

## LOTHIAN NHS BOARD

Board Meeting  
22 September 2010

Medical Director

### QUALITY IMPROVEMENT REPORT

#### 1 Purpose of the Report

- 1.1 This report presents the updated Quality Report for September 2010 including the measures introduced to date.

#### 2 Recommendations

The Board is asked to:

- 2.1 Review the quality measures presented.
- 2.2 Review and comment on quality improvement matters.

#### 3 Introduction

- 3.1 The Quality Dashboard was introduced in a previous paper to the Healthcare Governance & Risk Management Committee in February 2010 and to the Board in March 2010 as the Quality Matrix. The title has been changed to Quality Improvement Report to reflect the terminology set out in the Quality Strategy (2010) launched on 10<sup>th</sup> May 2010.
- 3.1.1 The quality improvement report includes a suite of measures which, at a system level, will allow monitoring of the quality of care provided by NHS Lothian.
- 3.1.2 This paper presents the updated quality improvement report for September 2010. Table 1 shows each of the individual measures, their data source, and what questions they answer about the care we deliver.

**Table 1**

Measure	How good is our care?	Is our care getting better?	How do we compare?	Data Source
HSMR	✓	✓		ISD
Adverse Events	✓	✓		IHI Global Trigger Tool Review
Hospital Acquired Infection(HAI)	✓	✓	✓	Infection Control Team
Incidents	✓	✓		Datix System
Complaints	✓	✓		Datix System
HSMR: Hospital Standardised Mortality Ratio				

### **3.2 Links to the Quality Strategy**

- 3.2.1 The NHSScotland Healthcare Quality Strategy launched in May 2010 included a three level Quality Measurement Framework (QMF). Level 1 is national reporting towards the quality ambitions, level 2 contains HEAT targets and level 3 is for other local or national measures required for quality improvement. An update from the Scottish Government on progress in developing potential level 1 Quality Outcome Measures as part of the QMF was received in August and is appended to this report (Appendix 1). Feedback is currently being sought from Boards on the potential measures.
- 3.2.2 The 'core' measures HAI, adverse events and HSMR presented in the NHS Lothian Quality Improvement Report are already aligned with the Quality Strategy level 1 measures. Similarly, HSMR, HAI, complaints and incidents also feature in the draft NHS Scotland Quality Strategy Scorecard (which is envisaged as spanning levels 1-3).

### **3.3 Quality of Care Measures**

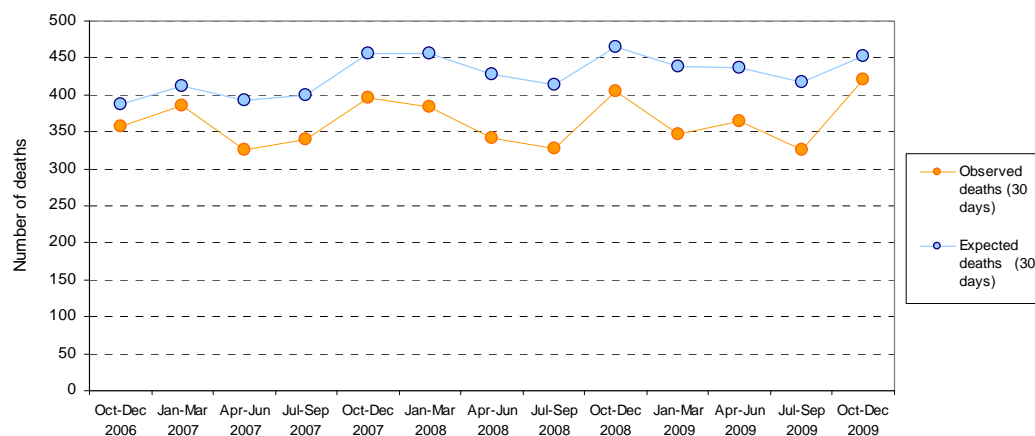
#### **Hospital Standardised Mortality Rate (HSMR)**

Hospital Standardised Mortality Ratio (HSMR) is calculated by Information Services Division and used by the Scottish Patient Safety Programme (SPSP). There is an SPSP target reduction in HSMR of 15% by 2011. HSMR is the ratio of observed deaths to expected deaths within 30 days of admission to hospital. If the HSMR for a hospital is less than 1, then fewer hospital deaths within 30 days of admission are occurring than expected. HSMRs have therefore been used as system level 'warnings' for areas for further investigation. There is some controversy about their use, but they remain widely used in this way.

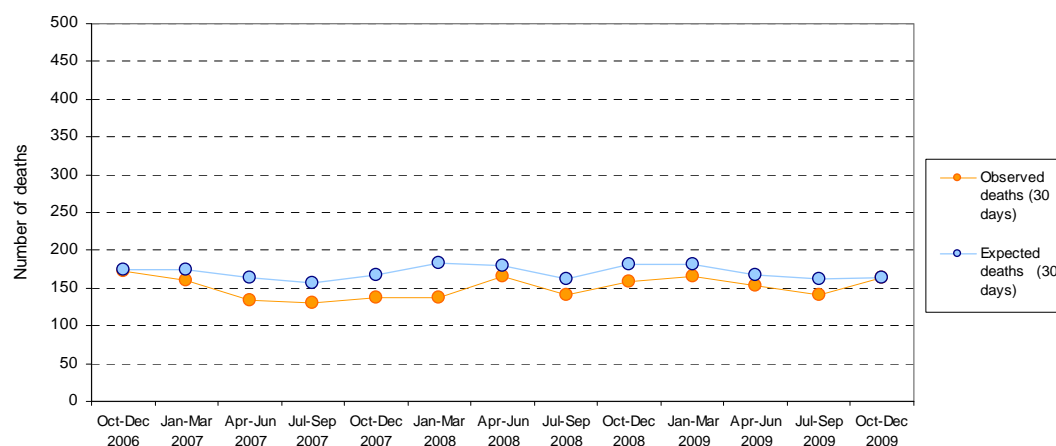
Figures 1a-c show the number of observed and expected deaths at Royal Infirmary Edinburgh (RIE), St John's and Western General Hospital (WGH) each quarter from October 2006 to December 2009. The HSMRs in each case for the last reported quarter are RIE=0.93, St John's=1.0 and WGH=0.72. These are all less than 1, indicating that the number of observed deaths is fewer than the expected number, with the exception of St. John's whose observed deaths match the expected number.

It must be emphasised that the quarter to quarter changes should be interpreted with caution. HSMRs cannot be compared between hospitals or boards.

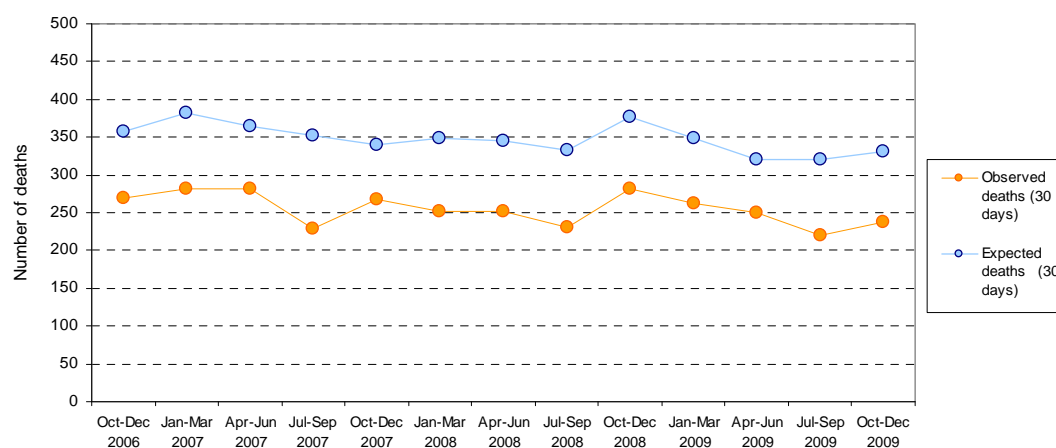
Quarterly Hospital Standardised Mortality Ratios in Royal Infirmary of Edinburgh  
Figure 1a - Number of observed and expected deaths; October 2006 – December 2009



Quarterly Hospital Standardised Mortality Ratios in St John's Hospital  
Figure 1b – Number of observed and expected deaths; October 2006 – December 2009



Quarterly Hospital Standardised Mortality Ratios in Western General Hospital  
Figure 1c – Number of observed and expected deaths; October 2006 – December 2009

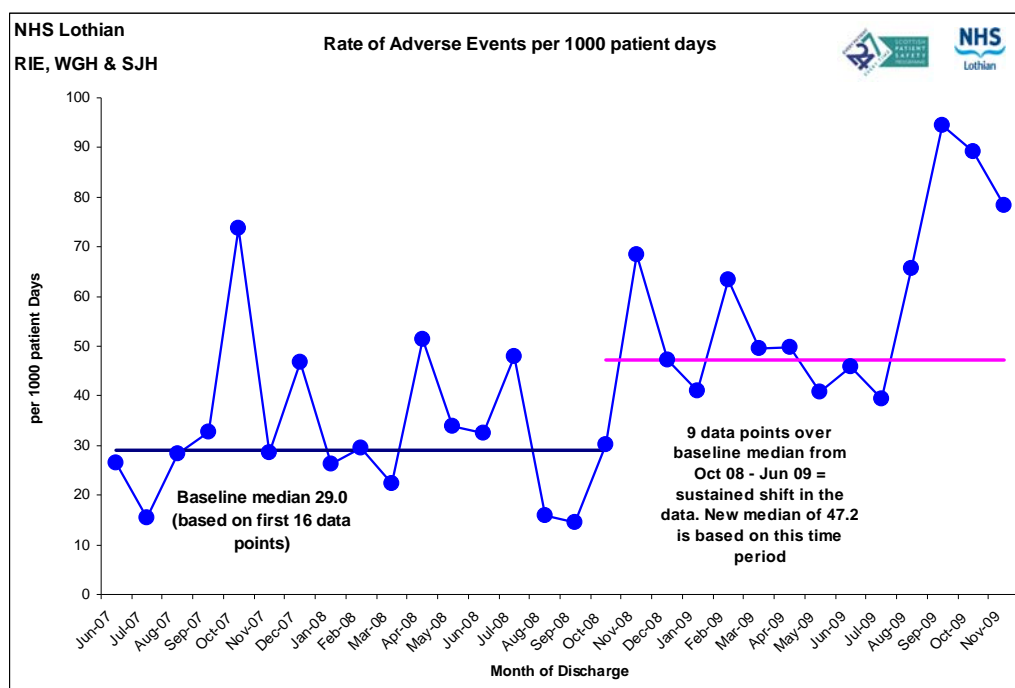


### 3.4 Adverse Events

Adverse events are currently measured at the three main acute sites using retrospective case note review using the 'Global Trigger Tool'. At present, the baseline has not stabilised, as illustrated by Figure 2. This is because the review process is subject to constant improvement (of both the sampling procedure and the review itself). This applies to all boards across Scotland. At present therefore, no comparison with other Boards is possible.

The Institute of Health Improvement (IHI), who are advisors to the Scottish Patient Safety Programme, advise that in a health care system of NHS Lothian's size and complexity an expected baseline would be approximately 89-90 adverse events per 1000 patient days. NHS Lothian is now starting to achieve this. If this rate is sustained, NHS Lothian will be expected to achieve a 30% reduction against this by 2011.

Rate of Adverse Events per 1000 patient days.  
Figure 2 – Jun 2007 to November 2009

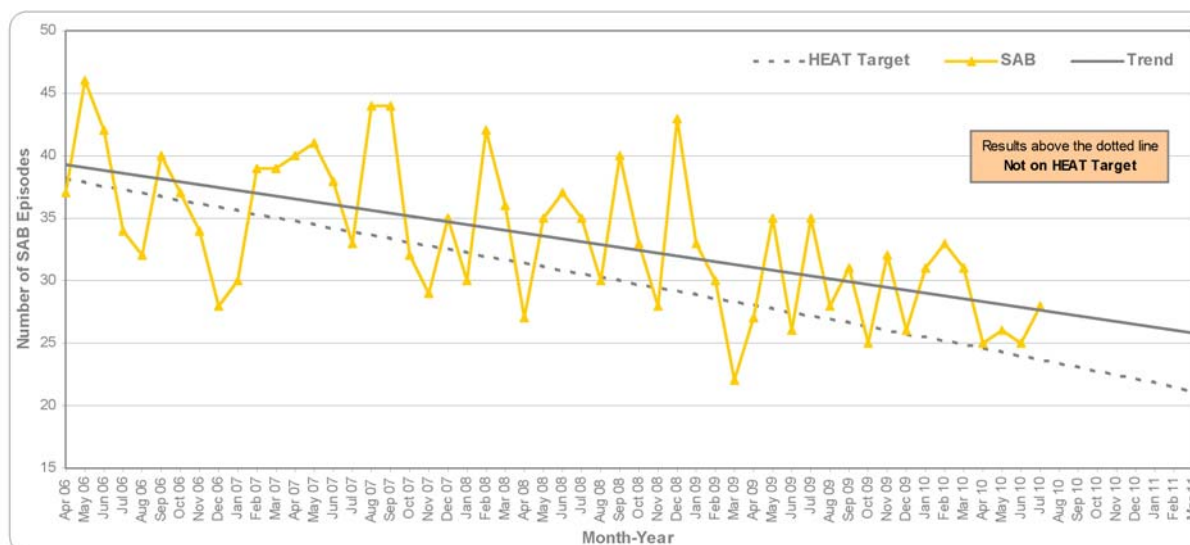


### 3.5 Healthcare Associated Infections

#### 3.5.1 S.aureus Bacteraemia (SAB)

NHS Lothian's HEAT target for SAB reduction is 49% by March 2011. In the quarter to July 2010, there has been an increase in the SAB rate. Infection Control within NHS Lothian is working closely with the Scottish Patient Safety Programme in Lothian, Health Protection Scotland and Quality Improvement Scotland to address the issue of SABs.

Figure 3a – Progress against HEAT Target for *S.aureus* Bacteraemia (SAB)



Lower is Better

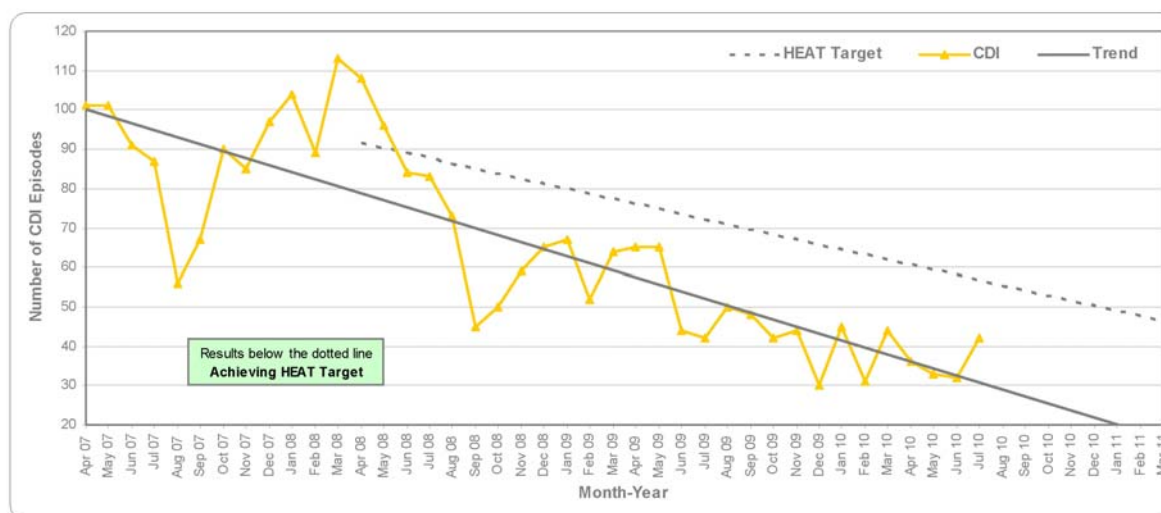
Source: Lothian Infection Control Team

### 3.5.2 *C.difficile* Infection (CDI)

In June 2010 the Scottish Government Health Department (SGHD) issued a new HEAT Target for CDI to all NHS Boards, increasing the target from a 30% to a 50% reduction by March 2011.

NHS Lothian has put in place an extensive CDI programme which is fully integrated with the Patient Safety Programme. This has resulted in an improved performance that has outstripped the HEAT target requirements, which is illustrated in Figure 3b.

Figure 3b – Progress against HEAT Target for *C.difficile* Infection (CDI)



Lower is Better

Source: Lothian Infection Control Team

### 3.5.3 Hand Hygiene

There has been a significant and sustained improvement in compliance since October 2007. NHS Lothian continues to surpass the 90% compliance rate (HEAT), currently achieving 93% as of July 2010.

### 3.6 Reported Incidents

Incidents are reported through out NHS Lothian using the DATIX system, whereby staff record incidents that affect patients and also incidents that affect staff. The category and degree of harm associated with each incident is also recorded by staff. There are improvements to be made in the degree of standardisation in this process and actions to improve standardisation are being led by the Risk Management Team in conjunction with clinical management teams.

Figures 4a, 4b and 4c show a sustained increase in incident reporting up to June 2010. This is considered a positive indicator of an organisation's safety culture. Factors which may have influenced reporting are shown in the figures below.

Figure 4a: Number of incidents reported per month in NHS Lothian (August 2008-June 2010)

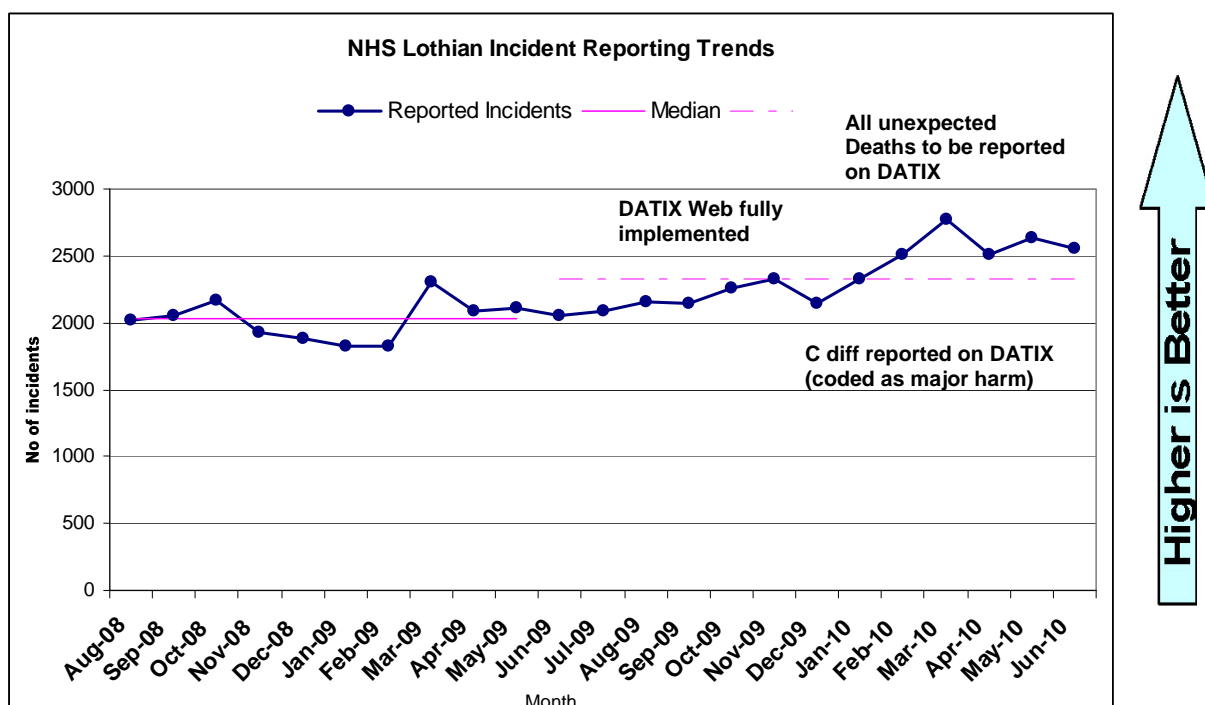
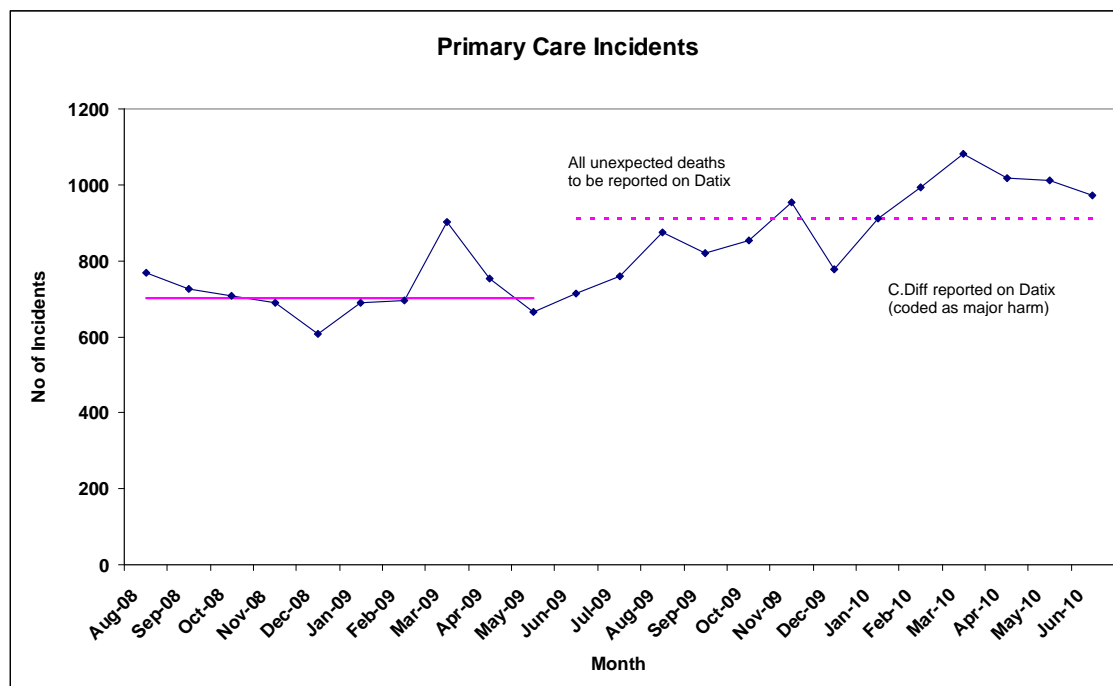


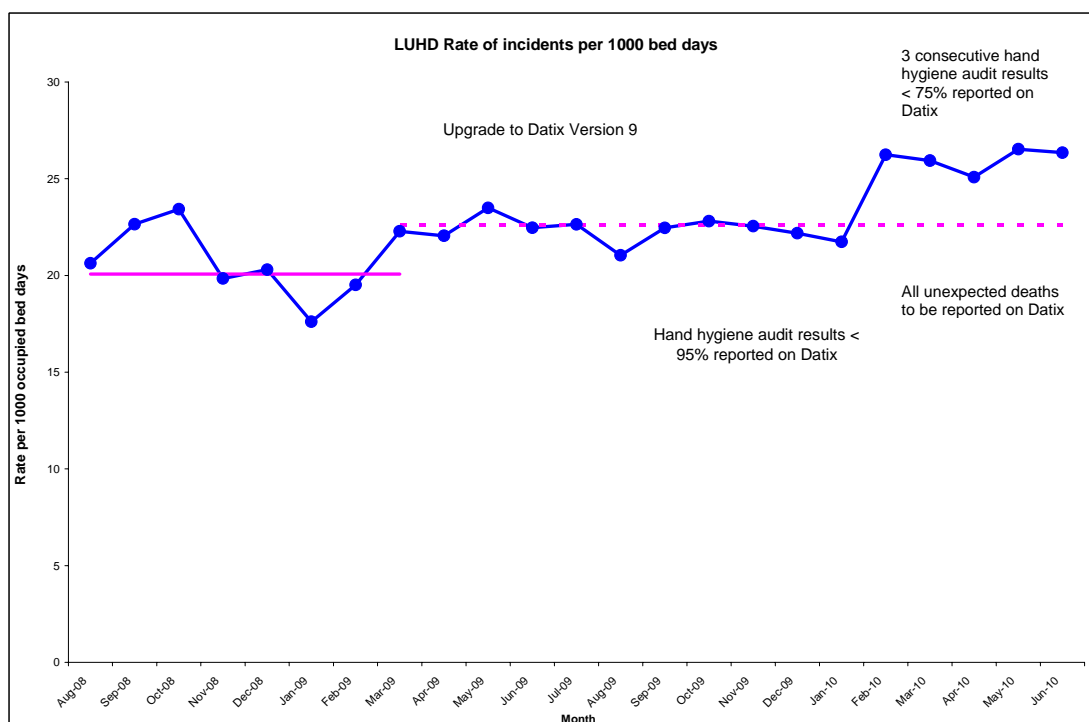
Figure 4b: Number of incidents reported per month in primary care (August 2008-June 2010)



Higher is Better

In Figure 4c the incident rate for Lothian University Hospitals Division is given per 1000 occupied bed days.

Figure 4c: Rate of incidents per 1000 bed days per month in LUHD in NHS Lothian (August 2008-June 2010)



Higher is Better

Figures 4d, 4e and 4f show an increase in incidents reported associated with major or moderate harm. This is understood to be a result of a change in incident reporting; for example, the Medical Director instructed that all unexpected deaths are reported on Datix. Similarly, there has also been an increase in the reporting of *Clostridium Difficile* infections on Datix, most of which have been coded as major harm.

Figure 4d: Number of incidents associated with moderate or major harm or death reported per month in NHS Lothian (August 2008-June 2010)

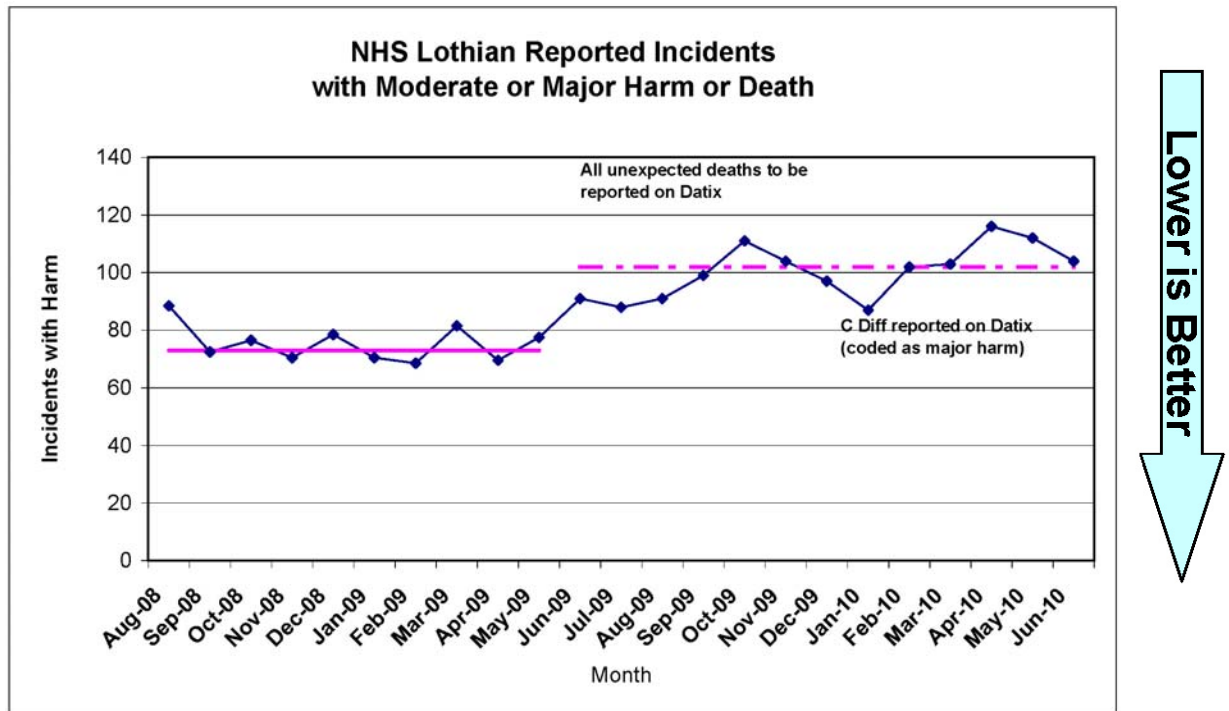


Figure 4e: Number of incidents associated with moderate or major harm or death reported per month in primary care in NHS Lothian (August 2008-June 2010)



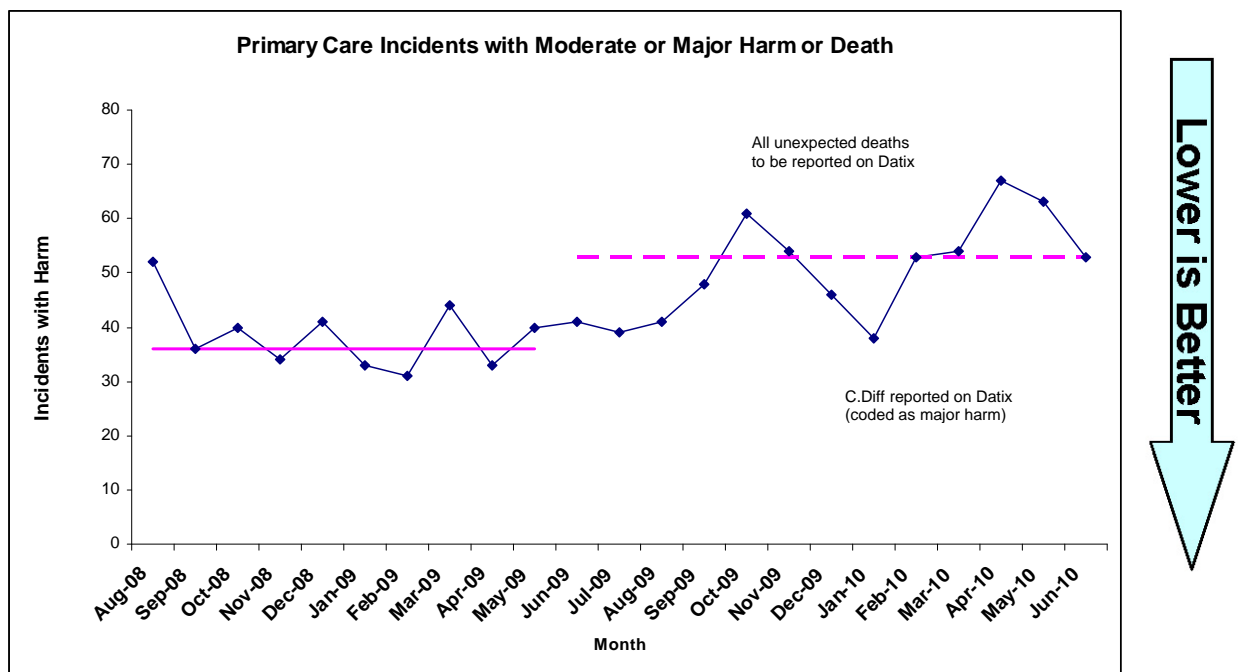
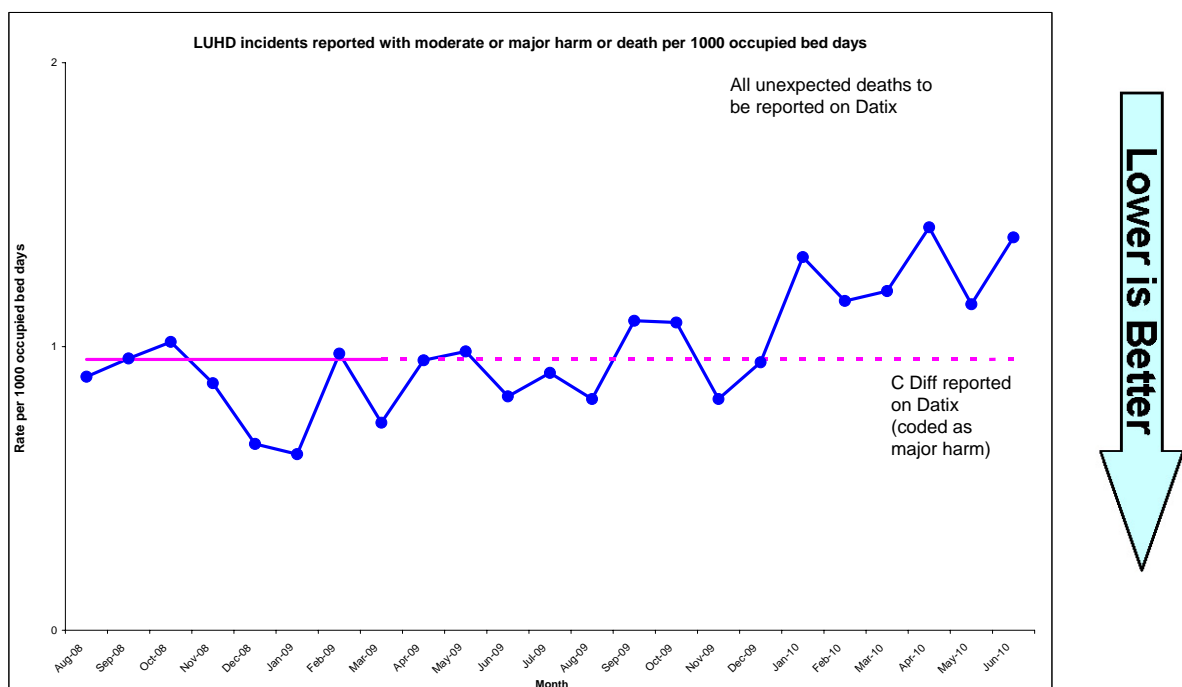


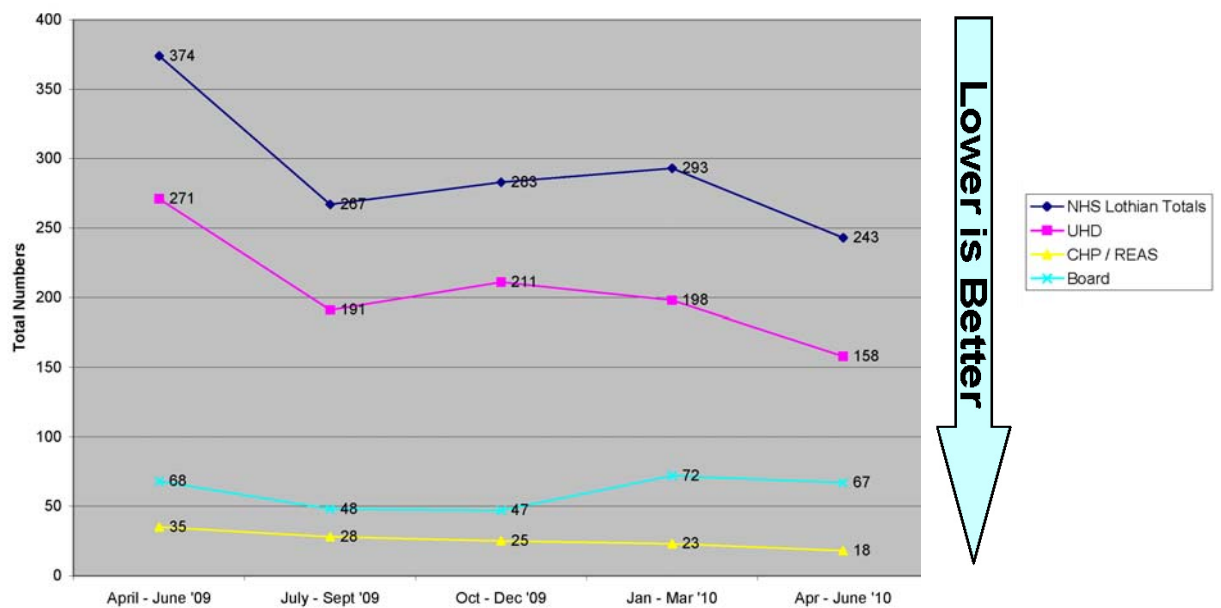
Figure 4f: Rate of incidents per 1000 bed days per month in LUHD associated with moderate or major harm or death



### 3.7 Complaints

NHS Lothian received a total of 243 formal complaints during the period April to June 2010, as illustrated in Figure 5a. This represents a decrease on the previous quarter. The main reason for the decrease is due to the improvement in car parking facilities at St John's and Western General Hospitals. In addition improvements in the reporting of complaints figures to ensure consistency in counting across the divisions has lead to a decrease in the number of complaints logged as board complaints.

Figure 5a – Formal Complaints across NHS Lothian?



NHS Lothian has achieved an average 20 day response time of 81% in respect of the target of 85% as illustrated in figure 5b, with some directorates achieving 100%. Improvement in the accuracy of reporting of complaints has seen a decrease in the number of formal complaints recorded. The centralisation of the NHS Lothian complaints team will bring improvements in standardisation of process and sharing of lessons learned, however some difficulties were encountered in the weeks following the transfer, and it is hoped that the performance will improve in the next quarter.

Figure 5b – 20 Day Response Target

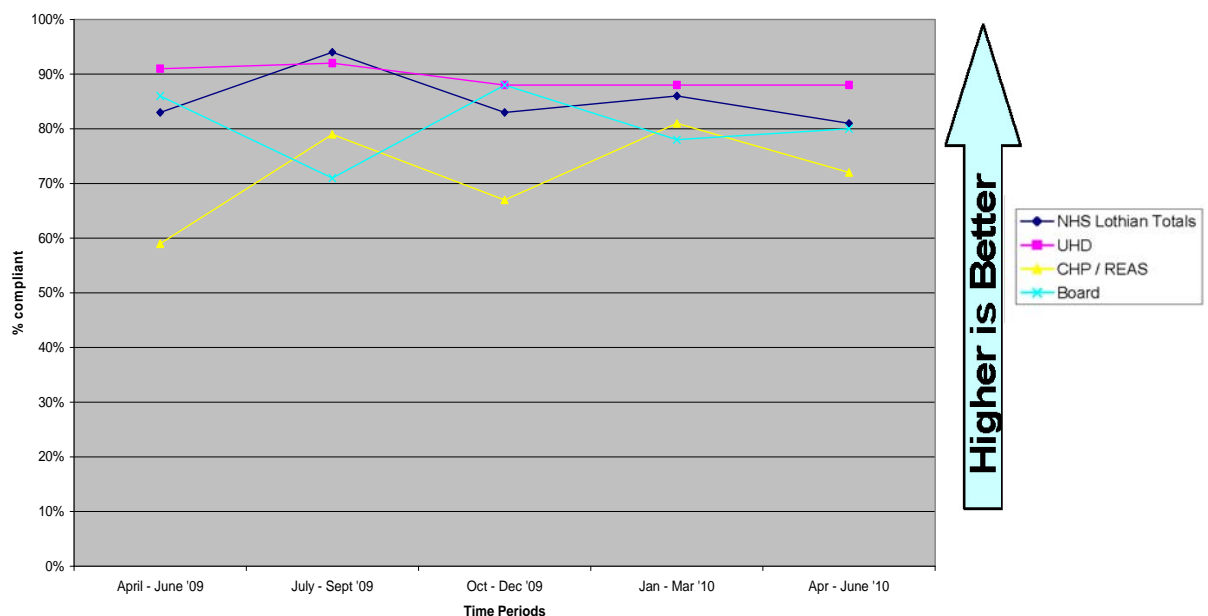


Table 2 shows the ISD figures for NHS Lothian for formal complaints from April 2009 to June 2010. The top three consistent themes are clinical treatment, staff

attitude and communication. ISD will produce board by board national comparisons in September 2010.

Table 2 – ISD Figures for Complaints 1 April to 30 June 2009 and 2010

1 April 2009 to 30 June 2009 (Total: 355)			1 April 2010 to 30 June 2010 (Total: 212 )		
Clinical Treatment	70	20%	Clinical Treatment	76	36%
Staff Attitude	39	11%	Staff Attitude	33	16%
Communication Oral	25	7%	Date for appointment	19	9%
Communication Written	22	6%	Communication Oral	13	6%
Admission/ Transfer/Discharge	17	5%	Admission/ Transfer/Discharge	13	6%

- 3.7.1 Scottish Public Services Ombudsman Reports: There have been three reports published by the Ombudsman's office in respect of the University Hospitals Division of NHS Lothian with a further two reports published in respect of GP services. In addition the Ombudsman's office has investigated three complaints which have been resolved without need to progress to full report

### 3.8 Effectiveness Measures

- 3.8.1 In the July board paper, the rationale for including a small number of system-level measures of the effectiveness of care in the Quality Improvement Report was explained. Since this time, work has taken place to agree the timetable of these measures. This is included in Appendix 2. This timetable aims to synchronise as far as possible with data releases that already occur; it may be subject to some change over the year if there are changes to these releases or if additional local analyses or work is required to better inform reporting to the Board.
- 3.8.2 The detail of which measures will be included for each topic will be agreed during 2010/11. This will be informed by updates from the Scottish Government as outlined above and as a result of on-going discussion with the clinical and/or strategic leads for these areas.
- 3.8.3 The first set of measures for critical care is presented below, as are findings from the recently published UK Audit of Vascular Surgical Services and Carotid Endarterectomy. Additional measures will be presented for vascular surgery as part of the surgical measures due to be reported next year.

#### 3.8.4 Critical Care

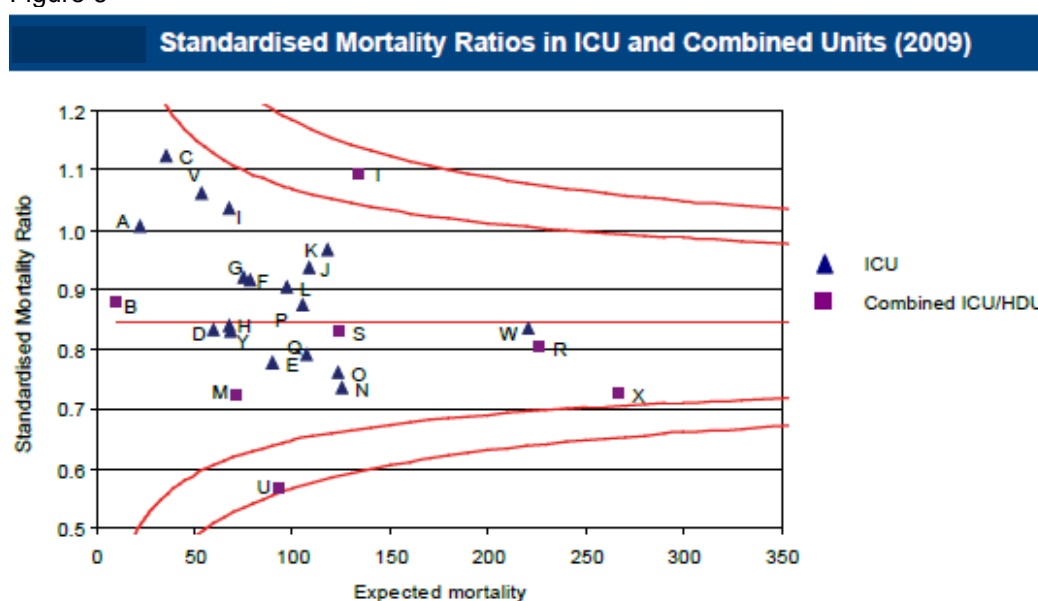
- 3.8.4.1 The data below shows outcomes in Scottish Intensive Care Units (ICU) and High Dependency Units (HDU) for 2009. This data is taken from the annual report of the Scottish Intensive Care Society Audit Group (SICSAG) which is a national audit funded through Information Services Division (ISD).
- 3.8.4.2 The outcome measure used by SICSAG is the patient's survival status when they leave hospital (even if this is not the original hospital). Patients admitted to ICU are at significant, but varied, risk of death. Comparing the proportion of patients who die in each unit can give a misleading impression because the severity of their illness is different. To overcome this, the APACHE II system is used to adjust for case-mix. This is a validated scoring system, which takes account of both the patient's acute condition and their chronic health. APACHE II produces an expected mortality rate for a unit, which can be compared to the

actual observed mortality rate to give a Standardised Mortality Ratio (SMR). An SMR significantly greater than 1 suggests that mortality is higher than expected, and a value of less than 1 that it is lower than expected.

- 3.8.4.3 To show the differences between units, a funnel plot is shown. This has curved lines on it to represent two standard deviations (inner curves) and three standard deviations (outer curves) from the Scottish mean. For SICsAG, the general understanding is that if an ICU is outside the inner curves then it 'might be different' from the Scottish mean. If an ICU is outside the outer curves then it 'is different' from the Scottish mean. It should be recognised that comparison of 25 ICUs/HDUs has a considerable chance of detecting a unit that 'might be' different.
- 3.8.4.4 Figure 6 sets out the Standardised Mortality Rates in ICU and combined units (2009) below. The SMR for all 3 Lothian ICUs (units M,R,X) is well below the Scottish mean on the SMR funnel plots.

The Scottish SMR has been decreasing steadily over recent years: 2006 = 0.93, 2009 = 0.84.

Figure 6



### 3.8.5 Vascular Surgery

#### 3.8.5.1 UK Carotid Endarterectomy Audit

NHS Lothian participates in the UK Vascular Surgery Audit which is delivered by the Royal College of Physicians in London and the Vascular Society. The audit runs continuously with reports published approximately every two years, and this is an update on the last audit published in 2008.

Carotid Endarterectomy can prevent stroke in patients with coronary artery narrowing who present with an ischemic event or a previous stroke. Both SIGN and NICE have produced guidance for clinicians and national standards for the

services. NHS Lothian operated on 153 patients, 2% of the UK total. 99% of patients had symptomatic disease. Indications for operation were completely consistent with recommended criteria. No patients were operated on with minor narrowing or complete occlusion (both relative contra-indications for successful operation). Further imaging to confirm a diagnosis was required in about 85% of patients. The national strategy suggests a target of 48hrs from symptom to operation for high risk patients. Mean referral time in the UK is 19 days and 9 days in NHS Lothian. This is a considerable improvement from over 20 days in 2008. There have been consequent improvements in time from admission to imaging and to surgery, and these steps along the pathway are measured and acted on quarterly.

Surgery is consultant led and the audit recommends and increase in the use of carotid patching which is the most effective type of operation. 26% of patients are now treated with a local anaesthetic plus a nerve block, which has considerably decreased the time for recovery to less than 4 hours. Length of stay is now only 3 days. 98% of patients attended follow up and were assessed by the surgeon. One recommendation is that assessment should also be undertaken by a physician with an interest in stroke, in order to detect minor complication.

Outcomes: There were no in-patient deaths reported in this audit, and only 2 patients died within 30 days of operation, one from a heart attack, and one from a stroke. Overall mortality was 1.6% which is less than that reported in randomised control trials, and not significantly different from 0.8% reported across the UK. The full report is available from the Medical Director.

#### 3.8.5.2 Organisational Audit of Vascular Surgical Services

The Organisational Audit is undertaken less frequently and is based on a 3 month snapshot between December 2009 and February 2010. NHS Lothian reports high levels of data compliance (more than 94%) which is better than the majority of units in England. NHS Lothian is one of the busiest units in the UK for some aspects of vascular surgery, reporting over 100 cases per year for arterial reconstruction and leg amputation. This is in the top quartile of UK services for operating on emergency leakage of abdominal aortic aneurysms. Overall, the standards of staffing and facilities in NHS Lothian are comparable to the best in the UK but the individual surgeons are amongst the busiest in the UK in terms of case load per consultant. Unlike other vascular surgeons in the UK the surgeons in NHS Lothian also undertake additional work with specialist management of difficult varicose veins. Using a weighted index, surgeons in NHS Lothian undertake 1.33 completed procedures per week versus the UK average of 0.98 with an inter-quarter IQ range of 0.72-1.27. NHS Lothian surgeons are therefore in the 95% percentile, i.e. the busiest surgeons in the UK. NHS Lothian also has a better ratio of trainees to consultants than many other vascular units, and is well supported with specialist nurses and vascular technicians. There are no particular areas of concern in this report other than monitoring the workload and capacity of vascular surgical services. The full report is available from the Medical Director.

## 4 **Impact on Health Inequalities**

- 4.1 The work set out by this paper, which incorporates existing data and the development and monitoring of new indicators, will have a positive impact on

inequality. A Rapid Impact Assessment (RIA) was carried out on the Scottish Patient Safety Programme on 5 May 2009, which has significant overlap with elements of this paper. This identified communication with patients and staff, and improved monitoring, as key issues. The plan proposed by this paper will be developed during 2010 and will incorporate a further RIA to determine the impact of increased monitoring and collation and use of quality and safety data. Actions arising from this RIA will be incorporated into the diversity monitoring action plan.

## **5 Resource Implications**

5.1 There are no resource implications associated with this report.

Professor Charles Swainson/ Jo Bennett / Dr Elizabeth Bream  
Medical Director/ Clinical Governance Manager / Public Health Consultant  
14 September 2010

## **List of Appendices**

Appendix 1: Quality Measurement Framework (QMF) Update

Appendix 2: Proposed Effectiveness Measures Timetable

## **The Quality Measurement Framework (QMF) – Update from Scottish Government**

### **Introduction**

The NHSS Healthcare Quality Strategy was officially launched in May 2010. This new approach is about putting people at the heart of everything we do, delivering measureable improvement and creating confidence that NHSScotland is delivering the highest quality healthcare.

As an action identified by the Quality Strategy, a Quality Measurement Framework is being developed. This will provide a structure for alignment of all measurement work to the three Quality Ambitions, and include a set of Quality Outcome Measures to indicate national progress towards these Ambitions.

This paper sets out to further explain and clarify:

- What is meant by the Quality Measurement Framework
- The significance of the Quality Ambitions
- The three levels of the Quality Measurement Framework
- How the three levels relate to each other
- What the Quality Outcome Measures will be used for and by whom
- How the 12 potential Quality Outcome Measures were chosen
- How the Quality Scorecard (developed in response to the Mid Staffs situation) relates to the Measurement Framework
- The work that is underway to develop the Quality Outcome Measures
- How this relates to the National Performance Framework
- How the Single Outcome Agreements (SOAs) fit into this framework

### **What is the Quality Measurement Framework?**

The Quality Measurement Framework provides a structure for understanding and aligning the wide range of measurement that goes on across the NHS in Scotland for different purposes. By showing how all of this work leads towards the Quality Ambitions – which are illustrated by 12 potential Quality Outcome Measures – we have a basis for prioritisation and the ability to demonstrate improvement both locally and nationally.

The measurement framework is NOT a new set of measures on top of everything else, rather it is a way of demonstrating how all existing work fits together towards the aim of improving quality.

A pictorial description of the framework is included in Appendix (a) for reference.

### **What is the significance of the Quality Ambitions?**

The Quality Strategy and the shared vision of healthcare quality for Scotland is based upon the Institute of Medicine's six dimensions of healthcare quality, together with the priorities of healthcare quality identified by people in Scotland as: caring and

compassionate; clearly communicating conditions and treatment; effective collaborative working between clinicians, patients and others; continuity of care; and clinical excellence.

At the national quality measures consultation event in March 2010<sup>1</sup>, the development of measures for the six quality dimensions was discussed. It was apparent that clear statements of what these meant was required, and that there were overlaps between the dimensions. The development of the three Quality Ambitions was the outcome of these discussions. The Quality Ambitions combine all of the above aspects of quality.

The Quality Measurement Framework supports the vision for NHSS as described by the Quality Ambitions. All measurement will be aligned to these Quality Ambitions.

### **What are the three levels in the framework?**

The three levels described by the framework provide a simplified structure for thinking about the intended use of sets of measures. The framework is intended as a representation to highlight that all measurement should align towards the quality ambitions. It is possible for certain measures to appear at more than one level, or that they may change use over time, with future developments. It should therefore be recognised that there is a degree of fluidity between the levels and that there is not an intention to determine a rigid unchangeable landscape. In summary:

- Level 1 is for national reporting on long term progress towards the quality ambitions
- Level 2 contains the HEAT targets, which are for shorter term Central Government performance management of NHS Boards
- Level 3 is for all other measures required for quality improvement, either by national programmes or locally.

**Level 1** These Quality Outcome Measures will be illustrative of the Quality Ambitions, and will indicate progress towards these three Quality Ambitions over time at the national (Scotland) level. These will not be targets and they will not state when progress will be achieved by. The 12 potential Quality Outcome Measures that were originally proposed in the Quality Strategy are listed in appendix (b). These measures are currently undergoing further investigation and development by the Quality Measures Technical Group (QMTG)<sup>2</sup>, and some suggestions for changes have already been put forward – for example that the workforce related measures should be on staff engagement and staff development.

**Level 2** HEAT targets are performance management targets which are planned and agreed with NHSScotland via the LDP process as the priority areas for progress each year. These are short term targets (1-3 years). Over time the HEAT targets will be aligned to the Quality Ambitions. The HEAT targets that are developed will not need to correspond specifically to the Quality Outcome Measures, but will reflect the priorities for the NHS in terms of moving towards the Quality Ambitions.

**Level 3** There are many existing national and local measurement systems to drive improvement across primary and secondary care, all of which can be

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<sup>1</sup> See section 'How were the 12 potential Quality Outcome Measures chosen' for details of this event

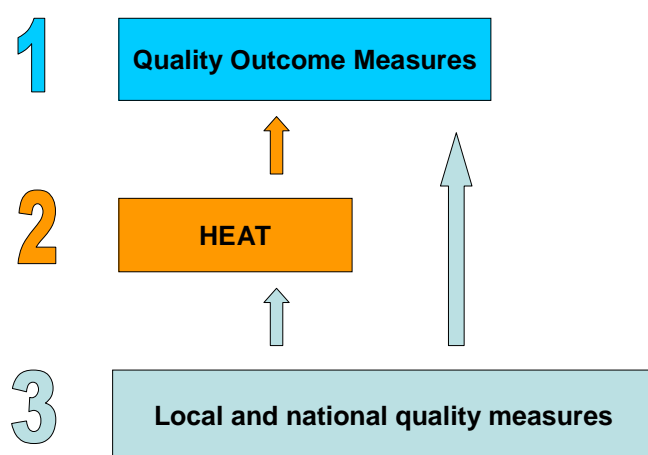
<sup>2</sup> See section 'What work is being undertaken to develop the Quality Outcome Measures' for membership of this group



considered as part of level 3. Examples include the measures used in the Scottish Patient Safety Programme, the Quality Outcomes Framework (QOF), the Mental Health Quality Measures Framework and clinical indicators used in secondary care departments, e.g. the CQIs developed through the Senior Charge Nurse Review. Where future aggregation to NHS Board or national level is anticipated, attention would need to be given to consistency of definitions. In other cases, where measurement is required that is meaningful locally for quality improvement, measures might be locally defined.

## How do the three levels relate to each other?

Figure 1: the three levels of measurement



### *Level 1 and level 2*

The HEAT measures will not simply be targets for the Quality Outcome Measures, but will be measures that reflect movement towards the Quality Ambitions. In some cases it will be easier to directly link HEAT to the Quality Outcome Measures than in others.

### *Level 1 and level 3*

Level 3 measures may be combined to national level to form Quality Outcome Measures. For example, this could be the case for HSMR. In some cases, there is a link between local and national levels in terms of improvement - for example, a Level 3 quality indicator such as local use of the CARE measure to improve patient consultations would be expected to have an impact on the Quality Outcome Measure for patient experience.

### *Level 2 and level 3*

Some measures that are used locally will end up as HEAT targets. Not every level 3 measure will be represented in HEAT, but they will usually still be important for local performance management/ improvement and also for some national programmes.

## What will the Quality Outcome Measures be used for and by whom?

The Quality Outcome Measures will reflect progress towards the three Quality Ambitions but will not be subject to specific targets. They will include a combination of patient-based, staff-based and system-based measures to cover the three main levers for change and will provide a line of sight to the National Performance Framework.

The Quality Outcome Measures will be used to describe and challenge the pace of progress towards the Quality Ambitions. They will be used by all those with an interest in, and responsibility for, delivering the vision set out in the Quality Strategy. This includes everyone working with and for NHSScotland, Scottish Government Health Directorates, and all those working in Local Authorities and the Third Sector who work in partnership with NHSScotland throughout each patient's journey.

### **How were the 12 potential Quality Outcome Measures chosen?**

In March 2010, a national measures event was held in Dundee. Chief Executives were asked to nominate a Quality Lead for each Board to join a national quality measures network. Each Lead was asked to invite any other interested parties to the network measures event.

In preparation for this measures event in March 2010, Health Boards were asked to feedback to the Scottish Government all the ways in which they measure quality. These were mainly level three measures which were mapped against the Institute of Medicine's six dimensions of quality (person-centred, safe, effective, efficient, equitable and timely) and the seven 'Cs' (caring, compassionate, clear communication, collaboration, clean, continuity of care, clinical excellence). In addition, other Scottish measures were also mapped including the National Performance Framework, Single Outcome Agreement, Community Care Outcomes, Staff Governance, Scottish Patient Safety Programme, Equality, Patient Focus and Public Involvement, Complaints data, Local Delivery Plan – HEAT targets, Scottish Ambulance Service, NHS24, State Hospital and the proposed Quality Scorecard. Some international measures were examined including the Institute of Healthcare Improvement's Whole System Measures.

At this event, groups were formed to look at each of the six dimensions of quality and examine which existing measures and international measures could be used for level one potential Quality Outcome Measures. From the discussions it became clear that there was some overlap and interaction between the six dimensions of quality and the seven 'Cs' and it would be helpful to combine them into the three Quality Ambitions.

The Measures network were then asked to comment on a draft version of the Measurement Framework in April 2010 and the twelve potential measures were developed.

The aim was to produce a balanced set of measures which reflect the three Quality Ambitions and are patient, staff and system based.

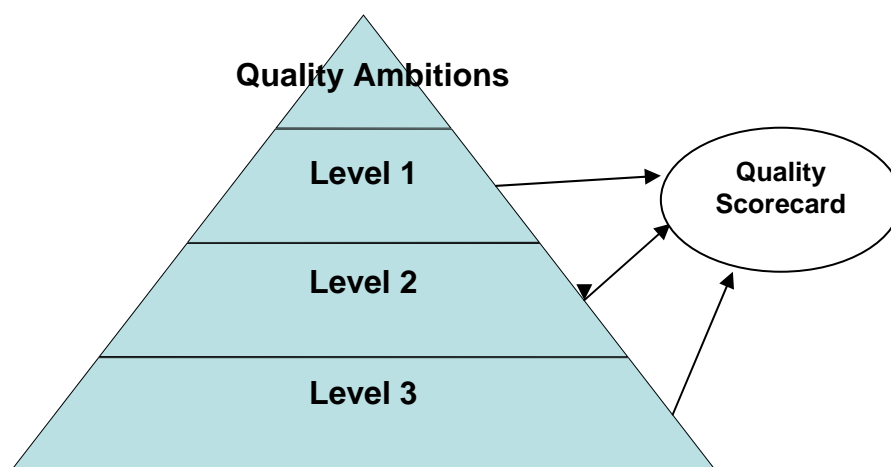
### **How does the developing "Quality Scorecard" fit into the measurement framework?**

Prior to the development of the Quality Measurement Framework, a project was initiated to produce a tool that could be used centrally to indicate any potential quality and governance concerns in Scottish hospitals. This was a response to the Mid Staffs situation.

The tool – which has been sometimes known as the Quality Dashboard or Quality Scorecard, but could also be thought of as a Quality Early Warning System - is being developed in conjunction with Information Services Division (ISD). Many Boards are already looking at these indicators, but the tool provides an additional comparison with the Scottish average so that outliers can be spotted.

This work is part of the measures landscape, but is important to note that it is not the same thing as the Quality Measures Framework. The indicators used in the scorecard will be selected so that they provide an overall picture for comparison of hospital systems. The indicators will be drawn from different levels of the framework, as illustrated in figure 2. It may be considered that there is conflict between the use of the same measures for longer term progress at level 1, and for shorter term monitoring in the scorecard. This will be explored further but it may be that these uses are compatible.

**Figure 2**



### **What work is being undertaken to develop the Quality Outcome Measures?**

To progress development of the Quality Outcome Measures (level 1), the Quality Measures Technical Group met for the first time on 16<sup>th</sup> June. Members of the group represented the Scottish Government, ISD, Quality Improvement Scotland (QIS) and the wider NHS.

At this preliminary meeting the membership and role and remit of the group were agreed. Small working parties will be taking forward the 12 potential measures to fully investigate them for use. A paper will be produced and shared for consultation for each measure.

These will detail information such as:

- the rationale for the measure
- how the measure will show improvement in quality
- definition and methodology
- data issues
- past trends/current position
- other systems which include the measure
- direct links to HEAT
- international linkages
- equalities information
- better value and financial implications

Each measure has an analyst (technical) lead (SGHD, ISD or QIS), a policy lead and a clinical lead to take forward the development of the Quality Outcome Measure and to make sure that each of these key areas of expertise are available to consider all aspects of using the measure.

Consultation on the papers for each of the Quality Outcome Measures will take place with the Measures network and the designated Measures Lead for each Board.

Wider engagement will take place with SG directorates, national ACF chairs, clinicians involved in the NHS Leadership Development programme (Delivering the Future) and others to be confirmed. Internationally, the Health Foundation, the Institute for Healthcare Improvement and Jonkoping will be consulted.

Based on the work to develop the measures papers, and the consultation, the 12 potential measures may change over the course of development or some may be dropped or added.

It is expected that by October, a position statement will be available for each of the measures. A number of the measures will be fully worked through with supporting technical notes, whereas some will require further development.

### **How does this relate to the [National Performance Framework \(NPF\)](#)?**

Scotland Performs measures and reports on the Scottish Government's progress towards its Purpose of creating a more successful country, with opportunities for all to flourish through increasing sustainable economic growth. Within the Purpose there are five strategic objectives, of which Healthier is the one most relevant to the NHS. However innovation in the NHS also contributes to Smarter Scotland, and consideration of environmental issues to Greener.

Of the 15 [national outcomes](#), there are several that improved quality in the NHS will support. The main ones are:

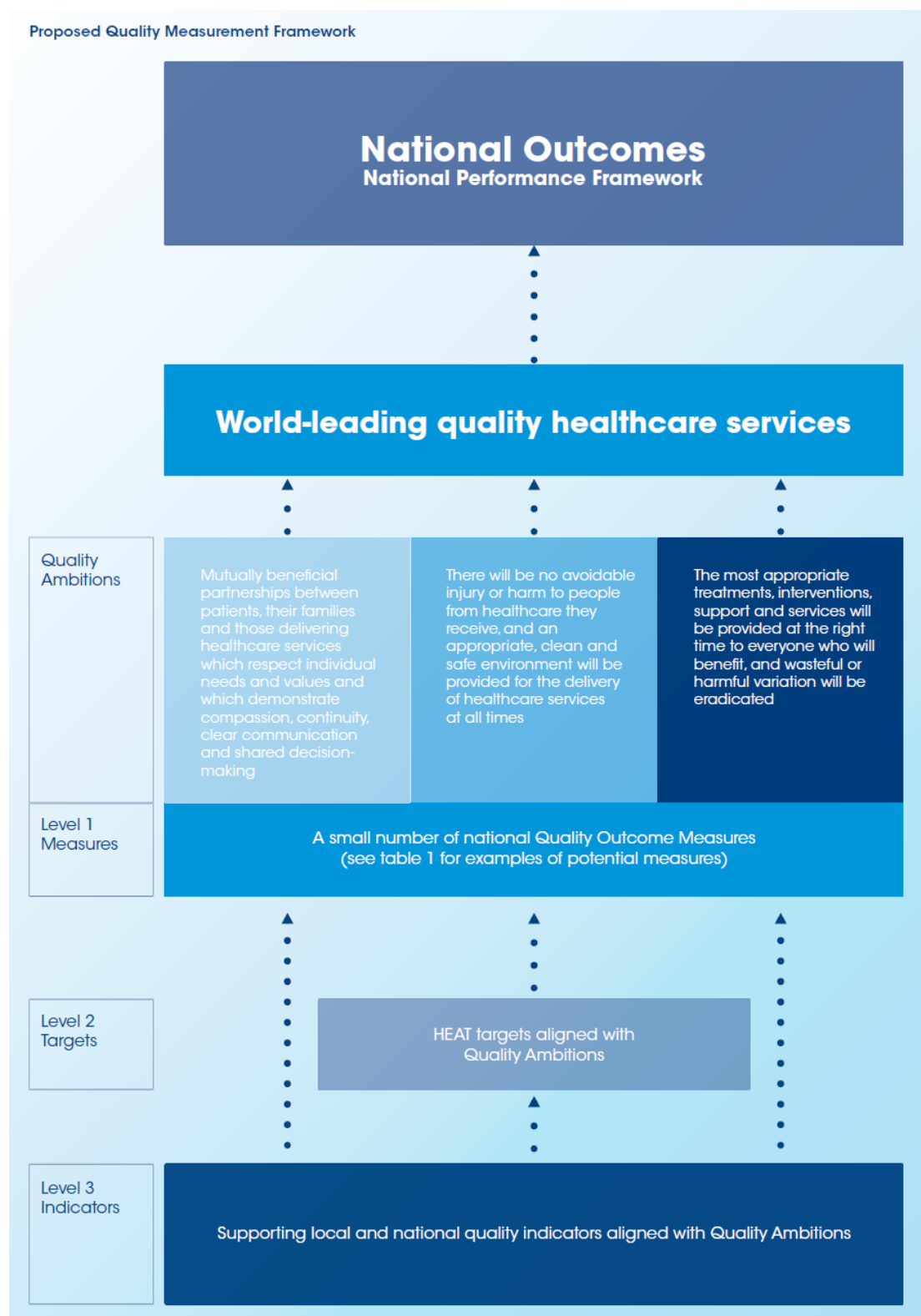
- We live longer, healthier lives
- We have tackled the significant inequalities in society
- **Our public services are high quality, continually improving, efficient and responsive to local peoples needs.**

Within Scotland Performs there are 45 national indicators, which represent progress towards the outcomes. Some of these are already reflected in HEAT, and some (for example improved patient experience) will be reflected in the Quality Outcome Measures.

### **How do the Single Outcome Agreements (SOA) fit into this framework?**

NHS Boards need to work closely with Local Authority and Community Planning partners towards their Single Outcome Agreements. In the context of the Quality Measurement Framework, these could be considered at level 3 as they are locally agreed measures. However in some cases, the SOA outcome measures used may also be in HEAT or potentially even at level 1 acknowledging the current variation in tiers of measures used across Community Planning Partnerships.

## Appendix (a) – The Quality Measurement Framework



## Appendix (b) – Potential National Quality Outcome Measures as specified in draft Quality Strategy – some are likely to change

Potential measure	Rationale
Healthcare experience	People's experience of our services is important. This is also an indicator in the National Performance Framework for which methodology has still to be developed. Ideally, this measure would include feedback from both patients and carers. Patient experience of various aspects of quality can be assessed from current surveys. Further consideration around how to capture the experience of carers will be required and existing information sources will be explored.
Staff experience	Staff survey results provide another angle on the person-centredness of the NHS. Survey questions relate to several of the quality dimensions. Again, these could be separate measures or combined into one measure.
Staff attendance	This indicator supports several dimensions, including efficiency and person-centredness. In addition, a reduction of staff absence could be expected to contribute to improved safety, timeliness and effectiveness.
Healthcare Associated Infections	Key priority within the strategy. Indicates a cleaner environment and reduction in avoidable harm. Infections can result in longer stays in hospital, reducing clinical effectiveness, efficiency and affecting timeliness.
Emergency admissions	This outcome indicator should represent a shift in the balance of care. It could demonstrate effectiveness of anticipatory and planned care. Patients are supported to remain at home where safe and appropriate. This measure should, therefore, reflect improved partnership working with social care, carers and the voluntary sector.
Adverse events	This directly contributes towards the aim of no avoidable injury or harm. Adverse events result in poorer clinical outcomes and less effective use of resources. Therefore, this measure supports effectiveness and efficiency as well as safety.
Hospital Standardised Mortality Rate (HSMR)	National reduction in HSMR should reflect work in individual hospitals to review mortality under the Scottish Patient Safety Programme and reflect reduction in serious adverse events and infections
Proportion of people who live beyond 75 years	This outcome is intended to reflect the range of improvements right through the healthcare system from prevention to treatment.
Patient Reported Outcomes	Indicates whether interventions have been effective from the point of view of patients. It is proposed that there is potential for, through time, an aggregated measure of PROMS based on local feedback to be developed. A project is being initiated by NHS QIS, working in partnership with the Universities of Stirling and Dundee & The Alliance of Self Care, to develop a national toolkit for this. As part of this project, the potential for this type of measure will be investigated. This is therefore a longer-term aim.
Patient experience of access	Shows the patient point of view as to whether they have been able to access the care they needed, when they needed it.
Self Assessed General Health	Self-assessed health will be a longer-term measure that will allow us to assess the effectiveness of a wide range of initiatives. Will reflect all quality outcomes including person-centred, timeliness, efficient, clinical effectiveness and safe.
Percentage of last 12 months of life spent in preferred place of care	Captures the outcomes of <i>Living and Dying Well</i> (a national action plan for palliative and end of life care in Scotland) i.e. use of tools to identify and assess people with palliative and end of life care needs; delivery and coordination of care across care settings to address those needs by consistent access to, and review of, anticipatory care plans (including palliative care summary and Do Not Attempt Cardio-pulmonary Resuscitation (DNACPR)).

### Proposed timetable for reporting effectiveness measures to the NHS Board

This is an indicative timetable and additional areas may be included and the schedule may change in light of additional analyses and/or local work being required. The timetable will also be adapted as additional national data become available. For example medicine, which is covered across many of the topics already listed, may have an additional report as a medical profile is scheduled to be released by QIS at the end of 2011.

Board Meeting	Proposed effectiveness measure report on	Example of measure to be used
Nov 2010	Mental Health Respiratory	Number of people recorded on Dementia Registers  Re-admission rates (7 and 28 days) for Chronic Obstructive Pulmonary Disease
Jan 2011	Cancer  Sexual health	Breast screening percentage uptake for women aged 50-70  Proportion of women of reproductive age using Long Acting Reversible Contraception (LARC)
Mar	Coronary Heart Disease	Proportion of Coronary Heart Disease patients on register having an annual review
May	Renal	Survival (from given time period when renal replacement therapy first started)
July	Diabetes  Child & maternal health  Surgery	Diabetes mortality  Percentage of pregnancies correctly identified by Down's Syndrome screening test  Surgical mortality
Sep	Stroke  Substance Misuse  Blood Borne Viruses	Percentage of patients admitted to a stroke unit on the day of admission  In development  Percentage of patients who complete treatment for Hepatitis C infection
Nov	Palliative care  Learning Disabilities  Older People	In development  In development  In development