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## A systematic review and meta-analysis of the impact of collaborative practice between community pharmacist and general practitioner on asthma management (Review) [\(Open Access\)](#)

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### Abstract

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**Objective:** This systematic review aims to investigate the impact of collaborative practice between community pharmacist (CP) and general practitioner (GP) in asthma management. **Methods:** A systematic search was performed across 10 databases (PubMed, Medline/Ovid, CINAHL, Scopus, Web of Science, Cochrane central register of controlled trials, PsycARTICLES®, Science Direct, Education Resource Information Centre, PRO-Quest), and grey literature using selected MeSH and key words, such as “community pharmacist”, “general practitioner”, and “medicine use review”. The risk of bias of the included studies was assessed by Cochrane risk of bias tool. All studies reporting any of the clinical, humanistic, and economical outcomes using collaborative practice between CPs and GPs in management of asthma, such as CPs conducting medications reviews, patient referrals or providing education and counseling, were included. **Results:** A total of 23 studies (six RCTs, four C-RCT, three controlled interventions, seven prepost, and three case control) were included. In total, 11/14 outcomes were concluded in favor of CP-GP collaborative interventions with different magnitude of effect size. Outcomes, such as asthma severity, asthma control, asthma symptoms, PEFr, SABA usage, hospital visit, adherence, and quality of life (QoL) (Asthma Quality-of-Life Questionnaire [AQLQ]; Living with Asthma Questionnaire [LWAQ]) demonstrated a small effect size ( $d \geq 0.2$ ), while inhalation technique, ED visit, and asthma knowledge witnessed medium effect sizes (ES) ( $d \geq 0.5$ ). In addition to that, inhalation technique yielded large ES ( $d \geq 0.8$ ) in RCTs subgroup analysis. However, three outcomes, FEV<sub>1</sub>, corticosteroids usage, and preventer-to-reliever ratio, did not hold significant ES ( $d < 0.2$ ) and, thus, remain inconclusive. The collaboration was shown to be value for money in the economic studies in narrative synthesis, however, the limited number of studies hinder pooling of data in meta-analysis. **Conclusion:** The findings from this review established a comprehensive evidence base in support of the positive impact of collaborative practice between CP and GP in the management of asthma. © 2019, Dove Medical Press Ltd.. All rights reserved.

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[Asthma](#) [Clinical outcomes](#) [Collaborative care](#) [Community pharmacist](#) [General practitioner](#)  
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