Northern Health and Social Care Trust

Trust Board Capital Business Case Briefing Paper	
Reference Number:	TB147/11/I
Date of Meeting:	24th November 2022
Presenting Director:	Kevin McMahon, Director of Surgical and Clinical Services
Subject:	**Replacement Fluoroscopy X-ray unit in Causeway Hospital 2022-23**
Purpose: Approval/Noting	To provide a summary of the Capital Business Cases for Trust Board Approval
Background:	This proposed imaging investment has been prioritised by The Capital Equipment Sub Group of the Regional Medical Imaging Board from a list of imaging proposals submitted against the available capital funding. This proposed investment will form part of the total approved CRL allocation for 2022/23 which is currently £21,050,341 for the region. The Department of Health has asked that business cases are ready and in a position whereby funding can be allocated and used promptly. This proposal aims to replace aging Fluoroscopy X-ray equipment in Causeway Hospital with modern, like for like, fit for purpose, low dose equipment to maintain existing services. Fluoroscopy (fluoro), a specialised area of X-ray, involves 'dynamic' examinations in which clinicians can assess patient function with 'real time' X-ray imaging e.g. barium swallows and ERCPs. Formal reports are then provided to the referrers. Doctors use these reports to inform diagnosis and support treatment decisions, including drug and treatment pathway prescription as appropriate. The project includes costs for enabling works to upgrade each site.
Benefits:	Providing new replacement equipment will: • Improve the safety and sustainability of the Causeway hospital site by ensuring uninterrupted provision of fluoro service • Reduce further the fluoro dose to patients by employing the latest imaging technology and radiation dose reduction • Future proof the service by ensuring aging equipment is replaced • Maintain patient access and capacity

Each new generation of X-ray equipment includes radiation dose improvement technology. New equipment offers improved patient and staff safety through reductions in radiation doses.

This will allow the Trust to adhere to the National Diagnostic Reference Levels formally adopted by the Department of Health, established to improve radiation protection practice for patients and staff.

This project will support provision of examinations of an appropriate quality at doses which are As Low As Reasonably Achievable (in particular for Paediatric patients).

Total Capital Costs:

	Option 1	Option 2	Option 3
Net Costs (capex and opex)	£0	£348,005	£399,005
Benefits (monetary and non-monetary Scores)	375	750	750
Risks	n/a	LM	LM
Conclusion**	n/a	1	2

Capital cost of preferred option is £348,005.

Affordability:

The capital costs of Option 2, £348k, will be funded from the ring-fenced ‘Imaging Diagnostics’ Capital Allocation for 2022/23.

Equipment cost is £299k.

Enabling costs for this option have been costed as follows:

Electrical - £11,000
Mechanical £5,500
Building - £10,500
Additional works - £13,500 (replacement fixed furniture i.e work tops and sinks and lead lined protection screens)
Total - £40,500 with additional
Contingency @10% £4,050
Prelims @10% £4,455
Total £49,005.00

The approach aligns with existing procurement rules and regulations and would achieve value for money.

Risks:	High capital cost – this risk is mitigated as low/medium risk – capital funding has been provided by the Department of Health. Disruption to Imaging services within the Radiology Department during equipment replacement timescale – this low risk as there is some potential for disruption to services. The new equipment must be 'low dose' with modern technology. This risk will be mitigated through an effective specification and procurement process. Procurement of equipment and completion of project must take place within financial year 2022/23. This risk will be mitigated through the timely allocation of funding and effective procurement process.
Conclusion:	The preferred option is option 2 as it fully addresses the objectives of the proposal. Option 2 can provide mitigation for the existing constraints and presents manageable risks to the successful conclusion of the project. This option has the lowest cost and net present value per benefit of all the options and therefore when taking into account the financial and non-financial benefits it would be seen as the preferred option. **This briefing papers seeks Trust Board approval to proceed.**