Infrastructure Capability: Infrastructure Maturity Assessment (IMA)

Project Title: Infrastructure Information Experience Framework (IIEF).
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In a modern healthcare system, the underlying platform for clinical and operational processes is the information systems, which form the interconnection between staff, patients, information and process. The infrastructure capability project aims to demonstrate the advantage of technologies that can improve information flow and operational process, creating a positive impact on the patient and clinical experience whilst supporting operational outcomes. This project is being delivered in three stages.

Stage 1 created an **Infrastructure Maturity Assessment (IMA)** tool focused on technology capabilities and how they relate to stakeholder experience and operational performance. This tool can rapidly assess and benchmark the information infrastructure capabilities of an organisation and provide a foundation to building a technology roadmap for the organisation, importantly aligned with their operational strategy. Taken up by HIMSS (and named INFRAM), the assessment tool can be mapped to the HIMSS EMRAM assessment and provide valuable guidance for building the appropriate infrastructure to support the organisation's EMR scope and performance aspirations. Stage 1 was delivered in June 2018.

Subsequent stages are focused on the design and application of an Infrastructure Information Experience Framework (IIEF) using Impact Mapping and Computational Design Frameworks. These will be linked to the IMA to create integrated and operationally valuable tools for deriving effective use of digital infrastructure to support modern healthcare delivery.
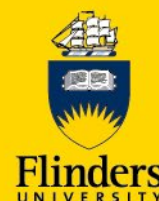

The primary benefit of this research is in providing the opportunity for a healthcare organisation to build a clearly staged roadmap for its information infrastructure investments, which can be linked to its business objectives.

A secondary benefit of the IMA process is to provide a much-needed common language to describe the information infrastructure capabilities of a healthcare organisation, in a value-based form that is understandable by both clinical providers and management. The highly technical nature of information system deployments has often meant the implications of the investments have been difficult to convey in a business case. Using capability maturity modelling, the Infrastructure Maturity Assessment (IMA) solves this problem.

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