

Minutes – Adherence working group

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| Meeting location | Park Plaza Hotel, Amsterdam Airport |
| Meeting date | 22nd March 2018 |
| Meeting time | 15:30 to 16:30 |
| Chair | Alexandra Dima |
| Objective | <ul style="list-style-type: none"> • Provide an update on current projects- Phase 2 'Improve understanding of the bi-directional causality relationship between asthma outcomes and adherence'. • Decide on the next project/s for the adherence working group |

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| 1 | <p>Update on current projects</p> <ul style="list-style-type: none"> • Improve understanding of the bi-directional causality relationship between asthma outcomes and adherence. (Lead investigator: Alex Dima) <ul style="list-style-type: none"> ○ Study was conducted to assess the relationship between asthma outcomes and adherence to ICS. ○ A simple cross-sectional study was not sufficient as this relationship is bi-directional and longitudinal; adherence to treatment affects asthma outcomes, but asthma outcomes also affect adherence. Therefore, a cohort study was performed using existing databases, where time intervals between asthma primary care visits and drug prescription were assessed. Patients were followed for 3 years; 1 baseline year, 2 follow up years. Patients of all ages were included. ○ Phase 1 of the study is now published on how ICS adherence can best be measured in medical databases. This was to address the challenges of non-standardization among previous studies on ICS adherence and the variation in adherence over small periods of time, which is usually not captured. This study split the data by implementation/initiation and persistence of treatment, which combined define adherence. The analysis excluded people with 0% adherence and 100% adherence, because the characteristics of these groups of people were not normally distributed. Also, 0% adherence may indicate that ICS treatment was never initiated or ceased long-term, so measuring how this relates to health outcomes may not be useful. The results showed that adherence seems lower when other medicines are prescribed simultaneously, when patients also have COPD or other co-morbidities, and among males and current smokers. <p><u>Challenge</u></p> <ul style="list-style-type: none"> - The moment when people come for their refill of medication to the GP (early/late) affects adherence measurements - While prescription and dispense of medicine is linked in the UK (because 1 prescription = 1 dispense), this is not the case in e.g. the US, so there we would not know if/when medicines are refilled - While collection of medicines is recorded in the UK, whether patients actually took their medicines cannot be assessed with database studies |
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- Only patients with 2 year follow up data were included, so these could be those who are already adherent in the first place and with severe asthma. There was no agreement of whether this period was appropriate or should be longer/shorter

Suggestions

- Asthma 'control' should be renamed asthma 'exacerbations'
- Seasonality was not included in analysis, because the data distribution did not indicate seasonality. However, this may be present in a subset of the sample, e.g. children, and could be measured in a separate analysis
- For future studies, think about how behavioural change after exacerbations can be studied as well as hospitalizations, and their effect on adherence
- In future studies, assess clinician's role in adherence, as this is agreed to be essential
- Assess the use of different types of devices and switching between them on adherence
- Assess characteristics of people who non-initiate ICS treatment