## **Polypharmacy:**

Reducing Anticholinergics in Care Homes (ReACH)



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## Foreword

Polypharmacy literally means 'many medicines' and has been defined by the World Health Organisation (WHO) as the routine use of four or more medicines including those that are prescribed and bought in a pharmacy (including herbal medicines).<sup>1</sup>

In 2017, the WHO declared polypharmacy as its third patient safety challenge and aimed to reduce severe avoidable medication related harm by 50% over 5 years globally.<sup>1</sup>

A report published in 2017, estimated that 410,000 people were living in care homes in England. An average care home resident is 85 years old, diagnosed with six or more conditions, is living with a combination of physical frailty, disability and mental health conditions<sup>3</sup> and is taking approximately seven medicines a day.<sup>6</sup> This predisposes the resident to an 82% risk of adverse drug reactions.<sup>2</sup>

Approximately 70% of care home residents are living with dementia<sup>3</sup> and anticholinergic medicines have been found to be particularly problematic for people with this condition.<sup>8</sup> This guide provides recommendations on how to raise awareness of the potential risks related to anticholinergics – a group of medicines that block a chemical called acetylcholine and can cause adverse effects such as confusion, reduced cognition, dry eyes and constipation.

The resources in this guide provide tools for people to raise concerns about their own medicines. The resources are endorsed by a patient led campaign,

Carshie Chull

**Dr Caroline Chill,** Clinical Lead for Healthy Ageing

'Me and My Medicines', which promotes 'it's ok to ask' to encourage people to find out more about their medicines. The National Institute for Health and Care Excellence (NICE) states that:

*"enabling people to raise any concerns about their medicines and managing medicines-related problems effectively when they happen are important to minimise harm and guide future care."*<sup>7</sup>

The NICE Medicines Support Campaign, 'Involved and Informed', have also endorsed the resources from this project. Together we can encourage more people to talk about their medicines. Join us in improving health for older adults by implementing these simple steps to reduce use of anticholinergics in care homes.

Mandeep Butt, Senior Pharmacist for Patient Safety

## Background

The number of people over 85 has doubled in the past three decades<sup>4</sup>, 82% of these people will have more than one long term condition.<sup>5</sup> They are more likely to routinely use several medications and be at risk of side-effects and interactions.<sup>2</sup>

The Royal Pharmaceutical Society states in their report 'The Right Medicine – Improving Care in Care homes' that the average age of residents in care homes for the elderly is 85 and they take an average of seven prescribed medications each day.<sup>6</sup>

It is estimated that £24 million (out of £300 million estimated total medicines wastage in England) is lost every year due to medicines waste in care homes across England.<sup>4</sup>



# **Introduction** to anticholinergic medicines

Anticholinergics directly block the beneficial effects of dementia medicines and can cause confusion and reduced cognition. They include some medicines used to treat conditions such as allergies (e.g. chlorphenamine) and depression (e.g. paroxetine). These medicines are assigned a score between 1 and 3 relating to the extent of their anticholinergic activity, with 3 being the highest activity. There is currently no consensus on the scores assigned to each anticholinergic medicine however the list from http://

www.medichec.com/ looks specifically at the current evidence around the medicines that can enter the brain affecting cognition, this list has been used to inform this resource. This guide focuses specifically on reducing medicines with high anticholinergic activity (score 2 or 3). A higher anticholinergic score may be reached with several anticholinergics with lower activity (score 1) compared to one anticholinergic with high activity. This guide looks specifically at the medicines with highest activity to enable care home staff to easily identify these medicines.



## About this guide

This guide includes several recommendations and resources to reduce anticholinergic medicines in care homes and can be used for all care home residents. The guide also provides free to download resources to support residents and their families/carers to have a conversation about their medicines. The steps have been developed from work undertaken over 12 months exploring ways in which inappropriate polypharmacy can be reduced in care homes. The full project report can be accessed here.

The guide can be used by anyone working with/in a nursing or residential care home including but not limited to:

- Care Home CCG/Local authority Leads
- Care Home Managers
- General Practitioners
- Care Home Pharmacists and Pharmacy Technicians
- Care Home Nurses



## Steps to Implement

#### Engage care home(s)

- Contact Local Authority and Clinical Commissioning Group (CCG) care home leads in each borough/geographical area to discuss how to engage care homes in their area.
- Request a slot to present the need to reduce anticholinergics at the local care home forum to generate interest from care home managers (access the presentation here).
- Contact the care home managers interested in the project.
- Contact the GP(s) working in the care homes to inform them of the project and to confirm their agreement for the care home to participate.
- Book dates for meetings with care home staff and residents/relatives.

#### **Top Tip**

Consider organising one day when the GP and care home pharmacist can attend a meeting at the care home to discuss the project.

#### Inform

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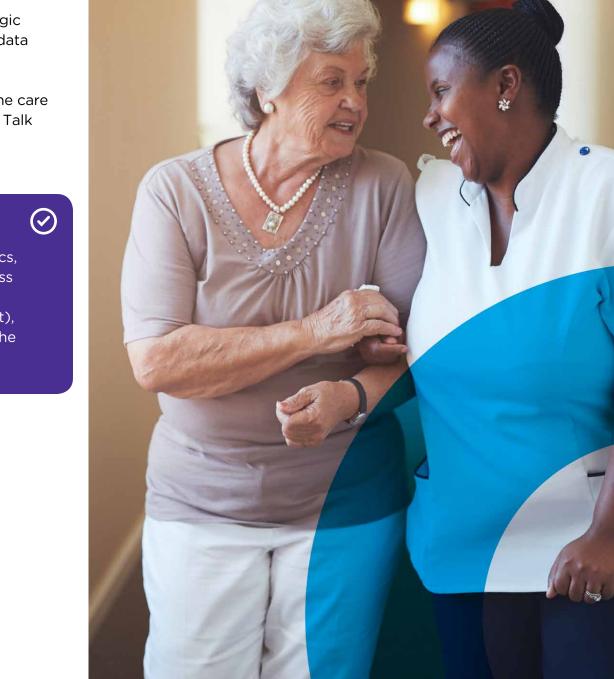
Inform key stakeholders about the potential risks of anticholinergics, specifically for those with dementia as well as the importance of regular medication reviews (access presentation here).

- 1. Liaise with the care home pharmacy team to support project and deliver the anticholinergics presentation.
- 2. Present information about anticholinergics to the care home staff, residents and relatives and GP practice.
- 3. Supply copies of the medicines communication charter from 'Me and My Medicines'.
- 4. Discuss with care home staff how highlighting anticholinergics can be incorporated into 'business as usual', for example, can the list of medicines with high anticholinergic activity be attached to the drug trolley?

- 5. Provide the list of medicines with high anticholinergic activity, poster of anticholinergic side-effects and data collection table for care home staff.
- Display the 'Let's Talk about Medicines' poster in the care home/GP practice and provide copies of the 'Let's Talk about Medicines' leaflets to care home residents/ relatives.

#### Top Tip

When informing stakeholders about anticholinergics, be very clear that not all medicines in a certain class have high anticholinergic properties (e.g. the antidepressant paroxetine does but citalopram doesn't), it is important to only highlight the medicines on the list provided.



#### Measuring the impact

- 1. Collect the following information on the data collection form:
  - name of residents taking medicines with high anticholinergic activity.
  - the name of the anticholinergic medicine(s), dose, frequency and indication of each.
- 2. Communicate this list to the pharmacist/GP via secure email or at their next visit to the care home.
- 3. Following the GP review, document the number of medicines that are stopped, switched and unchanged.
- 4. Consider presenting results to the local care homes forum, CCG medicines optimisation team.

#### **Top Tip**

Ensure confidential information is handled according to the General Data Projection Regulation (GDPR) and the Data Protection Act 2018.

#### Resources

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- Power-point presentation for care home forums
- Power-point presentation for participating care home staff, healthcare professionals, residents, and relatives
- Medicines with high anticholinergic activity
- Poster of anticholinergic side-effects for care home staff
- 'Me and My Medicines' communication charter
- 'Let's Talk about Medicines' leaflet for care home residents/relatives
- 'Let's Talk about Medicines' poster for care homes/GP practices and community pharmacies.



## References

- World Health Organisation (2017) Medication Without Harm: The third WHO global patient safety challenge. Available: https:// www.who.int/patientsafety/medication-safety/medicationwithout-harm-brochure/en/ [Accessed 31st July 2019]
- Prybys, K., Melville, K., Hanna, J., Gee, A., Chyka, P. Polypharmacy in the elderly: Clinical challenges in emergency practice: Part 1: Overview, etiology, and drug interactions. Emergency Med Rep. 2002;23:145–53.
- Alzheimer's Research UK (no date) Dementia Statistics Hub: Prevalence. Available from: https://www.dementiastatistics.org/ statistics-about-dementia/prevalence/. [Accessed 31st July 2019]
- 4. Office for National Statistics (2013). Population estimates total persons for England and Wales and regions, mid 1971
  mid 2012. Newport: Office for National Statistics. Available at: www.ons.gov.uk [accessed on 31 July 2019].
- Barnett K, Mercer SW, Norbury M, Watt G, Wyke S and Guthrie B (2012). Research paper. Epidemiology of multi-morbidity and implications for health care, research and medical education: a cross-sectional study The Lancet online.

- The Royal Pharmaceutical Society (2016). Improving Care in Care Homes. Available from https://www. rpharms.com/Portals [Accessed 31st July 2019].
- National Institute of Health and Care Excellence (2017) Managing medicines for adults receiving social care in the community (NG 67) Available from https://www.nice.org. uk/guidance/ng67 [Accessed 6th August 2019]
- Bishara, D., Harwod, D., Sauer, J. and Taylor, D.M. (2017) Anticholinergic effect on cognition (AEC) of drugs commonly used in older people. International Journal of Geriatric Psychiatry; 32; 650-656