Title: Anticholinergic Burden Culmative Effect **Project Lead: Sarah Vaukins** **Date: 03/10/23**

Background

Anticholinergic medications are prescribed regularly for a number of different conditions, however can cause side effects such as confusion, dry mouth, drowsiness, constipation, urinary retentions and reduce cognition. In the elderly (over 70s) these coupled with the multimorbidity's causes increases the risk of developing these side effects. Side effects can also mimic the symptoms of dementia causing either misdiagnosis or diagnosis to be missed.

When the anticholinergic burden reaches 3 and above there is a higher risk of developing the side effects. When treating a number of different conditions the cumulative effect can occur, and the ACB score can rise quickly.

Aims and Objectives

- To identify the average culmative ACB score for patients over 70yrs with the Practice
- To educate all clinicans about the medications that cause an increase in the ACB score, and the understanding before this.
- To try and reduce the cumulative ACB score, and reduce the medications initiated with any ACB score.

Why is it important to service users and carers?

Education of prescribing clinicans about the ACB score and reduction in the prescribing in over 70's helps to reduce adverse effects and thus reduces hospital admissions.

Adverse effects from anticholinergic effect, can cause patients to fall and cause drowsiness therefore this may effect their daily activities.

Other medications without the ACB burden can be used as replacements, without reduced risk to patients in the 70+ age group.

Ideas and Reference to Baseline Audit

Following the baseline audit, it was identified that the cumulative ACB score was seldom considered prior to starting the therapy, and usually during a pharmacist review after treatment had commenced.

The audit highlighted a knowledge gap about the lesser known medication causing a high ACB, leading to them being prescribed, and cumulative ACB scores increasing.

Tools Utilised

The data was found via EMIS searches within the Practice. The baseline audits were run initially in July 2023, these included -

- the number of patients over 70yrs who are prescribed medication with an ACB score;
- the number of patients who are over 70yrs and started a medication with an ACB score in the last 6 months;
- the average ACB score in those over 70yrs;
- the number of patients who are over 70yrs, and taking a medication with an ACB score of 3.

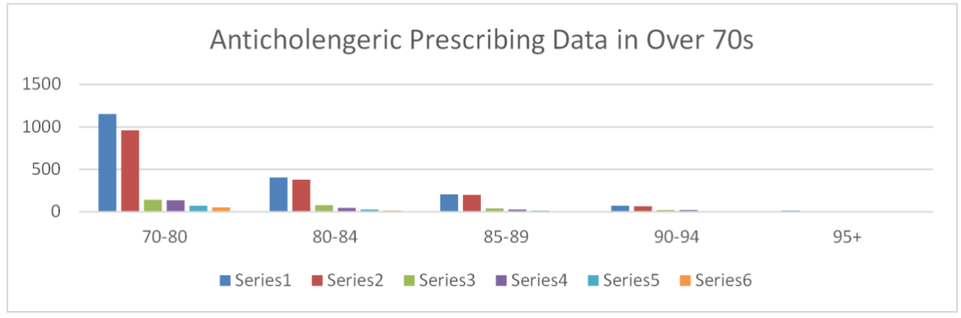
Education then took place to all prescribing clinicans within the Practice. This took the form of a education session and a powerpoint presentation, to inform them about the prescribing considerations, risks to patients, and identifying medication that have an ACB score.

Focus was put on trainee GP's, who were involved in carrying out their prescribing audits, discussing when they had prescribed a medication with an ACB score in those patients over 70yrs, discussing the reason behind their prescribing decision, and discussing alternatives that may have been prescribed instead.

At the end of September the reports were run again, to see if the education to the clinicans had a impact on the ACB score.

Results and Discussion

Results



Series 1 and 2 indicates the number of patients prescribed an medication with an ACB score (1 = July; 2 = Sept).

Series 3 and 4 indicates the number of a number of new medication with an ACB score (3 =July; 4 = Sept) .

Series 5 and 6 indicates the number of patients with an ACB score over 3 (5 = July; 6 = Sept).

Average ACB has reduced from 5 to 4.

Discussion

The overall prescrbing habits have improved over the 3 month period. Although there are still a number of patients prescribed medication with an ACB score, it will take a period of time for therapies to be reviewed, and reduced where appropriate.

The limitations with the data is that it was only taken over a period of 3 months, during the summer, where prescribing of said medicines is usually less frequent. There needs to be ongoing data collection and quarterly reviews to determine whether progress has been made in reducing the prescribing of medicines with an ACB score.

Outcomes and Future Implementation

Outcomes

Over the 3-month period, the Practice has demonstrated a reduction in prescribing of ACB medication in the over 70yrs. There has been a 20% reduction in the average cumulative ACB score. It is expected that with ongoing monitoring of ACB scores, prescribing habits, and medication reviews, further reduction in the average ABC score, and improved prescribing of these medication can be achieved. Discussing the risks of these medication with patients will also be a contributing factor.

Future Implementation

- To continue to educate clinicans about medications with an ACB score, and the alternative prescribing options.

- To produce a poster for displayed in clinicans consulting rooms as an quick reference guide when prescribing.

- Re-audit at 6 months and 12 months.

References:

National Institute for Health and Care Excellence (NICE). Drugs with anticholinergic effects and risk of cognitive impairment. Eyes on Evidence. October 2015.

PrescQIPP Bulletin 253: Anticholinergic Burden, Available at https://www.prescqipp.info/our-resources/bulletins/bulletin-253-anticholinergic-burden/