

CHBC Paediatric Early Warning System

The Project Charter sets the direction for the project and identifies focus areas requiring further analysis during the Planning Phase.

1.0 PROJECT IDENTIFICATION

1.1 Project Identification:

Project Name:	Supporting the Development of a Provincial Paediatric Early Warning System
Project Sponsor Name(s) & Title(s):	Maureen O'Donnell
Project Manager/Director Name:	Yasmin Tuff
Originating Business Area(s):	СНВС
Project Charter Prepared By:	Yasmin Tuff
Project Charter Prepared Date:	January 12, 2016 (v. 8)

1.2 Health Authorities Impacted by Project:

	ALL
Health Au	thorities
\square	Provincial Health Services Authority
\square	Island Health Authority
\square	Fraser Health Authority
\square	Vancouver Coastal Health Authority
\square	Interior Health Authority
	Northern Health Authority (not part of phase 1)
	First Nations Health Authority

Provincial PEWS

Contents

1.0 PROJECT IDENTIFICATION	1
1.1 Project Identification:	1
1.2 Health Authorities Impacted by Project:	1
2.0 PROJECT DRIVERS	
2.1 Strategic Context	3
2.2 Clinical/Business Need	5
3.0 PROJECT BENEFITS MANAGEMENT	6
3.1 Proposed Benefits Statement	6
3.2 Proposed Project Outcomes	6
4.0 PROPOSED PROJECT SOLUTION	8
4.1 Proposed Project Outputs	8
4.2 Work in Scope	8
4.3 Work Out of Scope	
4.4 Project Approach	
4.5 Assumptions and Constraints	
4.6 Linkages and Dependencies	
5.0 PROPOSED PROJECT BUDGET	
5.1 Project Budget Estimate Summary	12
6.0 PROPOSED PROJECT RESOURCES	
6.1 Project Resources	
6.2 External Project Resource Estimates	
7.0 PROPOSED PROJECT SCHEDULE MILESTONES	
7.1 Project Milestones	
8.0 PROJECT CONTROLS	
8.1 Reporting Management	
8.2 Issue Management	
8.3 Implementation & Education Strategy	
Education Strategy	
Implementation Strategy	
Logic model of provincial implementation of PEWS:	
The Implementation strategy will include the following components: 9.0 APPROVALS	
9.1 Project Sponsor(s) Approval	20

To view definitions of terms, refer to the Glossary of Terms Appendix. PLEASE PRINT DOUBLE-SIDED IN BLACK & WHITE

2.0 PROJECT DRIVERS

2.1 Strategic Context

In the document, Setting Priorities for the BC Health System, 2014, the provincial government has identified specific strategies around quality which include establishing guideline driven clinical care management system to improve the quality, safety and consistency of key clinical services and to improve patient experience of care.ⁱ

Internationally, Paediatric Early Warning Scores (PEWS) have been implemented for over 10 years, to improve safety for hospitalized children. PEWS use is particularly common throughout the USA, England, Australia, Canada and Wales (Chapman et al. 2010, Lambert et al, 2014)ⁱⁱ. PEWS are implemented in healthcare facilities that admit paediatric patients under the age of 18 years.

The paediatric early warning system (PEWS) provides evidence-based methods to assess hospitalized children in different age groups, for risk of deterioration using vital sign parameter score and risk indicators supported by evidence. In BC the PEWS system is made up of:

- a risk score based on physiological findings incorporated into paediatric flow sheet,
- an escalation protocol,
- a situational awareness bundle (evidence based risk factors), and
- a communication framework (SBAR).

Together these system parts are designed to provide a standardized framework and language to identify potential deterioration in a child; mitigate that risk; and escalate care as needed – all as early as possible.

Case for Change:

- The incidence of cardiopulmonary arrest (CPA) in hospitalized children is relatively low however mortality and morbidity remains high despite advances in resuscitation training, technology and treatment. The devastating consequences of CPA on both child and family are well documented. There are also substantive financial costs to the healthcare system for 'failing to rescue' deteriorating children in hospital (Berg et al. 2008, North America, Tucker et al. 2009)ⁱⁱⁱ
- There is evidence indicating that mortality prevention is possible. A detailed confidential panel review of 126 child deaths in the UK concluded 63 of the 89 deaths occurring in hospital, (71%) were avoidable or potentially avoidable (Pearson GA, 2008 CEMACH).^{iv} This suggests an urgent need to improve early identification and mitigation of deterioration in hospitalized children.
- Paediatric patients demonstrate physiologic and behavioural symptoms of deterioration 24 hours prior to CPA (Robson et al, 2013; McLellan et al. 2013).^v Thus, an window of opportunity may exist within which to identify children at risk of serious adverse events (SAE) in order to intervene earlier to improve outcomes. (Haines C 2005, Tusker RC 2005, Tume L & Bullock I 2004).^{vi} Internationally, Paediatric Early Warning Systems (PEWS) have been implemented to improve the safety for hospitalized children (CEMACH, 2008; Lambert et al, 2014)^{vii}
- In 2013/14 there were 36,377 paediatric hospital visits in BC. Of these children 1165 were transferred to a higher level of care at BC Children's Hospital.
- The majority of BC hospital sites rely on general providers, who see predominately adults, but also care for children. A survey of nurses across these care settings was done in the summer of 2014 and revealed that 40% of nurses responding to the survey reported caring for children once a week or less,

and 21% of nurses reported caring for children occasionally. 35% of the nurse respondents reported themselves as competent in distinguishing normal and abnormal vital signs in infants and children, and 37% reported themselves as able to anticipate and respond to paediatric clinical deterioration or acute urgent situations.

- The Paediatric Early Warning system offers tools and processes to support nurses and physicians in assessment, identification of deterioration, mitigation of risk and escalation of care. Health Authority leaders and clinicians report that the PEWS is a high priority for them, and that critical incidents in their sites have escalated this priority.
- BC Children's Hospital implemented PEWS in their inpatient units first in 2009, and then revised in 2012. Royal Columbia Hospital in Fraser Health piloted the revised BCCH tools for medical paediatric inpatients in 2012. Victoria General Hospital Island Health) was part of an international funded research study, and using the Bedside PEWS^{viii}(BPEWS) between July 2012 and January 2013. Other BC hospitals have not used a PEWS.
- Improving the systems through which healthcare is delivered is fundamental to reducing clinical error:
 - o **95-98%** of adverse events are due to system failures^{ix}
 - \circ $\;$ Healthcare is optimized when systems work seamlessly
 - \circ $\,$ This is achieved by empowering all members of the team to make the safest decision for every patient
 - \circ $\;$ The challenge is maintaining a strong network of care

Opportunities Supporting a Change:

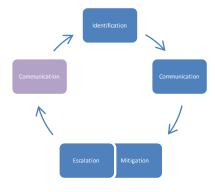
- In June 2013 after a presentation from Dr. Chris Parshuram about BPEWS, discussions with other Canadian hospitals and considerable analysis, the Child Health BC Steering Committee recommended provincial adoption of the BCCH tools and system for paediatric early warning system of clinical deterioration in a hospital setting.
- Vancouver Coastal Health undertook a pilot in 3 of their sites in both inpatient and emergency departments utilizing the BCCH PEWS system in the summer and fall of 2014. Following the pilot, other health authorities expressed readiness to work to implement a standard BC paediatric escalation of care system.
- A provincial consensus meeting for the implementation and evaluation of the pediatric early warning system (PEWS) was held in Vancouver on December 2nd and 3rd, 2014. Forty three participants attended from across the Province. The participants included 10 pediatricians, 18 clinical nurse leaders, and 8 administrative leaders, as well as the support of team of content experts from BC Children's Hospital. At this meeting there was overall consensus to implement a Provincial PEWS system which included all components.
- The progression of the electronic health record in Island Health and for PHSA and VCH created the need for review of the specific PEWS tool that would be supported by electronic charting systems, and the provincial decision was made to use the PEW system based on the Brighton PEWS score (Monaghan, 2005) and the Cincinnati Situational Awareness Model (Brady et al, 2010). The Brighton PEW score is the most widely used, validated and accepted tool internationally.

Provincial PEWS

2.2 Clinical/Business Need

The purpose of a paediatric early warning system (PEWS) is to:

- 1. Identify hospitalized paediatric patients who are at risk of clinical deterioration
- 2. Mitigate the risk though clinical and procedural response
- 3. Escalate to higher level of care if indicated
- 4. Improve communication, systems and teamwork during the processes of mitigation & escalation



A variety of vital sign based scores (PEW Scores) exist but none are 100% diagnostic. The Brighton Score from the UK is one of the oldest and most adapted scores. Its clinical performance has been positive and no harm of its use has been reported. In addition its simplicity lends itself to higher clinical utility. Risk factors associated with clinical deterioration are known as situational awareness (SA) factors. These evidence based risk factors stem from the work emerging from Cincinnati hospital where at least one of these factors was present in 89 serious safety events in the hospital.

There are positive directional trends in using PEWS including improvement in clinical and non-clinical outcomes including:

- earlier interventions,
- enhanced staff communication,
- reduction in unsafe transfers to Paediatric ICU
- reduction in hospital mortality and morbidity, and
- improved Paediatric ICU service delivery.

The majority of implementation occurs in inpatient paediatric units but some modifications of PEWS have been developed for use in emergency departments (ED) and cardiac units and for paediatric transfer from Post Anesthetic Unit (PACU) to inpatient unit (Lambert et al 2014).

3.0 PROJECT BENEFITS MANAGEMENT

3.1 Proposed Benefits Statement

There are multiple benefits to be realized by implementing a Provincial standardized approach to PEWS including:

- a consistent provincial approach and tool which will support the assessment of a deteriorating condition of a hospitalized child before a crisis occurs,
- the development of consistent, standardized approach for the transfer of patients who require a higher level of care both within and across Health Authorities,
- consistent documentation to support inter-hospital transfers and to support electronic health record implementation,
- consistent, standardized approach to education and training to support PEWS,
- standardized clear consistent communication of that assessment and support an optimal response to the child's condition,
- identification of at-risk patients prior to deterioration and mitigation of the risk, preventing further deterioration and improving outcomes.,
- improved processes of care and inter-professional communication, and
- timely use resources such as staff, physicians and consideration of transfer for ultimately improved outcomes of children with and without intra-facility transfer.

	Proposed Project Outcome	Outcome Specification	Outcome Owner
Health Authorities	BC will have standardized evidence based tools and a framework for the identification, mitigation and response to potential and actual deterioration in infants and children.	PEWS Flow sheet developed. Includes: assessment, PEWS score, behavior, temp, situational awareness and escalation protocol and paediatric flow sheet.	СНВС
	Nurses caring for children will be supported through education and practice to have and apply the knowledge needed to identify, mitigate and respond to clinical deterioration in children.	Education strategy developed. Will incorporate the development of on-line modules, regional workshops for subject matter experts, site specific education including classroom and just-in-time	СНВС

3.2 Proposed Project Outcomes

DRAFT PROJECT CHARTER

Provincial PEWS

	Proposed Project Outcome	Outcome Specification	Outcome Owner
		training strategies, resource tools.	
		HAs will ensure that nurses caring for children will have undertaken appropriate education. This will be built into the ongoing operations within the HAs including ongoing nursing orientation etc.	HAs
Health Authorities (Cont'd)	Nurses and physicians will have a common communication framework to collaborate on the care of children in hospitals, between hospitals and cross health authorities.	PEWS strategy will be endorsed by HA senior leadership, quality and HAMAC structures and clinicians across all hospitals.	HAs
	A comprehensive evaluation will be undertaken to provide evidence of improvements in both process and outcome measures.	PEWS system will be shown to improve care for paediatric patients.	СНВС
Patients and Families	Improved identification of patients at risk of deterioration	Ongoing assessment and identification of at risk patients resulting in earlier intervention.	Clinicians
	Improved patient outcomes	Mitigation of risk and escalation protocols. Reduction in morbidity and mortality.	HAs
	Improved communication	Health care team, patients and families overall improved communication processes .	HAs

4.0 PROPOSED PROJECT SOLUTION

4.1 Proposed Project Outputs

- A literature review of Paediatric Early Warning systems to support the design of a provincial tool
- A provincial standardized Paediatric Early Warning System which includes: PEWS Score imbedded in flow sheet, situational awareness, communication framework (SBAR) and escalation protocol
- Educational tools for the implementation and ongoing use of PEWS. Deliver phase one education
- A staged implementation strategy, work plan and communication plan
- A comprehensive evaluation framework, strategy and protocols
- Document and share the process and outcomes of the initiative

4.2 Work in Scope

This project charter will include paediatric patients admitted to inpatient paediatric or general inpatient units at the following sites:

Vancouver Coastal Health Authority:

- Lions Gate Hospital –paediatric inpatient unit
- Bella Coola inpatient unit (rural/remote site)

Island Health:

- Victoria General Hospital-paediatric inpatient unit
- West Coast General- inpatient unit (rural site)
- Cowichan District Hopsital- inpatient unit

Interior Health:

- Vernon Jubilee Hospital-inpatient unit
- Royal Inland (Kamloops) paediatric inpatient unit
- Nelson Hospital-inpatient unit
- Trail Hospital-inpatient unit

Fraser Health Authority:

- Abbotsford Regional Hospital -inpatient unit
- Langley Memorial Hospital-inpatient unit
- Surrey Memorial Hospital- paediatric unit
- Royal Columbian Hospital-inpatient unit

Provincial Health Services Authority:

• BC Children' Hospital

Phase One of the project involves the planning and development including the development of provincial tools, education strategy, communication strategy and evaluation strategy.

Phase Two includes: Site implementation at the sites listed above.

Richmond General Hospital will be implementing PEWS in their new Emergency Department and Paediatric short stay unit opening June 8, 2015. Although the work undertaken as part of this project will support the

Richmond implementation, it is not included in the overall scope of the project, nor as part of the evaluation. A separate project charter will be developed for the Richmond project.

4.3 Work Out of Scope

Areas that will not be included in the PEWS project include:

- Care environments community, private practice
- Population neonates who are being served by a perinatal program, including NICU
- Emergency Departments and PAR/PACU environments

4.4 Project Approach

The project will be managed using project management tools and processes.

To enable maximum feedback and input from BCCH, HA clinicians and other key stakeholders a small working group will lead the development of tools and supports, implementation plan, education strategy and evaluation framework.

CHBC Regional Coordinators will provide leadership within their HA to coordinate planning, implementation and communication to appropriate stakeholders.

4.5 Assumptions and Constraints

Assumptions

- All BC Health Authorities who provide acute care services for children and their sites are supportive and prepared to work collaboratively to implement a Provincial approach to PEWS.
- PEWS system will be approved by HAs HAMAC and Quality Councils.
- Responsibility for patient care rests with the most responsible physician and most responsible nurse. PEWS is a supporting framework but does not replace clinical judgment.
- HAs will be responsible for ensuring that the PEWS system is built into ongoing clinical operations in caring for children
- Child Health BC will lead the initiative, however, health authority and site responsibilities will be necessary.
- Emergency department implementation will be explored post phase one implementation following a pilot at Richmond Hospital. The magnitude of the staff and physicians involved, and the emergency department care processes create a significant implementation challenge.
- Health Centers' use of the PEWS will be explored following the implementation in hospitals.
- The entire PEWS system will be implemented, rather than a part (the score, the situational awareness and the escalation protocols).
- Harmonized ethics approval for evaluation strategy will be approved.
- CHBC and its donors will be acknowledged as per donor agreements with respect to establishment of provincial pews.

Constraints

- IMIT business solutions may require some temporary "workaround" solutions. The PEWS tool would need to be supported in an electronic charting system which will not be consistent from health authority to health authority. Temporary paper-based solutions will be necessary in order to bridge the time needed prior to implementation of an electronic system. The only HA that is implementing an electronic health record in the next year is Island Health.
- Competing demands and priorities of the educators in Health Authority sites and needed resources at BCCH may delay milestones.
- NHA does not have dedicated resources at this time to participate in phase one however, will be included in the role out of phase two sites. NHA will participate in the planning and implementation of the project.
- The evaluation strategy requires the ability to share data across the HA's and if this is limited it may impact the evaluation process.

Risks

- Although a Provincial escalation aid will be developed as part of the PEWS strategy, each hospital is responsible for clearly articulating their escalation process. The system escalation guide must be site reviewed, and approved to ensure they are safe and effective for the care environment and that there are supporting site processes that are well communicated to all providers.
- Organizational support and executive / clinical leadership is required to ensure success and sustainability.
- An educated clinical, suitably skilled and qualified workforce is critical. Having appropriate paediatric clinical management skills as well as communication and effective team work skills as well as knowledge on assessment of observation and identification is equally important.
- A significant organizational change in clinical practice will also require change management support to ensure the success of the implementation and the sustainability of the initiative.

4.6 Linkages and Dependencies

This project is linked to the following:

CHBC Steering Committee:

Provides overall direction on all CHBC initiatives and the initially recommended the development of a Provincial strategy for paediatric early warning system.

Health Authority Senior Leadership:

This project requires endorsement and support from both senior and paediatric leadership within the HAs both for initial implementation and sustainability. Changes in priority and structure may influence this initiative.

BCCH Senior Leadership:

This project requires endorsement and support from both senior and clinical leadership within the BCCH both for initial implementation and sustainability. Changes in priority and structure may influence this initiative.

UBC Department of Paediatrics:

Work with department of Paediatrics to ensure PEWS strategy is incorporated into education curriculum.

UBC and other Nursing Educational Institutions:

Work with to ensure PEWS strategy is incorporated into education curriculum.

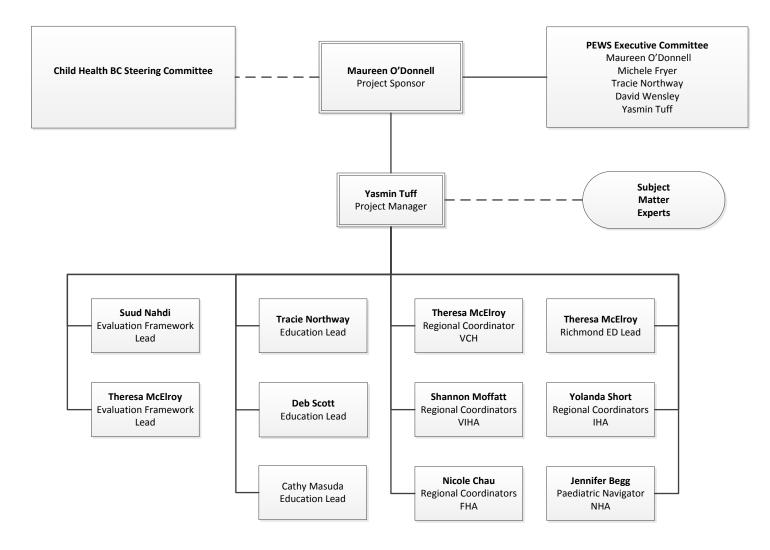
5.0 PROPOSED PROJECT BUDGET

5.1 Project Budget Estimate Summary

Project costs will be primarily related to staff time, compensation paid for clinician's time and for support costs for meetings and workshops. These costs will be supported by CHBC

6.0 PROPOSED PROJECT RESOURCES

Project Governance:



6.1 Project Resources

Roles	Responsibilities
CHBC Project Sponsor Maureen O'Donnell	 Provides overall strategic and operational oversight of project. Assumes accountability for the project Overall responsible for success of project. Confirms & approves project scope. Approve Project Charter/Plan. Resolves major issues arising from project. Approves major change requests. Promotes project to appropriate stakeholders. Responsible for final sign-off of project.
Executive Oversight Committee Maureen O'Donnell Tracie Northway David Wensley Yasmin Tuff Regional Representative	 To provide direction on project planning to support the successful delivery of the Project; advise on material changes to Project scope, budget or schedule; Provide direction on strategic project issues, risks or barriers to successful completion of the Project; assist with resolving strategic level issues and risks; evaluation strategy and, use influence and authority to assist the project in achieving its outcomes
Working Group CHBC Coordinators Yasmin Tuff Suud Nahdi PEWS Educator Tracie Northway Deb Scott Emma Carrick	 Responsible for developing and implementing all tasks and activities associated with the project including the development of tools and resources, communication plan, operational requirements, education strategy, quality improvement.
Subject Matter Experts BCCH medical, paediatric and, learning and development and quality leaders	 Responsible for providing input and expertise on the development and to provide feedback and guidance on issues that arise during the development and implementation of the PEWS system and the supporting business processes and implementation.
CHBC Project Manager Yasmin Tuff	 Responsible for project management including budget, change, risk and issue management. Provides daily leadership to project team and ensures plan and stakeholder/team engagement is appropriate. Secures resources and produces project status reports. Ensures project is completed on time, within budget and according to specifications.
CHBC Suud Nahdi Theresa McElroy	Literature review and development and implementation of evaluation framework and strategy

6.2 External Project Resource Estimates

External Resource Role	Project Role/Responsibility
HA Educators	• Subject Matter Expert and leads for clinical teaching model development and implementation for each site
Physicians	• Subject matter experts on clinical processes, paediatric care and meeting patient needs.
Nurses	 Subject matter experts on clinical processes, paediatric care and meeting patient needs.
Health Records	 Provide support for chart audits during evaluation component
HA HAMAC and Quality Councils	Provide overall approval of PEWs strategy at the HA level
HA Leaders	Support approval process and implementation within HAs

7.0 PROPOSED PROJECT SCHEDULE MILESTONES

7.1 Project Milestones

Mi	Milestone Responsible Lead				
РН	ASE 1 – Planning and development of tools				
1.	Complete literature review and share key findings	Suud Nahdi	Complete		
2.	Develop provincial flow sheet which integrates paediatric nursing assessment documentation with the PEW system (the PEW score and situational awareness factors and standard escalation aid).	Tracie Northway with SME input	Complete		
3.	Develop Guidelines for use of the form and system	Tracie Northway/Deb Scott	Complete		
4.	Create Site specific escalation protocols	CHBC Coordinators with HA SMEs	June 2015		
5.	 Develop standardized provincial PEWS education strategy a. Develop tools and resources to support including: two online modules for frontline staff, power point presentations for various audiences, edu-quicks, case 	Tracie Northway CHBC Coordinators, HA CNEs	June 2015		
	 studies, and awareness tools. b. Hire PEWS educator (secondment from HA) c. Conduct regional workshops for hospital clinical paediatric leaders d. Utilize a train the trainer approach to support education at individual sites with SME support e. Undertake site specific staff training f. Develop follow up strategy 	Tracie Northway Deb Scott CHBC Coordinators, HA CNEs	Summer 2015		
6.	 Develop Communication Strategy including: a. Prepare briefing package b. Support HA leadership with their presentations to HA committees (Senior leadership, Quality, HAMAC) c. Prepare Communication briefs for staff, posters etc. 	CHBC Coordinators	June 2015		
7.	 Evaluation and reporting strategy a. Design and approve evaluation framework b. Identify feasible outcome indicators c. Design and data collection and analysis strategy d. Ethics review and, if needed, Privacy Impact Assessment e. Resource and implement data collection strategy (FALL) 	Theresa McElroy and Suud Nahdi	August 2015		

DRAFT PROJECT CHARTER

Provincial PEWS

PHASE 2 - Implementation		
1. Deliver Communication to HA staff		June 2015
2. Deliver Education to clinicians		July/August 2015
3. Site Implementation (Refer section 8.3 and Appendix 1)		Fall 2015
a. Victoria, inpatient	Shannon Moffatt	August 2015
b. Cowichan, inpatient	Shannon Moffatt	Sept 2015
c. West Coast General, inpatient	Shannon Moffatt	Sept 2015
d. Abbotsford Regional Hospital, inpatient	Nicole Chau	Sept 2015
e. Surrey Hospital inpatient units	Nicole Chau	Sept 2015
f. Royal Columbia inpatient units	Nicole Chau	Sept 2015
g. Langley inpatient paediatric unit	Nicole Chau	Sept 2015
h. Bella Coola	Theresa McElroy	Sept 2015
i. Lions Gate Hospital, Inpatient paediatric Unit	Theresa McElroy	Sept 2015
j. Kamloops Hospital, Inpatient paediatrics	Yolanda Short	Oct 2015
k. Trail Hospital, inpatient paediatrics	Yolanda Short	Oct 2015
I. Nelson Hospital, inpatient	Yolanda Short	Oct 2015
m. Vernon Jubilee Hospital, inpatient	Yolanda Short	Oct 2015
n. BC Children's Hospital	Tracie Northway	Oct 2015
4. Launch Evaluation Strategy	PEWS Educator	Fall 2015

8.0 PROJECT CONTROLS

8.1 Reporting Management

The following table describes the reports the project will produce and to whom the reports will be submitted.

Reporting Type	Stakeholders	Frequency	Responsible
Project Status	Project Steering Committee	Monthly	Michele Fryer/ Yasmin Tuff
Site readiness and implementation tracking	Working Group	Weekly	Working Group members

8.2 Issue Management

Project issues and changes will be managed by the Project Manager and documented in the Issue Log which will be located on the CHBC Share Drive.



CHBC Paediatric Early Warning System

8.3 Implementation & Education Strategy

Planning Strategy:

The PEWS system is an extensive undertaking with multiple steps being conducted by stakeholders throughout the province. The following bullets outline what has been completed to date and the plan for rolling out site implementation:

- The CHBC PEWS project charter was completed in June 2015.
- A literature review was completed to look at the evidence for PEWS and to better understand its international use in March 2015. This is available through CHBC.
- A provincial flow sheet has been developed which integrates paediatric nursing assessment documentation with the PEW system (the PEW score and situational awareness factors). Clinicians from all health authorities provided feedback on this flowsheet throughout multiple iterations, and the first order of forms went to print May 2015.
- The standardized provincial PEWS education strategy was planned at a meeting of clinical educators from across the province on April 16, 2015. A toolkit of resources support this strategy is now being finalized and will include two online modules for frontline staff, power point presentations for various audiences, edu-quicks, case studies, and awareness tools.
- Health authority workshops for hospital clinical paediatric leaders are planned for the Summer 2015 months and clinical advice will available to site leaders to support a successful implementation.
- The clinical implementation of PEWS will occur in a phased approach beginning with 13 paediatric inpatient units across all health authorities as well as BCCH.
- ED implementation will be carefully considered and is not yet planned province wide. We will seek to understand the unique clinical environment and educational needs of EDs while we learn from the inpatient implementation experience. Richmond Hospital will proceed as a pilot site for PEWS ED commencing in June 2015 and their experience will help to inform a provincial strategy.

Education Strategy

Nurses, physicians, and respiratory therapists will be trained in the PEW system, with all 5 components. The composition of who is trained at each facility will be determined by the tier of service and availability of providers. However, baseline training will be standardized provincially through two online learning modules available on the Provincial Health Services Authority Learning Hub: <u>https://learninghub.phsa.ca</u> (see figure 6 below). Child Health BC will also work with content experts at BC Children's hospital to establish training materials and a training plan for the provincial roll out.

Provincial PEWS

The Online Training Modules for PEWS

1. Paediatric Foundational Competencies e-Learning Course

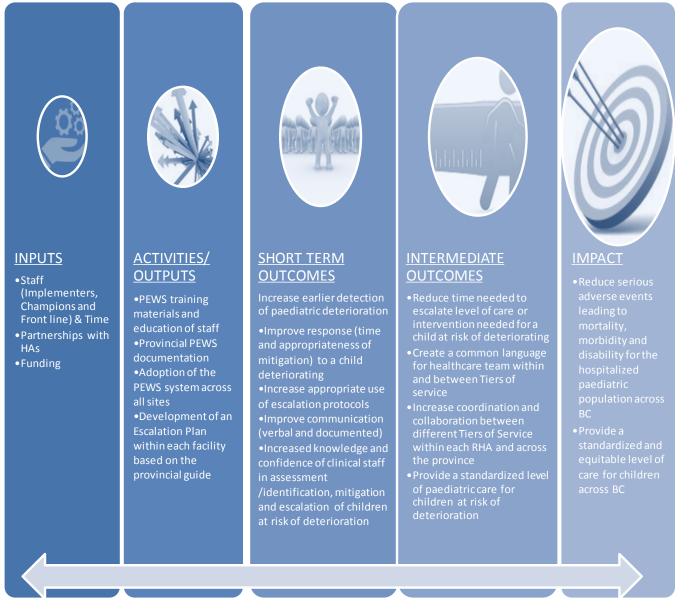
Course covers core paediatric knowledge for frontline paediatric care providers' related to: Basics of Paediatrics (Growth & Development); Paediatric Assessment; Fluid Dynamics, IV Management and Medication Administration

2. Child and Youth at Risk of Clinical Deterioration (PEWS) e-Learning Course

Course provides the necessary knowledge and tools to assist in the development of paediatric competencies required to care for at risk paediatric patients

Implementation Strategy

Logic model of provincial implementation of PEWS:



The Implementation strategy will include the following components:

- 1. Development of Site Specific Communication Strategy
- 2. Identification of Site Specific Operational Requirements
- 3. Development and implementation Site Specific Education Strategy
- 4. Development of Site Specific Quality Improvement processes

Site activity tracking will be undertaken on a weekly basis. See Appendix 1 for Site Activity Report.

Site Implementation is scheduled to occur in the fall of 2015.

9.0 APPROVALS

The Charter Gate signifies completion of the Project Initiation Phase and authorizes the project team to engage with organizational stake-holders in order to further specify the project scope through current state, future state, and gap analyses during the Planning Phase.

9.1 Project Sponsor(s) Approval

Having reviewed the Project Charter, I (we) am (are) prepared to accept the project scope as defined in this document. Furthermore, I (we) understand that there may be changes to the project scope, budget and schedule during the planning phase and these changes will be reflected in the Project Plan. Finally, I (we) will provide input/guidance as needed to actively support successful completion of the project planning phase and subsequent management phase.

Name:	Title:	Signature:	Date:
Maureen O'Donnell	Executive Director, CHBC		

Appendix 1

PEWS Implementation Plan

Tracking Report for each HA

Activities	Tasks/Actions	Timeline	Status
Communication Strategy			
communication strategy			
Health Authority approvals in place			
 Presentation to HA Committees (HAMAC, Quality, Senior Leadership,) 			
Presentations to nursing and physicians			
Posters			
• Other			
Operational Requirements			
Current documentation reviewed			
 Physician, Admin and Nursing Leaders identified (triad) 			
Roles and responsibilities clarified			
Health Authority approvals in place			
 Site escalation protocols created and endorsed 			
Ongoing monitoring protocols established			
 Operational tools in place (eg. Whiteboards etc) 			
• Other			

DRAFT PROJECT CHARTER

Provincial PEWS

Education Strategy		
Reporting/tracking system in place		
80% Completion of Peds competency		
modules at each site		
PEWS online modules reviewed and tested		
 Site specific education strategy developed and documented Nursing Staff identified ?LPNs Trainers/local champions identified 		
 Education resources/tools developed (includes case studies, power point presentations, edu-quicks etc other) 		
 Regional workshops planned including: Site/rooms booked Trainers identified Catering booked 		
 Physician Education Strategy Shortened PP developed Includes focus on why (quality/safety lens), escalation protocol, SBAR and roles and responsibilities Local physicians identified and roles and responsibilities understood Physician orientation completed 		
 Site specific education planned and delivered Nursing staff identified Education incl. online modules and face-to-face delivered 		
 Process for ongoing local support developed 		
 Quality Improvement Site specific quality initiatives identified eg. daily huddles, audits, indicators, PDSAs, success stories, lessons learned etc. 		
Evaluation		
Chart Audits O Pre		

DRAFT PROJECT CHARTER

Provincial PEWS

 Post 		
On line Surveys		
 Interviews and focus groups 		

ⁱⁱⁱ Tucker K, Brewer TL, Baker RB, Demeritt B, Vossmeyer MT. (2009) Prospective evaluation of a pediatric inpatient early warning scoring system. *Journal for Specialists in Pediatric Nursing*. 14(2):79-85

^{iv} Pearson G & Duncan H. (2011) Early warning systems for identifying sick children Paediatrics and Child Health. 21(5): 232-233.

v Robson MJ, Cooper CL, Medicus LA, Quintero MJ, Zuniga SA. (2013) Comparison of three acute care pediatric early warning scoring tools. Journal of Pediatric Nursing. 28: e33-e41.

vi Haines C, Perrott M, Weir P. (2006) Promoting care for acutely ill children – development and evaluation of a paediatric early warning tool. Intensive and Critical Care Nursing. 22: 73-81.

vii Lambert V, O'shea MT, Walshe C, Matthews A, Corbally M, O'Mathuna D, Staines A, O'Connor C. A systematic literature review to support the development of a national clinical guideline – Pediatric Early warning system (PEWS) Final report. School of Nursing and Human sciences (SNHS), Dublin City University. October 2014. Available at: http://health.gov.ie/wp-content/uploads/2014/03/PEWS-Sytematic-Literature-Review-Oct-2014.pdf

^{viii} Parshuram CS, Duncan HP, Joffe AR, Farrell CA, Lacroix JR, Middaugh KL, Hutchinson JS, Wensley D, Blanchard N, Beyene J, Parkin PC. (2011a) Multicentre validation of the bedside paediatric early warning system score: a severity of illness score to detect evolving critical illness in hospitalised children. BioMed Central Critical Care. 15:R184.

^{ix} Kohn LT, Corrigan JM, Donaldson MS, editors. To err is human: building a safer health system. Washington (DC): National Academy Press; 2000

ⁱ Setting Priorities for the B.C. Health System SUPPORTING the health and well-being of B.C. citizens. | DELIVERING a system of responsive and effective health care services for patients across British Columbia. | ENSURING value for money. February 2104

ⁱⁱ Chapman S.M, Grocott M.P.W, Franck L.S. (2010) Systematic review of paediatric alert criteria for identifying hospitalised children at risk of clinical deterioration. Intensive Care Medicine. 36:600-611. Confidential Enquiry into Maternal and Child Health (CEMACH). (2008) Why children die – a pilot study 2006. CEMACH, London.