

Eight Components for Provincial Implementation of TEACC (TECHNOLOGY ENABLED ACCESS TO CARE FOR CHILDREN)

1. CHILDREN & FAMILIES PERSPECTIVES

- Ensuring equity of access to specialist and subspecialist services across BC's vast geography is challenging. Reducing patient travel, facilitating appropriate and safe patient discharge from hospital to home and preventing admission/re-admission to hospital are important to families and providers.

2. CONCEPT, VISION & EVIDENCE

- Outcome and cost-benefit analyses conducted elsewhere in Canada (with adult patients) and internationally (with adults and children) have indicated that telehealth has a positive impact on access to care and supportive services.
- Telehealth and other consumer health technologic solutions have the potential to increase access and move us toward achieving the above goals.
- Along with the implementation of a 'tiers of service' model for the coordination and delivery of care and services across the province, this initiative will provide an opportunity to integrate telehealth and other enabling technologies to build capacity and bring specialist and sub-specialist care to those children and families who have more limited access.
- There are four technologies considered: real-time 2-way videoconferencing; store and forward; remote home monitoring; and apps & consumer health solutions.

3. COLLABORATION & PARTNERSHIPS

- Child Health BC (CHBC), an initiative of BC Children's Hospital, is a provincial network linking the health authorities, the three child serving ministries and many provincial organizations.
- CHBC's mandate is to improve health status and health outcomes of BC's infants, children and youth by working collaboratively to build an integrated and accessible system.
- CHBC, in collaboration with the Provincial Health Services Authority (PHSA) Telehealth Program, is leading a provincial initiative called Technology Enabled Access to Care for Children (TEACC). The first focus for TEACC is to set up reliable 2-way videoconferencing for pediatric clinical telehealth.
- CHBC is able to leverage its linkages with its provincial network members and partners whereby all child health programs from regional health authorities and First Nations Health Authority agreed to partake in this work. The Northern Health Authority will engage as they put in place their new child and youth program structure.

4. CONTENT, COMMUNITIES, PROCESS & TOOLS

- Supported by consultant project management and guided by a project charter, a provincial core working group, a clinical working group and a technical working group have been actively engaged on this complex project since December 2013.
- A **two-pronged** approach has been necessary to ensure reliable, standardized clinical telehealth encounters for both providers and families including:

Working with the BC Children's Hospital divisions, to incorporate telehealth as a mechanism for their service delivery and develop clinical pathways/ protocols to support the process.

Working with the regional health authorities to identify, develop and test viable regional sites through which the telehealth services for multiple clinical areas could be delivered on a reliable basis.

Three priority clinical initiatives were identified through a rigorous selection process to identify first wave activities. The products are:

- Surgical Patient Journey Project:** pre-operative assessment for suitability of surgery and pre-operative anesthesia, nursing and child life assessment; and post-operative follow-up;
- Expansion of Specialty Services Telehealth:** to support elective, scheduled pediatric consultations for neurology, metabolic disorders gastrointestinal, endocrinology/diabetes, cardiology, etc.; and
- Tele-PICU Project:** on-demand BC Children's Hospital specialist and sub-specialist consultation for patients outside of the lower mainland and for whom care may be delivered safely outside of BC Children's Hospital as well as videoconferencing connectivity to PICU to plan for patient transfers and/or provide management advice.

Many tools and processes have been developed to assist with the planning and implementation of TEACC such as:

- Site Readiness Assessment
- Data Reports
- Memorandum of Understanding with Health Authorities
- Workflow Documentation
- Clinical & Technological Protocols
- Standardized Equipment List
- Tele-PICU Education/Training Plan
- Telehealth Evaluation Surveys
- TEACC Communication Flyer & Snapshots of Telehealth Encounters

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AND THE BC PROJECT TEAM

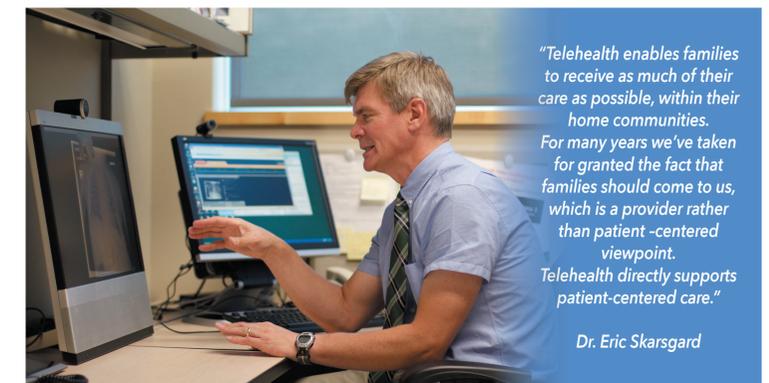
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5. COMMITMENT & LEADERSHIP

- Sustained leadership and commitment at many levels within and between all participating organizations is challenging but critical to ensure that the vision and scope are maintained to support the achievement of TEACC's objective. An example of medical leadership is demonstrated by Dr. Erik Skarsgard, Chief of Surgery at BC Children's Hospital, shown below performing a telehealth follow-up surgical assessment of a child with a chest wall deformity.



"Telehealth enables families to receive as much of their care as possible, within their home communities. For many years we've taken for granted the fact that families should come to us, which is a provider rather than patient-centered viewpoint. Telehealth directly supports patient-centered care."

Dr. Eric Skarsgard

6. COMMUNICATION & CHANGE

- The TEACC communication plan is being implemented to communicate the rationale and to maintain and reinforce the integration for clinical telehealth into service delivery. Targeted and compressive communication mechanisms and messages are being delivered to those working across the broad scope of practice including leaders, booking clerks, specialists, families, community physicians, etc.

7. COUNTING & EVALUATION

- TEACC's evaluation methodology includes surveys of families and patients at the time of the telehealth encounter, and of providers and specialists at regular intervals. Tracking and reporting systems are challenging within the provincial and five regional health systems and work-arounds have provided coverage of the gaps in continuity.

8. CONTINUATION & NEXT STEPS

- Continue to promote TEACC uptake and refine clinical telehealth integration processes, and increase patient encounters for expanded subspecialty telehealth services;
- Complete the Tele-PICU working model and implement plan;
- Order equipment and implement training; and
- Implement evaluation framework.



TEACC SITES COMING SOON:

- 1. Interior Health Authority**
 - Kootenay Boundary Regional Hospital (Trail)
 - East Kootenay Regional Hospital (Cranbrook)
- 2. Island Health Authority**
 - West Coast General Hospital (Port Alberni)
- 3. Vancouver Coastal Health Authority**
 - Bella Bella, Bella Coola