

Coronary Heart Attack Ireland Register (CHAIR) Pilot Progress Report – July 2005

CHAIR Pilot evaluation and duration

An external evaluator has evaluated the CHAIR Pilot project and a draft report has been submitted to the Department of Health and Children. At its May 2005 meeting, the National Cardiovascular Information Systems steering committee (NCIS-SC) recommended that the CHAIR Pilot continue until 31 December 2005 while the development and subsequent accreditation of databases for an integrated National Cardiovascular Information System (NCIS) continues.

The Department of Health and Children agreed to provide the funds for the CHAIR Pilot to continue until 31 December 2005. All CHAIR registration officers have now been contracted to this new date.

CHAIR Pilot Workshops

CHAIR registration officers met on Monday 7 March 2005 for the 10th CHAIR Pilot workshop. This workshop discussed:

- General CHAIR progress – general statistics.
- CHAIR External Audit – feedback on audit to date.
- CARDS and the National Cardiovascular Information System (NCIS).
- CHAIR training/courses.
- Irish Health Reform progress.
- CHAIR team proposal to the National Sudden Cardiac Death Taskforce.

CHAIR registration officers met on Tuesday 31 May 2005 for the 11th CHAIR Pilot workshop. This workshop discussed:

- General CHAIR progress – general statistics.
- Data entry sheets - storage vs disposal.
- Discussion on recording of day case transfers that are back within a few hours.
- Irish Health Reform progress.
- National Cardiovascular Information System (NCIS) progress.
- CHAIR External Audit – progress.
- CARDS ACS data fields and a plan to assess these via a ‘pilot’.
- Demographic and socio-economic data item recording.

The next CHAIR Pilot workshop is scheduled for late September 2005.

CHAIR pilot general statistics

CHAIR collects data on patients who are admitted to hospital with a confirmed or suspected acute coronary syndrome (ACS). An ACS may be either a myocardial infarction or unstable angina. Myocardial infarction (MI) is the medical term for a heart attack.

There were over 9400 CHAIR admissions to the end of April 2005

- 38% were discharged with an ACS - Male 67%, Female 33%
- 62% were discharged without an ACS - Male 62% Female 38%

CHAIR statistical data were split into ‘seasonal’ quarters (3 month periods) to discern any patterns in the data. CHAIR data collection began on 1 July 2002, with most hospitals collecting information from 1 November 2002 and all eight CHAIR hospitals collecting information from 1 May 2003.

The information for each seasonal quarter from 1 May 2003 shows CHAIR numbers to be fairly consistent at around 900 admissions per quarter (with a range from 845 to 981).

Patients discharged with an ACS ranged from 37% to 44% of CHAIR admissions in each of the quarters from 1 May 2003.

Non-ACS discharges ranged from 56% to 63% with the greater majority of these being discharged with ‘Non Cardiac Chest Pain’.

To the end of April 2005 there were 2493 CHAIR admissions discharged with Non Cardiac Chest Pain - 55% were male (mean age 56) and 45% were female (mean age 61).

The quarterly data also showed a consistency of the mean (average) ages of all CHAIR admissions and all confirmed ACS discharges in each quarter from 1 May 2003. This is shown in the table below.

	Male Mean Age	Range of quarterly Male mean ages	Female Mean Age	Range of quarterly Female mean ages
All CHAIR admissions	62	61 to 64	67	65 to 69
All confirmed ACS discharges	66	65 to 68	72	71 to 74

National Cardiovascular Information System (NCIS)

The future of CHAIR is linked with the development of the NCIS and in particular the NCIS Acute Coronary Syndromes / Coronary Care Unit (CCU) module.

NCIS modules in development are:

- *Acute Coronary Syndromes (ACS) / Coronary Care Unit (CCU)* – patients with acute myocardial infarction and unstable angina.
- Percutaneous Coronary Intervention (PCI) – patients who have treatment to relieve narrowed coronary arteries and usually involving coronary angioplasty and the implantation of a coronary stent.
- Cardiac Surgery – includes patients undergoing coronary artery bypass graft (CABG) surgery, cardiac valve surgery, surgery for congenital defects, and miscellaneous acquired cardiac conditions.
- Electrophysiology (EP) – patients undergoing ablation treatment for irregular cardiac rhythms, patients fitted with cardiac pacemakers, and patients fitted with an implantable cardioverter defibrillator (ICD).
- Heart failure – patients with heart failure.
- Cardiac Rehabilitation – patients entered in rehabilitation programmes, referred from many of the groups listed above.
- Paediatric Cardiology – this module will provide information on children, mainly with congenital heart defects.
- Paediatric Cardiac Surgery – this module will provide information on operations carried out mainly for congenital heart defects.

The EU CARDS project in 2004 agreed on data standards for acute coronary syndromes / coronary care units (ACS/CCU), percutaneous coronary interventions (PCI) and electrophysiology procedures (ablation, pacemakers and implantable cardioverter defibrillators). National data standards for Cardiac Rehabilitation were developed in the Health Services Research Centre of the Royal College of Surgeons of Ireland. The data standards for cardiac rehabilitation were checked for compatibility with general CARDS standards, and have been formally adopted by the Irish Association of Cardiac Rehabilitation and published as ‘Cardiac Rehabilitation Information System’ (CRIS). CRIS is also recognised by the European Society of Cardiology Working Group On Cardiac Rehabilitation and Secondary Prevention.

Piloting of CARDS ACS/CCU data collection

An Irish CARDS ACS/CCU dataset is to be developed separately from CHAIR. Although CHAIR and CARDS ACS/CCU collect similar information there are some details that CARDS ACS/CCU is required to collect that CHAIR does not collect (and vice versa).

To assist in the eventual introduction of an Irish CARDS ACS/CCU dataset the CHAIR Pilot Project team prepared a data collection form with the extra CARDS ACS/CCU data items. Example of the extra items are: more detailed history of cardiac-related illnesses; admission and in-hospital medications; details of ‘working’ diagnosis; more detailed investigation and treatment fields; and more detailed outcomes fields. The team then began a data collection exercise (on paper only) in late June and continuing throughout July on the extra items found in the CARDS ACS/CCU dataset.

Early feedback suggests that most of the extra CARDS ACS/CCU information can be found in the patient medical record. A report will be prepared for the NCIS Steering Committee in August.

Piloting of new demographic and socio-economic items data collection

The National Anti-Poverty Strategy (NAPS) and NCIS formed a working group to help develop demographic and socio-economic data standards for health information systems in order to measure and promote equity of access to acute medical care and appropriate follow up in the community. The NAPS/NCIS working group is conducting a pilot study using three cardiovascular information systems – CHAIR, CRIS and Heartwatch.

CHAIR already collects many demographic and socio-economic data items but the NAPS/NCIS working group study requires collection of more items and also a standard procedure for collection (across all cardiovascular information systems). A few members of the CHAIR Pilot Project team are pre-testing these data items on a small group of patients. In September the data items will be fully tested in a pilot in all CHAIR hospitals and the results will be reported to the NAPS/NCIS working group.

Future CHAIR pilot project work

As well as the ongoing monitoring of the project and development of the software and reports, there are a number of project tasks to complete. These are to:

- arrange and conduct further CHAIR workshops (next workshop – September 2005);
- continue analysis of the CHAIR pilot data and publish some information;
- ensure that all relevant hospitals are operating with a patient administration system (PAS) interface to CHAIR;
- pilot CARDS ACS data collection;
- pilot new demographic and socio-economic data item collection;
- complete a further targeted internal audit and evaluation of the CHAIR pilot;
- complete a further outcomes follow up on discharged patients; and
- produce a CHAIR pilot project report.

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Note: This progress report, past progress reports and other CHAIR information are available on the Irish Heart Foundation website - www.irishheart.ie – in the ‘professional’ information section.