MANAGING POLYPHARMACY: THINKING OUTSIDE THE BOX

Clare Morrison FRPharmS
Lead Pharmacist (Quality Improvement)
NHS Highland

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Disclosures

No financial, business or personal conflicts of interest to disclose

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Questions

Pharmacist prescribers

20% of pharmacists in Scotland are prescribers: *true or false?*

Location of pharmacists

The most senior clinical pharmacists should be based in large urban hospitals: *yes or no?*

Outline

1. Service development
2. Pharmacist roles
3. Two key enablers

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Service development

The starting point

Polypharmacy:
Guidance for Prescribing In Frail Adults

Warning – Document uncontrolled when printed

Policy Reference: id1214	**Date of Issue:** August 2010
Prepared by: Polypharmacy Action Group	**Date of Review:** August 2011
Lead Reviewer: Dr Martin Wilson, Consultant Physician, Raigmore Hospital	**Version:** 1.0
Authorised by: Policies, Procedures and Guidelines Subgroup of ADTC	**Date:** September 2010

First
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polypharmacy
guidance
2010

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High risk medicines study

Drugs - Real World Outcomes
DOI 10.1007/s40801-015-0031-8

ORIGINAL RESEARCH ARTICLE

Promoting Safer Use of High-Risk Pharmacotherapy: Impact of Pharmacist-Led Targeted Medication Reviews

Clare Morrison[1] · Yvonne MacRae[2]

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High risk medicines

NSAID **plus**	ACE inhibitor/ARB & Diuretic (triple whammy) eGFR <60 Heart failure Warfarin Age >75 without PPI
Warfarin **plus**	Antiplatelet NSAID Macrolide Quinolone Metronidazole Azole antifungal

High risk medicines

Heart failure **plus**	Glitazone NSAID Tricyclic antidepressant
Frailty **plus**	Digoxin >250mcg Antipsychotic Tricyclic antidepressant Benzodiazepine Anticholinergic Phenothiazine Combination analgesic

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From a population of 38,399 patients	
Number of patients taking a high risk medicine	3,643
Pharmacist recommend to stop/amend medicine	440
GP agreement to recommendation	214

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Follow up after one year – number of adverse outcomes	
Group following pharmacist recommendation	0
Group not following pharmacist recommendation	22 of which: 21 preventable 3 admissions

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Table 8

Six key high-risk medicines to target in regular medication reviews

High-risk medicine	Suggested action
Triple whammy combination (NSAID, diuretic, ACE inhibitor)	Stop NSAID
NSAID + reduced renal function	Stop NSAID
NSAID + age >75 + no PPI	Stop NSAID or add PPI
Hypnotic/benzodiazepine + age >60	Reduce or stop hypnotic/ benzodiazepine
Tricyclic antidepressant + age >60	Reduce or stop tricyclic antidepressant
Antipsychotic + age >60	Reduce or stop antipsychotic

NSAID non-steroidal anti-inflammatory drug, *ACE inhibitor* angiotensin converting enzyme inhibitor, *PPI* proton pump inhibitor

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EFIPPS – a national focus

Six high risk prescribing measures
Antipsychotics in age over 75 years
NSAIDs in age over 75 years without gastroprotection
NSAID plus aspirin/clopidogrel without gastroprotection
NSAID plus ACE plus diuretic
NSAID plus oral anticoagulant without gastroprotection
Aspirin/clopidogrel plus oral anticoagulant without gastroprotection

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Medicine sick day rules

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Medicine Sick Day Rules

When you are unwell with any of the following:

- Vomiting or diarrhoea (unless only minor)
- Fevers, sweats and shaking

Then STOP taking the medicines listed overleaf

Restart when you are well (after 24-48 hours of eating and drinking normally)

If you are in any doubt, contact your pharmacist, GP or nurse

Medicines to stop on sick days

ACE inhibitors:	medicine names ending in "pril" *eg, lisinopril, perindopril, ramipril*
ARBs:	medicine names ending in "sartan" *eg, losartan, candesartan, valsartan*
NSAIDs:	anti-inflammatory pain killers *eg, ibuprofen, diclofenac, naproxen*
Diuretics:	sometimes called "water pills" *eg, furosemide, spironolactone, indapamide, bendroflumethiazide*
Metformin:	a medicine for diabetes

Produced April 2013. Authorised by: NHS Highland SPSP Primary Care working group

What are the rules?

- Certain medicines should be stopped during dehydrating illness
- Taking them while dehydrated increases the risk of adverse events

Medicine	Adverse event in dehydration
Diuretics	Can cause dehydration or make dehydration more likely
ACE inhibitors (or A2Bs) NSAIDs	May impair kidney function which could lead to kidney failure
Metformin	Increases the risk of lactic acidosis

Community pharmacists

Dispensing doctors

GP practice nurses

Hospital pharmacists

Specialist nurses

Carers in care homes

GPs

Hospital nurses

Cares in Care at Home service

Hospital consultants

Non-medical prescribers

Primary care clinical pharmacists

Medicine Sick Day Rules

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"A simple initiative which potentially could have great benefits...

...most of the patients I gave the cards to had no idea that there could be an issue with serious consequences if they carried on taking these medicines when dehydrated."

Staff comment

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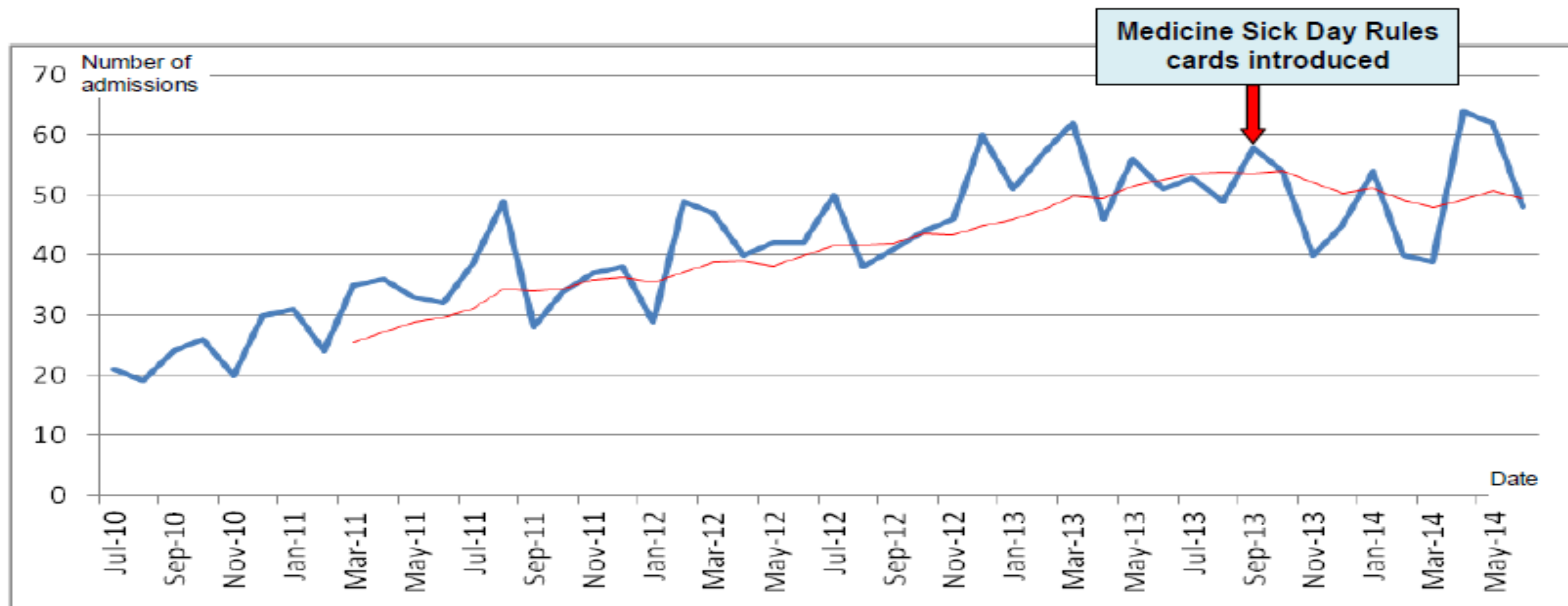
Hospital admissions coded for acute kidney failure



Key: trend line (red) shows a nine-month moving average. Nine months was picked because the chart shows nine months' worth of data since the cards were introduced

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National spread

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Medicine Sick Day Rules

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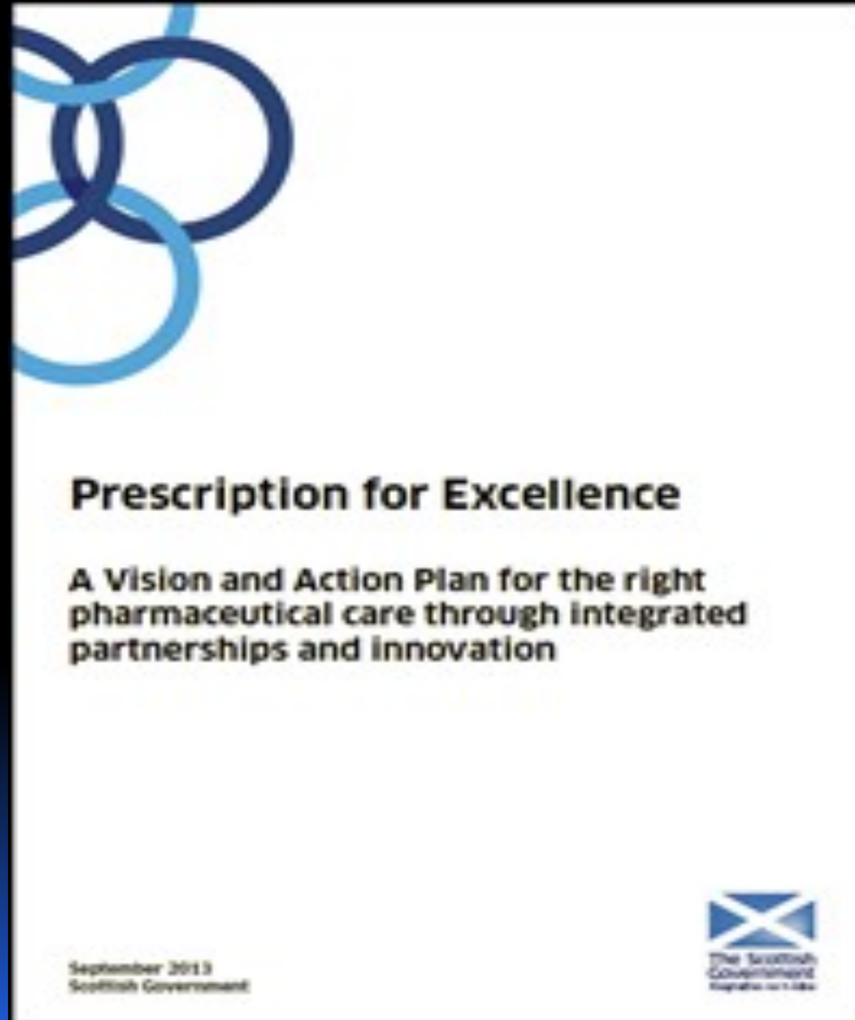
Strategic changes



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Strategic changes

Pharmacist roles

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Specialist Clinical Pharmacist

Patients with greatest level of need – frail
Works across a locality

Advanced Pharmacist Practitioner

Medicines management in GP practice
Works in single practice

Senior & Junior Clinical Pharmacist

Clinical pharmacy role in acute hospital
Works in single hospital

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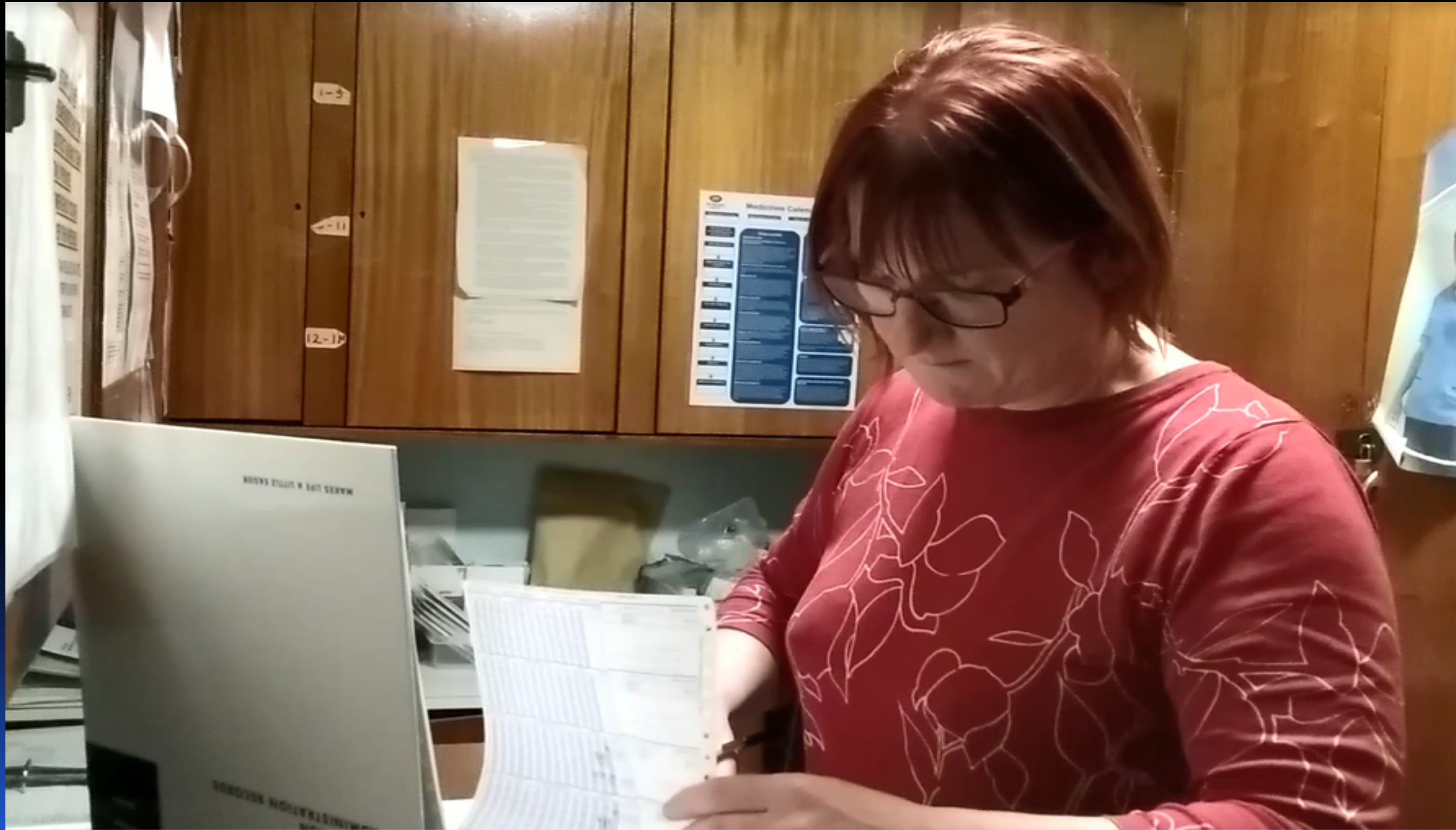

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North and West Highland Operational Unit Pharmacy Service

SPECIALIST CLINICAL PHARMACIST IN PRIMARY CARE

This pack describes the role of the Specialist Clinical Pharmacist in North and West Highland.

Caseload

The Specialist Clinical Pharmacist works across a locality, supporting frail older patients. Their caseload comprises:

- Patients living in care homes
- Patients receiving medicines support from the Care at Home service
- Patients who have had a fall, where the patient takes medicines
- Patients on GP practices' anticipatory care/SPARRA register
- Patients referred from the Integrated Teams

Some of these patients will be reviewed by the pharmacist regularly, others will receive a one-off review. The protocols to support this service are provided on the following pages.

The Specialist Clinical Pharmacist provides specialist pharmaceutical knowledge to optimise the medicines for these patient groups both in terms of maximising the clinical benefit achieved and reducing the risk of medicines harm.

Professional links

Specialist Clinical Pharmacists work with three other groups of pharmacists:

- Advanced Pharmacist Practitioners who provide medicines management in GP practices. Linking with these pharmacists is essential to ensure there is no duplication of work and that patients with a higher level of need are referred to the Specialist Clinical Pharmacist appropriately. In addition, the Specialist Clinical Pharmacist provides local professional leadership to the Advanced Pharmacist Practitioners.
- Community Pharmacists in high street pharmacies. Community pharmacists supply medicines to most of the patients on the Specialist Clinical Pharmacist's workload so close working is required to ensure patients do not receive a disjointed service. Community Pharmacists may also spot a deterioration in a patient's functioning that results in a higher level of support which the Specialist Clinical Pharmacist can provide.
- Hospital Pharmacists supply medicines and advice to hospital in-patients, therefore linking with hospital pharmacists is essential to facilitate smooth discharges and ensure appropriate follow-up in primary care.

They also work closely with all members of the local health care team, particularly GP practices and Integrated Teams.

Job pack produced by Clare Morrison, Lead Pharmacist (North), NHS Highland
Date of production: Dec 2016
To be reviewed: Dec 2017

North and West Highland Operational Unit Pharmacy Service

FALLS

PROTOCOL FOR MEDICINES MANAGEMENT REVIEWS FOR PATIENTS WHO HAVE HAD A FALL

Getting started

1. This service covers all patients who have fallen who are referred to the Specialist Clinical Pharmacist.
2. Most patients will be referred to the pharmacist through the Integrated Team meetings or the Health and Social Care Co-ordinator. Patients may also be identified by other members of the health care team, such as GP practice and ambulance service staff. Attend Integrated Team meetings regularly to ensure good links.

At each review

1. Start by conducting a paper-based review at the GP practice. If medicines-related issues are identified that warrant a discussion with the patient, the pharmacist will arrange this as appropriate with the individual patient (eg, appointment at the practice, telephone call, home visit).
2. The paper-based review should be undertaken within 2 weeks of referral from the Health & Social Care Co-ordinator, and earlier if possible. Once the technology is in place, Vision Anywhere will allow these reviews to take place more quickly.
3. If a face-to-face or telephone review is required, ensure the patient understands the purpose of the review and the fact that you are working with the GP to ensure the person gets the most out of their medicines. Gain the person's agreement (consent) for the review. For patients with an Adults With Incapacity certificate, conduct a paper-based review first and seek the consent of the patient's power of attorney/proxy if a face to face review is required.
4. The medication review should be undertaken in the context of holistic care considering each medicine and its impact on the individual clinical circumstances of each patient. As part of this it is also important to consider the cumulative effects of medicines.
5. Use the standard polypharmacy-based approach (see separate document) which includes a specific link to medicines associated with falls: pay particular attention to this list.
6. It should be emphasised that reducing doses and or frequency of high risk medicines may be useful where these cannot be stopped completely. Patient safety is the core concern.

Prescribing arrangements

1. Before starting a prescribing service, ensure the arrangements for prescribing have been discussed with each individual GP practice and the standard agreement signed by each practice.
2. If a patient does not have capacity to consent to the review, the pharmacist can still prescribe for the patient under the Adults with Incapacity Act. The patient must have an Adults with Incapacity certificate in place, signed by the patient's GP (this will almost certainly be in place already because it is needed for carers to administer medicines). The certificate enables the GP to treat the patient or to delegate another person to treat the patient.
3. Specific information about the Adults with Incapacity Act is available here http://www.gov.scot/Publications/2010/10/20153801/0 It states:

"Part 5 of the Act gives a general authority to treat a patient who is incapable of consenting to the treatment in question, on the issuing of a certificate of incapacity."

Two key enablers

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Pharmacy Anywhere:
addressing remote & rural challenges

Telehealth function	System
Pharmacist remote access to medical records	Vision Anywhere
Patient-pharmacist video consultation	Attend Anywhere

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Attending your appointment via a video call

NHS Highland Pharmacy Anywhere

NHS Scotland

Where appropriate, you can have your consultation online via a video call

Video calling is as convenient as a phone call, with the added value of face-to-face communication.

It can save you time and money, and bring your care closer to home.

Is it secure?

Video calls are secure; your privacy is protected. You have your own private video room, that only authorised clinicians can enter.

Where do I go to attend my appointment?

To attend your appointment, go to: www.nhshighland.scot.nhs.uk/aa/cp

Instead of travelling to your appointment, you enter the clinic's waiting area online. The health service is notified when you arrive, and your clinician will join you when ready. There is no need to create an account. No information you enter is stored.

What do I need to make a video call?

- A good connection to the internet. If you can watch a video online (e.g. YouTube) you can make a video call
- A private, well-lit area where you will not be disturbed during the consultation
- One of these:
  - Google Chrome web browser on a desktop or laptop, or on an Android device
  - An iPad or iPhone with the Attend Anywhere app
- Web-camera, speaker and microphone (already built into laptops or mobile devices)

See over for more information on how to make a video call.

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PHARMACIST MEDICATION REVIEWS – INFORMATION FOR PATIENTS

What is a medication review?
A medication review is a meeting to talk just about your medicines. Your medicines should be reviewed regularly (usually once a year) to check they are right for you.

What is the new medication review service?
We are offering a new service where your medicines will be reviewed by a clinical pharmacist who is working with the medical practice. Pharmacists are experts in medicines and our clinical pharmacist has additional qualifications in prescribing.

Why do I need a medication review?
When you are first prescribed a medicine, your doctor, nurse and pharmacist check that it is the best medicine for you. However, things may change. For example:
- You might develop a side effect from the medicine
- Your health might have changed
- You might have started taking other additional medicines
- Guidelines for treating conditions change over time.

All of these factors can affect whether a medicine remains the best choice for you.

What happens at a medication review?
You will be given an appointment with a pharmacist, either by telephone or videolink. This could take place in your own home, your workplace or GP practice. Please ensure you are in a private space. The review will usually take 10 minutes. The pharmacist will discuss your medicines with you, and you can ask any questions you have about your medicines.

Will my medicines be changed?
Possibly, but only to improve your treatment. Before any changes are made, the reasons for the change will be explained and you will be asked for your agreement.

Do I need to have anything with me for my medication review?
It would be very useful if you could have with you:
- All of the medicines you receive on prescription
- Any medicines you buy (such as from a pharmacy or other shop)
- Any vitamins, herbal or homoeopathic remedies you take

Medicines often have two names (a brand name and a generic name) so having the medicines with you at the review will prevent any confusion if the pharmacist calls the medicine a different name to the name you normally use.

What questions will I be asked at my medication review?
You will be asked how you are getting on with your medicines. Some of the questions you might be asked include:
- Are you able to take all of your medicines?
- Are there any medicines you miss out or forget to take?
- Do you feel you are having side effects from your medicines?
- Do you have any concerns about your medicines?

Information produced by North Highland Pharmacy Team, July 2014, updated March 2017. To be reviewed March 2019.

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www.nhshighland.scot.nhs.uk/aa/cp/Pages/Welcome.aspx

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You are in: Home › Attend Anywhere › Pharmacy Anywhere

Pharmacy Anywhere

This service is provided by NHS Highland to patients in remote areas of the Scottish Highlands. To use this service, you must first make an appointment via your GP practice (currently only available for patients of Assynt, Castletown & Canisbay and Torridon practices; other practices will follow).

Attend my appointment or make a test call

If you are ready to attend your telehealth (video) appointment or you want to make a t... click here:

Attend my appointment or make a test call

- For more information about telehealth (video) appointments, click here
- For more information about the clinical pharmacy service, click here

More information about telehealth (video) appointments

How do telehealth appointments work?

nhs.attendanywhere.com

NHS Highland Clinical Pharmacy Telehealth Service: NHS Highland Clinical Pharmacy Telehealth Service

Enter the Waiting Area

Click the following button to enter the NHS Highland Clinical Pharmacy Telehealth Service waiting area:

Start video call

Need help or more information?

Setup guide

Troubleshooting

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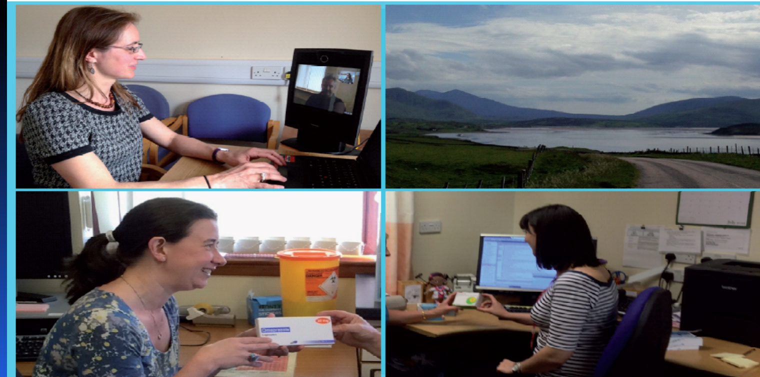

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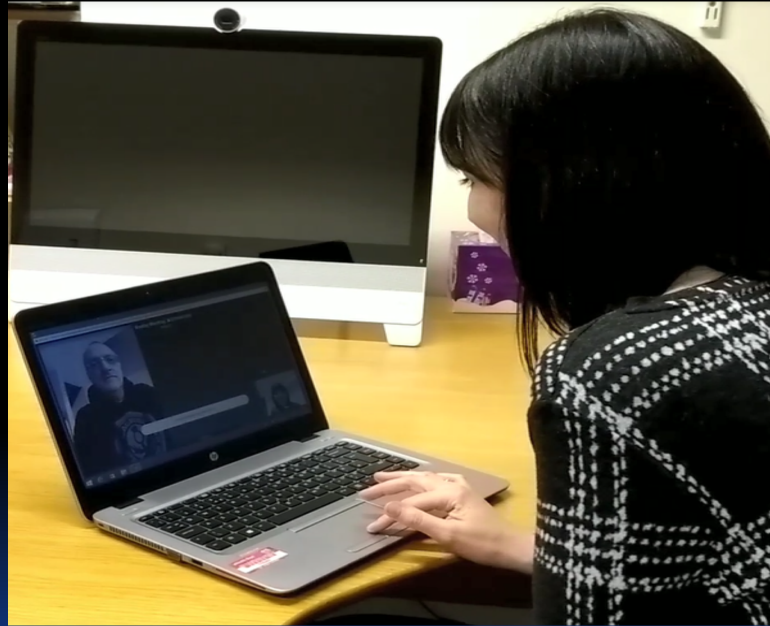

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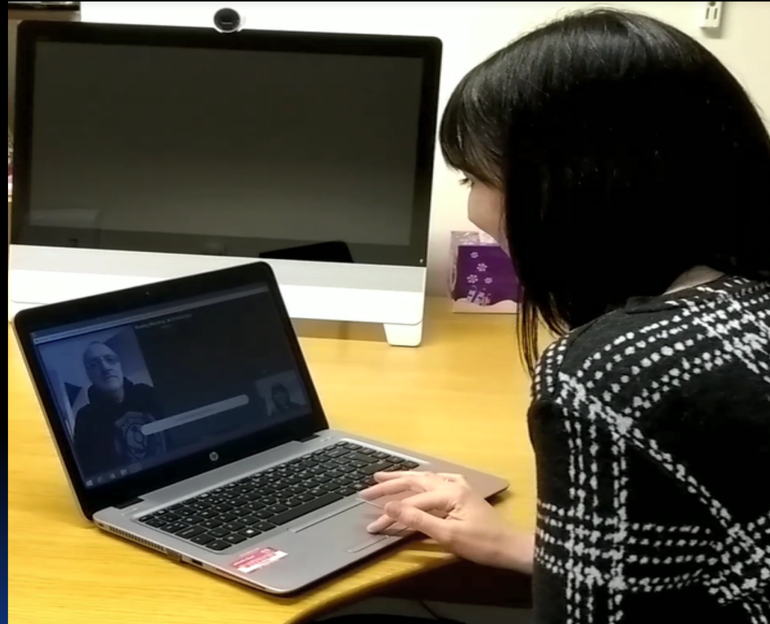
Provide care in remote locations



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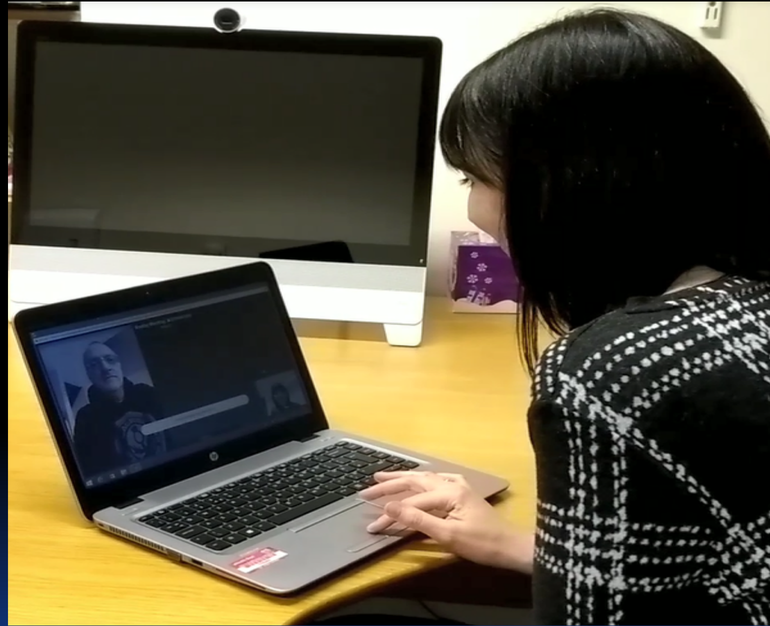
Provide care in remote locations



More responsive service

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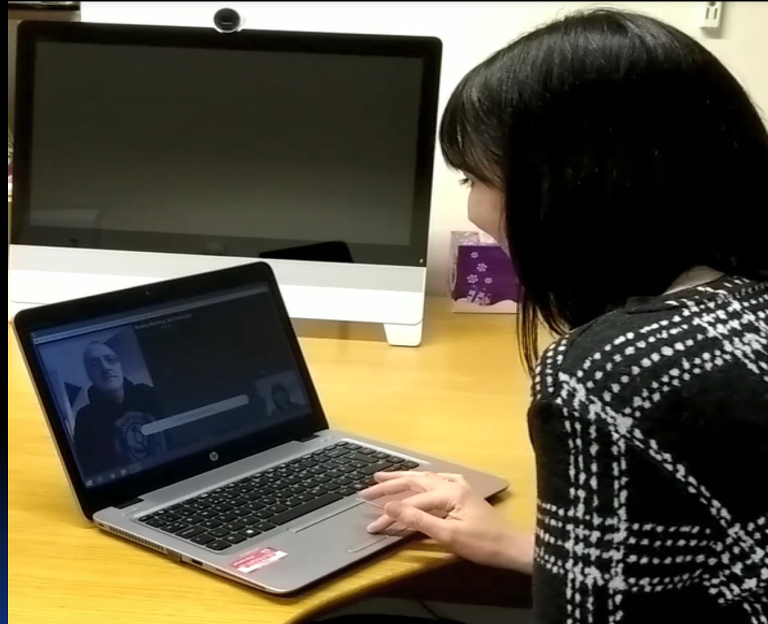
Provide care in remote locations



Better work life balance

More responsive service

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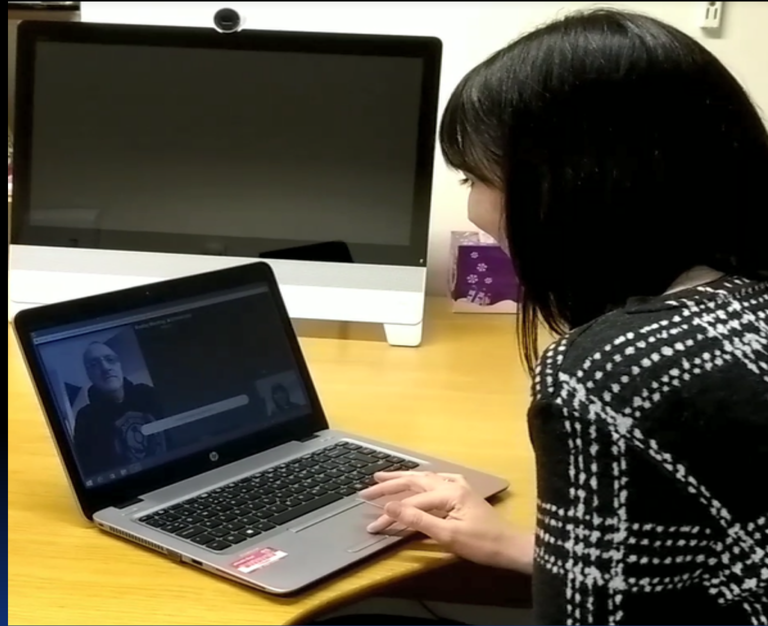
Provide care in remote locations



Better work life balance

More responsive service

Senior roles in rural locations

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Pharmacist prescribing...

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Frequent interventions?

Problem	Intervention
Excessive dose of paracetamol due to patient's low weight	Dose reduced
Falls risk with hypnotic or sedating antihistamine	Medicine stopped
Swallowing difficulties	Medicine changed
Out of date monitoring	Tests arranged
Unnecessary use of PPIs	Dose reduced or stopped

Patient – fall

Patient – fall

Heart failure medicines

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Patient – fall

Heart failure medicines
Investigations negative

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Patient – fall

Heart failure medicines
Investigations negative
Medicines continued... for 11 years

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Patient – fall

Heart failure medicines
Investigations negative
Medicines continued... for 11 years
Increased risk of falls

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Patient – fall

Heart failure medicines
Investigations negative
Medicines continued… for 11 years
Increased risk of falls
Pharmacist review

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Patient – fall

Heart failure medicines
Investigations negative
Medicines continued… for 11 years
Increased risk of falls
Pharmacist review
Gradual reduce and stop

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Patient – fall

Heart failure medicines
Investigations negative
Medicines continued... for 11 years
Increased risk of falls
Pharmacist review
Gradual reduce and stop
BP acceptable; falls risk reduced

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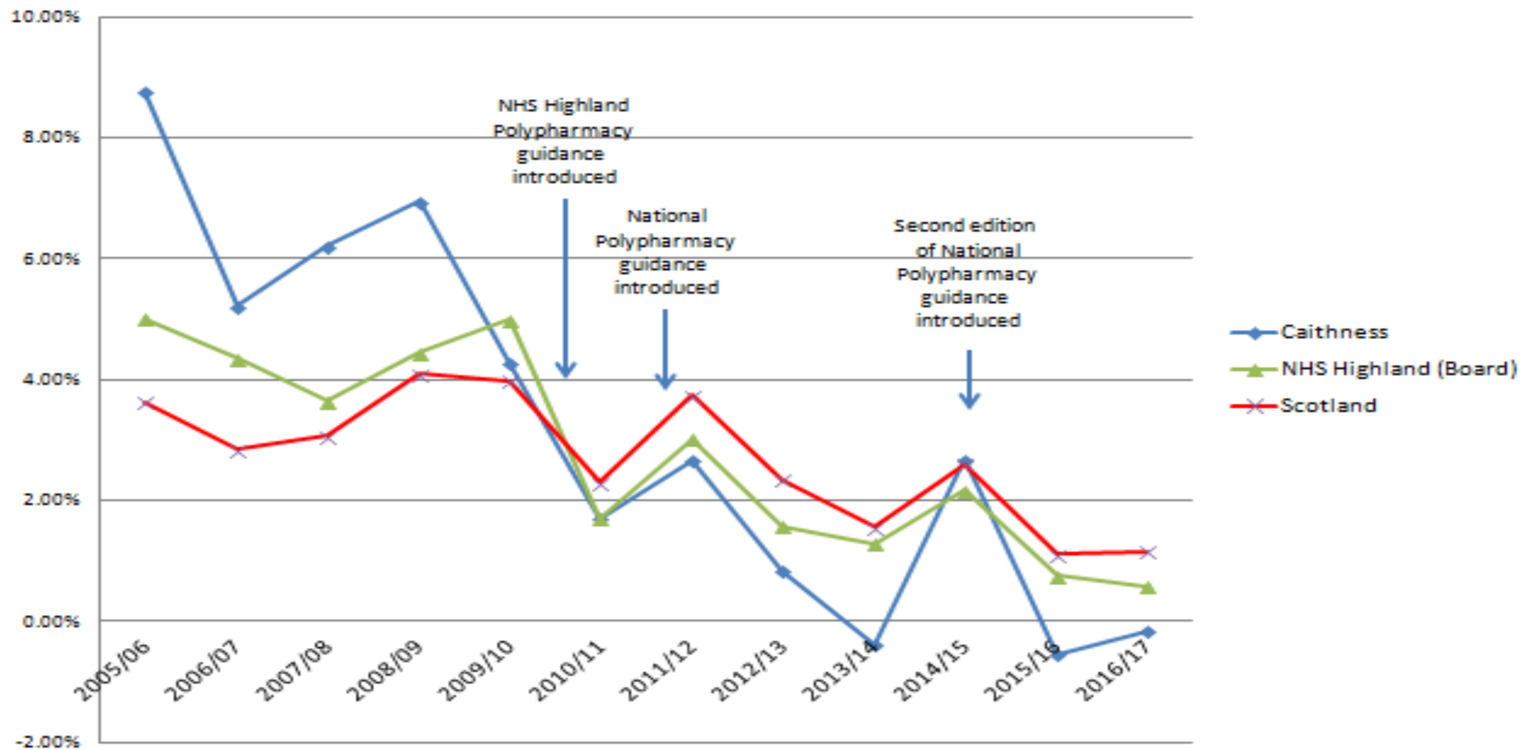

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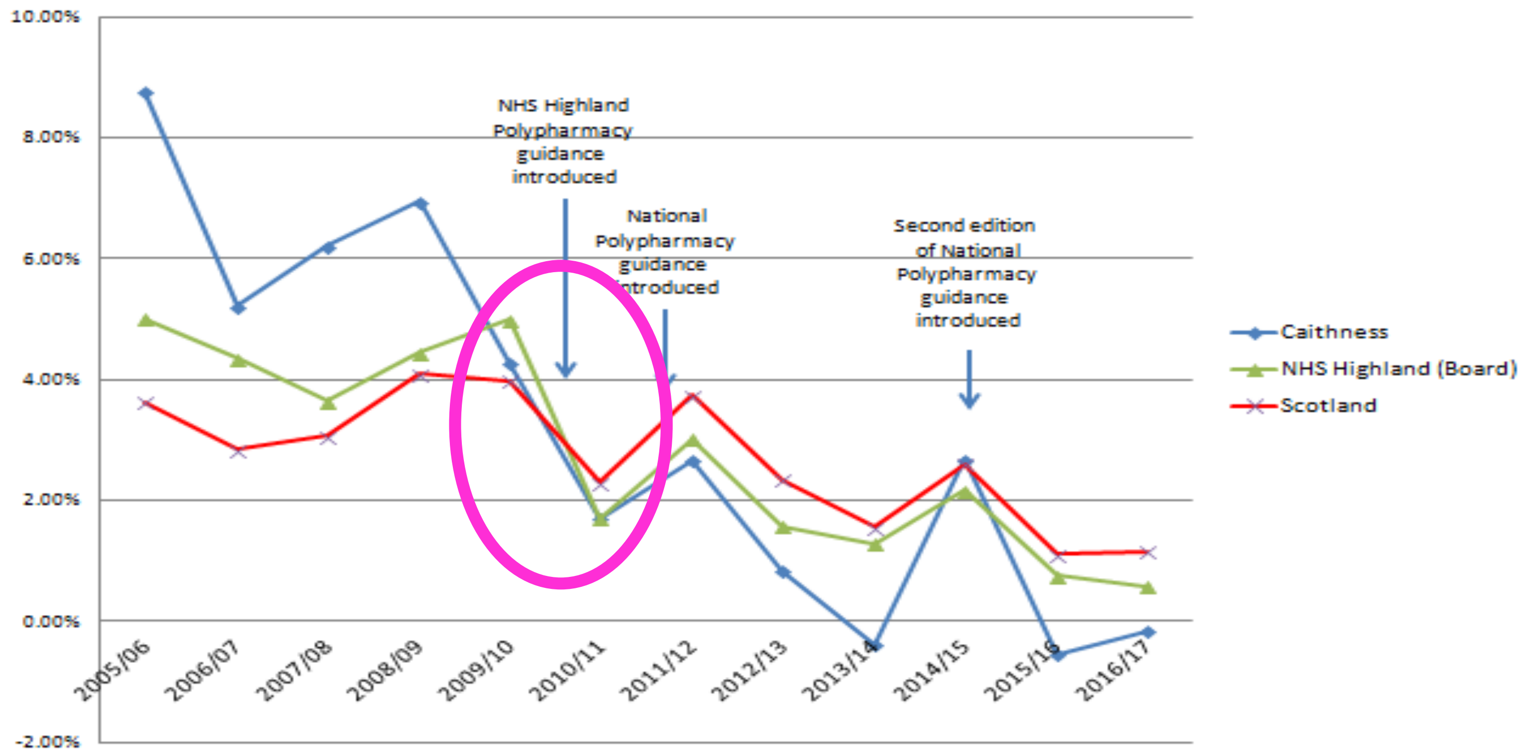

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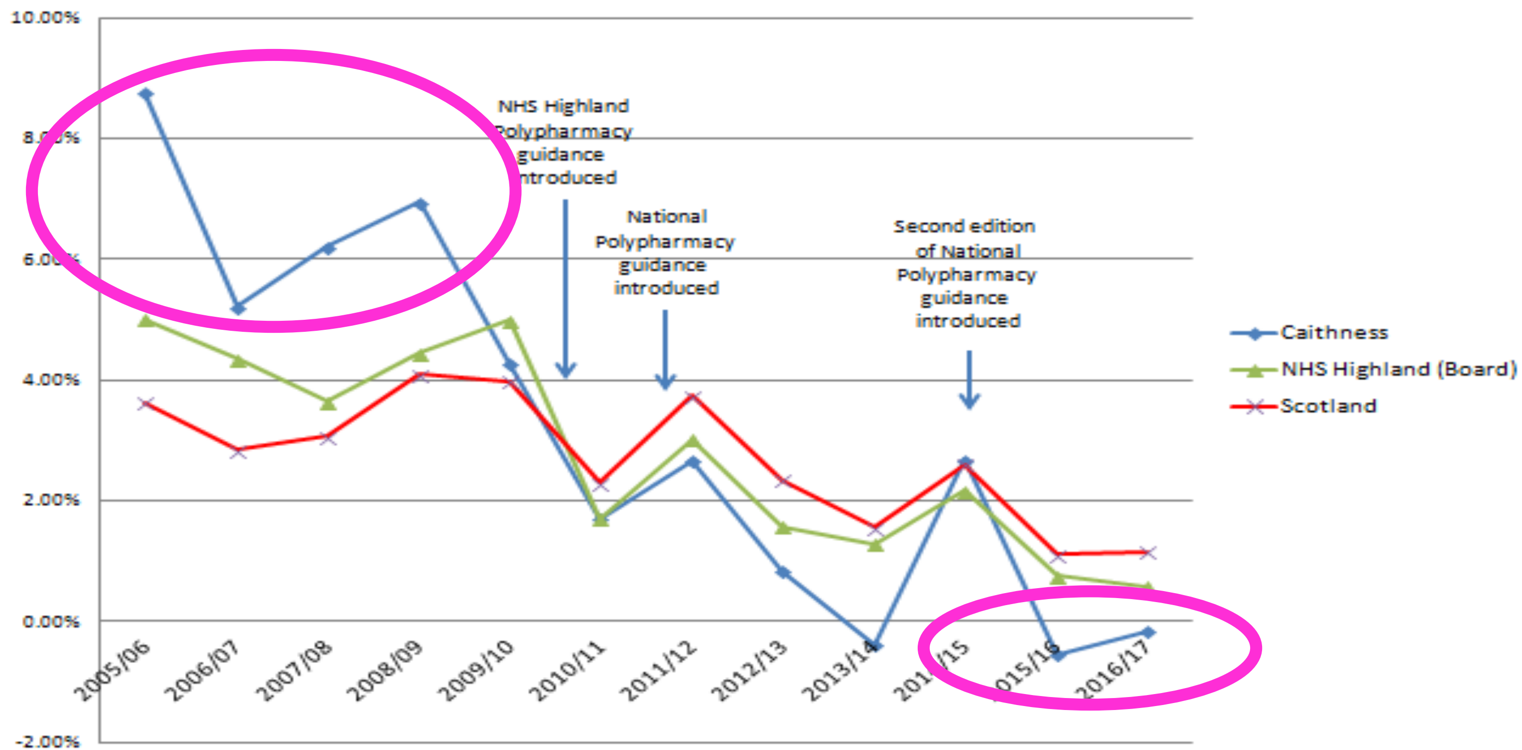

Pharmacist prescribing in Scotland

Data: NHS Education for Scotland, December 2017

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Questions

Pharmacist prescribers

20% of pharmacists in Scotland are prescribers:

False – it's 31%

Location of pharmacists

The most senior clinical pharmacists should be based in large urban hospitals:

No – don't restrict to any care setting (needed everywhere) or to any location (use telehealth)

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Three take home messages

1. Pharmacists are changing prescribing as independent practitioners
2. Remote working using telehealth is absolutely possible
3. Share and spread of new roles works by defining standard work and through national frameworks

e-mail clare.morrison2@nhs.net
Twitter @clareupnorth