

A Transfer of Knowledge from Research to Practice: Improving Bone Health Among Children with Physical Disabilities/Restrictions

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Background/Rationale

Children with physical disabilities who have mobility restrictions are at increased risk for developing osteoporosis. This is a major health issue with ramifications into adulthood. In response to the need to optimize bone health for children with physical disabilities, an evidence-based Clinical Practice Guideline for Children with Physical Disabilities/Restrictions were developed (Fehlings et al., 2010). The transfer of knowledge from research to practice is an ongoing challenge for organizations which strive to provide the best possible health care. The objectives of this poster are to explain and provide practical ideas for implementing a quality improvement initiative in response to the introduction of an evidence-based clinical practice guideline.

Description

In December 2009 a chart review was conducted in the Child Development Program at Holland Bloorview Kids Rehabilitation Hospital that identified less than 50% of children who met criteria for the clinical practice guidelines received the necessary bone health education and health promotion. This demonstrated a gap between current practice and best practice. The goal of our project is to increase utilization of the clinical practice guideline to 80%, thereby improving the quality of care delivered to children with physical disabilities.

In order to accomplish this goal we have implemented a Lean approach called workload leveling. Lean methodology, a client-focused management philosophy, is being utilized by our organization as part of a larger quality improvement initiative. The approach offers the opportunity to level workload between registered nurses and physicians in order to maximize their client care time and activity. Our team recognized that bone health education and promotion could be better and more efficiently provided by registered nurses. The initial phase was to expand nursing knowledge and skill. A number of tools have been developed to assist the registered nurses in obtaining a dietary history, calculating vitamin D and calcium intake and identifying supplements to meet the needs of clients. A process flow sheet was created to support team decision making around the delivery of health education and visual reminders were developed for the clinical areas. A client-customized flyer was created for clients and families in an effort to enhance health education. Our team engages in frequent quality improvement discussions in order to share successes and challenges and identify possibility for change in real time.

Relevance

The transfer of knowledge from research and clinical practice guidelines to practice is an ongoing challenge for clinicians and organizations. By implementing these strategies and new processes, we will increase utilization of the clinical practice guidelines to at least 80% in the Child Development Program at Holland Bloorview Kids Rehabilitation Hospital. A second chart review will be conducted in May 2011 to determine if our strategies and efforts to address the gap between current practice and best practice have been successful.

Tessa Gresley-Jones

Tessa Gresley-Jones graduated from the Masters of Nursing, Paediatric NP program at the University of Toronto last year and has been working in the Child Development Program with children and families with Cerebral Palsy and complex medical needs. Prior to her role here at Holland Bloorview, she worked as a registered nurse in a variety of paediatric settings at Sick Kids and in British Columbia.

Lauren Switzer

Lauren Switzer is a Research Associate in the Bloorview Research Institute at Holland Bloorview Kids Rehabilitation Hospital working along side Dr Darcy Fehlings in investigating the clinical management and evaluation of innovative treatments for children and youth with cerebral palsy. Lauren has received her MSc in Epidemiology & Biostatistics from the University of Western Ontario.