

interRAI Pediatric Home Care (PEDS-HC) Assessment Tool: Evaluating Ontario Healthcare Workers' Experience

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Anisha Lynch-Godrei^{1,2} , Megan Doherty^{1,2,3,4} 
and Christina Vadeboncoeur^{1,2,3,4} 

¹CHEO Research Institute, Ottawa, ON, Canada. ²Roger Neilson House, Ottawa, ON, Canada.

³CHEO, Ottawa, ON, Canada. ⁴University of Ottawa, Ottawa, ON, Canada.

ABSTRACT: High quality pediatric homecare requires comprehensive assessment of the needs, supports, and health care challenges of children with special healthcare needs and their families. There is no standardized homecare assessment system to evaluate children's clinical needs in the home (support services, equipment, etc.) in Ontario, Canada, which contributes to inequitable homecare service allocation. In 2017, the interRAI Pediatric Home Care assessment tool (PEDS-HC) was implemented on a pilot basis in several regions of Ontario. This qualitative descriptive study explores the experiences of homecare coordinators using the PEDS-HC, seeking to understand the utility and feasibility of this tool through focus group discussion. Four major themes were identified including: the benefits of the tool; areas for modification; challenges to use; and Clinical Assessment Protocols to develop. These themes can guide modifications to the tool to improve utility and improve pediatric home care services. The PEDS-HC is an effective tool to assess children needing homecare in a standardized and comprehensive manner. Use of the tool can improve the quality of homecare services by ensuring equity in service provision and facilitate early identification of clinical issues to prevent unexpected health deteriorations.

KEYWORDS: Home care services, pediatrics, needs assessment, focus groups

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CORRESPONDING AUTHOR: Christina Vadeboncoeur, CHEO, 401 Smyth Rd, Ottawa, ON K1H 8L1, Canada. Email: Vadeboncoeur@cheo.on.ca

Background

The interRAI Home Care assessment system has successfully been used in Canada and globally to comprehensively evaluate long term at-home needs and support service needs for adults.¹ The assessment system provides a comprehensive and standardized approach which facilitates equitable distribution of services.² An interRAI assessment tool was developed in Texas, USA for children with special healthcare needs: the Pediatric Home Care (PEDS-HC) Assessment Form.³ For children with special healthcare needs receiving in-home services in Canada, no standardized assessment tool is currently used. This has led to variability in assessments leading to inequity in resource allocation. The PEDS-HC was provided as a pilot to clinical care coordinators in Ontario. Focus groups were conducted to receive feedback about utility and feasibility of adoption of the tool.

All 14 Local Health Integration Networks (LHINs) in Ontario were invited to participate in the project which took place between February 2017 and March 2019. Nine LHIN agencies participated in 1 of 2 in person or virtual training sessions, and 3 agencies participated in the project. At each location, between 2 and 10 clinical care coordinators were recruited, and each of them used the instrument to assess between 2 and 5 patients in the home. Nine months into the trial period, 2-h focus groups were run at each site. Team members (MD and CV) served as session moderators to encourage discussion

amongst the participants, they were not involved in development of the instrument and thus could serve as unbiased facilitators. Session transcripts were recorded and then transcribed verbatim. Iterative thematic analysis was performed using NVivo software (released March 2020) to identify emerging themes in the discussion.⁴

Themes

Four themes were identified through analysis of the focus group transcripts: (1) benefits of the tool, (2) areas for modification, (3) challenges to use, and (4) Clinical Assessment Protocols (CAPs) to develop. See Figure 1 for complete details.

Theme: Benefits of the tool

Overall participants agreed that the instrument was helpful to identify the care needs of children in the home and avoid acute care utilization, such as hospitalization. Two participants stated “I find it does give a good picture of a client in the present, sort of in that one moment of time” (P1) and “overall, I do like it, I like the detail of it” (P2). Having a standardized list of items to assess was frequently noted to be useful. Participants also appreciated having both the option to complete the tool on paper or to input directly into the online system on their laptop. The ability to capture an accurate snapshot of the patient led many participants to identify the PEDS-HC as particularly effective for



Some questions also felt too personal, making the assessor and family uncomfortable, particularly when these questions did not seem relevant to determining the services required. A participant explained: “*So there’s a lot in here that what would I do with that information, the detail of it is not going to drive my intervention. Particularly around behaviour, because our focus is so much on physical health and intellectual abilities.*” (P8) For these questions, participants noted that they would preface the question with an explanation, rephrase the question, or offer less specific response options (eg, age range brackets). One participant noted, “*I know that a couple of the parents have questioned why I have to ask their age, and how I approach it is that parents are aging and that could potentially impact on their stress level, increased physical, that sort of thing. When I explain that to them, they sort of understand, but if you don’t preface it with that, they think you’re being nosy.*” (P9)

Theme: Clinical Assessment Protocols (CAPs) to develop

Some participants were aware of the suite of instruments available in other interRAI assessment instruments, including Clinical Assessment Protocols which provide suggestions related to clinical management based on the results of the assessment tools. Participants were keen to provide suggestions for the development of CAPs, identifying the clinical problems where CAPs would be most relevant and useful to assist with pediatric homecare provision in their settings. The specific CAPs which were suggested included those related to activities of daily living (ADL) performance, behavior (cognitive/mood), mental health and well-being, equipment needs/deficits, mobility and motor skills, nutrition, risk for child abuse, and caregiver distress.

Discussion and Conclusions

We describe the experiences of homecare coordinators during a pilot implementation of the interRAI PEDS-HC, a standardized pediatric homecare tool, to assess the care needs of children and their families. Coordinators reported that the tool was an appropriate and effective assessment for these children. Assessors noted that the tool helped them to identify clinical issues and risk factors which could lead to additional unexpected or urgent healthcare needs, such as emergency room visits or hospitalizations.

Based on these findings, we believe that development of the interRAI PEDS-HC tool is worth pursuing for eventual use in

Ontario, Canada. Although there was a significant time commitment and high level of detail required, assessors acknowledged that it may just take some getting used to and still valued the detailed level of assessment and its importance for ensuring equitable access to care. Many participants even requested to continue using the interRAI PEDS-HC tool well after the conclusion of the study trial period, further indicating efficacy of the tool and satisfaction among end-users. Going forward, the development of CAPs for pediatric home care should be prioritized, since previous studies have shown that CAPs support the implementation of clinical interventions to help individuals maintain and improve health.^{1,2} The results of this study confirm the PEDS-HC as an appropriate assessment for children receiving home care, which can help to ensure that children and their families have access to the best in-home care possible.

Author Contributions


Conception and design of the work: MD, CV. Data acquisition, analysis and interpretation: MD, CV, ALG. Drafting/Revision of Manuscript: ALG, MD, CV. All authors read and approved the final manuscript.

Ethics Approval and Consent

This study approved by Children’s Hospital of Eastern Ontario’s ethics board, approval number of 17/172X. Written informed consent was obtained from all study participants.

ORCID iDs

Anisha Lynch-Godrei  <https://orcid.org/0000-0001-5195-3264>

Megan Doherty  <https://orcid.org/0000-0003-3905-2169>

Christina Vadeboncoeur  <https://orcid.org/0000-0001-6589-4859>

REFERENCES

1. Freeman S, Hirdes JP, Stolee P, et al. Care planning needs of palliative home care clients: Development of the interRAI palliative care assessment clinical assessment protocols (CAPs). *BMC Palliat Care*. 2014;13:58.
2. Salahudeen MS, Nishtala PS. A systematic review evaluating the use of the interRAI home care instrument in research for older people. *Clin Gerontol*. 2019;42:463-484.
3. Phillips CD, Hawes C. The interRAI Pediatric Home Care (PEDS HC) assessment: evaluating the long-term community-based service and support needs of children facing special healthcare challenges. *Health Serv Insights*. 2015;8:17-24.
4. QSR International Pty Ltd. NVivo (released in March 2020). 2020. <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home> (accessed 21 Nov 2021).