Practice-based research networks (PBRNs) are collaborations between clinical practitioners and academics that undertake and participate in general practice research and work together to assist the translation of new knowledge into practice. PBRNs engage general practitioners as well as practice managers and nurses in the research process, increasing the relevance of the research questions, improving study design and maximising health outcomes for patients.

In 2021, there were 24 independent PBRNs operating across Australia, including the University of Melbourne managed **Victorian Research and Education Network (VicREN)**. Each PBRN varied considerably in its membership scope, level of research readiness, ability to provide training and achieve meaningful outputs.

To unite these networks, the Department of General Practice and Primary Care at the University of Melbourne is bringing together the major academic leaders in Australian primary care research and industry leaders in a national PBRN consortium called TRIDENT.

This portfolio includes a small sample of real-world health impacts that have been achieved with the University of Melbourne's general practice based research network in Victoria, VicREN. This model could be scaled nationally, through TRIDENT.

**FAST FACTS ABOUT VIC REN:**

- Approximately 600 practices in urban and rural Victoria partner with the University of Melbourne's Department of General Practice and Primary Care in research, evaluation, advocacy and teaching medical students.

- Every year, around 700 University of Melbourne medical students are placed in over 200 general practices for almost 9500 placement days for hands-on, experiential learning about being a general practitioner.

- Over 130 general practices partner with VicREN by sharing de-identified data from over two million electronic medical records for trials, decision support tool design, follow-up and linkage. Data is stored securely in the Patron data repository under the governance of an independent governance group.

- The Department of General Practice and Primary Care has conducted 22 randomised trials involving 450 practices and approximately 30,000 participants.

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DATA CONNECT
Linking hospital and general practice data sets to provide research opportunities and support

Department of General Practice and Primary Care  https://vcccalliance.org.au

SITUATION
Cancer and other healthcare services are delivered in a variety of locations and settings across Victoria. The related health data is normally collected in isolation, siloed in separate systems and bound by governance complexities that prevents its use for effective, scalable health services research.

By linking these data sources, researchers would be able to build a complete picture of how and where patients access care, how they’re being diagnosed and their quality of life after treatment. Data linkage would also provide greater opportunities for inspiration, innovation and integration.

SOLUTION
A collaboration between the VCCC Alliance, the University of Melbourne, hospitals and BioGrid Australia, Data Connect provides clinicians, researchers, scientists, academics and technical experts with secure access to large-scale, cost-effective and ethically-linked data.

The platform is housed in a secure research environment at the University of Melbourne and links de-identified data from six major Victorian health databases, primary care practices, and hospital, clinical and population registries. The Data Connect team also provides expertise and guidance to researchers to ensure the right data is available and any limitations on the datasets are understood prior to onset.

STRUCTURE

IMPACTS
End of Life Care
Establishing patterns of primary care usage in the last six months of care

Health Equity
Preliminary data analysis to inform equity work in vulnerable groups

Cancer Registry Pilot
Analysis of de-identified patients linked by sex, age, cancer type, encounters, imaging requests, results, conditions and admissions

Abnormal Blood Test Results
Estimating prevalence of abnormal results and rates of follow-up

BENEFITS
• Helps address the healthcare research gap in Victoria
• Completes the picture of how and where patients access care, how they’re being diagnosed and their quality of life after treatment
• Contributes to better understanding of how services can be integrated, where care delivery is most effective and how to achieve the best outcome
• Provides an ideal environment to enable access, linkage and analysis of health data from across Victoria for research purposes
• Facilitates faster translation of the latest advances in cancer research
SITUATION

Chronic disease is the leading cause of illness, disability and death in Australia with two million people visiting a general practice each week. This provides an ideal opportunity for prevention and early intervention across a range of patient presentations.

There is a need for quality improvement programs and clinical decision support tools that provide primary care practitioners with easy access to the latest recommendations to support their clinical decision making.

SOLUTION

General Practices were early adopters of electronic medical records (EMRs). These contain a wealth of data that can be used to identify people with, or at risk of, chronic disease.

The University of Melbourne, in collaboration with Western Health co-designed an innovative software platform called Future Health Today (FHT) that taps into the de-identified data stored in these EMRs. FHT utilises clinical decision support and patient information resources to optimise health management.

After an initial pilot with two Victorian general practices, the Victorian Research and Education Network (VicREN) was activated, successfully recruiting 40 general practices to take part in a 12 month randomised clinical trial.

IMPACTS

Early identification of at-risk patients

FHT automatically searches general practice EMR data to identify patients who are at risk of chronic disease, have undiagnosed chronic disease, or would benefit from change to their existing management plan. These patients can then be recalled for a review with their GP.

Diagnosis and management suggestions

FHT provides individualised clinical recommendations during patient consultations based on current evidence and clinical guidelines.

KEY FEATURES

- User friendly web-based dashboard and 'point-of-care' clinical prompt
- Provides individualised clinical decision support and recommendations during consultation
- All individual level patient data remains onsite in the practice
- Clinical decision support recommendations are updated nightly

BENEFITS

- Optimises community health outcomes
- Supports proactive general practice care
- Encourages whole-of-patient approach to consultations
- Bridges the gap between clinical guideline recommendations and translation in the general practice setting
- Increases practitioner confidence when faced with unfamiliar presentations
THE READINESS PROGRAM

A sustainable and capacity building program that addresses the health impacts of family, domestic and sexual violence in Australia

Department of General Practice and Primary Care  www.saferfamilies.org.au

SITUATION

Family, domestic and sexual violence is a major public health issue in Australia. Intimate partner violence against women is the most common form of abuse affecting one in four women. The health impacts of this violence are wide ranging and long lasting.

SOLUTION

A research team was formed to determine whether the safety, mental health and wellbeing of women could be improved if their general practitioner was supported to respond to intimate partner violence.

52 general practice clinics were recruited through the Victorian Research and Education Network to participate in a clinical trial where practitioners were trained to provide supportive counselling to women experiencing abuse and violence by a partner.

Trial results showed practitioners who had received training inquired more about safety issues, women felt supported by their GP and as a result experienced fewer depressive symptoms. These findings were published in The Lancet, receiving worldwide attention and critical acclaim.

Subsequent funding from the National Health and Medical Research Council saw the establishment of the Safer Families Centre for Research Excellence, which allowed the training program to be enhanced, expanded and adopted nationally.

IMPACTS

Primary Health Network Adoption
First trialled by the North Western Melbourne Primary Health Network, the program has been successfully adopted by additional PHNs.

The Readiness Program Development
This program is designed to improve the awareness, skills and confidence of general practice team members to identify and respond to domestic abuse and family violence. Training is interactive, practice-based and can be completed online with ongoing access to support and resources.

National Program Rollout
The Readiness Program has been funded by the Australian Government to roll out across Australia with many of the practitioners involved in the original study continuing to be engaged by training new practitioners.

KEY FEATURES

Online training workshops
Virtual practice-centred learning
Suite of e-learning modules
Webinar series
GP-led community of practice

BENEFITS

- Early identification and response with at-risk patients
- Confident practitioners feel empowered to provide relevant and timely information and support
- Evidence-based content promoting trauma and violence-informed care
- Whole of practice response to family, domestic and sexual violence
- Sustainable and capacity building model that addresses a chronic health issue in Australia