

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

Elizabeth Hallett and Kayleigh Poulsom, ABUHB

Contact: Elizabeth.Hallett@wales.nhs.uk

Background:

ABUHB supports 1,800 beds across 43 care homes, where residents are typically older, frailer, and living with multiple comorbidities. Over 80% of people aged 75+ take at least one medicine, and more than a third take four or more—figures even higher in care homes—raising risks of falls, cognitive decline, and hospital admissions.

Polypharmacy contributes to harm, with 6.5% of UK acute hospital admissions linked to medicines. NICE recommends regular medication reviews, but many residents miss timely reviews due to service pressures.

This project aimed to evaluate the impact of a clinical review of care home patients by a dedicated care home pharmacist.

Aim:

Improve medication safety, patient outcomes, and reduce medicines waste in care homes through structured, pharmacist-led medication reviews.

Objectives:

Deliver detailed medication reviews for care home residents, focusing on high-risk medicines, dose optimisation, and deprescribing.

Measure impact on patient safety (e.g., reduced adverse effects, improved ACB scores, fewer hospital admissions).

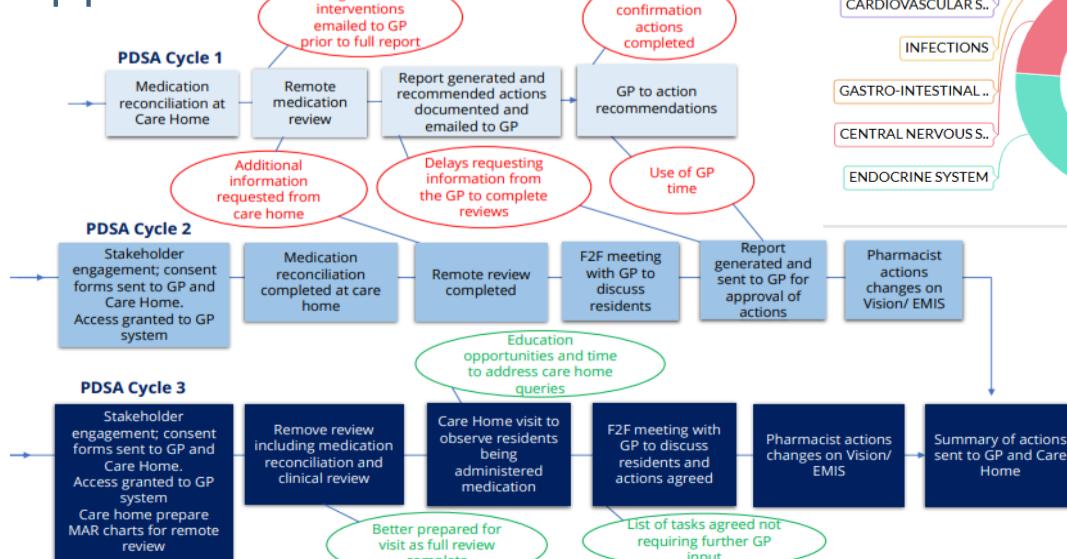
Optimise prescribing and reduce waste through in-depth polypharmacy reviews with appropriate and improved compliance.

Assess impact on GP workload by reducing appointments and care home visits.

Engage stakeholders to co-produce and evaluate the project for continuous improvement.

Develop a standardised toolkit to support consistency and scalability across ABUHB and beyond.

Approach:



Outcomes:

New Clinical Service

Pharmacist-led medication reviews introduced for care home residents and Complex Care Team patients, delivering personalised pharmaceutical care closer to home.

Structured Toolkit

A comprehensive implementation resource with guidance, templates, and training materials to support service spread and scale.

Protocols & Policies

Developed PRN and OTC medication guidance, with educational materials to promote safe, autonomous medicine use.

Impact:

(PDSA cycle 1,2 and 3)

Residents reviewed **341**

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

(PDSA cycle 2 and 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 CO₂ per box) saved 20 kg of CO₂ — 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



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

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.

Key Conclusions:

- Safer, personalised medication for residents
- GP time saved via pharmacist-led reviews
- Empowered care home staff through education
- Reduced medication waste and environmental impact
- Enhanced patient safety
- Care brought closer to home
- Developed a replicable toolkit for medication reviews



Next Steps:

- Expand the role of pharmacy technicians in care home settings through formalised training and shadowing.
- Enhance the medication review toolkit to include technician-specific guidance and resources.
- Support wider adoption across NCNs and Health Boards, using the toolkit as a scalable model for structured medication reviews.
- Continue to use the toolkit as a teaching resource and imbed into undergraduate and foundation pharmacist placements.
- Become a key resource in a wider planned all Wales medication waste reduction campaign.

