



June 2016

Issue #12

Events and Meetings

Clinical Quality Committee (CQC)

6th Sept 2016

13th Dec 2016

Steering Committee (SC)

19th July 2016

11th October 2016

Data Managers Feedback Meeting (PCI)

July-Aug 2016 (TBC)

STEMI Stakeholder Meeting

26th July 2016

HF Management Committee Meeting

TBA

Data Submission Deadlines

31st August 2016 (Q2 2016 data)

Project News & Progress Update

The first half of 2016 has been a busy time for the VCOR team. To date there are over 25,000 PCI cases, 462 Heart Failure admissions and 247 Regional STEMI presentations in VCOR. The Heart Failure Snapshot commenced on the 14th of June for the third year in a row. This year there are 16 sites collecting data across Victoria. We welcome the inclusion of Epworth Richmond, Dandenong Hospital, Frankston Hospital and Sunshine Hospital to the Heart Failure Snapshot, and thank the remaining sites for their contribution towards this project.

The Regional STEMI module has also expanded in the first half of 2016. Four new sites have come onboard—Albury Base Hospital, Wodonga Base Hospital, Wimmera Health Care Group and Mildura Base Hospital. HREC applications are currently progressing for these sites, with the aim being for data collection to commence in the 2nd half of 2016. This will take the total number of sites to nine.

Our data linkage projects are well under way with work progressing to obtain data from Victorian Admitted Episodes Dataset (VAED) and Ambulance Victoria to link with patient data from PCI and STEMI modules.

Work has progressed on the VCOR 2015 Annual Report. We thank all of our Data Managers for their efforts in responding to data queries in time for the Annual Report Deadline. A final draft has been prepared and is expected to be published in July 2016. To be added to the annual report mailing list, please email vcor@monash.edu

In May we welcomed a new staff member to the team—Janine Doyle. Janine has a cardiac nursing background and has previously worked at Epworth and the Royal Children's Hospital. Janine will be managing the Regional STEMI module as well as undertaking the VCOR PCI audits. With her cardiac background she is a welcome addition to the team.

As part of VCOR's reporting role in April this year a special report was prepared focussing on times to treatment with PCI for acute STEMI: The VCOR "Deep Dive Report". This report's intention was to underscore the issue, provide some more detailed information on hospital performance and provide tools to assist sites in their ongoing continuing quality improvement programs. Highlights from this report can be found on page two of this Newsletter.

25,000+

PCI cases

247

Regional STEMI presentations

460+

HF SNAPSHOT admissions

Upcoming Data Submission Deadlines for 2016

[PCI Q2 2016 Site Reports](#)

All baseline and follow-up data for Q2 2016 must be submitted by **31 August 2016**

VCOR PCI Statistics & Reporting *

Case Numbers	N
Number of registered PCI patients	22,390
Number of PCI cases entered	26,030
Gender - female (%)	23%
Age - years (Mean ± SD)	66 ± 12

Data Completeness	%
Baseline data 'complete'	98%
30-day follow-ups 'complete' [†]	96%
ALL PCI data 'complete'	95%

* Statistics correct at 21-June-2016



VICTORIAN CARDIAC OUTCOMES REGISTRY

Improving cardiovascular outcomes Victoria-wide

Highlights from the VCOR “Deep Dive” Report

Special report focussing on times-to-treatment with PCI for acute STEMI (door-to-balloon-time)

- ◆ VCOR hospital performances were compared with local and international guidelines for ideal PCI time-to-treatment delays. The European Society of Cardiology recommends that treatment delays should not exceed 60 minutes (ESC, 2012) while the Cardiac Society of Australia and New Zealand and the National Heart Foundation recommend delays no longer than 90 minutes (CSANZ/NHF, 2006). The report showed that achieving DBT within either of the recommended times is an area for continuing quality improvement.
- ◆ Compliance rates for achieving door-to-balloon-time (DTB) within 90 minutes is a more reflective indicator of performance than simple median door-to-balloon times. The VCOR Clinical Quality Committee set a target for hospitals to achieve DTB compliance in at least 75% of acute STEMI cases.
- ◆ Only a minority of VCOR hospitals achieved the target for DBT within 90 minutes in at least 75% of cases.
- ◆ Many health services exhibited a fall-off in performance for “out-of-hours” cases (Mon-Fri 6pm-8am & weekends).
- ◆ Ambulance pre-hospital notification (PHN) of patient arrival improves DBT performance. Hospitals without developed PHN systems prioritise development of this service to assist with timely reperfusion for STEMI.
- ◆ A number of other factors were associated with better hospital performance, irrespective of the time of day for PCI intervention for acute STEMI.

Factors associated with high-performing sites

Two hospitals (one public, one private) were interviewed to determine factors contributing to high DBT performance and compliance. Both these hospitals were able to achieve very high DBT compliance rates consistently, both during “in-hours” and “out-of-hours” (M-F 6pm-8am and weekends).

1. On-site nurse “champion” for STEMI management

- ◆ Monitors performance of STEMI treatment in real-time (case-by-case)
- ◆ Has established relationships with all stakeholders – cardiologists, cath lab and emergency departments
- ◆ Coordinates regular STEMI audits and results reviews and feedback to stakeholders – e.g. monthly or quarterly

2. Dedicated data collector

- ◆ All high-performing sites placed accurate and comprehensive data collection of performance outcomes at high priority
- ◆ Data collection tasks attributed to dedicated staff member – not necessarily the nurse “champion”. Part of regular work duties and responsibilities
- ◆ Data reviewed and presented to stakeholders at regular intervals

3. Well-developed system for pre-hospital notification with Ambulance Victoria

- ◆ Have established strong ties with Ambulance Victoria services
- ◆ Roles of team members after receipt of pre-hospital notification well-defined

4. Strong relationship between cardiology and ED

- ◆ Common interests and purpose in relation to STEMI management
- ◆ Personal relationships established over years of practice

5. Preference for direct transfer to cath lab

- ◆ Minimal delays in ED for uncomplicated cases
- ◆ Clearly defined protocol for patient pickup from arrival/ED and subsequent transfer to cath lab
- ◆ Formal documentation of protocols/ clinical pathways available

6. Cath lab on-call team within 30-minute radius of hospital

- ◆ High-performing hospitals appear to have cath lab staff mostly living within 30 min of hospital
- ◆ Some hospitals only place staff on call that can reach hospital within 30 minutes
- ◆ Some hospitals have on-site 24 hr radiography cover – minimises call-in delays

7. Patient preparation in cath lab commences with nursing and medical staff

- ◆ Prep and draping even while technologist and/or radiographer still on their way

Engaged Sites & Local Principal Investigators

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
Central Gippsland Health Service Dr Howard Connor
Epworth Hospital (Richmond & Eastern) A/Prof Ronald Dick
Frankston Hospital Dr Geoffrey Toogood
Geelong Private Hospital A/Prof John Amerena
Goulburn Valley Health Dr Tunde Ibrahim
Jessie McPherson Private Prof Ian Meredith
Knox Private Hospital Dr Michael Rowe
Latrobe Regional Hospital Dr Alistair Wright
Melbourne Private Hospital A/Prof Roderick Warren
Monash Medical Centre Prof Ian Meredith
Northeast Health (Wangaratta) Dr Robert Krones
Northern Hospital, The A/Prof William vanGaal
Royal Melbourne Hospital, The A/Prof Leeanne Grigg
St John of God (Ballarat) Dr Chris Hengel
St John of God (Bendigo) Dr Nim Nadarajah
St John of God (Geelong) Dr Martin Sebastian
St Vincent’s Hospital Melbourne A/Prof Andrew MacIsaac
St Vincent’s Private Hospital A/Prof Jack Gutman
University Hospital, Geelong Dr Chin Hiew
Valley Private Hospital, The Jodie-Ann Senior
Western Hospital (Footscray & Sunshine) Dr Nicholas Cox
Western Private Hospital Dr Deepak Haikerwal
West Gippsland Healthcare Dr Brett Forge

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