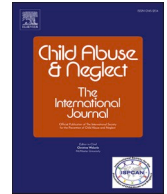




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Screening for economic hardship for child welfare-involved families during the COVID-19 pandemic: A rapid partnership response

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ABSTRACT

Background: Pandemics have a wide range of economic, health and social consequences related to both the spread of a disease and efforts made by government leaders to contain it which may be particularly detrimental for the child welfare-involved population. This is because child welfare agencies serve some of the highest needs children and families. A significant proportion of these families face economic hardship, and as a result of containment measures for COVID-19, more families inevitably will.

Objective: Given the range of negative consequences related to the pandemic and the evolving supports available to families, child protection workers needed a clinical tool to guide and support work with families informed by an understanding of economic hardship. The objective of this paper is to report on the development and implementation strategy of a tool to be used for practice intervention during the pandemic.

Methods: Action research methodology was utilized in the creation of the clinical tool. The tool's development and implementation occurred through an academic/child welfare sector partnership involving child welfare agencies representing diverse regions and populations in Ontario, Canada. Factor analysis of representative child welfare data from the Ontario Incidence Study of Reported Child Abuse and Neglect 2018 (OIS-2018) on economic hardship was used to inform the development of questions on the clinical tool.

Results: The development and implementation strategy of the clinical tool are described, including the results from analyses of the OIS-2018.

Conclusions: Future directions for the project are discussed, including considerations for using this tool beyond the pandemic.

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1. Introduction

Pandemics have a wide range of health, social and economic consequences related to both the spread of a disease and efforts made by governments to contain the disease and mitigate its effects on populations. The negative consequences of the COVID-19 pandemic, similar to previous pandemics, will disproportionately impact vulnerable and/or disadvantaged groups such as individuals with mental health and/or addiction concerns, visible minorities, and low-income populations, (DeBruin et al., 2012; La Ruche et al., 2009; Prime et al., 2020; Uscher-Pines et al., 2007). Existing systems and structures designed to provide populations with supports and services (e.g., child welfare systems, mental health services, and food banks) are disrupted by the pandemic, limiting people's ability to access them because of an inability to provide services as usual or any services in some instances. In order to fill this gap, an overwhelming number of service resources, interventions and informational materials were developed by researchers, governments, and community service providers to assist individuals and families during the pandemic with a host of issues ranging from infection control and prevention to parenting resources to how to obtain basic needs. Service providers and service users, already restricted in their ability to have face-to-face interactions, are left to navigate an increasingly complex service landscape.

Child welfare agencies in Ontario serve some of the highest needs children and families in the province. A significant proportion of these families struggle with mental health and/or addiction concerns, social isolation, and economic hardship (Fallon et al., 2020), which are likely exacerbated by the COVID-19 pandemic. A large proportion of these families are served by child welfare *because of* the above noted chronic concerns that are well-documented risk factors for child maltreatment (Conrad-Hiebner & Byram, 2018; Fallon et al., 2017; Stith et al., 2009). Despite the role that economic hardship has in contributing to the stress of parenting, families who come to the attention of the child welfare system in Ontario are not systematically assessed for this concern; rather, the system's focus is on safety, risk assessment, and the determination of whether child maltreatment has occurred (Fallon et al., 2017).

Prior to the COVID-19 pandemic, there were mounting concerns reflected in the international literature about the inadequacy of the child protection system's response to families facing economic hardship (e.g., Bilson & Martin, 2016; Davidson et al., 2017; Drake & Jonson-Reid, 2014; Hyslop & Keddell, 2018; Keddell & Davie, 2018; McCartan et al., 2018; Rothwell et al., 2018; Saar-Heiman & Gupta, 2019). Several scholars have proposed that practice frameworks and tools are necessary for effective child welfare service delivery for families facing economic hardship (Hyslop & Keddell, 2018; McCartan et al., 2018; Saar-Heiman & Gupta, 2019). Given this and the knowledge that child welfare-involved families were particularly vulnerable to the economic impact of the pandemic led to the development of a clinical tool to assist workers to respond to families during the pandemic which explicitly assessed economic hardship concerns. This tool was developed through an academic/child welfare sector partnership representing diverse regions and populations in Ontario. This paper reports on the development and implementation of this clinical tool and explores considerations for use of the tool beyond the pandemic.

2. Background

2.1. Ontario child welfare

The child welfare system within Canada is organized at the provincial/territorial level. There is variation in child welfare legislation and policies across the provinces/territories regarding child maltreatment investigation procedures and the nature of child welfare service provision (Trocmé et al., 2010). In Ontario, child welfare services are provided by non-profit organizations, called Children's Aid Societies (CASs), which are funded by the Ontario Ministry of Children, Community and Social Services (MCCSS). As of April 2020, there were 50 agencies in Ontario that provided child protection services, including 12 Indigenous societies (Ministry of Children, Community and Social Services, 2020). The autonomous private service delivery model supports the development of strong community links with innovative programs that reflect local needs. These individual CASs are mandated to investigate reported allegations of child maltreatment, provide child protection services, make referrals for families when necessary, and are responsible for children in out-of-home care (Fallon et al., 2015).

2.2. Economic hardship for child welfare-involved families

Economic hardship is defined as when a family struggles to afford their basic needs (e.g., food, clothing, housing, medical care) due to a lack of money (Mirowsky & Ross, 1999). Within Canada, there are very little available data assessing economic hardship. The Government of Ontario used the one-time Ontario Material Deprivation Survey (OMDS) in 2009 to monitor progress on their poverty reduction strategy. The OMDS measured the ability of Ontario families to afford basic necessities such as food, housing, clothing and social needs of leisure and participation. Since then, Statistics Canada has conducted the one-time Canadian Survey of Economic Well-being (CSEW) in 2013. Data from the CSEW indicated that the incidence of economic hardship, operationalized as being unable to afford two or more items that many Canadians consider to be necessities, was 19 % of Canadians (Notten et al., 2017). The CSEW asked about being able to afford a broad range of items such as appliances, furniture, internet, meat and vegetables, clothing and footwear (Statistics Canada, 2014). Data from the Ontario Incidence Study of Reported Child Abuse and Neglect (OIS), which examines the incidence of reported child maltreatment and the characteristics of the children and families investigated by child protection services in Ontario every five years, can be used to examine economic hardship among child welfare-involved families as of its 2013 cycle (OIS-2013). Economic hardship in the OIS-2013 was assessed by asking investigating workers to indicate whether the household had run out of money for food, housing or utilities within the past six months. Data from the OIS-2013 indicated that in just under 10 percent of investigations, the worker noted the household had run out of money for at least one the three identified necessities

(Lefebvre et al., 2017).

It is widely recognized that children experiencing economic hardship are at greater risk of experiencing a wide range of disadvantages in the areas of physical and mental health, behavioural and cognitive development, and academic achievement (e.g., Conger et al., 2010; Duncan et al., 2017; Knitzer & Perry, 2009; Lefmann & Combs-Orme, 2014; Singh & Ghandour, 2012; Yoshikawa et al., 2012). It has also been well documented that children experiencing economic hardship are at an increased risk of child maltreatment (e.g., Doidge et al., 2017; Dworsky et al., 2007; Drake & Pandey, 1996; Pelton, 2015; Putnam-Hornstein & Needell, 2011; Slack et al., 2011). Although the evidence is still limited in regard to the matter of causality, the results of several decades of research, including those from meta-analyses and systematic reviews (e.g., Black et al., 2001; Conrad-Hiebner & Byram, 2018; Stith et al., 2009) have shown a strong association between economic hardship and varying types of child maltreatment. The Family Stress Model posits that economic hardship and its associated stresses negatively impact family functioning (e.g., negative emotional states of parents, parental conflict, and harsh parenting practices), which in turn, affects child well-being (Conger et al., 1992).

2.3. University/child welfare sector partnership

This partnership utilized a participatory action research framework for the design and implementation of the tool. This approach highlights that participative and collaborative frameworks are required for the creation and implementation of effective interventions (Koshy et al., 2011; Meyer, 2000). Complex emergencies such as the current COVID-19 pandemic require increased collaboration and coordination across multiple sectors for the mitigation of harm and risk (Alliance for Child Protection in Humanitarian Action, 2019a; Alliance for Child Protection in Humanitarian Action, 2019b).

A pre-existing university/child welfare sector partnership, comprised of five Ontario child welfare agencies and University of Toronto researchers, was leveraged to support child welfare organizations' capacity to meet the needs of child welfare-involved families during the COVID-19 pandemic, such as concrete needs related to economic hardship, instrumental needs related to containment measures (e.g., childcare/school closures) and both general and COVID-19 specific health concerns. The partnership's five community partner agencies represent regions and communities from across Ontario, including agencies in the Greater Toronto Area, an agency in northern Ontario and an Indigenous child welfare agency. For the purposes of the tool development, and in the need for a collective response to an urgent issue, colleagues from Quebec and the United States joined this existing partnership with the purpose of potentially adapting it for their jurisdictions.

3. Objectives

In recognition of the importance of the development of concrete tools, the need for the child welfare sector to provide an immediate response to COVID-19, and the evolving supports available to families during the pandemic, the academic/child welfare sector partnership developed and implemented a clinical tool to guide and support work with families during the pandemic. The objectives of this paper are to describe the process, methods and implementation strategies utilized to rapidly produce a tool for child welfare workers under unprecedented conditions.

4. Methodology

The tool development required several different methodological strategies that were completed sequentially. First, the format of the tool was determined, then secondary analyses of provincially representative data were conducted to inform items in the tool, finally, face validity of the tool was established. These strategies are described below.

4.1. Tool format

The members of the university/child welfare agency partnership discussed the utility of various types of tools that could be used in practice. Ultimately, a decision was made to format the clinical tool as an easy-to-use online checklist which can aid in critical decision-making and lower the possibility of making mistakes by providing a road map for systematic thinking (Hales and Pronovost, 2006; Kramer and Drews, 2017). The members of the partnership acknowledge the limitations of checklists: they are not intended to act as a substitute for clinical judgement, replace current agency safety assessments and/or be used as a compliance metric.

4.2. Secondary data analysis

Given that economic hardship was a likely outcome of the pandemic containment measures and that Ontario child welfare agencies did not systematically assess economic hardship among families prior to the pandemic, an explicit focus of the clinical tool was on assessing economic hardship concerns. Secondary analyses of the Ontario Incidence Study of Reported Child Abuse and Neglect 2018 (OIS-2018) were conducted to establish service population needs in relation to economic hardship. These data became available in early 2020, only two months prior to the start of the pandemic. The OIS-2018 captures information on investigation outcomes, forms and severity of maltreatment, and the characteristics of children and families investigated by child welfare authorities in Ontario, including economic hardship information. A multi-stage sampling design was used to first select a representative sample of 18 child welfare agencies from 48 child welfare organizations in Ontario. Investigations opened between October 1 and December 31, 2018 were then sampled for inclusion in the study. The OIS-2018 definition of maltreatment-related investigations includes situations in

which there were concerns that a child may have already been abused or neglected (maltreatment investigations) as well as situations in which there was no specific concern about past maltreatment but where the risk of future maltreatment was being assessed (risk investigations). These procedures yielded a final sample of 7590 child maltreatment-related investigations involving children aged 0–17 years old. Weighted provincial, annual estimates were derived based on these investigations. Please see Fallon et al. (2020) for a detailed description of weighting procedures. The estimated number of investigations involving children aged 0–17 conducted in Ontario after applying these weighting procedures is 158,476 (a rate of 59.09 investigations per 1,000 children).

At the time of the development of the clinical tool, the Major Findings Report of the OIS-2018 (Fallon et al., 2020) had just been published but the economic hardship variables had not been analyzed. The COVID-19 pandemic was the impetus to analyze these variables in order to provide a recent understanding of the extent of economic hardship faced by a representative population of child welfare-involved families and also to investigate the utility of asking these questions within the context of the clinical tool that would be developed. Univariate analyses were conducted on the weighted sample of investigations to determine the number of child welfare-involved families in Ontario that experienced economic hardship or had other related socio-economic risk factors. The 2018 cycle of the OIS measures economic hardship by asking investigating workers to indicate whether the household had run out of money for the following five basic necessities within the past six months: food, housing, utilities, transportation, and/or telephone/cell phone. Additional univariate analyses were conducted to understand the household income source in investigations; the OIS-2018 captures information on nine forms of income (full-time work, part-time work, multiple jobs, seasonal employment, employment insurance, social assistance, other benefit, none and unknown). For the purpose of this analysis, part-time work, seasonal work, and multiple jobs were collapsed into one category as were social assistance, employment insurance, and other benefit. Finally, other household concerns noted by the investigating worker including more than two moves in the past year and home overcrowding were analyzed.

Bivariate analyses were conducted in order to establish whether particular household structures were more likely to be noted by the worker to have experienced economic hardship. Chi-square tests of significance were conducted using the sample weight, which adjusts for the inflation of the chi-square statistic by the size of the estimate by weighting the estimate down to the original sample size. Child age and the number of caregivers in the home were compared between households that were noted or not noted by workers to have experienced economic hardship.

Then, in order to identify the most important hardship-related questions from the OIS-2018 for inclusion in the clinical tool, a data reduction strategy using factor analysis was undertaken. This exploratory factor analysis was used to test whether there is a latent structure between hardship-related variables used in the OIS-2018 data collection instrument (i.e., primary income source, number of moves in the past 12 months, home overcrowding, household has run out of money for food in the past six months, household has run out of money for utilities in the past six months, household has run out of money for housing in the past six months, household has run out of money for transportation in the past six months and household has run out of money for transportation in the past six months). Factor analysis is based on a correlation matrix as it assumes that the observed indicators are measured continuously and distributed normally and that the associations among the indicators are linear. However, factor analysis can still be conducted with ordered categorical variables (Bartholomew, 1980).

Factor analysis is commonly used to validate a scale or index by demonstrating that the variables used to construct the index load on the same factor and can be used to drop scale items that crossload on more than one factor. Factor loadings are used to intuit the factor structure of the data. Principal component analysis was the chosen method as it identifies latent variables that contribute to the common variance of the set of measured variables. An eigenvalue for a factor measures the variance in all the variables that is accounted for by that factor. Only eigenvalues over 1 were requested from the extraction. Eigenvalues below 1 are not significant.

4.3. Face validity

Once initial drafts of questions for inclusion in the tool were developed based on findings from secondary analysis of the OIS-2018, face validity of the tool needed to be established. Given the urgent need to develop the tool quickly, ensuring face validity of the tool was prioritized. Face validity is established when an indicator can reasonably measure a variable of interest (Rubin & Babbie, 2016). Research team members and agency partners further developed and refined the questions using a modified Delphi method which is an iterative process that requires consensus among experts to enhance the credibility of measures (Hsu & Sandford, 2007). The detailed process of developing the tool using the modified Delphi method is described in the results section.

4.4. Tool implementation

Once face validity was established, the tool was implemented at partner agencies, and this process is described in the results.

5. Results

5.1. Tool format

As referenced in the methods section, the members of the partnership decided to use an online checklist-style tool. Checklists that aid in facilitating systematic thinking have four qualities. They delineate a clear break in the process, are quick and easy to complete, supplement existing knowledge and expertise, and are field tested and based on actual experience (Gawande, 2009). The checklist-style allowed for an assessment of needs (in the format of yes/no questions) as well as the embedding of curated resources which align to each question on the checklist. The goal was for the worker to provide families they are working with a specific list of

resources depending on the family's needs identified in the checklist. The tool would identify to workers resources that were both internal (e.g. agency specific supports such as food baskets and transit passes) and external (e.g. community-based services, financial programs to support families during COVID-19) to their agency. In order to meet the changing nature of available supports, an online platform was critical to the utility and adaptability of the tool in that it allows for regular updates of resources and the tailoring of resources to a specific agency or geographic location. An online tool was also critical in ensuring accessibility due to many child protection staff working remotely during the pandemic. In addition, paper-based data collection and tools continue to be phased out in child welfare to improve information sharing and accountability (Ontario Association of Children's Aid Societies, 2019). A working relationship was developed with a digital transformation company, *Convergence Technology*, to facilitate the online platform for the tool.

5.2. Secondary data analysis

Results of the univariate analyses of the socio-economic variables in the OIS-2018 are described in Table 1. While the majority of investigations involved households that relied on full-time work for their source of income (53 %), a high proportion of investigations involved households that relied on social assistance, employment insurance, or other benefits (25 %). An additional 10 percent of investigations involved households that relied on part-time work, seasonal work, or multiple jobs as their main source of income. In seven percent of investigations the worker noted no income source for the household.

Housing stability was assessed by asking about the number of family moves in the past 12 months. In six percent of investigations, the worker identified that the family had moved two or more times. Home overcrowding was also noted by the worker in six percent of investigations.

In nine percent of investigations, the worker noted that the household had run out of money for at least one of the necessities captured by the study. Specifically, the worker noted that the household ran out of money for food in five percent of investigations, housing in three percent of investigations, utilities in two percent of investigations, their phone in four percent of investigations and transportation in three percent of investigations. The worker endorsed that they did not know the answer to these questions in a small proportion of investigations, indicating that these questions would be appropriate to be included in the clinical tool, especially in the absence of any other available, validated tool measuring workers' knowledge of economic hardship for the child welfare population they serve.

Bivariate analysis of the OIS-2018 data comparing households that did and did not experience economic hardship (defined as running out of money for food, housing, utilities, phone and/or transportation in the past six months) revealed that there was a significant difference in the distribution of child age in these investigations. As shown in Table 2, households with children less than one year old were more likely to have experienced economic hardship. In 16 percent of investigations involving children less than one year old, the household was noted to have run out of money in the past six months. The proportion of investigations in which households experienced economic hardship involving children in the other age groups analyzed (one to three years, four to seven years, eight to 11 years, 12–15 years, and 16–17 years), was relatively similar (between seven and nine percent). There was also a significant difference in the proportion of investigations involving lone-caregiver and dual-caregiver households that had experienced economic hardship; 11 percent of investigations involving one caregiver and nine percent of investigations involving two caregivers had experienced economic hardship.

The results of the factor analysis of OIS-2018 socio-economic variables indicated a two-factor solution, explaining 74 percent of the variance with two significant Eigen values (values over one). Examining the significant variables in each component led to theorizing the two factors: proximal and distal measures of economic hardship. The five variables highly correlated with one another (all

Table 1
Socio-economic Factors in Maltreatment-Related Investigations in Ontario in 2018.

	Estimate	Percent
Household Ran Out of Money For		
Food	7,634	5 %
Housing	4,727	3 %
Utilities	3,806	2 %
Phone	5,841	4 %
Transportation	4,847	3 %
At least one of the above	13,312	9 %
Housing Concerns		
Two or more moves	8,837	6 %
Home overcrowding	9,304	6 %
Household Income Source		
Full-time work	82,318	53 %
Part-time/seasonal/multiple jobs	15,601	10 %
Social assistance/EI/other benefits	38,705	25 %
No income	10,193	7 %
Unknown	8,832	6 %
Total	155,649	100 %

Based on an unweighted sample of $n=7,462$ investigations. Percentages are column percentages.

Table 2
Child Age and Family Structure by Noted Economic Hardship in Maltreatment-Related Investigations in Ontario in 2018.

	Household Ran Out of Money						X2
	No		Yes		Total		
	#	%	#	%	#	%	
Child Age							32.101***
Under 1 year	7,134	84 %	1,354	16 %	8,488	100 %	
1 to 3 years old	20,404	91 %	1,906	9 %	22,310	100 %	
4 to 7 years old	37,198	91 %	3,461	9 %	40,659	100 %	
8 to 12 years old	37,137	92 %	3,316	8 %	40,453	100 %	
12–15 years old	31,799	93 %	2,523	7 %	34,322	100 %	
16–17 years old	8,665	92 %	752	8 %	9,417	100 %	
Family Structure							44.971***
Lone caregiver	51,385	89 %	6,588	11 %	57,973	100 %	
Two caregivers	90,920	93 %	6,724	7 %	97,644	100 %	

Based on an unweighted sample of $n = 7,462$ investigations. Percentages are column percentages.

*** $p > 0.001$.

correlation coefficients were greater than 0.93) in the proximal measure were the five questions which ask if the household had run out of money for a necessity in the past six months. These variables identify immediate economic concerns for the family. The only significant variables in the distal measure factor were household income source and moves in the past twelve months (correlation coefficients of 0.795 and 0.737, respectively) (Table 3).

The results of the secondary analysis of the OIS-2018 informed the development of the initial set of questions related to economic hardship. For example, based on the results of the bivariate analysis where families with infants were more likely to be noted to experience economic hardship, a question was developed which asked about whether a family could meet their material needs, specifically including baby supplies (i.e., formula and diapers). Given the results of the factor analysis that the economic hardship variables from the OIS-2018 were highly correlated with one another, the decision was made to combine them into one question for the sake of brevity in the clinical tool.

5.3. Face validity

Ensuring face validity of the tool was critical so it could quickly be understood by workers, measure the concepts intended to be screened for, and provide utility to workers in the current context of their work. Face validity was established through an iterative approach, with ongoing collaboration and feedback from partnered agencies and research team members. The initial drafted questions pertained to economic hardship as well as other identified concerns that families may be experiencing as a result of the pandemic (e.g., health concerns, disruptions to immunization schedules, lack of child care) in order to capture a range of negative consequences that families may be experiencing due to the pandemic. These questions, as well as proposed resources related to the checklist items, were circulated to members of the partnership. At the onset of COVID-19, families and workers were overwhelmed with an influx of resources, therefore the partnership undertook a process of reviewing pandemic-related resources in order to evaluate them for trustworthiness, applicability and accessibility. Questions and resources were refined based on the project teams' clinical understanding of the children and families they serve. For example, the decision was made to exclude asking about money for transportation in the overall measure of economic hardship as this was determined to be less of a concern given the stay-at-home instructions associated with the pandemic. Additionally, asking about whether the family had run out of money for telephone/cell phone was expanded into a separate question that also includes the household's internet access and device accessibility as these were identified by the partners as

Table 3
Exploratory Factor Analysis of OIS-2018 Socio-Economic Variables.

Item	Factor Loadings	
	Proximal Economic Hardship	Distal Economic Hardships
Household source of income	.065	.795
Number of moves in past year	.150	.737
Home overcrowded	.332	.285
In the last 6 months, household ran out of money food	.938	.155
In the last 6 months, household ran out of money housing	.931	.161
In the last 6 months, household ran out of money utilities	.950	.155
In the last 6 months, household ran out of money telephone/cell phone	.934	.163
In the last 6 months, household ran out of money transportation	.936	.174
Eigenvalues	4.827	1.089
% of variance	60.332	13.608

Factor loadings over .70 appear in bold.

important for online service provision and for families working and learning from home. Health related questions were refined based on emerging COVID-19 considerations. For example, the item that pertains to vaccine interruption was added as awareness emerged that children were not receiving routine vaccinations and the knowledge that children involved in the child welfare system were also likely to be under vaccinated (Hermann et al., 2018).

Multiple iterations of the questions and lists of resources were created until the final versions were agreed upon. The final questions and resources chosen were intended to help convey four trauma-informed principles: respect, information, connection, and hope by providing an engagement tool that allows families to describe their economic, health and instrumental challenges through a supportive, problem-focused engagement strategy (Green et al., 2016). Once consensus was achieved among the research team and agency partners on both the checklist question items as well as the associated resources, the tool was pilot tested with a small number of front-line workers from the partner child welfare agencies, and minor changes were made to the functionality of the online application of the tool based on their feedback.

The final version of the clinical tool is a succinct checklist of 12 questions and associated resources that workers can use when assessing families' needs during the pandemic. These questions reflect a range of concerns child welfare-involved families may be facing as a result of the pandemic, with an explicit focus on the assessment of unmet material needs as a result of economic hardship. This checklist tool first allows workers to systematically screen for pandemic related concerns and second, provides a practical guide for intervention by providing lists of aligned resources (e.g., government financial supports, telehealth, agency specific resources) tailored to families' specific needs assessed using the checklist tool. For example, if a family is unable to afford basic material needs, the checklist directs the worker to provide the family with information on the economic supports made available during the pandemic from different levels of government as well as concrete supports available within the community. Workers are also prompted to provide the family with available agency-specific concrete supports (e.g., food vouchers, baby items and equipment, clothing). Please see Table 4 for the final version of the questions included in the clinical tool.

5.4. Clinical tool implementation

In order for the tool to be easily and quickly integrated into worker practice, introductory videos were designed by the project team leaders, Dr. Fallon and Dr. Collin-Vézina. The videos were produced in English and French and made accessible on the online platform. The videos assisted workers in using the tool technically and clinically, while also providing information about the impact of the pandemic on families' abilities to meet basic needs, access social supports, and manage mental health concerns and feelings of stigma, fear and anxiety. As the project advances, these video training resources will be updated as needed in response to evolving frontline child welfare practices and responses during the COVID-19 pandemic.

Through weekly partnership meetings, agencies shared their approaches to implementation and their feedback was discussed. It quickly became evident that the tool was being used throughout each stage of the child welfare service continuum, from initial screenings with families to use with foster home providers. In some agencies, workers were directed to use the tool during each contact with their families, while other agencies presented the tool as an available resource to be used at workers' discretion.

6. Discussion

Before the COVID-19 pandemic, nearly one in ten child welfare-involved families in Ontario were noted to have run out of money for basic needs in the past six months. It is expected that a greater proportion of families will face economic hardship as a result of the consequences of the pandemic. The unemployment rate in Ontario more than doubled between February and May 2020, from 5.5 % of the population in February to 13.6 % of the population in May (Statistics Canada, 2020). The majority of families served by the Ontario

Table 4
Final Version of the Clinical Tool.

Question	Response
Does the family have enough food, medication and supplies for one week (including diapers, formula/baby food, and cleaning supplies)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Overall, is there money for utilities, food and housing?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has anyone in the household had any COVID-19 symptoms or is at increased risk of contracting the disease?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is anyone in the household experiencing other health issues that require care?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are members of the family experiencing delayed or interrupted scheduling of routine vaccination because of the pandemic?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is the family understanding the importance of physical distancing, including during time spent outside the home?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are disinfectants available and regularly used in the household?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the family require assistance with making a plan for adequate supervision of children in cases where caregivers would need to leave children unattended (work related responsibilities, errands, medical care)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the family have internet and cellular connection at home as well as devices needed to access the connection?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the caregiver at work, inside or outside the home?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the family impacted by childcare/school closures?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is the family First Nations, Métis or Inuit?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

*Endorsed responses indicate when the curated resources/supports will appear.

**In addition to the authors of this paper, the project development team included: John Fluke, Bryn King, Tara Black, Ashley Vandermorris, Julie Halverson, Ellen Smith, Kristen Lwin, Krista Budau, Brenda Moody, Anne Riley, Jill Stoddart, Catherine Whitley, and Thomas Vogl as well as the QC implementation team: Tonino Esposito, Denis Lafortune, Marie-Andrée Poirier, George Tarabulsky, Nico Trocmé.

child welfare system derive their income from work, and, therefore, have likely faced significant employment disruptions caused by the COVID-19 pandemic. Within this context, the developed clinical tool, which has already aided in grounding child welfare practice in an understanding of economic hardship, will continue to have critical utility as the economic and associated health and social impacts of the pandemic continue to affect families.

6.1. Future directions

The research team will continue to provide online training sessions with interested agencies and staff, orienting them to the platform and tool, and receiving feedback. Future implementation will be directed by agencies to ensure it is most appropriate to their needs and populations served. The design of the online platform easily allows for revisions which increases its utility based on jurisdiction and agency resources and needs. These revisions allow for adaptations to ensure the tool is responding to current needs through the types of resources provided. Members from the team will continually review and update the linked resources to ensure their relevancy. The checklist can also provide data to individual agencies who are interested in collecting data on economic hardship for the families they serve. The research team is committed to helping facilitate this process.

Additionally, while minor changes to the wording of questions may be required, the constructs included in the clinical tool are applicable in a variety of contexts and geographic locations. As indicated, the online platform allows for curated resources to be included based on supports that are available in a specific jurisdiction. At this time, the clinical tool has been disseminated to several jurisdictions outside of Ontario. For example, the clinical tool has been endorsed by the Ministry of Health and Social Services in Quebec and the Ministry of Social Development in New Brunswick. For use in these two other provinces, the tool has been professionally translated into French, and region-specific resources have been curated to align with each question. In Quebec, the Ministry is piloting mandatory use of the described tool. Three regions (two French and one English) have been selected, with 40 child protection workers and 30 youth continuum workers in each region using the tool with their families. The adaptability of the integration of the resources and questions allows for a broader utility of the tool. As proposed by ministries in Quebec and New Brunswick, the tool's utility extends beyond child protection, and into other health and social services centres. Research team members from the United States are also in conversation with several local governments and child welfare agencies to implement use of the tool. The research team is committed to working with any interested party to adapt the tool for their specific needs.

A worker survey has recently been added to the online platform to collect feedback from workers using the tool. The five-item survey asks workers to rate the helpfulness of the questions and resources, identify if any items are unnecessary or missing, and the average time to complete survey. These data can inform any future modifications of the clinical tool.

6.2. Beyond the pandemic

While the checklist tool was designed to screen for and provide resources for economic implications of containment measures specific to COVID-19, a significant proportion of child welfare-involved families will continue to experience economic hardship beyond the pandemic. As such, the checklist tool can be modified and integrated into routine child welfare practice, acting as one mechanism in which service providers can address the substantial challenges awaiting societies once the pandemic subsides (Van Lancker & Parolin, 2020).

Working within a framework informed by economic hardship, workers can assist families to receive the maximum benefits, subsidies, and other social assistance for which they already qualify and help them navigate the complicated and often inaccessible social assistance landscape. This often requires workers to become proficient in the concrete services that are available within their communities and the clinical checklist tool can guide and support this economic hardship-informed work with families by providing curated and aligned resources depending on a family's identified situation and need.

7. Conclusion

Children and families served by the child welfare system are some of the most vulnerable in society. Crises such as the COVID-19 pandemic can exacerbate existing hardships faced by families. Given the dynamic and unprecedented nature of the pandemic, an immediate response was imperative to meet the needs of child welfare organizations serving these vulnerable families. The research team recognized that this response should be developed in partnership with service providers and fluid based on the changing nature of the pandemic's consequences. Given the trajectory of the economic repercussions of the pandemic, families will likely be affected for years to come. The lasting utility of the developed tool is that workers will continue to be able to systematically screen for and address economic hardship, which is a significant parental stress and risk factor for a variety of negative child outcomes.

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Declaration of Competing Interest

The authors report no declarations of interest.

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