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BARRIERS AND ENABLERS TO IMPLEMENTING A VIRTUAL TERTIARY-REGIONAL TELEMEDICINE ROUNDING AND CONSULTATION (TRAC) MODEL OF INPATIENT PEDIATRIC CARE USING THE THEORETICAL DOMAINS FRAMEWORK (TDF) APPROACH: A STUDY PROTOCOL

ABSTRACT

BackgroundOver-occupancy at the two tertiary pediatric care hospitals in Alberta, Canada is steadily increasing with simultaneous decline in occupancy of pediatric beds at regional hospitals. Over-occupancy negatively impacts timeliness and potentially, the safety of patient care provided at these two tertiary hospitals. In contrast, underutilization of pediatric beds at regional hospitals poses the risk of losing beds provincially, dilution of regional pediatric expertise and potential erosion of confidence by regional providers. One approach to the current situation in provincial pediatric care capacity is development of telemedicine based innovative models of care that increase the population of patients cared for in regional pediatric beds. A Telemedicine Rounding and Consultation (TRAC) model involves discussing patient care or aspects of their care using telemedicine by employing visual displays, audio and information sharing between tertiary and regional hospitals. To facilitate implementation of a TRAC model, it is essential to understand the perceived barriers among its potential users in local context. The current study utilizes qualitative methodologies to assess these perceived clinician barriers to inform a future pilot and evaluation

of this innovative virtual pediatric tertiary-regional collaborative care model in Alberta.MethodsWe will use a qualitative descriptive design guided by the Theoretical Domain Framework (TDF) to systematically identify the tertiary and regional clinical stakeholder's perceived barriers and enablers to the implementation of proposed TRAC model of inpatient pediatric care. Semi-structured interviews and focus groups with pediatricians, nurses and allied health professionals, administrators, and family members will be conducted to identify key barriers and enablers to implementation of the TRAC model using TDF. Appropriate behaviour change techniques will be identified to develop potential intervention strategies to overcome identified barriers. These intervention strategies will facilitate implementation of the TRAC model during the pilot phase.DiscussionThe proposed TRAC model has the potential to address the imbalance between utilization of regional and tertiary inpatient pediatric facilities in Alberta. Knowledge generated regarding barriers and enablers to the TRAC model and the process outlined in this study could be used by health services researchers to develop similar telemedicine-based interventions in Canada and other parts of the world.