

Designed with care:

Design and neighbourhood healthcare buildings



Advance Dental Clinic, Chelmsford

Light sensitive

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|------------|-----------------|
| Client: | Dr Andrew Moore |
| Architect: | Richard Mitzman |
| Completed: | 2003 |
| Cost: | £324,000 |



Top:
A dilapidated, single-storey doctor's surgery previously occupied the site.

Bottom:
The design of the building makes the most of a tiny site in this residential suburb.

An awkward filling

When Andrew Moore was setting up his own private dental practice in Chelmsford, he purchased an awkward, long and narrow site, occupied by a small, single-storey doctor's surgery, by then closed and dilapidated. Looking for advice on what it might be possible to achieve given the site limitations in this residential suburb, he turned to Richard Mitzman, a former dentist, now an architect specialising in distinctive dental surgeries. Moore gave Mitzman a free hand to prepare designs for a surgery that fitted the site, met the technical and hygiene requirements and made good economic sense. His first two attempts met with planning problems, with the council insisting on a single storey building, in red brick and with a pitched roof. In response, Mitzman pushed these requirements to their limits – a soaring single storey (matching the height of the neighbouring houses), a stepped, pitched roof, the minimum use of brick, and the maximum use of glass. By placing the surgeries, x-ray and consulting room between two parallel corridors, one for staff and one for patients, Mitzman was able to make full use of the site footprint.

Let there be light

The generous use of light and glass is a distinguishing feature of Mitzman's work and a key element in the success of this building which, given the constraints of the site, threatened to be very dark. To counter this potential problem, Mitzman gave the front of the surgery a huge glass wall, set back from the road on the established building line, and used roof-lights to top light the four surgeries, the hygiene area and public spaces, including the corridor which provides patient access to the consulting room and surgeries. Here, use was made of clerestory windows which filter light onto the opaque glass walls of the surgeries. Painted walls are all white. Even on a gloomy day, the impact on the reception and waiting area is like a shaft of light. Not surprising, perhaps, that the Advance Dental Clinic received a regional RIBA Award in 2004.

Opposite:
The use of rooflights ensures that the building is full of natural light.

The generous use of light and glass is a distinguishing feature of Mitzman's work and a key element in the success of this building





Left:
A concern for hygiene has led to the surgery being a clutter-free space.

Keep it clean

Two other characteristics of Richard Mitzman's work are a concern for hygiene and the advocacy of two-surgery dentistry. Core to his thinking is the elemental truth that the less there is in the surgery, the less there is to keep clean. A Mitzman-designed surgery is therefore a clutter-free space, distinguished by a double-access 'steri-wall', connecting the surgeries with the central sterilising area, through which clean and dirty instruments can be passed. This has the effect of significantly reducing the danger of cross-infection and, along with other procedures, greatly increasing patient confidence.

The double surgery enables a dentist to move straight from a 'dirty' chair to a clean one without losing clinical time. The uncluttered 'dirty' surgery can then be easily cleaned. Andrew Moore finds that this makes more efficient use of his time and Mitzman has calculated that an extra hour gained each day gains six weeks a year, quite quickly producing a significant return on the investment in the additional surgery.



Left:
The double-access 'steri-wall'.

After two years, Andrew Moore and his welcoming staff team remain enthusiastic about the benefits of Mitzman's design philosophy

Right:
View back to the
clinic's comfortable
waiting area.



Below:
Andrew Moore at
work in the surgery.



Smiles all round

After two years, Andrew Moore and his welcoming staff team, which now includes two additional dentists and a hygienist, remain enthusiastic about the benefits of Mitzman's design philosophy and its practical implementation at the Chelmsford clinic. So it appears do patients, whose numbers are growing by some 40 a month, mainly as a result of personal recommendations.

Nowhere perhaps in everyday healthcare does *schwelle angst* run higher than at the dentist. As one patient commented to the RIBA judges, 'I don't mind coming to the dentist these days.' Perhaps it is the clean design of the building and its interior spaces, the coffee machine in the waiting area, the glimpses of sky from the dentist's chair or the day's newspapers. Or maybe it is just the fact that there is not a three-year-old *Country Life* in sight.

Top tips for healthy buildings

The challenges of a constrained site can be met by design

A well planned healthcare building can make good hygiene standards easier to maintain

Good design makes long term economic sense

CABE's key elements of good healthcare buildings

CABE believes that a set of key elements helps to create a good healthcare building.

CABE's 10 key elements

Good integrated design

Public open space

A clear plan

A single reception point

Circulation and waiting areas

Materials, finishes and furnishing

Natural light and ventilation

Storage

Adapting to future changes

Out of hours community use

Good integrated design

Design excellence is not just about attractive buildings. Good integrated design must also consider how a building can contribute positively to its environment.

Wherever possible, in the case of neighbourhood health facilities, this should include ease of access and straightforward integration with public transport. At the Hove Polyclinic, where the whole site was the subject of a Development Control Plan, the bus from the centre of town brings patients and staff directly to the clinic's forecourt, while buses stop outside both the Chiddenbrook and Idle surgeries.

Public open space

A patient-centred healthcare building should extend its concern for patients beyond its walls by trying to provide well-managed public open space in which pedestrians are given priority over cars, even at rural surgeries where car parking is essential. Good use of sensitive landscaping to enhance the natural landscape can be seen at the Maggie's Centre in Inverness, where Charles Jencks's landscaping both startles the eye and complements the architecture

Opposite:
The entrance to Barts Breast Cancer Centre which communicates high quality design from the moment of arrival.

or, by contrast, in the grassy undulating land which surrounds the Hove Polyclinic or the accessible inner-city gardens at Pulross.

There is an increasing body of evidence that nature can offer more than simply a pleasant setting for healthcare; it can also contribute directly to reducing stress and pain, and speeding recovery. Work led by the American academic Roger Ulrich has shown that 'simply viewing nature' produced 'a constellation of positive emotional and physiological changes' in patients. Moreover, 'hospital gardens not only provide restorative or calming nature views but can also reduce stress and improve outcomes through other mechanisms – for instance, fostering access to social support and providing opportunities for positive escape and sense of control with respect to stressful clinical settings.'¹³ It is a theory that St Oswald's Hospice would endorse through long experience of the therapeutic value of plants and gardens, and one that the Brent Birth Centre has ambitions to exploit as soon as funding allows.

A clear plan

The tranquil Georgian square which offers a focal point at the Barts Breast Care Centre acts as a bridge between a therapeutic urban landscape and the ordered and carefully planned internal design of the centre itself. A critical success factor of many of the case studies is their meticulous attention to the patient journey and the subsequent preparation of a clear plan.

For many patients, the experience of going to the doctor or dentist induces anxiety. The German phrase *schwelle angst* (a fear of the threshold) is particularly applicable in a medical environment. Good design in this context must seek to lower or even remove this psychological barrier so that patients



Left:
An aerial view of Maggie's Highlands in Inverness, by Page & Park.



Below:
The pebbled approach to Advance Dental Clinic in Chelmsford, by Richard Mitzman.