

CASE STUDY

Royal Lancaster Infirmary Critical Infrastructure

In advance of a new hospital being delivered under the New Hospital Programme, University Hospitals of Morecambe Bay NHS Foundation Trust needed to evaluate the Royal Lancaster Infirmary's (RLI) critical infrastructure to understand the level of investment needed for its continued effective operation until the new hospital was complete.

Through NHS Shared Business Services' Healthcare Planning, Construction Consultancy and Ancillary Services Framework Agreement, the Trust commissioned Drees & Sommer UK (D&S UK) to complete this evaluation for them.





What was delivered

The review examined the current condition and associated risks of the existing estate and identified the necessary mitigation measures required to minimise the impacts on staff and patient safety, infection control, and business continuity, delivering the key outcomes and recommendations in a report.

Via the report, **the Trust was able to clearly demonstrate where additional investment was needed to ensure the continued safe delivery of services**, providing facts and figures to gain the Board's approval for further business-as-usual funding to be released.

Engagement

The initial phase of the project involved comprehensive stakeholder engagement, starting with an on-site visit. This was followed by 11 virtual sessions with key stakeholders responsible for estates, facilities management, and infection control. To provide broader context, the Trust granted D&S UK access to various documents, including risk assessments, surveys and reports.



THE SOLUTION

Methodology

Key Pillars

To ensure a consistent and thorough approach to the review and risk analysis, the report considered the impact of the current condition against the following four key pillars:

- 1) **Infrastructure Constraints:** Limitations or challenges due to the design and structure of the existing infrastructure, which could significantly impact the system's efficiency, functionality and adaptability.
- 2) **Residual Risk:** The residual risk after current mitigations to address the infrastructure constraints had been implemented.
- 3) **Patient Safety:** The impact of the mitigated infrastructure constraints on patient safety, which could significantly affect the quality of care and patient satisfaction.
- 4) **Business Continuity:** Ensuring the uninterrupted delivery of clinical care, recognising the mitigated infrastructure constraints could pose significant risks to this continuity.

This approach was taken as it acknowledges the cyclical impact that infrastructure limitations, and the subsequent mitigations implemented by operational teams, have on patient safety and business continuity.



THE SOLUTION

Methodology

Risk Analysis

The report focused on four key buildings and considered the risks against the four key pillars.

To provide a consistent approach, the output utilised the Building Cost Information Service (BCIS) elements to present the risk presented by building fabric, essential systems and infrastructure, in an industry recognised format.

Each element was assigned a risk score against the four pillars, ranked from 1-5 for severity and 1-5 for likelihood of occurring.



THE RESULT

The key findings of the report guided the Trust on where to invest and focus its efforts.

Current Condition and Previous Investment – Before conducting the risk analysis, the Trust’s Six Facet Survey (6FS) was reviewed to assess the current condition of the estate. The report included a summary of the cost element of the 6FS, detailing the expenditure to date aimed at addressing the backlog. This analysis provided a clear overview of the financial efforts made to mitigate the identified issues and highlighted the ongoing investment required to manage the estate effectively.

Key Buildings Risk Analysis – The report identified a number of key risk elements and demonstrated that, whilst investment had taken place in the preceding years, there was a relatively high risk remaining associated with patient safety and business continuity. It made the case for why continued investment was required to mitigate and reduce these risks as much as possible and defined a clear action plan for how this investment should be spent.

Net Zero – The critical infrastructure review determined that RLI could not achieve the net zero target by 2040 for emissions directly controlled by the NHS. This was due to the ageing estate and significant infrastructure limitations, which made necessary upgrades prohibitively expensive. The recommendation was for the Trust to prioritise addressing the high-risk issues identified across the estate to ensure patient safety. Additionally, with plans for a new hospital within the next decade, efforts to decarbonise the current facilities would be impractical and financially wasteful.

SUMMARY

- The critical infrastructure review emphasised that the Trust needed to prioritise high-risk areas to ensure the hospital could continue to deliver effective services until the new hospital is operational.
- The report provided the evidence needed to secure funding for continued and targeted investment in RLI to reduce the risks associated with patient safety and business continuity and support its net zero goals.

To find out more about Drees & Sommer UK (D&S UK), contact: NHS.SBS@dreso.com to learn about NHS SBS' framework agreement, contact sbs.hello@nhs.net