**Greater Glasgow and Clyde NHS Board**

**Board Meeting**  
Tuesday 23 June 2009

Dr Brian Cowan, Board Medical Director  
Andy Crawford, Head of Clinical Governance

**NHS GG&C Scottish Patient Safety Programme Update for NHS GG&C**  
Board June 2009

**Recommendation:**

Members are asked to:

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

**1. Introduction**

Safeguarding patients receiving care is a key strategic priority for NHSSG&G. As part of the way NHS GG&C will demonstrate this commitment it is participating in the Scottish Patient Safety Programme (SPSP).

The SPSP approach focuses on improving safety by increasing the reliability of healthcare processes in Acute care. This is achieved by front line teams testing and establishing more consistent application of clinical or communication processes. The success of this activity is monitored through a measurement framework and supported by a visible commitment to safety from organisational leadership. This is linked to an overarching set of improvement aims which are currently stated as follows;

- **Mortality**: 15% reduction
- **Adverse Events**: 30% reduction

- Ventilator Associated Pneumonia: Reduction  
- Central Line Bloodstream Infection: Reduction  
- Blood Sugars w/in Range (ITU/HDU): 80% or > w/in range  
- MRSA Bloodstream Infection: 50% reduction  
- Crash Calls: 30% reduction  
- Harm from Anti-coagulation: 50% reduction in ADEs  
- Surgical Site Infections: 50% reduction (clean)
NHS GG&C implementation is based on a number of phases. Phase 1 launched in January 2008 involved 9 wards. In June 2008 a further 22 wards became involved in Phase 2. Phase 3 is currently being established and a further 60 wards are being prepared.

2. Key Points for attention

2.1 Progress against the national SPSP assessment scale

The underlying position for Phase 1 implementation in NHS GG&C has been agreed with SPSP appointed technical advisors to have reached 2. To progress to the next level we need to demonstrate data confirming sustained improvement or reliability in the peri-operative work-stream.

The projected performance against the assessment scale (table below) indicates that we will experience some slippage. This means we will drop behind trajectory during 2009 but regain any loss by the end of the year when level 3.5 should be achieved on time. The criteria for levels beyond this are currently unclear, requiring further discussion with SPSP. The overall position has been discussed with the national team and it is deemed to be still within acceptable limits.

<table>
<thead>
<tr>
<th>Score</th>
<th>Definition</th>
<th>SPSP target dates</th>
<th>NHS GG&amp;C dates (Actual/predicted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>Improvement noted (using run chart rules) in process and/or outcome measures for pilot populations in all five work streams.</td>
<td>Apr 09</td>
<td>Predicted Jun 09</td>
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<tr>
<td>3.0</td>
<td>All key changes in all five work streams have been implemented in the pilot populations. Sustained improvement noted (using run chart rules) in process and outcome measures in one to three pilot populations.</td>
<td>Jul 09</td>
<td>Predicted Sept 09</td>
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<tr>
<td>3.5</td>
<td>Sustained improvement (three months without sliding backwards) is noted in process and outcome measures for pilot populations in all five work streams. Spread (including testing, training, communication, etc.) of all key changes is underway beyond the pilot populations.</td>
<td>Jan 10</td>
<td>Predicted Jan 10</td>
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<tr>
<td>4.0</td>
<td>Spread (including testing, training, communication, etc.) of all key changes has been achieved in one to three (breadth) work streams with at least 50% penetration (depth) into other applicable patient populations and areas.</td>
<td>Jan 11</td>
<td>Unclear</td>
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<tr>
<td>4.5</td>
<td>Spread (including testing, training, communication, etc.) of all key changes has been achieved in all (breadth) work streams with at least 50% penetration (depth) into other applicable patient populations and areas.</td>
<td>Jan 12</td>
<td>Unclear</td>
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</table>
5.0. Spread has been achieved in all five (breadth) work streams with 100% penetration (depth) into the applicable clinical areas and has been sustained (no backward slipping in the outcome measures) for a minimum of three months.

Dec 12 Unclear

2.1 Progress in Phase 1 & 2 Front Line Pilot Teams

In general phase 1 Front Line Teams are maintaining tempo that keeps NHS GG&C in line with the published SPSP timeline for the clinical work-streams.

Two of the Phase One General Ward pilots are making good progress and there is a good level of confidence that the final milestones will be met for all content areas during the coming months.

The two Phase One Critical Care pilots have made good progress and there is a good level of confidence that the final milestones will be met for all content areas.

The two Phase One Peri-operative pilots continue to experience problems with measurement and incomplete data that is limiting their ability to consider whether reliable practice designs are in place. The teams own description and opinions suggest that a number of practices are now consistently in place. A further set of tests of measurement approaches has been completed and measurement deficits are beginning to resolve.

The two Phase one Medicines Management pilots continue to experience challenges around medicines reconciliation at admission and although inhibiting factors are being addressed by leadership there is diminishing confidence over milestone 3 attainment in this area. It has been decided as part of the spread plan that reconciliation on admission will be targeted through Acute receiving areas and the current pilot wards focus on reconciliation across the patients pathway and at discharge.

Phase two progress is generally acceptable. It is interesting to note that availability of learning from phase one does not appear to have shortened the length of time required to implement elements of the work-stream. The phasing of the five year programme in NHS GG&C is based on an assumption of eighteen month implementation period in each new ward. However it was hoped that this could be shortened in successive phases meaning we could conclude the core programme earlier than targeted but phase two experience suggests this hope may be misplaced.

2.3 Spread plan

Drafting of the Spread Plan is advancing as an iterative process and a continuously revised paper is being maintained. The Acute Services Division Directorates have responded well to the spread needs identified. We have 52 confirmed wards and another set of candidate wards that includes new areas in paediatric settings. We are confident that by the end of 2009 the target of 60 new wards working in the programme will be achieved. Team members have been confirmed for many teams and over eighty staff attended the national SPSP education day on 18th May. Then ninety one staff attended a set of training events on 2nd June. We are now in the process of confirming start dates for
the new teams. Key areas of current focus remains identifying team members and providing for their educational needs prior to commencement.

2.4 Measurement strategy

The deployment of the measurement strategy continues to be challenging. Reporting of all measures for phase one sites is being sustained and improvement has been observed in measures across three work-streams. There is an observed improvement in data collection for peri-operative work-stream. Data on a number of elements (DVT prophylaxis at GRI and RAH, glucose control at GRI, normothermia at GRI, peri-operative briefings at GRI) up to end of April is indicating reliability and are approaching conditions for run chart rules to be triggered. This allows us to progress to the next level on the national assessment scale.

The SPSP timeline for the implementation of the measurement system for Phase Two hospitals in NHS Greater Glasgow and Clyde was that all measures should be submitted to the Extranet on a monthly basis from 1st February 2009. This has not been achieved. It is expected that all data will be submitted by the 1st July 2009, which is 4 months behind the IHI timeline.

- In May 2009 the following measures were being collected on Phase Two sites.
  - IRH – 28/ 41 of applicable measures (68%). This is an increase of 4 measures since last month
  - VIC - 30 / 42 of applicable measures (71%). This is an increase of 2 measures since last month
  - SGH – 32/ 42 of applicable measures (76%). This is an increase of 3 measures since last month
  - GGH/ WIG – 34/ 42 of applicable measures (81%). This is an increase of 3 measures since last report

A fuller report of factors related to sustaining the measurement requirements has been reviewed by the Acute Services Division Strategy Management Group who noted the following

- There are concerns over sustainability of the future support model for the measurement system following the next phases of spread.
- Agreed a process outlining how teams will step down measurement frequency in conditions of sustained reliability at levels above 95% to reduce data collection burden.
- Agreed that SPSP programme staff need to review their role and approach to supporting measurement ensuring all data processing is concurrent with testing. Also that acknowledged there may be a need to divert Clinical Effectiveness staff from established support functions in services to SPSP.
- Agreed that a fuller evaluation of the measurement system should be carried, including collection of qualitative data from programme managers and the front line teams, on the usefulness of the data, the effectiveness of the data system in helping teams to understand and improve their processes of care, and the sustainability of the system.
NHS GG&C has also observed a number of challenges in operating the Global Trigger Tool. The GTT is a specific method of detecting adverse clinical events that will in theory produce a system level indicator. However the detection rate of the method in our hospitals has been well below the range predicted by the SPSP technical partners. A number of tests of change have been completed but all have been unsuccessful in improving detection levels. It should also be noted that our levels are in line with median rates across NHS Scotland. The ongoing challenges with GTT and the threat it creates for achievement of the Programmes high level aim of a 30% reduction in adverse event rates has been escalated to the National SPSP Steering Group on a number of occasions.

2.5 Learning collaborative

One of the key design features of the programme is the attempt to connect participating staff in a learning collaborative, sharing experience and solutions. The fourth national event for the SPSP has now taken place (19 & 20 May 2009) in the SECC with almost eighty GG&C attending. Feedback was mixed but the most positive messages being expressed by staff with least experience of programme. This is not reflective of the overall commitment and enthusiasm observed in participating teams, which remains high. The next major event is in November but we expect further Scottish or regional events to be scheduled before then.

Invite for applications to the next cohort of the SPSP Fellowship have now been sent to out through NHS GG&C. There were two staff in the first cohort who have expressed significant benefits from the educational development. We are hopeful of more staff being accepted into the second cohort.

2.6 Feedback on NHS GG&C progress

Feedback from SPSP national team continues to be very encouraging. They recognise that each Board’s trajectory will be unique and though we are predicting some slippage during this year the general view is we are making very good progress in some areas and satisfactory progress overall.

There was no formal IHI feedback provide as yet to the last submitted report (Extranet checked 25 May).

2.7 Benefits to date

In considering the programmes specific safety aims (see introduction) we have previously reported on the identified reductions in VAP rate and central line bloodstream infections in two ITU teams at RAH and GRI. We have yet to observe reductions in other measures, with two measures (Surgical site infection and adverse anticoagulation events) now being changed in the overall measurement strategy. In considering the two high level aims it is not expected that these will be affected by the programme until it is more fully implemented in larger number of areas within each hospital.

Beyond this we have demonstrated that teams are able to use the concept of reliability underpinned by design, testing and measurement to ensure that for a given set of processes we can achieve much higher degrees of consistent application. It is also apparent that clinical and managerial buy in to the methods and the focus on patient safety remains strong.
3 Conclusion

NHS GG&C continues to make good progress in implementing the requirements of the Scottish Patients Safety Programme and early results on outcome and process reliability in some areas are encouraging.