

HARMONY

Data Enabled, Shared Fluid Management Platform In Haemodialysis

ABSTRACT

Fluid status in haemodialysis (HD) is associated with acute symptomatic events, hospitalisation and cardiovascular mortality. Improving how decisions are made around managing fluid status is highly prioritised by clinical staff and patients to address workforce burden, patient wellbeing and patient outcomes. Previous attempts to improve outcomes have been frustrating and practice remains unchanged over many decades. The lack of proven interventions has been linked to a failure to acknowledge fluid management as a complex intervention.

Our collaboration has worked independently in this area over many years and plans to come together to address this challenge. This is based on the following principles:

- Fluid management is a complex intervention with multiple components and interventions should be developed and tested accordingly.
- Current management of fluid status does not make full use of the large amount of routinely collected data linked to volume status and lacks formal acknowledgement of patient preferences. Our digital solution is based on improving the accessibility of routinely collected data to patients and the multidisciplinary clinical team and on enabling routine, simple patient reported outcome collection via mobile applications.
- Patient preference has never been formally incorporated into interventions around fluid management. We plan to develop a truly patient-centred solution.

We will develop and feasibility test a fluid management platform, assess health economics, impact on workforce and other barriers and enablers of implementation. Working across national jurisdictions, with different digital platforms and supported by broad expertise and stakeholders, we will provide justification for subsequent widespread deployment of data enabled, patient-centred, fluid management.

Our collaborative working, with a broad base of expertise from different countries can provide shared learning and ensure our solution does not become dependent on specific infrastructure, enhancing potential for implementability. We will include patients, industry and clinicians at the heart of this project and will ensure our early career researchers benefit from working in a multi-institutional collaborative environment.

KEYWORDS

- Hemodialysis
- Complex intervention
- Fluid management
- Digital healthcare
- Shared care

DURATION

36 months

PARTNERS

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Coordinator (= Partner 1)	David Keane	University of Galway	Galway, Ireland.
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