

Greater Glasgow and Clyde NHS Board

Board Meeting

June 2013

Board Paper No. 13/20

Medical Director

Head of Clinical Governance

Scottish Patient Safety Programme Update

1. Summary of Actions for Board Members

Members are asked to:

- Review and comment on the ongoing progress achieved by NHS GG&C in implementing the Scottish Patient Safety Programme

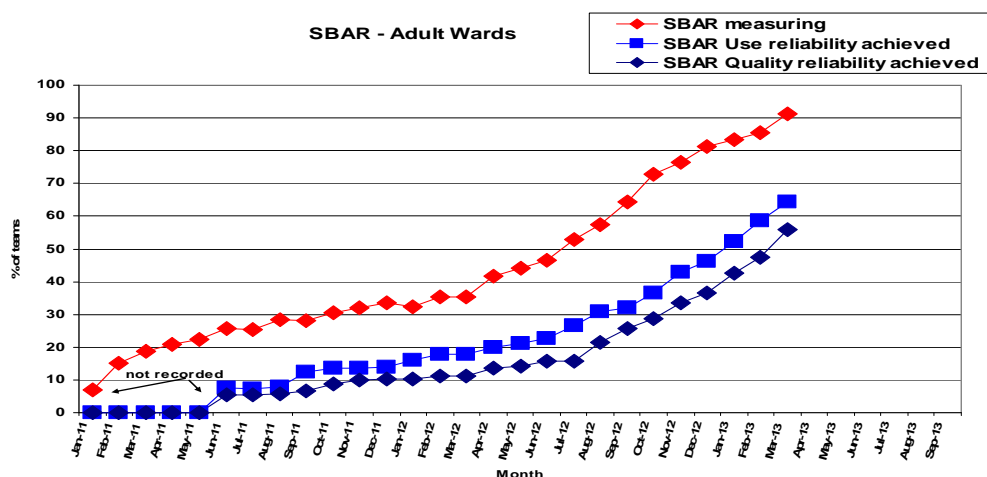
2. Programme overview for SPSP Adult Acute Care

The Board has recently responded to a request from Healthcare Improvement Scotland to outline progress across the Adult Acute Care programme. This progressed in implementation is summarised in the following tables for the elements in each of the four driver diagrams. The fourth column (**Number or % wards/units/theatres/depts. Implemented**) identifies the number of ward teams who are engaged on this element. The fifth column identifies those teams who have achieved a 95% reliable process.

The Acute Service Division Clinical Governance Forum is responsible for ongoing implementation and created an explicit General Ward as part of key Divisional safety objectives. We can see in this first table the current position confirming high levels of involvement and progress to reliable processes. (Reliability reflects that a process is predictably meeting defined requirements. In SPSP 95% process reliability is often the set requirement so when a process is described as reliable it has shown 95% performance for six consecutive data points).

Driver Diagram	Secondary Driver, SPSP required elements	Number of wards/units/theatres/depts. applicable to for your board	Number or % wards/units/theatres/depts. implemented	Notes (no. reliably implemented, if available)
General Ward	Assess patient risk using Early Warning Scoring System	166	166 (100%)	144 (87%)
	Peripheral Vascular Catheter Bundle	147	147 (100%)	99 (67%)
	Reliable hand hygiene practices	208	208 (100%)	193 (93%)
	Institute safety briefings	208	198 (95%)	149 (72%)
	Standardise clinical communications and handoffs Use SBAR format: (Situation, Background, Assessment, Recommendation)	194	179 (92%)	129 (66%)

These figures only tell part of the story. The next chart on SBAR, which is use of a structured communication tool, is one example to show that as a result of this focus in the Autumn of 2012 the rate of teams progressing to achievement increased and that current projections indicate completion in the summer of 2013. The Acute Service Division Clinical Governance Forum is now beginning to actively consider the next set of key Divisional safety objectives.



The following two tables show progress in Critical Care and Peri-operative care. Significant progress is apparent in both and the Acute Service Division is reviewing how programme support can move from improvement interactions to maintenance. (note: The two areas in peri-operative workstream that have not shown the same level of progress are associated with measurement challenges that have confounded opportunities to reach reliability)

Driver Diagram	Secondary Driver, SPSP required elements	Number of wards/units/theatres/depts. applicable	Number or % wards/units/theatres/depts. implemented	Notes (no. reliably implemented, if available)
Critical Care	Ventilator Associated Pneumonia Prevention Bundle	7	7 (100%)	6 (86%)
	Central line insertion bundle	7	7 (100%)	7 (100%)
	Central line maintenance bundle	17	17 (100%)	14 (82%)
	Optimal glucose control	7	6 (86%)	5 (71%)
	Peripheral Vascular Catheter Bundle	17	16 (94%)	13 (76%)
	Reliable hand hygiene practices	17	17 (100%)	17 (100%)
	Establish Daily Goals	17	14 (82%)	14 (82%)

	Institute Multi-Disciplinary Rounds	17	14 (82%)	13 (76%)
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Driver Diagram	Secondary Driver, SPSP required elements	Number of wards/units/theatres/depts. applicable	Number or % wards/units/theatres/depts. implemented	Notes (no. reliably implemented, if available)
Peri – op.	<ul style="list-style-type: none"> Ensure prophylactic antibiotic was prescribed as per local antibiotic policy/SIGN guideline, for the specific operation category and Ensure the antibiotic has been administered within 60 minutes prior to the operation 	46	45 (98%)	41 (89%)
	Avoid hair removal; if hair removal is necessary, avoid the use of razors	No longer measured	-	Controlled through forcing function of razors not available to Theatres
	Ensure the patient's blood glucose level was normal throughout the operation (diabetic patients only)	22	19 (86%)	9 (41%)
	Ensure the patient's body temperature was normal throughout the operation (excludes cardiac patients)	23	23 (100%)	22 (96%)
	Implement surgical briefings	54	53 (98%)	50 (93%)
	Provide reliable Deep Vein Thrombosis prophylaxis	46	37 (80%)	37 (80%)
	Continue beta blockade for patients on beta blockers	10	6 (60%)	4 (40%)

The final table reflects the current position and focus on medicine reconciliation in the admission pathways.

Driver Diagram	Secondary Driver, SPSP required elements	Number of wards/units/theatres/depts. applicable	Number or % wards/units/theatres/depts. implemented	Notes (no. reliably implemented, if available)
Medicine	Accuracy of medicines at the interface (Medicines Reconciliation on admission)	112	86 (77%)	17 (15%)

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3. Hospital Standardised Mortality Ratio (HSMR)

When SPSP was established there was a national measurement strategy that included two explicit overarching aims. One of these aims was to create a 15% reduction in hospital mortality.

At the time of the programme launch there was no national means of measuring, as given the factors that effect hospital mortality are so variable across each hospital and the community that it serves, that it is impossible to interpret through comparison by any simple statistical representation. So the Hospital Standardised Mortality Ration (HSMR) was established. Since December 2009, Information Services Division (ISD) has produced quarterly hospital standardised mortality ratios (HSMR) for all Scottish hospitals participating in the SPSP to enable these acute hospitals to monitor their progress on reducing hospital mortality over time. The HSMR is regularly published in a publicly accessible website.

The Scottish HSMR is calculated for all acute inpatient and day case patients admitted to all specialties (medical and surgical, but excluding obstetrics and psychiatry). It is based on information provided through hospital discharge summaries and linked to death registrations from the National Records of Scotland. The calculation includes more than those patients who die within a hospital and takes account of patients who died within 30 days from hospital admission including deaths that occurred in the community (out of hospital deaths). The HSMR then uses a risk based model to estimate the predicted probability of death within 30 days of admission based on the overall national experience in NHS Scotland during 2007. It, like many predictive models can not adjust for all clinically relevant characteristics that define risk in the patient case mix of individual hospitals over time. Also because it uses the national averages this causes some distortions when applied at an individual hospital. However it is helpful in provoking supporting local discussion as to whether a hospital is able to demonstrate an outcome of SPSP implementation, and other measures, in reducing mortality.

The governance of HSMR is embedded in reviews of SPSP implementation given that reducing hospital mortality is a fundamental element of the SPSP. HSMR is reported quarterly to the Acute Clinical Governance Forum as part of the SPSP standing reporting, with a breakdown of each site provided and performance over time. SPSP updates are also provided as a standing item to the Board's Quality & Performance Committee and to the NHS Board.

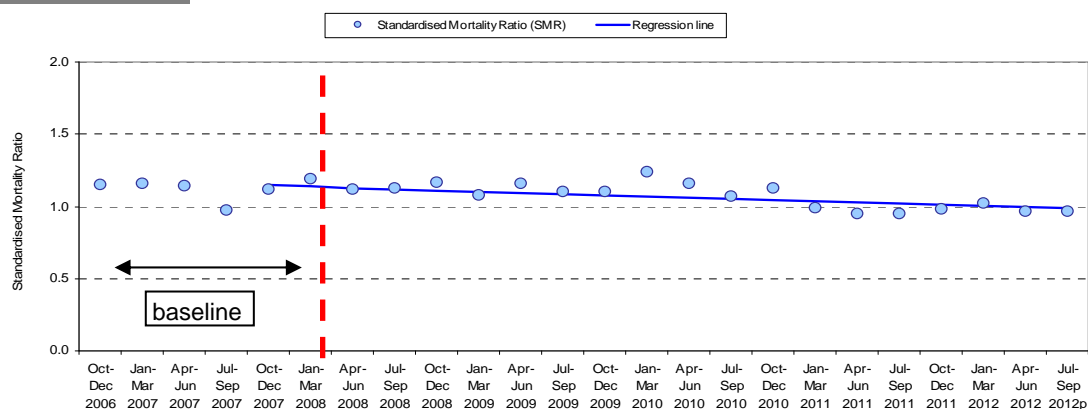
We were approached by NHS Healthcare Improvement Scotland in 2010 who indicated that RAH had not been reducing the HSMR in line with the national average and so appeared as an outlier through a comparative review. A review and action plan process was established, linked to the Medical Director in the role of Executive Lead for SPSP. The approach proved successful and the Board then received confirmation of acceptability be Healthcare Improvement Scotland on reducing the HSMR at the RAH.

In addition to the Ongoing implementation of SPSP at the RAH the set of interventions included;

- Review of the care for a large sample of patients who died in the RAH across both surgical and medical pathways. In the surgical pathway no causal factors were identified but this did show the impact of the palliative care pathway, which is a care model unique to the RAH. In the medical pathway no causal factors were identified.
- Review of the care for patients in High Dependency Unit, which resulted in trials of monitoring and assessment tools, and better integration with Intensive Therapy Unit and additional support from intensive care specialists.
- Review of the reliability of hospital systems for recognition and resuscitation of the acutely unwell and deteriorating patient which resulted in piloting of a new early warning scoring (EWS) (Note this has now been rolled out across the Acute Services Division), additional education for nurses and review of crash call system within RAH compared to those in use at other hospitals.
- Ongoing work to improve effectiveness of the in-patient bed management and flow within RAH
- Ongoing work to improve coding and data quality across the Acute Services Division

The current position for the RAH is highlighted in the chart below, which the HSMR at the RAH and Vale of Leven Hospital per quarter to the end of September 2012. (Please note that due to changes in patient pathways the HSMR is now a combined measure for both the RAH and the Vale of Leven Hospitals. At the time in 2010 these were separate measures and the Vale of Leven was not directly involved in our focused improvement activity).

Quarterly Hospital Standardised Mortality Ratios in Royal Alexandra Hospital / Vale of Leven



The Board SMR is outlined in the following table along with the most recent publicly available quarter's HSMR for GG&C hospitals (July – September 2012). The key figures to note are the reduction in HSMR. We can see from this table that all hospitals now have an HSMR of less than one and that all hospitals have also observed a greater than 10% reduction in HSMR of the reporting period. We can also see that the RAH has been successful in reducing the HSMR at level that is now in line with national average reduction.

Hospital	HSMR at Jul-Sep 12	Overall Change Since Dec 07
Vic Inf	0.79	-18.7%
SGH	0.81	-21.5%
WiGG	0.76	-12.2%
GRI/STB	0.79	-17.2%
Inv.	0.74	-10.6%

Rah/Vol	0.96	-13.5%
OVERALL	0.80	-15.62%

SPSP contains a number of drivers that are theoretically intended to reduce mortality and it is expected that some of this observed reduction arises from the spread of reliable clinical and communication processes across the Acute Services Division. There is also a range of other redesign and other quality improvement work that are considered to have a positive impact on reducing HSMR, notably reducing infections.

There has recently been an announcement of further nationally sponsored work, linked to Healthcare Improvement Scotland, to further develop our collective strategies aimed at reducing HSMR. The Board will participate with this large scale collaborative, which we anticipate will further enhance our local capability.