The Royal Wolverhampton Hospitals NHS Trust	

Trust Board Report

Meeting Date:	24 October 2011
Title:	Patient Safety Annual Report 2010/11
Executive Summary:	In July 2009 the Trust Board approved the strategy for Preventing Harm & Improving Safety (April 2009 – 2011). This is the second annual report which provides an update on the now well established range of patient safety activities and reports progress with the strategy. The summary of achievements can be found on page 9 along with the priorities for 2011/12.
Action Requested:	The Board is asked to note the content of the report
Report of:	Cheryl Etches, Chief Nurse
Author: **Contact Details:**	Mandy Gibbs, Patient Safety Manager mandy.gibbs@nhs.net
Resource Implications:	To be confirmed as part of reviewed strategy
Public or Private: **(with reasons if private)**	Public
References: **(eg from/to other committees)**	Presented to the Quality & Safety Committee (August 2011), Trust Management Team (September 2011)
Appendices/ **References/** **Background Reading**	
NHS Constitution: **(How it impacts on any decision-making)**	In determining this matter, the Board should have regard to the Core principles contained in the Constitution of: - Equality of treatment and access to services - High standards of excellence and professionalism - Service user preferences - Cross community working - Best Value - Accountability through local influence and scrutiny

The Royal Wolverhampton Hospitals NHS
NHS Trust

Patient Safety Annual Report

April 2010 – 2011

new cross hospital

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Patient Safety Annual Report 2010/11

1.0 Introduction

Patient safety is a national and a local priority and the provision of safe and effective care is a fundamental principle in healthcare and is one of the Trust's strategic goals. In July 2009 the Trust Board approved the strategy for Preventing Harm & Improving Safety (April 2009 – 2011). This is the second annual report which provides an update on the now well established range of patient safety activities and reports progress with the strategy.

2.0 Patient Safety Arrangements

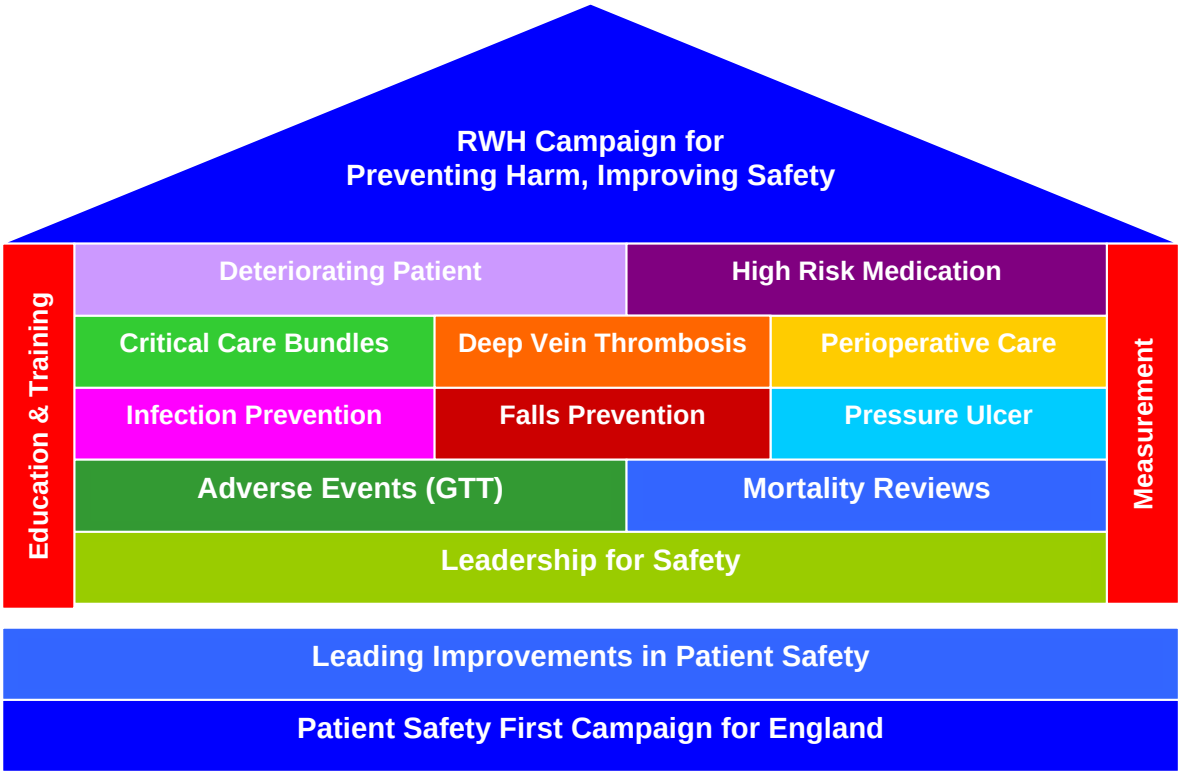
The Trust has firmly established governance arrangements to manage risks and ensure patients are safe. The Patient Safety Manager is responsible for the co-ordination of the patient safety improvement activities and during this period reported to the Director of Nursing & Midwifery.

During 2010 the patient safety team was extended to include a patient safety improvement co-ordinator to support the reduction of device related infections and a patient safety systems clinical project manager to implement an electronic point of care system called VitalPAC.

2.1 Preventing Harm Improving Safety Campaign

The Preventing Harm Improving Safety Campaign was launched in July 2009. The overall aim of the campaign is to have no avoidable deaths and prevent avoidable harm. This is monitored through the Hospital Standardised Mortality Ratio (HSMR), which should reduce, and the Global Trigger Tool, which should see a reduction in adverse event triggers. .

To achieve the aims of the campaign a range of initiatives were launched that had been proven to have an impact on the reduction of mortality and reduction in the number of events resulting in avoidable harm. The initiatives were agreed by the Preventing Harm Improving Safety Group and each initiative was led by a medical or nursing clinician, the diagram below depicts the campaign framework:



2.2 Preventing Harm Improving Safety Group

The Preventing Harm Improving Safety Group continues to meets on a monthly basis and is chaired by the Chief Executive. The constitution and terms of reference of the Group can be found in Appendix 1.

The purpose of the Group is:

- To determine the strategic direction of the Preventing Harm, Improving Safety Campaign
- Monitor progress of the improvement projects within the campaign framework
- Monitor rates of harm identified through the use of the Global Trigger Tool
- Review national guidance on patient safety initiatives
- Make recommendations for action
- Report to the Quality and Safety Committee on a quarterly basis

Core members of the group include the Director of Nursing & Midwifery (Deputy Chair), Non Executive Director, Patient Safety Manager, Clinical Leads, Divisional representatives, patient representative, and commissioner representative.

During 2010 eleven meetings were held on the 9 April 2010, 14 May, 11 June, 9 July, 13 August, 10 September, 8 October, 12 November, 10 December, 11 February and 11 March.

3.0 Reports to Trust Board

The Trust Board remains fully informed and involved in the patient safety agenda; two executive directors and one non executive director continue to participate in the Preventing Harm Improving Safety Group. The Board regularly receives reports on patient safety issues, including infection prevention and serious incidents.

The Quality & Safety Report is submitted to Trust Board on a quarterly basis and includes information on incidents, risks, inquests, litigation, complaints and other quality initiatives such as single sex accommodation, environmental standards, hand hygiene practice, nurse staffing levels and Essence of Care standards. The report also includes details on progress with each of the harm prevention initiatives.

4.0 Patient Safety Initiatives

The following patient safety initiatives were identified following staff engagement and following analysis of data from incidents, risks and complaints. Each initiative is led by a medical or nursing clinician and involves a multidisciplinary team and, in some groups, patients and carers.

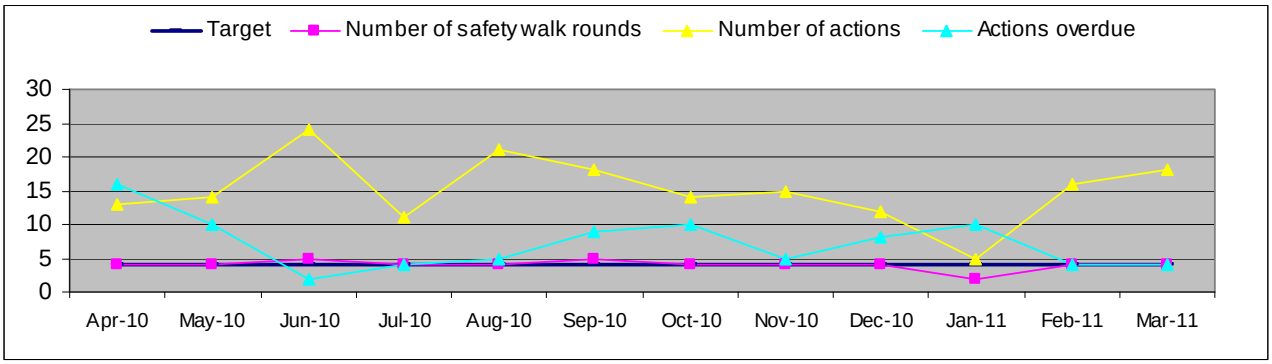
4.1 Leadership for Safety

The aim of this initiative is to ensure a leadership culture at Board level which promotes quality and safety. Leadership Safety Walk Rounds commenced in October 2009 and are led by an Executive Director. Graph 1 demonstrates the number of Walk Rounds completed.

The visiting team receive information on incidents and complaints involving the clinical area prior to the Walk Round and staff make notes of issues to discuss with the visiting team on a laminated poster. The incidents, complaints and poster notes form the basis for the discussion with staff on patient safety.

Following each Walk Round areas for action are agreed and monitored to ensure completion. The directorate management team include the Walk Round report in their Governance meetings.

Graph 1 Leadership Safety Walk Rounds (April 2010 to March 2011)



Outcomes from the Walk Rounds include the purchase of additional equipment, provision of patient information, development of transfer checklist, review of admissions from outpatient settings and environmental improvements.

Next steps 2011/12:
- Undertake an evaluation of the Leadership Safety Walk Rounds and review the process
- Include the community services in Leadership Safety Walk Rounds
- Include patient safety indicators as key performance indicators
- Review and develop quality and safety indicators and flow of information from ward to Board

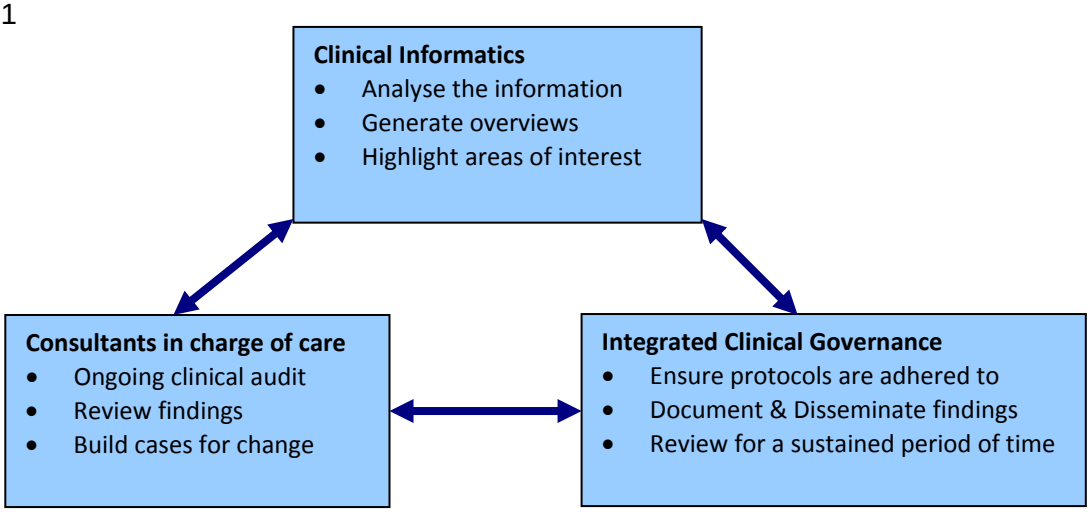
4.2 Mortality Reviews

A formal policy for mortality reviews was implemented in 2010 by introducing a systemic approach for investigating mortality throughout the Trust using a trust wide pro-forma that captures coding information as well any clinical process issues.

The Trust's Mortality Review Committee meets on a monthly basis to analyse directorate level audits of in-hospital deaths. The committee review a wide range mortality data from Dr Foster, HED analytics and in house information. The combined use of clinical and analytical data ensures that there is ongoing scrutiny of mortality performance and an established continuous improvement cycle.

In summary the Royal Wolverhampton Hospitals NHS Trust takes a prudent approach to mortality monitoring based on a three fold approach as demonstrated in Figure 1 below.

Figure 1



Next steps 2011/12:

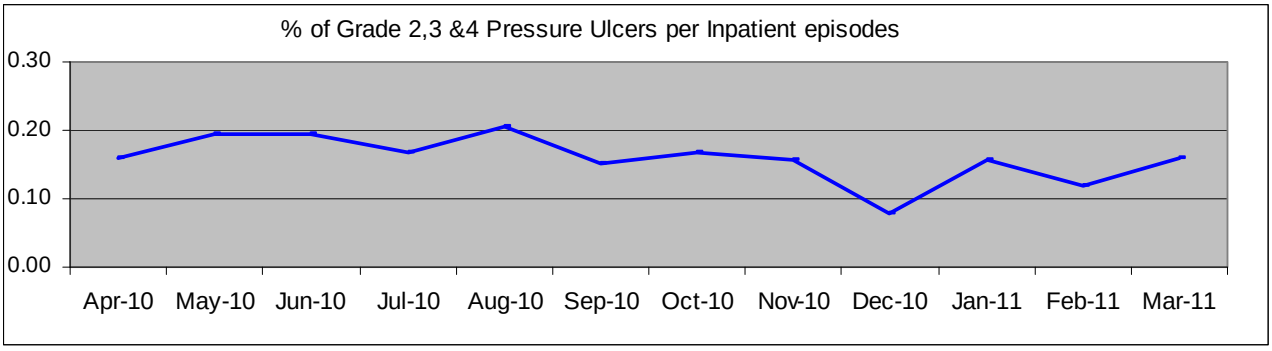
- Commence meetings of the Mortality Assurance Review Group (MoRAG), an executive level clinical and managerial group that has strategic responsibility for mortality surveillance, reporting and corrective action. The key function of the group is to ensure Board connectivity with the range of Mortality issues.

4.3 Prevention of Hospital Acquired Pressure Ulcers

Hospital acquired pressure ulcers represent largely avoidable episodes of harm to patients. In March 2010 a team was established to try to reduce the incidence of hospital acquired pressure ulcers. The graph below represents the percentage of pressure ulcers per number of inpatient episodes.

A policy covering the detection, reporting and management of pressure ulcers was developed. Initially the incidence of pressure ulcers rose due to increased awareness and incident reporting but during the year there has been a reduction in hospital acquired pressure ulcers.

Graph 2 Percentage of Pressure Ulcers per Inpatient Episode (April 2010 to March 2011)



The prevention of pressure ulcers remains a high priority for patient safety; further work is required to prevent patients developing pressures ulcers whilst they are in hospital and also in the community which are called community acquired pressure ulcers.

Next steps 2011/12:

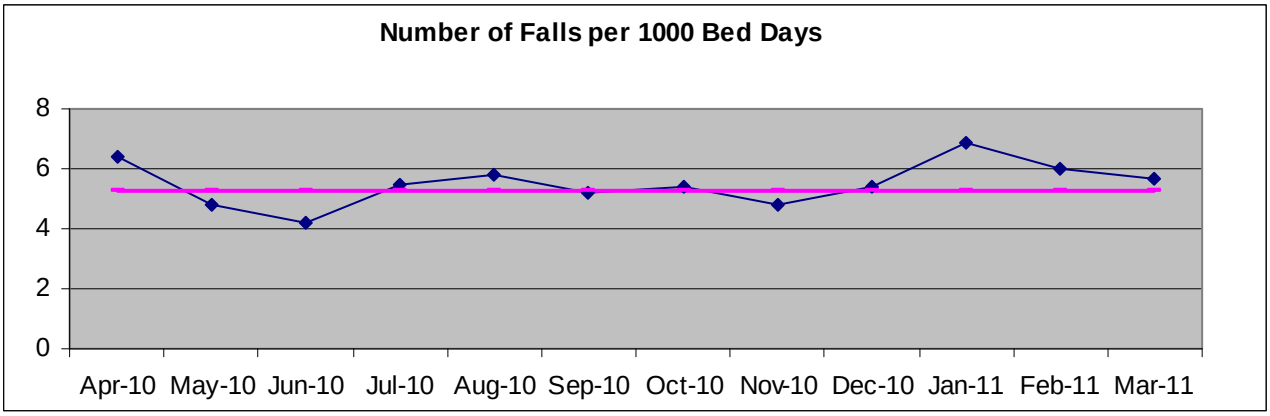
- Improve and enhance detection, reporting and management of pressure ulcers
- Undertake a rapid improvement event across clinical areas to decrease incidence of community acquired pressure ulcers
- Further develop and implement pressure ulcer prevention and management

4.4 Falls Prevention

The reasons for patient falls are varied and the Trust is committed to reducing the number and severity of inpatient falls and has implemented a falls prevention strategy. This includes the use of individualised falls risk assessments for every patient, the use of specialist equipment and education and awareness raising for both patients and staff.

Actions to reduce numbers of falls include basing nursing staff within the bays on the wards to improve patient monitoring, the development of falls competencies for staff, an audit tool to measure the effectiveness of actions and an electronic ward accreditation tool. Graph 3 shows the number of falls per 1000 bed days.

Graph 3: Number of Falls per 1000 Bed Days (April 2010 to March 2011)



We were not successful in reducing falls this year and falls prevention is a priority for 2011/12.

Next steps 2011/12:

- Increase frequency and attendance at Falls Committee
- Review falls strategy
- Implement a rapid improvement initiative focusing on areas with the most inpatient falls, review and extend to other areas
- Review equipment requirements and availability in order to prevent falls e.g. high low beds, movement sensors
- Undertake investigation where falls result in serious injury

4.5 Infection Prevention

A detailed annual report on Infection Prevention can be found on the Trust website. The report details the achievements against infection prevention targets, in particular MRSA bacteraemias, which are unprecedented with no MRSA bacteraemia since June 2009.

During 2010/11 we focused our efforts on reducing infections related to medical devices including central lines, urinary catheter with a target reduction of 10% in one year. Actions included data collection and monitoring, tools to prompt device removal, database development, and educational sessions to build knowledge and skills. As a result there was a 25% reduction in infections related to medical devices compared to the previous year.

There is however no room for complacency and the Trust continues to target a reduction in other infections. The current infection prevention strategies continue with additional focus on the prevention of MRSA acquisition, MSSA, C Difficile and device related infections.

Next steps 2011/12:

- Continue to improve knowledge and skills to prevent infections related to medical devices
- Extend the use of the central line database to all areas that insert central lines
- Continue existing infection prevention strategies

4.6 Perioperative Care

The surgical safety checklist provides the 'pre-flight checks' which aims to prevent adverse events in theatres, prevent surgical site infections and improve team work and communication. The World Health Organisation checklist was amended (as advised) and implemented in all theatres at the end of March 2010.

Our checklist incorporates each of the four components of the care bundle identified to prevent surgical site infections:

- antibiotics 60 minutes prior to incision,
- appropriate hair removal,
- maintenance of normothermia
- maintenance of blood glucose in diabetic patients).

The use of the checklist continues to be monitored by the matron in theatres with observational and completion audits are undertaken. The checklist is included in the theatre documentation and continues to be used.

4.7 Prevention of Venous Thromboembolism (VTE)

The NICE guidance for the prevention of VTE was released in January 2010. The Trust VTE clinical group reviewed the NICE guidance and developed a Trust policy. A training and education programme was developed and delivered to nursing and medical staff and a process for investigating hospital acquired VTE was introduced.

Initially a paper based system to record VTE risk assessments was implemented however by January 2011 all adult inpatient and day case areas began recording the risk assessments on an electronic system. Initial progress with the electronic VTE risk assessment was slow but has significantly improved.

Next steps 2011/12:

- Continue to monitor VTE risk assessment completion
- Review outcomes and learning from investigations into hospital acquired VTE

4.8 Critical Care Bundles

The critical care bundles include actions to prevent central line infections (CLI) and ventilator acquired pneumonia (VAP). Care bundles include a small number of components of care that, if applied rigorously, will help to prevent either CLI or VAP.

The clinical team review all cases of suspected CLI or VAP at regular meetings with the aim of identifying improvements to avoid reoccurrence. The team continue to monitor and reinforce the reliable application of each element of the care bundle in order to reduce VAP; audits of the care bundle compliance have found 100% compliance throughout the year.

The critical care team launched the critical care patient safety group in July 2010 to raise awareness and improve knowledge around VAP and CLI. Their performance with the care bundles and number of VAP and CLI are displayed for all to see and the critical care unit continue to participate in a national initiative called Matching Michigan, which aims to reduce central line infections in critical care settings.

4.9 High Risk Medicines

Medications are the most common intervention in health care and are also most commonly associated with adverse events in hospitalised patients. Adverse drug events are not always due to medication errors and efforts to improve medication safety have included standardisation of processes, active pharmacist interventions, and reporting and reviewing incidents.

The Trust initiative included the high risk medicines identified by the Patient Safety First Campaign for England and includes: anticoagulants, insulin, opiates and injectable sedatives each have a pharmacist lead. Individual groups were established which are led by a pharmacist. Activities included:

- Identification of International Normalised Ratio (INR) results greater than 5 followed by a review of cases with an INR greater than 8. The INR measures the blood coagulation (clotting) and is monitored closely in patients who are taking medication to prevent or treat thrombosis (blood clots). Close monitoring and review of all cases where a patient's INR was greater than 8 did not find any adverse events. An audit of all INRs greater than 5 was also undertaken and found appropriate care and management with no adverse advents.
- A conscious sedation policy and education package to address patient safety issues related to injectable sedatives was developed and implemented.

4. 10 Deteriorating Patient

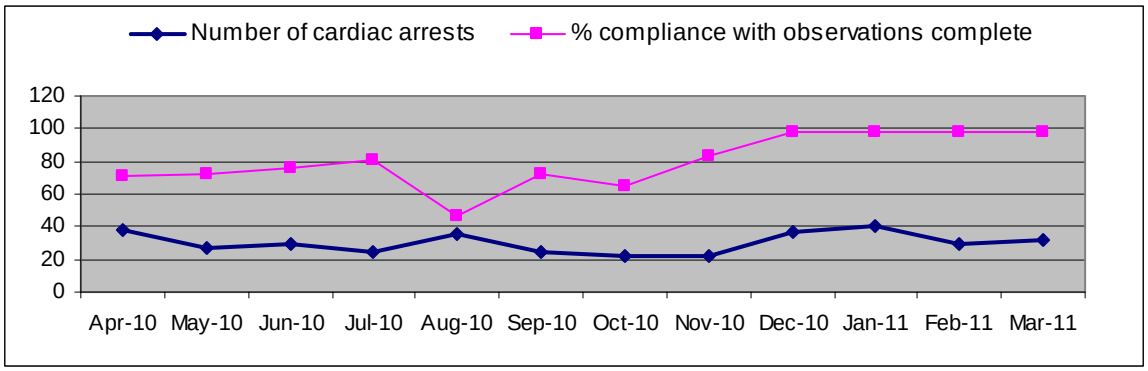
The aim of this initiative is to reduce in-hospital cardiac arrest and mortality rate through earlier recognition and treatment of patients who are deteriorating.

During 2010/11 a business case was approved and an electronic point of care system called VitalPAC was implemented. All adult day case and inpatient wards (except maternity and Mary Jones ward) started using VitalPAC by January 2011.

VitalPAC requires staff to enter patients' physiological observations into a hand held device, an early warning score is calculated and further actions are indicated dependant on the early warning score based on the Trust's escalation policy. With the appropriate access permissions, staff can access patients' observation charts from any computer in the Trust and closely monitor patients who may be at risk of deterioration so that prompt action can be taken.

The graph below shows the number of cardiac arrests and overall compliance with all aspects of patient observations.

Graph 5: Number of cardiac arrests per month and compliance with all aspects of the observation chart completed (April 2010 to March 2011)



Next steps 2010/11:

- Undertake benefits realisation of VitalPAC one year following implementation
- Identify further actions required to reduce in-hospital cardiac arrests
- Monitor percentage of late observations (include as key performance indicator)
- Change to more sensitive early warning score (ViEWS)
- Monitor the Apache scores of patients admitted to the critical care unit

4.11 Think Glucose

Think Glucose is a NHS Institute initiative that aims to reduce variation and improve the quality of care for diabetic patients who are admitted for reasons other than diabetes. The team focussed their efforts on the following areas: data quality & coding, length of stay, insulin errors, patient satisfaction, hypoglycaemia and education & training.

The Diabetes Outreach Team have continued to follow up all known patients admitted to the hospital with diabetes and deliver training to staff working in the clinical areas. An electronic training tool is available on our intranet site and this is mandatory for specific staff groups.

In addition, an audit of insulin usage and errors has resulted in a rationalisation of insulin available on the wards to ensure safe and appropriate use of insulin.

5. Training and Development

Training and development of staff is relevant for each of the safety initiatives. The Education and Training subgroup of the Preventing Harm Improving Safety Group has worked with the clinical leads to develop education and training for doctors and nurses including e-learning modules and face to face training.

The Patient Safety Manager has also delivered a number of weekly patient safety awareness sessions for staff. Various sessions on our harm prevention initiatives are included in induction and development sessions for staff.

Next steps 2011/12:

- Implement a Patient Safety Passport to include key knowledge and skills required to prevent harm and improve patient safety and the patient experience initiatives

6. Safety Culture

In July 2010 we undertook a Trust wide survey of all staff on our patient safety culture. The survey highlighted areas of strength and areas for improvement. An action plan has been developed to address the areas requiring improvement.

Areas of strength:

- patient safety is not overlooked by managers and actions of managers show that patient safety is a top priority; there is a work climate that promotes patient safety
- the hospital is actively doing things to improve patient safety
- people work well together, support one another and work as a team to get the work done
- the ward areas/departments do not use more temporary staff than is best for patient care

Areas for improvement include:

- co-ordination and communication between departments
- assessment of appropriate staffing levels to handle workload
- ensure hours of work are not longer than deemed best for patient care

Next steps 2011/12:

- Commence initiative to improve clinical handover (initially emergency medical patients)
- Undertake a nursing workforce review
- Undertake further staff survey using our internal ‘Chat Back’ in July 2011

7. Summary of Achievements 2011/12

Our aim was to reduce significantly reduce the Trust's Hospital Standardised Mortality Ratio (HSMR)**.** The year end un-rebased position shows a HSMR of 102 which is 2 points above the England average; there were 17 excess deaths according to the Dr Foster statistical calculation. The year end HSMR marks a marked improvement because the corresponding figure in previous years was [109] in 2008/9 and [116] in 2009/10.

The Trust continues to be vigilant in monitoring mortality and examines clinical processes, coding architecture and evidence based improvement strategies. We continue to not attribute HSMR to merely coding but openly investigate all avenues of enquiry. We continue to follow best practice principles in mortality surveillance set out by Dr Foster, the Department of Health and the Royal Society of Medicine.

During 2011/12 we continued to use the Global Trigger Tool to review randomised case notes. We used the Tool to establish if there were any triggers that resulted in harm to patients. The group identified few triggers using this process therefore it has revised the approach and will review specific case notes of patients that had a cardiac arrest whilst in hospital.

2010/11 key achievements include:

- Introduction of a robust process to investigate mortality
- Reduction in the Hospital Standardised Mortality Ratio (HSMR) by 14 points in 12 months
- Zero MRSA bacteraemia since June 2009
- Reduction in device related infections by 25% in 12 months
- Implementation of VitalPAC to record and monitor patients' physiological observations, VTE risk assessment and cannulae management
- Introduction of 30 day focus events on patient safety priorities
- Patient safety awareness sessions for staff
- Development of patient safety key performance indicators
- Patient safety culture staff survey

8. Priorities for 2011/12

During 2011/12 we will review and develop our strategy to prevent harm and improve patient safety and quality. Our key priorities for 2011/12 are:

- Prevention of falls
- Prevention of hospital/community acquired pressure ulcers
- Prevention of hospital acquired VTE
- Prevention of unrecognised deterioration
- Prevention of device related bacteraemias
- Completion of nutritional screening and assessment
- Improvement of clinical handover within the emergency medical patient pathway
- Improvement in the provision of information on medicines side effects to patients

Preventing Harm Improving Safety Group – Constitution and Terms of Reference

Constitution

The Trust Management Team has resolved to establish a group to oversee the implementation of the Trust's campaign for preventing harm and improving safety to be known as the **Preventing Harm, Improving Safety Group**

Core Membership

- **Chairman of the Committee** will be the **Chief Executive**
- **Director of Nursing and Midwifery** is the executive lead for the Preventing Harm, Improving Safety Campaign and will be the deputy chair of this Group
- **Director of Governance** and chair of the **Mortality Review Meeting** will provide professional clinical advice to the Group on the implementation of the clinical projects and outcomes of the Mortality Review Meetings
- **Medical Director** will provide a medical overview in relation to patient safety and issues relating to professional practice
- **Patient Safety Manager** will act as Secretary to the Group, ensuring that the strategy for Preventing Harm, Improving Safety is implemented, and will lead the implementation of the campaign framework
- **Project Leads** are responsible for implementing their project in the clinical areas and will ensure that progress reports are provided to the Group for consideration and action
- **Divisional Representatives** will support the implementation of the strategy across their division
- **Head of Education & Training** will provide advice and support regarding any training and development issues raised by the Group members
- **Patient Representative(s)** will support the Preventing Harm, Improving Safety Campaign and provide advice and feedback from a patient's perspective
- **Non Executive Director** will provide advice and support in relation to the implementation of the strategy

PCT Representative will provide advice and support in relation to the Primary Care Trust and the implementation of The Royal Wolverhampton Hospitals NHS Trust's strategy for Preventing Harm, Improving Safety

Quorum - A quorum will consist of a minimum of four core members to include one project lead and one divisional representative.

Deputies - If unable to attend a meeting the member will ensure that an appropriate deputy attends on their behalf. The deputy should be fully informed, have the authority to make decisions on behalf of the member and will fully brief the member following the meeting.

Frequency

The Group shall meet monthly prior to the Quality & Safety Committee meetings to ensure all progress reports are timely so that effective management action can be taken.

Authority

- The Preventing Harm, Improving Safety Group is authorised by the Quality & Safety Committee to review all documents relating to its terms of reference and that its reports inform the Trust's managerial decision making processes.
- It is authorised to seek any information it requires from any employee in pursuit of its Terms of Reference and all employees are directed to co-operate with any request made by the committee.
- The Preventing Harm, Improving Safety Group shall transact its business in an open manner and in conformity with the principles and values of public service.

Duties

The Preventing Harm, Improving Safety Group will:

- determine the strategic direction of the Preventing Harm, Improving Safety Campaign
- monitor progress of the improvement projects within the campaign framework
- monitor rates of harm identified through use of the Global Trigger Tool
- receive reports in relation to the outcome of mortality reviews
- review national guidance on patient safety initiatives
- make recommendations for action
- report progress and exceptions to the Quality and Safety Committee on a quarterly basis