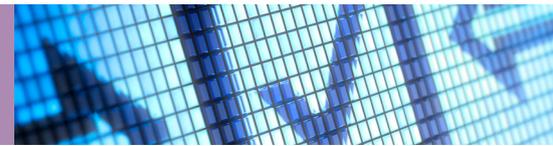


## Hospital & Community Pharmacy Practice and Management: Towards an e-Health Strategy

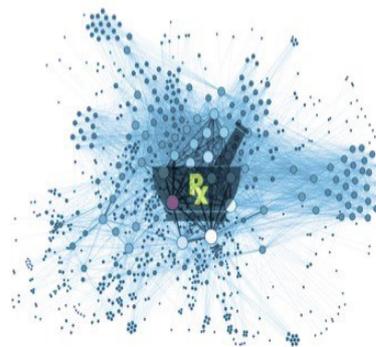


### Executive Summary

Pharmacy is a complex service and a core part of healthcare pathways. Thus, the improvement, redesign and management of pharmacy is often considered necessary to rebuild an improved healthcare service system. Connected Health is an emerging socio-technical healthcare management model. It presents significant promises to optimise healthcare services through improved accessibility of key resources such as data and information to support key timely decision-making. Specifically, within a healthcare context, one of the core resources which patients require to avail of safe and quality treatments are drugs. Therefore, medicine management needs to become a focus within the Connected Health community to explore how, for example, medicines are formulated, ordered, stored, dispensed and consumed right through the pharmacy value chain. This research examines current practice within the hospital and community pharmacy sector with a view to uncover the care pathways within these settings. In order to identify both 'how' and 'where' Connected Health solutions are best placed within these settings, modelling care pathways is a critical task.

### Commercial Opportunities for Industry

This research provides a state-of-the-art insight on pharmacy current practice and how technology innovators can improve service operations. It also supports industry to identify where IT-enabled innovation is best placed within the pharmacy network, identifies new pharmacy care pathways and identifies modelling techniques. Some of the key findings identify gaps (and opportunities) ranging from a health informatics skills gap, misprescription errors, workflow inefficiencies, wastage in medicines, lack of performance analytics, ongoing pharmacy financial losses, the lack of resource scheduling, and the overall lack of standardisation on pharmacy informatics. The findings identify over 50 categories of "problems and needs" which map onto Connected Health opportunities in pharmacy. The findings also identify the potential for further research and commercial opportunities, for example, innovation in medicine adherence management, medicine inventory management, and patient engagement quality.



*Companies with a commercial interest in these connected health opportunities or who are interested in collaborating with ARCH should contact the Project Co-ordinator on [info@arch.ie](mailto:info@arch.ie) or call 01 7165400.*

Project Ref: Core/2015/DA3

### Project Lead

Dr Noel Carroll  
e: [noel.carroll@lero.ie](mailto:noel.carroll@lero.ie)

### Collaborators

S3, ADA Security Systems, Hermitage Medical Clinic, HSE

### Research Theme

Data

### Completion Date

08/03/2016

### Project Deliverables\*

1. Report on state-of-the-art Pharmacy Practice and Current Models of Care
2. Medium term involvement by HSE and industry in project
3. Report on Current Pharmacy Care Pathway Modelling Techniques and Service Barriers
4. Report on Current Pharmacy Practice and Service Barriers
5. Report on Exploiting Existing Innovation across ARCH Industry Members
6. E-Pharmacy: a Proposed ARCH Research Strategy

\*ARCH Industry Members have full access to these reports



**UNIVERSITY of LIMERICK**  
OILScoil LUIMNIGH