

# Designing a ProACTive, Person-Centred Digital Integrated Care System



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Funding: European Union Horizon 2020 Programme

## Aims of the Study

There are limited studies on effective models to manage and **support integrated care** for those with **multimorbidity**. **Study aims** are:

• **Understand: the care pathways of people with multimorbidity** (PwMs) and associated complex health needs between home, primary care and hospital/specialist care; communication amongst relevant stakeholders along these pathways; barriers to access of care; inefficiencies within the system; critical information and decision points; key challenges faced by stakeholders.

• **Design and develop an ICT system ProACT** that aims to evaluate a digital integrated care ecosystem to support PwMs. Trial sites in Ireland, Belgium and Italy will deploy ProACT to PwMs managing two or more conditions (Diabetes, Chronic Obstructive Pulmonary Disorder, Congestive Heart Failure/Chronic Heart Disease).

## Methodology

**Mapping Stakeholders:** Across trial sites in **Ireland, Belgium** and **Italy**.

**Mapping Existing Pathways:** To identify pathways for PwMs in each trial site country. Review of NHS NICE pathways to better understand pathways for single disease management.

**Requirements Gathering:** Interviews and focus groups conducted across trial sites with **166 stakeholders** including PwMs, informal and formal carers, GPs, consultants, nurses, pharmacists.

**Pathways Analysis and Adaptation:** Given lack of pathways to support integrated care for multimorbidity, existing single-disease and older adult care pathways were adapted.

## Findings

Care Pathway (CP) Finding	IR	BE	IT – ER* Region
A multidisciplinary CP for older adult patients exists	Y	Y	Y
GP should coordinate care for PwM	Y	Y	Y
Older PwMs referred to geriatrician	Y	Y	Very often
Older PwMs receive comprehensive geriatric assessment	Y	Y	Not automatic
Specific CP for multimorbidity	N	N	N
Specific CP for COPD	N	N**	Y
Specific CP for Diabetes	N	N**	Y
Specific CP for CHD / CHF	N	N**	Y
Standardisation of CPs in region / country?	N	N	Y
Good integration between health services in different settings?	N	N	Y
Good integration between health and social care?	N	N	Occasionally
Integration of health and social care on government agendas?	Y	Y	Y
Current use of IT to support pathways?	N	N	Y
Recognised need to improve chronic disease management and health promotion?	Y	Y	Y
Recognised need for health system reform to support integrated care?	Y	Y	Y

\* Emilia-Romagna region of Italy    \*\*Exist within hospitals only

## Opportunities for ProACT

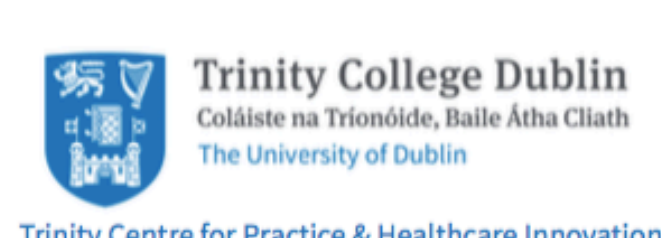
**Pathway steps: (1) Diagnosis; (2) Care Plan Development; (3) Managing Conditions (remaining stable / improving); (4) Managing Exacerbations**

3. Managing conditions (Home)		
Stakeholders involved	Challenges	ProACT Opportunity
<ul style="list-style-type: none"> <li>• Patient</li> <li>• Informal Carer</li> <li>• Formal Carer</li> </ul>	<ul style="list-style-type: none"> <li>• Raising interest to use ProACT and maintaining interest over time</li> <li>• Managing expectations</li> <li>• ICT training and support</li> <li>• Care Apps must be personalised</li> <li>• FC might view using ProACT as increased work burden</li> </ul>	<ul style="list-style-type: none"> <li>• Improving self-management of care</li> <li>• Empowering the patient to be in control</li> <li>• Increased self-efficacy</li> <li>• Increased knowledge of conditions and how to manage</li> <li>• Improved communication amongst all stakeholders</li> <li>• Digital literacy for patient, IC and FC</li> </ul>

3. Managing conditions (Primary Care)		
Stakeholders involved	Challenges	ProACT Opportunity
<ul style="list-style-type: none"> <li>• GP</li> <li>• Primary Care MDT</li> <li>• Public Health Nurse</li> </ul>	<ul style="list-style-type: none"> <li>• Fear of data overload</li> <li>• Fear of increased administrative work</li> <li>• Different GP practices (size, way of working etc.) results in diversified view on what provides added value and what doesn't</li> <li>• Resistance to implementing new IT systems</li> </ul>	<ul style="list-style-type: none"> <li>• Increased knowledge sources for conditions</li> <li>• Lower admin times</li> <li>• Providing a view of the patient 'as a whole'</li> <li>• Daily access to a wide range of information about patients</li> <li>• Ability to provide better patient care</li> </ul>

## Conclusion and Next Steps

- ProACT has the potential to support existing healthcare practices, and also **to improve management and integration of care for those with complex needs**, introducing new ways for key actors (e.g. informal caregivers, general practitioners, pharmacists etc.) to work together and support the PwM.
- ProACT will be trialled with 140 PwMs and their care networks across the 3 trial sites, over a 12 month period from early 2018.



The ProACT project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 689996. This document reflects the views only of the authors, and the European Union cannot be held responsible for any use which may be made of the information contained therein.