



Case Study

Poole Hospital

Four position Barn Theatre and four single conventional Theatres

Challenge

The project comprised a four position barn theatre and four single conventional theatres. The client, University Hospitals Dorset, wanted to have similar equipment throughout all of the theatres.

An additional challenge was that the new build had to be adjoined to the existing building but each had differing soffit heights.

The initial scheme had gone through to RIBA stage 3 with indicative equipment requirements. To get to RIBA Stage 4 and agree GMP the designers and construction team now had to define the customer requirements within the original budget.

The pandemic added an additional complication in that all members of the teams had to quickly adopt to the use of online meetings and working remotely.

Solution

Based upon Howorth's recognised expertise delivering barn theatres in UK Hospitals, IHP (Integrated Hospital Projects) engaged Howorth to support the design team to deliver the equipment selection for all of the theatres.

Howorth have now delivered 10 separate barn theatre projects, four of which have been with IHP.

The initial meetings comprised discussing the operating plans and requirements with the user groups. This allowed us to provide outline specifications and plans for further discussion with the users until we reached a point that the users requirements were met.

The initial scheme had specified the use of media bridges. By demonstrating our solutions using articulated pendants, i.e. the range of movement, flexibility in use and the ability to add or modify equipment on the pendant consoles later, we persuaded the users to switch away from the media bridges.

Howorth's Exflow EVOLUTION canopies were installed. These are screenless, fully self-contained UCV canopies, ideally suited to use in barn theatres due to having air recirculation contained in the canopy rather than through remote "low level return" air ducts.

An additional requirement from the users was to provide digital integration, originally to all theatres. However, the implementation or usage of such systems was envisaged in the first two years of operation.

Therefore, Howorth proposed a vendor neutral installation. The benefit being the same system installed across theatres/pods making adoption and usage for the staff much easier. The major benefit of vendor neutral solutions is the ability to be able to take images from any scope or camera and transmit it within the theatre or to other areas or locations.

The hospital does not become reliant upon a particular scope manufacturer. They can utilise any equipment in any pre-equipped theatre maximising the flexibility of the theatre department.

Outcome

The operating staff benefit from the Exflow EVOLUTION screenless canopy and the KLS Martin articulated service pendants providing an open and bright working environment.

The change to medical service pendants also had a positive effect on the project budget by reducing the overall cost of the theatre equipment package.

The hospital commenced surgery in July 2023 and immediately saw a very positive effect on the ability to treat patients effectively and contribute to the reduction in waiting times.