A / PROF GRAEME MAGUIRE

The vision of Baker IDI Central Australia and our Indigenous health program is to support health equity for Aboriginal and Torres Strait Islander people, particularly residents of Central Australia, by reducing the risk and impact of non-communicable and communicable diseases that contribute to the significant gap in life expectancy between Aboriginal and Torres Strait Islander people and other Australians.

Research Brief

A number of projects are being undertaken by the Central Australian team:

1. **Rheumatic Fever Follow Up Study (RhFFUS)**
   
   A collaboration between Baker IDI Central Australia and Menzies School of Health Research, James Cook University, and the University of Western Australia. Following on the earlier gECHO (getting Every Child's Heart Okay) study, RhFFUS seeks to determine if children identified with minor heart abnormalities are at greater risk of rheumatic heart disease (RHD) or contracting acute rheumatic fever (ARF). Understanding these changes is vital given that remote Aboriginal communities in these regions have among the highest rates of RHD and ARF in the world. The findings of RhFFUS will help inform the future response to RHD at the study sites and other settings. In particular, it will allow primary health care providers (nurses, health workers and GPs) and specialists to understand the significance of subtle changes on echocardiography and to determine whether these represent the earliest changes of RHD or simply variations of normal heart anatomy.

2. **Alice Springs Hospital Readmissions Prevention Project (ASH RAPP)**

   A collaborative project with clinical leaders at the Alice Springs Hospital in response to the issue of frequent readmissions to hospital among a segment of the population. Project is directed to adult Aboriginal Australian patients who have had five or more medical admissions over the previous 12 months. These subjects are being randomised to a control group (receiving usual care) and a study group (to receive the multi-dimensional intervention). The multi-dimensional intervention is composed of a needs based assessment, coordination with existing hospital based health care (including education, medication review, case conferencing and the development of an action plan), liaison with local primary health care providers and post-discharge follow up. The control group and study group are being compared with respect number of readmissions, total number of patient days and ER attendance. These outcomes will suggest whether the use of multi-dimensional interventions may be an effective approach to reducing hospital readmissions of Aboriginal people in Central Australia.

3. **Town Camp Chronic Disease Project**

   This project will examine the nature and extent of town camp residents' use of health care services for chronic disease screening, diagnosis and management, and offer on-site screening services to address potential service shortfalls. In close collaboration with the Tangentyere Council, through a household survey, the project is determining how residents of Town Camps access health care services with a particular focus on chronic disease screening, diagnosis and management. Town camp residents are being offered chronic disease screening in conjunction with the household survey. These screening services (and delivery of health promotion messages) are being delivered through involvement of local health service providers, which provides an opportunity for clinicians to gain a greater understanding of the social, environmental and economic context of town camps. As a tangible benefit, screening may provide participating town camps residents with an up-to-date appraisal of their own health and inform them about follow up services.
4. **Assessment of physical activity in Aboriginal and Torres Strait Islander people**

This project involves collaboration with the Physical Activity and Behavioural Epidemiology research group in Melbourne, the James Cook University and Apunipima Cape York Health Council, a three-staged program of study developed to improve knowledge in this area. The study includes validating methods for collecting physical activity data and pilot data collection in an Aboriginal and/or Torres Strait Islander population in a regional setting. The study describes the level of physical activity in a regional versus remote setting, and compares data for Aboriginal Australian, Torres Strait Islander and non-Indigenous Australians.

The final stage of the project involves developing and evaluating interventions at a community and individual level to enhance physical activity and reduce chronic disease risk factors as a mechanism of primary and secondary prevention for chronic disease in Aboriginal and Torres Strait Islander people living in urban, regional and remote settings.

5. **Supporting Better Diabetes Care in the Centre, Clinical Outreach Service**

Baker IDI Central Australia provides diabetes outreach services to 11 remote and very remote Central Australian communities. This service fills an unmet need for healthcare in Central Australian remote communities where the incidence and impacts of diabetes are severe. The project also aims to build local health services capacity to provide better practice diabetes care through in-service training and ongoing professional support.

The diabetes outreach services are based on a multidisciplinary model of care which pairs diabetes nurse educators with diabetes specialists, who work in concert with primary health care providers at remote health clinics. Baker IDI’s diabetes nurse educators (DNE) are critical in establishing continuity with community health clinics, staff and patients; these professional relationships are a foundation for ongoing success of the service. The DNEs provide patient consultation and staff education prior to their visit, support specialists during their visit, and monitor patient follow up (both in person and remotely) after the visit.

Our outreach specialists build trust in community relationships through repeat visits to communities. Specialists run diabetes clinics twice yearly in accordance with best practice diabetes care and also provide education to health clinic staff. In this way, remote communities benefit from the most advanced care in diabetes.

**Methodologies**

- Health services research
- Epidemiology
- Clinical trials

**Selected Publications**