Indigenous Australians make up approximately two per cent of the Australian population, however they constitute almost ten per cent of people commencing dialysis for end-stage kidney disease (ESKD). Indigenous Australians with ESKD are much less likely to receive a kidney transplant than non-Indigenous Australians, and experience longer delays between starting dialysis and receiving a transplant. Regional variations further exacerbate disparities in access to transplantation services, especially in rural and remote areas where there are a high concentration of Indigenous Australian patients.

**Making a Difference**

The IMPAKT study examines how health systems in different Australian states provide transplant services to kidney patients. It has a particular focus on the experiences of Aboriginal and Torres Strait Islanders who have ESKD, and their ability to access and use transplant services. Researchers at The George Institute have been working with and talking to health workers, medical staff and patients at many urban, rural and remote sites across Australia. The research program aims to work with service providers to improve access to transplantation for all suitable patients.

IMPAKT is made up of several discrete studies, including:

1. Surveying kidney specialists’ views and decision-making practices regarding what constitutes suitability for transplantation;
2. Interviews with nursing, allied health and specialist physicians to gain an understanding of where the health system operates efficiently and where there are barriers to offering suitable patients kidney transplants;
3. Tracking patient outcomes;
4. Reviewing clinical practice guidelines for patient suitability for transplant and transplant ‘work-up’ requirements; and
5. Modeling different kidney allocation algorithms (or ways of deciding who from a waiting list will receive a kidney).

**Current Status of the Project**

The metropolitan and regional hospitals that provide care for the vast majority of Aboriginal and Torres Strait Islander ESKD patients are now participating in the study. These include Royal Perth, WA; Queen Elizabeth, SA; Princess Alexandra, Cairns and Townsville, Qld; Royal Prince Alfred, NSW and Royal Darwin and Alice Springs Hospital, NT. The research is extended to other hospitals, renal satellite units and home/community based patients that are linked to those major hospitals. Researchers have been working directly with over 20 different sites located around the country and have established links to the relevant local Aboriginal Medical Services and communities.

The survey of nephrologists has been undertaken. Results have been presented at national and international meetings and papers accepted for publication. The interview study is scheduled for completion in early 2006. Data analysis will commence in March and the full study results will be available later in the year.

During the next phase of the project, significant amounts of data from interviews must be analysed and fed back to communities, renal units and government in effective and creative ways. The continued engagement of an Indigenous Research Officer and anthropologist will be crucial to facilitate this work.
THE BENEFITS OF IMPAKT
The ultimate goal of the project is to improve health service delivery and outcomes for indigenous people with kidney disease. This is a key objective of the George Institute Renal Program.

THE GEORGE INSTITUTE INVESTIGATORS
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COLLABORATORS
IMPAKT is undertaken in collaboration with the Menzies School of Health Research, Darwin; the Cooperative Research Centre for Aboriginal Health; renal units in Sydney, Dubbo, Brewarrina, Darwin, Alice Springs, Brisbane, Cairns, Townsville, Adelaide, Port Augusta, Perth, Kalgoorlie, Broome.

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THE GEORGE INSTITUTE’S RENAL DIVISION
In Australia, approximately one in seven adults have at least some indication of kidney damage, and kidney disease is listed as the cause of death for approximately one in ten Australians.

Population ageing and the global diabetes epidemic, along with high rates of hypertension, hypercholesterolemia, obesity, and smoking are leading to significant increases in the number of patients with chronic and end-stage kidney disease globally. The number of persons receiving renal replacement therapy - maintenance dialysis or a kidney transplant - around the world is projected to at least double in the next decade.

Even small reductions in the rate of progression of chronic kidney disease progression substantially reduce the probability of experiencing end-stage disease, cardiovascular morbidity, or premature death. Treatments of chronic kidney disease in its early stages, addressing cardiovascular risk, and risk factor reduction, have the potential to be highly cost-effective.

The Renal Division at The George Institute focuses on the development and implementation of treatment and prevention strategies for kidney disease. It also works to improve equity in health outcomes and equity in access to health care for patients with kidney disease. Aboriginal and Torres Strait Islander kidney health is an important focus of the Division’s work.

OTHER MAJOR RESEARCH PROJECTS WITHIN THE RENAL DIVISION INCLUDE:
- The SHARP study — a global clinical trial of lipid-lowering in chronic kidney disease. The GI Renal Division co-ordinates this study in the Australasian region.
- The RENAL study — a NHMRC-funded multi-centre clinical trial of intensive vs. normal continuous renal replacement therapy in acute renal failure in the ICU setting. This study is being undertaken in collaboration with the Australia and New Zealand Intensive Care Society Clinical Trial Group.
- The Burden of Kidney Disease study — a Kidney Health Australia funded study examining the economic burden of kidney disease in Australia and exploring the cost-effectiveness of strategies to improve the detection and management of kidney disease.