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# End-users' perspectives of an eHealth platform to promote physical activity in COPD: a qualitative study

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## Abstract

**Introduction:** eHealth platforms can be used as a tool to promote physical activity (PA) in patients with COPD. When developing such platforms, a bottom-up approach is needed to ensure that patients' and healthcare professionals' (HCP) needs and expectations are addressed.

**Aim:** To assess patients' and HCP' perspectives on the ideal eHealth platform (web application - app - for HCP + mobile app for patients) for PA promotion in patients with COPD.

**Methods:** One focus group with 5 patients (68±8 yrs, FEV1 44±21pp) and 6 individual interviews with HCP (physicians and physiotherapist, 39±10 yrs) were conducted using a semi-structured interview guide. Interviews were recorded and transcripts were analysed using the Grounded Theory approach.

**Results:** Participants considered an eHealth platform to promote patients' PA valuable. Both groups suggested that PA should be individualised according to patients' characteristics. The main features for a mobile app included: shared goal setting, PA progress graphs, motivational messages and goal badges, notifications, a bi-directional communication system to support patients and information on breathing exercises. Both groups highlighted the importance of measuring steps, PA duration, SpO<sub>2</sub>, and dyspnoea on exertion. For the web app, the HCP highlighted the importance of a notification system to signal PA changes or non-compliance (e.g., colour scheme),

as well as tabs for PA goal setting and monitoring. HCP recommended this platform for patients with stable or mild disease and/or those attending pulmonary rehabilitation.

**Conclusion:** Findings provide guidance to the design of future eHealth platforms for PA promotion in COPD.

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## Footnotes

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