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# Environmental Design Audit Tool

Principles for the Design of Residential and Day Care Homes and Hospices



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# Introduction

The natural and man-made environments have a profound effect on our sense of wellbeing. The Prince's Foundation for the Built Environment and The King's Fund have developed this Environmental Design Audit Tool as an aid to those charged with designing or refurbishing buildings in which older people and those approaching the end of their lives are cared for. It is designed to be used in all residential care settings, for example care homes, hospices and hospitals and should also be applicable to day care facilities.

The design principles are drawn from a number of sources. These include work undertaken to inform a hospice design competition in 2009<sup>1</sup> and The King's Fund's Enhancing the Healing Environment programme. This has included specific programmes focused on improving environments for care at end of life and improving the environment in which people with dementia are cared for.

From this work, a number of general

principles have been developed and incorporated into this Design Tool, along with those obtained from other specific work on dementia care environments. Older people, particularly those with dementia, may have significant loss of vision and need an environment that supports their senses.<sup>2</sup>

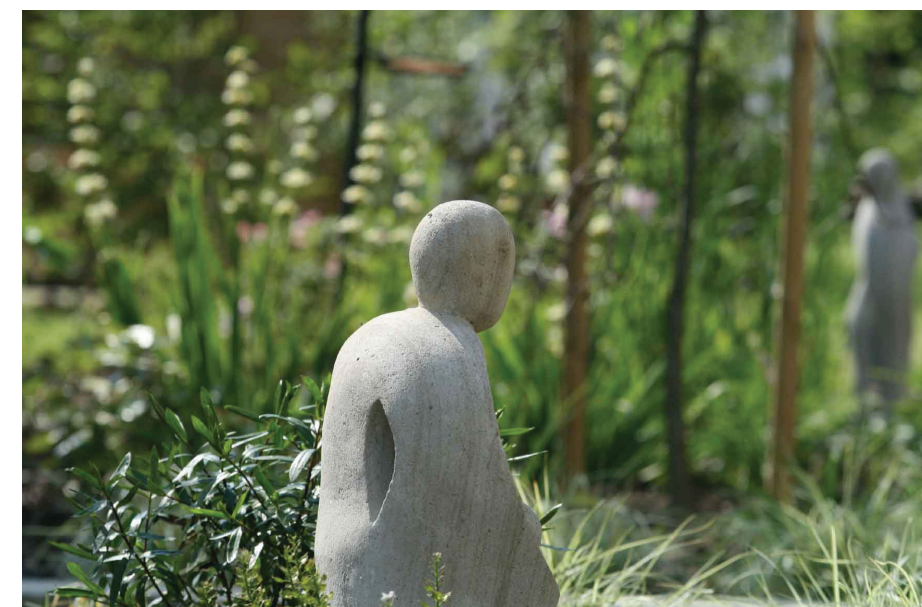
The design of the environment can significantly help in compensating for sensory loss and cognitive impairment and can support independence. Orientation, for example, can be greatly improved via colour definition. Additional design features that can support individuals' sensory functions include fragrant planting and provision of tactile artworks.

In the current economic climate, the refurbishment of current buildings is a more likely scenario than wholesale replacement with new facilities. The design tool therefore addresses both the general environment and design of specific spaces such as reception areas and bedrooms.

Principles for the Design of Residential and Day Care Homes and Hospices is designed to challenge, prompt and encourage thinking and discussion about the impact of the environment on care and illustrate practical examples of how spaces can be improved.

Primarily designed as a practical tool for clinical staff and those charged with managing and improving care environments, it is hoped that the tool will also prove to be of use in briefing architects and designers. It provides a structure for reviewing existing buildings to help guide staff, in partnership with patients and all those who use the facility, to create spaces that are not only fit for purpose but also provide an environment of care that can promote healing, respite and retreat.

The tool is not intended as a definitive guide but as a resource to be used in conjunction with other tools, evidence and guidance for creating supportive environments for patients, relatives and staff.



*The landscape has a deeply profound effect on people*

<sup>1</sup> see separate publication *Principles of Hospice Design*

<sup>2</sup> notably the work of The Dementia Services Development Centre, Stirling University

# Overarching Principles

The following overarching design principles were used to inform a Hospice Design Competition. They can be applied across care environments for older people and those who are approaching the end of their lives.

## Natural environment

The natural environment should touch every part of the building from the informal garden to the more arranged aspects of landscape through to internal planting. The landscape has a deeply profound effect on people and so should be carefully threaded through the entire scheme in an appropriate way.

## Natural materials

The building should use simple, robust and non-toxic materials that are from the ground or grown. Natural materials are important and, when properly detailed, get better with age – gaining a natural patina and telling the story of their use over time.

## The elements

Wherever possible rooms should be naturally lit and ventilated. This means windows that are tall to allow natural light deep into rooms and either windows or vents that allow for natural cross-ventilation. The ability to control light and air easily in rooms is impor-

tant. Moving water should be incorporated into the design as should the ability to light a fire and observe flame even if it is through glass.

## Legibility

It is important that the building and its associated landscape are very carefully organised into compatible uses that are public, semi-public, semi-private and private. The architecture should provide natural thresholds and devices that allow people to navigate easily around the building and know when they are entering areas that are more or less private.

## Dignity

The building should itself be dignified and be designed to allow for patient dignity. This relates closely to public and private organising of the building but also requires the architect to trace a series of patient journeys that may be undertaken through the building with patient dignity clearly in mind.

## Comfort

The building, its materials, fixtures and fittings should be comfortable for people to interact with or use. Comfort should also be enhanced through creating a homely feel within the building with domestic rather than institutional elements.

## Robustness and economy

The building should be flexible and capable of being gradually adapted over time. Simple and clear layouts are preferred with the use of complex forms or shapes (if appropriate) limited to internal elements. The building should also be uncomplicated and economic to construct but made of materials that will last well and are simple to look after and repair.

## Arts and crafts

It is important in a place of caring that the building elements and details demonstrate love and caring in the making. Selective elements of craft and carefully placed works of art that tell a story can lift the spirits and create moments of delight and interest.

## Respecting time

The perception of time differs greatly according to circumstance. When in pain one might wish time to pass quickly, when nearing the end of one's life one may wish it to slow down. When reflecting on life, one may lose track of time and when properly centred, time disappears and only a sense of being remains. All elements and spaces of the building should respect the way people may perceive time when relating to them and try and deal positively and appropriately with a sense of scale and detail to enhance the human experience.

## Beauty

The building and its relationship with nature must be beautiful. While many aspects of beauty are subjective, others are objective. Fine proportions and the relationships between detailed parts of the building and the whole should be created through simple harmonic relationships and proportioning systems.



*Fixtures and fittings should be comfortable for people to interact with*

# Design Application

The Overarching Principles from the competition have been adapted and enhanced to provide a series of statements that can be applied to the design of residential and day care homes and hospices and to guide environmental audits.

## Natural Environment

Gardens should provide therapeutic, uplifting, fully accessible spaces with returning pathways suitable for those with limited mobility or in wheelchairs. If space allows, connecting spaces can provide areas for discovery and delight. Small seating areas, shaded and screened from sun and rain should provide private 1:1 spaces for patients, relatives and staff. Planting should incorporate year round interest and appeal to the senses including sight, hearing, smell and touch. Raised beds may be provided for horticultural therapy.

## Natural materials

High quality natural materials and finishes should be used for the construction and decoration of the building. These must be robust enough to weather the inevitable bumps and scrapes from trolleys and beds.

## The Elements

Natural light should pervade the building and artificial lighting should only be used if it is decorative, functional,

*The building should be organic in form, designed to be flexible in use and to give support to the senses and uplift the spirit*



bright and glare free. Light levels should be adjustable to suit time of day, delivery of care and support normal sleep/wake patterns. Light pooling particularly on floors should be avoided. Ideally, natural ventilation should be used. Artificial ventilation, if necessary, should be unobtrusive and noiseless.

## Legibility

The building should sit comfortably in its landscape and be clearly signposted from the road. The main entrance should be obvious and create a sense of welcome. There should be sufficient spaces provided for drop off adjacent to the entrance, while car parking should be away from the building and screened.

The interior décor may call for the inclusion of accent colours to aid orientation and the use of contrasting colours so that those with visual disturbance or limited vision can see hand-

rails and discriminate between floors and walls. Access doors, for example to toilets, should be coloured and signed whereas access to other spaces can be discouraged by painting doors to blend with adjoining walls. Flooring should be non-slip and non-reflective and should not include small flecks which can be mistaken for litter and may encourage people to bend over and pick it up.

Inside the building there should be a clear hierarchy of space moving from public to private with logical adjacencies, which should be supported by intuitive wayfinding. Signage should be age appropriate and include both written and pictorial images placed at a height where people can read them. Corridors and courtyards should be human scale and intimate, not cold and relentless.

## Dignity

The internal entrance space should create a good, professional first impression and a sense of reassurance, warmth and friendship with a small seating area for those that are waiting. The function of the reception area/desk should be clear and the area uncluttered, with notices kept to a minimum. Patient information should not be visible and sufficient built in storage provided for paperwork. Information should be easily accessible including access to the internet.



*Views from windows and doors should be maximised.*





*Artworks can provide inspiration and distraction*



*Glimpses of nature can lift the spirit*

Bedrooms should provide privacy and quiet and be designed to allow the patient maximum control over their environment. Controls for lighting, curtains, heating, entertainment, internet access and the nurse call system should be within reach at all times.

#### **Comfort**

A variety of furniture and furnishings should be provided throughout the building both to offer choice and aid orientation. Small clusters of seating should be provided for informal conversations or for people to sit privately.

Dining and café areas should be designed to encourage socialisation and eating. Patients and visitors should have access to hot and cold drinks and snacks throughout the 24hrs. Ideally food should be cooked on the premises as positive cooking smells, for example baking, are known to encourage eating. Contrasting colours of crockery may also provide useful visual clues, thus aiding nutrition.

Bathrooms should be as homely as possible to encourage use and be free of clutter and hazards. Traditional fittings for baths, taps and flush handles should be used wherever possible to encourage recognition and use. Toilets should be well signed, obvious and easily accessible. Contrasting colours from the main sanitary ware should be used for toilet rails and seats to make them more visible and to help avoid slips, trips and falls.

#### **Robustness and economy**

The overall design of the building should be inclusive to all ages, cultures, and abilities, non-clinical and built to a human scale. It should support a relaxed and informal atmosphere and be arranged in a logical order with a separate service entrance for deliveries and collections.

#### **Arts and crafts**

The building should be simple and contain internal elements that are organic in form, designed to be flexible in use and to give positive support and stimulation to the senses and to lift the spirit. Elements of nature and artworks to provide inspiration and distraction should be integrated into the overall design. Natural materials should be used wherever possible and views from windows and doors should be maximised.

#### **Beauty**

Use of coloured linens or artworks can help personalise rooms and aid orientation. If practical there should be direct access from rooms to the outside so that a bed can be pushed into the garden or onto a veranda.

#### **Respecting time**

There should be open access for all who use the building to a quiet, spiritual space designed to comfort and support those of all faiths and none.

There should be facilities, not necessarily a bedroom, for relatives to stay overnight if required. If a death occurs there should be appropriate spaces provided for undertaking the required administrative procedures and for viewing the deceased.



*Facilities for relatives to stay overnight if required*

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