Evidence review:

Analysis of the evidence for out-of-home care

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Commissioned by the Community Services Directorate of the ACT Government

THE UNIVERSITY OF MELBOURNE

Parenting Research Centre
raising children well

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Disclaimer

This analysis of Out-of-Home-Care was commissioned by the Community Service Directorate of the ACT Government. It was conducted between April and June 2013. Readers are advised to consider new evidence arising post the publication of this review when selecting and implementing parenting interventions.

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1. EXECUTIVE SUMMARY

1.1 Overview

This evidence review of Out-of-Home Care (OOHC) interventions was conducted by the Parenting Research Centre (PRC) and the University of Melbourne (UofM) for the Care and Protection Services (CPS) area of the Office of Children, Youth and Family Support, Community Service Directorate of the ACT Government. The objective of the report was to provide CPS with a rigorous overview of the evidence to help guide its future decisions with respect to its ongoing efforts to improve the outcomes of children and youth in OOHC. This report provides an analysis of the available evidence for OOHC interventions across the continuum of care, by care type, and factors to consider when implementing OOHC interventions in the ACT context. In particular, the evidence was considered in terms of its strength and applicability to the ACT context, and implications for the field are discussed.

1.2 Methods

To identify and evaluate the evidence for OOHC interventions, a Rapid Evidence Assessment (REA) methodology was used. This method is a departure from traditional narrative reviews, utilising advanced and inclusive search strategies to systematically locate and synthesise relevant, high quality studies. While an REA is not a guarantee that all studies are found or that results accurately describe the effectiveness of found interventions, it is far more transparent and is likely to be less biased than traditional literature reviews. In this case, studies of OOHC interventions that used rigorous evaluation methods (i.e., randomised controlled trials or RCTs), both within Australia and Internationally, were systematically located, evaluated, and synthesised. We began with a review of previously completed high quality systematic reviews and a gap analysis (Appendix 1), proceeded with a search of the evidence, and compiled a list of OOHC interventions that had been evaluated and found to have some positive effect on one or more relevant outcomes. These were then rated on a continuum of effectiveness that ranged from 'Concerning Practice', 'Failed to Demonstrate Effect', 'Insufficient Evidence', 'Pending', 'Emerging', 'Promising', 'Supported', and 'Well Supported'. We supplemented this process with an exploration of some of the key OOHC findings from the Australian Institute for Health and Welfare (AIHW) child protection indicators, and incorporated these findings and the team's content knowledge into the final report.

1.3 Findings

The initial review of reviews identified 122 possible systematic reviews, which were brought down to eight relevant and high quality syntheses (Appendix 1). Most important findings among these were:

- Kinship care as a placement resource. One of the largest systematic reviews of its type, findings favoured kinship care to non-related foster care or indicated that kinship care was no worse than non-related foster care across a range of psychosocial and systems

level outcomes, particularly with respect to placement stability. However, there are indications that children in kinship care are less likely than children in non-related foster care to use mental health services, less likely to be adopted and may experience slower reunification.

- Treatment foster care for youth in Out-of-Home Care. Therapeutic foster care (more detail below) resulted in better psychosocial and systems level outcomes for youth with difficult behaviour problems than other forms of care.

- The use of independent living skills programs for youth in foster care who are 'emancipating' or 'ageing out' of the system appear to have no empirical support in terms of this service's capacity to facilitate successful 'independence'. Furthermore, a multi-site RCT conducted after the systematic review was completed also found very little empirical support.

The subsequent REA process screened 3,325 potential studies for inclusion and, at the end of this process, identified 58 studies describing 35 OOHC interventions that have been evaluated using RCTs. When combining both sources of data, 12 interventions emerged that we considered most likely to be 'effective' as they have a demonstrated effect in at least one RCT and at least six months maintenance of effects have been reported (Appendix 4). The rating of 'effectiveness' is somewhat of an artificial construct. That is, while a particular study or slate of studies may have positive findings, there is no guarantee that these results will be observed in different settings. Our ratings of effectiveness simply reflect variations in the extent and quality of the evidence observed for each program or practice. The 12 interventions are briefly summarised in Table 1.

1.4 Implications for the field

While the actual number of interventions is small, we believe it is a fairly accurate reflection of the current state of OOHC intervention research. Furthermore, some of the reviewed interventions have very clear implications for the ACT in light of its census and current configuration of OOHC services.

The ACT has a number of residential care homes which, for some youth, is an essential placement option. However, there appears to be little in the way of a middle ground between regular family foster care and fairly intense, restrictive levels of care. Unfortunately, residential care homes (known as group homes in the North American context) are typically associated with poor, and sometimes very poor, outcomes across a range of child protection systems-level and psychosocial outcomes. While it is clear that youth coming into such homes often have substantial behavioural and other challenges, there is little or no strong evidence that residential care home settings are able to produce outcomes that are better than alternative care arrangements. The one intervention that was found to be Well Supported in this review, Multi-dimensional Treatment Foster Care, is a manualised program that trains, coaches, and works closely with foster parents to manage behavioural and other issues, and these services can be used to prevent children from moving from foster care to more restrictive settings and to step youth down from residential care homes to foster care. It is one of those rare interventions that

can both improve outcomes and generate substantial cost savings, and is a movement toward a more professionalised pool of foster caregivers. The program can be used to create smaller, leaner, high intensity family foster care settings.

Table 1: Brief summary of the 12 interventions considered to be the most effective in the REA

Rating	Name	Population and place on the continuum	Outcomes
Well Supported	Multi-dimensional Treatment Foster Care (MTFC)	Therapeutic foster care for adolescents who are not suited to regular foster care (e.g., offenders, conduct disorder, mental health problems)	Lower levels of: • Restrictive care • Criminal offences • Running away • Drug use • Psychosocial problems
Supported	Attachment and Biobehavioral Catch-Up (ABC)	Children in foster care under the age of 6 years who have been maltreated or have attachment problems	Reduced: • Child abuse risk • Behavioural problems • Attachment issues • Parental distress
	Multi-dimensional Treatment Foster Care for Preschoolers (MTFC-P)	Similar to MTFC, but targeting children aged 2 to 7 years	Increased: • Placement stability • Permanence • Positive attachment
	TAKE CHARGE	Adolescents in foster care who are receiving special education Leaving care/transition from care	Improved: • Goal setting • Educational planning • Psychosocial outcomes • Quality of life
Emerging	Assertive Continuing Care (ACC)	Service for adolescents with drug and alcohol dependence issues who are leaving care	Increased: • Use of continuing care • Marijuana abstinence
	Big Brothers-Big Sisters	Mentor service for children aged 10 – 16 years (use in foster or kinship care)	Improved: • Prosocial skills • Self-esteem
	Combined cognitive behavioural program and educational program	Parenting program for improving difficult behaviour in children aged 3 to 8 years. Targets adoption and permanency	Increased: • Satisfaction with parenting • Positive interactions
	Fostering Healthy Futures (FHF)	Foster care for children aged 9 to 11 years who have been maltreated	Improved: • Quality of life • Mental health • Restrictiveness of care setting • Placement stability • Permanency
	Kid in Transition to School (KITS)	Children in OOHC transitioning from preschool to primary school	Reduced: • Aggression • Behavioural problems
	Life Story Intervention (LSI)	MH program for rural children in OOHC aged 7 to 17 years with parents who abuse methamphetamine	Improved: • Externalising behaviour

Rating	Name	Population and place on the continuum	Outcomes
	Middle School Success	Program for promoting healthy adjustment in adolescents in foster care transitioning to middle school	Reduced: • Substance abuse • Delinquency
	Together Facing the Challenge	Therapeutic foster care for children around 12 years of age	Reduced: • Behavioural problems

Kinship care was overwhelmingly found to be a positive placement option, which is good news for the ACT given its increasing use of this placement resource. In particular, kinship care can facilitate maintenance of cultural and community ties while not sacrificing outcomes. Nonetheless, outcomes for children in OOHC tend to be poor overall, and kinship caregivers tend to face fiscal and structural challenges (particularly for Aboriginal kinship caregivers), possibly leading to fewer resources for the children in their care. If the ACT is going to continue to use kinship care as its preferred placement option, investing in supports for these often disadvantaged caregivers may result in more positive outcomes for children and youth.

If the ACT is going to invest in services intended to promote successful transitions to adulthood, simple training programs in money management and basic independent living skills are very unlikely to make a difference. Building on the negative findings from rigorous evaluations of independent living services, there has been an international movement toward extending OOHC until at least the age of 21. In essence, the argument is that extending care more closely approximates the process and timing of leaving home for children who are part of the larger population - safe, loving, and enduring homes that help youth manage this difficult time of life. While the evidence is still fairly thin, extended stays in foster and kinship care are more likely to help young people successfully transition to independent living than programs that rely on as yet immature youth to embrace a set of simple skills.

Perhaps the best way to safely decrease the number of youth in OOHC is to prevent entry in the first place. Our limited analysis of reasons for entry, including parental functioning and rates of child neglect, point towards an increased investment in effective substance abuse services that are specifically targeted at parents and that, for Aboriginal parents, are culturally infused.

The review also leads to implications in terms of how to use evidence in a way that is most likely to deliver positive results. In particular, an approach that incorporates basic epidemiological data, the type that can be readily constructed from most management information systems, is crucial. In other words, knowing the population of children and youth and how they transition between various elements of the foster care system (i.e., investigation to placement; movement from placement to placement; restoration; other forms of permanence) is crucial when selecting one or more interventions.

Finally, most of the parenting interventions that have been found to be effective across a range of populations (though not as often with children in OOHC) are based on a set of common elements that are, at their core, derived from social learning theory. It is possible that these common elements can be articulated and assembled into a set of practices, or even a program, that has a reasonably good chance of being effective. Certainly, learning some of these basic parenting techniques can curb difficult child behaviours and should be essential tools for OOHC providers, especially those who would be considered ‘professional’.

1.5 Conclusions and limitations

This report provides details of rigorously evaluated OOHC interventions and can be used as a guide to the development and implementation of interventions in the ACT context. Although

systematic in its approach, measures were taken to make this a *rapid* review, and some evaluations may have been missed. Readers are advised to seek updated evidence before selecting and implementing interventions. In the end, several interventions, practices, and policy changes were recommended including the continued use of kinship care, more parenting and other supports for foster and kinship caregivers, the use of treatment foster care to transition youth from residential care to less restrictive forms of OOHC, the use of treatment foster care to prevent placement into more restrictive (and expensive) settings, extending care to age 21 rather than relying on ineffective skills training for youth ageing out of foster care, teaching positive parenting techniques to foster and kinship care providers, and investing in ways to improve the use of information to better measure outcomes and system performance. Although improving the OOHC system is a long-term, complex endeavour, we believe that these strategies offer some of the best opportunities for improving outcomes for children and youth while maximising the resources available to the ACT.

2. INTRODUCTION

2.1 Background

The number of children Out-of-Home Care (OOHC) in Australia has steadily climbed over much of the past two decades, and current best estimates indicate that almost 40,000 children were in care at the end of fiscal year 2011-2012 (AIHW, 2013). OOHC refers to a range of services which support children who are judged to be at risk from their natural parents because of maltreatment or because of their own behaviour. Internationally, a range of placement options exist that are similar in construct but may be different in name. These can be home-based in a family, such as foster care or kinship care, or can be located in a professionally administered setting (e.g., staffed units, residential treatment centres, or children's homes). OOHC services take place on a continuum from initial placement to the maintenance of placement stability to the achievement of legal permanence (permanence consisting of restoration or reunification to the birth family, legal custody with a relative or other care provider, or adoption).

While OOHC can be a lifesaving resource for children who are maltreated, the overall outcomes for children placed in care tend to be quite poor with respect to most psychosocial and health-related measures. As adults, youth formerly in care are more likely to have chronic health and mental health problems and may experience higher rates of homelessness, unemployment, and victimisation (Alexander, 2011; Courtney et al., 2011a, 2011b; McIntyre & Widom, 2011; Schneider, Baumrind, & Kimerling, 2007; Spataro, Mullen, Burgess, Wells, & Moss, 2004). OOHC is necessary for some youth, but even after more than 100 years of state-sanctioned family foster care services there is relatively little research regarding which types of care, administered in which way, are effective for specific children. Furthermore, available research information is not of equal quality and applicability, nor does it tend to be synthesised in a manner that aids in decision-making. And yet, policy-makers, administrators, and practitioners must daily make crucial decisions about such things as whether to place children, what type of placement to use, and when and whether to restore children to their parent(s). Moreover, since a substantial number of children in OOHC increasingly face a myriad of psychosocial issues, the challenges associated with maintaining stability in care and setting youth up to succeed upon exit are formidable and made more so by the absence of evidence that is understandable, contextualised and actionable.

In addition to the increasing challenge of caring for these children, changes in social structures and work patterns have exacerbated the difficulties of recruiting and retaining suitable voluntary and professional carers. Many children in OOHC are caught in a cycle of placement breakdown and disruption which can lead to poor outcomes (Aarons et al., 2010; James, Landsverk, & Slymen, 2004). In the ACT, about half (52%) of the children exiting care after 12 months or more during 2011-12 had experienced three or more placements. For those exiting care after less than a year one-fifth (19%) had lived in three or more placements.

This research synthesis builds upon a previously completed audit of Australian OOHC research (Cashmore & Ainsworth, 2004), two subsequent narrative reviews (Bromfield et al. 2005;

Bromfield and Osborn, 2007), and a series of Australian Institute for Family Studies (AIFS) research briefs (Osborn & Bromfield, 2007a; 2007b; 2007c; 2007d) that located, evaluated, and worked to contextualise studies conducted within country. These reviews offer a broad and thorough overview of OOHC research in Australia and serve as a useful reference point for the current synthesis.[1]

Since 1995, Australian OOHC has tended toward small-scale qualitative research. There are few rigorously conducted quantitative studies, including replications of earlier research or research into other jurisdictions, making it difficult to attribute outcomes to specific interventions or policy changes and to generalise findings to the broader population of children in OOHC. Most research focuses on particular aspects of family foster care. There is little or no substantial research in Australia on:

- Kinship care
- Permanency planning (from family re-unification to adoption)
- Treatment foster care, or wrap-around services
- The evaluation of policy and legislative change
- The educational needs and outcomes of children and young people in care
- Care for indigenous children, children from other cultural backgrounds, or children with disabilities

Getting the big picture (Bromfield & Osborn, 2007) provides summaries of research findings on particular aspects of OOHC that are largely based on surveys, epidemiological and small-scale qualitative studies. Overall, the review found studies relating broadly to the prevalence of placement types and systems level and individual outcomes associated with placement in OOHC. Specific findings included:

Outcomes for children and young people in care (for further details see Osborn & Bromfield, 2007a)

- Children in care experience worse mental health and other outcomes than children who have never been in care, and a significant minority of children in care experience complex psychological and behavioural problems
- These children are typically the same children who tend to experience placement disruption, and who have a family history characterised by substantial trauma

[1] Although some of these sources are becoming somewhat dated, there is little indication that their conclusions are no longer accurate. However, this summary of findings should be interpreted cautiously since there has been an increase in research activities in recent years. As will be seen in the REA findings, however, it is still the case that there are very few well-controlled effectiveness studies that have been conducted in Australia.

- Brief wellbeing assessments at intake can identify children at risk of significant behavioural problems and in need of support during the early phases of placement, creating an opportunity for early therapeutic intervention
- Children with behavioural problems cost the alternative care system a great deal of resources

Placement stability

- Ongoing and severe placement disruption appears to affect a relatively small (15–20%) subgroup of children in care. These children tend to be those who had experienced two or more breakdowns because of their behaviour.
- Early placement disruption may not be inherently damaging, but placement disruption that occurs after 12 months should be closely monitored and the need for additional supports assessed

Reunification

- Children of Aboriginal heritage and children in OOHC for reasons of child neglect tend to be less likely to reunify[2]
- Family contact may increase the likelihood of reunification, but some groups of children were less likely to experience family contact

Kinship Care

- Kinship care is the fastest growing form of OOHC
- Kinship caregivers are typically grandparents who often have limited financial resources
- Kinship caregivers may get fewer resources than non-related foster parents

Residential and specialised models of care

- Conventional home-based (foster and kinship) care is not suitable for some children and young people with complex behavioural problems and high levels of placement instability

Leaving Care

- Youth transitioning to adulthood from OOHC are highly vulnerable and are likely to experience poor outcomes

[2] These two factors are generally highly correlated (Public Health Agency Canada, 2010)

Foster parent retention

- Carer retention may be improved if carers are better supported through improved reimbursement packages, increased recognition and involvement (e.g., input into decisions regarding foster children), better information about the child, and increased levels of support (such as, access to support services and respite)

The findings from these reviews, while limited, parallel findings from other high income countries that have developed strong tertiary care systems, providing a level of support for using the international literature to supplement the Australian literature. Using synthesis methods developed for high quality systematic reviews, this rapid evidence assessment (REA) expands into the international OOHC literature and focuses more attention on studies that rigorously evaluate the effectiveness of programs and practices specifically designed to improve the safety, permanence, and well-being of children in OOHC.

2.2 Understanding the OOHC population in the ACT

The general process of choosing interventions that might be effective necessarily includes a fairly detailed understanding of the base population in order to target interventions at key areas of improvement. However, a simple census of children/youth can be very misleading for a number of reasons:

- Looking only at children in care indicates a great deal about who these children are, but says little about how they may have gotten to their current placement
- If looking only at children in care, comparisons with children who did not go into care are not made. That is, we cannot assume that the demographic and case characteristics of children and youth who are currently placed in care are different or similar to the larger numbers of children and youth who never entered care.

Cross-sections (point-in-time looks) of children in care are biased and tend to substantially overestimate several key constructs such as length of stay and various risk factors that are associated with the need for longer stays in care. For example, children in care on a particular day are more likely to be those children who have been in care for long periods of time (i.e., if they are always there, they are more likely to be there on the day selected to take a census).

The general solution to this cross-section problem is to statistically follow children from one transition point to the next, distinguishing the differences between those who make it to the next stage and those who do not. The child protection system tends to have a well-known set of major decision points, and these are also natural points upon which to focus and inform the selection of practice and policy interventions. These include:

- Notification
- Investigation
- Substantiation

- Provision of family support services
- Placement in Out-of-Home Care
  - Type of care
  - Re-placement by type of care and level of restriction
- Exit from care
- Renotification (cycle repeats)

Data available from the Australian Institute for Health and Welfare (AIHW) are useful starting points for understanding the bigger picture of how children come to be in OOHC and how they exit from care. While useful, AIHW data are necessarily limited in their scope and level of detail because of the fact that the ACT is contributing to a national database. They do not include measures of child behaviour, detailed family circumstances, and are not truly longitudinal in nature. The indicators represent, in a sense, a lowest common denominator that, while of reasonably high standard, are not set up to tell the story of how children and youth move through the child protection system in the ACT. As such, the indicators detailed below provide only a partial picture of the pathways through care – as it were, a set of pictures that are strung together at key intervals to represent a feature film. Nevertheless, these pictures can be informative and will, at the very least, indicate where further exploration of ACT-specific data is warranted.

An understanding of who is in care requires an understanding of how they may have come to be there. At the front end of the Care and Protection Service (CPS) system, ACT appears to investigate a relatively small number of cases (about 20% investigation rate while the rate for the rest of the country is 46%). Normally, this translates into a higher substantiation rate (i.e., if only the most severe cases are forwarded to investigation, we would expect a high proportion of substantiations), but this is apparently not the case. This seeming departure from the expected is an area worth exploring in more detail, but that is beyond the scope of this review.

Among substantiated investigations, the pattern for ACT is similar to that of the rest of the country. The rate of per-child notification has remained stable, but the rate of substantiation is increasing, and this is true for both Indigenous and non-Indigenous children. Also similar to the rest of the country, emotional abuse occurs most frequently, followed closely by neglect, with substantially lower rates of physical abuse and much lower rates of sexual abuse. Thus, issues of exposure to domestic violence and issues associated with child neglect such as parental substance misuse comprise the vast majority of substantiations. If the international literature can be a guide, the likelihood is that neglect is more of a major driver of entries to care than exposure to domestic violence (Public Health Agency Canada, 2010).

As with other jurisdictions, there was a high rate of substantiations and entries to care for young children and babies. About 40% of children admitted to care were under five, and young children

have the greatest chance of staying in care for long periods of time. A preventive approach would focus effort on this key demographic group.

As can be seen in other jurisdictions and, also in line with the international literature, Indigenous children and youth were more likely to be substantiated for neglect and emotional abuse, and were far less likely to be substantiated for physical and sexual abuse. This is most likely a reflection of the larger structural issues (e.g., poverty, housing issues) facing Aboriginal communities in Australia. As with other jurisdictions, Indigenous children are far more likely to enter care, though it remains unclear whether Indigenous and non-Indigenous children stay in care for comparatively similar periods of time. For ACT, this is a major issue given that the rate ratio for entry to care between Indigenous and non-Indigenous children is among the highest in Australia (13.8), and this corresponds to the over-representation (with respect to their numbers in the population) of Aboriginal children and families in terms of notifications and substantiations. It may well be the case that the structural issues facing this unique sub-population translate to fewer social support and other resources that would prevent placement into OOHC.

All told, there were 560 children in care in 2011-2012 fiscal year, and it is important to note that the rate of children and young people in OOHC appears to be increasing. Interestingly, the increasing rate of care orders are being absorbed by kinship placements, which have steadily and strongly increased while the rate of non-related foster care has been levelling out. This pattern appears for both Indigenous and non-Indigenous children and youth.

Residential care (known as group homes in the North American context) as an OOHC placement type has remained fairly stable, though there may be a decrease in the current year. In general, the census of youth in this placement type ranges between 35 and 45 young people. Children in these types of facilities tend to have difficult behavioural or psychological issues that require a fairly high and restrictive level of care. Interestingly, no family group homes are listed as placement types, and these are generally thought of as transitionary placements between family-based foster care and residential care.

In terms of length of time in care, more than half of the children in care have been there for two years or more, and this is similar for both Indigenous and non-Indigenous youth. There appears to be a reasonable number of children coming into care and staying for short periods of time, but different types of modelling would need to be employed to ascertain a meaningful rate.

In summary, the information from AIHW indicates that many of the performance indicators function similarly in the ACT to the way they do nationally, though the rate of investigation is somewhat lower and the rate of entry to care for Indigenous children and youth is on the higher end of the spectrum. The broad trends that are measured, especially in the area of kinship care, are also similar to the broad trends of international findings, lending some support for the generalisation, to the ACT, of findings from studies conducted abroad. Unfortunately, the AIHW Key Performance Indicators (KPIs) do not allow for a more detailed analysis of the 'stock and flow' of cases moving from one decision point to the next, which would better indicate where to concentrate effort. In particular, time-to-exit data are not strong features of the AIHW measures.

That is, exit data are provided for those children who do exit, but these figures do not take into account the larger pool of children and youth who do not exit. As the ACT considers which interventions to invest in, a more thorough, prospective (i.e., entry cohort) analysis of length of stay could provide useful information about those youth who enter care but do not exit. Also, single measures tend to hint at how the placement process unfolds, but they do not account for the range of demographic and case characteristics that are in operation for any given system outcome or individual outcome. Drilling down into these measures with unit record data would lend a great deal of assistance to those making decisions.

2.3 Purpose and scope of this review

Care and Protection Service (CPS) within the Community Service Directorate of the ACT Government currently oversees the OOHC Framework that delivers a range of services to children and young people in foster care, kinship care and residential care. The Community Services Directorate has sought evidence for OOHC interventions that have the best chance of producing good outcomes for children and young people, while taking cost effectiveness into account. This information will be used to aid in the development of a strategy to ensure the adequate supply and quality of OOHC placements.

The aim of this report is to provide the Community Services Directorate with information about OOHC that has been evaluated internationally, with a particular focus on rigorous evaluations that enable us to draw more confident conclusions about the effectiveness of the care for improving child and youth outcomes. We identify effective OOHC across the continuum and by care type, and we provide information about the child and young people in care. We anticipate that this report will be a useful tool for shaping decisions regarding the development and implementation of OOHC in the ACT.

Therefore, this report addresses the following questions:

1. What is the evidence for OOHC according to high quality systematic reviews?
2. What OOHC interventions have been evaluated internationally?
3. What do we know about these OOHC interventions (such as the type of care, children and young people targeted, elements of the care, workforce, where the care falls on the continuum, cost to implement)?
4. How effective are these OOHC interventions for producing good outcomes for children and young people?
5. What are the implications of this evidence for the OOHC field?
6. What are the critical factors to consider when implementing OOHC in Australia?

The report also addresses a number of questions that grew out of the REA process. These include:

1. What are the difficulties encountered by youth as they age out of the foster care system?
2. Does extending care to age 21 or later improve long-term outcomes for youth in long-term foster care?
3. How can interventions be implemented effectively?

To achieve these objectives, we have structured this report to include definitions of key terminology (in this section), followed by a section outlining the methodology used and our findings. The report ends with factors to consider when implementing OOHC in the Australian context, implications and recommendations for the field and concluding remarks.

2.4 Definitions

2.4.1 The Out-of-Home Care Continuum and Definitions

There are various types of interventions that have implications for OOHC, and these can be placed on a continuum that includes prevention of placement, permanent placement or reunification with the family, and ageing out of care as a young adult. A range of terms are used in practice and in the literature to mean 'Out-of-Home Care', and these can vary by country; some of these terms refer to different forms or care, while others can be used interchangeably but refer to the same type of care. For instance, children in OOHC are referred to as 'Looked After Children' in the UK; the phrase 'home-based care' may be used to refer to situations in which the child is cared for in a home or family-like setting, such as in foster or kinship care; and 'placement' can be used to indicate a wide range of OOHC options. Some additional terms that may be used to in relation to the continuum of OOHC are as follows:

Types of OOHC:

- Kinship care/relative care/customary care - children placed in the care of their family or extended family members. These are generally further defined in two ways: 'formal' or 'paid' placements; and 'informal' or 'unpaid' placements.
- Foster care
- Therapeutic care/treatment foster care
- Residential care/congregate care
- Group home/children's home
- Reception services/shelter care
- Adoptive placement

OOHC-related outcomes:

- Placement prevention
- Permanency
  - Family restoration/reunification
  - Adoption
  - Guardianship/legal custody
    - Subsidised
    - Unpaid
  - Long-term foster care
- Placement preservation/placement stability
- Restoration/family reunification
- Transition from care/Transition to independence/transition to adulthood /leaving care/ageing out/emancipation
- Adoption
- Guardianship/legal guardianship/legal custody
- Short term care
- Medium term care
- Long term care

2.4.2 Carer or caregiver

For the purpose of this report, we define a carer or caregiver as a person performing in the role of a primary caregiver to a child. In the context of OOHC, this is a different person from the child's biological parent. The person may be related to the child, as would be the case in kinship care, or they may be unrelated, such as in foster care.

2.4.3 Type of intervention

There is great variability in the nature of OOHC interventions. To distinguish between types of interventions, we have used a three-category system developed in a previous review (Australian Centre for Posttraumatic Mental Health and Parenting Research Centre, 2013) to classify interventions as a program, service model or system of care. These definitions can be found in Box 1.

2.4.4 Outcome

An individual-level outcome can be thought of as a measurable change or benefit for someone. For example, an outcome associated with OOHC might include an improvement in a child's psychological functioning or educational attainment. Outcomes can also be conceptualised at the child protection system level. Systems-level outcomes might include a decrease in unplanned placement breakdowns, a decrease in substantiated maltreatment recurrence, a decrease in length of stay in care, or an increase in the rate of family reunification. Both individual and systems level outcomes are different from outputs, which focus on *what was done* to try to achieve a change in outcomes. Outputs are generally framed as units of service delivered and might include days in care, number of sessions delivered, or number of visits made. An advantage of using outcomes rather than outputs as indicators of change is that they can be used to focus on what is supposed to change as a result of a program as opposed to a proxy that may or may not be related to actual individual or system-level changes.

Box 1: Definitions of different intervention types: programs, systems of care and service models (Australian Centre for Posttraumatic Mental Health and Parenting Research Centre, 2013)

Program

A program is a well-defined curriculum, set of services or interventions designed for the needs of a specific group or population. Programs are often discrete, manualised curriculums or series of actions/tasks/behaviours designed for a particular population to meet particular outcomes, which are usually measurable. Within a program, children, caregivers, guardians (i.e., group or population) receive direct targeted education, training or support or intervention to increase their knowledge, capacity, skills to improve child and family outcomes.

Service Model

A service model is a suite of approaches, programs or practices delivered to a client group by an agency, organisation or service system. Services may be delivered at home (e.g., a home visiting service) or within another setting. However, home visiting programs are not always services; for instance, if they are delivered as a structured curriculum they would be considered a program.

System of Care

A system of care is a coordinated network of community-based services and supports. It is a philosophy that promotes program delivery in ways that prioritise the needs of the children, youth and families to function better in various contexts (i.e., school, home, child protection, peers).

2.4.5 Effective intervention

The terms 'effective', 'effect', 'efficacy' and 'effectiveness' are often associated with evaluations of interventions but can take on different meanings. In all of its forms, the root term 'effect' generally refers to a measurable change in outcome. Rigorous research requires that this 'effect' be both 'statistically significant' (meaning results were not found simply due to chance differences that had nothing to do with the intervention) and of sufficient magnitude to be clinically or practically meaningful. The term 'efficacy' implies that such differences occurred in highly controlled (i.e., experimental) settings, while the term 'effectiveness' implies that this finding has been tested in real world settings.

For the purpose of this report, we use the term 'effective' to refer to interventions in which there is some measureable, statistically significant improvement in an outcome for the child, caregiver or family. In some studies, interventions are reported to be effective when changes are observed in outcomes from before the intervention to after the intervention (i.e., pre to post). For this analysis, we wanted to identify change that is less likely to be due to chance. Therefore we required interventions to demonstrate statistically significant improvements compared to other groups of caregivers/children that did not receive the same intervention. That is, in order to be referred to as effective in this report, an intervention needed to be tested against a comparison

group and found to have statistically significant improvements in at least one outcome that was not observed in the comparison group. However, even the presence of a control group is insufficient to instil confidence that the intervention is actually 'effective' since there is wide variation in the type and quality of studies. Thus, these positive results should ideally have been tested and replicated using randomised controlled trials (RCTs), the type of study with the greatest internal validity (i.e., the findings were less likely to be due to sampling or experimenter bias) and should also have demonstrated maintenance of effect at follow-up rather than simply at the end of treatment (e.g., six or 12 months after the end of the intervention).

3. METHODOLOGY

This section provides an overview of the methods used to conduct this review of OOHC interventions. We have divided the chapter into three sections: review of reviews and gap analysis (previously submitted); rapid evidence assessment (REA); and supplementary information.

3.1 Methodology: Review of systematic reviews and gap analysis

We conducted a review of high quality systematic reviews and identified gaps in the research and submitted this as the first stage in conducting this project. The information submitted can be found in Appendix 1. Since submitting this review of reviews and gap analysis, an updated systematic review and a major multi-site randomised control trial have become available, and we have used these to update the review of reviews. The methodology used in the review of reviews and gaps analysis is described here.

To identify relevant high quality systematic reviews in the area of OOHC, The Cochrane Library and The Campbell Library were searched using the terms “out of home care or foster care or kinship care”. We also searched PsycInfo and MEDLINE via OVID using the terms (foster adj1 care) and (systematic adj1 review) or (meta-analysis)) and limited to English.

Identified papers were screened for quality and relevance. It is important to remember that, while regular literature reviews are appealing in the sense that they focus on a relevant topic, the bias they bring in terms of the studies they include and the weight each are accorded is considerable. Systematic reviews were included in the gap analysis in which they met the following criteria:

- They related to OOHC
- The review addressed a clearly defined question
- There was an *a priori* search strategy and clearly defined inclusion and exclusion criteria
- Grey (unpublished) literature was specifically searched for
- There was more than one rater for extraction of study information
- Meta-analysis was included if there were sufficient studies, conducted in reasonably similar ways with reasonably similar populations.

Searches of The Cochrane Library, The Campbell Library, PsycInfo and MEDLINE identified 122 results. Forty-five of these were duplicate results, which were removed, leaving 77 potential reviews to assess. We found that 59 of these were not related to OOHC and a further 10 did not meet our criteria for high quality systematic reviews, leaving eight high quality systematic reviews. The findings from our review of these reviews can be found in the results section of this report and in Appendix 1.

3.2 Methodology: Rapid evidence assessment (REA)

Systematic reviews provide a means of synthesising and summarising evidence from a range of studies (published and unpublished), and permit conclusions based on multiple sets of findings that are sometimes contradictory. The advantage of systematic reviews over traditional literature reviews is that they employ a rigorous search methodology that minimises bias in the selection of included studies. Current understanding from the field is that traditional literature reviews often miss small but important effects, with different reviewers sometimes reaching different conclusions from the same research base, and that findings cited often have more to do with the specialty of the reviewer than with the evidence.

While systematic reviews are fast becoming an essential way to develop a true understanding of the evidence associated with effective interventions, they can be costly in terms of the time and personnel required (at least a year to identify, extract and analyse all relevant studies) (Hemingway & Brereton, 2009). In addition, because they provide a high level of detail and usually involve a meta-analysis, full systematic reviews tend to be focused on a very specific question (e.g., Is Cognitive Behavioural Therapy an effective treatment for major depressive disorder?). Increasingly being recognised as a less rigorous but more practical form of systematic review, rapid evidence assessments (REAs) are emerging as a more rigorous alternative to traditional literature reviews when there are time and staffing limitations.

REAs are reviews that use methods to accelerate or streamline traditional systematic review processes, facilitating the synthesis of evidence in an area within a short time period (Ganann, Ciliska & Thomas, 2010). Examples of methods used to make reviews rapid include placing limitations by language and date of publication, limiting the range of electronic databases searched, limiting searches in terms of geographical context and setting to ensure that evidence can be readily applied to the context of interest. Study designs, populations and intervention types can also be limited depending on the research question. REAs can provide quick summaries of what is already known about a topic or intervention, usually taking from two to six months. REAs use systematic review methods to search and evaluate the literature, but the comprehensiveness of the search may be limited. REAs are particularly useful when there is uncertainty about the effectiveness of a policy or service, or when a decision regarding evidence-based practice is required within months.

To determine the evidence for OOHC interventions that have not been included in high quality systematic reviews, we used a REA methodology to broadly review the international evidence on effective interventions for children and youth placed in OOHC. For the REA component, rather than limit the search by year, population, or specific intervention, we limited included studies to RCTs.[3] Results from the review of reviews and the REA will be combined to synthesise the body of found effectiveness literature on OOHC.

3.2.1 Search strategy

Evaluations of OOHC were identified via a systematic search of the following sources:

- Electronic bibliographic databases
- Selected Australian, UK and USA child welfare organisation websites and Australian government websites
- Reference list of all papers included in the REA, and references for all studies included in and excluded from all review papers located in the REA and in the review of systematic reviews.

Electronic bibliographic databases

Search terms were developed that were designed to identify papers reporting relevant evaluations of OOHC. We used various terms associated with OOHC and children, including truncation terms (denoted by an asterisk *, the use of which returns all items containing the root term to the left of the asterisk) and keyword searches that included titles, abstracts and subject headings. We also used methodological filters (sets of search terms designed to identify particular types of studies) to more efficiently locate studies that used a comparison or control group. The search terms used appear in Box 2.

Box 2: Search terms used in searches of electronic bibliographic databases in the review of OOHC

foster care OR group home OR group care OR residential care OR congregate care OR kinship care OR relative care OR customary care OR shelter care OR temporary care OR looked after child* OR child* place* OR place* in care OR out-of-home care OR out of home care

OR

foster child* OR foster youth OR foster care OR child abuse OR child welfare OR child

[3] RCTs are widely considered the 'gold standard' study design for testing the efficacy and effectiveness of interventions. In their simplest form, they enrol participants into the study, then randomly assign them to either the treatment or control (receive no intervention) or comparison (receive a different intervention) group. RCTs can be more complex, extending to 'multiple arms' (more than one treatment and / or control condition) and 'multi-site' (randomising by location).

maltreatment) and (reunifi* OR restoration* OR adoption* OR guardian* OR legal custody OR permanence OR permanent plan OR re-abuse* OR reabuse* OR recurrence* OR maltreatment OR recurrence of abuse OR length of stay OR days in care OR age out OR aging out OR transition from care OR transition to adulthood OR emancipat*

OR

infant* OR baby OR babies OR preschool* OR pre-school* OR child* OR pre-teen* OR preteen* OR teen* OR adolescen* OR youth* OR young people* OR young person*

AND

Randomi* OR Random* control* OR RCT OR Clinical trial* OR Control group* OR Evaluation stud* OR Study design OR Statistical* Significan* OR Double-blind OR Placebo OR meta-anal* OR meta anal* OR metaanal* OR Systematic Review* OR Econometric OR Propensity score matching OR Heckman* OR Instrumental variable OR Natural experiment OR Bayesian

Search terms were adapted to meet the individual requirements of each electronic bibliographic database. All years were included in the searches but language was limited to English and we also limited the search to include only peer reviewed publications. The following electronic bibliographic databases were searched: Embase and Embase Classic, PsycInfo, MEDLINE, Social Work Abstracts, CINAHL, ERIC, Applied Social Sciences Index and Abstracts (ASSIA), Sociological Abstracts, BIOSIS Citation Index, Social Sciences Citation Index Web of Science and The Cochrane Library.

Australian, USA and UK child welfare organisation websites, Australian government websites
Selected Australian, USA and UK child welfare organisation websites and Australian government websites were also searched systematically for published and unpublished papers relating to OOHC. All relevant documents located were searched for eligible RCTs of OOHC and citations of other potential interventions and RCTs. The purpose of this task was to identify additional interventions and evaluations that might add to our pool of effective interventions. A list of sites searched appears in Box 3.

Box 3: Australian, UK and USA child welfare organisation websites and Australian government websites searched for relevant RCT evaluations of OOHC

The Australian Institute of Family Studies (AIFS) http://www.aifs.gov.au/

Child Family Community Australia (CFCA) Information Exchange
http://www.aifs.gov.au/cfca/index.php

Australian Institute of Health and Welfare (AIHW) http://www.aihw.gov.au/

Child and Family Welfare Association of Australia http://www.cafwaa.org.au/

Promising Practice Profiles http://www.aifs.gov.au/cafca/topics/index.html

Closing the Gap http://www.aihw.gov.au/closingthegap/

Australian Domestic and Family Violence Clearinghouse http://www.adfvc.unsw.edu.au/

Australian federal, state, territory and local government websites http://australia.gov.au/

Australian Research Alliance for Children and Youth (ARACY) http://www.aracy.org.au/

Social Care Institute for Excellence http://www.scie-socialcareonline.org.uk/searchp.asp

British Association for Adoption & Fostering www.baaf.org.uk

Joseph Rowntree Foundation http://www.jrf.org.uk/publications

National Society for the Prevention of Cruelty to Children http://www.nspcc.org.uk

Social Services Research Group http://ssrg.org.uk/publications/

California Evidence-Based Clearinghouse for Child Welfare http://www.cebc4cw.org

Child Welfare Information Gateway, U.S. Department of Health and Human Services https://www.childwelfare.gov/library

Reference list checks

Reference lists of all papers included in the REA were searched for other relevant studies. We also collected all reviews identified in the REA and checked them for additional relevant studies. Lists of studies excluded from the systematic reviews identified in the review of reviews were also checked for further studies.

3.2.2 Paper selection

Abstract screening

Using our definitions of OOHC, caregiver and outcomes, raters were trained by the Manager of Knowledge Synthesis to select papers reporting relevant evaluations. Raters were trained to a minimum of 90% agreement to screen abstracts and identify papers that met these criteria:

- Does it relate to **Out-of-Home Care**?
- Does it relate to a **policy, practice or program**? (exclude papers that are just observations of children in care)
- Does it report a **quantitative evaluation**? (e.g., controlled trial, pre-post trial, systematic review, meta-analysis)

During this screening phase, papers were sorted into one of four groups by reading the abstracts: **accept** because paper appears to be relevant (including relevant systematic reviews), paper **may be** relevant, **reject** because paper is not relevant, paper is **of interest** (for e.g., papers relating to OOHC that are not reporting evaluations).

Study eligibility
Full text of papers categorised as accept or maybe were then read separately by the raters to determine if they were eligible for inclusion in the REA. The following eligibility criteria were used:

- Does it relate to **Out-of-Home Care**?
- Does it relate to a **policy, practice or program**? (exclude papers that are just observations of children in care)
- Does it report an **RCT**? (exclude any study that uses a non-controlled design or non-randomised controlled design)
- Does it report **findings or results** from the RCT? (exclude any paper that only describes the RCT or reports baseline data)

Studies excluded from the REA
Papers not reporting RCTs of OOHC were excluded from the REA, as were those that did not report the results of the evaluation. To accelerate the review process, we only included papers written in English, and theses, books and conference papers were excluded.

In addition, papers were excluded where they reported on environments so different from the ACT context that they would not contribute useful knowledge (e.g., studies of institutionalised infants in Romania and other former Soviet bloc countries, papers written earlier than the Second World War, and papers relating to health care in developing countries).

We also did not do secondary reviews of studies that had already been included in high quality systematic reviews. As stated earlier, these reviews are far more thorough in their analyses than can be achieved in a short-term REA and their inclusion in the REA would be an inferior duplication of effort. For instance, the effects of kinship care have been well-established in such a systematic review (Winokur, Holtan & Valentine, 2009), making the extraction and analysis of kinship care studies superfluous.[4] . Studies on the same topic area as a systematic review were included if they were published after the search was conducted for the systematic review in question.

Therefore, the exclusions were as follows:

- Papers not relating to OOHC

[4] A draft of the update to the 2008 Cochrane Collaboration systematic review of kinship care, which includes more than 100 studies, was reviewed for the purposes of this REA, providing an up to date set of findings for this very important topic area.

- Evaluations using designs other than an RCT
- Papers that do not report findings or results
- Papers in languages other than English
- Theses, books or conference papers
- Papers not relevant to the ACT context (e.g., Romanian orphanages)
- Papers included in systematic reviews identified in our review of systematic reviews

3.2.3 Data extraction

Two data extractors were trained by the first author to extract data from eligible papers. Data extracted included: study design, country in which evaluation was conducted, type of intervention (i.e., program, system of care, or service model), setting of the intervention, criteria for inclusion in and exclusion from the study, participant demographics, where on the OOHC continuum the intervention was delivered, details of the comparison group, measures used to assess changes in outcomes and intervention effects. Data were extracted by individual extractors using a data extraction form (see Appendix 2 for a blank data extraction form). More extensive data (such as staffing and costing information) were gathered for interventions rated Emerging and higher (i.e., interventions with a minimum of one RCT with six months maintenance of effect).

3.2.4 Rating of intervention effectiveness

Using the data extracted from each paper, interventions were assessed for effectiveness. We based this assessment on a scheme developed for our analysis of Australian parenting interventions (Wade et al., 2012) that was modified for our recent REA of parenting interventions for parents of young, maltreated children. These modifications took into account the more rigorous study design criteria used in the maltreatment REA and are relevant for the current REA as they allow use to apply stringent criteria for identifying interventions that we can more confidently call 'effective'. There are eight categories within our effectiveness rating scheme: Well Supported, Supported and Promising require RCTs with replication and maintenance of effect. Emerging requires one RCT with maintenance of effect to six months. Pending requires one RCT with an effect but without a maintenance requirement. If there were multiple RCTs for an intervention with mixed findings, for e.g., one with positive findings and one with null findings, we rated the intervention according to the RCT with positive findings. If the weight of the evidence was not favourable, such as more than one RCT with null findings, the intervention would have met the criteria for Failed to Demonstrate Effect. Figure 1 outlines the scheme used for rating intervention effectiveness.

3.2.5 Drawing on the work of existing systematic reviews

Unlike the situation in high quality systematic reviews, the time limitations of this REA prevented an extensive search of the grey literature and it was not possible to contact study authors to obtain further information about their work. To complement the assessment of intervention

evaluations identified through electronic bibliographic databases and grey literature searches, we drew on existing high quality systematic reviews in three ways as follows:

Using high quality systematic reviews with meta-analyses for rating purposes
The high quality systematic reviews identified in the review of reviews were checked to determine if they included meta-analyses. If these criteria were met, the systematic reviews were checked to see if any OOHC interventions had two RCTs or more that maintained significant gains at 12 months follow-up.

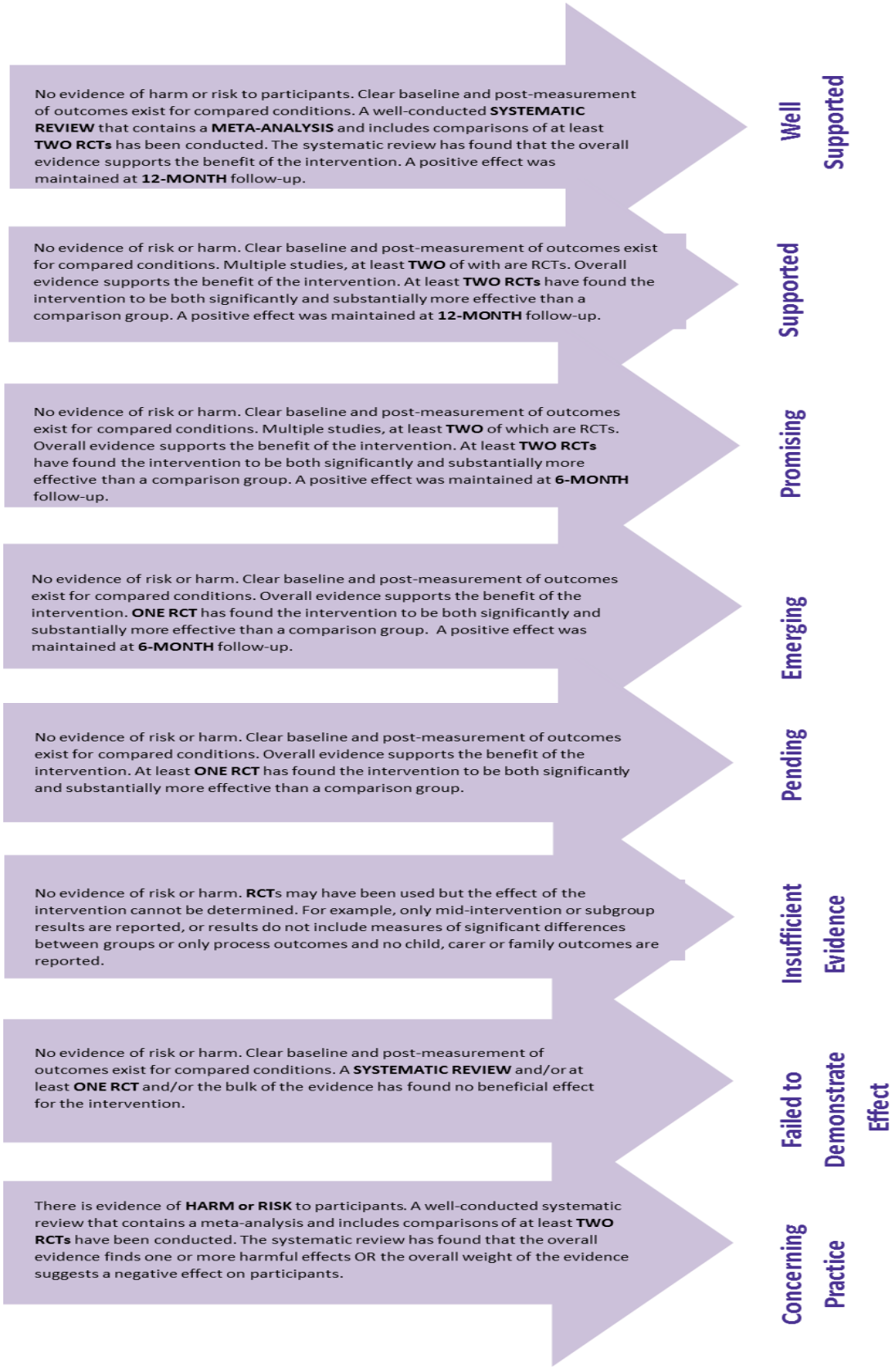
Relying on existing reviews of kinship care to provide information about the effect of this type of care
The Cochrane Collaboration review on kinship care (Winokur et al., 2008) has been rated as a high quality systematic review, despite the fact that kinship care does not meet our criteria as a well-supported intervention due to the relative absence of RCTs to test its effect as a result of ethical concerns about such studies (i.e., randomising children into kinship versus non-kinship placements). The review is one of a kind and, in its current update, contains more than 100 studies and dozens of separate meta-analyses of various outcomes associated with kinship care. In addition, we are aware that the ACT is very interested in this type of care and the number of children in kinship care has been increasing in the ACT for many years. We therefore created a special section for this report and use it to draw conclusions about the possible effects of kinship care as a placement resource.

Relying on high quality systematic to provide information about included studies
As high quality systematic reviews provide more detail about intervention evaluations than can be gathered in an REA, we did not include studies in our REA if they had been included in systematic reviews identified in our review of reviews. This eliminated the need for extracting data regarding these studies and instead allowed the focus of the REA to be on studies not previously included in a high quality systematic review (a *gap* in the review evidence).

3.2.6 Data synthesis

Data extracted from the included studies, along with the effectiveness information, was compiled using narrative analysis. Findings were tabulated and described, and a narrative picture of the interventions and their evaluations are presented and discussed.

Figure 1: Scheme used to rate the effectiveness of OOHC interventions



3.3 Methodology: Supplementary information

To complement the information gathered from high quality systemic reviews and in the REA, we have drawn on our content expertise to provide further details of OOHC interventions that have not been covered in the first two steps in our methodology. These are areas that may be of interest to the ACT government, but were not explicitly part of the REA. This material includes:

- Information about the challenges facing youth who age out of foster care.
- Evidence coming from the US that evaluates the impact of extending care to age 25.
- Information about how to effectively implement effective services in child welfare settings.

4. RESULTS

This results chapter is divided into three sections: review of systematic reviews and gap analysis; rapid evidence assessment (REA); and supplementary information. Findings from these three results sections will be combined in the discussion chapter.

4.1 Results: Review of systematic reviews and gap analysis

4.1.1 Original results and discussion from Review of Reviews

The completed review of systematic reviews (Appendix 1) identified eight high quality systematic reviews relating to various aspects of OOHC including residential care, kinship care, and treatment (therapeutic) foster care. Adoption was examined in three separate reviews: one review examined family reunification/restoration, one review examined cognitive-behavioural training interventions for foster carers caring for children, and one looked at independent living programs for young people leaving care.

This section recapitulates results and related discussion from the original review of reviews. As with individual studies, these systematic reviews vary in quality but provide some useful information. Findings from this gap analysis will be integrated with REA findings, filling in some detail that these more focused systematic reviews do not address. In summary they tell us the following:

1. Children placed in kinship care tend to have better behavioural development, mental health functioning and greater placement stability than their counterparts in non-related foster care. This cross-listed Cochrane and Campbell systematic review is of very high quality and, despite the fact that the included studies are overwhelmingly non-experimental, the bias is controlled for in a rigorous manner.

   These are major findings because the debate about the benefits of kinship care in child protection has progressed for more than 25 years. In particular, the debate has focused on whether placing a child back with the family of origin subjects that child to further exposure to unhealthy family functioning. At the end of the day, if children placed with kin are no more likely, or even less likely, than children placed with non-kin to develop behavioural and mental health problems, child protection systems can focus on enhancing each type of placement rather than trying to decide their relative merit. Further, the recent trend in governmental preferences to use kinship care as a placement of first choice appears to be a good idea on this dimension. In addition, the findings of greater placement stability and a generally better likelihood of permanence lend further support for this placement type.

   While the support for kinship care is relatively strong in this review, there are some cautions. Children in non-related foster care appear to utilise more mental health services. This is likely a result of two processes: children in non-related foster care may have more mental health issues upon entry to care; and kinship caregivers may be less likely to utilise mental health services even when needed. Thus, the two placement types

may have different challenges. In addition children placed with kin, while more likely to achieve permanence in terms of a long-term, stable placement, are less likely to be adopted. Two caveats to this finding: rates of kin adoption have been increasing substantially over the last few years, including years not covered by this review; and some outcomes associated with legal guardianship / legal custody (similar to Enduring Parental Responsibility) are similar to adoption (Testa & Cook, 2001). Nonetheless, these differences are present and, if adoption promotion is the aim, special efforts should be made to foster kinship adoptions.

Reunification rates are a difficult construct to synthesise, and the work in this review is no different. While rates of reunification between children in kin and non-kin care were found to be similar, a closer examination of the data seems to point to a difference in time to reunification. That is, while children in kin and non-kin care tend to reunify at similar rates, children in kinship care tend to reunify more slowly. In addition, at least one study has found that children who reunify from kinship care tend to re-enter care at lower rates than children who reunify from non-kin care.

2. Treatment (Therapeutic) foster care may lead to slightly better outcomes for children in care on a wide range of outcomes. This finding is based on another very high quality review cross-listed in the Cochrane and Campbell Collaborations. Children with fairly severe psychological and behavioural problems are often placed in group or residential care settings. These settings rarely lead to better outcomes for children. Rather, they are associated with some of the worst outcomes seen in OOHC. In addition, they tend to be the most expensive form of care, costing the child protection system enormous sums of money. If treatment foster care can be used as a preventive or 'step-down' strategy for less restrictive forms of care, outcomes for high-end children might improve while facilitating a substantial cost savings.

3. There appears to be very little evidence that has been systematically reviewed on the effectiveness of reunification / restoration services and prevention of re-entry to care. This does not mean that evidence is not available, it just means that there has not been a systematic review conducted in this area. There are a few known studies that provide rigorous evidence in this area.

4. Compared to institutionalised children, (early) adoption proves to be an effective intervention in the domain of attachment. Although this review is of lower quality than the previous reviews and uses studies that include populations very unlike those found in the ACT (i.e., large institutions located in less developed child welfare systems). The review also found that children growing up in a family environment (including foster care and adoptive homes) fared better in terms of IQ than children growing up in institutional care. While limited in terms of method and applicability, the review provides some support for adoption as a permanent plan for children who cannot live with their birth parents or kin. However, there may be issues with identity in later years and there are often cultural barriers to adoption, particularly in Aboriginal communities.

5. The use of independent living skills programs for youth in foster care who are 'emancipating' or 'ageing out' of the system appears to have no empirical support in terms of this service's capacity to facilitate successful 'independence'. No studies meeting the threshold for effectiveness were found in this Campbell Collaboration review.

4.1.2 Updates to Review of Reviews and Gap Analysis

The systematic review of the effectiveness of independent living programs (ILPs) for young people leaving care (Donkoh, Montgomery & Underhill, 2006) was an 'empty review', meaning there were no studies found that were of sufficiently rigorous methodology to make any conclusions about the effectiveness of any particular program. A high quality evaluation of four ILPs was subsequently identified (Coutney, Zinn, Koralek & Bess, 2011; US Department of Health and Human Services, 2008a; US Department of Health and Human Services, 2008b; Courtney, Zinn, Johnson & Malm, 2011; Courtney, Pergamit, Woolverton & McDaniel, in press) which had not been included in the Donkoh systematic review. The findings of this evaluation are discussed here.

After the completion of the review of systematic reviews, an updated version of the kinship care review was obtained (Winokur et al., in review). While the updated review included 40 more studies in its analysis, these additional studies did not alter the overall findings. Nonetheless, an updated set of findings is also discussed here.

Independent living programs

There is evidence that many of the young people who leave care each year in Australia lack the life skills and supports necessary to succeed in independent adult life. Compared to the general population, young people leaving care face higher rates of homelessness, unemployment, reliance on welfare, physical and mental health problems and involvement with the criminal justice system (Donkoh et al., 2006). Since Cashmore and Paxman's (1996) seminal Australian longitudinal study of wards leaving care, a number of programmatic or policy solutions have been suggested but very little evidence has been generated, internationally, about what is effective for preventing these poor outcomes.

Independent living programs (ILPs) are designed to improve outcomes for this vulnerable group of young people. The systematic review by Donkoh et al. (2006) aimed to evaluate the effectiveness of ILPs, but was unable to find any studies which used a randomised or quasi-randomised methodology. Eighteen studies were identified which generally reported favourable outcomes for ILP participants in the areas of educational attainment, employment, health, housing, and life skills, but the weak methodology of these studies makes these findings unreliable and potentially invalid.

We have identified a recent multisite evaluation of four independent living programs, none of which were included in Donkoh et al. (2006). The evaluation used a randomised control design to evaluate four independent living programs being delivered in the US as part of the Chafee Foster Care Independence Act of 1999. The evaluation of each program aimed to determine the effects of each program over a two-year follow-up period (from participants' entry into the program) in

relation to the following outcomes: educational attainment, employment, interpersonal and relationship skills, non-marital pregnancy and births, delinquency, and crime. Descriptions of the four ILP's and their populations are detailed below:

The Community College Life Skills Training (LST) Program consists of classroom-based and experiential life skills training (10 classes over five weeks), a teen support group, and exposure to community college opportunities. The evaluation sample consisted of 411 young people aged 17 on entrance to the study, all of whom were living in OOHC.

The Early Start to Emancipation Preparation (ESTEP) tutoring program offers structured tutoring for young people one to three years behind grade level in reading and math skills over a period of six to nine months. The tutoring relationship was designed to develop into a mentoring relationship. There were 402 participants aged 14-15 in OOHC.

The Independent Living – Employment Services (IL-ES) program provides individualised employment skills training, job referral, and employment support to young people aged 16-21. The evaluation sample consisted of 254 young people who turned 16 years old between September 2003 and July 2006 or who entered foster care during that period and were already at least 16 years old, eligible for Chafee services, and in placement in Kern County, California.

The Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care is a relationship-based program which provides one-to-one work with young people, to assist them to achieve their goals in preparation for adulthood and living independently after leaving care. Outreach workers assist young people with their goals, either through assistance with a task or through referrals to other services. The study sample included 194 young people aged 16-20 in intensive (therapeutic) foster care who had a case plan of independent living or long-term substitute care.

The evaluation found that none of the programs made a significant impact on participants across the whole range of targeted outcomes. LST, ESTEP and IL-ES provided services that were also offered more generally in the communities in which they operated. While the activities on which these programs were based - classroom-based life skills training, home tutoring, and active engagement of young people in employment-related skills – may all assist young people in gaining necessary life skills, none is effective by itself as offered in these programs.

However, the Outreach program was found to have an impact in two specific areas. Firstly, young people in the treatment group were more likely than those not receiving Outreach to have obtained important documents, such as a driver's licence or a birth certificate. These documents are highly important as proof of identification, and they are necessary for many areas of adult life, such as education enrolment or opening bank accounts. Holding a driver's licence can also make a big difference in terms of employment and social activities. Secondly, young people in the treatment group were more likely to enrol in post-secondary education and also more likely to have stayed in care past the age of 18. It is unclear how much of an impact this program would have on post-secondary enrolment if Outreach staff had not also encouraged young people to remain in care.

Services may be able to make a difference with specific goals if they are clearly focused on, but simple training programs in money management and basic independent living skills are very unlikely to make a difference. The transition to adulthood is multifaceted and requires success along multiple fronts including education, employment, stable housing, healthy behaviours, and supportive relationships.

Kinship care – Subsidised legal guardianship

The evaluation of kinship care in this review relies on the findings of a high-quality cross-listed Cochrane and Campbell systematic review (Winokur, Holtan & Batchelder, under review) which analysed the wellbeing, permanency and safety outcomes for "children and youth under the age of 18 who were removed from the home for abuse, neglect, or other maltreatment and subsequently placed in kinship care or non-kinship foster care".

Kinship care was defined in this study as "the full-time nurturing and protection of children who must be separated from their parents, by relatives, members of their tribes or clans, godparents, step-parents, or other adults who have a kinship bond with a child".

One hundred and two quasi-experimental studies were included in this review. Although these studies are overwhelmingly non-experimental, this is due to ethical considerations regarding the random assignment of children to different forms of care (i.e., children cannot be randomly assigned to kinship or non-related foster care). Nonetheless, the inclusion criteria for the systematic review (i.e., inclusion of a comparison group, even if children were not randomly assigned, and the use of multivariate methods to control for confounding factors) substantially decreases this bias, as does the inclusion of grey literature and the proper synthesis of studies using meta-analysis.

Children in kinship care tend to have fewer internalising and externalising behaviour problems than children in foster care, and the former tend to have better outcomes in terms of adaptive behaviours. For mental health, children in kinship care tended to be less likely to have a psychiatric disorder, and were also less likely to use mental health services than children in foster care. Kinship care also tended to be more successful than foster care in terms of placement stability outcomes (number of placements, placement disruption), and children in kinship care were less likely to re-enter care after reunification than those in non-related foster care. However, no difference between the two types of care was found for length of stay, either in an individual placement or in out of home care. However, pertinent to this last point, the method in which length of stay was measured may be problematic in this review. Specifically, comparisons did not synthesise studies in a way that adjusted adequately for length of follow-up. The most rigorous research in this area tends to find that children in kinship care tend to reunify at the same rate as children in non-related care, but that they take somewhat longer to do so. If this is the case, **cost calculations** may find that, despite generally decreased levels of services (when compared to non-related foster care), the overall cost of foster care payments may be higher for kinship care.

There were no significant differences between the two types of care in relation to educational attainment, family relations, developmental service utilisation or physician service utilisation.

Finally, children in kinship care were less likely than their counterparts in foster care to experience institutional abuse, but it is not clear whether this is a result of differences in actual institutional maltreatment or differences in the likelihood of reporting.

Evaluation

A comparison of kinship care with foster care comes with its own issues. The relationship of foster carers with the children in their care, with the children's birth family, and with the OOHC system may be quite different from how these dynamics play out for kinship carers. For example, rates of identification of behavioural or mental health problems, and the seeking of services, may be affected by the system carers' level of involvement. Equally, children entering foster care may experience more serious behavioural or mental health problems than the children taken into kinship placements.

While children in foster care were more likely to be adopted, those staying with kin are more likely to remain in care than foster children, and were also more likely to have a legal guardianship established with their kin caregiver for their ongoing care needs. Legal guardianship, as referred to in this systematic review, is roughly equivalent to the ACT's 'Enduring Parental Responsibility' program and associated legislation. The US has been experimenting with subsidised legal guardianship for relative caregivers since the late 1990s, examining safety and legal permanency outcomes and making comparisons to adoption (see, for example, https://www.childwelfare.gov/permanency/guardianship.cfm for a fairly comprehensive set of resources, legislation, and links to some of the research done in this area). Some of the main debates centred around whether kin should be paid a payment or 'subsidy' to kinship caregivers who assume legal guardianship, whether such a payment should be equal to payments made to non-related foster parents, and whether children in relative guardianship should be eligible for benefits accrued to children residing in and emancipating from non-related foster care. Of course, each of these decisions has **costing** implications. The research is somewhat equivocal in this area. Again, as with regular kinship care, if subsidised legal guardianship results in fewer reunifications, or even if reunification takes longer to occur, there is a strong likelihood that subsidised legal guardianship will cost more in terms of placement dollars than non-related foster care (Wulczyn & Zimmerman, 2002). On the other hand, if subsidised legal guardianship results in greater permanence, and the results of greater permanence are improvements in psychosocial functioning, it may be a substantial cost savings.

The evidence shows that children in kinship care are at least as safe as children in non-relative foster care, and tend to do as well as children in non-relative foster care, and in some areas they do better. For example, children in kinship care tend to have somewhat better behavioural developmental health and wellbeing outcomes than their non-related foster care counterparts, and they also tend to enjoy greater placement stability. Kinship care could be further enhanced by boosting caseworker support and service delivery to children in kinship care, though this may need to be balanced against the independence that some kin carers demand, and the increased cost that this would incur. These findings suggest that child protection systems can focus on enhancing both foster and kinship placements rather than trying to decide their relative merit, as children in both types of care can do well.

4.2 Results: Rapid evidence assessment (REA)

Using all sources searched, we identified 58 papers reporting 35 relevant OOHC interventions. Figure 2 depicts a flow chart of papers identified in the REA. This section includes intervention effectiveness ratings and descriptions of the OOHC interventions, with additional details provided for those rated Emerging and higher (i.e., those with at least one RCT and some maintenance of effect).

4.2.1 Studies excluded from the REA

Twenty-two papers were excluded from the REA, as they were found to not be of great relevance to the purpose of this review, as described previously. Fourteen of these were papers reporting evaluations of children living in Romanian orphanages who were randomly assigned to family foster care or to remain in the orphanage. Although the studies are compelling and indicate that family foster care is better than an orphanage, there is really no equivalent system or setting in modern-day Australia.

A list of these 22 papers, along with reasons for exclusion, appears in Table 2.

Figure 2: Flow of papers through the REA of OOHC

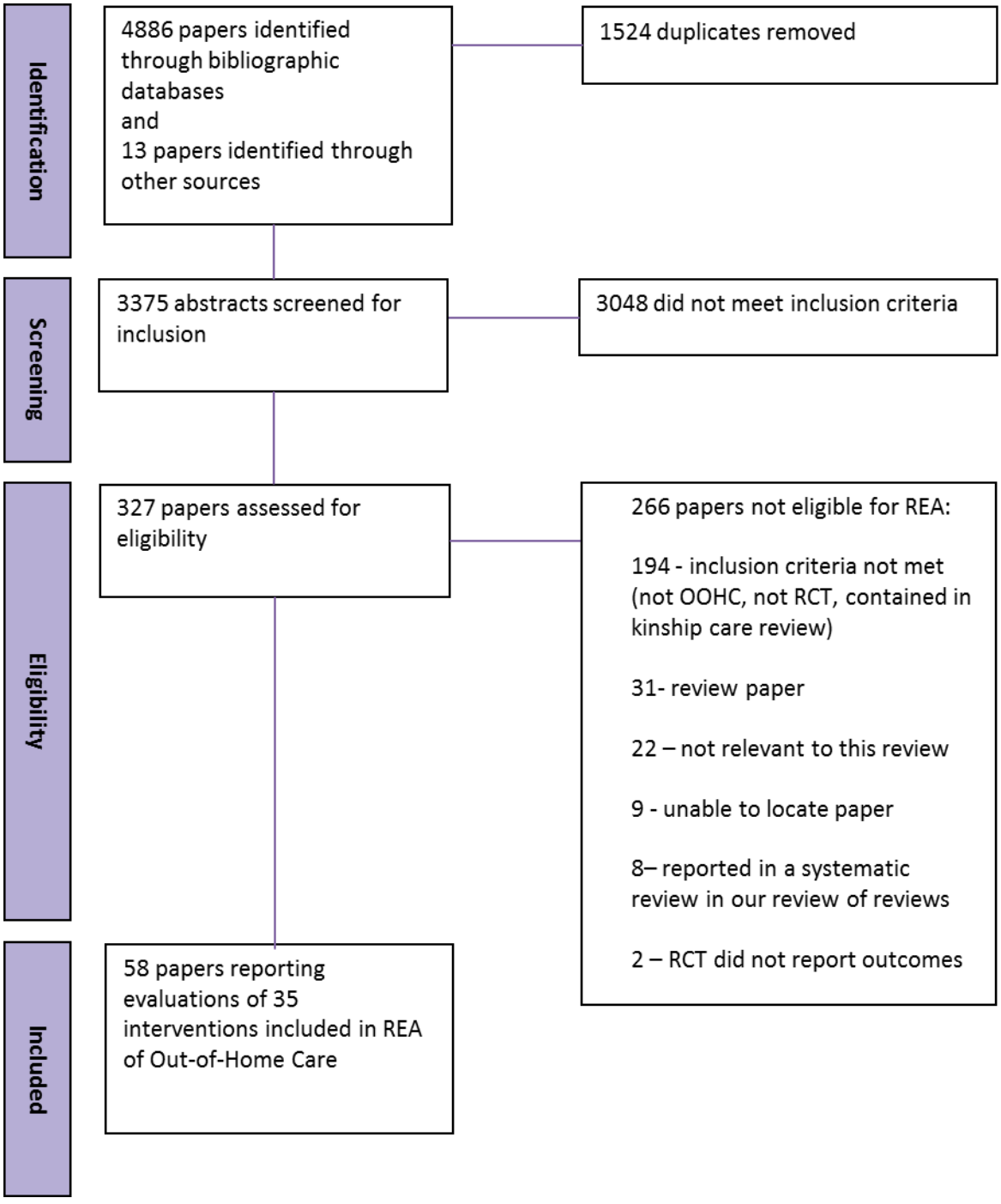


Table 2: Papers excluded from the REA because they were not relevant to this review

Papers excluded because they were not relevant to this review	Reasons why the papers were not relevant
Almas, A. N., Degnan, K. A., Radulescu, A., Nelson, C. A., III, Zeanah, C. H., & Fox, N. A. (2012). Effects of early intervention and the moderating effects of brain activity on institutionalized children's social skills at age 8. *PNAS Proceedings of the National Academy of Sciences of the United States of America, 109*(Suppl 2), 17228-17231.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Berument, S. K., Sonmez, D., & Eyupoglu, H. (2012). Supporting language and cognitive development of infants and young children living in children's homes in Turkey. *Child: Care, Health and Development, 38*(5), 743-752. doi: http://dx.doi.org/10.1111/j.1365-2214.2011.01314.x	Children in Turkish institutions
Bos, K. J., Zeanah, C. H., Jr., Smyke, A. T., Fox, N. A., & Nelson, C. A., 3rd. (2010). Stereotypies in children with a history of early institutional care. *Archives of Pediatrics & Adolescent Medicine, 164*(5), 406-411.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Bos, K., Zeanah, C. H., Fox, N. A., Drury, S. S., McLaughlin, K. A., & Nelson, C. A. (2011). Psychiatric outcomes in young children with a history of institutionalization. [Review]. *Harvard Review of Psychiatry, 19*(1), 15-24.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Dozier, M., Peloso, E., Lewis, E., Laurenceau, J.P., & Levine, S. (2008). Effects of an attachment-based intervention of the cortisol production of infants and toddlers in foster care. *Development and Psychopathology, 20*(3), 845-859.	The only outcomes reported is cortisol levels
Fisher, P. A., Stoolmiller, M., Gunnar, M. R., & Burraston, B. O. (2007). Effects of a therapeutic intervention for foster pre-schoolers on diurnal cortisol activity. *Psyhoneuroendocrinology, 32*, 892-905.	The only outcomes reported is cortisol levels
Fisher, P. A., Van Ryzin, M. J., & Gunnar, M. R. (2011). Mitigating HPA axis dysregulation associated with placement changes in foster care. *Psychoneuroendocrinology, 36,* 531-539.	The only outcomes reported is cortisol levels
Fox, N. A., Almas, A. N., Degnan, K. A., Nelson, C. A., & Zeanah, C. H. (2011). The effects of severe psychosocial deprivation and foster care intervention on cognitive development at 8 years of age: Findings from the Bucharest Early Intervention Project. *Journal of Child Psychology and Psychiatry, 52*(9), 919-928.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Gavita, O. A., David, D., Bujoreanu, S., Tiba, A., & Ionutiu, D. R. (2012). The efficacy of a short cognitive-behavioral parent program in the treatment of externalizing behavior disorders in Romanian foster care children: Building parental emotion-regulation through unconditional self- and child-acceptance strategies. *Children and Youth Services Review, 34*(7), 1290-1297. doi: http://dx.doi.org/10.1016/j.childyouth.2012.03.001	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Ghera, M. M., Marshall, P. J., Fox, N. A., Zeanah, C. H., Nelson, C. A., Smyke, A. T., & Guthrie, D. (2009). The effects of foster care intervention on socially deprived institutionalized children's attention and positive affect:	Romanian orphanages – Bucharest Early Intervention Project (BEIP)

Papers excluded because they were not relevant to this review	Reasons why the papers were not relevant
results from the BEIP study. *Journal of Child Psychology & Psychiatry & Allied Disciplines, 50*(3), 246-25.	
Kim, T. I., Shin, Y. H., & White-Traut, R. C. (2003). Multisensory intervention improves physical growth and illness rates in Korean orphaned newborn infants. *Research in Nursing & Health, 26*(6), 424-433.	Korean orphanages
Marshall, P. J., Reeb, B. C., Fox, N. A., Nelson, C. A., 3rd, & Zeanah, C. H. (2008). Effects of early intervention on EEG power and coherence in previously institutionalized children in Romania. *Development & Psychopathology, 20*(3), 861-880.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
McCall, R. B. (2011). Commentary: Handling long-term attrition in randomised controlled field trials: Lessons from the Bucharest Early Intervention Project and reflections on Fox et al. (2011). *Journal of Child Psychology and Psychiatry, 52*(9), 929-930.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
McLaughlin, K. A., Zeanah, C. H., Fox, N. A., & Nelson, C. A. (2012). Attachment security as a mechanism linking foster care placement to improved mental health outcomes in previously institutionalized children. *Journal of Child Psychology & Psychiatry & Allied Disciplines, 53*(1), 46-55.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
McGuinness, T. M., & Dyer, J. G. (2006). International adoption as a natural experiment. *Journal of Pediatric Nursing, 21*(4), 276-288.	Review related international adoption of children living in institutions
Oyemade, A. (1976). Factors influencing the growth of motherless babies reared in different environments. *Journal of Tropical Pediatrics and Environmental Child Health, 22*(2), 42-49.	Motherless babies in Nigeria
Rutter, M., Kumsta, R., Schlotz, W., & Sonuga-Barke, E. (2012). Longitudinal studies using a "Natural Experiment" design: The case of adoptees from Romanian institutions. *Journal of the American Academy of Child & Adolescent Psychiatry, 51*(8), 762-770.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Schott, E. (1937). IQ changes in foster home children. *Journal of Applied Psychology, 21*(1), 107-112.	Dated pre WWII
Sheridan, M. A., Fox, N. A., Zeanah, C. H., McLaughlin, K. A., & Nelson, C. A., 3rd. (2012). Variation in neural development as a result of exposure to institutionalization early in childhood. *Proceedings of the National Academy of Sciences of the United States of America, 109*(32), 12927-12932.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Smyke, A. T., Zeanah, C. H., Fox, N. A., Nelson, C. A., & Guthrie, D. (2010). Placement in foster care enhances quality of attachment among young institutionalized children. *Child Development, 81*(1), 212-223.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Smyke, A. T., Zeanah, C. H., Gleason, M. M., Drury, S. S., Fox, N. A., Nelson, C. A., & Guthrie, D. (2012). A randomized controlled trial comparing foster care and institutional care for children with signs of reactive attachment disorder. *The American Journal of Psychiatry, 169*(5), 508-514.	Romanian orphanages – Bucharest Early Intervention Project (BEIP)
Zeanah, C. H., Egger, H. L., Smyke, A. T., Nelson, C. A., Fox, N. A., Marshall, P. J., & Guthrie, D. (2009). Institutional rearing and psychiatric disorders in	Romanian orphanages – Bucharest Early Intervention Project (BEIP)

Papers excluded because they were not relevant to this review	Reasons why the papers were not relevant
Romanian preschool children. *American Journal of Psychiatry, 166*(7), 777-785.	

A further 11 papers were excluded from the review as these were reported in systematic reviews included in our review of reviews (see Table 3). Given that they had already been subject to the scrutiny of a high quality systematic review, it was decided that further review in this REA would not add value.

Table 3: Papers excluded from the REA because they were reported in systematic reviews in our review of reviews

Papers excluded from review that were included in systematic reviews
Chamberlain, P., Leve, L. D., & Degarmo, D. S. (2007). Multidimensional treatment foster care for girls in the juvenile justice system: 2-year follow-up of a randomized clinical trial. *Journal of Consulting & Clinical Psychology, 75*(1), 187-193.
Chamberlain, P., & Reid, J. B. (1998). Comparison of two community alternatives to incarceration for chronic juvenile offenders. *Journal of Consulting & Clinical Psychology, 66*(4), 624-633.
Fraser, M. W., Walton, E., Lewis, R. E., & Pecora, P. J. (1996). An experiment in family reunification: Correlates of outcomes at one-year follow-up. *Children and Youth Services Review, 18*(4-5), 335-361.
Lewandowski, C. A., & Pierce, L. (2004). Does family-centered out-of-home care work? Comparison of a family-centered approach and traditional care. *Social Work Research, 28*(3), 143-151.
Leve, L. D., & Chamberlain, P. (2005). Association with delinquent peers: Intervention effects for youth in the juvenile justice system. *Journal of Abnormal Child Psychology, 33*(3), 339-347.
Leve, L. D., & Chamberlain, P. (2007). A Randomized Evaluation of Multidimensional Treatment Foster Care: Effects on School Attendance and Homework Completion in Juvenile Justice Girls. *Research on Social Work Practice, 17*(6), 657-663.
Macdonald, G., & Turner, W. (2005). An experiment in helping foster-carers manage challenging behaviour. *British Journal of Social Work, 35*(8), 1265-1282.
Minnis, H., Pelosi, A. J., Knapp, M., & Dunn, J. (2001). Mental health and foster carer training. *Archives of Disease in Childhood, 84*(4), 302-306.
Ryan, J. P., Marsh, J. C., Testa, M. F., & Louderman, R. (2006). Integrating Substance Abuse Treatment and Child Welfare Services: Findings from the Illinois Alcohol and Other Drug Abuse Waiver Demonstration. *Social Work Research, 30*(2), 95-107.
Walton, E., Fraser, M.W., Lewis, R.E, Pecora, P.J. & Walton, W.K. (1993). In-Home Family-Focused Reunification: An Experimental Study. *Child Welfare, 72*(5), 473-487.
Walton, E. (1998). In-home family-focused reunification: A six-year follow-up of a successful experiment. *Social Work Research, 22*(4), 205-214.

There were an additional two papers excluded from the REA because they did not report outcomes. These were RCTs relevant to OOHC and were related to interventions included in the REA but they added no new information regarding intervention effectiveness. These two papers are listed in Table 4.

Table 4: Papers that were excluded from the REA because they did not report outcomes

Papers excluded from the REA because they did not report outcomes
Evans, M. E., Dollard, N., Kuppinger, A. D., Wood, V. M., Armstrong, M. I., & Huz, S. (1994). Development And Evaluation Of Treatment Foster Care And Family-Centered Intensive Case Management In New York. *Journal of Emotional and Behavioral Disorders, 2*(4), 228-239. doi: http://dx.doi.org/10.1177/106342669400200405
Taussig, H. N., Culhane, S. E., & Hettleman, D. (2007). Fostering healthy futures: an innovative preventive intervention for preadolescent youth in out-of-home care. *Child Welfare, 86*(5), 113-131.

4.2.2 Intervention effectiveness

Incorporating the findings of high quality systematic reviews into our rating of OOHC interventions

In the review of reviews, we located eight high quality systematic reviews related to OOHC. These were checked to determine whether they included meta-analyses (see Table 5).

Table 5: High quality OOHC systematic reviews involving meta-analysis

High quality systematic review identified in the review of reviews	Involved meta-analysis
Christoffersen, M. N. (2012). A study of adopted children, their environment, and development: A systematic review. *Adoption Quarterly, 15*(3), 220-237.	YES
Donkoh, C., Montgomery, P., & Underhill, K. (2006). Independent Living Programmes for Improving Outcomes for Young People Leaving the Care System. *Campbell Systematic Reviews, 8*.	NO
Saunders-Adams, S. M. (2011). Reunification and reentry in child welfare: A systematic review and meta-analysis. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 72*(6-A), 2158.	YES
Turner, W., Dennis, J., & Macdonald, G. (2007). Behavioural and Cognitive Behavioural Training Interventions for Assisting Foster Carers in the Management of Difficult Behaviour: A Systematic Review. *Campbell Systematic Reviews, 3*.	YES
Turner, W., & Macdonald, G. (2011). Treatment foster care for improving outcomes in children and young people: A systematic review. *Research on Social Work Practice, 21*(5), 501-527.	YES
van den Dries, L., Juffer, F., van Ijzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2009). Fostering security? A meta-analysis of attachment in adopted children. *Children and Youth Services Review, 31*(3), 410-421.	YES
van Ijzendoorn, M. H., Luijk, M. P., & Juffer, F. (2008). IQ of children growing up in children's homes: A meta-analysis on IQ delays in orphanages. *Merrill-Palmer Quarterly, 54*(3), 341-366.	YES
Winokur, M., Holtan, A., & Valentine, D. (2009). Kinship Care for the Safety, Permanency, and Well-Being of Children Removed from the Home for Maltreatment: A Systematic Review. *Campbell Systematic Reviews, 1*.	YES

Of the seven high quality systematic reviews relating to OOHC, seven included meta-analyses. These seven systematic reviews including meta-analyses were searched for evaluations of relevant OOHC interventions. This information was used to complement the results of our REA, in particular the ratings of intervention effectiveness.

Intervention effectiveness ratings

Data extracted from the papers and evaluations found in the systematic reviews with meta-analyses were compiled to form effectiveness ratings of the OOHC interventions. Of the 35 interventions assessed, one was rated Well Supported, three were rated Supported, none were rated Promising, eight were rated Emerging, and 14 were rated Pending. We found six interventions that Failed to Demonstrate Effect and a further three interventions that presented Insufficient Evidence required in order to rate their effectiveness. No interventions were rated as a Concerning Practice. Twenty-one of the interventions were programs, 13 were service models and one was a system of care. For a list of all included interventions, corresponding ratings, and papers reporting these interventions, please refer to Appendix 3. Refer to Table 6 for a breakdown of ratings by intervention type for interventions rated as Emerging or higher.

Table 6: Breakdown of interventions by rating category and intervention type

Type of intervention and rating	Well Supported	Supported	Promising	Emerging	Pending	Insufficient Evidence	Failed to Demonstrate Effect	Concerning Practice	Total
Program	0	2	0	6	7	1	5	0	**21**
Service model	1	1	0	2	7	2	0	0	**13**
System of care	0	0	0	0	0	0	1	0	**1**
Total	**1**	**3**	**0**	**8**	**14**	**3**	**6**	**0**	**35**

4.2.3 Effective interventions

In order to be considered potentially 'effective' in this REA, interventions needed to demonstrate effect in at least one RCT and for the effect to be maintained for least six months after the intervention had concluded. These criteria ensured that the interventions were tested using rigorous designs and that the effects were maintained once the participants were no longer receiving the intervention. Ideally, we would like to see results replicated in at least one more RCT, however the small pool of rigorous evaluations required some flexibility regarding what would be considered 'effective'. Interventions rated Well Supported, Supported, Promising or Emerging are considered potentially 'effective' for the purpose of this REA (*n* = 12). Summaries of the effective interventions appear in Appendix 4 detailing: intervention name (description where name not available), country, child population, setting, duration, staffing, costing / cost effectiveness, results (outcome with significant effect favouring intervention at post or number of months/years after post).

Well Supported interventions

In order to receive a rating of Well Supported, interventions needed to have been included in a systematic review involving a minimum of two RCTs, and 12-month follow-up. They needed to demonstrate a significant effect over the control condition at 12 months after the intervention had ceased. Our analysis of the included systematic reviews identified one intervention that met these criteria: Multi-dimensional Treatment Foster Care (MTFC). Refer to Appendix 4 for a summary of MTFC. Data extracted from all MTFC papers can be found in Appendix 5.

Multi-dimensional Treatment Foster Care (MTFC)

Intervention description

MTFC is a service model that aims to provide foster parents with the positive parenting skills needed to parent adolescents who would otherwise be in more restrictive non-family settings. They may have a history of maltreatment, mental health problems, serious medical conditions, or problems with chronic disruptive behaviour, such as criminal/offending, conduct disorder, and delinquency. These adolescents may not be suitable for regular foster care because of their behavioural problems and may have been at risk of multiple placements or placement breakdown, but the provisions of additional training and support to MTFC parents aims to increase prosocial behaviour and decrease deviant behaviour, enabling them to remain in foster care rather than a group care or more restrictive setting. This family-based intervention is individually tailored to the foster family's and child's needs and is delivered to both the youth and carers. The objective of MTFC is to address the complex needs of the youth, which regular foster care is unlikely to be able to do. Average participation in the service is for 6 to 12 months.

MTFC parents participate in 20 hours of pre-service training in treatment foster care, provided by the program supervisor and experienced foster parents. Ongoing supervision and support is provided during telephone calls and in weekly meetings.

The benefit-to-cost of the intervention is reported to be $43.70 USD for every dollar spent (www.wa.gov/wsipp; document #01-05-1201). According to the MTFC website

(http://www.mtfc.com/implementation.html), the following staff are required in order to run in intervention with approximately 10 beds:

- Full-time program supervisor
- Half-time individual therapist for MTFC-A or hourly playgroup staff for MTFC-P
- Half-time family therapist
- Skills trainer(s) at 20 to 25 hours a week per 10-bed program
- 75 FTE foster parent recruiter, trainer, and PDR caller
- One foster family for each placement (except sibling groups in MTFC-P)
- Psychiatry services on an hourly fee basis

Evaluation findings

The REA identified five RCTs reported in seven papers that were not included in the systematic review by Turner and Macdonald (2011). In an RCT testing the effectiveness of MTFC versus group care for offending youth (Chamberlain, Eddy & Whaley, 2004; Eddy & Chamberlain, 2000), intervention participants were found to have significantly better family management skills and lower deviant peer association scores at 12 months after leaving the service, and fewer criminal referrals for violent behaviour than control participants at 15 months after intervention completion.

Smith, Chamberlain and Eddy (2010) compared MTFC to group care in a USA RCT involving adolescents with chronic delinquency problems. In this study, MTFC youth were found to use significantly less tobacco, marijuana and other drugs at 15 months after the service ceased.

In a USA RCT involving adolescents with conduct disorders (Westermark, Hansson & Olsson, 2011), MTFC resulted in lower scores for youth externalising problems and lower maternal depression scores at 12 months after service completion for the intervention but not the control group.

In an RCT conducted in Sweden (Hansson & Olsson, 2012), MTFC was evaluated with youth with conduct disorders. Results indicate that at 12 to 15 months after the intervention, intervention youth had significantly better results than the treatment as usual group for psychosocial symptom load.

In another RCT conducted in the USA (Van Ryzin & Leve, 2012; Harold et al., 2013), MTFC targeted female adolescents with criminal referrals. Findings suggest that at 15 to 18 months after intervention completion, depressive symptoms were significantly improved for the intervention youth.

An additional RCT tested the feasibility of two modes of MTFC delivery, engagement of counties individually (IND) and Community Development Teams (CDT) (Chamberlain et al., 2008). Results

indicate that there was no significant difference on outcomes between the two modes of delivery.

Supported interventions

Supported interventions needed to be tested in a minimum of two RCTs. Effects favouring the intervention over the control needed to be observed in both RCTs and effects needed to be maintained 12 months after the completion of the intervention in at least one of these RCTs. In this REA, we rated three interventions Supported: Attachment and Biobehavioural Catch-up (ABC); Multidimensional Treatment Foster Care for Preschoolers (MTFC-P) (previously called Early Intervention Foster Care Program (EIFC)) and TAKE CHARGE. A tabulated summary of Supported interventions appears in Appendix 4. Data extracted from papers reporting RCTs of the interventions rated as Supported can be found in Appendix 6.

Attachment and Biobehavioral Catch-up (ABC)

Intervention description

ABC is a program that targets foster carers of children aged less than six years, who have been maltreated or who are at risk of maltreatment or who exhibit attachment related problems that threaten to disrupt their foster care placement. The program is delivered in the OOHC home in 10 sessions over 10 weeks by trained and supervised 'coaches' who have a minimum of a bachelor's degree and experience working with at-risk families. Coaches are paid between $30,000 USD and $40,000 USD per annum (though this figure could vary by location).

Evaluation findings

This REA identified three RCTs that evaluated ABC, all from the USA. Initial post intervention effects were observed in Sprang (2009), in which the intervention group had better scores for child abuse potential, internalising and externalising problems and parental stress than the control group. Dozier et al. (2006) and Dozier et al. (2009) assessed effect at one-month after intervention completion. They found that intervention children had fewer behaviour problems and less avoidant behaviour than control group children. Lewis-Morrarty, Dozier, Bernard, Terracciano and Moore (2012) observed intervention effects at 12 months after the intervention ended. Children in the intervention also had greater cognitive flexibility and improved theory of mind. Theory of mind is the ability to attribute mental states such as knowledge, desires and beliefs to oneself and one's action and understand that other have mental states that are different from your own.

Multidimensional Treatment Foster Care for Preschoolers (MTFC-P)

Intervention description

Like MTCF, MTFC-P is a service model in which foster parents and children are provided with training and support in the foster care setting. However, children in this intervention are of preschool age rather than adolescents. Papers identified in this REA reported the participants to be aged from two and seven years. Average duration of the service is from 9 and 12 months and it is delivered in the OOHC home and preschool settings.

Evaluation findings

The REA found three RCTs of MTFC-P. All of these were conducted in the USA. Bruce, McDermott, Fisher and Fox (2009) reported improvements in electrophysiological measures as a result of the intervention. In another RCT (Fisher & Kim, 2007; Fisher & Stoolmiller, 2008; Fisher, Kim & Pears, 2009), immediate post-intervention effects were observed for: secure attachment and avoidance behaviour (Fisher 2007) and caregiver stress (Fisher & Stoolmiller, 2008). Fisher et al. (2009) reported effects at 12 months after interventions cessation for successful permanency attempts; and overall permanency.

Fisher, Burraston and Pears (2005) report the effects of this intervention when it still used the name Early Intervention Foster Care Program (EIFC). At 24 months post-baseline (approximately 15 to 18 months after intervention completion), intervention children had fewer failed permanent placements than control children.

TAKE CHARGE

Intervention description

TAKE CHARGE is a program for adolescents in foster care who are receiving public special education. The program focuses on self-determination and provides support for the academic needs of the young people, and transition education and planning for those leaving care. A high proportion of the child population in the papers identified in the REA had a history of maltreatment, including neglect and sexual, physical and emotional abuse. The program is delivered to young people in the school setting over a 12-month period by trained and supervised 'coaches', two of whom were identified as staff and three as Master of Social Work students. Mentoring is also provided to the young people by adults with disabilities who were previously in foster care. Support for parents is also provided. No costing information was available.

Evaluation findings

This REA identified two RCTs of TAKE CHARGE; both conducted in the USA. Geenan et al. (2012) assessed the effectiveness of TAKE CHARGE for young people in early secondary school. Results at nine months after completion of the intervention indicate that students in the intervention group but not students in the group had an increase in identification of academic goals and self-attribution, increased education planning knowledge and engagement, increased credits towards graduating, increased time spent on homework, decreased anxiety and depression and reduced withdrawn behaviours and somatic complaints.

A second RCT (Powers et al., 2012) focused on transition from care and found effects at 12 months after intervention cessation for: self-determination, youth-identified accomplishments, quality of life, use of transition services, and engagement in key independent living activities.

Promising Interventions

To be rated Promising, interventions needed have been tested in a minimum of two RCTs and to have demonstrated pre-post effect over the comparison condition in both of these. Effect needed to be maintained until at least six months post-completion of the intervention in one of these RCTs. We identified no interventions in the 'Promising' category in this REA.

Emerging Interventions

To receive a rating of Emerging, interventions needed to demonstrate a significant effect over the comparison group in at least one RCT, and this effect needed to be maintained until at least the six-month follow-up. Unlike the interventions rated Promising and above, the Emerging interventions demonstrated no replication of effect. While these interventions may be effective in improving child, parent or family outcomes in these single studies, benefits must be reproduced with another sample before the intervention is upgraded to promising or better. Eight Emerging interventions were identified in this REA: Assertive Continuing Care (ACC); Big Brothers-Big Sisters; a combined cognitive behavioural program and educational program; Fostering Healthy Futures (FHF); Kids in Transition to School (KITS); Life Story Intervention (LSI); Middle School Success; and Together Facing the Challenge (enhanced Treatment Foster Care). Tabulated summaries of the Emerging interventions can be found in Appendix 4. Data extracted from papers reporting RCTs of the interventions rated as Emerging can be found in Appendix 7.

Assertive Continuing Care (ACC)

Intervention description

ACC is a service model for adolescents with alcohol or other drug dependence issues who are transitioning from care or leaving care. The service lasts for approximately 52 days and is delivered in an OOHC home and in the community. Young people receiving ACC receive 90 days of case management following discharge from residential treatment. Case managers receive supervision and training on the use of the treatment manual and sessions with case managers are monitored by a supervisor. No information on costing or cost effectiveness were available.

Evaluation findings

A study from the USA reported effects for the intervention group over the control with greater continuing care linkage and retention post-intervention and increased abstinence from marijuana at six-month follow-up (Godley, Godley, Dennis, Funk & Passetti, 2006).

Big Brothers-Big Sisters

Intervention description

Big Brothers-Big Sisters is an intensive relationship-based service model with the goal to promote the positive development of at-risk youth through relationships with well-functioning adults. Staff are volunteer mentors, and case managers monitor the mentor-youth matches. It is delivered in foster and kinship care in a community setting. USA financial statements are available on the Big Brothers-Big Sisters website in the form of annual reports and audits. (http://www.bbbs.org/site/c.9iILI3NGKhK6F/b.5961455/k.6E75/Financial_Statements.htm). No synthesis of this information is available, but an estimate of costing could be gleaned by viewing recent audits.

Evaluation findings

The REA identified one OOHC RCT for Big Brother-Big Sisters in which the average length of the matches was 12 months, and more than 70% of the youth met with their mentor one or more times per week. This evaluation found that foster youth improved in prosocial behaviours and self-esteem at six-month follow-up (Rhodes, Haight & Briggs, 1999) whereas controls did not.

Combined Cognitive Behavioural program and Educational program

Intervention description

The Cognitive Behavioural program and Educational program are designed to help adoptive parents be in better control of difficult behaviour and provide the children with a consistent, responsive, parenting environment. The Cognitive Behavioural program is an adaptation of the Webster-Stratton Incredible Years program whereby adoptive parents are shown how to increase acceptable behaviour by using praise and rewards, to ignore unacceptable behaviour, set firm limits and use “logical consequences” and problem-solving skills. The adaptation places emphasis on the need for adopters to conduct daily play sessions with their child and it provides a higher level of assistance to parents if their child rejects praise and/or rewards.

The educational program was aimed towards improving the adoptive parents’ understanding of the children’s current behaviour, encouraging greater empathy and helping them to see how past experience and present behaviour might be connected. Its intention was to shed light on the

possible origin of problems rather than attempt to identify specific causes. By actively addressing the manner in which adoptive parents respond to parenting challenges, they are better able to anticipate events and thereby increase their ability to manage the behaviour.

Both programs were delivered in 10 sessions by trained and experienced child and family social workers who are familiar with adoption. Program delivery occurred in an OOHC home and was related to adoption and permanency. Detailed cost effectiveness analysis can be found in Sharac, McCrone, Rushton and Monck (2011). The following is an excerpt taken from Sharac et al. (2011):

"The mean (SD) costs at baseline for the combined intervention group and for routine care were £3058 (£2119) and £3001 (£3232) respectively. At T2 the mean (SD) costs for the combined intervention group was £3186 (£2087) and for the routine care group the cost was £1641 (£2021). The difference controlling for baseline was £1528 and this was statistically significant (bootstrapped 95% CI, £67 to £2782). By T3 the costs for the intervention group were £1511 (£1352) and £1738 (£3532) for routine care. The difference controlling for baseline was £222, but this was not statistically significant (bootstrapped 95% CI, -£2384 to £1182). Over the entire follow-up period, the mean (SD) costs for the intervention group were £5043 (£3309) and £3378 (£5285) for the routine care group. The adjusted difference was £1652, which was not statistically significant (95% CI, -£1709 to £4268)."

Evaluation findings

The REA identified one UK OOHC evaluation for the combined cognitive behavioural program and educational program (Rushton, Monck, Leese, McCrone, & Sharac, 2010; Sharac et al. 2011). All children in the study were aged from three years to seven years 11 months at the time of placement with a score on Strengths & Difficulties Questionnaire of >13 (parents) and/or >11 (social worker), and not suffering from severe physical or learning difficulties. This evaluation found intervention parents were more satisfied with parenting and exhibited less 'shouting' and 'telling off' than the control group at six-month follow-up.

Fostering Healthy Futures (FHF)

Intervention description

Fostering Healthy Futures (FHF) is a community-delivered nine-month prevention program for pre-adolescent youth (ages 9-11) placed in OOHC because of maltreatment. The intervention involves a skills group, which children attend on a weekly basis. Group leaders help the children to process OOHC experiences. Group leaders must hold either a Master's or Doctorate degree and should have significant clinical experience working with high-risk youth. For the duration of participation, children are matched to mentors, who are graduates of the program. Mentors provide 1:1 role -modelling, advocacy and social skills support, in addition to the time spent in the skills group.

USA financial information is available at (http://www.cebc4cw.org/program/fostering-healthy-futures-fhf/detailed). The costing information that follows is taken from this website:

"Funds to reimburse mentors for mileage and for business class automobile insurance when needed. Mentors must use their own cars and must provide their own basic automobile insurance. $10/week per child is given to mentors to cover the costs of mentoring activities."

Taussig et al. (2012) also provide this information on costing "the average length of stay in an RTC was 177 days at a cost of $30 329. For foster care (through child placement agencies), the average length of stay was 227 days, costing $12485. Although there may be a cost savings associated with the FHF program, we must caution that these improved placement and permanency outcomes may not translate to better child well-being. Although the pattern of results suggests that improvements in childhood functioning may be driving intervention effects on placement and permanency outcomes, the resulting impact on child functioning is not yet known."

Evaluation findings

FHF has been evaluated in one USA OOHC RCT for children aged from 9 to 11 who had been placed in foster care by court order due to maltreatment (Taussig & Culhane, 2010; Taussig, Culhane, Garrido, & Knudtson, 2012). In this evaluation program participants had fewer mental health symptoms and an increased quality of life post-intervention and a smaller percentage were receiving mental health therapy at six months. At one-year follow-up participants were less likely to be placed in residential treatment. They had increased reunifications (for youth whose parental rights had not been terminated), fewer placement changes and a higher number had attained permanent placement.

Kids in Transition to School (KITS)

Intervention description

The Kids in Transition to School (KITS) is a focused, short-term program to increase school readiness before kindergarten entry and promote better subsequent school functioning in children in foster and kinship care. The program features a 16-week group-based school readiness curriculum for children and groups for caregivers. It occurs in two phases. The school readiness phase (approximately two-thirds of the curriculum) occurs in the two months before kindergarten entry and includes child playgroups that meet twice weekly and caregiver groups that meet twice monthly. This phase is focused on preparing children for school. The transition/maintenance phase occurs in the first two months of kindergarten, during which the children meet once a week for playgroups and the caregivers continue to meet twice monthly. This phase focuses on supporting a positive transition to school. A graduate-level teacher and two assistant teachers conduct the school readiness groups with 12 to 15 children using a manualised set of empirically based instructional and positive behaviour management strategies. No information on costing or cost effectiveness was available.

Evaluation findings

An OOHC evaluation by Pears, Kim, & Fisher (2012) reported reduced aggressive and oppositional behaviours and an overall reduction in the level of disruptiveness in class approximately 10 months after the intervention ended.

Life Story Intervention (LSI)

Intervention description

Life Story Intervention (LSI) is a mental health program adapted for individual rural children aged from 7 to 17 affected by parent methamphetamine abuse by a trans-disciplinary team including a child clinical psychologist, counsellor, psychiatrist, developmental psychologist, child welfare professional and social worker. It is a narrative-based and relationship-based intervention administered in and around the children's foster or kinship care homes by community-based, master's degree level professionals experienced in working with children, e.g., teachers, child welfare professionals, counsellors. Over a seven-month period, children meet individually for weekly sessions of one hour in an OOHC and community setting. No information on costing or cost effectiveness was available.

Evaluation findings

A USA OOHC evaluation of children aged from 7 to 15 reported improved strategies used during a leave-taking sequence post-intervention and reductions in externalising behaviours at seven-months follow-up (Haight, Black & Sheridan (2010); Haight et al. 2005).

Middle School Success

Intervention description

The Middle School Success (MSS) program aims at promoting healthy adjustment in adolescent girls in foster care during the transition to middle school. The long-term objective is to prevent delinquency, substance use, and related problems. The intervention consists of two primary components: (a) six sessions of group-based caregiver management training for the foster parents and (b) six sessions of group-based skill-building sessions for the girls. The groups meet twice a week for three weeks, with about seven participants in each group. Group coaches are recent female college graduates who are trained and supervised to serve as role models of prosocial behaviour and confidantes to discuss issues around family and peer relations. The caregiver sessions are led by one facilitator and one co-facilitator. The child sessions are led by one facilitator and three assistants to allow a high staff-to-child ratio (1:2). No information on costing or cost effectiveness was available.

Evaluation findings

One USA OOHC evaluation reported lower levels of substance use and reduced delinquency at 35-months follow-up (Kim & Leve, 2011).

Together Facing the Challenge (enhanced Treatment Foster Care)

Intervention description

The Together Facing the Challenge (TFC) provides therapeutic care and treatment foster care to children. It also involves supervision and support of treatment parents by TFC supervisory staff and proactive teaching-oriented approaches to problem behaviours. Training with treatment parents are conducted over a six-week period, with 2.5-hour sessions once a week. Topics include: building relationships and teaching cooperation, setting expectations, using effective parenting tools to enhance cooperation, implementing effective consequences, preparing youths for the future, and taking care of self. All training sessions are led by the program director, with

assistance from agency TFC supervisors. Supervisors receive two days of training. No information on costing or cost effectiveness was available.

Evaluation findings

One USA OOHC evaluation of youth in foster care with a mean age of 12 years reported reduced problem behaviours at 10.5-months follow-up (Farmer, Burns, Wagner, Murray, & Southerland, 2010).

Synthesis of effective interventions

The following section provides a narrative synthesis of the Well Supported, Supported and Emerging interventions. These interventions can more confidently be labelled as 'potentially effective', because they have demonstrated effect in at least one RCT and effect results have been maintained for at least six months after the intervention. This information appears in tabulated form in Appendix 3 and 4, listed separately for each of the interventions.

Intervention type

Eight of the potentially effective interventions were programs and four were service models. The one system of care identified in the REA (MST) was not rated among the 'potentially effective' interventions. The majority of the interventions were delivered solely or partly in the OOHC home setting (*n* = 9). Five were based solely or partly in the community. We identified two that were based in a clinical setting and two evaluations in a school setting.

Place on the continuum of OOHC

Most of the interventions (*n* = 7) were related to foster care, with an additional three specifically pertaining to therapeutic/treatment foster care. Although we did not include kinship care in the REA portion of the review due to the presence of the Winokur et al. systematic review (2008), three of the seven foster care interventions also had application for kinship care (Big Brothers-Big Sisters, KITS, LSI). One of the interventions referred to the broader category of OOHC or looked after children (FHF), with no other more specific information provided. We also identified two interventions supporting young people in the transition from care or when leaving care (TAKE CHARGE, ACC). Only one intervention targeted placement preservation/stability (MTFC-P) and another targeted adoption/permanency (a combined cognitive behavioural program and educational program).

Child population

Three of the interventions targeted adolescents only, with one of those specifically targeting those in special education (TAKE CHARGE), one targeting adolescents with issues of conduct disorders/delinquency/criminality (MTFC), and one for adolescents with alcohol and drug dependency issues (ACC). Three additional interventions targeted children in the preadolescent and early adolescent periods, with one of those specifically targeting children of parents with drug dependency issues (LSI).

Five of the interventions included children who had experienced some form of maltreatment such as neglect or sexual, physical or emotional abuse. A further intervention specifically targeted children (aged 9 to 11 years) who had been maltreated (FHF).

Four interventions were designed for young children, with two of those for children below primary school age (under six years) and two including children of preschool and early primary school age.

Intervention duration

Information on exact duration or minimum required dose was not indicated for many interventions. Instead, some provided a range or average length of time receiving the service. We identified six brief interventions that were between 3 and 16 weeks in duration. The remaining six interventions lasted from 6 to 12 months.

Evaluation country

Eleven of the interventions were evaluated in the USA, with one additional intervention evaluated in both the USA and Sweden (MTFC). One intervention was evaluated in the UK (a combined cognitive behavioural program and educational program). No Australian RCTs were identified in this REA.

4.2.4 Interventions with initial effect

The REA identified several interventions that have not met the replication and maintenance requirements for us to say that they are effective, but they have been evaluated in RCTs and show some positive results in favour of the intervention. These have been called Pending interventions.

Pending interventions

Interventions rated as Pending demonstrated significant effect over the comparison condition from pre to post in one RCT but they did not meet the six-month maintenance requirement. While these interventions appear to show some benefit for participants, further research is needed to determine whether these benefits will be sustained or diminish in the absence of the intervention. We identified 14 Pending interventions in the REA: Alameda Project; Connecticut Waiver Demonstration Project Local Service Agencies; Home visitation (description only, name not available); Early Citizen Review; Families for Iowa's Children (FIC); Fostering Individualized Assistance Program (FIAP); Incredible Years Parenting Program; Keeping Foster Parents Trained and Supported (KEEP); Multisystemic Therapy (MST) adapted for youth with SED (serious emotional disturbance); Project Focus; Promoting First Relationships (PFR); Ross Program; SafeCare; and Teach Your Children Well (TYCW).

4.2.5 Interventions with no effect at this stage

Insufficient Evidence

The REA identified three interventions that had insufficient evidence. Interventions received a rating of Insufficient Evidence when it was not possible to determine the effect of the intervention because, for example, only mid-intervention or subgroup results were reported, results did not include measures of significant differences between groups, or only process outcomes and no child, carer or family outcomes were reported. While these interventions showed no harm and may be of some benefit for participants, we did not have enough information to make clear decisions about effect. Further research is needed to determine

whether they are effective. The interventions with insufficient evidence were: Intervention for foster parents and girls (description only, no name available); Therapy for children in foster care (description only, no name available); and Family-Centered Intensive Case Management (FCICM).

Failed to Demonstrate Effect

Six interventions were found in the REA that had been tested in at least one RCT and had shown no significant benefit over a comparison condition. Although these interventions demonstrated no harm, these interventions show no clear benefit at this stage. It is possible that further research will show some effect for these interventions. The six interventions were: Anger Control; Child and Adolescent Service System Program (CASSP) framework - Stark County; Child Training; Cognitively Based Compassion Training (CBCT); Community mental health care (description only, no name available); and Family Group Decision Making (FGDM).

4.3 Results: Supplementary information

In this section we provide additional information about OOHC interventions that are of interest to the ACT context, but were not covered in the review of reviews or the REA.

4.3.1 Transition to Independence

The poor outcomes for youth who age out of foster care are well-known, but there have been few rigorous longitudinal studies providing the detail sufficient to begin working on preventative approaches. The Midwest Study is an exception (Courtney et al., 2009; 2011). This study (conducted across three American states) aimed to provide a comprehensive view of how young people were faring as they transitioned from foster care to adulthood. The study sample consisted of young people from Iowa, Illinois and Wisconsin, who were in statutory care at the age of 17 for reasons other than delinquency, and had entered care before they turned 16. Baseline interviews were conducted with 732, or 96%, of the young people from the sample, and four additional waves of interviews were conducted, when most of the study participants were aged 19, 21, 23-24 and 26 respectively. The data was compared with data from a nationally representative sample of young people who participated in the National Longitudinal Study of Adolescent Health (the Add Health Study).

The following discussion focuses on data collected at the ages of 23-24 and of 26. The evidence indicates that young people who had been in foster care were doing worse on most indicators than the general population as represented by the Add Health Study. In some cases, changes in outcomes at the different age levels can be interpreted as part of the normal growing up processes (e.g., gradual separation from biological family, rising levels of sexual activity, pregnancy and parenthood).

The number of young people in the study reporting economic hardship in the past year was 47.5% at age 23-24 and 45% at age 26, while reports of economic hardships from Add health participants were considerably lower and dropped more noticeably from 23% to 18%. At age 26, three-quarters of the young women, compared to less than half of the young men, had received means-tested government benefits.

The following discussion focuses on data collected at the ages of 23-24 and of 26. The evidence indicates that young people who had been in foster care were doing worse on most indicators than the general population as represented by the Add Health Study. In some cases, changes in outcomes at

Some data indicate that Midwest participants were doing worse as they grew older, while the trend for the Add health sample was for economic improvement.

Midwest participants were less likely to be employed, and earned less when they were employed, than the young people in the Add Health Study. Employment levels dropped between the ages of 23-24 and 26, from 52% to 48% (compared with an increase of 76% to 80% for the Add health sample). They were also less likely to have a bank account, own a vehicle or their own home. Many had outstanding debt beyond student, home or care purchase loans - more than a third at age 26.

Other outcomes for young people who had been in foster care that arose from the study include the following:

- At both these stages, young people were less likely to be living in their own home or with their biological parents than young people in the Add Health Study. At age 23-24, 37% reported having been homeless or “couch-surfed”; this figure had dropped to 31% at age 26.

- Most young people in the study, felt ‘very close’ to at least one member of their biological family. As might be expected of this age group, the numbers dropped slightly as the young people grew older – 79% at age 23-24 and 74% at age 26.

- Aged 23-24, 17% of Midwest participants were enrolled in education, compared to 23% from the Add Health sample. At age 26, young people who had been in foster care were much less likely to have obtained qualifications at all educational levels. Midwest participants were one-third as likely as their Add Health peers to have obtained a high school diploma or GED, one-sixth as likely to have a post-secondary degree (46% v 8%) and one-ninth as likely to have a degree from a four-year school (36% v 4%).

- While the vast majority of Midwest participants described their health as good to excellent, they were nevertheless more likely than the comparison group to describe their health as fair or poor and to report a disability. They were also less likely to have health insurance.

- One in five Midwest Study participants reported receiving mental or behavioural health care services during the past year, with psychotropic medication being the most common and substance use treatment being the least common.

- By age 26, Midwest young women were 1.8 times more likely than their Add Health counterparts to report having had a child. They were six times as likely to report that at least one of their biological children was living with someone else. Young men were

almost twice as likely as their Add Health counterparts to report being the birth father of at least one living child. Midwest Study fathers were less likely to report living with at least one biological child and 1.8 times more likely to report that at least one biological child was living with someone else.

- Young people of both genders in the Midwest study reported much higher levels of involvement with the criminal justice system over time.

4.3.2 Extending Care to Age 21

It is now increasingly common for young people to live at home with their parents, or remain financially dependent on them, beyond their school years, sometimes up to their mid-20s. Yet when young people in care reach the age of 18, most are forced to move to independent living arrangements, despite this group being less emotionally mature and more vulnerable.

Extending care would enable these young people to remain in one of a possible range of supervised living arrangements. These could include non-related foster care, kinship care, lead tenant or other supervised independent-living arrangements. These extra years of support and accommodation could provide a more fruitful opportunity to develop necessary life skills and resources than prior to 18 when many are too young to benefit.

There is some evidence to suggest that remaining in care can protect young women from becoming pregnant. Using data from the Midwest research (described above), Dworsky & Courtney (2010b) examined the links between remaining in care and teenage pregnancy. They compared the Out-of-Home Care experiences of young people in Illinois, where full foster care can be provided until age 21, to young people who had experienced care in Iowa and Wisconsin, where extended care is not an option and ends at age 18. In their interviews of participants at 17 or 18 years of age, and then at 19, Dworsky & Courtney (2010b) found that although 19-year-olds who were still in care were as likely to have been pregnant before their baseline interview as 19-year-olds who were no longer in care, the former were significantly less likely to have become pregnant since their interview at 17 to 18. They were also significantly less likely to have become pregnant more than once.

By its very nature, extended care can also prevent young people from becoming homeless. However, care should be taken not to assume that extra years in care alone will automatically improve long-term outcomes for these young people. Again, using data from the Midwest study, and using the same methodology as above, Dworsky & Courtney (2010a) looked at homelessness rates for participants at 19 years, then again at 21, and finally at the age of 23-24. At age 19, Illinois young people were 2.7 times less likely to have been homeless than their Wisconsin and Iowa peers. By the age of 21, however, when all participants in the study had left care, Illinois participants were just as likely to have experienced homelessness as their peers from the other two states. Nonetheless, homelessness was likely decreased in terms of overall days of being homeless simply due to the fact that the youth in Illinois had somewhere to go up until the age of 21.

Results from this natural experiment indicate that, while there may be some benefit to extending care to age 21, it is not a panacea. The quality of care for those years is likely a major determinant of outcomes. That is, extending a good out-of-home care experience probably results in better outcomes than would otherwise be observed.

5. DISCUSSION

The purpose of this analysis was to conduct an REA of OOHC. This included rigorous evaluations of care provided across the continuum, with a focus on identifying OOHC interventions that have the best chance of improving outcomes for children and young people, while also taking cost into account. In this section, we pull together the findings of the REA, outline critical implementation considerations, discuss implications for the field, describe the limitations of this analysis and provide concluding remarks.

5.1 Summary of findings

This REA identified 35 OOHC interventions evaluated in RCTs. Of these, only one was rated Well Supported (MTFC) and three were rated Supported. These four interventions are ones that we can most confidently call effective because of the rigour of the evaluations and the replication and maintenance of effect at 12 months after the completion of the intervention. We found eight interventions that we rated Emerging as they showed effect in one RCT with at least six months maintenance. These interventions rated Emerging and above have been grouped together in this report and referred to as 'effective' because of the rigour of their evaluations and because they have demonstrated that effects have not diminished in the absence of the intervention. This is a conservative list of effective interventions which reflects the level of rigour we have utilised when rating these interventions, in particular the use of information reported in high quality systematic reviews with meta-analyses to rate the Well Supported intervention.

Most of the effective interventions were evaluated in the USA (*n* = 11) and most were programs (*n* = 8), followed by service models (*n* = 4) and most were based in an OOHC setting (*n* = 9). Most interventions related to foster care (*n* = 10) and they targeted children ranging from age two through to and including adolescence. Half of the effective interventions were brief, while the remaining lasted from 6 to 12 months.

We rated no interventions as a Concerning Practice. There were however 17 interventions that did not meet our criteria to be called effective. These presented results that did not allow us to determine intervention effect (*n* = 3), had shown no effect using a rigorous design (*n* = 6) or had shown effect but had not demonstrated maintenance of this effect (*n* = 14). Further research may add to the evidence for these interventions.

Findings from high quality systematic reviews and from the REA support the use of MTFC, suggesting slightly better outcomes for children, particularly in comparison to residential or group care (placements that tend to be more expensive and associated with relatively poor outcomes).

Systematic reviews also tell us that kinship care has good outcomes for children with better placement stability and a higher rate of permanency. However, children in kinship care are less likely to use mental health services, less likely to be adopted and may experience slower reunification.

In addition, the findings of systematic reviews favour early adoption and foster care over child institutionalisation. We also have found that standard Independent Living programs are not likely to make a difference for child outcomes.

5.2 Implementation considerations

While the identification of effective interventions can be helpful when practitioners, agencies, and policy-makers are searching for interventions in which to invest, the emphasis on identifying and cataloguing effective interventions has not been matched by a corresponding effort to systematically assess the extent to which interventions are implemented and evaluate the impact of this on intervention outcomes (Aarons, Sommerfield & Walrath-Greene, 2009). This is despite strong evidence that the quality of the implementation of an intervention has an impact on desired outcomes; it is a feature of service provision that is not considered as often as it should be. In an effort to combat this widespread oversight, we think it is important to stress the importance of implementation as the ACT considers which interventions to investigate more deeply. This section addresses issues related to the quality of implementation of OOHC interventions in the Australian context by describing, in a more general way, some critical considerations regarding the implementation of interventions.

By 'Implementation' we are referring to a set of planned and intentional activities that aim to put into practice interventions or empirically supported practices (ESPs) within real-world service settings (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Mitchell, 2011). Implementation is a process, not an event, and should be distinguished from adoption, which is defined as the formal decision to use an intervention or set of ESPs (Mitchell, 2011). Effective implementation has more traditionally referred to the full implementation of all components of an intervention or practice, as planned by the original developer(s). More recently, implementation researchers have systematically started to examine the degree to which core components of a program can be maintained while allowing for local adaptation as a way of accommodating what may be needed at a system, policy or organisational level to facilitate effective implementation and sustainment of the intervention or ESPs (e.g., Aarons et al. 2012).

Implementing effective interventions is complex and challenging, and many previous efforts to implement effective interventions in the family support sector have not reached their full potential because of a variety of issues inherent in service provision setting and the implementation process itself (Aarons, Hurlburt & Horwitz, 2011; Mildon & Shlonsky, 2011). Without addressing these organisational and individual challenges as part of a planned, purposeful and integrated implementation strategy, interventions, even effective ones, may not produce the desired effects for caregivers and children. Therefore, attention to **how** an intervention is implemented is as important to child, carer and system outcomes as **what** is implemented. To ensure that government spending is directed at services and programs known to be associated with positive results, and to ensure that limited dollars are invested in interventions that are more likely to make a difference to children, we must attend to the evidence that an intervention works and the way that that intervention should be implemented.

Over the last 10 years, implementation researchers have increased their efforts to describe the process of implementation. These can be descriptions of the main steps involved in implementation and/or more refined conceptual frameworks based on research literature and practical experiences such as theoretical frameworks and conceptual models (Meyers, Durlak & Wandersman, 2012).

Frameworks for implementation are structures that describe the implementation process and include key attributes, facilitators, and challenges related to implementation (Flaspohler, Anderson-Butcher, & Wandersman, 2008). They provide an overview of practices that guide the implementation process and, in some instances, they can provide guidance to researchers and practitioners by describing specific steps to include in the planning and/or execution of implementation efforts, as well as pitfalls or mistakes that should be avoided (Meyers et al., 2012).

While there is no agreed upon standard in the field, some efforts have been made to synthesise these approaches to implementation. For example, Meyers et al. (2012) conducted a synthesis of 25 implementation frameworks. Frameworks were sought across multiple research and practice areas as opposed to focusing on a specific field (e.g., Damschroeder et al., 2009 who focused on the health care field). Only frameworks that described the specific actions and behaviours (i.e., the "how to") that can be utilised to promote high quality implementation were included in the synthesis. The authors argued that systematically identifying these action-oriented steps served as practical guidance for planning and/or executing implementation efforts. They found that many frameworks divided the process of implementation into several temporal phases, and within these phases, there was considerable agreement on the critical elements or activities conducted within each. Their synthesis found 14 elements that could be divided into four distinct temporal phases of implementation.

The first phase is *Initial Considerations Regarding the Host Setting* and contains a number of elements all of which described work that focused primarily on the ecological fit between the intervention and/or practice and the host setting. Activities here commonly include assessment strategies related to organisational needs, innovation-organisational fit, capacity or readiness assessment, exploring the need for adaptation of the program or practice and how to do it, obtaining buy-in from key stakeholders and developing a supportive organisational culture, building organisational capacity, identifying or recruiting staff and conducting some pre-implementation training.

The second phase is *Creating a Structure for Implementation*. Here the focus of the work can be categorised into two elements: developing a plan for implementation and forming an implementation team which clearly identifies who is responsible for the plan and tasks within it. The third and fourth phases incorporate the actual *doing* of the implementation (whereas, the first two phases focus on *planning* for implementation).

Phase three, *Ongoing Structure Once Implementation Begins,* incorporates three elements: technical assistance (including training, coaching and supervision), monitoring implementation

(process evaluation) and creating supportive feedback mechanisms to ensure all relevant players understand how the implementation process is progressing.

Phase four is *Improving Future Applications.* Here the element is identified as learning from experience, which commonly involves retrospective analysis and self-reflection including feedback from the host setting to identify particular strengths or weaknesses that occur during implementation.

The authors highlighted that many of the frameworks included in the synthesis were based upon what had been learned about implementation from practical experience and through staff feedback. There were few instances in which studies empirically tested the implementation framework that had been applied and modified based on their findings. What was more common was making modifications to implementation frameworks based on: feedback from the setting about strategies, considering what others were beginning to report in the literature, and/or by critical self-reflection about one's effort.

Box 4 summarises these and other important aspects of implementation identified within implementation science literature that should be considered when selecting an effective intervention to deliver to children, youth, and caregivers, and when planning for the implementation of that intervention.

Box 4: Implementation considerations (Wade et al., 2012)

Appropriateness of intervention aims and outcomes

- Is the intervention based on a clearly defined theory of change?
- Are there clear intervention aims?
- Are there clear intended outcomes of the intervention that match our desired outcomes?

Targeted participants

- Is the population of the intervention identified and does it match our intended target population?
- What are the participant (child, caregiver) eligibility requirements (ages of caregivers or children, type of person, presenting problem, gender)?

Delivery setting

- What are the intervention delivery options (e.g. group, individual, self-administered, home-based, centre-based)?
- Is there flexibility in delivery modes that suit our service context?

Costs

- What are the costs to purchase the intervention?
- What are the costs to train staff in the intervention?
- What are the ongoing costs associated with purchasing manuals and technical assistance (e.g. coaching and supervision of staff)?
- What are the costs to implement the intervention (in terms of staff time, resources to deliver, travel cost to agency, travel cost to intervention recipients, costs to caregivers in terms of time off work and childcare)?
- Are cost-effectiveness studies available?

Technical assistance required

- What are staff training needs (frequency, duration, location, cost)?
- What amount of ongoing technical assistance is required (including top-up training, coaching or supervision)?

Fidelity

- What are the requirements around the fidelity or quality assurance of delivery of the intervention components to children and caregivers? That is, how well do practitioners need to demonstrate use of the intervention either during training or while they are working with children/caregivers (e.g. are there tests, checklists or observations that they need to perform during training; are there certain things they need to do to prove/show to the trainers to confirm that they are using the intervention correctly, such as videotaped sessions, diaries, checklists about their skills or use of the intervention with children/caregivers)?
- Are there certain intervention components that MUST be delivered? That is, if they don't do X, they are not actually using the intervention as intended.
- What are the intervention dosage or quantity requirements for effective results (i.e. how often and for how long do children/caregivers need to receive the intervention)? Can our service meet those requirements?

Data and measurement of effectiveness

- How is progress towards goals, milestones and outcomes tracked?
- What are the requirements for data collection (i.e. what measures are recommended, how often are they to be administered, who can administer them)?

- How accessible and relevant are the developer-recommended evaluation tools (ease of access, cost, ease of administration and scoring, relevance to Australian context)?

Languages

- What languages are the intervention available in and does that match our client population?
- Is the intervention relevant and accessible to particular cultural and language groups (e.g. Indigenous people)?

Services face a range of challenges when selecting and implementing effective interventions. One significant challenge is that an effective intervention may not exist for a service provider's identified needs, selected target population, and service and cultural context. Alternatively, or sometimes additionally, the monetary cost of an effective intervention may be too high, which is a difficulty community-based services often face. While the cost of *not* implementing an effective intervention should also be considered in such circumstances, it is nonetheless the case that cost is often a barrier to the quality implementation of effective interventions.

While this report includes costings (where available) for individual interventions, the calculation of cost effectiveness is a complicated endeavour that must take into account system structure and population flow in and out of the program, and it must also cost relevant outcomes that can extend many years into the future. In particular, basic epidemiological data about the movement of children and youth from one state within the system to another is essential. There is movement in the child protection and child welfare field to blend basic epidemiological and cost data, and such an approach would be in line with some of the basics tenets of quality implementation. One organisation that is pushing such an approach is the Dartington Social Research Unit. Their Redirect and Reinvest project has developed a strategy for re-designing systems for children in care which takes into account the costs of the different parts of the system. It aims to reduce the numbers of children in care, and improve the outcomes of these children through evidence-based therapeutic services. Louise Morpeth outlines a four stage process (Morpeth, n.d.).

1. Understanding which children are coming into care, why, and for how long.
   This involves the systematic collection of data about the numbers of children who enter and leave the system and their length of stay alongside a more detailed analysis of a sample of case files (Note: this can be accomplished with high quality administrative data that are arranged into a longitudinal format for analysis).

2. Review of the data obtained in the first stage and identification of needs.
   Could any of the children in the sample have been diverted from care? Could they have been supported at home if other services were available?

3. Matching of needs with current services and other evidence-based programs.
   In light of the needs highlighted through the data analysis, management and line staff review current services and practice, and identify alternative evidence-based programs which could be introduced.

4. Evaluation of outcomes and cost of new system. Costs of new programs are balanced against the anticipated reduction in future numbers of children in care. Where safe and appropriate, children who would ordinarily enter care are redirected to the new alternatives. For high cost alternatives, half of the eligible children enter care as usual and half get the alternative and the outcomes and costs for both groups are monitored.

Cost Benefit Analysis methodology has been developed by the Dartington Social Research Unit's *Investing in Children* project which has adapted the WSIPP cost-benefit model (developed by the Washington State Institute for Public Policy, USA) to the UK context (this could be done for ACT context as well). This model predicts the impact of competing investment options on child wellbeing, as well as the costs and economic returns of various portfolios of interventions. The four-step approach involves:

Determining what works, using the highest standards of scientific evidence.

1. Calculating costs and benefits, using an internally consistent framework, which produces a ranking of public policy options.

2. Conducting a 'portfolio analysis' which reveals how a combination of policy options affects outcomes, costs and benefits.

3. Measuring the riskiness of the conclusions by testing how bottom lines vary when estimates and assumptions change.

Another significant challenge facing services is deciding whether and to what extent an intervention should be adapted to fit the context in which it is being implemented and, if done, how it should be adapted with quality and to good effect, retaining the essential elements of the intervention that contribute to its effectiveness. In general, when working with effective interventions it is best to work towards strong adherence to the intervention as is, to ensure intervention fidelity and avoid possible dilution of the benefits.

Nevertheless, adaptation and local innovation are sometimes necessary in order to meet emerging needs and suit specific populations. In such cases it is important to evaluate adapted or innovative interventions to ensure that intended child and family outcomes are being met, and that harm is not being caused. Ideally, where an evaluation reveals that an adapted or innovative intervention demonstrates promise (that is, has been reasonably well evaluated and was shown to have some positive outcomes), ongoing evaluation should be performed to establish higher levels of evidence.

5.3 Implications for the field

Although a large number of programs and practices were found, very few had been evaluated with sufficient rigour to be considered 'effective' to any degree. This is not a reflection of effort but is a reflection of the fact that research has not kept pace with need. That said, there were some strong findings from the review that may have bearing on the next steps the ACT takes in reshaping its OOHC services.

The ACT utilises a number of residential care homes which, for some youth, is an essential for of OOHC. However, there appears to be little in the way of a middle ground between regular family foster care and fairly intense, restrictive levels of care. The one intervention that was found to be Well Supported in this review, MTFC, is designed to do just that. Specifically, the program works closely with foster parents to manage behavioural and other issues, and these services can be used to prevent children from moving from foster care to more restrictive settings. Likewise, it can conceivably be used to step youth down from higher levels of care. Outcomes for children in residential care are notoriously poor in child protection populations, and it is the most costly form of care. Commitments involving large expenditures for services that are unlikely to be effective can limit government's capacity to test innovative and potentially effective services.

The cost effectiveness of MTFC is compelling, as is the professional and semi-professional mix of services. The program can be used to create smaller, leaner, high intensity family foster care settings that better move children and youth towards reunification or other permanency options. The development of this resource may involve the 'professionalisation' of some number of foster parents. That is, the issues brought to the home by children and youth with substantial psychosocial problems may require a level of intensive caregiving that cannot be achieved if parents are working full-time. In addition, most of the parenting interventions that have been found to be effective across a range of populations (though not as often with children in OOHC) are based on a set of common elements that are, at their core, derived from social learning theory.

It is possible that these common elements can be articulated and assembled into a set of practices, or even a program, that has a reasonably good chance of being effective. Certainly, learning some of these basic parenting techniques can curb difficult child behaviours and should be essential tools for OOHC providers, especially those who would be considered 'professional'.

Kinship care was found to be a positive placement option across a range of psychosocial and systems-level outcomes, which is good news for the ACT given its increasing use of this placement resource. In particular, kinship care can facilitate maintenance of cultural and community ties while not sacrificing outcomes. In addition, the findings relating to subsidised legal guardianship are encouraging in terms of outcomes, though there are questions about its cost relative to non-related foster care because of longer times to restoration.

Nonetheless, the question is not whether to use kinship care, but how to best use it to facilitate positive outcomes. Kinship caregivers may have a different set of service needs to foster non-related parents, and there is evidence from the literature to suggest that kinship caregivers

receive fewer services and supports than non-related caregivers. Unfortunately, kinship caregivers tend to be less well-off financially and may have lower levels of education than non-related caregivers, possibly leading to fewer resources for the children in their care. If the ACT is going to continue to use kinship care as its preferred placement option, investing in supports for these often disadvantaged caregivers may result in more positive outcomes for children and youth. Surveying kinship caregivers with respect to their need for mediation with birth parents, permanency options, respite care, training in behaviour management techniques, support for tutoring and recreational activities, and transportation needs can guide this investment, and the right mix of supports may go a long way towards enabling kinship caregivers to provide safe, stable, nurturing homes for children and youth.

If the ACT is going to invest in programs or practices designed to promote the successful transition of youth in OOHC to adulthood, simple training programs in money management and basic independent living skills are very unlikely to make a difference. Although this conclusion is based on only four non-peer reviewed publications from the same research group (the US federal government funded a major multi-site trial), the level of rigour in this evaluation and the absence of any other rigorous research make its negative conclusions quite compelling. Building on the negative findings from the evaluation of independent living services, there has been an international movement towards extending OOHC until at least the age of 21. In essence, the argument is that extending care more closely approximates the process and timing of leaving home for children who are part of the larger population - safe, loving, and enduring homes that support young adults through this difficult time. While the evidence is still fairly thin, extended stays in foster and kinship care are more likely to help young people successfully transition to independent living than programs that rely on immature youth to embrace skills they will need in the future. This is not to say that elements of independent living programs are not important. But they are not the solution to the poor outcomes faced by an overwhelming number of youth transitioning from care.

Perhaps the best way to safely decrease the number of youth in OOHC is to prevent entry in the first place. Our limited analysis of reasons for entry, including parental functioning and rates of child neglect, points towards an increased investment in effective substance abuse services that are ‘child aware’. Many substance abuse programs focus solely on the individual and may not adequately formulate services or their delivery around the needs of parents. In addition, high rates of involvement in CPS by Indigenous families point towards the increased use of culturally infused, evidence-informed practices and programs.

The review also leads to implications in terms of how to use evidence in a way that is most likely to deliver positive results. In particular, an approach that incorporates basic epidemiological data, the type that can be readily constructed from most management information systems, is crucial. In other words, knowing the population of children and youth and how they transition between various elements of the foster care system (i.e., investigation to placement; movement from placement to placement; restoration; other forms of permanence) is crucial when selecting one or more interventions. That is, find out what is known (for example, as the ACT has invested in doing here); combine this with rigorous analysis of internally generated epidemiological data;

prioritise desired outcomes; develop a logic model; and implement (using an implementation framework, piloting, and then scaling up if successful). It is important to note that proper implementation includes a continuous quality improvement process as well as overall (and repeated) evaluations of effectiveness.

The absence of a great deal of information about what might be effective in OOHC and across child protection services, while disconcerting, is also an opportunity. If a great deal is unknown, the door is open for exploration and even experimentation. But we would argue that this must be done safely, systematically and rigorously; it should be built upon what is known; and it should be used to expand the overall knowledge base in child welfare. With this in mind, there are a number of critical factors to take into account when considering and implementing OOHC interventions.

- Knowledge is a moving target but decisions have a longer shelf life. That is, what is considered effective (or ineffective) today may change with new evidence, but the systems we put in place to deliver services can be intractable. This implies that programs, practices, and policies should be tested before wholesale commitment.
- Complexity is king. Many interventions that are considered effective were tested in 'laboratory settings' that may not reflect the current practice/policy context.
- A comprehensive outcomes monitoring and reporting system is essential. These are becoming more and more affordable as technology improves.
- An understanding of the difference between outputs, systems level outcomes, and child and family level outcomes is crucial in order to be able to measure the right things at the right time.
- In-depth knowledge of the timing, inputs, outputs and outcomes of major decisions in the child protection system is key to the successful implementation of effective services. In particular, modelling the pathways of children and families through the system (rather than simply counting where they end up) can facilitate better decision-making.
- Be wary of unintended consequences. Every action has an equal and opposite reaction, and this is true in the child protection system. For example, lower rates of placement in OOHC can mean increases in rates of maltreatment recurrence; increased adoptions, if in sufficient number, can contribute to decreases in restorations; and the use of kinship care, while recommended, can increase time to restoration.
- Change will not come about all at once – it takes time and good information to navigate unknown waters.

5.4 Limitations

Although systematic reviews remain the ideal method of assessing the effectiveness of interventions, REAs are increasingly being used in circumstances where time and/or budgetary

constraints do not permit a systematic review. While REAs use methods considerably more rigorous than a standard literature review, they are not without limitations. In order to accelerate the review process (i.e., to fulfil the 'rapid' in REA), we imposed some restrictions: we included only English language papers; we did not contact authors for further studies or to clarify information reported in publications; and we did not include books, theses and conferences papers. As a result of these necessary limits, there may have been some interventions, studies or data that were missed in this REA. This additional information may have provided us with further information about the effectiveness of an intervention, lack of effect, or even potential harm. Our search of electronic bibliographic databases was, however, exhaustive and we imposed no limits on year of publication. We are confident that this process was rigorous enough to identify the vast majority of relevant publications within our search parameters.

Another limitation of the REA process was that we were unable to extract extensive data from all studies. This means that some information of relevance to the reader may not be reported here but could be further explored if needed. Moreover, we were not as rigorous in our evaluation of the quality of the research as would be required in a high quality systematic review. For example, we do not report effect sizes or assess for bias. In addition, the data were synthesised in a narrative fashion rather than through meta-analysis. Nonetheless, the rating scheme we used did require considerable design rigour, replication and maintenance in order for the interventions to be rated highly, and the inclusion of systematic review evidence to complement our rating scheme helped us to single out the most effective intervention for the Well Supported level. The use of this additional criteria, which is not imposed on interventions rated by web-based clearinghouses such as the California Evidence-Based Clearinghouse (http://www.cebc4cw.org/), somewhat compensated for our inability to evaluate interventions using more rigorous, and time-consuming, methods.

In order to make this review rapid and to help us to identify interventions that have been subjected to the most rigorous evaluations, we restricted design inclusion to RCTs. Although this allowed us to achieve the objective of identifying studies using rigorous methods, the implication is that we may have missed interventions that were evaluated using other methods that may have been the only viable option for a particular care type or circumstance.

A final limitation of this REA, and in fact of all reviews, is that the information reported here is time-limited. High quality systematic reviews undergo regular updates to check for new studies. This analysis was completed in June 2013 and readers are advised that new evidence will emerge after publication of this report. We recommend that any new evidence is taken into consideration when selecting and implementing OOHC interventions.

5.5 Conclusion

The three prior reviews of OOHC in Australia focused solely on Australian research and used a standard narrative approach. They were executed well and represent a solid first look at the Australian out-of-home care system. This review builds on their work by systematically surveying the international literature to gather evidence of relevance for the ACT. The objective of the review was to give the ACT government a broad overview of the relevant research in order to

assist it in its coming decisions about the provision of services to children and young people in OOHC.

We began by conducting a review of reviews, followed by a gap analysis and then an REA. As part of the process, we also looked at the published statistics about children in the child welfare system, and attempted to consider our recommendations in light of these figures. In addition, we added a number of supplementary components that, while not part of the formal REA or review of review processes, may be relevant for the territory. These included brief summaries of outcomes from the most recent and rigorous study of youth transitioning to adulthood, some of the literature on the extension of out-of-home care to age 21, and a short discourse on implementation considerations for child welfare services. This process has led to a set of findings and implications for the ACT to consider when determining and implementing its OOHC policies and mix of services in the years to come.

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7. LIST OF APPENDICES IN ACCOMPANYING DOCUMENTS

7.1 Appendix 1: Review of systematic reviews and gap analysis

7.2 Appendix 2: Data extraction form for OOHC interventions included in the REA

7.3 Appendix 3: Effectiveness ratings of OOHC interventions included in the REA

7.4 Appendix 4: Summary of Well Supported, Supported and Emerging interventions

7.5 Appendix 5: Data extracted regarding the Well Supported intervention

7.6 Appendix 6: Data extracted regarding the Supported interventions

7.7 Appendix 7: Data extracted regarding the Emerging interventions

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