

Stratheden Hospital Elmview and Muirview Mental Health Wards

A Case Study



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Stratheden Hospital - Elmview and Muirview Mental Health Wards



^ Elmview sitting low on the landscape
Image credit: A+DS



^ Glazed panel detail in Elmview
Image credit: A+DS



^ Elmview courtyard
Image credit: A+DS

Overview

The recently completed Elmview and Muirview wards at Stratheden Hospital near Cupar, Fife is a multi-award winning mental health facility, demonstrating that well considered thoughtful design of the environment can provide significant benefits to patients and staff.

The development was built over two phases and consists of an 18-bed ward (Elmview), and a 24-bed ward (Muirview), both are low security and deal with a range of organic and functional mental health conditions.

The new wards replace existing services that had previously been provided at Whyteman's Brae Hospital in Kirkcaldy from the 1960s. The hospital, which was designed with nightingale wards, had changed direction over time from being purely a mental health hospital to providing more of a community service. The ward types had become unfit for purpose and were generally considered to be outdated for the model of care required. As Ken Quinn, senior nurse states the facility got to the point that:

"Staff could not provide the quality of care they wanted to within their current environment with the resources available to them"

Ken Quinn, Senior Nurse, NHS Fife

Re-provision of the service on the existing hospital grounds was not possible due to the lack of space available on the campus in Kirkcaldy and after an extensive consultation process two potential site options were shortlisted, Queen Margaret's Hospital in Dunfermline and Stratheden Hospital near Cupar. The decision to go with Stratheden was due in part to the wide availability of land but also the picturesque landscape setting, which was seen to offer greater opportunity to provide a better environment for patients.

Elmview ward, the first phase at Stratheden hospital, was the initial pilot project to be taken through the Frameworks Scotland model of procurement. Developed by Health Facilities Scotland (HFS), Frameworks Scotland is a variation on design & build procurement and utilises the NEC3 form of contract, advocating a risk sharing cost reimbursement payment mechanism. The process itself actively encourages a non-adversarial approach to procurement through collaboration between all parties within the process.

Interserve were appointed in 2006 as Principal Supply Chain Partner (PSCP) along with Richard Murphy Architects as design team lead to develop proposals for the project. An initial series of stakeholder engagements were undertaken with representatives from patients, the clients, staff and end users to encourage knowledge transfer and shared learning to generate an evidence-based design (EBD). This was initially helpful for the design team who at that point had little specific experience within mental health and therefore the success of the briefing process was vital in determining the outcome of the project.

"The user-centred design approach that has been developed by NHS Fife (at Stratheden)... signifies the importance of pre-construction collaboration and design evaluation that adds value by generating staff, patient and visitor benefits"

Dennis O'Keefe NHS Dumfries & Galloway (former NHS Fife Design Champion)

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The briefing process itself was iterative throughout the life of the project. Initially it started out as a series of wider workshops but became more focused through the design development and then the construction process looking at technical requirements.

Additionally NHS Fife were also keen to ensure that staff had the relevant tools they needed to support the new facility once complete and actively encouraged staff to undertake a series of training sessions at the Dementia Services Centre at the University of Stirling.

"I think going to Stirling Dementia Centre was really important for staff to see how they could provide care in a different way in a new environment, as the current environment restricted what they were able to do. It was an opportunity to design a new way of working for the future"

Ken Quinn, Senior Nurse, NHS Fife

In this instance, the overall process appears to have helped the design team put together a well developed brief; identifying the business needs and service requirements and pegging these to the output. It also illustrates that Small & Medium Enterprises (SME's), who may not have significant amounts of experience in the sector, can, through a robust briefing process, draw out sufficient information to provide a framework for the design of the building.

Experience

The initial approach to either facility presents you with a single storey building with either a series of mono-pitch roofs or flat roofs, each with their own identity and resembling a series of smaller houses sitting in the landscape. This makes the scale of both facilities appear more intimate and inherently more suited to the nature of their use.

The location of each block on the site appears to have been carefully considered to allow the existing neighbouring wards, located immediately to the north west, to maintain their view over the countryside. The location of ancillary accommodation along these elevations helps to maintain a level of privacy meaning that the facilities don't feel overlooked.



^ Elmview - corner bedrooms
Image credit: Graeme Arnet



^ Elmview internal corridor
Image credit: Graeme Arnet

Elmview social lounge
v Image credit: Graeme Arnet



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^ The entrance drum at Muirview
Image credit: A+DS



^ Flourishing courtyard in Elmview
Image credit: A+DS



^ Outlook from one of Muirview's social spaces
Image credit: A+DS

> Light and colour in Elmview corridor
Image credit: A+DS

Individually each facility has its own unique character, however they do read as a pair through elements such as scale, articulation, and choice of material & colour, similar in a way to non-identical twins.

The main entrance and reception to both facilities are situated on the north face of the building. The Muirview entrance is better defined and ultimately more successful giving good control over the two wards and staff accommodation. Visitors can arrive at the facility and be greeted in a pleasant, light and airy environment without disrupting patients and staff offering a good control of the public and private realm.

Internally the layout of each ward is simple and intuitive with a logical plan. The ward environments are positive with generous courtyard spaces that provide a distinct focal point to each ward. Around these are gathered the social spaces and circulation routes, which incorporate smaller seating zones to encourage social interaction by patients. Large areas of glazing provide an abundance of natural daylight giving patients a constant reminder of the external space available to them, actively encouraging their use. This also helps wayfinding by allowing users to orientate themselves to where they are within the building and where they can go, thereby reducing the need for signage.

The courtyard gardens are sympathetically designed and provide a level of sensory stimulation for the patient. The open courtyard of Elmview adds another dimension to this by giving elderly and dementia patients a positive link to the surrounding landscape. Muirview adopts a different approach with slightly smaller enclosed courtyards with more intimate external spaces. These are supplemented by social spaces at each corner of the ward providing spectacular views out.

The use of glazing is well considered and greatly benefits use of the building by staff, making unobtrusive monitoring possible from most of the social spaces within the central area. This is particularly helpful within Elmview; where the open courtyard makes walking routes around the building longer than Muirview.

Most bedrooms are orientated to face outwards, generally away from the bustle of communal spaces. This serves to maintain a level of patient privacy whilst offering spectacular views of the surrounding landscape to the south and west, an important element of the overall patient environment.

In line with the Scottish Government Health and Social Care Directorate's (SGHSCD) guidance introduced in December 2006 all bedrooms are single rooms. This has significantly improved the quality of environment for patients from that experienced in the previous facility. There were some initial concerns raised by staff around how easily patients could be supervised by this move, however, this has not been a major issue.

"I think nursing patients in single rooms demands a different approach to delivering care. Patient's can become more isolated, which is a big issue, and staff need to be more proactive in their approach and give much more consideration to care planning and risk assessment to ensure patient's needs are met.

Ken Quinn, Senior Nurse, NHS Fife



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^ One of Elmviews bedrooms with window seat
Image credit: Dave Morris



^ Open air view from the Elmview courtyard.
Image credit: A+DS



^ Looking out at the fresh courtyard at Elmview
Image credit: Graham Armet

The bedrooms are spacious, particularly in Elmview, and designed to provide generous amounts of natural daylight. Large bay windows at the front of each room incorporate fixed seating units for rest and relaxation while offering a long view out. These have generally been noted to be well used by patients and visitors alike, however, there is the potential for these to be difficult to use by patients who are less able. Natural daylight provision is further supplemented by high-level windows within the room ensuring there are good levels of light throughout the day.

"All bedrooms are identifiable by their bay windows and pitched roofs creating individual rooms recognisable to patients and family"

Graeme Armet, Architect, Richard Murphy Architects

All the rooms have integrated wardrobes and en-suite bathrooms. In Elmview both the en-suites and wardrobes form a buffer between each of the adjacent bedrooms helping to reduce noise transfer between rooms and giving a calmer environment for the patient. One issue noted by the staff is that the sliding doors to en-suites are not easy to use or indeed recognisable for some elderly patients, particularly those who have dementia.

Servicing of both facilities has been designed to be unobtrusive resolving the problems in the previous facility where staff were removing waste through the ward. Dedicated service areas and service entrances are tucked away from the main entrance allowing discrete management of waste to be undertaken with little disruption to the running of the ward.

The material choice for the building does not mimic the existing hospital buildings at Stratheden but takes its inspiration from the domestic context, and in response gives a more homely character. This softens the image often associated with mental health care facilities by removing the institutional feel.

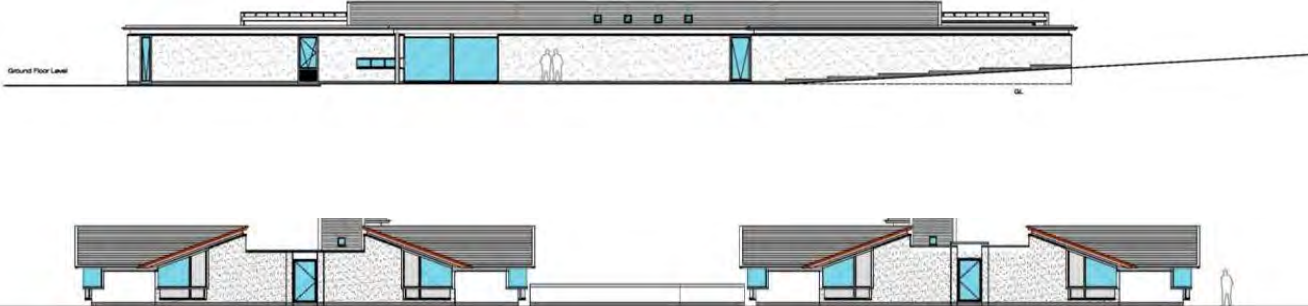
The sustainability approach to the building was achieved through the use of passive low-carbon design elements combining a well-insulated building envelope, abundant provision of natural daylight and maximisation of natural ventilation.

Reaction

Overall, the project is considered to be a success, both from the perspective of staff and patients. In the eyes of the construction industry it has also gained some recognition with the facility gaining a number of local and national awards.

One of the key benefits of the project was the phasing of the facility. This allowed a number of key learning points to be taken from the completion of Elmview ward, which helped to inform the development of the Muirview works.

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^ Elmview elevations
Image credit: Richard Murphy Architects



^ Elmview Layout
Image credit: Richard Murphy Architects

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^ Muirview social space looking out to landscape
Image credit: Piotr Kmiotczyk



^ Muirview
Image credit: Piotr Kmiotczyk



^ Looking out to the Levern Valley from courtyard at Elmview
Image credit: A+DS

These were informed through feedback gained from use of the facility by both patients and staff and proved to be helpful in shaping the facility. Some areas where adjustments were made were:

- *Ward corridors were changed to circuitous routes around each courtyard. This created wander paths for patients, particularly those with dementia, as well as opportunities for shortcuts for staff to aid a reduction in walking*
- *The small lounge areas within each ward were moved to the external corners of the building, which served to improve levels of light for these spaces, making them quieter spaces and linking them to a view.*
- *A more generous entrance foyer was provided allowing a transition for patients, staff and visitors entering the facility and giving patients more privacy within the wards.*
- *Additional provision of access to services was given from within the corridor spaces to allow staff to undertake maintenance work without disrupting patient time.*

The reaction from staff has been mainly positive, with some staff indicating that the facility is providing a significant change to their working practices and a much needed improvement to the working environment itself.

“Staff take pride in their new environment. It’s like anything else, if you are in a poor environment people tend to take less care of it but when you have something you have pride in you are more likely to keep it well maintained. You can see the difference in how people are looked after and how the environment is maintained”

Ken Quinn, Senior Nurse, NHS Fife

As well as this, the facility appears to be being well received by patients. NHS Fife have undertaken research, providing empirical evidence, that lower levels of direct physical intervention have been required since opening, suggesting that patients seem to be happier in the new facility. The knock-on effect is that this serves to free up more staff time to undertake other tasks and provide more focused care to patients. In addition to this, there has been some anecdotal evidence to suggest that there are reduced instances of chemical intervention and drug administration, which staff believe is a result of patients responding better to the new environment.

Similarly, the view from families has been quite positive with feedback indicating an improvement. In some cases the quality of environment proved to be better than some of the home environments with people keen to stay.

“When relatives come to see it, they go ‘wow, that’s great!’”

Ken Quinn, Senior Nurse, NHS Fife

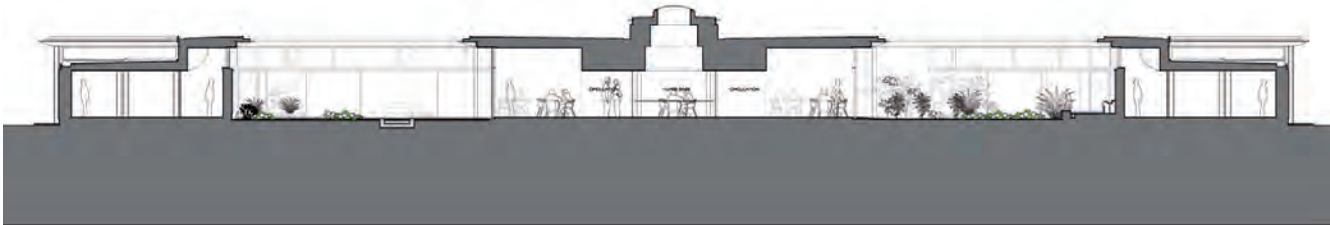
“There were a few families that we couldn’t persuade to leave us! They were all putting in appeals against discharge for their relatives”

Kate Thompson, Clinical Services Manager, NHS Fife

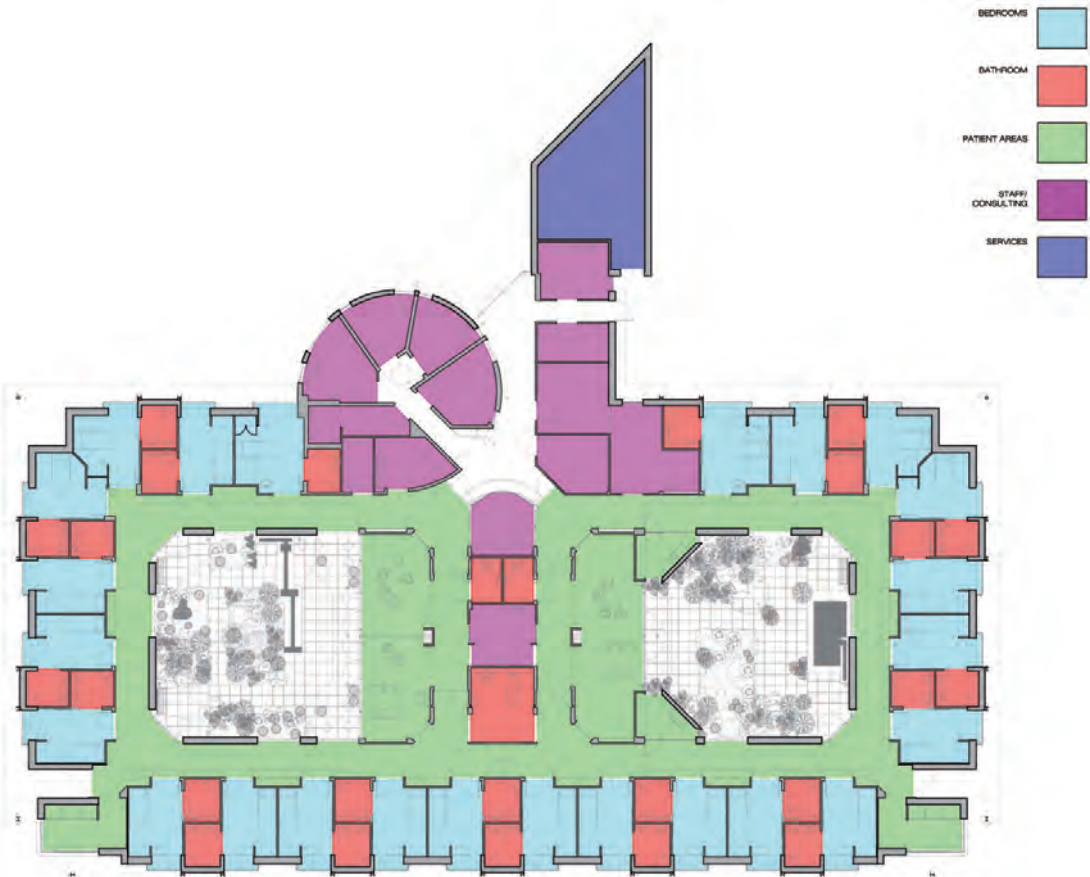
Stratheden Hospital - Elmview and Muirview Mental Health Wards



^ Muirview elevation
Image credit: Richard Murphy Architects



^ Muirview section
Image credit: Richard Murphy Architects



^ Muirview Plan
Image credit: Richard Murphy Architects

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^ Typical corridor with seat in Muirview
Image credit: Graeme Armet

With this being the first in a line of projects to be taken through the Frameworks Scotland procurement route it was expected that there would be a period of adjustment for all involved. The steep learning curve brought with it an initial level of discomfort in the early stages of the project, though these were soon overcome. The relationships established and the learning gained from the first phase of the works seemed to build strong partnerships, which helped make the second phase of the development more streamlined.

"The procurement route brought unfamiliar consultants and construction team together for the first time, a marriage of convenience where expectations and aspirations were very different... This caused unnecessary conflict and abortive work which did not happen on phase two, as all parties better understood the expectations and aspirations of the project"

Graeme Armet, Architect, Richard Murphy Architects



^ Muirview water feature
Image credit: Graham Armet

The extensive stakeholder engagement appears to have been one of the key successes of this project. The early collaboration between the design team, client and stakeholders allowed a natural evolution of the client brief to be developed. Staff have expressed that they felt engaged with the process and appreciated being able to be involved at such an early stage, particularly when the design had not yet been developed. This helped to shape a number of aspects of the environment both for patients and staff.

"I think the fact that [when] the architects came and spoke to them personally and said we haven't spoken to your managers, we're speaking to you; that was a huge boost to them.... to be involved right at the beginning saying we haven't designed anything, here, you tell us what you want, I think was a big thing for them, and I don't think they quite believed that to start with"

Ken Quinn, Senior Nurse, NHS Fife



^ Elmview bedroom from outside
Image credit: Graeme Armet

"In phase one the charge nurse was very vocal about what the aspirations should be for the new unit. With over 20 years experience of Dementia nursing care we were very keen to engage with Fiona Kellock, the charge nurse, and have as much of her input as possible as the design developed. Fiona took us round the existing ward and clearly took us through the daily routines of life on the ward highlighting, what did not work in seaview and how she thought things could be improved for both patients and staff in the new building."

Graeme Armet, Architect, Richard Murphy Architects

With the response to both Elmview and Muirview wards being positive, Stratheden has established itself as a good base model for mental health care facilities in Scotland. This success proves that an early user group consultation period followed by an in-depth evaluation period post completion, informs design teams of their successes and what they could do better. This level of user interaction, assists the delivery of successful care facilities, which ultimately raise the benchmark for healthcare across the board.

> Landscaped courtyards in Muirview
Image credit: Graeme Armet



Project Information

Client body: NHS Fife
Location: Stratheden Hospital, Cupar, Fife
Architect: Richard Murphy Architects
Principal Contractor: Interserve
Value: Elmview: £ 4.6 million, Muirview: £4.2 million
Opening Date: July 2009
Procurement Type: Framework Scotland

A+DS would like to thank the following for their time and candour:

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