GARDENS FOR HEALING – a personal view of recent initiatives in greening the hospital environment

by Jennifer Potter

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Anecdotal evidence for the healing power of gardens is easy to find. One of the most vivid expressions of how a patient might feel on discovering a garden after several weeks’ incarceration in hospital has come to us from physician and writer, Dr Oliver Sacks.

‘A peculiar delight suffused the garden outside my window,’ he wrote in his classic study of neurological dislocation, A Leg to Stand On, as he recovered from a leg injury sustained in an encounter with a bull in Norway. ‘There had been no real outside before, no daylight, no sun rising and setting, no grass, no trees, no sense of space or life. Like a man parched, I gazed thirstily, yearningly, at the green quadrangle, only realizing how cut off from life I had been, in my sterile, windowless, artificial cubicle.’¹

His joy intensified when - for the first time in almost a month - he was finally wheeled outside, into the garden. ‘A pure and intense joy, a blessing, to feel the sun on my face and the wind in my hair, to hear birds, to see, touch and fondle the living plants. Some essential connection and communion with nature was re-established after the horrible isolation and alienation I had known. Some part of me came alive, when I was taken to the garden, which had been starved, and died, perhaps without my knowing it.’²

Sacks’s appreciation of the restorative nature of a garden puts him in good company alongside St Bernard of Clairvaux, Florence Nightingale,

¹ Oliver Sacks (1984), p. 131. See bibliography for full titles. The garden was in the rehabilitation centre to which he transferred after nearly a month in hospital.
² Ibid., pp. 133-4.
and HRH Prince Charles, as we shall see. In the United States, landscape designer Topher Delaney became interested in healing gardens after she was diagnosed to have breast cancer. Finding no quiet space in which to digest the news, she took refuge in the hospital cafeteria, with its ambient clatter of vending machines and a televised basketball game. ‘I thought to myself that if I made it through the gauntlet of treatments, I would devote myself to creating gardens that offer sanctuary for contemplation,’ she said, explaining her interest in gardens that would allow people to reflect on the ‘sustainability of one’s life within the context of disease.’

For anyone already convinced of the healing power of gardens, the experiences of Topher Delaney and Oliver Sacks together make a good case for their wider provision. But anecdote and individual experience are clearly no basis for public policy. The UK’s publicly-funded National Health Service will always be subject to intense competing pressures, so any benefits for patients must naturally prove their cost-effectiveness. Put crudely, a hospital garden may confer some benefits to some people, at a certain cost, but is the surplus greater than the cost-free option of doing nothing, or using the space in a different way?

Since the launch in 2000 of the King’s Fund’s Enhancing the Healing Environment (EHE) programme (which covers both indoor and outdoor environments), hospital ‘green space’ is on the agenda of healthcare providers. Help (both financial and professional) is on hand for those trusts able and willing to take on the challenge. Even before the King’s Fund’s involvement, a number of acute hospitals were gaining a reputation for their gardens, and more were created at new hospitals built under the Department of Health’s Private Finance Initiative (PFI) as well as hospitals and care homes funded by other means.

**A personal view**

This paper offers a personal view of some of the exciting developments now taking place across the whole field of healthcare. With a background

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that spans social policy research (for the National Consumer Council), writing about gardens (in books and national magazines) and garden history (most recently a biography of the John Tradescants), I became interested in healing gardens when I interviewed garden designer Lesley Kennedy for *Gardens Illustrated*, and we spoke about a garden she was designing for young adults in a mental health hospital in Poole, Dorset, funded through the King’s Fund’s EHE programme. It was the first I had heard of the scheme, and I was attracted to a programme that set out to bring the healing potential of gardens into places that deliver healthcare.

The Planning Exchange Foundation based in Glasgow generously agreed to fund this study, which is necessarily small-scale. Given my background in consumer research, it is perhaps inevitable that I took user consultation as my original focus, setting out to explore how users’ views can be taken into account in the design and development of gardens provided by a range of healthcare facilities for adults, including hospitals, hospices, mental health units and long-stay care homes. (The concentration on adults is for practical reasons only.) As the study progressed, however, it quickly became clear that user consultation is a welcome and highly significant of the King’s Fund EHE programme. Users’ views really are being canvassed – and taken into account – in many if not most of the King’s Fund experiments. What is more often lacking in the UK, by contrast, is any real appreciation of how (and what sort of) gardens bring therapeutic benefits. These gardens enhance the outdoor environment, certainly, but how do they rate as places of healing?

The aim of this paper is nonetheless to applaud the many initiatives now taking place, bringing them to wider notice and prompting questions about their future development.

**Contents**
The paper contains five sections:

- A brief historical overview of the changing role of gardens and outdoor spaces in places of healing, and how these changes relate to wider shifts in society.
• A summary of the aims, objectives and achievements of the King’s Fund’s Enhancing the Healing Environment programme.

• A case study involving the design and implementation of one project in the EHE programme, a courtyard garden at St Ann’s Hospital in Poole, Dorset, run by the Dorset Healthcare NHS Trust.

• Best practice drawn from visits to a range of healthcare facilities in the UK, set within the context of a Swedish model for healing gardens.

• Brief conclusions.

Definitions

For practical reasons, I propose to adopt the definitions for ‘healing’ and ‘garden’ set out by Clare Cooper Marcus and Marni Barnes in one of the most comprehensive studies of healing gardens in the United States and the UK, Healing Gardens, Therapeutic Benefits & Design Recommendations. Taking the common usage of the term ‘healing’ to mean ‘a beneficial process that promotes overall well-being’, they identified three aspects of the healing process where a garden might bring therapeutic benefit:

• first, by achieving a degree of relief from physical symptoms, or an awareness of those symptoms;

• second, by helping to reduce stress and provide comfort to an individual dealing with the emotionally and physically trying experiences of a medical setting; and

• third, by improving an individual’s overall sense of hopefulness and well-being.

Marcus and Barnes use the term ‘garden’ to mean ‘any green outdoor space within a healthcare setting that is designed for use’. This seems perfectly adequate as a working definition. Four factors are clearly essential: the space is outdoors; it contains some living plant material (even if just planted containers); it is situated within or around a healthcare facility; and it has been consciously designed for use.

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4 Marcus and Barnes (1999), pp. 3-4.
Although this paper focuses on the potential therapeutic benefits of gardens as places rather than gardening as an activity, it is unhelpful to keep the two entirely separate. Some healthcare users may want a garden that gives them space to garden, for instance. Since 1978, the gardening charity Thrive has promoted the use and advantages of gardening for people with a disability. More recently, Thrive has worked with private health insurers BUPA, developing for them the template for a sensory garden and helping BUPA create such gardens at their residential care homes and nursing centres.\(^5\)

**Other cultures**

How other cultures view the connection between gardens and healing belongs to another study. Japanese Zen gardens and Islamic paradise gardens both offer good models of spaces that work on the spirits, for instance.

Different cultural attitudes towards illness may also affect our views on an environment’s healing potential. German doctors, for instance, are more likely than other Europeans to blame many illnesses on poor circulation and deficiencies of the heart, quite possibly prompted by the lingering influences of nineteenth-century Romanticism. Another legacy of Romanticism to German medicine is the importance given to nature in recommended cures, whether forest walks, mud baths or herbal remedies.\(^6\)

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\(^5\) Thrive, Information sheet no 1.
1. A BRIEF HISTORY

As even this brief historical overview shows, gardens in places of healing go in and out of fashion, often in response to wider changes in a society’s value systems.  

Economics dictated the first ‘real hospital’, provided by the Roman state to care for soldiers in the field. Like gladiators and plantation slaves, the patients were considered ‘too valuable to be cast out to die’.  

The early Christian church added a moral basis to healing. Caring for the sick was one of the six acts of mercy set out in the Gospel of St Matthew, which guaranteed eternal life to the righteous. (The other acts were feeding the hungry, giving drink to the thirsty, taking in strangers, clothing the naked, and visiting those in prison. A seventh act of mercy – burying the dead – was added later.)

Monastic healing

These ideals in turn influenced the monastic tradition and especially the monastic Rule established by St Benedict (c.480 – 543). A philosophy that emphasised warm hospitality for travellers and respect for the sick naturally influenced the gardens that grew up around medieval monasteries. These might include a turfed cloister garth at the monastery’s heart; a cemetery orchard intended to refresh the senses of the living; a cellarer’s garden for supplying vegetables for monks and visitors; a herbarium for growing physic herbs; and an infirmary garden.

‘In addition to the day-to-day care of patients with general ailments,’ writes garden historian Sylvia Landsberg, ‘the infirmary was a rest home for retired monks with incurable diseases of old age. It was also a convalescent home for monks who were bled about six times a year.’

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7 For good overviews of the role gardens have played in therapeutic environments, see Marcus and Barnes (1999); and Gerlach-Spriggs et al (1998).
9 St Matthew 25, v. 35-6.
11 Landsberg (c.1995), pp. 34-44.
Viewed as a way of relieving stress, blood-letting involved a stay in the infirmary ‘with a week of nourishing food, refreshment of the senses in pleasant surroundings, and exercise, in accordance with the precepts of Avicenna, a tenth-century Arab physician who was subsequently a great European influence’.¹²

Records preserved for the infirmarer’s garden at Westminster Abbey from the late thirteenth century show that it combined the roles of a physic garden for healing herbs, a kitchen garden for growing food, and a recreation space for convalescent monks who – by 1462 – were able to amuse themselves with butts set up for archery. Parts of the garden were divided by hedges, palings and walls. There was also a dovecot garden and a ‘little garden’ with a locked gate, probably containing poisonous plants and other ‘simples’ or herbs used in healing.¹³

A twelfth-century monk describing the infirmary gardens of Clairvaux Abbey (a Cistercian monastery in North-Eastern France founded by St Bernard) gives a clear insight into the sensuous delights and healing powers of the infirmary garden, still relevant today:

‘Within this enclosure, many and various trees, prolific with every sort of fruit, make a veritable grove, which lying next to the cells of those who are ill, lightens with no little solace the infirmities of the brethren, while it offers to those who are strolling about a spacious walk, and to those overcome by the heat, a sweet place for repose. The sick man sits upon the green lawn, and while inclement Sirus burns the earth and dries the rivers, he is secure, hidden, and shaded from the heat of the day, the leaves of a tree tempering the heat of that fiery star; for the comfort of his pain, all kinds of grass are fragrant in his nostrils. The lovely green of herb and tree nourishes his eyes and, their immense delights hanging and growing before him, well might he say, “I sat down under his shadow with great delight, and his fruit was sweet to my taste [Canticles 2:3]. The choir of painted birds caresses his ears with sweet modulation, and for the care of a single illness the divine tenderness provides many consolations, while the air smiles with bright serenity, the earth breathes with fruitfulness, and the invalid

¹³ Harvey (1992), p. 98.
himself with eyes, ears, and nostrils, drinks in the delights of colors, songs, and perfumes.'

Right at the heart of the medieval monastery stood its most potent open space: the enclosed cloister garth. Sheltered from sun and rain by arcades that had developed out of Roman peristyles, the cloister echoed Persian traditions with its division into four squares that also carried hints of the biblical Garden of Eden. Where the paths intersected stood a well or fountain; often the monks planted an evergreen such as Juniper to symbolise the Tree of Life. Architecture and symbolism combined to create the perfect space for spiritual enlightenment and (by extension) of healing. St Bruno (1033-1101), founder of the Carthusian order, expressed the hope that 'the beauty of the place would lead the monks to feel that already here below they could perceive, through senses quickened by spiritual insight, the outlines of a golden paradise, lost to sinful man in Eden'.

By the late Middle Ages, however, mysticism and monasticism were in decline, and the meditative or restorative garden gradually lost its hold. The provision of medical care was in retreat, too, a process quickened in Tudor Britain with the dissolution of the monasteries, which cut off the main form of social assistance open to the poor and the sick. 'Beggars, lazars, cripples, soldiers and sailors returning maimed from the wars, and paupers pitifully ill crawled through the streets.' When the church stopped giving, charitable donors (royal, noble and bourgeois) necessarily took over the role of caring for the impoverished sick. In much of Catholic Europe, hospitals mimicked church architecture with high windows that shut off the formal gardens outside. The aim was 'to create long wards where the priest celebrating Mass could be viewed from every bed', thus putting the soul’s salvation before that of the body.

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14 Quoted in Comito (1979), p. 46.
16 Ibid., p. 10.
17 Thompson and Goldin (1975), p. 79.
18 Marcus and Barnes (1999), p. 11.
Restorative gardens survived in a few places, notably in Spain where hospital design was the best in Europe, incorporating courtyards adopted from the Arab tradition. Courtyards were also found in Paris at the great hospital of Les Invalides (built 1671-6)); and after his tour of foreign lazarettos, English hospital and prison reformer John Howard (1726-1790) described gardens for hospital patients in Marseilles, Pisa, Constantinople, Trieste, Vienna and Florence. In London, Howard noted that St George’s Hospital for the Sick and the Lame at Hyde Park Corner had a ‘good garden’, but the beds were placed very close to the wall and were therefore probably infected with bed bugs.

**The changing asylum**

As social and political unrest pushed France to the point of revolution, concerns began to surface about the barbaric conditions endured by some of the most disadvantaged patients of all: people with mental illnesses or disabilities, locked away in asylums such as Bicêtre for men and Salpêtrière for women, both in Paris, which since 1656 had been reorganised into the *Hôpital Général*.

French philosopher, Michel Foucault, is surely right when he suggests that mad people assumed the outcast role played by lepers until the end of the Middle Ages, when leprosy largely disappeared from the Western world. Confinement was society’s response: first in the *Narrenschiffen* or Ships of Fools, that ‘conveyed their insane cargo from town to town’, and later in the great hospitals that locked away those who could not fend for themselves – the unemployed, the idle, vagabonds and the insane.

Insanity was treated as a moral disorder in need of correction. Combining the functions of workhouse, prison, asylum and factory, the *Hôpital Général*’s prime function was to suppress beggary. It had little in common with a medical establishment, and did not even attempt to separate people with different conditions. At Salpêtrière, for instance,

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22 See Foucault (1967), pp. 3-64.
'madwomen in chains or in a howling rage mingled with the peaceable and the quiet'.\textsuperscript{23}

As long as a hospital’s chief aim was to confine or correct, its therapeutic environment received scant attention. But as physicians developed a greater understanding of the different causes and conditions of mental illness, this began to change. The new treatment programme ordered by Louis XVI in 1786 explicitly recognised the therapeutic potential of the outdoor environment. ‘The melancholy were to console themselves among the trees of the central garden, while the senile could walk around the periphery under the lindens.’\textsuperscript{24}

Bicêtre’s attendant psychiatrist, Philippe Pinel took the reforms further, proposing separate treatment for people suffering different forms of mental disorder. According to his regime, gardens and gardening were to play an important therapeutic role in the treatment of melancholics, who ‘ought to be allotted a part of the establishment commanding open and cheerful scenery, and adjoining to the grounds or gardens, where it is intended to engage them in the pleasing exercises of horticulture’.\textsuperscript{25}

In England, William Tuke was developing similar ideas at The Retreat near York, a Quaker asylum set in a pleasantly landscaped one-acre garden and a further eleven acres of farmland devoted to potatoes and dairy cattle. In the words of his grandson Samuel, the garden afforded ‘an agreeable place for recreation and employment, to many of the patients; being divided by gravel-walks, interspersed with shrubs and flowers, and sheltered from the intrusive eye of the passenger, by a narrow plantation and shrubbery’.\textsuperscript{26}

Samuel Tuke was also aware of the benefits of gardening as therapy. In his account of the Retreat, he tells the story of a melancholic hypochondriac, a gardener by trade, who had admitted himself voluntarily

\textsuperscript{23} Thompson and Goldin (1975), p. 54.

\textsuperscript{24} Ibid.

\textsuperscript{25} Pinel [xxx] translated by Davis (1806), p. 176.

\textsuperscript{26} Tuke (1813), pp. 94-5.
for treatment. Once his gardening talents were recognised, the superintendent ordered the asylum’s gardener to keep him occupied, but ‘unhappily, the superior abilities of the patient, had excited a jealousy in the gardener’s mind, which made him dislike his assistance’. Although the case ended badly, it had at least highlighted for Tuke ‘the great importance of exercise and labour, in the moral treatment of insanity; more especially in cases of melancholy’.27

**A breath of fresh air**

The idea that hospital gardens might benefit all patients – not just those suffering mental disorders - came back into fashion through the fortuitous combination of improving medical science and the gust of fresh air blown in by Romanticism, which revived belief in the healing powers of nature. Again economics played their part, as a growing interest in statistics suggested that improving the nation’s health would bring national prosperity. This in turn led to a new emphasis on hygiene, on the grounds that infections spread through the air by ‘noxious vapors that arose from rotting material, stagnant water, animal waste, and putrefaction of all kinds’.28 The science may have been elementary, but its effect was to influence hospital design by the promotion of pavilion hospitals – low buildings linked by continuous colonnades to provide shelter from the elements, and ventilated by large windows that would literally blow away infections.

A great supporter of the new ideas and the new hospitals was Florence Nightingale, who opened the preface to her *Notes on Hospitals* by declaring that ‘It may seem a strange principle to enunciate as the very first requirement in a Hospital that it should do the sick no harm’.29 And so she continued in the same brisk, breezy, no-nonsense vein, like an old-fashioned matron extolling the virtues of common sense born of experience. Neither a professional architect nor a theoretician, she was a nurse and she knew what she was talking about.

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29 Nightingale (1863), opening words to the preface.
Keeping patients’ needs uppermost in her mind, and the practical business of caring for them, she criticised many hospitals for cramming too many sick people under one roof. Cramped bed spaces, lack of light and poor ventilation were the obvious result. Instead, she wanted patients to benefit from direct sunlight, not just daylight, and made an eloquent plea for outdoor views, which could equally be made today:

‘Among kindred effects of light I may mention, from experience, as quite perceptible in promoting recovery, the being able to see out of a window, instead of looking against a dead wall; the bright colours of flowers; the being able to read in bed by the light of a window close to the bed-head. It is generally said that the effect is upon the mind. Perhaps so; but it is no less so upon the body on that account.’  

No gardener herself, Florence Nightingale did not prescribe the actual design of outdoor spaces, although she did make detailed recommendations concerning furniture (oak), eating and drinking vessels (glass or earthenware, not tin, which can never lose its smell), and beds (she favoured open iron springs, because of their superior ventilation). Gardens nonetheless featured in her ideas for convalescent hospitals which she envisaged as gender-segregated cottages for men and women, the women to be occupied in household work and the men in the garden. ‘That all this must be done with discretion, and in subordination to the necessity of giving the convalescents constant fresh air, and as much as possible of it out of doors, it is almost needless to say,’ she commented.

**Medicine and technology in the twentieth century**

While the nineteenth century’s concern for hygiene brought patients back into contact with nature, the twentieth century witnessed an opposite trend: medicine’s increasing specialisation and sophistication. Cost-efficiency and technology together drove the revolution in twentieth-century healthcare. Low-rise pavilion hospitals gave way to high-rise medical complexes, hermetically sealed from the outside world. The result

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was a sterile environment where ‘gardens disappeared, balconies and roofs and solaria were abandoned, and landscaping turned into entrance beautifications, tennis courts for the staff, and parking lots for employees and visitors’. The description applies to the United States, and although healthcare workers in the UK’s National Health Service might look longingly at the tennis courts, much the same process happened here.

‘The modern hospital was like a large garage,’ said Simon Jenkins in his President’s Lecture to the King’s Fund in June, 2006. ‘It was no longer a place of comfort to the dying. It was to be functional, a factory of medicine, where the human body had its moving parts swiftly repaired and put back on the road.’

There have, of course, always been exceptions to the separation between medicine and nature, and between healing and horticulture. Access to the natural landscape is axiomatic for the hospice movement, which developed out of the work of Dr Cicely Saunders at St Joseph’s Hospice in London in the 1950s and 1960s, and of Swiss-born Dr Elizabeth Kübler-Ross in the United States. Hospitals catering to the long-term care of chronic as opposed to acute conditions have shown a similar concern for the outdoor environment.

Like hospices, many long-term care homes offer palliative care, defined as any form of treatment that concentrates on reducing the severity of a patient’s symptoms or slowing the progress of disease, rather than on providing a cure. Improving a patient’s quality of life is critical. No one, surely, would deliberately design a building that gave a dying person one last look at a blank wall.

**Evidence-based design**

Towards the end of the twentieth century, the acute care sector was also rediscovering the benefits of outdoor views and contact with nature. A

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33 Jenkins (2002).
34 Clare Cooper Marcus, ‘Hospice Gardens’ in Marcus and Barnes (1999), pp. 505-44.
turning point came in the 1980s with the publication of Roger Ulrich’s influential article in *Science*, the magazine of the American Association for the Advancement of Science, reporting on a research study among patients recovering from heart surgery. The study showed that patients with a window view of nature recovered faster and required less medication to control pain than patients with no such view. Here, at last, was quantitative research to back up Florence Nightingale’s commonsense opinion that ‘being able to look out of a window’ promoted a patient’s recovery.

A behavioural scientist and professor of architecture, landscape architecture and urban planning at Texas A&M University, Ulrich is one of the leading figures in the field of evidence-based design, which seeks to design healthcare buildings on the best available evidence. Summarising the effects of gardens on health outcomes, he concluded in 1999 that research on healthcare gardens was still at an early stage but vitally necessary if gardens were to demonstrate their cost-effectiveness.

‘One of the few findings to emerge in a fairly reliable manner from different studies is that certain types of nature views can have significant restorative effects on emotional, physiological, and behavioral components of stress in patients. It appears that even acutely stressed patients can experience significant restoration after only a few minutes of viewing nature settings with greenery, flowers, or water. Another potentially important finding that has emerged in at least three studies is that gardenlike scenes apparently mitigate pain, as indicated both by patient ratings of perceived pain and observed intake of analgesic medications.’

Research continues, albeit at a relatively slow pace. Speaking at the Health Estates and Facilities Management Association’s annual conference in 2005, Ulrich repeated the ‘convincing’ research finding ‘that visual exposure to nature can quickly and effectively lower physiological stress (e.g. blood pressure) and improve emotional wellbeing’. He also pointed to a number of studies demonstrating that viewing nature alleviates patient pain. As well as his own 1984 study of surgery patients given

views of nature, he talked of research into the effect of *simulated* nature (through ‘nature art, virtual reality’) on patients undergoing procedures such as bronchoscopy, chemotherapy or burn dressing changes, concluding that simulated nature ‘can effectively distract patients and thereby reduce pain... Regarding staff, there is limited evidence that contact with nature and gardens in the healthcare workplace reduces employee stress, increases job satisfaction and may reduce attrition.’

Studies measuring the effect of gardens on health outcomes continue around the world. In southern Sweden, for instance, a garden was laid out in the autumn of 2002 at the Swedish University of Agricultural Sciences’ Alnarp campus. Covering some two hectares, the garden was designed to offer a range of different types of healing garden, from areas of wild nature to raised beds and traditional greenhouses. Providing a setting for interdisciplinary research and allowing scientists to test different design hypotheses are among its key aims. We return to its typology of healing gardens in Section 4.

This growing interest is reflected in a rising number of healing gardens, both at home and abroad. Even before the King’s Fund’s involvement in the field (see next section), some UK hospitals such as St George’s, Tooting, have established a well-deserved reputation for ‘greening’ their immediate environment, to the benefit of patients and staff. Art and the environment feature strongly in many new facilities funded under the government’s Public Finance Initiative (PFI). BUPA is creating sensory gardens at a number of its residential care homes and nursing centres, advised by Thrive. Gardens and landscape also play an important role in the fine new architecture of the cancer charity, Maggie’s Centres, and the Glasgow Homeopathic Hospital. These and other examples are discussed more fully in Section 4.

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2: GREENING THE ENVIRONMENT THE KING’S FUND’S WAY

A major boost for hospital gardens came in 2000, when HRH The Prince of Wales launched the King’s Fund’s Enhancing the Healing Environment programme as part of the health charity’s activities to mark the millennium.\textsuperscript{40} The programme’s aim has remained constant: to enable and encourage clinically led teams to work in partnership with service users to improve the environment in which they deliver care.

Each project consists of two main elements:

- a development programme for a nurse-led, multi-disciplinary team from the participating trust; and
- a grant (currently £35,000) for the team to undertake a project to improve their patient internal or external environment. (£30,000 comes from the programme, and participating trusts must raise the additional £5,000 at least.)

Launched at the same time as the NHS Plan, the programme connects a number of strands in current healthcare policy. These include patient-centred care, the movement for arts and health, new working strategies for staff, and performance enhancement through evaluation.

While participating trusts are free to choose their own projects, all must meet these three conditions:

- the project’s main aim is to achieve a physical improvement which brings demonstrable benefits in an area used by patients;
- the team can demonstrate that users have been involved throughout the project;
- the scheme is of high quality and represents good value for money.\textsuperscript{41}

Initially focused on acute hospitals in London, the programme was gradually extended to the capital’s mental health trusts (in May 2002)\textsuperscript{41}

\textsuperscript{40} King’s Fund (2006), pp.4-7, summarizes the programme’s first five years.
\textsuperscript{41} Ibid., p. 6.
then to primary care trusts (July 2003). November 2003 saw a rollout to a nominated trust in each of the 23 Strategic Health Authorities (SHAs) outside London, funded by NHS Estates (now the Department of Health). A further 23 mental health trusts in England joined the programme in November 2004, and 23 additional mental health and learning disabilities trusts in December 2005. By 2006, some 120 trusts across England had joined or were committed to the programme, involving more than 1,200 staff, patients and local people in improving their hospital environment.42

Late in January 2006, the King’s Fund announced a pilot scheme to help transform the physical environments in end-of-life care at hospitals and hospices. Funding will come from NHS trusts and their associated charities, and the King’s Fund itself.

**Project teams**

As the King’s Fund explained in its second evaluation report, published in 2006:

‘When they join the programme each trust is asked to nominate a multi-disciplinary project team, led by a nurse, and including estates and facilities staff, service users, arts co-ordinators and SHA representatives, to plan and manage their project.

‘The trust team undertakes a development programme which is run by the King’s Fund. The programme is designed to equip teams with the knowledge and skills they will need to undertake their projects, particularly in fostering co-operation and engagement with patients and the public. Team members have the opportunity to explore practical ways in which the healthcare environment can be improved by the use of colour, light, art and design.”43

**Horticultural input**

Now providing garden design expertise to the training sessions is the consultancy, Henley Salt. After their show garden at Hampton Court on the theme of burns treatment caught the attention of the arts and health network, Henley Salt won the contract to create the much-praised garden at Kingston Hospital, among the first cohort of NHS trusts participating in the EHE programme. More recently, they have become involved in training

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for the programme, helping participants to understand the design process and especially how to develop a clear brief.

Jeremy Salt defines his role as encouraging trusts to think differently. As both designers and contractors, the consultancy is not wedded to any particular design style, although their website makes plain the kind of gardens they favour in a hospital setting:

'We firmly believe in 'Enhancing the Healing Environment'. Our passion and head-on approach is born from a dislike of sombre gardens and all they stand for. We feel that “Healing Gardens” should be upbeat and stimulate the senses, humour can be used where appropriate and visitors to the garden should leave feeling energised as a result of their visit. The benefit to staff and service users of this uplifting experience should never be underestimated.'

**Evaluation of outdoor projects**

Of the projects undertaken by participating trusts between 2001 and 2005, nearly three out of ten were devoted to gardens. At 29 per cent, this was easily the largest group. Next came projects devoted to waiting areas (20 per cent), ward/clinical areas (16 per cent), social areas (13 per cent), special rooms (9 per cent), corridors (8 per cent), and art works (6 per cent).

To evaluate the first three cohorts of acute trusts in London, the King’s Fund and NHS Estates appointed the Medical Architecture Research Unit (MARU) at South Bank University. Their evaluation was largely qualitative, aimed at highlighting and disseminating issues of practical, day-to-day use. The evaluators obtained their information through desk research, initial visits just before completion, an in-depth review of six case studies, and data analysis verified through a focus group bringing together a cross section of those involved in the programme.

The first evaluation report contained details of garden and courtyard projects at six trusts. These were of two kinds: gardens provided for the benefit of all hospital users, and those intended for particular care groups.

44 [www.henleysalt.com](http://www.henleysalt.com)
45 King’s Fund (2006).
The garden schemes included Kingston Hospital’s much-praised ‘sociable space’ (Kingston Hospital NHS Trust); the transformation of an under-used space behind the Royal Brompton Hospital into an attractive courtyard garden, creating a ‘breathing space’ for patients, visitors, and staff (Royal Brompton and Harefield NHS Trust); an enclosed courtyard at Harold Wood Hospital (Barking Havering and Redbridge NHS Trust); the enhancement of three inner courtyards at the Princess Royal University Hospital (Bromley Hospitals NHS Trust); an internal courtyard at Queen Mary’s Hospital (Queen Mary’s Sidcup NHS Trust); and a ‘healing garden’ at Newham General Hospital, ‘with an emphasis on natural textures and planting to stimulate the senses of sight, sound and smell in a relaxing and harmonious environment for patients’ (Newham Healthcare NHS Trust).

As the first evaluation report explained:

‘All these landscape projects have been developed to suit the nature of the particular site in which they are located. The Kingston scheme was previously a public lawn which has benefited from extensive hard and soft landscaping, creating a variety of spaces for people to walk and sit. The courtyard at Newham is adjacent to the main hospital street along which other courtyard projects are being developed. Three courtyards have been developed around the themes of earth, water and air at Bromley as part of a PFI scheme.

‘The scheme at the Royal Brompton is in a confined courtyard that gives relief and secluded outside space on a confined inner-city site. Sidcup’s garden is situated in a large courtyard site near to the main entrance that is overlooked by people going to the hospital restaurant. Barkings’s courtyard is located near to the stroke rehabilitation ward and has paid special attention to the needs of these patients.’

Consultation

As the first evaluation report showed, canvassing users for their views on the kind of environmental improvements they want has been a prime concern from the outset. Project teams tapped in to users’ opinions in many different ways: through steering groups, public meetings, questionnaires, one-to-one conversations, contact with the Patient

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46 Francis, Willis, Garvey (2003), pp. project directory pp. 59-64.
Advisory Liaison Service and access advisers, discussions with local schools and art colleges, and artist-led workshops. Some projects asked users to contribute to scrapbooks and brown-paper consultation walls. Teams also used visuals and creative techniques to communicate artists’ ideas and impressions to users.48

One conclusion to emerge from the first evaluation report was that ‘involving users, staff and the local community made the project process more open; facilitated communication; generated ownership, enthusiasm and commitment; allayed fears; countered resistance; and ensured that projects met the need of the users of the spaces’.49

There was nonetheless some initial confusion about what consultation might achieve. Some project teams used consultation to fine-tune their own ideas while others expected the ideas themselves to emerge through consultation. Culturally, too, there were differences in team members’ attitudes towards the process. Some nurses feared consultation would raise expectations that could not be met, while estates team members feared that consultation might simply slow down the process without bringing any benefit.

Second evaluation report

For their second (and more rigorous) evaluation, the King’s Fund and NHS Estates appointed York Health Economics Consortium (YHEC) and RKW Healthcare Strategists. They selected nine projects from the 23 participating schemes, of which only two included improvements to the external environment: a performing arts garden at the Pendered Centre, a mental health unit run by Northamptonshire Healthcare NHS Trust; and the refurbishment of a courtyard outside the regional burns and plastics unit and orthopaedic wards at Whiston Hospital, an acute hospital run by St Helens and Knowsley Hospitals NHS Trust.

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49 Ibid.
According to the second evaluation report, ‘Both of these schemes have seen an increase in use of the garden. The courtyard in the acute hospital is an internal space, overlooked by wards and clinics. The project team reported that, at night, visitors to these wards move their chairs so that they can look at the lights and sculptures. A programme of events planned by one project team member and a local arts co-ordinator has commenced in the garden of the mental health hospital, including art exhibitions with artworks made by patients, musical events with picnics and barbecues. Exercise classes run by the physiotherapy department are also proving popular.’

The evaluation also involved taking environmental measures using two toolkits developed by NHS Estates to assess large-scale healthcare projects: AEDET (Achieving Excellence Design Evaluation Toolkit) and ASPECT (A Staff and Patient Environment Calibration Tool). The tools are considered useful for comparing ‘before’ and ‘after’ scores of individual projects, rather than relative performance between different schemes, as not all criteria apply to all schemes. The toolkits were in any case developed for building projects rather than gardens, so a number of factors were not measured for the garden projects. This no doubt explains why the courtyard scheme recorded the smallest increase according to both toolkit scores. It certainly underlines the toolkits’ unsuitability in comparing the achievements of different schemes, particularly across internal and external environments.

SECTION 3: BRINGING THE SEA TO ST ANN’S

From the sunny but featureless courtyard at St Ann’s Hospital, Poole, you catch plenty of sky but get no hint of the mental health unit’s fine, cliff-top situation or the white sandy beach below. While the main hospital block is housed in an attractive Edwardian convalescent home built in a

style known as Pont Street Dutch, here the architecture is 1980s functional at its most bland: red brick walls, institutional green paintwork, concrete paving in pink and dirty white.

Before its transformation, the yard contained one picnic table and bench, a basketball hoop and a few planters. By late September 2006, most of the dwarf conifers and flowers were dead or dying. The yard had all the cheerfulness of a prison yard, but far less space.

St Ann’s Hospital is one of more than two dozen sites managed by the Dorset HealthCare Trust, a specialist trust providing mental health, learning disability, addictions, community brain injury and community dental services for over 700,000 people in Eastern Dorset, and a number of services across the county. In the most recent annual health check published by the Healthcare Commission, the Trust achieved ‘Excellent’ for Quality of Services, putting it among the top 4.2 per cent of trusts nationally, and ‘Good’ for its Use of Resources, including financial management, putting it among the top 15.8 per cent of all trusts nationally.

St Ann’s joined the King’s Fund’s Enhancing the Healing Environment in November 2004, among the first cohort of mental health trusts outside London. James Barton, Director of Mental Health and Social Care in Poole, is the Dorset HealthCare Trust’s sponsoring member, and an eloquent advocate for the EHE programme and the benefits he hopes will flow from the courtyard’s transformation.

In matters of design, he explains, the NHS is stuck in the mould. ‘There’s a traditional NHS-way of doing things, so what you get is dated and not very innovative, generally because we try to do things on the cheap. And we don’t have the expertise to think outside the usual way of doing things.’

The Trust’s mission is ‘to provide a service that we ourselves would happily be treated in and would recommend to our friends’. Yet when you
walk around the site, you encounter (in Barton’s words) a ‘hotchpotch of an estate’. Although only 20 years old or so, the buildings surrounding the courtyard reflect outdated concepts of an institution, where people share rooms and enjoy ‘bland space or no space at all’.

With the Dorset Healthcare Trust embarking on a fundamental reorganisation of its estates, James Barton looks on the courtyard as a pilot. ‘If it works,’ he says, ‘this is the way we want to do things in the future. Before we start erecting new buildings, let’s see how we can do things differently. The courtyard is just a snippet, but the skills and attitudes we are developing are transferable.

Creating a pleasurable environment was a primary aim, but Dorset Healthcare Trust was also keen to take on the challenge of creating a garden in a particularly difficult situation: a locked courtyard within a locked low secure unit. The courtyard in fact serves two secure wards: Studland, a forensic low secure unit for males (many of them young) who come to the hospital via the criminal justice system; and Haven, a short-stay Psychiatric Intensive Care Unit (PICU), predominantly male. Overlooking the courtyard from the first floor – but without access to it – is Allumhurst, a male unit for acute admissions.

Designing a garden in such circumstances raised a number of issues unique to mental health. While government policy for the NHS stresses the values of privacy and dignity, in mental health services observation can play an important role, especially at the more acute end of the service where keeping service users safe from each other and from self-harm is a priority. This calls for a garden that will give users the illusion of privacy, especially from each other, but which still permits observation by staff.

Security issues also dictate the materials used. As the client group for the courtyard at St Ann’s is predominantly young, male, strong and potentially aggressive, the planned environment must be free of potential weapons or ligature points. Even shallow water can be lethal, if used with intent, and edging stones or granite setts can easily become bludgeons.
The garden must also be free of potential hiding places for drugs or syringes, ruling out shrubberies, dense planting, and modern materials such as coloured gravels, unless these are sifted daily.

Finding out what this particular group of service users might want from their new courtyard garden was a challenge. While extensive literature exists on designing gardens for older people, and specifically older people with Alzheimer’s disease, the team at St Ann’s was almost literally stepping out into the unknown. What kind of outdoor space would appeal to disturbed young men entering a mental health unit, many for the first time in their lives?

Following the King’s Fund model, Dorset HealthCare Trust set up a multi-disciplinary team, which brought together James Barton, Associate Board Executive Director, as project sponsor; Senior Clinical Nurse Andrew Tillery as team leader; Anne Bowler (chair of Poole’s Mental Health Service Users Forum) representing service users; Nickie Davies, the Trust’s Press Office and Communications Manager; Becky Whyte, Support Services Manager; and Pauline Malins representing the South West Strategic Health Authority.

Team members attended two training sessions run by the King’s Fund, which helped them to work together as a team, and introduced them to the benefits of arts and gardens within the healing environment. The training sessions included a presentation about garden design from the design consultancy Henley Salt, which brought home to them how little they knew about designing gardens. And crucially, it introduced them to Jo Plimmer from arts consultancy Willis Newson, who led a training session that asked participants to work through a case study put together from real examples.

The team at St Ann’s clearly worked well as a group, playing to each other’s strengths. James Barton views his own role as giving people permission to try out new ways of doing things. ‘If you have a good team,
as we have here, it’s my role to permit them to dream, to think differently and to challenge the norm.’

Recognising their own lack of design skills, the team retained Jo Plimmer as consultant to the project, charged with helping them to consult users and to feed the results into a design brief. She was also asked to help select a small shortlist of artists and garden designers who would be asked to tender for the project, and may be involved again later in evaluation. Ownership of the project remains firmly in the hands of the Trust.

To help consult service users in the units around the courtyard, Jo Plimmer brought in glass artist Clare Hudman, who had experience as an actor in role-playing, and had also worked in the field of psychiatric care. Together they devised a small number of communication strategies, although they were quite prepared to jettison these if they proved inappropriate. In the event, one-to-one consultations were most helpful at coaxing opinions from the service users concerned. Group discussions in one of the wards were dominated by one particularly forceful user, for instance. Partly to defuse an increasingly volatile encounter, another user came forward with some really quite formative ideas.

Where consultations take place can also affect the outcome. Discussions in two of the wards were held in hard institutional surroundings, while the third took place in the inhospitable courtyard itself. All three would have benefited from the private spaces built in to the new design.

The brief for the new courtyard summarised the consultation undertaken, while recognising that the budget would not cover all the ideas put forward. These ideas were endorsed by all three units:

- The courtyard should be made to feel less linear and more organic.
- Water should be incorporated in some form, particularly for sound.
- Screens or changes in flooring could suggest the seaside, and mark out different activity zones such as: a ‘letting off steam’ zone for
basketball and football etc; a ‘chill out’ zone (shade, low seating, a deck?); as well as transitional spaces (walking routes and sitting spaces).

- The courtyard could provide areas to express thoughts and ideas (film works? A blackboard?)
- As it is hot and dry, the courtyard could incorporate low-maintenance and fragrant plants, which again have the potential to evoke the seaside.
- Using trellis, screens or art works to lessen the impact of the walls could give the impression of greater space.
- Designing routes to wander through the space could reduce the tendency to walk in circles, as at present.51

The consultation summary also included specific points put forward by each of the three wards. Although service users in the upper ward would not be able to use the courtyard directly, they recognised its potential benefit to them through sound (from water, for example, as a relief from television noise), gentle light and fragrance (from plantings such as night scented stock and honeysuckle). Users with experience of admission through the downstairs unit expressed the need for shade (as medication can render people very sensitive to light), peace and nature.

Users in Studland emphasised the importance of colour in reducing the impact of the walls. They also wanted to make the space useable at night, possibly through atmospheric lighting, and heaters (highly unlikely on health and safety grounds). One user suggested a telescope to look at the stars, raising the interesting prospect of bringing the sky (or at least an awareness of it) into the courtyard. They were particularly keen to provide a place to express thoughts and ideas.

Users in Haven wanted to use the courtyard as an outdoor cinema. Although probably beyond the project’s initial scope, the brief noted that ‘this would provide an element of excitement, something special. It could

51 Dorset HealthCare NHS Trust, Artist/Landscape Designer’s Brief, Enhancing the Courtyard at St Ann’s Hospital, Poole.
also possibly be used to show digital works created by service-users – something St Ann’s could potentially develop in the future with Poole Arts Centre through an Awards for All grant’. They also proposed a cut-out goal and figures on the wall in the place of the basket-ball hoop.

Commenting on the consultation process, James Barton believes that without in any way being complacent, the imaginative way they approached the task has allowed users to ‘dream dreams’. ‘The question “how do you feel?” clearly forms a large part of what we do clinically,’ he says, ‘and there’s a correlation between feelings and behaviour. The units display challenging behaviour, and we know that if you are not feeling good, your behaviour becomes even more challenging. Part of the consultation process involved finding out what makes people feel good. That’s more complicated than it sounds, because it depends on individual personalities and the population of the units is constantly changing.’

Jo Plimmer and Willis Newson’s involvement ended, as planned, with advice on selecting the successful artist or landscape designer from a shortlist of four names put forward: two mosaic artists (one with landscape design experience), one young male artist with experience of sports and play areas, and the successful candidate, Lesley Kennedy, an innovative garden designer now living in Dorset who had trained in psychology before branching into garden design. Her work includes a show garden of planted maize for Westonbirt’s International Festival of the Garden in 2004 which you entered through a curtain of recycled plastic containing embedded squares of mobile phone covers, plastic bags and fruit packaging held together with rubber bands. As Dan Pearson explained further in the Daily Telegraph, ‘This garden provokes thought with its spare Betula jacquemontii [a variety of silver birch] and silver enclosures lined with panoramas of nature. It makes you think beyond its boundaries.’

After presenting her initial ideas to the project team, Lesley Kennedy was appointed in February 2006. The design brief gave her four aims and objectives:

- To enhance and transform the internal courtyard through appropriate hard and soft landscaping and functional artworks.
- To create an outdoor space which is ‘welcoming and appropriate’ to a variety of activities among service users and staff, and to enhance the views out for first-floor service users.
- To devise a scheme with portable elements, which the units can take with them in any future relocation.
- To achieve these objectives through consultation and the ‘potentially creative involvement’ of staff and service users from the units.

The brief also drew attention to four general ideas which could influence the design: the proximity of the seaside; the desire of all units to incorporate water in the design, especially for sound; the need to include a wide range of activities, ‘from basketball and football to peace and quiet’; and the units’ possible relocation in the future.

Lesley Kennedy’s design was ready by late April 2006. In essence, the main courtyard space contains organic shapes of grass, some planted with young mature silver birch trees, set in a self-binding gravel like hoggin. Open, semi-circular light pods provide semi-private sitting spaces. Floored with wooden decking, each pod contains five or six blue plastic bean bags. Around the courtyard walls hang photographic images like giant postcards, which Kennedy envisaged as abstracted images of water sports and local wildlife, bringing colour, shape, speed, movement and a sense of the sea into the sealed space.

The initial reaction from users was disappointing, however. The project team now wish they had asked Lesley to make a personal presentation to users. Instead, after the management team had enthusiastically endorsed the design, plans were posted in the units and comments fed back to
Lesley through the occupational therapist on one of the wards. Users said they had expected something different. The plans they saw were, they felt, a bit too modern and ‘designery’. The World Cup had just kicked off and users on the wards were football crazy, like everybody else. What they really wanted, they said, was a place to kick a football around.

A meeting was fixed between the designer, Becky Whyte (the estates manager on the project team) and the staff member who had coordinated service user reactions. This was followed by a ward meeting at which Lesley Kennedy presented her design and brought it to life. Many people find plans hard to read, and the graphic images had been taken too literally. For instance, users found the solitary beanbag in each lighting pod ‘too isolating’, when the intention was to include several beanbags in each pod.

These discussions continued to shape the design. In a concession to the football players, the grass will be mown turf rather than specimen grasses. This substitution may well have happened anyway, as tall grasses can conceal drugs and objects thrown from the upper windows. The planned water feature – a shallow bowl – was another casualty to health and safety, now being replaced by a wall-mounted water bubble display.

Finding robust materials to construct the lighting pods within budget caused some delays to the schedule. And although work on the garden started as this report was being written, its completion took it beyond our time frame so it was not possible to track its progress to the ceremonial opening and subsequent use. We hope to include an update from the designer and the hospital at some later date.

4: BEST PRACTICE

The new courtyard garden at St Ann’s Hospital, Poole, fits well within the King’s Fund’s programme aimed at galvanizing directors, managers and staff within the NHS to form creative partnerships with patients to
improve the patient environment. The physical improvements engendered show what can be done: long may they continue, maintaining their momentum and encouraging more trusts to experiment with their environments.

The impetus for the programme comes almost entirely from within the health service, however, and its cultural influences stem largely from the well-established arts and health movement. This inevitably affects the finished results, as outside arts consultants import a particular knowledge and a particular expertise. The EHE programme’s garden design consultants, Henley Salt, endorse this focus. Their special strength lies in creating show gardens that attract attention, notably their ‘What We Want’ Teenage Garden at Hampton Court Flower Show 2002, complete with skateboard half pipe, chill zone and meadow, which won the RHS medal that year for the most original and innovative show garden. In 2006, they were contractors to Cleve West’s gold-medal-winning Saga Insurance Garden at the Chelsea Flower Show. This is gardening-as-theatre, designed to lift the spirits through well-designed and well-built hard landscaping, freshly up-to-date planting and quirky humour.

But the gardening world offers many other models for healing gardens, and hospital trusts could look more widely at the different types of gardens that meet very different needs.

Two articles in the American Horticultural Therapy Association’s Journal of Therapeutic Horticulture by Swedish landscape architects Ulrika A. Stigsdotter and Patrick Grahn usefully map the field and describe a multi-faceted healing garden then (2002-3) under construction at the Alnarp campus of the Swedish University of Agricultural Sciences. In the first article, the authors defined three difference concepts of gardens - the garden as room, the garden as manifestation of life, and the garden as applied art – before classifying theories about healing gardens into three schools:

• the healing garden school;
• the horticultural therapy school; and
• the cognitive school.

According to the **healing garden school**, a garden’s therapeutic benefits derive from experiencing its design and contents as a physical space or room. Again, a number of different theories purport to explain why or how this happens. According to the biophilia hypothesis, for instance, people are calmed by nature-like surroundings and wild nature, especially those that approximate most closely to man’s original habitat. A second theory credits the restorative influence of verdure on cognitive functions, by directed concentration or spontaneous attention. A third theory asserts that gardens and nature ‘make demands that can softly balance the person’s own ability and control. ... Generally speaking, nature makes fewer demands than gardens, where you can build in more or less demands in the design.’

The **horticultural therapy school**, by contrast, maintains that a garden’s therapeutic benefits stem from activities carried out within the garden room and especially gardening, which is seen as obvious, meaningful and enjoyable. ‘Gardening can, in a simple way, stimulate a great number of cognitive processes and physical exercises, and, hypothetically, self-rewarding flow experiences as well.’

The **cognitive school** seeks to combine the other two, crediting health effects to experiences of the garden room itself as well as the activities carried out within it and the garden visitor’s own background and character. According to Stigsdotter and Grahn, the ‘health effects are due to the fact that the garden or the wild nature with its shapes, colors, odors, etc., can restore a person to a more positive view of himself and his capacities.’ Gardens for people with Alzheimer’s disease, for instance, that seek to rekindle childhood memories and experiences in their users

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54 Kellert and Wilson (eds), (1993).
56 Ibid., p. 63.
57 Ibid.
fall within this school, especially where they encourage participative activities.

**Passive versus active enjoyment**

The main difference between the various schools lies in the degree of user involvement. As Stigsdotter and Gahn point out, the healing gardens and horticultural therapy schools are beginning to come together, but there are still too many examples of gardens at the two extremes, either badly designed ‘activity’ gardens or healing gardens that concentrate exclusively on the visual. ‘A garden is not just to look at,’ they maintain. ‘One may enter a garden and turn from being an observer into a visitor, experiencing the four dimensions of the garden (three dimensional space and time) with all one’s senses.”

The fine landscaped garden at the Joseph Weld Hospice in Dorchester is one example of a healing garden created for passive enjoyment, which the new chief executive, Alison Ryan, would like to see used more actively. Drawing on traditional styles and materials, the hospice (Patron: HRH Prince Charles) was designed by Dorchester architect Stephen Hebb and opened in 1994. Landscape architect was Michael Oldham of Environ Partnership, Dorchester. The sloping garden is subtly designed on four levels, each with its own character, from a small lawn bounded by trees and shrubs at the upper level down to a wild flower meadow screened from the railway at the bottom by dense woodland planting of mainly woodland planting. Close to the building are paved courts, pergolas, balcony and terrace areas and a loudly gushing waterfall, universally liked by staff and hospice users.

Yet despite the garden’s outstanding aesthetic values, Alison Ryan believes that the garden is seriously under-used and wants to find ways of integrating it more closely with the hospice’s philosophy of care – giving day centre users the chance to engage actively with the garden, for

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59 Interview with Alison Ryan at Joseph Weld Hospice, 21 August 2006.
60 For a description and plan of the hospice garden, see Marcus and Barnes (1999), pp. 517-23.
instance, and creating more private areas to entice families and service users out into the garden. ‘Kids could knock a football about on the meadow at the bottom,’ says Ryan, ‘but they don’t. They’re on their best behaviour. We like noisy kids because they liven the place up, but they seem to find the garden forbidding.’ Extensive consultation would precede any changes, but already they know from research that users of the daycentre and respite beds would like the hospice to develop its own occupational (and horticultural) therapy services.

In their categorisation of the different kinds of healing gardens, Swedish authors Stigsdotter and Grahn go on to characterise four degrees of involvement with a natural landscape, from directed inwards involvement of those whose mental power is weak, through emotional participation of people beginning to take an interest in their social surroundings, to active participation (of someone able to plant or plan a flowerbed, for instance) and finally, the outgoing involvement of those able to take charge. Visitors to a healing garden, they note, will possess varying degrees of mental power, suggesting that it must be designed to place different degrees of demand on the visitor.\textsuperscript{61}

**The eight garden rooms**
The Swedish authors have also usefully drawn on the work of architectural theoreticians, landscape architects, and psychologists (including C. G. Jung) to produce a typology of garden rooms, isolating the different characters that appeal to different people. This is reproduced below. Interestingly, they suggest that gardens characterised as ‘serene’, ‘space’, ‘rich in species’ and to some extent ‘culture’ appeal to many people, including those who are most ill and vulnerable. The characters of ‘the common’ and ‘the pleasure garden’ usually appeal to those who are somewhat less stressed and vulnerable, they say, while the ‘festive’ garden ‘appeals to some stressed persons but frightens others’.

**The eight garden room characters**

\textsuperscript{61} Stigsdotter and Grahn (2002), p. 65.


3. Rich in Species  A room offering a variety of animal and plant species.

4. Space  A room offering a restful feeling of “entering another world”, a coherent whole, like a beech forest.

5. The Common  A green, open place with vistas.

6. The Pleasure Garden  An enclosed, safe and secluded place, where you can relax and be yourself, and also experiment and play.

7. Festive  A meeting place for festivity and pleasure.

8. Culture  A historical place, offering fascinating links to other times.


All eight characters have been designed into the prototype healing garden laid out at the Swedish University of Agricultural Sciences. As well as offering different therapeutic programmes to people suffering from stress, the garden will allow researchers and scientists to study how the garden functions for these people, and to test different design hypothesis. The garden has three main areas: a welcoming area that attracts the visitor without asking anything in return; a nature area divided into forest, grove, and a meadow surrounded by an ellipse; and an area of cultivation, with garden rooms set aside for hardscape (reserved purely for horticulture), traditional cultivation (like an allotment garden), and a forest garden room designed to look like a natural forest but intended for active cultivation. It is, indeed, an ambitious programme.

SOME UK EXAMPLES
Healing gardens in the UK have not reached the same degree of sophistication as the Swedish model just quoted, and it is at least

debateable whether such a schematic approach would ever take root in
Britain, where gardens are part of our everyday landscapes, appreciated
but generally left unanalysed. There are nonetheless some outstanding
examples of healing gardens in the UK created outside the King’s Fund
programme, which display different characteristics. We discuss three
approaches here:

• ‘holistic’ gardens
• horticultural gardens
• gardeners’ gardens.

‘Holistic’ gardens and the Glasgow Homeopathic Hospital
Unlike many King’s Fund gardens, which seek to transform existing
spaces, the garden at Glasgow’s Homeopathic Hospital is fundamental to
its architectural conception. Opened in 1999, the 15-bed hospital was built
with charitable funds to stringent NHS cost and space standards, and
handed over to the NHS on completion. It now treats some 500 inpatients
and 10,000 outpatients a year, offering orthodox and complementary
medicine under one roof.

Central to the building’s success is Director Dr David Reilly’s design brief
to architects, which linked the building to its outside space and gave both
a therapeutic purpose. ‘Glasgow’s new Homoeopathic Hospital will serve
as a focus of care which will draw upon modern and traditional approaches
to create good medicine,’ explained the brief. ‘This new hospital will signal
its healing purpose to viewers from the outside. It will also create an
harmonious interior environment that will help in the process of healing.’

The competition to design the hospital was won by Glasgow-based
architects, Macmon, who met the brief with an elegant L-shaped structure
that surrounds and enfolds the south- and west-facing garden. Interior
and exterior provide an integrated care and healing environment, giving
all patient rooms floor-to-ceiling views out (and access to) the garden.

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63 See Cooper (2006), for instance
The garden merits the ‘holistic’ label because it sets out to create a sympathetic space for body and mind, where healing can take place. This quotation from Hippocrates appears on the hospital’s website: ‘Health depends on a state of equilibrium among the various factors that govern the operation of the body and the mind; this equilibrium in turn is reached only where man lives in harmony with his external environment.’

With the building still a concrete shell, the hospital commissioned lead artist Jane Kelly to collaborate with the architect on the building’s colour environment, which she based on extensive research into the sources of homeopathic medicine, whether animal, vegetable or mineral. Whites, lavenders and peachy yellows emerged to form the hospital’s restricted palette of colours, used in different strengths according to the homeopathic concept of dilution.

Jane Kelly was then asked to take on the design of the garden. The hospital had already been operating for about a year from its site in the middle of a field. This possibly influenced users’ desire for a wild rather than a formal garden, a point that emerged from extensive consultation among service users and staff, seeking reactions to all the design considerations Kelly could think of. The important question is not, ‘What do you want the garden to look like?’ says Kelly, but ‘What is this garden for?’

The design established a hierarchy of uses. Top priority was given to views into the garden from the beds of patients unable to move outside. Second, the garden provides visual interest for everyone as they move around the hospital. Third, the garden entices service users and staff outside in all weathers, offering a place to sit or walk about as they wish.

As a garden dedicated to the principles of healing, it must be counted a resounding success, giving all inpatients a privileged view into the natural world and suffusing the whole building with reflected natural light to the benefit of all who use it. Seating areas to either side of the informal reception desk (which resembles a Scandinavian health spa rather than a
fully functioning state-run modern hospital) look out to a paved and gravelled courtyard with architectural planting. Each plate glass window along the hospital’s small inpatient wing provides a different view, some wild, others tamer, such as one view to a small lawn. Curved paths leading into the garden accentuate the sense of space (in reality, the garden is very much smaller than it looks from the inside), while judicious planting affords privacy without cutting off the view. Seats, tables and shelters afford destinations and places for small groups to sit and talk, or simply to sit.

The planting itself is a mix of the familiar and the unusual, exciting curiosity and encouraging people to explore. Users often ask the gardeners to identify plants they want to grow themselves (surely a measure of the garden’s horticultural success), and the hospital now provides a stack of gardening books in the day room to help with queries about plant identification or growing conditions.

The colours used in the garden follow the same principle of homeopathic dilution adopted for the building: subtle variations of white, ochre, lavender and terracotta in addition to the many dilutions of green. This was less evident in autumn when I visited the garden just as the leaves were turning, berries were forming (including red and pink rowan berries, and a startling black elder) and the last of the coneflowers were shedding their bright yellow florets. At other times of the year, ‘planting colours strengthen from north to south. Whites and lavender in the gravel courtyard are enlivened by the ochres and blues in the adjacent herb garden. The perennials around the lawn range through yellow, orange and pink shades which move into a warm mix of crimson, red and violet around the terrace and raised beds of deep lavender blue glazed bricks.’

Planning and planting a garden like this demands a good working knowledge of plants, of course. Although an artist by training and profession, Jane Kelly admits to a strong interest in gardens, especially walled gardens (her MA thesis on the wedding dress as a cultural object.

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64 For a full description and many views, see www.ghh.info
made connections between the dress as a fertility symbol and the garden, concluding that both set out to control and contain nature). She remains involved with the hospital as lead artist, responsible for commissioning artworks, for instance, and devoting two days a month to the garden.

Two gardeners between them work one day a week, storing up their days during the winter time for labour-intensive tasks such as grass cutting, weeding, splitting bamboos and dividing herbaceous perennials. Some replanting is needed as the garden is now six years old, but there isn’t really a budget for this. The ‘fairy mounds’ loved by foxes and other wildlife were recently strimmed, prior to planting with ox-eye daisies and other wild flowers, and there are plans to remove straggly willows by the winding path. A garden such as this is not overly demanding but it needs a skilled hand to let it develop properly. Any contribution made by service users to its upkeep is welcomed primarily for the benefits it brings them.

**Topher Delaney’s Californian cancer gardens**

In style and philosophy, the garden at the Glasgow Homeopathic Hospital is close to those designed in the US by Topher Delaney for cancer treatment centres. According to an article in the US magazine, *Women & Cancer*, Delaney’s gardens invite ‘peace and reflection, while educating visitors about the actual healing properties of certain plants’.

It continues:

‘Although each garden may be influenced by its location and the particular needs of its visitors, Topher does recognize several elements that are essential to the harmony and the comfort of such spaces. All gardens, she says, should include a physical shelter from wind, rain, and bright sun; shelters may be arbors, greenhouses, tree canopies, or stone walls. She also promotes the concept of a “cultural shelter”, which she describes as a space that provides security and safety, where guests may be “sheltered from some social interactions”.'
‘Healing gardens should also invite visitors to relax – body and soul. Places that are warm and equipped with benches, swings, hammocks, and soft lawns or groundcover foster ease, and serenity. As well as repose, Topher’s gardens promote activity. With what she terms “active accommodations”, she recognizes the therapeutic importance of tending to the garden’s well-being through planting, weeding, and pruning.

‘With these basic elements as foundation, Topher’s creations are further guided by imagination and joy – sensibilities she uses to inspire, engage, and comfort visiting cancer patients.’

Mia James, ‘Planting seeds of health and hope’, Women & Cancer, Summer 2006

**Maggie’s Centres**

The UK-based cancer charity, Maggie’s Centres, offers more examples of an architecturally-inspired reaction against the standard institutionalised health service environment. Set up around Britain in an expanding programme, the centres commemorate Maggie Keswick Jencks, architectural historian and author of *Chinese Gardens*, who died of cancer in 1995. With her husband, architectural writer and historian Charles Jencks, she helped to create the Garden of Cosmic Speculation at their home in Portract, Dumfriesshire, one of the great new landscape gardens of the twentieth century.

Landscape plays a part at the growing number of Maggie’s Centres opening around Britain, many by internationally renowned architects such as Frank Gehry (with whom Maggie was working before her death on a garden design for one of his private clients), Zaha Habib, Daniel Libeskind, and Richard Rogers. Non-residential and attached to major NHS hospitals where cancer is treated, the centres offer a friendly, non-institutional environment to people with cancer, their families and carers. Their aim is ‘to help people with cancer to be as healthy in mind and body as possible and enable them to make their own contribution to their medical treatment and recovery’.
As chief executive Laura Lee explains, architecture was important from the outset because of Maggie Keswick’s own experience waiting for treatment in a windowless room, and as an inpatient for six weeks spent looking at a concrete wall. ‘The waiting itself isn’t the problem, but how you wait and what you do with the time. A building’s internal architecture and its relationship to outdoor spaces can alter the feeling of being in hospital.’

Among the charity’s first centres to open, those in Glasgow and Edinburgh are in converted buildings, with relatively small outdoor spaces. Glasgow’s garden lies in the shadow of the Western Infirmary, and is dominated by Charles Jencks’ aluminium sculpture of the DNA double helix. Although intellectually comforting (with its suggestion that mapping the human genome might allow us to edit out diseases such as cancer), it is undeniably hard-edged and seemingly at odds with the gentle ambience normally associated with healing. In the Edinburgh centre, Architect Richard Murphy’s conversion of the stable block at the city’s Western General Hospital creates tiny slithers of views out to rustling bamboos and a water feature.

Two of the charity’s latest commissions draw ‘nature’ from their surroundings. Zaha Hadid’s building in Fife sits in a basin of wild, natural landscape, while Frank Gehry’s centre at Dundee (named Building of the Year in 2004 by the Royal Fine Art Commission) has probably the best views of any hospital in Britain, across woods to the Tay estuary and the mountains beyond.

Currently under construction is Maggie’s Centre, London, at Charing Cross Hospital – building by architect Richard Rogers and landscape by Dan Pearson, renowned for his horticultural expertise and natural, intuitive landscapes. The architect’s brief for the site was disarmingly short, largely because the charity believes in defining how its buildings should make people feel, rather than immersing itself in the specifics of form and function.
On the garden areas, the brief comments:

‘We like the idea of a continuous flow between house and garden space; there should be somewhere to sit, easily accessed from the kitchen. We want the garden, like the kitchen, to be an easy public space for people to share and feel refreshed by. The relationship between “inside” and “outside” is important. A house protects you from the “outside”. Equally the “outside” of a garden is a buffer to the real “outside”. It is a place where you can feel sheltered but enjoy a bit of the kind sides of nature.’

While still on the drawing board, Dan Pearson’s interpretation of the brief appeared as follows on his studio’s website:

‘The purpose of the landscaping is to integrate the standalone building into the hospital site, while also creating a distinct environment around and within the building, adding to its healing potential. The spaces are lushly planted and are designed to start the process of decompression and restoration the centre wishes to encourage.

‘A massed birch woodland wrapping around the whole building shields it from the noisy Fulham Palace Road and provides a green backdrop for the Centre’s roof gardens. A woodland walk leads to the centre between existing mature plane trees culminating in a public courtyard surrounded by white flowered magnolias. Inside the building the entrance corridor is planted with rustling evergreen bamboos and a series of contemplative inner courtyards, seen only from within the building, are planted with exotic architectural plants to provide year round interest.’

Horticultural gardens

So far, this paper has focused on gardens and landscapes that are relatively recent. St. George’s NHS Trust in Tooting, south London, has established an enviable reputation for horticultural excellence that is extremely rare among acute hospitals in the country’s major cities.

Unlike many trusts, which maintain their gardens through contract labour, St George’s Trust has employed a skilled gardener, Bob Holdawanski, for the past eighteen years. He looks after the 32-hectare site helped by four gardeners with special needs and a dedicated band of volunteers. Gardens at St George’s fall within the remit of Arts Co-ordinator Belinda Harward,

65 Architectural Brief for Maggie’s Charing Cross, London.
66 www.danpearsonstudio.com
who sits within Estates but reports directly to the nursing directorate, thereby filtering arts and environment issues into the hospital’s core mission.

While St George’s Trust has no specific green strategy, it has devoted more attention to green space over the past few years, partly due to the influence of the current chair and partly through a growing understanding of documented therapeutic outcomes. The results can be seen on the ground. One of the hospital’s greatest assets is a large courtyard water garden designed by Anthony Paul in the late 1980s, the legacy of a professor in the hospital’s Medical School.

The lush planting pays tribute to Holdawanski’s horticultural skill in maintaining a mix of native and exotic species that include bamboos, acers, a great patch of shiny *Acanthus mollis*, a hawthorn much loved by the birds, and rarities such as the pea tree (*Caragana arborescens*) and the golden rain tree (*Koelreuteria paniculata*). He tries to make sure there is something of interest at all times of the year. The overwhelming impression is of a rampantly fertile Eden at the heart of a busy, modern hospital, its sense of a place apart marred only by the noisy whirrings of a hospital cooling system awaiting repair. The garden, says Holdawanski, is used by some five to six thousand people a week, both hospital users and staff who seek refuge here in their breaks. Patients come here in their wheelchairs – sometimes even in their beds; and some users sit and watch the fish for hours.

The water garden is also the hospital’s main centre for wildlife. Blue-tailed damselflies, clouded yellow butterflies, toads, frogs, grey herons, kestrels, sparrowhawks, grey wagtails, a single sedge warbler, black redstarts, redwings and hedgehogs are among the many recorded visitors to the hospital. The netting now used to protect the koi carp and other fish in the pond from visiting herons has also sadly deterred the darting dragonflies.

67 [www.david.element.ukgateway.net/stgeorgeswebpage1.htm](http://www.david.element.ukgateway.net/stgeorgeswebpage1.htm)
St George’s other main courtyard garden is currently under reconstruction. Created originally in 1982 by landscape artist Shelagh Wakely as a physic garden for the display of pharmacological plants (including many poisonous species), it had been closed to public access by tightening health and safety legislation, and declared off limits even to garden volunteers. Although medical students continued to draw on it as a teaching resource, the ‘Pharmacy garden’ was badly under-used as a precious area of green space at the hospital’s heart, and infrequent maintenance allowed the garden to evolve semi-naturally over time.

Redesign was funded by St George’s Charitable Foundation, which considered two options: a low-cost option offering a visual refuge from clinical spaces but no public access, and a costlier scheme that would also allow safe public access. The Foundation opted for the latter, commissioning a new garden design by Richard Marti Garden Architecture which is currently (October 2006) in construction. The hard landscaping has been planned for the same high footfall as the water garden, and will be fully accessible for wheelchair users and children. Although planting is mainly herbaceous, Bob Holdawanski can be expected to develop year-round interest with structural shrubs and small trees. And with the removal of poisonous plants, garden volunteers will once again be allowed in to maintain the garden regularly.

Elsewhere around the hospital, the landscape benefits from Holdawanski’s horticultural knowledge and skill, and his ingenuity in gardening for maximum effect on a minimum budget – buying plants as small plugs and growing them on; buying stock out of London (apart from winter bedding, bought locally); propagating in the hospital’s tiny greenhouse; composting on site instead of buying in fertilizers. A new garden near the front entrance contains semi-tropical plants to remind people of their holidays abroad, including banana trees, a *Grevillea* with lobster red flowers, *Melianthus major*, and the showy succulent, *Beschorneria yuccoides*. (Plants survive here in St George’s microclimate that would die in nearby Wimbledon.) Among the trees in this small hospital corner you will find a
tulip tree, a dawn redwood, and a Liquidambar for spectacular autumn colour.

Bulbs flower at St George’s from January to June, and the hospital site boasts more than 100 trees, from native alders attractive to wildlife to showier species such as the snake bark maple, the handkerchief tree and the katsura tree whose fallen leaves smell of burnt sugar. Bob Holdawanski is particularly proud of an elm returning to the English landscape. And somehow, he and his helpers find time to plant the bright windowboxes outside the diabetic clinic, where they can be admired by the clinic’s predominantly older users.

Of course, not everything works across such a large site. The summer’s drought was fatal to some plants, as the Trust’s directors insisted on watering by bowsers to meet the spirit of the hosepipe ban (the hospital has its own well). Plant thefts continue, sometimes of whole trees. The hospital’s no-smoking policy is actually exacerbating the problem by removing outdoor smoking shelters, which had previously channelled smokers into small areas. From January 2007, smoking will technically be no longer allowed outside the hospital, but without the manpower to police such a measure, smokers will simply spill out everywhere. Not all garden areas can be kept free of weeds all the time. And continual building works leave environmental havoc in their wake. But on balance, St George’s record on greening its hospital environment is outstanding, a credit to the foresight of its directors in employing a skilled horticulturist.

Garden maintenance
Not all trusts can match St George’s for home-grown horticultural expertise. And trusts should be aware that when they commission garden designs from outside consultancies, some landscape architects are better at designing and engineering the landscape than at planting. Trusts must also consider how they will maintain the garden into the future. Users may be perfectly willing to lend a hand as part of their own therapy but this cannot generally be assumed.
We have heard of PFI-funded courtyard gardens that have degenerated into weed-infested wildernesses, and visited one garden at a brand-new PFI-funded mental health hospital where the weeds were threatening to take over even before the adjacent ward had received its first patients. The new campus-style hospital was built in an area of urban scrubland, replacing a much-loved but thoroughly impractical building set in fine, natural surroundings on the outskirts of town. To ease the transition, and to compensate for the environmental loss, the trust undertook an ambitious programme of consultation between users and artists within an arts strategy masterminded by arts consultancy, Willis Newson. As well as enhancing the new environment through art, the aim was to give users some control over their future environment. The process of working with artists was also therapeutic for some patients.

While the rest of the hospital had been open for several months – and the outdoor spaces were clearly relished by users – an unexplained delay in opening this particular ward within the older adult unit meant that no attempt was made to keep the weeds under control. Its neglect was made even more poignant by the care that had gone into its creation. Exploiting the theme of childhood memories that had emerged through consultation, ceramic artist Marion Brandis created a charming daisy chain path using ceramic inlays, enticing residents to explore its weaving circular path. Daisies were repeated on the obelisk bird feeder, designed as a focal point to encourage people and birds into the garden, on the big terracotta planters, and on the coping to the raised brick beds filled with fragrant and tactile planting such as lavender and lambs’ ears (*Stachys byzantina*).

**Gardeners’ gardens**

As explained earlier, this paper does not intend to cover in any detail the many initiatives in the UK and elsewhere that use horticulture as a form of occupational therapy. But we did want to establish where horticultural therapy fits into healing gardens at hospitals and other healthcare facilities.
To get some idea, we contacted Thrive, the main national charity in the field, set up in 1978 to promote gardening as a way of changing the lives of disabled people. Thrive is often asked for advice on issues with a disability focus, and on more general questions of design, practice, and commissioning hospital gardens.

For the past five years or so, Thrive has been working with BUPA to design the template for a sensory garden, and training their staff in its implementation. These are some of the gardens BUPA told us about:

- A garden at Oakhurst Grange Nursing Home, Crawley, West Sussex, which includes a fragrant herb area, bamboo plants, wind chimes, colourful and scented flowers, a bird bath and bird feeders, and features to evoke residents’ memories such as a swing seat and a wheelbarrow planter.
- A garden at Bayford House Nursing Centre, Stockcross, Newbury, Berkshire with climbers such as roses and clematis, scented and colourful plants, and waist-high troughs to enable wheelchair users to participate in gardening activities.
- A garden at the Donnington Residential and Nursing Home at Newbury, Berkshire, with a pergola, raised beds, colourful and scented plants to attract butterflies, and a planned herb garden.

Thrive’s Chief Executive, Nicola Carruthers, emphasised the need to consider how gardens will be used, and pointed to the critical role of one or two ‘champions’ with the energy and enthusiasm to take a project further. Schemes fail when they fail to engage service users, she maintains. ‘There are all sorts of simple things that can be done at low cost, such as changing the planting in tubs at different seasons and seeing if patients want to help.’

Among the gardens we visited for this research, user involvement was generally minimal, although St Ann’s had a (separate) area for horticultural therapy and St George’s Tooting had a dedicated band of volunteers who help to maintain the hospital gardens.
As we saw earlier, the Chief Executive of the Joseph Weld Hospice was keen to develop the garden in a way that would encourage more active participation, especially by users of the day centre. Already gardens feature in a number of innovative programmes for individual users developed by the hospice’s occupational therapists, and Chief Executive Alison Ryan hopes to expand this side of its work.

5: CONCLUSIONS

This paper has provided a snapshot of healing gardens attached to medical facilities in England in the summer and autumn of 2006. Much has happened since, especially to the structure and funding of health provision in Britain, to render detailed recommendations out of place. But the thrust of the paper’s findings remains valid nonetheless, and it is hoped that the good practice revealed will continue to inform policy and practice.

The paper’s initial concern with user involvement proved at the time to be misplaced. Once a decision was taken to create a healing garden, potential users were consulted more often than not about the kind of garden they wanted. What was often lacking, however, was any real understanding of horticulture or how green space needs skilled care if it is to thrive and give people the benefits they crave.

The study uncovered much to admire, however. The outdoor spaces created under the King’s Fund Enhancing the Healing Environment (EHE) programme were the tangible benefits of an initiative that also fostered interdisciplinary working and patient involvement, and (because teams were led by nurses) attempts to link the external environment to therapeutic outcomes.

But programmes such as this need to maintain momentum if they are to provide lasting benefits. As authors John D. Thompson and Grace Goldin remarked about the fate of London’s Bethlehem (Bedlam) hospital, built with glorious intent as a ‘palace for the insane poor’:
Hospitals have a way of being conceived in glory, executed with ingenuity and humanity, then subjected in use to misuse and abuse, finally to be overcrowded and understaffed and always and forever plagued by insufficient funds. A hospital before death can become more decrepit than a man. The man dies, but a moribund hospital may live on for decades – and what is so terrible, filled to capacity.  

Today, the image is in danger of being reversed: spanking new hospitals empty of patients because they lack the funds to staff them; and newly created hospital gardens becoming choked with weeds before a patient has even set foot in their soothing environment.

The paper nonetheless highlights success stories that others can emulate: the inpatients at the Glasgow Homeopathic Hospital enchanted and intrigued by the wildly naturalistic garden planted in their midst; the young men of the locked wards at St Ann’s Hospital, Poole, contributing their ideas on what their courtyard garden might become; patients at St George’s Hospital Tooting watching the fish for hours on end, and staff eating their sandwiches under the alders.

As Oliver Sacks and Topher Delaney eloquently attest, gardens can bring comfort to wounded bodies and spirits. In harsher economic times, their potential to heal or at least console becomes ever more valuable.

Jennifer Potter

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68 Thompson and Goldin (1975), p. 79.
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