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# Exploring the impact of child and placement characteristics, carer resources, perceptions and life stressors on caregiving and well-being

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#### ABSTRACT

*Background:* The effect of potential protective factors and stressors faced by carers on their wellbeing and ability to provide care for children in out-of-home-care (OOHC) needs examination. *Objective:* To explore the impact of child and placement characteristics, carer resources, perceptions and stressors on caregiving and well-being; and identify carer group-based trajectories over time.

Participants & setting: Longitudinal study of up to 1143 carers caring for 1359 children in OOHC in Australia.

*Method:* Carers completed questionnaires at 4 waves across 2011–2018 regarding their demographics, various potential stressors, resource availability and support. A composite indicator of caregiving quality was generated. Caseworkers, who manage child placements with carers, and administrative data provided information on placement characteristics, child demographics and history in OOHC. Multilevel modelling and group-based trajectory analyses were conducted, and carer views examined.

*Results*: Potential concern for carer well-being and caregiving was flagged for 12–20% of carers. Increased odds of concern were found for carers in employment, with placements provided by a non-government organisation, and caring for >1 child in OOHC. Odds were lower for carers satisfied with caseworker assistance. Carer responses illuminated how these resources and stressors interact to impact caregiving. Four trajectory groups were identified: Minimal concern (12.7%), No concern (74.5%), Ongoing concern (6.2%) and Fluctuating concern (6.5%).

*Conclusions*: Effective support for carers is essential to ensuring that children and young people in OOHC can be placed with capable, resilient, and responsive carers. Without adequate support, carers are likely to experience decreased well-being and have difficulty adequately performing their caregiving role.

# 1. Introduction

Children and young people in out-of-home care (OOHC) are a vulnerable population. Many of these children and young people have histories of maltreatment prior to being placed in OOHC and, compared to their peers, experience higher rates of psychological,

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developmental, and physical health issues (Royal Australasian College of Physicians, 2006; Steenbakkers et al., 2017). The challenges some carers face in caring for children in OOHC are considerable (Murray et al., 2011; Octoman & McLean, 2014), especially as the psychological and emotional issues experienced by children in care are often untreated on entry into care and may go unrecognised, or underestimated, by carers and the child's caseworkers for some time (Eastman et al., 2018; Kaltner & Rissel, 2011). Carers are required to navigate the complex intersection of the legal system and private family life, occupying a parental role in some ways while also being subject to legal restrictions on the information they can access about the child and their right to make decisions regarding the child's health and wellbeing. Foster and kinship/relative caring entails unique role-specific challenges that extend beyond the 'usual' demands and responsibilities of parenting (Berrick & Skivenes, 2012).

Relative/kinship placements (henceforth, kinship) involve care being provided by a relative, or person with a pre-existing relationship with the child (including members of a cultural community) (Delfabbro, 2017). Kinship care placements are the fastest growing form of OOHC in Australia (Boetto, 2010) and the most common placement type for Indigenous children in care (Australian Institute of Health and Welfare, 2018). However, out-of-home services are not often tailored to address the unique needs of kinship carers (Doley et al., 2015; Spence, 2004). Kinship carers receive limited ongoing support (Boetto, 2010), usually enter the role without the same degree of preparation as foster carers, and often experience greater stress associated with the caregiving role (Delfabbro, 2017; Delfabbro, 2019). Grandparent carers, who represent around half of all kinship carers, have been found to have poorer psychological health and are more socially isolated than other carers or non-carer grandparents (Australian Institute of Health and Welfare, 2018; Doley et al., 2015; Dunne & Kettler, 2008; Harnett et al., 2014).

Despite the challenges faced by carers of children in OOHC, carers bring to the role their own personal strengths and capacities, as well as varying access to, and ability to draw on, external supports. These internal and external resources can help carers to meet the demands of the role and cope with additional challenges along the way. For instance, social support networks can be a protective factor for caregivers, lessening the impact of stressful life events and health problems on carer psychological health and well-being (Cole & Eamon, 2007), and promoting successful placements (Preston et al., 2012). Formal and ongoing training can also increase carers' confidence and ability to manage the emotional and behavioural difficulties of the children in their care (Octoman & McLean, 2014; Whenan et al., 2009), while the quality of the relationship between the caseworker and carer can have an important knock-on effect on carers' ability to access other services and professional support (Elarde & Tilbury, 2016).

There has been limited research on potential protective factors and stressors faced by carers in Australia and the impact of these factors on their psychological well-being and ability to provide effective care for children and young people in OOHC over time. The well-being and resilience of carers has implications for the well-being and outcomes of children and young people in their care. Even at low levels, strain and psychological distress have been found to affect the capacity of carers to provide sensitive, responsive, high-quality parenting (Cole & Eamon, 2007). High quality caregiving is associated with sensitive and emotionally responsive parenting (i.e. warm, non-hostile caregiving behaviours) (Oosterman et al., 2007; Commission for Children and Young People and Child Guardian (CCYPCG), 2013). In addition, psychologically healthy caregivers have been found to provide more responsive and sensitive care (Mihalo et al., 2016; Whenan et al., 2009), with carer psychological distress associated with less warm and consistent caregiving practices (Farmer et al., 2005; Morgan & Baron, 2011; Pardini, 2008). Parenting practices (i.e. warm/hostile) can be impacted by carer psychological health, and have been considered as an indication of caregiving quality, and have been shown to predict child outcomes (Zubrick et al., 2008). Carer role satisfaction also plays a part in ability to provide care, with positive associations of the caregiving role associated with self-efficacy and feelings of competence (Jungert et al., 2014; Whenan et al., 2009).

An adaption of the Double ABCX model (Lavee et al., 1985) provides a useful conceptual model to consider how carers adapt to various life stressors and the interrelatedness of various influential factors, both protective and potentially detrimental, within and external to the carer-child dyad. This conceptual model considers several key factors that can impact on the care provided, including factors relating to the child or young person (such as age, placement history) (A), characteristics of the carer (such as age, marital status, employment, income) (A), the type of placement and household (such as foster or kinship care) (A), resources available to the



Fig. 1. Adaptation of the ABCX model to investigate carer, child, placement, carer perception, resource availability, and service and system factors that impact on caregiving and well-being.

Adapted from: Lavee et al. 1985. The Double ABCX Model of Family Stress and Adaption. Journal of Marriage and the Family, 47 (4) 811-825.

carer (i.e. informal or formal support, training) (B), caregiver perceptions (e.g., satisfaction with caseworker assistance) (C), carer stressors (including carer health, stressful life events) (X), and service and system factors (i.e., agency managing the placement) (Fig. 1).

It is vital to examine the factors impacting both positively and negatively on carers and identify how to best support carers to continue in their role and provide a nurturing and stable environment for children and young people in their care. This study aims to explore the impact of child and placement characteristics, carer resources, perceptions and life stressors on caregiving and well-being; and identify carer group-based trajectories of caregiving and well-being.

### 2. Method

# 2.1. Participants

The Pathways of Care Longitudinal Study (POCLS) is the largest prospective longitudinal study of children and young people in OOHC conducted in Australia and is managed by the New South Wales (NSW) Department of Communities and Justice (DCJ) (Paxman et al., 2014). Ethical approval was obtained from the University of NSW Human Research Ethics Committee (approval number HC10335 & HC16542); Aboriginal Health and Medical Research Council of NSW Ethics Committee (approval number 766/10); NSW Department of Education and Communities State Education Research Approval Process (SERAP, approval number 2012250); NSW Population & Health Services Research Ethics Committee (Ref: HREC/14/CIPHS/74 Cancer Institute NSW: 2014/12/570).

The population cohort is a census of all children and young people who entered OOHC for the first time in NSW between May 2010 and October 2011 (n = 4126). To be eligible for inclusion in the interview component of the study, children must have entered care during this period and have gone on to receive final Children's Court care and protection orders (i.e. an application from child protection authorities for care of the child(ren) to be removed from the parent(s) and the child(ren) be placed in OOHC) by 30 April 2013 (n = 2828).

Overall, there were 1311 carers of 1507 children that responded to at least one questionnaire over the four study waves. The current study only includes foster or kinship primary carers (n = 1143 carers; 87.2%) and excludes carers of children and young people in residential care (n = 68 carers; 5.2%), and carers who were only surveyed while the child or young person was adopted, under guardianship, or restored to birth parents (n = 100; 7.6%). In the current study, there were 1143 primary carers represented in the 4 survey waves caring for 1359 children and young people.

#### 2.2. Data sources and measures

Information was obtained from the DCJ administrative data and a series of questionnaires involving caregivers and children and young people at four points in time: wave 1 (2011–2013), wave 2 (2013–2015), wave 3 (2014–2016), and wave 4 (2017–2018). Caseworkers were also surveyed once (2015–2016).

The DCJ administrative data provided information on the case manager (i.e. the young person's OOHC case manager) at each wave (i.e., non-government organisation (NGO), DCJ), number of placements of the child, predominant maltreatment issue at time of placement, care arrangement (i.e., placement type, such as foster or kinship), whether the child/young person had a disability (e.g., developmental delay, injuries, autism or physical disability, such as hearing or vision loss, epilepsy), and the number of children placed with the carer.

The caregiver questionnaires elicited information regarding the characteristics of caregivers, their demographics (e.g. age, sex, identifying as Aboriginal or Torres Strait Islander, income, marital status), employment, their family composition, health and wellbeing, including psychological distress (Kessler et al., 2003), whether the carer was living with any medical conditions or disabilities that have lasted or are likely to last for six months or more, experience of stressful life events (e.g., the death of someone close or job loss) in the past 12 months (Rahe, 1967), carer experience and training, caring for a child or young person with a disability (e.g. developmental delay, intellectual disability, attention deficit hyperactivity disorder (ADHD), autism, physical disability), birth family contact, parenting style (NSW Department of Communities and Justice, 2020), activities conducted with the child (The Australian Institute of Family Studie, 2021), how often carers received informal social support in raising the child in their care (i.e. support from friends and family); and attending training in the past 12 months (e.g. training sessions on trauma and attachment), and professional support services accessed (e.g. financial advice, after hours and crisis support, before and after school care). As carers completed a survey for each child in their care, the number of surveys completed in each wave by an individual carer was used to calculate the number of children in OOHC placed with the carer participating in the POCLS.

Carers were also asked how satisfied they were with caseworker assistance and about their sense of neighbourhood trust and social cohesion (Sampson et al., 1997). In each wave, carers completed a 5-item subscale of the Satisfaction with Foster Parenting Inventory (Stockdale et al., 1998) relating to social service support, with responses scored on a 5-point scale from 'very dissatisfied' to 'very satisfied'. Carers also rated their level of agreement with four statements taken from the Social Cohesion and Trust Scale about the closeness, helpfulness and trustworthiness of their neighbours, scored on a 5-point Likert scale (NSW Department of Communities and Justice, 2020; Sampson et al., 1997). These scores were summed to create a single variable for carer perception of neighbourhood social cohesion.

Carers were able to provide free-text responses to questions regarding difficulties in participating in carer training or obtaining professional support services, and which supports they had accessed, would have liked, or still required. Carers could also provide comments on the assistance received or desired from caseworkers, experiences of case management with different agencies, and the

### demands of being a carer.

The caseworker survey provided information on a range of topics, including whether the child had experienced a placement breakdown while managed by their agency and whether the child had a positive relationship with the carer. The POCLS also obtained information from the children and young people in OOHC that was not included in the current study of carers.

# 2.3. Study design

This mixed methods study combines quantitative and qualitative data analysis. The quantitative data (i.e. caregiver questionnaire, caseworker survey, and DCJ administrative data) were analysed first in two stages: a generalised mixed model identifying predictors of potential concern regarding carer well-being and caregiving, and group-based trajectory analysis identifying common characteristics and trajectories of carers against potential concern regarding their well-being and caregiving. A composite outcome variable was created from items in the caregiver questionnaire for the purposes of this study. Qualitative data drawn from the open-ended responses to the caregiver questionnaire were subsequently analysed to elaborate on the quantitative findings. The reasoning for this approach was that analysis of the qualitative data that included carers' perceptions and experiences in their own words could elucidate and give context to the statistical findings (Creswell and Clark, 2011). Qualitative data was used to analyse the interplay among issues impacting carers that are not discernible from quantitative analysis. The two sets of findings are connected in the interpretation stage of the study.

# 2.4. Composite outcome variable

The outcome was a binary composite variable constructed through meaningful grouping (Song et al., 2013) to flag a potential concern regarding carer psychological well-being and capacity for quality caregiving. The composite variable was created using the following items:

- i. Responses to the question: 'Your overall level of satisfaction with foster or kinship parenting' on a 5-point Likert scale ranging from 'very satisfied' to 'very dissatisfied'. Carers who responded 'dissatisfied' or 'very dissatisfied' were considered to signal concern; and/or
- ii. Scores on the 10-item Kessler measure (K10) (Kessler et al., 2003). The K10 involves 10 questions asking caregivers to rate how often a series of statements regarding emotional states applied to them on a 5-point scale ranging from 'all of the time' to 'none of the time'. Scores of  $\geq$ 25 indicating likely moderate to severe psychological distress (Kessler et al., 2002) were considered to signal concern; and/or
- iii. The Parenting-warmth and Parenting-hostility scales. The Parenting-warmth scale was used to assess the warmth of parenting practices for children aged 9 months-17 years. The scale consists of 4-items which asks caregivers questions such as "how often do you enjoy listening to [Child] and doing things with him/her?". The response categories were on a 5-point scale ranging from *'never/almost never*' to *'always/almost always*' [i.e. score range 4–20] (NSW Department of Communities and Justice, 2020). The Parenting-hostility scale was used to measure hostile/angry parenting for children aged 9 months-17 years. The scale consists of 3 items asking how frequently a carer has been angry with the child in their care, how often the child "gets on [the carers'] nerves" when they cry, and how often a carer has lost their temper with the child. The response to each question is scored on a 10-point scale from *'not at all'* to *'all the time'* [i.e. score range 3–30] (NSW Department of Communities and Justice, 2020). Scores of ≤16 on the Parenting-warmth scale, reflecting relatively low-moderate warmth in parenting style (i.e., ≤16 was in the 25th percentile of carer responses) and a score of ≥8 on the Parenting-hostility scale, reflecting relatively elevated (though still low) hostility in parenting style (i.e., ≥8 was in the 75th percentile of carer responses) was considered to signal concern.

The presence of any one of these (i.e., role dissatisfaction, psychological distress, or distant parenting) signalled concern for caregiving quality and carer well-being.

### 2.5. Quantitative data management and analyses

All quantitative analyses were conducted using SAS v9.4 (SAS Institute Inc.) within the Secure Unified Research Environment (SURE) (SAX Institute). The carer and child and young person questionnaire responses and DCJ administrative data were linked using a unique identifier for each participant. Almost a third of carers had multiple children placed with them (n = 340; 29.7%) in at least one wave. For questions that were repeated for each child/young person in their care (e.g., satisfaction with access to the child's caseworker) the responses were averaged to create one 'mean response' per carer per wave to be used in the multi-level analysis.

To identify significant factors impacting on carer well-being and caregiving capacity, a generalised linear mixed model was conducted. Modelling was performed using the PROC GLIMMIX procedure, with a binary distribution, logit link function and Kenward and Roger denominator degrees of freedom. The residual option of the random statement was used to model R-side covariance, i.e., within-person correlation over the waves of survey data. Adjusted odds ratios (AOR) and 95% confidence intervals (CIs) are provided. Previous research shows important differences in the characteristics, resources and needs of foster carers compared to kinship carers (Delfabbro, 2017). Therefore, the multivariable model was also generated separately for each placement type to identify differences in explanatory variables.

The predictor variables included in the model were related to the child (i.e. child with a disability or medical condition), carer

characteristics (i.e. carer sex, age group, marital status, employment status, income, Aboriginal or Torres Strait Islander), placement and service factors (i.e. placement type, case manager, number of children in care), carer stressors (i.e. carer health, stressful life events), resources (i.e. professional services, informal social support, training), and carer perceptions (i.e. satisfaction with caseworker assistance, and neighbourhood social cohesion).

Only primary carers that responded to each of the four survey waves (n = 322; 28.2% of all carers in any wave) were included in the group-based trajectory analysis. Group-based trajectory modelling involves identifying distinct characteristics and trajectories common to certain groups. It was conducted using PROC TRAJ (Jones & Traj, 2018) and a logit model to examine caregiving and wellbeing over four timepoints using the same predictor variables from the generalised linear mixed model analysis. Model selection was assessed for between two to five trajectory groups set to a cubic equation. A four group model had the best fit as it had one of the lowest Bayesian Information Criteria (BIC) and Akaike's Information Criteria (AIC) (BIC = -517.61 and AIC = -481.75) of the models examined (smaller BIC and AIC values indicate better model fit), and had the best average posterior probability (AvePP) of group membership for the four groups ranging from 0.75 to 0.91 (i.e. ideally >0.7) (Nagin, 2005). Chi-square tests of independence or Fisher's Exact test were used to examine the characteristics of the trajectory groups.

#### 2.6. Qualitative data management and analysis

Analysis of free-text responses was performed using NVivo v12 (QSR International) and were used to provide insight into the quantitative results. Responses to 22 open-ended questions from the caregiver questionnaire were extracted. Eight questions were asked if carers had given a particular answer to a previous question (e.g., only carers who indicated that the child had a long-term health condition were asked if they encountered barriers to accessing professional services) and five questions were asked if the agency providing case management or the carer being surveyed had changed since the previous wave. Responses were queried for the presence of words relating to the significant factors impacting on carer well-being and caregiving capacity identified in the generalised linear mixed model: employment, NGO provider, multiple children in care, and satisfaction with caseworker assistance. These

#### Table 1

Primary	y carer demogra	phic characteristics	by wave, I	Pathways of 9	Care Longitud	inal study,	2011-2018.

	Wave 1	( <i>n</i> = 887)	Wave 2 ( <i>n</i> = 758)		Wave 3 ( <i>n</i> = 569)		Wave 4 ( <i>n</i> = 518)	
Characteristics	n	%	n	%	n	%	n	%
Gender								
Female	807	91.0	688	90.8	521	91.6	462	89.2
Age group								
$\leq 40$	226	25.5	171	22.6	103	18.1	74	14.3
41–50	320	36.1	266	35.1	219	38.5	169	32.6
51–60	234	26.4	213	28.1	158	27.8	170	32.8
$\geq 61$	95	10.7	101	13.3	87	15.3	105	20.3
Not known	12	1.4	7	0.9	2	0.4	0	-
Marital status								
Not married	188	21.2	224	29.6	166	29.2	175	33.8
Married/de facto	523	59.0	529	69.8	402	70.7	342	66.0
Not known	176	19.8	5	0.7	1	0.2	1	0.2
Aboriginal or Torres Strait Islander								
Yes	131	14.8	109	14.4	85	14.9	93	18.0
Culturally and linguistically diverse								
Yes	116	13.1	77	10.2	78	13.7	63	12.2
Kinship carer								
Yes	406	45.8	350	46.2	206	36.2	192	37.1
Number of children in care in household								
1	621	70.0	547	72.2	413	72.6	383	73.9
2	195	22.0	153	20.2	123	21.6	111	21.4
$\geq 3$	71	8.0	48	6.3	33	5.8	24	4.6
Highest level of education								
$\leq$ Year 11	317	35.7	258	34.0	186	32.7	157	30.3
Year 12 or equivalent, certificate, trade or diploma	417	47.0	361	47.6	272	47.8	246	47.5
≥Bachelor	153	17.2	138	18.2	111	19.5	114	22.0
Not known	0	_	1	0.1	0	-	1	0.2
Employment status								
Unemployed/unpaid work	567	63.9	463	61.1	362	63.6	313	60.4
Paid employment	318	35.9	291	38.4	205	36.0	200	38.6
Not known	2	0.2	4	0.5	2	0.4	5	1.0
Annual household income <sup>a</sup>								
Less than \$40,000	228	25.7	167	22.0	94	16.5	82	15.8
\$40,000 to \$79,999	295	33.3	248	32.7	183	32.2	160	30.9
\$80,000 or more	296	33.4	275	36.3	223	39.2	214	41.3
Not known	68	7.7	68	9.0	69	12.1	62	12.0

<sup>a</sup> In Australia, the poverty line varies depending on the number of adults and children in the household. For example, \$960 a week for 2 adults with 2 children is considered to be living at the poverty line (Davidson P et al. Poverty in Australia 2020. ACOSS and UNSW: Sydney).

responses were read through by a researcher (TR) and coded inductively to identify key themes, with the other members of the team (RM and YZ) checking for consistency of interpretation.

### 3. Results

#### 3.1. Carer characteristics

There were between 518 and 887 carers surveyed at each of the four study waves, with between 12.9% to 20.9% carers identified where there was a potential concern for their caregiving ability and well-being. Within each study wave, the majority of carers were female (between 89.2% and 91.6%), and around two-thirds were married or in a de facto relationship. At baseline, 14.8% of carers identified as being of Aboriginal or Torres Strait Islander heritage and 13.1% reported coming from a culturally or linguistically diverse (CALD) background. In wave 1, around one quarter of carers were aged  $\leq$ 40 years, while 37.1% were aged  $\geq$ 51 years. Around 30% of households had  $\geq$ 2 children in care participating in POCLS during each study wave. Just less than half of carers in each study wave had 12 years of formal schooling or equivalent. Two-thirds of carers were in unpaid work or were unemployed. Within in each study wave, between 15.8% and 25.7% of carers had an annual household income of less than AUD\$40,000 (Table 1).

#### 3.2. Child and young person characteristics

In wave 1, around half the children and young people in POCLS sample were male (49.4%) and 45.0% were aged  $\leq$ 3 years. Two in every five children and young people had Aboriginal or Torres Strait Islander heritage, and around 15% came from a CALD background. In any wave, around 20% of children and young people were known to have a disability or medical condition. In waves 1 and 2, around half the children and young people were in kinship care arrangements (47.5% and 47.4%). The case manager of the child/ young person in was predominantly either DCJ (between 43.4% and 51.2%) or an NGO (between 38.6% and 51.2%) (Table 2).

#### 3.3. Carer resources, stressors, perceptions, and satisfaction with support

At wave 1, 29.1% of carers had a medical condition or disability that had lasted or was expected to last for  $\geq$ 6 months. In each

#### Table 2

	Wave 1	(n = 1259)	Wave 2	(n = 1056)	Wave 3 ( <i>n</i> = 775)		Wave 4 ( <i>n</i> = 692)	
Characteristics	n	%	n	%	n	%	n	%
Gender								
Male	622	49.4	532	50.4	406	52.4	363	52.5
Female	637	50.6	524	49.6	369	47.6	329	47.5
Age group								
$\leq$ 3 years	567	45.0	216	20.5	0	-	0	-
4–6 years	341	27.1	462	43.8	442	57.0	163	23.6
7–11 years	253	20.1	271	25.7	216	27.9	390	56.4
12–17 years	98	7.8	107	10.1	117	15.1	139	20.1
Aboriginal or Torres Strait Islander								
Yes	489	38.8	432	40.9	327	42.2	300	43.4
Culturally & linguistically diverse								
Yes	186	14.8	156	14.8	121	15.6	103	14.9
Disability or medical condition <sup>a</sup>								
Yes	219	17.4	192	18.2	155	20.0	145	21.0
Placement type <sup>b</sup>								
Foster	661	52.5	555	52.6	483	62.3	415	60.0
Kinship/relative	598	47.5	501	47.4	292	37.7	277	40.0
Aunt/uncle	167	13.3	134	12.7	93	12.0	90	13.0
Grandparent <sup>c</sup>	395	31.4	330	31.3	171	22.1	167	24.1
Other	36	2.9	37	3.5	28	3.6	20	2.9
Case manager								
$DCJ^d$	645	51.2	540	51.1	329	42.5	300	43.4
NGO <sup>e</sup>	486	38.6	426	40.3	386	49.8	354	51.2
Other/unspecified	57	4.5	60	5.7	50	6.5	37	5.3
Parents	71	5.6	30	2.8	10	1.3	1	0.1

Child characteristics by wave, Pathways of Care Longitudinal study, 2011–2018.

<sup>a</sup> Medical condition or disability that have lasted, or are likely to last, for 6 months or more.

<sup>b</sup> Children in kinship/relative care who had an order from the Children's Court giving them full parental responsibility were automatically transitioned to guardianship orders due to the proclamation of the NSW legistrative reform regarding guardianship orders on 29 October 2014, which occurred after wave 1 and before wave 3.

<sup>c</sup> Includes great aunt/uncle.

<sup>d</sup> Department of Communities and Justice.

<sup>e</sup> Non-government organisation.

#### Table 3

Primary carer resources, stressors, perceptions, satisfaction with support and outcome by survey wave, Pathways of Care Longitudinal study, 2011–2018.

Characteristics <sup>a</sup>	Wave 1 $(n = 887)$ Wave 2 $(n = 758)$		2 (n = 758)	Wave 3 (n = 569)		Wave 4 (n = 518)		
	n	%	n	%	n	%	n	%
Carer resources								
Available sources of informal support in raising child <sup>b</sup>								
0	28	3.2	30	4.0	16	2.8	27	5.2
1	152	17.1	99	13.1	61	10.7	110	21.2
$\geq 2$	707	79.7	629	83	492	86.7	381	73.6
Formal training attended in past year								
Yes, at least one	286	32.2	323	42.6	262	46.1	284	54.8
Professional support services received								
0	374	42.2	249	32.9	170	29.9	188	36.3
1	255	28.8	253	33.4	171	30.1	135	26.1
$\geq 2$	258	29.1	256	33.8	228	40.1	195	37.6
-								
Carer stressors								
Medical condition or disability expected to last 1 year or more								
Yes	258	29.1	154	20.3	79	13.9	46	8.9
Stressful life event in the past year								
Yes	-	-	360	47.5	272	47.8	251	48.5
Stressful life event – sum								
0	-	-	397	52.4	297	52.2	267	51.5
1	-	-	271	35.8	195	34.3	185	35.7
$\geq 2$	-	-	90	11.9	77	13.5	66	12.7
Ability to raise emergency funds <sup>d</sup>								
I would have trouble raising the money <sup>e</sup>	389	43.9	273	36.0	181	31.8	167	32.2
Could easily raise money	481	54.2	471	62.1	383	67.3	344	66.4
Not known	17	1.9	14	1.9	5	0.9	7	1.4
Carer perceptions Social cohesion & trust scale Perception of neighbourhood This is a close-knit neighbourhood								
Agree or strongly agree	-	-	478	63.1	369	64.9	340	65.6
People don't generally get along								
Disagree or strongly disagree	-	-	597	78.8	451	79.3	392	75.7
People are willing to help their neighbours								
Agree or strongly agree	-	-	562	74.1	434	76.3	386	74.7
People can be trusted								
Agree or strongly agree	-	-	571	75.3	425	74.7	380	73.4
Satisfaction with								
Access to caseworker								
Dissatisfied or very dissatisfied	230	25.9	120	17.0	62	10.9	62	12.0
Satisfied or very catisfied	568	64.0	560	73.0	475	83.5	414	70.0
Not known or unsure	200	10.0	500	/3.9	4/5	63.3 E 6	414	79.9 0 1
Assistance from caseworker	69	10.0	09	9.1	32	5.0	42	0.1
Dissociation or yory dissociation	221	24.0	145	10.1	00	15.0	04	16.0
Coticfied on youry estimated	221	24.9	145	19.1	90	13.6	262	10.2
Satisfied of very satisfied	554	02.5	525	09.3	420	/3.8	302	10.0
Not known or unsure	112	12.6	88	11.6	59	10.4	12	13.9
Working relationship with other agencies								
Dissatisfied or very dissatisfied	27	3.0	21	2.8	16	2.8	12	2.3
Satisfied or very satisfied	680	76.7	680	89.7	533	93.7	470	90.7
Not known or unsure	180	20.3	57	7.5	20	3.5	36	6.9
Information about study child								
Dissatisfied or very dissatisfied	177	20.0	67	8.8	44	7.7	42	8.1
Satisfied or very satisfied	624	70.3	640	84.4	494	86.8	438	84.6
Not known or unsure	86	9.7	51	6.7	31	5.4	38	7.3
Outcome								
Caregiving and well-being								
No concern	750	84.8	660	971	170	84.0	410	70.2
Dotential concern	/ JZ	04.0	000	07.1	4/8	16.0	100	79.4 20.0
r otentiai concern	132	13.4	98	14.9	91	10.0	109	20.9

<sup>a</sup> Only most common types listed here.

<sup>a</sup> Only most common types instea nete.
 <sup>b</sup> Indicated from responses to informal support of 'often' and 'always'.
 <sup>c</sup> Only most common types listed here.
 <sup>d</sup> Ability to raise \$2000 for an emergency in one week.

<sup>e</sup> Includes could not raise money, could raise money with drastic action or could raise money with some sacrifices.

wave, roughly half of carers had experienced at least one stressful life event, such as the death of someone close or an unexpected job loss, within the past 12 months. Over half of carers could easily raise AUD\$2000 for an emergency within one week (between 54.2% and 67.3%).

Most carers (between 73.6% to 86.7%) had >2 sources of regular, informal social support in raising the child/young person in their care, e.g., support from family members, friends, and neighbours. Around one-third of carers in each wave (between 29.1% and 40.1%) had accessed >2 professional support services, such as respite care, carer support groups, or psychologist or counselling services. Between two-thirds and three-quarters of carers had a positive perception of the closeness, helpfulness, and trustworthiness of their neighbours. In each wave, most carers were satisfied with their access to, and assistance from, the caseworker, their working relationship with other agencies, and had enough information about the child in their care (Table 3).

Across the waves, more than half (55.8%) of carers with NGO managed placements had face-to-face contact with the child's caseworker at least once a month, compared to less than a third (27.6%) of carers with DCJ placements. However, the proportion of carers with DCJ placements having frequent face-to-face contact with the caseworker did increase over the course of the study waves. Around three quarters of placements provided by NGOs were in foster care (73.1%), whereas DCJ managed a greater proportion of kinship care placements (56.8%).

#### Table 4

Univariate and multivariable predictors of concern for caregiving and carer well-being, Pathways of Care Longitudinal study, 2011-2018.

		Univariat carers)	e (n = 1143	Multivariable carers)	(n = 824)
		OR	95% CI	Adjusted OR	95% CI
Child characteristics					
Child with a disability or medical condition expected to last $\geq 6$ months	Yes	0.99	0.724–1.346	0.83	0.546-1.250
Carer characteristics					
Sex	Male	0.94	0.621-1.428	0.97	0.546-1.718
Age	41-50 years	1.07	0.775-1.476	0.80	0.518-1.236
	51-60 years	1.12	0.793-1.573	0.99	0.624-1.578
	$\geq$ 61 years	1.28	0.860-1.915	1.07	0.601-1.917
Marital status	Married/de facto	0.70**	0.542-0.907	0.71	0.476-1.043
Employment	Paid employment	1.18	0.931-1.483	1.44***	1.028-2.015
Income	\$40,000 - \$79,000	1.03	0.778 - 1.368	1.14	0.752 - 1.720
	≥\$80,000	0.86	0.634-1.166	0.92	0.573-1.468
Aboriginal or Torres Strait Islander	Yes	1.03	0.740-1.434	0.94	0.586-1.504
Placement and service factors					
Provider	NGO	1.70*	1.310-2.216	1.76**	1.207-2.563
	Other/parents	1.40	0.897 - 2.190	1.36	0.702-2.619
Placement type	Kinship or relative	0.95	0.735 - 1.215	0.86	0.585 - 1.269
Number of children in care	2	1.67*	1.270-2.192	1.86**	1.250-2.755
	$\geq 3$	1.36	0.862 - 2.132	1.38	0.704-2.716
Carer stressors					
Carer health condition	Yes	1.08	0.830-1.411	0.97	0.641-1.458
Stressful life events	1	1.23	0.942 - 1.600	1.34	0.981 - 1.829
	$\geq 2$	1.51***	1.054-2.157	1.48	0.975 - 2.260
Carer resources					
Professional support services	1	1.15	0.902-1.464	1.26	0.866 - 1.828
	$\geq 2$	1.38**	1.087-1.757	1.32	0.902 - 1.918
Informal social support	1	0.76	0.452 - 1.273	0.74	0.327 - 1.676
	$\geq 2$	0.64	0.396-1.034	0.71	0.332 - 1.530
Training	Yes	1.09	0.881 - 1.336	1.29	0.941-1.759
Carer perceptions					
Satisfaction; caseworker assistance	Above mean (positive)	0.86*	0.802-0.932	0.84**	0.750-0.935
Neighbourhood cohesion	Above mean (negative)	1.05***	1.006-1.099	1.05	0.999–1.106

'Not known' income excluded, n = 103, 9.0%.

Reference categories: Female; <40 years; not married; unemployed/unpaid work; less than \$40,000; not aboriginal or Torres Strait islander, other Australian; Department of Communities and Justice (DCJ) case manager; one child in care; no stressful life events; no professional services accessed; no regular sources of informal social support; no training attended

$$p < 0.001.$$
  
 $p < 0.01.$   
 $p < 0.01.$   
 $p < 0.05.$ 

#### 3.4. Concern for caregiving quality and well-being: characteristics of carers

Results of multivariate analysis showed that the odds of potential concerns about carer well-being and caregiving were higher for carers in paid employment than those not in paid work (AOR 1.44, 95% CI:1.03–2.02). The odds of potential concern for caregiving and carer well-being were also greater where placement services were being provided by NGOs rather than DCJ (AOR 1.76, 95% CI:1.21–2.56) and where there were two children and young people in OOHC placed with the carer, compared to one child/young person (AOR 1.86, 95%CI:1.25–2.76). Carers who expressed above average satisfaction with the assistance from the children's caseworker had lower odds of potential concern regarding their caregiving and well-being than those with below average satisfaction (AOR 0.84, 95%CI:0.75–0.94) (Table 4).

Separate multilevel analysis for foster and kinship groups identified differences in the predictors of potential concern for these carers (Table 5). Foster carers in paid employment had around one and a half times the odds (AOR 1.54, 95%CI:1.01–2.35) of indicating potential concern regarding their caregiving and well-being compared to foster carers who were unemployed or who performed unpaid work. Foster carers who had two children and young people in OOHC placed with them had nearly twice the odds (AOR 1.93, 95%CI:1.16–3.19) of potential concern regarding their caregiving and well-being than those who had one child/young person in OOHC in their home. Foster carers with above average satisfaction with caseworker assistance had lower odds of potential concern regarding their caregiving and well-being with below average satisfaction (AOR 0.83, 95%CI:0.72–0.95).

Kinship carers who were in older age groups had lower odds of potential concern regarding their caregiving and well-being compared to those aged  $\leq$ 40 years (41–50 years, AOR 0.36, 95%CI:0.15–0.84; 51–60 years, AOR 0.44, 95%CI:0.20–0.96). Kinship carers had more than twice the odds of potential concern regarding their caregiving and well-being where the care placement was provided by an NGO (AOR 2.27, 95%CI:1.22–4.23) compared to carers with a DCJ provided placement. The odds of potential concern regarding carer caregiving and well-being were around two and half times greater for kinship carers who had  $\geq$ 3 children and young people in OOHC placed with them (AOR 2.54, 95%CI:1.03–6.27) compared to those with one child/young person. Kinship carers

#### Table 5

Multivariable predictors of concern for caregiving and carer well-being by placement type, Pathways of Care Longitudinal study, 2011–2018.

		Foster carers ( $n = 483$ )		Kinship/relative carers ( $n =$ 356)	
		Adjusted OR	95% CI	Adjusted OR	95% CI
Child characteristics					
Child with a disability or medical condition expected to last $\geq 6$ months	Yes	0.73	0.435–1.227	0.95	0.437–2.044
Carer characteristics					
Sex	Male	1.61	0.799-3.225	0.52	0.155-1.720
Age	41-50 years	1.14	0.659-1.954	0.36***	0.150-0.842
	51-60 years	1.66	0.900-3.074	0.44***	0.200-0.961
	$\geq$ 61 years	1.25	0.523-2.978	0.77	0.316-1.851
Marital status	Married/de facto	0.64	0.382-1.085	0.81	0.423 - 1.558
Employment	Paid employment	1.54***	1.008-2.347	1.15	0.613-2.156
Income	\$40,000 - \$79,000	1.32	0.741-2.338	0.87	0.438-1.725
	≥\$80,000	0.88	0.464-1.650	1.04	0.471-2.274
Aboriginal or Torres Strait Islander	Yes	0.61	0.294-1.251	1.56	0.780-3.100
Placement and service factors					
Provider	NGO	1.31	0.808 - 2.116	2.27**	1.222-4.226
	Parents/other	0.87	0.357 - 2.133	1.87	0.642-5.453
Number of children in care	2	1.93***	1.163-3.185	1.72	0.840-3.514
	$\geq 3$	0.58	0.160-2.131	2.54***	1.025-6.270
Carer stressors					
Carer health condition	Yes	1.10	0.636 - 1.885	1.02	0.500-2.099
Stressful life events	1	1.23	0.833-1.818	1.76	0.964-3.195
	$\geq 2$	1.12	0.635-1.957	2.15***	1.032-4.491
Carer resources					
Professional support services	1	1.55	0.914-2.540	1.14	0.591-2.214
	$\geq 2$	1.31	0.794-2.146	1.64	0.850-3.174
Informal social support	1	0.67	0.224-2.006	0.89	0.213-3.711
	$\geq 2$	0.59	0.213-1.639	1.03	0.265-3.973
Training	Yes	1.22	0.822 - 1.820	1.36	0.775-2.373
Carer perceptions					
Satisfaction; caseworker assistance	Above mean (good)	0.83**	0.719-0.954	0.84	0.691-1.026
Neighbourhood cohesion	Above mean (bad)	1.05	0.984-1.123	1.04	0.946-1.133

Not known income excluded, n = 54 foster carers, 11.2%; n = 49 relative/kinship carers, 13.8%.

Reference categories: Female;  $\leq$ 40 years; not married; unemployed/unpaid work; less than \$40,000; not aboriginal or Torres Strait Islander, other Australian; Department of Communities and Justice (DCJ) case manager; one child in care; no stressful life events; no professional services accessed; no regular sources of informal social support; no training attended.

\*\*\*<sup>\*</sup> p < 0.05.

experiencing  $\geq 2$  stressful life events in the past 12 months had more than twice the odds of potential concern regarding their caregiving and well-being than those experiencing none (AOR 2.15, 95%CI:1.03–4.49).

# 3.5. Characteristics of carers by group-based trajectories

The 322 (28.2%) carers that completed all four survey waves were caring for up to 457 children and young people (range 1 to 6 per carer). At baseline, 96.0% of carers were female. Carers were disaggregated into four levels of concern regarding their caregiving and well-being from the group-based trajectory analysis: Minimal concern (12.7%) (Group 1), No concern (74.5%) (Group 2), Ongoing concern (6.2%) (Group 3), and Fluctuating concern (6.5%) (Group 4) (Fig. 2).

For carers that responded to all four survey waves, one-quarter of carers in the Ongoing concern group had  $\geq$ 3 children and young people in OOHC in their care. Otherwise, the four carer trajectory groups were similar for age group, marital status, and identification as having Aboriginal or Torres Strait Islander heritage or as CALD individuals, highest level of education, employment status, and average annual household income at baseline (Supplementary Table 1). Carers in the Ongoing and Fluctuating concern groups reported higher proportions of '*not very*'/'*not at all*' responses when asked how well the child's need for professional services, including health, emotional, behaviour, learning or other needs were being met compared to the two other carer trajectory groups ( $\chi^2 = 716.5$  (df 2); p < 0.0001) (Supplementary Fig. 1).

The baseline characteristics of children and young people differed by age, with carers in the Ongoing concern group caring for the highest proportion of children and young people aged  $\geq 6$  years (47.5%) and the No concern carer group caring for at least double the proportion of children aged <1 year (7.1%) compared to the other carer groups. The Ongoing concern carers had the highest proportion of placements from NGOs (68.3%) compared to the other carer groups. Compared to the other carer groups, the Fluctuating concern carers had the highest proportion (43.8%) of children and young people who predominantly experienced neglect-only prior to their first care period, and who had  $\geq$ 5 previous placements (28.1%) (Supplementary Table 2).

#### 3.6. Caregiver views

There were 1074 (94.0%) carers who provided at least one response to up to 22 open-ended questions regarding caregiver formal support and satisfaction, child health and access to services, and OOHC placement/ongoing casework. Employed carers reported finding it difficult to meet the expectations of caseworkers and agencies in terms of being available for meetings, taking the child/ young person to appointments, and attending training [see A1]. Consequentially, some carers spoke of working reduced hours and even leaving their job to be able to meet the demands of the 'full time' carer role [see A2].

Caring for multiple children and young people in their home at once or adjusting to the placement of another child in the household was stated to be challenging, especially when it occurred abruptly with little time for preparation [see B1]. Caring for more than one child/young person increased the caregiving 'workload' dramatically. Carers of multiple children and young people described an immense demand on their time (e.g., to coordinate birth family contact, appointments, and caseworker meetings) and an upturn in both ongoing costs and sudden expenses (e.g., when requiring a new car, or a larger living space) [see B2]. For some carers, the time and energy consuming work of caregiving also negatively impacted on their relationships with other family members, including their children [see B3].

Despite reported negative aspects of the caregiving role, carers frequently identified family, friends, and community as the main



**Fig. 2.** Group-based trajectories<sup>1</sup> of caregiving and well-being for carers by survey wave, Pathways of Care Longitudinal study, 2011–2018. <sup>1</sup>Group 1: Minimal concern (12.7%), group 2: No concern (74.5%), group 3: Ongoing concern (6.2%), and group 4: Fluctuating concern (6.5%).

supports they need to help them [see C1]. Carers reported relying on their partner, adult children or extended family for practical assistance in sharing the caregiving workload, e.g., taking children and young people to appointments. For carers without a partner or a social network, the around-the-clock demands of caregiving were straining [see C2]. Respite care was frequently mentioned, with carers expressing that respite care was needed to enable them to take a break from the stress of carer responsibilities, to maintain other family relationships, or to deal with life events, such as serious illness or the death of someone close [see D1 and D2].

Many carers provided positive comments about the support they received from the caseworker. Carers highlighted the responsiveness and accessibility of their caseworker and the feeling that they shared the common goal of doing the best thing for the child/ young person in care. However, carers also remarked on the inconsistency they experienced in terms of the quality of assistance from different caseworkers and service providers, and the disruptiveness of caseworker turnover. Rapid turnover of caseworkers meant new caseworkers were unfamiliar with the unique circumstances of the children and carers, requiring carers to reiterate information and face delays in getting access to requested services or support. Carers felt that having one caseworker over a longer period had the benefit of enabling caseworker-carer-child relationships to develop [see E1]. Carer responses also showed striking variation in terms of preferred degree of caseworker engagement. This ranged from a preference for infrequent visits and limited, carer-initiated contact, to pro-active and regular "hands-on" involvement of the caseworker in the foster/kinship family [see E2].

Carers expressed frustration with the lack of information that was made available to them when the child/young person was first placed with them. This included information relating to their medical history, family circumstances and reason for removal, as well as access to documentation to facilitate access to health services, such as the child/young person's Medicare card. Carers indicated that this information could assist them in their ability to understand and respond appropriately to the child's behaviour. Additionally, some carers reported not being provided with adequate information about their entitlements as a carer, their eligibility for supports such as financial assistance, and information on how to access services both for themselves and for the child/young person. Many carers who were dissatisfied with caseworker assistance felt that useful information was not forthcoming and described needing to 'fight', sometimes for extended periods of time, to get professional services for the child/young person in their care [see F1 and F2]. However, there was also the acknowledgment of the constraints and heavy workload that caseworkers performed under.

#### 4. Discussion

This study investigated the factors impacting on carer's well-being and caregiving over time. Foster carers who felt above-average satisfaction with the assistance received from their caseworkers, and kinship carers in older age groups, were found to have lower odds of potential concern for their well-being and caregiving. It was also found that a range of factors including carer employment, the caseworker r, and the number of children and young people in OOHC placed with a carer had an impact on caregiving and carer well-being.

Being a carer to multiple children or young people in OOHC was a predictor of potential concern for carer well-being and caregiving capacity, for both foster and kinship carers. The group-based trajectory analysis also found that the Ongoing concern group had the highest proportion of carers providing care for three or more children in OOHC. Carers' comments helped to clarify the additional sources of stress faced by those taking on the care of several children at once. These carers had a greater workload in terms of liaising with caseworkers and coordinating family contact and other services needed by multiple children. Some carers felt that the amplified demands on their time and energy when caring for multiple children was not fully recognised or appreciated by their caseworkers or agencies. The conditions of caring for multiple children in OOHC is underexplored in the foster care literature and even in parenting research, the impact of raising multiple children is not well studied (Nomaguchi & Milkie, 2020) and could be further explored. That the impact of caring for multiple children is not been extensively researched is important given that the average number of children placed with a foster or relative carer is increasing (McGuinness & Arney, 2012). In 2019, around half of foster carer households and 40% of kinship carer households had more than one child placed with them (Australian Institute of Health and Welfare, 2020).

Being in paid employment builds financial capacity for the carer's family and can be enriching for people in parenting roles by providing opportunities for building skills, self-efficacy, and developing social connections, but working either full- or part-time also competes for carers' finite time and energy for care provision (Cooklin et al., 2014). The risk of depression is higher for foster carers who perceive insufficient time to carry out their responsibilities (Cole & Eamon, 2007; McKeough et al., 2017), and being subjected to work-life conflict negatively affects one's ability to parent in a warm and consistent manner (Cooklin et al., 2014).

The group-based trajectory analysis indicated that child age at the time of placement was a relevant factor impacting on carer wellbeing and caregiving. Carers in the Fluctuating concern group had the highest proportion of children who would be starting primary school during the study timeframe (around wave 3), compared to other groups. Forbes et al. (2015), examined the time spent "over and above" ordinary parenting (i.e. time spent directly engaged in placement-related activities, such as liaising with caseworkers and pre-/ school) and found that the least additional time was spent for children under the age of two years and the most for children aged 3–5, the age at which most children commence pre-/school (Forbes et al., 2015). Conflicting demands of caregiving and working also peak when children are at pre/school age (Erickson et al., 2010), which aligns with findings from the present study regarding the impact of employment. It appears that some carers need further support at critical times, such as when a child in their care starts school, so consideration of providing additional caseworker support and resources could be considered. Having flexible arrangements for carers to access training, such as through recorded sessions or conducting sessions after work, could encourage access to these services.

Another distinguishing feature of the Ongoing concern and Fluctuating concern carer groups was that a much greater proportion of these carers reported that the child's need for professional services (relating to health or other needs) were not being adequately met. Many of the same system-related barriers that carers reported experiencing with obtaining timely services for the children in their care

have been identified previously (McLean et al., 2020): slow and difficult process to get approval/support to access professional services (e.g. birth parents may have to give consent, agency might have to confirm they will reimburse expenses etc.), which is made harder by not having adequate information on the child's background, medical history and documentation (e.g. Medicare card), and inability to pay out-of-pocket cost expenses often charged by specialist health services.

Carers in the current study expressed their desire for continuity with caseworkers, to achieve better communication and follow-up. Caseworkers can be a valuable source of support for carers and are critical in facilitating access to professional supports and services (Dolan et al., 2012), through keeping carers informed, advocating on their behalf, and encouraging their self-efficacy (Blythe et al., 2014; McDowall, 2013; Murray et al., 2011). A high turnover of caseworkers can be a barrier to establishing a good working relationship between carers and caseworkers (Blythe et al., 2014), and can leave carers feeling dismissed and unsupported.

In the current study, the carer's responses revealed the perceived value of a social network not only as a source of emotional or moral support, but as an extra set of hands to help with the day-to-day tasks of caregiving. The availability of this support – both psychological and practical – allows carers to direct their finite resources towards meeting the requirements of caregiving (Miller et al., 2019a). Support systems help carers to engage in self-care (Vanderwill et al., 2020), a valuable way of maintaining emotional regulation and resilience (Berrick & Skivenes, 2012; Miller et al., 2019b). Single carers and those without a close support network may be more at risk of feelings of isolation and being overwhelmed. While the number of informal social supports available to a carer was not found to be a predictor in the quantitative analysis in the current study, previous research on informal carers has concluded that the perceived helpfulness of one's available social support, whether from family and friends or community groups, is a predictor of psychological well-being (Shiba et al., 2016; White & Hastings, 2004). The importance of social networks and close supporters was apparent in the qualitative analysis of text comments in the current study.

In addition to the 'regular' difficulties encountered by foster and kinship carers alike, carers in kinship arrangements often face other challenges and stressors e.g., managing strained family relationships and parental contact (Harding et al., 2020; Kiraly & Humphreys, 2013). Unlike foster carers who independently initiate the decision to become a carer and who receive prior assessment and training, kinship carers are often recruited out of urgent need (Boetto, 2010; Harnett et al., 2014; Stout & Bell, 1991). Research has found that kinship carers report accessing less support than foster carers (Harding et al., 2020) and have distinct – and often unmet – information needs regarding their role and supports available to them (Valentine et al., 2013). Kinship carers who experienced  $\geq 2$  stressful life events were found to have a higher odds of concern for their caregiving and well-being, therefore consideration of short-term respite for kinship carers to deal with life events could be considered. Despite the growing number of kinship OOHC placements in Australia, and work led by Indigenous researchers towards developing appropriate assessment tools and frameworks (Blacklock et al., 2013; Blacklock et al., 2018; Krakouer et al., 2018), the important differences between these carer groups has not always been acknowledged at the policy level nor reflected in the guidance available to caseworkers (Boetto, 2010).

The finding of the current study that NGO-provided placements had higher odds of potential concern regarding the caregiving and well-being of kinship carers (but not foster carers), compared to DCJ placements, suggests a potential misalignment between how NGO agencies operate and the realities of kinship care. With less access to support and training, the experience of stressful life events, such as serious illness, may incur a greater impact on kinship carers' ability to cope with the demands of caregiving (Whenan et al., 2009). Interestingly, kinship carers in older age groups were less likely to show signs for concern about their well-being and caregiving. This may relate to having more prior experience in raising children (Delfabbro, 2017) and kinship carers' strong sense of commitment to, and satisfaction with, providing care for the child/young person in their family, despite the challenges (Harding et al., 2020).

There are multiple strengths of this study including that its analyses were guided by an established conceptual model, the size of the cohort, and the ability to link responses and provide perspectives of carers and caseworkers, along with information from DCJ records. The longitudinal nature of the study with multiple survey waves enabled the capture of experiences the novel examination of group-based carer trajectories across time. However, the study also has limitations, the POCLS research was primarily focused on children and young people in OOHC, therefore additional information on the carer's health was not available, such as the carer's use of health services.

Due to the exclusion of children under guardianship orders from analysis in the present study, fewer kinship carers than foster carers were retained for inclusion over time, lessening the representativeness of the experiences of kinship carers. Children in kinship care who had an order from the Children's Court giving them full parental responsibility were automatically transitioned to guardianship orders due to the proclamation of the NSW legislative reform regarding guardianship orders on 29 October 2014, which occurred after wave 1 and before wave 3 (NSW Government, 2014). Just over one-quarter of carers answered all four survey waves and had their responses included in the group-based trajectory analysis. This raises questions of generalisability of findings of the group-based trajectories, as it is possible that carers who are more at-risk for concerns regarding their well-being and caregiving were less likely to continue participating in the study. In addition, a higher proportion of carers who had an NGO service provider responded to all four survey waves compared to completing one to three survey waves (54.4% vs 34.8%). There were relatively low sample sizes for the Ongoing and Fluctuating concern trajectory groups that could affect the reliability of findings from the trajectory group comparison.

A few carer survey questions were only added in the wave two survey, such as questions regarding neighbourhood social cohesion, and stressful life events. Similarly, although the study used validated questionnaires, these were sometimes altered by the POCLS study team (e.g. one item removed or changed), which resulted in the inability to use validated subscales for some questionnaires. Lastly, as with any retrospective surveys, there is the potential for both self-report and recall bias.

#### 5. Conclusion

The capacity of carers to provide nurturing care to children and young people in OOHC is reliant upon carers being effectively supported in their caregiving role. Preventing carer burnout and promoting well-being is essential for retaining capable, resilient carers. It appears that further support is required by carers at critical times, such as when the child starts pre/school, and when caring for multiple children and young people. Government departments and agencies that manage the placement of children in OOHC need to consider how the supportive services they offer align with the diverse needs of carers in foster and kinship care arrangements, at different stages of the placement, and as children age. Without adequate support, limited information regarding the children they are caring for, and lack of access to short-term respite, carers are likely to experience decreased well-being and have difficulty adequately performing their caregiving role.

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#### Declaration of competing interest

The authors declare that they have no conflict of interest.

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#### Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.chiabu.2022.105586.

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