VCOR Newsletter

VCOR

VICTORIAN CARDIAC OUTCOMES REGISTRY

July 2014 **Issue #6**

Events and Meetings

Clinical Quality Committee (CQC)

14 October 2014 (Q2 2014)

9 December 2014 (Q3 2014)

24 March 2015 (Q4 2014)

Steering Committee (SC)

22 July 2014

18 November 2014

3 February 2015

Data Submission Deadlines

31 August 2014 (Q2 Data)

30 November 2014 (Q3 Data)

1 March 2014 (Q4 Data)

VCOR Annual Report Launch

Late 2014—watch this space!

VCOR Website

www.vcor.org.au

Online now.

Inside this issue

Project News & Progress Update

Welcome to issue six of the Victorian Cardiac Outcomes Registry (VCOR) newsletter. It is with great pleasure that we report our progress over the last quarter of Registry activity. Once again, the offices are busy with operational business as the registry continues to grow and our project management, data management and reporting responsibilities continue to expand. Work is underway to finalise the first VCOR Annual Report for 2013 data. This report will report on all 20 PCI sites that contributed data during 2013. VCOR would like to acknowledge and congratulate all our Data Managers for ensuring that 2013 data was submitted within set time-frames. More than 4800 PCI cases were recorded in VCOR last year and this is a fantastic effort! The annual report will be officially launched in the second half of 2014 and will be publically available online at www.vcor.org.au. Please refer to page two for a summary of some data included in the annual report.

With over 5000 PCI patients registered in the system (represents over 6000 procedures) and 21 PCI sites collecting data, we are now in a position where the Registry's primary focus is no longer just on metropolitan hospitals that perform PCI.

A broader cardiac outcomes focus is becoming a reality as we undertake more complex registry activities. The Acute Management of STEMI in Regional Victoria module now has six sites approved for data collection in the Gippsland and Hume regions. VCOR plans to continue rolling this module out to health centres Victoria-wide over the coming months and into 2015. The primary purpose of the STEMI module is to ultimately provide a framework for identifying gaps in delivery of STEMI care, however, in the first instance, it will review the feasibility of these types of improvement initiatives within regional centres.

Similarly, a one month Heart Failure (HF) data collection pilot will be implemented under the auspice of VCOR. It will provide a 'snapshot' of heart failure patients across Victoria including in centres that have HF programs and those that don't. More details about the HF module are included on page three of this newsletter.

MORE THAN 6000 CASES ENTERED INTO VCOR!

24 SITES CONTRIBUTING DATA IN JULY 2014 (21 PCI & 3 STEMI SITES)!

Update from the VCOR Clinical Lead: A/Prof Jeff Lefkovits

The last quarter has been a busy one for VCOR, with the registry passing a number of important milestones in respect of site participation, case numbers and reporting output. First and foremost, our gratitude to participating sites for their ongoing effort and commitment to the project. I would like to acknowledge the hard work and dedication of the sites' data managers and the strong support of the clinicians. Together with the tireless toiling of the VCOR management team, these efforts have facilitated VCOR establishing itself as an integral quality tool for the Victorian PCI community.

Site reports for the first quarter have been released and we are excited about the new design that has been adopted. We hope sites will find these reports a good balance between comprehensive data inclusion and useful and succinct format. We welcome any feedback about the new reports and are always open to new ideas and suggestions.

We are looking forward in the third quarter to the release of our first Annual Report on PCI and the official launch of VCOR with the Minister of Health. Site recruitment with a number of *private* hospitals in metropolitan and regional Victoria continues and we are inviting participation of additional rural sites into our module for early treatment of STEMI.

With increased interest in the whole area of clinical quality registries by a number of state and federal bodies, VCOR is now well positioned to take a leading role in this area.

VCOR Newsletter

VICTORIAN CARDIAC OUTCOMES REGISTRY

Improving cardiovascular outcomes & cardiac care Victoria-wide

Engaged Sites & Local PIs

Percutaneous Coronary Intervention (PCI)

The Alfred Hospital
Dr Stephen Duffy

The Austin Hospital
Dr David Clark

Ballarat Base Hospital
Dr Ernesto Oqueli

Bendigo Hospital
Dr Voltaire Nadurata

Box Hill Hospital
A/Prof Gishel New

Cabrini Hospital
A/Prof Jeffrey Lefkovits

Epworth Hospital (Richmond & Eastern)
A/Prof Ronald Dick

Frankston Hospital
Dr Geoffrey Toogood

Geelong Hospital
Dr Chin Hiew

Geelong Private Hospital
A/Prof John Amerena

Jessie McPherson Private
Prof Ian Meredith

Knox Private Hospital
Dr Michael Rowe

Melbourne Private Hospital
A/Prof Roderick Warren

Monash Medical Centre
Prof Ian Meredith

The Northern Hospital
A/Prof William vanGaal

The Royal Melbourne Hospital
A/Prof Leeanne Grigg

St John of God (Bendigo)
Dr Tony Jackson

St Vincent's Hospital (Melb)
A/Prof Andrew MacIsaac

St Vincent's Private Hospital
A/Prof Jack Gutman

Western Hospital
Dr Nicholas Cox

Western Private Hospital
Dr Deepak Haikerwal

Management of Acute STEMI (Regional Vic)

West Gippsland Healthcare
Dr Brett Forge

Goulburn Valley Health
Dr Tunde Ibrahim

Northeast Health (Wangaratta)
Dr Robert Krones

Latrobe Regional Hospital
Dr Alistair Wright

Bairnsdale Regional Health
Dr Ka Chun Tse
Ms Trish Young

Central Gippsland Health Service
Dr Howard Connor

VCOR PCI Statistics

Current PCI Statistics*

Case Numbers (to date)	N
Number of registered VCOR patients	**5813**
Number of PCI cases entered	**6600**

Data Completeness	%
Baseline data 'complete'	96%
Follow-up data 'complete' ŧ	87%
Whole PCI case 'complete'	88%

VCOR data is 'complete' when data has been verified and submitted to VCOR as 'final'.

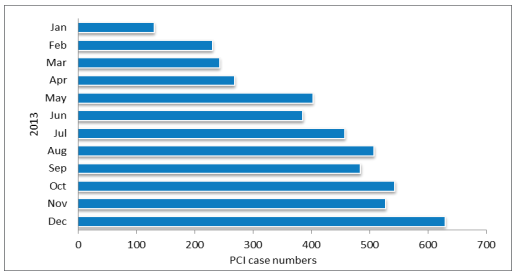
** Statistics correct as at 2nd July 2014.*

ŧ Due only when patient alive at discharge

2013 Annual Report PCI Statistics†

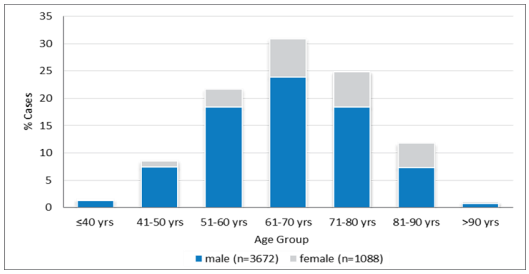
The inaugural Annual Report for PCI data in 2013 will be publically launched, sent to all relevant VCOR stakeholders and will be made available to the public via the VCOR website at www.vcor.org.au.

PCI Case numbers month by month



N=4876
(4760 submitted cases)

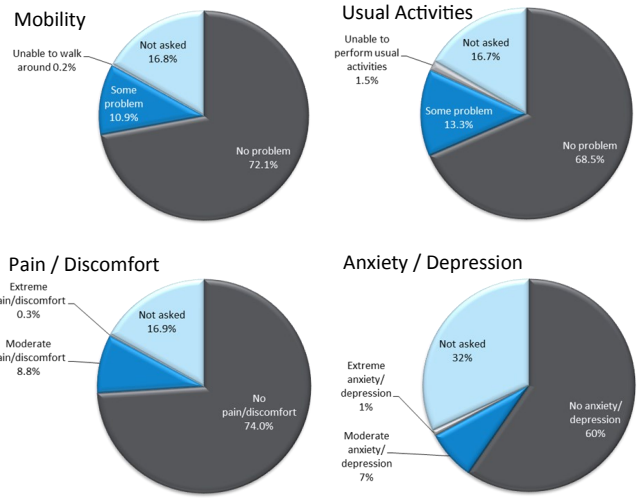
2013 PCI cohort age & gender distribution



Patient characteristics (STEMI vs cohort)

Characteristic	Acute STEMI cohort n=702	Non-Acute STEMI cohort n=4058
Age – years (Mean ± SD)	61.2 (±13)	67.1 (±12)
Gender – female	19.2%	23.5%
Diabetes medication	17.5%	23.1%
Peripheral vascular disease history	2.6%	3.7%
Cerebrovascular disease history	1.4%	4.2%
Previous PCI	11.4%	38.4%
Previous CABG	2.7%	10.0%

Quality of life at follow-up



*** Statistics based on data collected between 1 Jan—31 Dec 2013. Data cut taken on 1 June 2014.*

Q1 2014 Data Completeness and Clinical Quality Reports

Eighteen sites contributed data in Q1 2014 (2 sites did not submit any completed cases for inclusion in the Q1 reports). A total of 1191 cases were entered for Q1, 2014. A risk-adjustment model was proposed, based on a similar Australian PCI cohort and KPIs were reported back to the group in a new reporting format (refer to page 4). Data was reviewed by the VCOR Clinical Quality Committee on 17 June. No sites were considered outliers (an outlier is where a site is outside acceptable confidence limits for clinical quality analyses in two consecutive reporting periods).

VCOR Newsletter

VICTORIAN CARDIAC OUTCOMES REGISTRY

Improving cardiovascular outcomes & cardiac care Victoria-wide

VCOR and Privacy: Secure transfer of patient information

As many of you may be aware, reforms to the *Privacy Act* 1988 (The Privacy Act) were implemented in March of this year. *The Privacy Amendment* (Enhancing Privacy Protection) *Act 2012* (The Privacy Amendment Act) introduced 13 Australian Privacy Principles (APPs) which came into effect on the 12th of March 2014. As VCOR collects and stores identifiable and sensitive patient information, it is critical that the project and all staff involved keep abreast of their obligations under The Privacy Act. Even though VCOR and hospitals may be exempt from some of the APPs as a *permitted health situation,* we are still committed to protecting patients' privacy and the confidentiality of the information we house. Many of the APPs introduced are already addressed under the Health Records Act, of which all hospital staff would already be familiar and compliant with, however it is important to note all relevant changes.

One major consideration for VCOR is the cross-border disclosure of personal information (APP 8). Monash University currently uses Gmail as its email provider. As Gmail (and many other email service providers) uses several international servers for data transfer and cloud storage, any email sent to or from Monash leaves Australia and its Territories. For this reason it is critical that no identifiable or potentially re-identifiable information is ever sent via email (either in the body or as an attachment). If you do need to refer to a patient in an email to VCOR, please refer to them by their Unique Registry ID and/or the PCI event ID — never use name, UR or Medicare number etc. If you need to send or receive files with identifiable, potentially re-identifiable or sensitive information we have an online Secure File Transfer Protocol (SFTP) set up. Please contact VCOR if you require access to the SFTP service.

It should be noted that VCOR will never disclose personal information about an individual for purposes unrelated to the key function of the registry. All information held in the VCOR web system is confidential. VCOR has measures in place to protect the privacy of patients if requests for information are received.

VCOR has developed a registry specific privacy policy which will address each of the APPs—once this has been ratified by the Steering Committee it will be made available on our website along with all the other VCOR policy documents at https://vcor.org.au/VCOR_Public/vcor-policy-document. VCOR activities are also aligned with the Monash University Privacy Policy which can be obtained from: http://www.privacy.monash.edu.au. If you require further information about privacy matters, please contact us at vcor@monash.edu.

VCOR policy documents available at: https://vcor.org.au/VCOR_Public/vcor-policy-document

VCOR Secure File Transfer Protocol (between VCOR and registered sites) available at:

https://sftp.cidmu.org.au/sphpm/ (contact VCOR for access rights).

VCOR —Heart Failure Pilot Project

VCOR made a successful application for funding to the Victorian Cardiac Clinical Network (VCCN) to undertake preliminary work that may lay the foundation for a meaningful heart failure database in Victoria. This initial pilot project will encompass the development and piloting of a heart failure minimum dataset for use in patients presenting to hospital with acute heart failure.

Key stakeholders have been engaged, headed by Professor Henry Krum, to establish a minimum dataset that meets the dual purpose of collecting data critical to better understanding heart failure admissions in Victorian hospitals but employs a process that is not overly onerous to health services.

All public hospitals currently undertaking VCOR-PCI have been approached and invited to collect pilot data using the developed dataset. Initially, data will be collected in a 'snapshot' manner, over a one month period at each participating hospital (follow up completed at 30 days). To date, two hospitals have commenced their 30 day data collection period, with another 6 hospitals set to be trained and commence data collection upon ethics approval.

Upon completion of data collection across all participating hospitals, feedback will be sought via an Evaluation Survey to assess CRF usability, cohort ascertainment and feasibility to undertake this type of data collection in an ongoing or expanded manner. Ongoing funding will be sought to expand the snapshot activity into regional Victoria later in 2014 and 2015.

VCOR Newsletter

VICTORIAN CARDIAC OUTCOMES REGISTRY

Improving cardiovascular outcomes & cardiac care Victoria-wide

Data Management Hints, Tips & Reminders!

Coding times in VCOR (24 hour format):

When querying anomalous DBTs, VCOR has come across a series of different types of data entry errors for symptom onset, admission, procedure and balloon/device times: Please remember to **always use 24 hour format (HH:MM)** when entering times into VCOR and **enter times accurately as they are recorded in your hospital information systems**. This is especially crucial for STEMI patients whose door to balloon times (DBT) are derived from the times entered. Errors in admission, procedure or balloon/device time times will affected DBT, especially when the wrong time format is used. *E.g.: A patient presented to ED at 22:07, entered the cath lab at 22:48 and a device was deployed at 23:21. If device time is entered as 11:21 the DBT is inflated by 12 hours (781 mins instead of 61 mins).* VCOR online does warn users of unusual times entered, but this is still a common data entry error. DBT is a reportable KPI so the entry of accurate times is key. VCOR is currently implementing some new validation rules and clearer warning messages to avoid these data queries from arising in the future.

Coding dates in VCOR (accurate data entry):

VCOR data queries have revealed that, in some cases, reported Length of Stay (LOS) is inflated due to simple data entry errors (admission and discharge dates): Similar to above, please ensure that all dates are **entered accurately before data is submitted**. VCOR has implemented a process to query irregular LOS and/or DBT values with Data Managers but a quick double check of dates and times when submitting data can avoid re-work in the future (e.g. retrieving files, sometimes from offsite and going through patient records).

Case ascertainment:

During VCOR audits, it has become apparent not all Data Managers have implemented a process to log site PCI procedures and therefore case ascertainment is difficult to verify: A crucial aspect of VCOR is that 100% of relevant cases are entered onto the registry (unless patients opt-off the registry by contacting VCOR directly). Data Managers are therefore encouraged to keep a PCI procedure log. It is expected that VCOR database records would be regularly audited against this procedure list. This will avoid any issues of missing cases down the track and reports will accurately reflect the cases completed at your hospital.

Coding follow-up outcomes:

Data querying and auditing have revealed that, in some cases, follow-up outcomes (e.g. mortality, MI, re-hospitalisation) have been recorded against a PCI case even though they occurred after follow-up due dates: Data Managers and Data Collectors are reminded that if following a patient up some time after the follow-up due date, to **only record outcomes that occurred within the 30 days after discharge.** If a patient was deceased at day 35, they are still considered alive at the 30 day follow-up.

Coding patients as 'lost to follow-up': Patients are permitted to be coded as 'lost to follow-up' (LTF) once six months has elapsed and ALL avenues for following up the patient have been exhausted (medical records, telephone, GP, family members). If there is no way of making contact, follow-up status can be recorded as LTF. **If no attempt to contact patients has been made, patients should not be coded as LTF**.

New Quarterly Site Reporting Format for 2014

A new PCI quarterly site report format was launched for Q1, 2014 based on feedback form the VCOR Steering and Clinical Quality committees. The new format includes some comparative clinical data about patient risk-factors, procedure details and patient outcomes both for that quarter and the 12-months prior (e.g.. Jan-Dec 2013 and Q1 2014). Reports also include a review of data completeness and case ascertainment (as at data submission deadlines for the quarterly period). For the first time, clinical quality assessment of VCOR key performance indicators are also presented in the form of funnel plots and variable life adjusted (VLAD) control charts.

Reports are sent to VCOR Principal Investigators and Directors/Heads of Cardiology, to be shared within the health service at their discretion. All enquiries about site reports should be directed to VCOR Principal Investigators.

Data Managers also receive a summary of the data completeness/case ascertainment for that period, based on the data cut taken at the data submission cut off date for that period.

Continuous feedback on the format of reports will be sought to ensure that VCOR is able to regularly provide sites with meaningful and useful information about PCI practices and outcomes.

Contact VCOR

Contact Us

VCOR

C/- Monash University (SPHPM)
Lvl 6, The Alfred Centre
The Alfred Hospital
Commercial Road
Melbourne VIC 3004

T: +61 3 9903 0302
E: vcor@monash.edu
W: www.vcor.org.au