



Managed Clinical Network for Coronary Heart Disease



**ANNUAL REPORT
2010 - 2011**

**Managed Clinical Network
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Introduction

This is the annual report for NHS Dumfries and Galloway Managed Clinical Network for Coronary Heart disease covering the period April 2010 to March 2011.

This last year has seen the introduction of new guidelines and blood tests to help with the diagnosis of acute coronary syndromes, the introduction of a stress echo service and the challenges of addressing recruitment and retention issues throughout the cardiology service

Staff from NHS Dumfries and Galloway have been heavily involved with the development of Clinical Standards – Heart Disease for NHS Quality Improvement Scotland , then participating in the self-assessment and panel review process.

This work in conjunction with the Better Heart Disease and Stroke Care Action Plan has formed the basis of the work for the year for the Managed Clinical Network for Coronary Heart Disease.

People

Managed Clinical Network for Coronary Heart Disease

The membership and structure of the MCN for CHD has remained unchanged for the year April 2010 – March 2011 (Appendix 1 and 2)

Medical Staff

The consultant cardiologists have been supported in their role by locum cardiologists during the year and the position of a third cardiologist has been approved. Due to a recent resignation, 2 WTE vacant positions have been advertised.

Physiology Staff

Locum cardiac physiologists continue to support the cardiac physiology department service on an ad hoc basis. There has been additional training and support of team members with a review and planning process underway. Currently there is 1 WTE vacancy advertised.

Cardiac Rehabilitation/Cardiology Nurse Specialist

Recent staff changes within the Cardiac Rehabilitation Service has seen the development of a combined post with the Cardiology Nurse Specialists. This new developed post will help to ensure continuity for both services during periods of planned or unplanned leave.

Public Involvement Group

The members of the Public Involvement Group participated in the Hearty Voices Training programme provided jointly by the British Heart Foundation and Chest Heart and Stroke Scotland. By participating in this training programme, it has further developed the members' skills to be able to interact more confidently with the MCN for CHD as well as other areas of the NHS.

Services

Optimal Reperfusion Services (ORS)

The Optimal Reperfusion Service (ORS) has now been established for two years and has seen an increase in the number of patients with ST elevation myocardial infarction (STEMI) receiving pre-hospital thrombolysis with direct transfer to Golden Jubilee National Hospital for assessment for percutaneous coronary intervention (PCI)

During the period 1st January 2010 to 31st December 2010

I

	Dumfries & Galloway Royal Infirmary (DGRI)	Galloway Community Hospital (GCH)	TOTAL
STEMI	90	15	105
DEATHS	5	2	7

Thrombolysis

Dumfries & Galloway Royal Infirmary:

70% (63) patients were thrombolysed

The pre-hospital thrombolysis rate for the whole year equates to 46% (29 patients).

This has shown a consistent increase in patients treated by the Scottish Ambulance Services (SAS) and this trend continues as seen in SCI CHD run charts. (Appendix 3)

The main change within DGRI has been that the place of thrombolysis has very definitely moved to the Emergency Department (ED), with 40% (26 patients) being thrombolysed in ED and only 14% (9 patients) being thrombolysed in Ward 8.

As the pre-hospital thrombolysis service becomes more established, the previous door to needle target of 50% of patients being thrombolysed within 30 minutes of arriving at hospital is becoming less relevant as more of the patients being transferred to DGRI are the complex cases requiring further medical/clinical judgment. However, over the year 50% (13 patients) thrombolysed in ED were done so within 30 minutes.

26 patients were not thrombolysed.

The main reason for this cited as being either late presentation (>12 hours chest pain), or having contraindications to thrombolysis or due to a clinical decision.

Galloway Community Hospital:

9 patients were thrombolysed – 8 at GCH and 1 pre hospital thrombolysis.

Door to needle times were not well documented but the three documented times were <30 minutes from arrival at hospital.

6 patients were not thrombolysed.

The main reasons cited being uncertain initial diagnosis or contraindications.

Outcomes

Transfers to Golden Jubilee National Hospital

From DGRI (including direct SAS transfers):

8 patients were transferred but did not receive PCI (medical management only)

68 patients were transferred and received PCI

8 patients were not transferred due to clinical decision

From GCH (including direct SAS transfers):

8 patients transferred and received PCI

1 patient transferred for coronary artery by-pass surgery (CABG)

3 transferred (medical management)

1 transferred to DGRI

This year has seen a consolidation of the ORS in NHS Dumfries and Galloway. There have been individual issues highlighted to the Regional ORS Group particularly relating to the decision for helicopter transfers. The Managed Clinical Network for Coronary Heart Disease maintains regular contact with SAS colleagues and provides feedback and local reports.

Rapid Access Chest Pain Service (RACPS)

The established Rapid Access Chest Pain Service (RACPS) complies with the current waiting times target of 14 days from referral. The new NHS Healthcare Improvement Scotland (HIS) clinical Standards for Coronary Heart Disease recommends a waiting time of 5 days from referral. This new standard is particularly challenging to achieve and review work is ongoing.

From April 2010 – March 2011

234 patients were referred to the RACPS.

112 (48%) were seen within 1 week

82 (35%) were seen at 1 – 2 weeks

40 (17%) were seen after 2 weeks

Coronary Angiography

Patients who require coronary angiography are referred to the service either as in patients or from out patient clinics. The current target time for elective coronary angiography is approximately 4 weeks from referral which has been achieved over the year.

In the period April 2010 – March 2011 there have been 296 coronary angiography procedures performed.

Exercise Tolerance Test

An exercise tolerance test (ETT) or treadmill test is a non invasive test to assess any symptoms patients may experience during exercise. Most of these tests are carried out by nurse specialists and cardiac physiologists.

From April 2010 – March 2011 there were 958 nurse led tests completed.

Ward 8 – Medical high Dependency Unit/CCU

Ward 8 is an eight-bedded unit managing the care of acutely ill medical patients and acute and unstable cardiac patients. There is no specific division of beds per specialty.

The acute cardiac patients are mainly patients with unstable acute coronary syndrome (ACIS) or life threatening cardiac arrhythmias. The unstable ACIS patients can require urgent transfer to the Golden Jubilee National Hospital (GJNH) for specialist care. There are approximately three such transfers per month, which require a nurse escort.

The patients with life threatening arrhythmias, which can be either bradycardia (slow heart rate) or tachycardia (fast heart rate), require immediate specialist treatment within the unit.

All patients are monitored continuously plus there is the additional telemetry facility available to continuously monitor up to ten other patients throughout DGRI. This is also managed within the unit. The average of telemetry per month is 100.

Senior nurses from the unit are also team leaders in the Cardiac Arrest Team (Adult Resuscitation Team) and provide this service throughout DGRI. (Appendix 4)

Community Holter

The Community Holter service is available throughout the region being sited at Galloway Community Hospital, Newton Stewart Health Centre, Kirkcudbright hospital, Annan Hospital and Sanquhar health centre. This service allows patients to have the 24 hour ECG monitor fitted and removed within their own locality reducing the need to travel to Dumfries.

Cardioversion service

The cardioversion service is available at DGRI for patients requiring treatment for the irregular heart rhythm known as atrial fibrillation. The waiting time for this procedure is variable depending on the individual patient treatment plan. From April 2010 – March 2011, 72 patients have been referred for elective cardioversion treatment.

Stress Echo Cardiography Service

The Stress Echo Cardiography service was introduced to NHS Dumfries & Galloway during this last year. This service was led by Dr Kajzr and supported by the locum cardiologist. April 2010 to March 2011, 100 stress echoes were carried out.

This new service helps to assess the response of the heart to detect any effects of CHD, valve disease or problems with the pumping action of the heart. The introduction of this service has reduced the number of patients being referred to Glasgow for radionuclide scans. However, with the changes to personnel this service is currently at risk.

Telemonitoring

A trial of telemonitoring has been developed in the heart failure nursing service. Ten telemonitoring units, which can record blood pressure and weight and allow heart failure patients to answer specific questions relating to their current health status, have been rented via a Service Level Agreement for 1 year.

The aim of the trial is two-fold:

- To see if by monitoring trends it is possible to identify early changes in condition which can be controlled by altering treatment and avoiding hospital admission
- To see if remote monitoring can release some time for the heart failure nurses to support an in-hospital service at D G R I and dedicated heart failure clinics.

To date, 11 patients have been remotely monitored. The patients check BP and weight daily and this is transmitted electronically to the heart failure nurses' base where they review the data and trends. An interim report indicates an increased number of patient contacts via phone for the monitored patients without reduction of face to face contact. Patient feedback is positive. The trial still has 6 months to run, so it is not possible to say at this point if hospital admission rates have been reduced or changed.

Heart Failure Specialist Nursing Service

This last year has seen further developments within the heart failure nursing service, not just the introduction of the telemonitoring project but also the participation in the clinical standards review process and the introduction of the Scottish Patient Safety Programme Heart Failure Care Bundle. Referrals into the service are shown in Appendix 5.

Within this last year the 0.5WTE secondment to the British Heart Foundation has been completed with the seconded nurse returning to her substantive post. This returns the service to 2 WTE nurses (during the secondment, backfill was supported by 2 part time posts – one based at Galloway Community Hospital and one at Cluden Unit.

Scottish Patient Safety Programme (SPSP)

The heart failure service has supported the national initiative to introduce heart failure care bundles into the acute service. The heart failure bundle has been developed nationally but with each health board being able to produce their own version which fits in with local needs. The bundle helps ensure that heart failure patients have the investigations required, are referred to the consultant cardiologist for expert review, are prescribed evidence based medications and have been referred to the Heart failure nursing service.

The heart failure nurses, using improvement methodology have introduced care bundles within D G R I and although the bundle works well within the cardiology service, the challenge now is to ensure that all heart failure patients within DGRI have a bundle of care introduced. The final strand of the project is to see the introduction of the bundle to Galloway Community Hospital.

A monthly report of the Heart Failure Bundle is uploaded to the Scottish Patient Safety Programme (SPSP) web site which allows regular measurement and benchmarking of the process to happen.

From August 2010 to the end of March 2011 33 patients have full compliance with the heart failure care bundle.

Heart Failure Support Group (Gaun Yersel')

A local Gaun Yersel' Group / Heart Failure Support Group has been introduced. Funding was obtained from the Long Term Conditions Alliance Scotland (LTCAS) to support the development of the group. The group meets weekly in Cluden Cardiac Unit and has a programme of social outings and regular speakers arranged.

Cardiac Rehabilitation Service

Personnel changes within Cardiac rehabilitation has allowed the development of 1 WTE post to allow cross cover to be available between cardiac rehabilitation service and cardiology nurse specialist service.

The cardiac rehabilitation service has continued to maintain a supportive service for cardiac patients through their journey of care. This year has seen the consolidation of the Optimal Reperfusion Service (ORS) with STEMI patients having a reduced length of stay (LOS) in DGRI or GCH. The cardiac rehabilitation service has had to ensure that the service manages this by delivering a more condensed service during Phase 1 (hospital admission) with follow up if required by home visits immediately after discharge. It was anticipated that the number of home visits would increase with the introduction of ORS however to date this has not been the case.

The service is participating in the NHS HIS national cardiac rehabilitation audit. This audit will run to March 2012 and the aim is to be able to produce national base-line data about the service.

The recent National Acute Coronary Syndrome Audit reported that 94.6% of patients admitted to DGRI and GCH with a diagnosis of acute coronary syndrome were referred to the cardiac rehabilitation service.

The National Cardiac Rehabilitation Audit data reported that 96.1% of all patients referred to the cardiac rehabilitation service are assessed for a menu based programme according to their needs. (Appendix 5)

Quality

NHS QIS (HIS) Clinical Standards for Heart Disease

Following the launch of the NHS QIS Clinical Standards for Heart Disease in April 2010, members of the MCN for CHD have participated in various sub-groups, audit groups and panel review groups to assess the current position of all Health Boards in Scotland against the Standards. Local and national reports will be available by July 2011.

NHS QIS Audits

During the summer of 2010 a second round of audit was undertaken in primary care with measurement relating to the management of atrial fibrillation, heart failure management and secondary prevention.

The audit was carried out in four volunteering surgeries and actually took place during the change over period to EMIS, so this posed some additional technical difficulties.

The audit data have been circulated to participating surgeries and are available from the MCN office.

Better Heart Disease & Stroke Care Action Plan

The Action Plan derived from Better Heart Disease has formed the basis of the MCN work plan for the year. The recently appointed CHD Action Plan Co-ordinator held a national workshop for CHD MCNs and ten top priorities were identified to be targeted. This will be further discussed by the National Advisory Committee for Heart Disease.

Risk Register

The risk register for coronary heart disease and is reviewed by the MCN for CHD at each Cardiac Services Group meeting.

Quality Assurance Programme

The MCN for CHD continues to work within the criteria set by NHS QIS for the MCN Quality Assurance Programme. A recent local review of MCNs has been started by NHS Dumfries & Galloway with a final report and recommendations expected in August 2011.

West of Scotland Regional Planning Group

The MCN for CHD participates in West of Scotland regional planning processes for the development of new services and technologies to ensure that the needs of rural cardiac patients are taken into consideration during the planning stages.

MCN Website

The website for CHD MCN is <http://www.nhsdg.scot.nhs.uk/dumfries/252.html> and is updated with regular stories or news items of interest.

Comments

One of the main challenges of last year and indeed this next year lies around recruitment and retention. The new appointment of 2 WTE Consultant Cardiologists is crucial not only for the current service but to allow the local service to further develop for the benefits of patients in NHS Dumfries & Galloway.

The implementation of recommendations from the clinical standards report will help ensure continuous monitoring of cardiac services and provide valuable learning points for future training and development.

The Year Ahead

- Develop Rapid Access Atrial Fibrillation Clinic
- Develop Heart Failure Clinic
- Review results of telemonitoring project with view to future
- Support devolved ICD follow-up clinics

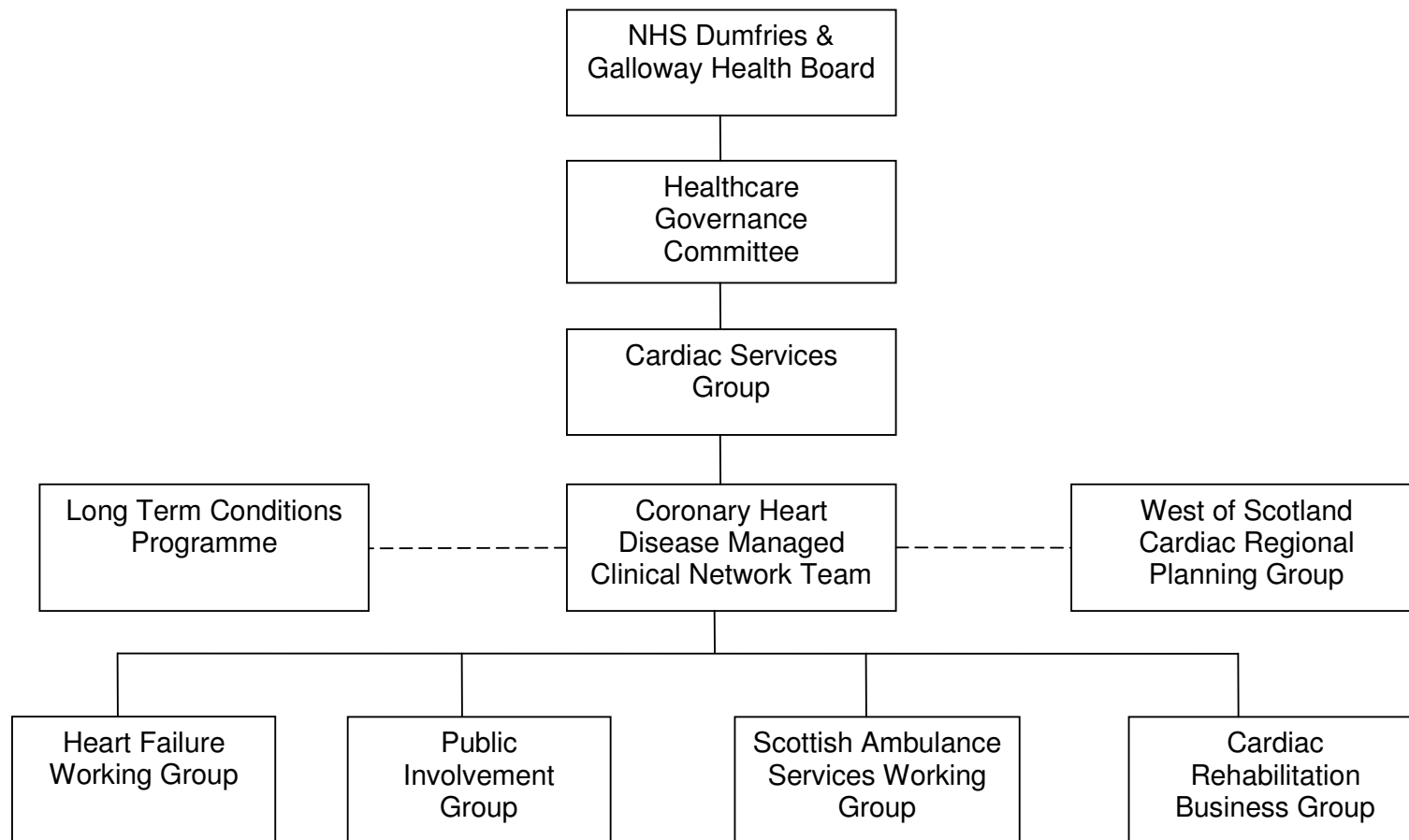
Coronary Heart Disease Managed Clinical Network Management Team Membership

Name	Designation
Mairi Dunn	Performance Manager for NHS Dumfries & Galloway
Elaine Kearney	Head of Cardiac Physiology
Dr John Locke	LHP Lead GP (Joint Lead Clinician)
Linda Lockhart	Cardiology Nurse Manager (Joint Lead Clinician)
Marian McDonald	Critical Care Nurse Manager
David Potter (Chair)	MCN Manager for Heart and Stroke Networks
Jim Stuart	Patient/Public Representative
Dr Graeme Tait	Consultant Cardiologist (Joint Lead Clinician)
Julie White	General Manager – Diagnostics
Ashley Webster	Network Administrator

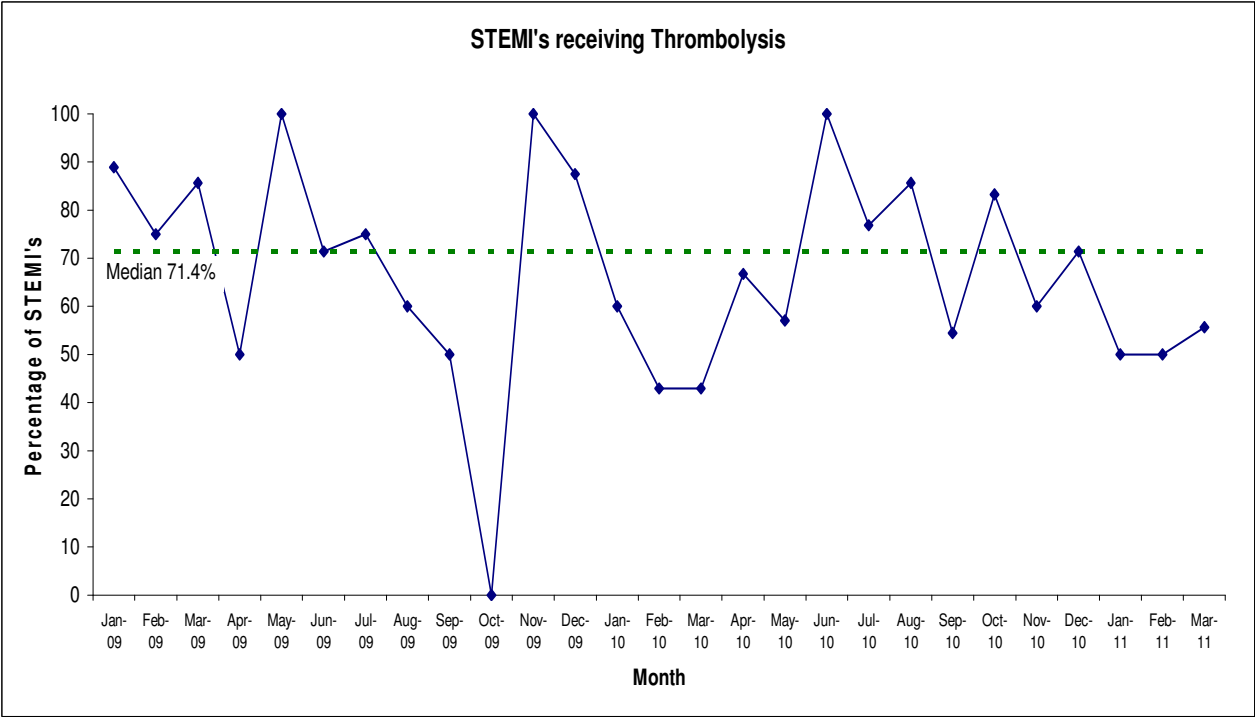
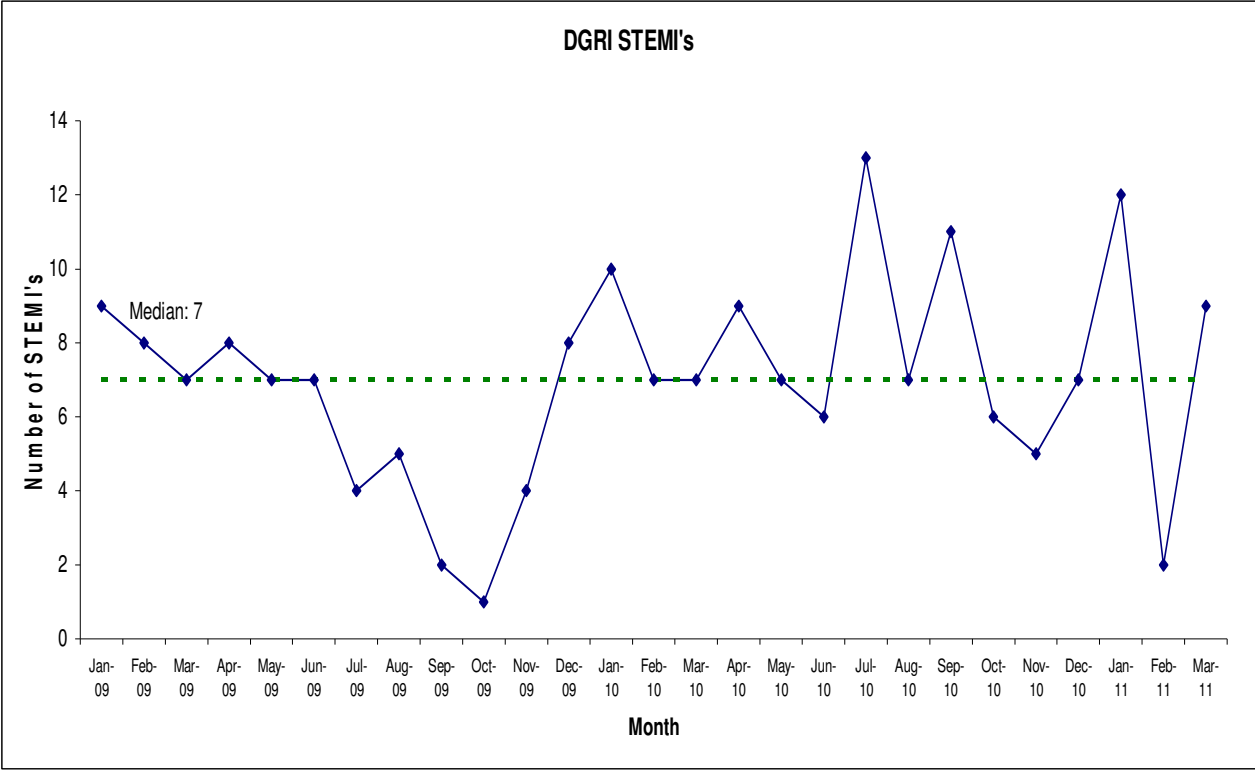
Cardiac Services Group Membership

Mrs Alison Burns	General Manager, Primary Care & Community Directorate (West)
Dr Angus Cameron	Medical Director
Dr Andrew Carnon	Public Health Consultant
Ms Mairi Dunn	Performance Manager for NHS Dumfries & Galloway
Mrs Julie White	General Manager, Diagnostics
Dr Mary Harper	Health Plan Co-ordinator
Mrs Marian McDonald	Critical Care Nurse Manager
Mr Jim Stuart	Patient/Public Representative
Dr Graeme Tait	Consultant Cardiologist
Mrs Linda Lockhart	Cardiology Nurse Manager (Joint Lead Clinician)
Mr David Potter	General Manager, Primary Care & Community Directorate (West)/ MCN Manager for Heart and Stroke Networks
Dr John Locke	LHP Lead GP (Joint Lead Clinician)
Mr John Knox	General Manager
Miss Nicole Connell	Assistant General Manager
Mr Ron Lilly	Clinical Governance Manager

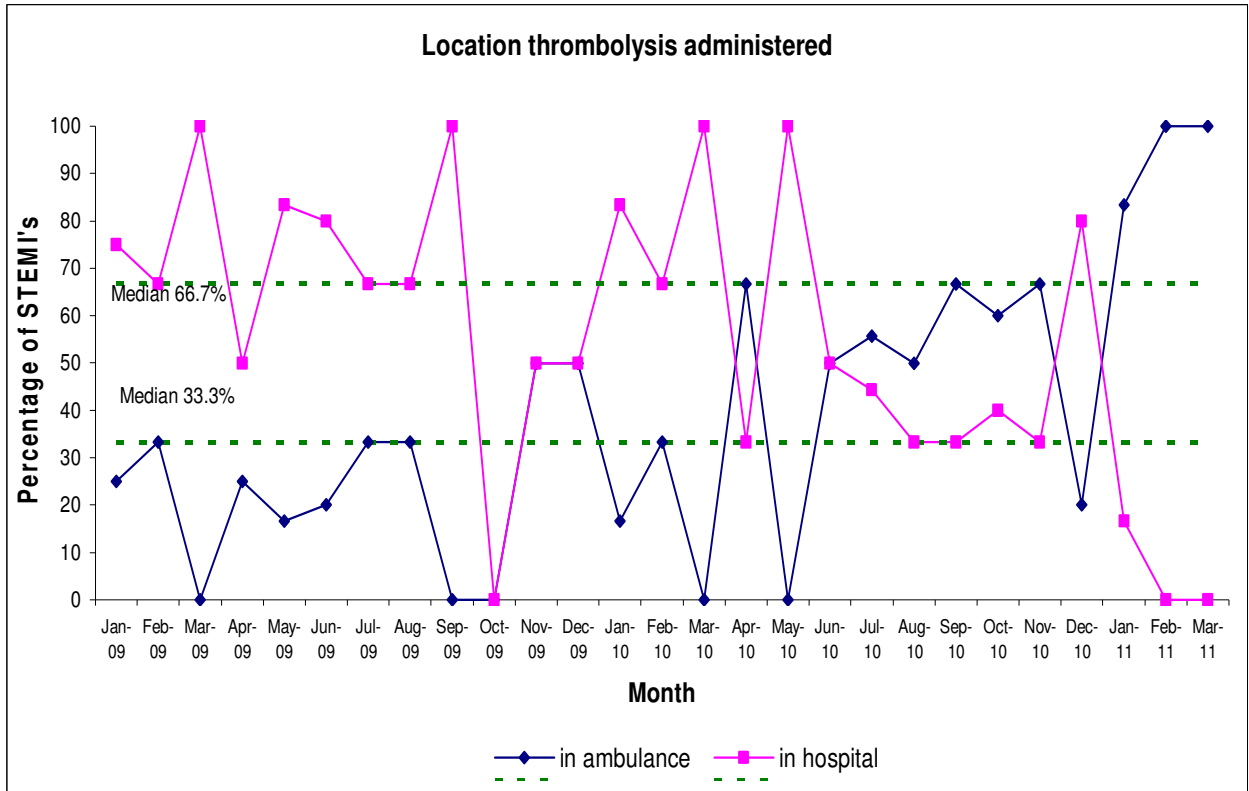
Organisation Chart

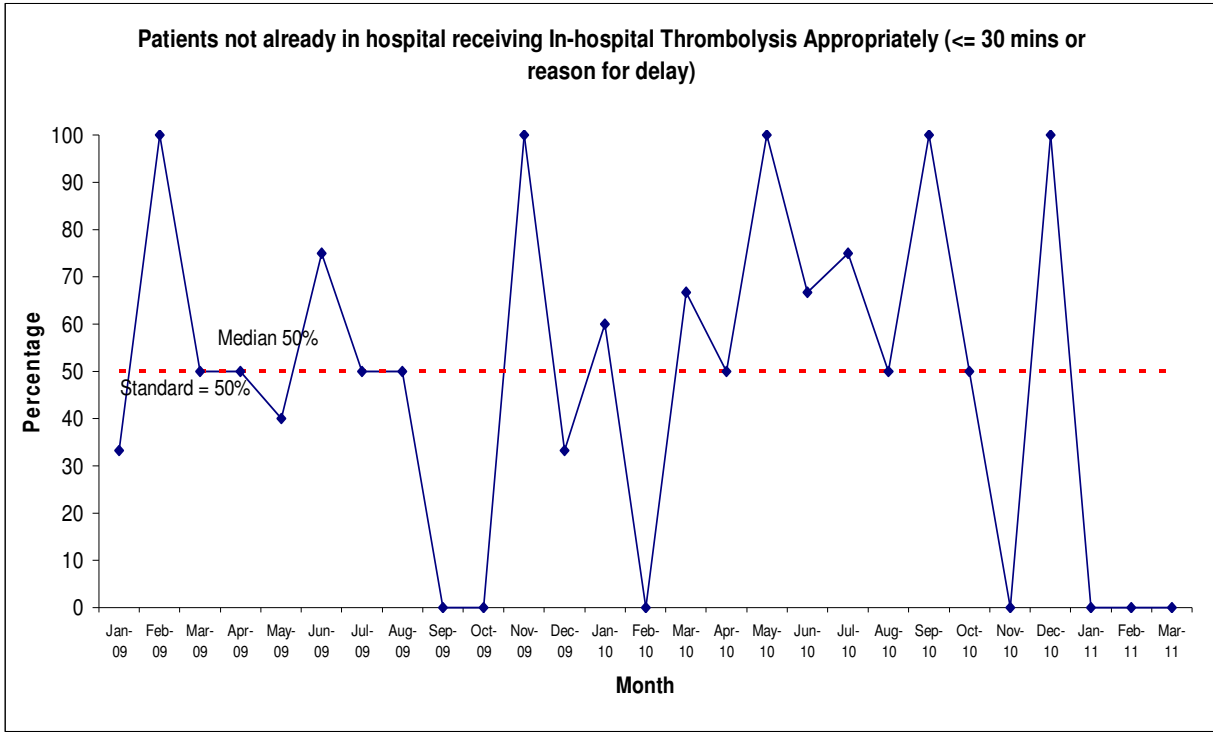


SCI-CHD Run Charts
Dumfries & Galloway Royal Infirmary

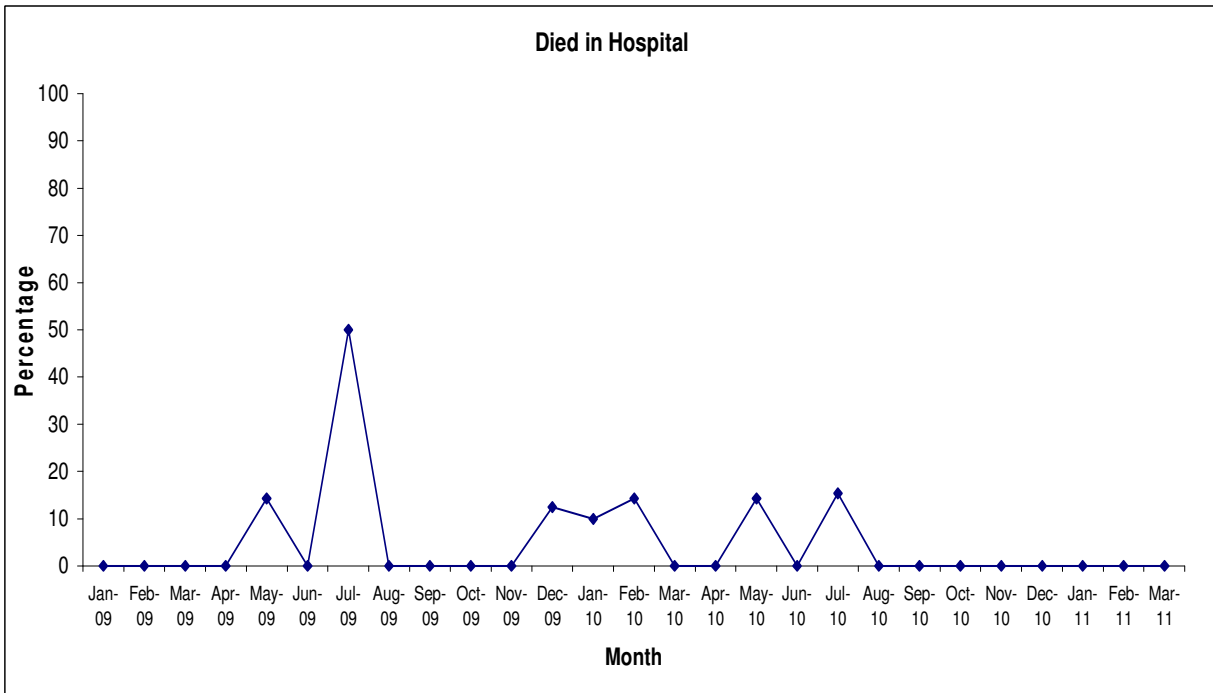


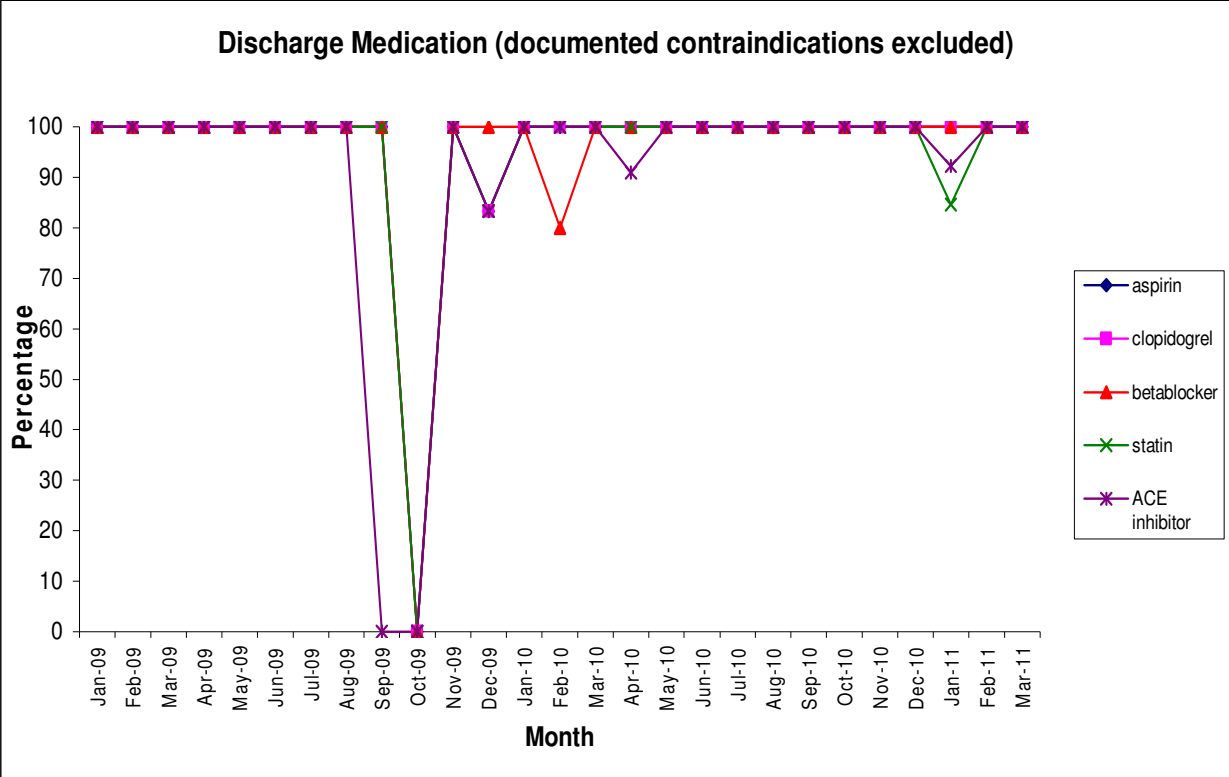
SCI-CHD Run Charts
Dumfries & Galloway Royal Infirmary



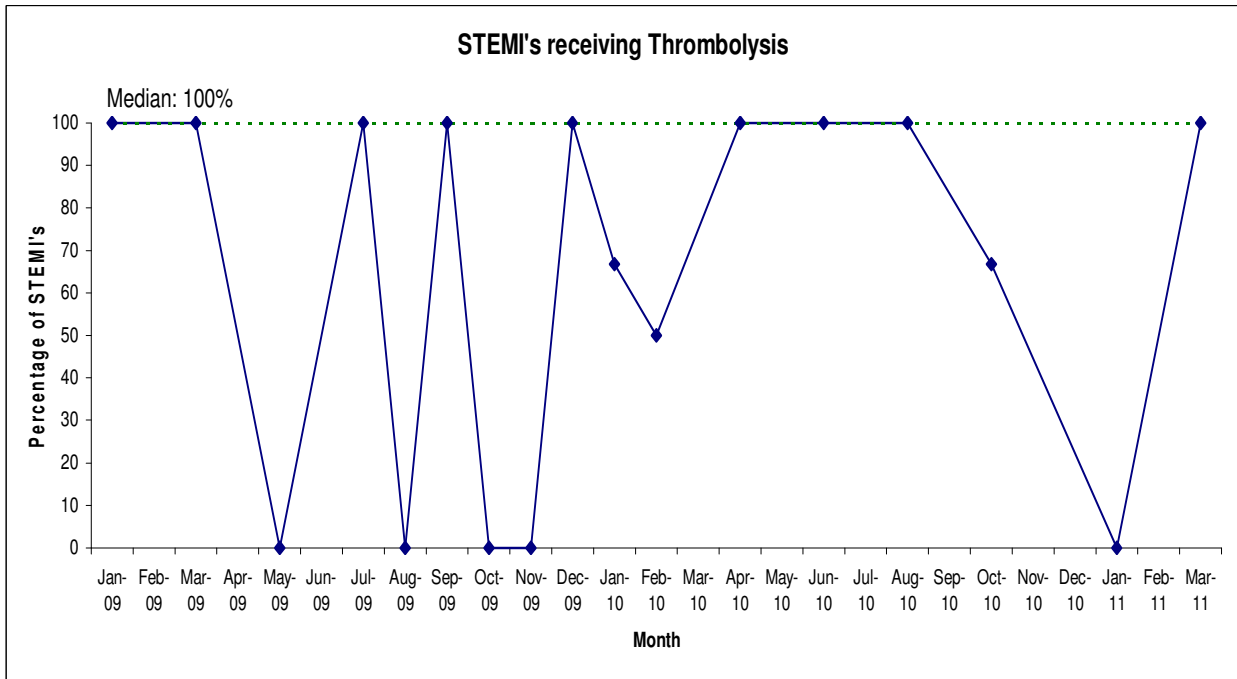
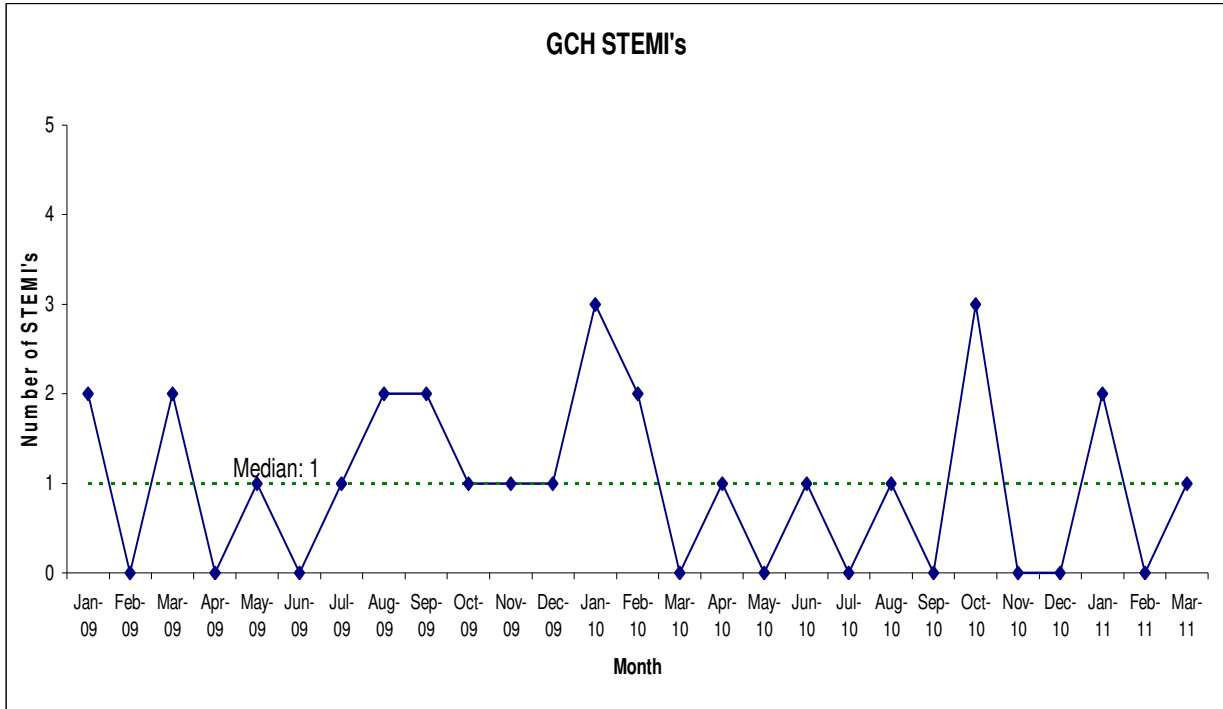


SCI-CHD Run Charts
Dumfries & Galloway Royal Infirmary

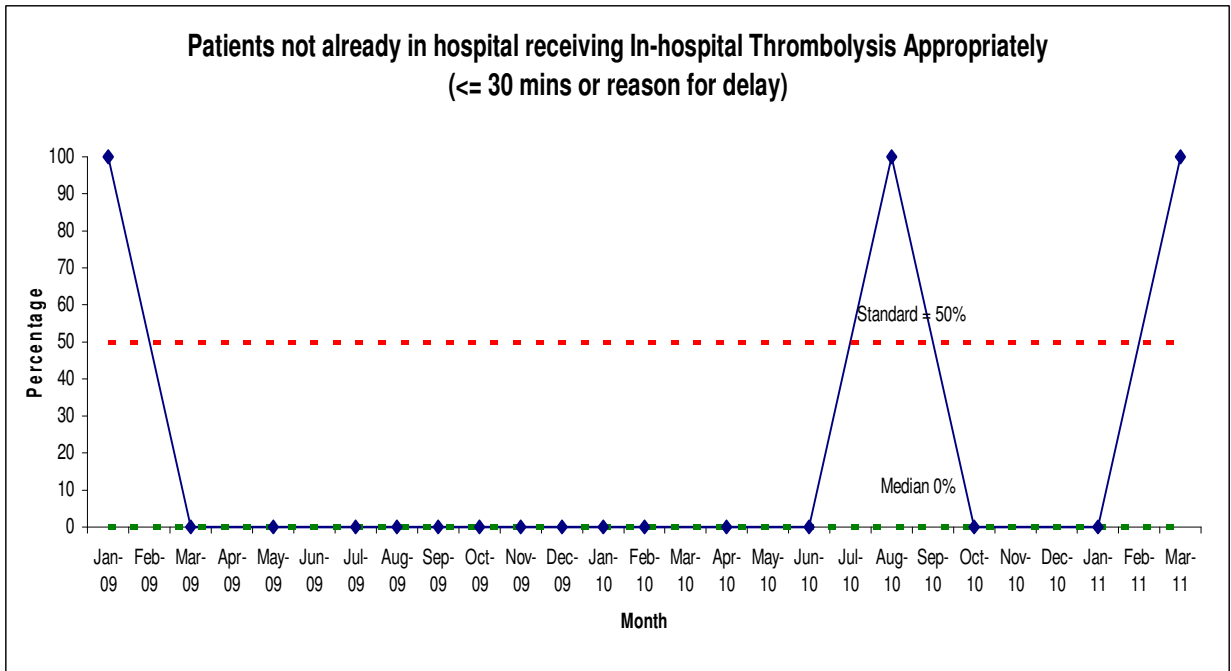
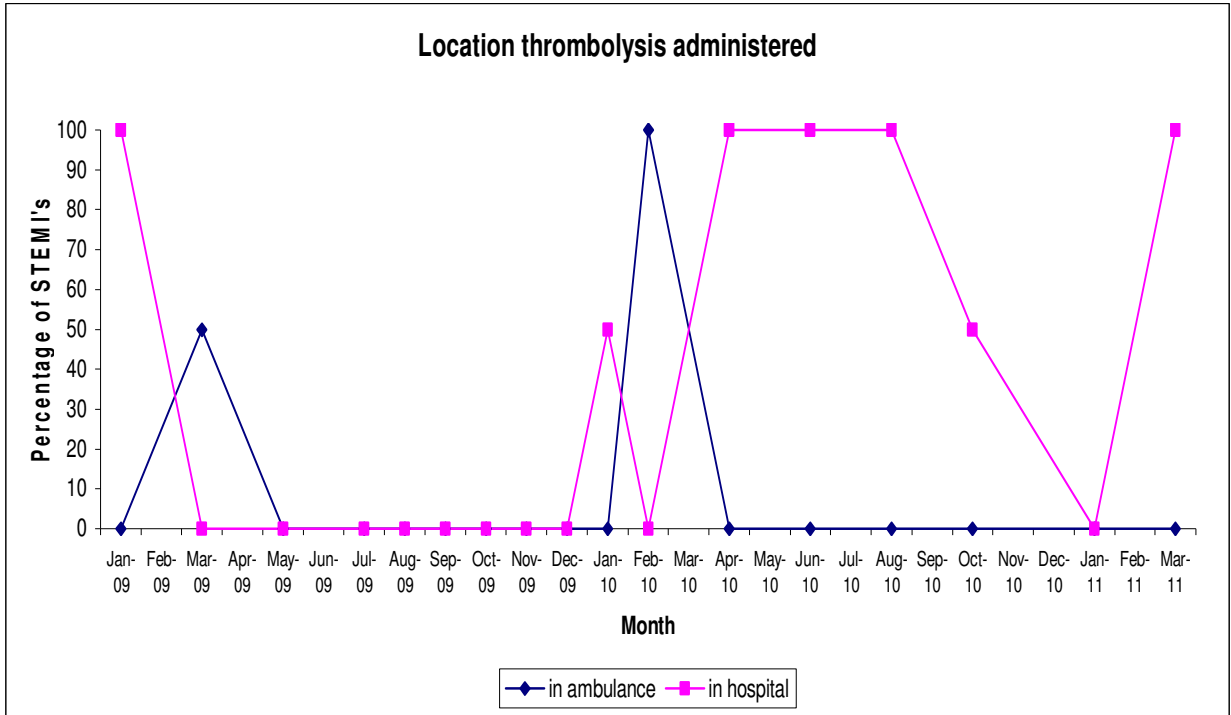




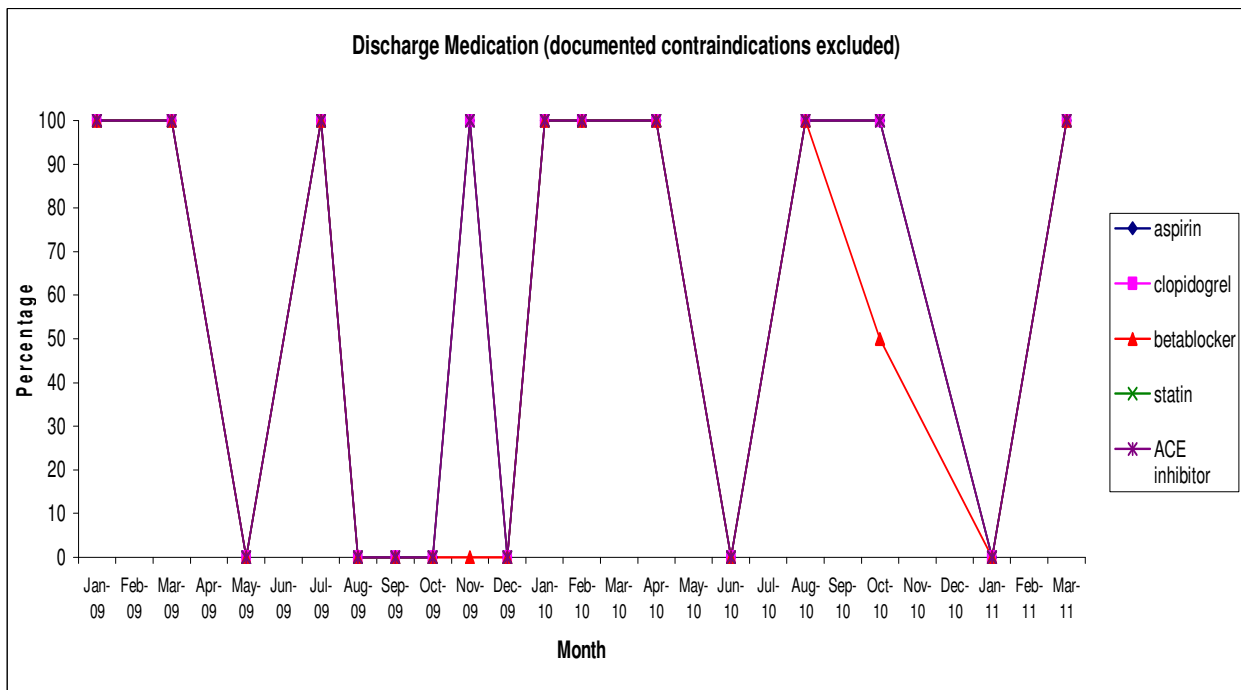
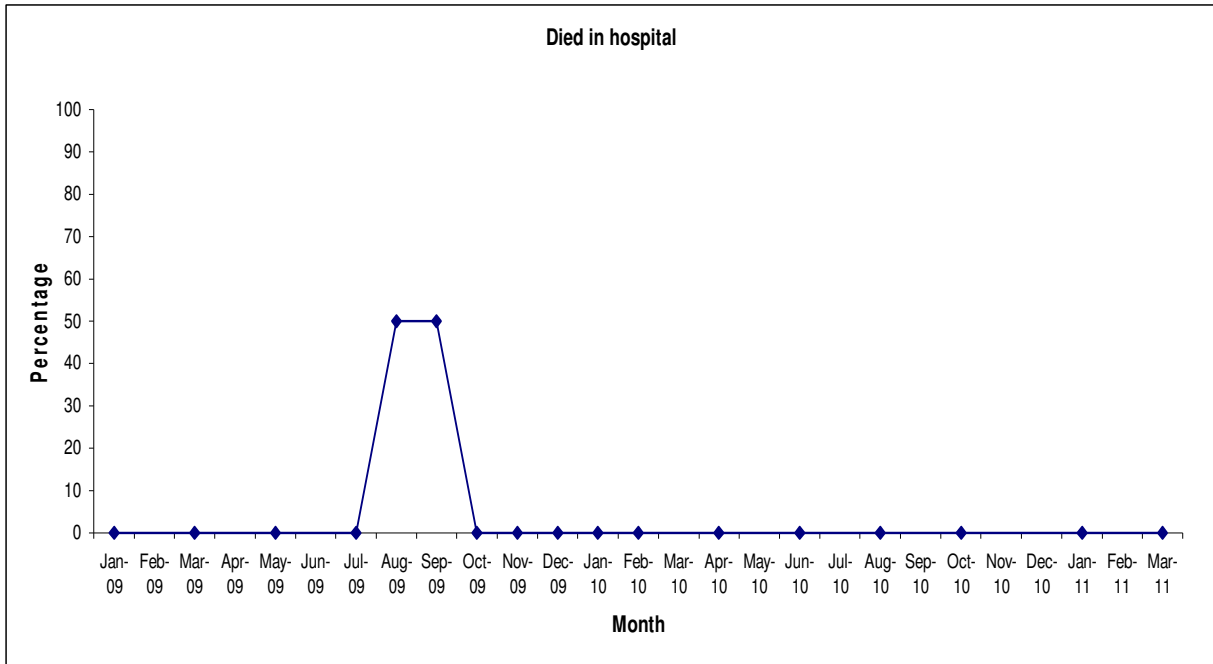
SCI-CHD Run Charts
Galloway Community Hospital



SCI-CHD Run Charts
Galloway Community Hospital



SCI-CHD Run Charts
Galloway Community Hospital



Confirmed Cardiac Arrest Calls
April 2010 - March 2011

2010	Confirmed Cardiac arrest
Apr	5
May	20
June	6
July	9
August	7
September	6
October	5
November	6
December	5
2011	Confirmed Cardiac arrest
January	4
February	2
March	2

Heart Failure Nurse Specialist Service

1st April 2010 to 31st March 2011

Referrals	100
Readmission to heart failure service	7
Discharged from service	83
Deaths	11
Referrals to palliative care	4
Referral to cardiac physiotherapist for exercise assessment	32

NB discharges, deaths and palliative care referrals are from the total service case load NOT just the new referrals

Cardiac Rehabilitation Referrals1ST January 2010 – 31ST December 2010

CONDITION	TOTAL
STEMI	115
NSTEMI	148
ACIS	16
CABG	38
CABG + VALVE SURGERY	9
VALVE REPLACEMENT SURGERY	35
ELECTIVE PCI	33
OTHER	14
TOTAL	408

Source – Cardiac Rehabilitation database SCI CHD ACS

