

CVD Patient Registries

– Backgrounder –

Data on large patient populations about types of therapies, interventions, treatment regimens and outcomes is invaluable in working towards a gold standard of treatment for cardiovascular disease (CVD) management.

Patient registries:

Patient registries are one of the key sources of data on CVD and collect data on patients in a **real life clinical setting**. These prospective health surveys contain important information on clinical characteristics, patient profiles, treatment, prognosis and outcomes. In particular, patient registries provide key information on:

- The current profile of the patient population, including demographics and clinical features
- Current daily treatment practices with a focus on how closely guidelines are being adhered to and the extent of evidence-based practice
- Changing patterns over the registry's follow-up period
- Variations in how patients are managed according to geography, type of physician and patient characteristics
- Factors which determine the long term prognosis for patients

Patient registries vs. clinical trials¹

Clinical trials monitor a group of people who are all of the same background / have the same patient characteristics etc. They use stringent inclusion and exclusion criteria to filter and select the patient group, which then allows for accurate comparison of a case versus control group. However for this reason, they do not adequately reflect daily clinical practice as a doctor sees patients at random so each patient is different. Patients participating in clinical trials may therefore not resemble those in the outpatient community.

Patient registries differ to clinical trials as they are databases that collect clinical data on patients with a specific disease, regardless of their background / patient characteristics etc. CVD patient registries therefore reflect the daily clinical practice and provide important databases of vital 'real world' insights into the disease and its management.

Examples of patient registries:

Two large-scale, international patient registries undertaken in the cardiovascular arena are GRACE (Global Registry of Acute Coronary Events) and REACH (Reduction of Atherothrombosis and Continued Health).

GRACE^{2,3}

Launched in 1999, GRACE is an international registry designed to track outcomes in patients presenting with acute coronary syndromes (ACS), including myocardial infarction or unstable angina. GRACE is the largest multinational registry covering the full spectrum of ACS. The aim was to enrol 10,000 patients with ACS each year.

Key objectives

The GRACE registry is tracking outcomes in an effort to improve the quality of care for patients with myocardial infarction or angina. The main goal of GRACE is to improve the medical treatment of patients with ACS through better understanding of patient demographics, management, and in-hospital and post-discharge outcomes.

Key outcomes

To date, GRACE has produced over 80 published manuscripts and in excess of 110 abstracts. For example it has yielded data on global patterns of antithrombotic and antiplatelet therapy use in patients with ACS, variations in management practices for ACS and has also led to the development of a risk model for predicting six-month mortality and heart attack-related death due to ACS.

REACH^{4,5}

REACH is one of the largest epidemiological registries to date. It aims to improve understanding of the burden of atherothrombosis (a systemic disorder affecting arteries throughout the body, including the coronary arteries) and assist in the development of better management strategies by gathering extensive data on affected patients. The REACH registry was launched in 2003 and hopes to follow-up enrolled patients for 4 years – and beyond.

Key objective

The main objective of the REACH is to provide a comprehensive picture of the impact of atherothrombotic disease at a global level.

Key outcomes

A number of publications have already stemmed from analysis of findings from the REACH registry, including data on the international prevalence, recognition and treatment of cardiovascular risk factors in outpatients with atherothrombosis, and validation of the Essen stroke risk score for predicting recurrent cardiovascular events.

References

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4. A Guide to AtheroThrombosis and the REACH Registry. Brochure for participating physicians. Available at: http://www.reachregistry.org/pdf/Physician_Guide.pdf
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