Pediatric Orthotic Intervention: A Needs Assessment

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BACKGROUND

Pediatric orthotics and splinting is a distinct and often overlooked area of upper extremity rehabilitation and intervention. What makes pediatric orthotics unique include differences in structures, delicacy in both soft and hard tissue, and growth patterns. Thus, it may be considered a specialty area when it comes to fabricating or measuring orthotic devices for this population. The occupational therapists at Alaska Hand Rehabilitation in Anchorage acknowledge this unique area and have been seeking recognition as specialists in pediatric orthotic fabrication both city and state-wide.

The clinic sees a steady caseload of pediatric patients and saw over 40 cases in the year 2019. However, this represents a small number of their total demographic, which may be due to few referral sources or limited demand. Thus, the purpose of my project was to determine the need and develop a marketing strategy for pediatric specialists in orthotic fabrication at Alaska Hand Rehabilitation

(Durlacher, Bellows, & Verchchere, 2014)

STUDY GOALS

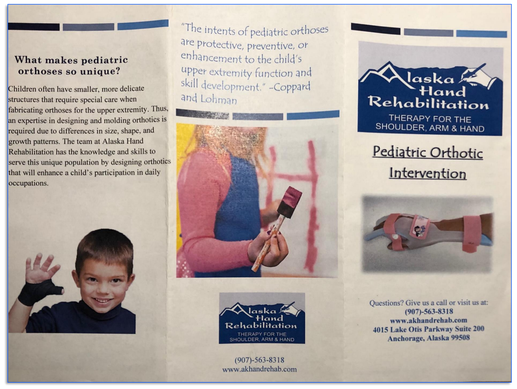
- Assessment of need for orthotic intervention for the pediatric population in Anchorage
- Use of a S.W.O.T. analysis to establish program development
- Identifying different marketing strategies to bring awareness of the program
- Interviewing physicians in the local Anchorage area to discuss the program and build a referral base
- Develop a marketing tool to increase awareness of the program at Alaska Hand Rehabilitation
- Write an essay discussing the research findings and interview results

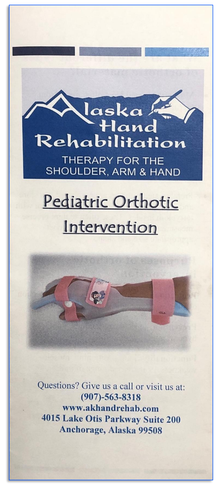
FOCUSED QUESTION

- What is the need for a specialty practice of pediatric orthosis fabrication at Alaska Hand Rehabilitation?

METHODS

1. Literature Review
   - A search was performed on articles pertaining to the effectiveness and use of orthotic interventions for the pediatric population
2. Development of Marketing Tool
   - An informational brochure was developed to include general information on pediatric orthotic intervention
   - The brochure was disseminated to the healthcare professionals that were interviewed and throughout the clinic
   - Interview participants were provided with a business card, referral booklet, and a copy of the brochure.
3. Identifying Participants and Performing Interviews
   - Cold calls and emails were the primary methods of contact for gathering interview participants
   - 4 medical professionals were contacted, including a family practitioner, a rehab program director at a major hospital, a pediatric orthopedic surgeon, and an outpatient pediatric occupational therapist
4. Needs Assessment
   - Results from interviews were used to determine viability of a pediatric orthotic intervention program
   - A S.W.O.T. analysis was used to identify strengths, weaknesses, opportunities, and threats to the development of a pediatric orthotic program at Alaska Hand Rehabilitation





RESULTS

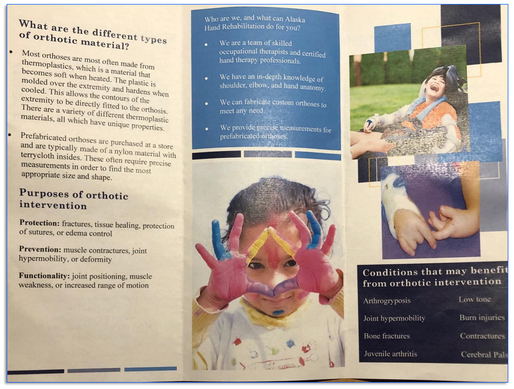
Results of the literature search shows that research is limited in the area of pediatric orthotic intervention. Much of the research focuses on how orthotic interventions may be used for congenital abnormalities; however, there is a lack of research pertaining to orthopedic and sports-related injuries due to the similarities in orthotic intervention with pediatric to adult populations.

Of the 4 interview participants, 1 was unable to participate due to the COVID-19 pandemic. Other potential participants were invited to be interviewed through virtual methods but did not respond.

Results from the interviews indicated that there is currently no immediate need for a pediatric orthotic program in the city of Anchorage. However, 2 of the interview participants estimate that the need may increase during the summer season as children begin to play outdoors again.

Primary marketing strategies used for increasing awareness of the program included an informational brochure, social media advertising, and word-of-mouth. Alaska Hand Rehabilitation has yet to receive any referrals from the 3 interview participants, but it is estimated that referrals may increase during the summer months.

(Lake & Oishi, 2014)



BOTTOM LINE FOR OT

There are numerous conditions that may require the use of orthotic intervention to correct or protect an injury. For example, Durlacher, Bellows, and Verchere (2014) found that infants with birth related brachial plexus injuries benefited from an orthosis to position the arm in a way that prevents abnormal growth in the future. Children with cerebral palsy have also benefited from orthotic intervention by placing the wrist and thumb in a more functional position if there are contractures. Orthoses are also commonly used for acute conditions such as tendinopathies or fractures.

Congenital anomalies affects approximately 6% of live births annually in the state of Alaska (Department of Health and Social Services [DHSS], 2012). However, the most common abnormalities include cardiovascular, alcohol related, and genitourinary defects (DHSS, 2012)). Musculoskeletal anomalies accounted for 0.5% of lives births annually, indicated that there is a low population of children born with congenital abnormalities for which orthotic intervention may be beneficial (DHSS, 2012). Although the total number of orthopedic-related injuries is unknown, there is always an ebb and flow of when they occur. Thus, the need for readily available orthotic intervention is always present.

As occupational therapists, we know that the primary occupation for our pediatric patients is play. However, a child's ability to explore the world with his or her hands may be impacted by traumatic injuries or congenital abnormalities. Orthotics are one such intervention that may help a child return to preferred occupations by either protecting, preventing, or improving functional use of his or her upper extremity(s).

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