

Reduce my burden. Reducing Anticholinergic Burden Through Pharmacist-led Reviews in Care Homes

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Opportunity for change

Polypharmacy is an increasing burden for both patients and their caregivers, particularly in care home settings. It often results in medication errors, drug interactions and increased side effects. This challenge is especially evident among older patients, those with frailty, and individuals with mental health conditions.

Following polypharmacy training, we identified the reduction of anticholinergic and overall medication burden as a key opportunity to improve outcomes for care home residents through targeted medication reviews and staff education. The training highlighted the complexities of polypharmacy, including pill and anticholinergic burdens, high-risk medications, and drug interactions. This provided the knowledge and confidence to care home staff implement changes aimed at reducing medication load in frail, elderly patients, especially those with high anticholinergic burden scores.



Intervention

To address polypharmacy in patients with a high anticholinergic burden (ACB) i.e. score of 3 or more, a pharmacist-led medication review and staff training initiative was launched across six care homes. The clinical pharmacist:

- Conducted medication reviews to reduce anticholinergic burden, pill burden, and overall medication use. Key interventions included deprescribing high-risk medications, simplifying pill regimens, and lowering the number of medications where appropriate.
- Trained care home staff on the impact of anticholinergic medications, with resources such as leaflets and the ACB calculator used to identify high-risk medications.
- Emphasised shared decision-making with patients, carers, and staff, ensuring that any changes were made in collaboration with all relevant parties.

Impact/Outcomes

The intervention had a positive impact across the care homes, with measurable improvements in medication management:

- **27 patients across six care homes were reviewed**, with a mix of individuals with and without capacity.
- **Anticholinergic burden was reduced** for five patients, with scores dropping from high levels, with an average reduction from 6 to 3.
- **Pill burden was reduced** for 10 patients, with medication regimens simplified (e.g., replacing two 5mg Enalapril tablets with one 10mg tablet).
- **The total number of medications was reduced** for 10 patients, with the overall count dropping from 312 to 294, a reduction of 18 medications.
- **High-risk drugs (e.g., NSAIDs, anticoagulants) were either reduced or stopped** for eight patients.

Additionally, the initiative led to better awareness among care home teams about the importance of managing anticholinergic medications and pill burden.

Patients and care home staff's quotes about the review:

Patient: "At first, he thought it was just for the NHS to cut cost that is why they are reviewing his medications and stopping it. In the end, after trialling him not taking the medication, he feels alright and feels the same when he is taking the medication and when he is not taking it. So, he said he is happy that that he has few tablets to take."

Care Home Staff: "It was a great knowledgeable session regarding ACB and anticholinergic drugs. Training helps us to know more about these drugs and their action in elderly and when they need it. We will try to monitor resident who are on this medication and will inform the pharmacist if they are on this for long term and whether they need this or not."

Conclusion/Lessons learned

The project highlighted several key lessons:

- Identifying patients who met the criteria for polypharmacy interventions was challenging, as not all patients with multiple medications had a high ACB score.
- Some patients, especially those with mental health conditions, required medications that contributed to a high anticholinergic burden, limiting the ability to make significant changes.
- Coordination with GPs was essential for managing medication changes in stable patients.
- Training staff in care homes was difficult due to time constraints, so engaging the senior carer in the process was crucial for cascading information to the rest of the team.

For future projects, broader staff training and better access to educational materials for both staff and families would be beneficial to ensure sustainable change. Additionally, creating a standardised template for medication reviews could help pharmacists and technicians streamline the process and ensure consistency.

Future work

Building on the success of this project, future work will focus on:

- Expanding training for multiple care home staff to ensure better understanding and identification of issues related to polypharmacy.
- Developing a template spreadsheet for pharmacists and pharmacy technicians to guide medication reviews, highlighting areas like mobility, falls risk, and bone protection, as well as interactions between medications.
- Continuing to engage care home staff in the identification of patients with high ACB scores and pill burden, encouraging them to request medication reviews as part of regular multidisciplinary team meetings.
- Sharing feedback from care staff and patients to refine the process and improve the effectiveness of the initiative.

Ultimately, the goal is to continue reducing the overall burden of medication on care home residents while improving their quality of life and reducing the risk of medication-related harm.