



Autumn 2021 WORKING GROUP MEETING MINUTES: Adherence

Meeting details	
Meeting location	Teleconference
Meeting date	Thurs 23 rd September
Meeting time	13:00-14:00 CET
Chair(s)	Sinthia Bosnic-Anticevich
Attendees	Job van Boven Walter Canonica Ioanna Tsiligianni Sarah Lucas
Objectives	
1	Update and next steps for scoping reviews

Items	
Update on scoping reviews	<p>Phase I: Evaluation of how adherence can be addressed with personalised medicine, including strategies for monitoring and encouraging adherence.</p> <ul style="list-style-type: none">• Methods for adherence monitoring• Determinants of adherence/non-adherence• Strategies for improving adherence• Threshold for non-adherence and percentage of patients considered non-adherent <p>Update on progress-</p> <p>Inclusion criteria: Studies considering medication adherence in those diagnosed with asthma or COPD. Focus on methods for monitoring adherence or determinants of adherence or strategies to improve adherence</p> <p>Exclusion criteria: Reviews articles are excluded, but their reference lists will be searched for additional relevant articles. Studies of adherence in chronic diseases where asthma and/or COPD were not analysed separately. Published study protocols that do not include any data. Studies conducting laboratory testing of sensors and monitoring systems without patient involvement.</p>



Pubmed, Web of Science and Scopus were searched using the term-
(adherence) AND (COPD OR Asthma) AND (precision OR personalised OR
personalized OR individualized OR individualised OR monitoring))

Initial search of gave: 770 original research articles
434 review articles

Of the 770 original research articles 314 were selected for inclusion (subject to 2nd
review)

330 additional articles included following review of their reference lists

Significant number of papers related to inhaler technique and adherence, and
others that use the terms *compliance* and *persistence* rather than adherence

644 potential articles for inclusion (subject to 2nd review) have been categorized:

- 196 Interventions to improve adherence (e.g. changes in number of doses and devices, counselling, education, monitoring with feedback and reminders)
- 112 Monitoring of adherence (e.g. questionnaires, digital inhalers, biomarker levels)
- 214 Determinants of adherence (e.g. age, costs, comorbidities, knowledge/beliefs, device type/number, drug type, psychological factors)
- 122 Adherence related to inhaler technique (e.g. factors influencing technique, monitoring of technique, interventions to improve technique, HCPs ability to monitor and correct patients technique)

Synthia is still reviewing the papers for inclusion. The review will need a focus.

Need to be clear if we are sticking to a scoping review and giving a broad overview to identify gaps in the research. Perhaps a focus on identifying where there is real-world evidence. Need to consider a framework such as the PRISMA for scoping review.

With digital inhalers there are many differences and biases between trials. Could highlight where there are gaps regarding digital inhalers and what have we learnt from non-digital adherence studies that is useful for digital devices. E.g. Device are often just sending reminders but that ignores many of the other factors that are influencing adherence.

Also noting who should be involved in adherence interventions, who need to do what, Robert Horne model to be included??

Consider the interaction between digital interventions and behavioural interventions. How can we add digital technologies for adherence in with other methods of addressing adherence and ensure the best use of digital technologies?

Perhaps consider minimum criteria for this field in terms of what is needed to improve adherence. Or taking this further with digital inhalers i.e. what guidelines/



or perhaps research into digital inhaler should be included in light of everything we know about adherence.

Phase II: Assess adherence within the current guidelines

- How adherence is currently included
- What strategies/methods of adherence assessment/monitoring are recommended.
- The type of interventions that are recommended
- Identify gaps in addressing adherence and determine whether there is a need to further address adherence within guidelines

Job has contacts from his previous paper on COPD guidelines that we could send a questionnaire to, to get information on national COPD guidelines from a range of countries. Would be good to do this for asthma too. So, we could look at publishing the COPD and asthma results separately as twin papers, with potentially an overarching editorial.

We should use the first scoping review to inform this second phase, to see where there are gaps and make recommendations on what should be included in guidelines as guidance to improve adherence. There may be some guidelines that could be used as examples of best practice.

Use WG members connections with GINA and GOLD to try to influence recommendations in terms of what monitoring tools should be used and interventions to try (and at which level- patients/HCPs/health system & government), with the aim that it would then filter down to national guidelines.