

Guest Editorial

Title:

Patient involvement to maximise patient-centred benefit of medical technology for people living with kidney disease

Authors and affiliations:

E M. Castle^{1,2,3}, K.Frearson⁴, J. Ferguson⁴, A. El Gabry⁴, D. Coyle⁵, J.S.Murray⁶, D.F.Keane⁷

¹ Kidney Care Team at King's College Hospital NHS Foundation Trust, London, UK

² Therapies team at King's College Hospital NHS Foundation Trust, London, UK

³ Physiotherapy Department, School of Health Sciences, Brunel University, London, UK

⁴ Kidney Research UK, Peterborough, UK

⁵ NIHR Devices for Dignity, Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, UK

⁶ Renal Unit, South Tees Hospitals NHS Foundation Trust, Middlesbrough, UK

⁷ CURAM SFI Research Centre for Medical Devices, HRB-Clinical Research Facility Galway, National University of Ireland Galway, Ireland

The COVID-19 pandemic has accelerated the delivery of digital healthcare services (1). This includes innovative healthcare service developments for people living with kidney disease (2). The UK Kidney Medical Technology Research network (UKKMTN) (3) was created in 2021 to optimise access to medical technologies and patient-centred benefits for people living with kidney disease. The UKKMTN will promote collaboration and sharing of innovation and best-practice, between clinicians, researchers, academics, and, most importantly, patients to ensure people living with kidney disease benefit from Medical Technologies (MedTech).

People living with kidney disease are at the core of this network, contributing two members of the leadership team and a diverse, nine-member strong patient advisory group (PAG). A virtual PAG meeting was held with patient advisors (n=6), researchers and clinicians (n=3), and members of a kidney charity (Kidney Research UK) (n=2) to inform the networks key priorities. The aims of this meeting were to understand kidney patients' perspectives, understanding, and the application of MedTech to healthcare services for people living with kidney disease.

All attending patients felt true patient-centred care and network patient involvement were essential to the development of effective renal MedTech products and devices. The term 'MedTech' was considered appropriate to encompass the broad use of technology to assist in kidney patient care from diagnosis to assessment and interventions. Patients stated technology should be cost effective, directly benefiting patients and their care. Several patient advisors had technological experiences and felt development and delivery of digital kidney care was delayed compared to other long-term conditions such as diabetes mellitus. MedTech was perceived to have the potential to empower people living with kidney disease and to facilitate opportunities for self-management where appropriate. MedTech was seen as an opportunity for patients to place their healthcare monitoring and treatment around their lives, rather than vice versa. This could include early detection of kidney disease, monitoring of bloods and symptoms, or lifestyle interventions.

The PAG identified the prevention and progression of kidney disease, the facilitation of prehabilitation and the optimisation of health outcomes should be short-term MedTech priorities. Potential strategies identified included meaningful patient input into ongoing MedTech research, and scoping MedTech progress in other research networks, patient populations, and disciplines.

The PAG reported it was imperative that MedTech is integrated and personalised to maximise benefit and avoid adverse outcomes, including health anxiety or additional tests and treatment burden. The group explored MedTech complexities, and the potential for inadvertently widening health inequalities associated with digital literacy, technical capability and confidence. To mitigate this, patient advisors recommended the network focus on patient engagement and promote MedTech that is user-friendly, considers digital inclusion and literacy and patient choice. MedTech should facilitate equitable access, for example in self-management support systems. Ultimately, the choice to engage or not with MedTech is a patient-led decision. To contribute to success, patients recommended Renal MedTech research focuses on patient-engagement, usability, inclusivity, and appropriateness for people living with kidney disease. The group unanimously agreed patient representation was integral to the MedTech network, and the network structure and leadership would reflect this.

This editorial highlights the need for robust and sustained patient involvement throughout the design, development and delivery of MedTech interventions for people living with kidney disease. There has been a huge growth of patient involvement on the teams of individual research projects. This growth should be mirrored by patient involvement in defining the research agenda, prioritisation and planning programmes of research.

References:

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