healthcare facilities

colour  artworks  textiles  comfort  nurture
For many people the word ‘hospital’ conjures up thoughts of drab, institutional buildings. However this is not the case today as designers strive to create healthcare facilities and buildings that support and uplift the spirits of patients and staff.

We are moving away from the sterile, clinical environments and healthcare interiors today are ‘softened’ with colour and warmth to make them more welcoming and ‘homely’.

Artworks are increasingly commonplace. Landscapes are preferred over urban views, and those with wider perspective are better than close-ups. Green landscapes and water scenes prove to be the most calming, research has revealed.

sensory design + environment
Not only is it the patients that benefit from well designed buildings, the staff also find these environments more enjoyable to work in. The most important criteria include:
• Involve the five senses - sight, touch, sound, taste and smell.
• Provide a connection with nature - garden, trees, birds, flowers, water, fish, fresh air.
• Avoid environmental stressors - noise, odours, colour imbalance, poor light/air quality.
• Spiritual issues - embrace the joy of living and restore vitality.
• Introduce positive distractions - art, music, entertainment, humour
• Empower patients - maximise independence, provide options for control
A balanced colour palette will eliminate problems associated with too much yellow, which tends to make patients look jaundiced. If there is yellow-based wood furniture, this can be balanced with blue-green and red-mauve tones to neutralise the yellow.

Using green, the opposite colour of red, in operating rooms may lessen eye-strain for surgeons as they move the focus of their eyes from body tissue to pale green walls.

Hues of similar value and saturation should not be used side-by-side in facilities for the elderly as their sight becomes blurred as they age, making it difficult to distinguish colour boundaries between objects and surfaces. Careful selection of colours to increase contrast and eliminate glare are important, particularly for this age group.

In children’s healthcare facilities, accents of primary colours create a fun feeling but should not be too intense as that may cause hyperactivity in children. To inspire the imagination of children, a full-spectrum of cheerful colours and combination of shapes and patterns can be applied in the day rooms; however, more soothing colours may work better in sleeping/resting areas.

A rainbow of changing colour can be achieved by washing light from coloured lamps over walls.

Colours are considered inappropriate if they interfere with diagnosis (affect pallor and skin tone) or agitate patients and staff.
starship for kids

This Auckland hospital for children was designed by Stephenson & Turner Architects and Engineers. It contains medical wards, oncology units and a full range of clinical services. Features of the design are the long, curving wards, glass roof courtyard, playground, and the selection of colours to make it a ‘happier place to be’ for kids.

hospitals

Hospitals are the most complex of building types and need to accommodate many functions. Diagnostic and treatment functions such as laboratories, x-ray and MRI imaging, emergency rooms, surgeries, in-patient care facilities as well as all the support services such as catering, house-keeping, building maintenance and storage of equipment and supplies.

This diversity is reflected in the breadth of building regulations and codes that hospital designers must comply with - highly complicated mechanical, electrical and communication systems that require specialised knowledge and expertise.

The basic functions of a hospital usually comprise of -

- Bed-related and inpatient functions.
- Outpatient related functions.
- Diagnostic and treatment facilities.
- Administrative and office functions.
- Services - medical supplies, food, maintenance.
- Research and education functions.

The physical relationships between these functions determine the configuration of the hospital - movement and communication of people, materials and waste. The multiple functions include laboratory, ward and intensive care.
Obviously efficiency and cost-effectiveness are critical when planning any hospital in order to maximise their performance. Flexibility and expandability follow close behind as both medical needs and modes of treatment continue to change.

Designing a ‘way-finding’ process so patients, visitors and staff know where they are and where their destination is, can be achieved with building elements, colour, design and signage. Adequate natural light or colour-corrected illumination is critical as well. Light and airy hospital interiors with an outlook, even via the ceiling.

Hospitals must be easy to clean and maintain so appropriate and durable finishes and materials need to be specified for each functional space. New anti-microbial surfaces minimise bacterial contamination and cross-infection.

Hospitals have particular security concerns, including protection of property, assets and medications. They impact on the environment and economy of their surrounding community, are vast users of energy and water and generate large amounts of waste, therefore sustainable design is paramount.

**nursing homes**

These facilities provide care for non-acute and long-term conditions. Most residents are aged and/or frail but not necessarily bed-ridden. As these are ‘homes’ to the patients they need to be sensitive and responsive to long term human needs and wellbeing.
Design criteria includes the following -
• Living spaces that are ‘home-like’ in size, scale with natural light and view of outdoors.
• Create a warm, reassuring environment using cheerful colours and textures.
• Promote traditional residential qualities of privacy, choice, control, personalisation.
• Provide higher than normal lighting levels for safety/supervision of residents.

An odour-free environment is important - ventilation and heating may need to exceed normal levels. Non slip flooring and grab-rails are required throughout the building for resident’s safety when moving about.

specialised residential healthcare
There are specialised design requirements for buildings to accommodate patients or residents with temporary or permanent disabilities. Physically impaired people may require walking frames, wheelchairs, additional hand rails, etc to assist them walk or move around the building safely. Therefore wide corridors and easy to access bathroom facilities are needed for their support equipment, and non-slip flooring and non-projecting fittings to minimise falls and injury.

Sight impaired residents require additional reassurance to negotiate their way around buildings. Both physical and computerised indicators are incorporated in the design to help them have a full life despite restricted vision.

Dementia day care facilities and higher security Alzheimer’s homes need to ensure the patients and residents are safely contained. Similar requirements are needed for psychiatric accommodation to protect patients from harming themselves or others.

consulting rooms and clinic
The Palm Clinic in Auckland was designed by Stephenson & Turner and comprises of separate treatment and consulting wings. The reception area is an oasis of calm with pale oak flooring, off-white walls and ceilings, dark grey furniture - illuminated with a soft wash of lighting.
medical consulting rooms + outpatient clinics

These facilities generally operate a little like a corporate office, with a reception area to process patients as they arrive and wait to be treated. However they are normally furnished in warmer and welcoming colours and textiles, rather than high-tech or corporate identity type design.

The medical practitioners usually have an individual consulting room for discussions and appraisal, and their treatment rooms are designed to accommodate the particular functions required.

These vary from minor surgery and day-stay wards to physiotherapist, dental or optical surgeries. Rehabilitation clinics may include swimming and exercise areas.

palliative care - hospice

These buildings are generally more like homes or boutique hotels where patients with terminal illness can enjoy indulgence and comfort during their stay. Hospices usually have adjoining gardens with trees, birds, flowers and sometimes water features that the patients can view from their rooms or be taken outside to enjoy on a sunny day.

The sleeping suites have private bathrooms, visitor chairs, and some even have a spare bed so partners can stay with their loved ones. The suites are often furnished in soft and soothing pastel colours, have attractive artworks and soft music and fresh flowers.

Patients can enjoy a spa bath, a gentle massage or uplifting aromatherapy treatment to give them relaxation.
Let’s not forget our four-legged friends when it comes to healthcare. They too have their wellness and health to be considered.

Like all clinics and surgeries, veterinary facilities need to durable and be easy to maintain. Reception areas need to provide a warm welcome for the owners of pets who are probably more distressed than the animals.

**working with communities**
Hospitals are partnering with communities and organisations in the areas they serve to provide education on wellness. They are working with schools, senior citizens, churches and other groups who in turn provide voluntary services to support the hospital staff in the care of patients. The objective here is to promote healthy communities.

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