

HOARE LEA & HEALTHCARE





**Healing  
environments  
of the future.**  
**Human-centred  
healthcare design.**



**“Technical innovations are set to revolutionise healthcare in the coming decades. As engineers we can support this with flexible facilities that respond to change and enable better outcomes for the patients of the future.”**

Creativity with no compromise	6
Healthcare trend 1: community hubs	10
Healthcare trend 2: translational medicine	12
Healthcare trend 3: human-centred design	16
Healthcare trend 4: design for manufacture	20
Two decades of transformation	22
Our project breadth	24

space





We are at the heart of the transformation taking place in healthcare buildings, balancing the requirements of all stakeholders – patients, clinicians and hospital managers – to deliver innovative solutions. Our vast experience spans state-of-the-art acute hospitals through to the evolving community-based facilities; what unites them is our commitment to patient-centred designs. Creating safe and secure healing environments is our number-one priority, working with teams to deliver flexible spaces that help hospital trusts improve efficiencies and reduce costs. Our approach also has sustainability at its heart, focussing on lowering operational costs and positively impacting the wellbeing of all stakeholders.

#### Our approach.

- Comprehensive knowledge of the various procurement routes, plus international and UK standards.
- Prioritising control of infection.
- A focus on human-centred design and the needs of all user groups.
- Ensuring services and layout are flexible enough to allow for changing clinical technologies and models of care.
- Designing appropriate resilience and redundancy in critical systems.
- Achieving best value for money: delivering your project at the lowest whole-life cost with the best possible quality, performance, and reliability.
- Working tirelessly and enthusiastically to develop engineering designs that lead to positive outcomes for all stakeholders.

**Creativity with no clinical compromise.**  
**Meet Andy Vernon & Graham Cossons, our healthcare sector leaders.**



HUMAN-CENTRIC DESIGN



SHEFFIELD  
CHILDREN'S HOSPITAL



### **Community focus.**

Multi-purpose community healthcare hubs form a key part of the new NHS long-term plan. With it, comes a rare opportunity to set a high benchmark for the design of this new generation of much-needed integrated care facilities. When planning these spaces, it's important that both patient and provider needs are prioritised. It's vital the design meets the overarching aims of better patient experience and improved efficiency, all while reducing both capital and operational expenditure. With everything from wellbeing, productivity, flexibility, and efficient operation a priority, there are a myriad of factors that we consider and balance; the more holistic a design can be, the better.

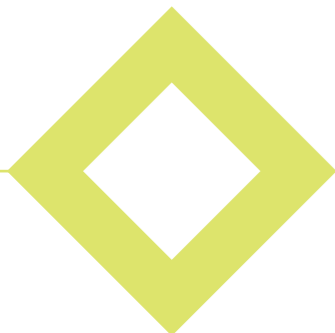
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### **Wellness first for Wandsworth Primary Care Trust.**

The Putney Primary & Residential Community Care Centre features reception, waiting areas, cafés, consulting rooms for three GP practices, pharmacy, admin and support areas, treatment rooms, and a variety of clinics. The residential facilities cover four floors and feature 16 private and eight affordable one to three bedroom apartments. The project presented the challenge of accommodating a range of different services into one building footprint, on a busy city-centre plot. By considering the needs of all users and stakeholders, we were able to deliver an adaptable building that provides a vital role for local people.

# Convenience & connection.

## Hoare Lea & community hubs.



HEALTHCARE TREND - 1  
COMMUNITY HUBS



GOSH Zayed Centre for Research Image: Stanton Williams



### **Better together.**

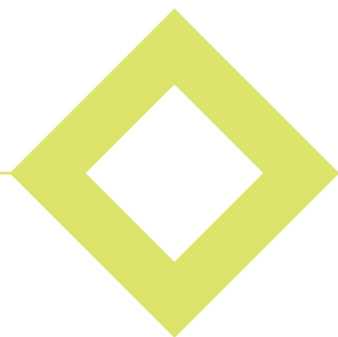
With the growth of translational research programmes – where integrated teams develop laboratory research to address critical medical needs – the value of ‘bench to bedside’ environments is becoming more recognised. Buildings that place researchers alongside patients can bridge the physical gap between healthcare providers and the academic/commercial sectors, and promote the cross-discipline collaboration needed to accelerate the development of vital treatments. These are demanding spaces, where a variety of requirements collide and need to be met. By considering all users, these unique developments can be designed to allow new ways of working in environments where people thrive.

### **Cross-collaboration for the GOSH Zayed Centre for Research.**

The brand new Zayed Centre for Research into Rare Disease in Children is the world’s first purpose-built centre dedicated to paediatric research into rare diseases. It provides dedicated laboratories, cutting-edge technology, equipment and offices to attract world-leading scientists and clinicians. These requirements made for a highly-complex project as each space required its own standards, with dedicated engineering systems and solutions. An integral part of its success was in creating environments that would allow people from different buildings and backgrounds to work together for the first time. Ultimately, this new fusion of healthcare and science will help to accelerate the development of vital cures for rare diseases and benefit children around the world.

# **Bench to bedside.**

## **Hoare Lea & translational medicine.**



HEALTHCARE TREND - 2  
TRANSLATIONAL MEDICINE



**GOSH ZAYED CENTRE FOR RESEARCH**

**ARCHITECT:** STANTON WILLIAMS

**SERVICES:** ACOUSTICS, DIGITAL  
ENGINEERING, FIRE ENGINEERING,  
LIGHTING DESIGN, MEP, PERFORMANCE

**VALUE:** £70 MILLION

**LOCATION:** BLOOMSBURY, LONDON

**“The Zayed Centre for Research will allow us to develop cures for rare diseases quicker than ever before, giving children everywhere the chance of a longer and fuller life.”**

**PROFESSOR BOBBY GASPAR,  
DIRECTOR-DESIGNATE, ZAYED CENTRE FOR RESEARCH**



Alder Hey in the Park Photo: BDP and David Barbour



### **The human factor.**

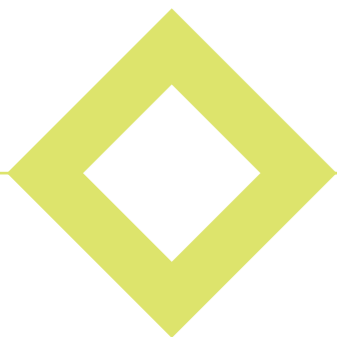
Research has shown that patients with access to views filled with light and greenery are more likely to recover faster. As society learns more about the connection between environment and wellbeing, the value of designing healthcare buildings specifically for people is becoming better understood. By focusing on the 'sensory journey' of patients and staff – from their navigation through internal spaces, to the settings of treatment and recovery – a building can become truly people-centric. So, whether it's lighting, ventilation, acoustics, intelligent wayfinding or even the building's form, we ensure the environment responds to human physical and emotional needs.

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### **Environments that help healing for Alder Hey.**

Alder Hey in the Park is Europe's first children's hospital built in the grounds of a park. The brief was ambitious and aspirational: to create a truly patient-centric environment that was therapeutic, connected to nature, sustainable, and fully equipped to support innovation and best practice. When you need a hospital to not feel like a hospital, the rule is simple: hide or change anything that is associated with such a place. That was where we came in. Our MEP solutions needed to balance wellbeing-centred design with clinical environmental requirements. Thanks to dedicated basement links and vertical cores, the building optimises natural daylight and as many spaces as possible have views of outside. Ultimately, this multi-award-winning project was a true departure from the typical idea of a hospital. Together with the wider project team, we pushed the boundaries of what's possible on a building of this scale and complexity further than ever before.

# Putting people first. Hoare Lea & human-centred design.



HEALTHCARE TREND - 3  
HUMAN-CENTERED DESIGN



“From the beginning, our vision was to create something really special and unique.”

**ALDER HEY IN THE PARK**

**ARCHITECT: BDP**

**SERVICES: LIGHTING DESIGN, MEP, SUSTAINABILITY, VERTICAL TRANSPORTATION**

**VALUE: £167 MILLION**

**LOCATION: WEST DERBY, LIVERPOOL**

Photo: Alder Hey in the Park / Gareth Jones



Dumfries & Galloway Royal Infirmary Photo: Ryder Architecture / Paul McMullin



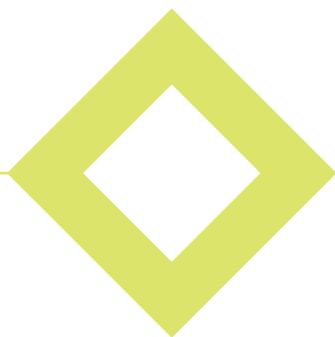
### **The offsite revolution.**

There is a significant opportunity to transform the efficiency of the construction industry. It's a move we're passionate about driving forward with our construction partners, in order to enhance the quality and improve the speed of delivery on projects. Offsite manufacture – known as Design for Manufacture and Assembly (DfMA) – focuses on ensuring all designs can be manufactured and assembled offsite easily and cost-effectively. Compared to the traditional approach – where vast quantities of raw materials are delivered to a site, and constructed by large teams of workers often in inhospitable conditions – DfMA means higher quality healthcare buildings can be created faster, safer and more sustainably.

### **Delivering to deadline for Dumfries & Galloway.**

Dumfries & Galloway Royal Infirmary (DGRI) is a bright, non-institutional building that provides patient-centric care across a variety of environments. The project had an incredibly tight programme for such a large-scale, complex building. Our ability to factor offsite manufacture into our designs – which contributed significantly to why we were brought in on the project – ensured we could meet the programme. Working with Laing O'Rourke and Crown House Technologies, we drew on our experience of designing for offsite manufacture on the Alder Hey and Royal Liverpool schemes. This way of working led to less construction time on site, improved installation quality, and delivery to deadline. The result is a modern, energy-efficient facility that has transformed the quality of healthcare services.

**Faster, safer, better.**  
**Hoare Lea & design for offsite manufacture.**



HEALTHCARE TREND - 4  
DESIGN FOR OFFSITE MANUFACTURE



Photo: Fotohaus

# Two decades of transformation.

## Hoare Lea & Bristol Royal Infirmary.

LASTING RELATIONSHIPS

### Exploring new possibilities.

Ranked as Outstanding by the Quality Care Commission, the Bristol Royal Infirmary (BRI) provides acute medicine and surgery, critical care, trauma, orthopaedic, and accident and emergency services for the people of Bristol. It also serves as the centre for cardiothoracic services for the South West and for cystic fibrosis care in the Severn area.

For the past 20 years, Hoare Lea has been involved in an extensive series of modernisation projects at BRI. From the £53 million Bristol Heart Institute and the £40 million surgical ward block, to the expansion of the Children's Hospital and the Haematology and Oncology Centre extension – the developments have transformed the BRI's offering. We are privileged to have remained the M&E consultants of choice for all significant projects in the past two decades and to have played our part in continually striving for cutting-edge, healing environments.



# Experience makes all the difference. A reassuring reputation.



**Reshaping Mental Health Services Swansea.**  
The first BREEAM Excellent healthcare scheme in Wales.



**Royal Liverpool University Hospital.**  
State-of-the-art PFI hospital; one of the largest in the country.



**The London Clinic.**  
A refurbishment of the famous 'go to' hospital for the Royal Family, which sits on a historic site.



**Fortius Clinic.**  
Development of a new clinic in Central London offering consultation, outpatient and diagnostic services.



**Sheffield Children's Hospital.**  
A fun, non-institutional environment centred around children and play.



**The Harbour.**  
A therapeutic environment, featuring private bedrooms, garden areas, and a range of facilities.



**Children's Hospital for Wales.**  
The first dedicated children's hospital for Wales, which opened eight weeks ahead of programme.



**Specialised Rehabilitation Hospital, Abu Dhabi.**  
A new kind of specialty hospital that is revolutionising the future of rehabilitation in the region.



**Cancer Treatment Centre, Milton Keynes.**  
A new state-of-the-art treatment centre, with 18 chemotherapy chairs, 16 beds, and outpatient facilities.



**University Hospitals Plymouth, NHS Trust.**  
State-of-the-art hybrid and interventional radiotherapy theatre provision.



**Prince Charles Hospital, Merthyr Tydfil.**  
The phased refurbishment of an existing 40-year-old district general hospital.



**Lancashire Women & Newborn centre.**  
Purpose-built to provide one of the most advanced units of its kind in the UK.



HOARE LEA (H.)

## Engineers of human experiences.

Hoare Lea is an award-winning engineering consultancy with a creative team of engineers, designers, and technical specialists. We provide innovative solutions to complex engineering and design challenges for buildings.

Irrespective of the scale or complexity of a project, we provide a full range of MEP, environmental, and sustainability services, bringing buildings to life and ensuring that they perform in operation as well as they look.

[HOARELEA.COM](https://www.hoarelea.com)

