 Feidhmeannacht na Seirbhíse Sláinte Health Service Executive	QUALITY ASSURANCE AND VERIFICATION DIVISION HEALTHCARE AUDIT	Tús Áite do Shábháilteacht 1 Othar Patient Safety 1 First
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SUMMARY REPORT

Title	Audit of compliance with selected criteria from the National Early Warning Score (NEWS) Clinical Guideline (2013) in acute hospitals	
Number	QAV004/2015	
Timeframe	July – November 2015	
Audit Team Members	Ms. Anne Keane, Auditor, Quality Assurance and Verification Division (Lead)	
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National Liaison	Ms. Deirdre O Keeffe, Head of Quality and Patient Safety, Acute Hospitals Division	
Source of Evidence	Type	Date
	Request for Evidence	Evidence returned July – August 2015
	Roscommon Hospital	26 August 2015
	Kerry General Hospital	2 September 2015
	Mater Misericordiae Hospital	17 September 2015
Issue Date	10 December 2015	

Report Distribution	
Date: 10 December 2015	
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1. BACKGROUND / RATIONALE

The National Early Warning Score (NEWS) is used for the early detection of the deterioration of a patient with an acute illness by prompting nursing staff to request a medical review at specific trigger points. Adapting the NEWS in clinical practice enables a more timely response through a common language by using a structured communication tool and when required a definitive escalation plan. It was developed by the National Clinical Effectiveness Committee in February 2013 as a national clinical guideline (NCG) that applies in all adult acute hospital settings.

Implementation of NEWS requires the use of a national adult patient observation chart (hereafter referred to as observation chart). The Health Service Executive (HSE) performance monitoring metric indicates that ninety eight percent of acute hospitals are now using the observation chart which forms part of the essential features of the system of care required to implement the system.

This audit was requested by the Head of Quality and Patient Safety in the Acute Hospitals Division to provide assurance on the compliance of acute hospitals with NEWS. Hospitals were selected for audit on a random basis and are representative of model 2, 3 and 4 acute hospitals.

2. AIM AND OBJECTIVES

This aim of the audit was to establish compliance with selected criteria from the NEWS national clinical guideline. The audit objectives are as follows:

- To establish the level of compliance with completion of the national adult patient observation chart
- To determine that an escalation protocol is in place for patients showing signs of deterioration
- To determine the emergency response system in place in the selected hospitals
- To seek evidence of the formal communication protocol in use
- To seek evidence of the education programme that is provided at the commencement of employment and as part of a regular refresher programme.

3. FINDINGS

The audit findings are based on a random sample of ten healthcare records (HCRs) from each of the three hospitals. The audit team visited two to four wards in each of the three hospitals and the wards represented medical and surgical in-patients on the day of the site visit. In addition, the audit team reviewed evidence pertaining to the national clinical guideline and during the site visits engaged with staff on the wards.

Compliance with completion of the National Adult Patient Observation Chart

All sites had an addressograph on the observation chart while not similar the patient demographic details were documented. Vital signs¹ were recorded and these observations were dated, timed and initialled, however the use of the 24 hour clock was not routinely followed at one site. Totalling of the NEWS score in two of three sites was inconsistent and at one of these sites incorrect totals were found.

Vital sign parameters were adjusted by medical staff in 57% (N=17/30) of the observation charts reviewed, however in 70% (N=12/17) of these observation charts, the time the adjustment was made was not documented. As a result, this caused confusion for nursing staff as to when subsequent observations were to be recorded as two scores existed, i.e., a total score and an adjusted score. In some instances the total score was followed and in other instances the adjusted score was followed. Recording of the adjusted EWS by nursing staff occurred at two sites but was documented as a fraction or the letter "A" on the observation chart. In the main on all sites medical staff did not document the Early Warning Score (EWS) and/or the adjusted score in the medical notes.

¹ Vital signs include seven physiological parameters: heart rate, respiratory rate, systolic blood pressure, levels of consciousness, oxygen saturation, oxygen route and temperature.

Escalation protocol

The audit team noted that the escalation protocol sets out the organisational response and commences with a EWS of one (See Appendix A). The audit team focused on HCRs with an EWS of three and above in order to find evidence of the escalation response. In the HCRs reviewed the EWS ranged between three and ten.

Two of the three sites audited followed the escalation protocol as per the NCG. The audit team noted that at the third site the escalation protocol differed in the recording of the minimum observation frequency for the total NEWS score of three as observations were required to be recorded more frequently than that stated in the NCG.

The table below sets out the pertinent criteria and the hospital responses based on the 10 HCRs reviewed in each hospital.

Escalation protocol response				
Criteria	*Hosp1	Hosp2	Hosp3	Total;
Is there documentary evidence in the nursing notes that the CNM or nurse in charge was informed of EWS of 3 or more	0%	0%	0%	0%
Is there documentary evidence in the observation chart that observations were recorded as appropriate where patients had an EWS 3 or higher	70% (N=7/10)	40% (N=4/10)	40% (N=4/10)	50% (N=15/30)
Is there a record of the RN contacting the SHO/Registrar to request a review	86% (N=6/7)	70% (N=7/10)	80% (N=8/10)	78% (N=21/27)
Is there a record of the time the SHO/Registrar reviewed the patient and was it within the appropriate time	83% (N=5/6)	43% (N=3/7)	50% (N=4/8)	59% (N=12/21)

**Three HCRs reviewed had no escalation of care due to a Do Not Attempt Resuscitation status*

Informing the clinical nurse manager to the EWS of the deteriorating patient occurred verbally on all sites and was not documented in the nursing notes.

In 50% of the observation charts reviewed, the frequency of recording the observations was within the recommended timeframe. In the remaining 50% the consistency with recording the frequency of the observations varied, in some instances they were recorded more often and in others less often than the EWS dictated.

Documentary evidence of the nurse contacting the senior house officer or registrar was written on the Identity Situation Background Assessment Recommendation (ISBAR) communication tool or in the nursing notes. Verbal contact also occurred and in some instances medical staff were present on the ward but this was not documented. In 59% of HCRs audited there was a record of the time the senior house officer or registrar reviewed the patient, and this was within the recommended timeframe. Documenting the time in the medical entry did not always occur.

The patients' EWS was not communicated at nursing handover at two of the three sites visited. The audit team found that the EWS was not documented on ward returns on a daily basis.

ISBAR communication tool

ISBAR is a structured tool used to communicate a patient's deteriorating condition by nursing staff. It forms part of the definitive escalation plan of care. The audit team found that in 63% (N=17/27) of the HCRs reviewed had the ISBAR communication tool completed, however two of these communication tools were used for other care issues, e.g., prescription requirements. Enhanced use of the ISBAR communication tool was evident at one location during the day of the site visit. Ten HCRs did not have the ISBAR communication tool completed even though patients had an EWS of three and higher.

Emergency Response System

At all sites, the emergency response system in use was the cardiac arrest response system. Some specialised areas, e.g., theatre, intensive care, high dependency unit have internal

emergency response systems. The cardiac arrest policy at two sites was provided. The audit team found that the local policies did not include any reference to the EWS in the event of a deteriorating patient requiring immediate review. All sites stated that if an immediate review is required for a patient who is clinically deteriorating and all avenues to communicate this need to medical staff had taken place, then a cardiac call would be initiated. No evidence of the need to initiate a cardiac call was documented in the HCRs reviewed.

Education programme

Compass is an interdisciplinary education programme for clinical and non-clinical staff designed to provide an understanding of the significance of altered observations in a deteriorating patient. It is a four hour foundation programme which can be a classroom or an on line based programme. Challenges existed in releasing staff on two of the sites to attend either training programmes.

Medical graduates received training at university prior to taking up a post at two sites, one university provided the Compass programme and the second university provided NEWS training. On the third site medical graduates did not receive any training prior to taking up a post. Compass training was delivered to all nursing interns prior to commencing work at all sites. The induction programme for medical and nursing staff at all sites included an introduction to the NEWS.

NEWS update training is not a part of the national mandatory training programme for clinical staff, however on one site it was delivered as part of the Basic Life Support training programme. Attendance at NEWS update training during 2014 ranged between 48-67% for clinical staff at the three sites audited.

Informal NEWS education sessions are held regularly on wards by Clinical Nurse Managers or Clinical Practice Coordinators but were not documented.

All sites provided the Compass training and the on-going education programmes for clinical staff. In order to improve attendance at education programmes, a review of the length of the on line Compass programme is required as this proves challenging at sites with large numbers of staff that require training.

4. CONCLUSION

Based on the evidence reviewed, the audit team found a substantial level of compliance on one site and can give reasonable assurance that the national clinical guideline is being adhered to at this point in time. The audit team can only offer limited compliance with the selected criteria from the national clinical guideline in the other two sites and therefore cannot provide reasonable assurance that the guideline is being adhered to by nursing and medical staff.

Significant improvements are necessary by nursing and medical staff to ensure that all stages of the escalation of care is documented. Nursing staff must complete the ISBAR communication tool when a EWS of three or higher is achieved. It is imperative that the observation chart is completed and for nursing staff to adhere to the appropriate frequency of recording observations.

The dating and timing of the adjusted parameters is not routinely documented in the observation chart by medical staff. The adjusted parameters give rise to an adjusted score which is often lower than the original score. Clarity is required regarding which score is followed as this impacts on the future timing of observations.

The audit team observed that the HSE Standards and Recommended Practices for Healthcare Record Management V3 (2011) is not always complied with e.g., in relation to the dating and timing of entries in the HCR.



Communicating the EWS for each patient as part of the nursing handover was not established at all sites. It is essential to embed the communication of the EWS as a way of working across all disciplines.

All sites must continue to provide the interdisciplinary education programme on the NEWS and ensure doctors and nurses understand each other's roles in the use of the EWS.

5. RECOMMENDATIONS

Finalised reports containing hospital specific recommendations were issued to each of the sites (see Appendix A). The National Director, Acute Care Division must engage with senior management in all acute hospitals with regard to the following recommendations.

1. Agree an organisational response to the management of adjustments to physiological parameters for patients.
2. Reinforce the processes in relation to the utilisation and accurate completion of the National Adult Patient Observation Chart as per the National Clinical Guideline.
3. Reinforce the requirement to date and time all entries/observations on the National Adult Patient Observation Chart.
4. Reinforce the stages of the protocol for escalation of care to include an agreed structured communication.

Lead Auditor	Ms. Anne Keane
Signature	
Date	10 December 2015
AND QAVD	Dr. Edwina Dunne
Signature	
Date	8 th December 2015

6. REFERENCES

Department of Health (2013) National Early Warning Score: National Clinical Guideline No1. <http://health.gov.ie/wp-content/uploads/2014/08/NEWSFull-Report-August2014.pdf>

Health Services Executive (2012) National Early Warning Score and associated COMPASS education Programme. <http://www.hse.ie/go/nationalearlywarningscore/>

APPENDIX A: ESCALATION PROTOCOL FLOW CHART

Total Score	Minimum Observation Frequency	ALERT	RESPONSE
1	12 Hourly	Nurse in charge	Nurse in charge to review if new score of 1
2	6 Hourly	Nurse in charge	Nurse in charge to review
3	4 Hourly	Nurse in charge and Team/On-call SHO	SHO to review within 1 hour
4-6	1 Hourly	Nurse in charge and Team/On-call SHO	1. SHO to review within hour 2. Screen for Sepsis 3. If no response to treatment within 1 hour contact Registrar 4. Consider continuous patient monitoring 5. Consider transfer to higher level of care
>7	1/2 Hourly	Nurse in charge and Team/On-Call Registrar Inform Team/On-Call Consultant	1. Registrar to review immediately 2. Continuous patient monitoring recommended 3. Plan to transfer to higher level of care 4. Activate Emergency Response System (ERS) <i>(as appropriate to hospital model)</i>
Note: Single Score triggers			
Score of 2 HR ≤ 40 (Bradycardia)	1/2 Hourly	Nurse in charge and Team/On-call SHO	1. SHO to review immediately
*Score of 3 in any single parameter	Hourly or as indicated by patient's condition	Nurse in charge and Team/On-call SHO	1. SHO to review immediately 2. If no response to treatment or still concerned contact Registrar 3. Consider activating ERS *In certain circumstances a score of 3 in a single parameter may not require ½ hourly observations i.e. some patients
*In certain circumstances a score of 3 in a single parameter may not require half hourly observations i.e. some patients on O2. When communicating patients score inform relevant personnel if patient is charted for supplemental oxygen e.g. post-op. Document all communication and management plans at each escalation point in medical and nursing notes. Escalation protocol may be stepped down as appropriate and documented in management plan.			
IMPORTANT: 1. If response is not carried out as above CNM/Nurse in charge must contact the Registrar or Consultant. 2. If you are concerned about a patient escalate care regardless of score.			

APPENDIX B: RECOMMENDATIONS ISSUED TO THE HOSPITALS

Recommendations issued to RH

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| 1. Roscommon Hospital must ensure that nursing staff document the alert to the clinical nurse manager of the patient's EWS in the Healthcare Records. |
| 2. Roscommon Hospital must ensure that medical staff document their actions in adjusting vital sign parameters on the medical plan in the Healthcare Records. |
| 3. Roscommon Hospital must ensure that medical staff document the frequency of observations required following adjustment of vital sign parameters on the National Adult Patient Observation Chart. |

Recommendations issued to KGH

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| 1. Kerry General Hospital must ensure that nursing staff document the alert to the clinical nurse manager of the patient's EWS in the Healthcare Records. |
| 2. Kerry General Hospital must ensure that nursing staff complete the Identify Situation Background Assessment Recommendation (ISBAR) communication tool exclusively to communicate the EWS of the deteriorating patient. |
| 3. Kerry General Hospital must ensure that nursing staff adhere to documenting the frequency of observations as appropriate on the National Adult Patient Observation Chart. |
| 4. Kerry General Hospital must document care in accordance with the HSE Standards and Recommended Practices for Healthcare Record Management V3 (2011). |
| 5. Kerry General Hospital must fully deliver on the interdisciplinary education programme on the NEWS in order to ensure that doctors and nurses understand each other's roles in the use of the EWS. |

Recommendations issued to MMUH

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| 1. Mater Misericordiae University Hospital must ensure that nursing staff document the alert to the clinical nurse manager of the patient's EWS in the Healthcare Records. |
| 2. Mater Misericordiae University Hospital must ensure that nursing staff complete the ISBAR communication tool in order to communicate the EWS of the deteriorating patient. |
| 3. Mater Misericordiae University Hospital must ensure that clinical staff must adhere to documenting the appropriate frequency of observations and the timing of the amended NEWS parameters on the observation chart. |
| 4. Mater Misericordiae University Hospital clinical staff must document care in accordance with the HSE Standards and Recommended Practices for Healthcare Record Management V3 (2011). |