



iSIMPATHY

making medication personal

Implementing Simulating Innovation in the Management of Polypharmacy and Adherence Through the Years

Project Executive Summary

7 STEPS TO APPROPRIATE POLYPHARMACY



Background to iSIMPATHY:

The project is funded by the European Union's INTERREG VA Programme and managed by the Special European Union Programmes Body (SEUPB). The iSIMPATHY project builds upon the achievements of the SIMPATHY project which was also EU funded and ended in 2017. The SIMPATHY project concluded with six key recommendations on how to implement programmes to address the patient safety challenge concerned with safe polypharmacy.

The patient safety challenge:

Polypharmacy describes the concomitant use of multiple medicines which represents a growing global challenge, largely attributable to aging populations with increasing prevalence of multi-morbidity.

Polypharmacy can be appropriate but is problematic when the increased risk of harm from interactions between drugs or between drugs and diseases outweigh the intended benefits. Polypharmacy has substantial economic impact on both service demand and hospitalisation as well as a detrimental impact on patients' quality of life. Apart from causing avoidable harm, polypharmacy can also lead to therapeutic failure, with up to 50% of patients taking four or more medications not taking them as prescribed. The project will also consider the impact of the reviews on adherence.

Evidence to date from Scotland estimates that once staffing costs are accounted for £120 per patient per annum is saved for each medicine review undertaken. This does not include the additional savings due to preventable admissions to hospital or other healthcare contact. Globally this costs \$18bn, with an estimated 8.6 million admissions annually in the EU.

The six key recommendations which iSIMPATHY will build on from the SIMPATHY project are:

- Use a systems approach that has multidisciplinary clinical and policy leadership
- Nurture a culture that encourages and prioritises the safety and quality of prescribing
- Ensure that patients are integral to the decisions made about their medicines and are empowered and supported to do so
- Use data to drive change and measure outcomes
- Adopt an evidence based approach with a bias towards action
- Utilise, develop and share tools to support implementation.

The iSIMPATHY project will address these key recommendations through the project activity. iSIMPATHY will deliver across 3 eligible project areas, thus directly contributing to the European Commission ambitions to see synergy between and co-ordination of EU funded initiatives. It will implement the change management tools developed in Scotland and identified by the SIMPATHY project.

The tools developed in SIMPATHY, together with the tools developed as part of the polypharmacy programme in Scotland are a means to ensure that patient outcomes from medication are optimised but with harm being minimised. With the patient at the centre of the intervention and involving them in the decision making about their medication, the aim is to develop new forms of data monitoring and systems modelling to inform a 'health in all policies' approach, with a specific focus on health inequalities to address inappropriate polypharmacy and adherence¹.

Contributions of iSIMPATHY:

iSIMPATHY will lead to a significant contribution towards the embedding of a single approach for polypharmacy management and adherence as well as firmly establishing the value of cross-border working in this field. This will ultimately enable those with multiple morbidity to live healthy and active lives.

The goal is a systems approach across health and care that ensures the optimal and sustainable use of medications for those with multiple morbidity to enable them to live healthy and active lives. A systems change is necessary to aide implementation.

Specifically, guidance is needed to support patients and clinicians in defining and achieving realistic goals of drug treatment, and support shared decision-making.

Multi-disciplinary team sharing across the three sites will allow for learning and development to facilitate stakeholder understanding and implementation. This will need to include addressing the culture of patient safety and working across professional boundaries. Tools that have been developed in Scotland will be shared and implemented in the project areas to benefit patients in the three areas and the use of patient tools will be undertaken in all three to support self-management of long-term conditions. This includes the potential role of digital monitoring and patient decision aides presented in mobile apps.

Project highlights:

The project is funded by the EU Interreg and managed by the Special EU bodies programmes body (SEUPB) with the Scottish Government, Effective Prescribing and Therapeutics, as the lead partner.

¹ **Adherence** is the voluntary cooperation of a patient in taking drugs or medicine as prescribed, including timing, dosage, and frequency

Project partners are Scottish Government/NHS Scotland, Northern Health & Social Care Trust / Medicines Optimisation Centre in Northern Ireland and the Health Service Executive in the Republic of Ireland.

The project is for 3 years and will run until the end of September 2022.

Total funding is €3,520,671 which includes 15% contribution from project partners.

The project will:

- Adopt an evidence-based approach with a bias towards action
- Utilise, develop and share tools to support implementation.

Project outputs

By 2022, the iSIMPATY project aims to transform the approach to optimisation of medicines in the three project jurisdictions, it will do this through:

- Delivering Polypharmacy Medicine reviews for 15,000 patients across the three project jurisdictions: 6,000 in Scotland, 4,500 in Ireland and 4,500 in Northern Ireland.
- Delivering training to 120 GPs, hospital doctors and pharmacists - 40 in each jurisdiction.
- Providing a significant contribution towards the embedding of a single approach for polypharmacy management as well as firmly establishing the value of cross-border working in this field.
- Providing a project evaluation report including any recommendations for further work.
- Providing evidence of benefit to patients