mjmedical

The architecture of the clinical interior

Jamie Brewster, Associate Director
June 2025

mjmedical.com

The art if the clinical interior

When Herzog & de Meuron set out to develop the University Children's Hospital in Zurich, the architects made a conscious decision to break the mould and to revolutionise the architecture of healing.

Jacques Herzog, Swiss architect and founding partner of Herzog & de Meuron, talked at length about his intentions to challenge conventional thinking to the Guardian's architecture and design critic Oliver Wainwright for his review of the hospital . It's worth a read for anyone working in healthcare facility design. In the piece, Wainwright set's Herzog's approach as a reference point for future clinical design.

The Kinderspital clearly shows what can be achieved if the typical norms are challenged and new alternatives suggested. The treatment of internal finishes is one of the main illustrations of the firm's fresh approach.

While some internal views from the published photos of the hospital show a conventional approach to finishes with accessible grid ceilings, white walls, and vinyl flooring; in other spaces, including inpatient rooms, timber predominates. The atypical wood feature signals that a move away from the conventional 'institutional' approach to interior architecture may be possible, even in an acute setting. It confirms that there is a need for the standard approach to selection of internal finishes to be challenged and should allow the ubiquitous use of grid ceilings, white plastered walls, and linoleum floors to be re-considered and renewed. One only needs to wander around most existing UK acute facilities to be exposed to the unrelenting approach to interior treatments which are wholly designed to safeguard hygiene, maximise access, and allow rapid installation.

Public buildings – what's inside should count

Much is made lately about the importance of 'place' in public space with a growing emphasis that healthcare facilities should be included in this. And yet the focus tends to be directed towards the external environment with the importance of quality public realm, landscape and matters relating to scale and materiality prioritised. Shouldn't there be a similar drive to ensure considerations of 'place' extend to the interior of our public buildings too – especially when spaces for treatment, care and therapy are concerned?

There is a growing pool of evidence to support the notion that occupant behaviour can be affected by the quality of the internal environment. It is clear that the quality of the hospital interior has a direct effect on the behaviour and engagement of patients/visitors as well as motivation and effectiveness of staff. At a subconscious level, occupant response to the interior treatment can be influenced by careful design decisions that consider experiential and sensory responses as well as technical performance and facilities management related requirements. Studies published by the Journal of Environmental Psychology and others have shown that higher levels of staff and patient dissatisfaction can be directly related to poor physical environments that may not only be inadequate in design ambition but are also poorly maintained.

A misguided sector should seek inspiration from airports and hotels

It is interesting and alarming to note that many of the key guidance documents for new design proposals for interiors published by the NHS are worryingly out of date. HBN 00-09 – Infection Control, the 'go-to' guidance for finishes and hygiene considerations, is almost 10 years old. Guidance on floor finishes (HBN 00-10) has not been updated since 2014. Many of the other relevant guidance documents (e.g., HTM 69 – Protection) are 20 years old.

With the exception of some hygiene matters, there is perhaps no reason why the treatment of internal finishes in other large, multi-occupancy public buildings such as airports, hotels, retail centres couldn't be repeated in care settings. These facilities may have different funding and revenue streams but their need to cater for matters relating to maintenance and cleaning, fire safety, and acoustic performance is not dissimilar to those of a large acute hospital. Is it time for the typical estates-led default which sees the ongoing use of modular grid-ceilings, white plasterboard walls and sheet flooring systems to be challenged? The work of Herzog and de Meuron, rightly lauded by Wainwright, paves the way for what is possible.

Why is the typical hospital interior lacking in ambition and quality?

Outdated guidance

As mentioned above, a refresh of the current guidance and mandatory standards for new proposals is long overdue. We need a new suite of documents that sets new standards for designers based on the latest research and knowledge. Reference to other sectors who also cater for large and varied occupant numbers and profiles, such as major transport interchanges, will provide useful precedent and encourage new and alternative treatments.

Many of the issues commonly seen in poor quality healthcare interiors are not just related to traditional design considerations. Two key areas often have an impact: adaptability and maintenance. Has the building been able to respond to change and has it been well looked-after?

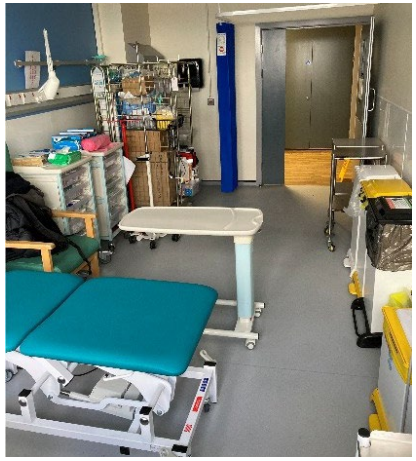
Adaptability

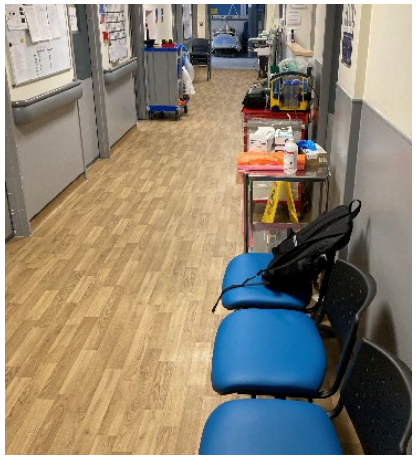
A good post-occupancy evaluation (POE) can highlight these issues and provide useful data to support the design of new facilities. Typically, though, POE is not yet a routine activity and when done, is sometimes carried out too early in the life-cycle of the completed project. Yes, insight can be drawn if one assesses performance soon after handover (within

the first few years) but waiting at least 10 years post-completion might provide a more potent analysis. It is only after waiting for this period of time that a full understanding is possible. How building occupants use and take possession of their space, often instituting changes that were unlikely to have been anticipated, can only be meaningfully assessed after an extended period. Examples include the re-purposing of room functions – such as bedrooms becoming treatment rooms, or vice versa. Circulation spaces often double-up as storage areas or waiting spaces, and inevitably, walls become adorned with notices, signs, posters crudely attached and located despite any original attempt through the provision of pinboards. The most successful schemes are often those that are either able to anticipate such change or ensure multiple configurations are possible by avoiding bespoke solutions and embracing standardisation.

Poor maintenance

Even when such issues are foreseen, poor or zero maintenance will undo careful design thinking. Stained or missing ceiling tiles have become an accepted aesthetic as well as impact-damaged surfaces and broken components. Individually, examples of items needing repair, maintenance or redecoration are often minor and relatively quick and inexpensive to address. Multiply these throughout the facility however, and one quickly begins to understand how most under-resourced estates teams with minimal access to funds can become overwhelmed. One wonders if the cost of maintenance (and provision of adequately staffed and skilled maintenance teams) figures highly enough when operational costs are assessed at the business case stages. Or is it the case that allowances are included in overall revenue costs at business case stage but are quickly reduced or diverted elsewhere given wider pressures. In the fight for limited money, maintenance needs are often side-lined and de-prioritised with issues relating to finishes seen as purely cosmetic and of lesser import than system or equipment maintenance.





Top image- Two-person inpatient bedroom now used as a treatment and minor procedure room. Bottom image – Corridor used for waiting and equipment storage with notices taped to wall. Photos by J Brewster

Achieving laudable UK hospitals

So, if new schemes are to aspire to the qualities unlocked by firms such as Herzog and de Meuron, what might need to happen?

- Firstly, NHS guidance needs to be reviewed and updated to take account of the latest research in terms of material performance. Learnings from other sectors who also handle vast numbers of daily occupants should be included. Consideration of fire performance of finishes, especially within facilities where sprinkler provision is mandated, might allow an alternative suite of internal materials to be used.
- The approach to interiors should not be so focussed on estates and facility-management matters. The obsession with maintenance access should be challenged. A suspended grid ceiling might provide ready maintenance access to equipment in the ceiling void but how often is that access actually needed? What does research tell us about this?
- Meaningful post-occupancy evaluation, carried out at an appropriate point after initial occupation, should inform design decisions. An approach which anticipates change and easily accommodates adaptation should be encouraged.
- Early allowance for the true cost of effective maintenance needs to be identified and protected in assessments of operational costs.

If the design of interiors in new hospitals can include some new thinking such as the matters described above, then perhaps they can be considered a ‘nice-place’ and be elevated from the ugliness described by Jacques Herzog to somewhere conducive to ‘feeling-better’.

Jamie Brewster, Associate Director

Jamie leads our major projects from initial concept to completion. A talented, strategic, estate master planner, Jamie brings experience, a level-head, and a drive towards precision to every project. He consistently achieves a high standard of delivery for our clients.

Jamie is a qualified architect with three decades of multi-sector experience across a wide range of small and large-scale projects. This includes healthcare facilities across the UK and the Middle East. From strategic planning to delivery, he has a proven ability to deliver projects on time and in budget. His work has involved the conservation and regeneration of historic and listed building.

About MJ Medical

MJ Medical is a leading healthcare planning and design consultancy. Established for over 30 years, we have helped plan, design, and equip more than 300 healthcare facilities across 75 countries totalling approximately US$100 billion in capital value. Our work includes world leading tertiary hospitals, remote rural health clinics, and everything in between.

mjmedical

mjmedical.com