

A look at progress on the North Staffordshire Primary Care Trusts Fit For the Future Programme

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At its inception in 1948 the NHS inherited a legacy of buildings which, albeit of diverse quality and type, included some of the finest architecture of the 19th century. However, the estate was under immediate pressure from the demands and aspirations of the new service and from the outset there was immense need to add, change, and 'infill' existing hospital developments in order to improve the range and scope of facilities.

The development of new technologies and new forms of treatment have since placed ever wider demands on accommodation. As a consequence, the coherence of the planning of many of the best hospitals inherited by the NHS at its inception, and built after its formation, has all too often been lost as a result of piece-meal development and redevelopment of hospital sites across the country.

By the closing decade of the 20th century it had

The demands placed on NHS services have become intense and continue to grow as medical sciences advance and life expectancy extends, but it does not serve our community well if perceptions are adrift from reality. The difficulties should and indeed will be reported: performance will continue to be measured, targets benchmarked, and standards of medical care will accordingly continue to rise. In this context, an outdated hospital infra-structure undermines the capacity of healthcare staff to deliver optimum services into the community.

Accordingly, some 50 years after the creation of the NHS, the Department of Health and NHS Estates have encouraged every healthcare community to assess its entire estate in the widest context of healthcare services, to ensure that our hospital facilities are rationalised, reorganised,

inadequate buildings in which those services have been accommodated. The Trust's brief aimed to centralise its services into new facilities on the City General site and contribute to the creation of stronger primary care services as a vital component of a vision for the future.

The City General site itself had been subjected to piecemeal development since the mid 19th century. This has led to a dispersed and poorly connected range of facilities across the sites: arrangements that precluded the efficient implementation of medical care services.

The new master plan integrates elements of the existing estate within the new build and provides a framework for future expansion. This offers a sustainable response to the provision of new healthcare facilities.



become evident that such an approach could continue no longer. A more substantial and radical review of the entire estate would be necessary and a substantial programme of rebuilding was inevitable.

Despite all these changes the NHS still enjoys a special place in the affections of the British people, yet its role in the context of a modern consumer-based society has become increasingly ambiguous. Available to all, the NHS aspires to deliver sophisticated yet caring services to the highest standards.

Such aspirations place considerable demands on the quality of medical practice, equipment and technology, and the facilities from which services are provided. Sadly, against such demands, and despite significant improvements in efficiency, continued developments in medical practice, and enormous investment in new technologies and facilities, the public perception of the NHS is all too often of an organisation that struggles against under funding.

replaced and where appropriate complemented with entirely new buildings on new sites. But the resulting projects should do more than just meet the demands of today; they should 'lift the spirit' of all those who are treated, visit and work within our hospitals. The new architecture should also respond to continuing advances in medical practices, technologies and service delivery. In pursuit of these objectives, and in order to encourage appropriately high ambitions, best practice, and a co-ordinated design response for the work as it proceeds, the Department of Health established a design programme, and developed a process to review the design of major capital schemes.

The University Hospital of North Staffordshire is a response to their objectives and has been delivered against their review process.

The existing buildings are currently split across three sites. This arrangement produced a number of problems stemming largely from the wide dispersal of services, but also the outdated and

When completed, the new complex will constitute the most significant built component in the rationalisation of healthcare facilities within North Staffordshire. Associated projects, being carried out by the same team, also include Maternity and Oncology provisions at the same location together with a community hospital in North Stoke.

The design allows for the consolidation of services currently provided across three sites to be concentrated onto a single urban campus. Previous logistical problems involving patient and staff movements between the various sites will be eliminated.

The developed masterplan has a clear and straightforward rationale. Car and public transport movements are all to the northern side of the site. Thus patient, visitor and staff arrival is immediately separated from the emergency and service traffic which is located to the southern side using different site entries. The site will accommodate all necessary car parking eliminating the previously required transportation of staff from

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remote facilities by bus.

The site historically contained a fairly typical collection of buildings developed piecemeal over the preceding 170 years. These ranged from listed early Victorian workhouses through 1950s wards to 1980s Nucleus templates. These buildings were thoroughly analysed for their historical context and their potential functionality for future healthcare needs.

The listed buildings have all been retained, although some insensitive additions are being removed. Their setting will be transformed by the creation of a new "parish green" onto which they will face. They will be converted for administrative use.

Most other buildings will be demolished as the development progresses including the service elements of the Nucleus buildings. The Nucleus wards and operating theatres will be retained and refurbished. The major new building will attach directly to these retained clinical buildings to permit internal circulation across the campus for the first time.

The heart of the new building, known as "The Hub", contains the central diagnostic and treatment departments. This pivotal location enables these principal facilities to be shared by both outpatients and inpatients. This simple design strategy has led to economies in the amount of diagnostic and treatment facilities required on the site as well as associated efficiencies in staffing and operation.

The main entrance to the hospital buildings will be across a large public piazza into a 3 storey

glazed atrium space which is immediately apparent from all public car parking and arrival areas. This is the beginning of an effective approach to "wayfinding". Connecting to the atrium is a full height glazed gallery rising to five stories as the external ground levels fall away. The gallery provides access to all outpatient clinics; node points and entrances are colour coded and visible before visitors even enter the building. The gallery and atrium overlook a linear garden designed to provide a contemplative space as well as further aiding passive wayfinding.

The main Hub facilities are situated at the lower levels where the deep plan space can be exploited as these departments generally require mechanical ventilation. Upper levels are reserved for the outpatient clinics and wards where natural ventilation and views can be best provided. The wards are located on the southern side where, by virtue of their height, they gain long distance views across the valley beyond. They will also be visible from long distance and their architectural form and articulation has accordingly been developed in the light of this broader urban context.

Wherever practicable natural ventilation has been incorporated and mechanical systems are designed to minimise the use of non-renewable energy and permit reclaim. Specifications have been developed requiring the use of sustainably sourced materials.

The site landscaping has been carefully considered. The perimeter of the campus is to be planted with a dense woodland mix to provide a degree of identity and separation from the surrounding streetscape. This will provide a habitat for birds and other wildlife. Car parking has been broken down into

small cells with clear directional walkways to avoid dominating the landscape. Nearer to the buildings the landscape becomes more formal and gardens and other spaces are being developed for patient and visitor use. The site is designed to be generally permeable and accessible.

The overall masterplan provides simple and clear provisions for future expansion. The buildings themselves are designed to permit straightforward internal conversion for different use in the future.

The new configuration of the University Hospital of North Staffordshire has been designed to address the challenges identified by the Department of Health and NHS Estates. Healthcare will be delivered more effectively and efficiently in an integrated modern facility which engenders pride in it users and provides a therapeutic environment in which to deliver treatment. The design acknowledges sustainability considerations and future flexibility is provided for.

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