



## **Northumbria Specialist Emergency Care Hospital**

### **Key Facts:**

Client:	Northumbria Healthcare NHS Foundation Trust
Facility:	Three-storey hospital wing and ambulatory care unit
Location:	Cramlington, Northumbria
Value:	£15m
Weeks on site:	52 weeks
Building size:	6,500m <sup>2</sup>
Partners:	P+HS Architects

### **Project Summary**

The McAvoy Group was awarded the £15m contract for the offsite construction of a new wing at Northumbria Specialist Emergency Care Hospital in Cramlington.

The 6,500m<sup>2</sup> three-storey building will be linked to the existing hospital. The first floor will be fitted out as part of this contract to accommodate one of the UK's first purpose-designed Ambulatory Care units, with the other two floors fitted out in the next phase of the development.

*“The quality of the facility to meet the clinical requirements was our main driver for a McAvoy offsite solution. We will also benefit from a huge reduction in the build programme – from at least two years to just 12 months.”*

**Robert Sanderson, Deputy Director of Capital Projects, Northumbria Healthcare FML**

### **Pushing the Boundaries of Offsite Construction**

This highly complex project on a live hospital site is pushing the boundaries of offsite construction. McAvoy is integrating with the design of the existing hospital and using offsite construction to deliver the building to a very short programme, achieve exceptional value for money and to the Trust's stringent quality standards.

McAvoy has developed a hybrid solution which incorporates both offsite and in-situ building methods and is maximising fit-out in the factory for this first phase to enhance quality and reduce disruption to staff and patients.

### **One of the UK's First Purpose-designed Ambulatory Care Units**

The ambulatory care unit will provide medical, surgical and gynaecology care in a relaxed and comfortable environment. It will also accommodate a fracture clinic. This will allow up to

150 patients to be treated the same day across four specialisms, without the need for hospital admissions. This will help to de-congest the emergency department, allowing patients to be seen by the most appropriate clinician earlier and offering an enhanced service for the local community.

## **An Offsite Solution to Help Meet the Rising Demand for Patient Services**

The new wing is being constructed by McAvoy using an advanced offsite solution to reduce the build programme by half to less than 12 months. This will help Northumbria Healthcare Trust to meet the rising demand for acute patient services in the region and maintain its position as a leader in the development of urgent and emergency care.

## **Innovations in Offsite Technology**

The project features a number of innovations in offsite construction for healthcare. It will use larger, bespoke modules up to 14.85m long which have been specially engineered to provide a structural flooring solution that seamlessly integrates with the existing hospital building. This will meet the key requirement for efficient patient flows, removing the need for ramps and steps.

Mechanical ventilation, heating and cooling systems will be installed in the ceiling voids in the McAvoy factory. This is believed to be an industry first in the healthcare sector.

## **Replicating the Appearance of the Existing Hospital**

Designed by healthcare specialists P+HS Architects working with McAvoy as principal contractor, the new wing will replicate the appearance of the existing hospital which opened in 2015. It will have a faceted external facade to create curved ends to the wing and will be finished in blue and white render. This hybrid construction solution has a three-storey offsite structure with an in-situ built curved link on each floor, a roof-top plant room and full-height stair towers.

## **A Dedicated Facility for Ambulatory Care**

The dedicated, 2000m<sup>2</sup> facility for ambulatory care will provide services in medicine, surgery, gynaecology and orthopaedics. Facilities include waiting areas; interview, assessment, and treatment rooms; plaster room with mobile x-ray; trolley bays; patient lounges; ultrasound; single ensuite rooms; nurse's station; staff rest room; clinical stores; utility rooms, and an open-plan office.

The scheme was awarded through the NHS Shared Business Services framework which facilitated reductions in procurement time and cost. The new wing is designed to comply with all relevant HTM and HBN requirements.

## **The Clinical and Estates Perspectives**

“With this new development, the Trust is demonstrating a dynamic approach with its use of modern methods of construction. The quality of the facility to meet the clinical requirements was our main driver for a McAvoy offsite solution. We will also benefit from a huge reduction

in the build programme – from at least two years to just 12 months. We are looking forward to the completion of the new facilities for ambulatory care which will bring enormous benefits for providing alternative pathways for patients needing urgent care.”

**Robert Sanderson, Deputy Director of Capital Projects, Northumbria Healthcare FML**

“The new ambulatory care unit is fantastic news for the Trust and will make an immediate and very real difference to our patients. Once open, it will significantly enhance our ability to manage peaks in demand whilst still providing dedicated ambulatory care. We are very much looking forward to the project being finished and are grateful that it will be finished so quickly.”

**Dr Eliot Sykes, Clinical Director for Surgery and Elective Care, Northumbria Healthcare NHS Foundation Trust**

