Centre of Excellence – Treatable Traits Impact Case Study:

Oral Corticosteroid Use in Asthma

This body of work comprises the following publications: Oral corticosteroid stewardship for asthma in adults and adolescents: A position paper from the Thoracic Society of Australia and New Zealand. Respirology. 2021; Mepolizumab and oral corticosteroid stewardship – data from Australian Mepolizumab Registry JACI: In Practice, 2021. The patients' experience of severe asthma add-on pharmacotherapies; a qualitative descriptive study. Journal of Asthma and Allergy, 2021. Cumulative dispensing of high oral corticosteroid doses for treating asthma in Australia. Med J Aust, 2020. What matters to people with severe asthma? Exploring add-on asthma medication and outcomes of importance. ERJ Open Research (2021).

1 Problem

- Oral corticosteroids (OCS) are associated with significant adverse effects and increased morbidity
- They are a cornerstone for the management of acute asthma attacks and some people require regular maintenance OCS
- An increased understanding of the heterogeneity of asthma, and improved access to monoclonal antibody therapy presents an opportunity to minimise OCS use in people with asthma

2 Key Findings

- 51% of people prescribed medication for asthma were prescribed OCS, and of those 27.9% reached the cumulative toxic dose of at least 1000mgs over a five year period.
- OCS adversely impacts the lives of people with asthma and reducing OCS is a top priority for people with severe asthma.
- It is possible to reduce OCS doses in people with severe eosinophilic asthma using monoclonal antibody therapy

3 How was the research used

- These studies were used to develop a position paper through the Thoracic Society of Australia and New Zealand. The paper provides a review of current knowledge of OCS use in asthma and proposes principles for OCS stewardship to guide asthma management and reduce harm
- The knowledge gained from the studies was used to develop infographics that can be used at the point of care for education purposes
- The research has raised awareness of the problems of OCS through various news media including written articles, radio interviews and social media platforms

4 What was the change

- This research has led to the development of a stewardship program for OCS.
- Key recommendations from the stewardship program include- improving inhaler technique, improving adherence, optimising treatment, multidimensional assessment to manage comorbidities, using monoclonal antibody therapies for people with uncontrolled asthma and placing restrictions on the way OCS are prescribed

5 What was the impact

- This body of research demonstrated methods for reducing OCS use without compromising asthma control via the use of monoclonal antibody therapies
- This research has established the groundwork to change policy and implement a stewardship program for OCS use in people with asthma
- A stewardship program will lead to practice change for the prescription of OCS, with follow on economic benefits and reduced morbidity from OCS related side effects

Who are the collaborators:

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