

An evaluation of the uses, benefits and problems of m-health in the pre-operative process for elective orthopaedic surgery

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Abstract:

Problem: As outlined by the NHS Five Year Forward View, rapid advancements in technology mean it is becoming a prodigious tool in healthcare management. It endeavors to support efforts for more effective demand and more personalized, user-centred care. One such example is m-health, digital health in the form of mobile phone apps, as part of wider telemedicine; studies have shown that use of such technology can increase patient satisfaction, reduce costs and improve treatment adherence. However, the slow uptake of this technology in the NHS and lack of literature surrounding its use, particularly in pre-operative surgical care made exploring the views of major stakeholders in adoption vital.

Methodology: 16 semi-structured interviews (SSI) were used to interview healthcare professionals (HCPs) identified as key stakeholders in the pre-operative pathway for elective hip and knee surgery at ICHT. Key stakeholders were chosen based on a process map, created with the help of HCPs. These included General Practitioners, Orthopaedic Surgeons, Anaesthetists, Orthogeriatricians, Nurses, Occupational Therapists and Physiotherapists. Interviews were stopped once data saturation had been achieved. Once interviews were concluded, a thematic analysis was conducted to identify themes in the data. Findings and recommendations were then member-checked with the interviewees. Ethical approval was received from Imperial College Research Ethics Committee on 05/02/2019.

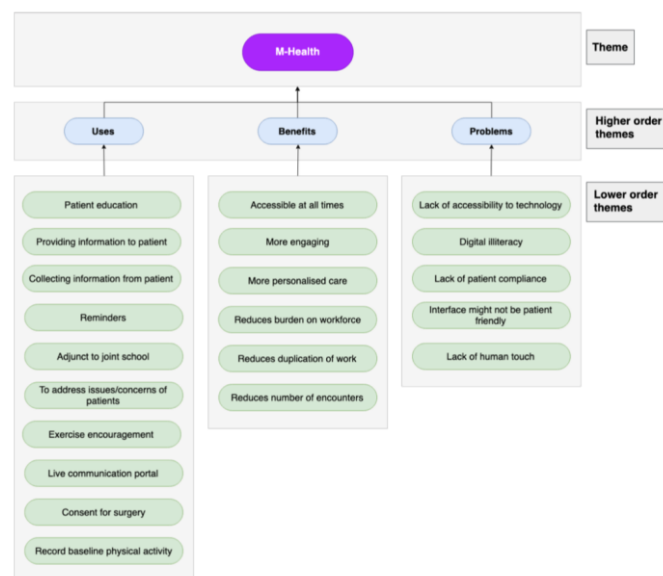


Figure 12 Chart displaying the use-cases, benefit and problems of M-Health

Conclusion & Significance: The literature and SSIs showed that m-health within the pre-operative process for elective orthopaedic surgery was promising in being used for patient education, providing a communication portal with the patient to address concerns and issues as well as monitoring patient progress via records of physical activity to improve accessibility, personalization and reduction in burden and overall costs to HCPs. However, the lack of access to mobile phones and the lack of digital literacy in the elderly and patient compliance did pose as some challenges in its widespread adoption.