

R046: Understanding real world healthcare costs for living donor kidney transplantation – QUB

Living Donor Kidney transplantation has become a relatively normal procedure in Northern Ireland. This small part of the UK now leads the world in the number of living kidney transplants carried out as a proportion of population.

This is a life changing procedure, freeing people from the symptoms of chronic kidney disease or from the burden of chronic dialysis therapy.

Despite there being clear medical benefits, there is less information known regarding the financial benefits to both individuals and society in general. Northern Ireland has a relatively stable population with limited immigration or migration from or to other countries, therefore; we have a stable population in which to investigate the individual and societal benefits of related transplantation.

Many of the costs associated with renal failure are related to an individual's ability to work or act as carers. A significant burden is also related to healthcare and premature mortality. To get an understanding of this we need to have a detailed dataset which follows patients through their journey from presenting with renal failure to starting dialysis or not and to eventually receiving a kidney transplant.

The study will estimate the overall cost benefit of living kidney transplantation from the perspective of the donor and the recipient and compare and contrast that to the costs of providing dialysis therapy. The overall aim is to clearly demonstrate the financial benefits of living transplantation in a generalizable manner for populations in the UK.

This research is designed to use the experience from Northern Ireland in delivering living related kidney donation to quantify in broad financial terms the benefits of living transplantation. This is incredibly important as little information exists supporting the wider benefits of living transplantation compared to those of deceased donor transplantation or dialysis therapy.

We plan to estimate the cost and benefits of living transplantation over and above standard dialysis methods of managing renal failure. This will facilitate a better understanding of how commissioning of services can incentivize clinicians and patients to pick the right service for everyone involved.

Secondary research questions

There are number of questions related to living transplantation that are currently poorly understood.

1. Is there a difference in the referral rates of individuals for transplantation depending on who their primary clinical team are? Is there variation in individual clinician referral rates?
2. Is there a geographical effect in the referral rates for patients in receipt of living related transplantation? Is this also seen in prospective donors?
3. Are there distinct patterns in costs related to donor characteristics?
4. Has the pattern of cost changed over time?