Provincial Pediatric Early Warning System (PEWS) Vital Signs, Assessment and Documentation Guidelines

Site Applicability

All VCH acute sites using the BC Pediatric Early Warning System.

Practice Level

All VCH Health Care Professionals (HCPs) performing or responding to basic nursing assessment with pediatric patients

RN:	Basic Skill • Conducting physical assessments, vital sign measurements and Pediatric Early Warning Scoring are foundational level competencies.
LPN:	• LPNs using the PEWS will do so in collaboration with a RN and practice within their scope as outlined by their professional college. • In areas where various levels of care providers (LPN, Care Aide, student nurses, employed student nurses) are assigned to patients, care of a deteriorating patient will be assumed by the RN.

Policy Statement

VCH HCPs will use the Child Health BC (CHBC) Provincial PEWS Vital Sign, Assessment & Documentation guidelines (see guideline link below) when providing nursing assessment to infants and children being cared for at sites using the BC Pediatric Early Warning system.

Need to Know

The purpose of this guideline is to outline assessment standards for pediatric patients seen in Vancouver Coastal Health and Providence Health Authority, aligning with provincial standards. Components of an assessment, including physical assessment, vital sign measurement, and the Pediatric Early Warning System (PEWS) are described.

Comprehensive physical assessment, as outlined in this document, is the responsibility of all nurses. By recording and comparing physical observations, a nurse is able to recognize potential problems early and mitigate potential risk. Due to the rapid onset of complications in the pediatric patient, frequent observations and focused assessments are necessary.

PEWS is an evidence based systems used internationally to ensure early recognition, mitigation and escalation of care for pediatric patients who deteriorate while in hospital.

Practice Guideline

The CHBC Provincial PEWS Vital Sign, Assessment & Documentation Guidelines provides detailed guidance on the assessment and documentation for pediatric patients seen in VCH facilities using the Pediatric Early Warning system:
http://www.childhealthbc.ca/sites/default/files/2018-01-26%20Provincial%20PEWS%20VS%20Assessment%20and%20Documentation%20Guidelines.pdf

Equipment & Supplies

1. PEWS age-specific flowsheets
    a) 0 to 3 months
    b) 4 to 11 months
    c) 1 to 3 years
    d) 4 to 6 years
    e) 7 to 11 years
    f) 12 + years
2. Stethoscope
3. Thermometer
4. Pediatric blood pressure cuffs
5. Oximetry monitor
6. Ophthalmoscope/otoscope or a pen light

Expected Patient Outcomes

Pediatric patient deterioration will be identified, mitigated and escalated to higher level of care (if appropriate) sooner, thus reducing the rates of unsafe patient transfers and serious adverse events that lead to morbidity and mortality.

Documentation

Vital Signs are to be recorded at the point of care or as soon as possible after the care event. Assessment findings are to be documented on the age appropriate Provincial PEWS flowsheet and other agency specific documentation tool(s) / or designated electronic health record.

Document in greater detail on the nursing notes any assessment findings or changes noted during shift. Record time of entry and use variance charting including data, action and response (DAR) or problem, intervention, evaluation (PIE) formats per agency guideline.

Affix ECG/telemetry rhythm strips (if used in your agency) to nurse's notes/flowsheet and document interpretation including rate, rhythm, appearance of P wave, PR interval, QRS interval.

Related Documents

- VCH: BC PEWS Clinical Decision Support Tool (D-00-04-30070)
- Instructions for Use of The Provincial Pediatric Patient Flowsheet
- BC Pediatric Early Warning System (PEWS) Clinical Decision Support Tool

References

Adams, J.M. (2015, September). Oxygen monitoring and therapy in the newborn. Retrieved from http://www.uptodate.com/contents/oxygen-monitoring-and-therapy-in-the-newborn?source=machineLearning&search=pulse+oximetry&selectedTitle=1~150&sectionRank=1&anchor=H22#H15

BC Children's Hospital. (2014, January 7). Oximetry (Spo2) monitoring. Retrieved from http://bccwhcms.medworxx.com/Site_Published/bcc/document_render.aspx?documentRender.IdType=30&documentRender.GenericField=1&documentRender.Id=10447

BC Children's Hospital. (2013, January 25). Temperature measurement. Retrieved from http://bccwhcms.medworxx.com/Site_Published/bcc/document_render.aspx?documentRender.IdType=30&documentRender.GenericField=1&documentRender.Id=8404

BC Children's Hospital. (2013, February 26). Nursing assessment and documentation. Retrieved from http://bccwhcms.medworxx.com/Site_Published/bcc/document_render.aspx?documentRender.IdType=30&documentRender.GenericField=1&documentRender.Id=7865

BC Children's Hospital. (2013, June 12). Blood pressure measurement. Retrieved from http://bccwhcms.medworxx.com/Site_Published/bcc/document_render.aspx?documentRender.IdType=30&documentRender.GenericField=1&documentRender.Id=12265

Canadian Association of Emergency Physicians. (2013, November). Canadian triage and acuity scale (CTAS) participant manual (version 2.5b).

Crawford Mechem, C. (2015). Pulse oximetry. Retrieved from: http://www.uptodate.com/contents/pulse-oximetry?source=search_result&search=pulse+oximetry&selectedTitle=8~150

Fraser Health Authority (2015, January). Acute care standard: nursing pediatric medical/surgical. Surrey, BC: Author.

Judge, N. (2007). Neurovascular assessment. Nursing standard. 21(45):39-44. Retrieved from http://www.snjourney.com/ClinicalInfo/Systems/PDF/NeuroVas%20Assessment.pdf

Leduc, D. and Woods, S. (2015, October 15). Canadian Paediatric Society position statement on temperature measurement in paediatrics. Retrieved from http://www.cps.ca/en/documents/position/temperature-measurement

Martin, B. (2010). American Association of Critical Care Nurses Practice Alert: Non-Invasive Blood Pressure Monitoring.

Mattoo, T.K. (2015). Definition and diagnosis of hypertension in children and adolescents. Retrieved from: http://www.uptodate.com/contents/definition-and-diagnosis-of-hypertension-in-children-and-adolescents?source=see_link&sectionName=Cuff+size&anchor=H12#H12

National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and. Adolescents. (2004). The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. Pediatrics, 114 (Issue 2 Suppl), 555-576.

National Institute for Health and Care Excellence. (2013, May). Feverish illness in children: Assessment and initial management in children younger than 5 years. Retrieved from http://www.nice.org.uk/guidance/cg160/evidence/cg160-feverish-illness-in-children-full-guideline3

Ogedegbe, G. and Pickering, T.G. (2010). Principles and Techniques of Blood Pressure Measurement. Cardiology Clinics, 28(4): 571–586.

Park, M.K., Menard, S.W. and Yuan, C. (2001). Comparison of Ausculatory and Oscillometric Blood Pressures. Archives of Pediatric and Adolescent Medicine, 55(1):50-53.

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(Regional SharePoint 2nd Reading)

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