

PCL/24/04 - Characterising postoperative trajectory following renal transplantation using nationally linked healthcare data

Survival following kidney transplantation is now very good, however the impact of complications on patients within the first year following transplantation is poorly understood. We know the first year after receiving a kidney transplant is critical in determining the long-term survival of the kidney organ. Yet little is known about the frequency of medical problems, hospital readmissions, and additional hospital investigations that occur within this first year (termed “trajectory”). Previous research has only focused on reporting overall survival or a single outcome measure, such as heart disease or specific infections.

As a result, clinical teams are unable to provide accurate information to patients on their likely trajectory over the first year following transplantation, and how this would compare to continuing their current treatment, to support their adjustment post-transplantation. This is because of the medical complexity of patients undergoing transplantation, variation in donor characteristics and the current lack of high-quality data to support additional discussion around how well a patient recovers following a kidney transplant in the first year after their operation.

I aim to use routinely collected data to determine whether we can describe, and then subsequently predict, particular patient groups who may have different or difficult trajectories over the first year of their transplant. This will help to better inform clinicians and patients during discussions about what outcomes may be expected following transplantation beyond organ and patient survival, together with determining how we could improve postoperative care for certain patient groups in future.