



25 July 2019

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# Welcome / Introduction

Professor Andrew Wilson

Chief Medical Officer



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## Our aim

Outstanding health care for all Victorians. Always.

## Safer Care Victoria will work to

Enable all health services to deliver safe, high quality care and experiences for patients, carers and staff.



# Safer Care Victoria

Partnering with consumers

Partnering with clinicians

Stewardship and support

System improvement,  
innovation and leadership



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## Safer Care Victoria: Office of the Chiefs

### **Role:**

To empower clinicians to influence health system improvements by:

- Providing expert clinical guidance and advice
- Building Connections, culture and capability
- Leading, influencing and delivering change



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## Medication Safety and Quality at SCV

- Advisory/strategic role – respond and provide advice on ministerial briefings, coroner’s recommendations, sentinel events, med shortages
- Representation on relevant groups, committees *e.g. Health Services Medication Expert Advisory Group (HSMEAG)*
- Collaborate with other key medicines and patient safety focussed organisations *e.g. VicTAG for today’s event*
- Antimicrobial stewardship (AMS) activities – policy and strategy, educational & awareness raising initiatives
- Communications – share information, updates



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# Using Data for Health System Improvement: Where are We?

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## Background

- Fragmented and poor use of extensive data
- Not available to sector
- Poor linkage especially for Federal datasets
- Unused capacity and inability to grow capacity strategically
- Need data to influence change and policy
- Broad community concerns about privacy
- Desire for transparency and accountability
- “Competing interests” – academia, health system, clinicians and consumers



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## What are some key questions to ask

- Is there variable outcome for patients across the system?
- Is there variable practice or access for patients?
- What is the outcome for a population group – by region or other community group?
- Are there health services or clinicians with very good or very poor health outcomes?
- What are the outcomes reported by patients?
- Is practice or care appropriate?
- What are the impacts of initiatives undertaken by the system?





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## Approach and initial focus

- Try to focus on asking questions that will lead to change at a system level first.
- Development or testing of a novel metric
- Rather than describing or admiring a problem
- Clarifying “why” will follow but isn’t essential at the initial stage
- Showing “what” is important to stimulate focus and push prioritisation and funding decisions
- Reporting “what” might lead to improvement without understanding “why” - public reporting
- Academia can be very focused on “why” and/or questions that might not be a system priority



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# National Data Demonstration Project

In December 2016, the Australian Health Ministers' Advisory Council (AHMAC) agreed that the National Health Information and Performance Principal Committee (NHIPPC) would lead the National Data Linkage Demonstration project, with the aim of demonstrating the efficacy of linked data and analytical services to inform planning and policy.

As of September 2017, the following arrangements were in place:



## Governance

National project steering committee established  
AIHW Ethics Committee has agreed on a list of allowable uses for the repository of linkable data  
A central data custodian at AIHW signs off on all user access requests and project outputs.



## Scope

Five years of data (ending 30 June 2015) for NSW and VIC only sourced from:  
Medicare Benefits Scheme (MBS)  
Pharmaceutical Benefits Scheme (PBS)  
National Death Index  
Emergency department / Admitted patient care



## Linkage and access

AIHW have designed, created and verified linkable data in the repository.  
Database loaded to the Enterprise Data Warehouse (EDW) (August 2017), the SURE facility (September 2017) and is available on AIHW's own platform

A list of proposed analysis projects were submitted to NHIPPC in May 2017

The *Delivering better cardiac outcomes: Primary, specialist and hospital care project* is one of a number of projects being undertaken under the National Data Linkage Demonstration project. It is the only collaborative project between Government and clinical networks.

Strong Governance

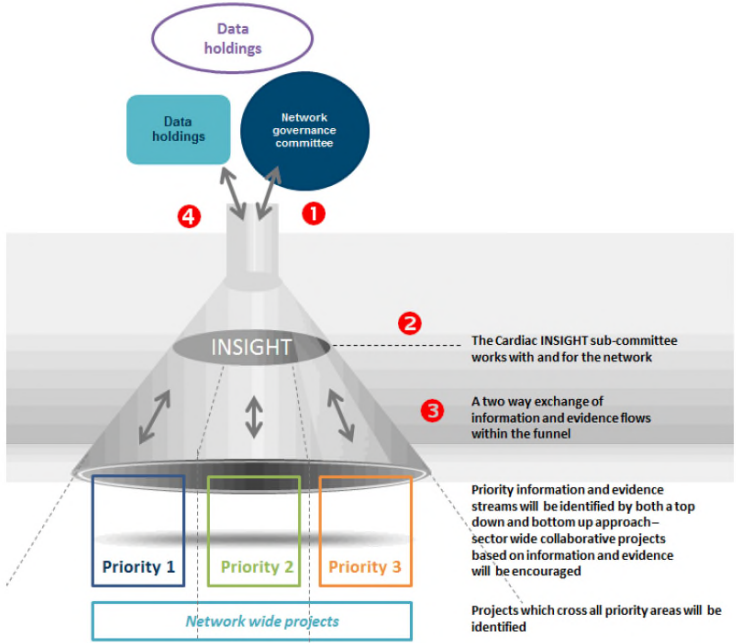
Relationships with Academic Partners/IP

Priority Driven Analysis

Relationships key



# The Victorian Data Liberalisation Model



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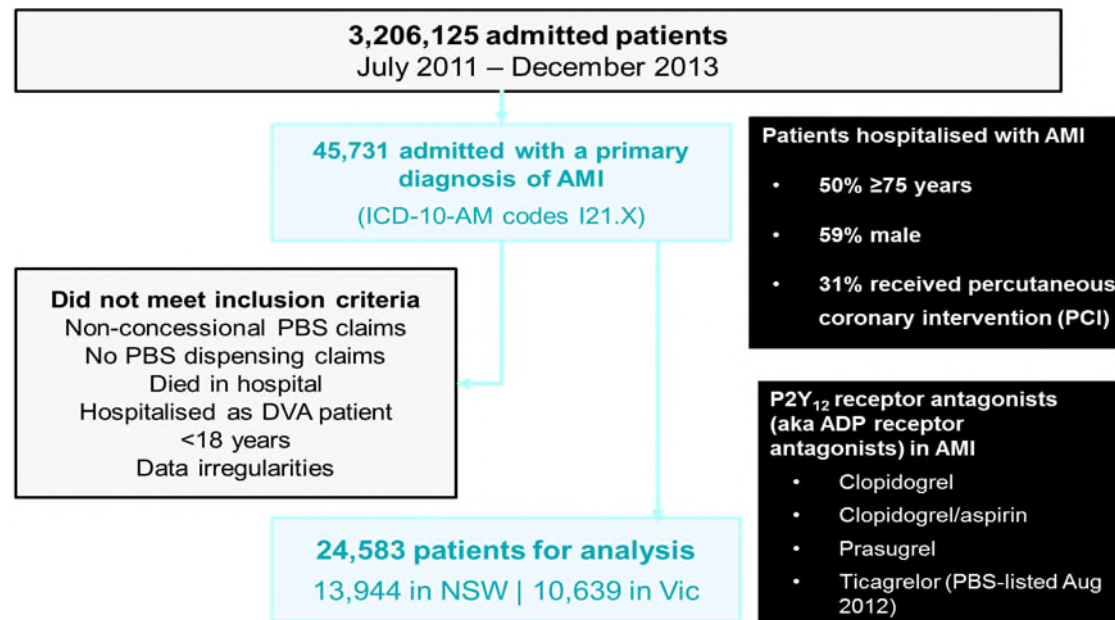
*P2Y12 inhibitor therapy is underutilised in patients hospitalised for acute myocardial infarction: results from a new population-level data linkage in Australia*

**David Brieger, Michael Falster, Andrea Schaffer, Sallie Pearson, Louisa Jorm, Lance Emerson, Melanie Hay, Arthur Nasis, Andrew Wilson**



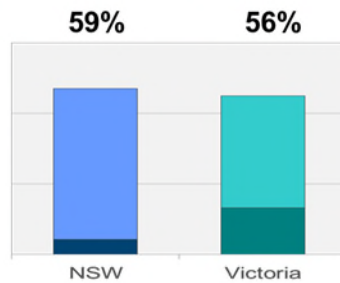
# National Data Linkage Demonstration Project: APDS-NDI-PBS-MBS

De-identified linked data, five years (July 2010-June 2015), NSW & Victoria



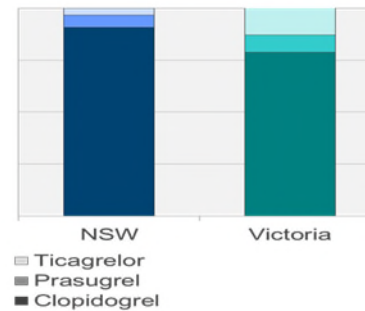
# Variations in ADP receptor antagonism in AMI

Timing of prescription



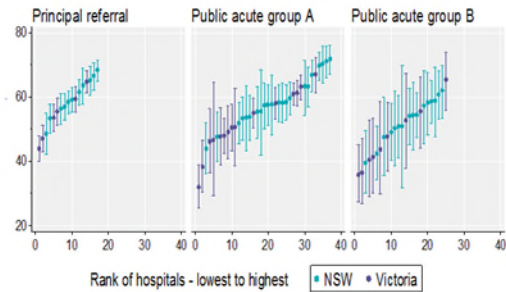
■ 1-30 days  
■ Day of discharge (day 0)

Choice of therapy

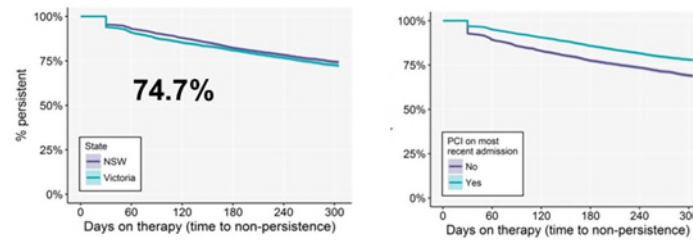


■ Ticagrelor  
■ Prasugrel  
■ Clodipogrel

30-70% prescription at 30 days



Persistence to 12mths



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*Use of oral anticoagulants after hospital discharge in patients with atrial fibrillation: insights from a new population-level linkage in Australia*

**Arthur Nasis, Andrea Schaffer, Michael Falster, Sallie Pearson, Louisa Jorm, Lance Emerson, Melanie Hay, David Brieger, Andrew Wilson**



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## Delivering better cardiac outcomes: Primary specialist and hospital care

Implemented by the Victorian Agency for Health Information (VAHI)

Two key areas:

1. Oral anticoagulants (OACs) in AF
2. Dual antiplatelet therapy (DAPT) in AMI.

For each area, aims are to describe:

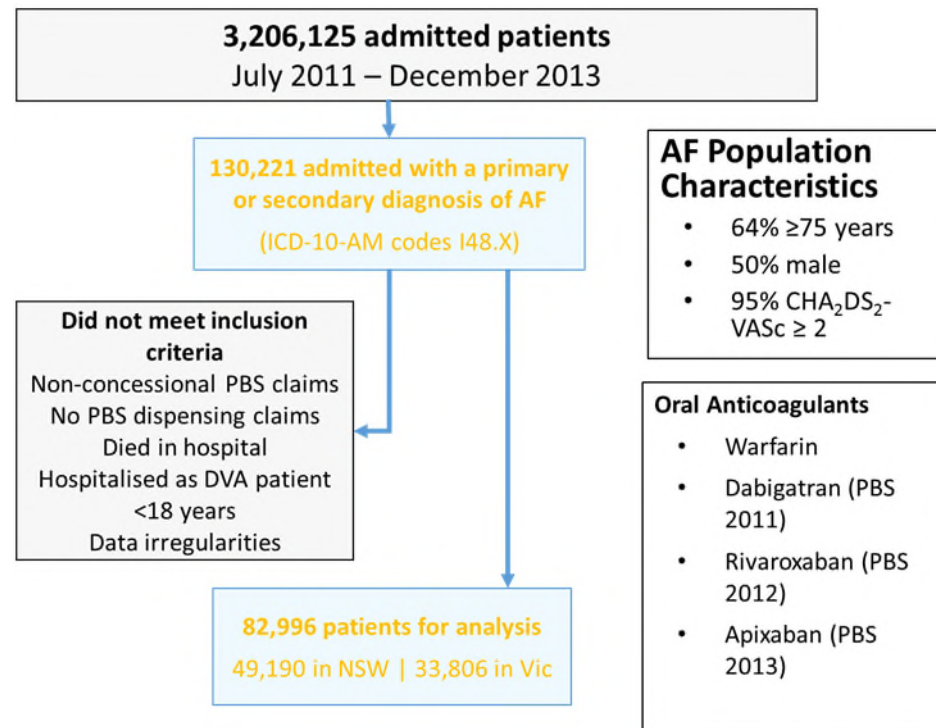
1. Rates of dispensing within 30 days following hospital discharge
2. Variation in 30 day dispensing by hospital peer group
3. Medication persistence rates at 1 year



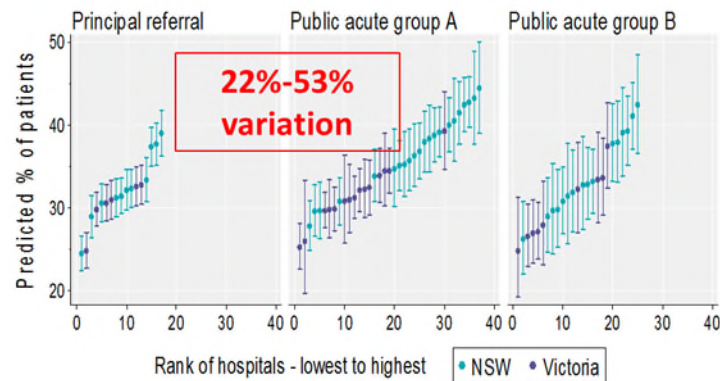
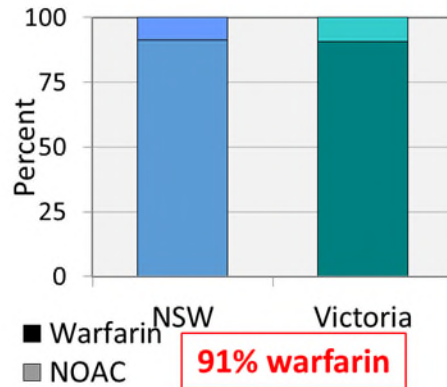
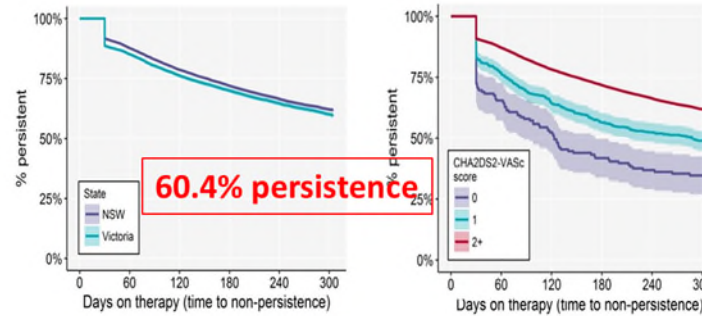


# National Data Linkage Demonstration Project

## AF de-identified linked data (July 2010-June 2015)



# OAC Dispensing, Persistence and Variation



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## Conclusion & policy implications

- OAC therapy is underutilised in patients discharged from hospital with a diagnosis of atrial fibrillation in two Australian states
- Linkage of state and Commonwealth data plays a vital role in understanding adherence to best-practice guidelines for CVD pharmacological treatment
- This information could be used to derive performance indicators, and report back to hospitals to drive improvements in patient care, and ultimately patient outcomes



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## Developments

- National Registry Strategy
- Focus on device safety – need to collect data
- Funding for registries
- Development of state based ability to link data
- Growth in sector capability and capacity and academic focus
- Need to explore data about clinicians, complaints and insurance claims – workforce, performance



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## Current Safer Care Victoria projects

- Data governance model and process established
- Sabbatical programme and honorary fellows and students
- Cardiac Arrest Linked Data Project
- ANZICS Data Linkage programme
- ECHIDNA (NHMRC Project 2019-2021; CIA Andrew Stewardson) Focused on patient movement across the system
- Others developed – aim for 6-10 this year



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## Anticoagulant Safety: SCV Scoping Project

**Aim:** Investigate and report on the extent of adverse events relating to anticoagulant safety in Victoria

**Method:**

Gather and synthesise data/intelligence from multiple sources (Coroners Cases, Sentinel Events, VHIMS, VAED) and present results in a scoping report.

**Depending on the findings, this work may inform future health improvement initiatives.**



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## Case Study 1 - Sentinel Event

Patient following elective surgery died from likely PE whilst an inpatient, 2 weeks post op.

- VTE risk assessed as high by nursing staff pre-op, however:
  - Poor communication (written & verbal) re: anticoagulation plan - post-op orders for anticoagulation were not prescribed
  - Issues with clinical handover between surgeon and ICU medical staff re: prescription of anticoagulation
  - Nursing staff failed to escalate this issue despite assessing pt. as high risk



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## Case Study 2 – Sentinel Event

Patient with Hx of PE and on long term warfarin therapy adm for colonoscopy and Gastroscopy for Ix of anaemia. Pt. died at home a few months later due to PE.

Overall, poor assessment and management of pt's VTE risks:

- Warfarin was withheld longer than the intended timeframe due to misinterpretation of Gastroenterologists initial decision.
- No evidence of pt. and family involvement in decision making re: long term warfarin management
- Lack of awareness by medical staff of the detail of the VTE guideline
- **FAILURES ARE LIKELY TO BE SYSTEMIC**





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## The future

- Digital Health – EMRs
- Linked Data
- Use of Registry Data – Linking with Administrative Datasets
- Better Data for Performance
- Better Metrics – Metrics are reviewed regularly
- User Friendly and Meaningful Data
- Increased Sector Skills for Data Interpretation
- Proposal to Link Existing Data for Policy and System Improvement



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## Future state

- Consumers, clinicians and health services trust health data and understand the use for health system oversight and improvement
- System managers are less risk averse about releasing data and the media are responsible in how it is discussed
- Data projects are designed with system performance, improvement and system health priorities a focus
- Large datasets explored for use in predictive modelling and population health outcomes



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## Connect with us



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