Third Party IHealth Review - Status Report

January 31, 2017

Background and Report Contents

A Third Party Review of IHealth was commissioned by the Ministry of Health and Island Health in July 2017 in response to concerns related to the safety of the advanced EHR tools, and end user confidence in using the new tools safely. The review was led by Dr. Doug Cochrane, BC Patient Safety and Quality Officer, and the IHealth Review report was published in November 2016.

The report concluded that the advanced EHR tools should continue to be used while refinements are made, and included 26 recommendations to guide re-engagement and improvement efforts. Through the report, Dr. Cochrane recommended that a functional revalidation of the advanced EHR toolset be completed as an initial step to confirm where the EHR is working as designed, and where priority improvements or changes are required.

The table below provides an 'at a glance' view of the 26 IHealth Review recommendations, by lead and primary category/type.

Recommendation	Lead	EHR Review/ Refinement	Monitoring, Quality Assurance	Policy, Practice, Education	Future Oriented	Page
Priority – Initial Focus						
23. Functional Revalidation	Island Health/MoH	●				
Active						
1. Limit maximum range doses	Island Health	●				
2. Dose checking for high risk medications	Island Health	●				
9. Patient summary	Island Health	●				
10. Validate device association	Island Health	●				
14. Simplify user interface	Island Health	●				
15. Canadian terminology	Island Health	●				
3. Monitor high risk medications	Island Health		●			
7. Monitor results distribution	Island Health		●			
8. Monitor message centre	Island Health		●			
11. Ensure system performance	Island Health		●			
22. Clarify/refine issue reporting	Island Health		●			
4. Medications at transfer	Island Health			●		
5. Multiple narcotics	Island Health			●		
6. MRP and copies to	Island Health			●		
12. Refresh downtime processes	Island Health			●		
17. CPOE in urgent situations	Island Health			●		
21. Refresh Training/education	Island Health			●		
25. Commit to working through conflict	Island Health			●		
26. Action Island Health policy as required	Island Health			●		
Future Reporting						
16. Future activations - staffing	Island Health				●	
18. Staffing for NRGH ED – CPOE Meds	Island Health				●	
19. Meds ordering in the NRGH ED and ICU	Island Health				●	
20. Workflow redesign	Island Health				●	
24. Go-forward plan	Island Health				●	
Ministry of Health Led						
13. PharmaNet Redesign	MoH					

The accountability structure for all of the recommendations is summarized in the Appendix.

Report Highlights – January 31, 2017

Since the IHealth Review report was released on November 17, 2016, efforts have been focused on:

1. **Initiating Functional Revalidation:** initiating the Functional Revalidation process as the recommended initial step to support re-engagement of NRGH end users and to identify priorities for changes and improvements
2. **Engaging Experts and Assessing Peer Design:** completing due diligence related to the EHR related recommendations, and engaging peer experts from other Canadian health systems on their design and experience
3. **Refreshing Decision Making Structures:** engaging HAMAC and the Combined Quality Structure on accountabilities for decision making on EHR, practice and policy changes; and defining the new EHR Quality Council as an authoritative body on EHR related priorities and design decisions
4. **Actioning the Recommendations:** assigning recommendations for action to the responsible parties, and initiating efforts against plans

1. Initiating Functional Revalidation

The Revalidation Oversight Committee has been established and held three meetings to-date. Dr. Doug Cochrane joined the first meeting to confirm the purpose of the functional revalidation. The Committee has confirmed its Terms of Reference and membership, and agreed on a high level approach and focus for the revalidation activities. In response to discussions with NRGH physicians and staff on the need to address challenges related to medication management, and in keeping with the medication safety theme identified in the IHealth Review report, the initial revalidation efforts will be focused on medication orders management.

An invitation for expressions of interest by physicians and staff will be distributed to all end users to identify participants for specialty work teams. The Revalidation Oversight Committee will meet again on February 8, 2017 to confirm the composition of the teams. Team members will then be engaged in preparation for the revalidation sessions, including confirmation of the scenarios and scripts. In addition, peer experts from other Canadian health systems will be participating in the revalidation activities, and will be on-site at NRGH to gain first-hand experience with the current EHR toolset in preparation. The revalidation sessions are scheduled to begin the week of February 20, 2017.

2. Engaging Experts and Assessing Peer Design

In delivering the IHealth Review report to the Island Health Board, Dr. Cochrane noted that some of the specific EHR related recommendations were directional, and had not been assessed for feasibility. On receipt of the report, the IHealth team completed an assessment of available EHR functional capability and engaged peer Canadian health systems on their design and experience.

Since receipt of the IHealth Review report, meetings have been held with colleagues from Prince Edward Island, London Health Sciences Centre, North York General Hospital, Mount Sinai Hospital, the Toronto Centre for Addictions and Mental Health, Cornwall Community Hospital, and the BC Lower Mainland Health Authorities. The use of additional algorithms and alerts to support medication safety; and the tools and approach for documenting and communicating the patient story through the nursing narrative were reviewed in detail and have informed the corresponding recommendation action plans.

3. Refreshing Decision Making Structures

The IHealth Review report highlighted the need to ensure that going forward there is stronger medical and clinical engagement, ownership, and depth of understanding of the EHR design and related practice, policies, and workflow changes. In response, the role of the Health Authority Medical Advisory Committee and Combined Quality Structure in the implementation of the IHealth Review report recommendations and go-forward planning has been reviewed and is being refreshed.

Using the principle that decision-making authority should be established as close to clinical practice as possible, the recommendations have been assigned a primary accountable body in addition to the teams responsible for completing the work. Through this process, the need to establish an EHR Quality Council, with both regional and local (NRGH, Dufferin and Oceanside) representation was identified. Several recommendations have been assigned to the EHR Quality Council as the accountable body, including Recommendation 14: Simplify the User Interface, and Recommendation 9: Nursing Narrative.

The terms of reference and initial membership for the EHR Quality Council have been drafted. The EHR Quality Council will be accountable for ensuring responsive action related to the safe and efficient use of the EHR, monitoring progress of changes and improvements, and creating a transparent process for communicating decisions and changes. In response to recent engagement with NRGH physicians, the EHR Quality Council has been asked to prioritize concerns related to provider efficiency, and assess options for changes and improvements that can be made in the immediate, near and long term.

4. Actioning the Recommendations

In addition to efforts related to Recommendation 23: Functional Revalidation, there are 19 other recommendations that have been assigned and initiated. Status updates for each recommendation will be posted by February 3, 2017. Priority decision/actions completed to-date include:

- Policies and procedures to support dose range checking have been updated. A *Validated Free Text* dose warning has been turned on and education has been provided.
- The seven priority high risk medications for activation of dose range checking have been confirmed (Hydromorphone, Fentanyl, Morphine, Heparin, Dalteparin, Enoxaparin, Digoxin) and the build is in progress.
- A new patient timeline view has been built as a prototype to communicate the nursing narrative and will be reviewed by the EHR Quality Council for decision.
- Device association updates have been made for devices in the PACU, ICU, NICU and the ED.
- Monitoring reports for all key system changes, planned and unplanned downtime/failures, hardware maintenance and turnover have been published on the intranet for transparency.
- Downtime tools updated to address gaps identified. Education and communication completed.
- Completed workflow analysis for select specialty areas to identify opportunities for improvement with focus on the user interface. Recommendations will be brought forward to the EHR quality council for prioritization and decision.
- Identified Canadian terminology changes completed. An audit to identify any remaining non-Canadian terms is being completed.
- Reviewed organizational practice and policy supports for CPOE. Developed scenario specific use cases with clear processes and communication plans for CPOE in urgent situations; educated across interdisciplinary teams.