

| Trust Board Capital Business Case Briefing Paper | |
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| Reference Number: | TB/145/10/G |
| Date of Meeting: | 25 August 2022 |
| Presenting Director: | Kevin McMahon |
| Subject: | Mobile CT Scanner placed at Causeway Hospital 2022-23 |
| Purpose: Approval/Noting | To provide a summary of the Capital Business Case for Trust Board Approval |
| Background: | <p>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.</p> <p>This proposal aims to replace the aged high dose mobile CT scanner at Causeway Hospital. The scanner would be a modern fit for purpose low dose scanner to maintain existing services – including the Emergency Department on Causeway Hospital, inpatient scanning, and deliver the activity which will be displaced from fixed scanners by the implementation of NICE CG95, which are NICE Chest Pain guidelines which require a significant increase in the volumes of Cardiac CT scans required. The project includes costs for enabling works to support the mobile unit on the site.</p> |
| Benefits: | <p>This proposal will:</p> <p>Maintain existing service capacity in Causeway Hospital, and the Trust as a whole, including 24/7 ED access to CT.</p> <p>Provide additional capacity for 5,000 patients per annum which would be displaced by the introduction of CG95 scanning for cardiac patients. Implementation of CG95 is not possible without additional scanning capacity.</p> <p>Provide contingency arrangements for Causeway and Antrim Hospitals in the event of a CT scanner critical failure.</p> <p>Work towards the National Diagnostic Reference Levels formally adopted by the Department of Health to improve radiation protection practice for patients.</p> |

| | <p>Future proof Trust CT service and enable increased levels of Cardiac CT scanning (if required).</p> <p>Support provision of sustainable and resilient CT service across the NHSCT geographical area for the full range of NHSCT referrals.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|----------|----------|----------|----------|----------|---------------------|------|------|------|------|---|-----|-----|-----|-------|---|-----|-----|-----|-----|-------------------------|-----|-------|-------|-------|--------------|-----|-----|-----|-----|---------------------|-----|---|---|---|
| <p>Total Capital Costs:</p> | <table border="1"> <thead> <tr> <th data-bbox="488 488 823 562"></th> <th data-bbox="823 488 963 562">Option 1</th> <th data-bbox="963 488 1104 562">Option 2</th> <th data-bbox="1104 488 1244 562">Option 3</th> <th data-bbox="1244 488 1385 562">Option 4</th> </tr> </thead> <tbody> <tr> <td data-bbox="488 562 823 636">Description*</td> <td data-bbox="823 562 963 636">£000</td> <td data-bbox="963 562 1104 636">£000</td> <td data-bbox="1104 562 1244 636">£000</td> <td data-bbox="1244 562 1385 636">£000</td> </tr> <tr> <td data-bbox="488 636 823 748">Net Costs (capex and opex) - NPC</td> <td data-bbox="823 636 963 748">240</td> <td data-bbox="963 636 1104 748">866</td> <td data-bbox="1104 636 1244 748">955</td> <td data-bbox="1244 636 1385 748">1,278</td> </tr> <tr> <td data-bbox="488 748 823 860">Benefits (monetary and non-monetary)</td> <td data-bbox="823 748 963 860">300</td> <td data-bbox="963 748 1104 860">600</td> <td data-bbox="1104 748 1244 860">760</td> <td data-bbox="1244 748 1385 860">780</td> </tr> <tr> <td data-bbox="488 860 823 904">Cost per benefit</td> <td data-bbox="823 860 963 904">N/A</td> <td data-bbox="963 860 1104 904">1.444</td> <td data-bbox="1104 860 1244 904">1.256</td> <td data-bbox="1244 860 1385 904">1.638</td> </tr> <tr> <td data-bbox="488 904 823 972">Risks</td> <td data-bbox="823 904 963 972">N/A</td> <td data-bbox="963 904 1104 972">L/L</td> <td data-bbox="1104 904 1244 972">L/L</td> <td data-bbox="1244 904 1385 972">M/H</td> </tr> <tr> <td data-bbox="488 972 823 1039">Conclusion**</td> <td data-bbox="823 972 963 1039">N/A</td> <td data-bbox="963 972 1104 1039">2</td> <td data-bbox="1104 972 1244 1039">1</td> <td data-bbox="1244 972 1385 1039">3</td> </tr> </tbody> </table> | | Option 1 | Option 2 | Option 3 | Option 4 | Description* | £000 | £000 | £000 | £000 | Net Costs (capex and opex) - NPC | 240 | 866 | 955 | 1,278 | Benefits (monetary and non-monetary) | 300 | 600 | 760 | 780 | Cost per benefit | N/A | 1.444 | 1.256 | 1.638 | Risks | N/A | L/L | L/L | M/H | Conclusion** | N/A | 2 | 1 | 3 |
| | Option 1 | Option 2 | Option 3 | Option 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Description* | £000 | £000 | £000 | £000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Net Costs (capex and opex) - NPC | 240 | 866 | 955 | 1,278 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benefits (monetary and non-monetary) | 300 | 600 | 760 | 780 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cost per benefit | N/A | 1.444 | 1.256 | 1.638 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Risks | N/A | L/L | L/L | M/H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conclusion** | N/A | 2 | 1 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Affordability:</p> | <p>The capital costs of Option 3, £830k, will be funded from the ring-fenced 'Imaging Diagnostics' Capital Allocation for 2022/23.</p> <p>The additional revenue of £4,000 that is needed for increased maintenance costs is available within the service following rationalisation of old X-ray equipment.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Risks:</p> | <p>High capital cost – this risk is mitigated as low risk – capital funding has been provided by the Department of Health.</p> <p>Disruption to Imaging services within the Radiology Department during equipment replacement timescale – this low risk as there is some potential for disruption to services.</p> <p>The new CT scanner must be 'low dose' scanners with modern technology. This risk will be mitigated through an effective specification and procurement process.</p> <p>Procurement of scanners 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.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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| Conclusion: | <p>The preferred option is Option 3 - Replace the CT Scanner and trailer with a Go TOP scanner in Causeway Hospital, as it fully addresses the objectives of the proposal. Option 3 can provide mitigation for the existing constraints and presents manageable risks to the successful conclusion of the project. Option 3 provides the greatest non-monetary benefits for patients.</p> <p>This briefing papers seeks Trust Board approval to proceed.</p> |
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