Healthcare Improvement Scotland

Medication reviews for older adults living with frailty

Dr Lara Mitchell, National Clinical Lead for Acute,
Healthcare Improvement Scotland

Leading quality health and care for Scotland

NHS SCOTLAND

Introduction

Dr Lara Mitchell

National Clinical Lead for Acute,

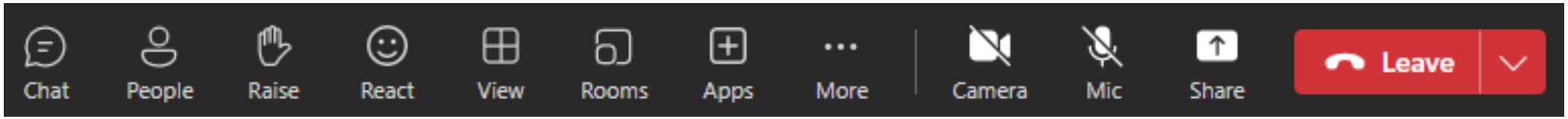
Healthcare Improvement Scotland

Housekeeping

Use **Chat** to introduce yourself, raise any questions you may have for the speakers and also post comments.

React to others contributions with emojis.

Press **leave** at the end of the webinar**.**



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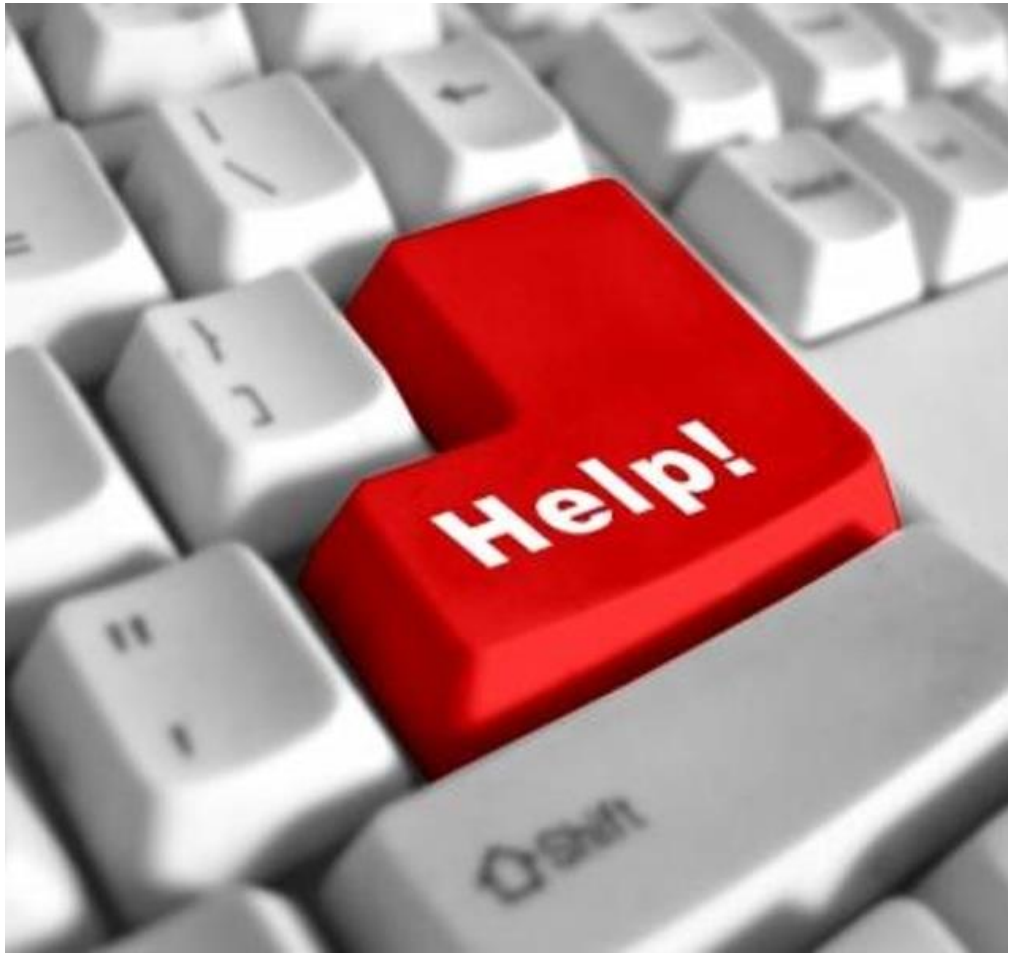
Gemma Rehill

- MS teams chat @gemmarehill
- Email: gemma.rehill@nhs.scot



This session will be recorded

The link to the recording will be shared on our website

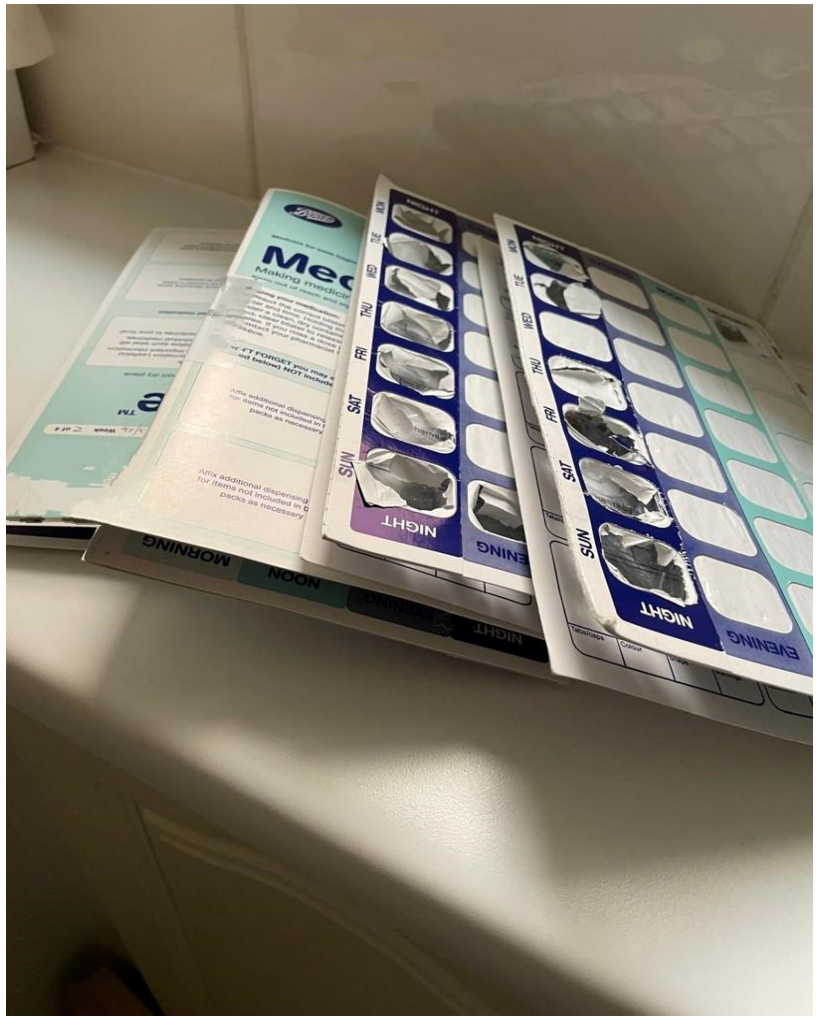
Aims

- Hear examples of medication reviews.
- Explore how medication reviews can improve outcomes.
- Consider how to improve the communication and co-ordination of medication reviews.

Agenda

Time	Topic	Lead
13:00	Welcome and introductions	Dr Lara Mitchell, National Clinical Lead for Acute, Healthcare Improvement Scotland
13:10	Realistic medication reviews: A patient centred approach to managing polypharmacy in an ageing/frail population	Lucy Little, Lead Clinical Pharmacist (Annandale and Eskdale), NHS Dumfries & Galloway
13:35	An innovative approach to medication reviews prior to complex care package allocation	Christine Thomson, Lead Pharmacist Primary Care, Moray Health and Social Care Partnership
13:40	Q&A	Dr Lara Mitchell, National Clinical Lead for Acute, Healthcare Improvement Scotland
13:55	Evaluation and close	Dr Lara Mitchell, National Clinical Lead for Acute, Healthcare Improvement Scotland

What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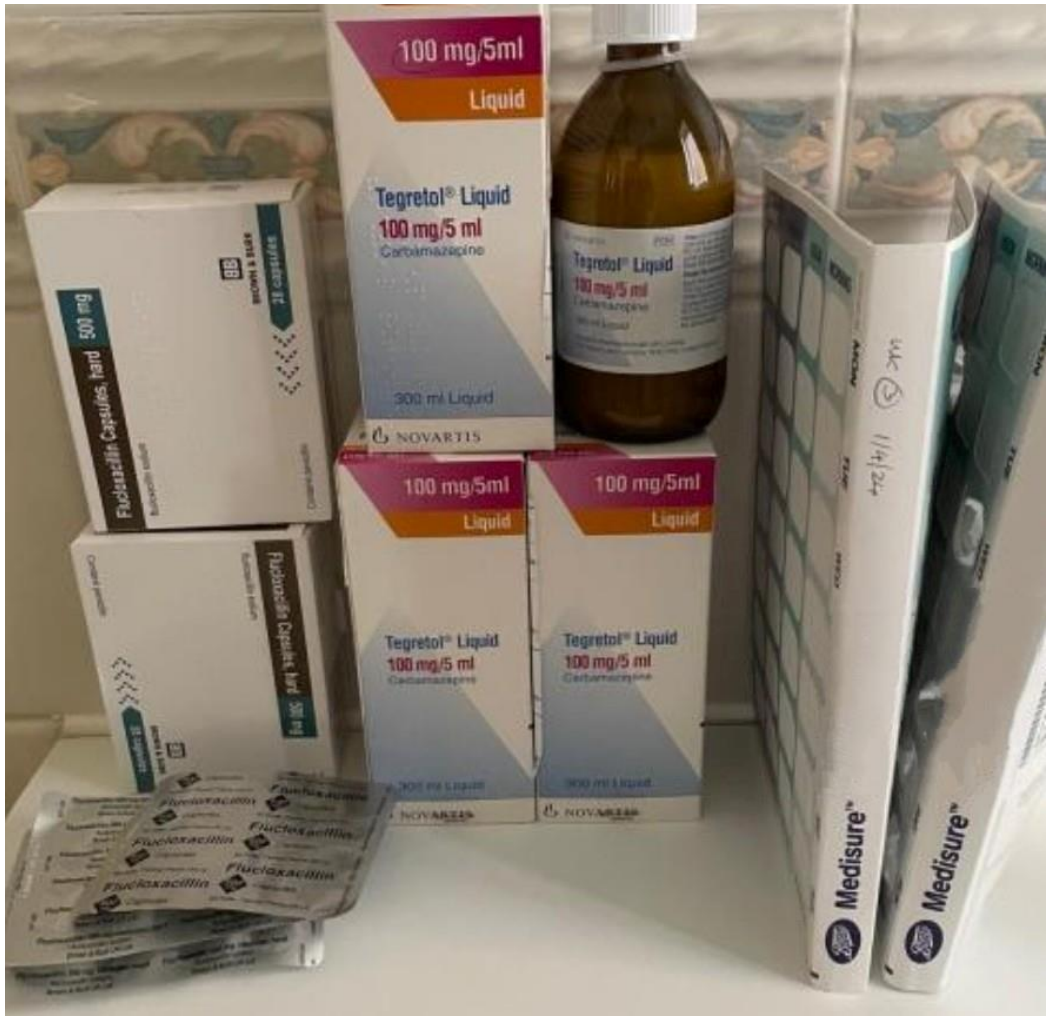
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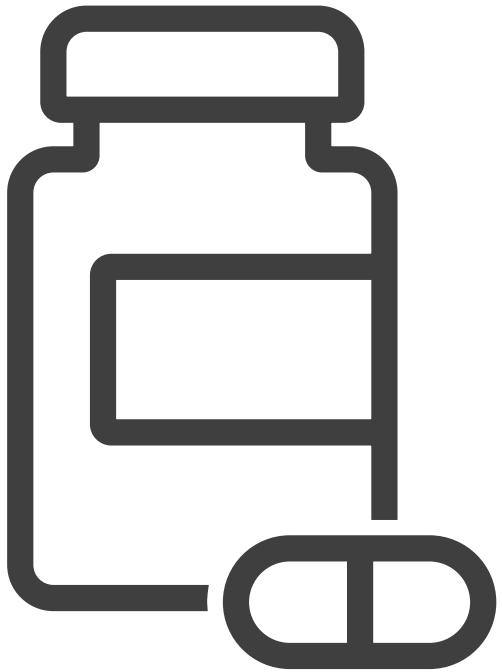
Medisure

Why

- **8.6 million** unplanned hospital admissions due to adverse drug events in Europe per year.
- **50%** of these are **preventable.**
- **70%** of these admissions are people aged over 65 on 5 or more medications.



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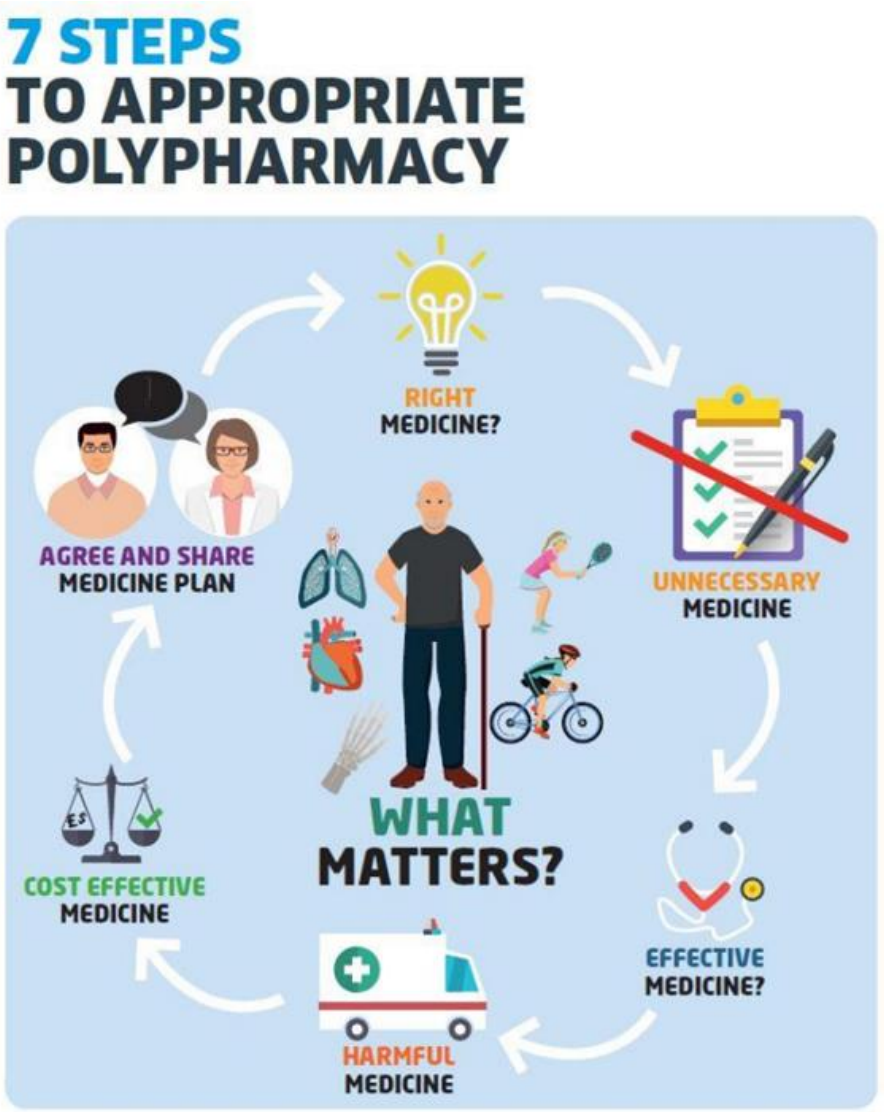


[Polypharmacy-Guidance-2018.pdf (scot.nhs.uk)]

Polypharmacy Review in Adults Living with Moderate to Severe Frailty

NHS Greater Glasgow and Clyde

WHAT IS FRAILTY?

- Frailty can be defined as state of increased vulnerability to a decline in function and adverse health outcomes in the context of an acute stressor (which may appear to be minor)
- There are several tools to help identify frailty, a commonly used tool in NHS GG&C is the **Rockwood Clinical Frailty Scale** (see below and click here www.dal.ca/sites/gmr/our-tools/clinical-frailty-scale.html)

Rockwood Clinical Frailty Scale

1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 Well – People who have **no active disease symptoms** but are less fit than category 1. Often, **they exercise or are very active occasionally**, e.g. seasonally.

3 Managing Well – People whose **medical problems are well controlled**, but are **not regularly active** beyond routine walking.

4 Vulnerable – While **not dependent** on others for daily help, often **symptoms limit activities.** A common complaint is being "slowed up", and/or being tired during the day.

5 Mildly Frail – These people often have **more evident slowing,** and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 Moderately Frail – People need help with **all outside activities** and with **keeping house.** Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. Terminally Ill – Approach ing the end of life. This category applies to people with **a life expectancy <6 months,** who are **not otherwise evidently frail.**

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia,** recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia,** they cannot do personal care without help.

MEDICINES AND FALLS RISK

- Any medicine which can cause sedation, hypotension or hypoglycaemia can increase falls risk
- Review any medicines which can increase the risk of falls
- Resources to aid decision making regarding falls can be found here STOPPFalls

GASTROINTESTINAL DISORDERS

Antispasmodics

- Can cause anticholinergic side effects
- Avoid long term use particularly of hyoscine and dicycloverine

PPIs

- Consider discontinuing if no proven peptic ulcer, GI bleeding or dyspepsia for 1 year
- Continue if Barrett's Oesophagitis, severe oesophagitis grade C or D, history of bleeding GI ulcers
- Continue if on for gastro protection (whilst taking medicines which increase risk of GI bleeding)

CARDIOVASCULAR DISEASE

Drugs for atrial fibrillation

- Anticoagulants to reduce stroke risk are effective even in frail patients
- Reduce HR lowering medicines if pulse consistently <60
- Review DOAC dose to account for weight, age, CrCl

Antiplatelets

- Aspirin not recommended for primary prevention
- For secondary prevention of IHD or stroke should usually continue unless problematic
- **In severe frailty** consider risk v benefit, especially if approaching end of life

Anti-angina drugs

- Consider reducing if mobility/exertion has decreased, asymptomatic for >6 months and low risk of residual coronary heart disease

Drugs for hypertension

- Review if BP <130 systolic and/or <65 diastolic or if on more than one antihypertensive
- May need continued if prescribed for another condition e.g heart failure

Drugs for Heart failure

- Usual treatment unless problematic

Lipid regulating drugs

- Review statin if limited life expectancy or if falling due to weakness

RESPIRATORY – COPD

- **Inhaled therapy** - Ensure able to use device
- **Theophylline** – Monotherapy not appropriate, consider stopping in COPD without co-existing asthma
- **Antihistamines** – Stop where possible
- **Mucolytics** – Continue only if symptomatic improvement

CENTRAL NERVOUS SYSTEM

Hypnotics and anxiolytics (NHSGGC Psychotropics)

- Confirm if patient is receiving ongoing input from specialist mental health team
- If initiation of anxiolytic necessary only use short term, lorazepam is first line in frailty
- Benzodiazepines increase risk of dementia and falls in elderly, ensure regular review but do not stop suddenly (see above for deprescribing)
- Antipsychotics for stress and distress should be a last resort and reviewed regularly (NHSGGC Antipsychotics in Dementia)

Antidepressants GGC Guideline

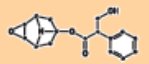
- If appropriate slowly reduce long-term
- SSRIs are preferred in frailty, consider gastroprotection, especially if on other drugs which increase bleeding risk
- Sertraline - first line and safest cardiac profile, Citalopram - Max dose is 20mg in >65yrs
- Mirtazapine - second line agent for depression, 15mg dose is more sedating

Analgesics

- Use minimum effective dose for shortest duration, Abbey Pain Scale useful in those unable to communicate
- **Paracetamol** - reduce dose if patient <50kg
- **NSAIDS** - avoid if possible, especially if CrCl <30; if essential use ibuprofen or naproxen short term and consider PPI
- **Opioids** - consider trial dose reduction to avoid side effects/toxicity, use pain data
- **Neuropathic pain** (tricyclic antidepressants/ gabapentinoids) – Use LANSS to assess efficacy. Consider gradual dose reduction then stop. Reduce gabapentinoid dose in renal impairment (toxicity more likely)

ANTICHOLINERGICS

- The benefits of anticholinergics are often outweighed by side effects – these include postural hypotension, constipation, dry mouth and confusion
- Combinations of medicines with anticholinergic effects increase the risk of side effects, calculate score using ACB Calculator* *www.acbcalc.com
- If used for urinary incontinence/urge but are ineffective (ongoing continence issues) consider a trial off medication



ENDOCRINE SYSTEM

Diabetes

- **Target HbA1c 65-75,** aim of treatment is symptom control
- Avoid HbA1c < 65 especially if on gliclazide or insulin
- **Metformin** - First line with maximum daily dose of 1000mg if eGFR is 30- 44 ml/min. Contraindicated if eGFR <30ml/min
- **Sulphonylureas** - Avoid if possible – risk of prolonged hypoglycaemia
- **SGLT2s** - Use with caution in those with renal impairment or those at risk of dehydration or hypotension

Bone metabolism

- All patients over 80 years who have been on oral bisphosphonate for 10 years should have treatment stopped
- Consider stopping bisphosphonate if eGFR < 35ml/min (discuss with specialist if high fracture risk)
- Patients with osteoporosis who have been on bisphosphonates for 5 years should be referred to Direct Access DXA Service (DADS) for review
- **In Severe frailty** with limited life expectancy, consider whether continuing bisphosphonate is of significant clinical benefit

For full guideline see: Polypharmacy review in adults living with moderate to severe frailty (QR code above)

VERSION 1. NHS GGC. Published December 2023. Review December 2025

mi · 343428 v1.0

Lucy Little

Lead Clinical Pharmacist

(Annandale and Eskdale),

NHS Dumfries & Galloway

Healthcare Improvement Scotland

Realistic medication reviews

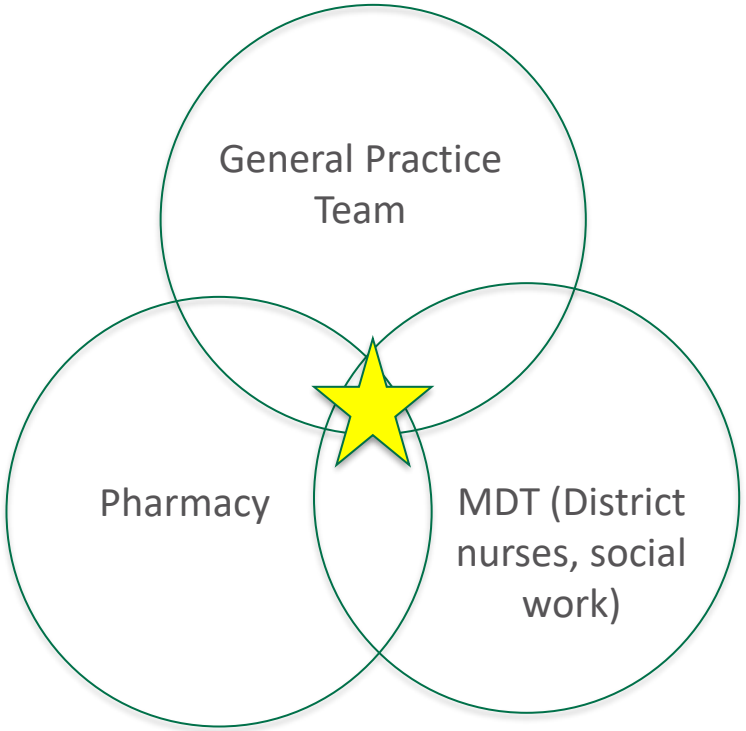
A patient centred approach to managing polypharmacy in an ageing/frail population

Leading quality health and care for Scotland

NHS SCOTLAND

‘What matters to you?’

- Recognition that workload has become reactive rather than scheduled. Improve patient outcomes prior to problems arising.
- Exacerbated by COVID19 pandemic, change in GP structure, aging population who are ‘not visible’, rural locality, local prescribing challenges.
- Aim: Understand the patient’s thoughts and how to educate and inform risk associated with medications. Optimise patient medication based on this as part of the wider MDT intervention to living well at home.



Background

Polypharmacy guidance realistic prescribing

- 7 step polypharmacy review

Shared decision making

- DECIDE
- BRAN

STOPP/START

- Screening tool – clinically specific

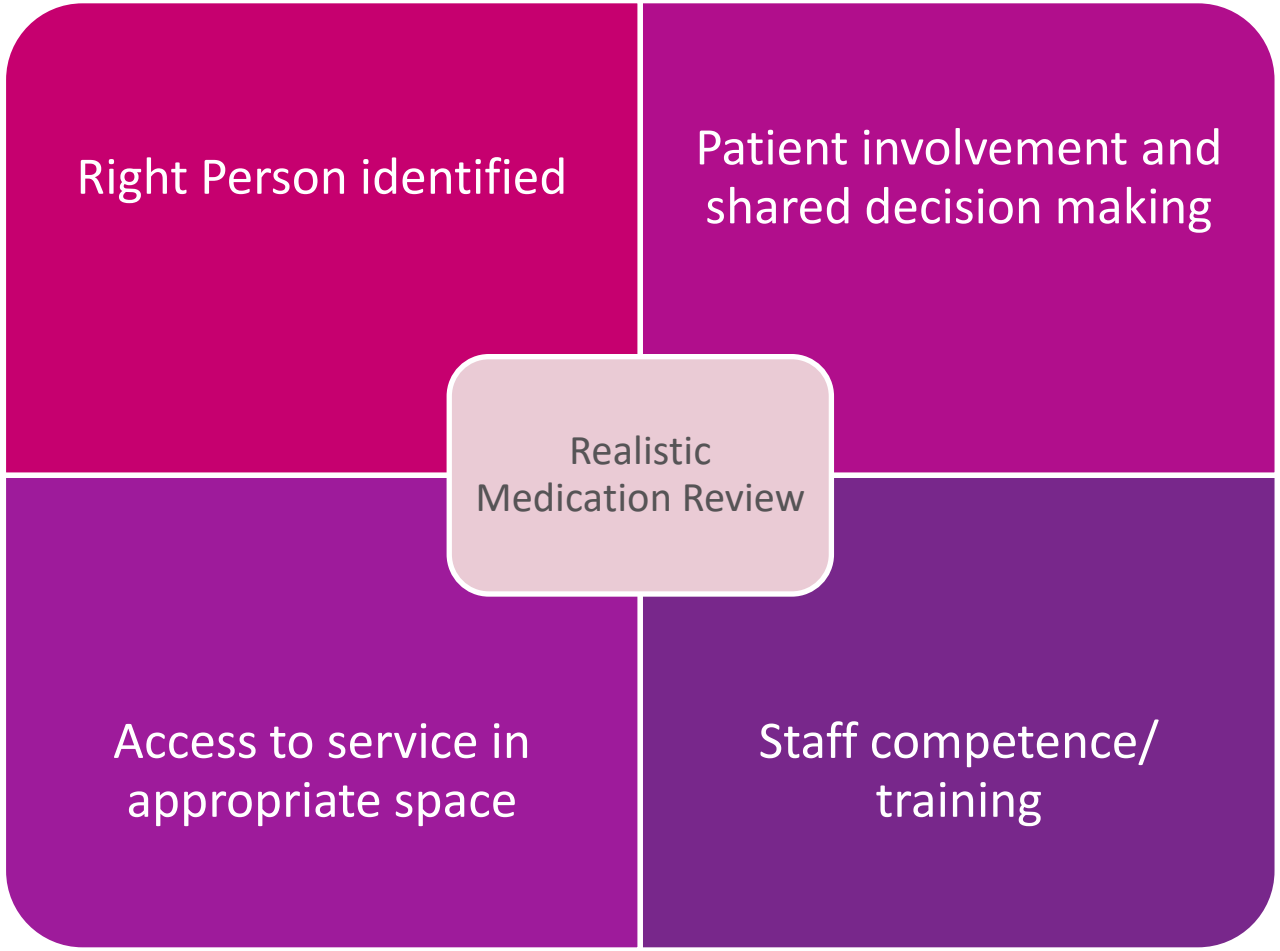
Local success in care home medication review

Pressure on health and social care

Pressure on acute services

Nothing revolutionary – ensuring a comprehensive patient centred review of at risk patients

Key drivers


Right Person identified
Patient involvement and shared decision making
Realistic Medication Review
Access to service in appropriate space
Staff competence/ training

Identifying patients

Reactive

- Where problems have arisen and are highlighted once a medication related problem has occurred by the wider team.
- Post discharge – autumn leaf indicating frailty

Scheduled

- General practice pharmacy team – coded searches*, STU*
- GP practice – eFI*, chronic disease management
- MDT approach – patients highlighted routinely where frailty/ polypharmacy identified.

Rockwood score identified locally as the measurement of frailty.

*Reliance on appropriate e-coding and access to wider electronic services such as bluebay and spire.

Patient centred medication reviews are available to all patients, but a priority thermometer aids prioritisation.

	Rockwood Score (Frailty)	Number of Items	Predominant condition	
URGENT	7-9		Severe Dementia	
HIGH	5-6	10+	Moderate Dementia	High risk drug or cumulative drug burden.
MODERATE	4	5+	Mild Dementia	
LOW	1-3	4 or below		

Test of change

- Did we ensure review was patient centred?
  100% of patients or carers were engaged within reviews and priorities established.
- What were the clinical outcomes?
  Average age of 73 years old.
  11% of used medication deprescribed.
  25% of deprescribed medication had a high ACB score.
- Who highlighted the patient for review?
  90% pro-actively highlighted by pharmacy team.
  10% from wider MDT.
- Main driving factor for review?
  Frailty was not the driving factor in identifying any review.

Outcomes

Patient A – 78 year old female.
Wants to live at home independently – some falls recently.

Reduction in anticholinergic burden.
Oxybutynin stopped.
Amitriptyline continues – plan to review dose and pain ongoing.
Co-codamol reduction (sedation).

Topical steroid education with focus on emollient use for eczema.

Physio self-referral.

Patient B – 81 year old female.
Struggling to swallow and wants to reduce pill burden.

Bisphosphonate stopped.
NSAID reduction with follow up review.
Paracetamol suspension.

Sick Day Rule discussion.
DEXA scan in line with D&G protocol.

‘This was really helpful.’

‘I didn’t know this service existed.’

‘No one has ever gone through all of my medicines with me before.’

Next steps…

- Local engagement and external engagement sessions and encouragement of effective cross-sector management of at risk cohort.
  - Pharmacy visible presence in MDT CH&SC Teams on a regular basis.
  - Community pharmacy education and awareness of referral pathway.

- Challenge identifying frailty – reliable and consistent recording across sectors. Not presently a driving factor.

- Individual impact and intervention – difficulty measuring reduction in harm or improved outcomes.

Christine Thomson

Lead Pharmacist Primary Care,

Moray Health and Social Care Partnership

Healthcare Improvement Scotland

An innovative approach to medication review prior to complex care package allocation

Christine Thomson, Lead Pharmacist, Moray HSCP
Creag Doctor, Pharmacy Administrator
Elaine Mackintosh, Senior Pharmacotherapy Pharmacist, Moray
Involving all HSCP Moray Pharmacotherapy Pharmacists

Background

- A high number of individuals in Moray receive **medicines management** as **part of their assessed home care package**.
- Some visits only for **medication prompting** (level 2) or for **medication administration** (level 3).
- **Lack of medication review** at outset/as follow up.
- Some patients **progress to manage self-medication.**
- A **gap** exists between the **original prescriber/prescription of the medication and prescriber/prescription required later when a patient returns home**.
- **Opportunity** to **review complex medication** upstream when clients assessed for high level care package.

Aim

- To **offer pharmacist medication review** for clients who need level 2 or 3 medicines management at home.
- To take an **upstream approach** by reviewing **complex** medication requirements for those patients who require a complex care package.
- To **reduce the time** spent **dealing with medication** by those that care for a client.

Method 1 – Individual referral

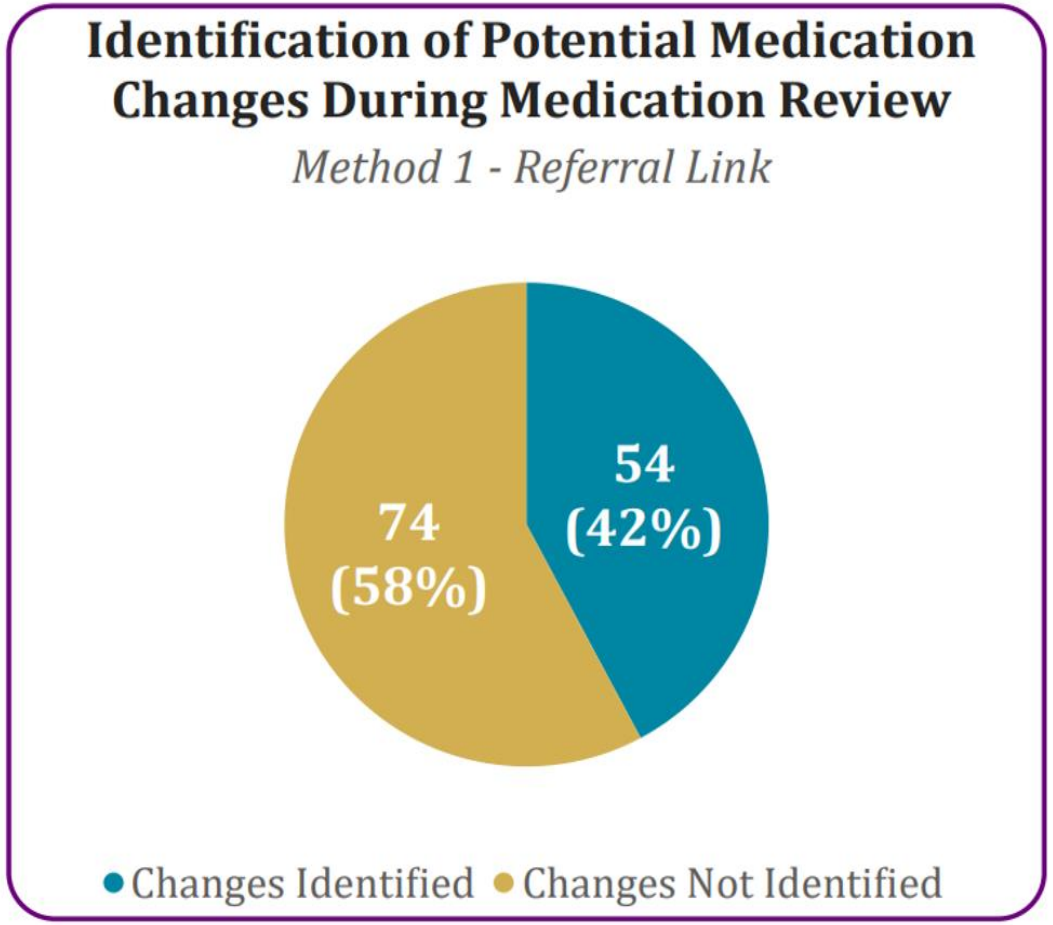
- An **electronic link to a referral form** was shared with **NHS and council teams** across Moray, including community hospitals, Care at Home, CRT and D2A.
- Staff were **encouraged to refer** many patients, to allow a **wide variety of medication reviews** to be conducted.
- Upon referral, **details would be passed electronically to an appropriate pharmacist** within the HSCM pharmacotherapy team.
- A **full polypharmacy review** was carried out by the pharmacist, with the **outcomes collated**.
- Any **reduction in visit frequency or visit time was identified**, this information would be **passed back electronically** to the original referrer.

Method 2 – Care at home list

- Following **DPIA approval**, the Care at Home team within Moray Council provided a full list of clients receiving medicines management.
- Clients from the **list** were **'referred' to pharmacotherapy** pharmacists, based on the client's registered GP and capacity of the pharmacist.
- **Pharmacist receives client information** on medicines management, the number of daily care visits and times of visits.
- Upon receipt of the details, a **full polypharmacy review** would be carried out and the **results fed back** into the list via an online form.

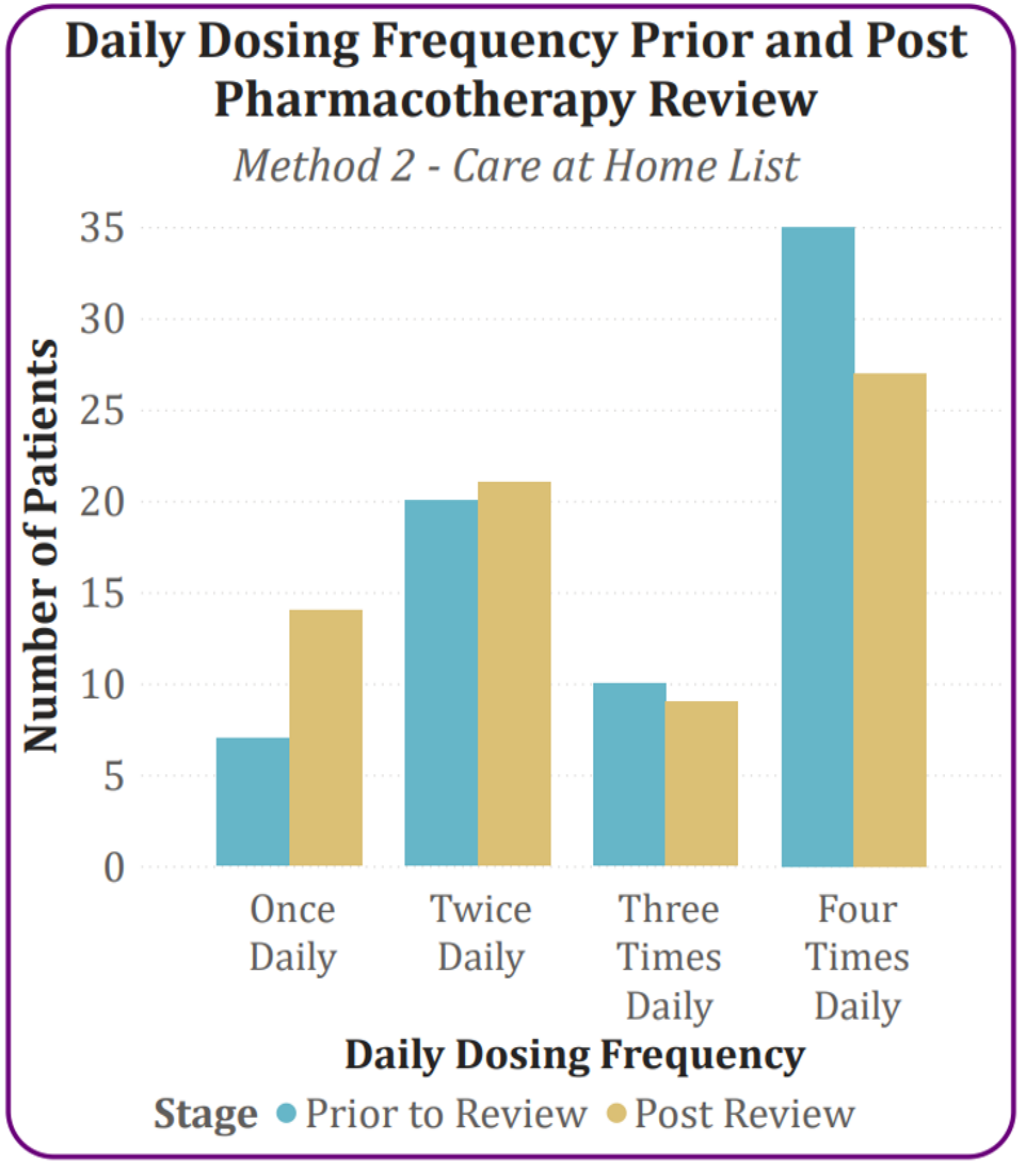
Results – Individual referral

- **128 patients** were reviewed via the referral form.
- Pharmacists were able to identify medication changes in **42% of reviews**.
- 22 reviews **stopped medications**, while 36 reviews managed to **reduce the overall dosing frequency.**
- Pharmacists were able to reduce the need for **48 daily visits in total.**
- Factors preventing pharmacists from reducing visits included:
  - “Meds cannot be rationalised further” (38%)
  - “Regular analgesia” (23%)
  - “Specialist meds” (11%)



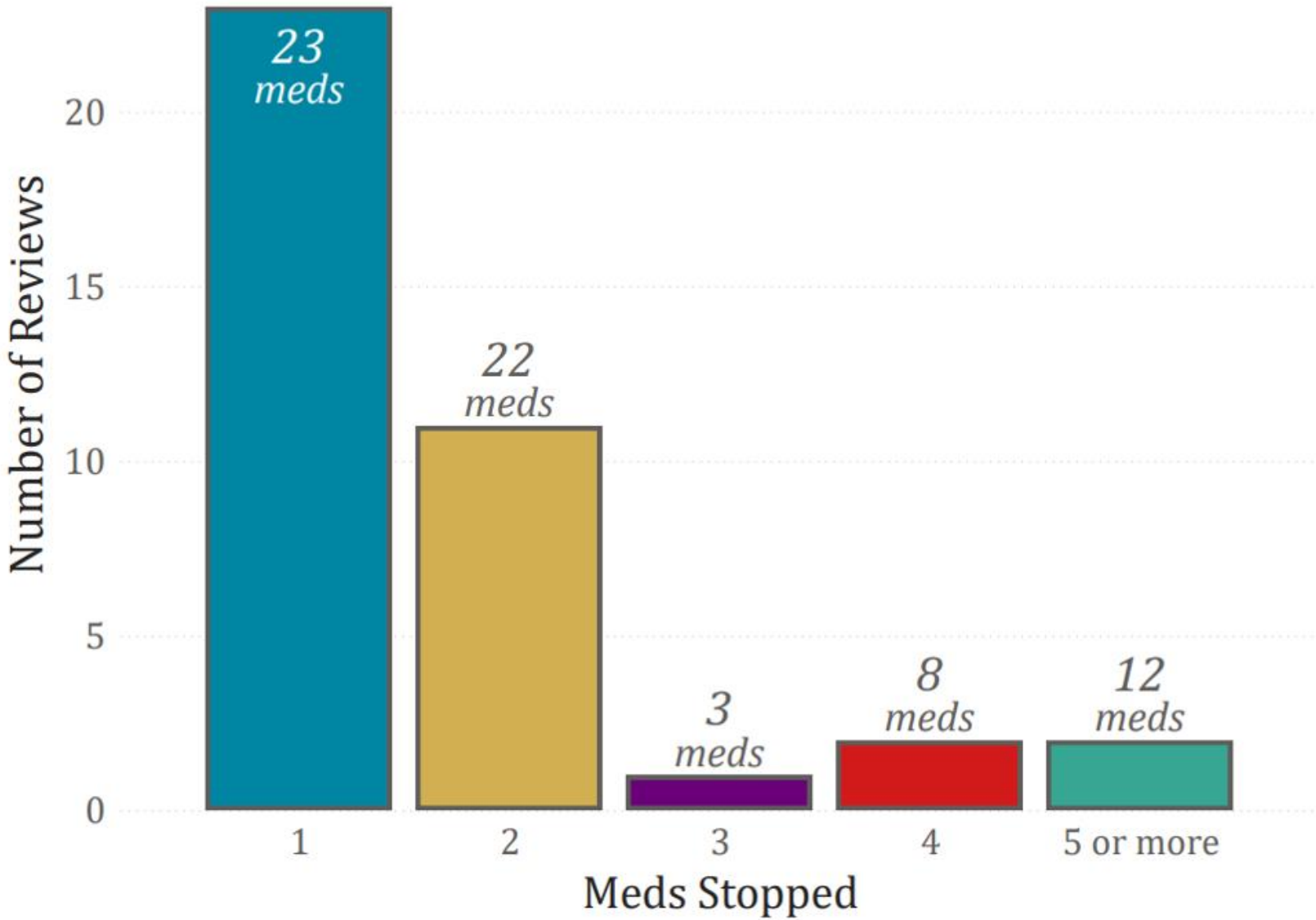
Results – Care at home list

- **72 patients** were reviewed from the list.
- 16 reviews **stopped medications**, while 13 reviews managed to **reduce the overall dosing frequency.**
- Pharmacists were able to reduce the need for **26 potential daily medication visits in total.**
- As well as this, **12** daily visits will no longer be needed for meds administration (now personal care only).
- In 22% of cases, regular analgesia was the reason frequency of dosing could not be reduced.



Number of Medications Stopped During Review

Referral Link & Care at Home List



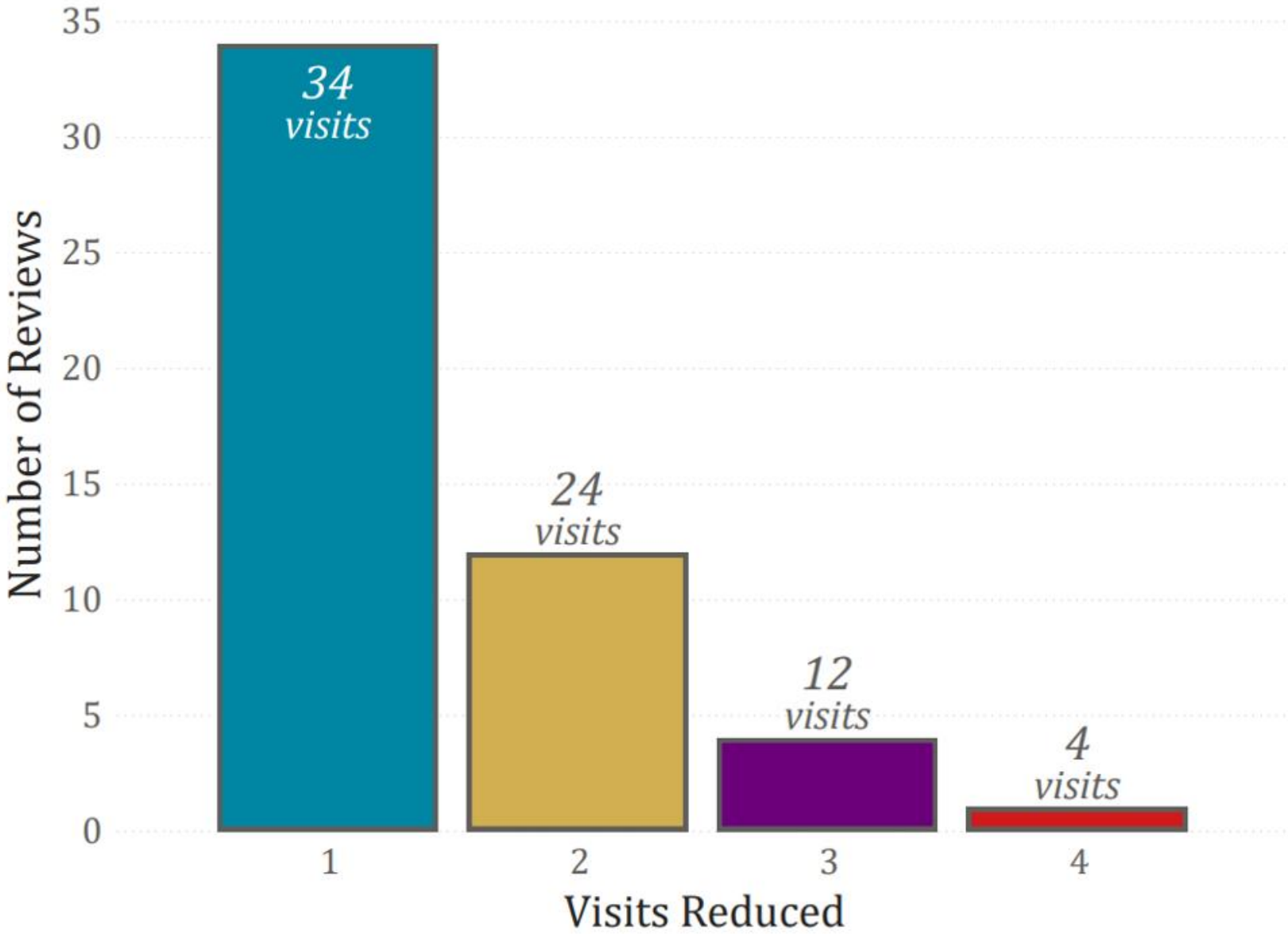
200
Reviews Completed

39
Reviews Stopped at Least 1 Med

68
Meds Stopped in Total

Potential Daily Medication Visits Reduced

Referral Link & Care at Home List



51

Reviews Reducing at Least 1 Daily Visit

74

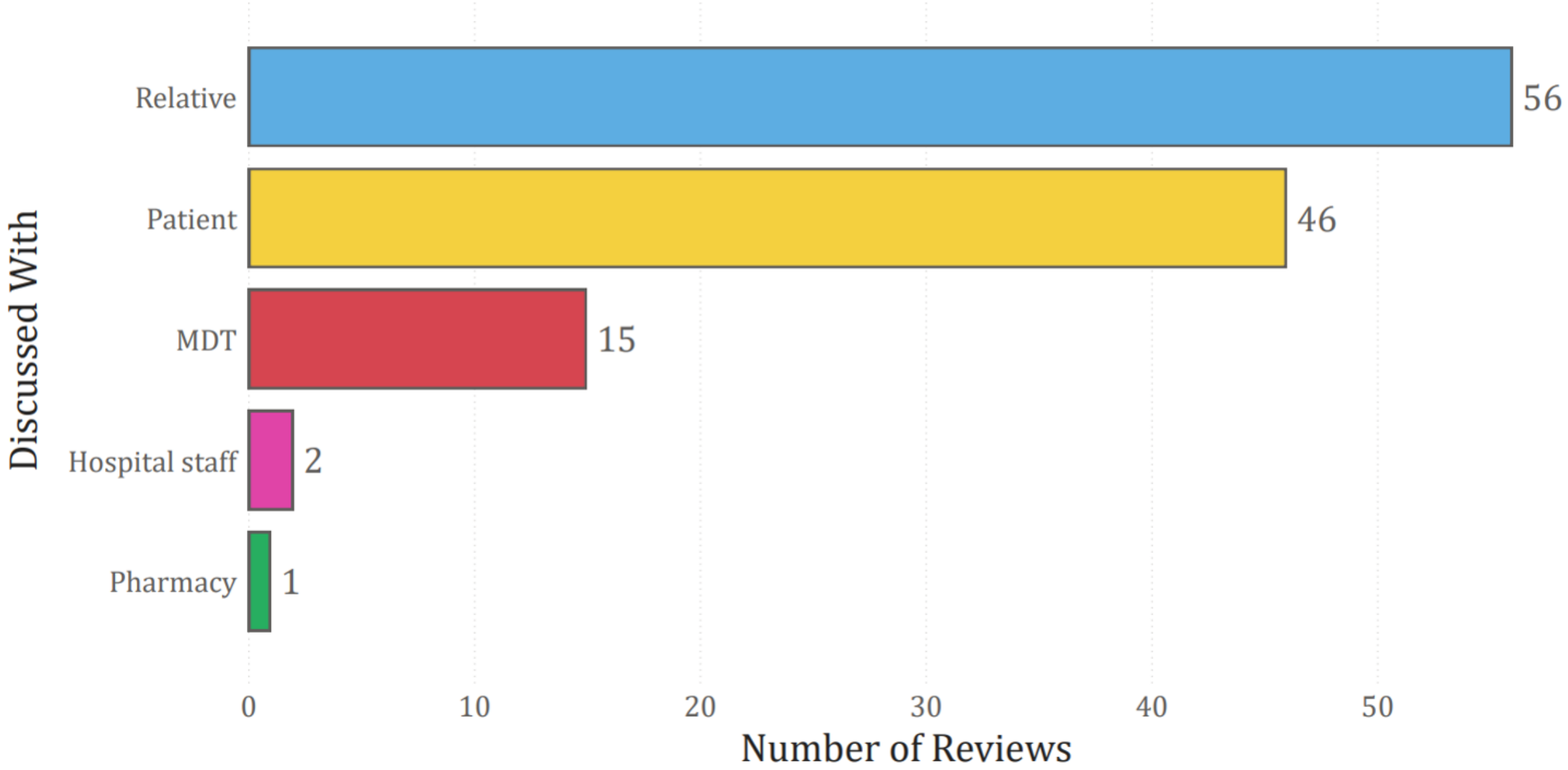
Potential Daily Med Visits Reduced in Total

519

Potential Weekly Med Visits Reduced in Total

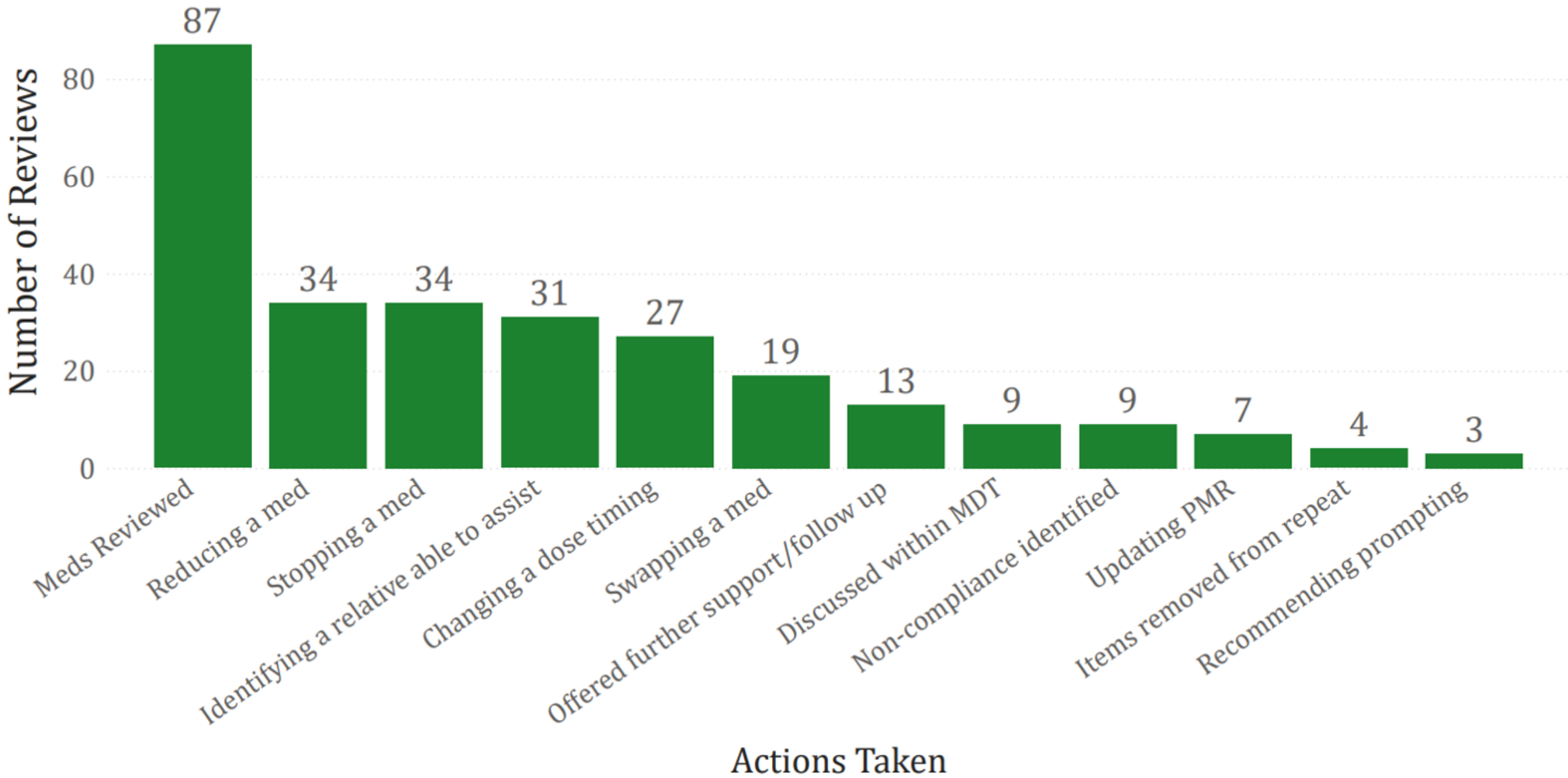
Reviews Involving Discussion with Patients, Relatives & Staff

Referral Link & Care at Home List



Actions Taken by Pharmacists During Review

Referral Link & Care at Home List



Reviews Affected by Analgesia Dosing

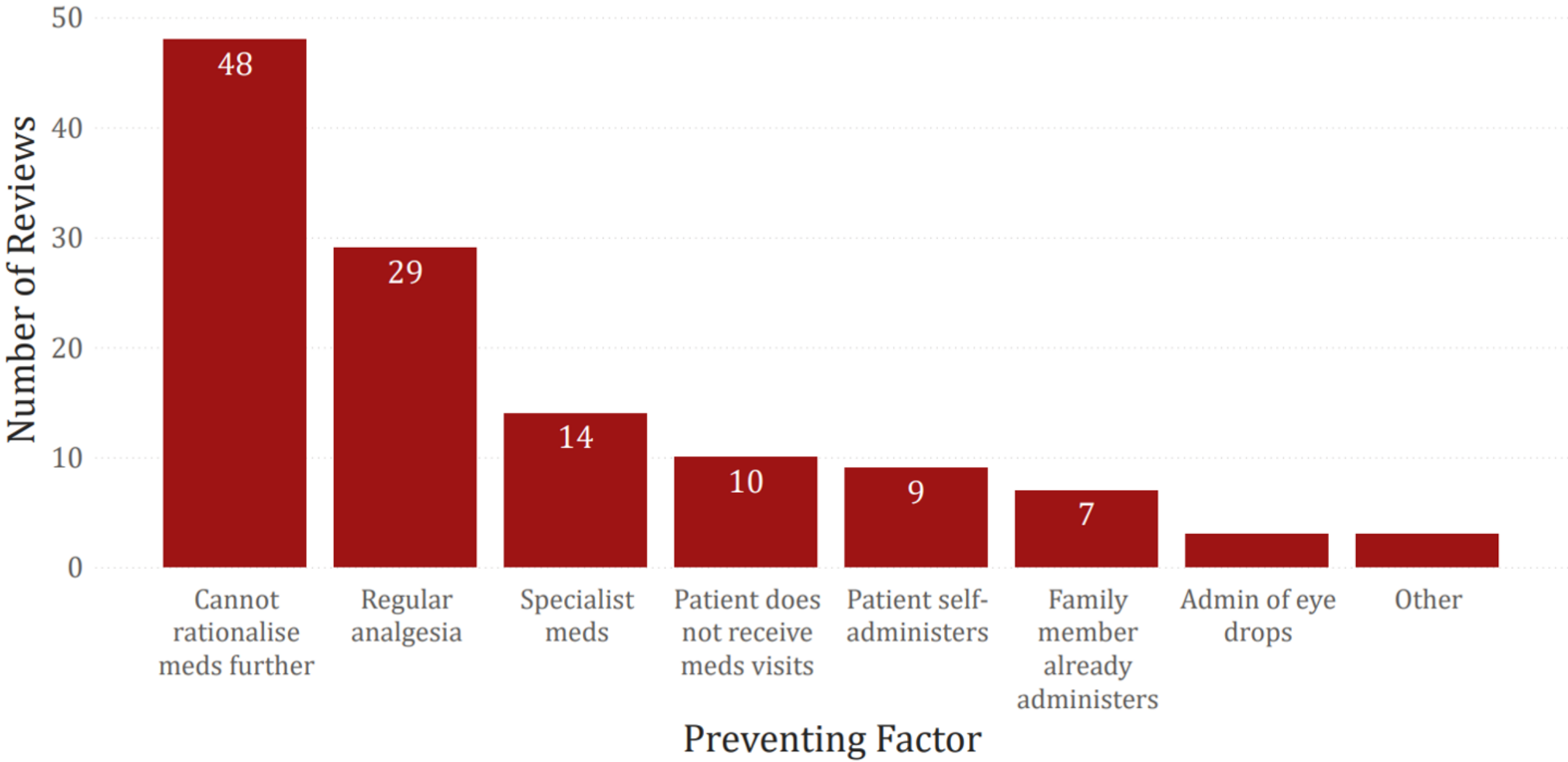
Method 1 - Referral Link

45
Reviews involved analgesia

28
Reviews cited analgesia as the primary factor preventing reduction

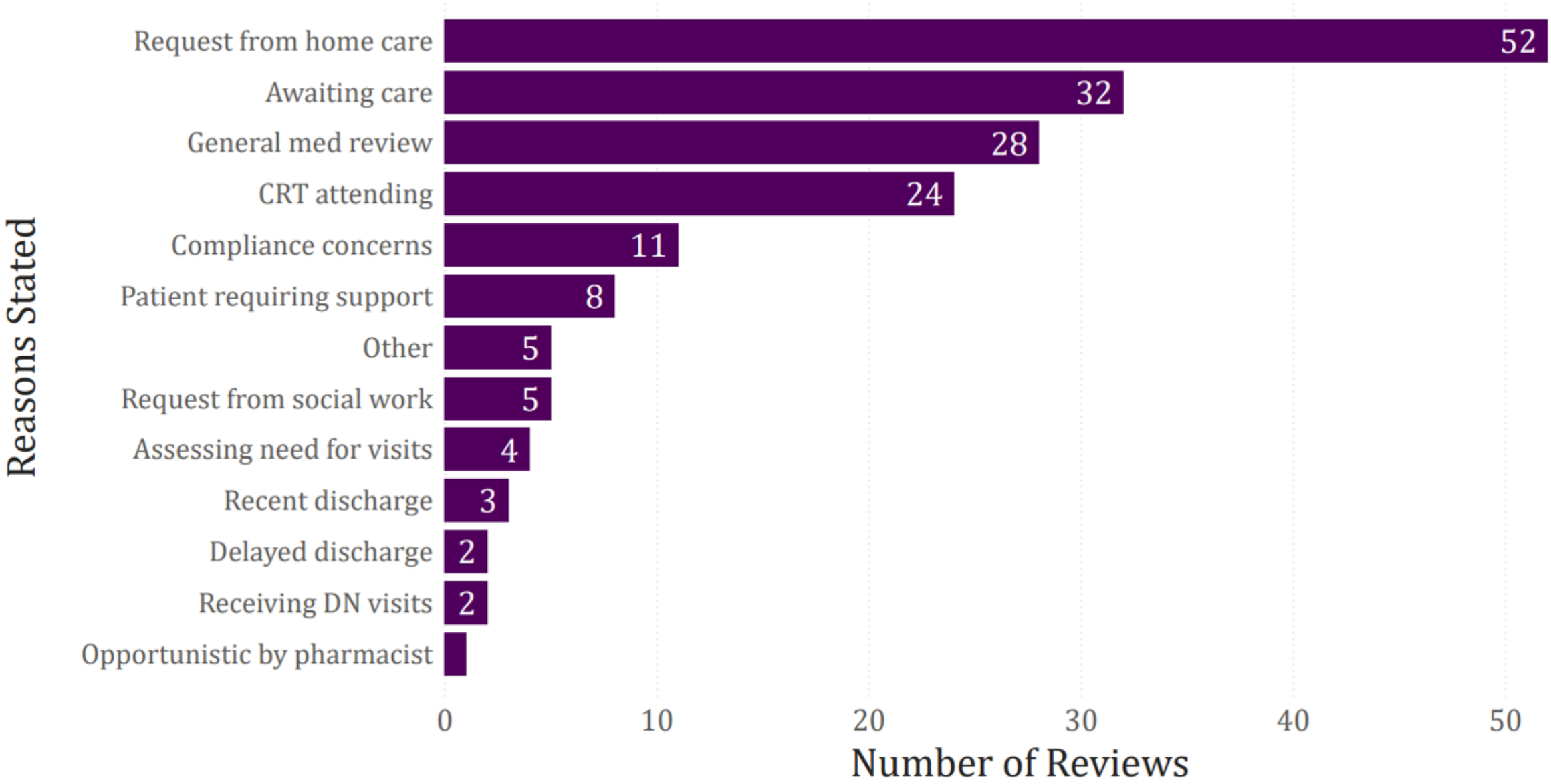
Factors Preventing Pharmacists from Making Changes During a Review

Method 1 - Referral Link



Reasons Stated for Referral for Medication Review

Method 1 - Referral Link



Discussion

- **Majority** of patients had **no recent medication review**, so **in-depth polypharmacy review was performed**.
- **Pharmacists were most likely to identify possible medication changes** through conversation with the patient, or a relative or carer. At least 62% of successful reviews involved **discussions**.
- Reviews allowed an **opportunity to identify and enable family members to assist in administration of meds**, where this was previously **overlooked**.
- Even in cases where a visit could not be reduced due to provision of personal care, **streamlining of medication allowed the possibility of a shorter visit time**.

Discussion contd.

- Practices with **MDTs** operating within the premises saw **greater chance of success** – giving the pharmacist **more scope for discussion and patient centred care**.
- A major **factor preventing reduction** of dosing frequency was **regular analgesia**. Of 44 reviews involving analgesia, 28 cited analgesia as the primary factor preventing reduction.
- Prior to outcome analysis, certain patients were excluded based on a criteria: patients that had already had a recent medication review; patients on palliative care; and patients transferred to care homes.

Example case 1

- Referral following an increased package of care due to frailty.
- Twice daily calcium tablets were switched to a once daily preparation.
- A twice weekly pessary was stopped at patient's request, eliminating the need for these visits.
- The patient confirmed they preferred to use their own emollient rather than the one prescribed, so this was removed from repeat.
- Overdue bloods were identified and requested.
- Family support was identified for medicines management.
- This allowed for visits to be once daily only.

Example case 2

- Upon receipt of the referral, the pharmacist reviewed updated bloods and BP readings for the patient.
- Based on BP readings, it was agreed that all hypertension meds should be stopped.
- Based on HBa1c level, it was agreed that metformin could be stopped.
- Iron levels indicated no need to continue on iron replacement.
- After discussion with the GP and POA, it was agreed that all medications could be stopped, and no med visits would be required for the patient.

Example case 3

- A patient on twice daily visits for medicines administration was reviewed. All medications were morning only, aside from twice daily apixaban.
- The pharmacist was able to contact the patient's daughter (as POA) and discuss a possible switch to rivaroxaban for once daily dosing.
- It was confirmed that the patient did not enjoy taking tablets, and so a reduction was preferable. The pharmacist explained that rivaroxaban was the second line choice but has a similar profile.
- The plan was agreed with the care team leader, and this allowed the afternoon care visit to be ceased, reducing visits to once daily.

Constraints

- **Staffing capacity** was a **major constraint** throughout the project, with no additional allocated resource.
- The rate of receiving referrals was low and slow.
- Further collaboration is required to receive correct appropriate patients on referrals.
- Details given during referral was sometimes limited, inaccurate or requesting a service unsuitable via pharmacist referral.
- Several cases saw pharmacists unable to make changes due to an inability to make contact with the patient, relative or carer.
- **GP practice patient files lack information** (or outdated) re what care is in place.

Future planning

- A **focus on building a culture of reviewing meds at the point of accepting patients onto the service** could reduce/align the time of medication visits or number of visits required from initiation.
- Patients could have **further medication review immediately after discharge**.
- Regular referrals from high risk/urgent patient list would give greater benefit/scope for pharmacotherapy pharmacists to identify and implement medication changes.
- Training would allow for more effective identification of patients for referrals and reduce the number of inappropriate referrals.
- With more availability of electronic prompting systems, DDS patients could be enabled to self-medicate, allowing for more independence and fewer visits.

Questions

Keep in touch

Email: his.frailty@nhs.scot

Frailty learning system: MS teams channel

Web: Frailty learning system (ihub.scot) and Focus on Frailty Programme (ihub.scot)