The Health Manifesto
A Smarter Role for Design in Healthcare
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Introduction

Since the end of 2009, a number of respected organisations have developed strong cases for rethinking and improving the role of NHS hospitals and patient care in the UK. The various arguments, picked up by the national press, have sparked serious debate and analysis. Yet few of the hypotheses have made it to the ‘how’ stage.

Building on this growing need for practical ‘how to’ answers, we at PriestmanGoode, one of the UK’s leading design consultancies, have identified a compelling opportunity for using design to address some of the specific challenges thrown up by this wealth of new thinking.

This paper, The Health Manifesto, provides a raft of principles, ideas and new thinking to turn these challenges into practical design solutions. The NHS is envied by much of the world, but as it has grown it has started straining under its own weight. We may spend billions of pounds a year in nursing, buildings, equipment and IT services yet we consistently fail to invest in the design thinking that can help make the system run faster, cleaner and more efficiently. Imposing targets has delivered cost savings, but also created new challenges. Red tape and system failure has diverted attention from patients to processes, with a resulting impact on quality of care.

This paper sets out to articulate and demonstrate some practical examples of how cost savings and greater efficiency could be achieved through clever design. Using our experience of working in the commercial sector, we’ve identified a number of practical ways in which design could be used to improve delivery of care in the health service including one great example of how, by applying the same design principles we use to create first class airline cabins and hotel rooms, we could create a better, more efficient patient environment.

Healthcare is something that we all have to come across at some point in our lives. We believe that intelligent, efficient design has the potential to improve everyday life for millions of people each year.
A smarter role for design in healthcare

Design is proving it works

Design is already being used successfully to rethink some specific parts of the healthcare puzzle. The Design Council has had great success developing a number of innovative products for hospitals with its Design Bugs Out health programme, launched 12 months ago in conjunction with the Design Business Association and the Royal College of Art.

A first tranche of work here focused on improving hygiene by designing smarter products with fewer, easier to clean parts to eliminate the spread of infectious diseases. The second tranche is turning its attention to privacy and patient dignity, starting with a successful redesign of the patient gown, launched in February 2010. The great success of these schemes has been their ability to improve products without raising their costs. (See References)

Beyond the hospital ward

Beyond this, Evidence Based Design is being used more widely within the NHS and there are some excellent examples in recent PFI developments of how this approach can help improve the patient environment.

However, what we need to understand is that the NHS and patient needs are changing as more emphasis is placed on shifting healthcare from hospitals to primary care facilities. The next big step for design to take is beyond the hospital ward and out beyond the environment of the hospital. We need to employ new design thinking in a bigger way now, to create alternative environments for recovering and convalescing patients. Only then will we begin to alleviate the unnecessary strain on hospital resources that is costing the UK £1bn a year.
The big issues for design in a nutshell

Healthcare is bigger than hospital
While much attention has already been paid to solving issues around hygiene and patient dignity inside NHS hospitals using design, there now needs to be greater consideration to the bigger questions of health institutions beyond the emergency room and hospital wards. Design can make a huge contribution to reducing waiting lists, bringing down stay times, and saving money right across the healthcare system.

Built environments for healthcare need to be thought out top-down not bottom-up
Patient environments are a complex set of multifunctional spaces, which need to be thought through as a whole. All too often these spaces ‘emerge’ as new equipment, furniture and staff procedures are integrated into the big system. Design can re-think these challenges in a smart, cost-efficient way.

Patient accommodation is not flexible enough
Individual spaces need to be redesigned to allow for a really wide range of different patient needs. In the ward this is often about better use of small spaces, creating solutions for toileting, or more solid dividing walls for better privacy.

In care homes, and longer stay buildings, this is more around offering people the facilities to live more independently.

Design spaces to fit
Environments are all too often built from a kit of parts that just about do the job, rather than being designed for the needs of the patients and care staff that use them.

Modern equipment needn’t cost more
Equipment across the healthcare system is falling behind the times. With the right design brief, a better replacement can be developed that not only does a better job, using sustainable materials, but which also costs less to buy.

Patient Care needs a big rethink
As the Parkinson Report highlights, nursing and patient care has become over-laden with processes and needs to be rethought in terms of ‘the patient journey’ not just how ‘the system’ functions if we are to restore dignity to healthcare.
Designing the answers

Design is not a straightforward process

It draws on ideas, innovations, and best practices from different places, as well as a little intuition to solve specific problems or tasks. Real innovation is often found in other industries, which have been tackling similar problems in different ways for many years. The challenges of designing an aircraft cabin for example, cover many of the same basic space and service parameters as the hospital ward. And in this field there have been significant amounts of innovation.

Similarly, the challenges of designing a patient care environment would benefit from the substantial innovation that has been developing for many years in the design of functional and cost effective hotel rooms. Like patient environments, hospitals need to be as cost-efficient to build, run and maintain as possible, while maximizing standards of quality and comfort.

Ten radical design rules for better healthcare

At PriestmanGoode we have spent 20 years creating efficient and cost-effective environments designed to improve the quality of people’s lives, whether they are on the move in an aeroplane or winding down in a relaxing hotel suite. We believe that this work has a huge range of parallels that can be applied to healthcare environments.

From our experience in the airline and hotel industries, we’ve extrapolated some smart and thoughtful design rules that we are confident could be easily and cost-effectively applied to the healthcare sector right away.
Nothing touches the floor
Efficient cleaning

Hospitals must be easy to clean and maintain both for efficiency of service delivery, as well as for health and safety standards. The same applies to hotels. These designs for Motel 6 demonstrate some clever design solutions which allow more efficient cleaning. For example, all furniture is designed to float above the floor avoiding dirt catching in hard-to-clean crevices and joints, corners are rounded off and the room is designed with hard flooring that is simply easier and quicker to clean but still comfortable.
Privacy in every space, for every patient

Privacy in hospitals is vital for patient dignity, but providing a private area for every patient in a space designed for the maximum number of people is a big challenge.

The design of these first class airline seats for Swiss is all about maximizing comfort and privacy in a minimum space, while allowing the highest level of service delivery to be maintained.
Three

Cheap doesn’t mean poor quality

The commercial imperatives faced by hospitals are similar to those of budget hotels. But delivering a complex, multi-functional building to a strict budget doesn’t have to mean compromising on quality. By stripping the room to its basic elements and looking at the construction methods, PriestmanGoode was able to design an incredibly low build-cost hotel room for ETAP without compromising on quality. The efficient, modular design means that much of the room can be mass-manufactured off-site, reducing production costs and speeding up installation time.
Four

Speed
Improve patient turnaround times.

The pressures on airline staff for a quick turnaround after landing are immensely challenging. By applying the principles we use here to the integral design of recovery and waiting areas in hospitals, patient turnaround times could be reduced.
Better information systems to reassure patients and families

Hospitals need to be as unthreatening, comfortable and stress-free as possible. Patients, visitors and staff need to know where they are, what their destination is and how to get there. A patient’s sense of competence is encouraged by making spaces easy to find, identify and use without asking for help.

This innovative way-finding system at Heathrow T5 designed by Priestmangoode, demonstrates how an entire environment can be designed in a way that facilitates the passenger journey, making it run smoothly and seamlessly.
Six

Reduce the amount of work for people in the system

An efficient hospital layout should promote staff efficiency by minimizing travel between frequently used spaces and allowing easy visual supervision of patients by over-stretched staff.

For airlines the challenge is the same: how to minimize staff and maximize service, so that a limited number of cabin crew can see and service everyone. Here the solution is in the layout of the seats. Using the same design principle would make wards and recovery environments more cost effective and efficient.
Seven

Smarter, more multifunctional use of space

Hospitals need to make big steps forward in terms of efficient use of space, ensuring there is enough without creating redundant areas. The tricks are in positioning support services so that they can be used by more than one area, making good use of multi-purpose spaces and maintaining safety standards.

This requires careful design that solves a number of issues simultaneously. The design of a business class airline cabin is driven by the need for each component to do five different jobs while maximizing luxury, privacy and safety in the smallest space. Similarly, in budget hotel rooms, there is an imperative to make efficient use of limited space. For ETAP (right) we created a central column which delivers all the services safely and efficiently - electrics, water pipes, internet/phone cabling etc. whilst also housing a desk and mirror on one side and the sink and mirror on the other.
Eight

At home in hospital
Self-funding entertainment

Feeling ‘at home’ while in recovery is not only therapeutic, it helps healing. At home we all enjoy home entertainment but TV, music and computers are not routinely available in patient facilities.

Making people feel ‘at home’ in this way is the key consideration when designing first and business class seats – comfort and entertainment are integral. Here, the level of entertainment a passenger gets is dependent on how much he or she pays. Design could provide the opportunity for ‘pay as you go’ entertainment and information systems in hospitals and care facilities which could not only be self-funding, but which could pay for other improvements.
Nine

Can’t they just be nicer to look at?

It’s well known that aesthetics can help create a therapeutic environment so why aren’t they used more effectively in hospitals? Just as a nicer looking hotel room leads to a greater respect by customers, in hospitals, a better environment contributes to better staff morale and patient care.

Hospitals don’t have to be ugly, utilitarian buildings. By choosing the right materials, colours and lighting, they can be designed to be more appealing environments that can ultimately help a patient’s recovery. And the beauty is, they don’t need to cost more.
The PriestmanGoode Recovery Lounge
A practical new idea

Thankfully for most people, hospitals are a short-term journey. But could they be an even shorter one? Using the design principles of business class airline cabins and budget hotel rooms, we are developing a series of intelligently designed and beautifully crafted recovery rooms – the Priestmangoode Recovery Lounge – to take the strain off the queues for hospital beds and improve quality of well-being during recovery, either in hospitals or primary care facilities that undertake day surgery procedures.

Patient needs vary when recovering from minor operations and medical procedures: some patients need to lie down whilst others will be much more comfortable sitting up. The Priestmangoode Recovery Lounge features a lie-flat seat offering three positions (lie-flat, relaxed and upright) with that flexibility at the touch of a button.

In addition, a simple but clever layout means that patients maintain their privacy, with each seat positioned in its own private zone, out of sight from other patients but allowing nursing staff a clear line of sight to all patients. Each zone can be closed off with additional panels to ensure complete privacy.

The staggered layout also creates room for more beds per sq/m allowing more efficient use of space.

Hospital seats don’t have to be utilitarian blocks of plastic. We’ve designed modern, comfortable seating to help patients feel at home whilst still maintaining the practical requirements of hospital furniture.

Our individual patient zones are equipped with all the comforts of modern life as well as being easy to clean and maintain.

The modular design allows each zone to be manufactured off site, lowering production costs and allowing easy installation in both new and existing facilities.
There is a huge opportunity now to use the smart art of design to great effect in healthcare. Design is already proving it can have a dramatic effect in creating better-value, longer-lasting products that are hygienic and better for the well-being of patients in hospitals. The next step is to apply this thinking to the design of better-value patient environments that take the physical and financial strain off current hospital facilities, in a way that is more efficient for healthcare services and more comfortable and better suited to the needs of patients.

Whether it’s reconfiguring existing hospital facilities with smarter recovery areas and pods, or the top-down design of new types of buildings and interior spaces (that apply the parallel principles of people-centric disciplines like hotel and aircraft design), cost savings will only be made if spaces are designed that maximise patient numbers and personalise the patient journey.

Our conversations with developers and healthcare organisations to date here at PriestmanGoode lead us to believe that now one or two pioneering hospitals in the private sector are taking a lead in this direction, it should not take long for the public sector to buy into this thinking wholesale. And it goes without saying that the institutions that get it right in the first place will be the ones that the sector looks to for inspiration in the future. Having established the economic and commercial rationale for using smart design in healthcare, we will begin to make a big difference for patients and healthcare services.

The PriestmanGoode Recovery Lounge is just one example of how we believe our experience could help improve hospital environments.
The PriestmanGoode Recovery Lounge
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