**SUMMARY REPORT**

**Quality and Safety Committee**

**Meeting On Thursday, 10th December 2015**

**AGENDA ITEM: 3.7**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Spot the Sick Patient Project Report</th>
</tr>
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<tbody>
<tr>
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**Purpose**

The report provides the background and progress to date for the Spot the Sick patient (StSP) project. It also outlines the plan for spreading the improvement work across the Health Board.

**Corporate Objectives**

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<thead>
<tr>
<th>Healthier Communities</th>
<th>Excellent Patient Outcomes &amp; Experiences</th>
<th>Sustainable &amp; Accessible Service</th>
<th>Strong Partnerships</th>
<th>A fully Engaged &amp; Skilled Workforce</th>
<th>Effective Governance</th>
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<tbody>
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**Executive Summary**

The Spot the Sick Patient Project aims to reduce harm and promote recovery by improving the way that we identify and manage patients when their condition deteriorates. The key to this is to develop and implement a standard operating procedure (SOP) approach to ensure that the minimum levels of care and appropriate responses are provided for all patients who show signs of deterioration. The SOP will standardise the National Early Warning Score (NEWS) escalation triggers and responses in ABMU will be standardised across all sites and will be in line with those used across NHS Wales.

A pilot project has been completed which showed that the main barriers for achieving a standard approach in the past have been poor documentation & communication between the multidisciplinary team (MDT). Documentation has been revised as a result of Plan Do Study Act (PDSA) cycles, which has resulted in improvement.

The new documentation, along with supporting documentation for the MDT, forms the toolkit to enable other wards to implement the change and measure the improvement. It is proposed that the toolkit be implemented by Service Delivery Unit teams with oversight from the Spot the Sick Patient Project Team.
### Key Recommendations

The Quality & Safety Committee is asked to note the report and support the Delivery Unit based approach to spreading the improvement work across the Health Board.

### Assurance Framework

NEWS recording forms part of the Service Delivery Performance management Framework and the Quality and Safety Committee Dashboard

### Next Steps

The Ward 10 pilot is now complete, the documentation will remain in place and the outputs will be used to spread the improvement work across the Health Board. In preparation for this, the documentation (observation chart and sticker) has been finalised and the standard operating procedure revised to reflect this.

Given that local ownership of the improvement work is key to its success, spread will be on a Service Delivery Unit basis. A toolkit including background information, guidance and documentation has been developed to support Units to implement and measure best practice. Meetings are being arranged between the project team and Unit Management teams to go through the toolkit and support them in formulating local spread plans. The first of these meetings was held with the POWH team on 19th November.
1. PURPOSE
The report provides the background and progress to date for the Spot the Sick patient (StSP) project. It also outlines the plan for spreading the improvement work across the Health Board.

2. BACKGROUND
Information from across the wider NHS from incident reports, complaints and audits indicate that there are often missed opportunities to intervene when a patient’s condition deteriorates. The deterioration is often picked up late, communication routes fail, monitoring is inadequate and subsequently definitive treatment or transfer to HDU/ITU is delayed. Common reasons that cause deterioration in a patient’s condition include sepsis, acute kidney injury, heart failure, GI bleeding and respiratory failure. The results are avoidable deaths, avoidable suffering, prolonged length of stay and loss of confidence in the health service.

Health Board specific information obtained from, for example incident reports and mortality reviews, reinforces these findings and demonstrates that early recognition of a deterioration in a patient’s condition is a key area where improvements could have a major positive impact on patient safety in ABMU. Timely and appropriate escalation of care can reduce the need for a critical care admission and avoid extended hospital stays.

In recent years a number of initiatives have been introduced with the aim of improving the recognition of deteriorating patients such as;

- Implementation of the National Early Warning Score, that is based on patients’ clinical observations, and linked escalation protocols
- Implementation of the sepsis screening tool and sepsis care bundle
- Communication initiatives at ward level to enable staff to highlight patients who are at risk of deteriorating
- Adaptation of Immediate Life Support training to focus on recognising deterioration in a patient’s condition at an early stage

Interrogation of adverse incident and mortality review information, along with 2222 Call audit findings and interviews with frontline staff, have shown that
implementation of these improvements has been inconsistent. There is not always a clear understanding of the link between the processes, such as taking a patient’s observations and calculating a NEWS Score, and patient safety.

The Spot the Sick Patient Project aims to reduce harm and promote recovery by improving the way that we identify and manage patients when their condition deteriorates. The project is one of the priorities identified in the Health Board’s 2015-16 Quality Improvement Plan. It aligns with two of ABMU’s strategic quality objectives namely; Delivering excellent, effective and efficient services that are based on evidence and standards & making sure that everything we do is as safe as possible.

3. PROJECT COMPONENTS
The project has several components which fit under three broad headings;

3.1 Standardisation
Develop and implement a standard operating procedure (SOP) approach to ensure that the minimum levels of care and appropriate responses are provided for all patients who show signs of deterioration.

The NEWS escalation triggers and responses in ABMU will be standardised across all sites. These will be in line with those used across NHS Wales i.e. a NEWS score of ≥3 will be the initial escalation trigger and not ≥4 as was previously the case. The Patient Observation Chart will be revised to take these changes into account.

A standard approach will be developed to take account of “Special circumstances” when deviation from the SOP is clinically indicated. This will include a standard way of documenting these clinical decisions for individual patients.

An overriding principle of the project is that documentation will be kept to a minimum, and be as simple as possible. All changes in documentation will be made with a view to replacing the paper process with an electronic one in time.

A policy will be developed that mandates the use of the National Early Warning Score (NEWS). The policy will clearly define the roles and responsibilities of all staff working as part of the multidisciplinary team in relation to NEWS scoring. Adopting the 1000 Lives approach, the policy will be supported by a “How to Guide” to assist multidisciplinary teams in applying NEWS scoring appropriately.

3.2 Education
Develop a sustainable education and support programme that reflects the standard operating procedure (SOP) and the content of the “How to guide”
Existing face to face training programmes delivered by the Resuscitation Team will be redesigned to emphasise the SOP approach and reinforce the requirement to comply with the health board’s NEWS policy.

An e learning package will be developed to supplement the face to face teaching, and act as an aide memoire for staff. The project team will link in with colleagues in
Public Health Wales to explore the possibility of developing the NEWS e learning on an All Wales basis.

3.3 Measurement
Process measures linked to NICE Clinical Guideline 50 *Acutely ill patients in hospital: Recognition of and response to acute illness in adult in hospital* already exist on the care metrics and are used by the Resuscitation Team when they carry out spot audits. The questions asked are:

Q1 Was the NEWS score present for every set of observations undertaken prior to the call?
Q2 Were the frequency of the observations increased as directed?
Q3 Was there documented evidence that the patients NEWS dictated escalation?
Q4 Did the NEWS score indicate sepsis screening?
Q5 How many of the patients that should have been screened for sepsis had a screening tool present

However, these process measures do not provide information about the outcome for the patient. The project aims to establish simple, meaningful outcome measures to complement the process measures. These must be owned locally and shared with ward teams, patients, carers and families.

The agreed measurement system will have the capability to aggregate data to provide a measure of acuity by specialty and by site.

4. APPROACH
Previous experience with introducing early warning scoring systems in the health board, and the trusts that preceded it, showed that implementation was inconsistent. For example data show that only 20% of patients whose NEWS score indicated that they should have been screened for sepsis had a completed sepsis screening tool in their casenotes. However, for patients who have been in contact with the Outreach Team, this is considerably higher. For example data to 2014 in Singleton showed that the monthly median for patients who met the threshold for sepsis screening and received all elements of the Sepsis 6 care bundle within 1 hour was 40%. In light of this it was agreed that as a first step it was vital to establish why this inconsistency exists and what the barriers are to getting NEWS process working for every patient, all the time.

A Steering Group was established, chaired by the AMD Patient Safety. It was agreed that one ward would be identified to act as an initial pilot site for the improvement work. The process that emerged from testing on that ward would then be tested on other wards prior to spreading the process across the health board.

5. WARD 10 PILOT
Ward 10 at Singleton was identified as the pilot ward. Ward 10 is an acute medical/gastroenterology ward. There was excellent engagement in the improvement initiative from the multidisciplinary team led by the Consultant.

The first meeting with the Ward 10 team was held in December 2014. The background to the StSP project, the improvement science approach and the initial steps for the pilot project were discussed.

The first task for the team was to **process map the NEWS process**. An outline of the process that should happen when a patient arrives on the ward was mapped out to stimulate discussion. The team identified differences between what should happen and what usually happens, or fails to happen, in reality. The process also identified areas where there was lack of clarity within the current process that contributes to deviation from best practice in assessment, decision-making and action when a patient’s observations are taken. The constraints, and points where the next steps are unclear, were added to the process map. The process map helped inform the development of the Standard Operating Procedure which reinforces the process of calculating, documenting and acting upon NEWS scores.

### 5.1 Priorities

Having reviewed the process map it was agreed that there were several issues that needed addressing to standardise the response when a patient’s condition deteriorates. These relate to:

- **Documentation and Communication**
  Measuring and recording a full set of patient’s observations on the observations chart, and correctly calculating and recording the NEWS score is fundamental to ensuring that patients whose condition is deteriorating are identified promptly.

  Clarity of the action required on response to an elevated NEWS score (≥3) is essential. The “Actions required by nurse” section of the existing observation chart was designed to take account of the different support arrangements available for ward staff to call upon in different hospitals.

  There was no consistent way for the HCSW or nurse to document that they had taken appropriate action in response to an elevated NEWS score.

  It is recognised that a raised NEWS score is normal for some patients because of their underlying clinical condition. However, this is often poorly communicated to the nursing team by the doctor. Unclear communication puts patients at risk because indications of deterioration may be missed.

- **Availability of specialist nursing support**
  A NEWS score of ≥3 requires the frequency of observations to be increased to 4 hourly, the nurse in charge and the patient’s team be informed and the patient to be screened for sepsis. The responsible doctor should be called for scores ≥4. The Outreach Team should be informed if sepsis is likely. A NEWS score of 6-8 requires a further reduction in the interval between observations to an hour and the ward staff must contact the medical team and/or Outreach Team/Out of Hours Nurse
Practitioners. Specialist nursing support is not available 24/7 on the Singleton site. There are gaps at both ends of the day between the end of one team’s shift and the start of the other team’s shift. However, there is always a doctor on duty.

5.2 Action taken

- **Documentation and Communication**

*Modifications to the Patient Observation Chart*

The patient observation chart was modified in a number of ways:

- The minimum frequency of observation was outlined for different areas; ED, SAU, inpatient wards, mental health.

- “If completed by a non qualified nurse section” was added to allow continuity of response from initial observations at the bedside.

- “Actions required by nurse section” was simplified to reflect the specialist nursing support that is available in Singleton.

- “New or worsening confusion” was added to the Disability section to enable the potential for hypoxia related deterioration to be scored.

Lastly a “Special Instruction from medical staff” section was added at the top of the form to enable the medical team to record that a higher than normal NEWS score is acceptable for the patient and the reasons for that. The section allows the medical team to provide clear instructions to nursing staff about when they need to contact the medical team.

These changes, as well as the introduction of the Action for NEWS Sticker were communicated to Ward 10 staff by the Resuscitation Services Manager at a number of face to face sessions over a period of 3 weeks. All nursing and medical staff attended at least one of these sessions. A handout was provided to all staff for them to refer to. The handout emphasises the importance of clear documentation, especially where alternative actions are taken outside of the NEWS protocols set out on the patient observation chart.

The modified patient observation chart is attached as Appendix 1

*Action for NEWS Sticker*

Discussions with the Ward 10 team revealed that communication of action taken in response to a raised NEWS score was inconsistent. Nursing staff did not generally document their actions in the main part of the casenote (“medical notes”). It was agreed that introducing a sticker to document who had been informed about the patient’s deteriorating condition and action taken, such as increasing the interval between observations and giving the patient Oxygen, would provide a consistent framework for staff and be more visible in the notes. The sticker includes the first two steps of sepsis screening. The sticker has been refined during the pilot work and now includes provision for a date and time.
A representation of the sticker is attached as Appendix 2

Handover between specialist nursing support
A new system of handover between Night Nurse Practitioners (NNPs) and Outreach nurses has been introduced. A list of high risk patients, and the action required in relation to each patient by the team taking over, is provided at each handover.

Availability of specialist nursing support
Plans are being developed to realign the primary role of NNPs towards providing expert clinical support to deteriorating patients. Work patterns are also being looked at.

5.3 Measuring the improvement
Initial data collection has been simplified to focus on measuring whether there was documented evidence that the required NEWS action was followed in the 24 hours preceding the audit. Initial audits were undertaken by the Resuscitation Team, but at the beginning of July Ward 10 identified a HCSW to be their Ward Auditor and NEWS Champion so she has carried out the audits since then.

The percentage of patients in the sample who had documented evidence of appropriate action having been taken has increased from 10% prior to the introduction of the new documentation in mid June to over >60% at the end of July. There was a sharp increase in compliance when the Ward Auditor took over at the beginning of July, demonstrating the positive effect of local ownership and a local champion.

A separate nightly audit undertaken by one of the Night Nurse Practitioners between 27th and 29th July showed that the action sticker was not being used consistently. Two patients in the sample had instructions from the medical team on the observation chart stating an acceptable NEWS score for them. In one of these cases there was supporting documentation in the casenote. Patients appeared to have been reviewed daily but doctors were not documenting that they have been informed of an elevated NEWS score. Despite the deficiencies identified by the audit, there
was evidence that patients who had abnormal observations, or whose condition deteriorated, had been managed appropriately.

It has been agreed that in future the ABMU ward measures for patients with an actionable NEWS score will be:

- Number of patients with documented request to review
- Mean time from review to resuscitation

Much, if not all, this information is available on the Critical Care Outreach database for the patients who are referred to that team. However local audit will be needed for patients with lower acuity who are managed by the ward team.

These data must be fed back to clinical teams at agreed intervals and be clear and visible to patients, families and managers.

5.4 Reflections
Nomination of a Health Care Support Worker to champion NEWS amongst her colleagues and audit compliance has resulted in an increase in the % of patients with a NEWS score of >3 where action is documented from a baseline of 10% - 20% in March 2015 to >60%. However, the sticker is still being used inconsistently.

The last audit in September showed that patients are being seen by the appropriate senior member of staff: Outreach nurse, Night Nurse Practitioner or doctor promptly. Experience on Ward 10 has shown that further senior nursing and medical support is required for the project to succeed. It was also evident that the ward team would welcome clear guidance about what is expected of them. The project team has developed a Pre-Spread Checklist (Appendix 3) that outlines what must be in place before a ward can become a StSP ward and sets out the responsibilities of the ward team and senior management.

6. NEXT STEPS
The Steering Group has agreed that the Ward 10 pilot is now complete, the documentation will remain in place and the outputs will be used to spread the improvement work across the Health Board.

In preparation for this, the documentation (observation chart and sticker) has been finalised and the standard operating procedure revised to reflect the final format.

Given that local ownership of the improvement work is key to its success, spread will be on a Service Delivery Unit basis. A toolkit including background information, guidance and documentation has been developed to support Units to implement and measure best practice. Meetings are being arranged between the project team and Unit Management teams to go through the toolkit and formulate local spread plans. The first of these meetings was held with the POWH team on 19th November. Following that meeting a site-based implementation team has been nominated and they are developing their plans to roll out the recommended changes.
The Standard Operating Policy, Policy for NEWS and outcome measures will all be completed to support the implementation in Princess of Wales Service Delivery Unit.

7. RECOMMENDATIONS
The Quality & Safety Committee is asked to note the report.
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<th>Complication</th>
<th>0-2</th>
<th>3</th>
<th>4-5</th>
<th>6-8</th>
<th>9-13</th>
<th>14 or more</th>
</tr>
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<tbody>
<tr>
<td>Sepsis (new NEWS of 3 or more) or repeat screening if there has been an increase in NEWS or a change in the patient's condition</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
<td>2222 &amp; Inform patients medical team</td>
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APPENDIX 2

Action for NEWS at __:__ __ hrs, date __

Have you given O₂? Y / N? Blood glucose ___ mmol

Nurse in charge __________________________ (name)

informed at __:__

Monitoring frequency increased to ___ hrly

Sepsis Screening

Two or more of the following Signs & Symptoms of Inflammation

- Temp > 38°C or < 35°C
- RR > 20 or PacDos < 82 mmHg / A3 l/min
- WBC < 4 or > 12

- Acute altered mental state

- Hyperglycaemia in absence of DM ([17 mmol])

- History or signs suggestive of a new infection? □

- Pneumonia, UTI, gastroenteritis, meningitis, cellulitis, septic arthritis etc

Use SBAR to inform (as indicated):

Outreach/Admission __________________________ (name) @ __:__

Doctor __________________________ (name) @ __:__

If alternative actions followed, state reason-

Completed by -

Print: __ Sign: __
APPENDIX 3

Spot the Sick Patient Project

PRE-SPREAD CHECKLIST FOR WARDS

Team sign up

- Lead Consultant identified and fully committed to the project
- Ward Manager fully committed to the project
- Ward Service Improvement Group* established
- Senior Nurse support confirmed
- Hospital Medical and Nurse Directors support gained

Clear Responsibilities

**Lead Consultant**
1. Champion and lead the project on their ward
2. Ensure that all medical staff understand the need for improvement in recognising and treating patients whose condition deteriorates and how NEWS provides a framework to do that
3. Inform other Consultants, trainee medical staff, nursing staff and the wider MDT (Therapists, Pharmacists) on the ward about the project, its aims and the supporting standard operating procedure
4. Raise awareness of the revised documentation, observation chart and action sticker,
5. Ensure that baseline and ongoing data is shared on a weekly basis with the ward MDT and used to drive improvement and that the Hospital Medical Director receives the updated run chart each week
6. Monitor doctors’ participation in the project and address any concerns raised by any member of the MDT in relation to doctors’ participation
7. Inform other Consultant colleagues in the hospital that the ward is taking part in the project and what will be different on the ward from now on

**Ward Manager**
1. Act as the link between the Lead Consultant and the nursing staff on the ward
2. Ensure that all nursing staff, qualified and HCSWs, understand the need for improvement in recognising and treating patients whose condition deteriorates
3. Ensure that all staff who undertake patient observations have the appropriate competencies, and fully understand the importance of using NEWS to record a patient’s condition and trigger additional support
4. Ensure that all nursing staff fully understand the amendments made to the observation chart, the purpose of the action sticker, and their role in making the NEWS process work effectively
5. Nominate at least one member of staff to collect data on a weekly basis to monitor the progress of the project.
6. Enter the data and update the run chart each week
7. Share the data with the Lead Nurse responsible for the ward and the Hospital Nurse Director on a weekly basis
8. Action any gaps identified by the data that relate to nursing staff to facilitate ongoing improvement

All Ward Staff
1. Fully participate in the improvement work
2. Ensure they understand what their own role is and how that fits in to the standard operating procedure
3. Seek support and advice from the Ward Manager or Lead Consultant if they are unsure of anything in relation to the project

Senior Nursing Team
1. Support the Ward Manager in taking the improvement process forward by visiting the ward regularly to assess progress and drive improvement
2. Review the data weekly to monitor progress

Hospital Nurse Director and Medical Director
1. Support the Lead Consultant, Senior Nurse and ward Manager in implementing and maintaining improvement

- Service Improvement Group to include Lead Consultant and Ward Manager