About this Release

This publication relates to cardiac rehabilitation referrals by NHS Board for initiating cardiac events in the 6 months between April and September 2010.

Cardiac rehabilitation referral rates have been estimated by matching anonymised aggregated data from 2 separate sources – cardiac rehabilitation audit data and Scottish Morbidity Records (SMR01). As such, there are inevitably issues of data completeness, data quality and comparability and all results presented should be treated with caution. In particular, the referral rates may exceed 100% due to:

1. Differences in classifying heart attack patients may include more patients in the cardiac rehabilitation audit and inflate the numerator.
2. Small differences in the time period covered mean the SMR01 number and cardiac audit patient cohorts may be slightly different.
3. Differences in classifying patients by initial event between the two data sources – SMR01 linked data has information on prior events which may not be available to cardiac rehabilitation staff.

Differences between NHS Board areas may reflect local differences in provision of services and pathways. The aim of these data is to allow Boards information on which to review their services. Note that for Island Boards, percentage calculations may be based on low numbers of patients.

Key Points

- Across Scotland, an estimated 70% of patients having an initiating event of either myocardial infarction (MI), coronary artery bypass graft (CABG) or percutaneous coronary intervention (PCI) were referred for cardiac rehabilitation. This includes 89% of patients undergoing CABG, 79% of heart attack patients and 23% of patients undergoing PCI procedures.

- Patients have been allocated to a single initiating event within a hierarchical order: MI, CABG, PCI, valve surgery, heart failure, unstable angina then other events. For
example, a patient undergoing PCI after admission to hospital with a heart attack would be allocated to MI as the initiating event. This may contribute to the apparent low percentage of patients undergoing PCI reported to have been referred for cardiac rehabilitation. Audit data shows that at least 39% of patients with a non-ST elevated MI (NSTEMI) initiating event also had a linked PCI intervention.

- Referral to cardiac rehabilitation after any MI/CABG/PCI initiating event reached 100% in NHS Ayrshire & Arran and NHS Dumfries & Galloway health board areas, but under 50% in NHS Grampian (41%) and NHS Highland (45%).

Estimated percentage receiving cardiac rehabilitation referral having had a spell of care in hospital involving acute myocardial infarction, coronary artery bypass graft or percutaneous coronary intervention by NHS Board

April to September 2010

Note: Referral rates have been calculated from separate sources of numerator and denominator data and may exceed 100% due to differences in data completeness, data quality and classification of patients by type of initiating event.

- Previously reported figures for Scotland from the 2008 National Audit of Cardiac Rehabilitation showed percentage uptake for Scotland in 2006/07 were MI 52%, CABG 74%, PCI 11% and combined MI/CABG/PCI 45%. Although not directly comparable because of methodological differences in calculations, the latest figures are reasonably robust to indicate an increase in referral in 2010 compared to 2006.

- 65% of patients in Scotland who were referred and assessed for cardiac rehabilitation after MI or revascularisation (CABG or PCI) completed the audited phase(s) of the programme. This was highest in Tayside (80%) and lowest in Shetland (36%).
Background

The Scottish Government in their “Our Better Heart Disease and Stroke Care Action Plan” (June 2009) recognised the clinical and cost effectiveness of cardiac rehabilitation and also emphasised the importance of ensuring that people living with heart disease, who could benefit from cardiac rehabilitation, can gain access.

The source data are routine audit of cardiac rehabilitation referrals captured on a continual basis by NHS Healthcare Improvement Scotland, and then ISD, since April 2010. Eligible numbers for cardiac rehabilitation have been estimated from routine national hospital episode records (SMR01).

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Further Information

Further information can be found in the full report on the ISD website.

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up. Information Services Division (ISD) is a business operating unit of NHS National Services Scotland - and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government Health Department and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves. www.isdscotland.org/