Organisational Module 9 – Trust Board

WITNESS STATEMENT OF DR TONY STEVENS

I, Anthony Stevens, former Medical Director within the Belfast Health and Social Care Trust (the Belfast Trust), make the following statement for the purpose of the Muckamore Abbey Hospital (MAH) Inquiry:

1. This statement is made on my own behalf in response to a request for evidence from the MAH Inquiry Panel dated 11 June 2024. The statement addresses a set of questions posed to me relating to my role as Chair of the Patient and Client Safety Operational Group.

2. This is my first witness statement to the MAH Inquiry. The documents that I refer to in this statement can be found in the exhibit bundle attached to this statement marked “TS1”.

3. The 11 June 2024 MAH Inquiry request for evidence, with the accompanying questions, can be found at Tab 1 in the exhibit bundle.

Qualifications and positions

4. I am a qualified medical practitioner. I hold the following degrees in medicine - MB, BCh, BAO, 1982, Queens University, Belfast. I hold a MD, 1991, from Queen’s University, Belfast. I hold fellowships from the Royal College of Physicians, London and Faculty of Occupational Medicine (RCPL).

5. I have held the following positions. From 1991 to July 2006 I was a consultant in occupational medicine at the Royal Group of Hospitals and Dental Hospital Health and Social Services Trust (the Royal Hospitals Trust). During that time, I also held a number of part time clinical managerial positions. From August 2006 to March 2007, I was acting Medical Director of the Royal Hospitals Trust. From April 2007, following the creation of the Belfast Health and Social Services Trust (the Belfast Trust), I was the Medical Director of the Belfast Trust. I remained in that role until 2014, when I left the Belfast Trust. From August 2014, I was Chief Executive of the Northern Health and Social Care Trust, until my retirement in March 2020. I returned to work in September 2020 as interim chief Executive of RQIA, until June 2021. I have held no substantive post since then. I continue to do occasional consultancy work via the HSC Leadership Centre.

6. I have been asked to address ten questions relating to the Belfast Trust's Patient and Client Safety Operational Group for the purpose of my statement. I will address those questions/issues in turn.

Questions relating to my role as Chair of the Patient and Client Safety Operational Group

Question 1

What was the composition and remit of the Patient and Client Safety Operational Group?

7. The Patient and Client Safety Operational Group (the PCSOG) formed part of the Belfast Trust's Assurance Framework. Before explaining its composition and remit, it may be useful to trace when this group came into existence and what it has since become. Although I cannot now, at this remove of time, recall the PCSOG coming into existence or changing into any other entity, I have, at my request, been given access to a range of documents held by the Belfast Trust which have allowed me to trace the composition of the Belfast Trust's Assurance structures, and which have allowed me, as best as I can (given the passage of time), to map out the role

and function of the PCSOG and identify what it became as the Belfast Trust's assurance structures changed over time.

8. A copy of the Belfast Trust's 2009/10 Board Assurance Framework is exhibited at Tab 2. As can be seen from the organogram on internal page 19, the PCSOG was a group that fed into the work of the Assurance Group.

9. A copy of the Belfast Trust's 2010/11 Board Assurance Framework, at Tab 3 of the exhibit bundle, does not show the PCSOG as a group within the Belfast Trust. The organogram on internal page 18 shows a rather different structure, with the Assurance Group being informed by the work of five Steering Groups, which themselves had a series of committees feeding into them. One of those Steering Groups is the Safety and Quality Steering Group.

10. I have had the opportunity to review a number of meeting minutes from around 2010/11 which, I believe, inform how the PCSOG changed around that time. A selection of minutes is exhibited behind Tab 4. It appears that the Belfast Trust holds papers for the PCSOG until in or around August 2010. From September 2010, another group, called the Patient and Client Safety Steering Group, appears to have taken over the PCSOG's work. In turn, the Patient and Client Safety Steering Group appears to have operated from around September 2010 until in or around May 2011. By August 2011 another entity, called the Safety and Quality Steering Group, was formed. It appears to have taken on the role of the Patient and Client Safety Steering Group. Although I now have no recollection of any of these changes taking place, the available documentation would suggest that the PCSOG was ultimately a forerunner of the Safety and Quality Steering Group that operated from August 2011 onwards.

11. The Belfast Trust's Corporate Governance department has conducted a search and has located two undated documents, which appear to be Terms of Reference for the PCSOG, which are exhibited behind Tab 5. I am unable, at this remove of time, to provide any further information about when or if these documents were in operation, however, they do demonstrate the issues the PCSOG was intended to deal with. The Terms of Reference for the PSCOG's successor, the Patient and

Client Safety Steering Group, dated 2011, are available behind Tab 6. I do not at this remove recall whether the remit of the successor Steering Group was exactly the same as that of the original Operational Group, although I believe, in light of the available documentation, that the Steering Group in effect took over the work of the Operational Group.

12. I believe, from what I have read and what I can recollect, that the PCSOG was originally formed as part of the Safer Patients' Initiative. The minutes of the Assurance Committee of Trust Board of the Belfast Trust for November 2008, exhibited behind Tab 7, refer to the Safer Patients' Initiative (SPI) Phase II coming to a conclusion. This was a major national programme, funded by the Health Foundation, and supported by the Institute for Healthcare Improvement. The SPI Phase II summary report is exhibited behind Tab 8. The Royal Hospitals Trust and Mater Hospital Trust, as legacy Trusts of the Belfast Trust, had participated in this initiative, as SPI Phase II required hospitals to work with a partner organisation (a form of buddy system). SPI focused on improving the reliability of specific processes of care in four designated clinical areas: general ward, critical care, peri-operative care and medicines management. The Belfast Trust was keen to maintain the momentum gained on patient safety and to ensure that it was spread across the entire trust. The Patient and Client Safety Operational Group was conceived as a suitable vehicle to do this. Its establishment also reflected a regional interest in the performance of Trusts in respect of some key indicators, for example Clostridum *difficile* infection rates, MRSA rates and crash call rates. The composition of the group ensured the inclusion of senior managers with accountability for relevant service areas and those with professional expertise in the improvement areas.

Question 2

How often did the Patient and Client Safety Operational Group meet?

13. To the best of my knowledge and based on available records, the PCSOG met monthly. As indicated above, this was a relatively short-lived group. It was an early

response to SPI phase 2. As the Assurance Framework developed, so the PCSOG also changed, initially becoming the Patient and Client Safety Steering Group and subsequently the Safety and Quality Steering Group. These changes are reflected in updates to the Assurance Framework I have described in more detail above.

Question 3

By what means (and at what intervals) did the Patient and Client Safety Operational Group report to the Trust Board?

14. The PCSOG did not report directly to the Trust Board and was not designed to do so. However, the work of the PCSOG could have been brought to the attention of the Trust Board by a number of routes and different intervals.

15. The PCSOG initially reported to the Assurance Group of the Executive Team of the Belfast Trust and subsequently to the Assurance Committee of Trust Board. The precise reporting arrangements are shown on the Board Assurance Frameworks exhibited to this statement; this changed over time as the Belfast Trust's assurance arrangements evolved. The Assurance Group or Assurance Committee (as the case may be) would feed more directly into the work of the Trust Board.

16. If the PCSOG identified an area of concern, the Group could escalate that concern through the relevant Director and/or to the Assurance Group. If necessary, the Assurance Group could then escalate further to the Trust Board in line with applicable governance arrangements. The PCSOG would not report directly to the Trust Board, as to do so would be beyond the accountability arrangements in place for the work of the PCSOG.

17. An example of how these reporting arrangements worked is shown in the September 2009 Minutes of the PCSOG, attached behind Tab 4. They included reference to Infection Prevention and Control performance reports (exhibited

behind Tab 9). Those reports were then reported to the Assurance Committee meeting in October 2009.

18. The decision about what to do with information escalated by the PCSOG to the Assurance Group / Assurance Committee would rest with the Assurance Group or Committee, as the case may be. That being said, some of the routine functions performed by the PCSOG were relevant to the work of the Trust Board or Executive Team. For example, aspects of the work of the PCSOG, and its successors, were reflected in the monthly Trust Board performance reports, such as that exhibited behind Tab 10. The PCSOG was also involved in the development and implementation of the Infection Prevention and Patient Safety Delivery Plan for 2009/10, which was taken to Assurance Committee. The Assurance Committee minutes from 3 June 2009 and 20 October 2009, which demonstrate this, are exhibited behind Tab 11.

Question 4

Do you recollect MAH being on the agenda and, if so, how often?

19. The focus of the PCSOG was on areas of care, for example intensive care and general ward, rather than on individual hospital sites. Accountability was through service groups rather than by hospital site. The work had an acute focus so was less directly relevant to MAH. However, as part of the continuing roll out of quality improvement the Mental Health and Leaning Disability Directorate was integral to the group and developed its own improvement targets. This related to the entire Directorate, rather than specifically to MAH.

Question 5

Do you recollect the Patient and Client Safety Operational Group receiving reports or other materials relating to MAH? If so, please give details and indicate how the Group dealt with such material?

20. The PCSOG dealt with reports from the Service Group for Mental Health and Learning Disability, in respect of the improvement targets it had set. I do not recall the PCSOG receiving any report or other materials relating specifically to MAH, although its work was not related to individual hospital sites.

Question 6

Do you recollect the Patient and Client Safety Operational Group ever seeking external assurance, that is from persons who were not BHSCT employees, on matters within its remit? If so, please give details.

21. The Terms of Reference reflect the fact that the group maintained a link to the Institute for Healthcare Improvement, for expert support and also constructive challenge. It was also engaging with the Service Delivery Unit (SDU), a body established at that time by the Department of Health Social Services and Public Safety (DHSSPS) to support and drive performance improvement. SDU looked at a range of performance indicators, that overlapped with the SPI, including infection control and crash calls. It had a performance management role in respect of Trusts.

22. The PSCOG also worked in a collaborative way with the then Health and Social Care Board (HSCB) and other HSC Trusts, for example through the HSC Safety Forum, to drive improvement, sharing experience and results. This reflects the ethos of the SPI (see the minutes of PCSOG from 1 September 2009 and 4 May 2010, behind Tab 4.)

Question 7

Did the Patient and Client Safety Operational Group have any role in the Trust's response to inspections of MAH, including those carried out by RQIA? If so, please give details.

23. This was not the function of the PCSOG, which focused on a portfolio of improvement targets. It would have responded to external inspections that raised

issues relevant to the group's Terms of Reference, for example a visit by RQIA to the Mater Hospital, that raised issues regarding environmental cleanliness, which was considered at the meeting of PCSOG on 1 September 2009 (exhibited behind Tab 4). I am unaware that such circumstances arose in respect of MAH.

Question 8

During your time as Chair, can you recall whether the Patient and Client Safety Operational Group raised any concerns in relation to MAH with the Trust Board? If so, please give details.

24. As Chair I do not recall an occasion when the PCSOG had reason to raise a concern in relation to MAH with the Trust Board. For the reasons previously explained, given the nature of the PCSOG and what it was dealing with, I would not have expected the PCSOG to be receiving concerns related to MAH that needed to be raised with Trust Board.

Question 9

Do you recall whether the Patient and Client Safety Operational Group had a role in the decision to install and operate CCTV in MAH? If so, please give details.

25. The period of activity of the PCSOG predated any decisions regarding CCTV in MAH, by some time. In any event, any such decision would have been outwith the Terms of Reference of the PCSOG and its subsequent iterations.

Question 10

Do you wish to draw the attention of the Panel any other matters not covered by the above questions that may assist in the Panel's consideration of the Terms of Reference?

26. The sequential iterations of the Assurance Framework demonstrate the development of thinking, both locally and nationally, in respect of board accountability, clinical governance and quality improvement. Safety is a key aspect of quality. The Belfast Trust was at the forefront of quality improvement through its involvement in the Safer Patients' Initiative. The PCSOG was an initiative aimed at maintaining this position.

27. The early Assurance Framework from 2009/2010 that references the PCSOG was developed to capture the wide range of expert, professional and advisory groups that existed. Subsequently the Assurance Framework was developed to give structure to this wide array of groups, ensuring that there were clearer reporting arrangements to the Trust Board. As part of this the PCSOG was developed into a steering group, whose Terms of Reference are exhibited behind Tab 6.

28. As Medical Director I had professional oversight of doctors and dentists working in the Belfast Trust. In all service areas, concerns about doctors may arise. While it is difficult for me to remember specific details at this remove, I have availed of the assistance of the Belfast Trust to have the records reviewed in the office of Medical Director as part of my work undertaken to provide the MAH Inquiry with this statement. I am content that the limited number of concerns about doctors at Muckamore Abbey Hospital, which were brought to the attention of my office, were dealt with in a reasonable way and in line with our normal procedures. They did not relate to anything to do with the abuse of patients. No evidence of doctors being involved in or aware of the abuse of patients during my time as Medical Director has been brought to my attention, and I have no personal recollection of any such instance.

Signed: **Tony Stevens**

Dated: **30 August 2024**

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MAHI Muckamore Abbey Hospital Inquiry

MAHI Team
1st Floor
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31 Gordon Street
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11 June 2024

By Email Only
Dr Tony Stevens
tonystevens56@gmail.com

Dear Dr Stevens

Re MAHI Organisational Modules 2024: Request for Witness Statement

The Inquiry is currently preparing for the final phase of evidence. Please see enclosed a document summarising the ten organisational modules to be heard in this phase: Organisational Modules 2024.pdf (mahinquiry.org.uk).

It is anticipated that the Inquiry will hear evidence in respect of these modules in September and October 2024.

The purpose of this correspondence is to issue a request, in the first instance, for a statement from you that will assist the Inquiry in this phase of evidence. It should be regarded as a request by the Inquiry Panel for the purposes of Rule 9 of the Inquiry Rules 2006.

The Inquiry understands that you were Medical Director in BHSCT and also Chair of the Patient and Client Safety Operational Group between 2010 and 2014.

You are asked to make a statement for the following module:

M9: Trust Board

I have also enclosed for your attention a copy of the Inquiry's Terms of Reference. You will note that the module in respect of which you are asked to make a statement is primarily concerned with the evidence of those in key positions of responsibility for MAH, past and present, at Trust Board level.

Given your role as Chair of the Patient and Client Safety Operational Group for BHSCT, the Panel would be assisted if you would address the following matters specifically in your statement:

1. What was the composition and remit of the Patient and Client Safety Operational Group?

2. How often did the Patient and Client Safety Operational Group meet?

3. By what means (and at what intervals) did the Patient and Client Safety Operational Group report to the Trust Board?

4. Do you recollect MAH being on the agenda and, if so, how often?

5. Do you recollect the Patient and Client Safety Operational Group receiving reports or other material relating to MAH? If so, please give details and indicate how the Group dealt with such material?

6. Do you recollect the Patient and Client Safety Operational Group ever seeking external assurance, that is from persons who were not BHSCT employees, on matters within its remit? If so, please give details.

7. Did the Patient and Client Safety Operational Group have any role in the Trust's response to inspections of MAH, including those carried out by RQIA? If so, please give details.

8. During your time as Chair, can you recall whether the Patient and Client Safety Operational Group raised any concerns in relation to MAH with the Trust Board? If so, please give details.

9. Do you recall whether the Patient and Client Safety and Operational Group had a role in the decision to install and operate CCTV in MAH? If so, please give details.

10. Do you wish to draw to the attention of the Panel any other matters not covered by the above questions that may assist in the Panel's consideration of the Terms of Reference?

It would be helpful if you could address those questions in sequence in your statement. If you do not feel that you are in a position to assist with a particular question, you should indicate accordingly and explain why that is so.

Please note that, while the Inquiry has received and heard a considerable body of evidence about the relevant systems and processes that were in place during the timeframe of the Terms of Reference, the Inquiry will now be focusing primarily on the *adequacy and effectiveness* of those systems and processes.

Please see enclosed a Statement Format Guide that will assist with the presentation of your statement. It is important that statements made for Inquiry purposes should

be consistent in format. It is appreciated that the number of required sections will depend on the range and breadth of issues to be covered and that some flexibility will be needed to ensure the most effective presentation, but you are asked to adhere to the Guide to the extent that is possible.

You are requested to furnish the Inquiry with your completed statement by 30 August 2024. Your statement should be uploaded to the Inquiry's document management platform BOX via the following link:

https://mahinquiry.box.com/s/lotjdnx2c6o8yqsz7jvgtdmix0wi016k

Should you have any issues accessing BOX please email info@mahinquiry.org.uk and a member of the team will assist you.

Statements made for the purpose of the organisational modules will be published on the Inquiry's website.

As noted above, it is anticipated that evidence in these modules will be heard by the Inquiry in September and October 2024. If there are any dates in those months on which you will be unavailable to attend the Inquiry to give evidence, please inform the Inquiry as soon as possible by emailing the Inquiry Secretary jaclyn.richardson@mahinquiry.org.uk.

If you have any queries about this correspondence, please do not hesitate to contact me.

Yours faithfully,

Lorraine Keown
Solicitor to the Inquiry

Encs:

1. Outline of Organisational Modules April – June 2024: Organisational Modules 2024.pdf (mahinquiry.org.uk).
2. MAHI Terms of Reference.
3. OM2024 Statement Format Guide.

BOARD ASSURANCE FRAMEWORK

2009/10

Index

1. Introduction

The Board of Directors of the Belfast HSC Trust (The Board) has a responsibility to provide high quality care, which is safe for patients, clients, young people, visitors and staff and which is underpinned by the public service values of accountability, probity and openness.

The Board is responsible for ensuring it has effective systems in place for governance, essential for the achievements of its organisational objectives. The Assurance Framework provides the structure by which the Board's responsibilities are fulfilled.

The Assurance framework is an integral part of the governance arrangements for the Belfast HSC Trust and should be read in conjunction with the Corporate Plan.

The Assurance Framework and Corporate Risk Register describes the organisational objectives, identifies potential risks to their achievement, the key controls through which these risks will be managed and the sources of assurance about the effectiveness of these controls. It lays out the sources of evidence which the Board will use to be assured of the soundness and effectiveness of the systems and processes in place to meet objectives and deliver appropriate outcomes.

This framework should provide the Board with confidence that the systems, policies, and people are operating effectively, are subject to appropriate scrutiny and that the Board is able to demonstrate that they have been informed about key risks affecting the organisation.

The Directors of the Belfast HSC Trust have:

- Defined Corporate objectives [1]
- Identified principal risks that may threaten the achievement of those objectives;
- Controls in place to manage these risks, underpinned by core controls assurance standards;
- Explicit arrangements for obtaining assurance on the effectiveness of existing controls across all areas;

[1] Belfast Health and Social Care Trust – Corporate Management & Delivery Plans

On an ongoing basis the Board will:

- Assess the assurances given;
- Identify where there are gaps in controls and/or assurances;
- Take corrective action where gaps have been identified; and
- Maintain dynamic risk management arrangements including, crucially, a regularly reviewed risk register.

2. Strategic Context

In order to produce the outcomes for which the Department of Health, Social Services and Public Safety (the Department) is ultimately responsible, a strong partnership is required between the Department and those HPSS organisations which commission and deliver the services that lead to those outcomes. The objectives of both partners are therefore inextricably linked.

The Minister's annual ***Priorities for Action*** (PfA)[2] reflect the *Priorities and Budget* focus on reform and modernisation of services within the context of the resources available to the Department, as well as the attainment of efficiency targets, and together they form an action plan for the HPSS.

The Trust Delivery Plan (TDP) describes how the Belfast Trust plans to use its resources to deliver health and social care services to patients, clients, children and young people, carers and families, and presents the Trust's proposals for addressing the reform and modernisation agenda and for meeting the efficiency programme targets.

3. Objective Setting

The Trust's Corporate Plan sets out the vision and purpose, core values and long term corporate objectives that will shape the strategic direction and priorities for the Trust over the next 3 – 5 years.

The Trust has five long term corporate objectives. These are:

- To provide safe, high quality and effective care
- To modernize and reform our services
- To improve health and wellbeing through engagement with our users, communities and partners
- To show leadership and excellence through organisational and workforce development
- To make the best use of our resources to improve performance and productivity.

The Corporate Plan and the Trust Delivery Plan set out annual targets to progressively deliver these corporate objectives.

[2] http://www.dhsspsni.gov.uk/prior_action/index.asp

The Trust Delivery Plan is developed annually as a response to the Department's Priority for Action targets and the commissioning plans of Health and Social Services Boards as expressed in their annual Health and Wellbeing Improvement Plans.

While the Corporate Plan incorporates these Departmental/ commissioner targets, it takes a wider view of the organisational responsibilities of the Trust, setting a range of local targets under each corporate objective.

The Corporate Objectives and associated annual targets (regional and local) are cascaded throughout the Trust by:

- Service Group Annual Performance Plans
- Service/Team annual plans
- Individual objectives

This process forms an integral part of the Trust's Performance Management and Assurance Framework.

4. What assurance means

The Board can properly fulfil their responsibilities when they have a full grasp of the principal risks facing the organisation. Based on the knowledge of risks identified, the Directors will determine the level of assurance that should be available to them with regard to those risks. There are many individuals, functions and processes, within and outside an organisation, that produce assurances. These range from statutory duties (such as those under health and safety legislation) to regulatory inspections that may or may not be HPSS-specific, to voluntary accreditation schemes and to management and other employee assurances. Taking stock of all such activities and their relationship (if any) to key risks is a substantial but necessary task.

The Board is committed to debating and making the connections between the corporate objectives, risks and the range and effectiveness of existing assurance reporting. This will require some consideration of the principle of **reasonable** rather than **absolute** assurance. In determining reasonable assurance it is necessary to balance both the likelihood of any given risk materialising and the severity of the consequences should it do so, against the cost of eliminating, reducing or minimising it (within available resources).

This framework defines the approach of the Board of the Belfast HSC Trust to **reasonable** assurance. It is clear that assurance, from whatever source, will never provide **absolute** certainty. Such a degree of assurance does not exist, and pursuit of it is counter-productive.

5. Accountability

5.1 Accountability to Minister and the DHSSPS

Health and Well Being Investment Plans and Trust Delivery Plans are the main vehicles for conveying where and by what means PfA targets, efficiency savings and service improvements will be delivered. The processes to monitor delivery of these form an integral part of the Department's monitoring and accountability arrangements and throughout the year 2007 – 08 some of these arrangements are likely to change as the Health and Social Care Authority takes on its performance monitoring responsibilities. The Belfast HSC Trust is ultimately accountable to the Minister for Health for the delivery of health and social services to the people of Northern Ireland and for good governance arrangements. Accountability mechanisms include formal reporting against the achievement of service priorities and on financial performance.

5.2 Accountability between HSS Boards and Trusts

Health and Social Services Boards and Health and Social Care Trusts are accountable to the public for the services that they commission and provide.

The basis for HPSS accountability is the Health and Personal Social Services (Northern Ireland) Order 1972[3] (the 1972 HPSS Order) and subsequent amending legislation. Article 4 of the 1972 HPSS Order imposes on the Department the duty to:

- provide or secure the provision of integrated health services in Northern Ireland designed to promote the physical and mental health of the people of Northern Ireland through the prevention, diagnosis and treatment of illness;

- provide or secure the provision of personal social services in Northern Ireland designed to promote the social welfare of the people of Northern Ireland; and

- secure the efficient coordination of health and personal social services.

Under Article 16 of the 1972 HPSS Order, the HSS Boards were established for the purpose of administering and providing health and personal social services within their respective areas. This broad remit changed in the early 1990s when

[3] S.I.1972/1265 (N.I.14)

the HPSS (NI) Order 1991[4] (augmented by the HPSS (NI) Order 1994[5]) led to the creation of HSS Trusts. The distinction drawn then between the HSS Boards' planning and commissioning of services for their resident populations, and the Trusts' provision of those services, remains to this day, and their accountability relationship rests on it.

Regarded from the accountability perspective, there are two broad categories of HPSS activity:

- Category one: those services identified as being needed and commissioned by HSS Boards from Trusts and also issues which are statutory obligations of Trusts. These comprise the full range of HPSS's business and relate to the provision of health and social services, the volume and quality of which are detailed in Service and Budget Agreements between the commissioners and the providers. They include delegated statutory functions.

- Category two: certain duties to be performed by HPSS organisations by virtue of their being public bodies. Such duties cover, for example, financial control (including value for money, regularity and probity), control of capital assets, human resources and corporate governance.

In accountability terms, there are differences between the two categories. In category one, Trusts are, initially answerable to the commissioning HSS Board(s), via their Service and Budget Agreements, for the quantity, quality and efficiency of services. This relationship has been strengthened by the introduction of the statutory duty for the quality of services commissioned for, and provided to, the population which applies to both HSS Boards and Trusts [6]. In this category, therefore, Trusts are responsible to HSS Boards for the delivery of services to the quantity, cost and quality specified in Service and Budget Agreements. (There may also be a shared responsibility between HSS Board and Trust to the Department, as in the achievement of Priorities for Action targets.)

Within this category, however, there exists a sub-set of services where a heightened degree of accountability between a Trust and HSS Board obtains. This originates in the 1994 Order, where certain functions – specified as "relevant functions" are the immediate responsibility of HSS Boards; the Trusts duly submit for approval by the relevant HSS Board and by the Department, 'schemes' setting out how they intended to discharge the functions or services in question. With the exception of those discharged under the Mental Health (NI) Order

[4] S.I. 1991/194 (N.I. 1)
[5] S.I. 1994/429 (N.I. 2)
[6] Paragraph 5 of HSS(PPM) 10/2002

1986[7], the functions in question are drawn from what are generally regarded as personal social services (including children and adoption services).

In accountability terms this means that, where a Trust scheme for a relevant function is in operation, the delegating HSS Board should monitor its operation. The Board must check that the Trust is complying with the terms of the scheme and hold the Trust to account for how it discharges that function. As a separate legal entity, accountable for the discharge of relevant statutory functions, the Trust will create sound organisational arrangements to discharge such functions effectively. The discharge by the Trust of its powers and duties under the legislation will involve: interventions in matters of personal liberty; the protection of vulnerable people; the provision of vital services; and the exercise of regulatory functions. The Trust will develop systems that are robust and capable of balancing appropriately the complex issues of protection and care.

In category two (financial control, governance, and for overall organisational performance etc) each HPSS organisation is accountable directly to the Department. HSS Boards may reasonably expect that Trusts, in responding to their commissioning requirements, will be complying with the Departmental directions etc on governance or financial control.

6. The Assurance Framework

This assurance framework provides a comprehensive and systematic approach to effectively managing the risks to meeting our objectives. The framework illustrates the wide range of assurances from internal and external sources.

The most objective assurances are those derived from independent reviewers – which will include the Regulation and Quality Improvement Authority, Departmental special enquiries or reviews and Internal and External audit. These are supplemented from non-independent sources such as performance management, multi-disciplinary audit, self assessment reports and professional monitoring and review processes within legislative and professional regulatory guidance.

It is important that as information is collated and evaluated across the Trust that this is done in a consistent and efficient way, is proportionate and minimizes duplication of work by different reviewers.

This framework provides a structure for acquiring and examining the evidence to support the Statement of Internal Control.

[7] S.I. 1986/595 (N.I .4)

Risk Management

The Belfast Trust will develop a risk management strategy that will be underpinned by its policy on risk (see Appendix A) and explain its approach to acceptable risk.

The Belfast Trust will adopt an open and learning culture that encourages continual quality improvement, but with openness when things go wrong. Processes for managing and learning from adverse incidents, complaints and litigation will be introduced as an immediate priority.
Controls assurance will remain a key process for the Belfast Trust.

The Belfast Trust will identify key Directors to be accountable for action planning against each standard. The results will be used to inform the Trust's corporate risk register and will be mainstreamed with other aspects of the Trust's Delivery Plan through the Assurance Framework.

Organisational Arrangements

Proposed organizational arrangements for governance and assurance are set out in Appendix B. An important element of the Trust's arrangements is the need for robust governance within service groups. This will be tested through the accountability review process. There are a number of internal and external mechanisms that will support this.

The **Board of Directors** is responsible for:

- Establishing the organisation's strategic direction and aims in conjunction with the Executive Management Team
- Ensuring accountability to the public for the organisation's performance
- Assuring that the organisation is managed with probity and integrity.

The membership of the Board of the Trust is defined in the Establishment Order to include the Directors of Social Work, Medicine, Nursing and Finance.

The Audit Committee

The Audit Committee (a standing committee of the Board of Directors) is comprised of non-executive directors. Its role is to assist the Board in ensuring an effective control system is in operation. This includes the effectiveness of internal financial controls, identifying financial risks, the review of internal and external audit functions and addressing the financial aspects of governance in the Belfast Trust.

The Assurance Committee

The Assurance Committee (a standing committee of the Board of Directors) is comprised of Non-Executive Directors only. Its role is to assist the Board of Directors in ensuring an effective assurance framework is in operation for all aspects of the Trusts undertakings, other than finance. The Assurance Committee is also responsible for the identification of principal risks and significant gaps in controls/assurance for consideration by the Board of Directors.

The Executive Team

The Executive Team is responsible for ensuring that the sequence of performance reports, audits and independent reports, required by the Board of Directors as part of the performance management and assurance processes, is available.

The Executive Team will ensure that governance and service improvement is embedded at all levels within the organisation and that risk management is an integral part of the accountability process. Executive Team will prepare and regularly update a corporate risk register, which will inform the management planning, service development and accountability review process.

The Assurance Group

The purpose of the Assurance Group is to co-ordinate the work of the assurance/scrutiny committees and service groups assurance quality and safety committees. The Assurance Group will be responsible on behalf of the Executive Team for developing and maintaining the assurance framework, including the corporate risk register. It will be responsible for maintaining a programme of self-assessment and independent audit/verification against required standards other than finance.

The Scrutiny, Professional & Advisory Committees

These committees report through the Assurance Group to Executive Team. They are generally expert groups that are responsible for developing assurance arrangements within specific areas of Trust activity and providing the necessary scrutiny of practice. They will also provide expert advice, supporting best practice within Service Groups.

7. Accountabilities and Responsibilities for Assurance in the Belfast Health and Social Care Trust

The following section outlines the roles and responsibilities of the Trust Board, Non-Executive Directors, Chief Executive, Directors and Operational Governance leads in respect of Governance. Good governance requires all concerned to be clear about the functions of governance and their roles and responsibilities. Good governance means promoting values for the whole organisation and demonstrating the value of good governance through behaviour; taking informed and transparent decisions, and managing risk; developing the capacity and capability of the Board of Directors to be effective and engage in stakeholders and making accountability real.

The role of the Board

The role of the Board is defined as collective responsibility for adding value to the organisation by directing and supervising the Trusts affairs. It provides active leadership of the organisation within a framework of prudent and effective controls, which enable risks to be assessed and managed. It sets the Trusts strategic aims and ensures the necessary financial and human resources are in place for the Trust to meet its objectives and review management performance. By setting the Trusts values and standards the Board ensures that the Trust's obligations to patients, the community and staff are understood and met.

The role of the Chairman

The role of the Chairman and the Chief Executive is to lead the Board and the Assurance Committee in ensuring it's effectiveness on all aspects of its role and agenda setting. He will ensure the provision of accurate and timely information to Board members and effective communication with staff, patients and the public.

The role of the Non-Executive Directors

Non-executive directors will assure themselves and the Trust Board that the Assurance Committee and its related committees are addressing key governance issues within the organisation. Their responsibilities include strategy, by constructively challenging and contributing to the development of strategy; performance, through scrutiny of the performance of management in meeting agreed goals and objectives; risk, by satisfying themselves that financial and other information is accurate and that financial controls and systems of risk management are robust and defensible. Non Executive Directors are responsible for ensuring the Board acts in the best interests of the public and is fully accountable to the public for the services provided by the Trust.

The role of the Chief Executive

The Chief Executive through his leadership creates the vision for the Board and the Trust to modernise and improve services. He is responsible for the Statutory Duty of Quality. He is responsible for ensuring that the Board is empowered to govern the Trust and that the objectives it sets are accomplished through effective and properly controlled executive action. His responsibilities include leadership, delivery, performance management, governance and accountability to the Board to meet their objectives and to the Department of Health and Social Services and Public Safety as Accountable Officer.

As Accountable Officer, the Chief Executive has responsibility for ensuring that the Trust meets all of its statutory and legal requirements and adheres to guidance issued by the Department in respect of governance. This responsibility encompasses the elements of financial control, organisational control, clinical and social care governance, Health and Safety and risk management.

The role of the Executive Team

The Executive Team is accountable to the Chief Executive for key functions and for ensuring effective governance arrangements are in place in their individual areas of responsibility. Collectively the Executive Team is responsible for providing the systems, processes and evidence of governance. The Executive Team are responsible for ensuring that the Board, as a whole, are kept appraised of progress, changes and any other issues affecting the performance and assurance framework.

Role of the Chief Operating Officer/Deputy Chief Executive

The Chief Operating officer is accountable to the Chief Executive for ensuring that the Trust operates sound systems of operational performance, working in conjunction with the Director of Finance.

The Chief Operating Officer has a lead role in ensuring organisational progress against the Trust objectives and Management Plan.

As part of the Trust's performance framework the Corporate and Service Group Directors, together with the Chief Operating Officer, are accountable for the Trust Management Plan and individual Service Group Directorate's plans based on the, Quality, Patient and Client Safety objectives and standards, financial objectives and targets agreed by the Board. The Chief Operating Officer maintains the review/monitoring process. The outcome of the review/monitoring process will contribute to the Board's Performance and Assurance Framework.

The Medical Director – Lead Director responsible for Integrated Governance and Risk Management and Involving Clinical Governance

The Medical Director is accountable to the Chief Executive for the strategic development of the integrated governance arrangements, including risk management excluding finance. This responsibility is shared with the Director of Nursing, Director of Social Work and Director of Finance.

He ensures, on behalf of the Chief Executive, that the Trust has in place the systems and structure to meet it's statutory and legal responsibilities relating to his area of accountability and that these are based on good practice and guidance from the Department and other external advisory bodies.

The Medical Director ensures the Trust Board receives the relevant information/annual reports required in the Boards information schedule. He will ensure that the Chief Executive and the Trust Board are kept appraised of progress and any changes in requirements, drawing to their attention gaps which may impact adversely on the Boards ability to fulfil it's governance responsibilities. As part of the Trust's performance and assurance process, the Chief Operating Officer and Medical Director oversee the review and monitoring process covering performance, integrated governance and risk management.

The Director of Nursing and Lead Director for Governance in Nursing

The Director of Nursing is responsible for all issues relating to nursing and midwifery policy, statutory and regulatory requirements and functions, professional practice and workforce requirements. She is responsible for providing strong professional leadership and for ensuring high standards of nursing and patient/client experience in all health and social care services.

The Director of Social Services – Lead Director for Governance in Social Services

The Director of Social Services ensures on behalf of the Chief Executive and the Board of Directors that the systems and structures are in place for the Trust to meet it's delegated Statutory Functions in child care services, services to people with a mental illness, learning disability, physical disability and older people.

The Director of Social Services ensures that the Board of Directors receives the relevant information, including the annual Statutory Functions Report and the Corporate Parenting reports. He/she is responsible for social work standards within the Trust including professional workforce issues as stipulated within the legislative regulations and guidance.

Director of Finance – Lead Director responsible for Financial Governance

The Director of Finance is accountable to the Chief Executive for the strategic development and operational management of the Trust's financial control systems. He/she is, with the Chief Executive, responsible for ensuring that the statutory accounts of the Trust are prepared in accordance with Department of Health and Treasury requirements.

The Director of Finance ensures that, on behalf of the Chief executive, the Trust has in place systems and structure to meet its statutory and legal responsibilities relating to finance, financial management and financial controls. He/she ensures the Trust has in place Standing Orders and Standing Financial Instructions, including a Reservation of powers and Scheme of Delegation, which accord with the Department of Health and Social Services model and takes responsibility for the financial management aspect of internal controls.

Director of Human Resources

The Director of Human Resources is accountable to the Chief Executive for ensuring the Trust has in place systems of staff management which meet legal and statutory requirements and are based on best practice and guidance from the Department of health and other external advisory bodies. Working closely with other Directors he/she maintains a system of monitoring the application of the Trust's Human Resources Strategy, Policies and procedures and, on behalf of the Board, ensures it receives the relevant information/annual reports according to the Board's information schedule.

The Trust's Learning and Development function falls within the remit of the Director of Human Resources. As such he/she works with relevant Directors to ensure the system in place meets the educational needs of staff and highlights management and clinical governance processes.

Director of Planning and Redevelopment

The Director of Planning and Redevelopment is responsible for ensuring that there are proper systems in place for the maintenance and safe management of all of the Belfast Trust's estates and assets. The Director will carry out risk assessments to identify and prioritise capital expenditure. The Director will ensure that the Belfast Trust meets its statutory obligations with regards to the management of fire safety, and will report annually to the Board of Directors.

Service Group Directors

The Service Group Directors are:-

- Director of Older People, General Medicine and Surgery
- Director of Mental Health and Learning Disability Services
- Director of Specialist Services
- Director of Clinical Services
- Director of Family and Children's Services

The Service Group Directors are responsible for ensuring that within their area of responsibility, staff are aware of and comply with the process of sound governance. Each Service Group will establish a Service Group Assurance Committee and develop systems and structures to support the various governance strategies, policies and procedures and ensure these are audited and monitored. Quality, safety and service improvement are the expected outcome to achieve improved performance overall.

As part of the Trust's arrangements for performance management and the assurance framework, the Service Group Directors agree with the Chief Executive and the Chief Operating officer, the objectives and targets for their Service Group based upon the management plan agreed by the Board. These are cascaded through the service as part of the Trust's individual objective setting, appraisal and performance development processes and Service Group Directorate performance reviews.

The Service Group Directorates are supported and facilitated to meet their governance requirements by their dedicated governance leads and the risk and governance staff of the Medical Director's office.

8. Board Reporting

It is important that key information is reported to the Board to provide structured assurances about where risks are being effectively managed and objectives are being delivered. This will allow the Board to decide on an efficient use of their resources and address the issues identified in order to improve the quality and safety of services.

The Chief Operating Officer/Deputy Chief Executive, Medical Director and Finance Director will be responsible for providing the monitoring and support for the Assurance Framework and providing an updated position on performance and governance, the effectiveness of the Trust's system of internal control; providing details of positive assurances on principal risks where controls are effective and objectives are being met; where the organisation's achievement of

its objectives is at risk through significant gaps in control; and where there are gaps in assurances about the organisation's ability to achieve its corporate objectives.

It will be important for the quality and robustness of this assurance framework to be evaluated by the Board annually.

Appendix A

RISK MANAGEMENT POLICY STATEMENT (INCORPORATING A DEFINITION OF ACCEPTABLE RISK)

The policy statement outlined below represents the Belfast Trust's corporate philosophy towards risk management. The purpose of this statement is to ensure that our staff and other stakeholders are aware of the Belfast Trust's responsibilities and their individual responsibilities for risk evaluation and control.

Policy Statement:

All staff and contractors must recognise that risk management is everyone's business. All staff will be actively encouraged to identify concerns about potentially harmful circumstances and to report adverse incidents, near misses and mistakes.

The Belfast Trust is committed to providing and safeguarding the highest standards of care for patients and service users. The Belfast Trust will do its reasonable best to protect patients and service users, staff, the public, other stakeholders and the organisation's assets and reputation, from the risks arising through its undertakings. The Belfast Trust will achieve this by maintaining systematic processes for the evaluation and control of risk.

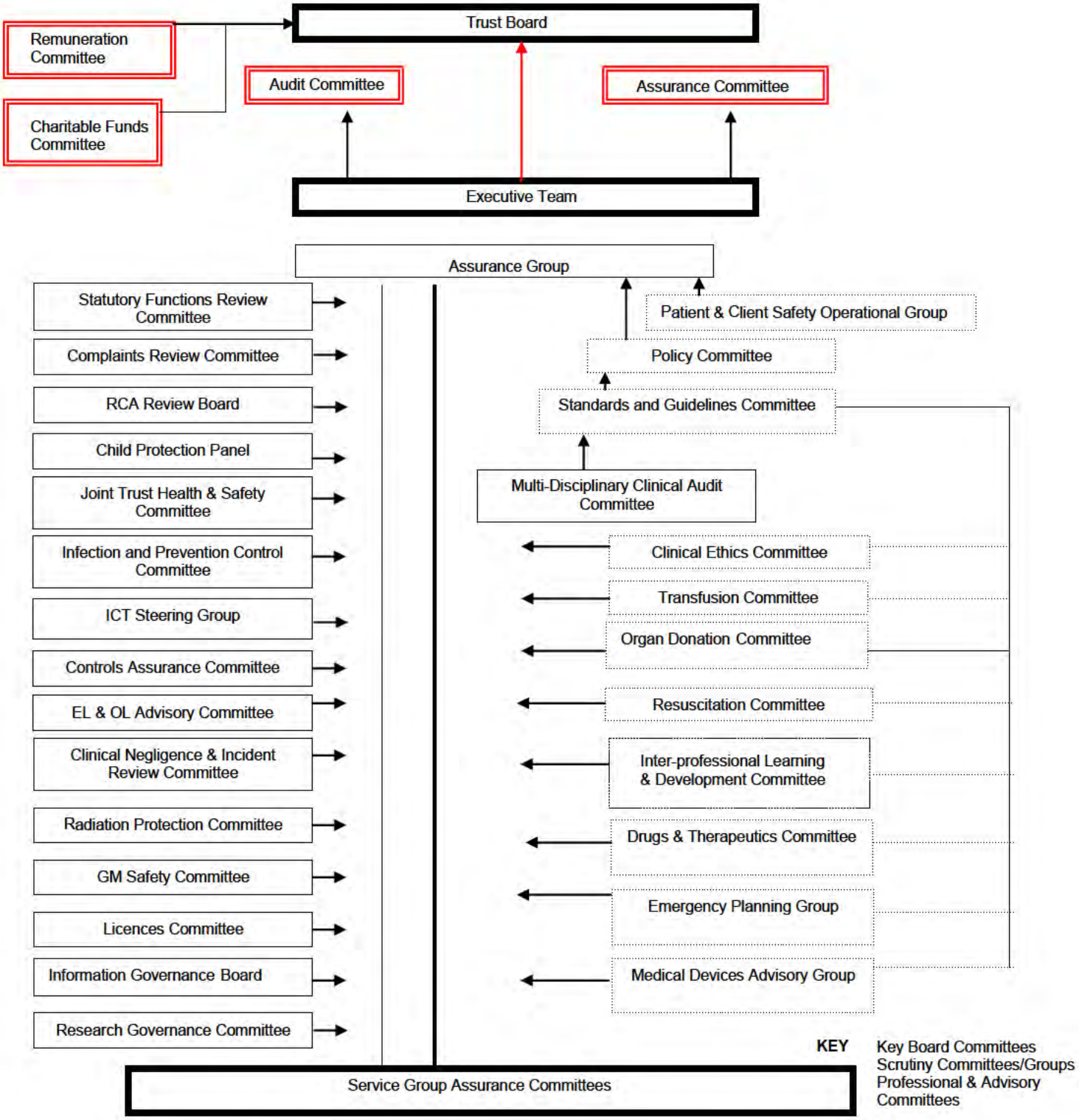
The Belfast Trust recognises that a robust assurance framework and a risk management strategy, integrated with performance management and focused on the organisation's objectives will support this commitment. The Belfast Trust will provide a safe environment that encourages learning and development through *"an open and fair culture"*.

The Belfast Trust acknowledges that it is impossible to eliminate all risks and that systems of control should not be so rigid that they stifle innovation and imaginative use of limited resources. Inevitably the Belfast Trust may have to set priorities for the management of risk. It will identify acceptable risks through a systematic and objective process. There is a need to balance potentially high financial costs of risk elimination against the severity and likelihood of potential harm. The Belfast Trust will balance the acceptability of any risk against the potential advantages of new and innovative methods of service.

The Belfast Trust recognises that risks to its objectives may be shared with or principally owned by other individuals or organisations. The Belfast Trust will involve its service users, public representatives, contractors and other external stakeholders in the development and implementation of a risk management strategy.

Appendix B

ASSURANCE COMMITTEE
SUB COMMITTEE STRUCTURE



BOARD ASSURANCE FRAMEWORK

2010/11

Index

1. Introduction

The Board of Directors of the Belfast HSC Trust (The Board) has a responsibility to provide high quality care, which is safe for patients, clients, young people, visitors and staff and which is underpinned by the public service values of accountability, probity and openness.

The Board is responsible for ensuring it has effective systems in place for governance, essential for the achievements of its organisational objectives. The Assurance Framework provides the structure by which the Board's responsibilities are fulfilled.

The Assurance Framework is an integral part of the governance arrangements for the Belfast HSC Trust and should be read in conjunction with the Corporate Plan.

The Assurance Framework (and Principal Risk Document) describes the organisational objectives, identifies potential risks to their achievement, the key controls through which these risks will be managed and the sources of assurance about the effectiveness of these controls. It lays out the sources of evidence which the Board will use to be assured of the soundness and effectiveness of the systems and processes in place to meet objectives and deliver appropriate outcomes.

This framework should provide the Board with confidence that the systems, policies, and people are operating effectively, are subject to appropriate scrutiny and that the Board is able to demonstrate that they have been informed about key risks affecting the organisation.

The Directors of the Belfast HSC Trust have:

- Defined Corporate objectives[1];
- Identified principal risks that may threaten the achievement of those objectives;
- Controls in place to manage these risks, underpinned by core Controls Assurance Standards;
- Explicit arrangements for obtaining assurance on the effectiveness of existing controls across all areas;

[1] Belfast Health and Social Care Trust – Corporate Management & Delivery Plans

On an ongoing basis the Board will:

- Assess the assurances given;
- Identify where there are gaps in controls and/or assurances;
- Take corrective action where gaps have been identified; and
- Maintain dynamic risk management arrangements including, crucially, a regularly reviewed risk register.

2. Strategic Context

In order to produce the outcomes for which the Department of Health, Social Services and Public Safety (the Department) is ultimately responsible, a strong partnership is required between the Department and those HPSS organisations which commission and deliver the services that lead to those outcomes. The objectives of both partners are therefore inextricably linked.

The Minister's annual ***Priorities for Action*** (PfA)[2] reflect the *Priorities and Budget* focus on reform and modernisation of services within the context of the resources available to the Department, as well as the attainment of efficiency targets, and together they form an action plan for the HPSS.

The Trust Delivery Plan (TDP) describes how the Belfast Trust plans to use its resources to deliver health and social care services to patients, clients, children and young people, carers and families, and presents the Trust's proposals for addressing the reform and modernisation agenda and for meeting the efficiency programme targets.

3. Objective Setting

The Trust's Corporate Plan sets out the vision and purpose, core values and long term corporate objectives that will shape the strategic direction and priorities for the Trust over the next 3 – 5 years.

The Trust has five long term corporate objectives. These are:

- To provide safe, high quality and effective care;
- To modernise and reform our services;
- To improve health and wellbeing through engagement with our users, communities and partners;
- To show leadership and excellence through organisational and workforce development;
- To make the best use of our resources to improve performance and productivity.

The Corporate Plan and the Trust Delivery Plan set out annual targets to progressively deliver these corporate objectives.

[2] http://www.dhsspsni.gov.uk/prior_action/index.asp

The Trust Delivery Plan is developed annually as a response to the Department's Priority for Action targets and the commissioning plans of Health and Social Services Boards as expressed in their annual Health and Wellbeing Improvement Plans.

While the Corporate Plan incorporates these Departmental/ commissioner targets, it takes a wider view of the organisational responsibilities of the Trust, setting a range of local targets under each corporate objective.

The Corporate Objectives and associated annual targets (regional and local) are cascaded throughout the Trust by:

- Service Group Annual Performance Plans;
- Service/Team annual plans;
- Individual objectives.

This process forms an integral part of the Trust's Performance Management and Assurance Framework.

4. What assurance means

The Board can properly fulfil its responsibilities when it has a full grasp of the principal risks facing the organisation. Based on the knowledge of risks identified, the Directors will determine the level of assurance that should be available to them with regard to those risks. There are many individuals, functions and processes, within and outside an organisation, that produce assurances. These range from statutory duties (such as those under health and safety legislation) to regulatory inspections that may or may not be HPSS-specific, to voluntary accreditation schemes and to management and other employee assurances. Taking stock of all such activities and their relationship (if any) to key risks is a substantial but necessary task.

The Board is committed to debating and making the connections between the corporate objectives, risks and the range and effectiveness of existing assurance reporting. This will require some consideration of the principle of **reasonable** rather than **absolute** assurance. In determining reasonable assurance it is necessary to balance both the likelihood of any given risk materialising and the severity of the consequences should it do so, against the cost of eliminating, reducing or minimising it (within available resources).

This framework defines the approach of the Board of the Belfast HSC Trust to **reasonable** assurance. It is clear that assurance, from whatever source, will never provide **absolute** certainty. Such a degree of assurance does not exist, and pursuit of it is counter-productive.

5. Accountability

5.1 Accountability to Minister and the DHSSPS

Health and Well Being Investment Plans and Trust Delivery Plans are the main vehicles for conveying where and by what means PfA targets, efficiency savings and service improvements will be delivered. The processes to monitor delivery of these form an integral part of the Department's monitoring and accountability arrangements and throughout the year 2007 – 08 some of these arrangements are likely to change as the Health and Social Care Authority takes on its performance monitoring responsibilities. The Belfast HSC Trust is ultimately accountable to the Minister for Health for the delivery of health and social services to the people of Northern Ireland and for good governance arrangements. Accountability mechanisms include formal reporting against the achievement of service priorities and on financial performance.

5.2 Accountability between HSS Boards and Trusts

Health and Social Services Boards and Health and Social Care Trusts are accountable to the public for the services that they commission and provide.

The basis for HPSS accountability is the Health and Personal Social Services (Northern Ireland) Order 1972[3] (the 1972 HPSS Order) and subsequent amending legislation. Article 4 of the 1972 HPSS Order imposes on the Department the duty to:

- provide or secure the provision of integrated health services in Northern Ireland designed to promote the physical and mental health of the people of Northern Ireland through the prevention, diagnosis and treatment of illness;

- provide or secure the provision of personal social services in Northern Ireland designed to promote the social welfare of the people of Northern Ireland; and

- secure the efficient coordination of health and personal social services.

Under Article 16 of the 1972 HPSS Order, the HSS Boards were established for the purpose of administering and providing health and personal social services within their respective areas. This broad remit changed in the early 1990s when the HPSS (NI) Order 1991[4] (augmented by the HPSS (NI) Order 1994[5]) led to

[3] S.I.1972/1265 (N.I.14)
[4] S.I. 1991/194 (N.I. 1)

the creation of HSS Trusts. The distinction drawn then between the HSS Boards' planning and commissioning of services for their resident populations, and the Trusts' provision of those services, remains but the HSS Boards functions have now been subsumed into those of the single regional Health & Social Care Board (HSCB). The Board was established in April 2009 by the Health and Social Care (Reform) Act (Northern Ireland) 2009 and includes five Local Commissioning Groups (LCGs) coterminous with the Trusts, Public Health Agency (PHA), a Business Services Organisation (BSO) and a Patient and Client Council (PCC).

Regarded from the accountability perspective, there are two broad categories of HPSS activity:

- Category one: those services identified as being needed and commissioned by HSS Boards from Trusts and also issues which are statutory obligations of Trusts. These comprise the full range of HPSS's business and relate to the provision of health and social services, the volume and quality of which are detailed in Service and Budget Agreements between the commissioners and the providers. They include delegated statutory functions.

- Category two: certain duties to be performed by HPSS organisations by virtue of their being public bodies. Such duties cover, for example, financial control (including value for money, regularity and probity), control of capital assets, human resources and corporate governance.

In accountability terms, there are differences between the two categories. In category one, Trusts are, initially answerable to the HSCB, via their Service and Budget Agreements, for the quantity, quality and efficiency of services. This relationship has been strengthened by the introduction of the statutory duty for the quality of services commissioned for, and provided to, the population which applies to both the HSCB and Trusts [6]. In this category, therefore, Trusts are responsible to the HSCB for the delivery of services to the quantity, cost and quality specified in Service and Budget Agreements.

Trusts, as corporate entities, are responsible in law for the discharge of statutory functions. The Trust is accountable to the HSCB for the discharge of those statutory functions delegated by the HSCB (relevant functions) and those conferred directly on Trusts by primary legislation. It is obliged to establish sound organisational arrangements to discharge such functions effectively. The majority of these functions relate to services provided by the Trust's professional Social Work and Social Care workforce.

[5] S.I. 1994/429 (N.I. 2)
[6] Paragraph 5 of HSS(PPM) 10/2002

The Scheme for the Delegation of Statutory Functions (the Scheme) sets out for each Service Sector the statutory duties delegated by the HSCB to the Trust and the accountability arrangements pertaining to these functions.

The Scheme specifies the organisational control and assurance processes informing the Trust's discharge of its statutory functions.

The nature and scope of the statutory functions and related services discharged by the Trust give rise to enhanced levels of public scrutiny. These include interventions in matters of personal liberty, the protection of vulnerable children and adults, the Trust's corporate parenting responsibilities, the provision of vital services and the exercise by the Trust of regulatory functions. Their effective discharge is central to organisational integrity. As a consequence, they have a heightened organisational and corporate significance and related assurance profile. The Trust is required to have in place systems that are robust and capable of balancing appropriately the complex issues of protection and care.

The Trust is accountable to the HSCB for the effective discharge of its statutory functions as well as the quantity, quality and efficiency of the related services it provides. The HSCB has the authority to monitor and evaluate such services and requires the Trust to produce an annual report on how it has discharged its relevant functions.

In category two (financial control, governance, and for overall organisational performance etc) the HSCB is accountable directly to the Department. The HSCB may reasonably expect that Trusts, in responding to their commissioning requirements, will be complying with the Departmental directions etc on governance or financial control.

6. The Assurance Framework

This Assurance Framework provides a comprehensive and systematic approach to effectively managing the risks to meeting our objectives. The framework illustrates the wide range of assurances from internal and external sources.

The most objective assurances are those derived from independent reviewers – which will include the Regulation and Quality Improvement Authority, Departmental special inquiries or reviews and Internal and External audit. These are supplemented from non-independent sources such as performance management, multi-disciplinary audit, self-assessment reports and professional monitoring and review processes within legislative and professional regulatory guidance.

The role of the Courts in the 'regulation' and the holding of the Trust to account with regard to the discharge of its statutory functions is of key importance.

It is important that as information is collated and evaluated across the Trust that this is done in a consistent and efficient way, is proportionate and minimises duplication of work by different reviewers.

This framework provides a structure for acquiring and examining the evidence to support the Statement of Internal Control.

Risk Management

The Belfast Trust will develop a risk management strategy that will be underpinned by its policy on risk (see Appendix A) and explain its approach to acceptable risk.

The Belfast Trust will adopt an open and learning culture that encourages continual quality improvement, but with openness when things go wrong. Processes for managing and learning from adverse incidents, complaints and litigation will be introduced as an immediate priority.

Controls Assurance will remain a key process for the Belfast Trust. The Belfast Trust will identify key Directors to be accountable for action planning against each standard. The results will be used to inform the Trust's corporate risk register and will be mainstreamed with other aspects of the Trust's Delivery Plan through the Assurance Framework.

Organisational Arrangements

Proposed organisational arrangements for governance and assurance are set out in Appendix B. An important element of the Trust's arrangements is the need for robust governance within Directorates. This will be tested through the accountability review process. There are a number of internal and external mechanisms that will support this.

The **Board of Directors** is responsible for:

- Establishing the organisation's strategic direction and aims in conjunction with the Executive Management Team;
- Ensuring accountability to the public for the organisation's performance;
- Assuring that the organisation is managed with probity and integrity.

The membership of the Board of the Trust is defined in the Establishment Order to include the Directors of Social Work, Medicine, Nursing and Finance.

The Audit Committee

The Audit Committee (a standing committee of the Board of Directors) is comprised of Non-Executive Directors. Its role is to assist the Board in ensuring

an effective control system is in operation. This includes the effectiveness of internal financial controls, identifying financial risks, the review of internal and external audit functions and addressing the financial aspects of governance in the Belfast Trust.

The Assurance Committee

The Assurance Committee (a standing committee of the Board of Directors) is comprised of Non-Executive Directors only. Its role is to assist the Board of Directors in ensuring an effective Assurance Framework is in operation for all aspects of the Trust's undertakings, other than finance. The Assurance Committee is also responsible for the identification of principal risks and significant gaps in controls/assurance for consideration by the Board of Directors.

The Executive Team

The Executive Team is responsible for ensuring that the sequence of performance reports, audits and independent reports, required by the Board of Directors as part of the performance management and assurance processes, is available.

The Executive Team will ensure that governance and service improvement is embedded at all levels within the organisation and that risk management is an integral part of the accountability process. Executive Team will prepare and regularly update a corporate risk register, which will inform the management planning, service development and accountability review process.

The Assurance Group

The purpose of the Assurance Group is to co-ordinate the work of the assurance/scrutiny committees and Directorates' assurance quality and safety committees. The Assurance Group will be responsible on behalf of the Executive Team for developing and maintaining the Assurance Framework, including the Principal Risk Document. It will be responsible for maintaining a programme of self-assessment and independent audit/verification against required standards other than finance.

The Expert Advisory Committees (Appendix B)

These committees report through the Assurance Group to Executive Team. They are generally expert groups that are responsible for developing assurance arrangements within specific areas of Trust activity and providing the necessary scrutiny of practice. They will also provide expert advice, supporting best practice within Directorates.

7. Accountabilities and Responsibilities for Assurance in the Belfast Health and Social Care Trust

The following section outlines the roles and responsibilities of the Trust Board, Non-Executive Directors, Chief Executive, Directors and Operational Governance leads in respect of Governance. Good governance requires all concerned to be clear about the functions of governance and their roles and responsibilities. Good governance means promoting values for the whole organisation and demonstrating the value of good governance through behaviour; taking informed and transparent decisions, and managing risk; developing the capacity and capability of the Board of Directors to be effective and engage in stakeholders and making accountability real.

The role of the Board

The role of the Board is defined as collective responsibility for adding value to the organisation by directing and supervising the Trusts affairs. It provides active leadership of the organisation within a framework of prudent and effective controls, which enable risks to be assessed and managed. It sets the Trust's strategic aims and ensures the necessary financial and human resources are in place for the Trust to meet its objectives and review management performance. By setting the Trust's values and standards, the Board ensures that the Trust's obligations to patients, the community and staff are understood and met.

The role of the Chairman

The role of the Chairman and the Chief Executive is to lead the Board and the Assurance Committee in ensuring its effectiveness on all aspects of its role and agenda setting. He will ensure the provision of accurate and timely information to Board members and effective communication with staff, patients and the public.

The role of the Non-Executive Directors

Non-Executive Directors will assure themselves and the Trust Board that the Assurance Committee and its related committees are addressing key governance issues within the organisation. Their responsibilities include strategy, by constructively challenging and contributing to the development of strategy; performance, through scrutiny of the performance of management in meeting agreed goals and objectives; risk, by satisfying themselves that financial and other information is accurate and that financial controls and systems of risk management are robust and defensible. Non-Executive Directors are responsible for ensuring the Board acts in the best interests of the public and is fully accountable to the public for the services provided by the Trust.

The role of the Chief Executive

The Chief Executive through his leadership creates the vision for the Board and the Trust to modernise and improve services. He is responsible for the Statutory Duty of Quality. He is responsible for ensuring that the Board is empowered to govern the Trust and that the objectives it sets are accomplished through effective and properly controlled executive action. His responsibilities include leadership, delivery, performance management, governance and accountability to the Board to meet their objectives and to the Department of Health and Social Services and Public Safety as Accountable Officer.

As Accountable Officer, the Chief Executive has responsibility for ensuring that the Trust meets all of its statutory and legal requirements and adheres to guidance issued by the Department in respect of governance. This responsibility encompasses the elements of financial control, organisational control, clinical and social care governance, Health and Safety and risk management.

The role of the Executive Team

The Executive Team is accountable to the Chief Executive for key functions and for ensuring effective governance arrangements are in place in their individual areas of responsibility. Collectively the Executive Team is responsible for providing the systems, processes and evidence of governance. The Executive Team is responsible for ensuring that the Board, as a whole, is kept appraised of progress, changes and any other issues affecting the performance and assurance framework.

The role of the Deputy Chief Executive / Director of Human Resources

The Deputy Chief Executive has a key role in ensuring organisational progress against the Trust's objectives and Corporate Plan.

The Director of Human Resources is accountable to the Chief Executive for ensuring the Trust has in place systems of staff management which meet legal and statutory requirements and are based on best practice and guidance from the Department of Health and other external advisory bodies. Working closely with other Directors he/she maintains a system of monitoring the application of the Trust's Human Resources Strategy, policies and procedures and, on behalf of the Board, ensures it receives the relevant information/annual reports according to the Board's information schedule.

The Trust's Learning and Development function falls within the remit of the Director of Human Resources. As such he/she works with relevant Directors to ensure the system in place meets the educational needs of staff and highlights management and clinical governance processes.

The role of the Director of Finance

The Director of Finance is accountable to the Chief Executive for the strategic development and operational management of the Trust's financial control systems. He is, with the Chief Executive, responsible for ensuring that the statutory accounts of the Trust are prepared in accordance with the Department of Health and Treasury requirements.

The Director of Finance ensures that, on behalf of the Chief Executive, the Trust has in place systems and structures to meets it statutory and legal responsibilities relating to finance, financial management and financial controls. He ensures that the Trust has in place Standing Orders and Standing Financial Instructions, including Reservation of Powers and Scheme of Delegation, which accord with the Department of Health and Social Services model and takes responsibility for the financial management aspect of internal controls.

The Medical Director – Lead Director responsible for Integrated Governance and Risk Management, including Clinical Governance

The Medical Director is accountable to the Chief Executive for the strategic development of the integrated governance arrangements, including risk management and excluding finance. This responsibility is shared with the Director of Nursing, Director of Social Work and Director of Finance.

He ensures, on behalf of the Chief Executive, that the Trust has in place the systems and structure to meet its statutory and legal responsibilities relating to his area of accountability and that these are based on good practice and guidance from the Department and other external advisory bodies.

The Medical Director ensures the Trust Board receives the relevant information/annual reports required in the Board's information schedule. He will ensure that the Chief Executive and the Trust Board are kept appraised of progress and any changes in requirements, drawing to their attention gaps which may impact adversely on the Board's ability to fulfil its governance responsibilities. As part of the Trust's performance and assurance process, the Chief Operating Officer and Medical Director oversee the review and monitoring process covering performance, integrated governance and risk management.

The Director of Nursing and User Experience

The Director of Nursing is responsible for all issues relating to nursing and midwifery policy, statutory and regulatory requirements and functions, professional practice and workforce requirements. She is responsible for providing strong professional leadership and for ensuring high standards of nursing and patient/client experience in all health and social care services.

The Director of Social Work – Lead Director for Governance in Social Services

The Director of Social Work is responsible for ensuring the effective discharge of statutory functions across all Service Sectors and the establishment of organisational arrangements and structures to facilitate same. She/he is required to report directly to Trust Board on the discharge of these functions, including the presentation of the annual Statutory Functions Report and six-monthly Corporate Parenting reports.

The Director of Social Work provides professional leadership to and is responsible for the maintenance of professional standards and all regulatory issues pertaining to the Trust's social work and social care workforce.

The Director of Planning and Redevelopment

The Director of Planning and Redevelopment is responsible for ensuring that there are proper systems in place for the maintenance and safe management of all of the Belfast Trust's estates and assets. The Director will carry out risk assessments to identify and prioritise capital expenditure. The Director will ensure that the Belfast Trust meets its statutory obligations with regards to the management of fire safety, and will report annually to the Board of Directors.

The Director of Performance and Service Delivery

The Director of Performance and Service Delivery is accountable to the Chief Executive for ensuring that a performance and accountability framework suitable for the delivery of the Trust Delivery Plan and Corporate Plan is in place, and ensuring that the Trust operates sound systems of operational performance.

Directorate Directors

The Directorate Directors are:-

- Director of Cancer and Specialist Services;
- Director of Specialist Hospitals and Child Health;
- Director of Social and Primary Care;
- Director of Acute Services.

The Directorate Directors are responsible for ensuring that within their area of responsibility, staff are aware of and comply with the process of sound governance. Each Directorate will establish a Directorate Assurance Committee and develop systems and structures to support the various governance strategies, policies and procedures and ensure these are audited and monitored. Quality, safety and service improvement are the expected outcome to achieve improved performance overall.

As part of the Trust's arrangements for performance management and the assurance framework, the Directorate Directors agree with the Chief Executive and the Chief Operating Officer, the objectives and targets for their Directorate, based upon the management plan agreed by the Board. These are cascaded through the service as part of the Trust's individual objective setting, appraisal and performance development processes and Directorate performance reviews.

The Directorates are supported and facilitated to meet their governance requirements by their dedicated governance leads and the risk and governance staff of the Medical Director's office.

8. Board Reporting

It is important that key information is reported to the Board to provide structured assurances about where risks are being effectively managed and objectives are being delivered. This will allow the Board to decide on an efficient use of their resources and address the issues identified in order to improve the quality and safety of services.

The Deputy Chief Executive, Director of Finance, Medical Director and Director of Performance and Service Delivery will be responsible for providing the monitoring and support for the Assurance Framework and providing an updated position on performance and governance, the effectiveness of the Trust's system of internal control; providing details of positive assurances on principal risks where controls are effective and objectives are being met; where the organisation's achievement of its objectives is at risk through significant gaps in control; and where there are gaps in assurances about the organisation's ability to achieve its corporate objectives.

It will be important for the quality and robustness of this Assurance Framework to be evaluated by the Board annually.

Appendix A

RISK MANAGEMENT POLICY STATEMENT (INCORPORATING A DEFINITION OF ACCEPTABLE RISK)

The policy statement outlined below represents the Belfast Trust's corporate philosophy towards risk management. The purpose of this statement is to ensure that our staff and other stakeholders are aware of the Belfast Trust's responsibilities and their individual responsibilities for risk evaluation and control.

Policy Statement:

All staff and contractors must recognise that risk management is everyone's business. All staff will be actively encouraged to identify concerns about potentially harmful circumstances and to report adverse incidents, near misses and mistakes.

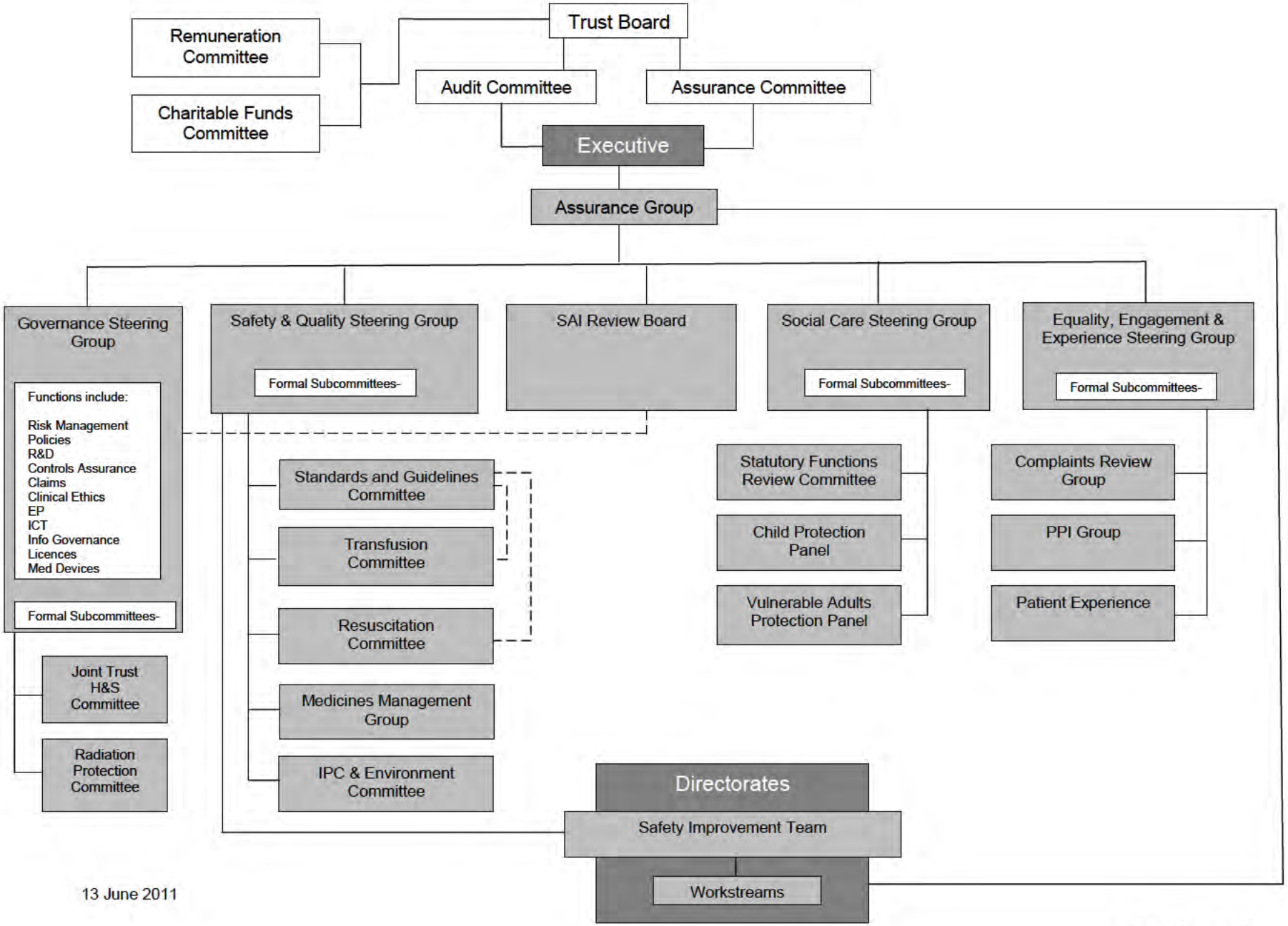
The Belfast Trust is committed to providing and safeguarding the highest standards of care for patients and service users. The Belfast Trust will do its reasonable best to protect patients and service users, staff, the public, other stakeholders and the organisation's assets and reputation, from the risks arising through its undertakings. The Belfast Trust will achieve this by maintaining systematic processes for the evaluation and control of risk.

The Belfast Trust recognises that a robust assurance framework and a risk management strategy, integrated with performance management and focused on the organisation's objectives will support this commitment. The Belfast Trust will provide a safe environment that encourages learning and development through *"an open and fair culture"*.

The Belfast Trust acknowledges that it is impossible to eliminate all risks and that systems of control should not be so rigid that they stifle innovation and imaginative use of limited resources. Inevitably the Belfast Trust may have to set priorities for the management of risk. It will identify acceptable risks through a systematic and objective process. There is a need to balance potentially high financial costs of risk elimination against the severity and likelihood of potential harm. The Belfast Trust will balance the acceptability of any risk against the potential advantages of new and innovative methods of service.

The Belfast Trust recognises that risks to its objectives may be shared with or principally owned by other individuals or organisations. The Belfast Trust will involve its service users, public representatives, contractors and other external stakeholders in the development and implementation of a risk management strategy.

ASSURANCE COMMITTEE
SUB-COMMITTEE STRUCTURE



13 June 2011

Patient & Client Safety
Operational Group Meeting

Tuesday 1st September 2009
Boardroom, Roe, KBHP

Present	Lorna Bingham, Anne McAuley, Marie Bardgett, Olive MacLeod, Eimear McCusker, Suzanne Pullins, Anne Loughrey, Cathy Jack, Ian Jamison, Brendan Mullen, Conor Campbell
Apologies	Joanna McCormick, Mairead Mitchell, Tony Stevens, Janet Johnson, Mary McElroy, Patricia Donnelly, Nigel Keery, June Champion

Item		Action
1.	**MINUTES OF LAST MEETING** These were agreed.	
2.	**ANTIMICROBIAL PRESCRIBING POLICY** Three policy formats (access / empirical prescribing / prophylaxis) have been signed off through Standards and Guidelines. The BHSCT Antimicrobial Review July 2009 document was circulated and discussed.	
3.	**HCAI** C. difficile – Latest reporting informs that infection levels have been running below trajectory allowance. Discussion took place re: possible impact of seasonality during upcoming winter months. MRSA – Reported figures show outcome levels which exceed BHSCT trajectory allowance. Discussion took place re: the failure of robust processes to impact upon MRSA figures. Root Cause Analysis (RCA) takes place in accordance with set targets and findings show that it is common for each case to have multifactorial contributing elements rather than a single theme. It was agreed that the subject of aspects not covered in reporting (e.g. neutropenia) should be raised at Trust Board level.	
4.	**HCAI RCA OVERVIEW REPORT** It was agreed that the report would be reformatted into sections for completed C. difficile RCAs and completed MRSA RCAs. Discussion took place regarding the lag in completion rate and the group were informed that a solution for the continuation of RCA follow-up must be put in place to replace R Jenkins who is now out of post. It was agreed that service groups and clinical units should be congratulated re: successful performance against C. difficile over the past quarter. It was agreed that performance management responsibility should remain within service group management. C McNicholl will be invited to attend the Patient and Client Safety Operational Group meeting re: performance management. Infection rates are now included in monthly accountability reviews.	M Bardgett SG Mgrs

	assembling of a list of reports each with an identified circulation group. DSG membership and data flow will be addressed (to include assurance and managerial responsibility) with T Stevens and J Champion.	C Jack
11.	**HAND HYGIENE REPORTING** Hand hygiene reporting was circulated and discussed with regard to compliance levels and reporting frequencies.	
12.	**HSC SAFETY FORUM** A range of HSC Safety Forum Learning Sessions will take place during September. Representatives will be nominated to attend each session.	
13.	**ENVIRONMENTAL CLEANLINESS** Report discussion was led by I Jamison. A recent RQIA visit to MIH Units J and K took place. Issues raiesed included attention required to windows, floors, bathrooms and toilets with costs estimated at £1M. Operational cleaning plans should be planned by levels within sites rather than by ward. BHSCT is working on a plan in partnership with DoH. The plan requires rewording and rescheduled timescales. The trustwide introduction of Maximiser has been delayed due to I.T. issues. A McCrory and I Jamison have been developing a reporting system. Discussion on cleaning included twice-daily bathroom cleans, Saturday cleans, standard schedule, rebasing and the impact of cost and service pressures.	
14.	**NEXT MEETING** The next meeting of the Patient & Client Safety Operational Group will take place at 10:00 – 11:30 on Tuesday 6th October 2009 at the Boardroom, Roe Centre, KBHP.	

Belfast Health and Social Care Trust

Patient & Client Safety Operational Group

Minutes of meeting

Tuesday 13th April 2010
11:00am
Boardroom, Roe, Knockbracken

Present	Tony Stevens, Ian Young, Mel Carney, Suzanne Pullins, Brenda Creaney, Ian Jamison, Eimear McCusker, Angela Carrington, June Champion, Joanna McCormick, Cathy Jack, Lorna Bingham, Conor Campbell
Apology	Olive MacLeod, Mary McElroy, Anne McAuley, Anne Loughrey, Patricia Donnelly, Nigel Keery, Shirley Murray, Janet Johnson

1.0 Apologies

All apologies were noted.

2.0 Previous Minutes

Previous minutes were agreed and no amendments made.

3.0 Matters Arising

VTE

Current annual costs of VTE implementation stand at £180,000. P Watson has completed a cost pressure paper at Dr Stevens' request. The paper indicates that the implementation of two sets of NICE guidance (one set already issued and directed at inpatients only and one set directed at all patients and not yet issued) would incur costs of £750,000. The paper is currently being rewritten to account only for implementation of the set of NICE Guidance already issued. Dr Stevens will write a letter to HSC Board regarding the implementation costs of the second set of NICE guidance.

Action: To write a VTE cost pressure paper – P Watson

Action: To write a letter to HSC Board re: implementation costs of NICE guidance (not yet issued) – Dr Stevens

VTE - Kardex Launch

A launch date of 18.05.2010 has been set. The kardex relates to adults only – regional paediatric guidance exists. Training of nurses and junior doctors (poor attendance by JDs at training to date) must be completed before launch. Service Group leaders must encourage NDLs re: organisation and completion of training which will be carried out on a site-oriented basis. NDL training will be made accessible to medics / anaesthetists. A Carrington will supply 15 kardex hard copies to Dr Stevens for discussion at Executive Team meeting. A clinical pharmacist will discuss the kardex launch at rolling calendar audit meetings of April / May 2010. The kardex launch has been profiled in Consultant E-News. AMDs / consultants will be contacted re: kardex launch.

Action: To lead NDL progression of training sessions – SG Leads

Action: To supply detail of upcoming rolling audit calendar meetings to E McCusker / A Carrington – C Campbell
Action: To co-ordinate clinical pharmacist participation at rolling audit calendar meetings – E McCusker / A Carrington
Action: To supply all Foundation Year 1 junior doctors with tutorial or standard risk assessment slides – C Jack
Action: To approach AMDs for action re: distribution of standard risk assessment slides to all consultants – A Carrington

4.0 Right Patient Right Blood (RPRB)

In relation to blood errors, discussion took place re: work carried out by S Murray on identification and competency assessment status of staff involved. Current figures warrant improvement focus and OPMS will engage in work re: clarification / improvement of competency assessment and performance. The RPRB project is being revamped. Current revision of organisational structures will consider the appointment of one leading Blood Safety Group to which the Transfusion Committee may be made accountable.
Action: To progress OPMS RPRB work (competency assessment and performance) – S Murray / L Bingham
Action: To address revamp of RBRB project – S Murray / M Armstrong
Action: To address structural placement of Blood Safety Group and Transfusion Committee – Dr Stevens

5.0 Hyponatraemia

It was agreed that BHSCT would support regional departmental setting of hyponatraemia objectives. A guideline entitled Management of Hyponatraemia in Adults has recently been issued by GAIN. BHSCT continues to advance hyponatraemia work through small cycles of change to build reliability and steady spread. Success will be measured through reliability and will commence on two wards where under 16 year-olds are nursed.
Action: To approach Dr J Johnston re: measurement plan and implementation – C Campbell

6.0 Infection Prevention and Control (IPC)

The Changing the Culture 2010 document is now in circulation. The IPC Committee will focus on outbreaks as a high priority. Anne Loughrey has drawn up an IPC Plan.

The Infection Prevention and Patient Safety (IPPS) Delivery Plan document is being updated by the Risk and Governance Group and the updated version will be completed and forwarded to the Medical Director and Director of Nursing by 23.04.2010. The Risk and Governance Group are in the process of updating the MRSA / CDI Recovery Plan. Dr Jack advised that the Mid Staffs Report was critical of a quarterly frequency of IPC Committee meetings and discussion pointed to a possible change to monthly frequency for BHSCT IPC Committee meetings. Dr Jack suggested that, given the changes in organisational structures, placement of IPC in an environmental structure would be appropriate.
Action: To maintain high-level focus on outbreaks – IPC Team
Action: To update IPPS Delivery Plan – Risk and Governance Group
Action: To update MRSA / CDI Recovery Plan – Risk and Governance Group
Action: To set the frequency for IPC Committee meetings – B Creaney

7.0 Governance Arrangements

Arrangements will divide into two streams (corporate governance and patient and client safety governance) that will be accountable to the overarching Patient and Client Safety Operational Group. The Improvement Teams will serve as cross-cutting supports for the Service Groups. A range of groups (Medicines Management / Safety, Infection Prevention and Control, Standards and Guidelines Committee, Environmental Hygiene) will be aimed at director / co-director / AMD level.

8.0 Environmental Hygiene Group

This group are currently revising terms of reference and will relaunch during May 2010 under B Creaney. B Creaney advises that (1) Environmental Hygiene and (2) Infection Prevention and Control should feature as standing items on all service group governance meeting agendas.

9.0 Co-Director Key Performance Indicators (KPIs)

Dr Stevens proposed that a set of KPIs (including HCAI and medical components) with co-directors responsible for action should be drawn up. Measures will be explored re: changes required to definition and measurement reliability.
Action: To set Co-Director KPI Plan as agenda item for next PCSOG meeting – C Campbell

10.0 Improvement Team Reporting

10.1 General Ward (GWIT)

Team membership and terms of reference were reviewed at the April 2010 GWIT meeting. I.T. representation was added to membership. Headline priorities for 2010/11 will include prevention of harm, early recognition and recovery, SBAR audit (20 per week per site), DNAR and Early Warning Scores.

Dr Jack described the requirements for effective use of the Global Trigger Tool (audit team of two nurses who will screen and one medic who will make decisions – long term commitment and embedment into ongoing culture required) for regular improvement / safety work per service group.

Discussion re: the validity of self-audit (environmental cleaning, hand hygiene) revealed that the group recognised the need for independent / validation auditing for assurance purposes. It was stated that presentation of self-audit to board level may not be reliable and may offer false assurance.

10.2 Perioperative / Critical Care

Terms of reference were reviewed and agreed (signed off by Dr Stevens) at an extraordinary meeting of PCSOG held on 23.03.2010 (originally on agenda of 09.03.2010 PCSOG meeting that was used to accommodate the HCAI Round Table Review).

Surveillance of central line and VAP is now more robust and is in place in all intensive care units. Training will take place on 19.05.2010 – this will assist with cover responsibilities. The new central line process bundle is now in operation. The new VAP process bundle is being considered (cost pressure factors exist) and is currently undergoing a consultation process.

10.3 Mental Health

The latest Service Improvement Project report is now due. M Woods has been concentrating on a range of issues including quality (inc. assurance) and caseloads.

11.0 Controlled Drugs Legislation

Managing and Sharing Concerns

Group discussion was led by E McCusker on a DoH document (with accompanying reporting document) aimed at Local Intelligence Network (LIN) (membership consists of designated person per Trust) management and sharing of concerns. By 01.05.2010, LIN requests an account of measures currently in place. Listed concerns include monitoring, reporting, complaints and police intelligence. DoH has in place an alert system linked to all Trusts.

With regard to Section 12, there were questions raised re: the ability of LIN to report directly without the approval of BHSCT Medical Director / Director of Nursing. Concerns were raised re: failure to channel the document through professional lines. Preference was stated re: LIN making recommendations to BHSCT re: referrals needed rather than reporting directly. The document has been created by LIN / PSNI. It was noted that, whilst most examples cited were nursing based, there is no nursing representation on the LIN group.

Action: To circulate the Controlled Drugs Legislation documents to PCSOG – C Campbell

12.0 HCAI Round Table Review

Dr Stevens informed the group re: the positive response and letter of thanks received.

13.0 Critical Care

Discharge Delay

Discharge difficulties were discussed. P Donnelly is currently focusing on development of improved patient flow solutions. It was suggested that a post-take ward round (17:00 – 21:00) would help ease discharge difficulties. The issue will be revisited at the next PCSOG meeting.

Action: To include on agenda of next PCSOG meeting – C Campbell

14.0 Safer Patients Network

The team for the Annual Learning Event of 18 – 19 May 2010 has been assembled. The programme of events and instruction re: pre-work will be circulated to the team once available.

15.0 Patient Safety Reports

Surgical Site Infection Process Compliance Report, Hand Hygiene Process Compliance Report and SDU Report were discussed. It was agreed that hand hygiene validation audits will now become a priority focus. Need for further address of the high level of caesarean section surgical site infections was discussed.

Action: To follow up on hand hygiene validation audit reporting – B Creaney

Action: To focus on development work re: reduction of caesarean section SSI outcome figures. – IPPSWS Group.

16.0 Next Meeting

Tuesday 4th May 2010
10:00
Boardroom, Administration Building, Knockbracken

Belfast Health and Social Care Trust

Patient & Client Safety Operational Group (PCSOG)
Minutes of Meeting
Tuesday 4th May 2010
10:00, Boardroom, Admin Building, Knockbracken

Present	Tony Stevens, Irene Thompson, Anne McAuley, Joanna McCormick, Eimear McCusker, Anne Loughrey, Olive MacLeod, Lorna Bingham, Carol Anne Murton, Ian Jamison, Nick Smith, Cathy Jack, Conor Campbell
Apology	Mel Carney, Janet Johnson, Angela Carrington, Shirley Murray, Mary McElroy, June Champion, Brenda Creaney

1.	**Apologies** All apologies were noted.
2.	**Previous Minutes** Previous minutes were agreed and no amendments made.
3.	**Quality Ward Improvement Team (QWIT)** The Team has been renamed - replacing the word “General” with the word “Quality”. Terms of reference have recently been revised. Key points for QWIT focus include: • Prevention of harm • Early recognition and rescue • SBAR Communication • DNAR implementation The next QWIT meeting (10.05.2010) will focus on OPMS. QWIT will work towards increased partnership working with Service Group (SG) Co-Directors. Hyponatraemia will feature as a standing item on the QWIT agenda and will routinely be reported at PCSOG. **Action:** *To support QWIT / SG Co-Director partnership – Dr Stevens* **Action:** *To include hyponatraemia on QWIT agenda – Dr Jack*
4.	**Perioperative / Critical Care Improvement Team (POCCIT)** The perioperative Surgical Site Infection (SSI) Process Bundle is robust and improving.

	There is a lag in CSICU reporting – this is being addressed through HISC (H Crookshanks). Discussion took place re: CA Murton's undertaking of duties following the departure of S Pullins. O MacLeod will provide additional support through QWIT. Discussion took place re: the ADN role in relation to QWIT. **Action:** *To support CA Murton through QWIT – O MacLeod*
5.	**Mental Health** A brief summary of the Mental Health Service Improvement Project results for March 2010 was given. *PfA1 – Care Plan / Treatment Plan discussed with Patient / Family* Compliance ranged from 70% - 90%. *PfA2 – Multidisciplinary Risk Assessment for All Patients* *Completion* At Admission – Compliance 100% at all units. At Transfer – Compliance 100% at all units. At Review – Compliance ranged from 0% - 100%. *Quality* At Admission – Compliance 100% at all units. At Transfer – Compliance 100% at all units. At Review – Compliance ranged from 0% - 100%. *PfA3 – Multidisciplinary Team Review within One Week of Admission* Compliance 100% at all units.
6.	**Medication Safety** A range of updates will be taken care of through amendments to Standard Operating Procedures (SOPs). Discussion took place re: a letter received through professional lines from Norman Morrow re: a GAIN Audit of Maternity. *Controlled Drugs – Sharing and Managing Concerns* E McCusker is the BHSCT Accountable Officer. Clarity is required re: how Local Implementation Network (LIN) will work in practice – there was no pre-implementation consultation process carried out. **Action:** *To contact Norman Morrow for clarification on how LIN will work – Dr Stevens*
7.	**Assurance Framework** Dr Stevens gave an overview of a draft version of the revamped Assurance Framework. The final version is soon to be released.

	There will be four groups placed under Assurance Group: • Governance Steering Group - *to include Health & Safety, Radiation Committee etc.* • Patient and Client Safety Steering Group – *to include Standards & Guidelines Committee, Resuscitation Committee, Transfusion Committee, Medicines Management, Infection Prevention and Control (IPC) and Environment etc.* • Social Care Steering Group – *to include Child Protection Panel, Vulnerable Adults, Statutory Function etc.* • Serious Adverse Incident Review Board The future chairmanship of a number of committees will be considered. The importance of appropriate agendas per committee was discussed. **Action:** *To consider / confirm a number of committee chairmanships – Dr Stevens* **Action**: *To finalise and issue the Assurance Framework – Dr Stevens*
8.	**Co-Director Key Performance Indicator (KPI) Plan** A set of measures for implementation under Co-Director responsibility (measures / action / accountability) will be drawn up. This will assure good governance. **Action:** *To draw up Co-Director KPI Plan – Dr Stevens*
9.	**HCAI Summaries – CDI and MRSA Deaths (April 2009 – March 2010)** The accuracy of the MRSA figures was questioned and requires checking. The report would be improved with Part 1 and Part 2 reporting split. It was decided that patient identifiers should be removed in order to suit for meeting use. There was debate regarding how deaths outside of the Trust are counted. Clarification from BSO is required. Updates of this document should routinely be sent to the Medical Director. **Action:** *To follow up on accuracy of MRSA figures and count of deaths outside hospital – I Thompson*
10.	**Letter - Physiological Early Warning Systems (PEWS)** The letter from M McBride details that: - All Trusts should review their use of PEWS. BHSCT will review PEWS. - Specific Protocol usage – J McCormick has responded to Dr Stevens to confirm that Trustwide use of a single system is in place immediately upon start of surgery. The Trust will respond to confirm that : - we know what the issues are - an action plan is in place (using J McCormick's e-mail). Ward-level audit discussion covered staff overload, audit size, escalation / step-down method, audit support per site and emergency action carried out on ward

	with no emergency call made. It was suggested that a monthly random audit selection across the patch should be employed. **Action**: *To respond to M McBride on behalf of Wm McKee – Dr Stevens*
11.	**Critical Care Discharge Delay** P Donnelly has been working towards a solution to this issue.
12.	**Safety Forum Advisory Groups** Advisory Group expectations / commitment from staff of NI Trusts were discussed. The Trust will contact Safety Forum re: rethink / clarification on advisory groups. It is thought that current pressures will make it difficult to support the advisory groups. **Action:** *To contact Safety Forum re: rethink and clarification – Dr Stevens*
13.	**Safer Patients Network** *Learning Event 18 – 19th May 2010* The team of 15 representatives is now complete. Conference registrations, hotel room bookings and flight bookings will be completed. **Action:** *To complete SPN Learning Event arrangements – C Campbell*
14.	**Patient Safety Reports** *Quality Improvement Report to HSC Board* A new internal crash calls target of 10% reduction against April 2009 – March 2010 figures has been set. The National Cardiac Arrest Audit was discussed. HCAI discussion included measures for DoH targets, C. difficile measurement parameters and the journey towards further improvement. *Surgical Site Infection Compliance Report* Performance in the mandatory reporting fields of Orthopaedic and C Section are robust and improving. *Hand Hygiene by Service Group Report* A report of hand hygiene process compliance by Co-Director will be drawn up. Latest self-audit performance yielded 96% process compliance and 97% unit participation. I Thompson reported that auditing carried out through IPCT across 12 wards resulted in an average of 60% process compliance – with the best performer (95% compliance) being RVH Ward 5E. Sign-off of a standardised hand hygiene audit tool will be managed through QWIT. **Action:** *To provide a Hand Hygiene Process Compliance per Co-Director Report – C Campbell* **Action***: To sign off on standardised hand hygiene audit tool for Trustwide use – Dr Jack / O MacLeod*

15.	**AOB** *Kardex Launch* Training needs have been addressed and there are no concerns reported. Further training sessions will take place at RVH (x 10), Mater (x 2), BCH (x 8) and MPH (x 3). *Infection Prevention and Patient Safety Delivery Plan / CDI and MRSA Recovery Plan* It was proposed that the content of these plans should be co-ordinated to proceed with one plan.
16.	**Next Meeting** The next meeting will take place at 10:00 on Tuesday 1st June 2010 at the Boardroom, Roe, Knockbracken.

Belfast Health and Social Care Trust

Patient & Client Safety Operational Group (PCSOG)
Minutes of Meeting
Tuesday 1st June 2010
10:00, Boardroom, Admin Building, Knockbracken

Present	Tony Stevens, June Champion, Olive MacLeod, Lorna Bingham, Joanna McCormick, Shirley Murray, Anne McAuley, CarolAnne Murton, Ian Jamison, Angela Carrington, Mel Carney, Janet Johnson, Conor Campbell
Apology	Cathy Jack, Nick Smith, Irene Thompson, Eimear McCusker, Anne Loughrey, Mary McElroy, Brenda Creaney

1.	**Apologies** All apologies were noted.
2.	**Previous Minutes** Previous minutes were agreed and no amendments made.
3.	**Quality Ward Improvement Team (QWIT)** The latest QWIT meeting (May 2010) focused on OPMS / Acute Services and was well-supported by NDLs. Through QWIT, one hand hygiene tool has been agreed for trustwide implementation. Independent hand hygiene audits are currently being carried out by nursing staff. The policy related to RCAs on HCAI has been developed and will be sent to the Medical Director and Director of Nursing for comment. Implementation will require support from Directors. Microbiologists will support by being available for two weekly sessions on all acute hospital sites. Testing has been carried out at MIH and BCH sites by M Hanrahan. Responsibility for implementing the process will be owned by Service Managers. Audits are currently in place and future arrangements will be directed / supported by QWIT. Norovirus levels were discussed. It was reported that the very busy level of acute admissions impacts on time / ability to perform hygiene, clutter and bedside care duties as thoroughly as desired. Space Utilisation Audit results reveal a great range in performance – from very effective to weak. Performance improvement will be addressed through dealing with people and system factors. It was advocated that a strong, daily ward-walking presence would be an effective means of improving awareness / performance / accountability. RCA outcomes revealed that a number of cases were preventable. The importance of reliable hand hygiene compliance and proper documentation was discussed. Poor hand hygiene compliance by AHP staff was discussed and it was agreed that AHP representation should be included in

	the membership of PCSOG (Paula Cahalan) and QWIT (TBC). The Infection Prevention and Control (IPC) Workplan has been completed (by O MacLeod, I Thompson and A Loughrey and support of all team members) and will complement the Infection Prevention and Patient Safety Delivery Plan. Service Group performance must be fully and routinely reported (e.g. hand hygiene compliance and HII performance) to appropriate directors. There must be evidence of reporting to senior level. The new structure for Associate Medical Directors and Assistant Directors of Nursing is awaited. The Balanced Scorecard for Social Services, Family and Childcare was reviewed. It was suggested that a review of priorities and audit process is required to ensure that reporting supplied to the Board is robust (independent audit versus self-audit etc.). Discussion revealed that areas reporting self-audit hand hygiene figures of 95% compliance may yield 65% compliance figures through independent audit. It was agreed that independent audits are important and that funding should be made available to pay for identified staff who are currently available to carry out this work. Independent auditing currently takes place on an increasing scale on all sites. Dissemination arrangements of independent audits were discussed. An upscaled profiling of the importance of reliable execution of infection reduction processes should be targeted at ward managers (to include components such as isolation, early testing and identification, contact precaution, hand hygiene performance and audit, high impact interventions and use of antibiotics). It was suggested that a review of reporting should be undertaken for streamlining / avoidance of duplication purposes. High levels of respiratory disease and infection were discussed - an Actichlor clean proved beneficial in counteracting similar circumstances in July 2009. An extraordinary declutter and Actichlor cleaning cycle will take place. AHPs must become appropriately involved in IPC matters. An Infection Reduction Plan will be created (by O MacLeod, I Thompson and A Loughrey) and built into the Performance Management Framework. This plan will include: - Screening - Patient Placement - Early Diagnosis - Contact Precautions - Hand Hygiene Performance and Audit - High Impact Interventions Performance - Root Cause Analysis - Declutter - Environmental Cleanliness Audits - Prudent Use of Antibiotics **Action:** *To send an electronic version of IPC Workplan to Dr Stevens – O*

	MacLeod **Action:** *To supply Dr Stevens with an account of Independent Hand Hygiene Audit Reporting – O MacLeod* **Action:** *To provide Independent Hand Hygiene Audit reports for Future PCSOG meetings and to Co-Directors – C Campbell* **Action:** *To raise hand hygiene compliance auditing for discussion at Executive Team – Dr Stevens* **Action:** *To convert HII performance figures (from weekly to monthly) (and from service group to co-director) and supply to PCSOG – C Campbell* *Action: All Service Groups to send weekly HII reporting to Dr Stevens – All SGs* **Action:** *To carry out a mapping exercise to provide an account of all wards matched to co-directorships – SGs / C Campbell* **Action:** *To create an Infection Reduction Plan – O MacLeod / A Loughrey* **Action:** *To carry out a declutter and Actichlor cleaning cycle during June 2010 – I Jamison* **Action:** *To discuss related performance management arrangements with C McNicholl – Dr Stevens*
4.	**Perioperative / Critical Care Improvement Team (POCCIT)** The lack of Surgical Site Infection outcome reporting for areas other than the mandatory fields of Orthopaedic and C Section was highlighted as a key concern. Cardiac Surgery and Neurosurgery have previously been announced as becoming mandatory reporting fields, however, this is yet to become effective. Redefined targets for improvement will be set against 2009 / 10 performance for Elective Orthopaedic – MPH, Orthopaedic – RVH, C Section – RJMS and C Section – MIH. A target will be set for returns of C Section surveillance forms. The WHO Checklist is in operation in all theatres. 80% of cases must use the WHO Surgical Checklist by March 2011. Discussion took place re: the need for integrated documentation to reduce the number of documents and duplication. There have been no recent infections on MIH and BCH sites. There is a robust crash calls process in place. A target for improvement on crash calls must be set against the 2009 / 10 recorded figures. **Action:** *To set SSI outcome targets against 2009 / 10 performance – C Campbell / E Smyth* **Action:** *To set C Section surveillance forms returns target – Dr Stevens* **Action:** *To set 2010 / 11 Crash Calls reduction target against 2009 / 10 figures – C Campbell*
5.	**Mental Health** M Carney gave a summary of performance against the PfA targets of the Mental Health Service Improvement Project and will explore latest figures /

	performance. Latest monthly performance figures will be circulated to PCSOG membership in the June 2010 HSC Board Quality Improvement Report. The 2010 / 11 targets will remain the same with the possible addition of a measure focused on seven-day discharge follow-up. **Action:** *To access April and May Mental Health Service Improvement Project results and circulate to PCSOG – C Campbell*
6.	**Medication Safety** Discussion took place re: VTE / kardex use. Dr Stevens will hold follow-up discussion with A Dawson. The kardex print run will require change in relation to VTE and oxygen. Dr Stevens will be advised of date of kardex availability. Pre-audits and post-audits will take place before the changeover of junior doctors. The outpatient kardex will be developed over the summer period. A summer programme was discussed. The Medicines Code will be finalised and presented to Drugs and Therapeutics Committee. A plan for implementation / action is required. The need for effective intranet placement with hyperlinks, FAQs etc. will be organised. A Medicines Management Meeting will take place on 10.06.2010 **Action:** *To discuss kardex use with A Dawson – Dr Stevens* **Action:** *To supply audit information and date of kardex availability to Dr Stevens – A Carrington* **Action:** *To draw up an action / implementation plan for Medicines Code – A Carrington*
7.	**Blood Safety** S Murray circulated and discussed the 2010 Action Plan. The plan will be submitted to the Director of Performance Management and Department of Health by 30.06.2010. Ownership of the plan will rest with PCSOG. Review and rationalisation of competency assessment of medical staff will take place and will employ a three-year cycle system. It is imperative that medical staff are competent or desist. 41% of errors recorded were made by staff not on the competency database. 50% of sample errors were made by staff not on the competency database. Sample error reporting will be made available. Training arrangements will target appropriate staff. The Blood Safety Project Group will be revamped with M Armstrong as Chair. This group will report to PCSOG. **Action:** *To carry out a drive on desist notices for those not meeting competency requirement – S Murray* **Action:** *To set criteria for desist notices – Dr Stevens / S Murray* **Action:** *To chair revamped Blood Safety Project Group – M Armstrong*

8.	**Safety Forum Advisory Groups** The Trust will contact Safety Forum re: rethink / clarification on expectations / commitment of NI Trusts to advisory groups. It is thought that current pressures will make it difficult to support the advisory groups. **Action:** *To contact Safety Forum re: rethink and clarification – Dr Stevens*
9.	**Safer Patients Network** *Learning Event 18 – 19th May 2010* Belfast HSC Trust was represented by a team of 11 at this event and submitted a storyboard poster presentation. The Trust was in a position to demonstrate its range of patient safety / quality improvement arrangements, however, the N Ireland position does not match the national advancements of other countries in attendance.
10.	**Scottish Patient Safety Fellowship** An application invitation document was circulated and staff were informed re: the application process for the Scottish Patient Safety Fellowship. Joanna McCormick is a current participant.
11.	**Patient Safety Reports** *Quality Improvement Report to HSC Board* *Surgical Site Infection Compliance Report* *Hand Hygiene by Service Group Report* The group were furnished with the latest updates of a range of patient safety reports.
12.	**AOB** *None.*
13.	**Next Meeting** The next meeting will take place at 11:00 on Tuesday 6th July 2010 at the Boardroom, Roe, Knockbracken. Remaining 2010 Dates: 10.08.2010 10:00 Boardroom, Roe 07.09.2010 10.00 Boardroom, Roe 05.10.2010 10:00 Boardroom, Roe 02.11.2010 10:00 Boardroom, Roe 07.12.2010 11:00 Boardroom, Roe

Belfast Health and Social Care Trust

Patient & Client Safety Operational Group (PCSOG)
Minutes of Meeting
Tuesday 6th July 2010
11:00, Boardroom, Admin Building, Knockbracken

Present	June Champion, Olive MacLeod, Anne McAuley, Angela Carrington, Mel Carney, Irene Thompson, Eimear McCusker, Brenda Creaney, Conor Campbell
Apology	Tony Stevens, Cathy Jack, Nick Smith, Lorna Bingham, Joanna McCormick, Shirley Murray, Carol Anne Murton, Ian Jamison, Janet Johnson, Anne Loughrey, Mary McElroy, Patricia Donnelly, Jennifer Welsh, Catherine McNicholl, Paula Cahalan, Nigel Keery, Martin Leahy

1.	**Apologies** All apologies were noted.
2.	**Previous Minutes** Previous minutes were agreed and no amendments made.
3.	**Matters Arising and Action Points** Dr Stevens was supplied with the IPC Workplan by O MacLeod. Independent Hand Hygiene Audit Reports were supplied to Dr Stevens / B Creaney by I Thompson / O MacLeod. HII Performance figures have been converted from weekly to monthly and mapped to ShARC. Manual reports will be provided until ShARC becomes operational (a recent testing day proved successful and development is now in final stages). Dr Stevens raised the subject of hand hygiene auditing (independent audit and self-reported audit) at Executive Team. The mapping exercise to assign Co-directors to all wards will complete with the matching of Co-directors to Clinical Services areas. An extraordinary declutter exercise has taken place and the routine programme will next declutter during July. Performance management arrangements were discussed by J Champion / C Campbell at NI Safety Forum with HSC Board's Stephen McDowell in attendance. A new reporting template be introduced. Regarding a selection of measures, Belfast HSC Trust will transfer from reporting by site to reporting by Service Group / Co-Directorship. C McNicholl and

	HSC Board are satisfied with proposed changes in reporting. Setting of SSI outcome targets (Orthopaedic and C Section) for 2010 / 11 will be discussed at a meeting of clinicians, infection control leads and patient safety representatives during July following the release of the latest quarterly SSI outcome reports (covering Quarter 4 of 2009 / 10). A paper detailing 2009 / 10 crash call reporting for 2009 / 10 and new reduction targets (10%) for all acute sites was circulated and discussed.
4.	**Quality Ward Improvement Team (QWIT)** An extensive range of independent audits have been carried out and there are many areas where there is consistency between independent and self-reported audits. A number of areas show variation between independent and self-reported audit results. Non-compliance is higher among medical staff and AHPs than among other groups. Typical examples of non-compliance include wearing of watches, jewellery and hair bobbles on wrists. It was announced that a number of posts dedicated to surveillance duties will soon become active. Controls Assurance Standards (CAS) dictate that Trusts should be visited by other Trusts for Independent Audit purposes. W McKee has suggested that Belfast HSC Trust engage in Independent Audit with South Eastern Trust. W McKee challenged the DoH re: CAS which resulted in a ruling for continuation – other Trusts see CAS as valuable. Junior Doctor Induction (JDI) will include a presentation from on Infection, Prevention and Control (I Thompson) and Antimicrobial Prescribing (A Loughrey). It was suggested that competency checking should be incorporated into JDI. Quality Ward Improvement Plan was drawn up during June and has been approved by Dr Stevens. Food / nutrition elements are yet to be inserted into the plan. New PfA target items (falls, pressure ulcers and medication errors) have been included in the plan. The plan was circulated and discussed. **Action:** *To discuss Independent Hand Hygiene Audit at executive Team (21.07.2010 suggested) – B Creaney* **Action:** *To furnish B Creaney with latest Independent Hand Hygiene Audit Reports – I Thompson* **Action:** *To supply B Creaney with Controls Assurance Standards documentation – I Thompson* **Action:** *To revert to 20 hand hygiene observations per interval at all units – Service Groups* **Action:** *To supply recently-completed SBAR Pilot Audit report to PCSOG / QWIT memberships – C Campbell*
5.	**Perioperative / Critical Care Improvement Team (POCCIT)** A meeting will take place during July, following the release of 2009 / 10

	Quarter 4 SSI Outcome reporting, during which SSI outcome targets for 2010 / 11 will be discussed with clinicians. POCCIT request PCSOG support with formal solution for challenge / follow up of hand hygiene non-compliance. It was directed that the existing Hand Hygiene / Dress Code Policy meets this need and should be implemented at all times. It was suggested that non-compliant staff should be handed a copy of the policy. The issue of agreement on compliance measurement of procedures (line insertion) properly carried out in theatre minus gloves was discussed. It was agreed that staff should attempt to perform the process wearing gloves. Should it then become necessary to remove the gloves to perform the process, the staff member will be rated as compliant having initially made an attempt using gloves. **Action:** *To hold meeting and discuss setting of 2010 / 11 SSI Outcome Targets – E Smyth / C Campbell* **Action:** *To respond to J Johnson / O O'Neill to update re: Hand Hygiene discussion and request response to PCSOG – C Campbell* **Action:** *To supply document re: compliance with glove usage to C Campbell – I Thompson*
6.	**Mental Health** Latest Service Improvement Project reporting to include April / May 2010 has been supplied. The 2010 / 11 targets will remain the same with the addition of a measure focused on seven-day discharge follow-up. M Carney advised the group of improvements made re: the measurement system for seven-day discharge follow-up and the resultant improvement of 90%+ compliance achieved An RQIA inspection was held at Windsor Male Unit. Inappropriate contents were found in sharps boxes and an unclean tray was used by a junior doctor when administering medication.
7.	**Medication Safety** Kardex audit analysis will take place during August / September. The Medicines Code is at finalisation stage. A plan for implementation / action will be drawn up and circulated for comment with a planned roll-out during August.. A QIP for Medication Safety will be drawn up by E McCusker / A Carrington following a 06.07.2010 meeting. Agreement has been reached with anaesthetists re: the Controlled Drugs Policy. Once implemented, the policy will be audited. Gain recommendations have been incorporated into the policy.

	Action: *To finalise Medicines Code – A Carrington* **Action:** *To supply audit information and date of kardex availability to Dr Stevens – A Carrington* **Action:** *To draw up an action / implementation plan for Medicines Code – A Carrington / E McCusker*
8.	**Blood Safety** M Armstrong will hold a meeting to re-establish the Blood Safety Project Group. **Action:** *To chair Blood Safety Project Group – M Armstrong*
9.	**Patient Safety Delivery Plan** The draft version (28.05.2010) was discussed. The plan will be formatted as per the Quality Ward Improvement Plan. All Improvement team plans will be incorporated into the Patient Safety Delivery Plan. An additional element (Chlorhexadine mouthwash) will be added to the VAP Process Bundle form September onward – Belfast HSC Trust is already compliant with this element.
10.	**Safety Forum Advisory Groups** The Trust will contact Safety Forum re: rethink / clarification on expectations / commitment of NI Trusts to advisory groups. It is thought that current pressures will make it difficult to support the advisory groups. Leadership of Safety Forum will be placed with Public Health Agency. PHA have furnished the Trust with documentation – for consultation purposes - detailing proposed plans for the future of NI Safety Forum. Belfast HSC Trust will gather comments and co-ordinate a response to PHA by the 16.07.2010 deadline. **Action:** *To contact Safety Forum re: rethink and clarification – Dr Stevens* **Action:** *To co-ordinate consultation process and supply B Creaney / J Champion with collation of comments to support Trust response to PHA – C Campbell*
11.	**Patient Safety Reports** *Quality Improvement Report to HSC Board* Improvement noted in areas of SSI Process compliance, Central Line Outcome, VAP Outcome and Crash Calls. *Surgical Site Infection Compliance Report* Reporting revealed a general trend of reliable process compliance. *Hand Hygiene by Service Group Report* All reporting areas at 95%+ and participation at 98% (181/185) coverage.

	The group were furnished with the latest updates of a range of patient safety reports.
12.	**AOB** Letter - NPSA Alerts: A letter from Carolyn Harper (PHA) was discussed. The letter detailed a regional approach to address of NPSA alerts. One person per Trust will support Carolyn Harper.
13.	**Next Meeting** The next meeting will take place at 10:00 on Tuesday 10th August 2010 at the Boardroom, Roe, Knockbracken. Remaining 2010 Dates: 07.09.2010 10.00 Boardroom, Roe 05.10.2010 10:00 Boardroom, Roe 02.11.2010 10:00 Boardroom, Roe 07.12.2010 11:00 Boardroom, Roe

Belfast Health and Social Care Trust

Patient & Client Safety Operational Group (PCSOG)
Minutes of Meeting
Tuesday 10th August 2010
10:00, Boardroom, Admin Building, Knockbracken

Present	June Champion, Olive MacLeod, Anne McAuley, Angela Carrington, Irene Thompson, Tony Stevens, Carol Anne Murton, Paula Cahalan, Shirley Murray, Ian Jamison, Anne Loughrey, Janet Johnson, Lorna Bingham, Joanna McCormick, Conor Campbell
Apology	Brenda Creaney, Cathy Jack, Eimear McCusker, Mel Carney

1.	**Apologies** All apologies were noted.
2.	**Previous Minutes** Previous minutes were agreed with one amendment to be made (replace chloraprep with chlorhexadine). The revised minutes will be circulated.
3.	**Matters Arising and Action Points** No items reported upon.
4.	**Chairman's Business** Patient and Client Safety Steering Group (PCSSG) – This group (PCSOG) will become PCSSG. Agenda content was discussed. The group will focus upon assurance, corrective action and ensuring the effectiveness of sub groups.
5.	**Quality Ward Improvement Team (QWIT)** VTE – At screening assessment, there is a 67% failure re: completion of VTE risk assessment. Hyponatraemia – The paediatric fluid balance chart is now undergoing piloting in 13 wards across the Trust. The adult fluid balance chart is ready to print and will be piloted across the Mater site during September. QWIT Quality Improvement Plan 2010/11 - The QWIT QIP has been completed and incorporated into the Belfast Trust Quality Improvement Plan 2010/11. Care Bundles - Room for improvement re: compliance with care bundles was reported. Corrective action plans were discussed. Root Cause Analysis Quarterly Report Q2 2010 – 17 RCAs (Mater – 6, RVH – 6, BCH – 5) were required – all were completed. 14 cases were MRSA bacteraemia-related. None had MRSA recorded on Part One of a

	death certificate. Three cases (RVH – 2, BCH – 1) had C difficile recorded on Part One of a death certificate. There was one C difficile cluster (Mater) and one C difficile outbreak (BCH). It was agreed that distribution of this report would include Microbiologists, AMDs, ADNs, IPCNs, Governance Managers, Medical Director, Director of Nursing, Directors and Corporate Governance. Service Group Re-organisation – Discussion took place re: the importance of ensuring that no gaps are left following the recent re-organisation. **Action:** *To meet to discuss solution re: improvement of care bundles performance – O MacLeod / L Bingham*
6.	**Perioperative / Critical Care Improvement Team (POCCIT)** Hand Hygiene Non-Compliance – The Escalation Policy has been applied on a number of occasions and offenders have been handed a hard copy of the Hand Hygiene Policy. High Impact Interventions – Compliance with processes is high and there are no issues to report. Audit of HII – Subjective marking was raised as an issue. The validity of results recorded is questionable. The use of independent auditing should take place. CJD Preoperative Checklist – The checklist is to be implemented on 01.09.2010. Consultation processes and newsletter profiling have taken place.
7.	**Mental Health** No report given. Service Improvement Project - The July 2010 HSC Board Improvement Report was supplied among the meeting papers and contains the June 2010 results of the Mental Health Service Improvement Project.
8.	**Medication Safety** QIP Elements - A submission covering PfA-related work was completed for inclusion in the Belfast Trust QIP. Audit - Pre-implementation audit results of kardex usage are currently being formulated and will be followed up with post-implementation results and a combined report to extend to ward and specialty breakdown. A planning meeting will be held to address a medicines management audit programme agenda to include the kardex audit. Junior Doctor Handbook - A handbook (developed using information from previous junior doctor experience) will be supplied to guide junior doctors. Access / distribution methods must be clarified.

	Medicines Code - An implementation plan for the Medicines Code will be drawn up. **Action:** *To meet to plan progression of Medicines Management Audit Programme – A Carrington / C Campbell* **Action:** *To draw up an action / implementation plan for Medicines Code – A Carrington / E McCusker / S O'Donnell* ***Action:*** *Junior Doctor Handbook – To bring copies to next meeting – A Carrington* ***Action:*** *Junior Doctor Handbook – To consult Dr C Jack for opinion – A Carrington*
9.	**Belfast HSC Trust Quality Improvement Plan 2010/11** The draft version (30.07.2010) was discussed. . Safety Forum - Safety Forum have enquired re: objectives for stroke and Mental Health. Mental Health PfA items will be added. There will be no addition of a stroke objective – this area of work will be documented as a Service Improvement Plan item. QIP Finalisation - The draft version of the Trust QIP will be tabled at the next Executive Team meeting before being issued to PHA. **Action:** *To return comments re: QIP to J Champion by 13.08.2010. - All PCSOG* **Action:** *At future meetings (PCSSG), the designated reporters (QWIT, POCCIT, Mental Health, Medicines Management, IPC, Blood Safety, Standards and Guidelines) will report against their respective elements of the Trust QIP – All reporters*
10.	**Blood Safety** Action Plan - A Blood Safety Action Plan was circulated and discussed by S Murray. Actions are due for completion by 31.10.2010 and follow-up audit will then be carried out by the Blood Transfusion Committee. Task Group – The Blood Safety Task Group has reformed (due to meet 26.08.2010) to achieve implementation of the Action Plan and will dissolve thereafter. This group will be a sub group of the PCSSG. **Action:** *To write Terms of Reference for Blood Transfusion Committee (must be fit-for-purpose and deliverable) – O MacLeod* **Action:** *To hold a meeting (following a pre-meet together) with Helen Allen – S Murray, O MacLeod, J Johnston, T Stevens)*
11.	**Public Health Agency SSI Dashboards – 2010 Quarter 1** C Section – It was noted that the Mater infection rate has risen. It is important that compliance of form returns improves as much as possible (latest quarter: Mater 80% returns and RJMS 63% returns).

	Orthopaedic – Discussion took place re: the need to identify what information is suitable for presentation and discussion at PCSSG. Process compliance data for June 2010 reveals that processes were carried out with 100% reliability at RVH and 97%+ reliability at MPH.
12.	**Patient Safety Reports** - Quality Improvement Report to HSC Board - Surgical Site Infection Compliance Report - Hand Hygiene by Service Group Report - Independent Hand Hygiene Audit Report Interpretation - The group were furnished with the latest updates of a range of patient safety reports. It was agreed that an interpretation document would accompany further circulations. Hand Hygiene - The group were of the opinion that the Independent Hand Hygiene Audit provides a more accurate reflection of practice than the self-audit reports. The independent report covered 56 areas and revealed an average of 72% compliance. It was agreed that high compliance relies upon strong ward management. Names of persistent offenders should be forwarded to the Medical Director and the Escalation Policy should be widely used. From 01.09.2010 all units will use the same hand hygiene audit tool. QWIT / POCCIT Reporting – A decision is required re: whether format of reporting should be by Co-Director or Service Group. KPI Report – Suitable content for inclusion in a KPI report was discussed and a final selection will be agreed upon. The report should be auditable and attributable. Key fields would include item title, QIP subsection, audit detail, attributable lead, frequency of measurement and applicable target. **Action:** *To supply interpretation summary document to accompany patient safety reports – C Campbell*
13.	**AOB** None
14.	**Next Meeting** The next meeting will take place at 10:00 on Tuesday 7th September 2010 at the Boardroom, Roe, Knockbracken. Remaining 2010 Dates: 05.10.2010 10:00 Boardroom, Roe 02.11.2010 10:00 Boardroom, Roe 07.12.2010 11:00 Boardroom, Roe

PATIENT AND CLIENT SAFETY OPERATIONAL GROUP

Membership of the Group:

Dr Tony Stevens	-	Chair, MDG
Ms June Champion	-	MDG, Chair Data Sub-Group
Dr Anne Loughrey	-	MDG and Data Sub-Group
Ms Janet Johnston	-	Peri-op Improvement Team and Critical Care Team & Clinical Services
Ms Olive MacLeod	-	Corporate Nursing and General Ward Improvement Team
Dr Cathy Jack	-	MDG and General Ward Improvement Team
Mr Nigel Keery	-	Estates
Mr Ian Jamison	-	PCSS
Ms Suzanne Pullins	-	Specialist Services
Mr John McGeown	-	Mental Health
Ms Lorna Bingham	-	OPMSTO
Ms Anne McAuley	-	SS&FC
Mr Conor Campbell	-	MDG
Ms Nicola Kelly	-	MDG (secretary to group)

Terms of Reference:

- To facilitate integration of patient and client safety into management planning and performance management within the Trust.
- Coordinate implementation of the Patient Safety Delivery Plan by service groups and improvement teams.
- Provide regular progress reports to Service Groups and Assurance Group.
- Quality assure performance reports to HSCB, IHI and other agencies.

PATIENT AND CLIENT SAFETY OPERATIONAL GROUP

Membership of the Group:

Dr Tony Stevens	-	Chair, MDO
Ms June Champion	-	MDO, Chair Data Sub-Group
Dr Anne Loughrey	-	MDO and Data Sub-Group
Ms Patricia O'Callaghan	-	Chair, Peri-op Improvement Team
Mr Brendan Mullen	-	Chair, Mental Health Improvement Team and MHLD Service Group
Ms Olive MacLeod	-	Corporate Nursing and General Ward Improvement Team
Dr Cathy Jack	-	MDO and General Ward Improvement Team
Dr Patricia Donnelly	-	Clinical Services and Clinical Care Improvement Team
Mr Nigel Keery	-	Estates
Mr Ian Jamison	-	PCSS
Ms Suzanne Pullins	-	Specialist Services
Ms Lorna Bingham	-	OPMS
Ms Anne McAuley	-	SS&FC
Mr Conor Campbell	-	MDO

Terms of Reference:

- To facilitate mainstreaming of patient and client safety into management planning and performance management within the Trust.
- Coordinate implementation of the Patient Safety Delivery Plan by service groups and improvement teams.
- Provide regular progress reports to Service Groups and Assurance Group.
- Quality assure performance reports to SDU and IHI

Belfast Health and Social Care Trust

ASSURANCE FRAMEWORK COMMITTEE

TERMS OF REFERENCE

COMMITTEE	Patient & Client Safety Steering Group
PURPOSE	• The group's main purpose will be to examine performance by Service Group areas in meeting the targets set out in the improvement / work plans of all sub-committees: - Safety Improvement Team/s and Workstreams - Infection Prevention Control & Environment Committee - Medicines Management group - Standards & Guidelines Committee - Resuscitation Committee - Transfusion Committee • To facilitate integration of patient and client safety into management planning and performance management within the Trust. • Provide regular progress reports to Trust Board • Quality assure performance reports to HSCB, IHI and other agencies.
MEMBERSHIP	**Chair:** Dr T Stevens **Directors / Co-directors** Catherine McNicholl Brenda Creaney Denise Stockman / Eamon Malone Frank Young June Champion **Sub-Committee Chairs:** Dr Julian Johnston Ms Olive MacLeod Ms Joanna McCormick Dr Helen Gilliland Ms Eimear McCusker Dr Cathy Jack Ms Janet Johnston **Service Group Associate Medical Directors** Mr Ray Hannon Dr Richard Wright Dr Ken Lowry Dr Maria O'Kane

	Assistant Directors of Nursing: Mr David Robinson Ms Linda Linford Ms Gabby Tinsley Mr Mel Carney Ms Ruth Clarke Ms Nuala Toner **Support** Ms Christine Murphy Mr Conor Campbell Mr Danny McWilliams
DUTIES	- To review the progress of all sub-committees by DashBoard and exception reporting. - To identify areas of poor performance and address. - To provide regular updates to trust board on progress against agreed plans. • The group will review set safety and quality documents (Quality Improvement Plan, dashboard) and discuss exception reporting
AUTHORITY	The committee operates under the authority of the Medical Director.
MEETINGS	**Frequency of Meetings -** The Committee will meet every 2 months weeks, scheduled two weeks prior to trust board. **Papers** - Minutes will be circulated to committee members within 10 days after the meetings and will detail action points and responsibilities.
REPORTING	The group will report to Assurance Group
CONFLICT/ DECLARATION OF INTEREST	Under the responsibilities will come a requirement for committee members, co-opted members and members of working groups to declare personal or commercial interests that may conflict with the impartial working of committee when making decisions.
REVIEW	**Version 2.1 18 July 2011**

Belfast Health and Social Care Trust

Minutes of the 5th Meeting of Assurance Committee of the Belfast Health & Social Care Trust held in the Boardroom, Trust Headquarters, on Wednesday 5 November 2008 at 2.00pm.

Present:	Mr P McCartan	Chairman
	Mr L Drew	Non-Executive Director
	Dr V McGarrell	Non-Executive Director
	Ms J Allen	Non-Executive Director
	Prof E Evason	Non-Executive Director
In Attendance:	Mr W McKee	Chief Executive
	Mr H McCaughey	Chief Operating Officer/Deputy Chief Executive
	Ms V Jackson	Director of Nursing
	Dr T Stevens	Medical Director
	Ms D Stockman	Director of Planning and Re-Development
	Dr P Donnelly	Director of Clinical Services
	Ms P O'Callaghan	Director of Head & Skeletal Services
	Miss B McNally	Director of Social Services, Family and Child Care
	Mr Brendan Mullen	Director of Mental Health and Learning Disability Services
	Dr P Donnelly	Director of Clinical Services
	Mrs June Champion	Senior Manager – Governance
	Mr Paul Ryan	Head of Office of Chief Executive
Apologies:	Mr J O'Kane	Non-Executive Director
	Mr T Hartley	Non-Executive Director
	Mr C Jenkins	Non-Executive Director
	Mrs M Mallon	Director of Human Resources
	Mrs J Welsh	Director of Specialist Services
	Mrs W Galbraith	Director of Finance

A/C 25.08 Minutes of Previous Meeting

The minutes of the Assurance Committee Meeting held on the 11 June 2008 were read and approved.

A/C 26.08 Matters Arising from the Minutes

There were no matters arising.

A/C 27.08 Chairman's Business

Mr McCartan noted that legal services to the Trust would in future be provided on a regional basis by the Directorate of Legal Services.

A/C 28.08 Report of the Medical Director

a) Corporate Risk Register

Dr Stevens presented the Corporate Risk Register consisting of both (a) the Principal Risks and (b) the Service Group High Level Risks. Dr Stevens advised that the Principal Risks document identified risks from service and independent reviews as well as risks picked up through adverse events. The Service Group high level risks document identified the service group risks which may be brought forward to the Corporate Risk Register.

Both documents would change part as part of the management process.

Mr Drew raised the issue of records management and the integration of the records of six legacy organisations. He referred in particular to Child Care Records. Dr Stevens advised that records management were one of the Controls Assurance Standards under the lead of Ms P O'Callaghan.

Decision: The Committee noted the Corporate Risk Register and the Principal Risks identified by service group.

b) Litigation Reports

Dr Stevens presented the two litigation reports (i) the clinical negligence report and (ii) the Employers and Occupiers Liability Claims report.

Clinical Negligence Claims Report 1 April – 30 June 2008.

Dr Stevens advised that there were 31 clinical negligence claims during this period. During the period there was expenditure of £5253,224 in relation to clinical negligence cases.

Dr Stevens selected several cases for highlighting:

- A/51/2006/55/KW Royal Hospital
- A/51/2000/48H Royal Hospital and
- PS/026A-119 Belfast City Hospital

This latter case amounted to damages costing £3.4 million. The Committee sought a further detailed report for the next meeting. Prof Evason sought reassurance that the department was taking the management learning from these litigation cases regionally. Dr Stevens described the learning process associated with the Root Cause Analysis processes and led by the Director of Nursing. Mr McCartan advised that he would wish to see Mr Maginess, Director of Legal Services invited to a future meeting.

Decision: The Clinical Negligence Claims Report was noted by the Committee.

c) Employers and Occupiers Liability Claims Report 1 April – 30 June 2008

Dr Stevens presented the report on Employers Liability Claims and Occupiers Liability Claims Report. He highlighted the issues of violence and abuse to staff. There were 28 Employers Liability Claims closed during the quarter. Nine claims were closed with no cost incurred by the Trust. The cost to settle the 19 claims settled by the Trust amounted to £81,579 plus legal costs of £157,143.

Decision: The Reports were noted by the Committee.

d) Serious Adverse Incident Report

Dr Stevens presented the Serious Adverse Incident Report for April – 30 September 2008. Dr Stevens advised that legacy Trusts had interpreted differently the definition of and adverse incident. The process of serious adverse incidents was presently under review by the Department.

Dr Stevens highlighted the serious adverse incidents by Service Group and drew the attention of the Committee to the high numbers in Mental Health and Social Services Family and Child Care. He had already reported fully to the Board of the Trust on Clostridium Difficile. Mrs McNally referred to the reporting of all suicides within the Trust and Mr McKee commented upon the possible culture of under-reporting in the Acute sector.

Decision: the Committee noted the report on Serious Adverse Incidents.

e) Risk and Governance Health and Safety Annual Report 2007-2008

Dr Stevens presented the first Annual Report on Risk and Governance Health and Safety for 2007/08. He advised that this was a baseline report which up-dated key areas on policy development, and high risk areas such as parts of ligature risk assessment. He advised of the significant amount of work being carried out by health estates staff and the robust risk assessment processes in place. There were 2984 accident to staff reported during the year related to incidents of aggression, trips and galls, liquid chemicals and moving and handling.

Dr Stevens advised that he wished to present a standardised rate for each category, complemented by benchmarked data.

Dr McGarrell sought further clarification on Section 13 relating to ligature risk assessments and the issue of funding.

Dr Stevens described the risk assessment process.

Decision: The Committee noted the Risk and Governance Health and Safety Annual Report 2007/08.

f) Patient and Client Safety Interlink Initiatives
g) Annual Infection and Prevention Control Annual Report
h) Infection Prevention and Control Action Plan

Dr Stevens presented the about reports together. He advised that the Safer Patient Initiative was coming to an end, after a two year project. He described the significant achievement which had been made in both the Mater Hospital and the Royal. The learning had been spread across all hospital sites. Dr Stevens advised that the Belfast Trust had achieved as well as other hospital pilot sites in the UK. The Trust was now setting out management arrangements for the Safer Patient Initiative going forward.

Dr Stevens also presented the Infection Prevention and Control Report 2007/08 and the Infection Prevention Control Action Plan. He described the role of these reports complimenting the Performance Report presented by Mr McCaughey at Board meetings. Both of these processes and report sought to offer assurances to the Assurance Committee and Trust Board.

Decision: The Committee noted the report on Infection Prevention and Control.

A/C 29.08 Report of the Director of Nursing

Picker Study and Presentation on User Satisfaction

Ms Jackson introduced Mr Tim Markham, Picker Institute Europe and Ms Sandra McCarry, Senior Manager Nursing – Patient and Public Involvement. Mr Markham presented the Survey Methodology on the 850 inpatients, the questionnaire on what was important to patients and the survey response. There was a 44% response rate. Mr Markhan described the positive aspects of the patient experience but highlighted issues related to admission to hospital, hospital and ward, food and cleanliness attitudes and treatment by doctors and nurses and issues of care and treatment overall.

In comparison the Picker average on 81 questions, scores were average on 64 question, significantly better than average on 8 questions and significantly worse than average on 9 questions. Areas to consider related to information given to patients, involvement in decisions, noise, toilets and food, and leaving hospital.

Sandra McCarry, presented the follow-up actions being planned by the Trust. The Committee acknowledged the good return to the survey and the value of breaking down the findings by service group and institution. Discussion followed an engaging elderly people in feedback about the service they had received.

Sandra McCarry set future actions in the context of the Trust Patient and Public involvement strategy and the establishment of a patient network forum. Ms McCarry also outlined the pilot on training of service users in audit with NICAM, the development of the PPI Register and work to measure patient satisfaction.

Decision: The Committee noted the findings of the Picker Survey and the subseq*uent actions being developed by the Trust*.

A/C 30.08 Independent Reviews and Action Plans

Dr Stevens presented the RQIA Report on Quality Standards and the action plan on the RQIA Report on the Review of Consultant Medical Appraisal. He advised that medical appraisal was an ongoing challenge and he would present future report on this to the Board.

A/C 31.08 Corporate Manslaughter Act

The Trust Action Plan and Briefing paper on the Corporate Manslaughter and Corporate Homicide Act 2007 was presented for information.

Decision: The Committee agreed to invite Mr Alfie Maginnis, the Director of Legal Services to a future Board meeting to discuss this in more detail.

A/C 32.08 Complaint

Prof Evason and Dr McGarrell presented the Complaint Review Committee Annual Report. Both Non-Executive Directors had visited staff at Glendining House and advised the Board of the development in the management of the complaints process.

The Minutes of the Complaints Review Committee meeting of the 29 September 2008 were tabled for information.

A/C 33.08 Any Other Business

There was no other business. The indicative schedule of reports was tabled for information.

A/C 24.08 Date of next meeting

The dates of future meetings were confirmed as 4 March 2009, 3 June 2009, 21 October 2009.

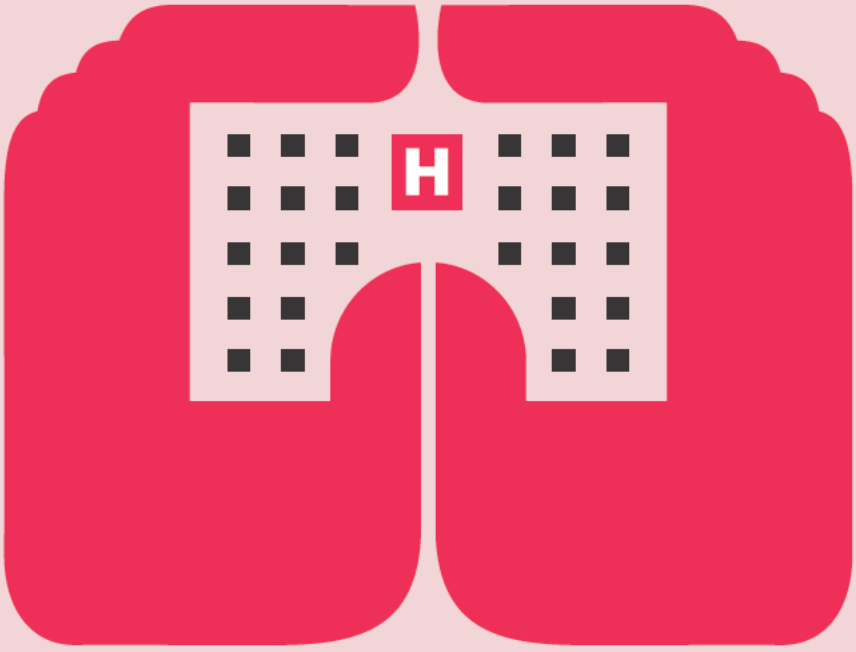
Evidence:

Safer Patients Initiative phase two

The Health Foundation
Inspiring Improvement

A controlled evaluation of the second phase of a complex patient safety intervention implemented in English hospitals

February 2011



Identify Innovate Demonstrate Encourage

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Foreword

The Health Foundation is an independent charity that aims to improve the quality of healthcare across the UK. We are here to inspire and create the space for people, teams, organisations and systems to make lasting improvements to health services.

In 2006, we launched the second phase of the Safer Patients Initiative (SPI), a large-scale intervention and the first major programme addressing patient safety in the UK. We set up the initiative to test ways of improving patient safety on an organisation-wide basis within 20 hospitals in across the UK. The participating trusts undertook improvement in leadership and four clinical areas. They had two stretch aims: a 30% reduction in adverse events and a 15% reduction in mortality over a 20-month timescale. In addition, trusts had specific goals relating to a range of process and intermediate outcomes measures.

In 2006, we also appointed a consortium led by the University of Birmingham to undertake an evaluation of the second phase of SPI (the same team evaluated the first phase). The evaluation sought to assess the wider organisational impact of SPI and so looked beyond the pilot populations of the clinical interventions. It measured the average effect of the programme across a range of practices, based on the starting assumption that SPI would transform organisation-wide approaches to patient safety.

The evaluation reports that the intervention did heighten managerial awareness of and commitment to patient safety. It also created organisational understanding about how to implement safety improvement efforts. Case note review found that many aspects of evidence based medical and peri-operative care were good at baseline (over 90% on some criteria), leaving little room for improvement. Overall, a significant additive effect of SPI on the measures included in the study was not detected.

A rising tide in patient safety

The evaluators consider possible explanations for the absence of an additional effect of the programme, including a 'rising tide'

phenomenon, where improvements in patient safety were driven by common forces across the NHS.

We believe that SPI was part of that rising tide that has placed safety firmly on wider policy and professional agendas. Throughout SPI and since, we have been committed to being at the forefront of work to accelerate the UK-wide patient safety agenda, shape the debate and develop learning on the challenges of building a sustainable culture of patient safety.

Our work has had an impact on the development of national patient safety initiatives in each of the four UK Countries.

- In 2006, the English Department of Health publication, *Safety First,* identified the Health Foundation as one of the organisations that had played a significant role in patient safety at national level. It recommended that a national patient safety campaign be established and that it should be 'in keeping with the approach already successfully used by organisations such as the Health Foundation and Institute for Healthcare Improvement. The programme should be specifically designed to engage and inform frontline staff and should enable staff to take ownership and harness the opportunity to influence the national patient safety agenda.'
- In Scotland, a report from the Scottish Government in 2007 (*Better Health, Better Care: Action Plan*) said that the Scottish Patient Safety Alliance will 'build upon the successes of the current SPI which is already improving safety standards in NHS Ayrshire and Arran, NHS Dumfries and Galloway and NHS Tayside.'
- In Northern Ireland, a proposal in 2007 to develop national indicators for safe and effective care drew on the work of the three Trusts involved in SPI; and a report by Northern Ireland's Chief Medical Officer, in 2008, cited working with the Health Foundation as enabling Northern Ireland to adopt internationally recognised best practice in tackling healthcare-associated infections.
- In Wales, a report in 2007 to the Welsh Assembly, *Minimising Healthcare Associated Infections in NHS Trusts in Wales*, includes examples of good practice from SPI site (phase one) Conwy and Denbighshire NHS Trust.

We have led and contributed actively to the national debate. In a speech to the 2008 Patient Safety Congress, Prime Minister Gordon Brown referred to the influence that SPI has had on the patient safety agenda. In 2009, we made a submission to the Health Select

Committee's Inquiry into patient safety and in the Government's response to the consultation it said:

> *'In the Committee's views SPI, The Health Foundation's important work in applying carefully researched methodology for improving safety performance, were welcomed. We also value the contribution The Health Foundation is making as a member of the National Patient Safety Forum and the NQB, and in particular its major contribution with the NPSA and the NHS III in supporting the national initiative for improving safety in England'*

More recently, the 2011 Department of Health's White Paper consultation response cites our contribution, highlighting the Health Foundation as being a leading and influential organisation in patient safety.

Taking all of these impacts together, we believe that we contributed to wider policy changes and were instrumental in creating the rising tide of policy and professional forces.

Evaluation's contribution to the science of improvement

The evaluations of SPI phase one and two make valuable contributions to the literature and debate about the role of the collaborative model in improving quality. Hulscher et al.'s (2009) systematic review of collaboratives (available on the Health Foundation's website: www.health.org.uk) identified ten published controlled evaluations of collaboratives – three show positive effects, two show null effects and five had mixed effects. The review concludes that the evidence of impact of collaboratives is positive but limited and the effects cannot be predicted with great certainty.

Hulscher et al. caution against over-claiming what collaboratives can achieve. What is critical, therefore, to the design of a collaborative is the development of an explicit programme theory and organisational theory of change. This will help to clarify whether the proposed dose of intervention is likely to result in a localised or systemic intervention; determine whether there is a sufficiently specified plan for vertical and horizontal spread, to allow the work to move from project status to becoming embedded in mainstream structures; and make clear the strategy for clinical engagement.

With hindsight, more could have been done in SPI at the outset to develop and critically examine the underlying programme theory, and then ensure that the proposed evaluation design reflected this.

As the evaluators remark in this report:

> *'In that case a more focused and less ambitious intervention, and somewhat narrower evaluation, might have ensued.'*

We think there is value in greater integration between the science of improvement and evaluation methods. We welcome closer collaboration between leaders in these areas to develop the science of evaluating improvement initiatives. From such collaboration will come the rigorously derived knowledge urgently required to bring about organisation-wide improvement in patient care across the health system.

Dr. Dale Webb
Director of Evaluation & Strategy
The Health Foundation

Contents

Figures and tables

Abbreviations

AHR	Alcohol hand rub
APACHE II	Acute Physiology and Chronic Health Evaluation II
BNF	British National Formulary
BTS	British Thoracic Society
C. diff	*Clostridium difficile*
CI	Confidence intervals
CMP	Case Mix Programme
COPD	Chronic obstructive pulmonary disease
CURB	Confusion urea respiratory rate blood pressure
DVT	Deep vein thrombosis
HCAI	Healthcare Associated Infections
HES	Health Episode Statistics
HPA	Health Protection Society
ICC	Intra-class correlation coefficients
ICNARC	Intensive Care National Audit and Research Centre
ICU	Intensive Care Unit
IHI	Institute for Healthcare Improvement
LSOA	Lower level super output areas
MRSA	Methicillin-resistant *Staphylococcus aureus*
NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
NOSEC	National Observational Study to Evaluate the Clean Your Hands campaign
OR	Odds ratios
PCA	Patient controlled analgesia
SE	Standard errors
SPI	Safer Patients Initiative
SPI1	Pilot phase hospitals of the Safer Patients Initiative
SPI2	Second phase hospitals of the Safer Patients Initiative

Executive summary

Objectives

To evaluate the second phase of the Health Foundation's Safer Patients Initiative (SPI), a large scale multiple component intervention intended to improve the safety of hospital care.

Setting and participants

Nine NHS hospitals in England participating in phase two of the Health Foundation's Safer Patients Initiative (SPI2) and nine matched English control hospitals.

Intervention

The second phase of a multi-component intervention mentored by the US Institute for Healthcare Improvement (IHI), with an investment from the Health Foundation of approximately £270,000 per hospital. It was delivered over 20 months and focused on improving the reliability of specific front-line care processes within designated clinical areas and engaging senior leaders to change the culture of the organisation. The intervention is fully described in the *Safer Patients Initiative: phase one* evaluation report.

Design and outcomes

A controlled evaluation comprising of five linked sub-studies:

- Before and after assessment of attitudes of front-line staff using a structured postal survey in both control and SPI2 hospitals.
- Case note review of the hospital records of high-risk patients in medical wards treated before and after the intervention in both control and SPI2 hospitals. Quality of care was measured by two teams who were independent of the hospitals – one assessed

quality against specific standards (explicit review of acute medical care), and the other undertook holistic assessments (implicit review of acute medical care).
- Explicit case note reviews of high-risk perioperative care patients against specific standards, carried out by a third independent team.
- Indirect evaluation of hand hygiene by measuring used hygiene consumables from trend data already collected to compare the matched controls with the SPI2 hospitals.
- Measurement of outcomes: adverse events and mortality among high-risk patients admitted to medical wards; hospital-wide mortality; intensive care unit (ICU) outcomes; hospital-acquired infection rates and patient satisfaction. Comparisons were made of control hospitals versus the SPI2 hospitals at baseline and over time.

Results

Only one dimension of the staff survey changed significantly (in favour of control hospitals). Measurements of vital signs and use of risk scoring improved markedly over time, but did so similarly in both control and SPI2 hospitals. Many aspects of evidence-based medical and perioperative care were good at baseline, leaving little room for improvement.

There was a marked improvement in use of hand-washing materials and a dramatic decrease in hospital-acquired infections across all hospitals. A significant additive effect of the SPI on the measures included in the study was not detected.

Conclusion

Many aspects of care are already good or improving across the NHS, suggesting considerable gains in quality across the board. These improvements might be due to policy activities, including some with features similar to the SPI, and the emergence of professional consensus on some clinical processes.

An additional effect of a large-scale organisational intervention (SPI) was not detected. It is possible that any effect was too small to detect, that the null additive effect was due to sub-optimal implementation, or that there may be longer-term additive effects that take longer to surface.

Chapter 1

Introduction

The first phase of the Health Foundation's Safer Patients Initiative (SPI1) programme involved four UK hospitals that were selected to take part in an organisational intervention to transform organisational approaches to delivering safer care designed by the Institute of Healthcare Improvement (IHI) and implemented in 2004.[1]

To build on the experience and learning from this first phase, a second phase of the intervention, known as the Safer Patients Initiative: phase two (SPI2), was rolled out from March 2007 to September 2008 inclusive. SPI2 included a further 20 UK hospitals (10 in England and 10 in the other countries of the UK) that were selected following a process similar to that used for SPI1.

The second phase of the intervention remained much the same as SPI1 intervention. For a full description and rationale for end-points used please see our report on phase one, *Evidence: Safer Patients Initiative phase one*, where these are described in full.

The programme was again mentored by the IHI. It was designed to strengthen the organisations generically, while putting in place specific front-line activities, such as the introduction of early warning score systems (EWSS) to improve the management of acutely sick patients, the use of ventilator bundles to reduce ventilator-acquired pneumonia in intensive care and the introduction of a surgical bundle of evidence-based standards to reduce surgical complications.

There were five main differences between SPI1 and SPI2 in the overall management of the programme based on experiences gleaned from SPI1 sites:

– The hospitals were required to work with a partner organisation (a buddy system) and encouraged to hold regular meetings between the lead implementation teams (10–12 people) from each site. By using this system it was envisaged that sites would

support each other, share the burden and provide support in quickly achieving the goals of the intervention.
- There was a longer period between dissemination of the preparatory materials (December 2006) and the first kick-off session where the various teams came together with IHI to share experiences (March 2007). This gave sites more time for planning and developing the intervention and to obtain a baseline measurement in the safety climate survey.
- The financial package was smaller than in the case of SPI1; a mean of £270,000 per site rather than £775,000.
- There were four learning sessions as with SPI1, but an additional reliability and capability workshop was provided.
- SPI2 sought a 15% reduction in mortality rates; this was not an explicit SPI1 aim.

Specific aspects of the intervention also changed:
- the reduction of adverse event target was revised from 50% to 30% as it was felt that this was a more achievable yet aspirational target
- removal of the routine use of beta blockers in the surgical bundle as this clinical standard was contentious in the UK.

1.1 Selection of participating sites

As with the selection of the SPI1 sites, SPI2 sites were selected through a competitive bidding process. A similar format to the phase one selection was followed with initial applications reviewed by an international panel with expertise in patient safety, organisational change and improvement methodology. Applications were assessed against the following criteria:

- leadership commitment
- capacity and capability
- openness, transparency and communication
- collaboration.

The short-listed sites were subject to an on-site assessment and the final 20 sites were chosen by a selection board.

Chapter 2

Methods

This evaluation was conducted with ethical approval and its methods were similar to those used for the evaluation of SPI1. The SPI2 evaluation used a series of linked sub-studies to address generic outcomes (that might be expected to improve if a general strengthening of organisational systems in relation to patient safety occurred) and specific outcomes (that were targeted specifically by SPI interventions).

2.1 Framework for the evaluation

All of the quantitative studies undertaken in the SPI1 evaluation were replicated in SPI2, but no qualitative elements (senior staff interviews and ethnographic study on the wards) were collected. The following SPI1 studies were repeated:

- Staff survey
- Explicit case note review of patients with acute respiratory disease to:
  - audit care against explicit standards
  - measurement of error rates implicitly (holistic case note review)
  - measurement of adverse events (preventable and non-preventable)
  - measurement of mortality among patients included in the case note reviews
- Patient survey.

The quantitative collection of processes and outcomes data was expanded to include:

- Case note review of surgical case notes to measure compliance with a bundle of standards for perioperative care
- ICU outcome data to provide evidence relevant to the effectiveness of the critical care bundles
- Consumption of alcohol hand rub (AHR) and soap in hospital trusts, along with measures of *Clostridium difficile* (C. diff) and Methicillin-resistant *Staphylococcus aureus* (MRSA) infection

rates to provide evidence on measures to reduce healthcare associated infections (HCAI)
– Overall hospital mortality rates in adult patients, standardised for sex and age.

The complete list of sub-studies for the evaluation are summarised in table 2.1.

Each sub-study was based on before and after comparisons in both control and SPI2 sites. The use of both the before and after observations across control and SPI2 sites enables rates of change to be compared across control and SPI2 hospitals.

2.2 Control and SPI sites

We focused on the ten English SPI2 hospitals so that we could take advantage of routinely collected data in England. Although the hospitals worked in pairs, each hospital formed a unit of analysis for the statistical power calculation and for the evaluation.

One of the ten SPI2 hospitals declined to participate in the evaluation leaving nine available for study. Nine SPI2 matched control sites were selected using the following criteria:

– Only non-specialist acute hospitals in England were considered.
– Control and SPI2 hospitals should have a similar directorate structure (as described in the NHS national staff survey).
– The hospitals should have the same foundation or non-foundation status (to gain foundation status a hospital must satisfy the government that it has the management capacity to warrant greater operational autonomy).
– Hospitals should be similarly located in either urban or rural settings.
– Once these criteria were satisfied, the hospital with the most similar size (usually within 1000 staff) to the SPI2 hospital was selected as the control hospital.
– If a trust had more than one hospital, quantitative data collection was focused on the largest hospital with an ICU.

Although nine control and nine SPI2 sites agreed to participate in the evaluation, we were also required to obtain further consent for each sub-study. In some instances this was not granted.

In addition, certain hospitals did not participate in specific routine data collection exercises, while others failed to supply case notes for specific analysis. It is for these reasons that discrepancies exist in the number of sites agreeing to participate in the evaluation and the number included in each sub-study. Full details are provided in the results section of each sub-study.

Table 2.1: Summary of sub-studies comprising the evaluation of SPI2

Sub-study	Purpose	Location	Data collection	Analysis
1) Staff survey	Measure effects of SPI2 on staff morale, culture and opinion	Control and SPI2 hospitals	Validated structured questionnaire before and after intervention phase of SPI2	1) Comparison of control versus SPI2 hospitals: a. At baseline b. Over time i.e. difference in difference 2) Comparisons within control and SPI2 cohorts
2) Quality of care: acute medical care	Measure effects of SPI on the quality of care being delivered using independent case note reviews in acute medical care (both explicit and holistic).	Control and SPI2 hospitals	Before and after intervention phase of SPI2	1) Comparison of control versus SPI2 hospitals: a. At baseline b. Over time i.e. difference in difference (epochs 1+2 vs. epoch 3)*
3) Quality of care: perioperative care	Measure effects of SPI on the quality of care using independent case note reviews in perioperative care (explicit).	Control and SPI2 hospitals	Before and after intervention phase of SPI2	Comparison of control versus SPI2 hospitals: a. At baseline b. Over time i.e. difference in difference (epoch 2 vs. epoch 3)*
4) Clinical process measures	Indirect measure of hand hygiene by counting used hygiene consumables.	Control and SPI2 hospitals	Trend data collected as part of the National Observation Study of Effectiveness of the national Clean Your Hands Campaign study	1) Comparison of control versus SPI2 hospitals: a. At baseline b. Over time i.e. difference in difference
5) Outcomes	Measure effects of SPI on: a. Adverse events among acute medical care case notes reviewed b. Mortality among acute medical care case notes reviewed c. Hospital wide mortality d. ICU outcomes e. HCAI rates f. Patient satisfaction	Control and SPI2 hospitals	Before and after study using: a) and b) case notes c) d) and e) routine data f) validated structured questionnaire	1) Comparison of SPI2 versus control hospitals: a. At baseline b. Over time i.e. difference in difference 2) Comparisons within SPI2 and control cohorts 3) Measurement of reliability and learning/ fatigue effects 4) Hospital wide mortality rates not included in original protocol

*Sub-studies involving case note review that overlapped with SPI1 have two pre-intervention phases (epochs 1+2), while sub-studies specific to SPI2 have only one pre-intervention phase (epoch 2). In all cases epoch 3 is the post-intervention phase.

2.3 Sub-study 1: Staff surveys

All hospitals in England participate in the national staff survey, a yearly survey run by the Care Quality Commission (formerly the Healthcare Commission).

All nine control sites and nine SPI2 sites were included in both the 2006 and 2008 national staff surveys, conducted between October and December in each of these years, and so data from these surveys were used to test for effects of the intervention.

Questionnaires were sent to a simple random sample of 850 staff in each hospital trust, as this is the standard methodology employed in the survey. A sample size of 850 is such that an average 60% response rate – around 500 responses per site – would yield 95% confidence intervals of no greater than 10% for all scores within a single organisation.

The detail of the survey methods is not repeated here but is available from the staff survey website (www.nhsstaffsurveys.com).

Approximately 28 survey items are regularly collected on behalf of the Care Quality Commission (although the precise number has varied from year to year according to the content of the questionnaires).

Of these, 13 items (table 2.2) were identified at the start of the evaluation as being of likely relevance to the SPI programme. This was either because they reflect safety issues directly or because they relate to working practices known from research to be linked to safety and health outcomes. Eleven of these scores were the same as those used in the SPI1 evaluation. A further two that were clearly relevant to the SPI programme, but had not been available at the earlier evaluation period, were also included.

Details of these questions and how they are calculated can be found in appendix 1.[2;3]

Differences between the control and SPI2 hospitals, in terms of changes between the two survey periods, were tested using a generalised linear mixed model with SPI2/control and survey period as fixed factors (with interaction), and hospital as a random factor.

Table 2.2: Staff survey items deemed relevant to the SPI

1. Well-structured appraisals[2;3]
2. Working in well-structured teams[4]
3. Witnessing potentially harmful errors or near misses in previous month
4. Suffering work-related injury
5. Suffering work-related stress
6. Experiencing physical violence from patients/relatives
7. Intention to leave
8. Job satisfaction
9. Quality of work-life balance
10. Support from supervisors
11. Organisational climate[5]
12. Fairness and effectiveness of incident reporting procedures*
13. Availability of hand-washing materials*

* These scores were not included in the SPI1 evaluation.

In order to control for known differences between groups of staff, the following background factors were included as covariates in the models:

- age
- sex
- ethnic background (white or other)
- occupational group (nursing/midwifery, medical/dental, allied health professional/scientific & technical, admin/clerical, general management, maintenance/ancillary, or other)
- length of service
- management status (line manager or not).

A statistical correlation for multiple observations was not applied but the confidence intervals were set at 0.99 ($p<0.01$).

2.4 Sub-study 2: Error rates/quality of care – acute medical care

Case note selection criteria

Patients over the age of 65 with acute respiratory disease admitted to acute medical wards were selected as the focus for study for the following reasons:

- Improving recognition and response to acute deterioration in a patient's condition was a specific SPI target, and patients admitted with acute respiratory disease are at high risk of such deterioration[6;7]
- A number of specific evidence-based guidelines exist for this condition
- There is a high incidence of co-morbidities in people aged over 65, making this a high-risk population (as confirmed in the evaluation of SPI1) where the opportunity for error is high and hence where there should be headroom for improvement.

The areas of review included both those specifically targeted by the SPI, and those that might plausibly be expected to improve if an overall shift in organisational systems and culture related to patient safety had occurred.

Case note assembly (and statistical power calculation)

We collected case notes from both the nine control and nine SPI2 hospitals from time periods that both preceded (epochs 1 and 2) and followed (epoch 3) the SPI2 intervention period. The pre-implementation observations were spread over two epochs (epoch 1, October 2003 to March 2004 and epoch 2, October 2006 to March 2007) so that the sites participating in the SPI2 evaluation could also serve as controls for the preceding SPI1 evaluation. Epoch 3 (October 2008 to March 2009) was therefore the post-SPI2 period. The temporal change between epochs 1 and 2 was included as a fixed effect in the statistical models. Each six-month time period was made to correspond across the calendar to control for seasonal effects.

We aimed to analyse, using review against explicit criteria, 15 case notes from each control and SPI2 hospital per epoch (810 in total). This would give 80% power to detect effects summarised in table 2.3. For example, for a standard (such as measurement of respiratory rate at least six hourly) with a baseline compliance of 70%, the study is powered to detect an SPI associated improvement to 83% compliance, or a deterioration to 55%.

These calculations are appropriate for analysis in binary data where each patient is associated with a single opportunity for error. However, the power available to analyse prescribing errors will tend to be considerably greater than that in table 2.3 since the typical patient is associated with more than one medication order and thus has several opportunities for error. That said, some actions, such as use of blood culture in patients who may have blood stream infection, were contingent (did not apply to the whole sample) and less power would be available in such cases.

Table 2.3: Detectable effect sizes, at 5% significance and 80% power, for a sample with 135 case notes in each epoch at the intervention sites and 135 case notes in each epoch at the control sites

The assumed analysis adjusts for unexplained variation between hospitals.

Baseline proportion	Modified proportions detectable with 80% power	
0.05	0.14	0.00
0.10	0.21	0.02
0.15	0.27	0.05
0.20	0.34	0.09
0.25	0.39	0.13
0.30	0.45	0.17
0.35	0.50	0.21
0.40	0.56	0.25
0.45	0.61	0.30
0.50	0.65	0.35
0.55	0.70	0.39
0.60	0.75	0.44
0.65	0.79	0.50
0.70	0.83	0.55
0.75	0.87	0.61
0.80	0.91	0.66
0.85	0.95	0.73
0.90	0.98	0.79
0.95	1.00	0.86

Patients over 65 years of age and admitted with acute respiratory disease, primarily community-acquired pneumonia, exacerbation of chronic obstructive pulmonary disease (COPD) or acute asthma were included in the study (for rationale see case note selection criteria, p 7). The case notes from the first two or three patients who fulfilled the eligibility criteria were selected from each hospital in each month from each epoch.

For each case note, the admission of interest was photocopied and anonymised (with respect to the patient's name, hospital name and year of admission) by medical-record clerks in each hospital. Photocopied notes were despatched to Birmingham before being

Box 2.1: Components of an ideal respiratory history

- Duration of presenting symptoms
- Normal (pre-morbid) exercise tolerance
- Presence/absence of shortness of breath
- Presence/absence of orthopnoea
- Presence/absence of cough
- Whether or not cough was productive (if present)
- Smoking history taken
- Presence/absence haemoptysis
- Whether or not chest pain was present
- Occupation/previous occupation
- Pet ownership

sent to reviewers. In Birmingham, anonymisation was quality-assured, the notes were digitised and the year of admission was removed so that reviewers would be blinded to the epoch from which the case notes originated.

We audited the quality of anonymisation by asking the reviewer in the explicit review (see explicit case note review below) to note if the hospital of origin, the year of origin and the patient name had been recognised by the reviewer.

Explicit case note review

We developed a set of explicit criteria to define medical care for respiratory patients with reference to British Thoracic Society (BTS) guidelines,[8;9] the British National Formulary (BNF) (versions 53, 54 and 56 – the editions that covered the study period[10–12]) and expert opinion (consultant respiratory physicians from a teaching and a general hospital – see acknowledgements).

The areas of review and source of guidelines were:

- Quality of medical history-taking. Eleven items (box 2.1) were identified, using expert opinion, as constituting the ideal history for a patient admitted with acute respiratory disease

Table 2.4: Vital signs that should be recorded

	Admission	6 and 12 hours later
Temperature	✓	✓
Respiratory rate	✓	✓
Cyanosis/oxygen saturation	✓	–
Presence of confusion/mental state (new onset)	✓	–
Pulse	✓	✓
Blood pressure	✓	–
Oxygen saturation	–	✓

- Proportion of routine investigations (urea and electrolytes, chest x-ray and full blood count) ordered within six hours of a patient's admission (expert opinion – see above)
- Observations and signs of patient deterioration. The completeness with which patients vital signs were recorded (table 2.4) was evaluated on admission and then for the first and subsequent 6 hour time periods (BTS). Vital sign data that were recorded in the case notes constituted the numerator, while all vital signs that should have been recorded constituted the denominator
- Appropriate clinical response for abnormal vital signs was measured (table 2.5) (BTS)
- Investigating features of good care for specific classes of patients by:
  - Calculating the CURB score to determine the severity of community acquired pneumonia and hence appropriate antibiotic selection (box 2.2) (BTS, BNF)
  - Use of intravenous steroids for patients with acute exacerbations of asthma and COPD (BTS)
  - Measurement of peak flow in asthma patients (expert opinion)
  - To exclude hypercapnia in COPD patients, by performing arterial blood gases, before prescribing/administering oxygen (BTS).

Table 2.5: Appropriate clinical response for abnormal observations

Abnormal vital sign	Appropriate clinical response
Oxygen saturation <90, at any time	One of: Full blood gases within 2 hours Given oxygen if not on oxygen Doctor called or transferred to ICU if on oxygen
Blood pressure systolic <90	Both of: At least next six hours, hourly observations Blood culture
Sputum present	Sputum culture
Respiratory rate >20 at any time after admission	One of: Given oxygen (if not on oxygen) Doctor called (if on oxygen)
Temperature over 38° C – any episode	Blood culture
Failure to improve by 48 hours or subsequent deterioration	One of: Review by consultant Repeat chest x-ray White cell counted/repeated Appropriate addition of further antibiotics

Box 2.2: Assessment of severity of community acquired pneumonia using the CURB score

CURB score

Confusion: new mental confusion (defined as an Abbreviated Mental Test score of 8 or less)
Urea: raised >7 mmol/l
Respiratory rate: raised > 30/min
Blood pressure: low blood pressure (systolic blood pressure <90 mm Hg , diastolic blood pressure < 60 mm Hg).

Interpretation of CURB score

- Patients who have two or more 'core' adverse prognostic features are at high risk of death and should be managed as having severe pneumonia
- Patients who display one 'core' adverse prognostic feature are at increased risk of death. The decision to treat such patients as having severe or non-severe pneumonia is a matter of clinical judgement, preferably from an experienced clinician. This decision can be assisted by considering 'pre-existing' and 'additional' adverse prognostic features.

Influence on antibiotic therapy

Non-severe community-acquired pneumonia
Most patients can be adequately treated with oral antibiotics. Combined oral therapy with amoxicillin and a macrolide (erythromycin or clarithromycin) is preferred for patients who require hospital admission for clinical reasons. When oral treatment is contraindicated, recommended parenteral choices include intravenous ampicillin or benzylpenicillin, together with erythromycin or clarithromycin.

Severe community acquired pneumonia
Patients with severe pneumonia should be treated immediately after diagnosis with parenteral antibiotics. An intravenous combination of a broad spectrum b-lactamase stable antibiotic such as co-amoxiclav or a second generation (e.g. cefuroxime) or third generation (e.g. cefotaxime or ceftriaxone) cephalosporin together with a macrolide (e.g. clarithromycin or erythromycin) is preferred.

Rates of prescribing errors. The following definition was used:

> *'A clinically meaningful prescribing error occurs when, as a result of a prescribing decision or prescription writing process, there is an unintentional significant reduction in the probability of treatment being timely and effective or increase in the risk of harm when compared with generally accepted practice.'*[13]

Errors were identified using a previously developed pro forma.[14] SPI1 had identified reductions in the number of adverse effects related to anticoagulant therapy as a key aim (see Outcomes, below), so prescribing error in this area was investigated as a sub-category (as listed in section 2.8 of the BNF).

Finally, medicines reconciliation on admission was also a target of the SPI. We therefore examined failures to continue to prescribe medicines on the transition from primary to secondary care where no explanation for this was recorded in the notes.

All case notes were reviewed by a single reviewer (Maisoon Ghaleb) over the period November 2006 to November 2009. Ideally reviews would be conducted in a random sequence once all records had

been collected. This was not possible due to the time taken to collect the case notes and the reporting requirements of the evaluation. Therefore, to control for any learning or fatigue (or both) effect on the part of the reviewer, the case notes were scrambled to ensure that the notes were not reviewed entirely in series and in particular, so that the same hospitals and epochs were not examined in series.

Generalised linear mixed models were used to analyse the effect of the SPI intervention. Within all models, pre-intervention levels were estimated by pooling data from the first two epochs and post-intervention levels were estimated using data from the third epoch. Fixed effects were included:

- for differences in pre-intervention levels between control and SPI2 hospitals (baseline comparisons)
- for temporal changes between epochs 1 and 2 across all hospitals.
- the temporal change experienced in the control hospitals between the pre-intervention period (i.e. epochs 1 and 2 pooled together) and the post-intervention period (epoch 3)
- the effect of the SPI, interpreted as the difference between the temporal changes pre/post intervention experienced in the control and SPI2 hospitals.

Adjustment for the patient-level covariates, age and sex was included in all analyses. Cubic polynomials at the time of review were used to adjust for learning/fatigue effects in the review process and were included in all analyses save that for mortality. Binary observations were modelled using mixed effects logistic regressions with a random component for variation between hospitals. Medication errors (per recorded prescription) were analysed with population-averaged negative binomial models with grouping by hospital, fitted using generalised estimating equations.

Where the data were insufficient to support a full analysis as described here, the hospital effects were excluded from the model leading to logistic regression analyses (for binary data) and negative binomial regression models (for prescribing errors.) The calculations were performed in STATA 11.0. Statistical significance is claimed for p-values less than 0.01, and 99% confidence intervals are used throughout.

Holistic case note review

In addition to the explicit review, each case note was evaluated holistically (implicit review) by a specialist in general medicine (M Clare Derrington). M Clare Derrington has considerable experience in case note review and has investigated hospitals who were outliers on hospital mortality statistics.[15] To measure inter-observer reliability, a subset (n=74) was independently re-evaluated by an

Box 2.3: Definitions of error and adverse events

Error:

Undesirable event in healthcare management which could have led to harm, or did so, but which did not impact on duration of admission or lead to disability at discharge.

A failure to complete a planned action as it was intended or to adopt an incorrect plan.

Adverse Event:

Unintended injury or complication.

Prolonged admission, disability at discharge or death.

Caused by healthcare management rather than the disease process.

Poor outcomes, some of which are the result of preventable actions or poor plans.

experienced trainee in

Table 2.6: Classification of errors and adverse events

Category	Nature of the problem
Diagnosis/Assessment admission error	– failure to diagnose promptly/correctly – failure to assess patient's overall condition adequately (including comorbidities)
Hospital-acquired infection	– hospital-acquired infection
Technical/management	– technical problem relating to a procedure – problem in management/monitoring (including nursing and other professional care)
Medication/maintenance/test results	– failure to give correct/monitor the effect of medication – failure to maintain correct hydration/electrolytes – failure to follow up abnormal test
Clinical reasoning	– obvious failure of clinical reasoning
Discharge information	– information needed by GP not transferred at discharge for whatever reason

Note that a particular error/event could be assigned to more than one category. For example, a test result showing severe hyperthyroidism was ignored and this error could be classified under 'Medication/Maintenance/Test results' and 'Discharge information'.

respiratory medicine (Thirumalai Naicker). Using expert clinical judgement, an overall quality score was assigned, graded on a scale from one (unsatisfactory, an error had occurred) to 10 (very best care).

A specific score for each of three stages of care – admission, management and pre-discharge – was also allocated on a scale from one (unsatisfactory) to six (excellent care).

Reviewers recorded errors and adverse events using the definitions found in box 2.3.[16–20] The number of errors and adverse events (of all

types, not just those relating to medication) were recorded for each patient. It was possible for a patient to have more than one error or adverse event.

The results are presented as average numbers of errors or adverse events per 100 patients. Average ratings and average numbers of adverse events and errors were calculated for both control and intervention groups. Adverse events and errors were further classified by broad categories (table 2.6), and adverse events were also categorised into four levels of preventability: definitely preventable; preventable on balance of probabilities; not preventable on the balance of probabilities; and definitely not preventable.

A mixed modelling approach was used to test for differences in changes in outcomes between epochs 1 and 2, and epoch 3.

Random effects were included to allow for within hospital correlation, using an exchangeable correlation structure. Covariates included:

- binary variable 'after' indicating whether the observation was before or after the intervention period
- binary variable 'intervention' indicating whether the hospital was a control or SPI2 hospital
- binary variable 'epoch 1 (or 2)' indicating whether the observation was from the pre-intervention phase
- an interaction between 'after' and 'intervention', to evaluate the estimated difference in change between the control and SPI2 hospitals (between epoch 3 and the average of the pre-intervention epochs).

All models were adjusted for age and sex of patients.

For the adverse events and errors, inter-observer reliability was assessed comparing errors and adverse events identified by both reviewers, using the Kappa statistic.

2.5 Sub-study 3: Error rates/quality of care – perioperative care

Case note selection

Patients undergoing major surgical operations of two types (total hip replacement and open colectomy) were selected for the following reasons:

- improving perioperative care was a specific SPI2 target
- specific guidelines apply to this group of patients
- it was believed that compliance with the guidelines was poor.

We developed a set of explicit criteria for perioperative care using clinical guidelines from IHI[21], British Orthopaedic Association[22] and the National Institute for Health and Clinical Excellence (NICE).[23;24] The areas of review were as follows:

- Administration of prophylactic antibiotics prior to inclusion.
- The use of prophylactic deep vein thrombosis (DVT) treatment (unless contraindicated), which included pharmacological intervention (unfractionated or low molecular weight heparins) and/or mechanical interventions, such as anti-thromboembolism stockings, foot pumps and sequential compression devices.
- Intra-operative temperature monitoring (on at least one occasion).
- The use of advanced methods of pain control (epidural anaesthesia and/or patient controlled analgesia) for post-operative pain control. It was decided to look at the types of anaesthesia administered, as there is evidence that using neuraxial blocks (spinal and epidural) with sedation only or in combination with a general anaesthetic helps with early post-operative pain control and recovery. Likewise there is evidence to support the use of patient controlled analgesia (PCA). Our quality criterion was that at least one of the modalities (neuraxial block or PCA) should be used.

Within the SPI intervention, the IHI advocated the removal of hair by clipping (not shaving); as this standard is not routinely recorded, this was not included as a process measure for the evaluation.

Case note assembly

Again, notes were selected from nine control and nine SPI2 hospitals. In this case there was a single pre-intervention epoch (corresponding to epoch 2, that is October 2006 to March 2007) for comparison with the post-intervention epoch (corresponding to epoch 3, that is October 2008 to March 2009).

The intention was to analyse 10 case notes from each epoch (five of each surgical operation type) to yield a total sample of 360. To control for seasonal effects the case notes were spread across each time period (approximately two per month).

The anonymisation procedures used in the sub-study dealing with the management of the acutely sick respiratory patients was followed (see section Case note assembly (and statistical power calculation), p 8).

All case notes were reviewed by a single medically trained reviewer (Ugochi Nwulu) over a period from November 2009 to January 2010. The first 20 cases were read jointly by Ugochi Nwulu and Richard Lilfordand each one was discussed for training purposes.

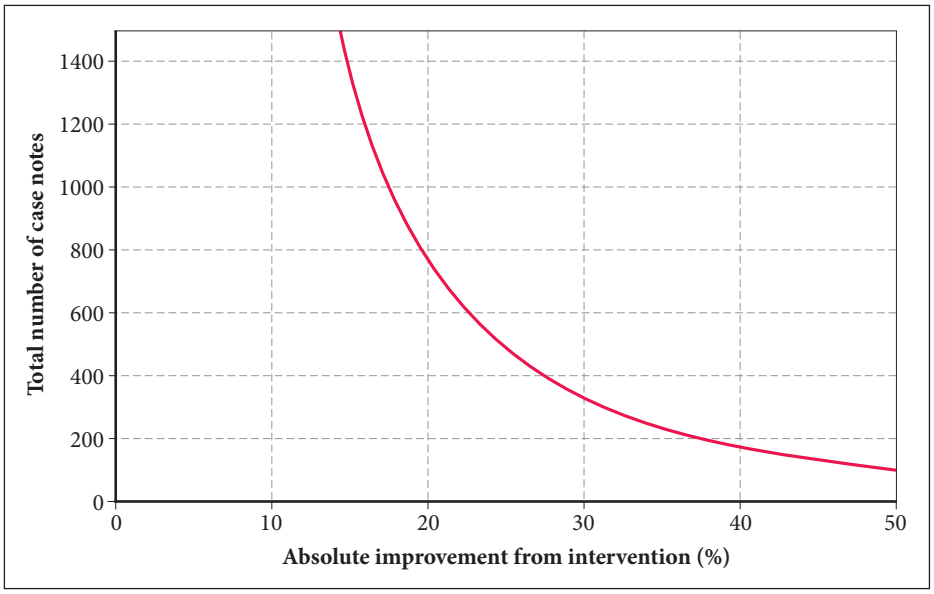

Figure 2.1: Sample sizes for 80% power (at 5% significance)

The notes were partially scrambled over epochs to assess, and if necessary control, for learning/fatigue effects. Inter-rater agreement was measured using 27 case notes reviewed by a second reviewer (Amit Kotecha), a surgical trainee.

Sample size calculation

We performed the sample size calculation after analysing results for 42 case notes. We found high compliance (>90%) with the venous thrombo-prophylaxis and antibiotic criteria such that there was little headroom for post intervention improvement.

We therefore based the calculation on intra-operative temperature monitoring where compliance was about 40% at baseline (that is, there was plenty of room for improvement in response to SPI).

Table 2.7: Sample sizes for 80% power (at 5% significance)

Effect Size (%)	Total number of cases needed for 80% power
15	1,364
20	764
22.5	600
25	484
30	328
35	236

Assuming that control hospitals experience an improvement from 40% to 50% compliance over the study period, our sample (n=360) is sufficient to detect an additional 25% to 30% improvement in association with SPI at 80% power, see figure 2.1 and table 2.7.

2.6 Sub-study 4: Indirect measure of hand hygiene

Improvement in hand hygiene was a specific aim of the SPI intervention.

In the UK there has also been a national initiative to improve hand hygiene amongst acute hospital employees – the Clean Your Hands campaign.[25]

This initiative consisted of actions to make AHR available at the bedside, monthly updated posters on wards and a patient empowerment component to encourage patients to ask staff to clean their hands.

The campaign was rolled out in England and Wales between December 2004 and June 2005 and continues to date. Since hand hygiene is also an SPI target we tested the hypothesis that SPI would have an additive effect.

The success of this campaign was measured by the National Observational Study to Evaluate the Clean Your Hands campaign (NOSEC).[26] As part of their study, monthly data from NHS Logistics for soap and AHR consumption (litres) was collected as an indirect measure of hand hygiene compliance. Data were available on a monthly basis for the period July 2004 to September 2008. This spanned a before period (July 2004 to February 2007) and a period concurrent with the intervention (March 2007 to September 2008). To adjust for potential variations in consumption due to hospital size, these data, which were available at hospital trust level and were expressed as a rate (in litres) per 1,000 bed occupied days.

Bed occupancy days were based on yearly averages spanning financial years.[27]

Population averaged (marginal) models were used to used to assess the effects of the intervention on soap and AHR consumption. To allow for decays in correlations (within hospitals) over time, an auto-regressive (AR 3) correlation structure was included. Model fits were compared between log and identity scales, and results presented here are based on the identity scale (as this allows estimation of difference in change).

Covariates within the models included an indicator variable denoting intervention or control hospital and time as a continuous variable (from one to maximum number of temporal observations available). The effect of time was modelled as a polynomial function (cubic) as there was an indication that changes in rates were non-linear.

Finally, a fixed effect interaction between time and intervention allowed assessment of whether the change in rates of infection differed between control and SPI2 hospitals.

Both models were fitted in STATA using the GEE population averaged class of models. For the before and after comparisons, estimates of differences in differences (as estimated by the GEE models) are presented along with 99% confidence intervals. For the temporal models, smoothed estimates of outcomes over the study period are presented in graphical format, along with p-values for tests of significant differences in changes between control and SPI2 hospitals.

Models were weighted with a suitably appropriate denominator – either number of events or standard deviation of outcome for summary data.

2.7 Sub-study 5: Outcomes

Adverse events detected in acute medical case notes

SPI2 aimed to make a 30% reduction[28;29] in the total number of adverse events. The incidence of patient harm caused by medication was measured as part of the explicit review.

The holistic review also measured adverse events both overall and by degree of preventability. In addition, each death was re-analysed by a second reviewer (blind to epoch and group), who had been trained in anaesthesia and public health, and who had experience as a reviewer of deaths for the National Confidential Enquiry into Perioperative Deaths (CL).

This study of deaths was not included in the original protocol and was added as a further quality control procedure after completion of the data collection.

Rates of mortality among acute medical care patients

We compared mortality rates across pre and post-intervention epochs, among patients whose case notes were selected for review. This was because this was feasible and, arguably, a higher signal to noise ratio would be expected among this group, which not only was especially well placed to benefit from specific SPI interventions, but also tends to have high mortality.

Hospital-wide mortality

This analysis was not part of the original protocol and was added at a later stage. The standardised mortality rates were derived from discharge information captured by Hospital Episode Statistics (HES).

The analysis included the discharge episodes of all patients aged 15 and over where the patient classification was coded as one. This excluded day cases, regular attendees for recurrent treatments such as dialysis and chemotherapy, or patients attending to give birth.

The purpose of the exclusions was to reduce the extent to which the denominator of discharged patients was inflated with low-risk episodes in those units having large day-case suites or maternity units. All in-year discharges were analysed and the rates of those discharged dead were directly standardised within sex and quinary age groups using a reference population of total discharges in each age and sex group.

We used HES records for intervention and control hospitals for financial years 2002/03 to 2008/09 inclusive.

ICU: Mortality, morbidity and length of stay

To provide information relevant to the effectiveness of the critical care bundles, we accessed data from the Case Mix Programme (CMP)[30] – a comparative audit run by the Intensive Care National Audit and Research Centre (ICNARC).

This programme collects patient outcomes from adult, general critical care units (intensive care and combined intensive care/high dependency units) covering England, Wales and Northern Ireland. Critical care units volunteered to join and collect standardised datasets (case mix, patient outcome and activity data) on patients admitted to their unit. These data are submitted to ICNARC for validation and analyses.

Data for the ICUs for all the study hospitals were available on a monthly basis for six months prior to the SPI (from October 2006 to March 2007) and for six months after the intervention (from October 2008 to March 2009).

Mortality data were available on the observed numbers of deaths and the risk-adjusted number of deaths, both of which were used to calculate observed to expected mortality ratios. Information was also available on the mean length of stay in the unit, along with standard deviation.

Finally, data were available on the mean risk prediction scores: the APACHE II score31 and the ICNARC score32 for patients admitted directly from a ward (along with standard deviation).

For data on intensive care outcomes, a mixed modelling population averaged approach was again used to provide information relevant to the effects of the intervention. However, since these data were only available for a single six-month period prior to the intervention, and for a single six-month period after the intervention (continuous time series data throughout the study period were not available), these data were modelled using a simple difference of difference model (that is, not including time as a continuous variable and not including an auto-regressive component).

Covariates within the model included an indicator variable denoting control or SPI2 hospital, and an indicator variable denoting before or after the intervention. Correlations within hospitals were incorporated using an exchangeable correlation structure. Adjustment was made for the morbidity covariates, mean APACHE II score and mean ICNARC physiology score.

Finally, a fixed effect interaction between intervention and before/after period allowed assessment of whether the change in outcomes between the before and after period differed between control and SPI2 hospitals.

All models were fitted in STATA using the GEE population averaged class of models. For the before and after comparisons, estimates of differences in differences (as estimated by the GEE models) are presented along with 99% confidence intervals.

Full results from fitted GEE models are provided in appendix 4.

C. diff and MRSA infection rates

Several components of the SPI intervention are related to infection control. We obtained the numbers of all C. diff and MRSA bacteraemia associated diarrhoea in the study sites from the Health Protection Agency (HPA), which collects mandatory HCAI data from all acute trusts in England and Wales.

The C. diff and MRSA data relate to both community and hospital-based infections (that is, they include cases diagnosed within the first 48 hours of stay) in patients older than 65 years.

C. diff data were available quarterly for the period January 2004 to June 2009. MRSA data were available from April 2001 to September 2009. These data therefore spanned a pre-intervention period (April 2001 or January 2004 to March 2007), a period concurrent with the intervention (April 2007 to September 2008) and a post-intervention period (October 2008 to June 2009 or September 2009).

To adjust for potential variations in numbers of cases due to hospital size, these data were expressed as a rate per 1,000 bed occupancy days for C. diff infections and as a rate per 100,000 bed occupancy days for the MRSA infections. Bed occupancy days were based on yearly averages spanning financial years.

Population averaged (marginal) models were used to assess the effects of the intervention on rates of C. diff and MRSA infections. To allow for decays in correlations (within hospitals) over time, an auto-regressive (AR 3) correlation structure was included.

Model fits were compared between log and identity scales, and results presented here are based on the identity scale (as this allows estimation of difference in change).

Covariates within the models included an indicator variable denoting control or SPI2 hospital, and time as a continuous variable (from one to maximum number of temporal observations available). The effect of time was modelled as a polynomial function (cubic) as there was an indication that changes in rates were non-linear.

Finally, a fixed effect interaction between time and intervention allowed assessment of whether the change in rates of infection differed between control and SPI2 hospitals.

Both models were fitted in STATA using the GEE population averaged class of models. For the before and after comparisons, estimates of differences in differences (as estimated by the GEE models) are presented along with 99% confidence intervals. For the temporal models, smoothed estimates of outcomes over the study period are presented in graphical format, along with p-values for tests of significant differences in changes between control and SPI2 hospitals.

Full results from fitted GEE models are provided in appendix 4.

Patient surveys

Since quality of care and avoidance of adverse events are important to patients, improvements in practice might plausibly affect patients' views of their care. Their views were assessed by means of a patient survey.

All English hospitals participate in the Care Quality Commission's National NHS Acute Inpatient Survey in England. The detail of this methodology is available from www.nhssurveys.com

Data were collected in October to December 2006 (pre-intervention) and October to December 2008 (post-intervention). Methods similar to those for the staff survey were used in the analysis, except that the control variables included were sex, age, length of stay and whether the admission was emergency or elective.

Five scores (table 2.8) were identified for analysis: three overall satisfaction scores and two related to cleanliness. The details of these scores can be found in appendix 2.

Table 2.8: Patient survey questions deemed relevant to the SPI

1.	Overall, how would you rate the care you received?
2.	How would you rate how well the doctors and nurses worked together?
3.	Overall, did you feel you were treated with respect and dignity while you were in the hospital?
4.	In your opinion, how clean was the hospital room or ward that you were in?
5.	How clean were the toilets and bathrooms that you used in hospital?

Chapter 3

Results

3.1 Sub-study 1: Staff surveys

In the nine SPI2 hospitals, the overall response rate for the first, before, survey was 53% (3,957 of 7,402 valid questionnaires returned).

This rate remained the same for the second, after, survey (3940/7448). In the nine control hospitals, the response rates were 50% (3,634/7,301) and 49% (3,616/7,424) respectively.

Table 3.1 shows the changes in both control and SPI2 hospitals on each of the 13 scores identified, along with the differences between the groups in these changes (with associated 99% confidence intervals).

Comparison with control hospitals is important because national changes in the NHS over this period resulted in generally more positive scores from the second survey than from the first.[34]

Only one of the 13 scores (organisational climate) shows a statistically significant ($p<0.01$) change over time between the control hospitals and SPI2 hospitals. Organisational climate, which refers to extent of positive feeling within the organisation relating to communication, staff involvement, innovation and patient care, was significantly lower in the control hospitals than the SPI2 hospitals at baseline (2.79 versus 2.91 on a scale where 1 is very negative and 5 is very positive).

Thus, although the increase in this score in control hospitals was higher than in SPI2 hospitals (0.08 compared with 0.01), the score was still higher in SPI2 hospitals at the second survey. The effect size for this difference in change between the control and SPI2 hospitals after covariates are taken into account was modest, at 0.07 points on a five point scale where there was a range at baseline of 0.55 points between hospitals.

Table 3.1: Staff survey scores in control and SPI2 hospitals at the two periods*

	Control hospitals					SPI2 hospitals					Range at baseline	Difference in change (99% CI)	p-value
	N	Survey 1 score (SE)	N	Survey 2 score (SE)	Absolute % change	N	Survey 1 score (SE)	N	Survey 2 score (SE)	Absolute % change			
% staff having well-structured appraisals within previous 12 months[2;3]	3477	28 (1)	3429	28 (1)	-1	3783	28 (1)	3734	26 (1)	-2	20–39	3 (-3, 9)	0.191
% staff working in well-structured teams[4]	3498	36 (1)	3408	37 (1)	1	3781	38 (1)	3747	38 (1)	0	32–42	4 (-4, 12)	0.205
% staff witnessing potentially harmful errors or near misses in previous month	*3602*	*37 (1)*	*3532*	*33 (1)*	*-4*	*3918*	*41 (1)*	*3851*	*40 (1)*	*-1*	*32–47*	*-4 (-10, 3)*	*0.167*
% staff suffering work-related injury in previous 12 months	*3524*	*19 (1)*	*3490*	*16 (1)*	*-3*	*3848*	*19 (1)*	*3796*	*18 (1)*	*-1*	*16–23*	*-2 (-5, 2)*	*0.182*
% staff suffering work-related stress in previous 12 months	*3575*	*33 (1)*	*3532*	*27 (1)*	*-6*	*3882*	*32 (1)*	*3842*	*27 (1)*	*-6*	*26–40*	*-1 (-6, 5)*	*0.670*
% staff experiencing physical violence from patients/relatives in previous 12 months	*3598*	*11 (1)*	*3536*	*11 (1)*	*-1*	*3884*	*11 (1)*	*3849*	*11 (1)*	*0*	*7–16*	*-1 (-3, 3)*	*0.645*
Intention to leave[5]	*3557*	*3.26 (0.02)*	*3544*	*3.40 (0.02)*	*0.14*	*3880*	*3.31 (0.01)*	*3865*	*3.42 (0.01)*	*0.11*	*3.07–3.50*	*-0.04 (-0.12, 0.04)*	*0.198*
Staff job satisfaction[5]	3593	3.34 (0.01)	3568	3.44 (0.01)	0.10	3902	3.40 (0.01)	3898	3.49 (0.01)	0.09	3.23–3.50	-0.02 (-0.08, 0.04)	0.422
Quality of work-life balance[5]	3568	2.77 (0.02)	3536	2.56 (0.02)	-0.22	3868	2.68 (0.02)	3857	2.51 (0.02)	-0.17	2.46–2.97	0.05 (-0.04, 0.14)	0.142
Support from supervisors[5]	3583	3.39 (0.02)	3551	3.56 (0.02)	0.17	3894	3.43 (0.01)	3869	3.61 (0.01)	0.18	3.22–3.53	0.00 (-0.08, 0.07)	0.889
Organisational climate[5;33]	3578	2.79 (0.01)	3551	2.87 (0.01)	0.08	3861	2.91 (0.01)	3886	2.92 (0.01)	0.01	2.52–3.07	-0.07 (-0.14, 0.00)	0.009
† Fairness and effectiveness of incident reporting procedures[5]	3555	3.36 (0.01)	3487	3.41 (0.01)	0.05	3861	3.41 (0.01)	3803	3.45 (0.01)	0.04	3.27–3.54	-0.01 (-0.05, 0.04)	0.664
† Availability of hand-washing materials[5]	2939	4.58 (0.01)	3126	4.75 (0.01)	0.17	3231	4.51 (0.01)	3418	4.67 (0.01)	0.16	4.32–4.72	-0.01 (-0.07, 0.04)	0.587

* The first six of these scores were percentages, simply reflecting the percentage of respondents who answered 'yes' to a single question or a set of questions. The other seven are on a scale of one to five, and are based on the mean of between three and six questions, each of which was scored between one and five for each respondent. For six of these seven scores, the higher the score the better, although for intention to leave, lower scores are better. To aid interpretation, scores where a lower value is better are shown in *italics*. Range at baseline indicates the range of scores across SPI and control hospitals in the first survey to give some context for the level of change shown. The difference in change and corresponding confidence interval does not necessarily reflect the difference in absolute change because of the inclusion of covariates in the models tested.

† These scores were not included in the SPI1 evaluation.

3.2 Sub-study 2: Error rates/quality of care – acute medical care

Explicit review

The intended sample size of 405 from the SPI2 hospitals was not met – 347 case notes were reviewed. These case notes were split approximately equally across the epochs – 116 from epoch 1, 117 from epoch 2 and 114 from epoch 3. Control hospitals yielded 355 case notes out of the intended sample size of 405: 120 from epoch 1, 123 from epoch 2 and 112 from epoch 3.

History taking (tables 3.2a and 3.2b)

Baseline comparisons showed no significant differences between control and SPI2 hospitals. An effect of SPI was not apparent and was not statistically significant for any of the outcomes measured.

For two items (exercise tolerance and occupation) measured in relation to history taking, there was significant evidence of an improvement overtime in both control and SPI2 hospitals (see table 3.2b). There was some evidence of a reviewer learning/fatigue effect for exercise tolerance ($p<0.001$), chest pain ($p=0.010$) and occupation ($p=0.001$).

Several of the questions were asked less often for older patients. Age was a significant predictor for items 3, 6 and 7 ($p\leq0.001$ in all cases), typically reducing the odds of the question being asked by about 5% per year of age.

Vital signs (tables 3.3a and 3.3b)

There is no significant evidence for an effect associated with SPI. However, compliance in taking patient observations at six and 12 hours after admission also improved in both groups of hospitals when epochs 1 and 2 are compared to epoch 3.

This was most evident for respiratory rate where practice continued to improve across all three epochs. In addition, improvement took place between the first two epochs on these and most of the other six and 12 hour items ($p<0.010$ for all items except for six hour pulse, for which $p=0.016$).

Appropriate clinical response (tables 3.4a and 3.4b)

The data are sparse, and formal analysis was possible for only three items (see table 3.4b). No significant conclusions were indicated.

Steroids and antibiotics – compliance with standards (tables 3.5a and 3.5b)

There is no significant evidence that the SPI had an effect. Use of the CURB score (a clinical prediction rule for predicting mortality from community-acquired pneumonia and infection at any site) has improved significantly over time (OR=7.3; 1.4 – 37.7), though from a very low base, and differences were not statistically significant between control and SPI2 hospitals.

A negative age-effect ($p<0.001$) was apparent for item four yielding a reduction in odds of compliance of about 6% per year of age. There is a reviewer learning effect ($p=0.002$) for item 2 (oxygen prescription for COPD).

Prescribing errors (tables 3.6a and 3.6b)

A reviewer learning/fatigue effect was significant ($p=0.009$) in the review of prescribing errors, with a decreasing rate of error detection with time of review; this was allowed for in the analysis. No significant time effects for SPI arm, time or SPI were detected (table 3.6b).

Anti-coagulant prescribing errors (table 3.7)

A total of 10 errors were recorded. Six occurred in SPI2 hospitals before the introduction of the intervention, the other four in control hospitals in epoch 3. The breakdown is shown in table 3.7, but no further analysis was possible.

Reconciliation errors (table 3.8a and 3.8b)

The results can be found in tables 3.8a and 3.8b. Again, there is no significant evidence that the SPI has an effect ($p=0.914$).

Table 3.2a: Medical history taking (% of patients asked)

	Control hospitals						SPI2 hospitals					
	Epoch 1		Epoch 2		Epoch 3		Epoch 1		Epoch 2		Epoch 3	
No. of patients	236		240		381		380		381		380	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
1. Duration of presenting symptom	92.5	2.4	91.1	2.6	95.5	2.0	96.6	1.7	98.3	1.2	99.1	0.9
2. Normal exercise tolerance	26.5	4.1	31.7	4.2	38.4	4.6	38.8	4.5	38.3	4.6	33.9	4.5
3. Presence/absence shortness of breath	88.3	2.9	91.1	2.6	88.4	3.0	91.4	2.6	93.2	2.3	92.0	2.6
4. Presence/absence orthopnoea	23.3	3.9	28.1	4.1	17.0	3.6	32.8	4.4	29.3	4.2	18.0	3.7
5. Presence/absence cough	88.3	2.9	89.4	2.8	86.6	3.2	91.4	2.6	91.5	2.6	83.9	3.5
6. If cough, was it productive	78.3	3.8	84.6	3.3	77.7	4.0	87.1	3.1	88.0	3.0	76.8	4.0
7. Smoking history taken	73.9	4.0	81.3	3.5	66.1	4.5	77.6	3.9	79.5	3.7	74.1	4.2
8. Presence/absence of haemoptysis	22.2	3.9	28.1	4.1	16.1	3.5	25.2	4.1	23.3	3.9	26.1	4.2
9. Chest pain (of any type)	68.1	4.3	71.5	4.1	54.5	4.7	54.3	4.6	65.5	4.4	59.8	4.7
10. Occupation/previous occupation	44.4	4.6	37.7	4.4	53.6	4.7	34.8	4.5	38.5	4.5	38.4	4.6
11. Pets	3.4	1.7	3.3	1.6	0.9	0.9	1.7	1.2	2.6	1.5	6.3	2.3
% over all items		55.7		58.2		54.1		57.5		59.0		57.4

Entries are percentages with binomial standard errors.

Darker shaded areas relate to post-intervention epochs.

Table 3.2b: Medical history taking – differences between control and SPI2 hospitals, changes over time and the effect of SPI2

	Baseline comparisons		Changes in controls		Effect of SPI2	
	OR (99% CI)	p-value	OR (99% CI)	p-value	OR (99% CI)	p-value
1. Duration of presenting symptom	3.2 (0.7, 14.0)	0.040	1.6 (0.4, 7.3)	0.391	1.7 (0.07, 40.3)	0.672
2. Normal exercise tolerance	1.4 (0.8, 2.4)	0.125	2.2 (1.1, 4.4)	0.005	0.7 (0.3, 1.7)	0.312
3. Presence/absence shortness of breath	1.3 (0.5, 3.5)	0.480	0.8 (0.3, 2.3)	0.539	1.3 (0.3, 5.7)	0.701
4. Presence/absence orthopnoea	1.3 (0.7, 2.5)	0.330	0.6 (0.3, 1.5)	0.159	0.9 (0.3, 2.6)	0.749
5. Presence/absence cough	1.2 (0.5, 2.9)	0.506	0.7 (0.2, 1.8)	0.286	0.7 (0.2, 2.4)	0.407
6. If cough, was it productive	1.4 (0.7, 2.9)	0.208	0.7 (0.3, 1.6)	0.307	0.7 (0.2, 2.1)	0.418
7. Smoking history taken	1.1 (0.5, 2.1)	0.841	0.6 (0.3, 1.2)	0.061	1.5 (0.5, 4.0)	0.313
8. Presence/absence of haemoptysis†	0.9 (0.4, 1.9)	0.686	0.6 (0.2, 1.4)	0.106	2.2 (0.7, 6.5)	0.061
9. Chest pain (of any type)	0.6 (0.4, 1.1)	0.041	0.7 (0.4,1.4)	0.193	2.1 (0.9, 5.2)	0.028
10. Occupation/previous occupation	0.9 (0.5, 1.7)	0.696	2.0 (1.0, 4.0)	0.010	0.6 (0.3, 1.5)	0.178
11. Pets	0.9 (0.2, 4.7)	0.872	0.3 (0.02, 5.6)	0.299	8.3 (0.3, 210.0)	0.093

† Denotes items with significant (P < 0.010) between hospital variation within the arms of the study.

Table 3.3a: Vital signs – percentage compliance with standards

	Control hospitals						SPI2 hospitals					
	Epoch 1		Epoch 2		Epoch 3		Epoch 1		Epoch 2		Epoch 3	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
On admission:												
Temperature	96.7	1.6	99.2	0.8	99.1	0.9	99.1	0.9	99.1	0.9	96.5	1.7
Respiratory rate	95.8	1.8	99.2	0.8	100.0	0.0	96.5	1.7	98.3	1.2	100.0	0.0
Cyanosis/oxygen saturation	98.3	1.2	98.4	1.1	100.0	0.0	99.1	0.9	99.1	0.9	100.0	0.0
Confusion/mental state	53.3	4.6	71.5	4.1	74.1	4.2	62.6	4.5	57.3	4.6	80.7	3.7
Pulse	98.3	1.2	99.2	0.8	100.0	0.0	99.1	0.9	99.1	0.9	100.0	0.0
Blood pressure	98.3	1.2	99.2	0.8	100.0	0.0	99.1	0.9	99.1	0.9	100.0	0.0
At six hours:												
Temperature	61.7	4.5	69.9	4.2	69.6	4.4	63.2	4.5	77.8	3.9	68.1	4.4
Respiratory rate	40.8	4.5	69.1	4.2	72.3	4.2	47.4	4.7	76.1	4.0	77.9	3.9
Pulses	69.2	4.2	73.2	4.0	75.0	4.1	64.9	4.5	81.2	3.6	79.6	3.8
Oxygen saturation	61.7	4.5	71.5	4.1	74.1	4.2	60.5	4.6	78.6	3.8	79.6	3.8
At 12 hours:												
Temperature	58.3	4.5	70.7	4.1	68.8	4.4	58.8	4.6	69.8	4.3	72.6	4.2
Respiratory rate	35.0	4.4	69.9	4.2	73.2	4.2	44.7	4.7	67.5	4.3	78.8	3.9
Pulse	63.3	4.4	76.4	3.8	75.0	4.1	59.6	4.6	70.9	4.2	79.6	3.8
Oxygen saturation	54.2	4.6	75.6	3.9	74.1	4.2	57.0	4.7	70.9	4.2	79.6	3.8
Routine investigations:												
U & E	99.2	0.8	98.4	1.1	99.1	0.9	100.0	0.0	99.1	0.9	100.0	0.0
Chest X-ray	96.7	1.6	97.6	1.4	97.3	1.5	96.5	1.7	98.3	1.2	100.0	0.0
Full blood count	98.3	1.2	97.6	1.4	99.1	0.9	99.1	0.9	99.1	0.9	100.0	0.0

Darker shaded areas relate to post-intervention epochs.

Table 3.3b: Vital signs – differences between control and SPI2 hospitals, changes over time and the effect of SPI2

	Baseline comparisons		Changes in controls		Effect of SPI2	
	OR (99% CI)	p-value	OR (99% CI)	p-value	OR (99% CI)	p-value
On admission:						
Temperature	2.2 (0.2, 21.1)	0.381	0.7 (0.02, 24.0)	0.823	0.1 (0.002, 4.1)	0.108
Respiratory rate	0.7 (0.1, 3.9)	0.617	–	–	–	–
Cyanosis/oxygen saturation	1.6 (0.1, 18.2)	0.605	–	–	–	–
Confusion/mental state	0.9 (0.5, 1.7)	0.674	1.8 (0.8,3.7)	0.045	1.7 (0.6, 4.5)	0.187
Pulse	1.1 (0.1, 14.9)	0.942	–	–	–	–
Blood pressure	1.1 (0.1, 14.9)	0.942	–	–	–	–
At six hours:						
Temperature	1.3 (0.7, 2.4)	0.323	1.4 (0.7, 2.8)	0.239	0.8 (0.3, 1.9)	0.457
Respiratory rate	1.3 (0.7, 2.5)	0.281	2.1 (1.0, 4.3)	0.010	1.0 (0.4, 2.8)	0.907
Pulse	1.1 (0.6, 2.1)	0.604	1.3 (0.6, 2.8)	0.327	1.2 (0.4, 3.3)	0.662
Oxygen saturation	1.2 (0.7, 2.2)	0.433	1.4 (0.7, 3.0)	0.223	1.2 (0.4, 3.1)	0.703
At 12 hours:						
Temperature	1.0 (0.6, 1.8)	0.934	1.2 (0.6, 2.4)	0.583	1.2 (0.5, 2.9)	0.685
Respiratory rate	1.2 (0.6, 2.3)	0.524	2.4 (1.1, 5.0)	0.002	1.2 (0.4, 3.1)	0.713
Pulse	0.8 (0.5, 1.4)	0.394	1.2 (0.6, 2.5)	0.510	1.5 (0.6, 4.1)	0.268
Oxygen saturation	1.0 (0.6, 1.7)	0.953	1.4 (0.7, 2.9)	0.231	1.4 (0.5, 3.6)	0.430
Routine investigations:						
U & E	0.9 (0.03, 28.8)	0.944	0.6 (0.01, 27.7)	0.762	–	–
Chest X–ray	1.1 (0.2, 5.1)	0.904	0.7 (0.1, 5.6)	0.641	–	–
Full blood count	1.6 (0.2, 16.9)	0.609	1.7 (0.1, 40.4)	0.663	–	–

No items showed significant variation between hospitals within arms.

Blanks are associated with 100% compliance in table 3.3b, for which logistic regression analysis is impossible.

Table 3.4a: Appropriate clinical response

	Control hospitals									SPI2 hospitals								
	Epoch 1			Epoch 2			Epoch 3			Epoch 1			Epoch 2			Epoch 3		
	N	%	SE	N	%	SE	N	%	SE	N	%	SE	N	%	SE	N	%	SE
Oxygen saturation <90 at any time:																		
Full blood gases within 2 hours	13	61.5	13.5	10	50.0	15.8	0	–	–	2	50.0	35.4	10	70.0	14.5	4	25.0	21.7
Given oxygen (if not on oxygen)	12	66.7	13.6	7	57.1	18.7	1	0.0	0.0	4	75.0	21.7	9	77.8	13.9	2	50.0	35.4
Doctor called or transferred to ICU (if on oxygen)	8	25.0	15.3	6	50.0	20.4	0	–	–	2	50.0	35.4	5	80.0	17.9	2	50.0	35.4
Blood pressure systolic <90:																		
At least next six hours, hourly observations	7	28.6	17.0	8	25.0	15.3	8	50.0	17.7	4	50.0	25.0	6	16.7	15.2	2	100.0	0.0
Blood culture	4	50.0	25.0	5	40.0	21.2	8	37.5	17.1	4	25.0	21.7	5	80.0	17.9	2	100.0	0.0
Sputum Present																		
Sputum culture	70	41.4	5.9	72	48.6	5.9	69	24.6	5.2	71	36.6	5.8	78	46.2	5.7	62	29.0	5.8
Respiratory rate >20 at any time after admission:																		
Given oxygen (if not on oxygen)	3	0.0	0.0	0	–	–	0	–	–	2	0.0	0.0	1	0.0	0.0	0	–	–
Doctor called (if on oxygen)	5	0.0	0.0	1	100.0	0.0	0	–	–	3	0.0	0.0	2	0.0	0.0	3	0.0	0.0
Temperature over 38°C – any episode:																		
If yes, blood culture	16	68.8	11.6	14	71.4	12.0	15	73.3	11.4	19	73.7	10.1	25	76.0	8.5	13	61.5	13.5
Failure to improve by 48 hours or subsequent deterioration:																		
Review by consultant	11	100.0	0.0	12	100.0	0.0	10	100.0	0.0	9	100.0	0.0	10	100.0	0.0	3	100.0	0.0
Repeat chest X-ray	10	100.0	0.0	9	100.0	0.0	9	100.0	0.0	8	100.0	0.0	8	100.0	0.0	3	100.0	0.0
White cell counted/repeated	11	100.0	0.0	12	100.0	0.0	11	100.0	0.0	8	100.0	0.0	10	100.0	0.0	3	100.0	0.0
Appropriate addition of further antibiotics	9	100.0	0.0	5	100.0	0.0	8	75.0	15.3	7	85.7	13.2	6	100.0	0.0	2	50.0	35.4
Follow up:																		
Arrange follow up?	45	71.1	6.7	47	61.7	7.1	38	42.1	8.0	49	59.2	7.0	52	63.5	6.6	44	38.6	7.3

Note: The columns headed N represent the opportunities for error. The opportunities vary within categories, e.g. the reviewer may judge that it would have been inappropriate to call a doctor, or move a patient to ICU despite falling oxygen saturation, e.g. because death was expected.

Entries are error rates as percentages of N, with binomial standard errors.

Darker shaded areas relate to post-intervention epochs.

Table 3.4b: Appropriate clinical response – difference between control and SPI2 hospitals, changes over time and the effect of SPI2 (formal analyses for three items only, because of sparse data for other items.)

	Baseline comparisons		Changes in controls		Effect of SPI2	
	OR (99% CI)	p-value	OR (99% CI)	p-value	OR (99% CI)	p-value
Sputum present:						
Sputum culture	0.8 (0.4, 1.6)	0.411	0.5 (0.2, 1.2)	0.040	1.7 (0.5, 6.0)	0.250
Temperature >38°C:						
If yes, blood culture	1.0 (0.2, 4.5)	0.969	0.9 (0.1, 7.1)	0.874	0.6 (0.04, 9.6)	0.636
Appropriate follow-up:						
Clinical review arranged if appropriate	0.7 (0.3, 1.7)	0.343	0.3 (0.1, 1.0)	0.009	1.2 (0.3, 5.4)	0.698

Table 3.5a: Use of steroids and antibiotics, CURB score and other standards applicable to specific cases – compliance with standards

	Control hospitals									SPI2 hospitals								
	Epoch 1			Epoch 2			Epoch 3			Epoch 1			Epoch 2			Epoch 3		
	N	%	SE	N	%	SE	N	%	SE	N	%	SE	N	%	SE	N	%	SE
Asthma or COPD given steroids within 24 hrs	70	84.3	4.4	63	91.8	3.5	56	92.9	3.5	59	91.5	3.7	74	93.2	2.9	53	94.3	3.2
COPD: appropriate prescription of oxygen	30	33.3	8.7	20	55.0	11.1	7	57.1	18.1	19	57.9	11.3	21	47.6	10.9	7	85.7	13.2
Peak flow record	10	80.0	12.6	11	63.6	14.5	5	40.0	21.9	24	79.2	8.3	18	94.4	5.4	8	75.0	15.3
Severity of pneumonia patients recorded in notes?	52	73.1	6.2	68	70.6	5.6	57	77.2	5.6	49	77.6	5.9	45	77.8	6.3	60	70.0	6.0
CURB score recorded in notes?	52	1.9	1.9	67	22.4	5.1	56	21.4	5.5	50	2.0	2.0	44	25.0	6.1	60	41.7	6.4
Was appropriate antibiotic treatment given?	51	94.1	3.3	68	92.6	3.2	53	96.2	2.6	49	91.8	4.0	42	100.0	0.0	55	94.5	3.1

Darker shaded areas relate to post-intervention epochs.

Table 3.5b: Steroids and antibiotics, CURB score and other standards applicable to specific cases – differences between control and SPI2 hospitals, changes over time and the effect of SPI2

	Baseline comparisons		Changes in controls		Effect of SPI2	
	OR (99% CI)	p-value	OR (99% CI)	p-value	OR (99% CI)	p-value
Asthma or COPD given steroids within 24 hrs	1.8 (0.6, 5.7)	0.183	0.9 (0.2, 4.8)	0.813	0.6 (0.05, 6.8)	0.568
COPD: appropriate prescription of oxygen	1.7 (0.1, 19.2)	0.585	0.1 (0.001, 4.0)	0.092	1.0 (0.005, 220.5)	0.985
Peak flow record	1.1 (0.03, 40.9)	0.954	0.1 (0.001, 13.5)	0.255	29.7 (0.1, 15943)	0.165
Severity of pneumonia patients recorded in notes?	0.9 (0.3, 3.2)	0.829	0.9 (0.3, 3.1)	0.821	0.7 (0.1, 3.0)	0.478
CURB score recorded in notes?	1.4 (0.4, 4.9)	0.453	7.3 (1.4, 37.7)	0.002	2.1 (0.4, 11.1)	0.236
Was appropriate antibiotic treatment given?	1.4 (0.2, 10.5)	0.676	1.5 (0.1, 15.7)	0.665	0.5 (0.02, 10.0)	0.519

No items showed significant variation between hospitals within arms.

Table 3.6a: Prescribing errors*

	Control hospitals						SPI2 hospitals					
	Epoch 1		Epoch 2		Epoch 3		Epoch 1		Epoch 2		Epoch 3	
No. of patients†	120		122		112		113		117		114	
No. of prescriptions	2953		3269		2871		2529		2938		2656	
Prescriptions per patient	24.6		26.8		25.6		22.4		25.1		23.3	
Errors:												
Total	345		298		216		251		266		167	
	Rate	SE	Rate	SE	Rate	SE	Rate	SE	Rate	SE	Rate	SE
Unadjusted rates:												
Error rate per prescription	0.120	0.017	0.092	0.013	0.076	0.012	0.106	0.015	0.088	0.013	0.060	0.010
Rates adjusted for date of review:												
Overall rate (all errors)	0.103	0.017	0.086	0.013	0.089	0.015	0.098	0.015	0.084	0.013	0.073	0.014
By five most prevalent stages of the drug use process:												
Need for drug therapy	0.006	0.002	0.018	0.003	0.018	0.004	0.014	0.003	0.011	0.002	0.015	0.002
Selection of dose	0.057	0.009	0.031	0.005	0.032	0.006	0.039	0.006	0.039	0.006	0.030	0.006
Selection of drug	0.002	0.001	0.002	0.001	0.001	0.001	0.004	0.001	0.002	0.001	0.001	0.001
Selection of formulation	0.010	0.003	0.005	0.001	0.005	0.002	0.007	0.002	0.008	0.002	0.009	0.003
Provide information needed for supply	0.029	0.006	0.029	0.005	0.035	0.007	0.032	0.006	0.026	0.005	0.025	0.006

* A breakdown of error types, including failure to reconcile a patient's previous medicines with prescription on admission (a particular focus of the SPI) are given in the full report – there were no significant SPI effects.

† The number of patients are those with medication charts available for review.

Darker shaded areas relate to post-intervention epochs.

Table 3.6b: Prescribing errors – differences between control and SPI2 hospitals, changes over time and the effect of SPI2

	Baseline comparisons		Changes in controls		Effect of SPI2	
	Rate ratio (99% CI)	p-value	Rate ratio (99% CI)	p-value	Rate ratio (99% CI)	p-value
Overall rate (all errors)	1.0 (0.6, 1.5)	0.860	0.9 (0.6, 1.4)	0.662	0.9 (0.5, 1.5)	0.444
By five most prevalent stages of the drug use process:						
Need for drug therapy	1.0 (0.6, 1.6)	0.825	1.5 (0.7, 2.9)	0.157	0.8 (0.3, 2.1)	0.626
Selection of dose	0.9 (0.6, 1.4)	0.595	0.8 (0.5, 1.3)	0.166	1.0 (0.5, 2.0)	0.982
Selection of drug	1.2 (0.5, 2.9)	0.670	0.7 (0.1, 4.2)	0.643	0.7 (0.05, 9.3)	0.687
Selection of formulation	1.1 (0.6, 2.0)	0.788	0.8 (0.3, 2.0)	0.506	1.6 (0.5, 5.3)	0.277
Provide information needed for supply	1.0 (0.6, 1.8)	0.842	1.1 (0.7, 1.9)	0.556	0.7 (0.3, 1.5)	0.220

Table 3.7: Anti-coagulant prescribing errors

	Control hospitals			SPI2 hospitals		
	Epoch 1	Epoch 2	Epoch 3	Epoch 1	Epoch 2	Epoch 3
No. of patients	28	42	62	31	64	74
No. of prescriptions	43	61	92	54	92	99
No. of errors	0	0	4	1	5	0

Darker shaded areas relate to post-intervention epochs.

Table 3.8a: Reconciliation errors at admission

	Control hospitals			SPI2 hospitals		
	Epoch 1	Epoch 2	Epoch 3	Epoch 1	Epoch 2	Epoch 3
No. of patients	28	42	62	31	64	74
No. of admissions	120	122	112	113	117	114
Admissions with reconciliation errors:						
N	8	14	10	7	8	6
% (SE)	6.7 (2.3)	11.5 (2.9)	8.9 (2.7)	6.2 (2.3)	6.8 (2.3)	5.3 (2.1)
Mean no. of errors when error is present (SE)	1.4 (0.3)	2.1 (0.3)	2.2 (0.6)	2.9 (1.1)	2.3 (0.7)	2.3 (0.6)

Darker shaded areas relate to post-intervention epochs.

Table 3.8b: Reconciliation errors at admission – differences between control and SPI2, changes over time and the effect of SPI2

	Baseline comparisons		Changes in controls		Effect of SPI2	
					Ratio of temporal changes	
	OR (99% CI)	p-value	OR (99% CI)	p-value	OR (99% CI)	p-value
Admissions with reconciliation errors	1.2 (0.3, 4.8)	0.727	1.5 (0.6, 3.8)	0.292	0.9 (0.3, 3.2)	0.914

Odds-ratios (OR) derive from a logistic model with random effects for hospitals, adjusted for the date of review.

Table 3.9: Holistic review: changes in ratings and numbers of adverse events and errors between control and SPI2 hospitals (standard errors in parenthesis)

	Control hospitals			SPI2 hospitals			Difference in change (99% CIs)*
	Epoch 1	Epoch 2	Epoch 3	Epoch 1	Epoch 2	Epoch 3	
No. of patients	126	126	114	117	120	122	
Quality ratings:							
Admission rating†	4.76 (0.13)	4.94 (0.12)	4.97 (0.10)	5.03 (0.10)	4.93 (0.11)	4.87 (0.10)	-0.26 (-0.77, 0.24)
Management rating†	3.98 (0.17)	4.18 (0.17)	4.29 (0.16)	4.35 (0.16)	4.03 (0.17)	4.25 (0.16)	-0.18 (-0.92, 0.56)
Pre-discharge rating†	4.13 (0.16)	4.25 (0.14)	4.32 (0.13)	4.28 (0.15)	4.16 (0.15)	4.25 (0.14)	-0.10 (-0.74, 0.54)
Overall care rating‡	7.42 (0.13)	7.62 (0.12)	7.77 (0.11)	7.72 (0.11)	7.46 (0.12)	7.47 (0.11)	-0.41 (-0.94, 0.11)
Errors/ Adverse Events							Rate ratios
No. errorsΦ	52.4 (5.6)	39.7 (5.2)	30.7 (5.3)	35.9 (4.9)	45.0 (5.7)	38.5 (5.0)	1.47 (0.74, 2.90)
No. adverse eventsΦ	4.76 (2.21)	3.97 (1.74)	3.51 (1.73)	0.85 (0.85)	5.00 (1.99)	0 (–)	

* Differences in changes are estimated from a mixed effects model (see methods for details) and represent a difference in change between epoch 3 and epochs 1 and 2.

† Score scale: 1 (below best practice) to 6 (excellent care)

‡ Score scale: 1 (unsatisfactory) to 10 (very best care)

Φ The numbers of errors and numbers of adverse events are per 100 patients (patients could experience more than one error and more than one adverse event) .

Darker shaded areas relate to post-intervention epochs.

Table 3.10: Rates per 100 patients of errors identified by broad category of error (standard errors are in parenthesis)

	Control hospitals			SPI2 hospitals			Rate ratio (99% CIs)*
	Epoch 1	Epoch 2	Epoch 3	Epoch 1	Epoch 2	Epoch 3	
No. of patients	126	126	114	117	120	122	
No. of errors	67	50	36	44	54	47	
Diagnosis/assessment/ admission error	63.49 (7.18)	42.86 (6.00)	36.84 (6.74)	44.44 (6.91)	55.00 (7.28)	46.72 (6.60)	1.34 (0.72, 2.51)
Hospital-acquired infection	0	0	0.87 (0.87)	0	0	0	Not estimable
Technical/management	10.32 (2.72)	9.52 (2.63)	9.65 (2.78)	4.27 (1.88)	8.33 (2.53)	5.74 (2.11)	0.94 (0.21, 4.28)
Medication/ maintenance/follow-up	24.60 (4.46)	16.67 (3.52)	8.77 (2.66)	22.22 (4.22)	16.67 (3.80)	17.21 (3.43)	2.13 (0.69, 6.53)
Clinical reasoning	36.50 (4.30)	27.78 (4.00)	20.18 (3.78)	24.79 (4.01)	29.17 (4.17)	27.87 (4.08)	1.65 (0.72, 3.77)
Discharge information	12.70 (2.98)	14.29 (3.13)	9.65 (2.78)	11.11 (2.92)	16.67 (3.42)	13.93 (3.15)	1.43 (0.44, 4.68)

* Differences in changes are estimated from a mixed effects model (see methods for details) and represent a difference in change between epoch 3 and epochs 1 and 2.

Errors can be of multiple categories.

Darker shaded areas relate to post-intervention epochs.

Implicit (holistic) case note review

The sample

In the nine SPI2 hospitals, 359 case notes were holistically reviewed (roughly equally divided between the nine hospitals). For the nine control hospitals, 366 cases notes were holistically reviewed (again roughly equally divided between the nine hospitals).

For the control and SPI2 hospitals, roughly equal numbers of cases notes were reviewed from each of the three epochs (243 cases notes were reviewed from epoch 1; 246 from epoch 2; and 236 from epoch 3). This means that a total of 489 cases notes were reviewed from the pre-intervention period and 236 cases notes were reviewed from the post-intervention period. A small number of case notes analysed by explicit review did not get included in the holistic review, and vice versa, due to logistical problems and time constraints.

For this reason the homology between the two sets of notes is not complete. For example, there were 31 deaths among the explicit case notes reviewed, and 30 among the implicit case notes.

Reliability

In total, 74 case notes were reviewed by two reviewers. Measures of reliability between the two holistic reviewers were, as expected for holistic reviews, low[35] (ICCs were 0.05 (99% CI: -0.25, 0.34) for admission rating; 0.05 (99% CI: -0.25,0.34) for the management rating; 0.37 (99% CI: 0.08,0.60) for the pre-discharge care rating; and 0.31 (99% CI: 0.02, 0.56) for the overall care rating).

The main reviewer tended to assign higher average ratings with more variability, whereas the second reviewer tended to assign lower average ratings with less variability.

The errors and adverse events identified by the two reviewers had small Kappas (0.08 and 0.00 respectively).

Quality of care

The average quality of care scores during epoch 1 with standard errors (SE) for admission, management and pre-discharge ratings were 4.89 (SE 0.08), 4.15 (SE 0.12) and 4.20 (SE 0.12) respectively on a scale of one (below best practise) to six (excellent care); and the average score for overall care was 7.56 (SE 0.09), on a scale of one (unsatisfactory) to 10 (very best care).

During epoch 1, all of the four quality of care ratings were higher in the SPI2 hospitals compared with the control hospitals (table 3.9), although not significantly so. However, during both epoch 2 and epoch 3, all four quality of care ratings were higher in the control hospitals compared to the SPI2 hospitals (although, not significantly so).

In the control hospitals, all ratings tended to increase with time. Whereas in the SPI2 hospitals, all ratings decreased between epoch 1 and epoch 3 (although once again, not significantly so). However, differences in changes across control and SPI2 hospitals were not significant for any of the four ratings (table 3.9).

Errors

Over all hospitals and all epochs, the average number of errors observed was 41 (SE 2.17) per 100 patients, which equates to approximately one error in every 2.5 case notes reviewed.

In the control hospitals, the average number of errors per 100 patients decreased over the three epochs from 52.4 (SE 5.6) errors per 100 patients in the first epoch to 30.7 (SE 5.3) in the third epoch (table 3.10). Whereas, in the SPI2 hospitals, the average number of errors per 100 patients was relatively stable over epochs: from 35.9 (SE 4.9) in the first epoch to 38.5 (SE 5.0) in the third.

Again, differences in changes in the average number of errors before and after the intervention across control and SPI2 hospitals were not significant (rate ratio 1.47; 0.74-0.90).

A total of 153 errors were identified in the control hospitals and 145 errors identified in the SPI2 hospitals (table 3.10). The most frequent categories of errors related to diagnosis, assessment or admission, or were errors relating to poor clinical reasoning.

Errors relating to both these types were more frequent in the control hospitals in epoch 1, but were less frequent during epochs 2 and 3. Rates of other errors also differed between control and SPI2 hospitals and between epoch 1 and epoch 2, although no differences in changes were significant.

Table 3.11a: Reviewer agreement in the perioperative case note review

	Appropriate pain relief	Prophylactic antibiotics	Temperature monitored	DVT prophylaxis
% Agreement	85%	93%	59%	96%
Kappa*	0.46	–	0.24	–

*Blank entries for Kappa indicate that one reviewer put all cases in the same category.

Table 3.11b: Rates of compliance with perioperative care standards

	Control hospitals				SPI hospitals			
	Pre-intervention		Post-intervention		Pre-intervention		Post-intervention	
No. of patients	51		43		79		69	
	%	SE	%	SE	%	SE	%	SE
Advanced method of pain relief*	94.0	3.4	94.9	3.6	85.3	4.1	82.5	4.8
Perioperative antibiotic given†	94.1	3.3	100.0	–	97.5	1.8	97.1	2.0
Temperature monitored‡	16.0	5.2	30.2	7.1	29.1	5.1	41.2	6.0
Appropriate DVT prophylaxis†Φ	100.0	–	100.0	–	98.7	1.3	100.0	–

* Hospital staff identified 15 cases with contraindications to this standard, all of which were corroborated by the reviewers. The data relates to the 227 eligible patients.

† Logistic regression impossible because 100% in one cell.

‡ Evidence of heterogeneity between hospitals at baseline.

Φ Three cases had contraindications yielding a denominator of 238. It was withheld in only two cases where no contraindications were present but wrongly administered in two cases where there was a contraindication.

Darker shaded areas relate to post-intervention epochs.

Table 3.11c: Perioperative review: changes in the level of compliance between SPI2 and control hospitals and the effect of SPI

	Baseline comparisons (SPI/control)		Changes in controls (Epoch 2/epoch 1)		Effect of SPI	
	OR (99% CI)	p-value	OR (99% CI)	p-value	OR (99% CI)	p-value
Advanced method of pain relief	0.3 (0.03, 2.6)	0.148	1.0 (0.1, 17.2)	0.978	0.6 (0.03, 18.4)	0.820
Perioperative antibiotic given	0.8 (0.06, 11.5)	0.862	–	–	–	–
Temperature monitored*	1.8 (0.5, 6.5)	0.227	1.8 (0.4, 7.6)	0.279	0.9 (0.1, 5.2)	

*Temperature monitoring is subject to significant (P=0.010) variation between hospitals within the arms of the study.

Table 3.12: Soap and AHR consumption – median and inter-quartile ranges for control and intervention hospitals, pre- and post-intervention period

	Control hospitals		SPI2 hospitals	
	Pre-intervention	Post-intervention	Pre-intervention	Post-intervention
Total hospital consumption rates per 1,000 bed days*:				
Soap	43 (33,54)	63 (35,86)	49 (30,64)	75 (5,102)
AHR	34 (12,45)	56 (45,67)	39 (28,74)	60 (42,96)

* Before period is July 2004 to February 2007 and after (during) period is March 2007 to September 2008; units are litres per 1,000 bed days.

Darker shaded areas relate to post-intervention epochs.

3.3 Sub-study 3: Error rates/quality of care – perioperative care

Sample, reviewer reliability and headline message

We fell short of the target number of 360 case notes and were able to retrieve 242 notes. At total of 127 came from admissions for total hip replacements and 115 from admissions for open colectomies. A second reviewer examined 27 case notes.

Percentage agreement and Kappa statistics are given in table 3.11a. These figures indicate low agreement on whether the temperature had been monitored (59%). For all other items the reviewers agreed on at least 85% of the cases.

No significant SPI effects were observed for any of the four clinical standards examined and the before/after comparison if anything, leaned towards the control hospitals. The hospitals were similar at baseline except with respect to intra-operative temperature monitoring where controls had more headroom for improvement.

The results relating to the individual criteria are given in table 3.11b and the outcomes of the mixed effects logistic regressions are given in table 3.11c.

Pain relief

Hospital staff identified contraindications to either epidural or self-administered analgesia in 15 of 242 cases. The existence of the contraindication was confirmed by the reviewers in all of these 15 cases, with an additional contraindication in a patient identified by one of the reviewers.

Thus, 226 patients were eligible for modern analgesic methods and 199 (88%) received such care. There was little room for improvement and there were no differences between control and SPI2 hospitals at either baseline, or over time.

Prophylactic antibiotics

These were given in 235 of 242 cases (97%). While the breakdown across arms and epochs is summarised in table 3.11c, the full logistic regression analysis was not feasible because of the 100% compliance in the control hospitals at epoch 2.

Temperature monitoring

There was marked but non-significant increase in compliance over epochs in both control and SPI2 hospitals with little difference in rate of improvement (OR 1.8; 0.4-7.6). There is evidence of heterogeneity between hospitals.

DVT prophylaxis

Anticoagulation prophylaxis was given in 239 of the 242 cases (99%). Two of these 239 were contraindicated for prophylaxis. It was correctly withheld in one further contraindicated case, and in two cases where no contraindications were recorded.

3.4 Sub-study 4: Indirect measure of hand hygiene

Data available

Data on soap and AHR (in litres) were available for nine and eight of the control trusts and for seven and six of the SPI2 trusts respectively.

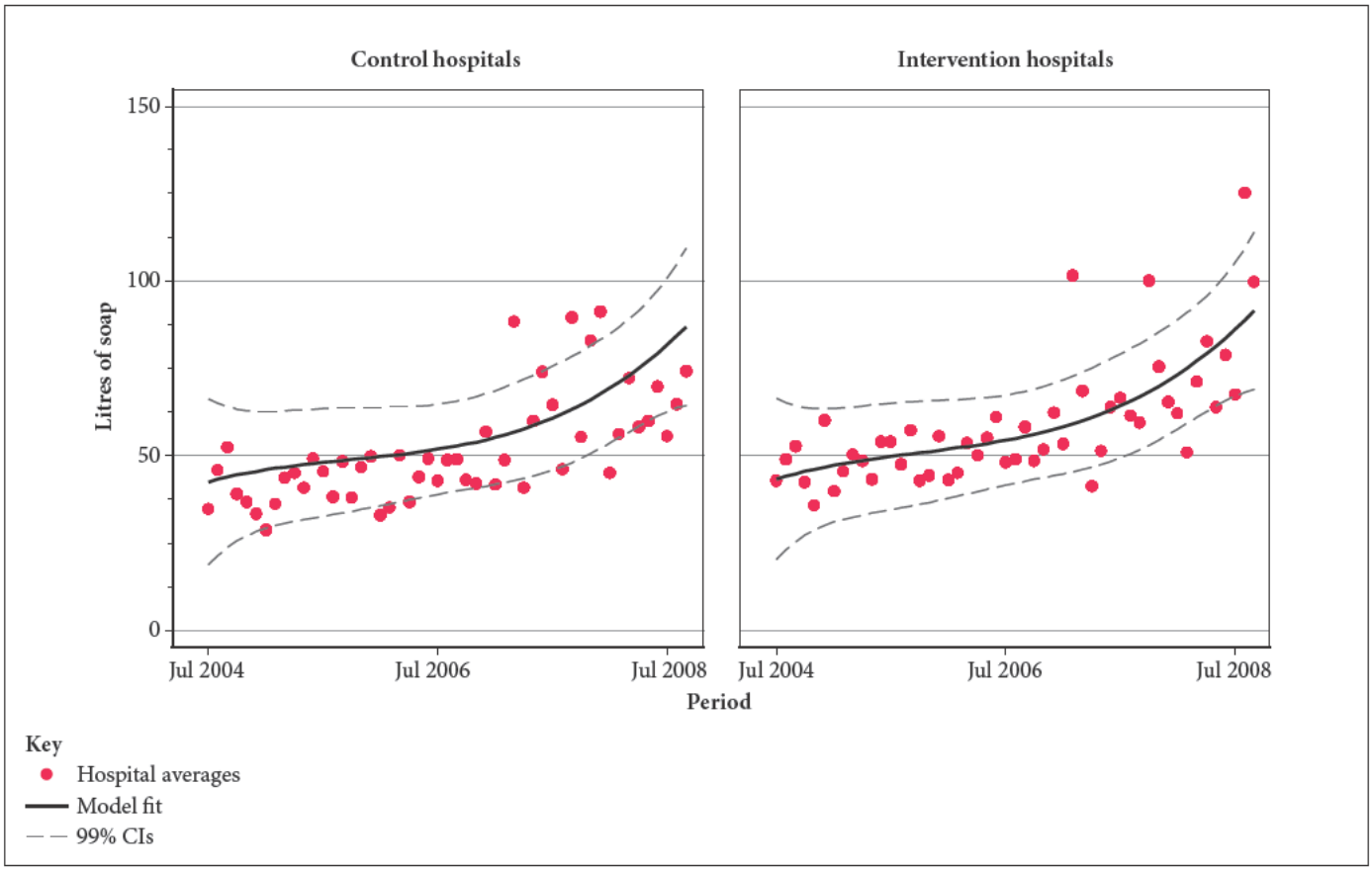

Figure 3.1: Rate of soap consumption per 1,000 bed days over time in control and SPI2 hospitals

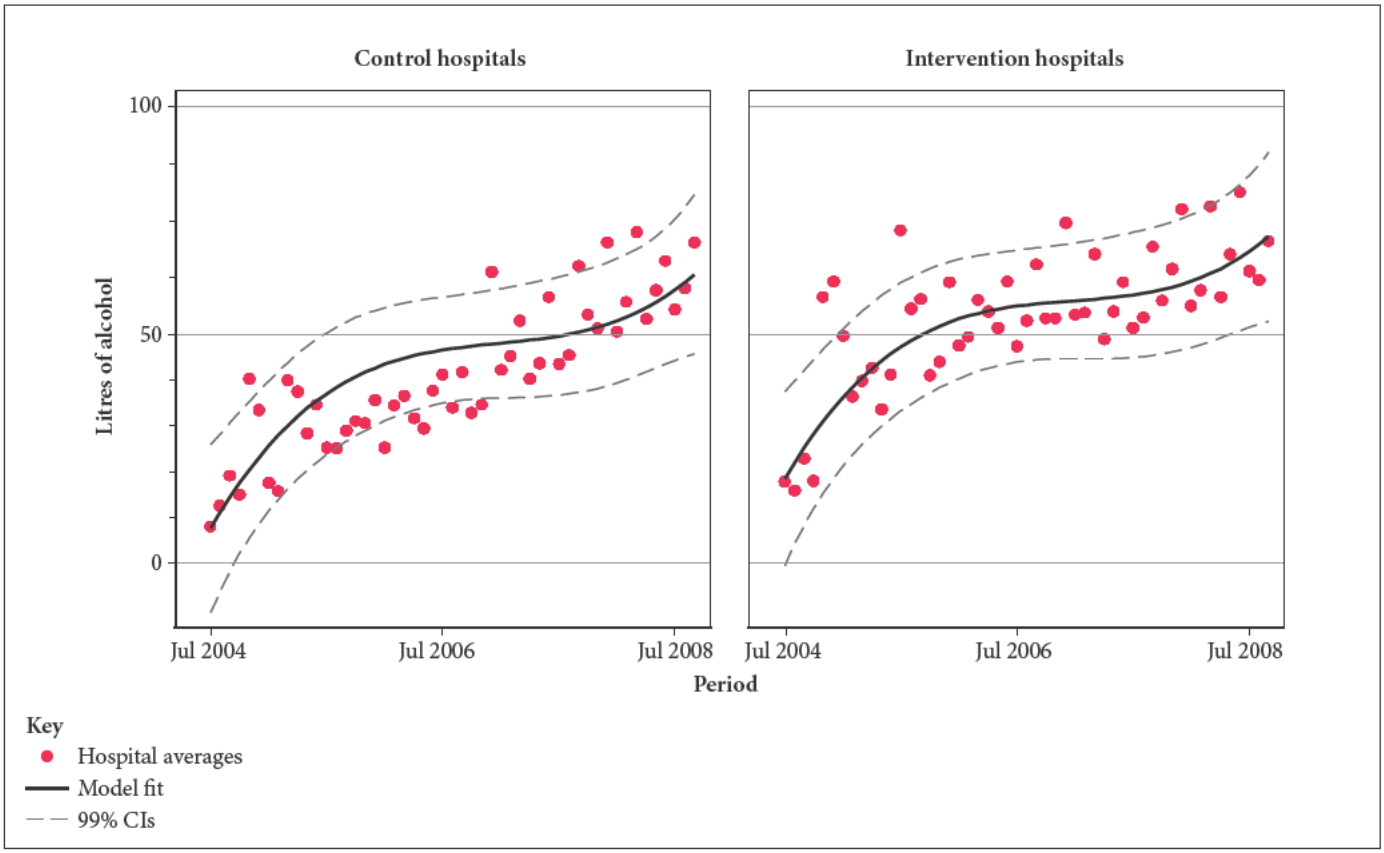

Figure 3.2: Rate of AHR consumption per 1,000 bed days over time in control and SPI2 hospitals

Soap and AHR consumption

The median rate of soap consumption over all hospitals and all time periods was 50 litres per 1,000 bed days (IQR: 32, 71) and the median rate of AHR consumption was 44 litres per 1,000 bed days (IQR: 29, 61). Averaging over all time periods (July 2004 to September 2008) the median rate of soap and AHR consumption was higher in the SPI2 hospitals compared to the control hospitals: the median rate of soap consumption in the SPI2 hospitals was 53 litres (IQR: 30, 79) compared to 46 litres (IQR: 34, 65) in the control hospitals; and the median rate of AHR consumption was 49 litres (IQR: 31, 79) compared to 43 in the control hospitals (IQR: 34 ,65).

Rates of both soap and AHR consumption increased in both control and SPI2 hospitals over the study period (table 3.12). For example, in the control hospitals the median rate of soap consumption increased from 43 litres (IQR: 32, 54) in the period before the intervention to 63 litres (IQR: 35, 86) in the period during the intervention; and in the SPI2 hospitals this rate similarly increased from 49 litres (IQR: 30, 64) to 71 litres (IQR: 5, 102). Smoothed estimates of rates of increase of consumption of both products, as estimated by the GEE population averaged model, are presented in figures 3.1 and 3.2.

The rate of increase in rates of consumption of both soap and AHR (that is, the difference of the differences) were similar between control and SPI2 hospitals and were not significant (p=0.760 and p=0.889 respectively, appendix 4, table A2), reflecting the fact that rates of consumption of both products were higher in the SPI2 hospitals throughout the study, and not only after the intervention phase.

3.5 Sub-study 5: Outcomes

Adverse events among patients on acute medical wards

Over all hospitals and all epochs, the main reviewer identified 22 adverse events among the 725 case notes and the average number of adverse events observed was 3.03 per 100 patients.

In the control hospitals, the average number of adverse events per 100 patients decreased over the three epochs from 4.76 (SE 2.21) adverse events per 100 patients in the first epoch, to 3.51 (SE 1.73) in the third epoch. In contrast, in the SPI2 hospitals, the average number of adverse events per 100 patients increased between the first and second epoch from 0.85 (SE 0.85) to 5.00 (SE 1.99); and decreased to zero in the third epoch. Again, differences in changes in numbers of adverse events across control and SPI2 hospitals were not significant (rate ratio=1.47; 0.74 – 2.90).

Classifications by type of adverse event are presented in table 3.13. Small numbers of identified adverse events preclude informative comparisons.

The principal reviewer identified strong or certain evidence of preventability in four of the 22 adverse events (that is, 0.5% of cases overall). None of these four adverse events was fatal and all occurred in the pre-intervention epochs (itemised in table 11 of the SPI1 paper).[1] However, the second reviewer found two preventable deaths (both among control hospitals) in the third epoch, one due to brachycardia in a patient with hypokalaemica, and another due to delay in diagnosis of femoral artery thrombosis. She also found three preventable deaths in earlier epochs.

A further case where the probability of a causal link was less than 50% was also identified again in the control group. Due to such small numbers of adverse events being assessed as preventable, these percentages were not analysed between control and SPI2 hospitals.

Table 3.13: Rates (per 100 patients) of adverse events among patients admitted with acute respiratory disease

	Control hospitals			SPI2 hospitals			Difference in change (99% CIs)*
	Epoch 1	Epoch 2	Epoch 3	Epoch 1	Epoch 2	Epoch 3	
No. of patients	126	126	114	117	120	122	
No. of errors	6	5	4	1	6	0	
Diagnosis/assessment/ admission error	3.97 (1.75)	1.59 (1.12)	2.63 (1.95)	0.85 (0.85)	3.33 (1.65)	0	-1.98 (-8.18, 4.23)
Hospital-acquired infection	2.38 (1.36)	1.59 (1.12)	1.75 (1.24)	0	2.50 (1.43)	0	-1.03 (-5.78, 3.74)
Technical/management	0.79 (0.79)	1.59 (1.12)	0.88 (0.88)	0	0.83 (0.83)	0	-0.10 (-3.48, 3.28)
Medication/ maintenance/follow-up	0	0	0	0.85 (0.85)	1.67 (1.17)	0	-1.27 (-3.88, 1.33)
Clinical reasoning	0	0	0	0.85 (0.85)	0	0	-0.42 (-1.94, 1.09)
Discharge information	0.79 (0.79)	0	0	0.85 (0.85)	0	0	-0.02 (-2.17, 2.11)

* Differences in changes are estimated from a mixed effects model (see methods for details) and represent a difference in change between epoch 3 and epochs 1 and 2.

Errors can be of multiple categories.

Darker shaded areas relate to post-intervention epochs.

They serve to shed light on mortality estimates however. A breakdown of deaths by level of preventability and reviewer is given in table 3.14.

Three medication related adverse events were found on holistic review. At around 0.004% (3/725), this is also a somewhat lower rate than reported elsewhere.[19]

Mortality among acute medical care patients

Crude mortality was higher in the control hospitals than in the SPI2 hospitals (OR 0.7; 0.2-2.1) (Table 3.15a), but neither this, nor any other effect – including that of the SPI – was significant at the pre-determined 1% level after adjustment for age of patient (OR 0.3; 0.068-1.4) (although the result was just significant [p=0.043] at the 5% level).

Sex and number of co-morbidities were also included as patient-level covariates, though only age was significant (p<0.001). The mortality rate increased by 10.3% (CI 6.8%-15.1%) per year of patient age.

Hospital-wide mortality

Over time, the general trend of hospital-wide mortality is downwards in both control and SPI2 hospitals (figure 3.3). Using the standard deviations supplied, there appears to be no simple functional relationship consistent with the data.

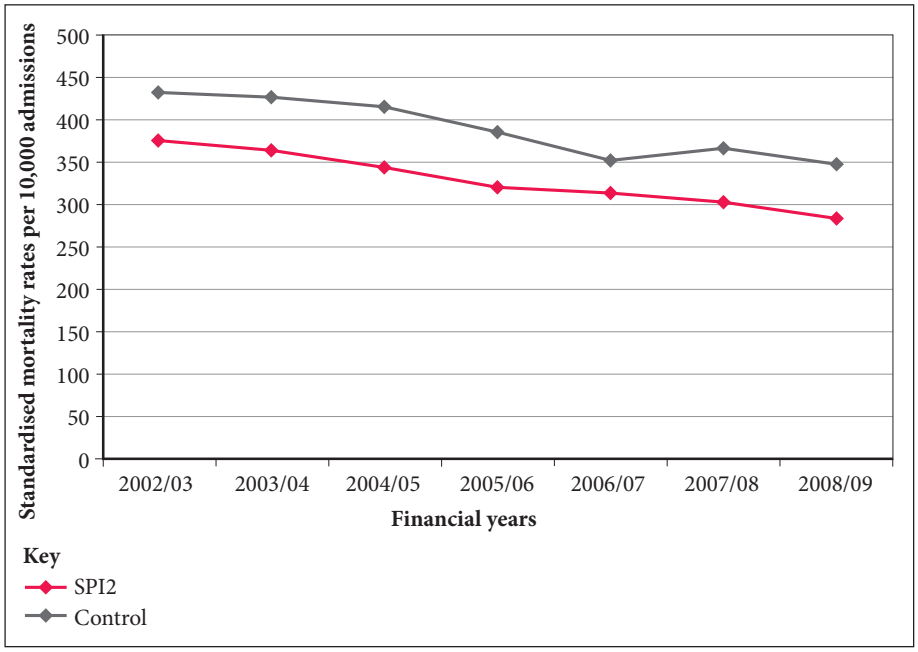

Figure 3.3: Hospital directly age sex standardised mortality rates per 10,000 admissions, all medical specialties, controls and SPI2, 2002/3 – 2008/9

Table 3.14: Preventable deaths in acute medical wards across the study epochs*

Epoch	Control					Intervention				
	No. of deaths within holistic review	Preventable deaths: ≥50% 1st reviewer	Preventable deaths: ≥50% 2nd reviewer	Preventable deaths: <50% 1st reviewer	Preventable deaths: <50% 2nd reviewer	No. of deaths within holistic review	Preventable deaths: ≥50% 1st reviewer	Preventable deaths: ≥50% 2nd reviewer	Preventable deaths: <50% 1st reviewer	Preventable deaths: <50% 2nd reviewer
1	17	0	1†	2	0	9	0	0	0	0
2	24	0	1†	1	1	11	0	1†	0	1
3	23	0	2	2	2	7	0	0	0	0

*Preventable deaths <50%: substandard practice was present that could have led to death but the probability that it did so was less than 50%
Preventable deaths ≥50%: substandard practice led to death on the balance of probabilities.

† These deaths (both associated with CO2 retention in patients denied non-invasive ventilation – one of whom was given 60% oxygen) are not included in table 11 of SPI1 evaluation.

Darker shaded areas relate to post-intervention epochs.

Table 3.15a: Mortality among acute medical care patients whose case notes were reviewed

	Control hospitals			SPI2 hospitals		
	Epoch 1	Epoch 2	Epoch 3	Epoch 1	Epoch 2	Epoch 3
No. of patients	120	123	112	116	117	114
Deaths	18	24	24	9	15	7
1 % Mortality (SE)	15.0 (3.3)	19.5 (3.6)	21.4 (3.9)	7.8 (2.5)	12.8 (3.1)	6.1 (2.3)
2 Age: mean (SD)	77.6 (7.7)	81.1 (7.9)	79.6 (8.0)	77.7 (7.6)	78.1 (7.1)	80.6 (7.8)
3 % Female	63.3	53.7	53.6	53.4	50.4	52.6
4 Co-morbidities: mean	2.9	3.1	2.6	2.8	3.0	2.9

Darker shaded areas relate to post-intervention epochs.

Table 3.15b: The effect of SPI2 on the mortality among acute medical care patients

	Baseline comparisons		Changes in controls		Effect of SPI2	
	Odds ratio (99% CI)	p-value	Odds ratio (99% CI)	p-value	Odds ratio (99% CI)	p-value
Mortality (adjusted for age, sex, number of co-morbidities)	0.7 (0.2, 2.1)	0.391	1.4 (0.6, 3.1)	0.320	0.3 (0 08, 1.4)	0.043

Odds-ratios (OR) derive from a logistic model with random effects for hospitals, adjusted for the date of review.

Furthermore, the difference between control and SPI2 hospitals is not constant over time, whether measured on the natural scale or the log scale (the latter represents a relative measure).

However, calibration using between hospital information may disturb these conclusions – for example, it is conceivable that the data are consistent with a constant temporal difference, when assessed against standard deviations that incorporate an allowance for variation between hospitals within the arms of the study.

We investigated the baseline differences in mortality in control verses SPI2 hospitals by considering the possibility that the control hospitals served a more deprived area. We obtained a distribution of income deprivation scores from the neighbourhoods of all admitted patients for control and intervention hospitals.

The neighbourhoods used were Lower Level Super Output Areas (LSOA) which are fairly homogenous areas, each containing around 1,600 residents offering a good granularity of measurement for deprivation and other social and environmental variables. Each LSOA in England has an income deprivation score calculated as part of the Indices of Multiple Deprivation 2007.

The score is effectively a proportion of people in a neighbourhood who live in a household with less than 60% of the national median income and/or are in receipt of one of a number of means-tested welfare benefits.

We took the median and upper and lower quartile scores for all admitted patients in both control and SPI2 hospitals for all years. On aggregate the median income scores for both control and SPI2 were very similar (0.12 and 0.13 respectively). However the variation of medians and quartile values within the two groups were markedly different, the SPI2 group appearing to be much more heterogeneous (figure 3.4).

We thus failed to account for the difference between control and SPI2 hospitals in baseline mortality. The mortality in SPI2 hospitals did indeed improve by the 15% target, but similar improvement was evident among controls.

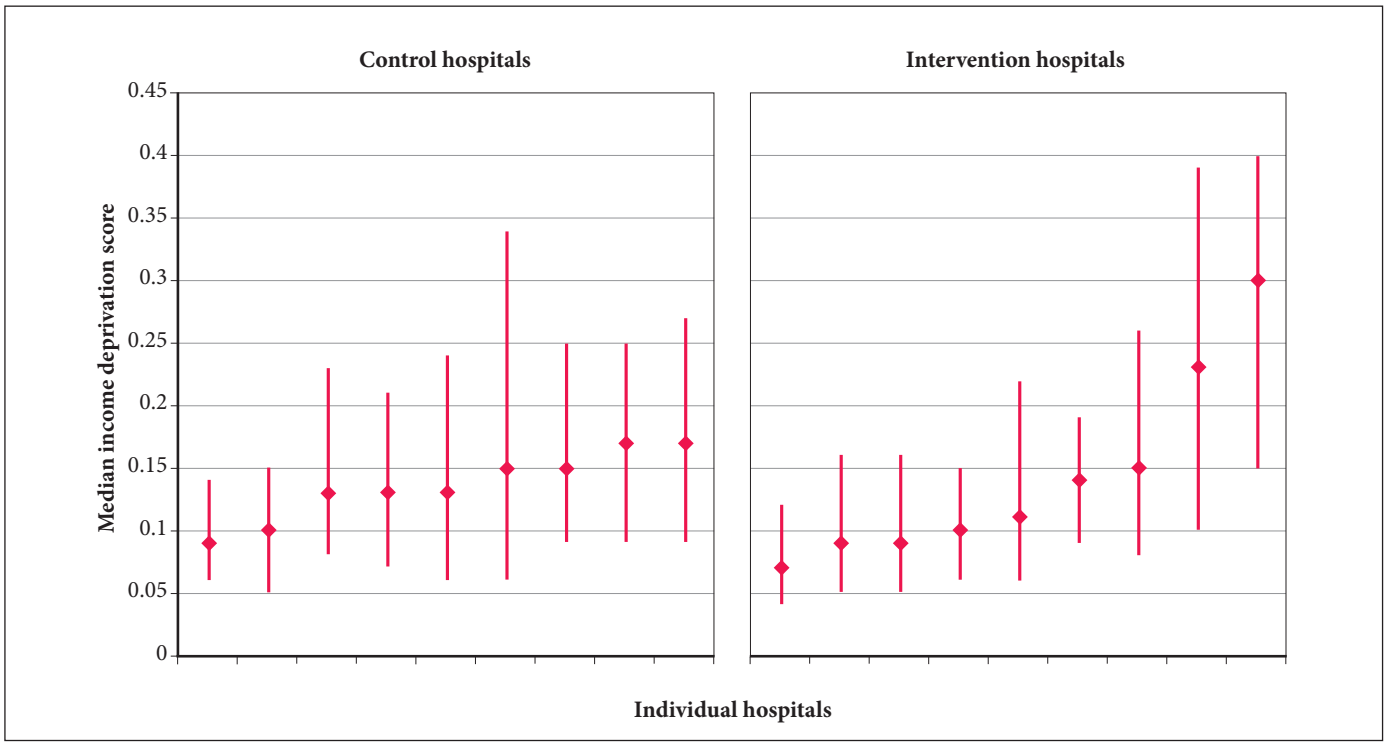

Figure 3.4: Median income deprivation scores of control and SPI2 hospitals

ICU: Mortality, morbidity and length of stay

Data available

Data on mortality, length of stay and several other outcome measures for ICUs were available for 16 hospitals, eight of which were control hospitals and eight of which were SPI2 hospitals.

Data were supplied to ICNARC by seven control and seven SPI2 hospitals for the pre-intervention period (epoch 1) and for six control hospital and eight SPI2 hospitals post-intervention period (epoch 2) (there were some hospitals which did not provide data for both periods).

Observed to expected mortality

The median observed to expected mortality ratio over all hospitals and all time periods was 1.06 (IQR: 0.93, 1.28). Averaging over all time periods (July 2004 to September 2008), this ratio was lower in the SPI2 hospitals compared to the control hospitals: the median observed to expected mortality ratio in the SPI2 hospitals was 0.98 (IQR: 0.90, 1.15) compared to 1.18 (IQR: 1.01, 1.32) in the control hospitals.

The rate of observed-to-expected mortality increased in the control hospitals over the study period (table 3.16). For example, in the control hospitals before the intervention period, the median observed-to-expected mortality ratio was 1.14 (IQR: 0.99, 1.32), and this rate increased to 1.24 (IQR: 1.02, 1.33) in the six months after the intervention.

In the SPI2 hospitals, the observed-to-expected mortality ratio decreased over the two periods: during the first six month period the observed-to-expected mortality ratio was 1.04 (IQR: 0.90, 1.15), and during the last six month period this decreased to 0.97 (IQR: 0.90, 1.15).

At the end of the follow-up period (March 2008), the rate of observed-to-expected mortality was higher in the control hospitals. However, the adjusted difference in differences between control and SPI2 hospitals after adjustment, was not significant at the 99% level (p=0.25, appendix 4, table A3).

Median length of stay

The median length of stay was 125 hours (IQR: 96,153) over all hospitals and all time periods. Averaging over all time periods (July 2004 to September 2008) the median length of stay was lower in the SPI2 hospitals compared to the control hospitals: the median length of stay was 103 hours in the SPI2 hospitals (IQR: 82,132) compared to 146 hours in the control hospitals (IQR: 123, 183).

Based on this, control ICUs may have been dealing with a different case-mix from the SPI2 ICUs.

Length of stay increased in the control hospitals over the study period (table 3.16): during the pre-intervention period the median length of stay was 144 hours (IQR: 117, 174), and this increased to 147 hours (IQR: 126,185) in the post-intervention period.

In the SPI2 hospitals, the median length of stay remained similar between the pre and post-intervention periods: during the pre-intervention period the median length of stay was 102 (IQR: 82, 130), and during the post-intervention period the median length of stay was 103 hours (IQR: 81, 137) in the six month period October 2007 to March 2008. Once again, differences in the rate of changes in length of stay were not significant (p=0.60, appendix 4, table A3).

APACHE II and ICNARC risk prediction scores

Over all time periods and over all hospitals the median APACHE score was 20 (IQR: 17.8, 21.8) and the median ICNARC score was 22.1 (IQR: 19.5, 22.1). These scores were similar between control and SPI2 hospitals and were similar between pre and post-intervention periods (table 3.15). Tests for differences in differences were not significant (p=0.45 and p=0.16, appendix 4, table A4).

C. diff and MRSA rates

Data

Data on numbers of C. diff and MRSA cases were available for all 18 trusts.

C. diff

Over all time periods, the median C. diff infection rate was 1.14 cases per 1,000 bed occupied days (IQR: 0.77, 1.64). Averaging over all time periods, the median rate of C. diff infection was similar between the control and SPI2 hospitals: the median C. diff infection rate was 1.15 (IQR: 0.88, 1.55) in the control hospitals and 1.1 (IQR: 0.67, 1.73) in the SPI2 hospitals.

The median C. diff infection rate decreased over the study period in both the control and SPI2 hospitals (table 3.16). In the control hospitals, the median C. diff infection rate was 1.26 (IQR: 0.95, 1.67) in the period before the intervention, and this decreased to 0.77 (IQR: 0.56, 1.02) in the period after the intervention.

In the SPI2 hospitals, in the period before the intervention, the median C. diff infection rate was 1.37 (IQR: 0.65, 1.99) and this decreased to 0.66 (IQR: 0.50, 0.88) in the period after the intervention.

Differences in changes were not significant between control and SPI2 hospitals (p=0.652, appendix 4, table A1). Smoothed estimated rates of C. diff infection per 1,000 bed occupied days, by control and SPI2 hospitals, are presented in figure 3.5.

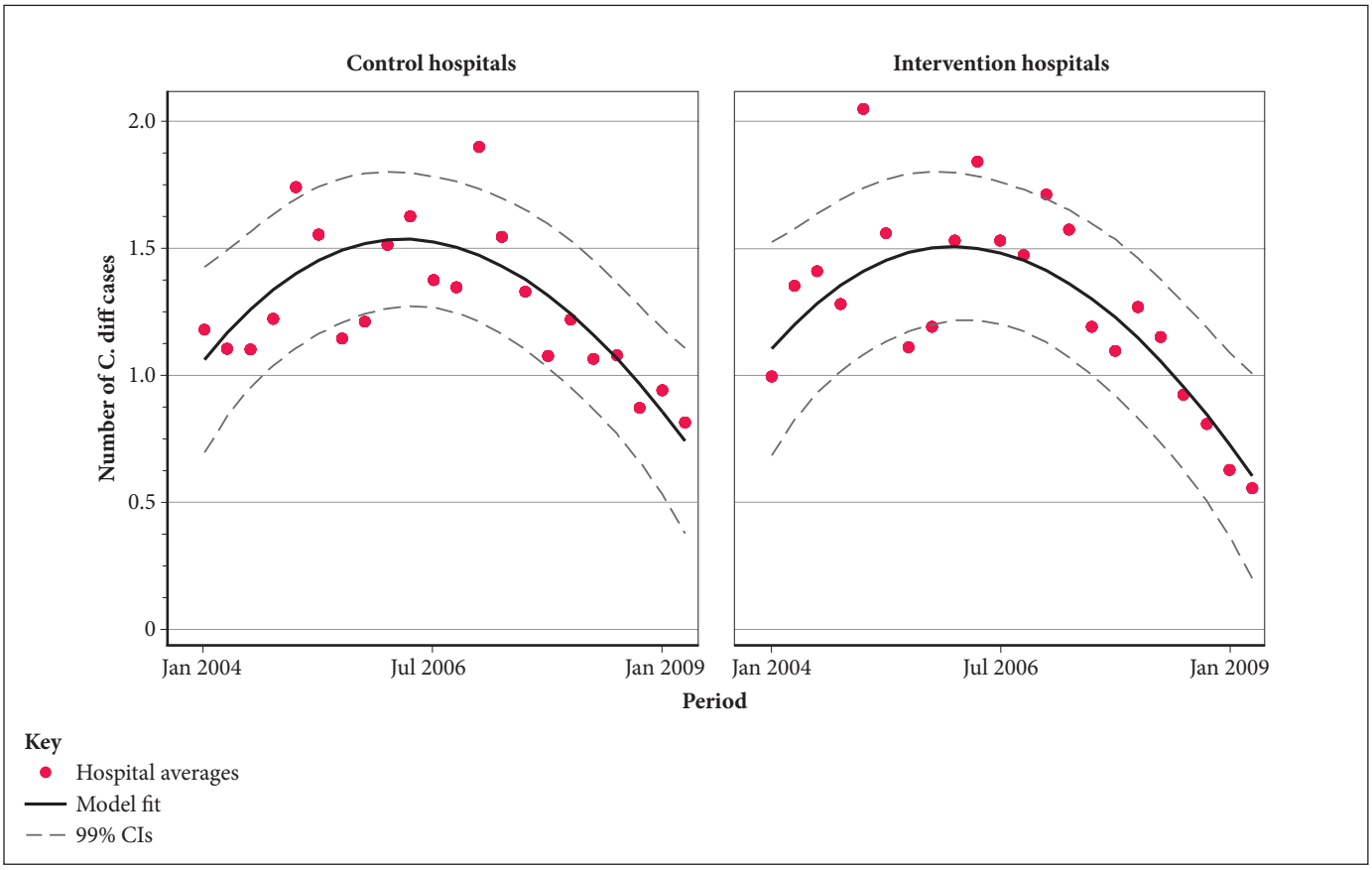

Figure 3.5: Rate of C. diff cases per 1,000 bed days in control and SPI2 hospitals

MRSA

Over all time periods, the median MRSA infection rate was 14.75 cases per 100,000 bed occupancies (IQR: 8.93, 21.98). Averaging over all time periods, the median rate of MRSA infection was similar between the control and intervention hospitals: the median MRSA infection rate was 14.87 (IQR: 9.36, 21.63) in the control hospitals and 14.58 (IQR: 8.85, 22.77) in the SPI2 hospitals.

The median MRSA infection rate decreased over the study period in both the control and SPI2 hospitals (table 3.16). In the control hospitals, the median MRSA infection rate was 17.4 (IQR: 12.01, 23.04) in the period before the intervention, and this decreased to 4.31 (IQR: 2.26, 8.18) in the period after the intervention.

In the SPI2 hospitals, in the period before the intervention, the median MRSA infection rate was 17.76 (IQR: 11.6, 24.43) and this decreased to 6.77 (IQR: 4.89, 10.65) in the period after the intervention.

Table 3.16: Intensive care outcomes and healthcare associated infection rates – median and inter-quartile ranges for control and SPI2 hospitals, pre and post-intervention period

	Control hospitals		SPI2 hospitals		Difference in difference	
	Pre-intervention	Post-intervention	Pre-intervention	Post-intervention	Change (99% CI)	p-value
Intensive and Critical Care Outcomes*						
Adjusted Mortality Ratio	1.14 (0.99,1.32)	1.24 (1.02,1.33)	1.04 (0.90,1.15)	0.97 (0.90,1.15)	0.09 (-0.11,0.29)	0.25
Mean LOS (hours)	144 (117,174)	147 (126,185)	102 (82,130)	103 (81,137)	5.86 (-22.78,34.50)	0.60
Mean APACHE II score	20.4 (17.7, 22.6)	19.0 (17.1, 20.8)	21.1 (19.1, 23.0)	20.3 (17.8, 21.8)	-0.83 (-3.63,1.98)	0.459
Mean ICNARC score	22.3 (19.5, 26.3)	20.7 (18.0, 23.5)	22.6 (21.2, 25.3)	22.2 (19.7, 25.1)	-2.26 (-6.39,1.87)	0.16
Rates of C.diff (per 1,000 bed days) and MRSA infections (per 100,000 bed days)						
C. diff†	1.26 (0.95,1.67)	0.77 (0.56,1.02)	1.37 (0.65,1.99)	0.66 (0.50,0.88)		
MRSA‡	17.41 (12.02,23.04)	4.31 (2.26,8.18)	17.76 (11.60,24.43)	6.77 (4.89,10.65)		

* Before period is October 2006 to March 2007 and after period is October 2008 to March 2009.

† Before period is April 2004 to March 2007 and after period is October 2008 to June 2009.

‡ Before period is April 2001 to March 2007 and after period is October 2008 to September 2009.

LOS: Length of Stay

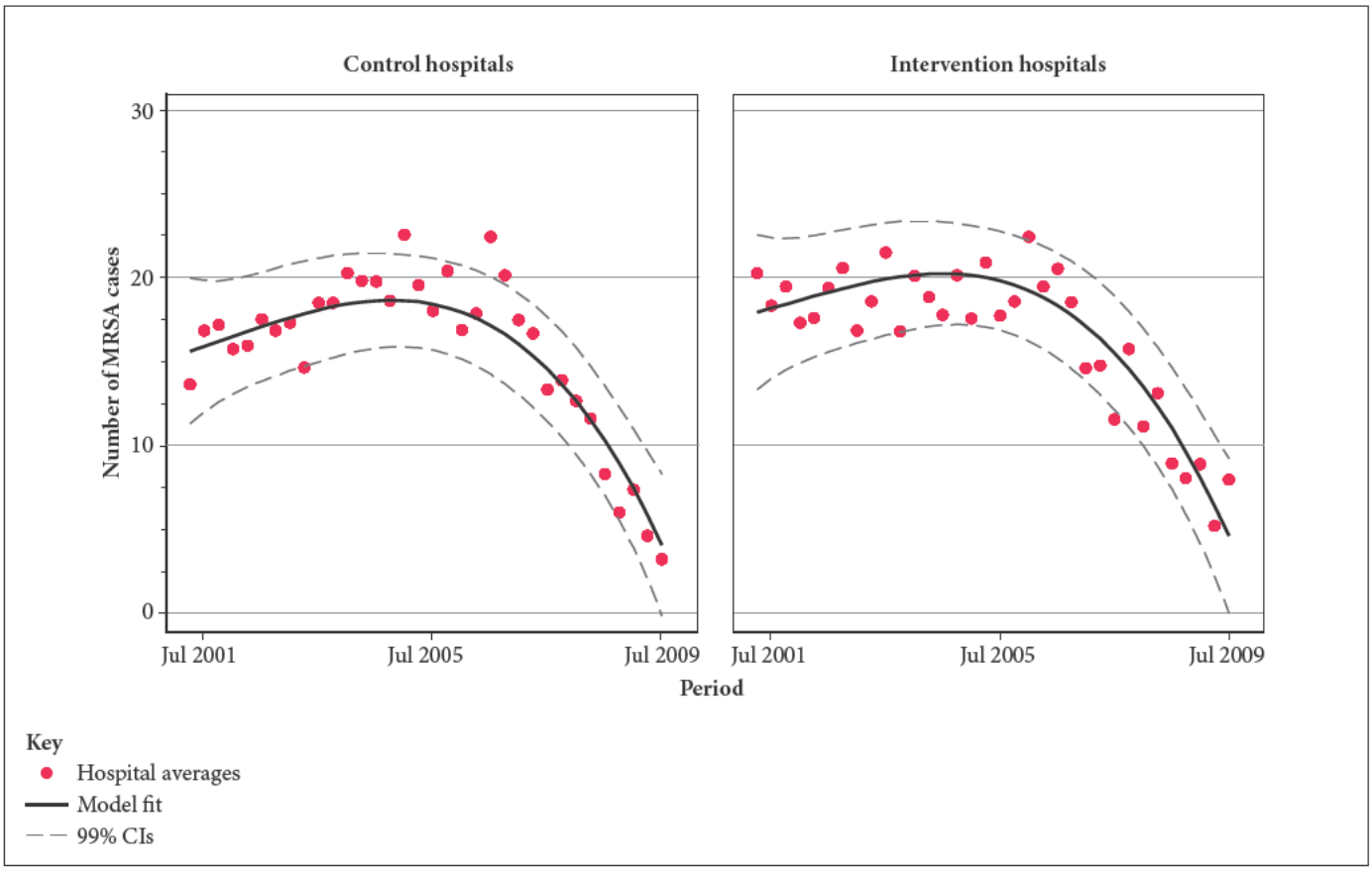

Figure 3.6: Rate of MRSA cases per 100,000 bed days in control and SPI2 hospitals

Differences in changes were not significant between control and SPI2 hospitals (p=0.693, appendix 4, table A1). Estimated smoothed rates of MRSA infection per 100,000 bed occupied days, by control and SPI2 hospitals, are presented in figure 3.6.

Patient survey

For the first survey, the overall response rate was 62% (4,328 of 7,010 valid questionnaires returned) in the nine SPI2 hospitals; for the second it was slightly lower at 55% (3,762/6,810). In the nine control hospitals, the response rates were 63% (4,62/6,791) and 57% (3,973/6,913) respectively. Table 3.17 shows the changes in both control and SPI2 hospitals on each of the five scores identified, along with the differences between the groups in these changes and associated 99% confidence intervals. All five scores improved over the study period in both the control and SPI2 hospitals. None of the five scores showed any significantly different changes between the two groups.

Table 3.17: Patient survey scores in control and SPI2 hospitals at the two periods

	Control hospitals					SPI2 hospitals					Range at baseline	Difference in change (99% CI)	p-value
	N	Survey 1 score (SE)	N	Survey 2 score (SE)	Absolute % change	N	Survey 1 score (SE)	N	Survey 2 score (SE)	Absolute % change			
% staff having well structured appraisals within previous 12 months	8046	39 (1)	7260	28 (1)	-10	6111	34 (1)	3993	27 (1)	-7	27–46	3 (-2, 8)	0.095
Overall, how would you rate the care you received?	4200	82 (0.4)	3913	85 (0.3)	4	4277	80 (0.4)	3705	84 (0.3)	4	75–87	1 (-1, 3)	0.292
Overall, did you feel you were treated with respect and dignity while you were in the hospital?	4111	78 (0.4)	3807	82 (0.4)	4	4167	76 (0.4)	3604	80 (0.4)	3	65–85	0 (-2, 2)	0.702
How would you rate how well the doctors and nurses worked together?	4182	87 (0.4)	3878	88 (0.4)	1	4220	88 (0.4)	3677	89 (0.4)	1	83–91	0 (-2, 2)	0.597
In your opinion, how clean was the hospital room or ward that you were in?	4113	75 (0.4)	3870	77 (0.4)	2	4201	77 (0.4)	3645	78 (0.4)	1	70–80	-1 (-3, 1)	0.141
How clean were the toilets and bathrooms that you used in hospital?	4141	76 (0.4)	3877	78 (0.4)	2	4220	78 (0.4)	3665	79 (0.4)	1	70–82	-1 (-3, 1)	0.204

Darker shaded areas relate to post-intervention epochs.

Chapter 4

Discussion

4.1 Non-comparative findings

There was despair in the United States at the apparent lack of progress on patient safety after the publication of two key reports in 2000.[36] Taken in the round, the data collected in this study seem to tell the story of an improving NHS.

While the staff survey shows little change between epochs, the patient survey shows improvement across all five dimensions pre-specified for our study, suggesting better patient experience. There was even an improvement in medical history taking. Hospital mortality rates are generally falling and although this may be a result of the main from improved technology and increasing proportions of people dying in the community, encouraging trends were noted in the quality of patient care.

Firstly, the baseline performance across hospitals was over 90% on many criteria relating to quality, leaving very little room for improvement. Over 90% of patients with an acute exacerbation of obstructive airways disease received steroids when indicated, and the rates of perioperative prophylaxis against venous thrombosis and wound infection approached 100%.

Secondly, where there was scope for improvement many examples of improved (and none of worsening) practice were found. Both the vigilance of monitoring vital signs on acute medical wards and the use of severity scoring has seen sharp significant increases and there was a strong upward trend in the incidence of intra-operative temperature monitoring.

Rates of hand-washing have increased (if consumption of cleansing materials is accepted as a surrogate) and the incidence of C. diff and MRSA infection has plummeted.

4.2 Control hospitals vs. SPI

Our data for SPI2, as for SPI1, suggest that it was difficult to detect an additive SPI effect. Statistically significant observations were made but not between the two groups of hospitals. In the case of the staff survey, our observations have high statistical power yet only one of the 11 dimensions examined produced a significant result. This was the same dimension (organisational climate) that was also the single dimension to yield a significant result in the evaluation of SPI1. However, in a reversal of our SPI1 evaluation results, the control hospitals improved most in the current study.

Many specific criteria reflecting the quality of care remained stable over time in both groups of hospitals, possibly reflecting a long history of quality improvement in areas such as perioperative care.

Others, such as the quality of intra-operative monitoring and recording vital signs underwent marked improvement, but did so to similar degree in both sets of hospitals.

One exception was the drop in mortality among the acute medical cases in the SPI2 hospitals and an unexplained rise in the control hospitals, such that the difference in differences would have been just significant if the $p<0.05$ threshold had been selected *a priori*.

However, this finding does not align well with either the explicit review of the quality of care or the adverse event tally observed among those same case notes – only two (or at the most three) care-related deaths were found in either group of hospitals in the post-intervention period.

Dramatic improvements in the use of hand-washing materials and in infection rates produced near mirror image results. The NHS leviathan seems responsive to the need to change in certain ways and it is hard to discern any additive effect of the SPI initiative.

Again, this corroborates the finding from the SPI1 evaluation, where improvements were noted across both control and SPI hospitals.

Overall, there is little evidence that good or improved quality and safety in participating NHS hospitals can be reliably attributed to an additive effect of the SPI.

4.3 Strengths and weaknesses

The study was based on a before and after design with contemporaneous controls. Such a design is not as strong as a cluster randomised trial. However, it is stronger than a simple before and after study of the sort that characterises most quality improvement evaluations.

One advantage of contemporaneous controls is that the groups can be compared at baseline. There were differences at baseline for some observations (most notably hospital mortality rate) but not for others.

Baseline rates on the staff and patient surveys were similar and there is little to distinguish the two groups of hospitals on the explicit reviews in either acute medical or surgical patients. For example, none of the 17 vital signs criteria differed significantly between the two groups of hospitals. Thus most of the comparisons that were made were based on end points where no material differences were evident across the groups compared.

We tested for learning/fatigue effects on the part of the reviewers. We found that this was sometimes important (especially for the tricky detection of prescribing errors where the reviewer must audit case notes against the entire formulary running to many hundreds of pages).

Where this problem was observed, we were able to allow for it in the analysis. We also tested for inter-observer agreement and while it was satisfactory with respect to explicit reviews it was poor with respect to the implicit review. This allows the reader to be discerning and treat the results of the implicit review with due caution.

Source data for most end points was collected by independent researchers working across the various hospitals – we set up a supply chain of anonymised case notes for this purpose.

Certain data was collected in the participating hospitals (infection rates and data from the ICU), and this could lead to bias in the comparative study if hospital-based observers were motivated to show the SPI in a good (or bad) light. However, any bias must have affected both sets of hospitals approximately equally since the comparative results are null.

Moreover, we do not think that it is plausible that the observed dramatic reductions in infection rates across all hospitals are the result of the statutory duty to report certain infections when they are identified in the laboratory.

A particular strength of our study arises from possibilities for triangulation. Some of the observations act as a kind of internal control for others. While the funding envelope did not permit us to build qualitative studies into the design (as in SPI1), the study did provide the following internal controls:

- Findings on use of hand-washing materials and two different types of infection support the hypothesis of general improvement in this area.
- The observation that vital signs were recorded with increasing diligence, while use of risk scoring was also used more frequently supports the idea that patients at risk of deterioration are being taken more seriously.
- Mortality rates on the acute medical wards could be triangulated, not only by an audit of compliance with process standards, but also by scrutinising each death in the sample to see if it could have been caused by poor care (only two of the 30 deaths in the post-intervention period were preventable).

We wished to seek further evidence on this point by examining the incidence of unsuspected cardiac arrest crash calls, but found that this information is not yet collected in a consistent way.

The evaluation of SPI1 included qualitative observations which can provide yet a further form of internal control.

However, the study sponsor felt that theoretical saturation had already been reached in the previous evaluation. For example, ethnographic sub-studies within the SPI1 evaluation did indeed confirm that ward staff had taken the importance of close observations of sick patients increasingly to heart.

4.4 Interpretation

A large number of different observations have been made. Many of these observations relate to specific SPI objectives, such as the patient at risk of deterioration, infection control, perioperative care and intensive care. Statistically significant observations were made, but not between the two groups of hospital.

This broadly null additive effect of SPI on patient care should not, however, be translated into a conclusion that there was evidence

of no effect. While a null result can never be proven, this is a greater problem for quality initiatives, where small effect sizes may nevertheless be cost-effective, than it is for studies of clinical effectiveness.

It can, however, be translated, less problematically, into the conclusion that any effect was not large, where large is defined in terms of observed confidence limits. To put this idea in another way, our results are compatible with effects on many end points, of a magnitude that lies below the threshold that can be detected statistically in a study of this size. That said, the results will come as a disappointment to many who were involved in the intervention and who expected a rather more dramatic outcome.

Lack of a measured additive SPI effect may be explained in several ways: programme design; implementation; multiple patients; safety initiatives; and improvements may not yet be detected.

Programme design

One explanation might lie in programme design. It is possible that organisational interventions of this type are simply not highly efficacious and that alternative approaches, such as initiatives focused on professional networks, could be more powerful, as suggested in a study of motivations to change in a maternity context.[37]

Implementation

Secondly, it is possible that implementation of the SPI was not optimal, as discussed in the companion paper.[1] Looking back over the evaluations of both programmes, and following many conversations with those responsible for this and other interventions with similar aims, we suggest that the method by which vertical and horizontal spread of the SPI might have been achieved was incompletely specified.

A combination of a more explicit programme theory and organisational theory of change might have focused more attention on ensuring clinical engagement, encouraged an earlier recognition that the intervention was broad, relative to resource, and identified that effects were likely to be localised in response to a dose of intervention.

In that case, a more focused and less ambitious intervention, and somewhat narrower evaluation, might have ensued.

Multiple patient safety initiatives

A third explanation for the absence of a measured additive effect of the SPI might lie in the extent of the policy-level programmes and initiatives that were largely contemporaneous with the SPI and shared some of its goals, principles and methods, and were targeting several of the same clinical processes as the SPI.

For example, the Clean Your Hands campaign ran continuously from late 2004/05 onwards, promoting the same goal of improved hand hygiene as the SPI. Similarly, improving recognition and response to deterioration in hospitalised patients (an SPI goal) became a focus of policy attention, and guidelines on recognition and response to acutely ill patients were issued by NICE in 2007.[38]

Perhaps most significantly, several initiatives were explicitly modelled upon IHI techniques and principles, which began to have increasing impact on policy making at around the time that the SPI was launched (and it is possible that this was not a coincidence).

For example, the Department of Health's Saving Lives programme, beginning in June 2005 with a revised version in 2007,[39] included a self-assessment tool for trusts to assess their managerial and clinical performance, and a set of high impact interventions that were similar to the IHI bundles, were aimed at several clinical processes also targeted by the SPI.

In addition, the Health Act 2006 introduced new legislation on mandatory requirements on prevention and control of HCAIs.

It is further relevant that many of these policy initiatives had already been anticipated by significant consensus within professional societies and medical colleges about the appropriate measures to be adopted, and thus enjoyed considerable professional legitimacy – a crucial factor in promoting safe and effective practice.[40]

From a scientific perspective, the contemporaneous changes occurring in the control environments makes it especially difficult to isolate an additive effect of the SPI; the SPI may not have been a sufficient additional dose to generate further differences.

Detecting improvements

Finally, it is possible that any additional effects associated with SPI may simply not be detected yet. The difference between the control hospitals and the SPI hospitals was that the SPI hospitals benefited from a specific organisational intervention designed to promote the building of improvement skills into systems of care. Any SPI effect may be in the form of stickiness. SPI hospitals may potentially be

better equipped to show sustained improvements after the policy spotlight has moved elsewhere. If, however, no differences can be detected in the longer term, the role of organisational interventions of this type in promoting safety will require further examination.

4.5 Theory building

In the previous report, we put forward certain ideas that might explain the mostly null comparative results obtained in the evaluation of SPI1 (which have now been replicated in a more extensive quantitative dataset in SPI2).

These covered the scope of the intervention (the dose may have been too small), the ambitious time scale and certain features of the intervention, such that it was not fully owned by middle grade staff.

The observation that the NHS has adopted certain good practices over the same time scale as the initiative, suggests a further, rather more radical idea: the originators of SPI, along with many opinion formers in management, are working with the wrong theory.

The current theory is largely built around the concept of organisations and the pivotal role they are thought to play in driving up quality. However when it wishes to change practice generally, the NHS works with professional affiliations such as intensive care societies and medical colleges.

Research into why evidence-based guidelines were adopted or ignored in a maternity care context showed that staff were influenced almost entirely through personal/professional networks and hardly at all via the management route.[41] That is not to say that hospitals do not have an essential role to play, but the idea put forward is that this role is enabling not generative in the main. In this respect medical services (and perhaps other highly professionalised groups) may differ from many industries where the hegemony of the organisation can drive change more directly.

From our perspective the changes observed across 18 hospitals in our sample are unlikely to have resulted from concerted and simultaneous management action. This might be expected in the SPI hospitals, but it is unlikely that this would be mimicked simultaneously in the board rooms of control institutions. The idea put forward here is that health services may have learned precisely the wrong lesson by adopting certain ideas and mind-sets from managers and theorists with an industrial background.

4.6 Next steps

From the perspective of these authors there are two dangers to be avoided. The first danger is to despair and resort to nihilism. The corresponding danger is to privilege positive results over null results. Objective proof without subjective interpretations is even more difficult to come by in the evaluation of service delivery interventions than in other branches of science.

Yet while null results remain valuable, face validity is not enough. It is important to recognise that hospitals did report effects from SPI participation. These effects included heightened managerial awareness of, and commitment to, patient safety, and organisational learning about how to implement patient safety improvement efforts in the future.

The intervention did register in the hospitals even if it did not penetrate right through to the sharp end. The challenge is to build on these observed effects. The staff we interviewed theorised about the way forward.

They proposed offering more support to the middle layer of management, engaging clinical leaders at earlier stages and encouraging clinical ownership as a way of securing future success. Reducing the number of areas to be tackled and avoiding areas where there is scientific contestation or dispute about whether something is an important problem were also seen as important.

It was clear that hospitals had learned that addressing issues of legitimacy was a key task. They had identified that introducing initiatives that generated more paperwork would be unpopular among stretched ward staff, and that large scale resourcing and structural support may be needed to implement many patient safety efforts successfully.

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Notes from the authors

Ethics

Ethical approval for each sub-study had different considerations and hence separate applications were made for each one. Ethical approval was obtained for the staff and patient surveys from North West Multi-centre Research Ethics Committee and each site granted access to their data. The National Research Ethics Service deemed the case note review as audit/service evaluation and no further ethical approval was required. Permission was also granted from each site to access ICNARC, NOSEC and HAI data. Local research governance was followed at each site.

Contributors

Amirta Benning, Mary Dixon-Woods, Jeremy Dawson, Nick Barber and Richard Lilford designed the study and submitted the grant proposal. Richard Lilford was chief investigator. Amirta Benning, Nick Barber, Richard Lilford, Maisoon Ghaleb and Bryony Dean Franklin designed the explicit case note review pro forma and methods for the explicit case note review. Amirta Benning, Richard Lilford and Ugochi Nwulu designed the semi-structured holistic case note review pro forma and methods for data extraction. Amirta Benning and Ugochi Nwulu were responsible for the case note review collection. Maisoon Ghaleb and Byony Dean Franklin conducted the acute medicine case note review. Martin Carmalt and Thirumalai Naicker conducted the holistic case note review. Martin Carmalt and Clare Derrington carried out a separate review of deaths. Ugochi Nwulu and Maisoon Ghaleb designed the acute medicine case note review database. Gavin Rudge and Amirta Benning created the queries for data extraction. Ugochi Nwulu, Amirta Benning and Richard Lilford designed the perioperative case note review pro forma. Amirta Benning and Ugochi Nwulu designed the perioperative case note review database. Ugochi Nwulu and Amit Kotecha conducted the case note review. Alan

Girling analysed all the explicit case note review data. Gavin Rudge and Amirta Benning designed and wrote database queries for final analysis and to assess the learning effect on the case reviewers. Gavin Rudge captured processed raw mortality data and calculated hospital standardised mortality rates for hospitals in both arms, and undertook analysis of the socio-economic composition of the admitted patient populations of hospitals in the study. Karla Hemming analysed the holistic case note review data. Karla Hemming and Sopna Choudhury performed quantitative analysis of the qualitative data from the stakeholder interviews. Karla Hemming carried out analysis of the infection related data, intensive care mortality data, and hand hygiene related data. Anu Suokas carried out the ethnographic fieldwork. Jeremy Dawson was responsible for all aspects of the staff and patient surveys. All authors contributed to the final manuscript. Richard Lilford is the guarantor.

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Competing interests

None declared.

Appendix 1

Staff survey – 13 questions identified as relevant to the SPI

Six of these 13 scores are straightforward percentages:

1. **Percentage of staff having well structured appraisals** reflects the percentage of respondents who not only say that they had received an appraisal in the previous 12 months, but that this appraisal helped them improve how to do their job, helped agree clear objectives for their work, and left them feeling that their work was valued by their organisation. These aspects of appraisal have been shown to be particularly important for organisational outcomes in many sectors, including healthcare.[2;3]

2. **Percentage of staff working in well-structured teams** is the percentage of respondents who said they worked in teams, that their teams had clear objectives, that they had to work closely with team members to achieve these objectives, and that the team met regularly to discuss their effectiveness and how it could be improved. These are features of team working that have been shown to be critical for achieving high-quality team outcomes.[4]

3. **Percentage of staff witnessing potentially harmful errors or near misses in previous month** was the percentage of respondents who said they had witnessed an error or a near miss in the previous month that could have harmed either patients or staff.

4. **Percentage of staff suffering work-related injury** is the percentage of respondents who said they had suffered injury or illness as a result of moving or handling; needlestick or sharps injuries; slips, trips or falls; or exposure to dangerous substances in the previous 12 months;

5. **Percentage of staff suffering work-related stress** is the percentage of respondents who said they had suffered injury or illness as a result of work-related stress in the previous 12 months.

6. **Percentage staff experiencing physical violence from patients/ relatives** was the percentage of respondents who said they had personally experienced physical violence at work from either patients, or relatives of patients, in the previous 12 months.

Six of the other seven scores were calculated as the mean of a number of separate questionnaire items, each scored from one to five representing answers from strongly disagree through to strongly agree, or from very dissatisfied to very satisfied:

7. Intention to leave shows the extent to which employees are considering leaving their jobs. It is based on three questionnaire items.
8. Staff job satisfaction is a measure of employees' overall satisfaction with their jobs, and is based on seven items.
9. Quality of work-life balance measures the support provided by organisations for employees to maintain a good work-life balance, and is based on three items.
10. Support from supervisors is a measure of the extent to which employees feel supported by their immediate managers at work, and is based on five items.
11. Organisational climate is a measure of the overall climate, or positive feeling, within the organisation, including factors such as trust in management, communication, staff involvement in decision making and emphasis on quality. This is based on six items. Each of these scores has been shown to relate to performance outcomes, including quality of care, in healthcare organisations.[5]
12. Fairness and effectiveness of incident reporting procedures is a measure of the extent to which employees trust procedures for reporting and dealing with errors, near misses and incidents are effective and fair. This is based on seven items.

One other variable was also measured on a similar scale, but with some slight differences:

13. Availability of hand-washing materials is a measure of the extent to which hand-washing materials (hot water, soap and paper towels, or AHR) are available when needed by different groups. This was originally measured on a scale from one to four representing answers from never through to always, and then adjusted to fit a one to five scale for consistency with the other scale scores.

Appendix 2

Patient survey – five identified scores relevant to SPI

Each of these was scored between 0 and 100. The three satisfaction scores were:

1. Overall, how would you rate the care you received? (five possible responses: excellent = 100, very good = 75, good = 50, fair = 25 and poor = 0)
2. How would you rate how well the doctors and nurses worked together? (same response options)
3. Overall, did you feel you were treated with respect and dignity while you were in the hospital? (yes, always = 100; yes, sometimes = 50; and no = 0).

The two scores related to cleanliness were:

4. In your opinion, how clean was the hospital room or ward that you were in? (possible responses: very clean = 100, fairly clean = 67, not very clean = 33, and not at all clean = 0)
5. How clean were the toilets and bathrooms that you used in hospital? (same response options, plus 'I did not use a toilet or bathroom', which was excluded from the analysis).

Appendix 3

Errors and adverse events – analysis tables

Table 3.10A: Ratings and rates of adverse effects and errors: differences between SPI2 hospitals and control hospitals at baseline; and changes between epoch 3 and baseline in the control hospitals (99% CIs are in parenthesis)

	Comparisons at baseline* (1) Intervention – Control	Changes in Controls* (2) Epoch 3 – Baseline
Quality ratings:		
Admission rating†	0.12 (-0.27, 0.50)	0.11 (-0.32,0.26)
Management rating†	0.14 (-0.33, 0.61)	0.28 (-0.29, 0.84)
Pre-discharge rating†	0.00 (-0.54,0.54)	0.11 (-0.38,0.60)
Overall care rating‡	0.10 (-0.30, 0.48)	0.29 (-0.12, 0.69)
Errors/Adverse Events:		
No. errorsΦ	-5.78 (-23.84, 12.28)	-14.35 (-32.42, 3.71)
No. adverse eventsΦ	-1.42 (-5.81, 2.97)	-1.70 (-7.37, 3.96)

* Effects are estimated from a mixed effects model (see methods for details) and represent differences at baseline (1) and the effect of time (2). Baseline refers to the average scores over epoch 1 and epoch 2.

† Score scale: one (below best practice) to six (excellent care).

‡ Score scale: one (unsatisfactory) to 10 (very best care).

Φ Number of errors and number of adverse events are per 100 patients (patients could experience more than one error and more than one adverse event).

Errors can be of multiple categories.

Table 3.11A: Rates per 100 patients of errors identified by broad category of error: differences between SPI2 hospitals and control hospitals at baseline; and changes between Epoch 3 and baseline in the control hospitals (99% CIs are in parenthesis)

	Comparisons at baseline* (1) Intervention – Control	Changes in Controls* (2) Epoch 3 – Baseline
Quality ratings:		
Diagnosis/assessment/admission error	-3.28 (-27.15,20.60)	-13.08 (-36.31, 10.14)
Hospital-acquired infection	-0.00 (-0.93,0.93)	0.88 (-0.28,2.04)
Technical/management	-3.58 (-10.50, 3.34)	-1.17 (-9.66,7.31)
Medication/maintenance/follow-up	-1.08 (-11.24, 9.07)	-8.54 (-21.43, 4.35)
Clinical reasoning	-4.90 (-18.56, 8.76)	-10.93 (-24.84, 2.97)
Discharge information	0.62 (-9.43, 10.67)	-5.63 (-16.14, 4.87)

* Effects are estimated from a mixed effects model (see methods for details) and represent differences at baseline (1) and the effect of time (2). Baseline refers to the average scores over epoch 1 and epoch 2.

Errors can be of multiple categories.

Appendix 4

C. diff and MRSA – analysis tables and figures

Table A1: Fitted models for rate of C. diff (per 1,000 bed days) and MRSA infections (per 100,000 bed days)

	C. diff		MRSA	
	Coeff (se)	p-value	Coeff (se)	p-value
Constant	0.94 (0.22)	0.000	15.36 (2.51)	0.000
Intervention	0.05 (0.28)	0.853	2.37 (0.14)	0.420
Time	-0.13 (0.07)	0.051	0.26 (0.50)	0.601
Time^2	-0.01 (0.01)	0.264	0.01 (0.03)	0.789
Time^3	0.00 (0.00)	0.784	-0.00 (0.01)	0.208
Intervention*time	-0.01 (0.02)	0.652	-0.05 (0.14)	0.693

Table A2: Fitted models for rate of soap and AHR (litres) consumption per 1,000 bed days

	Soap		AHR	
	Coeff (SE)	p-value	Coeff (SE)	p-value
Constant	41.76(13.3)	0.000	3.80 (10.5)	0.708
Intervention	0.73 (13.9)	0.941	10.90 (12.2)	0.371
Time	0.73 (1.82)	0.623	3.91 (1.28)	0.002
Time^2	-0.03 (0.08)	0.657	-0.12 (0.06)	0.034
Time^3	0.00 (0.00)	0.501	0.00 (0.00)	0.065
Intervention*time	0.08 (0.44)	0.760	-0.05 (0.38)	0.889

Table A3: Fitted models for observed to expected mortality ratio (exponential scale) and mean length of stay for patients admitted to ICU

	O/E mortality		Mean LOS	
	Coeff (SE)	p-value	Coeff (SE)	p-value
Constant	1.28 (0.12)	0.000	180.4 (19.7)	0.000
Intervention	-0.14 (0.08)	0.068	-39.4 (17.2)	0.022
Before	-0.07 (0.06)	0.258	-12.9 (8.49)	0.128
Intervention before	0.09 (0.08)	0.250	5.9 (11.11)	0.598
APACHE II score	0.01 (0.01)	0.138	0.34 (1.18)	0.774
Physiology score	-0.01 (0.01)	0.015	-1.34 (0.87)	0.123

Table A4: Fitted models for APACHE II and ICNARC physiology scores for patients admitted to ICU from a ward within the hospital

	APACHE II score		ICNARC score	
	Coeff (SE)	p-value	Coeff (SE)	p-value
Constant	18.47 (0.72)	0.000	20.95 (1.00)	0.000
Intervention	1.20 (0.98)	0.225	2.32 (1.36)	0.087
Before	1.85 (0.81)	0.022	1.77 (1.19)	0.136
Intervention before	-0.83 (1.09)	0.449	-2.26 (1.60)	0.158

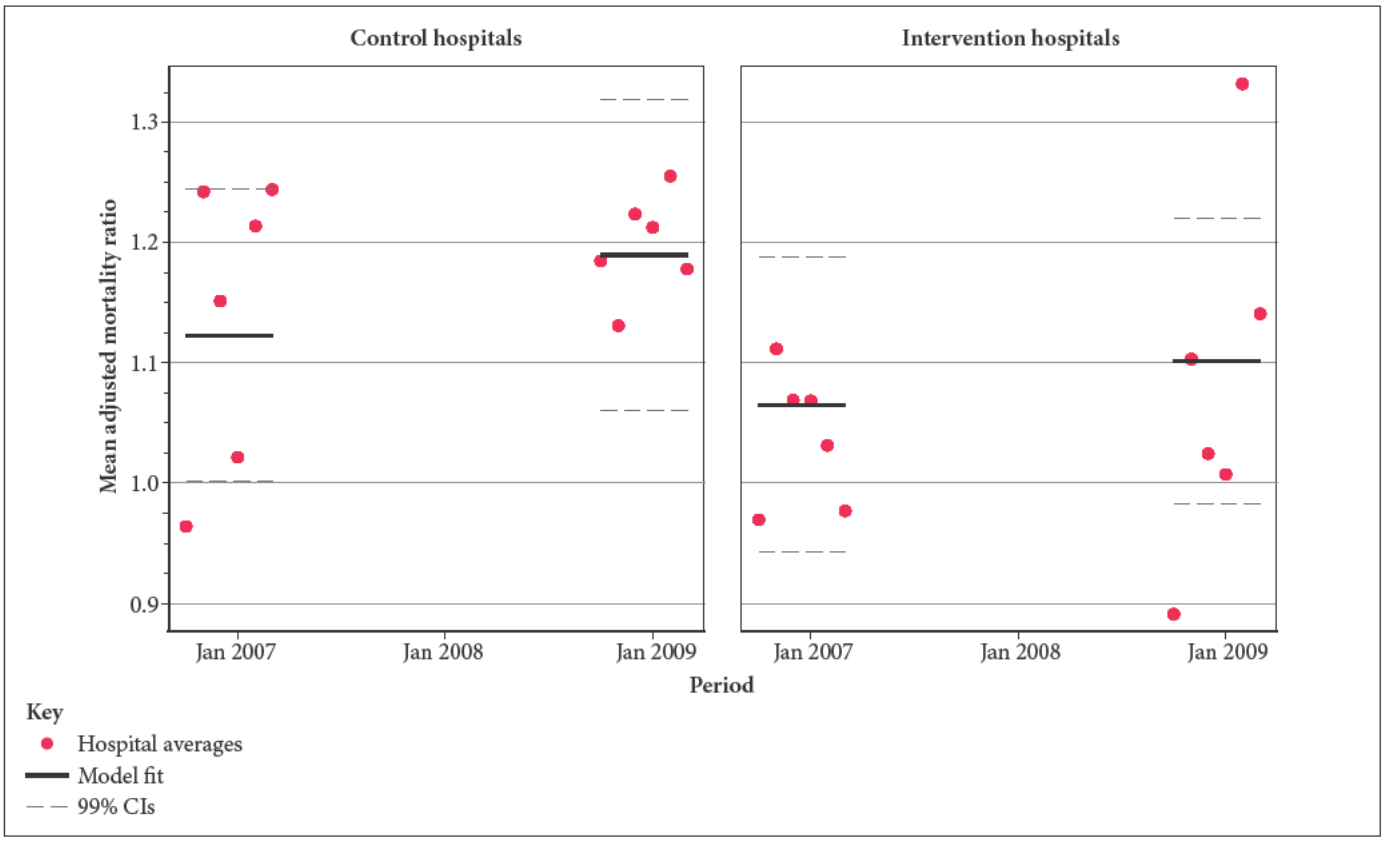

Figure A1: ICUs adjusted mortality rates

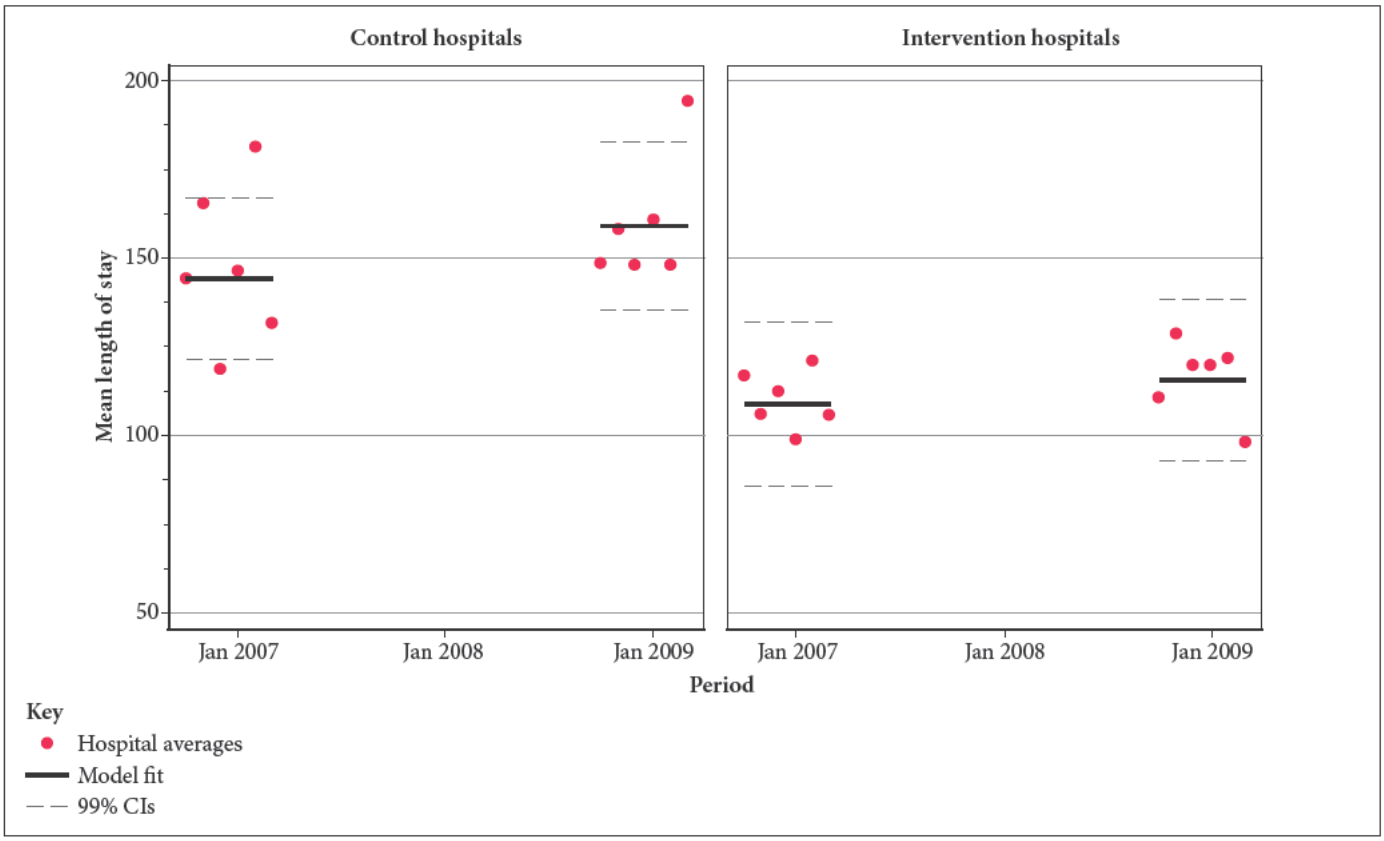

Figure A2: ICUs length of stay

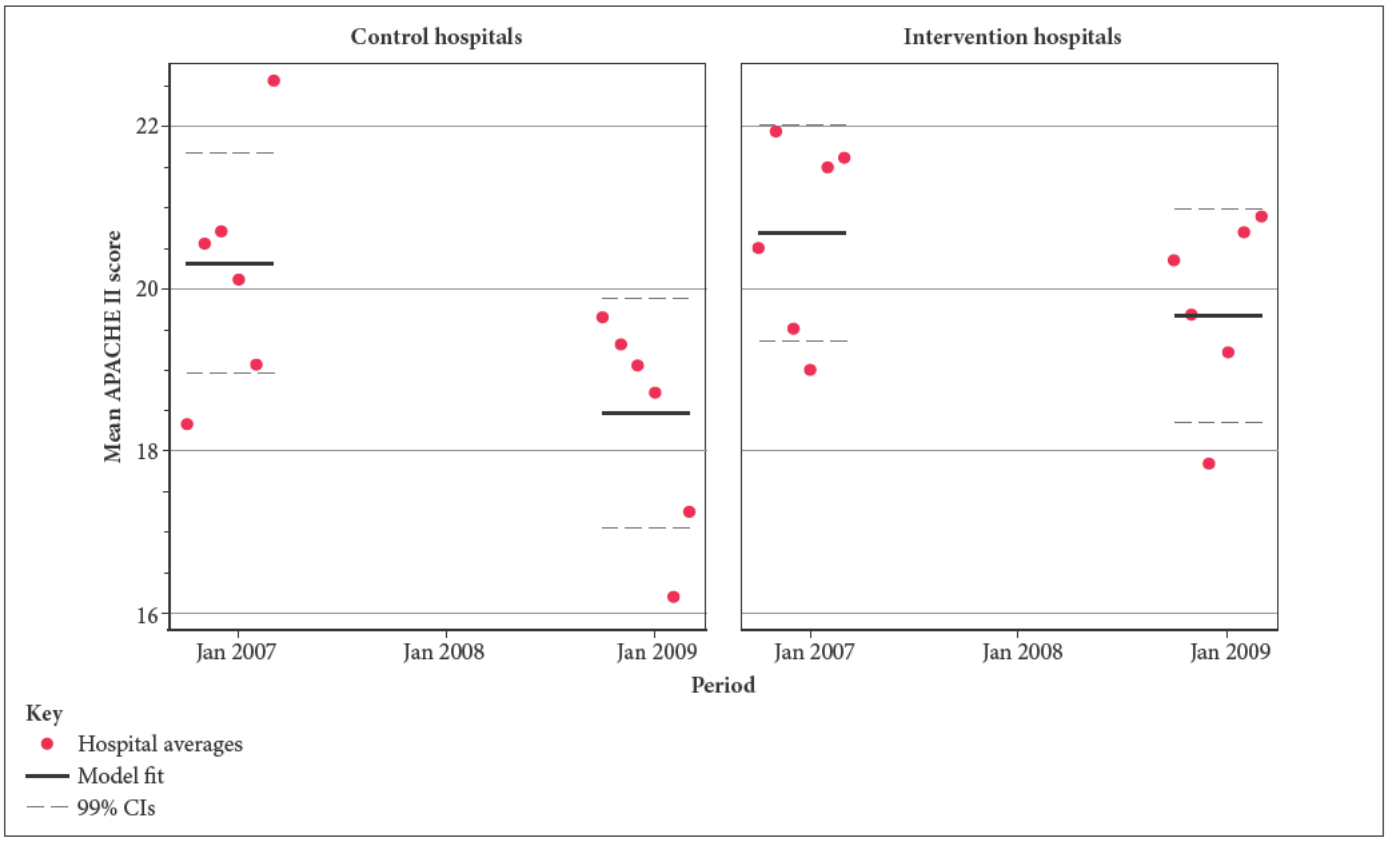

Figure A3: ICUs: APACHE II score

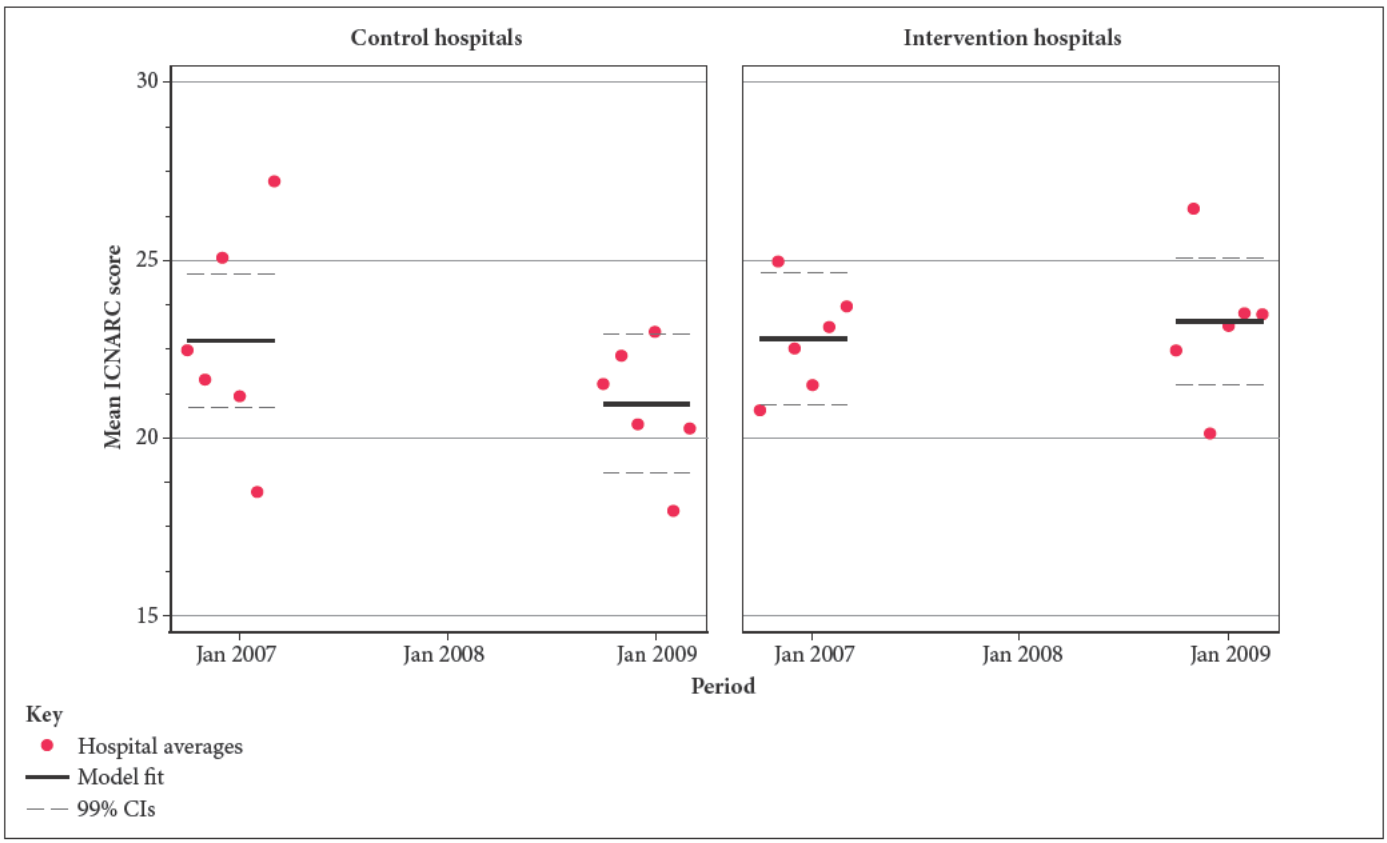

Figure A4: ICUs: ICNARC score

The Health Foundation is an independent charity working to continuously improve the quality of healthcare in the UK.

We want the UK to have a healthcare system of the highest possible quality – safe, effective, person-centred, timely, efficient and equitable. We believe to achieve this, health services need to continually improve the way they work.

We are here to inspire and create the space for people, teams, organisations and systems to make lasting improvements to health services.

Working at every level of the healthcare system, we aim to develop the technical skills, leadership, capacity, knowledge, and the will for change, that are essential for real and lasting improvement.

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HAND HYGIENE REPORT
SERVICE GROUP BREAKDOWN

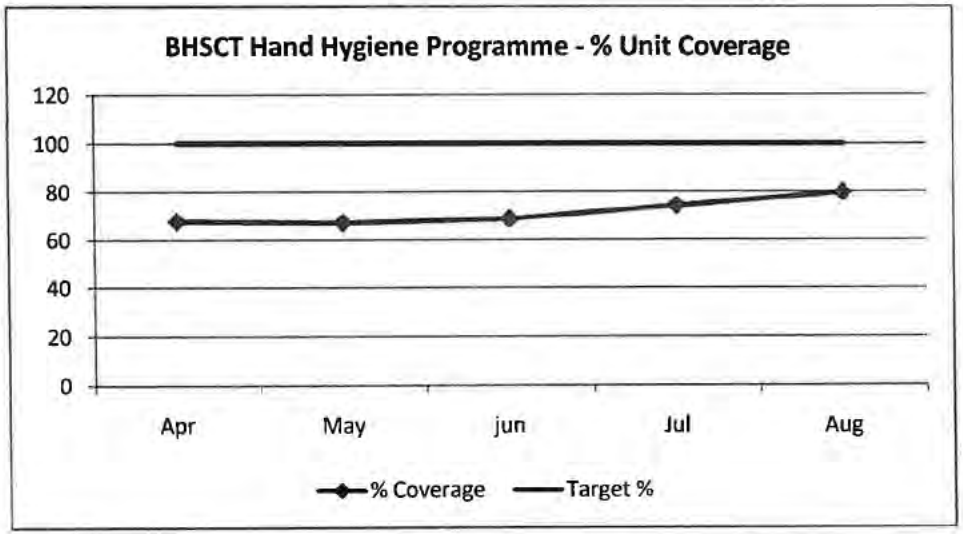
BELFAST HSC TRUST
30 SEPTEMBER 2009

YR	M	OPMS					SPEC S					M HLTH					CLINICAL SERVICES					SSFC					OVERALL				
		COMP	OBS	%	QTR	U	COMP	OBS	%	QTR	U	COMP	OBS	%	QTR	U	COMP	OBS	%	QTR	U	COMP	OBS	%	QTR	U	COMP	OBS	%	QTR	U
2007	8	0	0	0.00	0.00	0	100	100	100	100	1	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	100	100	100.00	100.00	1
2007	9	0	0	0.00	0.00	0	33	53	62.26	86.93	1	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	33	53	62.26	86.93	1
2007	10	18	70	25.71	25.71	2	39	64	60.94	79.26	1	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	57	134	42.54	66.20	3
2007	11	76	150	50.67	42.73	2	33	44	75	65.22	1	0	0	0.00	0	0	114	178	64.04	64.04	2	0	0	0.00	0	0	223	372	59.95	55.99	5
2007	12	124	166	74.70	56.48	4	59	60	98.33	77.98	1	0	0	0.00	0	0	119	188	63.30	63.66	1	0	0	0.00	0	0	302	414	72.95	63.26	6
2008	1	310	454	68.28	66.23	8	42	54	77.78	84.81	1	0	0	0.00	0	0	46	59	77.97	65.65	2	0	0	0.00	0	0	398	567	70.19	68.22	11
2008	2	573	890	64.38	66.69	16	21	32	65.63	83.56	1	0	0	0.00	0	0	75	100	75.00	69.16	2	0	0	0.00	0	0	669	1022	65.46	68.35	19
2008	3	613	865	70.87	67.72	16	189	306	61.76	64.29	8	0	0	0.00	0	0	87	120	72.50	74.55	2	0	0	0.00	0	0	889	1291	68.86	67.92	26
2008	4	728	1011	72.01	69.20	17	402	594	67.68	65.67	8	0	0	0.00	0	0	102	189	53.97	64.55	3	13	20	65.00	65.00	1	1245	1814	68.63	67.92	29
2008	5	911	1153	79.01	74.35	18	866	1282	67.55	66.77	19	0	0	0.00	0	0	142	200	71.00	65.03	3	47	80	58.75	60.00	1	1966	2715	72.41	70.45	41
2008	6	780	1019	76.55	76.00	18	1098	1510	72.72	69.88	22	0	0	0.00	0	0	200	261	76.63	68.31	3	59	80	73.75	66.11	1	2137	2870	74.46	72.28	44
2008	7	850	1071	79.37	78.35	18	1371	1875	73.12	71.46	27	0	0	0.00	0	0	194	240	80.83	76.48	3	58	79	73.42	68.62	1	2473	3265	75.74	74.31	49
2008	8	833	962	86.59	80.70	18	1530	1883	81.25	75.91	28	0	0	0.00	0	0	248	280	88.57	82.20	3	65	80	81.25	76.15	1	2676	3205	83.49	78.01	50
2008	9	785	916	85.70	83.69	16	1261	1512	83.4	78.98	28	0	0	0.00	0	0	202	241	83.82	84.63	3	52	60	86.67	79.91	1	2300	2729	84.28	80.98	48
2008	10	918	1023	89.74	87.42	18	1640	2004	81.84	82.07	32	49	71	69.01	69.01	3	210	220	95.45	89.07	3	56	60	93.33	86.50	1	2873	3378	85.05	84.29	57
2008	11	712	796	89.45	88.30	18	2173	2629	82.66	82.57	45	83	101	82.18	76.74	3	219	260	84.23	87.52	3	63	80	78.75	85.50	1	3250	3866	84.07	84.46	70
2008	12	503	595	84.54	88.36	16	2560	3106	82.42	82.35	55	129	172	75.00	75.87	3	183	200	91.50	90.00	3	60	80	75.00	81.36	1	3435	4153	82.71	83.86	78
2009	1	584	658	88.75	87.80	17	3247	3875	83.79	83.04	58	209	232	90.09	83.37	3	112	120	93.33	88.62	3	70	100	70.00	74.23	1	4222	4985	84.69	83.87	82
2009	2	845	1060	79.72	83.53	24	2871	3303	86.92	84.38	61	234	293	79.86	82.07	4	110	120	91.67	92.05	3	61	80	76.25	73.46	1	4121	4856	84.86	84.16	93
2009	3	1141	1351	84.46	83.74	28	4056	4735	85.66	85.40	72	303	317	95.58	88.60	4	20	20	100.00	93.08	1	65	80	81.25	75.38	1	5565	6483	85.84	85.20	105
2009	4	2336	2741	85.22	83.89	44	3729	4279	87.15	86.51	71	296	320	92.50	89.57	4	193	216	89.35	90.73	3	153	190	80.53	79.71	2	6687	7746	86.33	85.79	124
2009	5	2019	2260	89.34	86.52	42	3144	3493	90.00	87.36	66	321	353	90.93	92.93	5	188	231	81.39	85.87	9	75	80	93.75	83.71	1	5747	6417	89.56	87.18	123
2009	6	2958	3359	88.06	87.48	60	2870	3203	89.60	88.77	46	201	260	77.31	86.82	5	269	292	92.12	87.96	6	206	247	83.40	83.95	9	6235	7361	84.70	86.74	126
2009	7	3125	3474	89.95	89.10	65	2174	2325	93.51	90.77	48	150	186	80.65	84.11	3	253	268	94.40	89.76	4	771	1010	76.34	78.68	16	6473	7263	89.12	87.71	136
2009	8	5806	6304	92.10	90.50	59	3929	4124	95.27	92.97	58	81	100	81.00	79.12	2	230	240	95.83	94.00	3	1060	1318	80.42	79.11	24	11106	12086	91.89	89.16	146

KEY	
COMP	COMPLIANT OBSERVATIONS
OBS	TOTAL OBSERVATIONS
%	PERCENTAGE COMPLIANCE
QTR	QUARTERLY AVERAGE
U	NUMBER OF UNITS

MAHI - STM - 318 - 186

	% Coverage	Target %
Apr	67.76	100
May	67.21	100
jun	68.85	100
Jul	74.32	100
Aug	79.78	100



BHSCT HCAI 2009 /2010

Actual cases

Isolate	MRSA						MSSA						Staph aureus						C. Difficile ≥ 65 years					
Service Group	Clinical	FCC	MH&LD	OPMS	Specialist	Total	Clinical	FCC	MH&LD	OPMS	Specialist	Total	Clinical	FCC	MH&LD	OPMS	Specialist	Total	Clinical	FCC	MH&LD	OPMS	Specialist	Total
Apr-09	0	0	0	5	3	8	2	1	0	4	8	15	2	1	0	9	11	23	3	0	0	17	2	22
May-09	0	0	0	4	1	5	0	3	0	3	4	10	0	3	0	7	5	15	0	0	0	8	4	12
Jun-09	1	0	0	5	1	7	3	3	0	5	1	12	4	3	0	10	2	19	0	0	0	12	3	15
Jul-09	0	1	0	0	1	2	1	1	0	8	3	13	1	2	0	8	4	15	0	0	0	10	4	14
Aug-09	0	0	0	3	4	7	1	2	0	3	5	11	1	2	0	6	9	18	0	0	0	10	5	15
Sep-09																								
Oct-09																								
Nov-09																								
Dec-09																								
Jan 10																								
Feb-10																								
Mar-10																								

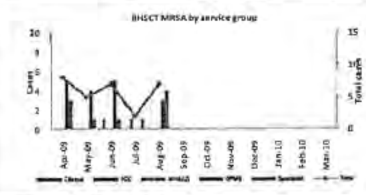
41

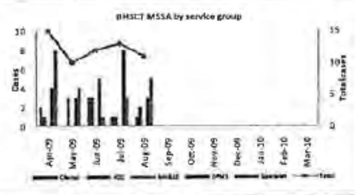
Cumulative cases

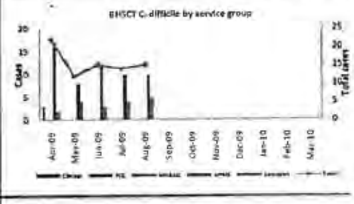
Isolate	MRSA						MSSA						Staph aureus						C. Difficile ≥ 65 years					
Service Group	Clinical	FCC	MH&LD	OPMS	Specialist	Total	Clinical	FCC	MH&LD	OPMS	Specialist	Total	Clinical	FCC	MH&LD	OPMS	Specialist	Total	Clinical	FCC	MH&LD	OPMS	Specialist	Total
Apr-09	0	0	0	5	3	8	2	1	0	4	8	15	2	1	0	9	11	23	3	0	0	17	2	22
May-09	0	0	0	9	4	13	2	4	0	7	12	25	2	4	0	16	16	38	3	0	0	25	6	34
Jun-09	1	0	0	14	5	20	5	7	0	12	13	37	6	7	0	26	18	57	3	0	0	37	9	49
Jul-09	1	1	0	14	6	22	6	8	0	20	16	50	7	9	0	34	22	72	3	0	0	47	13	63
Aug-09	1	1	0	17	10	29	7	10	0	23	21	61	8	11	0	40	31	90	3	0	0	57	18	78
Sep-09																								
Oct-09																								
Nov-09																								
Dec-09																								
Jan 10																								
Feb-10																								
Mar-10																								

MRSA | MSSA | C. difficile

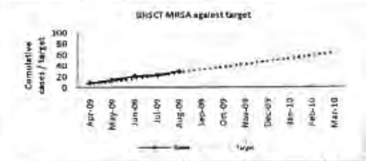
Isolates by service group & BHSCT total

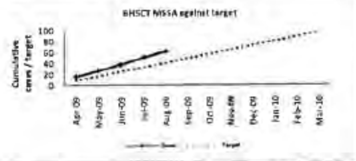


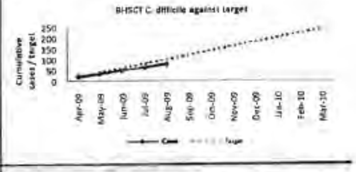




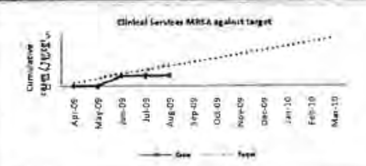
BHSCT against target

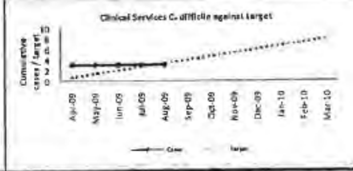




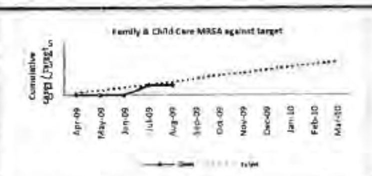


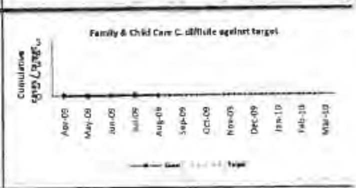
Clinical Services against target



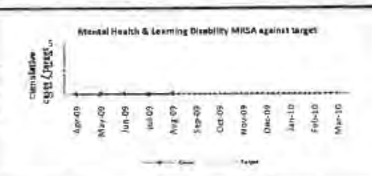


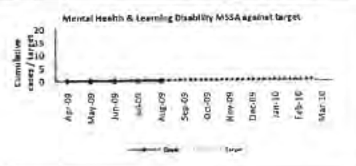
Family & Child Care against target

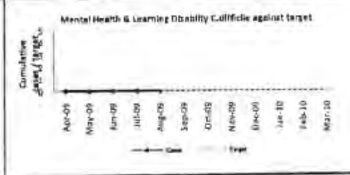




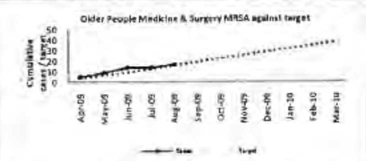
Mental Health & Learning Disability against target

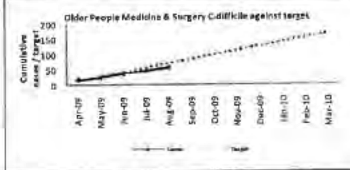




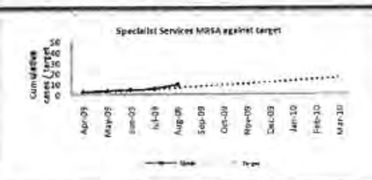


Older People & Medicine against target

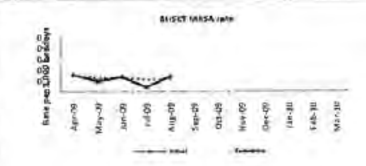


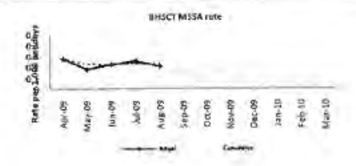


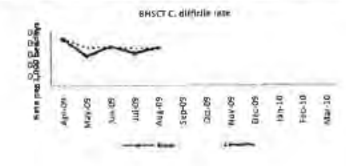
Specialist Services against target



Rate per 1,000 beddays



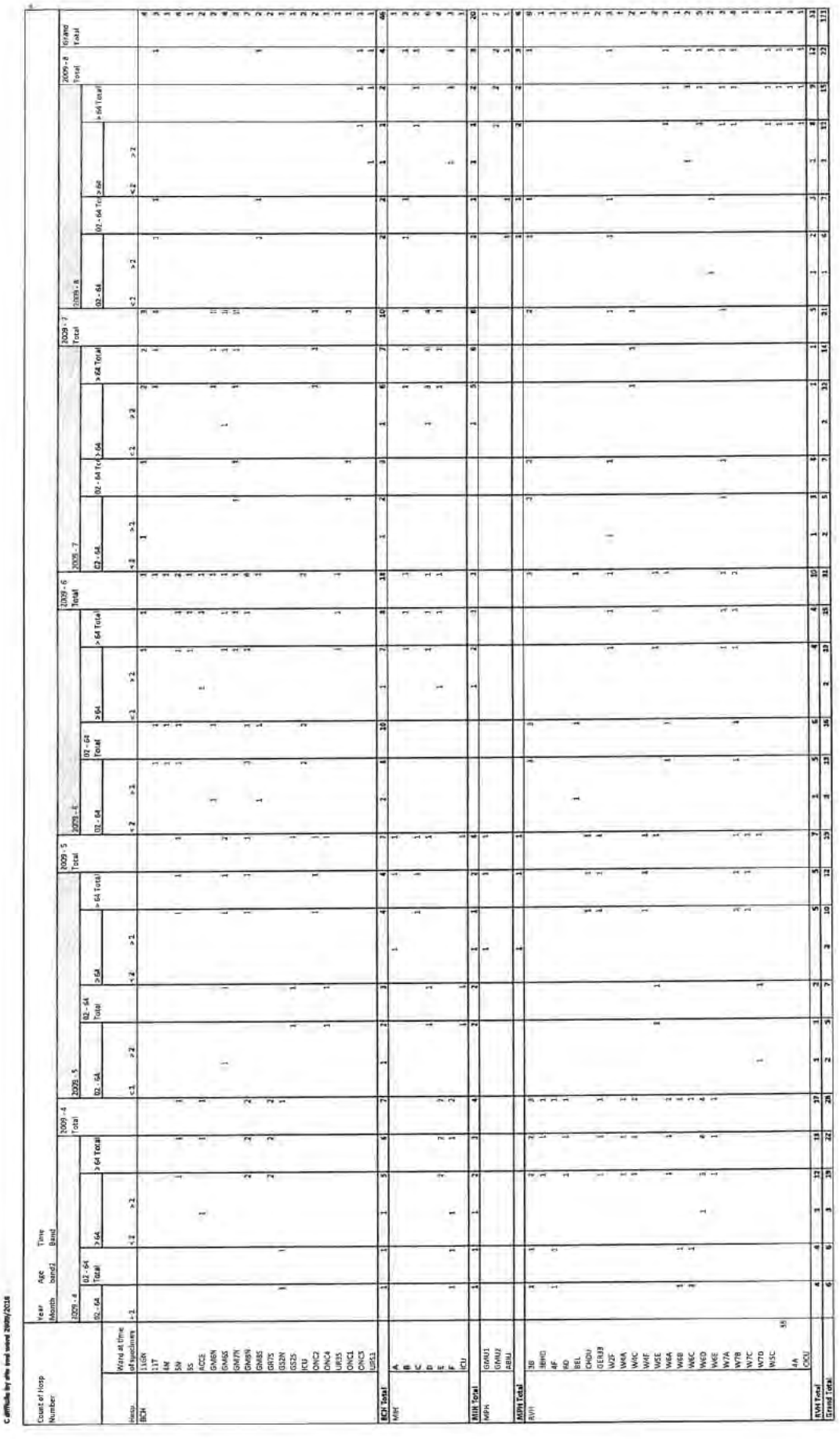




HCAI by specimen, hospital and site 2009/2010

Hospital	Site	Ward Code	Ward Name	MRSA												MRSA Total	MSSA											MSSA Total	C. Diff ≥ 65 years											C. Diff ≥ 65 years	C. Diff 02 - 64 years											C. Diff 02 - 64 years
				Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10		Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10		Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	C. diff Total ≥65years	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	C. diff Total 02-64 years
BCH	BCH	11AD	Level 11 Acute Dialysis													0												0										0											0
BCH	BCH	11GN	Level 11 General Nephrology													0	1				2							3										0		1									1
BCH	BCH	11NS	Level 11 Nephrology Surgical													0												0										0											0
BCH	BCH	11T	Level 11 Transplant													0												0										1	1		1								2
BCH	BCH	1ST	1 South - Elderly Care													0												0										0											0
BCH	BCH	4N	4 North - Gynaecology													0												0										0	1										1
BCH	BCH	4S	4 South	1												1		1										1										0											0
BCH	BCH	5N	5 North - General Surgery / Vascular													0			1									1										0	1										1
BCH	BCH	5S	5 South - General Surgery / Vascular													0												0										0											0
BCH	BCH	ACCE	*Emergency Care Receiving Unit (A&E)*	1		1										2			1									1										0											0
BCH	BCH	CA9N	9 North - Cardiology													0												0										0											0
BCH	BCH	CA9S	9 South - Cardiology													0												0										0											0
BCH	BCH	CACC	Coronary Care Unit Level 9													0												0										0											0
BCH	BCH	CAPD	CAPD Unit													0												0										0											0
BCH	BCH	ENTA	Dufferin - Adult ENT / Pain Relief													0												0										0											0
BCH	BCH	ENTC	Dufferin - Children's ENT													0												0										0											0
BCH	BCH	GM6N	6 North - General Medicine													0	1			1								2										0	1										1
BCH	BCH	GM6S	6 South - General Medicine													0		1										1										0											0
BCH	BCH	GM7N	7 North - General Medicine / Geriatric Acute					1								1												2										0		1									1
BCH	BCH	GM8N	8 North - General Medicine	1		1										2												3										0	1										1
BCH	BCH	GM8S	8 South - General Medicine													0												1										0	1		1								2
BCH	BCH	GR7S	7 South - Acute Care of the Elderly													0		1										1										0											0
BCH	BCH	GS2N	2 North - General Surgery / Breast		1											1												0										0											0
BCH	BCH	GS2S	2 South - General Surgery			1										1												0										0											0
BCH	BCH	GSWL	Ward 2 East													0												0										0											0
BCH	BCH	HAEM	10 North - Haematology													0												0										0											0
BCH	BCH	HDP	High Dependency Unit													0												0										0											0
BCH	BCH	ICU	Intensive Care Unit													0												0										0	2										2
BCH	BCH	NR2	Renal Dialysis Unit	2				1								3	1			2								3										0											0
BCH	BCH	UR3N	3 North - Urology													0												0										0											0
BCH	BCH	UR3S	3 South - Urology													0												0	1									1											0
BCH	BCH	WW	Windsor Ward													0												0										0											0
BCH	BPR	ONC1	Ward 1 - Oncology		1											1												0										0		1									1
BCH	BPR	ONC2	Ward 2 - Oncology													0	1	1										2										0											0
BCH	BPR	ONC3	Ward 3 - Oncology					1								1		2			1							3	1									1											0
BCH	BPR	ONC4	Ward 4 - Oncology													0	1											1										0			1								1
BCH Total				*5*	*2*	*3*	*0*	*5*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*15*	*5*	*6*	*2*	*3*	*3*	*0*	*0*	*0*	*0*	*0*	*0*	*19*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*27*	*10*	*3*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*18*
FGH	FG	4F	FGH - 4													0												0										0											0
FGH	FG	7F	FGH - 7													0												0										0											0
FGH Total				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Knockt KBR		Bush	Bush													0												0										0											0
Knockt KBR		Moy	Moy													0												0										0											0
Knockt KBR		Clare	Clare													0												0										0											0
Knockt KBR		K'bracke	K'bracken													0												0										0											0
Knockt KBR		Inishfree	Inishfree													0												0										0											0
Knockt KBR		Avoca	Avoca													0												0										0											0
Knockt KBR		Mahee	Mahee													0												0										0											0
Knockt KBR		Valencia	Valencia													0												0										0											0
Knockt KBR		Skerries	Skerries													0												0										0											0
Knockt KBR		Rathlin	Rathlin													0												0										0											0
Knockt KBR		DGUA	DGUA													0												0										0											0
Knockt KBR		Shannon	Shannon													0												0										0											0
Knockt KBR		Maine	Maine													0												0										0											0
Knocktbrocken Total				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
MIH	MIH	A	Ward A - Cardiology		1											1												0										0	1										1
MIH	*MIH*	*AE*	*A&E Holding Ward*		1											1												0										0											0
MIH	MIH	B	Ward B - General Medicine													0												0										0	1										1
MIH	MIH	C	Ward C - General Medicine	1												1				1	1							2	1									1											0
MIH	MIH	CCU	CCU - Coronary Care Unit													0	1				1							2										0											0
MIH	MIH	D	Ward D - General Medicine / Surgery / Urology			1		1								2	1											1										0											0
MIH	MIH	DSU	Day Surgery Unit													0												0										0											0
MIH	MIH	E	Ward E - General Medicine / Surgery				1									1			1		1							2										0											0
MIH	MIH	ESU	ESU - Elective Surgical unit													0					1							1										0											0
MIH	MIH	F	Ward F - General Medicine			1										1					1							1	1									1											0
MIH	MIH	GYNA	Gynaecology Ward													0												0										0											0
MIH	MIH	J	Ward J - Mental Illness													0												0										0											0
MIH	MIH	K	Ward J - Mental Illness													0												0										0											0
MIH	MIH	L	Ward L - Mental Illness													0												0										0											0
MIH	MIH	MIC	Intensive Care Unit													0												0										0											0
MIH	MIH	MMU	Maternity Unit													0												0										0											0
MIH Total				*1*	*2*	*2*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*2*	*1*	*0*	*2*	*4*	*0*	*0*	*0*	*0*	*0*	*0*	*9*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*16*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*
MPH	MPH	ABIU	ABIU - Rehabilitation													0												0										0				1							1
MPH	MPH	FLNH	Forest Lodge Nursing Home													0												0										0											0
MPH	MPH	GMU1	GMU1													0												0										1											0

Hospital	Site	Ward Code	Ward Name	MRSA												MRSA Total	MSSA												MSSA Total	C. Diff ≥ 65 years												C. diff Total ≥65 years	C. Diff 02 - 64 years												C. diff Total 02-64 years
				Jun-08	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10		Jun-08	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10		Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jun-10	Feb-10	Mar-10		Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	
MPH	MPH	GMU2	GMU2													0												0									0												0
MPH	MPH	GMU3	GMU3													0												0									0												0
MPH	MPH	MHDU	High Dependency Unit													0												0									0												0
MPH	MPH	RH4	RH4 - Rheumatology Day Ward													0												0									0												0
MPH	MPH	RH5	RH5 - Rheumatology 5													0	1											1									0												0
MPH	MPH	W2A	W2A - Adult Orthopaedic Day Case													0												0									0												0
MPH	MPH	W2B	W2B - Children's Orthopaedic													0												0									0												0
MPH	MPH	W3A	W3A - Rehabilitation / Orthopaedic													0												0									0												0
MPH	MPH	W3B	W3B - Pre Op Assessment													0												0									0												0
MPH	MPH	W4A	W4A - Adult Orthopaedic													0												0									0												0
MPH	MPH	W4B	W4B - Orthopaedic													0												0									0												0
MPH	MPH	W5A	W5A - Adult Orthopaedic Daycase													0												0									0												0
MPH	MPH	W5B	W5B - Adult Orthopaedic													0												0									0												0
MPH	MPH	W6A	W6A - Adult Orthopaedic													0												0									0												0
MPH	MPH	W6B	W6B - Adult Orthopaedic													0												0									0												0
MPH	MPH	WOI	Spinal Cord Injuries Unit													0												0									0												0
MPH Total				0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	1
RGH	CH	AW	Allen Ward													0			1									1									0												0
RGH	CH	BARB	Barbour Ward				1									1			1									1									0												0
RGH	CH	BEL	Belvoir Ward													0	1	1	1	1								4									0	1											1
RGH	CH	CCC	Children's Clarke Clinic													0												0									0												0
RGH	CH	CTH	Cherry Tree House													0												0									0												0
RGH	CH	DRW	Day Recovery Ward													0												0									0												0
RGH	CH	HAEM	Haematology Unit													0												0									0												0
RGH	CH	ICU	Intensive Care Unit													0												0									0												0
RGH	CH	KNOX	Knox Ward													0		2										2									0												0
RGH	CH	PAUL	Paul Ward													0												0									0												0
RGH	RMH	AC	A Ward Cots													0												0									0												0
RGH	RMH	AW	A Ward - Antenatal													0												0									0												0
RGH	RMH	E	E Ward - Postnatal													0												0									0												0
RGH	RMH	EC	E Ward Cots													0												0									0												0
RGH	RMH	F	F Ward - Postnatal													0												0									0												0
RGH	RMH	FC	F Ward Cots													0												0									0												0
RGH	RMH	JH	Johnstone House													0												0									0												0
RGH	RMH	JHC	Johnstone House Cots													0												0									0												0
RGH	RMH	SCU	Neonatal Intensive Care Unit													0					2							2									0												0
RGH	RV	EDAD	EDAD													0	1											1									0												0
RGH	RV	28	Ward 28													0												0									0												0
RGH	RV	29	Ward 29													0												0									0												0
RGH	RV	31	Ward 31													0												0									0												0
RGH	RV	33	Ward 33 M/F Elderly Care													0				1								1									0												0
RGH	RV	36	Ward 36 M/F Elderly Care													0												0	1								0												0
RGH	RV	3B	Ward 3B M/F RICU													0	2		3	1	1							7									0	3	2	1									6
RGH	RV	3BHD	Ward 3B HDU				1									1												0									0												0
RGH	RV	C	C Ward Gynaecology													0												0									0												0
RGH	RV	CCU5	Coronary Care Unit Ward 5D				1									1	1											1									0												0
RGH	RV	CHDU	Cardiac Surgery HDU													0												0									0												0
RGH	RV	CICU	Cardiac Surgery ICU					1								1	1											1	1								0												0
RGH	RV	W2E	Ward 2E - Burns Unit													0												0									0												0
RGH	RV	W2F	Ward 2F - M/F Medical Admissions													0			1									1	1								0		1	1									2
RGH	RV	W4A	Ward 4A - Thoracic													0												0	1								0												0
RGH	RV	W4B	Ward 4B - M/F Vascular													0												0									0												0
RGH	RV	W4C	Ward 4C - M/F Fracture													0												0									0												0
RGH	RV	W4D	Ward 4D - Preoperative Unit													0												0									0												0
RGH	RV	W4E	Ward 4E - Neurology													0					1							1									0												0
RGH	RV	W4F	Ward 4F - Neurosurgery													0												0									0												0
RGH	RV	W5A	Ward 5A - M/F Cardiac Surgery													0												0									0												0
RGH	RV	W5B	Ward 5B - M/F Cardiology													0												0									0												0
RGH	RV	W5C	Ward 5C - M/F Cardiology													0	1											1	1								0												0
RGH	RV	W5D	Ward 5D - M/F Cardiology													0												0									0												0
RGH	RV	W5E	Ward 5E - M/F Fracture													0												0									0												0
RGH	RV	W5F	Ward 5F - M/F Fracture													0					1							1									0												0
RGH	RV	W6A	Ward 6A - M/F Surgical													0												0	2								0	1											1
RGH	RV	W6B	Ward 6B - M/F Surgical													0												0									0												0
RGH	RV	W6C	Ward 6C - General Surgery													0				1								1	1								0												0
RGH	RV	W6D	Ward 6D - M/F Medical													0					1							1	1								0												0
RGH	RV	W6E	Ward 6E - M/F Medical													0												0									0												0
		W6F														0					1							1									0												0
RGH	RV	W7A	Ward 7A - Infectious Diseases / Medical	1	1											2	1											1	2								0		1										1
RGH	RV	W7B	Ward 7B - M/F Medical	1												1	1											1	1								0	1	1										1
RGH	RV	W7C	Ward 7C - Elderly Care / Neurology					1								1												0									0												0
RGH	RV	W7D	Ward 7D - M/F Endocrine													0			1	1								2									0												0
		W7F														0												0									0												0
RGH Total				2	1	2	2	1	0	0	0	0	0	0	0	4	7	3	10	4	4	0	0	0	0	0	0	32	9	0	0	0	0	0	0	0	32	6	4	3	0	0	0	0	0	0	0	19
BHSCT Total				8	5	7	2	7	8	0	0	0	0	0	0	39	15	10	12	11	11	0	0	0	0	0	0	61	15	0	0	0	0	0	0	0	78	16	7	7	9	0	0	0	0	0	0	43



MRSA by site and ward 2009/2010

Count of Hosp Number		Year Month / Time Band															
		2009 - 4		2009 - 4 Total	2009 - 5		2009 - 5 Total	2009 - 6		2009 - 6 Total	2009 - 7	2009 - 7 Total	2009 - 8		2009 - 8 Total	Grand Total
Hosp	Ward at time of specimen	< 2	> 2		< 2	> 2		< 2	> 2		> 2		< 2	> 2		
BCH	4S		1	1												1
	ACCE	1		1				1		1						2
	GM8N		1	1					1	1						2
	GS2N					1	1									1
	GS2S							1		1						1
	NR2	2		2									3		3	5
	ONC1				1		1									1
	ONC3													1	1	1
	GM7N													1	1	1
BCH Total		**3**	**2**	**5**	**1**	**1**	**2**	**2**	**1**	**3**			**3**	**2**	**5**	**15**
MIH	A					1	1									1
	AE				1		1									1
	C		1	1												1
	D							1		1				1	1	2
	F							1		1						1
MIH Total			**1**	**1**	**1**	**1**	**2**	**2**		**2**				**1**	**1**	**6**
RVH	3BHD								1	1						1
	CCU5							1		1						1
	W7A		1	1		1	1									2
	W7B		1	1												1
	CICU										1	1				1
	BARB										1	1				1
	W7C													1	1	1
RVH Total			**2**	**2**		**1**	**1**	**1**	**1**	**2**	**2**	**2**		**1**	**1**	**8**
Grand Total		3	5	8	2	3	5	5	2	7	2	2	3	4	7	29

MSSA by site and ward 2009/2010

Count of Hosp Number		Year Month / Time Band																	
		2009 - 4		2009 - 4 Total	2009 - 5		2009 - 5 Total	2009 - 6		2009 - 6 Total	2009 - 7		2009 - 7 Total	2009 - 8		2009 - 8 Total	Grand Total
Hosp	Ward at time of specimen	< 2	> 2		< 2	> 2		< 2	> 2		< 2	> 2		< 2	> 2		
BCH	11GN		1	1											1	1	2	3
	4S					1	1											1
	5N								1	1								1
	7S					1	1											1
	ACCE							1		1								1
	GM6N		1	1								1	1					2
	GM6S				1		1											1
	NR2		1	1							1		1					2
	ONC2		1	1		1	1											2
	ONC3				1	1	2								1		1	3
	ONC4		1	1														1
	RHS	1		1														1
	REDI										1		1					1
BCH Total		1	5	6	2	4	6	1	1	2	2	1	3	2	1	3		20
MIH	CMU		1	1											1	1		2
	D		1	1														1
	E				1		1					1	1					2
	C											1	1		1	1		2
	ESU													1		1		1
	F														1	1		1
MIH Total			2	2	1		1					2	2	1	3	4		9
RVH	3B	1	1	2					3	3		1	1		1	1		7
	5C	1		1														1
	AW							1		1								1
	BARB							1	1	2								2
	BEL	1		1		1	1				1		1					3
	CCU5		1	1														1
	CICU		1	1														1
	EDAD		1	1														1
	KNOX				1	1	2											2
	W2F							1		1								1
	W6C								1	1		1	1					2
	W7D							1		1	2		2					3
	W6D								1	1								1
	W6F											1	1					1
	W5F											1	1					1
	SCU														2	2		2
	33											1	1					1
	W4E														1	1		1
RVH Total		3	4	7	1	2	3	4	6	10	3	5	8		4	4		32
Grand Total		4	11	15	4	6	10	5	7	12	5	8	13	3	8	11		61

C diff by service group

Count of Hosp Number		2009 - 8		2009 - 8 Total	Grand Total
Age band2	Service Group	< 2	> 2		
> 64	Clinical Services				3
	OPMS	2	8	10	57
	Specialist Services	1	4	5	18
> 64 Total		3	12	15	78
02 - 64	Clinical Services		1	1	7
	Family & Child Care				1
	OPMS	1	3	4	26
	Specialist Services		2	2	9
02 - 64 Total		1	6	7	43
Grand Total		4	18	22	121

MRSA by service group

Count of Hosp Number			2009 - 8 Total	Grand Total
Age band	Service Group	> 2		
(blank)	Clinical Services			1
	OPMS	3	3	17
	Specialist Services	1	4	10
	Family & Child Care			1
(blank) Total		4	7	29
Grand Total		4	7	29

MSSA by service group

Count of Hosp Number		2009 - 8		2009 - 8 Total	Grand Total
Age band	Service Group	< 2	> 2		
(blank)	Clinical Services		1	1	7
	Family & Child Care		2	2	10
	OPMS	1	2	3	23
	Specialist Services	2	3	5	21
(blank) Total		3	8	11	61
Grand Total		3	8	11	61

Count of Hosp Number		2009 - 8		2009 - 8 Total	2009 - 9
Age band2	Service Group	< 2	> 2		> 2
> 64	Clinical Services				
	OPMS	2	8	10	
	Specialist Services	2	4	6	2
> 64 Total		4	12	16	2
02 - 64	Clinical Services		1	1	
	Family & Child Care				
	OPMS	1	3	4	
	Specialist Services		2	2	
02 - 64 Total		1	6	7	
Grand Total		5	18	23	2

E.coli by hospital

Count of Hosp Number		Year Month / Time Band															
		2009 - 4		2009 - 4 Total	2009 - 5		2009 - 5 Total	2009 - 6		2009 - 6 Total	2009 - 7		2009 - 7 Total	2009 - 8		2009 - 8 Total	Grand Total
Age band2	Hosp	< 2	> 2		< 2	> 2		< 2	> 2		< 2	> 2		< 2	> 2		
> 64	BCH	3	5	8		4	4	1	7	8	1	5	7	1	1	2	27
	MH	1	2	3	1	1	2	1	2	3	1	5	6	1	1	2	16
	MPH				1		1								2	2	9
	RVH	1	12	13		5	6		4	4		1	2	1	8	9	32
> 64 Total		3	15	17	2	10	12	7	11	15	3	11	14	3	12	15	78
02 - 64	BCH		1	1	1	2	3	2	8	10	1	1	5		2	2	19
	MH		1	1		2	3								1	1	4
	MPH														1	1	1
	RVH		4	4	1	1	2	1	5	6	1	1	4	1	2	3	19
02 - 64 Total			6	6	2	5	7	3	11	14	2	5	7	1	6	7	43
Grand Total		3	25	28	4	15	19	5	26	35	4	17	21	4	18	22	123

MRSA by hospital

Count of Hosp Number		Year Month / Time Band														
		2009 - 4		2009 - 4 Total	2009 - 5		2009 - 5 Total	2009 - 6		2009 - 6 Total	2009 - 7	2009 - 7 Total	2009 - 8		2009 - 8 Total	Grand Total
Age band	Hosp	< 2	> 2		< 2	> 2		< 2	> 2		> 2		< 2	> 2		
(blank)	BCH	3	2	5	1	1	2	2	1	3			1	2	5	15
	MH		1	1	1	1	2	2		2				1	1	6
	RVH		1	1		1	1	1	1	2	2	2		1	1	6
(blank) Total		3	5	8	2	3	5	5	2	7	2	2	1	4	7	29
Grand Total		3	5	8	2	3	5	5	2	7	2	2	1	4	7	25

MSSA by hospital

Count of Hosp Number		Year Month / Time Band																		
		2009 - 4		2009 - 4 Total	2009 - 5		2009 - 5 Total	2009 - 6		2009 - 6 Total	2009 - 7		2009 - 7 Total	2009 - 8		2009 - 8 Total	2009 - 9		2009 - 9 Total	Grand Total
Age band	Hosp	< 2	> 2		< 2	> 2		< 2	> 2		< 2	> 2		< 2	> 2		< 2	> 2		
(blank)	BCH	1	5	6	2	4	6	1	1	2	2	1	3	2	1	3	1	1	2	22
	MH		3	3	1		1					1	2	1	3	4				9
	RVH	3	4	7	1	2	3	4	6	10	3	5	8		4	6		1	1	33
(blank) Total		4	11	15	4	6	10	5	7	12	5	8	13	3	8	11	1	2	3	64
Grand Total		4	11	15	4	6	10	5	7	12	5	8	13	3	8	11	1	2	3	64

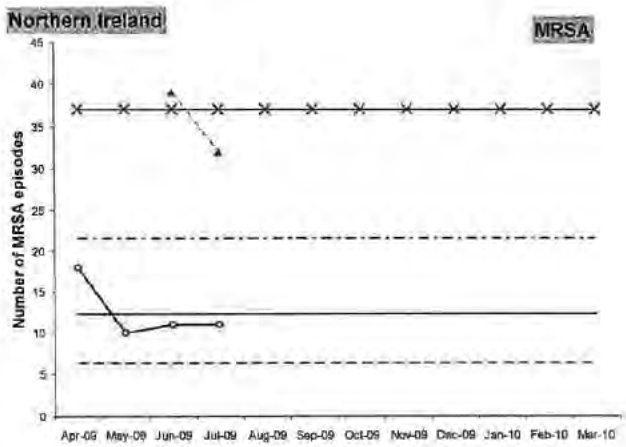
Belfast Trust

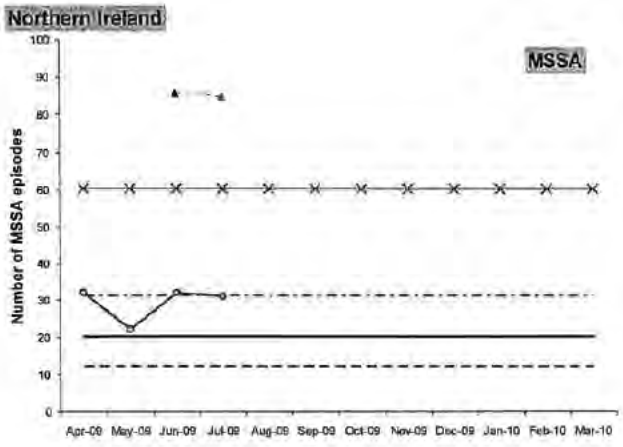
Target Monitoring

S. aureus and *C. difficile*

July 2009

Figure 2 NI performance figures based on monthly data and 3 monthly rolling totals for a) MRSA; b) MSSA and; c) *C. difficile* (>65 year old inpatients) (see Appendix 1 for derivation).





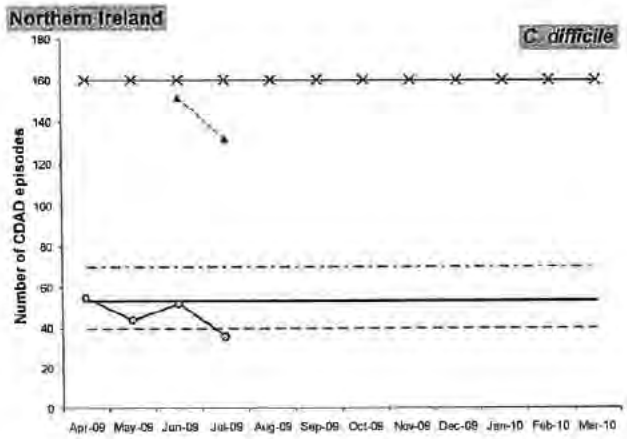
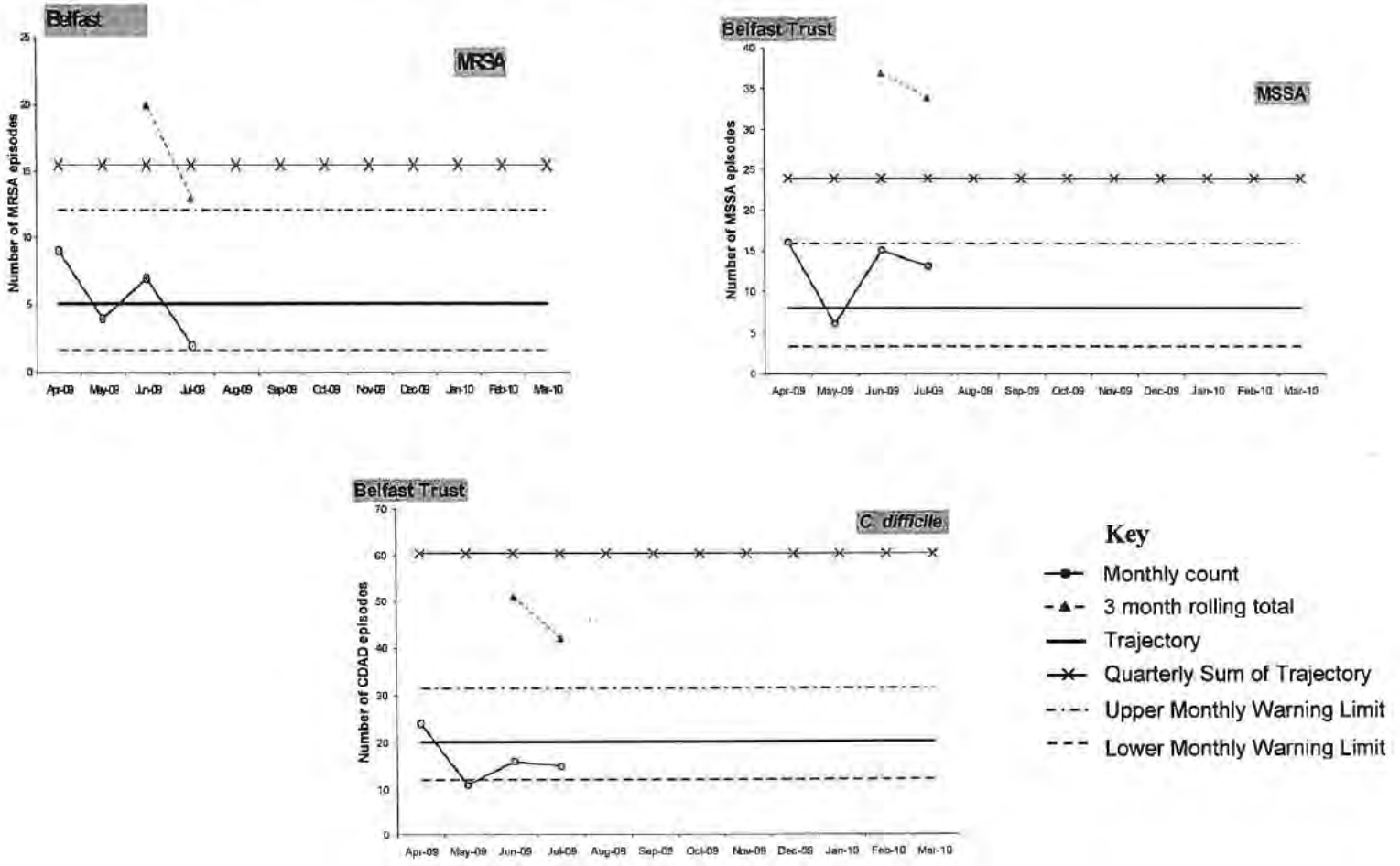


Figure 4 Trust performance figures based on monthly data and 3 monthly rolling totals for a) MRSA; b) MSSA and; c) *C. difficile* (>65 year old inpatients) (see Appendix 1 for derivation).



Appendix 1

Trajectory figures (figures 1 and 3)

- The bar chart represents monthly numbers derived from figures supplied to CDSC(NI) during the quarterly validation process. Shaded bars show un-validated figures taken from the data supplied weekly to SDU.
- The cumulative trajectory line shows the monthly cumulative total based on the monthly trajectory figure.
- The cumulative count (dashed line) is the cumulative total of the monthly figures. If this line rises above the trajectory line, it indicates that the target will not be met.

Performance Figures (figures 2 and 4)

- The circular points on the chart represent the monthly number of MRSA/MSSA or *C. difficile* episodes that have been reported by the Trust. These figures have been calculated using the validated quarterly figures supplied to CDSC(NI). Points in lilac represent un-validated monthly figures sent to SDU.
- The trajectory line has been calculated for each Trust and represents the maximum number of episodes that a Trust can report in a month to remain on target.
- Due to the natural variation that can occur upper and lower warning limits have been calculated based on the **monthly trajectory target**. If the upper limit is exceeded and repeated this suggests that special cause variation is occurring, for example, an outbreak.
- A 3 monthly rolling total has been calculated to smooth out variation that can occur over shorter times (denoted by a triangle in each figure) and this can be compared to the quarterly sum trajectory line to determine if the Trust is on target over a 3 monthly period (represented by an x). These points will change as they require 3 months data to generate one point.

Week commencing 21.09.09

HII's- Critical Care, Perioperative and Imaging services BHSCT														
Source	Central		Peripheral		Renal		S Site	VAP		Urinary		C.Diff	Hand Hygiene	
Bundle No.	**1**	**1b**	**2**	**2b**	**3**	**3b**	**4**	**5**	**5b**	**6**	**6b**	**7**	**BBE**	**Before & after**
Critical care														
RICU/HDU	Recorded monthly 100%	100%	100%	100%				Recorded monthly 99%	50%	No	60%	100%	80%	86%
BCH	NS	100%	NS	100%				100%	100 %	NS	100%	NS	100%	100%
MIH	NS	NS	NS	NS	NS	NS		NS	NS	NS	NS	NS	NS	NS
RVH level 3	No		100%		No		SSi			100%			100%	98%
RVH E&ENT	No		44%		No		SSi			No			100%	100%
RVH DPU	No	NS	100%		No		SSi			No			100%	100%
RVH 4D	No	NS	No	100% ongoing audit			NS						100%	100%
BCH Tower block	NS		NS		NS		NS			NS			95%	100%
BCH Dufferin	NS		NS		NS		NS			NS			NS	NS
BCH DPU	No		67%		No		audit			100%			NS	NS
MIH main Theatre	No	NS	100%		No		Ongoin g audit			No			100%	100%

MIH DPU	No	NS	100%		No		Ongoing audit			No			100%	100%
BCH	NS		NS	NS	NS					NS			NS	NS
RVH	NS		2%		NS					1%			NS	NS

Green	>95%	Compliant with target
Amber	50%%-94%	Action required
Red	<49%	Urgent action required
NO		No Observations
NS		Data not submitted

Safety Forum

Quarterly Report – July to September 2009

Steering Committee

• Dr Eddie Rooney now Chair of Steering Committee
• Second meeting held 6 August 2009
  o Agreed that quarterly accountability progress report will be circulated to *core* Steering Committee members
  o Progress against Business Plan will be a standing item at each committee meeting
  o 10 minute presentation on Safety Forum work at next committee meeting on 5 November 2009.

WORK AREAS
PfA 08/09/10

• A regional definitions document was agreed and produced, except for VAP and CVC-BSI in ICU both of which will be taken forward by HISC/CCaNNI. These definitions were shared at the relevant Learning Sessions
• The PMSID Reporting template is being updated to include run charts as agreed by PMSI (Board) and the Forum. Ongoing work with PMSI and PSO's at Trusts
• Trusts have successfully submitted 2009-2010 QIPs (including WHO Checklist aim) and VTE QIP
• Learning sessions 4 of the Pfa 08/09 Collaboratives (Crash Calls, SSI –ortho and C Section, Mental Health) took place during the week beginning September 21, 2009. Attendance was as follows: Mental Health = 30; Crash Calls = 28; SSI = 35 (Belfast Trust were unable to send a team to the SSI session due to local pressures)
• There will be further Learning sessions for Mental Health, Crash Calls and SSI C-section; SSI bundle now reliably implemented in Ortho.
• VTE QIPs submitted by all Trusts
  o First Learning Session of VTE Collaborative held on September 23, 2009. All 5 Trusts participated (Attendance =25). Belfast Trust will explore further with Safety Forum the feasibility of a high level outcome measure for the Collaborative. Data being obtained from all Trusts re resource implications.
  o The English VTE Exemplar group have invited Trusts for Northern Ireland to join, as well as offered educational opportunities. This was addressed and considered by participants at the first learning session and we will provide the England leads with the Trusts' feedback
  o Learning Session 2 scheduled for 20 January 2010

WHO Surgical Checklist
• Following a WHO Checklist conference call which resulted in a regional agreement to "have 50% of theatres implement *reliably* the WHO Checklist by March 2010" Trusts have begun work on Checklist implementation. A Safety Forum Collaborative will be offered to support this work.
Perinatal
• An agreement was reached on a Conference Call to adapt the RCOG Dashboard and generate (with NIMATS DATA where available) a local dashboard with regionally agreed core measures • LS4 of the Perinatal Collaborative took place on 24 September 2009 and, in addition to Trust feedback (all except Belfast Trust which was unable to send a team)

• Preparations well advanced for 19 November 2009 Conference on Involving Patients in Improving Safety (Acute Care)
Stroke
• Paper presented to Regional Stroke Strategy Group 14 September 2009 • Belfast (RVH/BCH) agreed as pilot site for thrombolysis pilot • Stroke Collaborative planned to commence spring 2010
Collaborative working with key stakeholders
• Meetings attended with Ambulance Trust, RQIA, GAIN, NIPEC, QUB, UU, BMC, Board. • Advice to PMSI at Board • Ongoing links with SQS (DHSSPS) • Participation in Regional Quality Strategy Project Team • NIMDTA -Presentation to all N Ireland F1 doctors (3 August 2009) • QUB – Presentation to Year 3 Medical Students (3 September 2009)

campbell, conor

From: Jo Bibby [The.Health.Foundation@cmp.charityemail.org.uk]
Sent: 30 September 2009 15:23
To: campbell, conor
Subject: Innovation fund: Give your ideas a chance to shine

Dear Conor

Could you help us to find a star individual or team who could take advantage of a fast-track innovations award and give their idea the chance to Shine?

Shine is our new annual award focusing on innovation. Each year we will be looking for ideas that tackle a key challenge to high quality care.

We all want the best health service and we all have ideas about how to improve it, but good ideas only become good practice when there's an opportunity to develop, test and gather evidence to support them.

We're looking for examples of smart thinking from across the health service. For our part, we'll provide:

- the resources to test and evaluate a team's idea
- ensure that successful innovations have a platform for national recognition
- promote the most effective innovations to policy-makers and NHS leaders.

We are looking to invest £75,000 in each of 18 teams from across the health service: commissioning, primary care, acute care, mental health and beyond. We're seeking people with the best innovative ideas and the skills to put together an innovations trial to develop and test that thinking.

What's the Shine challenge for 2009?
This year's Shine challenge is: Find new approaches to delivering healthcare that will both improve quality and save money.

In the current financial climate, cost improvements are going to be a key focus of healthcare organisations. By stimulating thinking, ideas and action among healthcare professionals, new innovative ways to release cash – while not losing quality – can be tested in practice. The best ideas will go beyond the well-tried approaches to improving efficiency and instead, will use radical innovation to deliver better outcomes through different inputs and processes.

Pass on the challenge

Kelly, SharonA

From: McWilliams, Danny
Sent: 05 October 2009 15:41
To: Kelly, SharonA
Subject: HCAI

Tony

I have enclosed information we discussed. The first document shows the 'Outcomes' as in HCAI against targets, then with a 2 days split and then with comparative NI and English figure.

The excel documents are the 'Process' measures and contain:
1)Hand hygiene by SG and then with reliability and compliance range, the only info' missing is the participation which I am putting in once I speak to Conor.

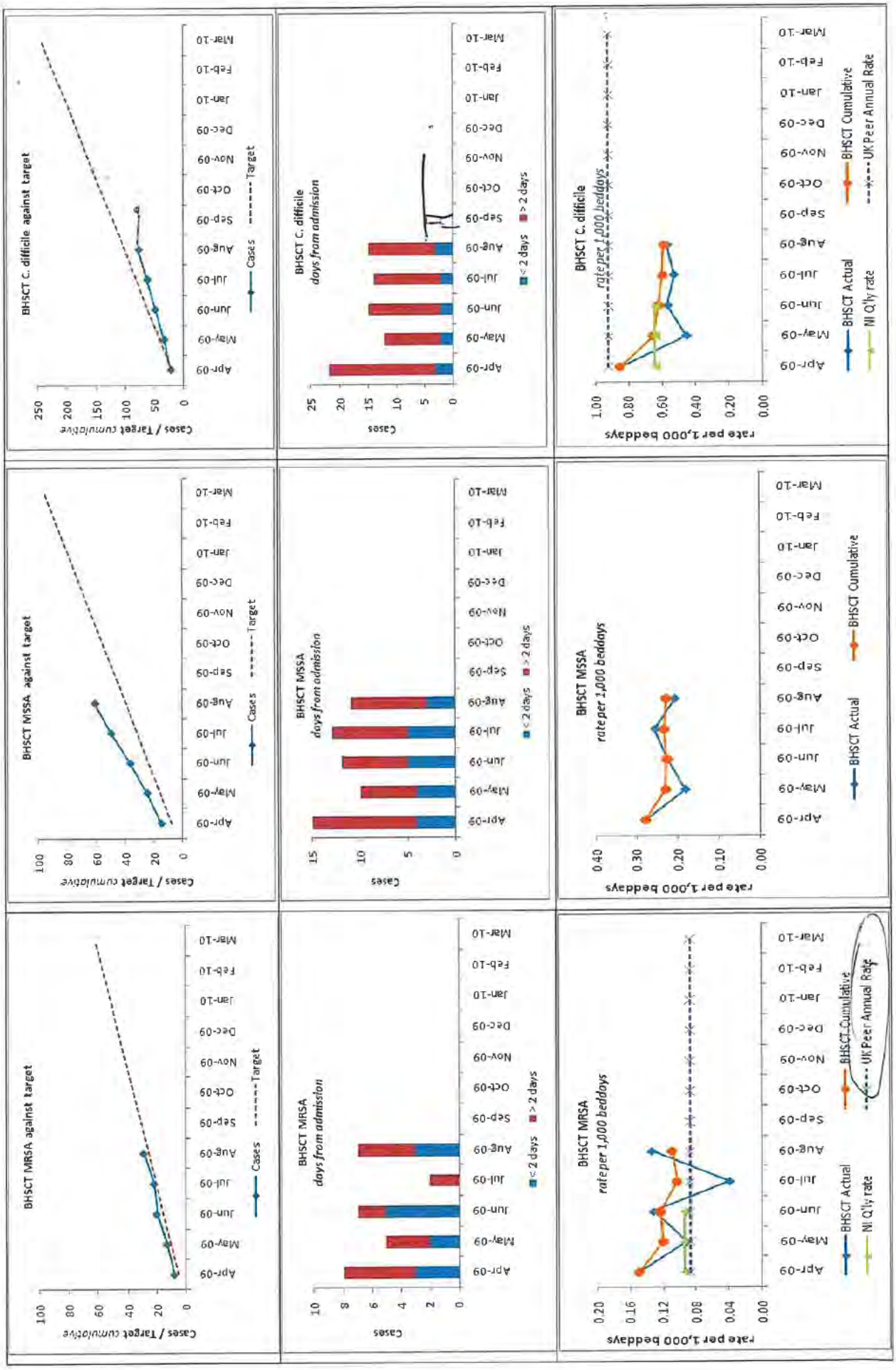
2)Next included is a summary of the latest week for HII Scorecards across the Trust presented in a summary form which gives a reliability and participation view. Until the new system is up and running we cannot give any proper trended/aggregate analysis and this is the best we can do at short notice-it at least gives performance within context, this demonstrates the advantage of procuring the new system. Really this is very operational information and was designed initially within that context, re-modelling this in our new system gives very new possibilities of linking across indicators to see the relationship between processes and outcomes more clearly and seamlessly.

3)The RCA analysis is included also at summary level.

Apologies for the word/excel sheets but perhaps Sharon could put these into something more , I just want you to see what we have asap as time is short but I will fit in as much as possible before the deadline.

Thanks

Danny


BHSCT C. difficile against target
Cases / Target cumulative
Cases
Target
BHSCT C. difficile
days from admission
Cases
< 2 days
> 2 days
BHSCT C. difficile
rate per 1,000 beddays
rate per 1,000 beddays
BHSCT Actual
BHSCT Cumulative
NI Q'ly rate
UK Peer Annual Rate
BHSCT MSSA against target
BHSCT MSSA
days from admission
BHSCT MSSA
rate per 1,000 beddays
BHSCT MRSA against target
BHSCT MRSA
days from admission
BHSCT MRSA
rate per 1,000 beddays
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10

Belfast HCAI April to August 2009-Outcomes Part B

Belfast Trust HCAI April to August 2009 Processes A-Hand Hygiene Service Group Summary

Month	OPMS					Specialist Services					Mental Health					Clinical Services					SSFC					OVERALL				
	COMP	OBS	%	QTR	w	COMP	OBS	%	QTR	w	COMP	OBS	%	QTR	w	COMP	OBS	%	QTR	w	COMP	OBS	%	QTR	w	COMP	OBS	%	QTR	w
Apr-09	2336	2741	85.22	83.89	44	3729	4279	87.15	86.51	71	296	320	92.50	89.57	4	193	216	89.35	90.73	3	153	190	80.53	79.71	3	6687	7746	86.33	85.79	124
May-09	2019	2260	89.34	86.52	42	3144	3493	90.00	87.36	66	321	353	90.93	92.93	5	186	231	81.39	85.67	9	75	80	93.75	83.71	1	5747	6417	89.56	87.18	123
Jun-09	2958	3359	88.06	87.48	60	2870	3203	89.60	88.77	85	261	290	77.31	86.82	5	269	292	92.12	87.96	6	206	247	83.40	83.96	8	6235	7361	84.70	86.74	126
Jul-09	3125	3474	89.95	89.10	65	2174	2325	93.54	90.77	48	150	186	80.65	84.11	3	293	288	94.49	89.76	4	771	1010	76.34	78.66	16	6473	7283	88.12	87.21	136
Aug-09	5606	6304	92.10	90.50	99	3918	4206	93.15	92.07	58	61	100	61.00	79.12	2	230	240	95.83	94.06	3	1022	1240	82.42	80.06	11	11057	12090	91.46	88.96	133

COMP	COMPLIANT OBSERVATIONS
OBS	TOTAL OBSERVATIONS
%	PERCENTAGE COMPLIANCE
QTR	QUARTERLY AVERAGE
W	NUMBER OF WAVES

95.27%

COMPLIANCE RANGE (%)	2009 MAY		2009 JUNE		2009 JULY		2009 AUGUST	
	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
OPMS (59)	55		38.39		55		50	
SPECIALIST SERVICES (5	47.5		51.22		55		74	
CLINICAL SERVICES (3)	50		75		87		94.44%	
MENTAL HEALTH (2)	76		51.67		57.50%		30%	
SSFC (11)	93.75		40		36.67%		0	

RELIABILITY RANGE	2009 JUNE			2009 JULY			2009 AUGUST		
	<85%	85 - 95%		<85%	85 - 95%		<85%	85 - 95%	
OPMS (59)	16 (26.67%)	21 (35.00%)	23 (38.33%)	16 (24.62%)	18 (27.69%)	31 (47.69%)	11 (18.64%)	18 (30.51%)	30 (50.85%)
SPECIALIST SERVICES (5	12 (26.09%)	8 (17.39%)	26 (56.52%)	5 (10.42%)	11 (22.92%)	32 (66.67%)	5 (6.62%)	8 (13.79%)	45 (77.59%)
CLINICAL SERVICES (3)	1 (16.67%)	2 (33.33%)	3 (50.00%)	0	1 (25.00%)	3 (75.00%)	0	1 (33.33%)	2 (66.67%)
MENTAL HEALTH (2)	2 (40.00%)	1 (20.00%)	2 (40.00%)	2 (66.67%)	0	1 (33.3%)	1 (50%)	1 (50%)	0
SSFC (11)	5 (55.56%)	2 (22.22%)	2 (22.22%)	10 (62.5%)	5 (31.25%)	1 (6.25%)	7 (63.64%)	2 (18.18%)	2 (18.18%)
OVERALL (133)	36 (28.57%)	34 (26.98%)	56 (44.44%)	33 (24.26%)	35 (25.74%)	68 (50.00%)	24 (18.05%)	30 (22.56%)	79 (59.40%)

Belfast Trust HCAI April to August 2009 Processes B - High Impact Interventions week Commencing 21st September 2009

RELIABILITY BREAKDOWN

			Central Line						Peripheral						Renal			Urinary						Dress Code		
			1 Insertion			1b Maintenance			2 Insertion			2b Maintenance			3 Insertion			5 Insertion			6b Maintenance			Bare Below The Elbow		
SG	SUBGROUP	UNITS	<85%	85 - 95%		<85%	85 - 95%		<85%	85 - 95%		<85%	85 - 95%		<85%	85 - 95%		<85%	85 - 95%		<85%	85 - 95%		<85%	85 - 95%	
SPEC Serv	BCH	19	0	0	0	0	0	4 (21.05%)	0	0	14 (73.68%)	0	0	10 (52.63%)	0	0	1 (5.26%)	0	0	4 (21.05%)	1 (5.26%)	0	9 (47.37%)	0	4 (21.05%)	14 (73.68%)
	MIH	3	0	0	0	0	0	0	0	0	3 (100%)	0	0	2 (66.67%)	0	0	0	0	0	0	0	0	0	0	0	3 (100%)
	MPH/FG	5	0	0	0	0	0	1 (20%)	0	0	3 (60%)	0	0	3 (60%)	0	0	0	0	0	2 (40%)	0	1 (20%)	3 (60%)	0	0	5 (100%)
	RVH	22	0	0	1 (4.55%)	0	1 (4.55%)	2 (9.09%)	2 (9.09%)	0	7 (31.82%)	1 (4.55%)	2 (9.09%)	8 (36.36%)	0	0	0	0	1 (4.55%)	2 (9.09%)	2 (9.09%)	0	6 (27.27%)	1 (4.55%)	2 (9.09%)	18 (81.82%)
SSFC	RBHSC	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3 (21.43%)	5 (35.71%)	1 (7.14%)
	MATERNITY	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3 (27.27%)	3 (27.27%)	5 (45.45%)
	GYNAE	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 (12.50%)	0
	KBHP/MPH	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 (33.33%)	0	1 (33.33%)
OPMS	OLDER PEC	12	0	0	0	0	0	0	1 (8.33%)	0	11 (91.67%)	1 (8.33%)	0	11 (91.67%)	0	0	0	0	0	4 (33.33%)	1 (8.33%)	0	9 (75.0%)	0	0	12 (100%)
	MEDICINE	10	0	0	0	0	0	0	4 (40%)	1 (10%)	4 (40%)	0	3 (30%)	6 (60%)	0	0	0	0	0	5 (50%)	1 (10%)	1 (10%	7 (70%)	0	4 (40%)	5 (50%)
	SURGERY	10	0	0	0	0	0	2 (20%)	0	1 (10%)	9 (90%)	1 (10%)	2 (20%)	7 (70%)	0	0	0	0	0	7 (70%)	0	2 (20%)	8 (80%)	1 (10%)	3 (30%)	8 (80%)
	EMERGENC	6	0	0	0	0	0	0	0	1 (16.67%)	4 (66.67%)	1 (16.67%)	1 (16.67%)	0	0	0	0	0	0	3 (50%)	1 (16.67%)	0	1 (16.67%)	0	0	5 (83.33%)
	T & O	17	0	0	1 (5.88%)	0	0	7 (41.18%)	1 (5.88%)	0	9 (52.94%)	0	3 (17.65%)	10 (58.82%)	0	0	0	0	0	6 (35.29%)	0	1 (5.88%)	11 (64.71%)	1 (5.88%)	2 (11.76%)	14 (82.35%)
	OPD/DPU	7	0	0	0	0	0	0	0	0	1 (14.29%)	0	0	0	0	0	0	0	0	0	0	0	0	1 (14.29%)	0	6 (85.71%)
	KNOCKBRA	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 (33.33%)	2 (66.67%)
SPEC Serv	OVERALL	49	0	0	1 (2.04%)	0	1 (2.04%)	7 (14.28%)	2 (4.08%)	0	17 (34.69%)	1 (2.04%)	2 (4.08%)	13 (26.53%)	0	0	1 (2.04%)	0	1 (2.04%)	8 (16.33%)	3 (6.12%)	1 (2.04%)	18 (36.73%)	1 (2.04%)	6 (12.24%)	20 (40.82%)
SSFC	OVERALL	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7 (19.44%)	9 (25%)	7 (19.44%)
OPMS	OVERALL	65	0	0	1 (1.54%)	0	0	9 (13.85%)	6 (9.23%)	3 (4.62%)	38 (58.46%)	3 (4.62%)	9 (13.85%)	34 (52.31%)	0	0	0	0	0	25 (38.46%)	3 (4.62%)	4 (6.15%)	36 (55.38%)	3 (4.62%)	10 (15.38%)	50 (76.92%)
BHSCT	OVERALL	150	0	0	2 (1.33%)	0	1 (0.67%)	16 (10.67%)	8 (5.33%)	3 (2%)	55 (10%)	4 (2.67%)	11 (7.33%)	57 (24.67%)	0	0	1 (0.67%	0	1 (0.67%)	13 (8.67%)	6 (4%)	5 (3.33%)	54 (36%)	11 (7.33%)	25 (16.67%)	77 (51.33%)

UNIT PARTICIPATION

			Central Line		Peripheral		Renal	Urinary		Dress Code
SG	SUBGROUP	UNITS	1	1b	2	2b	3	5	6b	BBTE
SPEC S	BCH	19	0	4 (21.05%)	14 (73.68%)	10 (52.63%)	1 (5.26%)	4 (21.05%)	10 (52.63%)	18 (94.74%)
	MIH	3	0	0	3 (100%)	2 (66.67%)	0	0	0	3 (100%)
	MPH/FG	5	0	1 (20%)	5 (80%)	3 (60%)	0	2 (40%)	4 (80%)	5 (100%)
	RVH	22	1 (4.55%)	7 (31.82%)	9 (40.91%)	11 (50%)	0	3 (13.64%)	8 (36.36%)	21 (95.45%)
SSFC	RBHSC	14	0	0	0	0	0	0	0	9 (64.29%)
	MATERNITY	11	0	0	0	0	0	0	0	11 (100%)
	GYNAE	8	0	0	0	0	0	0	0	1 (12.5%)
	KBHP/MPH	3	0	0	0	0	0	0	0	2 (66.67%)
OPMS	OLDER PEC	12	0	0	12 (100%)	12 (100%)	0	5 (41.67%)	10 (83.33%)	12 (100%)
	MEDICINE	10	0	0	9 (90%)	9 (90%)	0	5 (50%)	9 (90%)	9 (90%)
	SURGERY	10	0	2 (20%)	10 (100%)	10 (100%)	0	7 (70%)	10 (100%)	10 (100%)
	EMERGENC	6	0	0	5 (83.33%)	2 (33.33%)	0	4 (66.67%)	1 (16.67%)	5 (83.33%)
	T & O	17	1 (5.88%)	7 (41.18%)	10 (58.82%)	13 (76.47%)	0	6 (35.29%)	12 (70.59%)	17 (100%)
	OPD/DPU	7	0	0	1 (14.29%)	0	0	0	0	7 (100%)
	KNOCKBRA	3	0	0	0	0	0	0	0	3 (100%)
SPEC S	OVERALL	49	1 (2.04%)	12 (24.49%)	29 (59.18%)	26 (53.06%)	1 (2.04%)	9 (18.37%)	22 (44.90%)	47 (95.92%)
SSFC	OVERALL	36	0	0	0	0	0	0	0	23 (63.89%)
OPMS	OVERALL	65	1 (1.54%)	9 (13.85%)	47 (72.31%)	46 (70.77%)	0	25 (38.46%)	43 (66.15%)	63 (96.92%)
BHSCT	OVERALL	150	2 (1.33%)	21 (14%)	76 (50.67%)	72 (48%)	1 (0.67%)	34 (22.67%)	65 (43.33%)	133 (88.67%)

Belfast Trust HCAI April to August 2009 Processes C- Root cause Analysis for HCAI

Summary

Apr-09	Total No of RCAs required	Total No of RCAs Completed	Compliance
OPMS	4	3	75%
Specialist services	2	2	100%
May-09	**Total No of RCAs required**	**Total No of RCAs Completed**	**Compliance**
OPMS	3	3	100%
Specialist services	3	3	100%
Jun-09	**Total No of RCAs required**	**Total No of RCAs Completed**	**Compliance**
OPMS	7	2	35%
Specialist services	2	2	100%
Clinical services	3	3	100%
SSF & CC	0	0	na
Jul-09	**Total No of RCAs required**	**Total No of RCAs Completed**	**Compliance**
OPMS	4	4	75%*
Specialist services	4	1	25%
Clinical Services	2	2	100%
Aug-09	**Total No of RCAs required**	**Total No of RCAs Completed**	**Compliance**
OPMS	3	0	0%
Specialist services	6	1	17%
Clinical Services	1	0	0%
SSF & CC	1	1	100%
Trust Total Apr-Aug09	**45**	**27**	**60%**

Belfast Health and Social Care Trust

TRUST BOARD

PERFORMANCE REPORT

July 2011

Contents

1.0 INTRODUCTION

This paper sets out the performance report for the period up to the end of July 2011. The objective of the report is to present a summary of Trust performance in relation to key indicators and targets for 2011/12.

2.0 REPORT FORMAT

The performance report has been developed for 2011/12 to reflect the five key strategic objectives for the organisation as set out in the Trust vision and corporate plan.

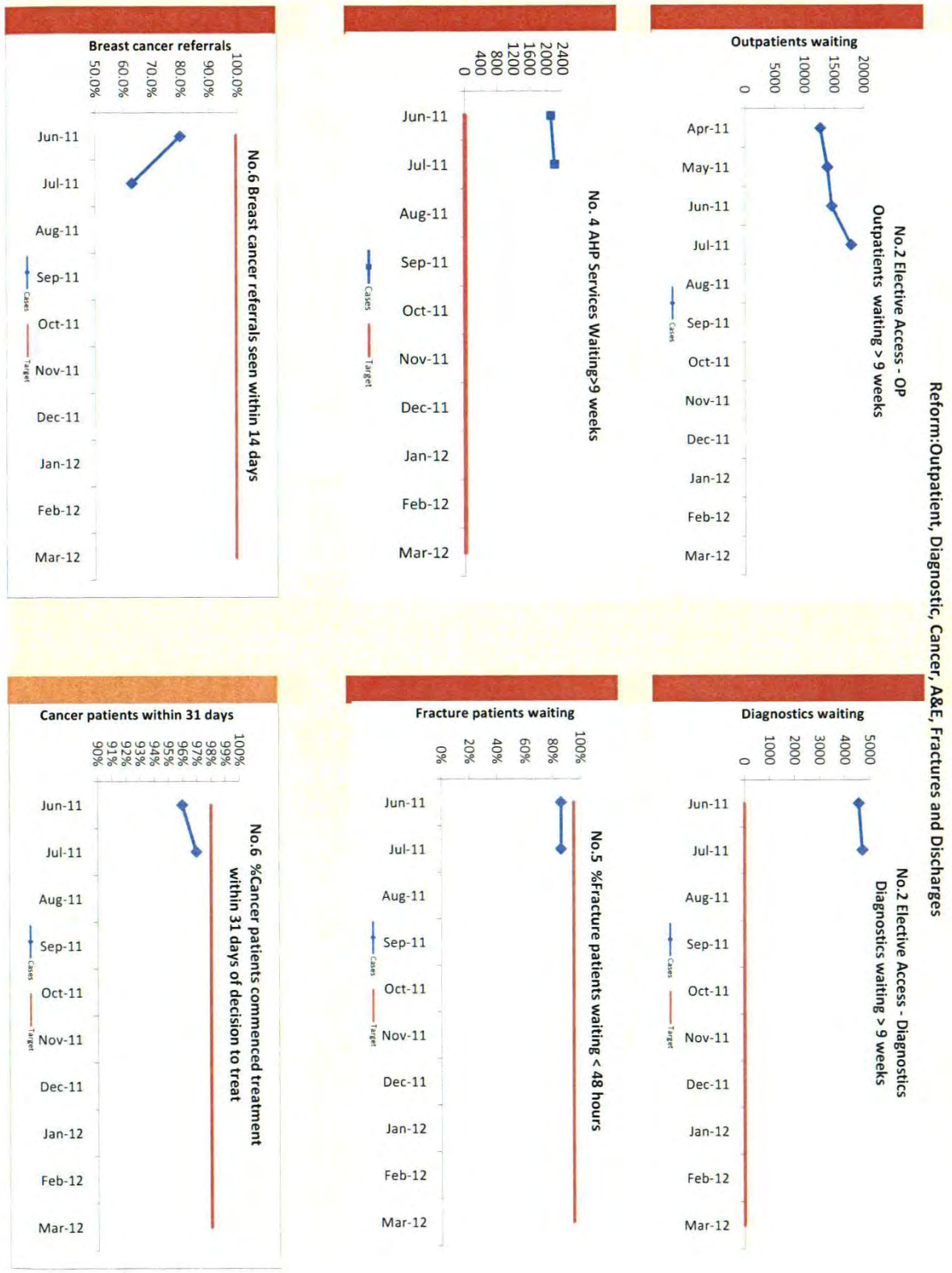
The report format will include the following:

- Section 1: Key performance indicators (linked to Trust strategic objectives) - reflecting in the main the key targets which the Trust is required to deliver in 2011/12. These include key targets outlined in the DHSSPS Commissioning Directions document and the Draft HSCB Commissioning Plan. A summary of activity delivered since the beginning of the financial year is also provided, to set in context the scale of the work undertaken by the Trust in relation to the targets above.

- Section 2: Quality and safety - incorporating key targets and indicators linked to this organisational objective. This section will include an update on Trust progress in relation to the implementation of the Quality Improvement Plans for infection prevention and control and a range of other patient safety areas.

- Section 3: Service and Budget Agreement – The Trust and HSCB are reviewing the final outcomes from the Acute Capacity Planning Exercise. The outcomes of the exercise are being used to inform investment decisions relating to elective access funding in 2011/12and future proposed volumes of activity for a number of specialties. Pending the outcome of the above, a summary of Trust performance against historical Service and Budget Agreements figures is provided.

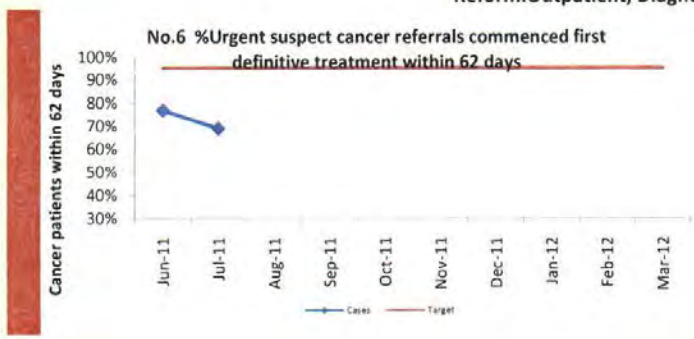
Target	July 11				
Modernisation and Reform					
1. Specialist Drug Therapies					
a. Arthritis – 9 months waiting time					
b. MS – 13 weeks waiting time	N/A				
c. Wet AMD – 9 weeks waiting time					
2. Elective Access					
a. Outpatients – majority 9 weeks; no patient longer than 21 weeks					
b. Inpatients/Daycases – majority 13 weeks; no patient longer than 36 weeks					
c. Diagnostics – 9 weeks					
3. Diagnostic Reporting					
4. AHP – 9 weeks					
5. Fractures – 48 hour					
a. 95% hip fractures within 48 hours					
b. 100% other fractures within 7 days					
6. Cancer					
a. 14 day OP appointment (urgent breast cancer referrals)					
b. 31 day – 98%					
c. 62 day – 95%					
7. A&E 4 hours – 95%					
8. Renal - Live Donor Transplants – 50					
9. Acute Hospital Discharges					
a. 90% within 48 hours (Complex discharges)					
b. 100% within 6 hours (Simple discharge)					
c. 100% within 7 days (Complex discharges)					
10. Children in Care – formal assessment					
11. Care leavers in education / training / employment – 70%					
12. Assessment of children at risk and in need					
13. MH - Resettlement					
14. MH - Access					
a. Mental Health – 9 weeks					
b. Psychological Therapies – 13 weeks					
15. Mental Health Discharges					
a. 75% within 7 days					
b. 100% within 90 days					
16. LD - Resettlement					
17. LD Discharges					
a. 75% within 7 days					
b. 100% within 90 days					
18. Wheelchairs – 75% w13 week wait (basic) and					
a. 13 week waiting time for 95% of basic wheelchairs					
b.13 week waiting time for 75% of basic wheelchairs	N/A				
19. Hearing Aids – 95% within 3 months	N/A				
20. Housing Adaptations – 22 weeks / 10 working days					
21. Autism – 13 week wait for assessment / 13 week wait for treatment					
22. Acquired Brain Injury – 13 week maximum wait					
Partnerships with Users, Community and Partners					
23. 45% older people care needs in a domiciliary setting					
24. Assessment and treatment older people					
a. 8 weeks for assessment					
b. 12 weeks – main components of care in place					
25. Direct Payments					
26. Complaints (end June)					
Organisational and Workforce Development					
27. Absence – 5%					
Quality and Safety					
28. CDiff (to end July)					
29. MRSA (to end July)					
30. VAP (to end June)					
31. CLI (to end June)					
32. Crash Calls (to end June)					
33. Surgical Site Infections (to end March)					
34. Prevention of venous thromboembolism	N/A				
35. Mental Health Quality Indicators (to end June)					

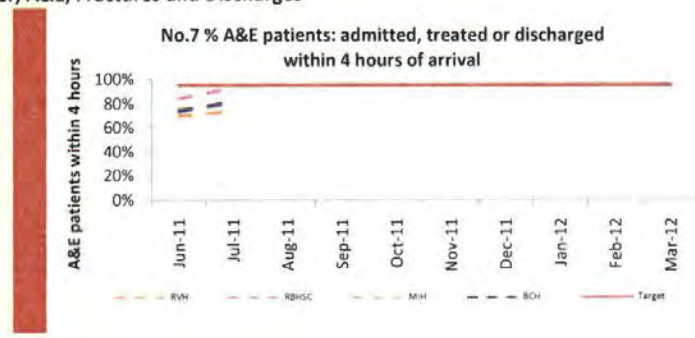


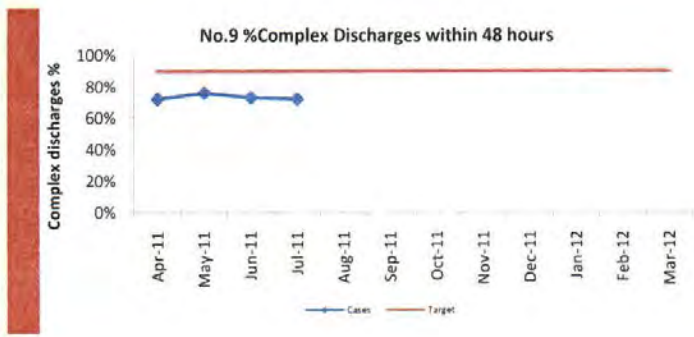
Belfast Trust Summary Report Graphs to end of July 2011

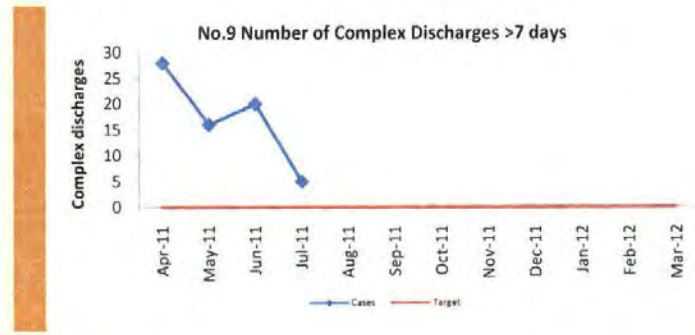
Belfast Trust Summary Report Graphs to end of July 2011

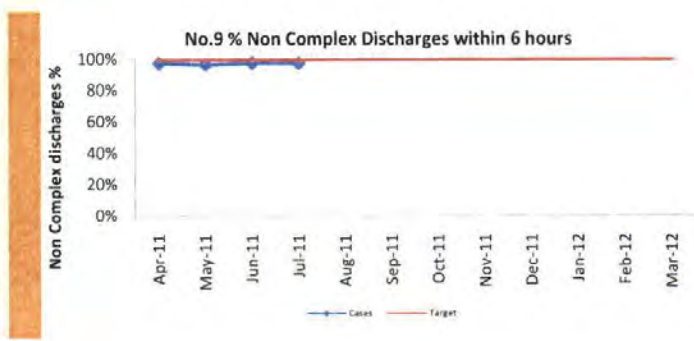
Reform:Outpatient, Diagnostic, Cancer, A&E, Fractures and Discharges

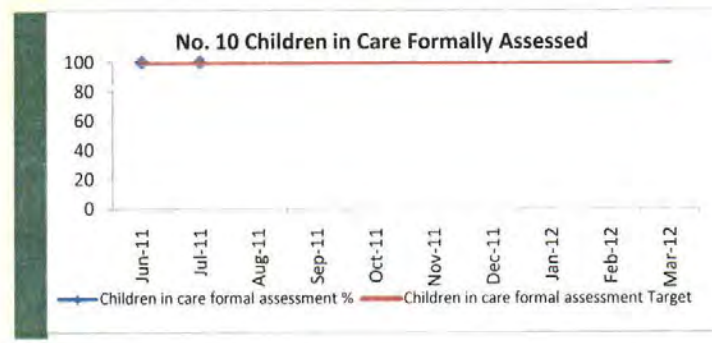






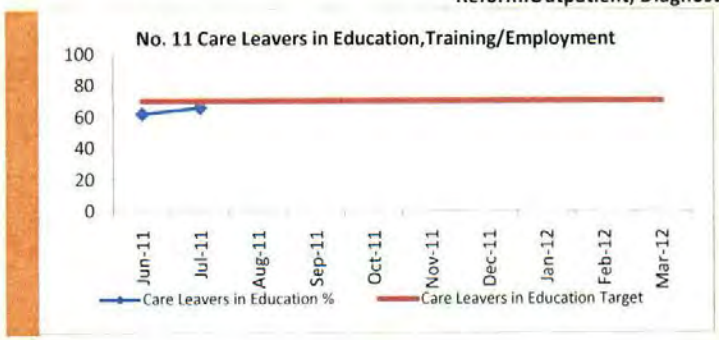


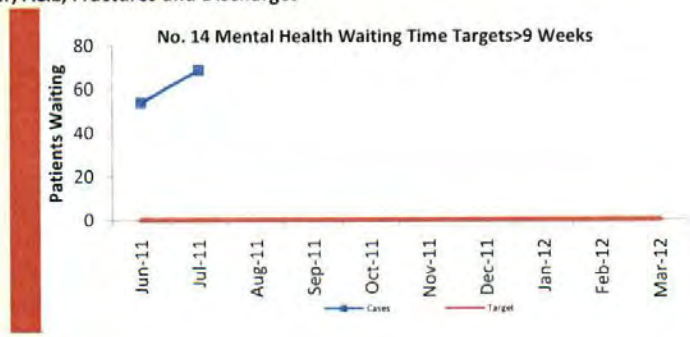


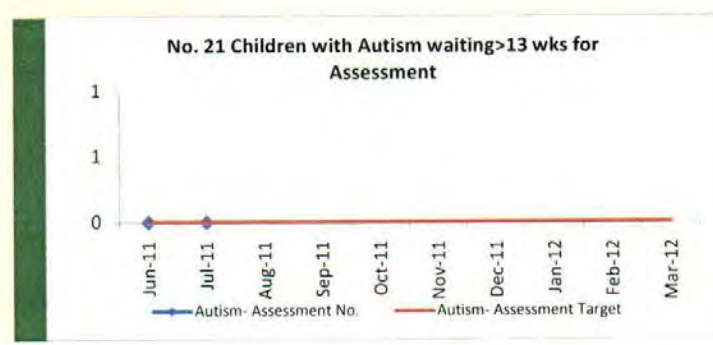


Belfast Trust Summary Report Graphs to end of July 2011

Reform:Outpatient, Diagnostic, Cancer, A&E, Fractures and Discharges

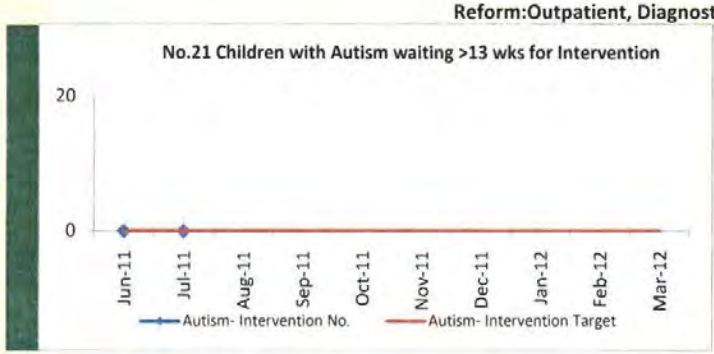




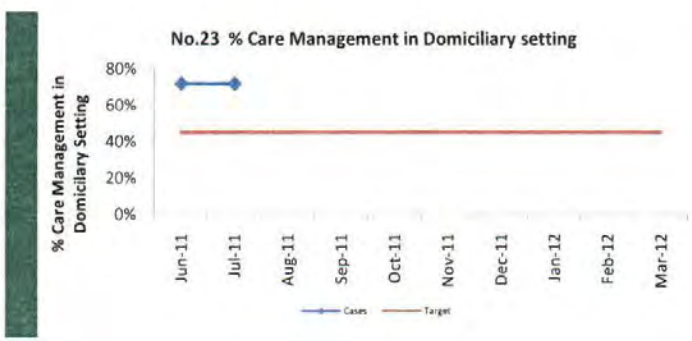


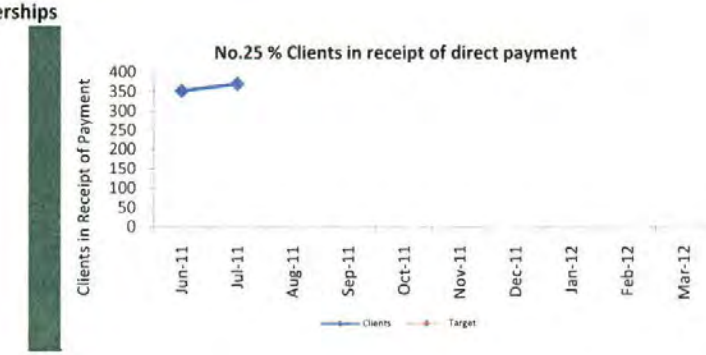
Belfast Trust Summary Report Graphs to end of July 2011

Reform:Outpatient, Diagnostic, Cancer, A&E, Fractures and Discharges

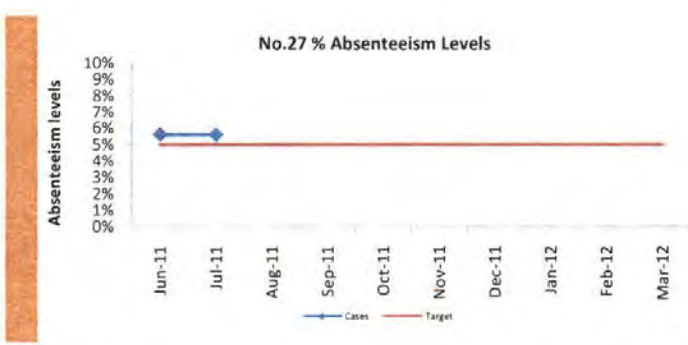


Partnerships



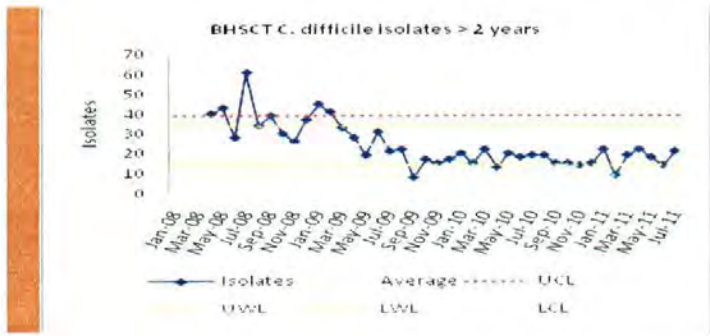


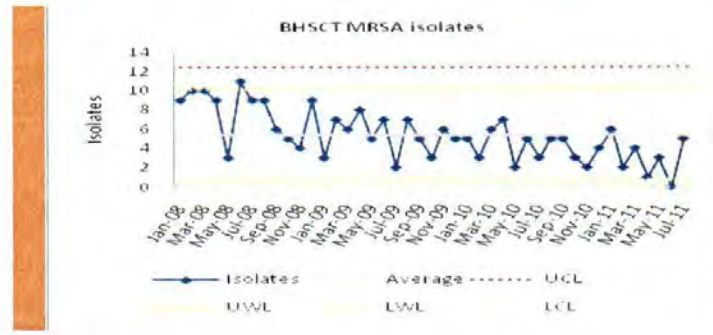
Workforce

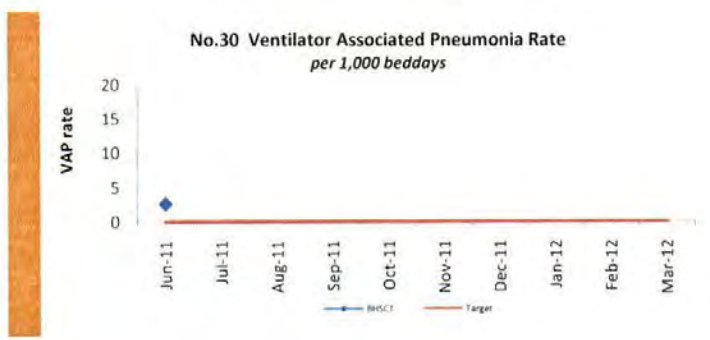


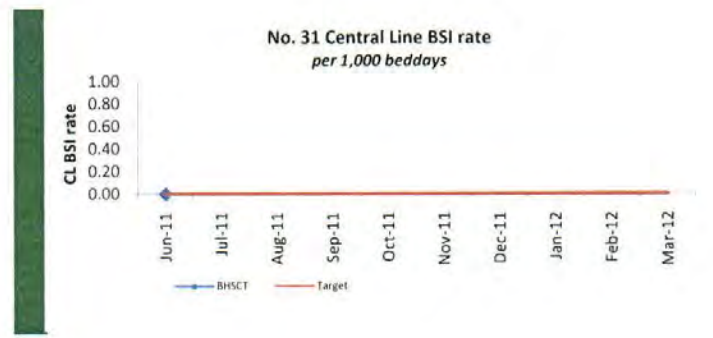
Belfast Trust Summary Report Graphs to end of July 2011

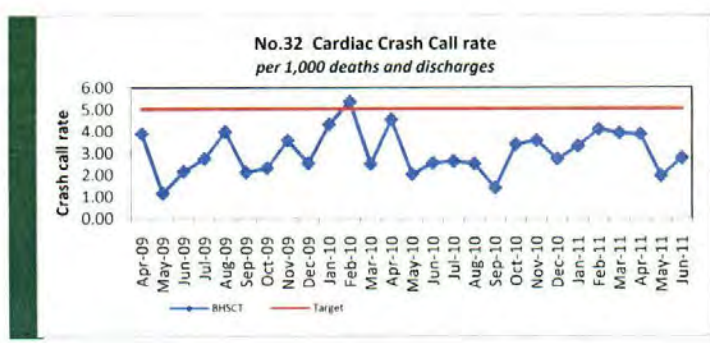
Patient Safety

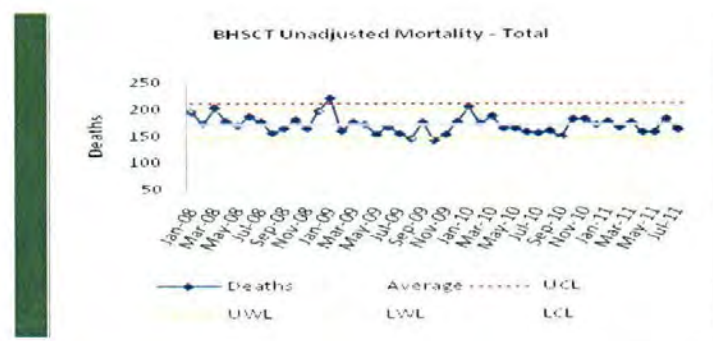












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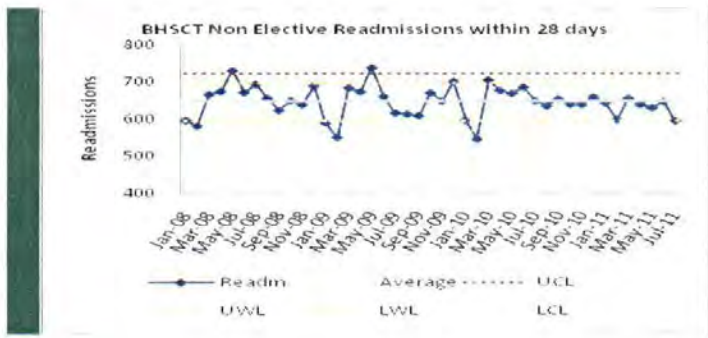
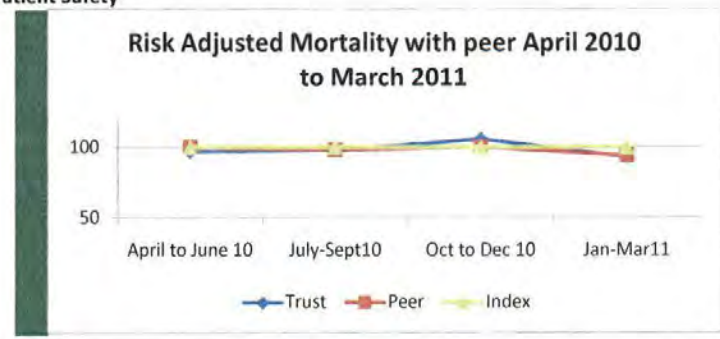


Patient Safety



Summary of Activity – April - July 2011

It is important to consider Trust performance against targets in the context of total activity delivered by Trust staff. The details below provide a summary of some of the work undertaken by Trust staff from April to July.

NB: 2010/11 data has been refreshed since the tabling of the end March 2011 Performance Report.

- Belfast Trust A&E Attendances

Month	10/11	11/12
April	14789	15271
May	15289	15112
June	14886	14333
July	14193	13829
August	14620	
September	14370	
October	14742	
November	13715	
December	14691	
January	14710	
February	13865	
March	15323	
Total	175193	

- Total acute finished consultant episodes (RVH / BCH / MIH / MPH) (elective and non elective, includes PPs & Non- N.I. Residents)

Month	10/11	11/12
April	12355	12203
May	12582	12390
June	12632	13083
July	12431	12142
August	11991	
September	12350	
October	12539	
November	12695	
December	12660	
January	12532	
February	11858	
March	13105	
Total	149730	

- Total daycases (RVH / BCH / MIH / MPH) (Includes PPs and Non-N.I. Residents)

Month	10/11	11/12
April	5762	5562
May	5715	6488
June	6559	6861
July	5722	5512
August	5932	
September	6708	
October	6467	
November	7310	
December	5867	
January	6476	
February	6073	
March	7478	
Total	76069	

- Births (all)

Month	10/11	11/12
April	496	511
May	575	554
June	570	545
July	585	604
August	538	
September	581	
October	630	
November	581	
December	599	
January	553	
February	513	
March	589	
Total	6810	

- RVH / BCH / MIH New outpatient attendances
  (Consultant Led only, includes PPs & Non- N.I. Residents).

Month	10/11	11/12
April	14011	12099
May	13256	13899
June	15497	15463
July	12541	10950
August	13179	
September	15146	
October	14397	
November	16151	
December	12122	
January	14659	
February	14360	
March	15631	
Total	170950	

- RVH / BCH / MIH Review outpatient attendances
  (Consultant Led only, includes PPs & Non- N.I. Residents).

Month	10/11	11/12
April	33754	31107
May	33643	36936
June	38943	39155
July	31695	29379
August	34447	
September	38703	
October	36127	
November	39580	
December	28964	
January	36377	
February	35130	
March	40586	
Total	427949	

- District nursing visits (District Nurses and Nursing Auxiliaries)

Month	10/11	11/12
April	25543	23766
May	26100	20661
June	27167	20590
July	27813	
August	27729	
September	27336	
October	29173	
November	29995	
December	26316	
January	27196	
February	25250	
March	27241	
Total	326859	

- Allied Health Professions attendances

Month	10/11	11/12
April	22448	16973
May	23832	21597
June	24348	18888
July	18568	
August	19255	
September	22566	
October	22485	
November	24528	
December	15456	
January	22051	
February	21961	
March	23537	
Total	261035	

**Outstanding daily diary sheets yet to be logged on LCID*

The figures above relate to the position at month end, figures can be amended subsequently as a result of updated recording on PAS and community systems.

The following narrative provides more details in relation to progress against the above target areas.

3.1 STRATEGIC OBJECTIVE: MODERNISATION AND REFORM

TARGET 1 – ELECTIVE ACCESS – SPECIALIST DRUG TREATMENTS

a) Specialist drug therapies for arthritis – from April 2011, no patient should wait longer than 9 months to commence NICE approved specialist therapies for rheumatoid arthritis, psoriatic arthritis or ankylosing sponylitis.

COMMENT:

Target	A	M	J	J	A	S	O	N	D	J	F	M
Patients waiting over 9 months	29	24	0	0								
Comment												
The Trust has been able to deal with the backlog of patients and currently no-one is waiting over 9 months.												

b) Specialist drug therapies for MS – from April 2011 no patient should wait longer than 13 weeks to commence NICE recommended therapies for MS.

COMMENT:
The Trust is developing the systems needed to support monitoring of this target so reporting has not yet begun.

c) Specialist drug therapies for Wet AMD – from April 2011 no patient should wait longer than 9 weeks to commence specialist drug treatment for Wet AMD for 1st eye.

COMMENT:

Target	A	M	J	J	A	S	O	N	D	J	F	M
Patients waiting over 9 months	0	14	10	25								
Comment												
The Trust experienced breaches of the 9 week waiting time due to continuing problems in the recruitment of medical staff, however a locum consultant was appointed at the beginning of August; this additional capacity should allow the service to reduce waiting times to 9 weeks by the beginning of September.												

TARGET 2 - ELECTIVE ACCESS

Elective care (consultant-led) - the majority (at least 50%) of patients should wait no longer than 9 weeks for a first outpatient appointment and no-one waits longer than 21 weeks, the majority (at least 50%) of inpatients and day cases are treated within 13 weeks and no patient waits longer than 36 weeks, all outpatient reviews are completed within the clinically indicated time.

The tables which show performance to end of July are included at Appendix i.

COMMENT:

Outpatients
Between April – July 2011 69% of patients who attended consultant led outpatient appointments during that period waited 9 weeks or less. 94% of patients were seen within 21 weeks. However there are a number of specialties where a 21 week waiting time target cannot be delivered. These include; neurology, neurosurgery, cardiology genetics, ophthalmology, urology, dermatology, rheumatology, immunology, oral medicine, oral surgery, paediatric dentistry, paediatric medicine and paediatric neurosurgery.

The Trust continues to discuss issues related to the above with the HSCB. The HSCB has discussed maintaining the end of March 2011 waiting times with the Trust and we continue to monitor performance in relation to this as well.

Inpatient/Daycase
Between April – July 2011 60% of patients who underwent surgery during that period waited 13 weeks or less. 95% of patients were seen within 36 weeks. However there are a number of specialties where a 36 week waiting time target cannot be delivered currently. These include; breast surgery, endoscopy, neurology, neurosurgery, orthopaedics, plastic surgery, ophthalmology, thoracic surgery, urology, vascular, pain management, oral surgery and urogynaecology.

The Trust continues to discuss issues related to the above with the HSCB. The HSCB has discussed maintaining the end of March 2011 waiting times with the Trust and we continue to monitor performance in relation to this as well.

Outpatient Backlog Reviews
At the end of July 29,667 (BCH / RVH / MIH sites) patients were recorded as being passed their planned outpatient review appointment date. The total number waiting has increased by 8.1% from the end March 2011 position. The reduction in clinics during the summer period will have had an impact on this. MPH figures are being updated but were 5135 at the end of May.

The Trust is continuing to focus on reducing the backlog. A bid for additional funding submitted by the Trust is with the HSCB for consideration. Other initiatives included commencing the introduction of partial booking for review appointments (from September), discussions with LCG representatives re the role of primary care in supporting reductions in backlog reviews.

2.3 DIAGNOSTICS, 9 WEEKS (monitored tests)

The number of patients waiting over 9 weeks to the end of July 2011 is set out in the table below.

Diagnostic Test	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
MRI	848	477								
Cardiac MRI	305	290								
CT	0	0								
Ultrasound	128	245								
Barium Enema	0	0								
Dexa Scans	0	3								
Radio-nuclide	107	103								
Audiology	10	12								
ECHO	23	19								
MPI	208	250								
Neurophysiology	2931	3259								
Sleep Studies	10	53								
Urodynamics	0	4								
Total	**4570**	**4715**								

COMMENT – most recent end July position

MRI : General/neurological and musculoskeletal
The Trust agreed with HSCB a backstop waiting time of 52 weeks for MRI, at the end of July 56 patients had been waiting over 52 weeks, the longest waiting of whom had been waiting 68 weeks. The number of 9 week breaches has reduced due to the use of the Alliance mobile scanner (funded by the HSCB). The service anticipates that a 9 week waiting time will be achieved at the end of September 2011.

GA MRI
GA MRI patients are included in the number of MRI breaches in the table above. An action plan has been put in place to present to the HSCB for investment to reduce the waiting time to 9 weeks.

Cardiac MRI
The Trust agreed with HSCB a backstop waiting time of 30 weeks for Cardiac MRI, at the end of July 7 patients had been waiting over 30 weeks, the longest waiting of whom had been waiting 43 weeks, due to the fact that this service is facing increasing demand.

Ultrasound
These breaches are in the sub-specialty area of musculoskeletal ultrasound with injection, an area which has a lack of capacity. The capacity problems have been compounded recently by a consultant retirement; the recruitment process to replace this consultant is underway however it is not expected that a replacement will be in post until 2012. There is no way to mitigate the gap in capacity until the new consultant begins, at that point a plan to address the backlog will be drawn up.

Radio-Nuclide
The Trust agreed with HSCB a backstop waiting time of 17 weeks for radio-nuclide and at the end of July 24 patients had been waiting over 17 weeks, the longest waiting of whom had

been waiting 20 weeks. The main issue for 9 week breaches is the increase in demand experienced by the service for brain scans to diagnose dementia. A demand project is currently being undertaken by the Public Health Agency, the HSCB and the Trust and the recommendations are awaited. It has now been confirmed that the PET CT scanner will be replaced over a 7 week period commencing 3rd October 2011. The Trust has received funding for a mobile scanner to ensure continuity of service but brain scans to diagnose dementia cannot be carried out in the mobile. Therefore although additional sessions will be held during September 2011, it is expected that the number of breaches will increase over the 8 week replacement cycle.

Audiology
It is expected that the 9 week target will be achieved by the end of September 2011.

MPI
The Trust agreed with HSCB a backstop waiting time of 17 weeks for MPI and at the end of July no patients had been waiting over 17 weeks.

Neurophysiology
The Trust agreed with HSCB a backstop waiting time of 56 weeks for neurophysiology and at the end of July 134 patients had been waiting over 17 weeks, the longest waiting of whom had been waiting 71 weeks. In January 2011, it was agreed that the waiting list for nerve conduction studies would be centralised in the Belfast Trust and since then the waiting list has grown. The Trust is in the process of trying to recruit an additional consultant to the team and an investment proposal is being prepared for HSCB.

TARGET 3 – DIAGNOSTIC REPORTING

From April 2011, all urgent diagnostic tests are reported within 2 days of the test being undertaken, with 75% of all routine tests being reported on within 2 weeks and all routine tests within 4 weeks.

COMMENT:

Table: DIAGNOSTIC REPORTING – end July 2011

Area	Urgent (within 2 days) Target 100%	Routine (within 2 wks) Target 75%	Routine (within 4 wks) Target 100%
Neurophysiology	93%	100%	100%
Cardiology (Echo)	98%	100%	100%
Cardiology (perfusion studies)	59%	100%	100%
Imaging - MRI	80%	93%	98%
CT	93%	99%	100%
Non Obstetric Ultrasound	97%	100%	100%
Barium Enema	74%	100%	100%
Dexa Scans – Nov figs (consul reported scans only – 8)	100%	100%	100%
Radio- nuclide imaging	93%	98%	100%

The main challenge within these modalities is the urgent patient target of 100%. In the majority of instances the breach of 48 hours related to patients scanned on a Friday and reported by a consultant the following week. Systems are now in place within each area to ensure that where necessary any issues are highlighted to the referring consultant.

Neurophysiology
The July data shows a significant improvement of routine reporting with the backlog of reports having been cleared and reports distributed within 2 weeks.

Cardiology Perfusion Studies
As stated above, the challenge is that this is a small specialty area and urgent reports are having to wait greater than 48 hours due to the capacity issues inherent in a small specialty, however reports are issued for all urgent patients within 7 days.

MRI / CT / Ultrasound / Radio nuclide
Performance has improved within MRI particularly in relation to the routine reports within 4 weeks element of the target. There was an initiative during the month of June 2011 which involved the use of an independent sector provider to assist in clearing the backlog of reporting and bringing the turnaround to under 2 weeks in future. A vacant consultant neuro-radiologist post was replaced in June and an additional consultant neuro-radiologist will take up post in September, these two appointments should allow for continuing improvement in performance.

Barium Enema
The 26% of urgent patients who were not reported on within the 2 day target timescale represents 6 patients, all of whose tests were reported on within 7 days. These breaches occurred due to a temporary downturn in capacity due to annual leave.

TARGET 4 - ELECTIVE ACCESS - ALLIED HEALTH PROFESSIONS

Elective care (AHP): from April 2011, no patient should wait longer than 9 weeks from referral to commencement of AHP treatment.

COMMENT:
The Trust performance in relation to sustaining the 9 week target to July 2011 is set out in the table below.

Table: AHP SERVICES, 9 WEEKS – to end July 2011

Service	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Dietetics	35	22								
OT	287	366								
Podiatry	0	1								
Physiotherapy	1654	1631								
SLT	137	184								
Orthoptics	0	0								
Belfast Trust Total	2113	2204								
Comments – Most recent end July Position										
The main reason for the breach of 9 weeks in all areas is a lack of capacity which is mainly due to the impact of staffing pressures (maternity and sick leave). The service is projecting is that it is unlikely that 9 weeks will be achieved in a number of areas by end of March 2012 and that extended waiting times will need to be agreed.										

TARGET 5 - FRACTURES

From April 2011,

- **95% of patients, where clinically appropriate, should wait no longer than 48 hours for inpatient treatment for hip fractures and**
- **100% of patients, where clinically appropriate, wait no longer than 7 days for all other inpatient fracture treatment**
- *95% of patients, where clinically appropriate, should wait no longer than 48 hours for inpatient treatment for all fractures.*

NB: The Commissioning Plan Direction document cites the target as relating to hip fractures only whereas the Draft Commissioning plan has a hip fracture and general fracture target.

The Trust performance in relation to the targets to July 2011 is set out in the tables below.

Table: Hip Fractures, 95% within 48 hours - to end July 2011

Site	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
RVH	95%	96%								

COMMENT:
The Trust is achieving the target.

Table: All Fractures, 100% within 7 days, number of breaches - to end July 2011

Site	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
RVH	5	6								

Table: All Fractures, 95% within 48 hours - to end July 2011

Site	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
RVH	83%	81%								
RBHSC	100%	99%								
Total	86%	86%								

COMMENT:
The main issue during the months of June and July was a lack of bed capacity. Investigation of the reasons for the target not being achieved showed that the Trust was unable to admit transfers from other hospitals because of delays in the repatriation of patients from other Trusts, Northern Trust patients in particular.

TARGET 6 - CANCER

From April 2011, all urgent breast cancer referrals should be seen within 14 days, 98% of cancer patients should commence treatment within 31 days of the decision to treat, and 95% of patients urgently referred with a suspected cancer should begin their first definitive treatment within 62 days.

COMMENT:
The Trust performance in relation to delivering the targets to the end of July 2011 is set out in the table below.

Table: CANCER PERFORMANCE – To end July 2011

Target	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
14 day target*	80%	63%								
31 day target (98%)	96%	97%								
62 day target (95%)	77%	69%								

14 day Breast target
The performance against the 14 day target is expected to improve when the third breast consultant takes up post in December 2011. In the interim the Trust is looking at other actions, eg ad hoc clinics, which will improve performance against the target until the new consultant takes up post. PMSID is preparing technical guidance for Trusts which should clarify the detail within the reporting of this target.
* Data drawn from CAPPS

31 day target
There were 9 patients who breached their 31 day pathways;
5 Urology - 2 due to brachytherapy planning time and capacity, 3 due to urology surgical capacity
2 Lung due to thoracic surgical capacity issues
1 Upper GI due to surgical delay
1 Lower GI due to surgical capacity for resection

62 day target
There were 33 patients who breached their 62 day pathways. Late Inter-Trust Transfers (ITTs) ie beyond day 28 of the pathway, contributed to 22 out of the 33 breaches in July, of which 3 were late ITTs from the Belfast Trust to SET and a further 4 were due to delays to PET scanning provided by the Belfast Trust.

The reasons for all 33 breaches are as follows;

2 Gynae – due to;
- Late ITT on Day 44 from ST
- Chemotherapy clinic capacity

2 Head and Neck – due to;
- Late ITT on Day 49 from SET to Belfast for XRT (radiotherapy)
- Late ITT on Day 50 from Belfast and delay to UHD receiving referral

9 Lower GI – due to;
- Wait 48 days for Flex Sig
- XRT planning capacity in Belfast Trust due to Bank Holidays in July
- Late ITT on day 41 and XRT capacity in Belfast Trust
- Late ITT on day 95 from Western Trust
- Delay to endoscopy as endoscopy unit in MIH temporarily closed for refurbishment
- Late ITT and admin delay
- Lack of surgical capacity
- Delay to endoscopy

- Late ITT from Western Trust on day 55 to Belfast for XRT

5 Lung – due to;

- Complex DTT (decision to treat) due to patient not being fit for surgery, XRT planning unable to be done within target due to clinic capacity in Belfast Trust
- 2 x delay to PET scans
- Delay for bronchoscopy in Northern Trust and delay to 2 MDMs in Northern Trust - late ITT on day 67 and delay because of lack of thoracic surgical capacity
- Late ITT on day 61 from Western Trust and delay to surgery due to lack of thoracic capacity in Belfast

2 Skin – due to;

- Late ITT on Day 50 from Belfast to SET to plastic surgeon in UHD
- Delay to first appointment and punch biopsy and late ITT on Day 53 from Belfast to SET for surgery

5 Upper GI – due to;

- Patient not fully staged before referral to oncology
- 2 late ITTs because of PET and EUS (endoscopic ultrasound) delays. Late ITT from Northern Trust on day 48 without EUS and PET scan having been done. EUS and PET scan needed when ITT to Belfast - also had delays for these tests in Belfast.
- Late ITT due to delays to OGD and colonoscopy in Southern Trust because of Bank Holiday
- Late ITT due to delay for Endoscopy in Northern Trust

8 Urology – due to;

- 3 delays to TRUS
- Delay to TRUS and brachytherapy capacity
- Late ITT on day 52 to Belfast Trust and lack of surgical capacity for nephrectomy
- 3 lack of surgical capacity

TARGET 7 - Accident and Emergency

From April 2011, 95% of patients who attend A&E should be either treated and discharged home, or admitted within four hours of their arrival in the department. No patient should wait longer than 12 hours.

COMMENT:

The Trust performance in relation to delivering the 95% target to the end of July is set out in the table below. The number of 12 hour breaches during the months is also provided.

Table: A & E PERFORMANCE – to end July 2011

	Jun	Jul
RVH	70%	74%
Children's	84%	93%
Mater	76%	80%
BCH	74%	82%
Belfast Trust	75%	80%

	Jun	Jul
RVH	56	25
Children's	1	0
Mater	58	15
BCH	6	1
Belfast Trust	121	41

Table: A & E PERFORMANCE – June and July 2010

	Jun	Jul
RVH	72%	78%
Children's	91%	94%
Mater	69%	69%
BCH	75%	79%
Belfast Trust	76%	78%

	Jun	Jul
RVH	52	41
Children's	0	0
Mater	113	35
BCH	33	5
Belfast Trust	198	81

When the June and July 2011 performance is compared to the same period in 2010 it can be seen that there has been a slight improvement in performance, however the Trust continues to find the achievement of the A&E targets to be extremely challenging. Project groups have been formed in each of the 3 acute hospital sites, along with a community group to take forward the Unscheduled Care Pathway Project across the Trust. These groups will interact as required to collectively drive forward the delivery of specific improvements in patient safety and reform of the unscheduled care pathway. A Coordinating group has also been established to coordinate cross cutting issues. Each of the project groups has a Director lead and the groups report to a Steering Group Chaired by the Chief Executive.

Outlined below are the three broad areas of work to be undertaken to achieve the level of modernisation and reform needed and to meet the initial key performance indicators (KPIs) which have been set for the Trust's Unscheduled Care Pathway Project;

- emergency department
- patient flow within the hospital system
- radiology / investigations.

However, there will be local nuances on each site and therefore the work areas will have different prioritisation and will be achieved through a range of sub-groups. Overall, the focus will be the unscheduled care patient pathway, from the delivery of effective admission avoidance programmes through to hospital admission, including the management of the four inpatient streams (short stay, sick general, sick specialty and complex) and the discharge of all inpatients, both complex and non-complex.

TARGET 8 – RENAL SERVICES

From April 2011 the Trust should deliver a minimum of 50 live donor transplants.

Live Donor Transplants

Target	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr – Jul
No. of LDTs	3	8	3	4									17

COMMENT:
Trust performance is in line with the target.

TARGET 9 - ACUTE HOSPITAL DISCHARGES

From April 2011, 90% of complex discharges from an acute setting should take place within 48 hours of the patient being declared medically fit, all non-complex discharges within 6 hours and no discharge should take longer than 7 days.

COMMENT:
The table below sets out the Trust performance from April 2010 to July 2011.

Table: DISCHARGE PERFORMANCE – end July 2011

Target	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
% 48 hour complex discharges	72%	76%	73%	72%								
% non complex discharges < 6 hours	97%	96%	97%	97%								
No complex discharges > 7 days	28	16	20	5								
Comment												

NB: the %48 hour complex discharges and % non complex discharges > 6 hours has been updated to include the discharges of Belfast Trust residents from the hospitals of other Trusts, as these patients are included in the assessment of Trust performance.

The Trust has made good progress in discharging patients with very complex needs requiring specific placements within the seven day target, this work is labour intensive requiring significant levels of co-ordination. Weekly audit reports for complex discharges within the Belfast Trust show the percentage achieved in the 80% plus range with 90% achieved at the end of July however the overall percentage is reduced when complex discharges from the Ulster Hospital are factored in reflecting the increased complexity of cross trust working.

Difficulties persist around the discharge of patients with dementia and behavioural disturbance, this underlines the need to develop specific pathways and services to address the needs of this small but high need group This patient group also require intensive support post discharge.

Older People's Services are currently developing a contingency plan in response to the proposed changes to Emergency Departments. The plan proposes extended access to social work and domiciliary care to support patient flow alongside enhancing community presence in hospital discharge systems to accelerate discharge processes. Proposals are also being worked up to reconfigure geriatric medicine pathways across the 4 sites.

TARGET 10 – CHILDREN IN CARE

From April 2011, the HSC Board and Trusts should ensure children admitted to residential care, prior to their admission: (i) been the subject of a formal assessment to determine the need for residential care, and (ii) had their placement matched through the Children's Resource Panel process. For every child taken into care, a plan for permanence and associated timescale should be developed within six months and formally agreed at the first six monthly LAC review.

COMMENT: Performance in relation to June – July is provided in the table below.

Target	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Number of children and young people admitted to residential care	3	3								
Number of these admissions who have been subject to formal assessment	3	3								
Number of these admissions who have been subject to formal assessment and had their placement matched through the children's resource panel	2	3								

During the month of June, 3 children were admitted to residential accommodation, 2 of whom underwent formal assessment and had their placement matched through the Children's Resource Panel prior to admission. One child was not matched as this was a new case being dealt with by the Gateway Service.

For every child taken into care in 2010/11, a plan for permanence was developed within six months and formally agreed at the first six monthly LAC review.

TARGET 11 – CARE LEAVERS IN EDUCATION, TRAINING OR EMPLOYMENT

From April 2011, the HSC Board and Trusts should ensure that at least 70% of all care leavers aged 19 are in education, training or employment

COMMENT:

Performance in relation to June – July is provided in the table below.

Target	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Care leavers aged 19 in education, training or employment at month end	53 62%	57 66%								

The Trust's Employability service continually reviews the circumstances of these young people with a view to engaging them in education, training or employment. Recently, the Trust has ring-fenced a small number of Band 1 and 2 posts so that young care leavers can be offered these jobs. The Trust is also developing the possibility of exploring employment opportunities in companies with which the Trust does business; under existing procurement arrangements the Trust has a, "social clause," with companies which may allow the Trust to stipulate that young care leavers are offered work placements or other employment opportunities.

TARGET 12 – CHILDREN IN CARE

Assessment of children at risk and in need: from April 2011, the following should be ensured:

- ***Child Protection: referrals allocated within 24 hours of receipt***
- ***all child protection referrals investigated and initial assessment completed within 10 working days from date referral being received***
- ***following completion of initial assessment, a child protection case conference is held within 15 working days of the original referral being received***
- ***Looked-after Children: Initial assessment completed within 10 working days from the date of the child becoming looked after***
- ***Family Support: 90% of referrals are allocated to a social worker within 20 working days for initial assessment***
- ***All Family Support Referrals are investigated and initial assessment completed within 10 working days from the date the original referral was allocated to the Social Worker***
- ***on completion of the initial assessment 90% of cases deemed to require a family support pathway assessment should be allocated with a further 20 working days.***

Target	End Jun	End Jul	End Aug	End Sep	End Oct	End Nov	End Dec	End Jan	End Feb	End Mar
100% child protection referrals allocated within 24hrs	100%	100%								
100% child protection referrals investigated and initial assessment completed within 10 working days of referral	100%	100%								
Following initial assessment 100% of child protection case conferences held within 15 working days of referral	100%	96%*								
100% of initial assessments completed within 10 working days from date of child becoming looked after	100%	100%								
90% family support referrals allocated to social worker within 20 working days for initial assessment	100%	99%								
100% family support referrals investigated and initial assessment completed within 10 working days from date referral was allocated to social worker	37%	47%								
Following initial assessment 90% of cases requiring a family support pathway assessment allocated within 20 working days	72%	85%								

* The Trust did not achieve 100% performance against this target as the standard was not achieved in the case of one child.

The Trust is continuing to work to improve performance in the area of family support referrals where achievement against the target is low.

TARGETS 13 – 15 (Mental Health)

13. ***By March 2012, an additional 45 long stay patients should be resettled from mental health hospitals to appropriate places in the community compared to the March 2011 total and should also reduce the number of delayed discharge patients by 10.***
NB: Trust share of regional target TBC

14. ***From April 2011, no patient should wait longer than 9 weeks from referral to assessment and commencement of treatment for mental health issues with the exception of psychological therapies for which no patient should wait longer than 13 weeks.***

15. ***From April 2011, ensure that 75% of patients admitted for assessment and treatment are discharged within 7 days of the decision to discharge, with all other patients discharged within a maximum of 90 days.***

COMMENT:

Performance in relation to the targets is set out below:

Table: MENTAL HEALTH PERFORMANCE – end July 2011

Resettlement

Target	Apr - Jul	COMMENT
45 resettlements by March 2012.	1	The Trust is awaiting clarification on its share of the regional target of 45 resettlements. There were no resettlements during April, May and June with one resettlement taking place in July.

Target	End Jun	End Jul	End Aug	End Sep	End Oct	End Nov	End Dec	End Jan	End Feb	End Mar	Comment
9 weeks MH waiting time target - breaches	54	99									None of these breaches were true breaches but admin errors. The service moved to PARIS in June and some recording errors are still taking place, training of staff in the new system is ongoing.
13 week psychological therapies waiting time target - breaches	36	61									17 of these were not true breaches but admin recording errors as above. There were 44 breaches; 16 children's psychology, 26 psychosexual and 2 learning disability. In children's psychology, there continue to be capacity issues due to vacancies and maternity leave. Within the psychosexual service there is is an ongoing capacity issue within the regional aspect of the service, with 1.5 WTE providing this regional service. Referral data on the psychosexual service has been forwarded to HSCB as requested. The number of breaches with the learning disability service has reduced from 13 at end April to 2 at end July. The service is on target to reduce the number of breaches to zero and sustain this performance with the 2011/12 investment.
75% discharges within 7 days (completed discharges within the month)	100%	98%*									

* 1 patient was discharged having waited over 7 days and at the end of July there was 1 patient waiting over 90 days for discharge.

TARGETS 16- 17 (Learning Disability)

16. ***By March 2012, an additional 45 long stay patients should be resettled from learning disability hospitals to appropriate places in the community (regional target), compared to the end March 2011 figure and should also reduce the number of delayed discharge patients by 15.***
NB: Trust share of regional target TBC

17. ***From April 2011, 75% of patients admitted for assessment and treatment are discharged within 7 days of the decision to discharge, with all other patients discharged within a maximum of 90 days.***

COMMENT:
Performance in relation to the targets is set out below:

Table: LEARNING DISABILITY PERFORMANCE – end July 2011

Resettlement

Target	Apr - Jul	COMMENT
45 resettlements by March 2012	2	The Trust is awaiting clarification on its share of the regional target of 45 resettlements. 1 resettlement took place in June and 1 in July.

Discharges

Target	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
75% Discharges within 7 days (completed discharges),	50%	100%								
100% within 90 days	50%	100%								

At the end of July there were nine patients who had been waiting over 90 days for discharge.

TARGET 18 – SPECIALISED WHEELCHAIRS

From April 2011, ensure a 13-week maximum waiting time for 95% of basic wheelchairs and 75% of specialised wheelchairs.

COMMENT:

Target	Apr	May	Jun	Jul	Comment
95% within 13 weeks (basic)	83%	76%	74%	79%	This performance level relates to all wheelchairs including specialised ones, the service has not yet developed monitoring and reporting systems which allow it to assess performance against basic and specialised wheelchairs separately.
75% within 13 weeks (specialised)					

NB: The target in the Draft Commissioning Plan is as above however the Commissioning Plan Direction equivalent target was, "A 13 week maximum waiting time for 95% of all wheelchairs including basic wheelchairs."

TARGET 19 – HEARING AIDS

From April 2011, ensure 95% of patients have hearing aids fitted within 3 months of date of referral.

COMMENT:
The Trust is developing the systems needed to support monitoring of this target so reporting has not yet begun.

TARGET 20 – HOUSING ADAPTATIONS

From April 2011, 95% of lifts and ceiling track hoists are installed within 22 weeks of the OT assessment and options appraisal as appropriate and that all urgent minor housing adaptations are completed within 10 working days.

COMMENT:

Target	End Jun	End Jul	End Aug	End Sep	End Oct	End Nov	End Dec	End Jan	End Feb	End Mar
Lifts / ceiling hoists installed with 22 weeks ***(completed waits)***	100% 3 installed	100% 2 installed								
Urgent minor housing adaptations within 10 working days ***(completed waits)***	89% 33 complete	100% 18 complete								

N.B. A completed wait is where the work to be done on a property has been carried out and finished.

Comment

Trust performance at the end of July is in line with the target.

TARGET 21 – AUTISM

From April 2011, all children wait no longer than 13 weeks for assessment for autism following referral and a further 13 weeks for commencement of specialised intervention.

Target	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Number of children waiting over 13 weeks for assessment	0	0								
Number of children waiting over 13 weeks for commencement of specialist intervention	0	0								
Comment										
The Trust is achieving the target.										

TARGET 22 – ACQUIRED BRAIN INJURY

From April 2011, there should be a 13 week maximum waiting time from referral to assessment and commencement of specialist treatment for acquired brain injury in 95% of cases.

COMMENT:

Target	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Number of patients waiting over 13 weeks	0	0								
% of patients treated within 13 weeks	100%	100%								
Comment										
The Trust is achieving the target.										

STRATEGIC OBJECTIVE: IMPROVE HEALTH AND WELLBING THROUGH PARTNERSHIPS WITH USERS, COMMUNITIES AND PARTNERS

TARGET 23 and 24

23. ***From April 2011, ensure that Trusts achieve a performance level of 48% of care management assessments completed in relation to nursing home, residential or domiciliary care, recommend domiciliary care provision.***

24. ***From April 2011 ensure that no care management assessment should take longer than 8 weeks to complete and the main component of the assessed care need – nursing home care, residential care or domiciliary care – will be delivered within 12 weeks of the assessment being completed.***

COMMENT:
Performance in relation to the targets is set out below:

Table: Performance – end July 2011

Target	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
% with needs met in a domiciliary setting	72%	71%								
No. clients waiting > 8 weeks for care management assessment	0	0								
No. clients waiting > 12 weeks for main components of assessed care need	0	0								
Comment										
The Trust is achieving the target.										

TARGET 25

Increase the uptake of direct payments to 2100 regionally by March 2012. The Belfast Trust share of the total is TBC.

Table: Direct Payments

Number of Clients in receipt of a Direct Payment										
Locality	**End Jun**	**End Jul**	**End Aug**	**End Sep**	**End Oct**	**End Nov**	**End Dec**	**End Jan**	**End Feb**	**End Mar**
Belfast Trust	352	370								
Comment										
The Trust is awaiting clarification on its share of the regional target of 2100 direct payments. The number of clients in receipt of direct payments remains stable compared to end March figure (373).										

TARGET 26. – COMPLAINTS

In relation to the New Complaints Procedure the Trust will monitor itself against the 8 new standards for handling complaints. These Standards are:

a. ***Accountability – proper structures in place***
b. ***Accessibility for patients and clients to the complaint process***
c. ***Receiving Complaints – effective handling of complaints***
d. ***Supporting complainants and staff***
e. ***Investigation of complaints – appropriate processes in place***
f. ***Responding to complaints (monitoring of response time appropriate to the grading of the complaint). Complaints will be graded Green (response within 20 working days), Amber / Red (response time dependent on nature and complexity of complaint)***
g. ***Monitoring mechanisms in place***
h. ***Learning from complaints actioned.***

COMMENT: Performance from April – June 2011 is shown below.

	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Comment
Total complaints received	391				The Trust continues to work towards improving response rates in relation to the 20 working days standard. In relation to the 8 standards for handling complaints the Trust is now compliant with these standards. However work in relation to strengthening the learning across the organisation is ongoing.
Number acknowledged within 2 working days	97%				
Number responded to within 20 working days	52%				
Number responded to within 30 working days	68%				

NB: These figures are accurate at time of reporting however complaints figures will be subject to change as Directorates update Complaints Dept as to progress made.

STRATEGIC OBJECTIVE: ORGANISATIONAL AND WORKFORCE DEVELOPMENT

TARGET 27 – ABSENTEEISM

An absence target has been set for all Trusts to reduce their absenteeism level to 5% by March 2012.

Table: ABSENCE RATES

Target 2011/12	Apr 11 - Jul 11
5%	5.22%

COMMENT:

Absence for the period April to July 2011 was recorded at 5.22% which compares favourably with a rate of 5.49% for the period April 2010 to July 2010. Human Resources managers are continuing to work proactively with line managers to take targeted action on individual cases and continuing to explore ways of managing absence associated with mental health related conditions and musculo-skeletal illness, those being the two most frequent reasons for episodes of long term sickness absence.

STRATEGIC OBJECTIVE: IMPROVED PERFORMANCE AND PRODUCTIVITY

3.2 QUALITY AND SAFETY INDICATORS

3.2.1 INTRODUCTION

Continuous improvement in the quality of our services and a focus on safety is one of the five Trust strategic objectives and is a priority for all staff.

The Draft Commissioning Plan 2011/12 has set out targets for the Trust in relation to Quality and Safety as follows:

- ***Healthcare Associated Infections:***
  From April 2011, ensure a further reduction of 14% in MRSA (all patients) and C Difficile infections compared to the position in 2010/11

  - MRSA: maximum 32 cases for 2011/12
  - C Diff: maximum 194 cases for 2011/12

- ***Mortality:***
  During 2011/12, Trusts should have in place arrangements to routinely review the Trust's standardised mortality rates, both over time and against comparator organisations in NI and GB. Trust review arrangements should include consideration at Trust Board.

- ***Trust Quality Initiatives:***
  During 2011/12, Trusts should continue to ensure satisfactory progress is made towards full implementation of approved quality improvement plans and achievement of Trust specific targets for Ventilator Associated Pneumonia, Surgical Site Infections, Central Line Infections, Crash Call Rate. Data systems in relation to monitoring the prevention of venous thromboembolism are still being developed.

- ***Specific Targets in relation to the above are as follows:***

  - ***Ventilator associated pneumonia (VAP) -*** *In the general adult Intensive Care Units (ICUs) on the BCH, MIH and RVH sites and in the RVH Cardiac Surgery ICU, the rate of VAP will be reduced per 1000 ventilator days to a zero position*

  - ***Central line infections (CLI) -*** *In the general adult Intensive Care Units (ICUs) on the BCH, MIH and RVH sites and in the Cardiac Surgery ICU (RVH site), the rate of CLI will be reduced per 1000 central line days to a zero position*

  - ***Crash calls -*** *(i.e. the emergency response to cardio-respiratory arrest in hospital) - To reduce crash call rates by 10% from baseline* by March 2009 and 30% from baseline* by March 2010 on BCH, MIH and RVH sites. The indicative target figure of 5% has been set*

- ***Surgical site infections (SSI) Caesarean section and orthopaedic surgery***

  To establish a Caesarean -section SSI baseline rate (including post-discharge surveillance) by March 2009. To reduce Caesarean Section Surgical Site Infection by 10% by March 2010, by 30 % by March 2011 and by 50% by March 2012

  To maintain an Orthopaedic Surgical Site Infection rate below Northern Ireland average of 1.36% (average in N.I. In 2006/07)

  adherence to good practice on mental health inpatient care as regards risk assessment, inpatient review and discharge planning

- ***Venous Thromboembolism***

  Targets have not been set yet. A new Belfast Trust Kardex has just been introduced which will provide comprehensive recording data to facilitate monitoring.

- ***Mental Health:***

Adherence to good practice on mental health inpatient care as regards risk assessment, inpatient review and discharge planning. The three specific indicators the Trust is monitoring in relation to Mental Health are:

- Care plan agreed and discussed with patient and family including treatment plan- Target 100%
- Multidisciplinary risk assessment on admission and quality of risk assessment Target 100%
- Multidisciplinary team review of patients within 1week of admissions Target 100%

The Trust has developed quality and safety plans for all of the above areas, which set out our internal targets and key interventions to be undertaken by service groups and corporate departments. Organisational arrangements have been established to enable the Trust to implement and monitor progress for the above and other relevant patient safety initiatives.

In addition to the targets set out above the Trust Board report will include overall Trust performance in relation to the following clinical indicator:

- Emergency readmissions within 28 days following discharge

A further range of clinical outcome measures, which are speciality specific, have also been developed. Service managers and clinicians will review performance in relation to these service group specific indicators regularly.

3.2.2 July 2011 Report

The report for July 2011 includes an update on the following:

28. C Diff targets
29. MRSA targets
30. Ventilator Acquired Pneumonia
31. Central Line Infection
32. Crash calls target
33. Surgical Site Infections
35. Mental Health Indicators
36. Mortality
37. Trustwide specific indicators below:
    - Emergency Readmission within 28 days following discharge (all specialties.

28 & 29 - MRSA Bacteraemia / C Difficile Rates (to July 2011)

The number of cases reported to July 2011 is set out below.

		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
MRSA	Cases *actual*	1	3	0	5								
	Cases *cumulative*	**1**	**4**	**4**	**9**								
	Target *cumulative*	**3**	**5**	**8**	**11**								
C. Difficile	Cases *actual*	22	18	14	21								
	Cases *cumulative*	**22**	**40**	**54**	**75**								
	Target *cumulative*	**16**	**32**	**48**	**65**								

Comment
MRSA rates are well within cumulative target rates and also with control limits(below). C.Difficile rates are higher on a cumulative basis than the target, however these do remain within control limits (below), additionally there are always increases and decreases within a year period which may skew trajectories in the short term. However overall it remains likely that there has been a true increase in cases and action to resolve this is a high priority for the Trust.

The Department of Health issued a guidance document in January 2010, "CDI How to deal with the problem," recommendations are made in a number of key areas;

- prevention through environmental cleaning and disinfection
- prevention through isolation
- prevention of CDI through antibiotic prescribing

- hand hygiene using soap and water

These measures aim to reduce the risks of acquisition of spores from contaminated environment or equipment, direct patient to patient spread or spread via the hands of healthcare workers. If a patient is exposed to C. Difficile spores within the healthcare environment, or is already colonised on admission, risk of subsequent disease development is reduced through prudent antimicrobial prescribing. There are additional recommendations in relation to ensuring best care of affected patients and managing periods of increased incidence. The Trust has made substantial advances in many of these areas in recent years.

Healthcare Associated Infection Monitoring

The Trust has in place a detailed action plan in relation to HCAI. As part of this action plan a system providing regular continual Trust wide hand hygiene audits has been in operation at ward level through observation to assess compliance with the standard. This system has now been replaced with a new methodology for audit as the current system was found to be unreliable. The most recent audit using the new methodology showed an average Trust hand hygiene compliance of 68% which is comparable to published independent compliance internationally. Service groups ranged from 64% to 88%

CONTROL PROCESS CHARTS ANALYSIS

In relation to the above, it is also important to review performance within statistical control process charts (See appendix (iii) for chart explanation).

MRSA and C.Difficile infection rates are presented on a monthly basis, the charts indicate that current performance to the end of July 2011 is within the expected control limits for both infections

Chart A – MRSA

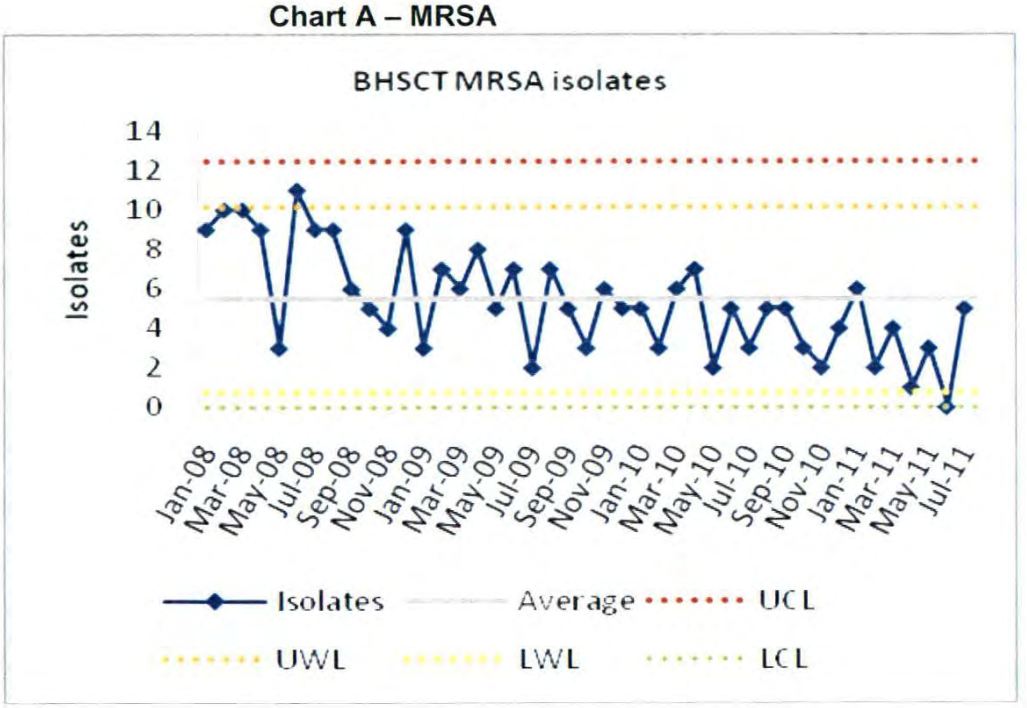


Chart B – C Diff

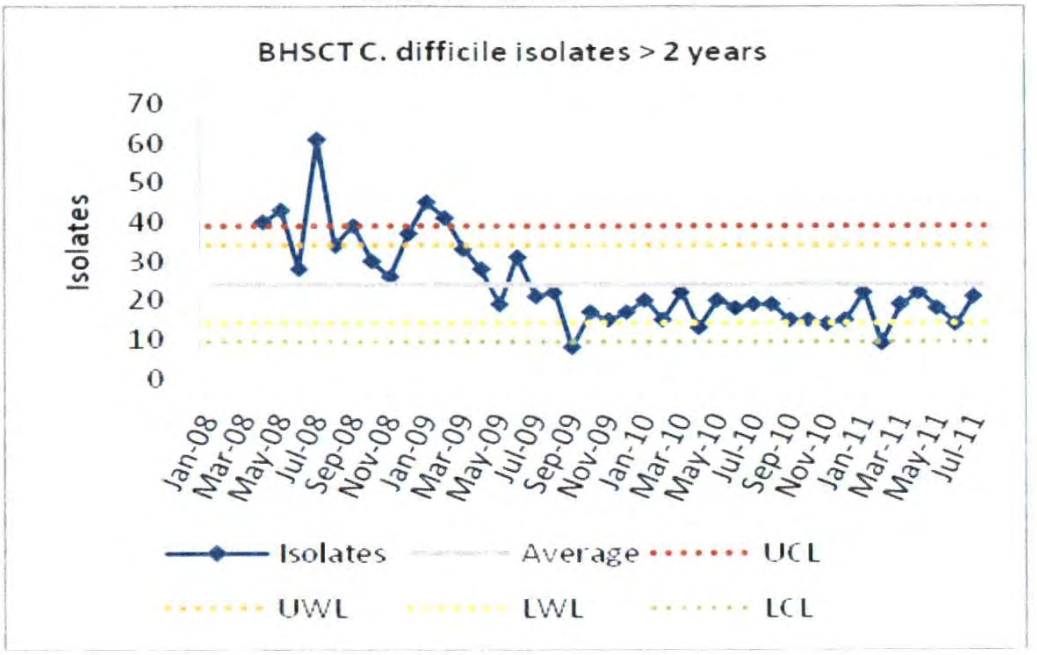


Chart C – MRSA

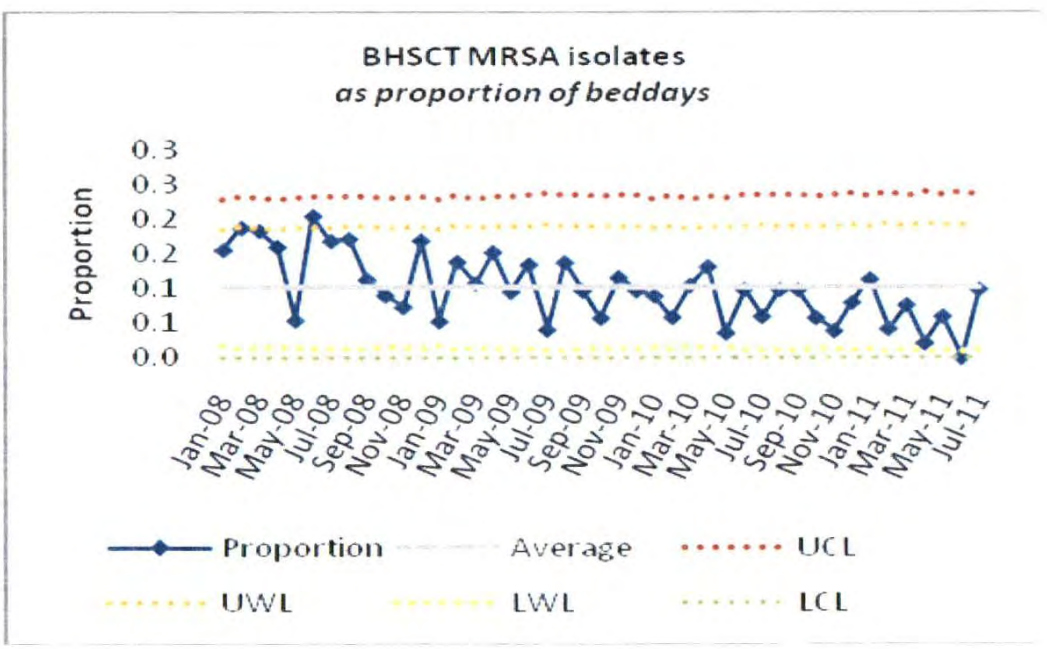
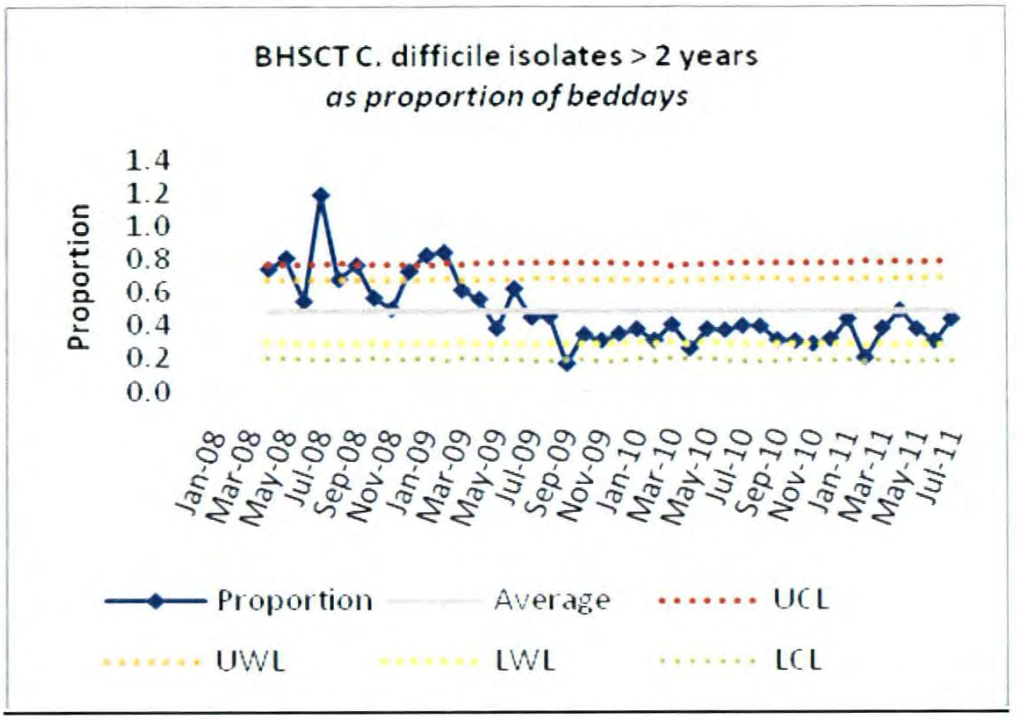


Chart D – C Diff



Trust Specific Targets-Patient Safety

30. Ventilator Acquired Pneumonia

New Trust wide data collection procedures have been introduced from June 2011and show an infection rate of 2.6 per 1000 beddays against a Target of zero, this represents one actual infection in June.

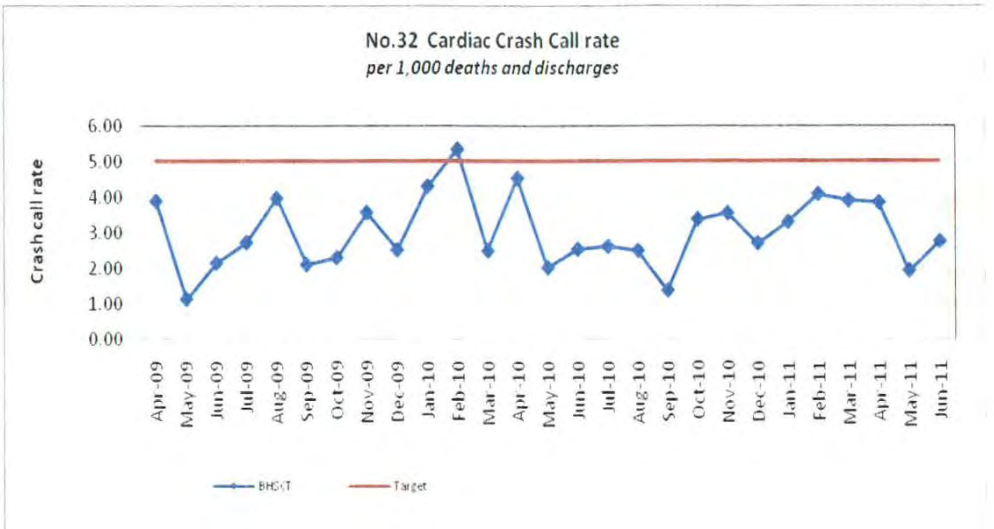
31. Central Line Infection

New Trust wide data collection procedures have been introduced from June 2011and show no infections in June against a zero target.

32. Crash Call Rates (End of June 2011)

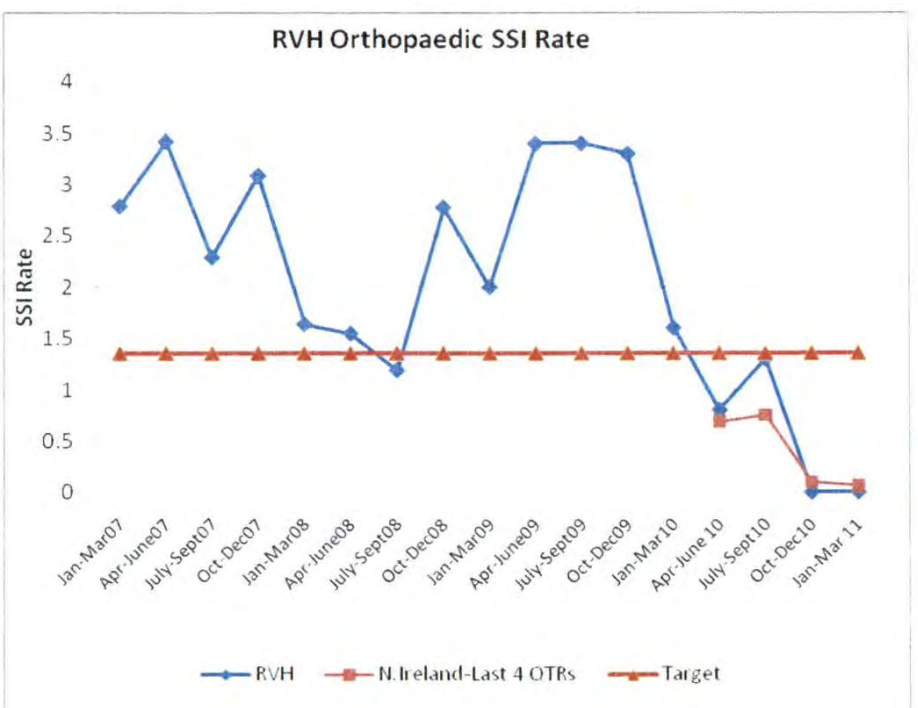
The data indicates achievement of the target of 5 per 1000 discharges. This process measure is now operational in the Royal, Mater, Belfast City and MPH hospitals sites. The target is being achieved across the Trust.

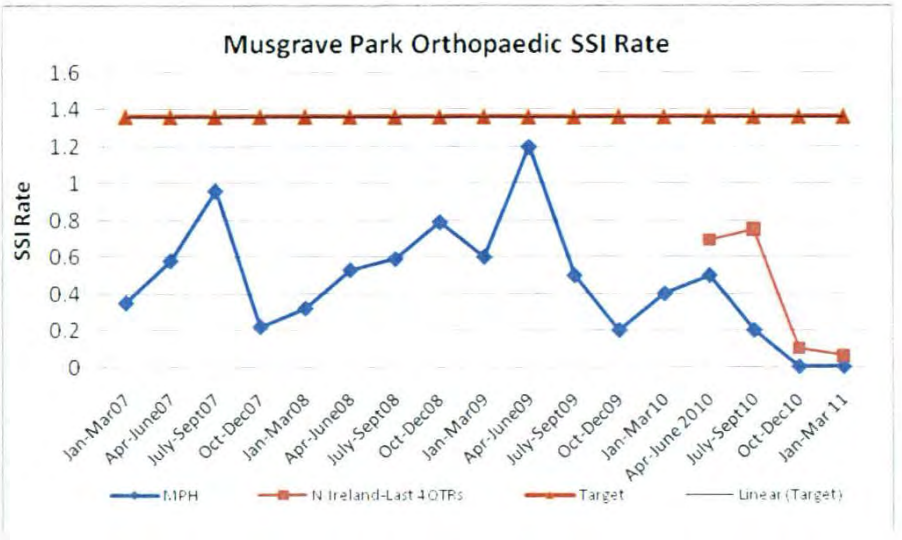
Chart – Crash Call Rates



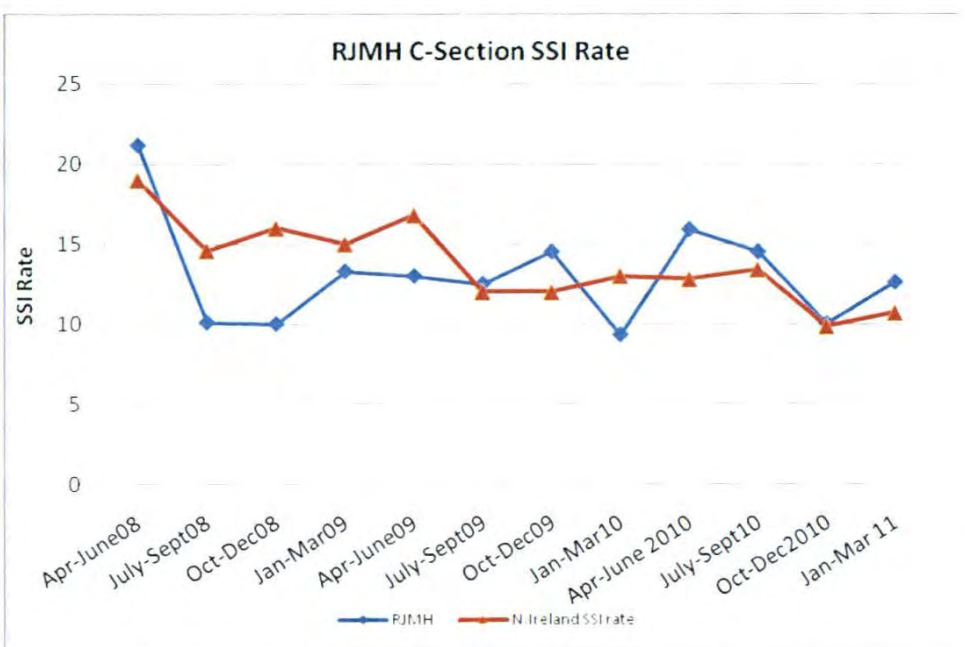
33. Surgical Site Infection Rates (End of March 2011)

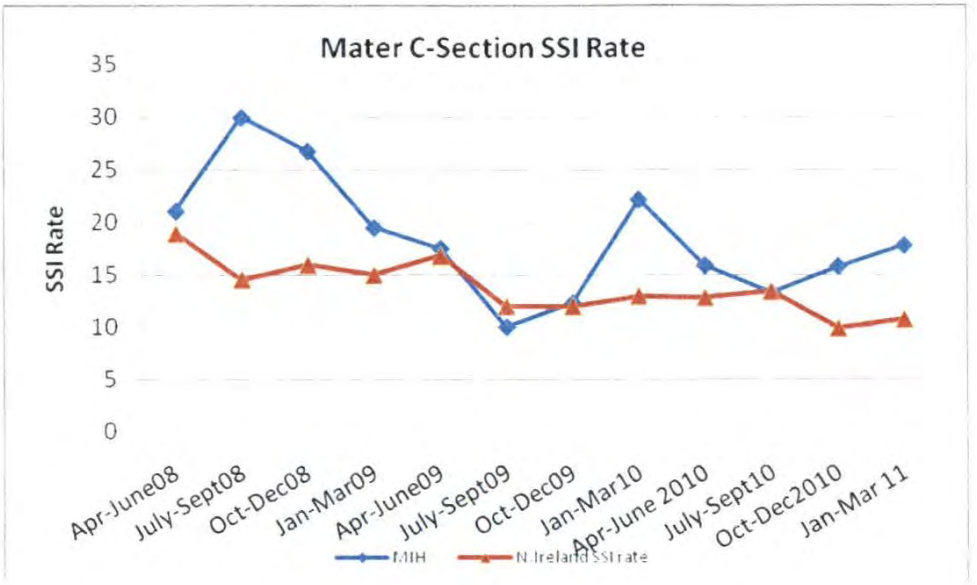
Rates of orthopaedic infection have surpassed target rates and are also ahead of N.Ireland regional rates with fewer infections within the Trust noted in both measures. It should be noted that information for this indicator is based on data held at this point in time and is subject to change based on future refreshed data returns.





Target rates for Caesarean Section infections have not been set regionally however infections rates in RJMH can be compared against the N.Ireland average. Mater infection rates are higher than the N.Ireland average, this relates to 8 infections for January to March. RJMH rates are higher also and this relates to 36 infections for January to March 2011. Work is ongoing to increase the volume of returns to be included in the data as this will affect the apparent performance in this measure. Returns available to the end of March 2011 would still indicate an overall reducing SSI rate.





34. Venous Thromboembolim

The recording systems which will enable reporting against this indicator are still being developed. A pilot project set definitions and expected performance for this measure. A roll out to other areas is now planned beginning with Fractures services.

35. Mental Health Indicators

The three patient safety specific indicators, which the Trust is monitoring in relation to Mental Health are detailed below, the most recent audit was completed during June 2011 and the results are shown below;

- Care plan agreed and discussed with patient and family including treatment plan - Target 100%. The Trust achieved a rate of 100% for June 2011.
- Multidisciplinary risk assessment on admission and quality of risk assessment - Target 100%. The Trust achieved rates between 80% and 100% for this indicator in June 2011. This target is however being reviewed regionally.
- Multidisciplinary team review of patients within 1 week of admissions - Target 100%. The Trust achieved a rate of 100% in June 2011.

New documentation and multi-disciplinary notes have recently been implemented which will further improve performance.

36. Mortality Rates (to July 2011)

Chart A indicates the actual number of deaths in each month. This is presented to assist interpretation of the % mortality rate indicated in Chart B.

Chart B indicates actual mortality, i.e. all deaths occurring in Belfast Trust Acute Hospital sites (RGH, MIH, MPH, BCH) in each month, presented as a % of total discharges in each month. The mean % mortality over the period shown in the chart is indicated.

The Trust is also reporting on risk adjusted mortality rates (to the end of March 2011) against an expected index of deaths set at 100 i.e. target is to remain below 100, details are below.

The charts indicate that for the period to the end of July performance has remained within the expected range.

Chart A

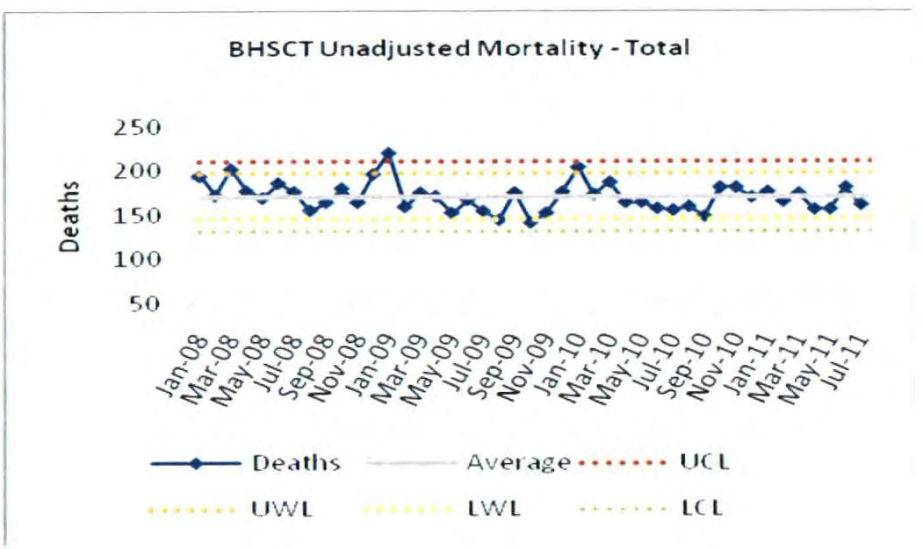
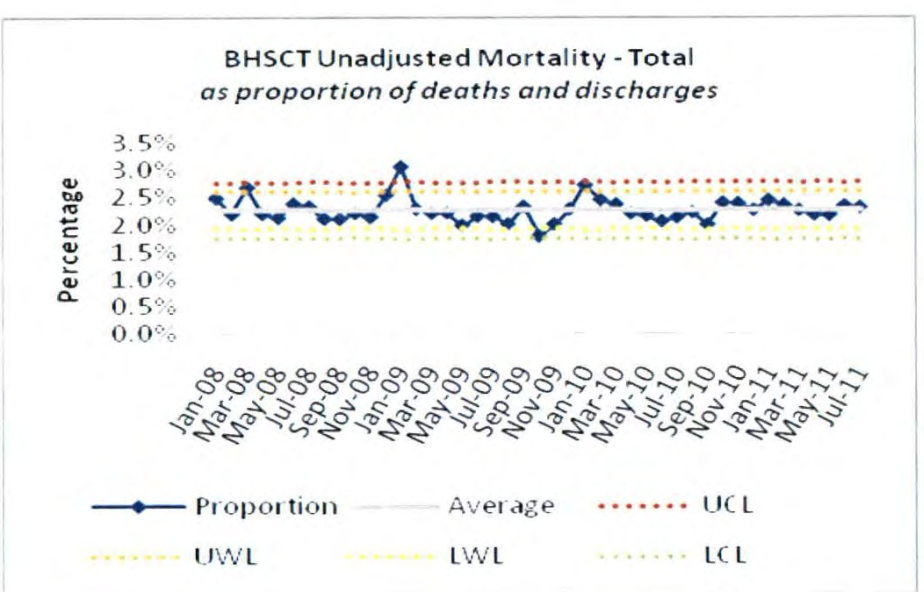


Chart B



BHSCT Risk Adjusted Mortality

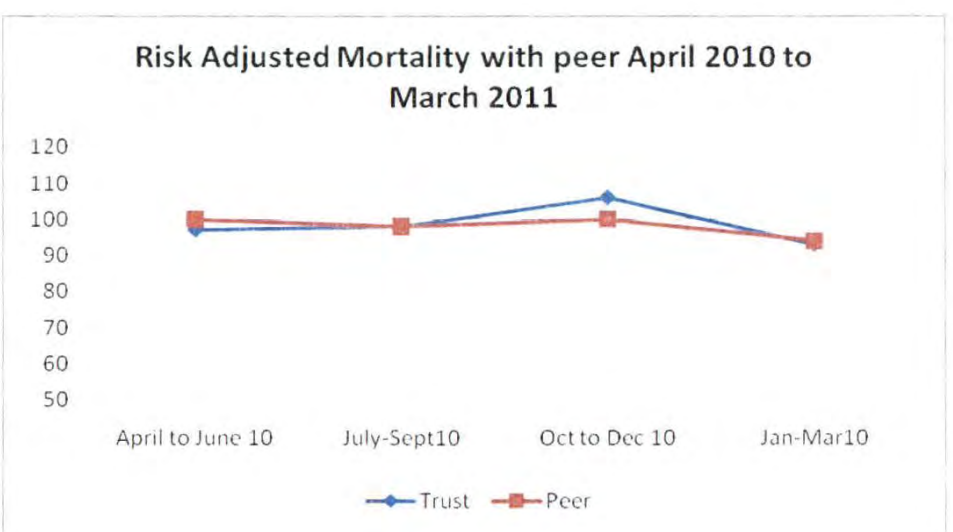
Following commitments given in Priorities for Action 2010/11 the HSCB is now developing arrangements to routinely review each Trust's Hospital Standardised Mortality Rates (HSMRs), both over time and against comparator organisations in GB. Details in relation to the Trust's end of December position are provided below.

Risk Adjusted Mortality

Crude mortality figures including numbers and percentages are useful however they do not take account of the differing levels of severity of patients illnesses. Risk adjusted mortality analysis attempts to put some of this into context. Expected rates of death are calculated nationally based on age, sex, diagnosis and other risk factors, this calculation creates an index of expected deaths. This index is then applied to the Trusts data and an 'expected mortality rate' is calculated for the Trust. The 'actual deaths' in the Trust are then compared against this index. The calculation is expressed against 100, therefore an index of 85 actually means that the Trust had 15% less than expected and an index of 115 would mean 15% more deaths than expected.

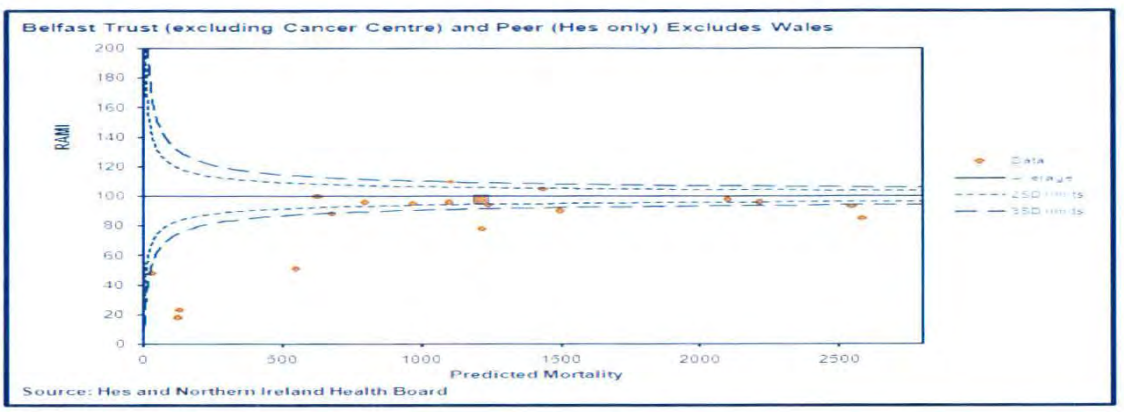
However, risk adjusted mortality data relies heavily on the quality of diagnostic information and is subject to different recording practices which can alter the statistics involved in the risk adjusted index. Due to resource pressures the Trust's data quality has declined in some areas which will affect our apparent performance. This means that it is imperative to look at this measure alongside other measures of mortality such as the crude mortality control charts in the report which shows the actual number and percentage of deaths over time.

The chart below compares the Belfast Trust performance with a range of comparable peers, 22 in number. The chart shows that the number of deaths in the Trust has risen during the quarter ending December 2010 and is higher than the peer group, however as has been stated above, risk adjusted mortality data should not be viewed in isolation. When the full year is examined as a whole rather than by quarter the Trust position is 99 against a peer figure of 98.



Risk adjusted mortality for the Trust was compared with the other Trusts in the peer group using funnel plots. The position of the Belfast Trust is indicated by the square marker.

The latest available funnel plot chart (April 2010 to March 2011) shows the Trust performance in relation to its peers against the risk adjusted mortality index. The Trust and its peers are examined for one time period against the mortality index. Actual deaths are shown on the horizontal axis and our performance against the index is shown on the vertical index against the figure of 100. The Trust is below the 100 index and thus had fewer deaths than expected. This chart also uses control limits i.e. the 2 pairs of lines above and below the central line (mean). As the Trust stayed within these limits it is possible to say that as well as having remained within the 100 index the Trusts performance is within safe limits against its peers.



BHSCT Risk Adjusted Mortality April 2010 to March 2011		
	Trust	**Peer**
Risk Adjusted Mortality Inc' Cancer Centre	99	98

37. Re-admission Rates (to July 2011)

Chart A indicates actual number of emergency re-admissions within 28 days of discharge for the Belfast Trust Acute Hospitals in the periods shown.

Chart B indicates emergency re-admissions within 28 days of discharge, presented as a % of discharges within the same period.

The charts indicate that for the period to the end of July performance has remained within expected range.

Chart A

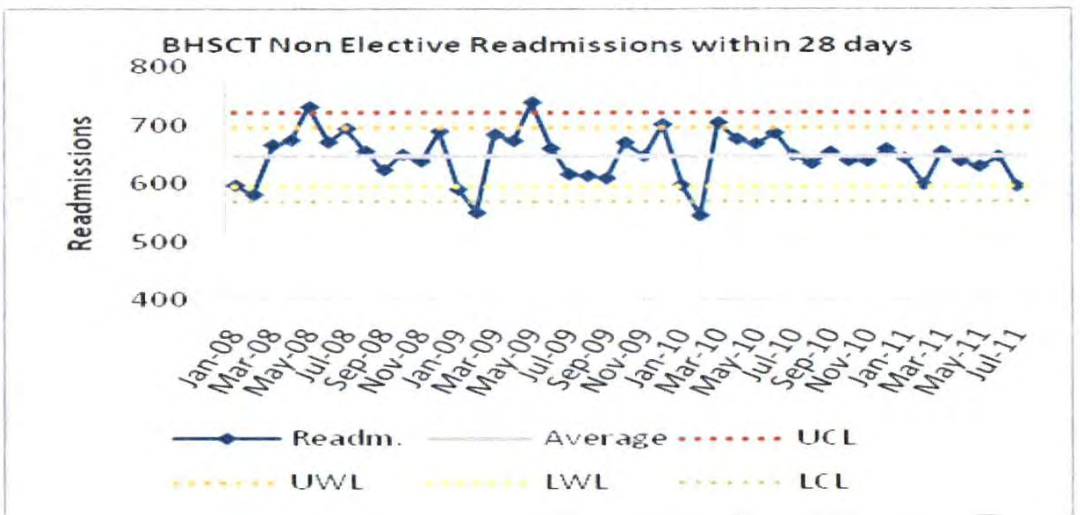
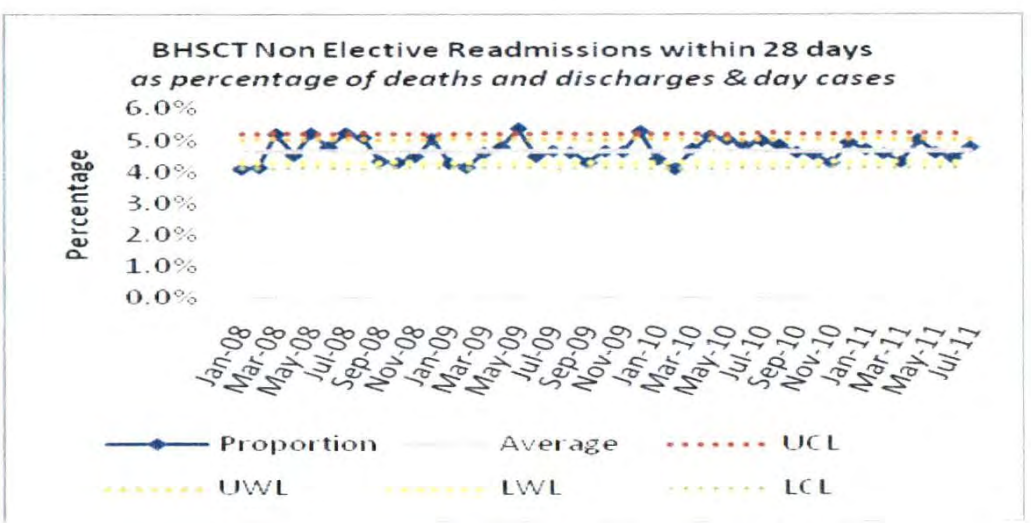


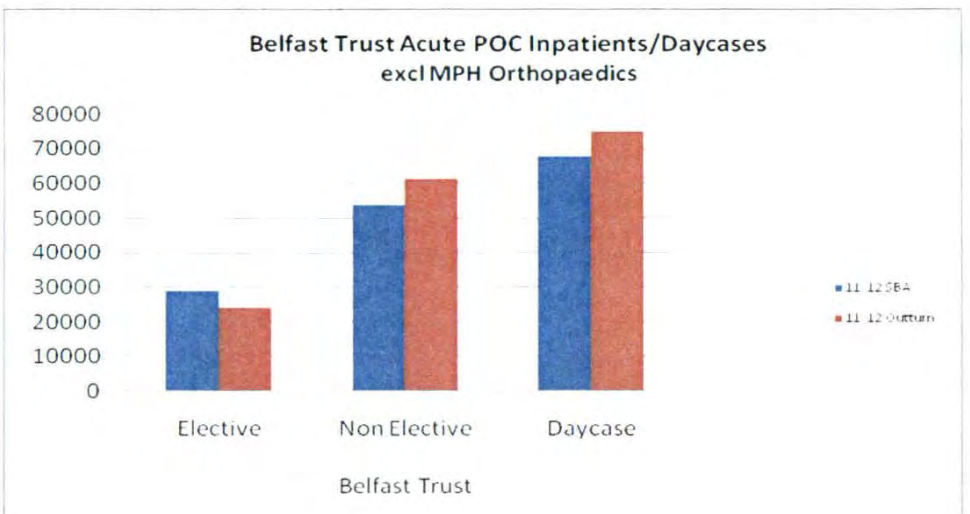
Chart B

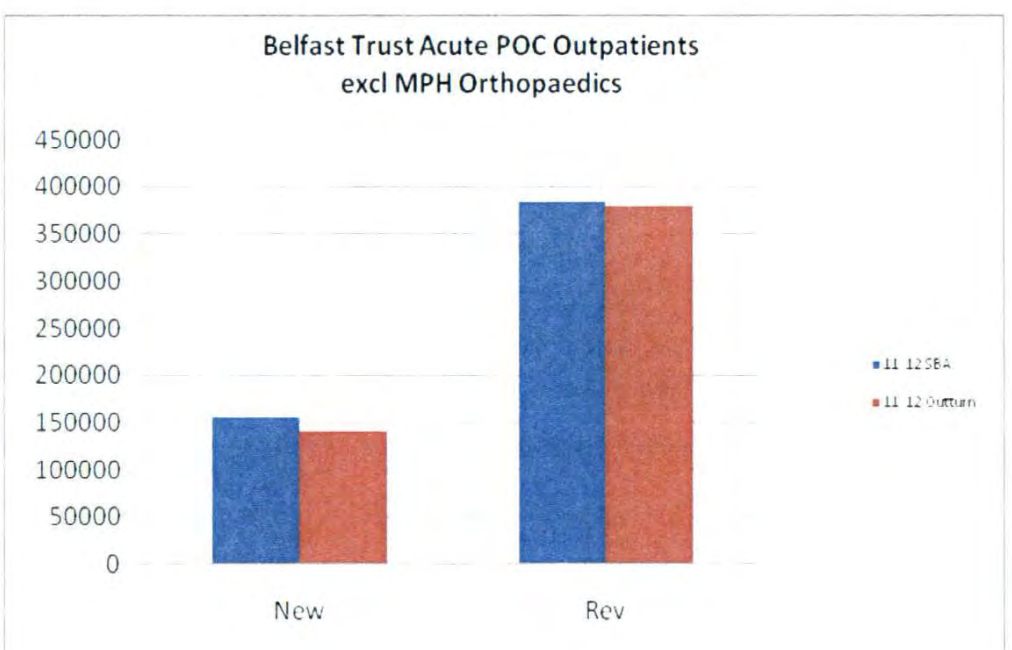


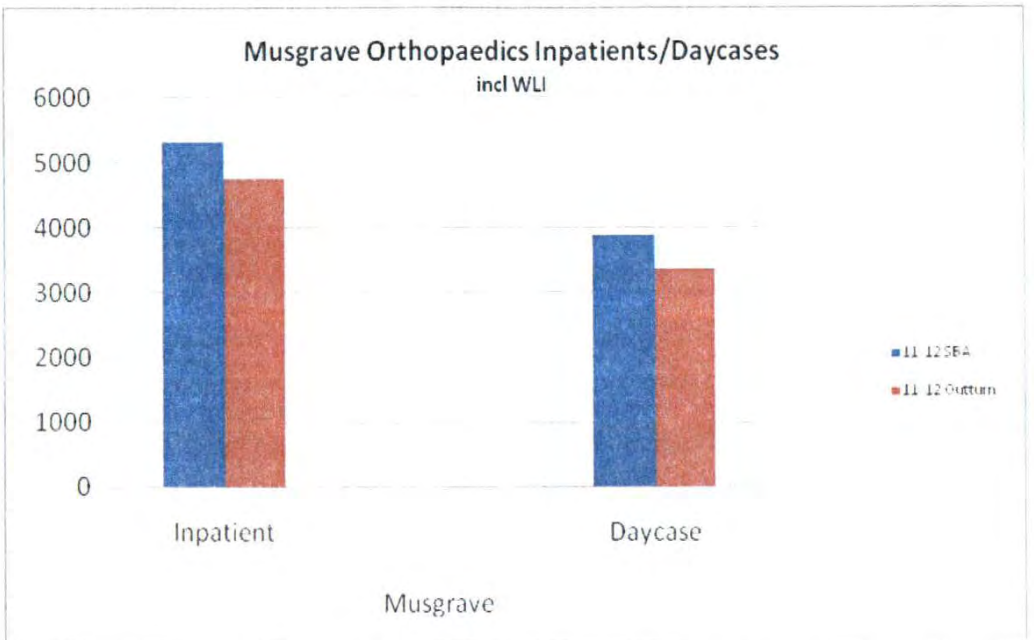
3.3 Service and Budget Agreement (end July 2011)

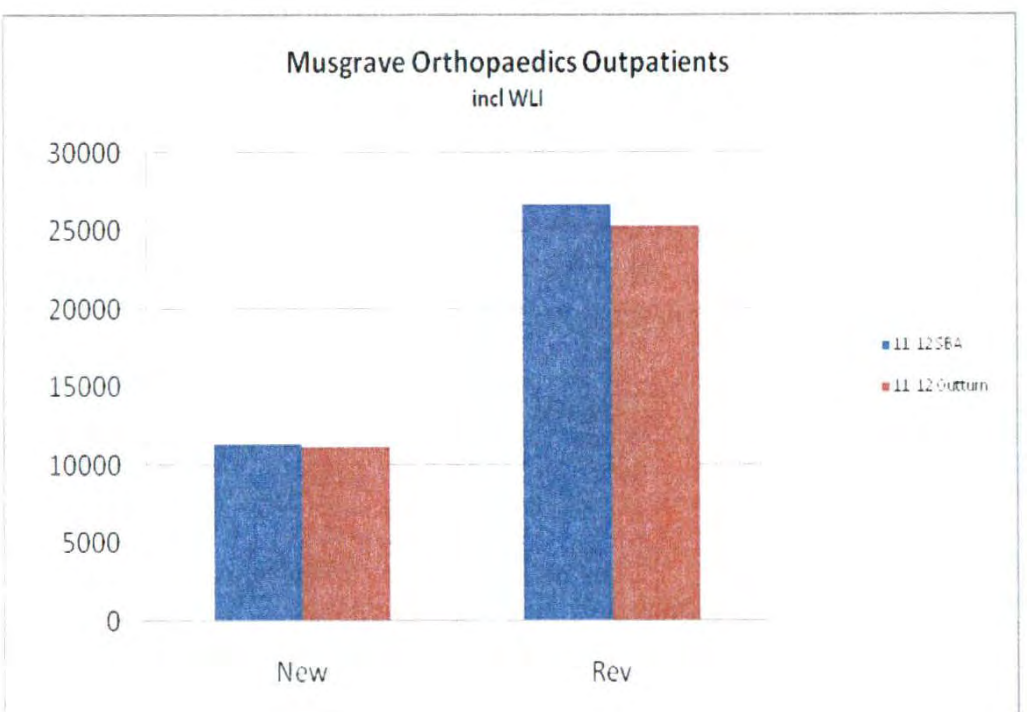
HSCB Capacity Assessment and Evaluation Exercise - update

The Trust is currently reviewing the outcomes of the Acute Capacity Planning Exercise with the HSCB. Pending adjustments to the SBA in light of the Exercise, data is presented in relation to the historical SBA position (April – July 2010).






Musgrave Orthopaedics Inpatients/Daycases
incl WLI
6000
5000
4000
3000
2000
1000
0
Inpatient
Daycase
Musgrave


Musgrave Orthopaedics Outpatients
incl WLI
30000
25000
20000
15000
10000
5000
0
New
Rev

The charts indicate the following:

RVH / BCH / MIH

- Overall inpatient elective activity (finished consultant episodes) is performing 18% under SBA (-5087 FYE FCEs, for end July)
- Non-elective activity (finished consultant episodes) is performing 14% over SBA (+7353 FYE FCEs for end July)
- Overall within elective and non-elective activity (finished consultant episodes) the Trust is 3% over SBA (+2266 FYE FCEs for end July)
- Daycase performance is 10% over SBA (+7100 FYE daycases for end July)
- Outpatient activity is 4% under SBA (-20,575 FYE attendances for end July).

Musgrave Park Hospital (Orthopaedics)

- Inpatient and daycase activity is 12.5% under SBA (-1149 FYE for end July)
- Overall outpatient performance is 4% under SBA (-1615 FYE attendances for end July).

BELFAST TRUST (OUTPATIENTS)
PERFORMANCE AGAINST MARCH 2011 POSITON

Specialty	Maximum waiting time (wks) at 31.3.11 - HSCB Letter of 22.4.11 (Trust data)	Maximum waiting time (wks) at 31.6.11 - HSCB Letter of 22.4.11	Actual End July Position					
	END MARCH WAITING TIME	END JUNE TRUST PROJECTED WT	Number of breaches end July (waiting over end March WT position - HSCB letter wt	Longest wait end July (wks)	% patient seen during Apr - July within 9 weeks	% of patients seen during Apr - July within 21 weeks	Number of patients waiting over 21 weeks at end July	Directorate Comments
Rosaleen Corvan								
Breast Surgery	9	9	0	0	90%	100%	0	
Endocrinology	9	9	0	0	75%	100%	0	
Gastroenterology	9	9	8	10	76%	100%	0	
General Medicine	9	9	41	13	74%	100%	0	
General Surgery	9	13	61	14	73%	100%	0	
Hepatology	9	9	0	0	65%	100%	0	
Infectious Diseases	9	9	9	22	100%	100%	1	
Respiratory Medicine	9	9	54	19	72%	100%	0	
Specialist Medicine	9	9	23	12	74%	100%	0	inc with Gen Med for Completed waits
Aidan Dawson								
Neurology	26	26	265	37	46%	65%	571	
Neurosurgery	46	46	28	63	26%	79%	178	
Orthopaedics (c)	9	9	1275	19			0	
Orthopaedics (IS)	9	9	61	13			0	
Orthopaedics (T&O)	9	9	7	35	83%	100%	2	
Osteoporosis	9	9	31	15	71%	100%	0	
Brian Armstrong								
Cardiology	9	9	14	13			0	
Cardiology P McKeown	44	44	1	45	81%	97%	6	
Cardiac Surgery	9	0	0	0	99%	100%	0	
Burns	9	0	0	0	100%	100%	0	
ENT	13	13	65	23	53%	100%	1	
Ophthalmology	27 (30/36)	27	48	35	46%	82%	328	
Paediatric ENT	9	13	181	18	59%	100%	0	

BELFAST TRUST (OUTPATIENTS)

PERFORMANCE AGAINST MARCH 2011 POSITON

Specialty	Maximum waiting time (wks) at 31.3.11 - HSCB Letter of 22.4.11 (Trust data)	Maximum waiting time (wks) at 31.6.11 - HSCB Letter of 22.4.11	Actual End July Position					
	END MARCH WAITING TIME	END JUNE TRUST PROJECTED WT	Number of breaches end July (waiting over end March WT position - HSCB letter wt	Longest wait end July (wks)	% patient seen during Apr - July within 9 weeks	% of patients seen during Apr - July within 21 weeks	Number of patients waiting over 21 weeks at end July	Directorate Comments
Orthodontics	9	13	23	16	13%	100%	0	
Periodontics	36	36	0	24	8%	93%	55	
Prosthetics	26	26	0	0	39%	55%	18	
Community Paediatrics	60	60						
Paediatric Dentistry	43	43	77	57	37%	69%	200	
Paediatric Dermatology	9	9	33	14	42%	100%	0	
Paediatric Haematology	9	9	0	0	78%	100%	0	
Paediatric Medicine	21	21	80	24	54%	94%	80	
Paediatric Nephrology	9	9	0	0	98%	100%	0	
Paediatric Neurology	30	30	0	22	11%	76%	1	
Paediatric Neurosurgery	44	44	1	45	14%	48%	178	
Paediatric Orthopaedics	9	9	28	12	84%	100%	0	
Paediatric Plastics	9	9	20	12	74%	100%	0	
Paediatric Surgery	9	9	19	13	59%	100%	0	
Liz Bannon								
Gynaecology	13	13	7	18	67%	100%	0	
Regional Fertility	9	9	2	11	84%	100%	0	
Una MacAuley								
Geriatric Medicine	9	9	1	45	79%	100%	1	
Old Age Psychiatry	9	9	36	18	65%	100%	0	
Total			**4170**		**69%**	**94%**	**6676**	

BELFAST TRUST (INPATIENTS/DAYCASES)

PERFORMANCE AGAINST MARCH 2011 POSITON

Specialty	Maximum waiting time (wks) at 31.3.11 - HSCB Letter of 22.4.11 (Trust data)	Maximum waiting time (wks) at 31.6.11 - HSCB Letter of 22.4.11	Actual End July Position					
	END MARCH WAITING TIME	END JUNE TRUST PROJECTED WT	Number of breaches end July (waiting over end March WT position - HSCB letter wt	Longest wait end July (wks)	% patient seen during Apr - July within 13 weeks	% of patients seen during Apr - July within 36 weeks	Number of patients waiting over 36 weeks at end July	Directorate Comments
Rosaleen Corvan								
Breast Surgery	36	44	14	47	85%	97%	14	
Endocrinology	13	13	1	24	96%	100%	0	
Gastroenterology (scopes)	36	36	29	43	67%	96%	29	Lack of capacity
General Medicine	13	13	2	34			0	Lack of capacity
General Medicine (scopes)	36	36	124	77	62%	93%	124	Lack of capacity
General Surgery-Scopes	36	36	164	49			164	Lack of capacity
General Surgery	21	21	56	31	70%	97%	0	Lack of capacity
Hepatology	36	36	0	0	77%	90%	2	
Respiratory Medicine	13	13	1	19	100%	100%	0	Lack of capacity
Aidan Dawson								
Neurology	57	68	52	72	80%	91%	97	
Neurosurgery	36	36/60	21	64	70%	96%	21	
Orthopaedics (c)	36	36	81	126			81	
Orthopaedics (IS)	36	36	36	60			36	
Orthopaedics (T&O)	36	36	36	78	47%	82%	36	
Brian Armstrong								
Cardiology	36	36	3	54	81%	98%	3	
Cardiac Surgery	26	26	7	29	12%	96%	0	
Plastic Surgery	70	75	11	78	56%	73%	203	
ENT	33	33	8	40	40%	96%	1	
Ophthalmology	36	36	16	45	46%	98%	16	
Paediatric ENT	33	33	0	32	50%	99%	0	
Paediatric Cardiology	36	36	0	19	56%	100%	0	
Thoracic Surgery	36	39	6	44	92%	98%	6	
Urology	52	57	10	72	64%	92%	350	
Vascular	36	42	35	42	61%	91%	35	
Janet Johnston								
Pain	62	54	7	74	26%	58%	163	
Radiology	13	13	12	29	98%	100%	0	

BELFAST TRUST (INPATIENTS/DAYCASES)

PERFORMANCE AGAINST MARCH 2011 POSITON

Specialty	Maximum waiting time (wks) at 31.3.11 - HSCB Letter of 22.4.11 (Trust data)	Maximum waiting time (wks) at 31.6.11 - HSCB Letter of 22.4.11	Actual End July Position					
	END MARCH WAITING TIME	END JUNE TRUST PROJECTED WT	Number of breaches end July (waiting over end March WT position - HSCB letter wt	Longest wait end July (wks)	% patient seen during Apr - July within 13 weeks	% of patients seen during Apr - July within 36 weeks	Number of patients waiting over 36 weeks at end July	Directorate Comments
Caroline Leonard								
Dermatology	13(22)	20	12	24	72%	99%	0	
Haematology	13	13	0	0			0	
Medical Oncology	13	13	0	0			0	
Nephrology exc LDT	13(45)	13	6	41	90%	98%	1	Completed waits will include LD
Rehabilitation Medicine	13	13	0	0			0	
Rheumatology	13	13	1	14			0	
Karin Jackson								
Oral Surgery	36	36	18	52	73%	95%	18	
Paediatric Dentistry	26	26	1	30	71%	98%	0	
Paediatric Medicine	13	13	0	0	85%	100%	0	
Paediatric Neurology	13	13	0	0			0	
Paediatric Neurosurgery	13	13	1	14	100%	100%	0	
Paediatric Orthopaedics	36	36	12	78	70%	90%	12	
Paediatric Plastics	32	32	4	54	23%	95%	4	
Paediatric Surgery	40	>40	3	42	58%	88%	3	
Liz Bannon								
Gynaecology General	21	21	11	28			0	
Gynaecology urogynae	36	36	13	40	52%	95%	13	
Una MacAuley								
Geriatric Medicine	13	13	0	0	100%	100%	0	
Old Age Psychiatry	13	13	0	0	100%	100%	0	
Total			**814**		**60%**	**95%**	**1432**	

% completed waits will only include patients with a date on WL

Appendix ii

Summary of Targets Reported to Trust Board Bi-annually

Suicide Awareness/Prevention Training
By March 20121 100, "Gatekeepers," suicide awareness/prevention training sessions to be delivered to a minimum of 1000 people.

Seasonal Flu Vaccine
By March 2011 20% uptake of seasonal flu vaccine by frontline HSC workers.

Falls Bundle
From January 2012 achieve 95% compliance with all elements of the falls bundle in specified inpatient acute care settings.

SKIN Care Bundle
From January 2012 achieve 95% compliance with all elements of the SKIN bundle in specified acute care settings.

Clinical Quality Improvement Collaboratives
By October 2011 establish two new clinical quality improvement collaboratives in priority safety topics.

MARACs
From April 2011 appropriate HSC staff to participate in at least 95% of Multi-Agency Risk Assessment Conferences held in their area.

Family Support
By March 2012 provide family support interventions to 3000 children each year.

Care Leavers – Foster Carers
From April 2011 225 care leavers aged 18+ to be living with their former foster carers or supported family.

PPI
By March 2012 publish and implement approved Public and Personal Involvement Consultation Schemes.

Procurement
From 1 October 2011 95% of project requirements over £20k in relation to supplies and services procurement and £30k for construction to be publicly advertised using eSourcing NI.

Sub-Contracting
From 1 October 2011 95% of contracts to include requirement for terms and conditions for sub-contracting.
Generic Prescribing

By March 2012 increase the level of prescribing generic medicines to 66% compared to previous year.

Unplanned Admissions
By March 2012 reduce the number of unplanned hospital admissions by 10% for adults with specified long term conditions compared to previous year.

Telemonitoring
By March 2012 enable 1800 people regionally to benefit from remote telemonitoring services.

Daycase rate
During 2011/12 75% of cases treated as daycases for each individual procedure within a basket of 24 procedures.

Excess Bed days
During 2011/12 reduce number of excess bed days for the acute programme of care by 5%.

Explanation of Statistical Process Control Charts and Control Limits

The charts indicate:

- The mean performance over the period shown in the chart
- The actual performance over the period shown in the chart
- Upper warning limit: calculated as 2 standard deviations above the mean
- Upper control limit: calculated as 3 standard deviations above the mean
- Lower warning limit: calculated as 2 standard deviations below the mean
- Lower control limit: calculated as 3 standard deviations below the mean

The statistical process control charts plot how far Trust performance each month moves away from the average performance over the time period show (usually 18 months).

In general terms, if the aim is to reduce performance against the mean:

- Breaching the UCL in any given month would warrant investigation and further analysis
- Consistent breaching (over a period of months) of the upper warning limit would also warrant investigation and further analysis.

If the aim is to achieve performance better than the mean:

- Breaching the LCL in any given month would warrant investigation and further analysis
- Consistent breaching (over a period of months) of the lower warning limit would also warrant investigation and further analysis.

Belfast Health and Social Care Trust

Minutes of the 7th Meeting of Assurance Committee of the Belfast Health & Social Care Trust held in the Boardroom, Trust Headquarters, on Wednesday 3 June 2009 at 2.00pm.

Present:	Mr P McCartan	Chairman
	Mr J O'Kane	Non-Executive Director
	Mr T Hartley	Non-Executive Director
	Prof E Evason	Non-Executive Director
	Dr V McGarrell	Non-Executive Director
	Mr C Jenkins	Non-Executive Director
	Ms J Allen	Non-Executive Director
In Attendance:	Mr W McKee	Chief Executive
	Dr T Stevens	Medical Director
	Mrs W Galbraith	Director of Finance
	Mrs M Mallon	Director of Human Resources
	Dr P Donnelly	Director of Clinical Services
	Mr B Mullen	Director of Mental Health and Learning Disability Services
	Mrs J Welsh	Director of Specialist Services
	Ms D Stockman	Director of Planning and Re-Development
	Ms C McNicholl	Acting Director of Performance & Service Delivery
	Mrs Nicki Patterson	Acting Director of Nursing
	Mr Paul Ryan	Head of Office of Chief Executive
	Mr I Jamison	Acting Patient and Client Support Services Director
Apologies:	Mr L Drew	Non-Executive Director
	Miss B McNally	Director of Social Services, Family and Child Care

A/C 11.09 Minutes of Previous Meeting

The minutes of the Assurance Committee Meeting held on the 4 March 2009 were read and approved.

A/C 12.09 Matters Arising from the Minutes

Dr Stevens briefed the Committee on a settlement in December 2008, for damages of £2.425m relating to a 1997 obstetrics case.

A/C 13.09 Chairman's Business

Mr McCartan welcomed a CHKS Report which stated that the Belfast Trust Hospitals were among the top forty in the UK.

Mr McCartan tabled the Revised Assurance Framework April 2009.

Dr Stevens presented a self-assessment of the revised Assurance Framework detailing any outstanding actions required by the Trust. The overall assessment was that the Trust met the requirements of the Revised Assurance Framework.

Mr McCartan tabled correspondence from Mr L Drew who could not attend the meeting. The points raised by Mr Drew would be dealt with during the meeting.

Mr McCartan welcomed Mrs Nicki Patterson, Acting Director of Nursing and Ms Catherine McNicholl, Acting Director of Performance and Service Delivery to the meeting.

Presentation by the Director of Legal Services

Mr Maginness presented on the Corporate Manslaughter Legislation.

Mr Maginness set the context for the need for corporate manslaughter legislation. To be guilty of the common law offence of gross negligence manslaughter a company had to be in gross breach of a duty of care owed to the victim. Mr Maginness set the context of the Herald of Free Enterprise and the Sheen Report. He set out the principal provisions of the legislation and emphasised that the organisation is only guilty of an offence if the way in which its activities are managed or organised by its senior management is a substantial element in the breach.

Mr Maginness set out the relevant duty of care to staff and the public. He detailed the exemption and the powers of the court. He set out the remedial orders available to the court.

Mr Maginness concluded with a reference to Section 20, 'The common law offence of manslaughter by gross negligence was abolished in its application to corporations but the offence was still available in respect of individuals.

Mr McCartan thanked Mr Maginness for his presentation. The Committee in discussion raised the issues of individual liabilities, vicarious liability and definitions of an organisation. Discussion followed on the issues of resources and the routes for persuing a prosecution. Exemptions in relation to Pandemic Flu Planning were also discussed.

Mr McKee advised that the legislation was intended to encourage organisations to do the right thing. Mr Maginness emphasised the role of Senior Management in resolving issues and adhering to organisational policies.

A/C 14.09 Report of the Chief Executive

Mr McKee presented a personal stock take of the organisations achievements since the merger of the six legacy organisations. He set the real operational context for the organisation based upon the 80/20 rule of business development and achievement of objectives. He advised of the huge expectations of the organisation and the substantial progress which had been made.

Mr McKee reflected upon the culture of performance which existed in the early years of the Trust and to which he sought to bring balance in the promotion of the highest standards and effective service delivery in the interests of patients and users of the service. Mr McKee praised the pace of improvement and reform which had already been achieved in the Belfast Trust.

The Committee discussed the tension which existed in the delivery of targets against the scale of delivery of services within the Belfast Trust.

The Committee asked that performance reporting should reflect the volume of services delivered overall as well as the performance against targets.

A/C 15.09 Report of the Medical Director

Dr Stevens presented the following report.

(i) Corporate Risk Register – May 2009

Dr Stevens selected some of the key change areas in the Principal Risks and Controls. He reported on the work in relation to Pandemic Flu preparation. He detailed the risks associated with the Management of Deteriorating Patients. Other key areas identified related to the use of stand alone monitors and non-compliance with Blood Safety and Quality Regulations (S1 2005 NO SO) within the Belfast Health and Social Care Trust.

Dr Stevens emphasised those areas of Controls Assurance where the Trust did not achieve substantial compliance against the controls assurance standards for ICT, Records and Building and Land and Plant. He made reference to the ongoing concerns about the Working Time Directive and the organisations capacity to ensure that doctors rotas are compliant with the working time directive rotas.

Dr Stevens clarified for the Committee the process for identifying risks both corporately and within service groups.

Dr Stevens then addressed the items in Mr Drew's comments about firm target dates, and the issue of business cases alone not being sufficient to address risk.

In discussion the Committee sought further evidence in some areas of attempts to mitigate risk as well as the promotion of business cases to the Department for additional resources.

Decision: The Committee noted the Corporate Risk Register – May 2009.

Serious Adverse Incident Annual Report

Dr Stevens presented the Serious Adverse Incident Report 1 April 2008 – 31 March 2009.

There were eighty three reports during the years and over twenty three thousand adverse incidents reported overall in the region. Ninety per cent of these adverse incidents were of a minor nature or near misses. There were four hundred and twenty-nine serious adverse incidents across the region.

Decision: The Committee noted the Serious Adverse Incidents Report 1st April 2008 – 31 March 2009.

(iii) Report on RCA P602

Dr Stevens presented the lessons from the Root Cause Analysis (RCA) into P602 He presented the background and summary of findings. The recommendations were both of a local nature and regional.

Dr Stevens expressed his deep regret for the incident which had occurred and acknowledged the system failures and the failures in communication and leadership. Trust staff were offering ongoing support to the family and relatives.
A further investigation and performance review of clinical teams was being carried

out. The Trust had now established an RCA Review Board as a consequence of this case, to address any actions which were outstanding.

Decision: The Committee noted the Serious Adverse Incident Report on P602 *and asked for an early up-dating report to the Board of the Trust.*

(iii) Infection Prevention and Patient Safety Delivery Plan 2009/10

Dr Stevens presented the Infection Prevention and Patient Safety Delivery Plan 2009/10. The document replaced the Infection Control Action Plan that was reported on during 2008/09 and the Quality Improvement Plans that were contained in the document entitled 'Patient and Client Safety – Interlinking Initiatives which was produced in June 2008 and updated in October 2008.

Dr Stevens also presented the Belfast Health and Social Care Trust Safety and Quality target areas 2008-2009 and the April 2009 Progress Overview. This report summarised all the work in patient safety within Priorities for Action.

(iv) Controls Assurance Compliance Reports

Mrs Champion presented the Controls Assurance Compliance Report. She advised the Committee of the areas where substantive compliance was not achieved.

The Committee expressed concern about the areas of ICT and Records in particular.

The Committee requested a more detailed meeting to discuss in particular the issues of ICT. Dr Stevens advised the Committee that significant improvements which had been made in many of the other areas of Controls Assurances.

Decision: The Committee noted the Controls Assurance Report and asked for a specific workshop on ICT.

(v) Medical Device Management Annual Report

Mrs Champion presented the Medical Devices Management Annual Report 2008/09. This was the first annual report on Medical Devices, the purpose of which was to highlight governance arrangements.

Mrs Champion detailed the accountability arrangements and structures and presented the sub-committee reports on decontamination, estates report and risk management report. Mrs Champion described the Adverse Incident Reporting in relation to medical devices and the extensive training for medical device management.

The Committee clarified the number of incidents related to failure of a device or equipment. Mrs Champion described the process of dealing with quality control issues and re-affirmed the medical devices policy arrangements.

Decision: The Committee noted the Annual Report on Medical Devices Management 2008/09.

A/C 16.09 Independent Reviews/ External Inspections and Action Plan Summaries

Visit by Mental Health Commission to Mental Health and Learning Disability Services

Mr Mullen, Director of Mental Health and Learning Disability Services presented the report of visits to Knockbracken Healthcare Park, Muckamore Abbey Hospital, Shannon Clinic, Shaftsbury Square Hospital and the Maine Unit.

The Committee discussed the issues associated with the Maine Unit and Avoca.

Decision: The Committee noted the Report but asked for all RQIA Reports to be made available to the Non-Executive Directors.

External Inspection

Dr Donnelly presented the External Inspection Reports. She advised that there were twenty-eight regulated systems within the Trusts responsibilities relating to twenty-four authorities. The granting of licenses was on an annual, bi-annual and three yearly cycle. Dr Donnelly had to report on any critical non-compliance areas. Dr Donnelly set out the Inspecting Authority, the service inspected, the inspection interval and the outcome and actions required. The Trust Licensing Committee oversees the work of a central team who had a well developed plan of audit linked into regulation.

Decision: The Committee noted the External Inspections and Action Plan Summaries

A/C 7.09 Report of the Director of Planning and Re-Development

Statutory Compliance Audit Risk Tool (SCART)

Ms Stockman gave a presentation on maintaining a safe and effective health and social care environment. She set out the care element of estate risk management detailing the Trust statutory and legal responsibilities, compliance with best practice guidelines, budget responsibilities and the needs of service users.

Ms Stockman presented the Statutory Compliance Audit and Risk Tool (SCART) which helped to define and assess the physical risk condition appraisals, and set the strategic direction.

SCART was now being piloted in the Belfast Trust on behalf of Health Estates. It was a risk tool to identify gaps in compliance with legislation and best practice guidelines. A physical risk register and SCART were both required to present the total risk profile of the estates.

Ms Stockman set out the thirty-nine categories of assessment and detailed the progress on implementation across the six sectors of the Trust.

Ms Stockman emphasised that the requirements of the service users needed to be the top priority. The Committee thanked Ms Stockman for her valuable presentation.

Decision: The Committee noted the presentation on Maintaining a Safe and

Effective Health and Social Care Environment.

A/C 18.09 Report of Director of Nursing

Mrs Patterson, Acting Director of Nursing, presented the Supervision Report to the Chief Nursing Officer. This represented the Annual Assurance Report on the Supervision of Registered Nurses.

Mrs Patterson set the background in the Review of Clinical Supervision for Nursing in the HPSS 2006 carried out by NIPEC, (the Northern Ireland Practice and Education Council) on behalf of the Department. She detailed the Trust position in relation to supervision activity and reported on the improvement in the baseline of 20% in January 2008 to 45% in March 2009.

The Committee commended Mrs Patterson for the work of the Implementation Group in achieving this progress.

Decision: The Committee noted the Report of the Director of Nursing on Supervision for Registered Nurses – April 2009.

A/C19.09 Minutes of Complaints Review Committee – March 2009

Prof Evason addressed the minutes of the Complaints Committee – March 2009. She highlighted the presentation of compliments as well as complaints in the report. There were one hundred and ten compliments recorded from January 2009 – March 2009. Prof Evason advised of the ongoing work in relation to complaints and clearing time adjustments. She advised of the experience of the Social Security Agency.

A/C 10.09 Any Other Business

There was no other business.

The next meeting was confirmed for 21 October 2009.

Belfast Health and Social Care Trust

Minutes of the 8th Meeting of Assurance Committee of the Belfast Health & Social Care Trust held in the Boardroom, Trust Headquarters, on Thursday 20 October 2009 at 2.00pm.

Present:	Mr P McCartan	Chairman
	Mr T Hartley	Non-Executive Director
	Prof E Evason	Non-Executive Director
	Ms J Allen	Non-Executive Director
	Mr L Drew	Non-Executive Director
In Attendance:	Mr W McKee	Chief Executive
	Dr T Stevens	Medical Director
	Mrs W Galbraith	Director of Finance
	Mrs M Mallon	Director of Human Resources
	Dr P Donnelly	Director of Clinical Services
	Mrs J Welsh	Director of Specialist Services
	Miss V Jackson	Director of Older People, Medicine & Surgery T&O
	Ms D Stockman	Director of Planning and Re-Development
	Miss B McNally	Director of Social Services, Family & Child Care
	Mrs N Patterson	Acting Director of Nursing
	Mrs D Curley	Head of Communications
	Mr I Jamison	Acting Head of Patient and Client Support Services
	Miss B Creaney	Acting Director of Children's Services
	Mr J Growcott	Acting Director of Social Work
	Mrs J Champion	Acting Head of Office of Chief Executive
Apologies:	Mr J O'Kane	Non-Executive Director
	Dr V McGarrell	Non-Executive Director
	Mr C Jenkins	Non-Executive Director
	Ms C McNicholl	Acting Director of Performance & Service Delivery

A/C 21.09 Minutes of Previous Meeting

The minutes of the Assurance Committee Meeting held on the 3 June 2009 were read and approved.

A/C 22.09 Matters Arising from the Minutes

From the minutes Dr Stevens reported to the Committee that an action plan in relation to the RCA on P602 had been agreed and submitted to the Health and Social Care Board. Dr Stevens further advised the Committee that the requested workshop on ICT would be scheduled as part of this year's Trust Board activity. In relation to the request for all RQIA Reports to be made available to the Non-Executive Directors, Dr Stevens confirmed that there had been no new thematic reviews since the date of the last Assurance Committee Meeting.

A/C 23.09 Chairman's Report

Mr McCartan reported that he would review the schedule of meetings for the Assurance Committee for 2010/11, he suggested that given the breadth of the papers which required to be tabled at the Committee there may be a need to increase the number of meetings.

Decision: The Chairman and Chief Executive would discuss the schedule of meeting for 2010/11.

A/C 24.09 Pandemic Flu Preparedness

Dr Tony Stevens presented a verbal update on pandemic flu preparedness to the Committee. He advised that following a recent case in the Western Health and Social Care Trust the region were awaiting new guidance in relation to screening. Dr Stevens reported that the Trust would be meeting with the Health and Social Care Board to discuss the interface between the Trust and primary care.

Mr McKee gave a brief outline of the details of the case in the Western Health and Social Care Trust. Dr Stevens highlighted the importance of good communication.

A/C 25.09 Statement on Internal Control (Mid Term Report)

Mrs Galbraith set the context of the new requirements for the mid-term statement on internal control and described the impact in relation to the scheduling of reports in the year.

Mrs Galbraith highlighted that at this point the emergency planning controls assurance standard had slipped to a moderate compliance level. She explained that the planning requirements for pandemic flu have meant that other aspects of emergency planning have not received the same focus during the first part of 2009/10. Mrs Galbraith reported that it was expected that the situation would be remedied in the next few months with an aim to increase compliance to the required substantive level. Mrs Galbraith confirmed that internal audit have reviewed the action plans of all twenty-two standards and in particular had focused on the three standards which had failed to achieve the required compliance for 2008/09. These standards were buildings, land, plant and non-medical equipment, information, communication and technology and records management. She reported that if work was maintained on these action plans then the three standards would be expected to achieve compliance by March 2010.

Decision: The Committee noted the mid-term report on the Statement on Internal Control.

A/C 26.09 Assurance Framework

a. Assurance Framework 2009/10 (revised)

Dr Stevens presented the revised Assurance Framework for 2009/10. He explained that it had been revised to take account of three new Committees. These Committees were the Patient & Client Safety Operational Group, the ICT Steering Group and the RCA Review Board.

Mr Hartley expressed some concern around the number of expert, professional and Advisory Committees contained within the Assurance Framework. Dr Stevens clarified that each Committee had agreed terms of reference and work plans for 2009/10 and that these work plans and progress had been reviewed through the Assurance Group and normal accountability arrangements.

b. Principles Risks

Dr Stevens presented the principle risk document. He explained that following the issue of the new DHSSPSNI Assurance Framework Guidance the Principle Risk document had been amended to take account of best practice.

c. Corporate Risk Register Service Group and Controls Assurance High Risks

The Corporate Risk register was also tabled. Dr Stevens confirmed that the Risk Register Review Group continued to scrutinise and evaluate all significant risks. Some recent changes to the document were highlighted.

Decision: The Committee noted the Principal Risk Document October 2009 and the Corporate Risk Register October 2009.

A/C 27.09 Annual Reports

a. Clinical Negligence Annual Report

Mrs Champion presented the Clinical Negligence Annual Report 1 April 2008 to 31 March 2009. Detailed clinical negligence reports, including the breakdown of costs, had been presented to the Committee throughout the year. Mrs Champion confirmed that the eight claims against the maternity service were not recent cases. Mrs Champion highlighted the work of the Clinical Negligence and Incident Review Committee which sought to summarise the nature of the allegations which gave rise to claims and to identify and share across the organisation any lessons to be learned or action to be taken to prevent recurrence.

Decision: The Committee noted the Clinical Negligence Annual Report 1 April 2008 to 31 March 2009.

b. Health & Safety Annual Report

Dr Stevens presented the Annual Health and Safety Report 1 April 2008 to 31 March 2009.

Dr Stevens advised that the Trust Health and Safety Committee was jointly chaired by himself and Mr Ray Rafferty (UNISON). Dr Stevens further advised that this Annual Report highlighted the benefits of close partnership working with trade unions. He reported that Mr Rafferty had recently been nominated jointly by HSENI and ICTU as Health and Safety Representative of the Year for the Northern Ireland. Mr McCartan offered Mr Rafferty's congratulations on behalf of the Committee for his achievements in the field of Health and Safety.

Dr Stevens highlighted progress in a number of key areas including; the development of an organisation-wide Health and Safety Audit tool, harmonisation of Health and Safety policies and the development and delivering of training programmes.

Dr Stevens reported that the organisation had reported 131 staff incidents to the Health and Safety Executive Northern Ireland under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). He confirmed for the Committee that the majority of these incidents had been reported as staff had been absent for more than 3 days.

In discussion the Committee sought further information regarding Employer Liability claims following alleged assaults on staff by patients.

Decision: The Committee noted the Annual Health and Safety Report 1 April 2008 to 31 March 2009.

c.

Infection Prevention and Control Annual Report

Dr Stevens presented the Annual Infection Prevention and Control Report 1 April 2008 to 31 March 2009.

The Report highlighted information on accountability arrangements, policies and procedures in relation to infection prevention, audit surveillance and education. Dr Stevens advised that the Report had been approved by the Infection Prevention and Control Committee.

Decision: The Committee noted the Annual Infection Prevention and Control Report 1 April 2008 to 31 March 2009.

d.

Food Safety Annual Report

Mr Jamison presented the Annual Report on Food Safety 1 April 2008 to 31 March 2009.

Mr Jamison set the context for the report and explained the Trust's statutory obligation to monitor food hygiene standards. Mr Jamison advised that the report detailed the food hygiene scores for the Belfast Trust catering facilities, the results of the external food hygiene audit by Environmental Health Officers (EHO) and the outcome of the self assessment of the controls assurance food hygiene standard.

Mr Jamison advised that the fluctuation in scores from 07/08 was due to a combination of many factors including availability of resources to perform repairs and upgrading of equipment, funding and organisational restructuring.

Mr Jamison reported that the Belfast City Hospital facility which had been downgraded to a one star rating following EHO inspections in July 2008 had subsequently been reinstated to three stars following immediate and appropriate managerial action.

Mr Jamison highlighted that a priority for 2009/10 had been to complete an option appraisal/business case on the future delivery of catering services by November 2009. He also highlighted the importance of exploring the relationship with the Belfast City Council Environmental Health Department as a key means of independent assurance in year.

Decision: The Committee noted the Annual Report on Food Safety 1 April 2008 to 31 March 2009.

e. Annual Report on Environmental Cleanliness

Mr Jamison presented the first Belfast HSC Trust Annual Report on Environmental Cleanliness 1 April 2008 to 31 March 2009.

Mr Jamison provided a brief overview of the regional and organisational context for environmental cleanliness and described the accountability arrangements. Mr Jamison reported that there had been a number of RQIA Unannounced Inspections of Trust facilities and a summary of these findings were to be discussed at Item 13.

Mr Jamison advised that the report demonstrates that significant progress has been made on a number of fronts; however there remains a considerable amount of work to be undertaken. The number of departmental and managerial audits has increased in year but there remain an unacceptable number of functional areas where environmental cleanliness audit data does not exist. He highlighted the disparity in audit scores between managerial and departmental audits which indicates that some work is required in 2010/11 to develop a consistency of approach.

Decision: The Committee noted the Annual Report on Environmental Cleanliness 1 April 2008 to 31 March 2009.

A/C 28.09 Report of Acting Director of Nursing

Mrs Patterson, Acting Director of Nursing, presented the Report on Nursing October 2009.

Mrs Patterson advised that in relation to the Patient Safety Delivery Plan, Corporate Nursing had in addition to supporting the monthly project board and ward improvement group delivered a number of awareness sessions across the organisation.

Mrs Patterson reported on the introduction of guidance to support Nursing and Midwifery staff to manage performance within the Trust capability process. The guidance had been developed in partnership with ward managers, team leaders, the HR department and staff side and would serve to maintain the quality and reputation of the Trust and to protect patients and staff.

Mrs Patterson reported on the current status of referrals to the Nursing and Midwifery Council (NMC) and advised that the Trust has thirteen current cases under review. None of these thirteen registrants are currently employed by the Trust. Mrs Patterson confirmed that there were “Lay” representatives on the NMC Council.

Decision: The Committee noted the Report on Nursing October 2009.

A/C29.09 Report of Acting Director of Social Work

Mr J Growcott, Acting Director of Social Work, presented the Report on Social Work October 2009.

Mr Growcott confirmed that that the Statutory Function Committee had completed all actions due from 1 April 2009 to date.

Mr Growcott reported that at present, approximately 1,300 Trust staff are registered on the NISCC Register and that it is envisaged that the remainder of the Trust's Social care Workforce (approximately a further 2,500 staff) will be required to register with the NISCC on a phased basis by December 2012.

Decision: The Committee noted the Report on Social Work October 2009.

A/C 30.09 Infection Prevention and Patient Safety Report

Dr Stevens presented the Infection Prevention and Patient Safety Performance and Governance Report October 2009.

Dr Stevens reported that in relation to Priorities for Action the Trust was achieving the MRSA and C difficile targets.

Dr Stevens highlighted the significant commitment of service groups in relation to compliance with process measures to achieve the reduction in HCAIs. In particular; hand hygiene which by August was audited in 77% of applicable wards with overall compliance rates of 92 %+-.

Dr Stevens also highlighted crash call rates

Mr McKee drew attention to the overall improvement rate

There was discussion around presentation of reports. It was agreed that there should be action summary notes to reports to highlight key messages and purpose.

Decision: The Committee noted the Infection Prevention and Patient Safety Performance and Governance Report October 2009.

A/C 31.09 Serious Adverse Incidents Summary Report

Mrs Champion presented the Serious Adverse Incident Report 1 April 2009 to 30 September 2009.

There were a total of nearly 11,000 adverse incidents reported for the period. The majority of these incidents were graded in relation to severity as either minor or insignificant in nature. Twenty three incidents were deemed to meet the DHSSPSNI Serious Adverse Incident criteria.

Mrs Champion advised that a number of key lessons had been learned following investigation into these incidents and that these have been shared across the region.

Decision: The Committee noted the Serious Adverse Incidents Summary Report 1 April to 30 September 2009.

A/C 32.09 Independent Reviews and Action Plans Summaries

Mr Jamison presented the RQIA Unannounced Hygiene Inspections Summary Report and Action Plan 1 April 2009 to 30 September 2009.
Mr Jamison reported that the RQIA had completed six unannounced hygiene inspections across various locations in the Trust since 1 April 2009.

He advised that the RQIA's escalation protocol had only been evoked in respect of three individual wards.

Mr Jamison reported that 60% of the recommendations had been actioned immediately following the inspections, 28% within 3 months and t only 12% remained unaddressed after 3 months. He advised that whilst operational issues highlighted by the inspections were relatively easy to rectify it is much more difficult to address issues identified that relate to the built environment.

Mrs Stockman confirmed that the Trust frequently relied upon general capital becoming available to the Estates Department in order to improve the built environment and that there is not enough money available to undertake programmed replacement and refreshment works. She advised that it was highly unlikely that there will be significant capital monies available within the next few years to undertake new capital build programmes. The Estates Department therefore have to take a risk based approach to how it maintains existing services.

Decision: The Committee noted the Independent Reviews and Action Plans Summaries (RQIA Unannounced Hygiene Inspections) 1 April to 30 September 2009.

A/C33.09 Complaints Review Group

Professor Evason addressed the minutes of the Complaints Review Committee 21 September 2009. She highlighted the importance of the move to McKinney House to allow for full integration of the Datix software system. Professor Evason also advised that the majority of incidents were now being managed within 30 days.

A/C34.09 Any Other Business

There was no other business.

A/C35.09 Date of Next Meeting

The next meeting will take place on Thursday 25 February at 2.00pm in the Boardroom, Trust Headquarters.