

Public involvement in a NIHR CLAHRC West research project

Project title: Preventing post-operative urinary retention: an example of researcher-patient co-production

This project aims to develop a protocol to reduce the incidence of post-operative urinary retention (PO-UR) in routine non-urgent surgery.

PO-UR (not being able to pass urine) is common after surgery, affecting between 5% and 70% of patients, depending on the kind of surgery and their personal risk profile. Catheterisation (inserting a tube to drain the bladder) lengthens inpatient stay and poses significant added risks, such as urinary infection and damage to the bladder neck. Patients can find catheterisation invasive, undignified, distressing and uncomfortable. PO-UR creates substantial financial burdens for the NHS, by slowing patient flow and creating additional treatment needs.

The project was initiated by Nick Leggett, who submitted a proposal as a “research idea” through the NIHR CLAHRC West Open Call.

As a patient, Nick experienced PO-UR, requiring catheterisation, after three different common non-urgent surgical procedures. Before three subsequent and comparable conditions requiring surgery, Nick investigated clinical research literature on PO-UR. Through negotiation with clinicians treating him, based on this investigation, he avoided PO-UR following these procedures. This led him to hypothesise that it should be possible to specify criteria to identify those at risk of PO-UR, and to develop methods to reduce its likelihood, following certain common non-urgent surgical procedures.

The project was taken on by NIHR CLAHRC West. Nick proposed, and NIHR CLAHRC West agreed, that it should be developed, at every stage, as a pioneering form of unusually innovative co-production. So, at the same time as seeking to benefit patients and the wider NHS, by reducing a common, expensive and unpleasant adverse effect of surgery, the project aims to identify radically new ways in which patients and the public can collaborate in clinical research.

The research team structure models co-production. The joint principal investigators are: Dr Penny Whiting, Epidemiology Team Lead at NIHR CLAHRC West, and Nick Leggett. We have set up an honorary research associate contract at the University of Bristol to enable Nick to perform this role. Other members of the core NIHR CLAHRC West team are: Philippa Davies, Joni Jackson, Manjula Nugawela and Lauren Scott.

There was initial difficulty in identifying clinicians eager to join the project. PO-UR is quite often not seen as a major problem by the medical community, but more as a common side effect of surgery that can be ‘solved’ by catheterisation. This led us to contact Tony Blacker, the consultant endourologist from University Hospital Coventry and Warwick (UHCW) who was the lead clinician co-producing, with Nick, a successful set of methods to avoid his PO-UR. Tony was keen to join the project team. We were also very happy to be joined at the outset by Professor Paul Abrams of the Bristol Urological Institute, who is a world authority on functional urology. More recently, we have been joined by three more colleagues from UHCW: Dr Jitin Sharma (Consultant anaesthetist), Andy Metcalf (Associate Professor in Trauma and Orthopaedics/ Consultant Orthopaedic Surgeon) and Richard King (Orthopaedic Surgeon).

The first stage of the project has been two systematic literature reviews, to identify risk factors and treatments for PO-UR. Nick has contributed to all stages of the review: he has screened titles and abstracts; and he has assessed full text papers for inclusion. NIHR CLAHRC West has supported Nick by specific training for each task that he has taken on. Nick’s inputs from personal experience have assisted the team in several key inclusion decisions, as the review proceeded. Particularly, we decided to focus the review on three common procedures, with high PO-UR incidence: hysterectomy, hernia surgery, and hip and knee replacement.

Nick has added value to the project, not just from patient experience, but also from his understanding of research and practice in public involvement, which he had previously developed when he was a member of the Strategy Group of People and Health West of England, and which he continues to develop, in other research organisations/projects, and as a regular member of the University of the West of England PPI Journal Club.

The literature reviews are now close to completion. In the next year we aim to publish these reviews, and also to disseminate our findings on PO-UR and on co-production at meetings and conferences, locally and nationally. We have already co-presented to the NIHR CLAHRC West External Advisory Panel.

We are now beginning discussions about the next stage: seeking funds to trial what we have learnt. Our research model will be co-produced, will incorporate proposals for co-production during the research process, and will additionally aim to study patient experience of PO-UR and catheterisation.

For more information about this project contact: Penny Whiting email Penny.Whiting@bristol.ac.uk; or Nick Leggett email nl15041@bristol.ac.uk