

TRIDENT

A NATIONAL PRIMARY CARE TRIALS, DATA AND SURVEILLANCE NETWORK



Improving health outcomes for all Australians through easier access to clinical trials and health data via a national general practice research network

Our goal is to expand research capacity outside hospital walls and into the community. This will help us be better equipped to address the critical research and policy questions on Australian health outcomes. Connected data infrastructure in primary care will enable high-quality, largescale intervention trials and disease surveillance and vaccine effectiveness studies across diverse populations. We need to be better prepared for future pandemics and to meet the needs of the community in managing the burden of chronic disease.

The Australian Primary Care **TRI**als, **D**ata and Surv**E**illance **N**e**T**work (**TRIDENT**) is an Australian first. It brings together the major academic leaders in Australian primary care research, utilising their existing resources and networks while also creating strong partnerships with industry leaders.

The network already has a \$3.75 million investment from its first leading industry partner that was pledged in support of a current Medical Research Future Fund (MRFF) National Critical Research Infrastructure Initiative application.

Ongoing engagement with industry partners is vital to delivering a sustainable long-term model that provides continuity and security as well as improving the commercialisation of health research outcomes. Sponsors will have greater access to patients with a broad range of conditions through the efficient recruitment platforms delivered by TRIDENT. Increased collaboration between industry and academic researchers will create stronger partnerships and expand industry-sponsored research in primary care.

WHY TRIDENT IS ESSENTIAL

As a national primary care network, TRIDENT is the solution to the lack of a national approach to developing and coordinating practice-based research networks that currently undermines capacity to respond to emerging public health challenges. It establishes a means to undertake vital research in areas of unmet need.

TRIDENT studies enabled by this infrastructure will answer questions of national and international significance covering the breadth of prevention, diagnosis and treatment of conditions that are managed predominantly in primary care, that cannot be answered in tertiary settings. A key outcome is the direct contribution that TRIDENT will have in Australia's pandemic preparedness as trials, and ongoing surveillance, of vaccines and treatments are ideally suited to the primary care setting.

ELEMENTS FOR SUCCESS

Each state and territory site will have a local **Academic Lead** (respective CIs on the grant)

A funded Local Coordinator will support the maintenance of the local network, providing the critical link between general practices and researchers wishing to access the network. The State **Coordinator** will support local education and training of staff to create research-ready practices and build local primary care research capacity.

Up to 15 practices per local network that will include both rural (MMM 3-7) and metropolitan (MMM1-2) sites.

Innovative software for network members to improve data collection and participant identification:

Torch Recruit. R This software, integrated into the main GP medical record systems (Best Practice and Medical Director), lets researchers create trial-specific searches of the medical records to identify potentially eligible patients, and track them through to recruitment. Compared to current approaches to recruitment in primary care, which may takes weeks to months, this allows eligible patients to be identified and approached within days.

GRHANITE.TM This software extracts and de-identifies clinical data (e.g. diagnoses, prescriptions, test results) and allows storage in a secure centralised database called PATRON. PATRON data can be accessed for health services research, including assessment of trial feasibility, and can be used for the follow-up of trial participants to capture clinical outcomes. The data can also be linked to other healthcare datasets through linkage keys created by GRAHNITE TM.

WHAT TRIDENT DELIVERS



Access to general practice populations across Australia.



Access to linkable general practice data for epidemiology and disease surveillance, critical for pandemic preparedness.



Methodological and technological infrastructure to support primary care-based trials with efficient mechanisms for patient recruitment.



A framework for consumer and primary care end-user involvement in research led through TRIDENT



An attractive environment for industry-led surveillance and trials generating economic benefit and earlier access to new treatments and diagnostics



Upskill the primary care workforce to support the conduct of research and mechanisms to feedback results to increase uptake of new evidence in primary care.

NATIONAL PRIMARY CARE EXPERTS



Prof Lena Sanci



Prof Jan Radford University of Melbourne University of Tasmania



Prof Jon Emery University of Melbourne



Prof Nigel Stocks University of Adelaide



Dr Zoe Schofield Royal Flying Doctors

Service



Dr Lucy Gilkes University Notre Dame Australia



Prof Katharine Wallis University of Queensland



Dr David Gonzalez-Chica University of Adelaide



Prof Andrew Bonney University of Wollongong University of New South



A/Prof Joel Rhee Wales



Prof Grant Russell Monash University



A/Prof Jo-Anne Manski-Nankervis **University of Melbourne**



Prof Andrew Kirke University of Western Australia



Dr Phyllis Lau



Prof Kirsty Douglas Western Sydney University Australian National University University of Melbourne



Prof Dougie Boyle