

Improving cancer care

Southampton University Hospitals NHS Trust (SUHT), a designated Cancer Care Centre, provides a full oncology service. An extension to its Oncology Centre has improved these vital services for more than 1.5 million people in the local area.



Overview

When SUHT went about expanding its oncology facility it had both a prestigious reputation and a great responsibility to patients to uphold.

The trust provides oncology for Southampton along with areas served by local cancer units, including the Channel Islands, the Isle of Wight, Winchester, Basingstoke and Salisbury. Malignancies treated include breast and lung cancer, head and neck tumours and lymphomas.

Oncology had been working across two sites – with some services based at the new Southampton Oncology Centre at Southampton General Hospital, and others at the Royal South Hampshire Hospital, three miles away. The existing centre at Southampton General already had three linear accelerator bunkers used for radiotherapy treatment, wards, chemotherapy outpatients and support facilities. The trust planned to centralise all its oncology services in a £4.5 million expansion project. This was to

include a ground floor extension with two more bunkers and additional works such as a waiting area.

The trust chose ProCure21 for this sensitive and demanding project because of its partnership approach, ability to innovate and track record for high quality performance. “The trust had already worked with the same PSCP on its earlier £25 million Cardiac Centre scheme and had no hesitation in choosing the firm again,” said Keith Dowell, SUHT Director of Estates and Capital Development.

Benefits from this choice were apparent from the start – for example, several months were saved by not tendering under traditional procurement methods.

However, large-scale construction at the site was a complex proposition and did present some challenges. The Southampton General Hospital is a teaching hospital on a densely developed



“island site” surrounded by residential roads. The new Oncology works were an extension to the Oncology Centre and adjacent to the Eye Unit and Neurosciences Centre. They had to be carried out in phases. Phase 2A began in October 2004 and completed in December 2005. Phase 2A+ started in November 2005 and completed in September 2006. Both were finished on time and to budget.

Achievements and benefits

- The solid partnership between the trust and its PSCP helped ensure that disruption to the working of the hospital was minimised. This was achieved by collaborative decision making via integrated working groups. “The views, expectations and expertise of hospital staff, both clinical and technical, were always taken into account throughout the phases of construction,” said Keith Dowell.
- Neither the trust nor the PSCP knew that the second phase of building would take place when the construction of the first phase started. Funding became available and the trust and PSCP worked together to integrate the second phase extension.

Gary Spring, the trust’s Head of Major Projects added, “It was necessary to modify the first phase during its construction – to ensure extra structures could be added with minimum disruption and with minimum cost.

For instance, we extended the ductwork and put in increased pipe sizes, without this impacting on the completion date (for the first phase) or any claims for disruption on the PSCP. That is pretty much unheard of in traditional contracting.”



- A joint management approach to risk allocation and assessment safeguarded the project as work continued through 2005.
- Collaboration with suppliers involved their input from the outset. One example was involvement at early design stage of the specialist linear accelerator equipment supplier. This proved instrumental in providing accurate information for the substructures and bunker construction of the expanded facility.
- The excellent relationship between SUHT and its PSCP led to the trust approaching the construction firm about another series of projects. A £7m “fast track” new build and conversion scheme, to assist the trust to achieve a critical service change very quickly, has been awarded. The development of business cases for a new critical care scheme at approximately £15m is just starting and a major refurbishment of 13 theatres (£10m) has also begun.

Principles and objectives

Because of the criticality of ongoing patient care, SUHT needed absolute trust in the ability of its contractor to deliver as planned.

The specialist nature of the project demanded the sharing of insight, skills and management.

“We had previously been working with traditional procurement methods and there were initial concerns about ProCure21, centring on the involvement of the design team working so closely alongside the construction team,” said Gary Spring. “However, those doubts were addressed and we can say we have been very happy with the process.”



Major issues

- Advanced construction materials came into play for the linear accelerator bunkers, used for radiotherapy treatments. These bunkers require durable radiation shielding, and accepted wisdom for constructing them has been to use reinforced concrete. Instead, through guidance from the trust, the PSCP used a bespoke system of dry-laid Ledite block radiation shielding and this achieved twice the shielding efficiency. It also enabled the bunkers to fit within existing floor to ceiling heights and be easily dismantled, remodelled and extended to accommodate future developments at the site – a key benefit as space is at a premium for the trust.

“The bunker shielding materials are manufactured in north America and then shipped to the United Kingdom. ‘Just in time’ delivery planning was fundamental in ensuring this critical path programme operation was completed ahead of schedule.”

Rod Stiles,
HBG Implementation Manager





Successful initiatives

- Reduced construction programme, through consultative approach with suppliers.
- Future proof design.
- All dry construction – using pre-finished components almost completely eliminates drying out times and speeds up the build process.
- Ledite blocks were laid several at a time by machine rather than hand laying.
- ‘Just in time’ delivery of the linear accelerator bunkers shortened the overall process. The trust did not have to prepare extensive documentation or go out to tender. Patient services were therefore delivered much faster.
- Following the successful oncology expansion project, the trust has: placed the order for the “fast track” theatres, OPD and breast imaging scheme at £7m and engaged the same PSCP for its major theatres refurbishment and critical care expansion (£25m).



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