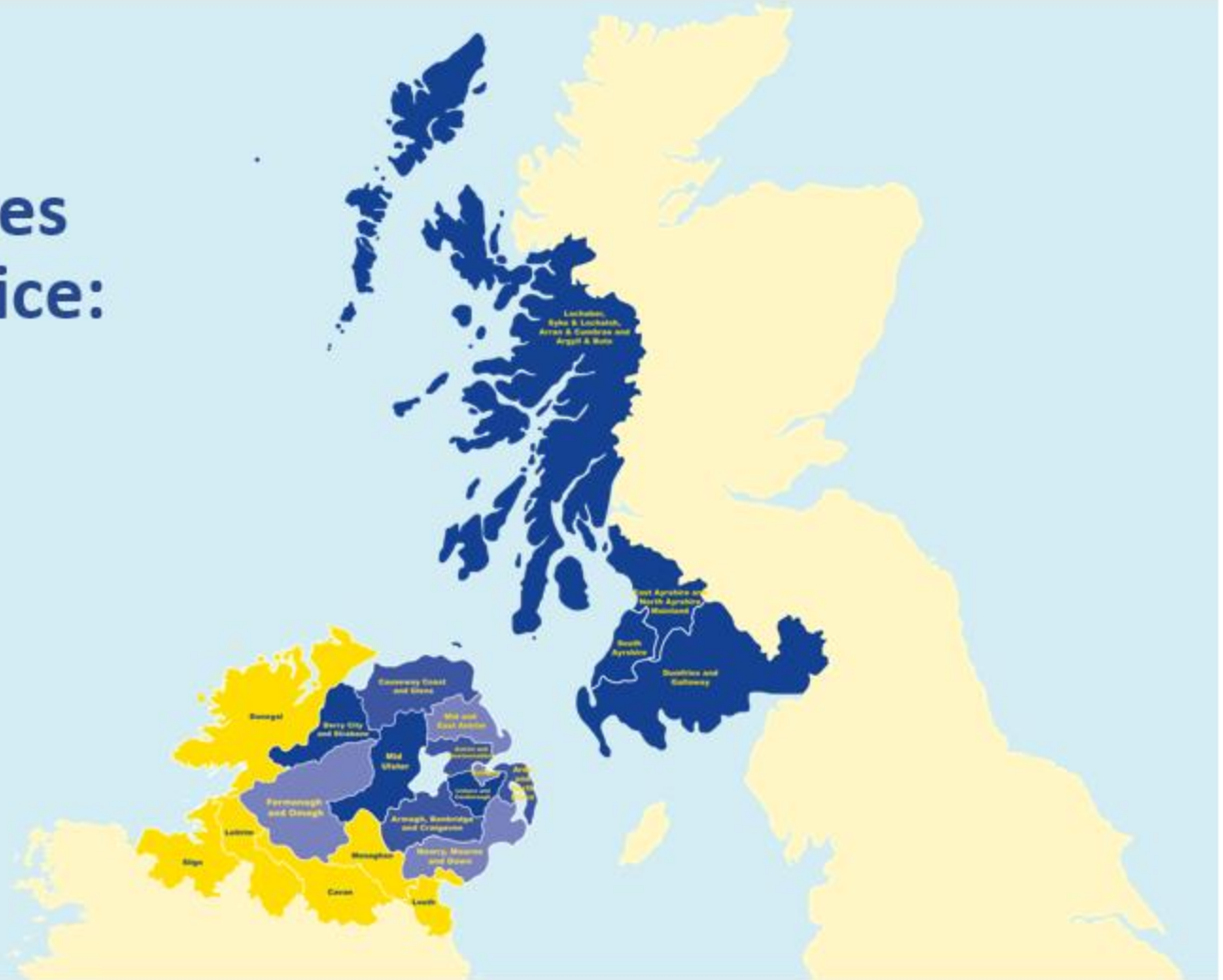


Person-centred Medicines Review in General Practice: iSIMPATHY Project



A project supported by the European Union Interreg VA Programme, managed by the Special European Programme Body (SEUPB)

Ireland team

- Senior clinical iSIMPATY pharmacists
 - **Clare Kinahan** –Kingscourt Surgery and Ballyjamesduff, Family Practice Co Cavan and the Group Practice, Cloughvalley, Carrickmacross, Co Monaghan
 - **Jacqueline Keane** – Strandhill Surgery and Medicentre Barrack Street, Co Sligo and Dromahair Surgery, Leitrim
 - **Emma Jane Coyle** – Bayview Family Practice, Bundoran and Ballyshannon Health Campus, Co Donegal
 - **Leon O’Hagan** – The Square Medical, Dundalk and Northgate, Drogheda, Co Louth
 - **Niamh Feeley** – Drumalee Practice, Cavan
- **Celine Croarkin** – Project Management Lead, HSE iSIMPATY
- **HSE iSIMPATY Steering Group** – Joseph Ruane Chair and Dermot Monaghan Deputy Chair
- **Joanne O’Brien, Trevor Hunter** – Primary Care Pharmacists HSE, CHO 8 and 1
- **Dr Paul Ryan** – Therapeutics Lead, ICGP

Senior clinical pharmacists working in GP practice carries out comprehensive person-centred medicines review with patient and liaise with GP to agree and implement changes

Shared Decision Making



7 STEPS TO APPROPRIATE POLYPHARMACY



Inclusion criteria

- Any one of
 - 10 or more regular medicines*
 - *Reduced in project to 5+; our analysis is for 10+
 - High-risk prescribing indicator
 - Aged 50+ in residential care setting
 - Nearing end of life

Results summary (Ireland)

- Over 2500 reviews delivered (Jan 2021 – Mar 2023) to patients of the general practices (GP or family doctor) - including in nursing homes, mental health, disability
 - Evaluation report (full project) due soon www.isimpathy.eu
 - Analysis with UCC of Ireland's experience for publication(s)
- Average age 75 (not restricted to older people but 90% were aged 65+)
- Average comorbidities 6
- Baseline high levels of polypharmacy (mean 13.6) and potentially inappropriate prescribing (adapted Medication Appropriateness Index PC-MAI mean 25)
- Reduced polypharmacy (mean 13.8 to 12.2 medicines; 1.6 per person reviewed)
- Reduced PC-MAI by mean 17.6 points, from 27.1 to 9.5; 98.5% had improved appropriateness

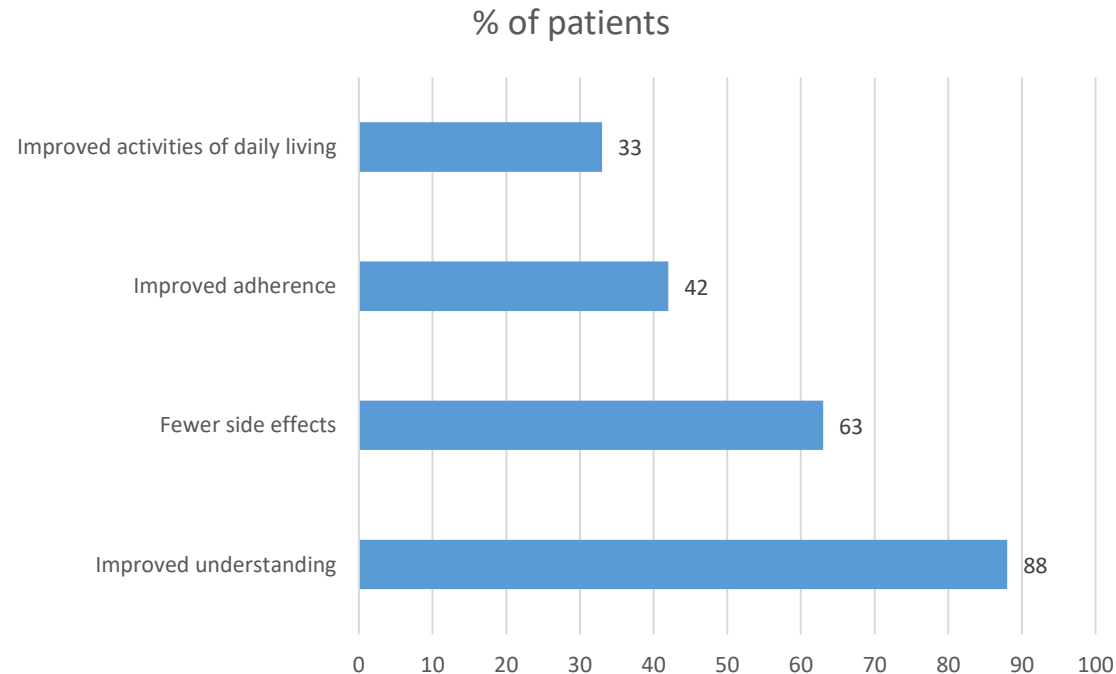
Quality and safety

- 12 issues addressed per review, including drug changes (stopping, reducing, starting and increasing medicines or doses), education, information, monitoring and referrals.
 - 586 Eadon grade 5 interventions in 1544 reviews reporting interventions
(Very significant: prevents a major organ failure or adverse reaction of similar importance)
- Polypharmacy indicator(s) (associated with potentially serious adverse outcomes) identified and approximately 70% addressed, examples below

Category	Common indicator examples
Falls	Two or more sedating / anticholinergic medicines in older people
Bleeding	Oral anticoagulant plus antiplatelet
Renal	ACE inhibitor / ARB plus diuretic plus NSAID
Cardiac	Beta blocker and pulse of less than 60 bpm
Hypotension	Dementia and 2 or more BP lowering drugs and BP less than 130/75 mmHg
Cerebrovascular	Atrial fibrillation and CHADSVASC score 3 or greater not prescribed an anticoagulant

Patient experience

- High uptake, openness to shared decision making, positive feedback.
- Phone reviews favoured by most patients.
- Patient Reported Outcome Measures (n=206)



“Pains in my legs used to limit my walking distance, but this improved after my medication review”

“Dad’s mood and appetite are much better since his medication review”

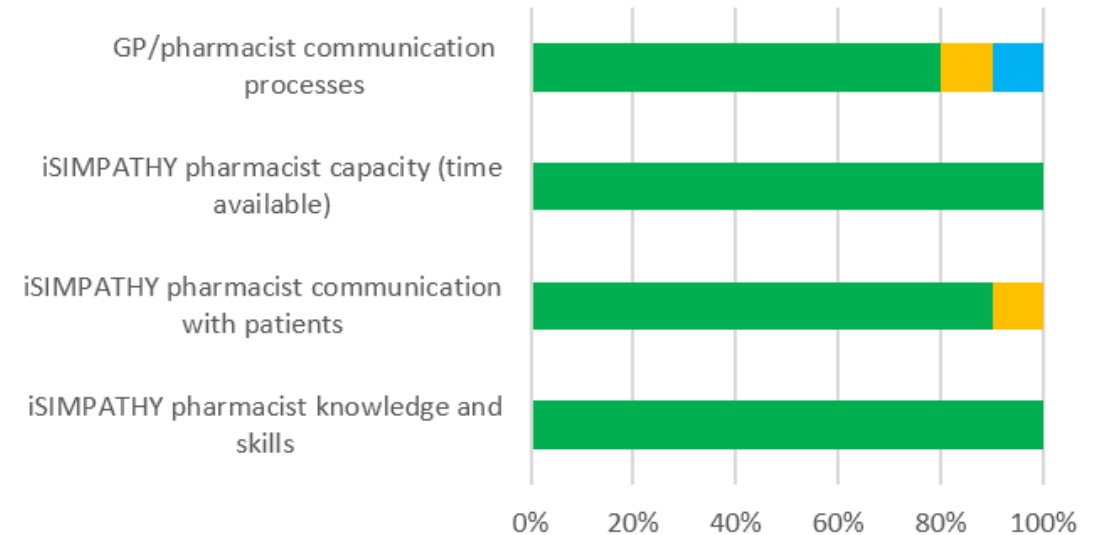
“My mouth is less dry and my bowels have improved”

“There was a definite improvement in my constipation and shortness of breath. I had no idea that changing my tablets could help with these things”

“I’m delighted that I don’t have to get up as often during the night to use the toilet”

GP experience

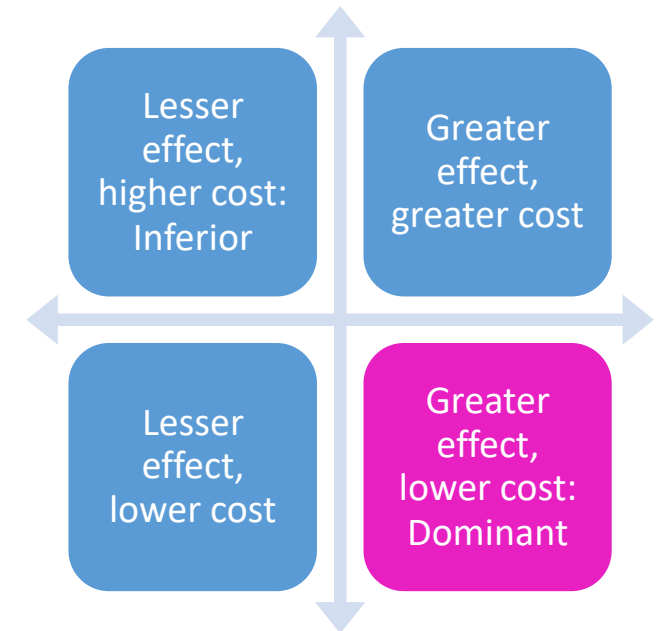
- GPs have reported;
 - Positive effects on patient safety, quality of life, satisfaction, understanding, adherence and quality of care.
 - Positive effect on GP job satisfaction, knowledge and understanding
- Key facilitators highlighted by GPs
 - HSE survey of project GPs and pharmacists, July 2021



- SIGNIFICANT FACILITATOR TO SUCCESS OF THE APPROACH
- FACILITATOR SOME OF THE TIME
- NEUTRAL - NEITHER A FACILITATOR NOR A BARRIER
- A BARRIER SOME OF THE TIME
- SIGNIFICANT BARRIER TO SUCCESS OF THE APPROACH

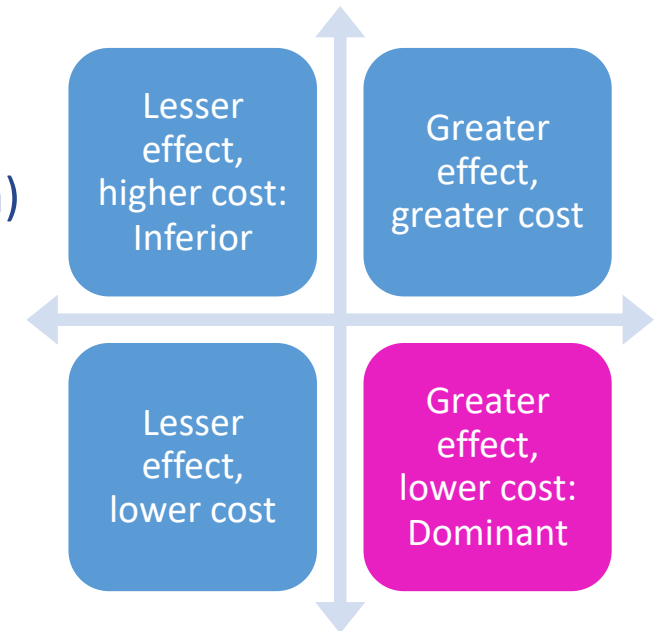
Economic analysis (iSIMPATHY project)

- **Cost per review = €246**
 - 366 medicines reviews per working year per pharmacist
 - Payscale + PRSI + equipment + travel & subsistence
 - GP payment per review
- **Cost savings per review = €431**
 - Direct drug cost savings to HSE
 - Mean -€375 (95% CI -€546 to €207)
 - Hospital admission due to ADR avoidance: €56 per review
 - Population-based calculation of likelihood of avoidance of an ADR-related hospital admission
- **Net cost savings per review = €185**
- NB project activities took up to 2 days/week



Budget impact assessment (2023)

- **Cost per review = €227**
 - 10 medicines reviews per working week per pharmacist (450 pa)
 - Payscale + PRSI + equipment + travel & subsistence
 - GP payment per review
- **Cost savings per review = €431**
 - Direct drug cost savings to HSE
 - Mean €375 (95% CI €217 to 542)
 - Hospital admission due to ADR avoidance: €56 per review
 - Population-based calculation of likelihood of avoidance of an ADR-related hospital admission
- **Net cost savings per review = €204**



Outputs per pharmacist per year			
Age	65 to 100		65 to 100
Meds	10+ Meds		5 - 9 Meds
Total Cost	€	97,750	€ 97,750
Total Savings	€	185,627	€ 104,896
Total Net Savings	€	87,877	€ 7,146
Savings Ratio		1.90	1.07

Reflections

- Very positive experience, very significant impacts, in contrast to many research studies of other models of medicines review in Ireland
- Value of understanding and shared decision making – patient empowerment
- Optimisation not only deprescribing
- Adding capacity and capability – new clinical pharmacist roles with good guidance and peer support
- Information access – history, labs, medication list, patient
- Close teamworking with prescribers

- Learning from experiences of project partners in Northern Ireland (acute in-patient reviews) and Scotland (multiple settings)

Discussion points

- Widespread support for mainstreaming but path not clear to do this
 - Department of Health, HSE, patient advocates, engagement, publicity, business cases
- Similar to other really important and urgent initiatives to reduce medication-related harm, e.g. pharmacy-led medicines reconciliation
- What have you found generates interest, commitment and funding to address medication-related harm (especially where require funding, policy change, new posts to deliver services)?

Resources

- www.isimpathy.eu
- www.safermeds.ie