

An Introduction to Medical Architecture

Creating therapeutic environments that promote wellbeing & recovery



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Medical Architecture



We are specialists in healthcare architecture.

Who we are

We are a specialist architectural practice designing therapeutic environments that promote wellbeing and recovery. Our strategic approach to clinical planning is combined with a committed focus on design quality, making effective spaces feel truly special.

We work closely with our clients to develop a clear vision for their estate, sharing the pride that comes with providing the best possible healthcare.

We are a close-knit team of 50, based in our studios in London and Newcastle upon Tyne. Our talented and experienced designers share the same focus, enabling us to pool our understanding and expertise. We constantly evaluate our work and evolve our thinking to ensure we push the field of healthcare architecture forward.

What we do

Our impact begins at the strategic and business case end of projects. We work closely with our clients to develop a clear vision for their estate, assessing their needs and the scope of the work required. Our expertise in strategic planning helps to greenlight schemes and enables the design process to begin.

We realise the vision of our clients through therapeutic environment design. We combine architecture, landscape, and interior design, with detailed clinical planning, to create great spaces to be and effective places to operate. This draws upon decades of evidence from our focus on healthcare architecture and its impact on wellbeing and recovery.



What we value

01



Therapeutic environments that promote wellbeing and recovery

The many benefits of well designed, nurturing healthcare environments for patients and staff include a reduction in: anxiety and stress, length of stay, medication use, pain, incidents requiring restraint or seclusions, and staff sick days. Great design improves patient dignity and wellbeing, whilst increasing staff satisfaction, productivity, and retention.

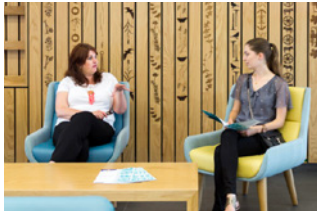
02



The delight and regenerative power of nature

Contact with nature reduces stress and anxiety levels in both patients and staff. In patients, this allows the immune system to work more effectively, cutting recovery times. In staff, this has a positive effect on wellbeing and productivity, increasing job satisfaction and quality of care.

03



Timeless design that creates long term value

Timeless design is about getting the fundamentals right and creating flexibility. Our designs ensure healthcare buildings can adapt to new technology and changing models of care. We specify robust, durable, and tested materials to ensure our buildings can withstand the demands placed upon them.

04



Creating healthy communities through engagement

Our work is not just about well-designed buildings; it is about creating healthy and flourishing communities, towns, and cities. We engage with local communities to ensure that we design places that are needed, that promote a healthy lifestyle, and that create a positive perception of local healthcare services.

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Designing for a sustainable future

Sustainable design matters to us. We recognise the urgency of combatting climate change by reducing the environmental impact of our work. We raise awareness of the biodiversity and climate emergencies amongst our clients, supply chains, and construction partners, offering solutions to environmental challenges at every project stage.

How We Work

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National Forensic Mental Health Service Hospital



We are passionate about using planning, architecture and interior design to make better places for diagnosis, treatment, recovery and wellbeing. By working closely with health organisations over many years, we have helped bring about a material and qualitative change to the whole of their estates.

Evidence-based design

Commitment to evidence-based design stems from the firm's roots at the Medical Architecture Research Unit in London. In practice, we refer to our library of published research, whilst each project provides additional material to drive continuous improvement. We stay abreast of emerging trends and advise on standards and guidance.

Planning for growth and change

Delivering long term value means catering for change. New health facilities will have to accommodate new healthcare models, a variety of staffing patterns, and increasing digitisation, as well as adapting to climate change. Our "what if" approach to design appraisal incorporates resilient features with minimal capital impact that provide lasting value.

Engaging stakeholders

Stakeholder approval can be pivotal to the process of change. Our team is experienced in managing relationships effectively. We listen and communicate clearly using language and tools appropriate to the audience. To achieve "buy in", we define a roadmap of endorsement to reinforce a linear and conclusive engagement process.

Building Information Modelling

We pioneered the adoption of BIM for healthcare in 2005. We have worked with software developers and have delivered numerous fully co-ordinated health projects. Our industry-standard applications, Autodesk Revit and Navisworks Manage, integrate with the latest versions of specialist tools, ADB, NBS and Codebook. This gives us a mature and scalable capability to provide full BIM documentation.

Acute Health

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Emergency Department and Intensive Care Unit



Whether engaged for a major new project or a multi-phased reconfiguration of existing buildings, we have a long track record of designing high quality acute care facilities that deliver improved outcomes and a positive patient experience.

Creative clinical planning

Clinical planning is constantly evolving, reflecting changes in medical technology, models of care, and patient pathways. Our informed approach to health planning and healthcare design, creates efficient clinical adjacencies and well-ordered internal arrangements, ensuring our hospitals operate effectively.

Work in a live clinical setting

Planning and executing construction work in operational hospital environments needs particular foresight and skill. We have years of experience planning and managing critical projects, often to constrained timescales with limited funds. Achieving successful change comes through detailed forward planning, appreciation of operational risks, a thorough communication plan, and obsessive attention to detail.

Patient and staff experience

In an acute setting, the human experience makes a huge difference to wellbeing, recovery and the perception of care quality. Careful consideration of connection with landscape, wayfinding, artwork, lighting, and interior design can raise a mundane experience to one that is dignified and positive. The health and wellbeing of staff is of equal importance. We ensure that hospital environments provide a supportive environment, and one which engenders a sense of pride in their workplace.

Sustainable design

Sustainability really matters to us and we know it matters to our clients too. We design acute hospitals with the flexibility to adapt to changing needs, considering whole life and operational sustainability as a matter of course. We have BREEAM Accredited Professional skills in-house, and we are currently working with NHS Trusts to design BREEAM Outstanding and Net Zero Carbon in-use hospitals.

Mental Health

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Blossom Court



We have a 30-year record in developing facilities for adults and young people, across a variety of diagnoses. Design plays a major role in creating a positive experience of mental health services and supporting patient recovery.

Therapeutic environment

Design for recovery helps patients understand where they are, the time of day and provides cues to behaviour. This enhances the sense of wellbeing and can reduce stressful demands on staff and carers. We use daylight to reinforce circadian rhythms and provide cues to passing time; natural ventilation to provide fresh air; and long views to landmarks and activity, as well as short local views, to offer scope for enjoyable engagement and reflection.

Mental and physical wellbeing

It is well recognised that especially in secure mental health units, boredom leads to challenging behaviours and poor physical health. We therefore design our facilities to ensure that as many spaces as possible, both inside and out, offer opportunities for mitigating boredom, and provide a meaningful day for patients.

Safety and security

Design can reduce opportunities for self-harm and violence. Good relational security can be fostered by excellent observation and communication, and graduating territory. Physical security can be enhanced by grading risk and introducing robust and anti-ligature fixtures in higher risk zones. We have developed a palette of components that balances the need for safety with attractive and familiar interior design.

Access to outside space

Connection to outside space offers recognition of the seasons and the chance to engage in a range of activities. We incorporate gardens and activity spaces which are safe and navigable, so that residents can enjoy unrestricted access; essential for their independence and wellbeing. Seating and terraces provide opportunities for residents to sit outside to eat, socialise, or appreciate their surroundings.

Integrated Care

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Jean Bishop Integrated Care Centre



We understand the challenges of integrating services and have been instrumental in pioneering this building type. We design integrated care centres with strong identities, that are uplifting places to visit, and efficient spaces to manage.

Integration

We design integrated care facilities that improve the patient experience, and achieve greater efficiency and value from health systems. We do this by addressing fragmentation in patient services, and enabling better coordinated and more continuous care.

Regulatory standards

Integrated care facilities need to meet regulatory standards economically. We have an extensive library of current and relevant standards to meet or exceed the relevant regulatory requirements, without the operational overheads of an acute hospital.

Change management

Integrating services which have traditionally been with separate provider organisations, can be difficult and time-consuming. We are geared to absorb data and formulate realistic options that can be understood quickly. Our excellent communication skills mean that we articulate clear organisational ideas and develop a shared project vision that will provide a positive focus for the planned change.

Pioneering facilities

We led the design of The Jean Bishop Integrated Care Centre in Hull, one of the pioneering facilities of its building type. A recent study led by a team of researchers from the Wolfson Palliative Care Research Centre at the University of Hull, concluded that frail patients treated here (who could expect to go to A&E more than three times a year) are 50% less likely to need emergency treatment.

Identity

Developing an identity for integrated care is a challenge. Buildings need to be functional and efficient, yet have a distinctive and publicly recognised image. We develop buildings and therapeutic landscapes underpinned by an ethos of wellness and professional care.

Our Work

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Our research and expertise place us at the forefront of design innovation in healthcare. We contribute to national guidance, speak at conferences internationally, and disseminate best practice in facility design.



Blossom Court

New Specialist Hospital

A flexible and adaptable home for critical care and specialist services.



Working with Medical Architecture has been a very positive experience and a great collaboration.”

– ROB SMITH, DIRECTOR OF ESTATES, THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST

Situated at the Royal Victoria Infirmary, this new clinical block is seen as the catalyst for an integrated approach to address multiple strategic needs of the Trust.

It will provide improved and expanded Adult Critical Care facilities; enhanced Burns Care; a range of repurposed clinical wards; rooftop outdoor treatment area for all patients; expansion of Women’s Services outpatients; and expanded Maternity Inpatient and Neonatal services within the existing hospital, in a multi-phased programme. Aligned with the Trust’s sustainability strategy, the project’s aim is for a BREAAAM Outstanding and a Net Zero Carbon in-use building.

LOCATION	Newcastle upon Tyne
SECTOR	Acute Health
CLIENT	The Newcastle Upon Tyne Hospitals NHS Foundation Trust
ROLE	Architect; Master planner
VALUE	£225m
STATUS	Final Business Case completed 2023



Blossom Court

Prioritising direct and independent access to outdoor space.



“The team took a collaborative approach and really listened to clinicians about the needs of our different mental health wards.”

– DR KAREN TOWNEND,

SERVICE LEAD - BARNET, ENFIELD AND HARINGEY MENTAL HEALTH NHS TRUST

Blossom Court represents a new approach to design for mental health, with modern therapeutic spaces that promote direct and independent access to outdoor space. The unique two-storey arrangement sees four wards stacked around two terraced courtyards, creating a positive focal point for patients, and an abundance of natural light. A calming interior with views to nature enhances the therapeutic environment, promoting patient wellbeing and recovery, and improving the working lives of NHS staff.

LOCATION	Tottenham, London
SECTOR	Mental Health
CLIENT	Barnet, Enfield and Haringey Mental Health NHS Trust
ROLE	Architect, Health Planner, Masterplanner, Principal Designer
VALUE	£25,000,000
STATUS	Completed 2020



The Jean Bishop Integrated Care Centre

An exemplar facility for integrated care with wellbeing at its heart.



We wanted the centre to be welcoming and warm and have had great feedback so far. It enhances the healing environment, it's relaxed, calm, and dementia friendly.

- DR DAN HARMAN,
CONSULTANT GERIATRICIAN - CITY HEALTH CARE PARTNERSHIP CIC

The pioneering Jean Bishop Integrated Care Centre is the first of a new class of NHS facilities to cater for the needs of an increasingly elderly population, providing out of hospital care and reducing the need for hospital admission. Adopting an entirely new way of delivering health services, the centre brings together a range of specialist services to provide a more holistic approach to health, care, and social support. A welcoming heart to the building, with clear wayfinding and open and transparent views to landscaping, supports the wellbeing of patients, staff and visitors.

LOCATION	Hull, UK
SECTOR	Integrated Care
CLIENT	Citycare With NHS Hull CCG and Community Health Partnerships
ROLE	Architect, Lead Consultant
VALUE	£9,000,000
STATUS	Completed 2018



Clock View Hospital

Creating a strong community connection to mental health.



It's about as far from a traditional view of what your pre-conceptions – or misconceptions – of what a mental health unit might be.”

– ADRIAN CHILES, BROADCASTER

Clock View Hospital has set a new national benchmark in mental health facility design for the quality of its therapeutic environment and the level of engagement with the community it serves. The building presents a positive frontage to the surrounding neighbourhood, creating a strong local connection and projecting a message of openness and inclusivity. The hospital is the culmination of years of long-term strategic planning and business case development with the Trust, to set an aspirational vision for mental health services across the region.

LOCATION	Walton Hospital, Liverpool
SECTOR	Mental Health
CLIENT	Liverpool and Sefton Health Partnerships with Mersey Care NHS Trust
ROLE	Lead Consultant, Architect, Landscape Architect
VALUE	£25,000,000
STATUS	Completed 2015



Newcastle Hospitals Internal Improvement Programme

A consistent approach to refurbishment, creating dementia-friendly environments for care.



Great job by Medical Architecture, what a transformation. Super environment and fantastic for the staff and patients.”

– ROB SMITH,
DIRECTOR OF ESTATES - THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST

Forming part of the estates strategy we developed with the Trust, the internal improvement programme brings a structured and consistent approach to strategically important refurbishment projects across their two hospital sites. The internal spaces provide an environment for care that is calming and reduces anxiety, whilst conveying a sense of professional efficiency. Particular attention is given to design for patients with dementia and frailty, as well as technical standards and guidance compliance.

LOCATION	Newcastle upon Tyne, UK
SECTOR	Acute Health
CLIENT	The Newcastle upon Tyne Hospitals NHS Foundation Trust
ROLE	Architect, Interior Designer
VALUE	£5,500,000
STATUS	Completed 2022



National Forensic Mental Health Service Hospital

A national step-change in normalised facilities for secure mental health.



“While dealing with a challenging and complex brief, the scheme has been executed with great sensitivity which maximises light and the user’s connection to nature at every opportunity.”

– JUDGES CITATION,
RIAI WELLBEING AWARD 2022

Heralding a new era in mental health services in Ireland, the new National Forensic Mental Health Service Hospital exploits the therapeutic value of nature in a discreetly secure setting which promotes the recovery of patients. The hospital is laid out as a series of single storey pavilion buildings around a pedestrianised ‘village green’ with a variety of spaces for meaningful activity. The arrangement achieves intuitive wayfinding through a site-wide narrative of colour, art, and landscaping.

LOCATION	County Dublin, Ireland
SECTOR	Mental Health
CLIENT	Health Service Executive Ireland
ROLE	Specialist Mental Healthcare Architect to Scott Tallon Walker Architects
VALUE	£125,000,000
STATUS	Completed 2021



Hopewood Park Hospital

Forming a coastal community
with spaces for recovery.



Most hospitals and clinics are either overly ‘homely’ or have clinical interiors without natural light. Entering Hopewood Park you ‘fall straight out’ into the landscape on the other side – a masterstroke.”

– JUDGING PANEL,
RIBA AWARDS 2015

Hopewood Park is an exemplary 122-bed inpatient facility for adults and older people. The extraordinary site overlooking the North Sea inspired the creative evolution of the architecture, landscape, art, and wayfinding strategy. The elevated position, panoramic aspect and shelter contribute to the stepped form of a hillside community. A sense of neighbourliness is fostered through the clustering of wards and gardens around a communal heart.

LOCATION	Ryhope, Sunderland
SECTOR	Mental Health
CLIENT	Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust
ROLE	Lead Consultant, Architect, Healthcare Planner, Interior Designer, Landscape Architect, BIM Coordinator
VALUE	£50,000,000
STATUS	Completed 2014



Royal North Shore Hospital

A future-proof hospital masterplan with people in mind.



Healthcare facilities must fit comfortably into the urban and social fabric of communities, respecting the urban design tenets that underpin successful public buildings.”

– BOB WILLS,
DIRECTOR - MEDICAL ARCHITECTURE

A strategic long-term masterplan to inform development of Royal North Shore Hospital, ensuring that it can respond to the current and future needs for clinical, academic, teaching, and education services. The masterplan optimises the potential for redevelopment and promotes a people-orientated environment, with direct access to high quality external space.

LOCATION	Sydney, Australia
SECTOR	Acute Health
CLIENT	Health Infrastructure NSW with Northern Sydney Local Health District
ROLE	Consultant Architect, Urban Designer, Health Planner
PARTNER	Deicke Richards Architects
STATUS	Masterplan completed 2012



Ferndene Children and Young People's Centre

A special environment for children and young people to recover.



The design and interior provide a homely rather than a clinical environment. The young people told us that they wanted a 'homely' feel rather than somewhere that felt like a hospital."

- JANE GIBSON,
SERVICE MANAGER - CUMBRIA, NORTHUMBERLAND, TYNE AND WEAR NHS FOUNDATION TRUST

Ferndene is the first specialist building in the UK that brings together children and young people's mental health and learning disability services. Developed with input from the young inhabitants, the building responds directly to their needs, cleverly avoiding characteristics of a traditional mental health building whilst providing a safe, therapeutic, and rehabilitative environment. Grafted into mature landscape on the fringe of Northumberland's countryside, the building is arranged to maximise panoramic views to its outstanding natural setting.

LOCATION	Prudhoe, Northumberland
SECTOR	Mental Health
CLIENT	Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust
ROLE	Lead Consultant, Masterplanner, Architect
VALUE	£25,000,000
STATUS	Completed 2011



National Hospital for Neurology and Neurosurgery

A strategic programme of refurbishment to create calming environments to work and heal.



Thank you for taking all our comments and concerns on board and creating something that is looking very patient-centred, with good working space.”

– JENNY MCDONALD,
WARD MANAGER - MEDICAL INTENSIVE THERAPY UNIT

A phased series of complex refurbishment projects to increase capacity and reduce waiting times at the UK's largest dedicated neurological and neurosurgical hospital. Each phase of work at this 160-year-old institution required careful design to overcome the challenges of limited space, limited infrastructure and survey information, asbestos, and construction alongside live, acute clinical services. Improvements, including sympathetic alterations to a Grade II Listed Building, were developed to achieve planning consent within a conservation area.

LOCATION	London, UK
SECTOR	Acute Health
CLIENT	University College London Hospitals NHS Foundation Trust
ROLE	Architect, Health Planner, Interior Designer, BIM Coordinator
VALUE	£12,000,000
STATUS	Completed 2018



Our Practice



MEET THE TEAM



Our leadership team

We understand the healthcare sector and go the extra mile to become a trusted partner to those we work with. Contact us to see how we can work together.



Bob Wills
DIRECTOR

Bob has been an architect for over thirty years, joining the practice in 2007 as Innovation and Technology Lead. He has a particular interest in the use of research and development techniques to universally improve the quality and therapeutic value of the built environment. His specialist construction knowledge has influenced many key projects.

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Lianne Knotts
DIRECTOR

Lianne has over 14 years experience in the design and planning of healthcare buildings and is an Associate of the Design in Mental Health Network. She believes strongly in the importance of user-consultation in the design process and close collaboration with client and consultant teams, to improve outcomes and the patient experience.

T: +44 (0) 7814 652 660
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Paul Yeomans
DIRECTOR

Paul is a highly skilled healthcare architect with over 15 years' specialised experience. He has substantial knowledge of the sector in areas of strategy, planning, design and construction and a proven track record of delivery. He brings an approach to design that values improved clinical outcomes and enhances the human experience of treatment and care.

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Ruairi Reeves
DIRECTOR

Ruairi has substantial knowledge and 19 years experience of healthcare design. He has worked on a broad range of projects, for children, adults and the elderly. He has managed a number of international projects in collaboration with other architects, in the UK, Ireland and Australia. Ruairi is excellent at managing design from inception to completion.

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Our studios

Based in our studios in London and Newcastle upon Tyne, our experienced team are focused on creating great spaces for healthcare.



Awards & Recognition

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	PROJECT	CATEGORY	AWARDING BODY
2022	National Forensic Mental Health Service Hospital	Wellbeing Winner	RIAI Awards
		Health and Fitness - Highly Commended	World Festival of Interiors
		Fit Out Project of the Year - Healthcare	Fit Out Awards
		Environmental Sustainability Natural Environment	ACEI Engineering Excellence Awards
2021	Blossom Court	Health Winner	SPACES Awards
		Building Project of the Year over £10m	SECBE Constructing Excellence Awards
2020	The Jean Bishop Integrated Care Centre	Best Social Infrastructure Project	Partnerships Awards
2019	The Jean Bishop Integrated Care Centre	Primary Care Redesign - North/Mid/East	Health Service Journal Awards
2018	The Jean Bishop Integrated Care Centre	Innovation in Health & Social Care	Health and Care Awards
		Best NHS Collaboration	National Health Business Awards
2017	Mitford Adult Autism Unit	Best Mental Healthcare Design	Building Better Healthcare Awards
2016	Hopewood Park Hospital	Best BIM Development	Building Better Healthcare Awards
	Clock View Hospital	Service User Experience	Design in Mental Health Awards



We are absolutely ecstatic with the results from this facility. We're going to be able to provide a second-to-none service for our patients.”

– Linda Shynkaruk *Director*
Saskatchewan Hospital North Battleford

Overall members of the clinical and operational team felt it was a really good process and one which has delivered a building which provides a high-quality environment for the care of patients with autistic spectrum disorders.”

– Professor Raja Mukherjee *Consultant Psychiatrist*
Surrey and Borders Partnership NHS Foundation Trust

Working with Medical Architecture to understand and achieve our aims, they have also interpreted service users and carers' views to ensure a world-class hospital at the forefront of mental healthcare that continues to attract positive feedback nationally and internationally. The result of our close client-architect relationship is a beautiful, healing building that benefits the whole community.”

– Beatrice Fraenkel *Design Champion & Chair*
Mersey Care NHS Trust



For those who haven't worked with Paul and his team, I highly recommend their vision and professionalism.”

– Darren Laybourn *Strategic Lead, UK & Global Head of Healthcare*
Turner & Townsend

Medical Architecture provided clear and easy to follow dialogue with good leadership. This set a good standard for the entire team. The design process was robust and dynamic with open dialogue throughout the entire process and the mature, long-term personal relationships and the ability to work together augmented the value-added aspects of project completion.”

– Tony Railton *Project Director*
Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust

Blossom Court sets the bar high – this is how all mental health care should look and we are committed to improving the rest of our estate over the coming years, so all our patients can enjoy the quality of environment that Blossom Court now provides.”

– Jinjer Kandola *Chief Executive*
Barnet, Enfield and Haringey Mental Health NHS Trust

