HSE Board Briefing Template

Subject: Extending Pathfinder Maternity and Newborn EHR Programme
Submitted for meeting on: 25 February 2022
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Why is this information being brought to the Boards attention? Reserved functions of the Board
Is there an action by the Board required, if so please provide detail?: Contract approval.
Please indicate which of the Boards objectives this relates to ; ▪ The development and implementing of an effective Corporate Governance Framework, incorporating clinical governance and a performance management and accountability system; ☐ ▪ Developing a plan for building public trust and confidence in the HSE and the wider health service; ☑ ▪ Ensuring the HSE's full support for and implementation of the Government's programme of health reform as set out in the Sláintecare Implementation Strategy; ☑ ▪ Exercising effective budgetary management, including improving the value achieved with existing resources and securing target saving, with the objective of delivering the National Service Plan within Budget. ☑
Brief summary of link to Board objectives. HSE Board approval is required where contract value is greater than €10,000,000. ██
Background - provide context in order to ensure that the Board fully understand the issue. The introduction of Electronic Health Records has proven to improve safety and effectiveness of healthcare delivery. In 2007, a number of independent initiatives to introduce EHRs in different maternity hospitals converged into a clinically-led proposal for a shared EHR for Maternity and Newborn services across all maternity services. Procurement started in 2011 and resulted in a contract award to Cerner in 2014 for the Maternal and Newborn Clinical Management System (MN-CMS) to be built on their Millennium EHR platform. Successful implementation of Phase 1 sites proceeded with 4 hospitals going live in a 14 month period completing in January 2018. Substantial patient benefits have accrued for women and infants in these facilities. Notwithstanding the complexities of change involved for clinicians and teams, the solution has proven to be value in day to day care and the appetite for extensions into additional services has been strong. Some of those extensions have been delivered and adopted and more are planned. There is some distance to go with to achieve widespread coverage of Women and Infant services across all maternity facilities.
Implications The Millennium Executive Governance Group (MEGG) met a number of times during 2020 to confirm engagement with Cerner on the contracts held between the HSE and Cerner for MN-CMS and MedLIS. There

were 2 key drivers for this engagement being the proximity of contract end dates and the escalating clinical risk of an ageing platform that had been in service since 2015.

The Millennium platform was severely impacted during the cyber attack. Although recovered, the supplier cannot assure the HSE of the stability and suitability of the 'on-premise' platform in the HSE datacentre for clinical services. This position further increases the risk of serious disruption to women and infants clinical services in the hospitals that rely on MN-CMS.

The document attached describes the risks to Maternity services and options to de-risk the platform with a hardware refresh and software update. Options for 'on-premise' and remote hosting were examined and a recommendation for remote hosting is made.

The HSE has published two Voluntary Ex-Ante Transparency (VEAT) notice outlining our intentions in relation to the extension of the MN-CMS contract and a move to vendor hosting in Sweden. The VEAT reduces the risk of a procurement challenge later in the process. The key issues and risks are:-
a)   Challenge by a 3rd party vendor to the proposed contracts extensions
b)   Ability to deliver the overall programmes within the agreed resources

The HSE has a large estate of legacy ICT solutions, much of which was acquired by health boards and continues to enable care delivery. Contracts underpinning those systems vary widely. Procurements for national systems since the HSE was established use the HSE's standard terms and conditions. Although the standard contract has evolved over time they are mostly fixed term, with options to extend the term for additional periods by mutual agreement between the HSE and the supplier. There are a small number of 'evergreen' contracts that are not fixed term, but these are the exception.

The focus of ICT systems procurement attention has been procuring new capabilities to enable new services or meet new regulatory demands. For some very large systems (e.g. medical imaging) Procurement has worked through the publication of VEAT notices as required to extend contract periods beyond those set out in the contract. When there is a service requirement for change, such as new service demands or consolidation of services into networks of care, a new procurement is undertaken and a contract with a fixed term is then in place. Ordinarily when there is no requirement for change, the HSE will roll contracts over for support and maintenance services.

The HSE recognises that remote hosting and cloud hosting can offer significant advantages in terms of total cost of ownership and risk mitigation. The 'off-premise' solutions in healthcare information systems are maturing at different rates, so each offering is examined in detail to ensure the solution is proven, is future fit and offers value for money. New tenders seek options for 'off-premise' offerings. For legacy systems where the supplier can offer a proven 'off-premise' solution that is consistent with the application lifecycle approach the proposal is evaluated considering all aspects including clinical and technology risk mitigation, resilience, expertise and total cost of ownership. Where there is a strong case and capacity to deliver, 'on-premise' solutions are moved out of the HSE IT datacentres.

Conclusion
The end of life Millennium platform with residual ransomware affects means clinical services at increased risk of serious disruption. The options for moving the platform to contemporary hardware and software have been examined and rigorous due diligence has been conducted on the recommended remote hosting option.

The transfer to a remote hosting model will restore the Millennium platform to the required level of stability. Furthermore, an upgrade to the latest software version ensures a secure, stable and robust solution. The Remote Hosting contract extension will spread the cost of set-up over seven years. A shorter term contract is possible, but offers less value for money to the HSE over the lifetime.

Recommendation
A detailed paper for the Maternity and Newborn Clinical Management System is provided to detail the risks and investment decision.

Decision 1: Move MN-CMS to Remote Hosting and deploy to two additional maternity hospitals
The benefits for Women and Infants services in the hospitals using MN-CMS to support care delivery have been

extensive. Continuing to deliver those benefits and mitigating risks to patient services in the hospitals using MN-CMS requires a contract extension ██
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Decision 2: Deploy MN-CMS to two additional maternity hospitals
Extending the use of the system to The Coombe and University of Limerick Maternity Hospital requires a contract change ██
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