## **Abstract**

This dissertation examined factors which impact on the interoperability required for health information exchange in the HSE, as perceived by key informants. A review of the literature provided an overview of interoperability. Semi-structured interviews were carried out with 14 informants who held national roles in the areas of policy, quality, data, ICT and clinical programmes. The informants were chosen for their positions of influence and experience of information and ICT in the Irish Healthcare system. The sample was drawn from across a number of agencies. The data were analysed through inductive analyses. The informants identified key components required for successful system interoperability: clear organisational structures, roles and responsibilities; a single ICT strategy; effective ICT governance; IT leadership embedded in the business; a framework for the technical building blocks required; the availability of relevant standards and terminologies; financial investment; and enabling policy and legislation. This study found that there were gaps or weaknesses in all of these areas in the HSE and that these formed barriers to interoperability. Fragmentation and duplication across ICT and information management were strong themes to emerge from the interviews. Projects and initiatives underway, which touched on many of the aspects of interoperability, sat under different line management or in different agencies and were not being managed under one framework. Systems and data sets were duplicated and this constituted a corporate risk. It is recommended that an interagency group should oversee the adoption of a single strategy for ICT; that clear ICT governance arrangements are put in place in the HSE; that a project be set up to deal with duplication of systems and data sets; that the required standards be agreed among all stakeholders and responsibility for their development clarified; and that enabling policy be progressed and the required statutory basis be provided for an individual health identifier. A Chief Information Officer, who has both business and ICT competencies, is recommended to oversee the implementation of interoperability in the HSE. Ireland is undergoing a series of healthcare system reforms, including changes to the structures and to the model of care delivery, in preparation for a move to healthcare commissioning paid for through universal health insurance. This provides an opportunity to put in place the factors required for interoperability to meet the needs of the new model of health care and to enable the exchange of health data required for clinical practice and an improvement in quality, safety access and efficiency.