



Chelsea and Westminster NICU and ICU London, UK

Completion November 2021

Project Type Healthcare

Client Chelsea and Westminster Hospital
NHS Foundation Trust

Main Contractor McLaughlin and Harvey

Value £28m

Area 3,100sqm

The redevelopment and expansion of a major general hospital in South West London, originally completed in 1993.

The Neonatal Intensive Care Unit (NICU) and the Intensive Care Unit (ICU) were not designed to meet current attendances or healthcare standards.

The project aimed to provide more clinical treatment spaces that are more appropriately sized to reflect the needs of leading clinical NICU and ICU.

Refurbishment and extension works were carried out on the third and fifth floors, providing 42 cot spaces for NICU, and 20 cot spaces for ICU.

Retrofit Strategy

The design was focused around the needs of patients and their families, as well as the hospital staff to ensure they can provide the best care possible.

Retrofit Type

Critical Infrastructure - Healthcare



“The new ICU has already played such an important role in helping to deal with the pressures of COVID-19, and the expansion reinforces the hospital’s reputation as a centre of excellence and innovation.”

Lesley Watts, Chief Executive, Chelsea and Westminster Hospital
NHS Foundation Trust

The NICU facility includes dedicated family rooms which were designed with input from parents to create a comfortable and relaxing environment.

The new ward spaces are provided by extensions above the front of the building on Fulham Road. Additional steel frame storeys were constructed with large glazed elevations to maximise light ingress and to provide views over Chelsea and Kensington.

The design was based on extensive research to create an optimal healing environment with regards to lighting, acoustics, layout and furnishing.

The latest digital innovations were implemented including adaptive circadian rhythm lighting - artificial light that matches the needs of human biological cycles.

To improve energy performance, new MEP systems were installed in each of the refurbished areas including lighting replacements, heating and ventilation upgrades.

The project shows how a successful retrofit can increase the resilience of critical healthcare infrastructure. The expansion has increased adult ICU capacity by 45 percent, offering support to an additional 500 patients every year, as well as a 40 percent increase in NICU beds.

This was particularly important during the COVID-19 pandemic, in which several areas were handed over early for operation, easing the strain on the health service during this time.



Lessons Learnt

With the facility being a live hospital, the site needed to be kept operational at all times during design and construction. Careful phasing and constant communication with the healthcare team was therefore required to limit construction noise and disruption to sensitive areas.

There was limited access to the site from the main roads nearby. This meant the ambulance access road needed to be temporarily re routed for works to progress.

The surrounding area is highly controlled by the local planning authority, making it difficult to gain planning consent. Early stage liaison with planning officers was therefore crucial to get the ‘buy in’ for the new roof level to the ICU suites.