Optimising Medicines, Enhancing Lives: The Role of Clinical Pharmacist Reviews in Improving Outcomes and Reducing Waste in Nursing Homes

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Background

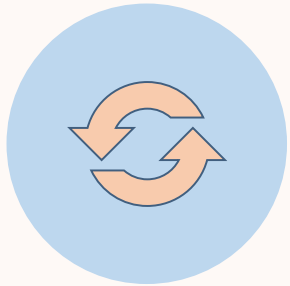
- Aging population
- High prevalence of polypharmacy
- Complex health needs
- Increased demand for care home beds
- 80% of people over 75 are prescribed one medication, and over a third take four or more – in care homes these numbers are even higher
- Polypharmacy increases risk of falls, hospital admissions, cognitive impairment and drug interactions

Aims & Objectives

- Evaluate the impact of dedicated Pharmacist care home reviews
- Improve patient safety
- Optimise medication and therapeutic benefit
- Reduce waste
- Create a care home resident review guide for spread and scale
- Achieve equitable healthcare
- Advocate for vulnerable patients to ensure the patient voice is heard
- Support the wider MDT

Design and Delivery Approach

Collaborative Co-design
Involved key stakeholders; GPs, practice pharmacists and care home staff



Iterative PDSA cycles
Delivery was structured in three iterative PDSA cycles focusing on reviews, workflow refinement

Pharmacist-led Medication Reviews
Focusing on high-risk drugs, compliance, cost-effectiveness and reducing anticholinergic burden.

Mixed-methods Evaluation
Combined quantitative intervention data and qualitative feedback to refine and validate the service.

Improvement through PDSA cycles

PDSA Cycle 1

Medication reconciliation at Care Home

Remote medication review

Report generated and recommended actions documented and emailed to GP

GP to action recommendations

Higher risk interventions emailed to GP prior to full report

No confirmation actions completed

Additional information requested from care home

Delays requesting information from the GP to complete reviews

Use of GP time

PDSA Cycle 2

Stakeholder engagement; consent forms sent to GP and Care Home.
Access granted to GP system

Medication reconciliation completed at care home

Remote review completed

F2F meeting with GP to discuss residents

Report generated and sent to GP for approval of actions

Pharmacist actions changes on Vision/ EMIS

Education opportunities and time to address care home queries

PDSA Cycle 3

Stakeholder engagement; consent forms sent to GP and Care Home.
Access granted to GP system
Care home prepare MAR charts for remote review

Remove review including medication reconciliation and clinical review

Care Home visit to observe residents being administered medication

F2F meeting with GP to discuss residents and actions agreed

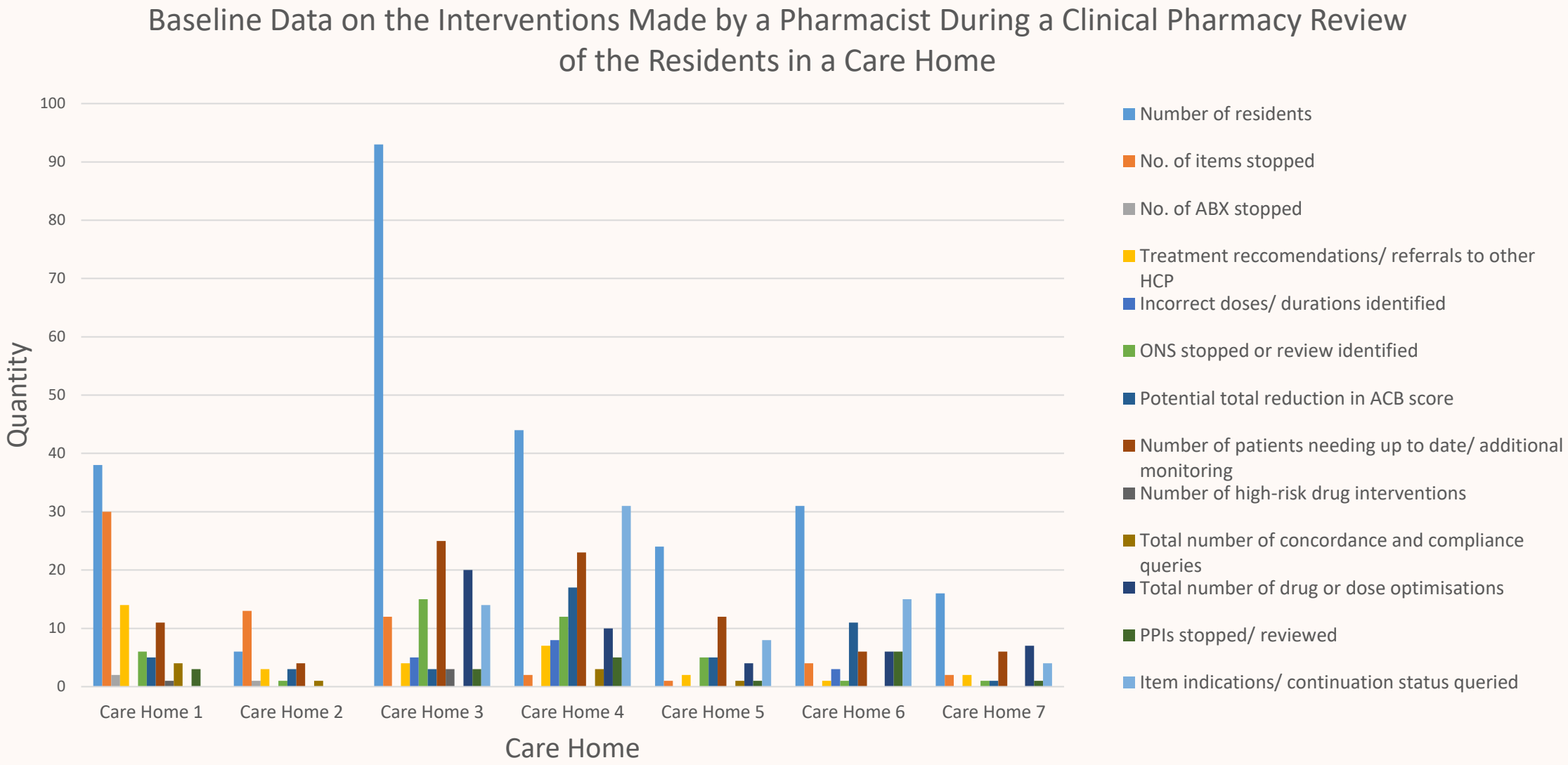
Pharmacist actions changes on Vision/ EMIS

Summary of actions sent to GP and Care Home

Better prepared for visit as full review complete

List of tasks agreed not requiring further GP input

PDSA Cycle 1


Baseline Data on the Interventions Made by a Pharmacist During a Clinical Pharmacy Review of the Residents in a Care Home
Quantity
100
90
80
70
60
50
40
30
20
10
0
Care Home 1
Care Home 2
Care Home 3
Care Home 4
Care Home 5
Care Home 6
Care Home 7
Care Home
Number of residents
No. of items stopped
No. of ABX stopped
Treatment reccomendations/ referrals to other HCP
Incorrect doses/ durations identified
ONS stopped or review identified
Potential total reduction in ACB score
Number of patients needing up to date/ additional monitoring
Number of high-risk drug interventions
Total number of concordance and compliance queries
Total number of drug or dose optimisations
PPIs stopped/ reviewed
Item indications/ continuation status queried

PDSA CYCLE 2 & 3

40 Medicines stopped

64 less administrations per day across 89 residents freeing up nursing time

34% of residents aligned to 28 day cycle to reduce waste

7 high risk drug interventions

12% formulation changes to aid compliance

51 PPIs reviewed

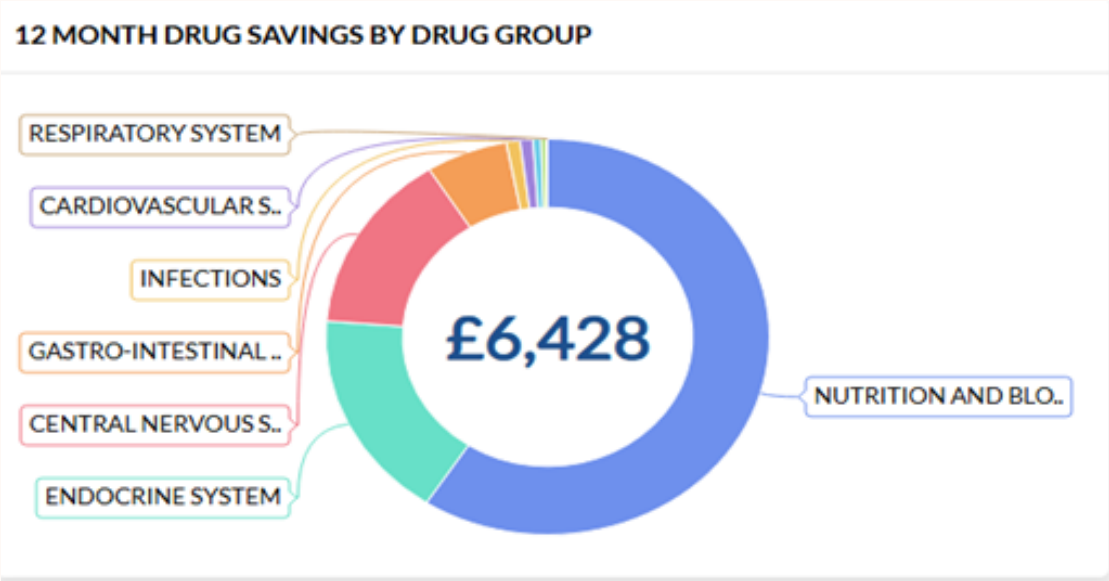
ACB score reduction of **10** across residents reviewed

Stopping 40 medicines (≈ 0.5 kg CO_2 per box) saved 20 kg of CO_2 — roughly the same as driving an average petrol car **100 km.**

267 GP appointments saved

Rectified doses, ordering of up to date monitoring and specialist advice for high risk medicines

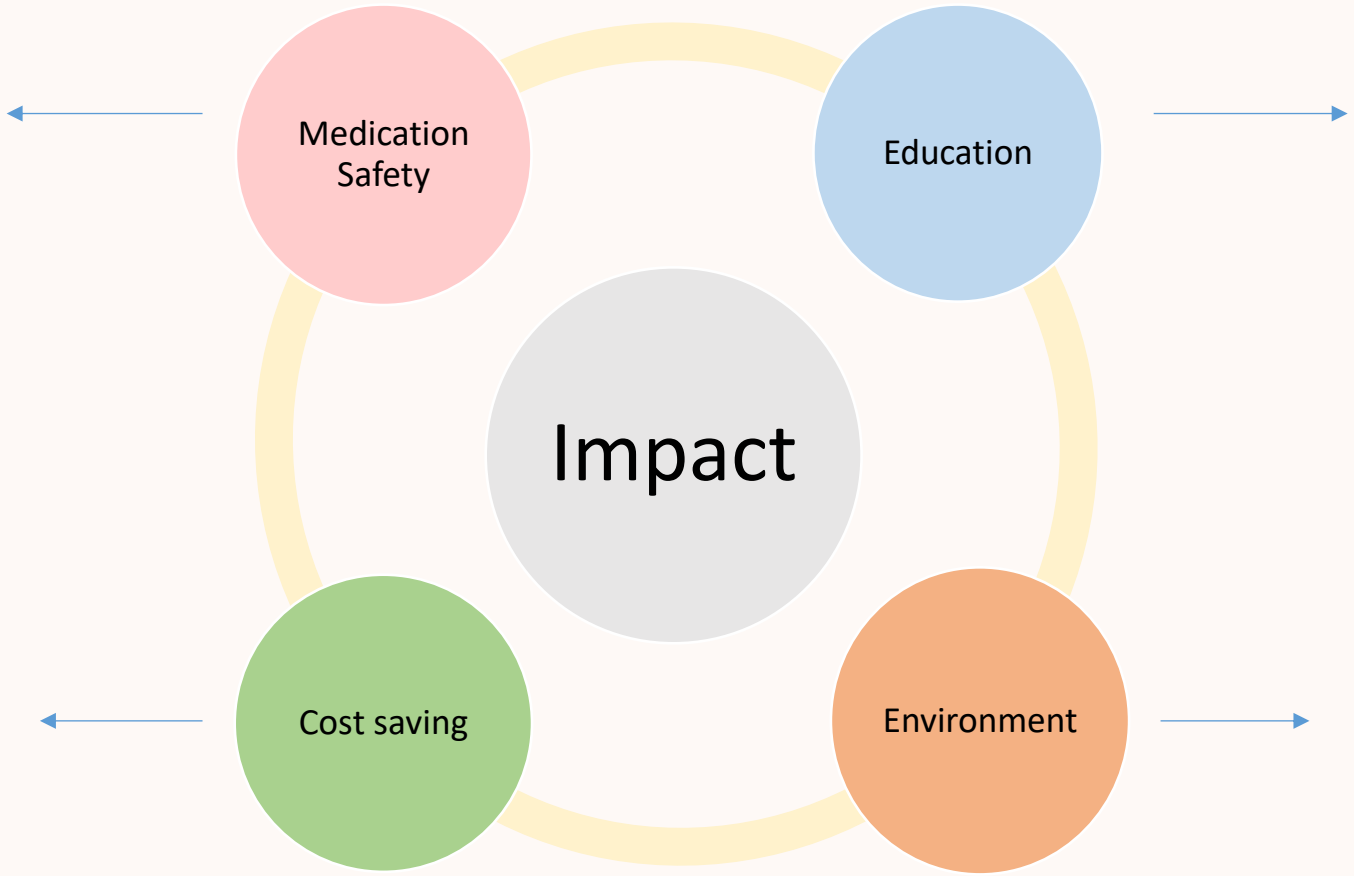
Resident previously chewing all tablets – now **compliant** with medication in a suitable form contributing to person centred care



PDSA CYCLE 1, 2 & 3

Residents reviewed **341**
Potential ACB score reduction: 55 across residents contributing **falls reduction risk**

- High risk drug interventions
- Formulation adjustments to aid swallowing difficulties
- Up to date monitoring
- Falls risk reduction



- Improved medicine management at care homes
- Regular pharmacy training sessions
- Raising awareness of high risk medicines and good administration practices
- Care home toolkit – for use by other HCPs and the FPUPP programme.
- Introduced new policies
- Reduction in unnecessary covert plans

- Stopping of unnecessary medicines
- Reduction in nursing administration time
- 267 GP appointments saved

- Cycle alignments resulted in waste reduction
- Refinement of care home ordering processes – less medication being ordered and wasted

Medication Review Toolkit - The Care Home Edition

What's included?

- Details of the medication review process and what is needed
- Consent form for Care Home
- Consent form for GP
- Proposed scope of practice/ List of approved actions by GP
- Medication review proforma
- Tips for using the medication review proforma
- Suggested medication review documentation template
- The review – key areas to consider for a care home resident
- Suggested resources
- Over the Counter Medicines Policy (draft)
- PRN Protocol Template
- Care Home Pharmacist Job Description
- Care Home Medication Review Toolkit Feedback

This review has helped some residents to have independence over the way they take their medication as some of them had medications administered covertly. This review has made it possible to have other medications forms available and this can be administered overtly

The home has greatly benefited with manager and nurses knowledge towards the medications used

I would like this review to be frequent so that we can have the chance to discuss with the pharmacist the kind of problems we face in the homes regarding medication preparation

Comments from the GP surgery involved in the project:

- "Kayleigh was incredibly friendly and approachable whilst supporting the GP surgery, thank you!"
- "The Medication Review allowed an in depth review of residents on multiple items ensuring appropriate switches, deprescribing and initiation were identified and highlighted the GP for review. This method allowed the GP additional capacity."

The image shows Kayleigh – Care Homes Pharmacist at one of the care homes with the interim manager completing medication reviews. The above comments were received from staff at the care home.

Patient stories

- *47 year old Male*
- *Quadriplegic*
- *Non-verbal – communicates via eye glaze*
- *Full capacity*
- *Medication review requested by clinical lead nurse*

Patient would like to request PRN medicines rather than be offered and would like the opportunity to have OTC medicines.

PRN protocols written to support healthcare support workers

OTC policy drafted to support patient

'Thank you for putting the work in'

- *33 year old female*
- *Athetoid cerebral palsy*
- *Review requested by Mum*
- *Feels patient is on a lot of medication*
- *Adverse reaction to medication*

Medication review completed with lead nurse, mum and support workers.

Polypharmacy review highlighted inconsistencies with clinic letters and lack of follow up.

Medications reviewed and reduced

Discussion with GP and link made with specialist.

Review to continue with collaborative working between the GP, CH pharmacist and neurologist to improve patients medication and quality of life

Next Steps and Future Ambitions

- Expanding Pharmacy Technician Roles
- Toolkit Refinement and Adoption
- Education and Waste Reduction across care homes and complex care
- Regular slot on engagement meeting for care homes to raise awareness of pharmacy related issues
- Project to contribute to OOWYN campaign
- Hospital transfer and discharge to care homes project
- Inclusion of team in the ABUHB Winter Plan
- ***If this work is adopted by all health boards in Wales, there is a potential saving of £3,258,996 per year across all care homes*** ***(£6428 savings for two care homes. Therefore £3214 x estimated number of care homes in Wales – 1014)***

Thank you for listening.

Any questions?

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FINALIST Welsh Pharmacy Awards 2025

PCPA AWARDS 2025

PCPA Excellence in GP Pharmacy Awards 2025

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