (x3)</li> <li>• Head of Nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Theatres Matron</li> <li>• Ward Sister (x2)</li> <li>• Consultant Anaesthetist (x4)</li> <li>• Clinical Director of Digital Innovation</li> </ul>
A&E and Urgent care	<ul style="list-style-type: none"> <li>• <b>Ophthalmic Specialist and Clinical Service Director A&amp;E (chair)</b></li> <li>• Consultant Ophthalmologist (x3)</li> <li>• Senior Resident A&amp;E Service Manager</li> </ul>	<ul style="list-style-type: none"> <li>• A&amp;E Matron</li> <li>• Senior Nurse Specialist, A&amp;E</li> <li>• Lead Optometrist, Urgent Care</li> <li>• Associate Chief Pharmacist</li> <li>• Paediatric Consultant</li> </ul>
Children and young people	<ul style="list-style-type: none"> <li>• <b>Paediatric Clinical Service Director and Ophthalmology Consultant (chair)</b></li> <li>• Consultant Ophthalmologist (x5)</li> <li>• Consultant Paediatrician (x2)</li> <li>• Consultant Anaesthetist</li> <li>• Paediatric Matron</li> <li>• Paediatric Sister</li> </ul>	<ul style="list-style-type: none"> <li>• Head of Optometry</li> <li>• Specialist Optometrist</li> <li>• Head Orthoptist</li> <li>• Medical Photographer</li> <li>• Associate Chief Pharmacist (x2)</li> <li>• Family Support Specialist</li> <li>• Assistant Divisional Manager</li> </ul>
Outpatients, applied research and clinical support services	<ul style="list-style-type: none"> <li>• <b>Consultant Ophthalmologist (co-chair)</b></li> <li>• <b>Clinical Director of Support Services (co-chair)</b></li> <li>• Consultant Ophthalmologist (x12)</li> <li>• Nurse Consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Chief Ocular Prosthetist</li> <li>• Outpatients Matron</li> <li>• Head of Optometry</li> <li>• Head Orthoptist</li> <li>• Chief Pharmacist</li> <li>• Sister (Nursing)</li> <li>• Advanced Nurse Practitioner</li> </ul>
Centralised and shared clinical support services	<ul style="list-style-type: none"> <li>• <b>Clinical Director of Support Services (chair)</b></li> <li>• Head of Life Sciences</li> </ul>	<ul style="list-style-type: none"> <li>• Superintendent Radiographer</li> <li>• Electrophysiologist</li> <li>• Medical Physics expert</li> </ul>

Once reviewed by the clinical sub-groups, the 'test to fit' drawings have been agreed by the Clinical Oversight Group, of which membership includes:

- Director Of Nursing And Allied Health Professions.
- Medical Director.
- Chief Operating Officer.

- Director of Service Improvement and Sustainability.
- Clinical Director of Service Redesign.
- Chairs of each of the clinical planning groups.

### **Non-clinical involvement**

The following non-clinical stakeholders have been involved in the building design process:

- UCL scientists, and joint clinician scientists.
- Joint Director of Education and educator colleagues.
- Operational/management colleagues.
- Chief Information Officer and IT colleagues.
- Director of Workforce and Organisational Development and workforce colleagues.
- Director of Estates and Major Projects and estates colleagues.
- Moorfields Eye Charity.
- Friends of Moorfields Charity.
- PALS, ECLOs (Eye Care Liaison Officers) and Nurse counsellors.
- Moorfields Arts Committee.

### **5.2.2 Ongoing clinical involvement**

As design development moves into the next phase, additional working groups have been established. These are described in section 8.8 of the Management Case.

### **5.2.3 Clinical senate review**

As part of the public consultation, commissioners presented the clinical case for change and the proposals for review by the London Clinical Senate at a panel in November 2018. This was supported by Moorfields. Following the Review Panel, the London Clinical Senate submitted a report on its findings to the CCGs in which it confirmed that it found “that there was a clear, clinical evidence base to support the proposed move of the services at City Road to the new site at St Pancras Hospital.”

The panel made recommendations to which commissioners have responded. Its report, and subsequent correspondence, was published by commissioners as part of the formal consultation, which notes that all recommendations have now been addressed. They are available at [www.oriel-london.org.uk](http://www.oriel-london.org.uk).

## **5.3 Clinical pathways**

### **5.3.1 Overarching principles**

Clinical pathway blueprints have been developed for three core journeys in adult and children and young people’s care;

- A&E and urgent care
- Surgery
- Outpatients, applied research, diagnostic and support services

These were based on a number of core principles:

**1) Patient Experience**

- **Patient-centred:** users' needs and perspective drive the design.
- **Personalised care:** we provide patients with different levels of reassurance and reminders to improve their experience; we provide additional and appropriate support to vulnerable patients.
- **Empowered patients:** we proactively educate patients and support self-care.
- **Research driven:** we consider all patients as potential research candidates.
- **Great communication:** we communicate clearly with patients both face to face and virtually, and improve how they can communicate to us.

**2) Workforce**

- **Flexible deployment:** staff roles and tasks challenge traditional hierarchies and provide opportunities to take greater responsibility.
- **Growth and learning:** we encourage continuous development of our teams.
- **Supporting career development:** we create desirable roles and career pathways, through meaningful work experiences and appropriate education.
- **Supporting wider workforce:** we recognise the value of community staff and contribute to their upskilling.

**3) Care delivery**

- **Diagnostics first:** we streamline patients through diagnostics and imaging.
- **Standard bundles:** we standardise diagnostic bundles, medication packages and approaches for routine pathways.
- **Smart stratification:** we use data to stratify patients into pathways, bundles and research opportunities.
- **We use technology** wherever possible, and foster partnerships with community providers to provide seamless care across acute and community settings.
- **Effective referral standards:** we make it easy for referrers to provide comprehensive information and enforce tighter referral standards.

**4) Supporting infrastructure**

- **Increased automation:** we use high levels of technological automation to deliver quality care.
- **Paperless:** we improve data capabilities and reduce reliance on clerical administration.
- **Flexible spaces:** we design and use spaces flexibly to future proof our ability to deliver services.
- **World leading education and research:** we act as a role model nationally and internationally, acting as a trailblazer for innovation.

The following key **themes** emerged across the pathways:

- Shift to competency led workforce and a move away from professional groupings.
- Shift to stratification of patients to get them to the appropriate care for their needs, ensuring all patients are seen by the most appropriate clinician.
- Move to diagnostics bundles (standardised collections of efficiently-delivered diagnostic tests), where possible.
- Move to a high volume and high complexity surgical approach.
- High levels of technological automation to support care.

The new clinical pathways for Oriel are described in Appendix 5A, including specific benefits of each which are further summarised in the Benefits Realisation Plan in section 8.6.

### **5.3.2 Equality Impact Assessment**

As part of the public consultation, commissioners and Moorfields commissioned MSE Strategy Unit and Partners to undertake an independent Integrated Health Inequality and Equality Impact Assessment (or Integrated Impact Assessment – IIA). The purpose of this was to ensure that a proposal does not have a disproportionate impact upon any groups with protected characteristics, as defined by the Equality Act 2010. This is detailed in the DMBC and appendices at <https://oriel-london.org.uk/consultation-documents/>.

The IIA concluded that overall, the identified protected characteristics, health inequalities and health impacts will not be negatively impacted by this proposed relocation. In summary:

- Most stakeholder feedback obtained as part of the consultation supported the proposal to relocate.
- Respondents to the consultation felt that the new centre would benefit both patients and staff, in that a specialist and highly regarded hospital such as Moorfields needs 21st century purpose-built facilities providing a world class centre of excellence.
- Elderly patients (due to age and comorbidities) and patients with protected characteristics are the ones most likely to be negatively impacted by the proposed relocation. This is because changes to their journey, namely concerns about the busy nature of Kings Cross, can cause stress and anxiety for these groups.

The IIA provided recommendations for the project's next steps, including:

- Disability access and support should be incorporated into the design.
- Improved signage and use of digital technology has the potential to improve the overall patient, carer and staff experience.
- It is important to retain any care that is currently being provided closer to patients home e.g. network clinics.
- It is important that future plans make it possible for people to be independent.
- The impact of anxiety and stress that may be felt by patients and staff as a result of the move should be considered. Support should be clear and accessible, and changes clearly communicated.
- The design should ensure clinical environments are dementia friendly.

Moorfields has committed to considering all of the IIA's recommendations when developing its accessibility plan. The full Moorfields response to consultation is included at Appendix 3D.

## **5.4 Research**

Moorfields and UCL IoO have a world-leading research partnership, which is the only joint University Clinical NHS Partnership in the UK that is ranked number 1 globally in any medical field. The partnership publishes more papers on eye and vision research than any



other equivalent organisation or partnership nationally, and are leaders in areas including inherited disease, gene therapy and regenerative medicine.

Oriel is a catalyst for meaningful improvements in the way that research is conducted and the benefit this can bring for patients. It will enable progression of a translational model of 'bench to bedside' research, developing new treatments to a stage where they can be made widely available to patients more quickly. This will be facilitated through provision of a Translational Research Laboratory (including procedure rooms and wet labs), which will have greater capacity for research than the current facilities. This area will be shared between Moorfields and UCL IoO, promoting partnership working between the organisations.

Within the bounds of maintaining confidentiality of patient data, the partners are looking to achieve a level of data sharing which enables rapid and seamless partnership working during early stage trials and clinical trials. The research-first focus of the building, with its increased physical capacity in some areas, will also enable the trust to continue to pursue further partnerships with commercial pharmaceutical companies looking to undertake research trials within a broad patient base.

The IoO will also benefit from provision of enhanced fundamental research facilities such as tissue culture labs, BSU (Biological Services Unit), flow cytometry, cellular and sub-cellular imaging technology. This will further improve the quality of laboratory-based research, which should increase the speed with which exciting developments can be trialled with patients.

Moorfields plans to increase the visibility of research opportunities in Oriel, and improve patient access to the benefits that this can bring. All patients will be screened for their eligibility to participate in research trials, and information will be available in outpatient clinics on each of these patients' options, potential benefits, risks and consent. All staff will be aware of research opportunities and how to access them. In this way it is planned that more patients will be able to participate in research trials, bringing individual and societal benefits.

## **5.5 Education**

Clinical education is provided by UCL in partnership with Moorfields at all levels, from undergraduate and postgraduate, to short courses and professional development, and clinical fellowships. The partners have developed a joint education strategy (described in section 3.4.2) which sets out the aspiration to be the world leading organisations for vision and eye health education over the next five years. The partners plan to expand provision of degree and short courses, as well as using technology and innovation in terms of the courses and way in which they are taught. Moorfields will benefit from more high-quality clinical staff who are likely to remain at the trust.

As previously stated, the estate is the biggest barrier to the partners' ability to offer a higher-quality student and staff experience. The current space both at the IoO and Moorfields is not fit for purpose and does not do either institution or the highly qualified staff justice. It does not offer sufficient capacity, is poorly configured and does not provide all of the facilities

required such as wet labs for students or simulation and silt lamp areas which can accommodate large numbers of students.

Oriel will provide the partners with the opportunity to have state of the art learning facilities that match the need and the future of learning and teaching. It will provide proper training rooms that facilitate student interaction and use of technology.

The location at St Pancras will place students closer to the main UCL campus, with the benefit of access to expanded resources, different faculty expertise, and a less isolating (and therefore more attractive) student experience. The new facility will be flexible so that sizes of classrooms and what can be done in them is changeable.

### **5.5.1 Opportunities for improvement**

The education provision in Oriel will enable the partners to:

1. Develop an excellent portfolio of degree programmes that reflects their reputation in both clinical practice and life sciences including new modes of delivery.
2. Ensure lifelong learning through an extensive range of short courses, continuous professional and personal development that is offered across their areas of expertise.
3. Manage the pipeline of volunteers, learners, students and trainees through diverse and inclusive education programmes.
4. Transform the teaching and learning of clinicians, nurses, allied health professionals, postdoctoral researchers, doctoral candidates and staff to grow education and training capacities.
5. Explore innovative ways of engaging and educating society through an online learning resource centre that offers an array of exceptional digital resources and opportunities.
6. Revitalise the curriculum and our approach to education to create the best experience for students.
7. Build an interactive education space that supports innovation and flexible learning.

Co-location with research and clinical areas will encourage a culture shift which places education and development of the future workforce as a key priority for all staff. All staff will have the opportunity to develop their skill set within their competency, which will enable them to further their careers, and provide Moorfields with a more highly skilled, flexible workforce.

Students in ophthalmology, optometry and nursing will benefit from more exposure to clinical practice, which will improve the quality of their education. Oriel will also serve as a recruitment tool, providing an attractive place to work for the best graduates as well as more experienced staff from other trusts.

### **5.5.2 Oriel enablers**

In order to facilitate improvements in education, and delivery of the partners' joint education strategy, Oriel will provide:

- Flexible open learning space that can be repurposed easily and quickly, with movable surfaces and as few hard walls as possible.

- Space for events, gathering and socialising that can be flexible for learning and presentations.
- Use of furnishings for collaboration and for focus study space in gathering areas.
- Integrated and immersive technology, moveable IT equipment that works in flexible space and a fit-for-purpose simulation lab.
- Movable specialised equipment points.
- Library space should be focused on gathering/meeting and focused study space with resource material kept virtually or digitalised to reduce physical space use.
- Easily configured storage space for small and large equipment that is co-located to classrooms.

## 5.6 Workforce strategy

The following section provides an overview of the workforce strategy to support the planned service changes in Oriel.

### 5.6.1 Trust workforce strategy

The organisational workforce strategy considers the following questions, which reflect current workforce challenges, and the opportunities afforded by Oriel:

- 1) How do we ensure that we have the staff with the skills, capability and capacity to deliver world leading eye care?
- 2) How do we develop the leadership and culture to enable the workforce to grow, thrive and perform at the highest levels?
- 3) How do we ensure that every member of staff, volunteer and student feels welcome, valued and able to contribute to the success of Moorfields?
- 4) How do we ensure that our workforce processes, practices and policies are efficient, aligned and provide best value?

### 5.6.2 Workforce planning for Oriel

The service models set out in section 5.3, as well as the overarching workforce strategy described in section 3.4, will require a change in the structure of the workforce. Detailed workforce models will be developed for FBC, based on the following principles:

- **Upskilling elements of the workforce** – There is an ambition to upskill nursing and technical staff, thereby reducing the amount of consultant time required for certain tasks such as A&E triage, follow-up appointments, diagnostic bundles and certain procedures.
- **Ensuring an appropriate skill mix** – This will enable patient stratification which will organise workflows so that clinics or theatre lists for low-complexity patients can be run by less senior staff, with senior oversight where required.
- **Improving efficiency** – Staff will be able to spend more time undertaking core activities with the introduction of virtual clinics, and improved patient flow as a result of a fit-for-purpose design with appropriate co-locations and departmental layouts.

- **Increased automation** – This may reduce the headcount required in some areas, such as administration functions. Plans include automation of patient check-in, theatre stock management and digital triage in A&E.
- **Care closer to home** – Moorfields has committed to continue to work with commissioners to move care into the Moorfields network and community settings. The workforce impact of this will be modelled on a case-by-case basis.

Further detail on the assumptions and their implications for workforce in Oriel are included in Appendix 5B.

### 5.6.3 Implementation plan

The next steps for workforce planning in Oriel are:

- **Detailed workforce modelling** alongside further development of clinical pathways, building design and IT planning, taking into account availability and supply of the workforce, use of technology and skill mix of teams.
- **Job planning** across the trust, using a team-based approach and linked to demand management, performance review and capacity planning.
- **Training** to support repatriation of work between professional groups, skill mix changes and changes to how tasks are assigned and executed. Training programmes will also be linked to new building and IT systems.
- **Changing culture and values** through a robust staff engagement programme. The desired culture and values required to support the new ways of working will be developed, and leaders supported and trained to ensure that they are able to lead changes in a way that delivers the culture needed.
- **People management processes** will be specified and redesigned to support implementation of the operating model, this will include appraisal, performance management, recruitment, succession planning and talent management.

It is anticipated that there will be significant changes in how services are delivered which will lead to a reduction in overall headcount as technology, volunteer use and skill mix impact.

## 5.7 IT systems and infrastructure

This section provides an overview of the IT strategy for Oriel. The process undertaken to develop this strategy, and details of the core deliverables for Oriel and their benefits, are set out in Appendix 5C.

### 5.7.1 IT principles

The trust recognises the power of digital technology in improving service quality and efficiency, and one of the key drivers for Oriel is the ability to embrace technological advancements and deliver a truly digital facility. As described in the case for change (section

3.10.2), the current building does not have the ability to support the infrastructure required to realise the trust's vision without significant investment. The digital vision for Oriel is:

“Enabling service delivery, research and collaboration by building world-leading digital capabilities, to create a patient centric eye care centre.”

The opportunities presented by Oriel are:

- Delivering truly patient-centred care.
- Supporting improved service efficiency.
- Delivering more care in the community.
- Improving access to services.
- Increasing collaboration and integration.
- Enabling clinical image management and research.
- Enhancing the educational experience.

### **5.7.2 Proposed digital components**

The trust have agreed the following principle components which will be required in Oriel, in order to deliver the efficiency and patient experience improvements planned.

#### **Clinical services**

- View of digital records for clinicians as and when required across multiple devices.
- Real-time digital data captured directly, close to source and shared centrally.
- Ability to share selected data with patients and other health professionals inside and outside of Moorfields, to support collaboration and knowledge share.
- Workflow and transition between departments which ensures that patient details are ready when required.
- Infrastructure to support rapid and reliable access to clinical images.
- Ability to extend care ‘outside’ of current care delivery points e.g. tele-consultations, remote patient monitoring, remote robotics surgery.

#### **Research**

- Technology solutions to support and enable research, and never impede it.
- Efficient storage and retrieval of large volumes of images.
- Ability to engage and collaborate with other research institutes globally – through information exchange, video conferencing, collaborative working.
- Collaboration and ability to share clinical data with UCL and other trusted parties (this will be carefully controlled in line with GDPR).

#### **Education**

- Ability to hold lectures virtually and remotely to a connected audience.
- Infrastructure and applications (e.g. desktop video conferencing, recorded consultations, whiteboards) to provide an enhanced education experience.
- Online digital library of tutorials to enable faster learning. Applicable for non-clinical and Health and Safety training in addition to clinical applications.

- Accelerated knowledge sharing and training for new techniques and procedures.

### **Patients**

- Digital communication with patients in a form of their choosing.
- Outpatient registration to simplify the patient journey and enable Moorfields staff to focus on clinical care rather than administration.
- Interactive visual and audio wayfinding.
- Transparency of current waiting times for A&E and alternative ways for treatment to enable patients to make informed choices and optimise A&E throughput.
- Transparency of current waiting times for clinics to optimise throughput.

### **Infrastructure**

- Integrated working and shared use of space and services where appropriate.
- Ability for staff to work away from offices and clinic rooms efficiently.
- Ability to support future development.

### **Whole of building**

- Digital asset tracking to enable easy administration and reduce loss and wastage.
- Streamlined business processes supplemented by automation to deliver efficient and effective services.
- Ability to support artificial intelligence enhancements to streamline processes and analyse success variations.
- Accurate and easy reporting to support appropriate governance and simplified decision making.

### **5.7.3 Deliverables**

#### **Trust-wide application requirements**

The following applications are already in the trust digital programme, and are planned to be rolled out across the network. These will be implemented before Oriel opening, to minimise disruption and ensure that services can operate effectively in the new building. They will be rolled out across the trust to ensure inter-operability and trust-wide benefits.

- Electronic Medical Records (EMR).
- Pre-assessment portal.
- Patient portal.
- Order communications and results reporting.
- ePrescribing and medicines administration.
- Digital image platform.
- Electronic Document Management (EDM).
- Tele-ophthalmology and virtual clinics.
- Integration with national systems.
- Digital research platform.



The following applications are proposed new Oriel capabilities, which will be implemented in the new building in time for its opening. Descriptions and benefits of each are described in Appendix 5C.

- Dynamic scheduling.
- Clinical logistics.
- eObservations.
- Ward status boards.
- Wayfinding.
- Asset management – RFID tracking.
- Remote working.
- Robotic Process Automation (RPA).
- Room booking and scheduling.
- Collaboration tools including video and teleconference facilities.

#### **5.7.4 Implications of the IT strategy for building design**

Oriel will need to be able to support the functionality described above, and have the flexibility to respond to as-yet-unknown technological changes in the future. The following principles have therefore been incorporated within the design:

- **Integrated technology infrastructure:** Site-wide IT connectivity solutions will enable staff to interact seamlessly. The infrastructure will need to support information management, communication to staff and visitors, translation and hearing loop facilities and apps and/or pagers to manage appointments and waiting. The infrastructure will also support rapid sharing of large amounts of data.
- **Information governance:** The confidentiality of patient data is paramount, and an appropriate, stable and resilient platform will be required.
- **Imaging related research:** High specifications are required for imaging work.
- **Equipment:** The design will allow for the replacement of the equipment during the life of the facility. Adequate routes for removal and delivery of such equipment are essential, and the necessary structural loadings taken into account. The entire infrastructure must be sufficiently robust and flexible to be capable of easy adaptation, modernisation and expansion over the life of the building.
- **Patients' behaviour is changing:** Robust, accessible Wi-Fi infrastructure will be provided to support mobile device applications that enable appointment scheduling, wayfinding etc.
- **Information and online advice:** Digital kiosks will be required to offer opportunities for patients to check in and find out more information about diagnosis and treatments.

The vision for the new facility is that, where possible, a single instance of any system, service or technology should be implemented and shared between the partners. This approach will provide financial, operational and research benefits.

The services housed in the building will be highly dependent on IT to support the provision of clinical services, research services and critical equipment. The site will therefore need to

provide highly reliable network availability 24/7 365 days per annum. The infrastructure will also need to support the intelligent building design and Smart BMS system.

## 5.8 Design overview

This section describes the design process undertaken, the current status of the designs and their alignment with NHS guidance.

### 5.8.1 Purpose of the building

Oriel takes a radical approach to the integration of sight-related care, research and education, driving innovation and speeding up the translation of research findings into treatment. The new building will enable seamless collaboration between clinicians, patients and researchers, delivering world class clinical services and cutting edge research.

The design caters for the wide diversity of user groups including:

- Patients, family members and carers.
- Doctors, nurses and other clinical staff.
- Volunteers.
- Academic researchers.
- Students.
- Administrators and other staff

At the centre of the building is a light-filled atrium, forming the focus and heart of the building. All visitors, patients and staff will arrive into this space before proceeding to the different parts of the building. A central 'oriel space' rising up through the atrium forms the main circulation route through the building, providing the public-facing focus of the building for patients and staff alike. From this oriel, all departments within the building can be accessed. With plenty of daylight, warm timber finishes and acoustic treatment the atrium and oriel form the key orientation within the building. Wayfinding will be emphasised through light, signage, art, colour and contrast.

### 5.8.2 Design principles

In order for Oriel to achieve its ambition to be a catalyst to implement radically new ways of working, improve the experience of all users, and drive excellence in ophthalmology across the country, Moorfields has developed a set of core design principles for the building. These were echoed in the feedback received during the public consultation. These are:

- **Consider the full spectrum of visual impairment types.**
- **Safety and accessibility:** visually impaired visitors approaching the new facility should find the route free of obstacles, safe and easy to navigate.
- **Welcome and wayfinding:** the interior as a whole should be welcoming, comfortable and reassuring. Wayfinding around the building should be as straightforward as possible.

- **Appropriate lighting is vitality important.**
- **Environments for older people and those with complex needs:** the environment should be easily used by the full spectrum of people with protected characteristics, including people with reduced mobility and sensory impairments.
- **Provision for guide dogs:** the building must accommodate the needs of patients and visitors with guide dogs.
- **Meets changing needs:** the facilities must be able to flex to meet the needs of the building's users now and into the future. Space will be able to adapt to new uses and techniques, enabling the partners to meet changing needs and encourage staff to prepare and embrace change in the continual pursuit of improvement.
- **Staff health and wellbeing:** the facilities must support staff to make healthy lifestyle choices and will support their physical and mental wellbeing.

In addition to this, the building will promote organisational sustainability, making use of low-Carbon energy sources wherever possible, and being energy efficient to reduce its impact on both the environment and building running costs. Materials, fixtures and fittings are being selected based on their whole-life cost, to ensure the building can continue to support the organisation's financial position over the long term as well as its strategic aspirations.

The building's functional areas are set out in Appendix 5D.

### 5.8.3 Design process

The design team, in conjunction with clinical representatives and the Oriel project team (described in section 5.2.1), have developed a Schedule of Accommodation and designs based on a 'test to fit' exercise. The designs and capital cost estimates in this OBC represent the conclusion of RIBA stage 1. The focus of this work has been on confirming the external envelope of the building and gaining assurance from LB Camden town planning department that the proposals are deliverable within town planning policy. This is described further in the Commercial Case (section 7.8.2). The test to fit designs have provided assurance on capital affordability and functionality.

#### Design development process

The design programme is based on the RIBA Plan of Work stages. These are the industry recognised stages for preparing design information.

Stage 1 has included the following additional activities:

- The preparation of a shell and core design to allow planning discussions to progress and the cost plan to be developed.
- Stacking diagrams for the building to allow the plant requirements to be honed and tested against the allowances in the SoA and the locations of the departments agreed in principle.
- The preparation of 'test-to-fit' layouts to determine that the circulation and wall allowances included in the SoA are robust. Whilst these layouts have had clinician input their core purpose is to prove that the area allowances are robust providing the

clinicians more time to hone their models of care and more detailed space allowance requirements.

This has enabled the robustness of the building's shell and core design can be tested against planning requirements and the departmental area requirements.

The schedule of accommodation and 'test to fit' designs are included in Appendices 5E and 5F.

### **Health planning involvement**

The trust appointed Essentia Trading Ltd to undertake the health planning role to develop the schedule of accommodation (SoA) with clinical teams. This role is being re-procured to provide ongoing support and challenge during the Stage 2 & 3 design process, to ensure they provide appropriate facilities and patient flow. This health planner will support the user groups to ensure the design aligns with departmental and patient requirements.

## 6. Finance case

### Finance case – chapter summary

The Economic Case described a shortlist of five options. The economic appraisal of these options determined that the preferred option is to build a new facility at St Pancras with an area of 39,500 square metres. The purpose of the Finance Case is to assess the affordability of the preferred option from the perspective of the trust's budget. For this chapter, affordability has been defined as:

- Cash balances above £5m in every year.
- Underlying surpluses (which excludes non-recurrent costs e.g. relating to the transition to the new site) in every year.
- Adjusted surplus (the measure used by NHSI) by FY29.

The conclusion of the chapter is that the preferred option is considered to be affordable, including in a downside scenario.

The Finance Case sets out:

- Key principles and assumptions underpinning the financial model (Section 6.1).
- The current and historical financial performance of the trust to give the context for the long term forecasts and assumptions used (Section 6.2).
- A summary of the revenue and capital forecasts, explaining the key assumptions underpinning these (Section 6.3).
- The annual summary financial statements for the period under these assumptions (Section 6.4).
- Assessment of the sensitivity of these assumptions by testing them against a downside scenario (Section 6.5).
- A review of the incremental impact on the financial forecasts of the preferred option, compared to business as usual (Section 6.6)
- The overall conclusion of the chapter – that the preferred option is considered affordable (Section 6.7).

### **Key supporting documents**

- **Appendix 6A – Year on Year surplus bridge**
- **Appendix 6B – Fundraising strategy and governance**
- **Appendix 6C – Long Term Financial Model**

### 6.1 Key principles

The trust has developed a Long Term Financial Model (LTFM) to assess the affordability of the preferred option as identified in the Economic Case.

The baseline of the LTFM is the 2019/20 Financial Year (FY20). The LTFM forecast years are FY21 to FY29, which covers two full years after the opening of the new centre.

Forecast financial information is presented in undiscounted nominal terms, to reflect the current forecast of how this information would be presented in the trust's financial statements in these years. These are prepared on the basis of International Financial Reporting Standard (IFRS). Note that IFRS 16 (which relates to the inclusion of operating leases in the Statement of Financial Position) is adopted by the NHS from FY21 and is therefore not reflected in the modelling at this stage. This, along with any other known changes to accounting standards at the time, will be reflected in the FBC.

The presentation of the financial statements assumes no impact from the JDV. A separate business case for the JDV will be submitted to the Trust Board and NHS Improvement/England during FY21 as part of the required NHS approval process. Technical accounting advice will be required as part of this case.

The Finance Case make the following assumptions on **programme**:

- Sale of City Road in FY22 (conditional on vacant possession).
- Vacant possession of St Pancras attained and construction start in July 2022.
- Practical completion and commissioning complete by April 2026.
- Vacant possession of City Road in FY27.

## 6.2 Current and historical financial performance of the trust

The last four years has been a period of significant strategic and operational progress for Moorfields. Against increasing demand for the services and financial pressures across the NHS, the trust has maintained a strong financial position whilst delivering excellent patient care. The trust has continued to invest in its search for innovative and ground-breaking discoveries to prevent and treat eye diseases, in its service quality and in infrastructure improvement whilst developing Oriel, in partnership with UCL's IoO and MEC.

The trust's Statement of Comprehensive Income (SoCI) statement for the period FY17 to FY20 is shown in Table 23. Income from patient activity has increased by £27.8m, an average growth of 4.7% per year. The trust's operating expenditure has increased by £33.5m at 5.3% average growth per year. In addition, the trust has delivered £25.9m of efficiency savings over the last four years. The underlying surplus has decreased from £6.3m in FY17 to £2.4m in FY20 forecast



**Table 23: Statement of Comprehensive Income FY17 - FY20**

Statement of Comprehensive Income £m					Average growth %
	FY17	FY18	FY19	FY20 forecast	
<i>Income from activities</i>					
NHS income	163.4	164.9	174.1	187.1	4.6%
Private patient income	26.8	27.2	28.9	30.8	4.8%
<b>Total income from activities</b>	<b>190.2</b>	<b>192.1</b>	<b>202.9</b>	<b>217.9</b>	<b>4.7%</b>
NHS Provider Sustainability Fund	6.7	6.4	8.0	2.1	-32.2%
Other operating income	27.0	23.4	24.4	23.1	-5.0%
<b>Total income</b>	<b>223.9</b>	<b>221.8</b>	<b>235.3</b>	<b>243.2</b>	<b>2.8%</b>
<i>Expenses</i>					
Pay costs	(113.7)	(118.2)	(125.7)	(130.6)	4.7%
Non-pay costs	(86.4)	(84.9)	(92.0)	(103.0)	6.0%
<b>Total operating expenses</b>	<b>(200.1)</b>	<b>(203.1)</b>	<b>(217.7)</b>	<b>(233.6)</b>	<b>5.3%</b>
<b>EBITDA</b>	<b>23.7</b>	<b>18.8</b>	<b>17.6</b>	<b>9.5</b>	<b>-26.2%</b>
<b>EBITDA %</b>	<b>10.6%</b>	<b>8.5%</b>	<b>7.5%</b>	<b>3.9%</b>	
Depreciation and amortisation	(8.1)	(8.9)	(7.3)	(6.5)	-7.0%
Interest and dividends	(2.0)	(1.5)	(1.4)	(1.8)	-2.9%
Other one-off gains	(0.9)	(0.2)	2.3	(0.1)	
Impairments	(10.2)	(2.4)	(2.5)	(1.1)	
<b>Surplus/(Deficit)</b>	<b>2.6</b>	<b>5.7</b>	<b>8.5</b>	<b>0.0</b>	
<b>Surplus/(Deficit) %</b>	<b>1.1%</b>	<b>2.6%</b>	<b>3.6%</b>	<b>0.0%</b>	
<i>Normalising items:</i>					
Impairments	10.2	2.4	2.5	1.1	
NHS Provider Sustainability Fund	(6.7)	(6.4)	(8.0)	(2.1)	
Disposal (gain)/loss	(0.5)	0.0	(1.8)	(0.0)	
Oriel costs	0.7	0.7	1.1	3.4	
<b>Normalised surplus</b>	<b>6.3</b>	<b>2.5</b>	<b>2.3</b>	<b>2.4</b>	

## 6.2.1 NHS Patient activity

Moorfields' NHS patient activity volumes for the three year period to FY19 are shown in Table 24, with added FY20 forecasted volumes. Between FY17 and FY20, the trust has seen an average overall activity growth of 3.1% annually.

Over the period, the highest activity increase was in FY19 of 5.2%, and the lowest in FY18 of 1.2%. Activity growth in FY19 was driven by 6% increase in outpatient and 4.5% increase in day case activity, with modest growth in A&E activity. However in FY18, the trust saw a 5.5% decrease in A&E activity with negligible growth in day cases. A&E activity has recovered significantly in FY20 with forecasted growth of 6.1%.

In FY20, over 818,000 activity units are forecast to be delivered across all NHS sites which is an almost 72,000 (9.6%) increase from FY17. Outpatients will receive nearly 675,000 attendances (3.6% average annual growth) and the trust will treat over 39,000 inpatients and day cases (2.1% annual increase). In the A&E department, the trust will see over 103,000 patients for treatment (3.1% average growth).

**Table 24: Moorfields' NHS patient activity FY17 - FY20**

NHS Activity	Activity volumes				Average growth %
	FY17	FY18	FY19	FY20 forecast	
A&E	102,558	96,947	97,210	103,114	3.1%
Inpatient day case	33,370	33,404	34,908	35,513	2.1%
Inpatient elective (planned)	1,112	1,054	1,131	1,226	3.3%
Inpatient non-elective (unplanned)	2,705	2,757	2,628	2,867	2.0%
Outpatient	606,955	621,419	658,647	675,675	3.6%
<b>Total Activity</b>	<b>746,700</b>	<b>755,581</b>	<b>794,524</b>	<b>818,395</b>	<b>3.1%</b>
Annual Growth		1.2%	5.2%	3.0%	

Planned activity growth over the next 10 years is expected to increase by 3.1% annually for outpatients, 2.6% for inpatients and day cases, and 2.9% for urgent and emergency care. This may be offset by commissioner reprovisioning. This is based on commissioner demand modelling (detailed in section 3.11) and is in line with historic trends.

## 6.2.2 NHS Patient income

Moorfields' NHS patient income for the 3 year period to FY19 and FY20 forecast is shown in Table 25. Income has grown by £23.7m between FY17 and FY20, representing a 14.5% overall increase and 4.6% average annual growth. Income growth is particularly impacted by high cost drugs and injections growth (10.4% average). Average annual income growth excluding drugs impacts is 3.3%, compared to activity growth of 3.1%. The difference is a combination of tariff and commissioning impact.

Most of the trust's activity is reimbursed on a national tariff basis including the MFF uplift. In FY20 there has been a significant change in prices compared to previous years. Apart from tariff inflationary increase, there was an increase in A&E prices related to change in tariffs and distribution of PSF funding. The trust has also incurred the first year impact of a five year MFF percentage reduction amounting to over £1.5m income loss in the year.

**Table 25: Moorfields' NHS income FY17 - FY20**

NHS Income £m	Income				Average growth %
	FY17	FY18	FY19	FY20 forecast	
A&E	10.8	11.2	11.2	15.9	13.7%
Day case / Inpatients	36.6	37.6	39.2	40.6	3.5%
High Cost Drugs	28.9	31.9	35.5	38.8	10.4%
Non Elective	5.4	6.1	5.6	5.6	1.3%
Outpatient	62.9	61.6	66.4	71.2	4.2%
Other NHS Clinical Income	18.9	16.4	16.1	15.1	-7.2%
<b>Total NHS Clinical income</b>	<b>163.4</b>	<b>164.9</b>	<b>174.1</b>	<b>187.1</b>	<b>4.6%</b>
Annual growth		0.9%	5.6%	7.5%	
<b>Total excl. high cost drugs/ injections</b>	<b>134.5</b>	<b>133.0</b>	<b>138.5</b>	<b>148.3</b>	<b>3.3%</b>
Annual growth		-1.1%	4.2%	7.0%	

### 6.2.3 Moorfields Private (London)

[Redacted]

### 6.2.4 Moorfields Private (UAE)

[Redacted]

### 6.2.5 Efficiency programme

Over the last four years the trust has planned £31.8m of efficiencies across various schemes. Table 26 shows planned efficiencies between FY17 and FY20. Planned schemes include £6.6m (21%) of corporate savings.

**Table 26:** Efficiency schemes planned FY17 - FY20

Efficiency Schemes £m	Planned			
	FY17	FY18	FY19	FY20
City Road	4.3	3.9	3.7	3.4
North	1.2	1.2	1.5	1.2
South	1.2	0.9	0.9	0.8
Access	-	0.4	0.2	0.2
Corporate	1.8	1.7	1.67	1.45
<b>CIP plan</b>	<b>8.5</b>	<b>8.2</b>	<b>8.1</b>	<b>7.0</b>
<i>CIP % of Operating expenses</i>	<i>4.2%</i>	<i>4.0%</i>	<i>3.7%</i>	<i>3.0%</i>

Out of £31.8m of planned efficiencies, the trust has delivered £25.9m, 81% of planned over the last four years. Delivery of savings has allowed the trust to maintain a surplus position despite the very challenging NHS finance environment. Table 27 shows achieved efficiency schemes over the last four years. In FY17 £6.2m was achieved, increasing to £6.8m in FY19, representing 3.1% of operating expenses. Achievement against plan has improved over the last four years from 72.8% to 86.6%.

**Table 27:** Efficiency schemes achieved FY17 - FY20

Efficiency Schemes £m	Achieved			
	FY17	FY18	FY19	FY20
City Road	2.2	3.7	2.9	2.9
North	1.1	0.7	1.3	1.1
South	0.8	0.4	1.0	0.8
Access	-	0.3	0.0	0.1
Corporate	2.1	1.7	1.60	1.17
<b>Total CIP</b>	<b>6.2</b>	<b>6.8</b>	<b>6.8</b>	<b>6.1</b>
<i>CIP % of Operating expenses</i>	<i>3.1%</i>	<i>3.3%</i>	<i>3.1%</i>	<i>2.6%</i>
<i>Achieved % of Planned</i>	<i>72.8%</i>	<i>82.8%</i>	<i>84.6%</i>	<i>86.6%</i>

## 6.2.6 Financial Risk Ratings

Financial risk is assessed by the scoring of five key measures from 1 to 4, where 1 reflects the strongest performance. These scores are then weighted to give an overall score. The trust has maintained a financial risk score of 1 over the last four years. This reflects a strong financial performance in terms of revenue performance, capital and cash. Table 28 shows financial risk ratings for each key measure.

**Table 28: Financial Risk Ratings**

<i>Financial Risk Ratings</i>	FY17	FY18	FY19	FY20 forecast
Capital service capacity	1	1	1	2
Liquidity	1	1	1	1
I&E margin	1	1	1	2
Distance from financial plan	1	1	1	1
Agency spend	2	1	1	1
<b>Overall scoring</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

## 6.3 Forecast financial performance

This section presents the forecasts from the Long Term Financial Model (LTFM) from FY21 to FY29, which includes the impact of the preferred option. It explains the key assumptions and risks. This is split between Revenue (section 6.3.1) and Capital (section 0).

### 6.3.1 Revenue

#### Overview

**Figure 14:** Finance Case overview

[Redacted]

#### FY21 to FY24

- On an 'adjusted surplus' basis (the metric on which NHSI performance manage the trust), the trust is forecast to breakeven during this period, in line with the targets set centrally for the trust by NHSI/E.
- The cash balance is maintained over this period, as construction costs are funded by [redacted], but the revenue position limits any additional cash generation.
- Additional margin generated through growth and CIPs are offset by 1) loss of central funding (MFF/PSF/FRF) and 2) increasing PDC due to capitalised construction costs starting in FY22.

#### FY25 to FY29

- Increasing PDC over the construction period continues to offset revenue gains.
- A bridging loan in FY25 is used to provide cash for construction up to vacant possession on City Road in FY27 – at which point profit on the sale is recognised and [redacted]
- Transitional costs are incurred in FY26 to FY28, with the new facility assumed as operational (and depreciation beginning) in FY27. These transitional costs, along with the impact of drawing down a bridging loan, lead to risk ratings of '3' and '4' during this period.
- FY28 to FY29 shows the start of ongoing improvement in cash and surplus: growth and CIP continue to generate margin but this is no longer being offset by additional costs related to the new facility. All the risk ratings have improved to a '1' or '2' by FY29.

**Figure 15:** Bridge of adjusted surplus from FY20 to FY29

[Redacted]

Figure 15 above shows the incremental changes between the forecast adjusted surplus in FY20 to the adjusted surplus in FY29.

- 'Business as usual' cost pressures of £XXXm over the period include national changes to tariff and assumed cost inflation as well as reserves for cost pressures and risk.
- On top of this are the incremental costs of the new facility, totalling £XXXm.
- These pressures need to be covered through CIPs and organisational growth. Although significant growth is assumed, the largest contributor is through CIP/efficiency (54% of the offsetting margin gain).

The above bridge is presented on a year on year basis in Appendix 6A.

The underpinning assumptions used in the LTFM are set out in the following section.



## Key revenue assumptions, evidence and risk

	Item	Key assumption	Supporting evidence	Risk
Tariff and inflation	Generic tariff and inflation (net inflation)	<ul style="list-style-type: none"> <li>National assumptions on annual tariff uplift and inflationary pressure</li> <li>An additional 0.5% pay inflation to cover local pay pressure up to FY24</li> </ul>	<ul style="list-style-type: none"> <li>Follows national guidance</li> <li>Additional 0.5% pay pressure based on calculation of the impact of incremental drift in 20/21 – assumed to continue to FY24.</li> </ul>	Future national tariff changes may affect the distribution of funding across services, and this may disproportionately impact Moorfields given its focus on one speciality.
	Market forces factor (MFF)	<ul style="list-style-type: none"> <li>National changes to the calculation of MFF compensation in national tariff leads to a decrease in income over a transitional period ending FY24</li> </ul>	<ul style="list-style-type: none"> <li>Follows national guidance</li> </ul>	
	Loss of Financial Recovery Fund (FRF & PSF)	<ul style="list-style-type: none"> <li>National changes to the financial planning regime remove this central funding by FY24</li> </ul>	<ul style="list-style-type: none"> <li>Follows national guidance</li> </ul>	
NHS services	Activity growth	<ul style="list-style-type: none"> <li>Per annum growth rates of 3.1% outpatient; 2.6% inpatient; 2.9% urgent &amp; emergency</li> <li>Weighted average of c. 3%</li> </ul>	<ul style="list-style-type: none"> <li>Based on Edge Health review as part of the public consultation and DMBC – 3% weighted average growth rate has been agreed with commissioners</li> </ul>	<b>Key risk 1: Commissioner QIPP</b> - commissioners will continue to look for efficiencies through demand management/re-provisioning and this could transfer some growth to other organisations
	Margin on growth	<ul style="list-style-type: none"> <li>65% marginal cost assumption</li> </ul>	<ul style="list-style-type: none"> <li>Assessment of variable cost base</li> <li>Consistent with SOC assumption</li> </ul>	<b>Key risk 2: NHS margin</b> - Over the period, additional pressure on margin where thresholds for semi-fixed costs are crossed – e.g. funding for additional capacity on networks sites
Commercial	Activity growth	<ul style="list-style-type: none"> <li>[Redacted]</li> </ul>	<ul style="list-style-type: none"> <li>External review of historical growth, market share and future projections</li> <li>Detailed plan for FY21 and higher level plan for future period</li> </ul>	<b>Key risk 3: Private activity</b> - changes in the market could reduce overall market growth, reduce the competitiveness of Moorfields and therefore its share, or limit Moorfields'

	Item	Key assumption	Supporting evidence	Risk
			supported by external review	ability to deliver this growth at marginal cost.
	Margin	<ul style="list-style-type: none"> <li>50% marginal cost assumption</li> </ul>	<ul style="list-style-type: none"> <li>Based on assessment of variable costs</li> <li>Consistent with SOC assumptions</li> </ul>	
	Capacity	<ul style="list-style-type: none"> <li>Sufficient capacity in the schedule of accommodation in new facility for theatres and laser rooms – additional outpatient capacity will be sourced from other locations (most costs are recharged to consultants, but some pressure on margins)</li> </ul>	<ul style="list-style-type: none"> <li>Schedule of accommodation</li> <li>Private patient plan aligned with capacity assumptions</li> </ul>	
Efficiency	Total CIP assumption	<ul style="list-style-type: none"> <li>FY21 to FY24: 2% to 4% of cost base (excluding pass through drugs)</li> <li>FY25 onwards: 2% per annum</li> </ul>	<ul style="list-style-type: none"> <li>Assessment based on historical performance and opportunity</li> <li>Long term thematic Cost Improvement Programme</li> </ul>	<b>Key risk 4: CIP</b> – efficiencies may not be sustainably achievable at the assumed level up to FY29
	Of which, non-recurrent	<ul style="list-style-type: none"> <li>£XXXm per annum</li> </ul>		
	Cost to deliver efficiency	<ul style="list-style-type: none"> <li>£XXXm additional ongoing IT and £XXXm of non-recurrent transitional costs are assumed as part of supporting the more efficient operating model set out in the clinical case</li> </ul>	<ul style="list-style-type: none"> <li>External review of the cost of new IT schemes</li> </ul>	
Building running	Facilities management and utilities	<ul style="list-style-type: none"> <li>A saving of c. £XXXm is demonstrated by benchmarking and assumed as part of the CIP assumptions</li> </ul>	<ul style="list-style-type: none"> <li>Benchmarking against PFI trust in similar area</li> </ul>	Contingency of 10% is held against the estimates based on benchmark
	Lease costs	<ul style="list-style-type: none"> <li>A reduction in City Road lease costs</li> </ul>	<ul style="list-style-type: none"> <li>Current lease costs</li> </ul>	

	Item	Key assumption	Supporting evidence	Risk
		£XXXm offset by additional lease costs required for some corporate areas (£XXXm)	<ul style="list-style-type: none"> <li>Area required per analysis for corporate transformation programme</li> <li>Cost per area based on CBRE benchmarking</li> </ul>	
Transaction specific	Transitional costs	<ul style="list-style-type: none"> <li>£XXXm of transitional costs have been assumed in FY26 to FY28 to cover: double running, move costs, IT, accessibility improvements, loss of income over move period</li> </ul>	<ul style="list-style-type: none"> <li>Estimates based on programme – a full programme for the transitional period to be worked up for FBC</li> </ul>	There is a risk that costs could be greater but this is assumed to be covered by contingency against current estimates (i.e. included within the £XXXm)
	Project costs	<ul style="list-style-type: none"> <li>Current project costs run up to FBC submission and then reduce to £XXXm per year to FY25 to support the necessary transformation programme.</li> </ul>	<ul style="list-style-type: none"> <li>Estimate based on budget to FBC and assumptions about post FBC period.</li> </ul>	
	Impairment	<ul style="list-style-type: none"> <li>An impairment on the value of the new facility is assumed at 25% - this has an impact on PDC and depreciation</li> </ul>	<ul style="list-style-type: none"> <li>Assumption based on previous projects and aligned to contingency/OB level</li> </ul>	
Generic risk	Cost pressure reserve	<ul style="list-style-type: none"> <li>A reserve for cost pressures at £XXXm p.a. to FY24 rising to £XXXm p.a. to FY29.</li> <li>This is to cover additional business as usual investment required e.g. to address new regulatory requirements and/or to remain competitive in the future market</li> </ul>	<ul style="list-style-type: none"> <li>Cost pressures in FY20 were £XXXm</li> </ul>	<p>These cost reserves are together held to cover the risk of additional costs, including the key risks highlighted above.</p> <p>In addition this will cover the revenue implications of capital risks. These are set out in section 6.3.2.</p> <p>The overall sufficiency of these reserves is tested in the sensitivity analysis in section 6.5.</p>



### 6.3.2 Capital

#### Overview

**Figure 16:** Summary of the sources and application of capital funding

[Redacted]

- Land purchase of £XXXm for 2 acres of St Pancras site. This is showing the total £XXXm cost, net of the UCL contribution of £10m, and including Stamp Duty Land Tax at 5%.
- Design and construction costs based on RIBA stage 1 costs assessed by Gardiner and Theobald (Cost Consultants / Quantity Surveyors).
- City road proceeds based on the mid-point of the valuation estimate from CBRE (£XXXm in total), split between Moorfields and UCL on the basis of an expert determination.
- Charitable donations of £XXXm – over 50% of this has already been committed to by donors. Further detail is set out in Appendix 6B.
- £XXXm of STP/PDC funding – approved by DHSC as part of Phase 4 capital bids.
- £XXXm of Moorfields cash – as set out in the previous section, the cash balance remains positive throughout the period to FY30, and NHSI's liquidity risk rating only falls below a '2' in one year - due to the impact on net current assets of the bridging loan in FY26.

Table 29 analyses the summary above in terms of the annual impact.

**Table 29:** Annual cash flows – sources and applications of capital funding

[Redacted=

- City road proceeds assumed as [Redacted]
- Charitable donation phasing based on MEC assumption that funding will be received around key milestones towards the end of construction and opening of facility. This will be determined in detail with donors after FBC approval.
- STP funds cannot be drawn down prior to FBC approval or prior to need – they therefore begin in FY23 when the initial cash received from City Road sale has been utilised.
- The bridging loan is assumed to be drawn down in one instalment – a significant proportion is therefore ahead of need (£XXXm at the end of FY25).





## Key capital assumptions, evidence and risk

	Item	Key assumption	Supporting evidence	Risk/Certainty
BAU	BAU capital	<ul style="list-style-type: none"> <li>Capex assumed to require c. £XXXm per annum in normal circumstances</li> <li>In the two years prior to opening the new facility, the assumption is that it will be possible to reduce capex to c. £XXXm.</li> </ul>	<ul style="list-style-type: none"> <li>Underlying historical trend</li> </ul>	<p>Operational risk will need to be managed with respect to maintenance during this transition period</p> <p>BAU capex levels for network sites are maintained throughout the period.</p>
Build Costs	Land	<ul style="list-style-type: none"> <li>£XXXm cost of land shown net of UCL contribution of £XXXm (and including £XXXm for Stamp Duty Land Tax)</li> </ul>	<ul style="list-style-type: none"> <li>Agreed price with C&amp;I, as set out in the option agreement</li> </ul>	
	Works	<ul style="list-style-type: none"> <li>£XXXm cost covering design, construction and commissioning</li> </ul>	<ul style="list-style-type: none"> <li>Stage 1 costing by G&amp;T (QS/cost consultants)</li> </ul>	<p><b>Key risk 5: Increased construction costs</b></p> <p>Risk of increased costs.</p>
	IT and medical equipment	<ul style="list-style-type: none"> <li>£XXXm cost</li> <li>Assumed a transfer of 40% of existing equipment</li> </ul>	<ul style="list-style-type: none"> <li>Based on review of requirement by MTS, aligned to costing in OB forms</li> </ul>	<p>Contingency (10%) and optimism bias (15%) held against these costs to cover assessed construction risks</p>
	Lifecycle	<ul style="list-style-type: none"> <li>Lifecycle costs of £XXX per sq m</li> <li>15% optimism bias included</li> <li>Phased based on life of component, mainly 5, 10 and 25 years.</li> </ul>	<ul style="list-style-type: none"> <li>Benchmarked costing and profiling by G&amp;T</li> </ul>	<p>Optimism bias of 15% held against risk</p>
	VAT	<ul style="list-style-type: none"> <li>VAT on construction costs is assumed to be 75% recoverable.</li> </ul>		<p>This is a prudent recovery assumption aligned with the level assumed in the SOC/LABC.</p>

	Item	Key assumption	Supporting evidence	Risk/Certainty
Transaction specific	Charitable donations	<ul style="list-style-type: none"> <li>• £XXXm of donations phased over FY25 to FY28</li> <li>• See Appendix 6B</li> </ul>	<ul style="list-style-type: none"> <li>• Feasibility study</li> <li>• 51% of funds already committed</li> </ul>	This will remain a risk until fully funded but given 51% achieved to date (vs an expectation of 40% by the time the public campaign begins), the trust is confident the donations are achievable / currently above plan.
	PDC	<ul style="list-style-type: none"> <li>• £XXXm approved by DHSC</li> </ul>	<ul style="list-style-type: none"> <li>• DHSC confirmation letter</li> </ul>	
	Opening of facility	<ul style="list-style-type: none"> <li>• Assumed April 2026</li> <li>• Based on the timing of a series of events in the critical path</li> </ul>	<ul style="list-style-type: none"> <li>• Programme assumptions</li> </ul>	<p><b>Key risk 5: increased construction costs (due to delays)</b></p> <p>Delays to events on the critical path could lead an overall delay of the project – with implications for, e.g.:</p> <ul style="list-style-type: none"> <li>• Inflation costs</li> <li>• Penalty payment to buyer of City Road</li> <li>• Additional transitional costs</li> </ul> <p>Also considered as part of contingency and optimism bias on construction costs.</p>

	Item	Key assumption	Supporting evidence	Risk/Certainty
	Sale of City Road	<ul style="list-style-type: none"> <li>Total sale price (for combined MEH and UCL site) of £XXXm – representing the midpoint per CBRE valuation report)</li> <li>Sales costs are included in revenue costs during FY21/22</li> <li>Moorfields share of based on expert determination</li> <li>[Redacted]</li> </ul>	<ul style="list-style-type: none"> <li>CBRE valuation report</li> <li>Expert determination of the apportionment of sale proceeds between the partners</li> </ul>	<p><b>Key risk 6a: Sale proceeds - amount</b></p> <p>There is uncertainty in the sale valuation.</p> <p>Note: [Redacted]</p> <p><b>Key risk 6b: Sale proceeds – timing</b></p> <p>[Redacted]</p>
Generic risk	Compensation / other risk	<ul style="list-style-type: none"> <li>£XXXm contingency is held in FY22 against potential compensation payments required in relation to the build, and any other potential capital risk not directly related to build costs (which are assumed to be covered by contingency and optimism bias).</li> </ul>		<p>Contingency and optimism bias held as part of the capital costs can be released against the risks highlighted above.</p> <p>The generic contingency here can cover some additional risk, e.g. related to other events such as compensation requirements.</p> <p>Beyond this, the mitigation to capital costs is capital loan funding – the revenue cost for this would be covered by revenue contingency set out in section 6.3.1.</p> <p>Assessed further in sensitivity analysis in section 6.6</p>

## 6.4 Review of forecast financial statements

This section reviews the core financial statements on an annual basis over the forecast period, and provides commentary on key movements.

### 6.4.1 Statement of Comprehensive Income

**Table 32:** *Statement of Comprehensive Income*

[Redacted]

- NHS and commercial growth assumptions lead to increased income and costs over the period.
- Non-recurrent project costs are incurred in the period FY20 to FY24 and transitional/move costs in the period FY26 to FY28, which suppresses recurrent EBITDA.
- PDC charges increase over the period due to capitalised construction costs from FY22 to FY27. Depreciation increases in FY27 and FY28 reflecting the part year effects relating to the opening of the new facility.
- Gain on disposal recognised in FY27 when the sale of City Road becomes unconditional.
- An adjusted surplus is reported from FY29 onwards – the first year without transitional costs or part year effects from the opening of the facility. This demonstrates affordability from a revenue perspective.

#### 6.4.2 Statement of Financial Position

**Table 30:** *Statement of Financial Position*

[Redacted]

- Current assets increase slightly over the period reflecting the increasing (nominal) income base of the organisation.
- Non-current assets increase over the period to FY27 due to Oriel constructions costs (which run from FY22 to FY27).
- Non-current liabilities reflects three elements:
  - Business as usual – assumed to remain stable at c £XXXm p.a. for long term creditors and provisions
  - Loans over one year – starting balance of £XXXm reducing by £XXXm p.a., with the bridging loan recognised in addition for one year in FY26.
  - City Road [Redacted]
- PDC increases by £XXXm reflecting the allocation of PDC funding for this project being drawn down.
- Cash is maintained at c. £XXXm or higher up to FY26. This reduces to a low point of £XXXm in FY27 as a result of the use of Moorfields internal cash to fund the capital programme and to fund transitional revenue costs – this still represents a net current asset position with a liquidity risk rating of ‘1’ under the NHSI framework. This demonstrates affordability from a cash perspective.

### 6.4.3 Statement of Cash flows

**Table 31:** *Statement of cash flows*

[Redacted]

The changes in the cash flow statement reflect the changes in the Statement of Comprehensive Income and the Statement of Financial Position described in the previous two sections.

The key conclusion is that the cash balance remains sufficient throughout period, and once clear of the transitional costs in FY27, net cash generation is robust and increasing (FY28 to FY29, and onwards).

### 6.5 Sensitivity testing and risk assessment

The previous sections have presented the view that the project is affordable within the trust's budgets in future years.

The purpose of this section is to test the sensitivity of this conclusion to changes in the underlying assumptions, alongside a view of the likelihood of these changes occurring.

The key risks are those highlighted in section 6.3.1 (Revenue risks) and 6.3.2 (Capital risks).

These have been quantified on the following basis:

- **Key risk 1: Commissioner QIPP** – reduced NHS growth to match the 'with reprovisioning' rate identified by the Edge Health system growth review as part of the DMBC (equates to a reduction from a c. 3.0% growth rate to c. 2.5% per annum).
- **Key risk 2: NHS margin** – reduced marginal cost assumption to assume that no clinical costs are fixed (uplifts marginal cost from 65% to 75%).
- **Key risk 3: Commercial margin** – the growth assumption for the trust is reduced [Redacted]
- **Key risk 4: CIP** – assumes 20% non-achievement of CIP target year on year based on average historical achievement against CIP plan in last four years (81% achievement of plan on average).
- **Key risk 5: Construction costs** – models a 25% increase in construction costs.
- **Key risk 6a: City Road sale proceeds (amount)** – assumes [Redacted]
- **Key risk 6b: City Road sale proceeds (timing)** – assumes [Redacted]

Against these, the following mitigations have been quantified:

- **Mitigation A: working capital** – in the base case, some cash is used to reduce payables and some other working capital adjustments. In a downside, it is assumed that this is reversed.
- **Mitigation B: release of contingency and risk reserves** – assumes all the revenue risk reserves are released against the above risks.



- **Mitigation C: bring forward MEC reserve contribution** – of the £XXXm of charitable donations, £XXXm come from the Moorfield's Eye Charity reserves and are currently held in long term investments but, in a downside scenario, could be provided earlier.
- **Mitigation D: additional capex loan funding** – assumes two tranches of additional capex loan funding from DHSC are drawn down to replace lost capital funding from the reduced sales proceeds and to cover the increased capital costs. In total, £XXXm of capex loan is assumed, borrowed over a 25 year period at an interest rate of 3.5%.
- **Mitigation E: one off measures in FY21** – assumes a small amount (£XXXm) of above plan performance in FY20 (not included in base case) allows an at least non-recurrent improvement in FY21 in this downside.

The following tables set out the quantification of these risks and mitigation and shows the impact on adjusted surplus and then cash.

**Table 32: Surplus after risks and mitigations**

[Redacted]

**Table 33: Cash after risks and mitigations**

[Redacted]

This analysis demonstrates that in this downside scenario, assuming the mitigations as set out, the preferred option is still affordable, with a strong adjusted surplus reported by FY29 and a reasonable cash level throughout the period.

## 6.6 Incremental impact of the preferred option

The forecast reviewed in the previous section is based on the preferred option. This section reviews the incremental impact of the preferred option (option 3) compared to business as usual (BAU - option 0). Section 6.6.1 provides a summary bridge of the impact at a surplus level and explains the key assumptions; section 6.6.2 reviews the differences between the financial statements in further detail.

The conclusion of this is that the preferred option represents a net financial benefit to the trust within three full years of opening.

### 6.6.1 Summary bridge of incremental impact

The following chart bridges the adjusted surplus/(deficit) at the end of the period, FY29, under the two different options.

**Figure 17: Bridge of FY29 adjusted surplus between preferred option and BAU**

[Redacted]

The financial modelling of the two options shows that by FY29 (the second full year after opening the new facility), the preferred option will represent a £XXXm decrease in the adjusted surplus achieved by the trust compared to BAU.

The new facility is assumed to provide five years of additional NHS and private capacity compared to BAU, as well as additional efficiencies over a five year period, and this full benefit is therefore not reflected in the time period of the financial model. By FY30, taking into account these further benefits, the preferred option would represent a net benefit to the trust's surplus position, compared to BAU.

Therefore, the preferred option represents a net benefit to the surplus position of the Trust within three full years of the opening of the facility.

**Key assumptions:**

The assumptions are aligned with those used in the Economic case. Specifically, the preferred option, compared to business as usual (BAU - option 0):

- Includes additional efficiencies that result from the new facility. The impact of this is £XXXm in nominal terms by FY29, as shown in Figure 17.
- Assumes NHS growth at City Road continues beyond FY27 (the point at which capacity is fully utilised under the assumptions of the demand and capacity model in BAU). This equates to an additional £XXXm of margin by FY29 compared to BAU.
- Assumes private patient growth in London beyond FY27, reflecting utilisation of additional private theatre capacity provided in the preferred option. This equates to £XXXm of margin by FY29 compared to BAU.
- Includes the additional capital investment and related capital funding streams for the new facility. The key incremental impact of this compared to BAU is an additional cost of £XXXm in PDC charge and £XXXm in depreciation that would be generated by the new facility by FY29 in the preferred option.
- Includes additional revenue costs of the preferred option – specifically, additional lease costs for accommodation of corporate staff and additional investment in IT. This is a cost of £XXXm and £XXXm respectively by FY29.

## 6.6.2 Review of incremental impact by financial statement

This section reviews the incremental impact on the individual financial statements in further detail

**Table 34: Statement of comprehensive income – incremental impact of preferred option**

[Redacted]

In the preferred option, compared to BAU:

- NHS and commercial income show an increase from FY27 onwards, reflecting the additional capacity in the new facility.
- Pay and non-pay are higher from FY27 due to the marginal cost of delivering this additional activity.
- Non-pay increases throughout the period also reflect transitional costs – project costs from FY20 to FY24 and transitional/move costs in FY26 to FY28.
- Depreciation, interest and PDC are increased costs, driven by the capital costs invested in the new facility.
- The I&E is impacted by the receipt of capital funding to cover these costs: charitable donations of £XXXm are received in FY27 to FY28 (these are amounts specifically committed to the Oriel project) and a gain is recognised on the sale of City Road (£XXXm) in FY27.

**Table 35: Statement of Financial Position – incremental impact of preferred option**

[Redacted]

In the preferred option, compared to BAU, the key differences in the statement of financial position are:

- Non-current assets are £XXXm higher by FY29 reflecting the increased capital investment for the new facility.
- A bridging loan is required as part of the capital funding structure – drawn down in FY25 and repaid FY27.
- Public dividend capital of £XXXm is received, which is committed capital funding for the preferred option.
- Cash is £XXX lower by FY29 – see following section.

**Table 36: Cash flow statement**

[Redacted]

Overall, cash is £XXXm lower by FY29 in the preferred option compared to BAU. This reflects two key elements: the internal capital funding utilised for the preferred option as set out in table 31 and additional revenue costs through the period - including project costs and move costs, interest costs of the bridging loan and increased PDC charges.

However, these costs begin to be offset by additional activity and efficiencies once the new facility opens and, by FY29, the in-year net cash flow is £XXXm higher in the preferred option than in business as usual. These improvements are set to continue further in the following years.

## 6.7 Conclusion

The Economic Case chapter sets out the five shortlisted options and sets out the economic appraisal which demonstrates that the preferred option is to build a new facility in the St Pancras area with an area of 39,500 square metres.

This chapter has demonstrated the affordability of this preferred option:

- In the base case, underlying surpluses are maintained throughout the period, an adjusted surplus is reported by FY29, the cash balance is maintained above £5m throughout the period, and the NHSI liquidity risk rating does not fall below a '1', excluding the impact of the bridging loan in FY26.
- In a downside, where the key risks identified are quantified and then offset by mitigations (including £XXXm capital loan funding), the preferred option remains affordable.
- The incremental impact on surplus of the preferred option compared to business as usual is a £XXXm decrease by FY29 but will be a surplus improvement to the trust by FY30. Cash is £XXXm lower in the preferred option by FY29, but the cash generated by the Trust in year by FY29 is £XXXm in the preferred option, and set to increase further in the following years.

## 7. Commercial case

### Commercial Case – chapter summary

The following chapter describes the commercial arrangements to deliver the proposal, which can be summarised as follows:

- Moorfields will acquire the land at the St Pancras Site.
- UCL will enter into an agreement to lease the land, paying a lease premium of £XXXm.
- The partners will jointly procure the construction, equipment and facility management solutions – novating contracts into a Joint Delivery Vehicle (JDV) once approved.
- The JDV will construct the facility with funding provided by the partners.
- Once built, each partners' share of the asset will be shown on their balance sheet.
- Thereafter, the JDV will provide Facility Management services (scope to be agreed).
- The partners will jointly dispose of the current City Road / Bath street sites, to maximise marriage value.

This commercial case details:

- The preferred **procurement route** for the main construction and enabling works – an OJEU two-stage design and build tender, with competitive dialogue, based upon RIBA Stage 3 design. It describes the methodology to determine this, including appraisal of options, market engagement and Trust Board sign-off.
- The proposal to establish a **Joint Delivery Vehicle** (JDV) between UCL and the trust to deliver the facility, which will be established as a separate legal entity to meet the project objectives. This joint approach will be applied to design, construction, and commissioning of the new facility, and to post-handover into non-clinical operation and maintenance (including lifecycle replacement management) of the building in the longer term).
- The proposals for **FM services** and **equipping** using the same JDV approach.
- Potential **risk apportionment, contractual arrangements and payment mechanisms**, which will be confirmed in the FBC.
- **Benchmarking** which provides assurance of value for money.
- The **acquisition strategy** for purchasing the Oriel site at St Pancras. The trust will acquire the land upon which the facility will be constructed. The Oriel partners will work with C&I and their development partner to develop a joint masterplan for the St Pancras site for LB Camden. The partners will submit a planning application for the St Pancras site in September 2020.
- The **disposal strategy** for City Road, which concludes that the site should be sold subject to planning to achieve best value, while transferring the cost of a planning application to the purchaser.



- A description of how the scheme complies with the Government Construction Strategy and UK Construction 2025 strategy.

**Key supporting documents:**

- **Appendix 7A – Procurement strategy**
- **Appendix 7B – Equipment strategy**
- **Appendix 7C – Acquisition strategy**
- **Appendix 7D – Disposal strategy**
- **Appendix 7E – JDV proposal (detail)**

## 7.1 Determining the procurement strategy for built solution

### 7.1.1 Service streams and required outputs

A contractor will be procured to undertake RIBA Stage 4 design (up to and including technical design) and to deliver the built solution, which will subsequently be novated to a JDV. In order to ensure high quality and performance, and encourage innovation, a 2-stage process has been selected (described in section 7.1.2) with a competitive dialogue which retains contractors in competition. The partners will issue a **brief that concentrates on required performance and outcome**, and through this procurement route designers and constructors will work together to develop an integrated solution that best meets the required outcome.

Other items to be procured include FM services contracts for any FM services the partners choose to outsource (described in section 7.3) and equipment (described in section 7.4). The procurement strategy for these will be further detailed at FBC.

### 7.1.2 Procurement options appraisal

#### Options appraisal methodology

Gardiner and Theobald (G&T), an independent construction and property consultancy appointed by the partners, has led the discussion and debate on a suitable range of procurement options for the construction works. The process has included:

- Market engagement to review procurement proposals / project interest.
- Legal advice sought on the preferred route.
- Workshops with Moorfields, UCL and advisors, set out below.

**Table 37: Procurement workshops**

	Attendees	Purpose
Workshop 1	<ul style="list-style-type: none"> <li>• Moorfields Director of Estates, Capital &amp; Major Projects</li> <li>• UCL Assistant Director of Capital Projects</li> <li>• Project managers</li> </ul>	Identify and weight procurement success factors (within the parameters of time, cost and quality) according to importance.

	<ul style="list-style-type: none"> <li>Quantity surveyors</li> </ul>	Initial identification and assessment of procurement options
Workshop 2	<ul style="list-style-type: none"> <li>Moorfields Director of Estates, Capital &amp; Major Projects</li> <li>Moorfields Non-Executive Director</li> <li>Moorfields Facilities management</li> <li>Project managers</li> <li>Quantity surveyors</li> </ul> <p>Meeting held separately with UCL estates</p>	<p>Review outcome of workshop 1.</p> <p>Test draft programme.</p> <p>Confirm next steps.</p>

The following options were appraised – their advantages and disadvantages are summarised below, and detailed in the procurement strategy at Appendix 7A.

**Table 38: Procurement options appraisal**

Option	Advantages	Disadvantages
Traditional lump sum – single stage	<p>Time:</p> <ul style="list-style-type: none"> <li>Simple, well-defined and widely understood</li> </ul> <p>Cost:</p> <ul style="list-style-type: none"> <li>High level of cost certainty</li> <li>Good value for money on variations</li> <li>Contractor accepts most cost and time risks</li> </ul> <p>Quality:</p> <ul style="list-style-type: none"> <li>Can result in higher design quality with specialist input</li> <li>Client retains design control</li> <li>Easy to instruct variations</li> </ul>	<p>Time:</p> <ul style="list-style-type: none"> <li>Little potential for pre-planning or pre-ordering</li> </ul> <p>Cost:</p> <ul style="list-style-type: none"> <li>Potentially adversarial with costly claims</li> <li>Cost certainty decreases with post-contract changes</li> </ul> <p>Quality:</p> <ul style="list-style-type: none"> <li>Client responsible for design team performance</li> <li>No contractor involvement in design may affect buildability</li> </ul>
Traditional lump sum – two stage	<p>Time:</p> <ul style="list-style-type: none"> <li>Allows earlier start on site</li> </ul> <p>Cost:</p> <ul style="list-style-type: none"> <li>Open book policy</li> <li>Retains a degree of competition</li> <li>Good value for money on variations</li> <li>Contractor accepts most cost and time risks</li> </ul> <p>Quality:</p>	<p>Time:</p> <ul style="list-style-type: none"> <li>Contractor can delay commitment to price and programme</li> </ul> <p>Cost:</p> <ul style="list-style-type: none"> <li>Contractor fee for early involvement</li> <li>Greater client risk until works packages tendered</li> </ul> <p>Quality:</p>

	<ul style="list-style-type: none"> <li>• Early advice on buildability</li> <li>• Can result in higher design quality with specialist input</li> <li>• Client retains design control</li> <li>• Easy to instruct variations</li> </ul>	<ul style="list-style-type: none"> <li>• Client responsible for design team performance</li> </ul>
Design and build (can be one or two stage)	<p>Time:</p> <ul style="list-style-type: none"> <li>• Works on site may commence before the design is complete</li> <li>• Contractor controls design information</li> </ul> <p>Cost:</p> <ul style="list-style-type: none"> <li>• Earlier works package tendering to obtain cost certainty</li> </ul> <p>Quality:</p> <ul style="list-style-type: none"> <li>• Contractor involvement ensures buildability</li> <li>• Project benefits from specialist sub-contractors</li> </ul>	<p>Time:</p> <ul style="list-style-type: none"> <li>• Pre-contract period can become protracted in order to achieve a higher degree of cost certainty before contract agreement</li> </ul> <p>Cost:</p> <ul style="list-style-type: none"> <li>• Post-contract changes can be difficult and expensive to incorporate</li> <li>• Cost premium associated with single point responsibility</li> </ul> <p>Quality:</p> <ul style="list-style-type: none"> <li>• Reduced main contractor pool who have the ability to deliver single point of responsibility</li> <li>• Reduced client control over design once contractor appointed (can be offset by robustness of Employers Requirements)</li> </ul>

### 7.1.3 The preferred procurement route

By scoring options against success criteria at Workshop 1, with the benefit of G&T's market knowledge:

- **Design and build** was selected over traditional procurement as it enables transfer of design and construction risk to the same party upon contractor appointment, provides earlier cost certainty, and enables a shorter programme.
- **Two-stage** procurement was selected over single-stage as is anticipated, given the size and value, that main contractors will only consider a two stage tender route. This has been confirmed through market feedback. In addition, this will encourage increased competition, transparency and innovation.
- **Official Journal of the European Union (OJEU)** has been selected over a framework route to allow full competition of the market place.

The second stage competitive dialogue will be based upon RIBA Stage 3 design. During the second stage, the two shortlisted main contractors will re-assess Stage 3 design and develop the design (RIBA Stage 4) where necessary to re-risk and offer a final price for

assessment and recommendation. This is considered to offer the best value for money, and ensure interest from the market.

The **benefits** of this approach are:

- An OJEU tender would allow full competition of the market place, including to those larger contractors who have an excellent track record in delivering bespoke world-class health and research facilities.
- Main contractor market will unlikely respond to a single stage tender.
- Avoids reduced competition / transparency which results from selection of a single main contractor on a two stage tendering basis.
- The proposed procurement route seeks to retain competition until a fixed price is agreed.
- More than one main contractor tendering, on a two stage tender basis, will likely be seeking payment if not selected. It is expected that this payment will contribute towards the significant bidding costs incurred by the tendering contractors, including those of third parties, but saved in the competitive prices offered. This proposal is supported by Moorfields Eye Hospital and the partners of Oriel.
- The programme allows the main contractors time to consider and integrate innovation / off site fabrication in the design.
- It places progression of detail design with those responsible for delivery and by doing so considers the buildability of the final design.
- It enables the trust and partners to ensure the digital strategy is fully understood by bidders, and forms an integral part of the design approach. It is essential that Oriel is designed for digital at every stage of its development.
- Current client side design team could be appointed on a monitoring role basis.
- FBC submission will be based on the agreed Contract Sum for the Main Contract and Enabling works.
- Control of the programme up to contractual award, due to retained competition during second stage process, is maintained by the partners.

#### **7.1.4 Consideration of the P22 framework**

The ProCure (P22) framework is a Construction Procurement Framework administrated by DHSC for the development and delivery of NHS and Social Care capital schemes in England. It is due to be re-procured in 2020 – this successor framework will be called ‘P2020’.

Use of the P22 framework was evaluated as part of the option assessment during the procurement workshops. Although P2020 is based upon a two stage design and build strategy, there are differences between this and the preferred option which have resulted in it being discounted. These include:

- The market is reduced to the six main contractors on the framework.
- Oriel is not solely a healthcare building – it is a shared development with UCL.
- There are limited schemes comparable to Oriel which have been completed through P22 and predecessor frameworks.

- A single main contractor is selected during a two stage process for P22, rather than two in competition, resulting in loss of competition during the second stage.
- A Guaranteed Maximum Price (GMP) is presented for FBC rather than a lump sum.
- Benefits such as repeatable room designs for general acute hospitals have less benefit for a specialist centre which will be a unique 'flagship' site that must attract and retain the world's top talent in eye care and research. It is therefore not felt the best fit for this large scale, bespoke and highly-specialised project.

The above reasons confirm that the project requirements do not align with a P22 approach. Where relevant, Oriel will seek to follow the principals of P22 in securing Value for Money.

### **7.1.5 Market Engagement**

#### **Main contractors**

In order to inform how the procurement strategy could provide best value for money (including by being attractive to a number of suppliers), a closed group of main contractors were selected to offer market feedback. Responses were reviewed by the project's cost advisors, G&T, and used to refine key areas of the procurement strategy. The feedback suggested that the proposed strategy is of interest, with the following points to note:

- Where two contractors are in competition to price Stage 3, a payment towards bidding costs would be expected. The value will need to be discussed and agreed.
- The tender period timescales are sufficient. One contractor observed that better value could be obtained by merging the contractor design and contractor pricing periods. This is seen as a positive request and will be considered by the Oriel team.
- Tendering on RIBA Stage 3 information is favourable and will help balance the risk and opportunities for the contractors.

#### **Mechanical and Electrical (M&E) contractors**

Due to the large proportion of M&E elements of the building arising from the clinical and research space, feedback from selected M&E contractors was also sought. The responses further supported the procurement proposals, particularly for earlier support with RIBA Stage 4 detail design. It was felt that involvement at Stage 4:

- Avoids potentially costly reverse engineering, converting completed detail designs into pre fabrication / factory designs.
- Supports completion of Building Information Modelling (BIM) Level 2.
- A controls approach is planned for the new site that will be at the forefront of BIM approaches – early involvement of M&E contractors will facilitate this approach.
- Reduces project costs and programme as retrospective design responsibility and validation work is minimised.

#### **Other Subcontractors / Specialist Trade Contractors**

A number of specialist contractors were also approached, who provided support for design, programme and cost direction. Full details of all market engagement can be found in Appendix 7A.

### 7.1.6 Legal and technical advice

As previously stated, the partners have sought technical advice on the procurement options available from its cost consultants, G&T. In addition, legal advice has been obtained from DAC Beechcroft for the following:

- Compliance that the procurement strategy aligns with EU procurement law and procurement legislation.
- Ability to formally seek early market feedback on the procurement strategy from (a closed group of) main contractors.

DAC Beechcroft confirmed the following:

“We have considered the compliance of the proposed procurement route and soft market testing with the Public Contracts Regulations 2015 (“the Regulations”). We consider that in principle the proposed procurement route and soft market testing are compliant with the Regulations.”

DAC Beechcroft’s legal report on the procurement strategy, including two ‘safeguards’ with reference to the approach to the procurement strategy and main contractor soft market testing, is included in the procurement strategy at Appendix 7A.

## 7.2 Delivery vehicle – Enabling a Partnership Approach

The partners propose to deliver the facility through the use of a **Joint Delivery Vehicle (JDV)**. The following section sets out the rationale for the proposal to establish a JDV to deliver Oriel. The detail of this proposal, including the options considered for delivery of the scheme, the planned next steps, accountancy treatment and personnel implications, are set out in Appendix 7E. The trust and UCL recognise that the truly integrated nature of this joint centre is best crystallised by the use of a JDV.

The trust notes the specific guidance relating to forming the JDV in NHS Improvement’s (NHSl) *Addendum to the transactions guidance – for trusts undertaking transactions, including mergers and acquisitions*. A business case on the JDV will be submitted to NHSE/I in 2020.

### 7.2.1 Context

Oriel has, from its inception, been consistently described as a joint initiative between Moorfields and UCL IoO, building on current operational alliances. It is recognised that the partners are in a unique position to deliver a new facility configured to deliver and translate academic research through to the patient from the laboratory. The partners have therefore examined ways in which Oriel can be delivered which shares the risks and potential upsides of delivery, and creates a truly integrated facility, which cuts across organisational boundaries.



While overall management oversight should always remain with the remit of each body's governance structure, ring fencing Oriel in a separate delivery vehicle will allow the project team, objectives, risk and funding to be separately managed whilst at the same time, still allowing both parties to crystallise the positive aspect of current synergies of joint working.

In order to best support this collaborative approach, the proposal is to create a JDV, akin to a special-purpose vehicle, which will be established as a separate legal entity to meet the project objectives.

JDVs have been considered due to the recognition that, while in theory the project could be delivered within current governance and operational structures, this will be challenging when organisations are also delivering 'business as usual' in different regulatory environments. Experience from successful capital projects delivered by both by the NHS and commercial organisations is that substantial projects of this size are best controlled and managed if they have very clearly defined and separated boundaries enabling the delivery team to progress the project unencumbered from operational demands.

When considering how best to achieve the aims of the partnership, Moorfields and UCL have appointed an independent expert (Chase Reeves & Co Ltd) to examine the delivery structures available. This appraisal has considered lessons learnt from other NHS trusts, as well as the Francis Crick Institute which opened in 2016, and is the biggest single biomedical laboratory in Europe.

The parties currently split the costs associated with the Oriel project on a 70/30 ratio, on the basis of an agreed Memorandum of Understanding.

### 7.2.2 Benefits of a Joint Development Vehicle for Oriel

A JDV will enable Moorfields and UCL to take a true partnership approach to delivering and operating within the building. While there will be areas of the building used primarily by UCL or Moorfields, shared space will enable collaboration and integration between research, education and clinical services. As well as enabling the partners to work to best effect in the building, a JDV will provide a single FM and building maintenance service for shared areas.

The following table summarises some of the key areas of benefit that will be achieved through establishing a JDV (as opposed to delivering the project directly):

**Table 39:** *Anticipated benefits of the JDV*

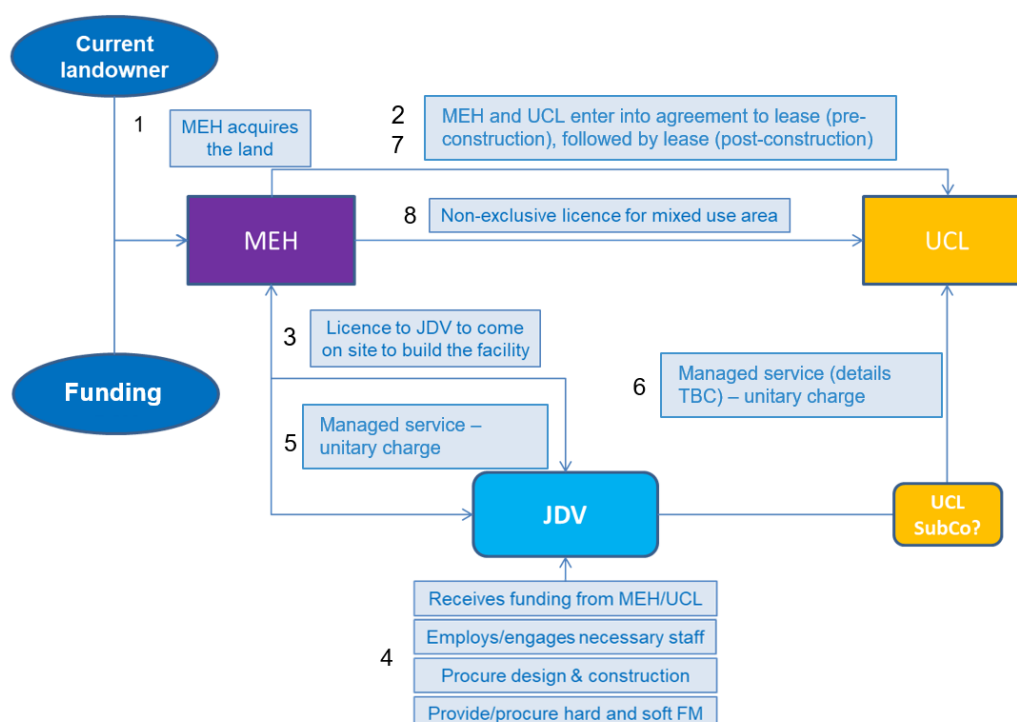
Area considered	Benefit
Functional competency	Clinical and estates functions within the partners can focus on what they are best placed to manage.
Operational efficiency	Unlocking organisational efficiency that accelerates delivery of maintenance, refurbishment and new capital projects.
Coherent strategy	Delivering single strategy for Oriel which is applied across the new centre, breaking down organisational boundaries.

Best practice	Separation of project delivery from 'business as usual' activities will enable delivery teams to focus on delivering best practice.
Performance monitoring	Providing a degree of separation that allows the partners to monitor its estate performance objectively against specified KPIs.
Workforce	Creation of a new, and truly integrated facility in which clinical services, research and education work together effectively, will improve recruitment, retention and flexibility of workforce.
Commercial independence	Enabling the JDV to operate commercially and pursue opportunities with a wider range of participants in the market.

### 7.2.3 Overview of the configuration of the JDV

The key principle of the JDV is that it will be configured to afford it sufficient independence to make key decisions, whilst at the same time ensuring each partner retains a level of control to assure their board (Moorfields) or council (UCL) that they can strategically manage their ownership, benefits and risks. Once the JDV is formally constituted (subsequent to approval of a separate JDV business case), the deliverables for the entity can be summarised across 8 high-level steps as demonstrated in the diagram below:

**Figure 18:** JDV deliverables and commercial arrangements



Key	
1	Moorfields purchases the site
2	Moorfields enters into agreement to grant a lease to UCL
3	Moorfields grants a licence to occupy to JDV

4	JDV constructs the new facility
5	JDV provides a managed healthcare facility to Moorfields
6	JDV provides managed facility to UCL (details to be confirmed)
7	Moorfields grants lease to UCL
8	Moorfields grants a non-exclusive license for mixed use area and charges a service charge to UCL

#### 7.2.4 Independent advice and approval

##### Commercial JDV advice

The trust have engaged independent experts (Chase Reeves & Co Ltd) with experience of establishing SPVs for other NHS trusts including UCL, Imperial College Healthcare NHS Trust and Royal Free London NHS Foundation Trust. These advisors have worked with the trust to undertake the options appraisal (set out in Appendix 7E) and detail the proposed JDV structure.

##### Legal advice

At this OBC stage, Moorfields has not formally engaged legal advice regarding the establishment of the JDV. Subsequent to the approval of the OBC, Moorfields and UCL will appoint joint legal advisors to support the development of JDV supporting documentation listed above.

##### Financial advice

Formal sign-off of the proposed accounting treatment will be sought from the trust's external auditors once the detail of the Joint Venture Agreement has been agreed. This will be detailed in the JDV business case.

##### External approval

The NHSI guidance for trusts undertaking transactions including mergers and acquisitions, states that all subsidiary transactions require a trust-approved business case detailing the nature of the proposals. The separate proposal should be submitted to NHSI to allow them to understand and assess the inherent risk of the proposed transaction.

In accordance with the NHSI guidance *Addendum to the transactions guidance – for trusts forming or changing a subsidiary (November 2018)*, it is anticipated that the proposal to establish a JDV to deliver Oriel will represent a significant transaction, and as such will require NHSI approval. The current programme includes sufficient time for the development and approval of the business case to support establishing the JDV, between OBC approval and FBC submission.

### 7.3 FM Services

Moorfields currently outsource some FM services (including cleaning and catering) and have in-house teams for the remainder (including portering and maintenance). Similarly, the UCL IoO utilise a range of outsourcing and in-house solutions for their FM services.

Oriel will require Hard and Soft FM solutions which cover the whole building. These will be procured and managed by the JDV, and costs will be shared between Moorfields and UCL on a pro-rata basis (yet to be agreed). It is likely that the majority of FM services will be outsourced, with an internal helpdesk which uses the Building Management System (BMS) to plan work schedules ahead of time.

Outsourced FM services for Oriel will be procured following detailed design development.

## **7.4 Equipment strategy**

An equipment strategy has been developed by the trust's equipping advisors, MTS Health, and is attached at Appendix 7B. The objective of the equipping strategy is to ensure that the partners have fully equipped clinical, research and education facilities and shared space, keeping pace with technological developments whilst also securing best value for money once the development is completed. There is also a need to ensure affordability within the overall capital investment envelope. Consequently, there is a commitment to review and utilise Moorfields existing equipment (medical and non-medical) asset base where possible.

The equipment strategy identifies the scope and responsibility for procurement of equipment and how this will be managed by the partners during the development of the scheme. It also considers the process that will be followed to identify the options available for the provision of equipment and the programme of tasks and timescales required to complete the process.

The equipment strategy assumes that 40% of the equipment required for the Moorfields and shared space will be transferred from existing facilities, as informed by MTS Health. The trust will continue its programme of lifecycle replacements between now and 2026. A detailed equipment audit will be undertaken in advance of equipment procurement, to identify items of sufficient quality to transfer. This is in line with other new-build hospital projects such as the Chase Farm Hospital redevelopment. The estimated cost of equipment by group is summarised in the equipment strategy and detailed in the equipment schedule at Appendix 7B.

The equipment strategy will continue to be developed, exploring the procurement options available, accommodating existing equipment and analysing forecasts of future activity taking account of clinical developments and technologies. Detailed discussions will be carried out with leading ophthalmic manufacturers when confirming the specification of equipment to be procured.

## **7.5 Potential risk apportionment**

### **Allocation of risk between parties**

In line with the principle that risks should be passed to the party best able to manage them, (subject to value for money), the following table shows how the construction risks might be apportioned.

**Table 40: Potential risk transfer allocation**

Risk Category	Potential allocation		
	JDV*	Contractor	Shared
1. Design risk <i>This will be transferred to the contractor upon appointment</i>		✓	
2. Construction and development risk <i>This will largely sit with the contractor but some residual risk such as ground conditions may be shared</i>		✓	✓
3. Transition and implementation risk			✓
4. Availability and performance risk			✓
5. Operating risk	✓		
6. Variability of revenue risks	✓		
7. Termination risks	✓		
8. Technology and obsolescence risks			✓
9. Control risks	✓		
10. Residual value risks	✓		
11. Financing risks	✓		
12. Legislative risks	✓		

\* It is anticipated that risks will be shared between Moorfields and UCL under a 70/30 split. This will be confirmed through the Joint Venture Agreement.

## 7.6 Potential payment mechanisms and proposed form of contract

The main construction project will be delivered under a standard NEC4 contract, Option A – Priced Contract with Activity Schedules. Option A is a fixed price lump sum contract with interim payments based upon the **completion of defined activities**. This form of contract allows ‘Z clauses’ which permits additional clauses to best fulfil the partners’ requirements. Any Z clauses or contract alterations will seek to ensure the appropriate balance of risk and reward with the construction market, not counteract the effectiveness of the standard contract form nor add ambiguity.

The proposed form of contract will contain realistic contractual key milestones and delivery dates. Liquidated and ascertained damages will be set at an appropriate level, within both of the construction contracts (enabling and main works), based upon the estimated loss for the partners should the project be delayed.

It is likely that FM services (described in section 7.3) will be procured by the JDV with charging by a **performance or incentive payment mechanism**. The FM services payment

mechanism will be selected to ensure delivery of services to the required standards, while maintaining value for money.

## **7.7 Assurance of value for money**

The project's cost advisors have used benchmarking to validate:

- Estimated project capital costs.
- Estimated project lifecycle costs.
- Proposed risk allowances.
- Design aspirations.
- Programme durations.
- Circulation and plant area allocations.
- Associated trusts costs (for example FF&E, IT/telecoms/data, Optimism Bias).
- Proposed inflation allowances.

### **7.7.1 Construction cost**

An estimated outturn cost estimate for the Moorfields element of the project has been produced by the project's cost advisors, G&T, based on the Stage 1 designs described in section 5.8. The capital cost breakdown (totalling **£XXXm** + **£XXXm** site purchase cost) is set out in section 6.3.2 of the Finance Case. The cost includes a 10% contingency allowance and 15% optimism bias allowance.

The project's cost advisor have benchmarked the estimated outturn cost for Oriel against their own cost database. The assessment compared the cost estimate with a sample of 9 similar projects, including buildings containing health, research and science accommodation, in both a public and private setting. The exercise excluded contingency and adjusted the sample schemes to the same location and inflation indices as this project.

The analysis confirmed that the capital cost of Oriel is very close to the benchmark average and within acceptable norms.

### **7.7.2 Land purchase**

Moorfields has secured an option on the St Pancras site to purchase two acres at a price of **£XXX** (excl. tax) (described in more detail in section 7.8). It is planned that UCL will pay a **£XXX** lease premium to Moorfields for use of this land. The site will be purchased in full by Moorfields who will own the freehold for the whole of the Oriel site.

The land valuation is based on an appraisal undertaken by property advisors Cushman & Wakefield in 2016. The appraisal was based on the assumption that C&I could obtain planning permission for residential development to maximise value and represent the correct valuation basis for the acquisition. This approach is consistent with market practice and the RICS Valuation Guidance. The methodology is described further in the SOC (also known as the Land Acquisition Business Case, June 2017).



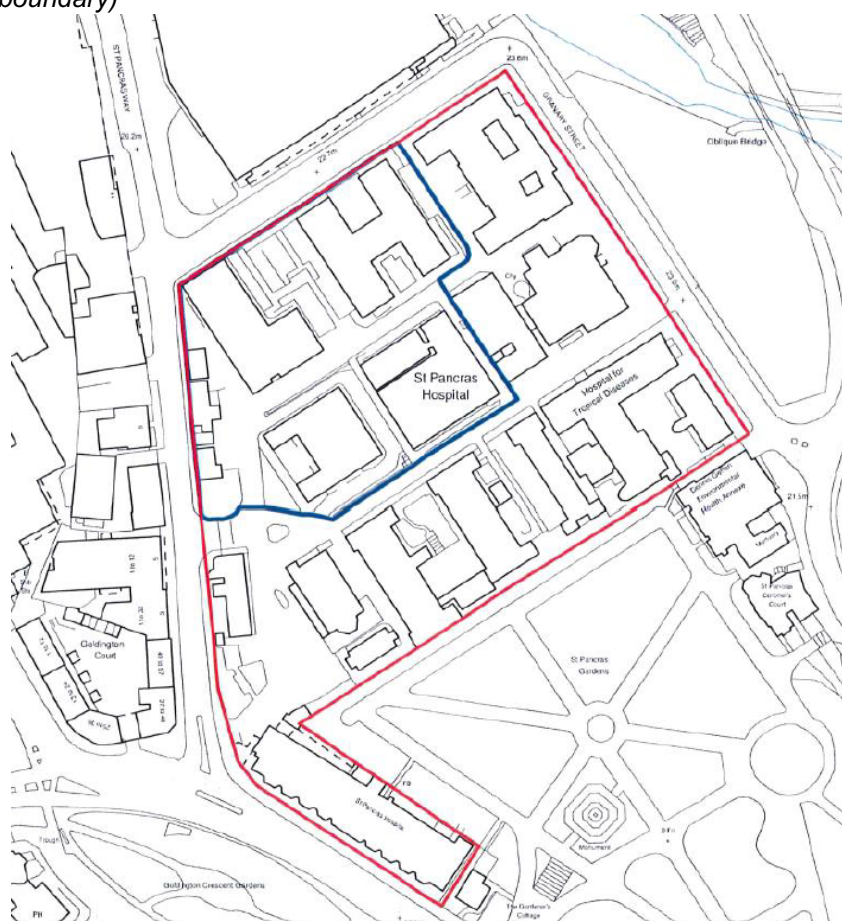
## 7.8 The St Pancras Site – Acquisition and town planning

### 7.8.1 Site acquisition

The site acquisition approach is recognised by the wider NCL STP-level health economy and wider stakeholders, local boroughs and London planning authorities, who will continue to be engaged in the project.

Moorfields and Camden and Islington NHS Foundation Trust (C&I) have entered into an option agreement on the St Pancras site, which gives Moorfields the ability to acquire up to 2 acres of the site on pre-agreed terms (notionally indicated by the blue line on the plan below) at a price of £XXXm per acre. The option period expires on 31 December 2023. The option agreement is included in the site acquisition strategy at Appendix 7C.

**Figure 19:** St Pancras Hospital site (red boundary) with indicative Oriel site (blue boundary)



The two parties have a co-operation agreement designed to support the option agreement, and facilitate the future working of the two parties in their subsequent relationship as adjoining parties, with a view to ensuring the best outcome for all service users, carers, tenants and other stakeholders. This states that the parties will work together to optimise the

vacant possession strategy for both parties, maximise value for money for the NHS and work together to submit a planning application for the development of the site.

Moorfields plan to use this option to purchase the site in Q1 2021. Vacant possession is expected in Q2 2022.

Further information, including the due diligence planned on the site before exchange and completion, and how the transaction complies with EstateCode, is included in the acquisition strategy at Appendix 7C.

### **7.8.2 Town Planning**

The Oriel site sits within the larger historic St Pancras Hospital site, located within a conservation area in the London Borough (LB) of Camden. The rest of the St Pancras Hospital site will be developed by C&I's development partner. Given the scale of the overall development, LB Camden's planning department requires a single masterplan for the St Pancras site. Within that, Oriel will form a detailed planning application. The partners are unable to submit an outline planning application due to the site's location in a conservation area. This requirement is set out in the London Borough of Camden's pre-application letter dated July 2019 (included at Appendix 3E).

The trust plan to submit their planning application in September 2020. Engagement with planning officers will continue throughout the RIBA Stage 2 and 3 design process to ensure that plans are progressing in line with planning policy, and to maximise the prospect of retaining their support.

In order to de-risk the design and planning process, the partners, supported by their design team (including Penoyre & Prasad architects and JLL town planning advisors), have entered into a Planning Performance Agreement (PPA) with the London Borough of Camden town planning department. A pre-planning application enquiry was submitted in February 2019. Following this, a number of meetings were held with planning officers to discuss the partners' intentions on the site, and test the design against local planning policy.

LB Camden wrote to the trust in July 2019 stating their support for the key principles of the proposed scheme, subject to further development. They outlined a number of issues for consideration as the scheme progresses, including refining the massing and architecture, further work on the impact on local transport conditions, and responding to the adjacent St Pancras site as plans for this develop. The trust and planning officers are confident that these are reconcilable and will be addressed through the planning application process. This is confirmed in their letter at Appendix 3E.

## 7.9 The City Road site – Disposal strategy

### 7.9.1 Preferred disposal route

Moorfields and UCL have appointed independent property advisors, CBRE, to develop a disposal strategy in accordance with EstateCode (HBN 00-08), to achieve best value from the disposal and to deliver maximum receipts to fund, in part, Oriel. This disposal strategy is included at Appendix 7D and is summarised below.

The disposal strategy has been informed by:

- **Town planning considerations** following detailed discussions with the London Borough of Islington and the GLA, regarding the development potential of the site which affects its likely value. Planning authorities have confirmed their support for an office-led redevelopment of the site, and LB Islington have included specific guidance on the site in their draft Local Plan. This has significantly de-risked the town planning position.
- **Market testing** undertaken in 2018 which confirmed that there would be a deep market of domestic and international developers and investors who would be interested in this project.
- **Legal advice** from DAC Beachcroft which has concluded that an OJEU-compliant sale route is not required. The trust is therefore planning to pursue a private treaty sale route to ensure maximum market engagement and control of the process.
- **Market conditions** which remain strong for central London office developments due to a lack of supply.
- **The partners' programme, appetite for risk and funding** which has concluded that the partners should not pursue their own planning consent.

The disposal strategy assesses a number of disposal routes and concludes that the site should be sold 'subject to planning'. The estimated value of this is **£XXXm (base case)**. This is reflected in the Finance Case.

Site marketing will commence in March 2020, in order to secure a preferred bidder and certainty of the sale price for FBC. Under a 'subject to planning' sale, funds will not be received until after town planning permission has been secured. A requirement for a bridging loan is therefore described in the Finance Case.

### 7.9.2 Compliance with EstateCode (HBN 00-08)

The disposal strategy is consistent with latest EstateCode guidance:

- **ePIMS** – Moorfields will be required to register the City Road site on the ePIMS database for 40 working days prior to the launch of any sale process. This period will give other public sector groups an opportunity to consider a purchase of the site before open marketing. CBRE monitors such requirements closely and believe it is very unlikely that any such interest would be received.

- **Crichel Downs rules** – DAC Beachcroft are considering the position in terms of Crichel Downs rules and have highlighted two positions that require further investigation. Work on this topic is ongoing, but these are not expected to have a material impact on the disposal of City Road / Bath Street.

### 7.9.3 Next steps

The principal steps of the disposal process will be as follows:

- **Pre-marketing due diligence and sale preparation.** Legal due diligence has been commenced and no significant title, tenure or existing tenancy positions have been found to date that would impede the overall program. This period will involve finalising due diligence and preparing marketing materials.
- **Marketing period.** This will include a number of stages including at least 2 rounds of bidding to maximise competition
- **Selection of preferred bidder.**
- **Planning period** – following exchange of conditional contracts, the partners will work with the preferred bidder to secure a favourable planning consent.

These stages are shown in the overall project programme in Appendix 8C.

## 7.10 Commitment to Government Construction Strategy and Construction 2025

The aim of the Government Construction Strategy, launched in 2011, has been to “*reform industry practice, reduce waste and drive better value from its procurement of construction*”. Through the implementation of this reform, specific targets have been set with an overall aim “*to reduce costs of Government construction projects by 15-20%*”.

The UK Construction 2025 strategy, launched in 2013, set out four goals that it sought to achieve by 2025 by working in partnership with the construction industry and government jointly. These are to reduce cost, time, greenhouse gas emissions and the trade gap in both upfront construction of built assets, and throughout their lifecycle.

The Oriel partners are committed to supporting these strategies in the following ways.

### Cost Reduction

Items identified below illustrate some examples of the strategies to target cost reductions:

- **Design Team:** A multi-disciplinary team has been selected through a competitive OJEU consultant tender with commercial (and quality) a scored component.
- **PM & QS Appointments:** A mini competition process was run through the NHS SBS Consultant Framework, again with commercial (and quality) a scored component.
- **Existing Agreements:** Although the project is not planned to be procured through the P2020 Framework, the project can still benefit from main contractors accessing the Standard Component Agreement and/or to challenge any identified potential suppliers to match such agreements.

- FF&E: The partners will continue to evaluate the strategy for re-use and transfer of existing equipment.
- Lifecycle costing: Whole life costs will be considered when selecting materials.
- Standardisation: Although the project is not planned to be procured through the P2020 Framework, the principles of repeatable rooms are being adopted (described in section 5.8).
- Sustainability measures: These will also reduce cost over the life of the building.
- Procurement: The procurement route seeks to retain competition up to Financial Close. A tender at RIBA Stage 3 allows the market an opportunity to engage and integrate innovative solutions, rather than a more completed design at Stage 4; Soft marketing testing has indicated cost savings will be achieved from the M&E subcontractor market who can take responsibility earlier in the design process with reduced design assessments / reduced risk transfer and the ability to integrate preferred (and acceptable) alternative cost efficient solutions.

### **Procurement reform**

The Government Construction Strategy notes that it is '*seeking a more collaborative, integrated model that nonetheless maintains competitive tension and the ability to demonstrate value for money*'. Under Oriel's procurement strategy:

- Tendering with RIBA Stage 3 design will encourage a genuinely integrated supply-side proposition.
- Early contractor involvement will encourage offsite fabrication of buildings, systems or components'.
- Retaining competition with two contractors during the second stage tender will incentivise cost and programme efficiencies. It will maintain competitive tension, and make cost (derived from agreed principles of value for money) a key driver, rather than an outcome.

Further details is provided in the procurement strategy at Appendix 7A.

### **BIM**

All publicly procured projects since 2016 are required to deliver schemes using Building Information Modelling (BIM). This will enable multiple benefits in quality of buildings and efficiency of delivery including reduced waste, more coordinated design, clarity of stakeholder and end user sign off, ease of programming, phasing, and potential for asset management.

BIM is being used on the project to provide a single common platform that will provide information to the construction teams for tender. This platform, and the corresponding stage 3 report, will help reduce project risks. By maintaining a competitive contractor process for as long as possible it is anticipated that the initial cost of construction will be optimized. Strategic whole life costs are being considered as the design progresses to ensure that the operational and whole life costs are minimised once the building comes into use. In addition, a soft landings process will be initiated at handover to help optimize the buildings performance.



### **Government soft landings (GSL)**

GSL enhances post completion operational efficiency through effective handover, training, monitoring and aftercare from the designers and contractors. The Oriel design team has continued to integrate with both Moorfields' and UCL's FM teams on design choices, reflecting their operational efficiency aspirations. RIBA design stage sign-offs will incorporate both partners' FM teams. This close integration is planned to continue throughout the development of the project to offer a greater opportunity to deliver a building of the highest quality and an asset reflecting the partners' long term needs.

Early and continued FM integration will play a key part for the smooth transition from design, construction and operation.

### **Greenhouse gas emissions and the trade gap**

The project will seek to adhere to the sustainability requirements in the new London Plan, expected to be published March 2020, and is targeting a BREEAM Excellent rating. These initiatives will substantially reduce greenhouse gas emissions.

Where feasible, UK manufactured products will be specified on the project. Furthermore, the construction strategy will consider increasing the amount of manufactured content on the building. For many items, this content will be produced by UK companies working in tandem with local suppliers.

## **7.11 Contractual issues and accountancy treatment**

A **standard form of NEC4 contract Option A – Priced Contract with Activity Schedules** will be used for the project. Key contractual issues (such as change control and dispute resolution) will be confirmed for FBC. Proposed payment mechanisms and risk allocation are set out in sections 7.6 and 7.5.

**Accountancy treatment** is addressed in the Finance Case.

**Personnel implications** are addressed in the Clinical Quality Case section 5.6.

The **disposal strategy** identifies the need to achieve best value from the sale of City Road, through a sale subject to planning. The partners will be required to commit to a vacant possession date, which will be closely monitored through management of the programme to achieve the critical path (see Management Case section 8.1). Legal due diligence to date has not identified any issues related to the sale.

The **acquisition strategy** identifies the need to complete due diligence before the St Pancras site is purchased. Achieving the construction programme will be dependent on obtaining vacant possession from C&I, which will be monitored through regular programme-level meetings with all trusts involved.



## 8. Management case

### Management Case – chapter summary

This chapter sets out how Moorfields and UCL are managing the project implementation in partnership. It describes:

- The project management methodology and framework, including **governance** arrangements which ensure facilitate joint decision-making while maintaining appropriate oversight by Moorfields and UCL.
- **Change management** which has been established to ensure that project changes are controlled to ensure delivery within cost, programme and quality parameters.
- Organisational change management, which will be key in changing the culture and approach to working amongst all staff groups, to achieve maximum benefit from the project.
- The project **programme, benefits and risk register**.
- The **communications strategy** which builds upon the significant patient, staff and public engagement undertaken during the public consultation.
- Proposals for ongoing **project assurance and post-project evaluation**.

#### **Key supporting documents:**

- **Appendix 8A – Benefits realisation plan**
- **Appendix 8B – Risk register**
- **Appendix 8C – Programme plan**
- **Appendix 8D – Oriel workstream responsibilities**
- **Appendix 8E – Communications strategy and plan**
- **Appendix 8F – Peer review of governance arrangements**

### 8.1 Project management methodology

The project governance structure has been developed to follow the best practice guidance set out in the NHS Estates Capital Investment Manual<sup>16</sup> and the Treasury ‘Green Book’, supported by the project management disciplines of PRINCE2<sup>17</sup> and Managing Successful Programmes (MSP)<sup>18</sup>.

### 8.2 Project framework

#### 8.2.1 Oriel governance structure

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<sup>16</sup> 1994, ISBN 0 11 321718 8

<sup>17</sup> Project In a Controlled Environment: a structured approach to project management endorsed by the Office for Government Commerce (OGC) as the standard for the conduct of major projects in the public sector

<sup>18</sup> MSP is the de facto standard methodology for delivering programmes in the UK public sector. It is the programme equivalent of PRINCE2 and is owned by the Office of Government Commerce

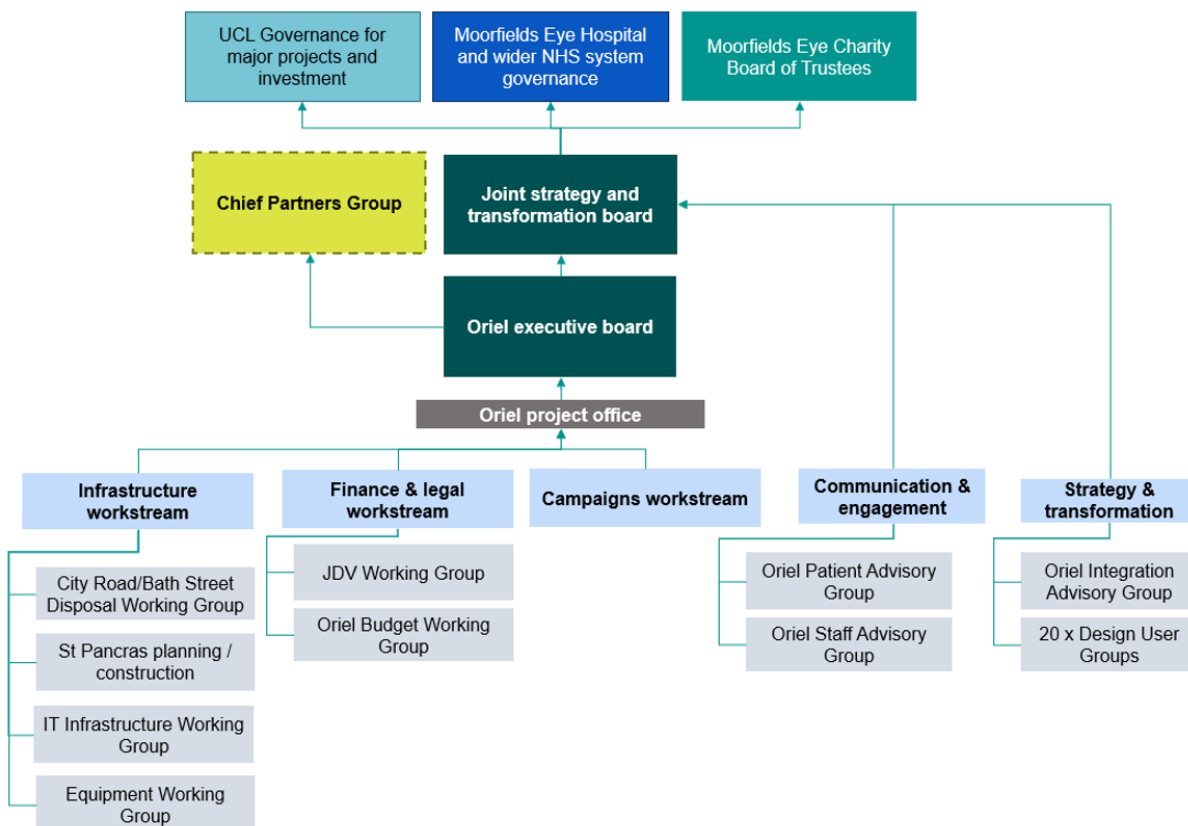
The key governance principles for Oriel are:

- Oriel is a collaboration across three independent organisations; UCL, Moorfields Eye Hospital and Moorfields Eye Charity.
- The partnership will aim to harness the best of each individual partners' strengths – the sum of the whole is worth more than each part.
- To achieve the vision of an integrated facility, a joint project team will deliver content required to meet the partner business case governance processes. The project will produce a single shared suite of project documentation (financial model, programme plan, risk register, benefits register etc), working to a single critical path, delivered by a joint project team. Organisation-specific business cases will be produced to align with the governance requirements of each.

These principles, and key agreements to date, have been formalised in a Memorandum of Understanding (MOU) between UCL and Moorfields.

In order to deliver the project in line with these principles, the following governance structure has been established. This has been refreshed in early 2020 and agreed by executive leads from Moorfields, UCL and MEC, workstream leads and other senior management representatives.

**Figure 20: Project governance structure**



The **Joint Strategy & Transformation Board (JSTB)** has ultimate accountability for the development and delivery of the partners' joint strategy. It has decision making responsibility

for Oriel user requirements and organisational implications. It meets monthly and is co-chaired by the UCL IoO and Moorfields CEO. It has delegated authority to approve joint strategic ambitions and to monitor progress of their implementation, in line with the partner's SFIs. The Board is authorised to create (and disband) governance groups, workstreams and sub-committees, both standing and ad hoc, to deliver the joint strategy, as required.

The **Oriel Executive Board** oversees delivery of the new building and is accountable for its delivery in line with the programme, budget and quality parameters. It has delegated authority and budget to deliver the project on behalf of the three partners. It is attended by representatives of these partners. It provides leadership and direction to the workstreams, and is responsible for managing risks and issues escalated by workstreams. It meets monthly and is co-chaired by the joint project SROs – the Moorfields Director of Strategy and Business Development and the UCL IoO Director.

The **Chief Partners Group** meet every two months and provides assurance to UCL and Moorfields around project delivery. It holds the Joint Strategy and Transformation Board to account around achievement of key milestones, and provides advice on key decisions, issues and risks as required. It also provides support in managing and influencing key project stakeholders, and in communicating decisions and updates through individual partner governance channels.

**Individual workstreams** have been established to deliver key areas of the project. Each has a workstream lead and an executive lead from both Moorfields and UCL. Workstream co-ordination is undertaken through weekly workstream leads meetings. Individual workstream responsibilities are described in Appendix 8D. Many of the workstreams have Working Groups or Advisory Groups to deliver specific elements of the programme. Key working groups to note are:

- The patient and staff **Oriel Advisory Groups** ensure engagement practices are wide-reaching, effective and inclusive, and oversee development of designs and accessibility plans. The patient Oriel Advisory Group has a membership comprising of patients, carers governors and representatives from charities within the sight loss sector. These have been selected based on relevant experience and ensuring a range of characteristics are represented such as age, gender, ethnicity and degree of visual impairment.

**Progress reporting** for each workstream against key deliverables (milestones, activity in period, risks and issues, budget and items for escalation) is reviewed on a monthly basis through the Oriel Executive Board and Joint Strategy and Transformation Board. Progress is summarised in an overarching PMO report which, along with the programme and risk register, is shared on a monthly basis with the partners' own governance, via the Moorfields Management Executive Committee and Audit Committee, and UCL Oriel Project Board.

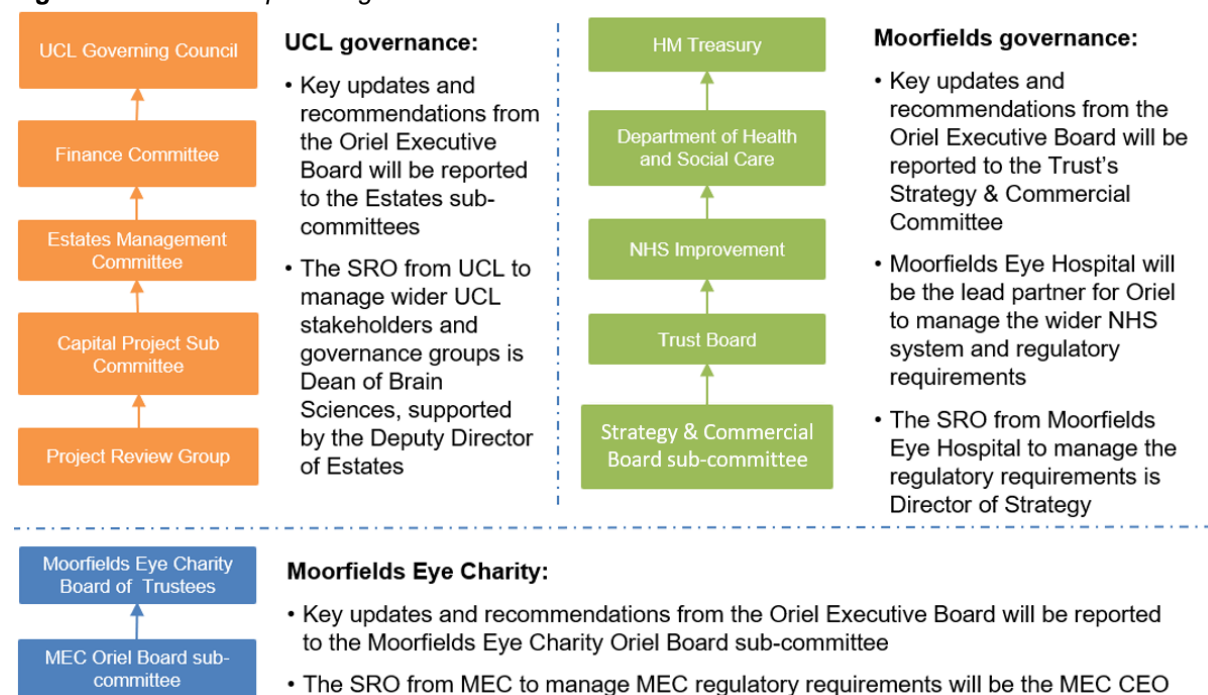
**Document control** is maintained using an online collaboration tool (Huddle). This ensures information is shared with all relevant project team members, while maintaining version control, an information audit trail and confidentiality.

### 8.2.2 Individual partner governance

As noted in Figure 20 above, each of the three partners of Oriel has their own organisational governance requirements. Throughout the programme, key milestones and decisions are communicated and approved by each partner's governance, for example approval of business cases, endorsement of key strategies such as the disposals and acquisitions strategies, design team and contractor appointment, and budget sign-off.

The governance routes for each organisation are shown below. Each of the partners may also set up their own internal working groups on an as-needed basis to inform work undertaken by the joint project team, however these groups will not have decision making authority on behalf of the partners.

**Figure 21: Individual partner governance**



### 8.2.3 St Pancras redevelopment oversight

The critical path and key dependencies between the projects being undertaken by Moorfields, UCL, WHT and C&I are monitored through the following:

#### Joint Steering Group

The Joint Steering Group (JSG) is attended by Moorfields, UCL, WHT and C&I. Its role is to support the four organisations in delivering their strategic estate programmes efficiently, for mutual benefit. Attendance is requested according to relevant experience and expertise as required. The JSG is chaired in rotation by:

- Chief Executive Moorfields

- UCL Dean of Brain Sciences
- Chief Executive C&I
- Chief Executive Whittington Health

The JSG is supported by a Joint Working Group to provide executive level coordination and direction in a more practical and detailed manner.

### **St Pancras and Moorfields Transformation Programme Group**

In addition to the above, the DHSC chair a three-weekly group covering the St Pancras and Moorfields work. Initiated at the request of C&I and Moorfields, it aims to deliver the programme without delay, performance managing all aspects of the programme including governance. Meetings are chaired by Ian Stone (Deputy Director - Capital and Land Strategy DHSC). Membership includes representatives from:

- DHSC
- NHSE/I
- GLA London Estates Board
- Moorfields (CEO)
- Whittington (CEO)
- C&I (CEO)

### **8.2.4 Key roles and responsibilities**

The key project roles are set out in Table 41 below.

**Table 41:** Key project roles

Key role	Responsibilities
SRO (Senior Responsible Officer)	<p>Each organisation has an SRO who is responsible for:</p> <ul style="list-style-type: none"> <li>• Ensuring the governance requirements of their organisation are met.</li> <li>• Owning the shared vision for the project and the supporting business case.</li> <li>• Providing clear leadership and direction throughout the life of the project.</li> <li>• Maintaining accountability for the outcome of the project and realisation of benefits.</li> <li>• Managing the interface with key senior stakeholders, keeping them engaged and informed.</li> <li>• Maintaining alignment of the programme to both organisations' strategic direction.</li> <li>• Ensuring that the project remains affordable and represents value for money.</li> <li>• Liaison with external approving bodies (NHSE/I, DHSC and Treasury) to confirm and facilitate the approvals process (Moorfields SRO only).</li> </ul>

	The SRO for Moorfields is the Director of Strategy and Business Development, and for UCL is the IoO Director.
Executive leads	<p>Each workstream has an executive lead from each of the relevant partner organisations. These leads are responsible for:</p> <ul style="list-style-type: none"> <li>• Agreeing the key deliverables and parameters of the workstream with the Oriel Executive Board and SROs.</li> <li>• Overseeing the workstream's delivery of outputs.</li> <li>• Ensuring the workstreams are appropriately resourced.</li> <li>• Escalating risks and issues to the Oriel Executive Board and individual partner governance structures as appropriate.</li> <li>• Ensuring that the workstream outputs align with individual partner organisations' requirements.</li> </ul> <p>The workstream leads are accountable to the Oriel Executive Board. The executive lead for each workstream is set out in Appendix 8D.</p>
Workstream leads	<p>Workstream leads report to their respective executive leads. Each workstream lead is jointly appointed by the relevant partner organisations. They are responsible for:</p> <ul style="list-style-type: none"> <li>• Delivery of workstream outputs in line with programme and budget parameters.</li> <li>• Reporting progress to executive leads and the Oriel Executive Board.</li> <li>• Appointing and managing external advisors.</li> <li>• Working with other workstreams where interdependencies arise. Oversight of interdependencies is maintained by the PMO.</li> <li>• Working collaboratively with business-as-usual colleagues where required.</li> </ul> <p>The responsibilities of each workstream are described in Appendix 8D.</p>
PMO	The PMO maintains the governance and project control processes described in this chapter, ensuring that reporting arrangements are maintained effectively. They co-ordinate the workstreams to ensure that deliverables are produced in line with the programme, and that risks and issues are escalated appropriately.

### 8.3 Change management

#### Change management framework

Changes to a project may arise from:

- **Project / design development:** These should not impact project time, cost or quality as they are responding to the project brief, and therefore remain within key parameters.



- **Changes to the brief:** Any changes of this nature are more likely to have an impact on time, cost or quality. Broadly, the later in the project these changes occur, the greater those impacts are likely to be.

A project change control process has been agreed. This will be updated as the project enters each new phase (for example upon main contractor appointment, during construction and post-construction).

Changes arising from development of plans (designs, service models, workforce models etc.) will be managed at a workstream level. If a change is considered to be a variation to the brief, or if it is likely to have an impact on time, cost or quality, a change request can be raised by any member of the project team.

This will follow a change control process to verify whether the case for change has been appropriately signed off, following an assessment of its relative benefits and impact. Once approved, the change can be formally instructed by the relevant workstream lead.

In order to maintain a clear and auditable trail of all changes impacting the scheme design, all changes will be recorded in a change control register.

### **Organisational change**

The new clinical, research and education models, and the emerging IT and workforce strategies described in the Clinical Quality Case (chapter 5), represent a significant organisational change for both Moorfields and the IoO. In order to achieve the planned benefits, Moorfields and UCL staff will need to develop a more collaborative approach to delivery of clinical services, research and education. It is recognised that while the new building will be an enabler to this, organisational change management will be key in changing the culture and approach to working, amongst all staff groups.

An organisational change management strategy will be developed once designs, workforce models and service plans have been developed in more detail, enabling a gap analysis to be undertaken to complete a detailed assessment of the scale and impact of change on individual departments and job roles.

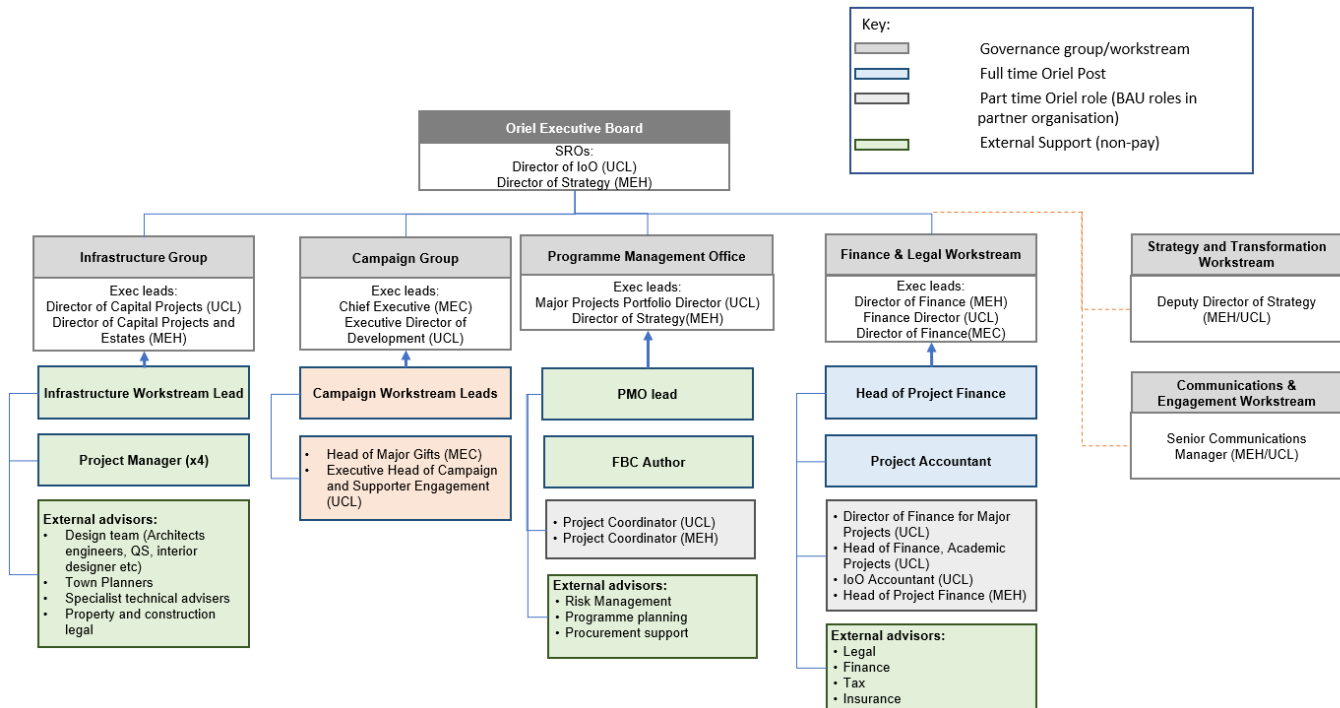
Training plans will be developed to ensure all staff understand how to use new systems and technologies to achieve optimum benefits.

Given the importance of effective organisational change in achieving the project's benefits, a Strategy and Transformation Board will be established to oversee organisational change and integration between Moorfields and UCL.

## **8.4 Resourcing strategy**

The project resourcing is structured according to governance group and workstream. In addition to the workstream executive and lead, each group also has external advisors to support the delivery. This is shown in the figure below.

**Figure 22: Workstream resource structure**



#### 8.4.1 Use of specialist advisors

The main project advisors are set out in the table below. Most of these have been procured competitively to ensure continuing best value.

**Figure 23: Key external advisors**

Organisation	Role	Reports to	How procured
AECOM	Project management and infrastructure workstream lead.	Infrastructure workstream (executive lead)	Competitive tender from SBS framework
	St Pancras site design team.	Infrastructure workstream	OJEU design competition
Henry Riley	PMO	SRO	SBS framework direct call-off
Gardiner & Theobald (G&T)	Trust-side cost consultants	Finance workstream	Competitive tender from SBS framework
PA consulting	Options appraisal	Finance workstream	Competitive tender from framework

	Demand and capacity modelling	Strategic planning workstream	
Ernst & Young (EY)	Economic modelling and benefits quantification	Finance workstream	Competitive tender from framework
CBRE	Property advisors (disposal and acquisition)	Infrastructure workstream	SBS framework direct call-off
Essenture	Health planning	Strategic planning	Framework direct call-off
Chase Reeves & Co	JDV advisors	Finance workstream	Direct appointment
DAC Beachcroft	Legal advisors	Infrastructure workstream	Competitive tender
Currie & Brown	OBC author	SRO	Competitive tender

The fee requirement to continue the project to FBC stage is estimated at **£XXXm**.

#### 8.4.2 Contract management

The project's professional advisors are procured competitively using frameworks where appropriate (see table above). Advisors are appointed under NHS standard terms and conditions, and are managed at a workstream level. All advisors have a pre-agreed scope and schedule of deliverables which are matched to the project programme. These are reviewed regularly, and payments are made upon completion of pre-agreed outputs to a satisfactory standard.

The proposed contract management arrangements for the main contractor are described in section 7.6 of the Commercial Case.

### 8.5 Programme milestones

The project programme is included at Appendix 8C. It has been developed by the PMO in conjunction with workstream leads and executives. It is maintained by the PMO, who monitors progress against milestones. Elements of the programme are managed at a workstream level, and workstream leads are responsible for highlighting potential areas of programme pressure to the PMO. Any changes to the programme which affect the critical path, or significantly impact an area of float thereby increasing project risk, are shared with the Oriel Executive Board for acceptance.

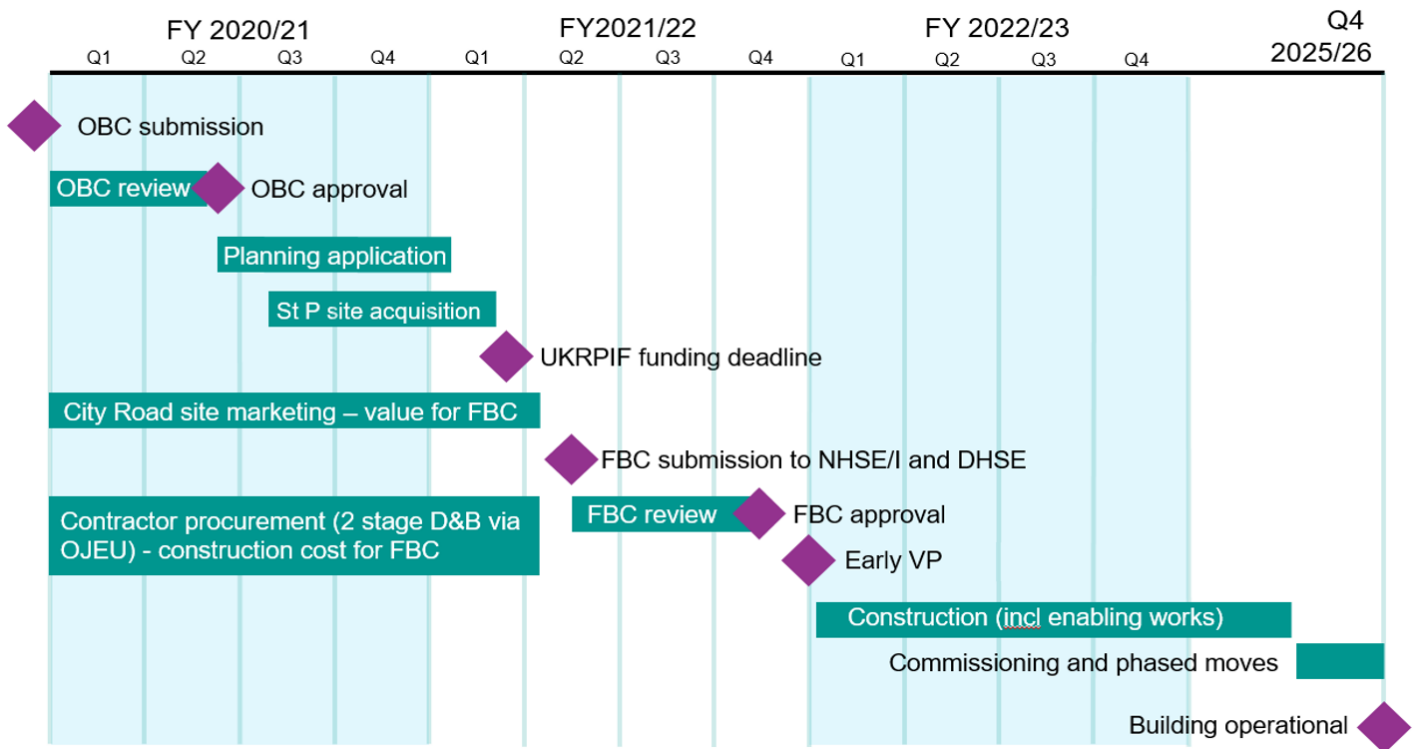
Key dependencies between the critical paths of Oriel, C&I and the Whittington's projects are monitored at regular meetings between these organisations and NHS regulators.

The design programme will be developed by the architects at increasing level of detail at each stage. Contractors will be invited to submit detailed construction programmes during

the tender process, which will provide certainty as to the building completion date. This will be included at FBC, along with the recommended preferred bidder.

The critical path is shown below:

**Figure 24: Programme critical path**



The key project milestones are shown in the table below.

**Table 42: Key project milestones**

Milestone	Date
OBC submission to regulators	Feb-20
Contractor procurement commences	Mar-20
Marketing of City Road commences	Mar-20
OBC approval	Sep-20
Town planning submission	Sep-20
Resolution to grant town planning (target date)	Feb-21
Acquisition of Oriel site at St Pancras	Mar-21
Contractor selection and agree contract sum	Jun-21
Preferred bidder selected City Road	Mar-21
FBC submission to regulators	Aug-21
Commence planning process City Road	Mar-21
FBC approval	Feb-22
Early vacant possession and commencement of enabling works	Jan-22
Full vacant possession	Jul-22

Main works start on site	Jul-22
Practical completion	Aug-25
Commissioning and decant complete	Jan-26

It should be noted that this programme is based on the assumption that C&I are able to grant the partners early access to the St Pancras site in January 2022. As this has not yet been agreed, the finance case is based on a 'worst case' assumption that work cannot commence until the full vacant possession date of July 2022. This enables the trust to take a prudent assumption on inflation costs.

## 8.6 Benefits

A schedule of project benefits has been identified, which represent the desired outcomes for the project. Realisation of these is key to project success. Four classes of benefit have been identified:

- **Cash releasing** – reduce costs for the organisation in such a way that the resources can be re-allocated elsewhere e.g. reduced operating costs or increasing income. These are represented in the Finance Case (Chapter 6).
- **Non-cash releasing** – financial benefits which do not release resources for re-allocation e.g. improved efficiency (set out in the Benefits Realisation Plan at Appendix 8A).
- **Quantifiable benefits** – can be measured but do not have a financial impact e.g. improved outcome (set out in the Benefits Realisation Plan at Appendix 8A).
- **Qualitative benefits** – are of value but cannot be quantified e.g. happier patients.

The overall planned benefits for Oriel are as follows:

- Maintain current high clinical standards.
- Improved patient experience.
- Improved access to clinical services.
- Increased research output.
- Improved clinical education.
- Improved staff satisfaction and retention.
- Flexibility to respond to future change.
- Improved efficiency and reduced wasted time.
- Reduced environmental impact.

The benefits realisation plan is included in Appendix 8A and sets out how each benefit will be measured. These have been identified through a benefits mapping exercise involving key clinical and non-clinical staff, and reflect the benefits quantified in the Economic Case where possible. Most benefits have baseline and target data (which will be further developed for FBC), with a responsible owner identified. These individuals will be responsible for ensuring benefits are achieved. Progress will be monitored by the Oriel Executive Board, which will take appropriate corrective action should delivery be threatened.

## 8.7 Risk management

### 8.7.1 Introduction

The objective of risk management is to identify and assess the risks to successful project delivery, identify a risk response (e.g. mitigating action) and assign a risk owner. Part of the mitigating action has been to assign financial values to risks where applicable, to inform the contingency sums to be included in the project cost. Risk management is an ongoing process throughout the duration of the project.

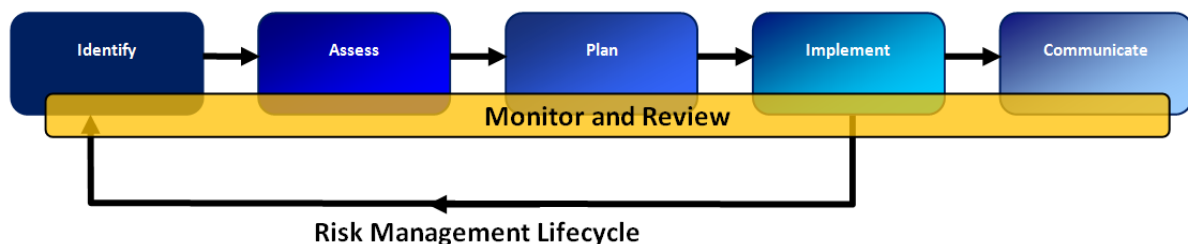
### 8.7.2 Risk management strategy

The project manages risk in alignment with the Moorfields and UCL risk management frameworks, the Capital Investment Manual, the Treasury Green Book and PRINCE2 methodology. The risk management strategy is designed to ensure that the risks associated with all elements of the project have been identified, weighted, and action plans developed in a risk register.

Risks to Oriel are logged and scored for their probability of occurring and their likely impact in terms of cost and time, which generates an overall risk score. This is undertaken at a workstream level, with oversight from the PMO. All risks have a responsible owner and a response identified, which is usually a mitigating action. The top risks are reviewed on a monthly basis by the Oriel Executive Board to ensure that all reasonable measures have been taken to mitigate them, note any changes and identify new risks as they arise. This group is responsible for escalating risks as required. Risk review workshops are also held with all workstream leads to review the risk register.

This risk management process (shown below) will be regularly repeated throughout the project.

**Figure 25:** Risk management lifecycle



The highest 'red' project risks are shown in the table below. All have mitigation plans in place. More detail can be found in the full risk register in Appendix 8B.

**Table 43:** Oriel top risks

Risk	Potential impact	Mitigation	Post-mitigation score
Delay to Vacant possession at St Pancras by C&I	Programme delay and increased inflation costs.	1. Negotiations ongoing with C&I to achieve VP. 2. Chief partners meeting monitors overall programme.	16

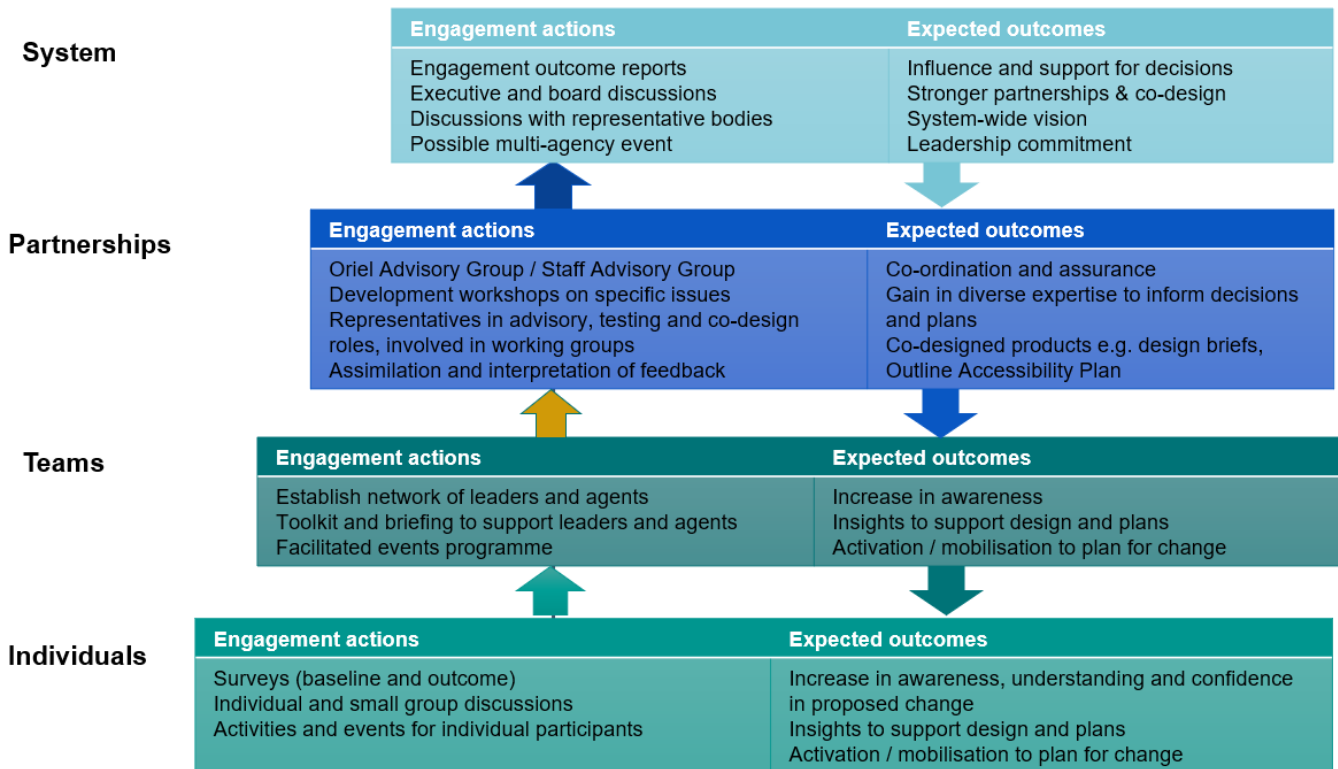


		3. Construction programme rescheduling	
Bids on City Road site not in line with site valuations	Project cannot meet its capital funding requirements.	1. Pursued disposal as joint approach to maximise marriage value. Sensitivity analysis modelled. 2. Ongoing engagement with town planners and property market.	15
RPIF funding cannot be drawn down by deadline	Project unable to meet its capital funding requirements. Reputational impact	1. Programme aligns with RPIF dates. 2. Ensure agreement between Moorfields, C&I and UCL to enable transaction.	15
Philanthropic targets not met	Project unable to meet its capital funding requirements.	1. Continued monitoring of progress by campaign workstream. 2. Due diligence into all prospects and donors. 3. Workshop with fundraising consultant.	12
UCL business case approval delayed	Potential delay to project	1. Consider de-scoping elements of the project. 2. Create a robust business case aligning all elements (financial, academic, estates). 3. Engage with BC approvers.	12

## 8.8 Communication and stakeholder engagement strategy

The Oriel communications and engagement workstream has developed a stakeholder engagement strategy and action plan, included at Appendix 8E. This is summarised below.

**Figure 26: Engagement strategy**



Oriel has benefitted from significant stakeholder engagement to date. The trust had a key role in the commissioner-led public consultation, contributing resource and maintaining involvement through the Consultation Programme Board. The consultation captured feedback from over 4,600 people over 16 weeks, including service users, charity partners, staff and other local healthcare providers. 73% of the 1,511 people who responded to the survey agreed that a new centre is needed, and 73% agreed that it should be located at St Pancras.

Pre-consultation and consultation activities have extended and strengthened relationships with patient and community representatives, particularly people associated with the sight-loss community. Around 450 people expressed a specific interest in staying involved with the Oriel programme, the patient Oriel Advisory Group will continue working closely with the programme, supplemented by a staff Advisory Group, and leading sight loss charities have offered their expertise to the next stages of design and planning.

### 8.8.1 Patient and public involvement in developing proposals

The following themes were identified during consultation requiring further work with patients and other stakeholders:

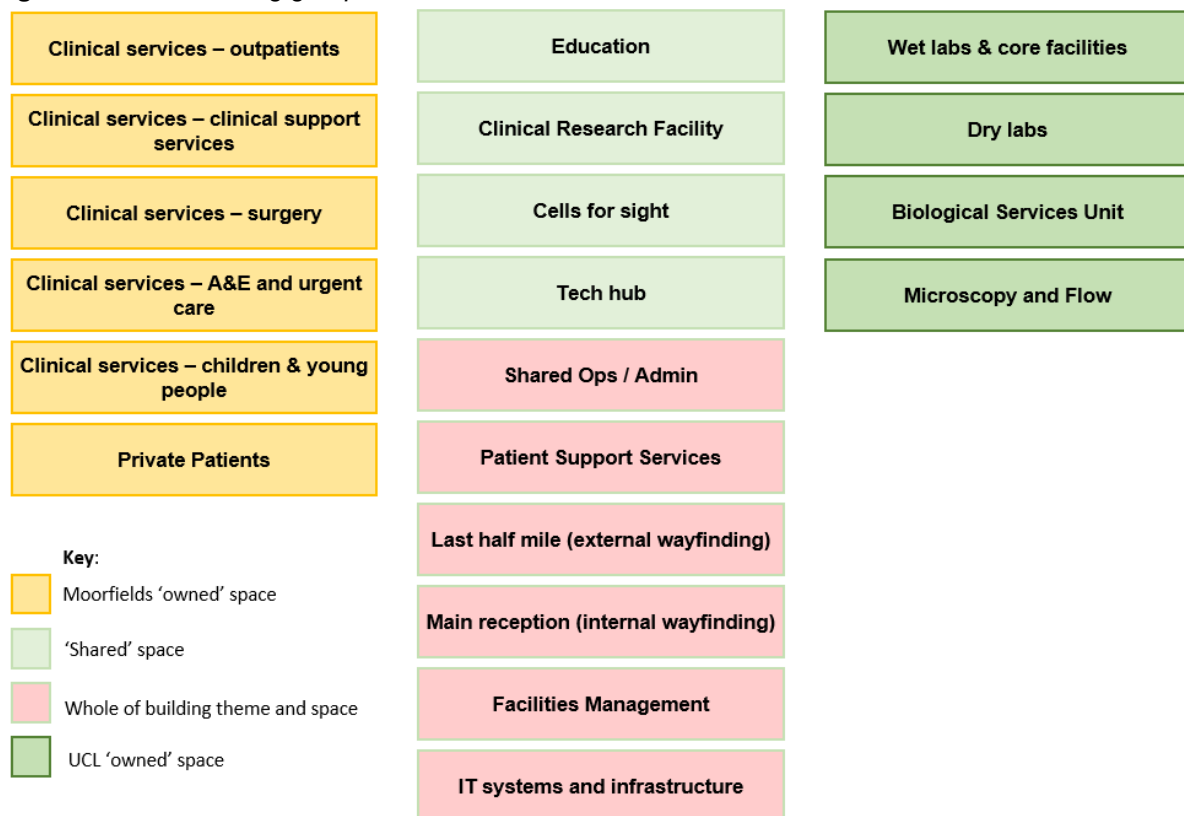
- Accessibility – getting to the proposed site
- Accessibility – getting around the proposed new centre
- Improving the patient experience
- Managing transition
- Innovation and research

- Options review – a task and finish group of patient and public representatives has already contributed to the options review.

Three co-production workshops and several site visits have already taken place to explore issues relating to accessibility. The findings from this exploratory work together with feedback from consultation are informing the designs and accessibility plan. Feedback from consultation will be extracted and presented to service leads to improve patient experience, innovation and research and managing transition.

20 working groups (shown in Figure 27) have been set up to prepare design briefs covering all aspects of the proposed new centre. Patient and public representatives and independent experts will be involved with those working groups concerned with patient services, as well as Moorfields staff and clinical leads. Each relevant working group will have the benefit of a patient and public involvement champion from Oriel Advisory Group and the wider pool of interested representatives. With the support of the Oriel team, each champion will help to co-ordinate patient and public contributions to the work of the group, which may include task and finish groups, discussion events, surveys or other techniques as appropriate.

**Figure 27:** Oriel working groups



To support continuing involvement, Moorfields and commissioner communications leads will continue to publish regular updates on the Oriel programme via the Oriel website and other channels, such as newsletters, patient participation group meetings and social media.

Patient and public involvement will continue throughout the project. At every stage, Moorfields will work with patient and public representatives to advise on and test developments.

### **8.8.2 Engagement with statutory bodies**

Engagement with CCGs and their corresponding local authorities was an important part of the pre-consultation and consultation process. The following stakeholders were engaged – detail is provided in the DMBC:

- CCGs.
- NHS England Specialist commissioning.
- Governing Bodies and Joint Commissioning Committee (JCC) meetings.
- NHS England/ Improvement Oversight Group for Service Change and Reconfiguration (OGSCR).
- NHS England/ Improvement London Region.
- Joint Health Overview and Scrutiny Committee (JHOSC) (Local Authority).
- London Clinical Senate.
- HealthWatch.
- Clinical involvement.
- Mayor of London.

Commissioner support for the proposals has been obtained through the approval of the DMBC. Letters of support from commissioners, LB Camden, the Mayor of London and other key stakeholders are included at Appendix 3E.

### **8.8.3 Staff engagement**

Involving staff in the development of proposals will be critical to both shaping plans with the benefit of the expertise available, and in delivering these proposals with a workforce which is ready to implement changes to how they work in Oriel. A core group of staff is involved in shaping proposals through the user groups shown in Figure 27, including representatives from both Moorfields and UCL. Development of plans is also being informed by the staff Oriel Advisory Group. Wider consultation will be undertaken with a broader group of staff to obtain feedback and gain buy-in on proposals once developed. The Moorfields communications team will ensure that all staff are aware of key project updates through business-as-usual communication channels.

## **8.9 Project assurance and evaluation**

### **8.9.1 Peer reviews**

Ongoing project assurance is being sought through peer reviews at key stages in the project. A peer review was undertaken in late 2019 by Guys and St Thomas NHS Foundation Trust. Their recommendations, and the project's response to these, are included at Appendix 8F.

### 8.9.2 Learning from other projects

Moorfields has undertaken a lessons learnt exercise for the Richard Desmond Children's Eye Centre (RDCEC) which was built in 2007. This has included an evaluation of the building functionality as well as the delivery process. It involved members of staff, patients, their families and carers. Feedback will be incorporated into the design process.

Moorfields is also working with other providers across the NHS, and internationally, who have recent experience of new hospital developments. Members of the project team have recent experience from similar projects, including the Zayed Centre for Research into Rare Disease in Children (an integrated clinical and research centre) and UCLH Phase 5 (a specialist Ear Nose Throat and Dental facility).

### 8.9.3 Post Project Evaluation (PPE) strategy

The trust is committed to ensuring that a thorough and robust Post Project Evaluation is undertaken at key stages in the process to ensure that positive lessons can be learnt from the project, and that its success can be objectively assessed. All partners recognise that completion of the building is only the start in terms of service transformation and continuous improvement. It is therefore important to continue to assess whether Oriel achieves its aims, and whether the approach to service delivery can be adjusted to better deliver against project objectives. The project will be evaluated by undertaking the following investigations.

Project Implementation Review:

- A review of the **project delivery** to learn lessons for future. This will involve stakeholders from across the project team, as well as key stakeholders such as patient representatives. The lessons learnt will be of benefit to Moorfields, UCL, MEC and other organisations, to inform the approach for future projects.

Post Evaluation Review:

- A review of the **benefits** detailed in the Benefits Realisation Plan to assess whether they have been met. This will measure the project's achievements against the baseline and target data set out in the Benefits Realisation Plan. This will be reviewed 6, 12 and 24 months after project completion.
- A DQI assessment with patients, staff and other key stakeholders to assess the **quality of the building design**.
- A review of the FBC **capital and revenue costs** to confirm that the capital costs were robust and adhered to, and that the actual and projected revenue costs were realistic.
- A review of the **project programme** and adherence to it throughout the life of the project.

### Post-Project Evaluation Framework

The SROs will be responsible for ensuring the PPE is undertaken in accordance with best practice. The trust will identify responsibilities and resource requirements during the FBC development.

## **8.10 Approvals and letters of support**

Letters of support have been received from the following, and are included at Appendix 3E:

- Medical Director
- Mayor of London
- LB Camden
- MEC
- NCL CCGs
- NHS England Specialised Commissioning

## **9. Recommendation**

NHSE/I, DHSC and HM Treasury are recommended to approve this OBC for continuation to Full Business Case (FBC) stage.

The estimated spend for continuation to FBC, for which approval is requested, is £XXXm of capital expenditure and £XXXm of revenue expenditure.