



## THE VICTORIAN CARDIAC OUTCOMES REGISTRY (VCOR) - FROM CONCEPT TO CREATION

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### ABSTRACT

**Objective:** Clinical quality registries are useful tools to monitor health care processes and outcomes. The challenge for stakeholders involved in cardiovascular care across Victoria was whether a broad-based state-wide clinical quality registry focusing on cardiac procedures, devices and therapies could be successfully established.

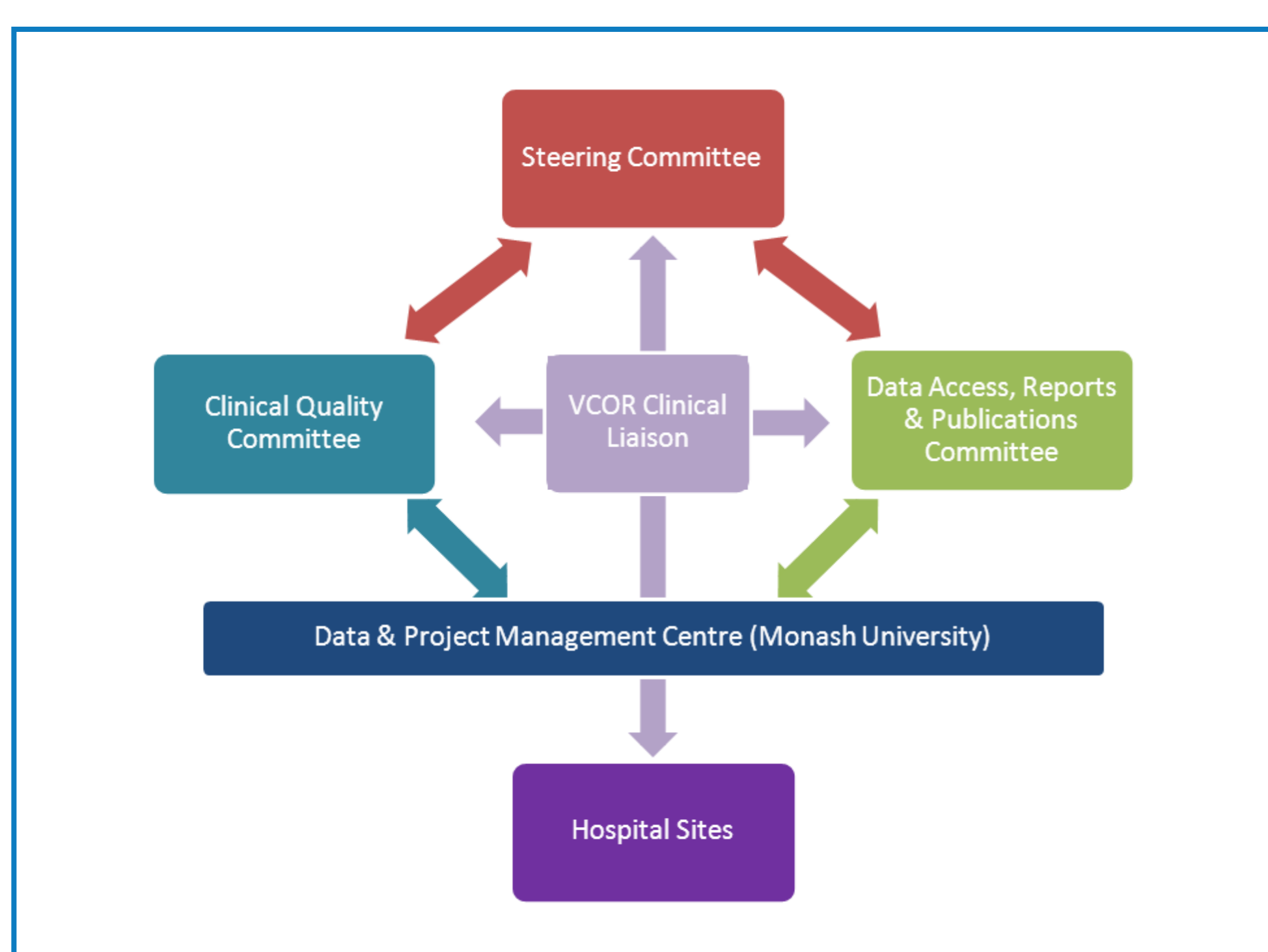
**Methods:** The project, coordinated by the Victorian Cardiac Clinical Network, and funded by Department of Health, Victoria and Medibank Private, invited all public and private hospitals performing percutaneous coronary intervention (PCI) to join VCOR. The registry was developed and managed by Monash University who were appointed custodians of the data. The design was multi-modular, focusing firstly on PCI. A governance structure, minimum dataset and performance indicators were formulated. A web-based data collection portal conforming to technical and security standards for clinical information was established. Each health service funded their own data collection as part of their quality assurance activities.

**Results:** Of the 29 hospitals initially approached, 12 public and 7 private health services agreed to participate, representing 100% of public and 41% of private hospitals in Victoria performing PCI. Ethics approval was obtained individually at each health service. VCOR commenced in December 2012, with hospitals going "live" in a sequential manner after appropriate training.

**Conclusion:** Broad-based cooperation and collaboration, coordinated by a Cardiac Clinical Network, resulted in the establishment of the first state-wide clinical quality registry in cardiovascular health in Victoria. This achievement can serve as a model for other aspiring state and national performance assessment networks.

### REGISTRY GOVERNANCE

- The initial steering committee meeting was held in January 2012
- VCOR Steering Committee oversees strategic direction of the registry, governs all project decisions & review sub-committee activity
- 21 member Steering Committee driven working group finalised the VCOR PCI dataset

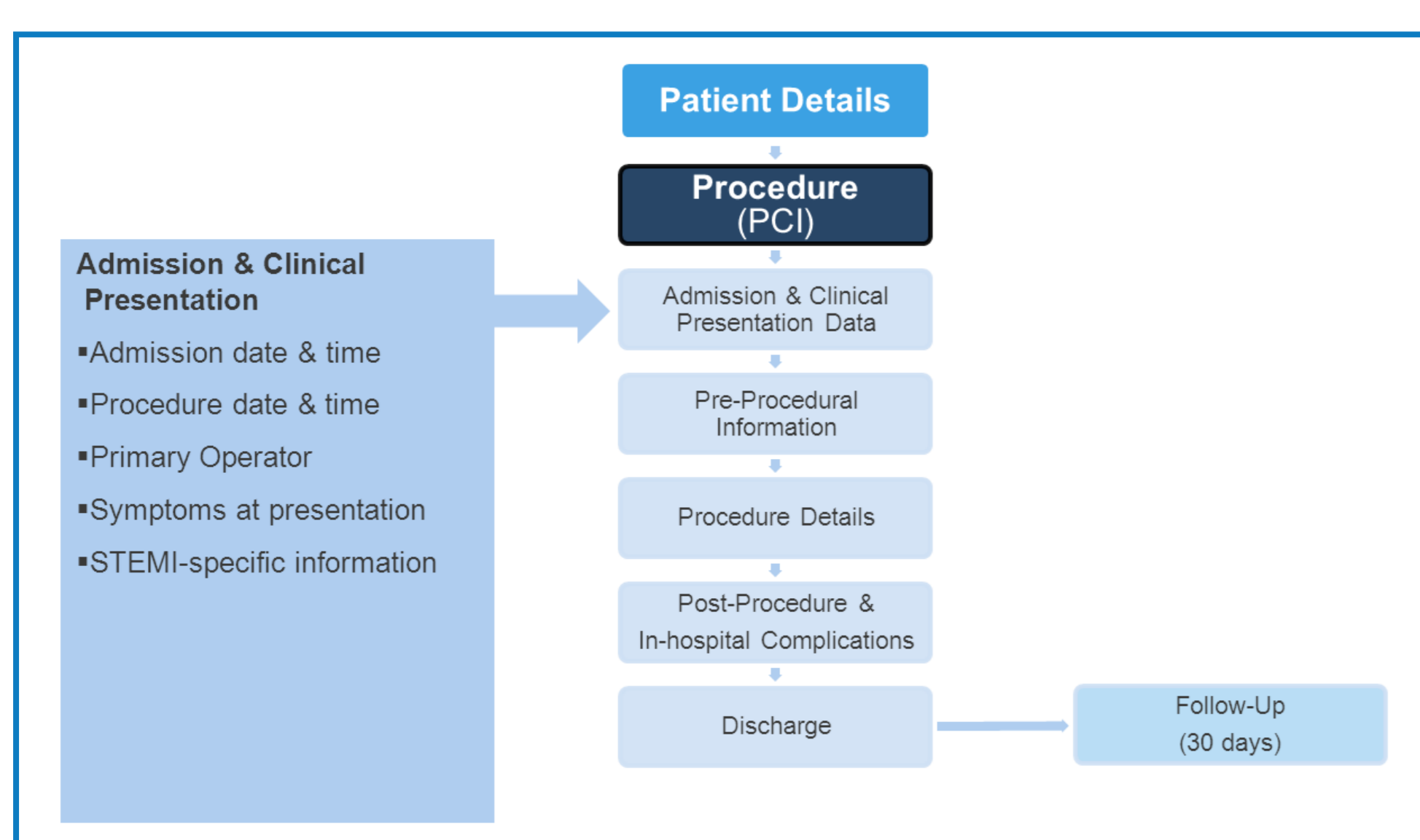


### PROJECT COMPLIANCE

VCOR conforms to national operating principles for clinical quality registries (CQRs) as set out by the Australian Commission on Safety and Quality in Health Care (ACSQHC) and endorsed by Australian Health Minister's Advisory Council (AHMAC).

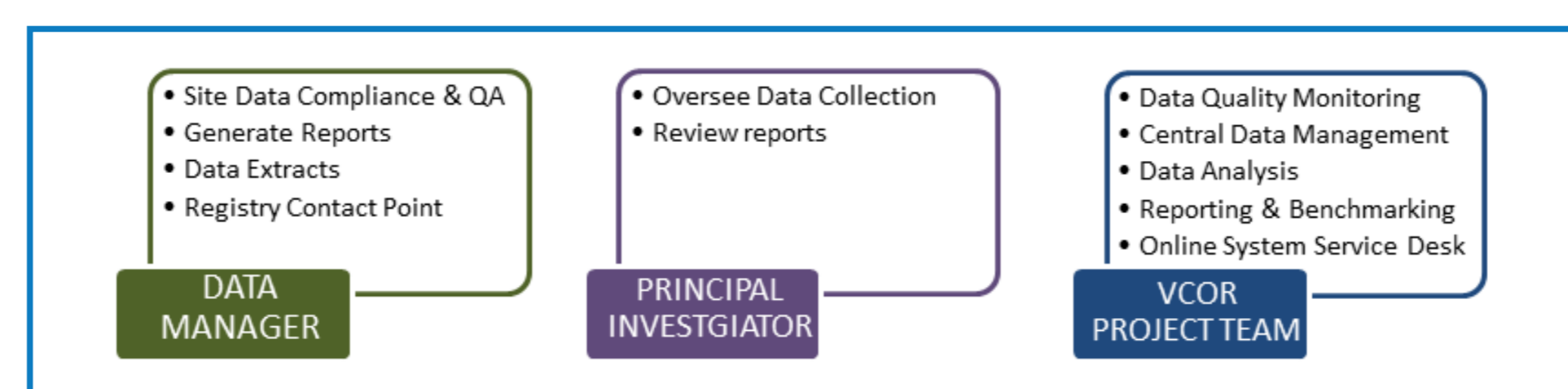
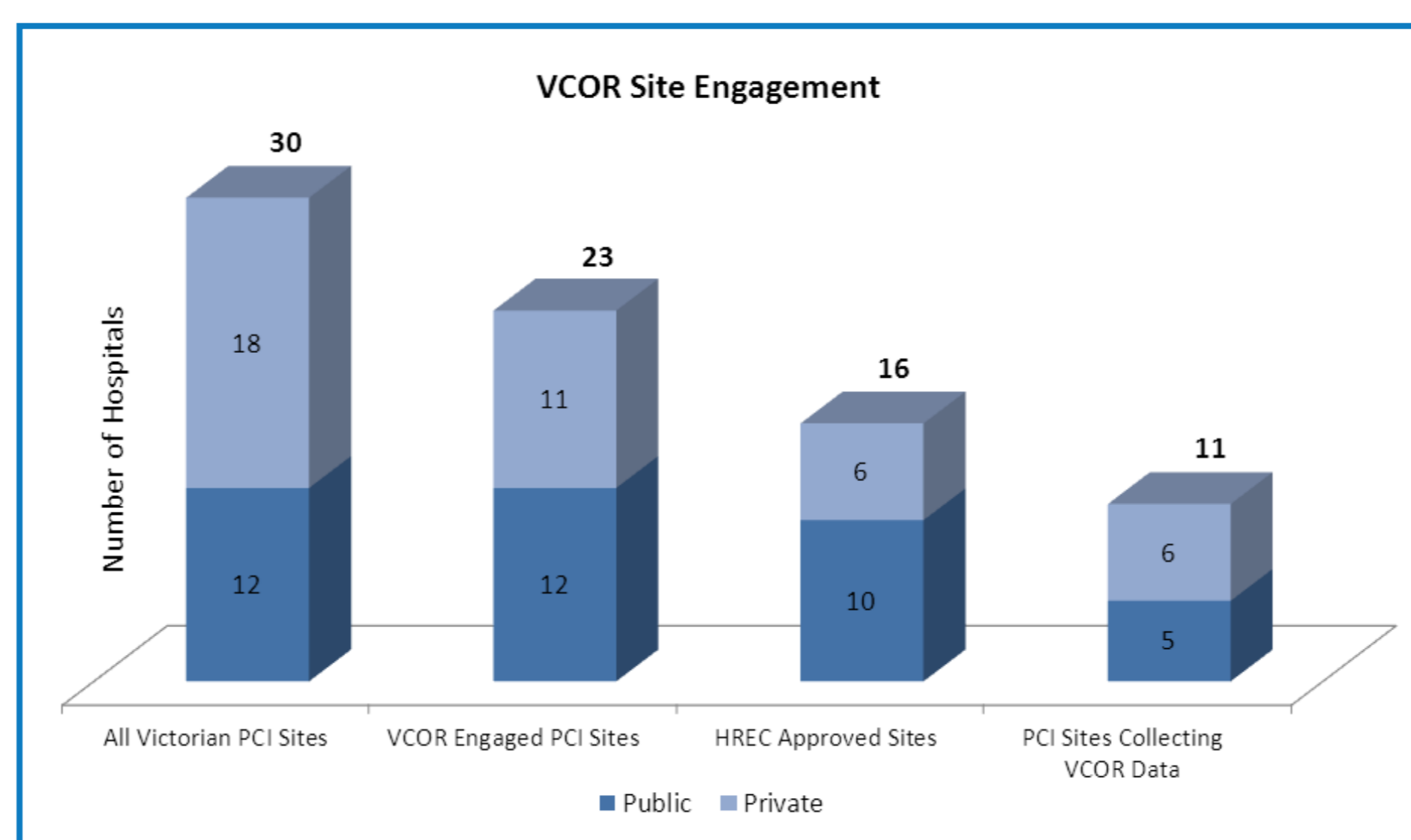
### PCI DATA ELEMENTS

- 1 Baseline Form (5 sub-sections)
- 1 Follow-up form (30 days)
- Epidemiologically sound data elements
- Limited to minimum data set
- Collectable & verifiable (e.g. medical record)
- Allow for risk-adjusted reporting of outcomes & KPIs



### SITE ENGAGEMENT & PARTICIPATION

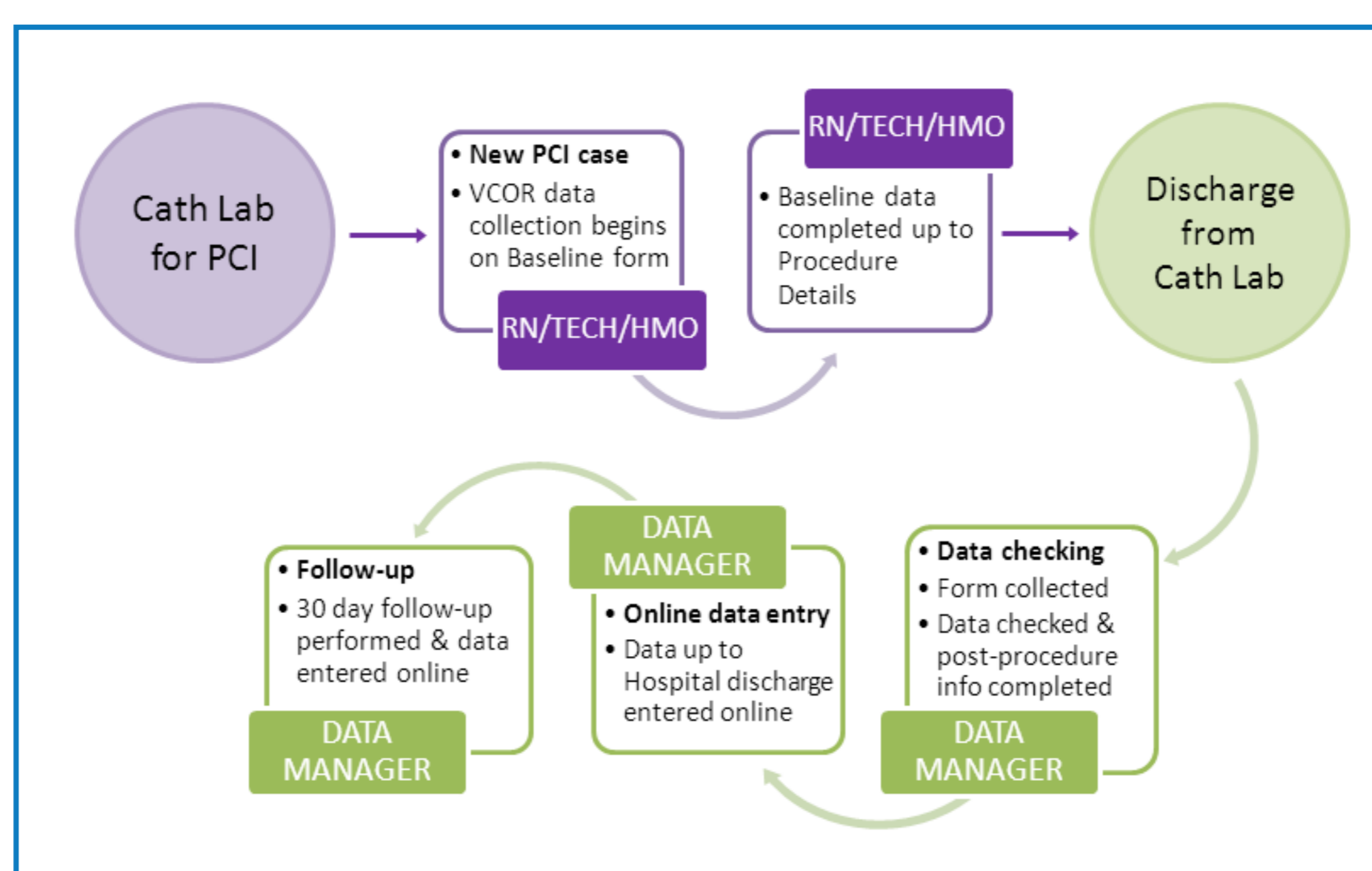
- All hospital data remains the property of the institution
- Each health service funds their own data collection as part of quality assurance activities
- Project rolled out to PCI sites in a staggered format



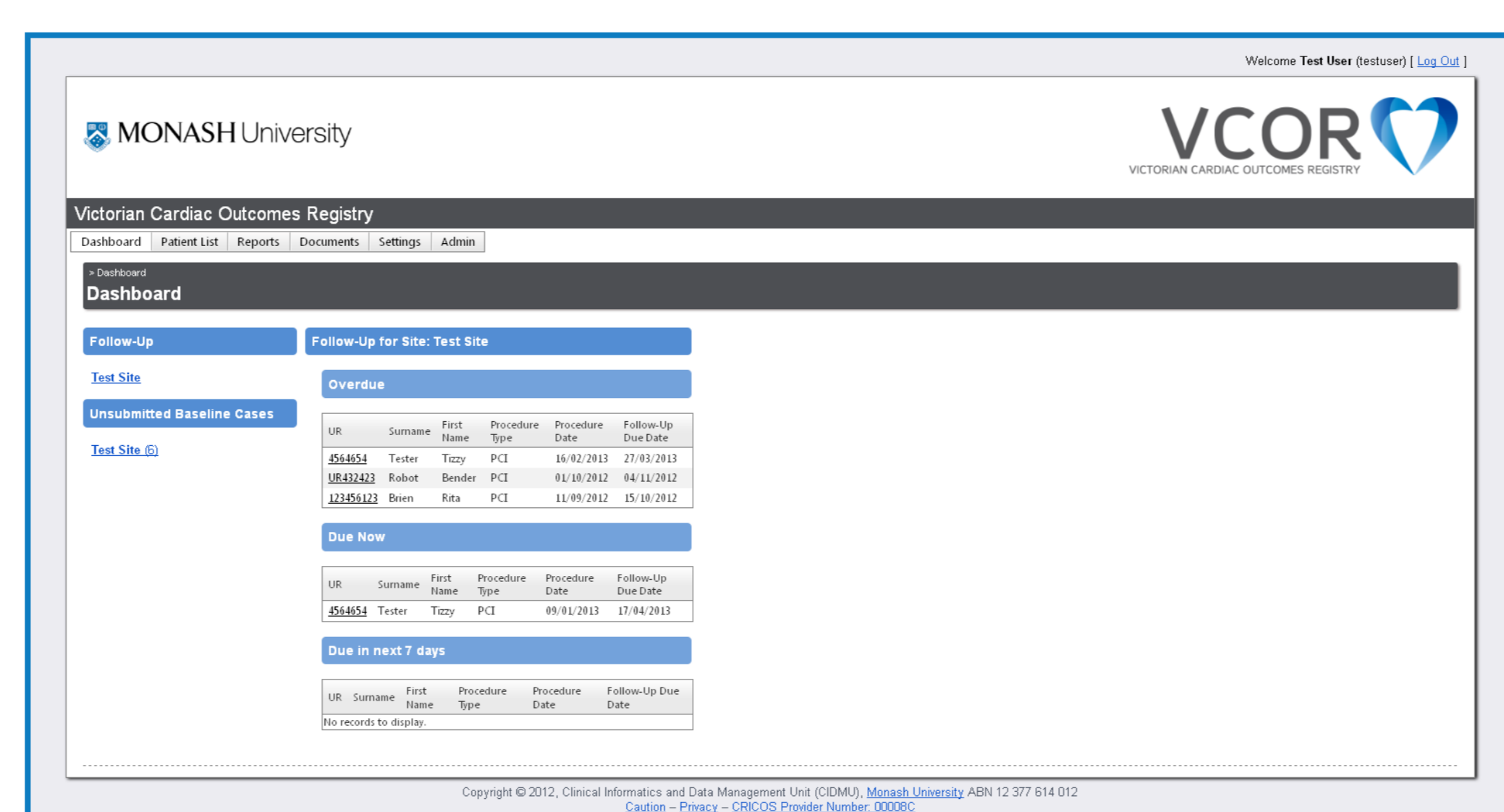
### DATA MANAGEMENT CENTRE

Monash University's Clinical Informatics & Data Management Unit acts as the coordinating data and project management centre. The Registry Data Custodian is Professor Christopher Reid, Department of Epidemiology & Preventive Medicine, Monash University.

### LOCAL DATA MANAGEMENT



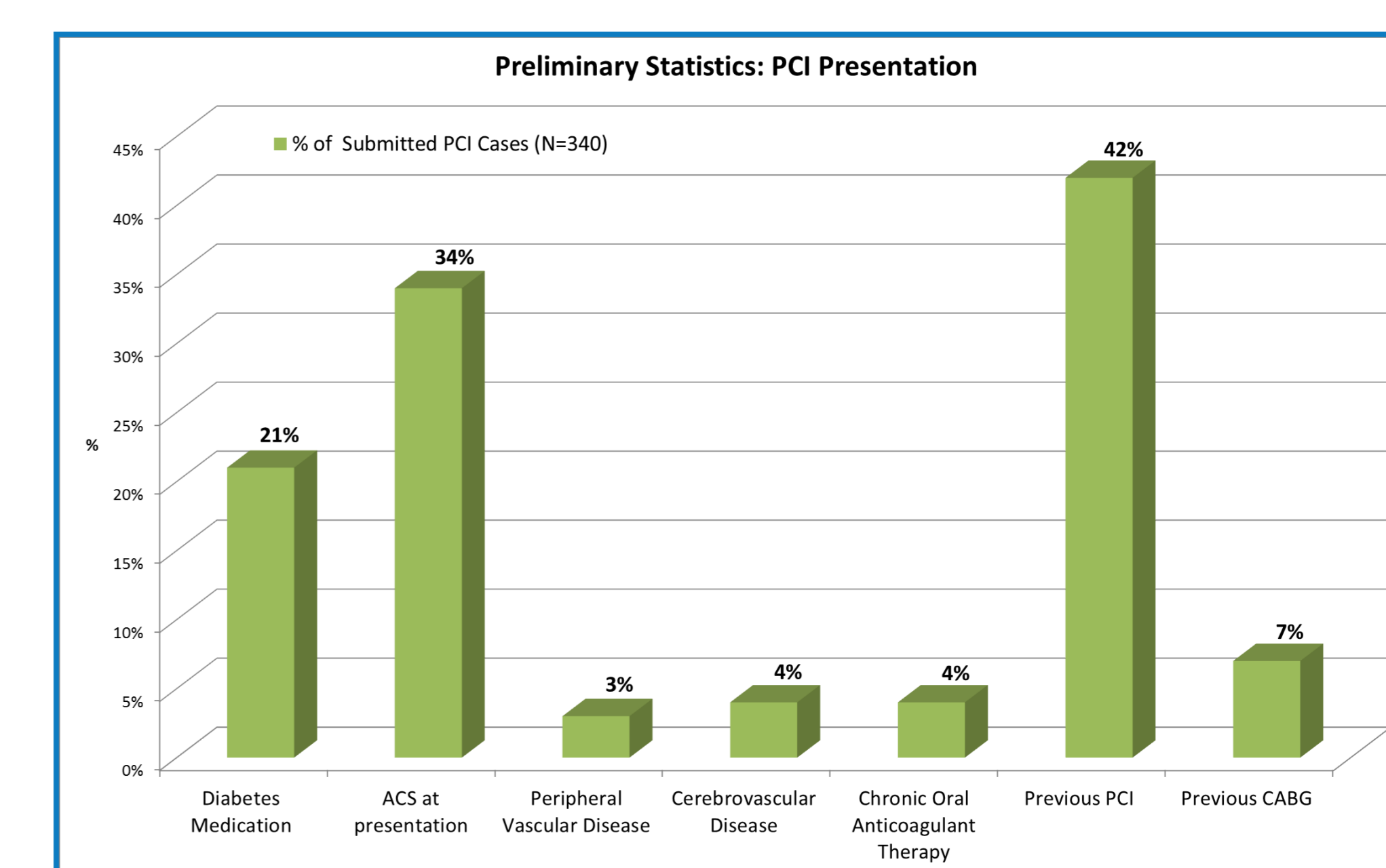
### ONLINE DATA COLLECTION SYSTEM



### BENEFITS OF VCOR PARTICIPATION

- Online data entry ensures immediate validation of data (reduced errors and less data queries to follow-up)
- Real-time summary reports (comparing hospital data to cohort data)
- Real-time access to site-specific download of raw data
- An epidemiologically sound, and compliant database for local quality assurance, research & internal reporting
- Clinicians access to procedure data performed across multiple institutions

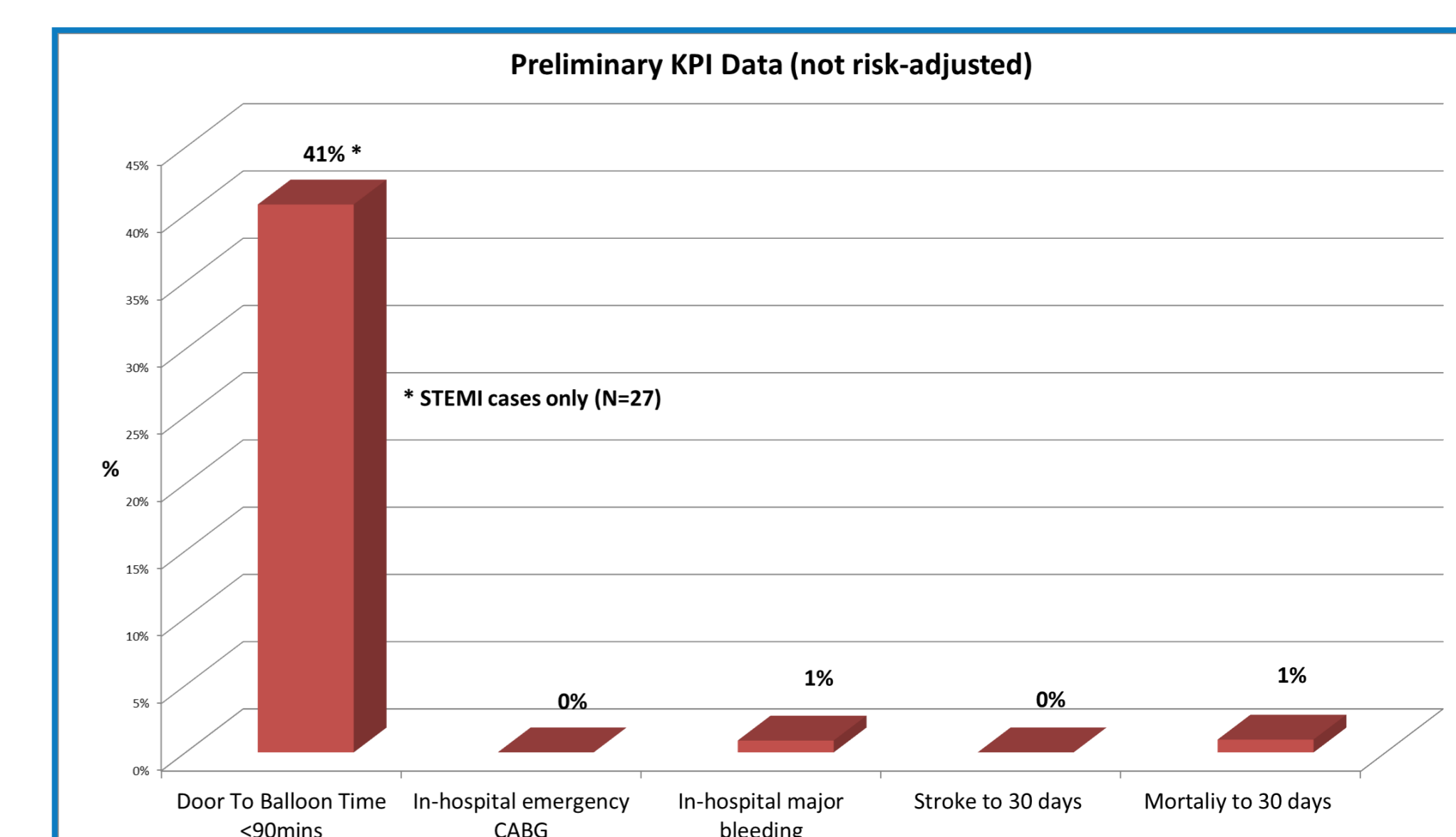
### PRELIMINARY SUMMARY DATA



- 609 PCI patients registered in VCOR (78% male)\*
- 340 submitted baseline cases\*
- 202 submitted follow-ups\*

\* Preliminary data based on 5 private and 2 public hospitals

### PRELIMINARY KPI DATA



### REPORTING

Reporting policy development is an ongoing feature of VCOR, that will be approved under the guidance of the governance committees. Ongoing data compliance reports and quarterly KPI performance reports will be provided to participating sites and key stakeholders.

### CHALLENGES

- Developing a minimum data set that suits hospital data collection methodologies
- Formulating a Site Registry Agreement template
- Securing engagement of all potential sites, especially from within the private sector

### CONCLUSION & FUTURE DIRECTIONS

The Victorian Cardiac Outcomes Registry (VCOR) is the first broad-based clinical quality registry in cardiac health in Victoria. It spans both the public and private sectors. Its conception is a testament to the utility of a cardiac clinical network, and the benefit of support by a private health funder for quality initiatives. VCOR plans to expand into other key areas of cardiovascular health care including early management of STEMI in rural and regional areas and the use of devices including implantable defibrillators. The successful creation of VCOR serves as a model for other aspiring state and national performance assessment networks.