

Collaborative reviews of anticholinergic burden scores in primary care following admission to secondary care after a fall

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This project originated from the West Yorkshire Integrated Care System Anticholinergic Burden (ACB) Task and Finish Group and supports extensive work to reduce ACB scores across West Yorkshire. This project was identified in a Health Innovation Network national medicines safety scoping exercise for NHSE.

Introduction

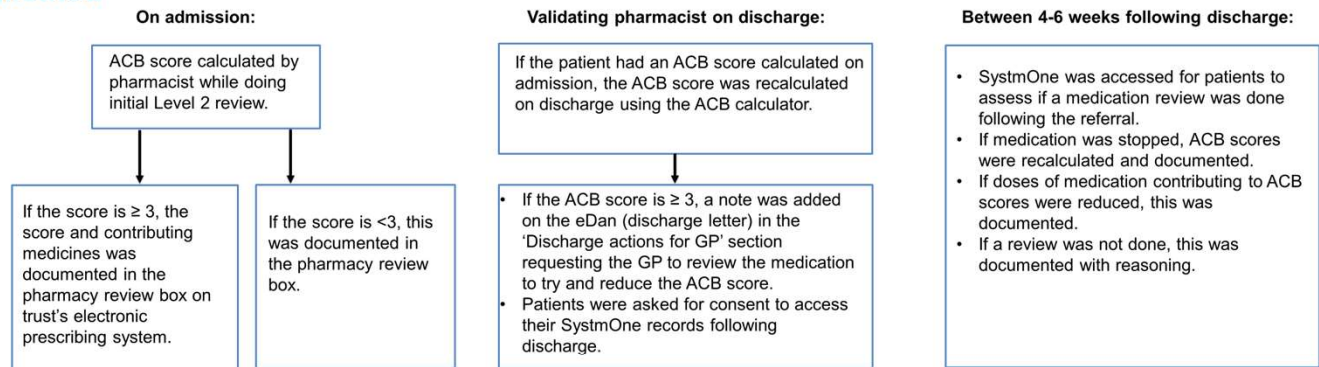
Older adults are prescribed a range of medicines to manage chronic conditions¹. Some of these may cause anticholinergic side effects such as dry mouth, constipation, urinary retention, blurred vision, dizziness, confusion and delirium².

Anticholinergic burden (ACB) can be defined as the cumulative effect of taking more than one drug that causes anticholinergic side effects¹. The ACB Calculator assigns each anticholinergic medicine with a score. A total score of 3 or more is considered clinically significant³. Patients with high ACB scores are at an increased risk of falls, cognitive impairment, and mortality. Reducing ACB scores results in positive outcomes for patients¹.

Aim

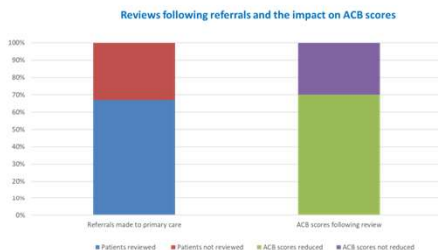
- To raise awareness of anticholinergic side effects including the detrimental effects on cognition and falls.
- To calculate ACB scores for falls patients on acute older people's admission wards.
- To refer to primary care network (PCN) pharmacists and general practitioners (GPs) for review on discharge if the ACB score is 3 or more.

Method



Results

- Over one hundred ACB scores were calculated during the 4-week data collection period.
- 15 patients were referred to primary care for reviews.
- 10 out of 15 patients were reviewed in primary care.
- Out of the 10 patients that were reviewed, 7 patients had their ACB scores reduced.
- While the remaining 3 patients did not have their ACB scores reduced, the doses of contributing medicines were reduced.



Discussion

The aims of the project were achieved because:

- Awareness was raised.
- The number of ACB scores calculated in secondary care increased.
- The number of referrals that were actioned in primary care increased.

The patients involved in the project that were reviewed and had their ACB scores reduced were positively impacted. Overall, this project had a positive impact, but more work is needed going forward to reduce prescribing of anticholinergic medicines among older people.

Next Steps

- Provide training sessions for pharmacy technicians so that they can calculate ACB scores for patients admitted with a fall.
- Continue referrals to PCN.
- Expand the project to a bigger cohort for a longer time.
- Promote ACB on trust screensavers to raise awareness.
- Work with NHSE if project is identified to take forward.

References

- O'Donnell LK, Gnjdic D, Nahas R, Bell JS and Hilmer SN. Anticholinergic burden: considerations for older adults. *Journal of Pharmacy Practice and Research*. [Internet]. 2017 Dec. [cited 2024 May 23]; 47(1), pp. 67-77. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1002/jppr.1303>.
- Gorup E, Rivel J and Petek Ster M. Anticholinergic burden and most common anticholinergic-acting medicines in older general practice patients. *Zdr Vast*. [Internet]. 2018 Jun. [cited 2024 May 23]; 57(3), pp. 140-147. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6032175/>
- Lipovec NC, Jazbar J and Kos M. Anticholinergic burden in children, adults and older adults in Slovenia: A nationwide database study. *Sci Rep*. [Internet]. 2020 Jun. [cited 2024 May 22]; 10(1):9337. Available from: <https://pubmed.ncbi.nlm.nih.gov/32518392/>