



# QPS TALKTIME



A community of quality and patient safety improvers

24 May, 2022

## Person-centred Medicines Review in General Practice: iSIMPATY Project

# How we are running today's session



- You will be muted but the chat is open throughout - please post any questions or comments there and we will address them after the presentation.
- If your tech fails, don't worry – we're recording it so you can watch video and access the slides at your convenience. Audio is available via your PC or dial in:  
Telephone no: Irish: 01-5260058 / UK: +44-20-7660-8149  
Event number: 2733 300 4653#
- Please feel free to continue the discussion on Twitter: @ciarakirke @KinahanClare @iSIMPATY @mapflynn @johnfitzsimons9 @QPSTalktime @NationalQPS @HSCQI
- Please help us to improve our QPS Talktime Webinars by completing a short feedback form (pop up window before you log out)
- You will receive an email from QPS Talktime confirming your attendance

# To get started ... we invite you to

Share using the chat box

- Your name, work and where you are joining us from ...
- Invitation to respond to this question:

“Can you guess or does anyone know the percentage of hospital admissions related to adverse drug reactions?...”

# Speakers today



**Ciara Kirke**, Clinical Lead of the HSE's National Medication Safety Programme, National Quality and Patient Safety Directorate, and HSE lead for the iSIMPATY Project



**Clare Kinahan**, HSE Senior Clinical Pharmacist and iSIMPATY Project Clinical Pharmacist



**Dr Majella Grealish**, General Practitioner, Bayview Family Practice, Ballyshannon, Co Donegal

Facilitating the conversation



**Dr Maureen Flynn**, Director of Nursing, OMNSD and QPS Connect Lead, National Quality and Patient Safety Directorate

“When I was out walking some time ago I used to get quite dizzy. I was taken off a couple of tablets and now I feel great again.”

“I think everybody should have a review.”

James Howard

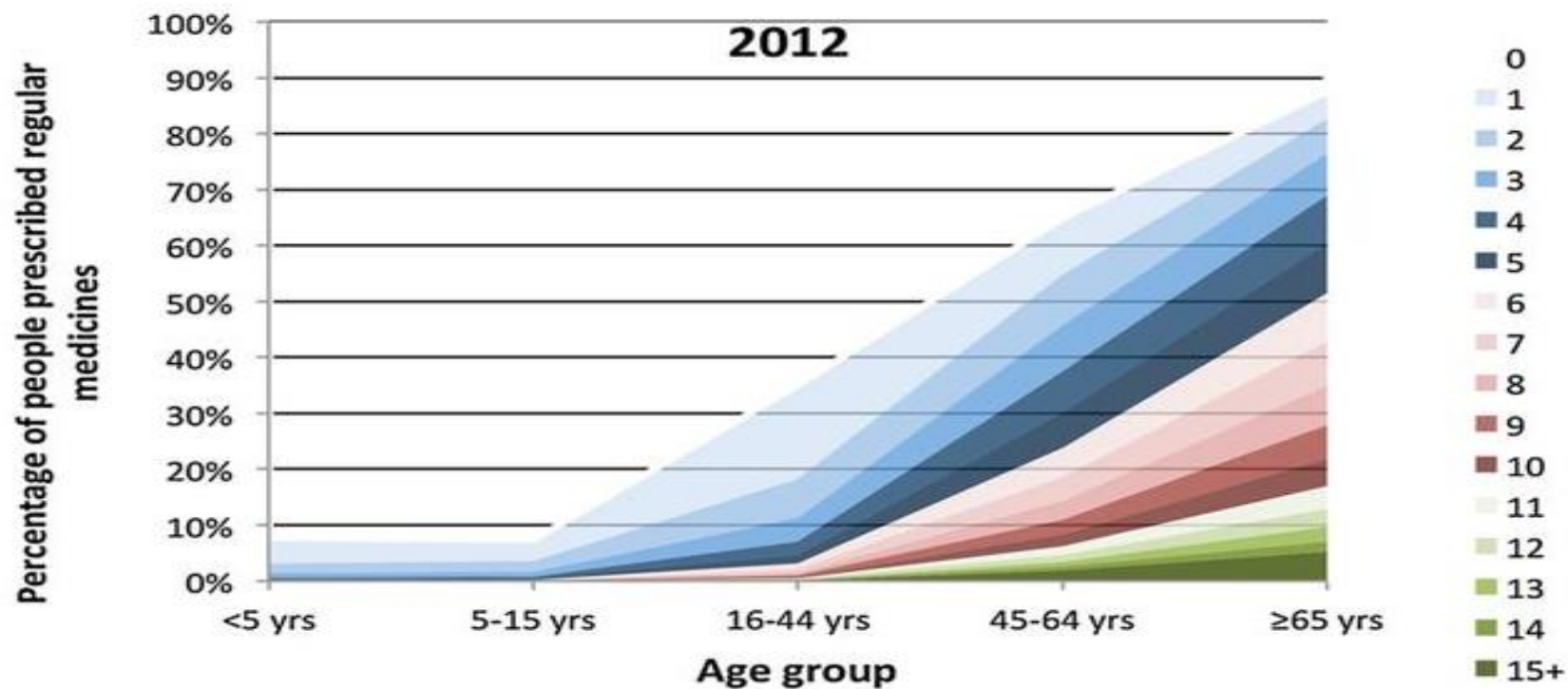






60% aged 65+ on 5+ medicines and 22% on 10+  
30% aged 45-64 on 5+ medicines and 8.3% on 10+

Moriarty F et al. BMJ Open 2015;5:e008656



# Polypharmacy

- Associated with increased
  - inappropriate medicines
  - adverse drug events/ harm
  - healthcare utilisation
    - Of people aged 50-64, the 10% on 10+ medicines account for 28% of inpatient, 30% outpatient and 25% GP visits. (TILDA Report, 2012)
  - drug burden and complexity, reduced adherence
  - waste





# Adverse drug events

- 10% of emergency admissions in people aged 65 + associated with an adverse drug event (Curran, 2020)
  - 71% definitely or possibly avoidable

# iSIMPATHY

- Implementation of Stimulating Innovation Management of Polypharmacy and Adherence Through the Years
- EU-INTERREG VA funded; match funding from Department of Health
- Scottish Government (lead partner), HSE, MOIC/Northern Trust
- GP practice-based in border counties and Scotland. Hospital in NI
- Training, peer support, Scottish Polypharmacy Guidance and expertise
- Funded to March 2023
- [www.isimpathy.eu](http://www.isimpathy.eu)

# 7 STEPS TO APPROPRIATE POLYPHARMACY

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



# Our team

- Senior clinical iSIMPATY pharmacists
  - **Leon O'Hagan** – The Square Medical, Dundalk and Northgate, Drogheda, Co Louth
  - **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 GP practice in Leitrim from Jan 2022
  - **Emma Jane Coyle** – Bayview Family Practice, Bundoran and Ballyshannon Health Campus, Co Donegal
- **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

# Results summary

- 1600 reviews delivered (Jan 2021 – Apr 2022)
- Approximately 10 reviews per working week per pharmacist
- Average age 77 (31-101)
- Average comorbidities 7

# Safety & quality

- Average 14 drugs pre-review; 12 post-review
- Average of 13 issues per review; drug changes, education, information, monitoring, referral, medicines reconciliation. Clinical significance:

Eadon category	Number	%
1. Detrimental to patient	0	0
2. No significance to patient	90	1.3
3. Significant: does not improve patient care	1264	18.9
4. Significant: improves patient care	5150	77.1
5. Very significant: prevents a major organ failure or adverse reaction of similar importance	175	2.6
6. Potentially lifesaving	0	0



# Safety & quality

<https://www.therapeutics.scot.nhs.uk/polypharmacy/indicators>

- 390 polypharmacy indicators were identified (74%). These are associated with potentially serious adverse outcome.

Indicator category	Number	%	Most common indicator
Falls	120	30.8	Two or more sedating/anticholinergic medicines in older people (n=115)
Bleeding	58	14.9	Oral anticoagulant plus antiplatelet (n=44)
Renal	42	10.8	ACEI/ARB plus diuretic plus NSAID (n=21)
Cardiac	36	9.2	Beta blocker and pulse of <60bpm (n=15)
Hypotension	22	5.6	Dementia and 2 or more BP lowering drugs and BP <130/75mmHg (n=16)
Cerebrovascular	20	5.1	AF and CHADSVASC score $\geq 3$ not prescribed an anticoagulant (n=15)

- The risk was fully addressed for 69%.
- Others partially addressed or not appropriate to address.

# Patient experience

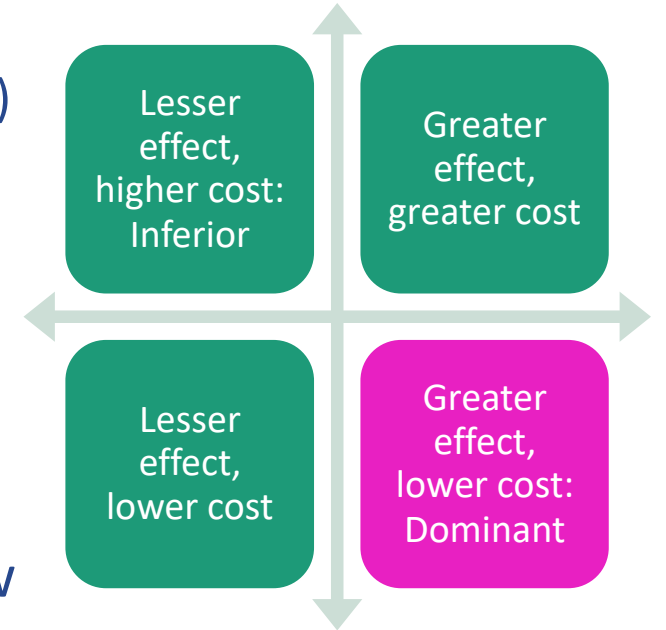
- Very high uptake of reviews
- Phone reviews very acceptable to most patients
- Very positive feedback
- Agreement with pharmacist suggestions and with shared decision making
- Strong support from patient advocates on HSE steering group and from HSE Board Quality and Safety Committee

# GP experience

- HSE survey of project GPs and pharmacists, July 2021
  - Positive effects on patient safety, quality of life, satisfaction, understanding, adherence and quality of care.
  - Positive effect on GP job satisfaction, knowledge and understanding
  - Pharmacist knowledge and skills, capacity (time) to carry out reviews and communication with the patient are key facilitators.
  - GPs' capacity (time available) to engage with the project is a challenge.
  - Unanimous support for continuation and spread.

# Cost effective

- Cost per review = €202
  - 10 medicines reviews per working week per pharmacist (450 pa)
  - Payscale + PRSI + equipment + travel & subsistence
  - GP payment per review
- Cost savings per review = €411
  - Direct drug cost savings to HSE
    - Mean €375 (95% CI €217 to 542)
  - Hospital admission due to ADR avoidance: €36 per review
    - 638,090 over 65s; 26.3% have a hospital admission per annum, 10% are ADR-related, 2.6% have an ADR admission; 27% avoidable, therefore 0.71% of over 65s reviewed will avoid a hospital admission as a result per annum. €889 inpatient cost per day, ALOS 5.7 days
- Net cost savings per review = €208



# Does Shared Decision Making (SDM) Address Potentially Inappropriate Prescribing (PIP)?

MSc Leadership in Healthcare

Clare Kinahan, iSIMPATY Project Pharmacist



# 7 STEPS TO APPROPRIATE POLYPHARMACY



Step 1: What matters to the patient

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Step 2: Identify essential drug therapy

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Step 3: Does the patient take unnecessary drug therapy?

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Step 4: Are therapeutic objectives being achieved?

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Step 5: Is the patient at risk of ADRs or suffers actual ADRs?

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Step 6: Is drug therapy cost-effective?

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Step 7: Is the patient willing and able to take drug therapy as intended?



# iSIMPATHY facilitates Shared Decision Making (SDM)

02-UK 18:12

(Alendronate, Fosamax, Binosto)

How likely is Alendronic Acid to help me?

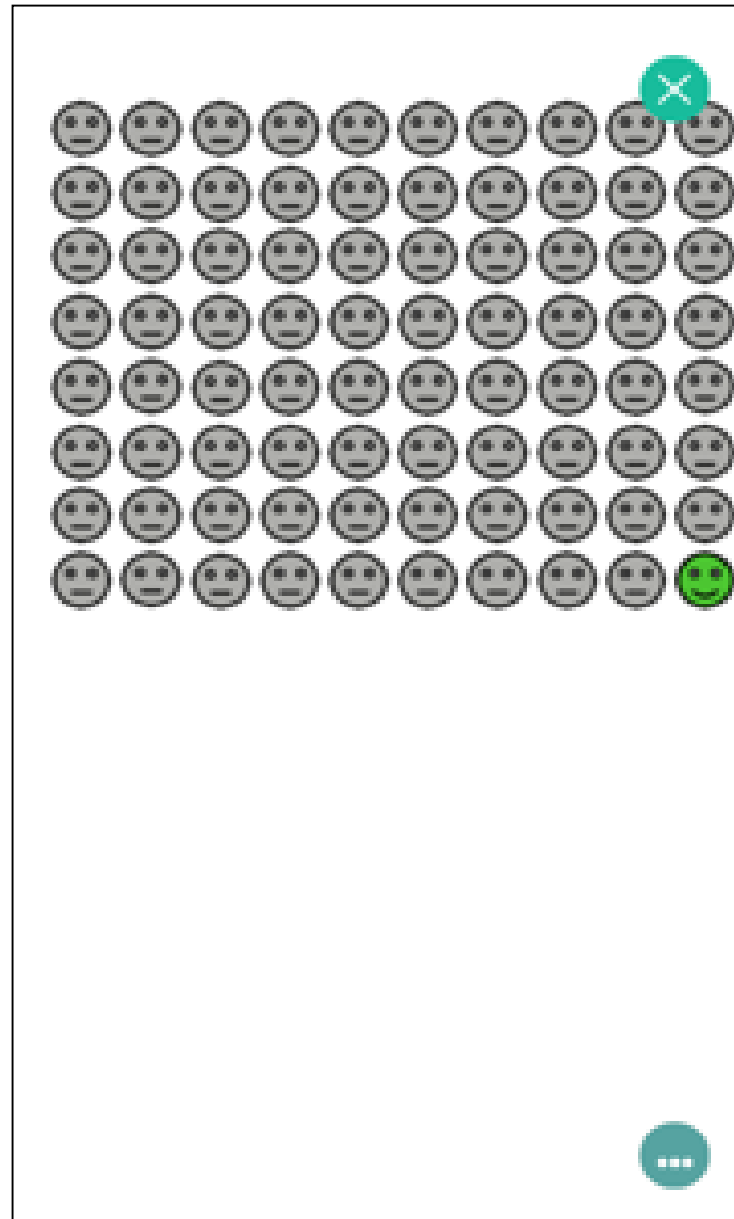
**Key**

This grey face represents the number of people in the survey group.

This green face represents the one person in the survey group that the medicine has helped.

For women who are past the menopause and have already had a vertebral fracture, research suggests that the benefits of Alendronic Acid vary with age:

- In a group of 80 women aged 65-74 with previous vertebral fractures, Alendronic Acid will prevent one person (on average) from a second fracture in the course of one year.



02-UK 18:12

How likely is Alendronic Acid to help me?

What are the possible risks of taking Alendronic Acid?

You can discuss with your health professional the possible side effects and other risks Alendronic Acid might have.

side-effects are unwanted affects that can happen to your body when taking a medicine.

Not everyone will get side-effects. These usually improve as your body adjusts to the new medicine, but speak with your doctor or pharmacist if any of the following side-effects persist or worry you.

The most common side-effects of Alendronate, affecting less than 1 in 10 people, are:

- Indigestion, abdominal pain, bloating
- Constipation or Diarrhoea
- Headache, muscle or joint pain
- Dizziness, itching.

# Shared Decision Making



# Prescribing Decisions Need to be Revisited



Ageing population



↑ Chronic diseases  
(multimorbidity)



↑ Use of medicines  
(polypharmacy)

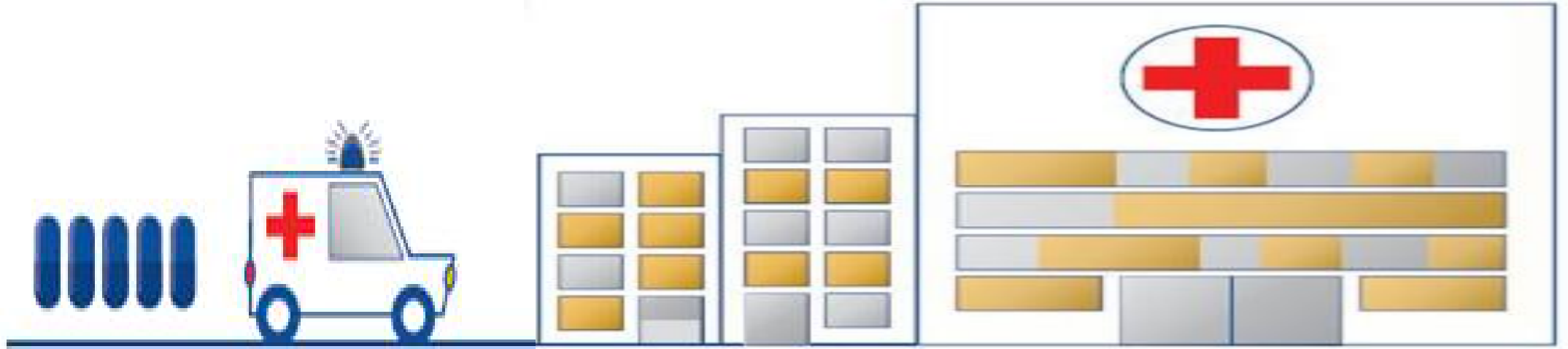


↑ Risk of adverse drug  
reactions (ADR)

“We, as patients, tend to assume that the professionals we are dealing with know what they are doing and rarely mention our difficulties unless we are outright asked if we have difficulty managing our medicines or it reaches the point where we feel truly desperate”

Barnett-Cormack, S. (2017). Managing medicines in multimorbidity: a patient perspective. *EJHP*, 24, pp. 34-36

# ~~REACTIVE~~



Inappropriate prescribing identified by STOPP contributes to a higher proportion of ED visits and admissions than identified by other tools

Moriarty F, Bennett K, Kenny RA, Fahey T, Cahir C. Comparing Potentially Inappropriate Prescribing Tools and Their Association With Patient Outcomes. *J Am Geriatr Soc.* 2020;68(3):526-534.



# PROACTIVE



# Challenging to Effectively Address PIP without SDM

A Cochrane Review found interventions using validated tools to address PIP yielded uncertain impacts on clinically significant patient outcomes

Rankin, A., Cadogan, C. A., Patterson, S. et al. (2018). Interventions to improve the appropriate use of polypharmacy for older people. *The Cochrane database of systematic reviews*, 9(9).

Several recommendations cannot be implemented during hospital admission as participants want to discuss them with their GPs

Blum, M. R., Sallevelt, B., Spinewine, A. et al. (2021). Optimizing Therapy to Prevent Avoidable Hospital Admissions in Multimorbid Older Adults (OPERAM): cluster randomised controlled trial. *BMJ (Clinical research ed.)*, 374, n1585.

The OPTI-SCRIPT intervention led to significant reductions in the most commonly occurring PIP nationally, but reductions in PPI dosage did not improve outcomes

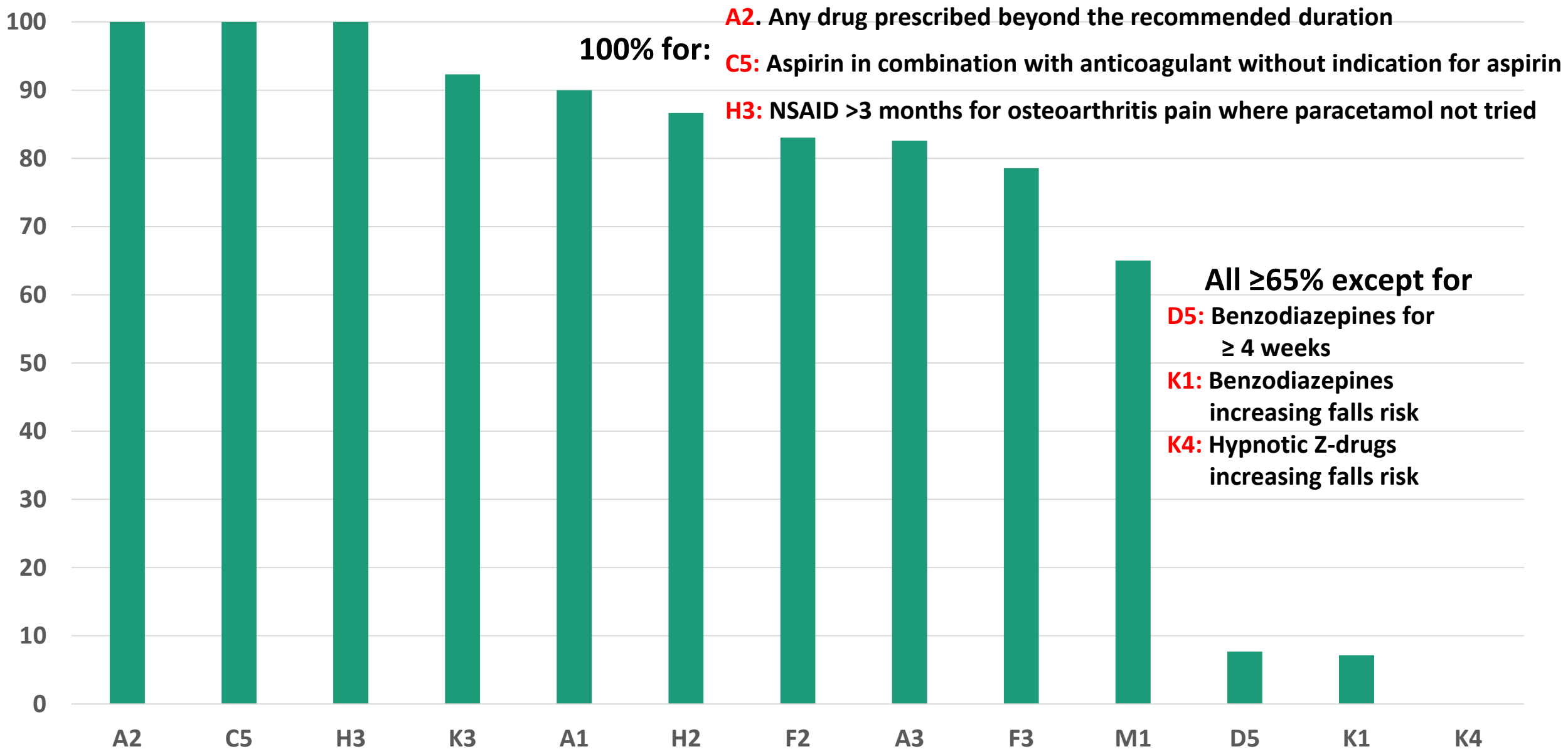
Clyne, B., Smith, S. M., Hughes and OPTI-SCRIPT study team (2015). Effectiveness of a Multifaceted Intervention for Potentially Inappropriate Prescribing in Older Patients in Primary Care: A Cluster-Randomized Controlled Trial (OPTI-SCRIPT Study). *Annals of family medicine*, 13(6), pp. 545–553.

# Study Methodology

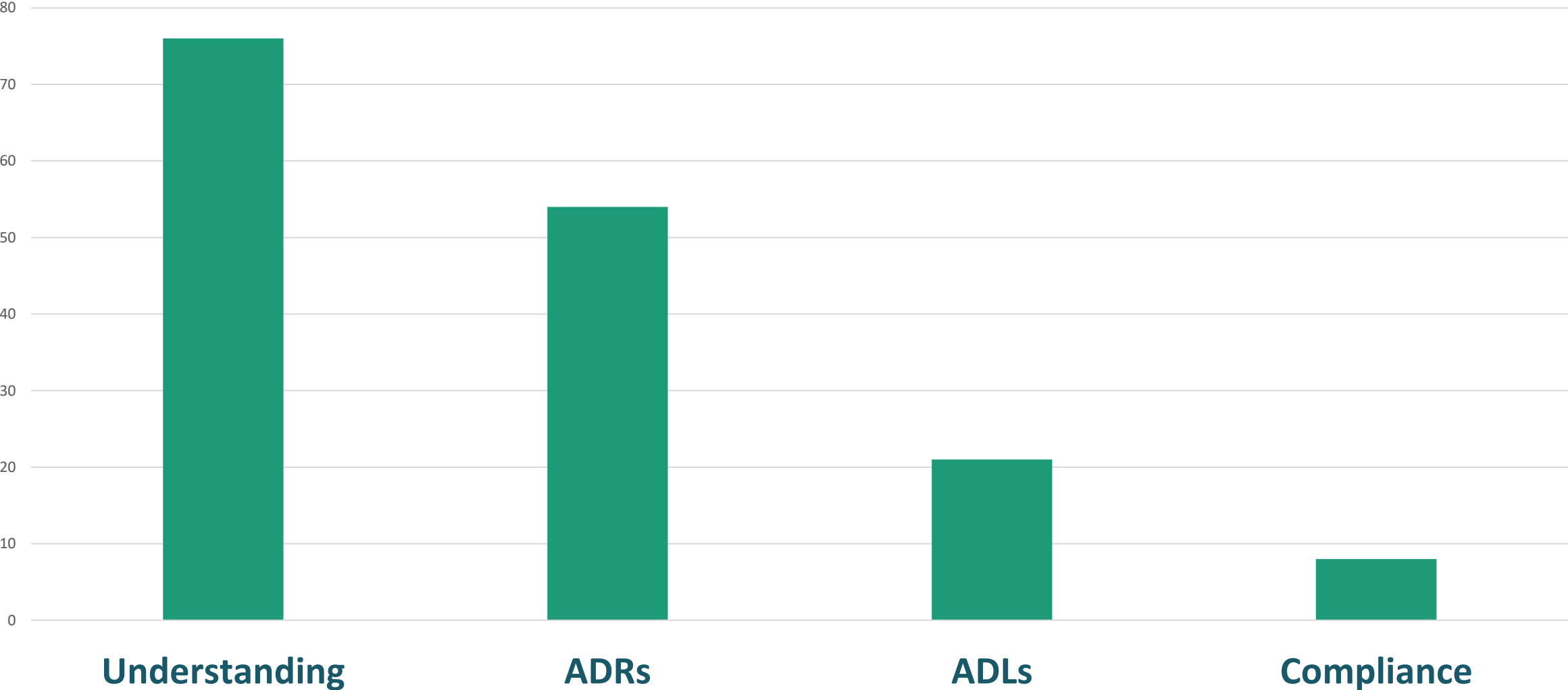
1. Innumerate the number of STOPP/START criteria Pre and Post review for first 100 Medication Reviews of Patients >65 years on  $\geq 10$  medications
2. Examine correlation with iSIMPATY Patient Reported Outcome Measures:
  1. Understanding of Medications
  2. Adverse Drug Reactions (ADRs)
  3. Activities of Daily Living (ADLs)
  4. Adherence



# Reduction rates of most prevalent STOPP

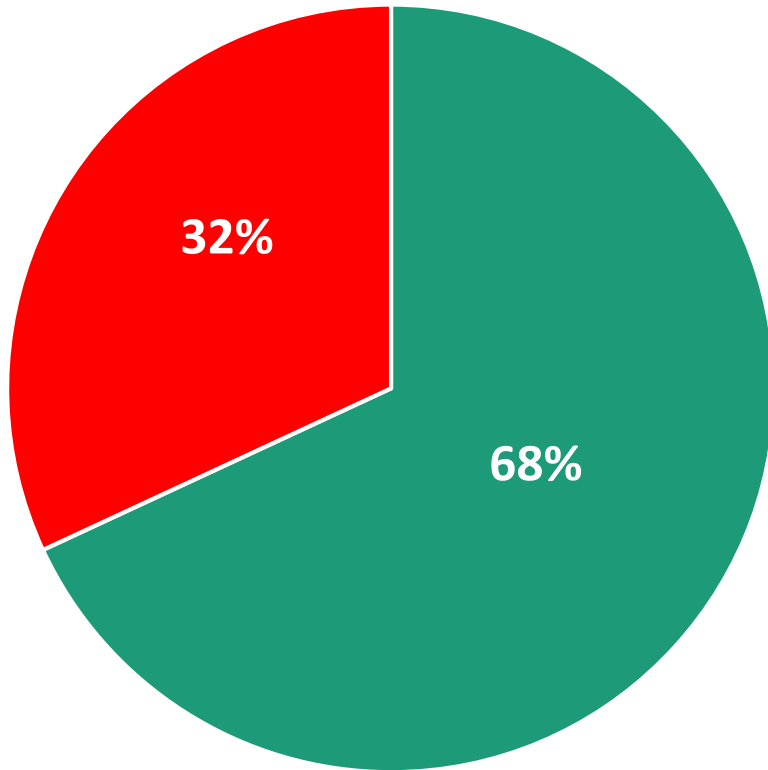


# Improvement in Patient Reported Outcome Measures (PROMs)

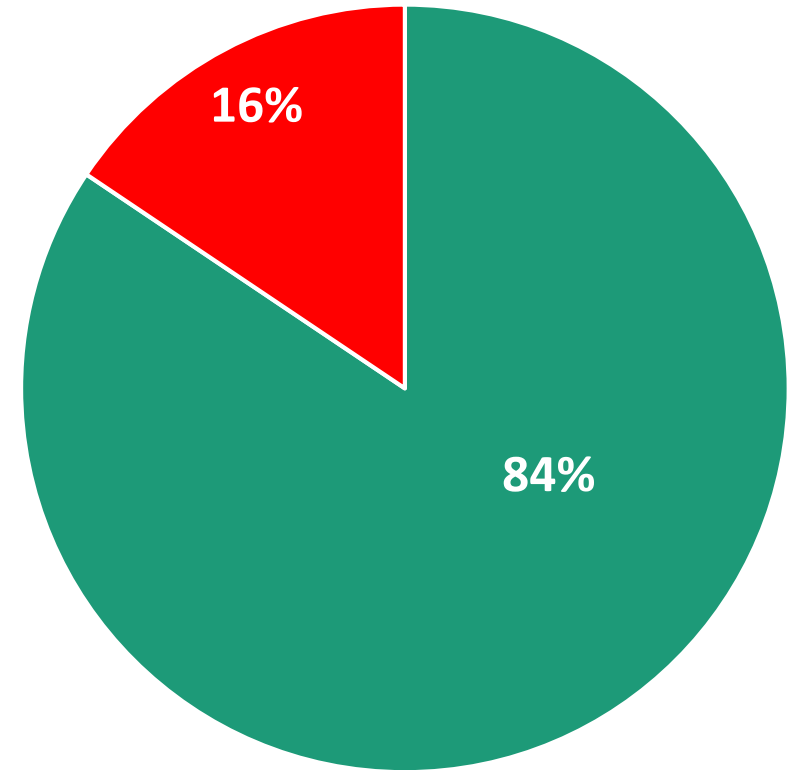


# Correlation between Improvement in PROMs and Reduction in PIP

PROM 0-1, n=53



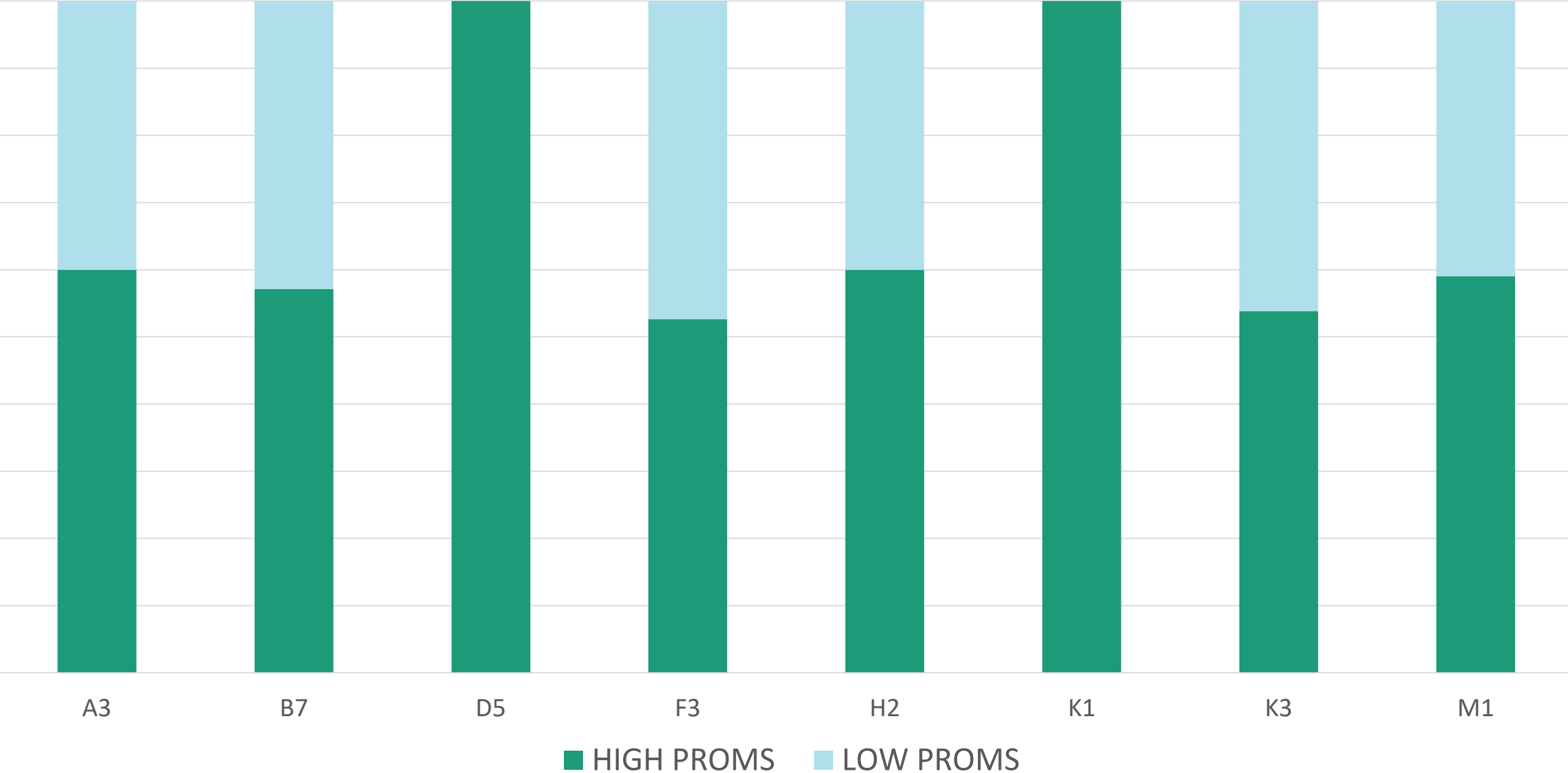
PROM 2-4, n=47



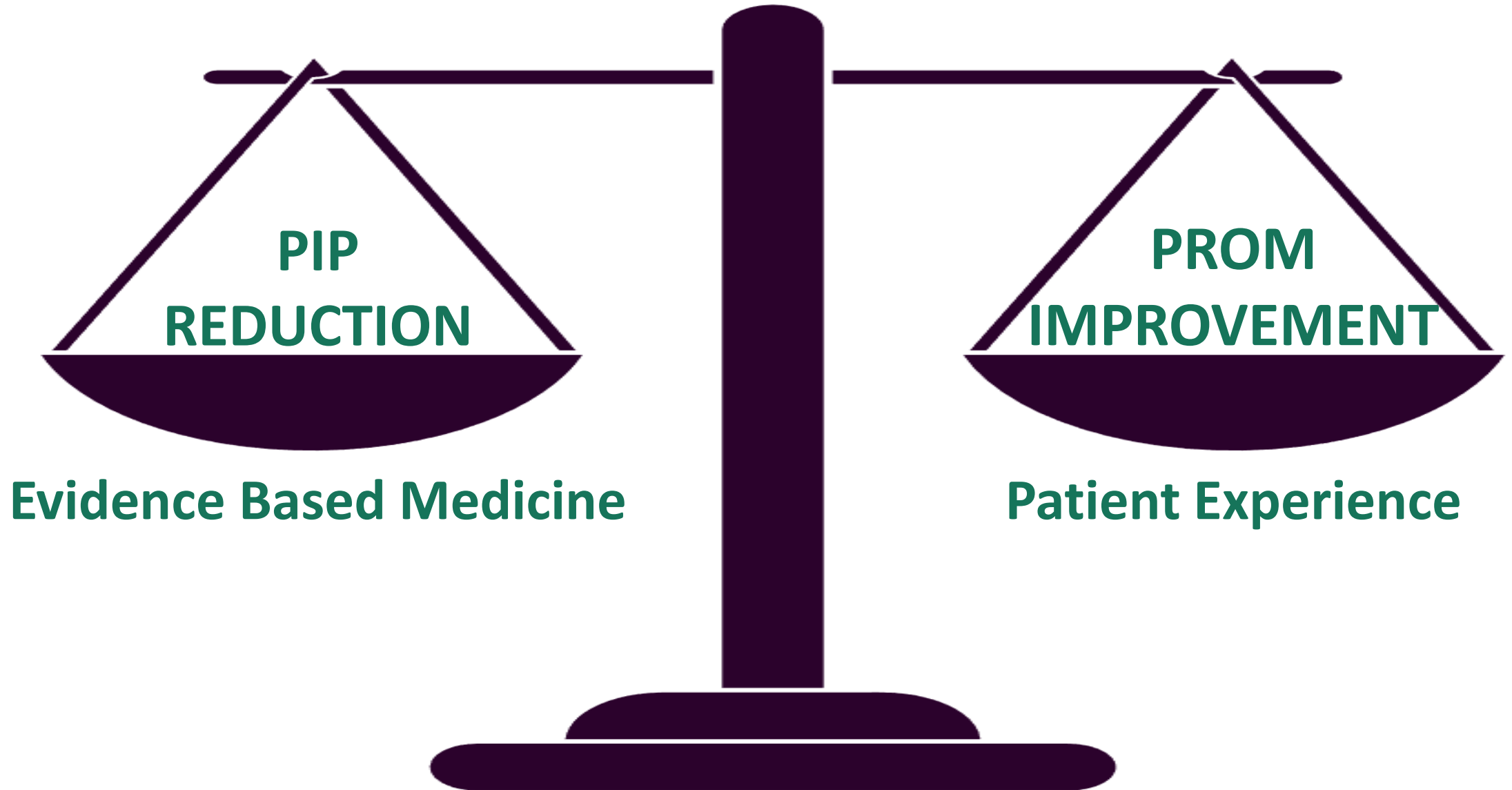
■ STOPP ADDRESSED ■ STOPP UNADDRESSED

■ STOPP ADDRESSED ■ STOPP UNADDRESSED

# Prevalent STOPP Criteria reduced to a greater extent in those with significant PROM improvements



# iSIMPATY REVIEWS ACHIEVE



# Resources

- Training
  - 3 x 45 min videos with MCQs, available shortly, email [celine.Croarkin@hse.ie](mailto:celine.Croarkin@hse.ie) if interested
- <https://www.therapeutics.scot.nhs.uk/wp-content/uploads/2018/04/Polypharmacy-Guidance-2018.pdf>
- <https://managemeds.scot.nhs.uk/>
  - App or website with guidance – HCP section and patient section
- <https://www.lenus.ie/handle/10147/631776?show=full>
  - Interim report iSIMPATY in ROI



# HEARING YOUR THOUGHTS AND COMMENTS

# Applications open | Apply by 24 June 2022



**HSE** An Stúirthóireacht um Ardchaighdeán agus Sábháilteacht Othar  
Oifig an Phríomhoifigigh Cliniciúil

National Quality and Patient Safety Directorate  
Office of the Chief Clinical Officer

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## Postgraduate Certificate in Quality Improvement Leadership in Healthcare

- One year RCPI programme **fully funded** for HSE employees by the HSE National Quality & Patient Safety Directorate (NQPSD)
- Blended learning programme commencing September 2022

**Apply at [www.rcpi.ie](http://www.rcpi.ie)  
Submit by 24 June 2022!**



### HOW TO APPLY

- Form your multidisciplinary team of three people!
- Generate project idea focused on addressing common causes of harm outlined in the *Patient Safety Strategy 2019-2024*. (Applications are particularly welcome from teams seeking to make patient safety improvements in the areas of mental health and medications safety).
- Discuss with your senior manager and seek executive endorsement.
- Start your application online! (You can save your progress but remember to submit by 5pm, Friday, 24th June!)

A team- and project-based learning programme

Use this link to read more about the programme and how to apply :

<https://courses.rcpi.ie/product?catalog=Postgraduate-Certificate-in-Quality-Improvement-Leadership-in-Healthcare>



# Handbook of Patient Safety: A pragmatic, simple approach to Safety

*Edited by Peter Lachman, Jane Runnacles, Anita Jayadev, John Brennan, and John Fitzsimons*

- Explains patient safety theory in simple terms to help clinicians practice safely
- Provides day-to-day practical approaches to improve care
- Provides summaries with key take home points
- Written by clinical specialists with international expertise in patient safety issues
- Content applies patient safety theory to clinical practice with real world examples
- Reflects the WHO Patient Safety Curriculum

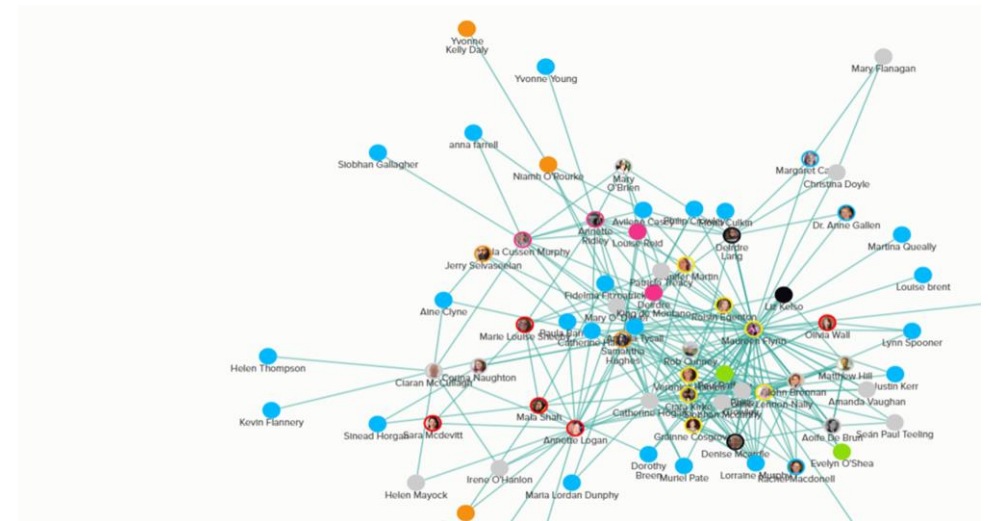


To purchase: <https://global.oup.com/academic/product/oxford-professional-practice-handbook-of-patient-safety-9780192846877?cc=ie&lang=en>

# The QPS Ireland Network Map

To help visualise connections between people interested in quality, safety and improvement across Ireland: <https://www.hse.ie/eng/about/who/nqpsd/qps-connect/network-map/>

- How to join the map?
  - Visit the HSE website (see link in the chat)
  - Get sent your unique link to the map
  - Enter information about you, your professional characteristics and your interests
  - Log your connections
- How to use the map?
  - Filter the map by role, organisation, interests
  - View individual profiles
  - Connect and collaborate with others



# Apply to become a member of Q Community



- All you need to know about applying can be found on the Q website
- You will be invited to complete an online application using the Q online portal
- If you have queries or require support, please contact our colleague via email

[Caroline.Lennonnally@hse.ie](mailto:Caroline.Lennonnally@hse.ie)

# Upcoming Webinars: Dates for your diary ....

Dates	Topics	Speakers
21 June 2022	QI Learning Programmes in Practice	Dr Mary Browne, National Quality and Patient Safety Directorate

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Missed a webinar – Don't worry you can watch recorded webinars on HSE QPS Talktime page:

<https://www.hse.ie/eng/about/who/nqpsd/qps-connect/qps-talktime/qps-talktime.html>

# Let us know how we did today ....

**Reminder:** Short questions (pop up) as you sign off, please help us to improve our QPS Talktime Webinars by sharing your feedback

We really appreciate your time, thank you

**Contact:** [Noemi.Palacios@hse.ie](mailto:Noemi.Palacios@hse.ie) to be included on our mailing list to receive QPS Talktime invitations



*Thank  
you*