Telehealth interventions for transition to self-management in adolescents with allergic conditions: a systematic review

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Abstract

Telehealth is an emerging approach that uses technology to provide healthcare remotely. Recent publications have outlined the importance of supporting the transition to self-management of adolescents with allergic conditions. However, no synthesis of the evidence base on the use and impact of telehealth interventions for this purpose has been conducted to date. This review achieves these aims, in addition to exploring the language use surrounding these interventions, and their implementation. Four databases were searched systematically. References were independently screened by two reviewers. Methodological quality was assessed using the Mixed Methods Appraisal Tool. A narrative synthesis was undertaken. Eighteen papers were included, reporting on fifteen telehealth interventions. 86% targeted adolescents with asthma. Mobile applications were the most common telehealth modality used, followed by video-conferencing, web-based, virtual reality and artificial intelligence Five intervention content categories were identified; educational, monitoring, behavioural, psychosocial and healthcare navigational. Peer and/or healthcare professional interaction, gamification and tailoring may increase engagement. The studies showed positive effects of the interventions or no difference from active controls, in self-management outcomes such as knowledge, health outcomes such as quality-of-life, and economic outcomes such as healthcare utilisation. The most common implementation outcomes reported were acceptability, appropriateness, feasibility and fidelity.

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Fig 1

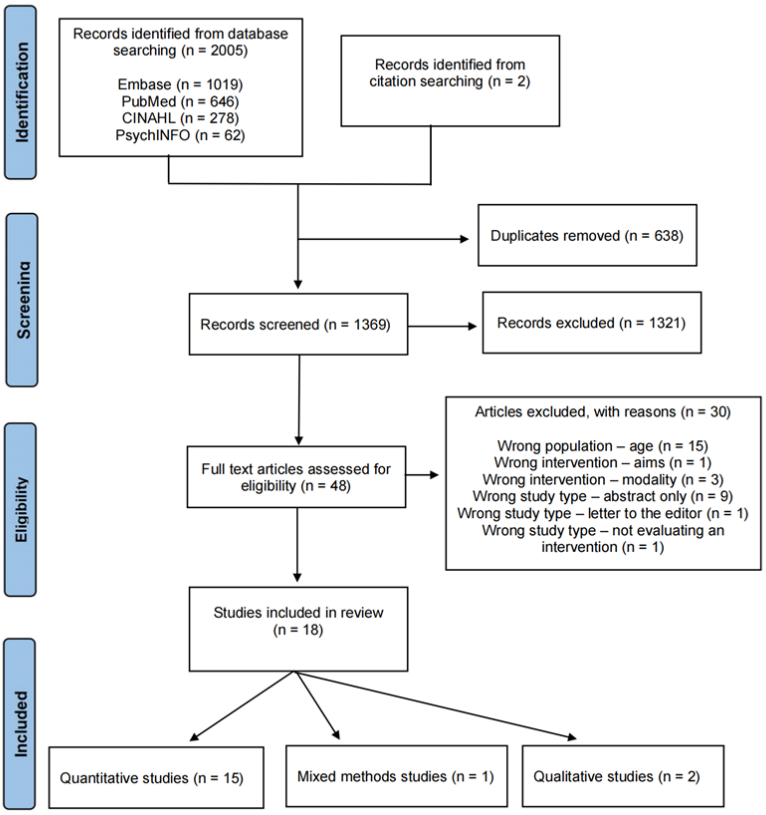

Fig 2

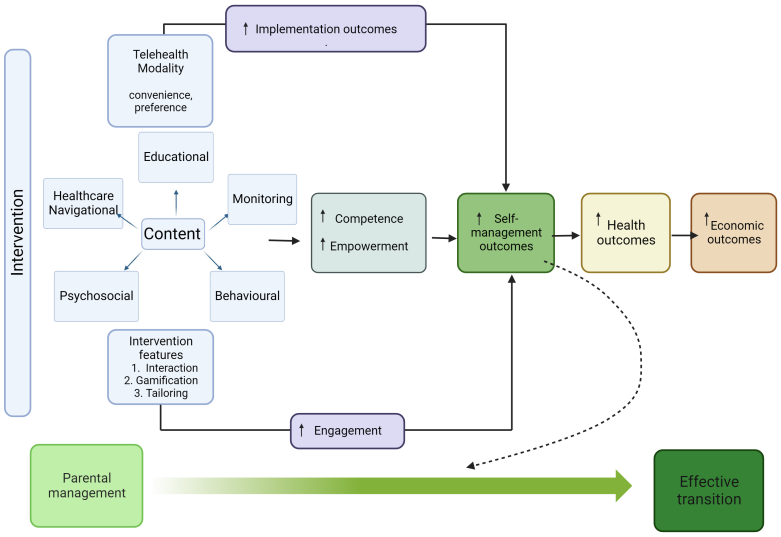

Fig 3