"Towards a prototype and strategy for an electronic medication reconciliation capture in e-medication management systems in an Irish acute care setting"

Cliodhna Cotter

There is much evidence to support the practice of medication reconciliation (Med Rec) and its contribution to patient safety. Med Rec is the process whereby a complete and accurate list of a patient's medication is discerned. It occurs when a patient is at a healthcare transition e.g. moving between primary and secondary care. It involves accounting for every medication a patient is taking, and documenting decisions made by a physician to actively discontinue, continue, hold or alter a patients' individual medications at every transition point of care. Failure to reconcile medications can result in omissions, duplications, wrong dosages and medication interactions. Currently in Ireland there is no standardised process for Med Rec. Successful Med Rec is time consuming and is associated with a cognitive burden on clinicians that could potentially be relieved by technology. Consideration of an e-Med Rec solution can be considered an arduous task as it requires; consideration of the clinical workflow and culture of the organisation, effective communication and teamwork and a complex clinical process to be translated into a linear technological specification. In this research, a literature review was conducted, and semi-structured interviews were performed with key stakeholders to elicit their expert opinions on what an ideal e-Med Rec tool for an Irish setting would require. While tools to facilitate e-Med Rec have been implemented in some healthcare facilities with varying degrees of success, there is scant literature on the evaluation of such systems. For e-Med Rec to be fully adopted, it needs to be endorsed and incorporated both locally and nationally. At an institutional level it was found that endorsement by quality improvement leaders, highly integrated care, experience of technology and a culture of promoting patient safety could enhance the adoption of e-Med Rec tools. Persuading frontline users and improving awareness of the importance of Med Rec among clinicians has been seen to be essential for success. Workflow redesign was recommended as one of the main measures to increase compliance with the process. There is a desire for a standardised and simple solution for e-Med Rec. Development and refining of such a tool is an iterative process. It should ideally fit in with existing systems, be designed to allow for future integration and be compatible with enablers such as the National Medicinal Product Catalogue and individual Health Identifier (IHI) when it becomes available. The success of this project requires support from clinical leaders and government bodies. Work around the standardisation and agreement on a universally acceptable design should start now.