**Oriel Showcase – Description of our exhibition and its messages**

**Welcome!**

Welcome to our Oriel Showcase exhibition at the Moorfields and UCL Education Hub in Ebenezer Street.

This is a recap of the Oriel story so far and a presentation of current designs for the new centre for eye care, research and education. More importantly, it is a chance to talk to the Oriel design team. The design is at an early stage. What we are presenting today is a work in progress. There are people on hand listen to your views.

Our exhibition has seven stations with information on display, which is provided below.

**Station 1 - My day in the new centre**

We have been listening to a range of staff and patients in recent months to hear about which aspects of the new centre they would value.

Here are some highlights from what they have told us. Tell us about your views and expectations.

**PhD student**

“Working alone is essential at times, but there is so much to gain from an exciting centre with lots happening. It will be good to turn up early and meet other students and staff over breakfast in one of the rest areas. You can pick up things from others, or do some group study in the library in the Education Centre.”

**Patient with experience of A&E**

If your eye is damaged it should be quick and straight forward to get help, like being able to phone and talk to someone 24/7. If you do have to go to A&E you hope it will be smooth-running and no long waits, so that you can get back to work. It’s reassuring that A&E is near the drop-off point.

**A&E triage nurse**

“The atmosphere is so important to doing your best job, like daylight to feel connected to the world. The design should help to improve patient flow, especially with smart devices for getting patients to the right place. If we don’t have to wander around looking for colleagues and patients, we could be a lot more efficient and not keep people waiting.”

**Patient with experience of urgent care**

After you’ve had surgery, you feel anxious about whether things are as they should be. If things can be sorted out remotely that’s great. At the centre itself, people will value a smooth patient flow and pharmacy on hand so you quickly get the drops you need to alleviate any symptoms.

**Paediatric trainee**

You need related services to be adjacent as much as possible. Other disciplines can be with you straight away when you need them. Families won’t have too much waiting and I can book more study time in the tech hub. With more locker space and showers available, I might fit in a run!

**Young patient**

“There should be different things to play with while you’re waiting. iPads are good. Places to get snacks. I think it will feel like a friendly place where you don’t get bored and people will be nice to you.”

**Optometrist**

“We have a chance to get everything we need into one clinical workspace, so patients and staff are not having to move around the department. If people do have a wait e.g. for spectacles to be dispensed, there are cafes and places to relax. We could alert people with smart devices.”

**Patient with experience of cataract treatment**

“You need good information before you go for your appointment, especially if you’ve not been before. It think the new centre will have a calm, light and airy atmosphere, and a simple check-in with volunteers to help if you need it. If it starts well, you feel you’re in good hands.”

**Anaesthetist**

“Lunch breaks are important, for meeting people as well as getting a break. A hot meal in one of the common areas will be convenient. The roof terrace is a good option. Theatres in close proximity makes life easier. It will be good to stay in touch with the latest robotic developments being trialled in the research theatre.”

**Patient with experience of surgery**

“The centre has various calming spaces, which you might need before you go in for surgery; or your family might find helpful while you’re having your operation – even St Pancras Gardens on a nice day. I’m glad the green line will be there to lead you from the station.”

**Orthoptist**

“Clinical services, research and education in the same place can make a lot happen. I might meet researchers more often, use space for learning sessions, book a workspace away from clinics and get a change of scenery, or take in the amazing views from the roof.”

**Patient with outpatient visit experience**

“Exiting the centre will need good wayfinding support. With dilated pupils, for example, people can’t see as much on the way home. It’s good that he guide dog relief area offers water. The green line will be helpful to some with rest areas along the way. Others may need help to access public transport.”

**Principal investigator**

“In the new centre, you want to end the day feeling like you’ve achieved something - planned a teaching programme, advised a colleague, led a research team meeting, run an international workshop, recorded a lecture…and you feel supported and inspired by the environment.”

**Parent**

“Spacious toilet facilities and changing places are important. Having lots of distractions is a great help – play areas where you can still see your child, places to get drinks and snacks. Art exhibitions and interesting information matter. They give you confidence that you’re in a world-leading centre.”

**Patient with outpatient visit experience**

“If tests are in one place and appointments go smoothly moving around the centre should be for the right reasons - to mix with others and learn from being there. It will be helpful to have eye-care liaison officers close to outpatients, other patient support services on the upper ground level and the chance to join a talk in the education facilities.”

**Outpatient pharmacist**

“If you can add value, you feel valued. With an automated tube system to deliver medicines in sealed carriers, we can bring pharmacy to every floor. Our day will be out in clinical areas, as well as the hub. It’s a big difference to work alongside staff and patients to dispense prescriptions very quickly.”

**Station 2 - Getting to the new centre**

Information at this station is presented by accessibility experts who are advising on journeys and how we might support people to access the new centre in the future. There are maps showing the recommended route to the centre from King’s Cross and St Pancras stations. They show the plan for a green line similar to the current green line that leads from Old Street station to Moorfields Eye Hospital on City Road. There are tactile maps and a visual presentation with an audible commentary.

Do talk to our accessibility experts, who can also bring you up to date on current discussions with Camden Council, Transport for London and others.

**Station 3 – Outside the new centre**

Members of the Oriel design team are available to talk with you at stations 3 and 4.

Information displayed at station 3 shows an aerial view of the current land where the new centre will be built, an illustration of the emerging new neighbourhood and a plan of the new site. There is also a tactile version of the plan.

Immediately to the south of the new site, St Pancras Gardens and its historic church offer a tranquil haven from the bustle of Kings Cross. To the west, lies Somers Town, to the north is Camden Town and to the east, the Regents Canal and the recently rejuvenated, traffic-free Kings Cross area of shops, restaurants and cafes. Currently, a relatively small number of people have reasons to travel there, but Oriel and the developing neighbourhood will bring new life to the area.

**Some of the benefits of the location**

The location offers the opportunity to develop important relationships with a world-class knowledge cluster of technology, research and education, including the main UCL campus, the Francis Crick Institute, the British Medical Association and the Wellcome Foundation, to name a few. It is also close to sight loss organisations, Guide Dogs and the Royal National Institute of Blind People (RNIB).

Information at stations 3 and 4 is presented by members of the Oriel design team, a partnership led by AECOM, working with Penoyre and Prasad and White Arkitekter.

**The exterior of the centre**

Tactile plans on display will give you the shape of the building, which has two boomerang-shaped wings embracing a central space which allows natural light to reach the centre of the whole building*.* Oriel, a word for a bay-window, was chosen as an appropriate name for our development programme, referring in particular to the central, light-filled space.

The south boomerang is seven storeys and the north boomerang is ten storeys high. This variation in height is to make sure that the building is in keeping with the local area, and not just one big block. The exterior design fits in with other premises in the area, which include refurbished Victorian buildings as well as new builds.

The proportion of glass to solid is calculated to let daylight permeate the building without glare or overheating, and to allow thermal insulation for efficient energy use.

**Approaching and entering the building**

Visual images and tactile plans on display show how the building sits beside St Pancras Way to the west and Granary Street to the north. Because the site is on a slight slope, there is a lower ground floor and an upper ground floor with lifts and stairs between the two levels.

The South West Entrance from St Pancras Way leads to the lower ground floor. The North East Entrance from Granary Street leads to the upper ground level. A flat stretch of ground at St Pancras Way is the best place for patient drop-off, particularly for wheelchair users and people with mobility issues.

From the St Pancras Way drop-off area, most people will walk under the cover of a colonnade around the corner of the building to the entrance. Because of the slight slope, there will be steps and a ramp from the walkway to the entrance, with tactile paving, hand rails and lighting to support people with sight loss.

There is a toilet area for assistance dogs, and we are designing this with recommendations from the charity, Guide Dogs.

**Station 4 - Inside the new centre**

Information at station 4 is presented by members of the Oriel design team, a partnership led by AECOM, working with Penoyre and Prasad and White Arkitekter.

Computer generated images on display show the following:

Inside the South West Entrance.

Interior of the lower ground floor, registration area and transport lounge where people would wait for their pick-up.

What the stairs could look like.

Interior of the upper ground floor, café and main reception.

Inside the North East Entrance.

Patient support services on the upper ground level.

What the bridges on each floor level could look like leading from the central Oriel tower to the two wings of the building.

How the landings on each floor have communal areas as well as the lifts and stairs.

Some work in progress with contrasting colours and signage to assist wayfinding.

A separate entrance to children’s and young people’s services.

The central, light-filled space between the two boomerang-shaped wings is not a vast, empty atrium. It has various facilities and usable space on every floor, from which bridges lead to departments and rooms. This central space, the “Oriel”, is the social heart of the building. On each floor there are common areas where people can linger, have some refreshments, contemplate, study, work and meet. These spaces will support and encourage collaboration between patients, staff and researchers.

Following the paths from the entrances, people will access different ways to register their arrival and find their way to where they need to go, with friendly staff and volunteers on hand to help if needed. An information wall will use several techniques, including digital, audible and tactile information. Technology could connect with your device to tell you where to go and other useful information, such as whether there is a wait time for your clinic.

Stairs and lifts from the lower ground floor lead to a main reception on the upper ground floor. Not everyone will need to go to reception as there will be a choice of ways to register your arrival and find your way to your appointment, without delay.

Both the lower and upper ground levels have places to buy food and drinks.

Please talk to members of the design team to find out more about the interior design and give us your views.

**Passing through the building.**

The design and lay-out of services in the new centre is being developed to achieve a smooth flow for patients and staff, with minimal delays in the process of arriving, being seen, having tests, getting results, medicines and receiving treatment.

Based on the number of people using the centre, we have calculated that six lifts will transport people efficiently to all floors with minimal waiting. We are discussing with people how we can make the most of the latest technology in lifts and ensure ease of access for all ages and abilities.

Access to toilets is one of the issues that frequently come up when discussing the time spent during an appointment process. There will be male and female toilets, individual gender neutral toilets, toilets for people with disabilities, adult changing facilities, with a “changing places” toilet and baby changing facilities, with access to breast feeding and wellness rooms.

**Accessibility inside the centre**

We are working with sight loss organisations and accessibility experts to continue to build in features and services that will ensure excellent accessibility.

We are already thinking about step free access, appropriate space for people and wheelchairs, the use of colour and contrasts in flooring to help with wayfinding, changes in colour tone, texture and lighting, signage and tactile surfaces.

We are also considering rapidly developing navigation and assistive technology, such as smart phone apps and links to audio information. At the same time, there will always be a human touch in our support for people to find their way and have a good experience of visiting the new centre.

**Creating a welcome and a sense of being cared for**

Part of our design work includes a creative strategy for the new building. The overarching aim is to create an environment that will encourage patients and their visitors to feel welcome and cared for, where staff feel valued, and students can thrive. The creative strategy will be a force behind building community and public engagement through imaginative education, public and community engagement programmes.

**Station 5 – Levels and lay-out**

Information at station 5 presents a diagram of the floor levels and what services are on each floor. The information is currently relatively basic. Details of room lay-outs are still to be developed.

The levels and main services are as follows:

Lower ground.

A and E and Urgent Care. Pharmacy. Radiology. Café. Optometry. Bike storage and showers.

Upper ground.

Patient support and information. Café. Education. Outpatients. Contemplation space. Loading Bay

Level 1

Outpatients in the north boomerang. Research in the south boomerang.

Level 2

Private patients in the north boomerang. Outpatients and overnight stays in the south boomerang.

Level 3

Surgery and pharmacy.

Level 4

Surgery and tech hub.

Level 5

Research in the north boomerang. Outpatients in the south boomerang.

Level 6

Education and research.

Level 7

Research

Level 8

Research

**Station 6 – Eye care now and in the future**

At station 6, we have some summary information of six examples of research and innovation being led by the UCL Institute of Ophthalmology (IoO) and Moorfields Eye Hospital. The information is given below.

**Introduction**

Moorfields Eye Hospital at City Road, London was built to provide very different care from eye care today. People stayed in hospital wards for days and weeks. Now the majority of operations are done within a day.

As technology improves, people are spending less time in the hospital setting; and our world-class research at UCL Institute of Ophthalmology (IoO) and Moorfields Eye Hospital is opening up new opportunities to diagnose and prevent eye disease.

A new integrated centre, purpose-bult for tomorrow’s eye care, research and education, is vital to ensuring that we continue to provide a world-leading service to patients and our population as a whole.

Here are just a few of the many examples of our pioneering work to save sight and improve lives

**Cataract drive**

*An initiative to clear the backlog of patients waiting for treatment during the pandemic; led by Moorfields Eye Hospital, supported by industry partner Alcon and St John Ambulance.*

While COVID 19 has created unprecedented challenges for world health, there is also progress. Moorfields Eye Hospital’s “Cataract Drive” is an example of how we have found ways to increase capacity and quadruple the number of operations to help clear waiting lists.

By rethinking operational procedures and using the latest technology in intraocular lenses, equipment and technology, Moorfields’ staff found ways to take less time, with patients on site for surgery for just over an hour. In one week the Trust treated 680 patients, four times the average rate for cataract surgery. It was a multidisciplinary effort with new processes and teamwork between administration, pharmacy, surgery and with patients supported through their rapid treatment pathway by volunteers from St John Ambulance.

Learning from the Cataract Drive will help to reduce waiting times in other hospital treatments and increase the number of patients being treated.

**Artificial intelligence (AI) to detect glaucoma progression**

*An automated way to identify the risk of rapid progression to blindness developed by UCL IoO, Imperial College London and Western Eye Hospital*

Glaucoma is the leading global cause of irreversible blindness, affecting over 60 million people, which is predicted to double by 2040 as the global population ages. Loss of sight due to glaucoma is caused by the death of cells in the retina at the back of the eye.

A test using a dye that attaches to retinal cells can show which cells are dying. UCL’s clinical trial shows that, by using AI to review these tests, disease progression can be detected 18 months earlier than the current gold standard method. Measurable indicators of disease state or severity are urgently needed for glaucoma, as treatment is most successful if provided at an early stage. Being able to diagnose glaucoma at an earlier stage, and predict its course of progression, could help millions of people to maintain their sight.

**Artificial intelligence (AI) that can predict age-related macular degeneration (AMD)**

*An AI system developed by UCL IoO, Moorfields Eye Hospital, Deep Mind and Google Health*

Patients who have decreased vision in one eye from wet AMD are often worried that their “good eye” will become affected. Researchers at UCL IoO and Moorfields Eye Hospital have developed an AI system that can review eye scans and predict the likelihood that the condition will affect their “good eye”. Not only does this offer an early warning system that can preserve sight but has the potential to lead to preventative therapies to treat eye conditions at an earlier stage.

**Eye2Gene**

*A decision support system designed by UCL Institute of Ophthalmology and the Moorfields Ophthalmic Reading Centre*

Gene mutations are known to cause diseases of the eye retina, such as Stargardt disease and retinitis pigmentosa. The award-winning Eye2Gene project uses artificial intelligence (AI) to review retinal scans and help to diagnose inherited retinal disease. With more than 300 possible genetic causes, requiring differing management or treatment options, swift diagnosis is crucial. Eye2Gene will help to identify patients that are eligible for existing treatments or clinical trials.

**INSIGHT has the potential to transform care for eye diseases and other conditions, such as diabetes and dementia**

*A Health Data Research UK hub for eye health and associated conditions, where Moorfields Eye Hospital and researchers from UCL IoO work in partnership with University Hospitals Birmingham, University of Birmingham, Roche, Google and Action Against AMD*

As one of ten Health Data Research Hubs across the UK, INSIGHT brings together the data from routine eye imaging – currently more than 25 million images a year across the whole of the NHS – into an exceptional resource for innovation to make breakthroughs, not just in eye care, but in treatments for other conditions such as diabetes and dementia. In future, this could mean that a simple eye check-up provides enough information to assess our overall health.

INSIGHT’s datasets are unprecedented in their size and quality, allowing researchers to use computers to analyse millions of retinal images and related health records. This identifies links between tiny details and a range of conditions. INSIGHT speeds up research for new medicines and therapies and improves our ability to diagnose serious conditions at an early stage. By analysing big data with advanced tools such as artificial intelligence, we can discover ways to improve millions of lives with personalised health care.

**AlzEye**

*Investigating the links between eye disease and other life-limiting conditions. Research at Moorfields Eye Hospital, funded by Fight for Sight UK and Alzheimer’s Research UK.*

There is increasing evidence that the eye provides unique signatures that can predict the risk of different diseases. AlzEye is an unprecedented data linkage project linking eye scans of over 140,000 people, who attended Moorfields Eye Hospital between 2008 and 2018, with nationally held data on people who develop Alzheimer’s disease and other forms of dementia. The team is exploring patterns of retinal change associated with dementia across a diverse population of varying ethnicity and socioeconomic status.

Recently, the team has diversified beyond dementia to look at potential links with heart attack, stroke and kidney failure. Heat attack rates have been found to be high among younger patients with cataracts and diabetic retinopathy, for example. Findings suggest that patients with these eye conditions would also benefit from early action to prevent cardiovascular problems.