



THE UNIVERSITY OF
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Primary Care Trials Unit



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The University of Melbourne acknowledges the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woi-wurrung and Bunurong peoples (Burnley, Fishermans Bend, Parkville, Southbank and Werribee campuses), the Yorta Yorta Nation (Dookie and Shepparton campuses), and the Dja Dja Wurrung people (Creswick campus).

The University also acknowledges and is grateful to the Traditional Owners, Elders and Knowledge Holders of all Indigenous nations and clans who have been instrumental in our reconciliation journey.

We recognise the unique place held by Aboriginal and Torres Strait Islander peoples as the original owners and custodians of the lands and waterways across the Australian continent, with histories of continuous connection dating back more than 60,000 years. We also acknowledge their enduring cultural practices of caring for Country.

We pay respect to Elders past, present and future, and acknowledge the importance of Indigenous knowledge in the Academy. As a community of researchers, teachers, professional staff and students we are privileged to work and learn every day with Indigenous colleagues and partners.

In making this Acknowledgment of Country we commit to respectful and responsible conduct towards all others according to the Traditional lores of this land, particularly at times of formal ceremony.



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Primary Care Trials Unit (PCTU)



Research expertise in the complex, multidisciplinary primary care environment:

- Health services and implementation science
- Innovation – pharm, non-pharm and digital
- Trials and cohort studies
- Clinical data analytics and linkage
- Co-design with consumers and practitioners.

Since 2005, PCTU:

- Over 28 RCTs, over half of these in the last five years
- Over 370 general practices and more than 24,000 participants randomised across the 28 trials



Melbourne Centre for Clinical Trials (MCCT)



- PCTU is 1 of 15 partners of MCCT
- Consortium of clinical trial groups and units that deliver world class trials
- Provides a point of access to expertise and resources within The University of Melbourne and Melbourne Academic Centre of Health (MACH) clinical trials
- Leveraging collective knowledge and diverse skills

Partners:



Clinical Trials Unit



Centre for Eye Research
Australia Clinical Trials Unit



Clinical Trials Unit



Melbourne Clinical
Trials Unit



Methods and Implementation
Support for Clinical and
Health (MISCH) Research Hub



Clinical Trials Unit



Parkville Cancer
Clinical Trials Unit



Core PCTU functions



Practice recruitment and coordination

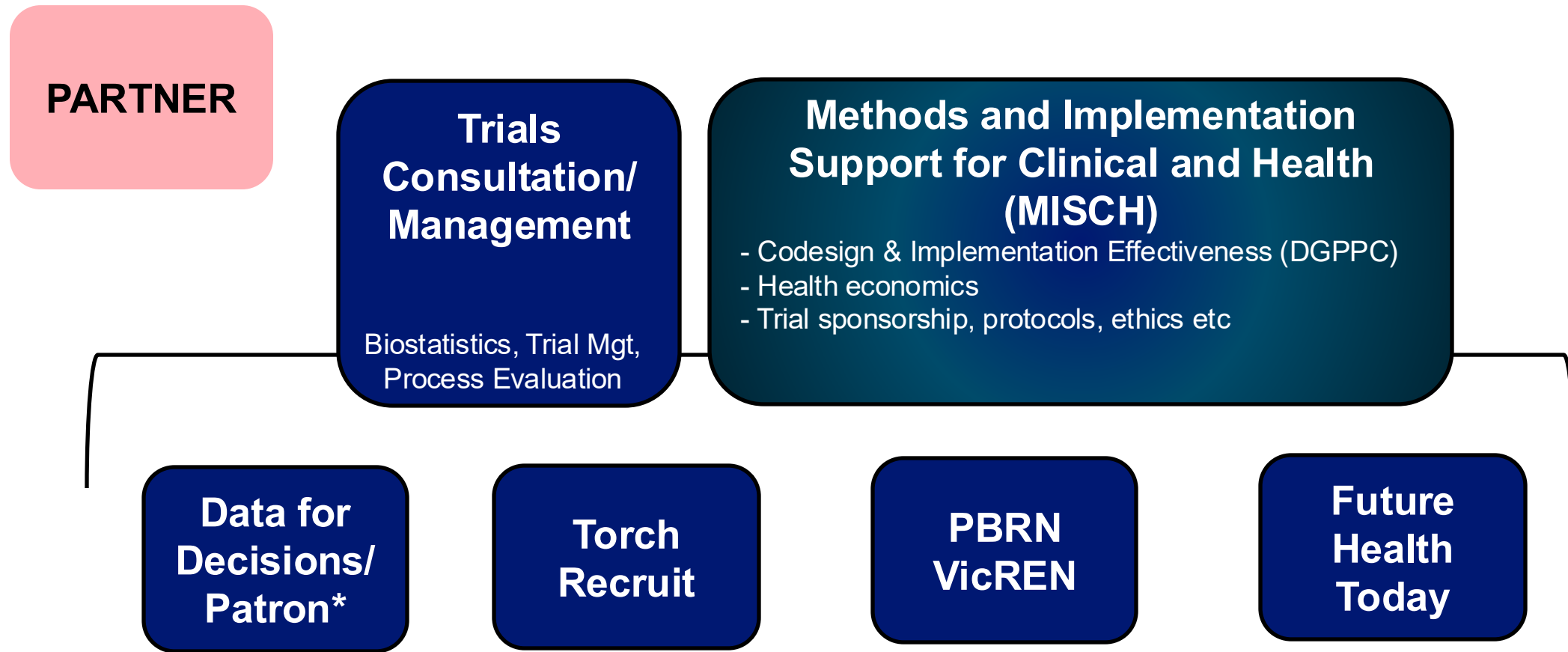
Biostatistics, trial design, data management and analysis

Primary care data (Patron)

Liaison with internal and external researchers

Trial budgeting

Primary Care Trials Unit - Components



PCTU operations



Fortnightly meetings to review all new requests from Internal and external collaborators. Meets with investigators to clarify needs. Monthly operations meeting for process improvements.

- PCTU manager- oversees all functions and coordinates budgets for quotes
- GP clinical academic lead/s
- Biostatistician
- Informatics – data analytics, Patron
- Non-clinical academic trialists
- FHT/Torch
- Partner national manager
- VicREN -GP academic & admin lead – advice on recruitment design



Victorian Research and Education Network (VicREN)



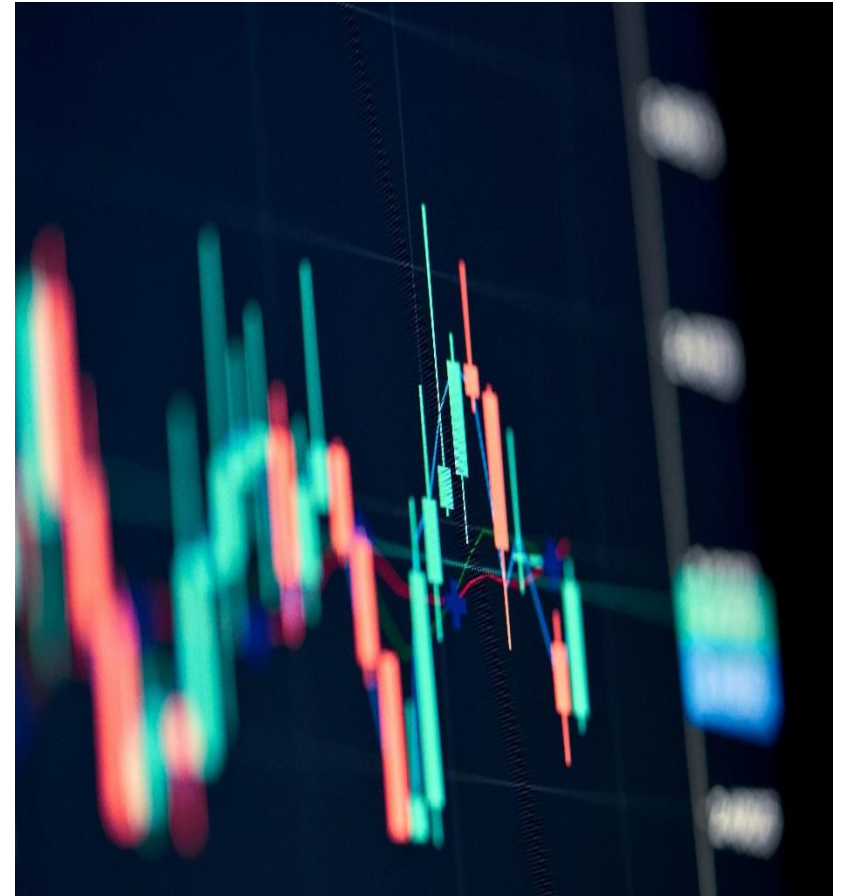
- Promotes research and education designed for the primary care environment, ensuring feasibility and appropriateness for primary care.
- 600+ Victorian practices, includes Vic Patron practices (e-PBRN)
- Two-way partnership with practices on teaching, research, and research capacity building.
- Connections with national PBRNs to enable larger and nationally inclusive collaborative trials e.g. PARTNER
- Connection to international PBRNs



Biostatistics



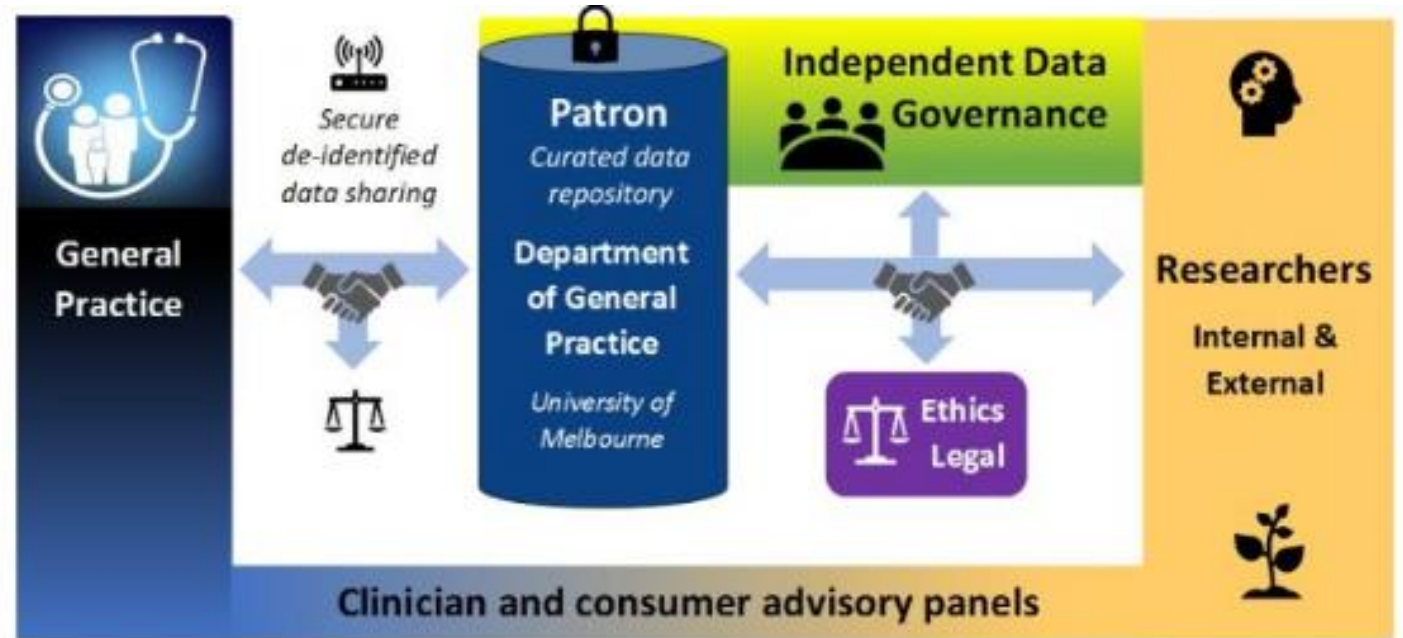
- Biostatistics team with 25+ years expertise in the design and analysis of primary care trials and complex research data sets
- Trial protocol development
- Sample size calculations
- Randomisation schedules
- Development of Statistical Analysis Plans (SAP)
- Data management and processing
- Processing and analysing large clinical datasets extracted from general practice records
- Novel trial designs – cluster and step-wedge; APT through MISCH



Data for Decisions



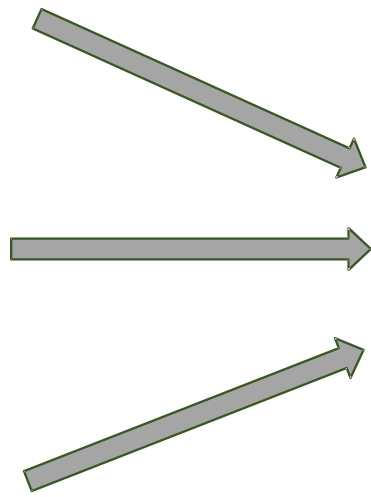
- In partnership with general practices, we collate data from de-identified medical records.
- The primary care data is stored in a Secure Research Environment at the University of Melbourne called **Patron**.
- Underpinned by a robust governance framework, researchers can apply to access this data for research.
- Also useful for feasibility enquiries.



Data for Decisions - Patron



GRHANITE Extraction:
Deidentified & encrypted data



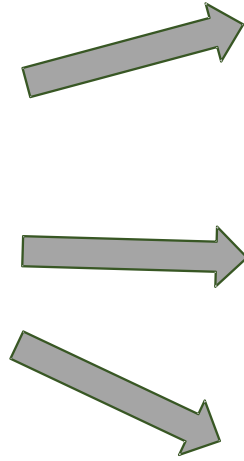
National rural
primary care
+ VicREN
practice
database

Data uses

Trial feasibility and
outcome data

Health services research

Epidemiology & Surveillance
(e.g. infectious diseases,
vaccine effectiveness)



What Else Can Be Done With Patron Data?



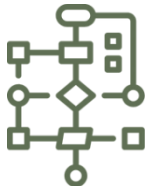
Clinical Decision Support

Data informs clinically accurate tools to support decision making, e.g. 'Future Health Today'



Clinical Trials

Direct research relationships with general practices facilitate participation in clinical trials, including new models of care



Patient risk stratification

Risk identification and reduction strategies and algorithms that can be translated nationally



Data standards quality assurance

Identified inaccuracy of coded GP data, working nationally to encode and validate the implementation of up-coming standards such as FHIR Sparked



Record linked research

Data linkage has been achieved within the AIHW Linkage Unit and the Centre for Victorian Data Linkage. E.g, VCCC Linked Data Project



Contribution to national data hubs

Work in conjunction with the AIHW National Health Data Hub and the ABS Person-Level Integrated Data Asset (PLIDA)

Data for Decisions



- **148** general practice clinics located in Victoria, and rural areas nationally, including via the PARTNER network
- **1,873,603** active patients
- **4,769,732** total patient records*
- DGPPC collects and collates de-identified data from these general practices
- Data stored in a central, secure server and used to further primary care research



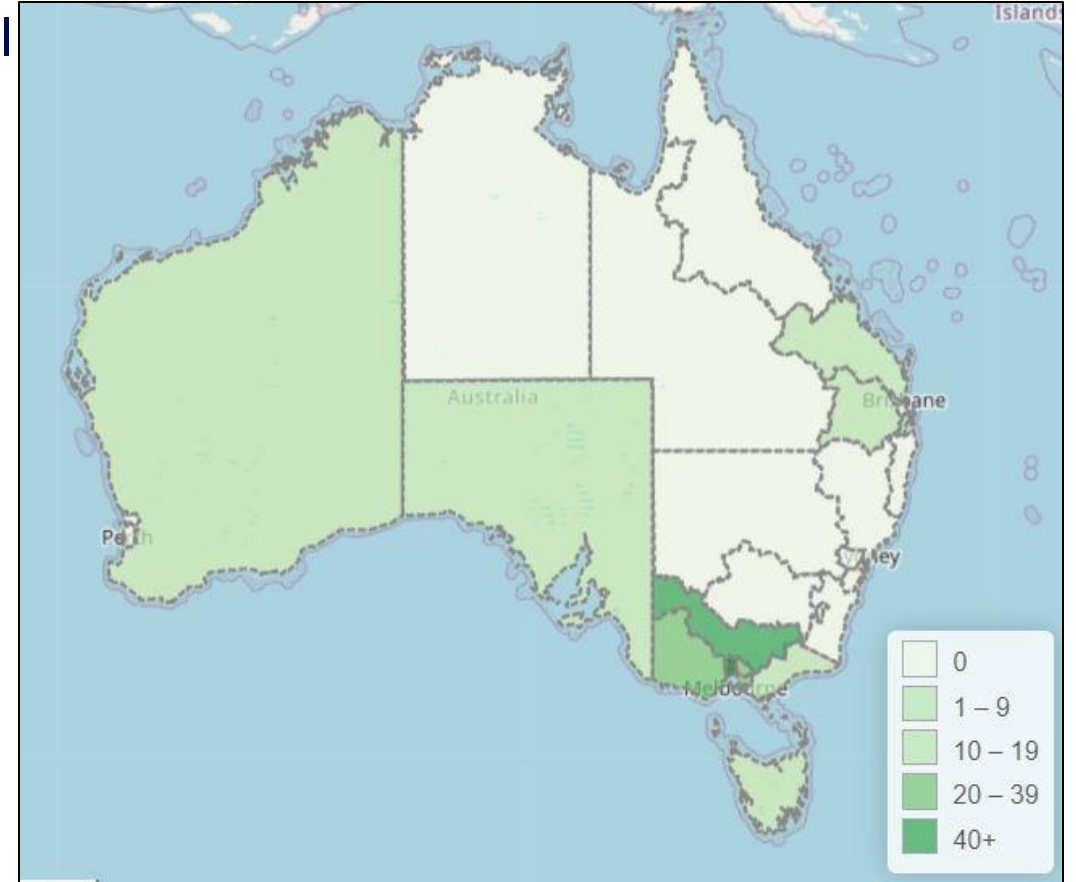
Increased knowledge



Quality improvement



Improved healthcare practices



Locations of participating general practices

**As of July 2025 includes active, inactive and deceased patients*



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Future Health Today (FHT)

Changing the course of chronic disease

**FUTURE
HEALTH
TODAY**



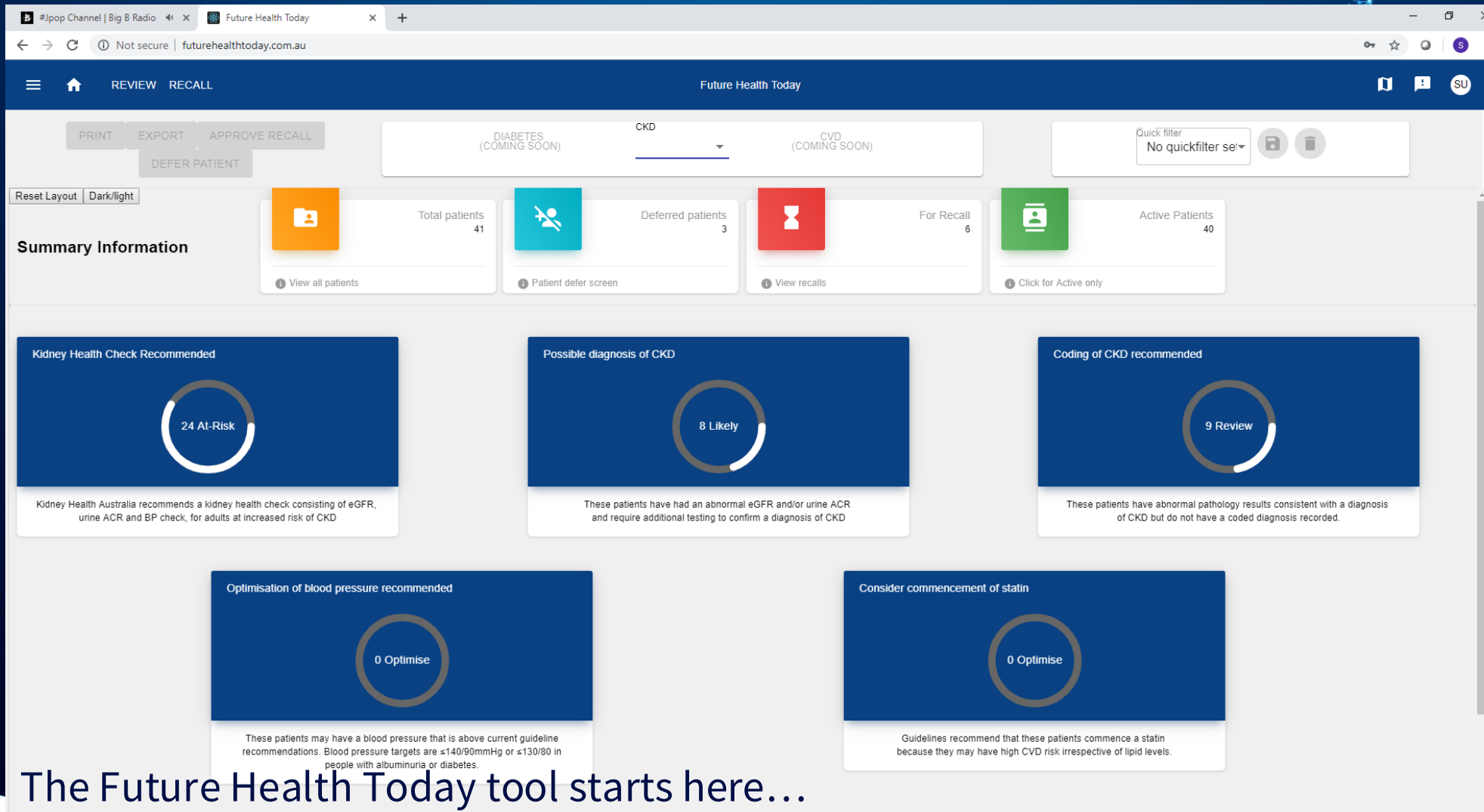
IMPACT – Future Health Today



Future Health Today (FHT) is a co-designed general practice software tool that aids early detection and management of health conditions.

- Sophisticated algorithms
- Works in the background to review patient records
- Automatically identifies patients requiring further testing, diagnosis or management.
- On screen recommendations displayed during patient consultations with suggestions for further testing, diagnosis and management.





Future Health Today

DIABETES (COMING SOON) CKD CVD (COMING SOON)

PRINT EXPORT APPROVE RECALL DEFER PATIENT

Quick filter: No quickfilter set

Reset Layout Dark/light

Summary Information

- Total patients: 41
- Deferred patients: 3
- For Recall: 6
- Active Patients: 40

Kidney Health Check Recommended
24 At-Risk
Kidney Health Australia recommends a kidney health check consisting of eGFR, urine ACR and BP check, for adults at increased risk of CKD

Possible diagnosis of CKD
8 Likely
These patients have had an abnormal eGFR and/or urine ACR and require additional testing to confirm a diagnosis of CKD

Coding of CKD recommended
9 Review
These patients have abnormal pathology results consistent with a diagnosis of CKD but do not have a coded diagnosis recorded.

Optimisation of blood pressure recommended
0 Optimise
These patients may have a blood pressure that is above current guideline recommendations. Blood pressure targets are $\leq 140/90$ mmHg or $\leq 130/80$ in people with albuminuria or diabetes.

Consider commencement of statin
0 Optimise
Guidelines recommend that these patients commence a statin because they may have high CVD risk irrespective of lipid levels.

The Future Health Today tool starts here...

Patient identification for trials



TorchRecruit

Accelerating recruitment for clinical trials

Data for Decisions



Data for Decisions and Patron Program of Research was established in 2017 to make better use of existing primary care data to improve knowledge, medical education, health care policy and the way medical care is delivered to ultimately improve the health of all Australians.

The largest electronic practice-based research network in Australia

Trusted data collection and curation technologies, all data in a secure data enclave

Supports primary care research through partnership with general practices

National research resource, accessed via online application process

Ongoing relationship and specific agreements with practices

Can be record-linked to almost any other data source

Overseen by a consumer-led independent data governance committee

Supports the 'OMOP' common data model, allowing collaboration in international research



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