

5.07 A mixed methodology study to determine indicative key performance indicators that will support, inform and harmonise appropriate use and development of digital health technologies for respiratory patient usage.

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Background: There has been a staggering interest amongst academics, healthcare professionals, technologists, and policy makers on the development of digital health technologies (DHT). However, there is a marked lack of research focusing on key performance indicators (KPIs) for DHT that will inform usage, regulation including AI trustworthiness. Thus, there is a need to elucidate appropriate KPIs so as to effectively develop e-technologies for serving remote respiratory patient-care.

Objective: To explore perceptions, beliefs, barriers, and cues-to-action that underpin decision making and inform future key performance indicators (KPIs) among a cohort of Irish respiratory patients prompting acceptability of DHT.

Methods: An exploratory sequential mixed-methods design was undertaken in Ireland.

Results: 58 individuals participated in this study. 45% (n=26) male and 55% female (n=32). The mean age was 65.9, 29% reporting from an urban background, 60% from a rural. 52% (n=30) believed DHT would reduce hospital admission. 36% (n= 21) indicated preference for a reduction in clinic appointments. 41% (n=17) had no concerns regarding the sharing of health data, 40% (n=19) were not concerned about the security of the technology.

Conclusion: It is important to share information from bottom up-user perspective to inform top-down strategic government policies such as for DHT– particularly at interface where decisions are made. Indicative KPIs emerged during this study; however, there is a need to reach broad stakeholder consensus for future use of DHT in Respiratory care.

Keywords: digital health technologies; respiratory care; harmonization; KPIs; sustainability

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References

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