Abstract

**Background:** Children in Care (CiC) have often experienced trauma and, as a result, are at high risk for poor health outcomes. It is imperative that human service stakeholders provide trauma-informed health services and interventions. However, little is known about how health promotion is addressed in the standards and guidelines for CiC. The aim of this scoping review was to examine and compare how nutrition and physical activity are discussed in: (1) federal standards for CiC across the United Kingdom (UK), United States of America (USA), New Zealand, and Australia; and (2) state and territory guidance in Australia.

**Method:** The grey literature was searched for documents outlining key child welfare standards, guidelines, or policies for the provision of care across foster, kinship or residential care. Documents were examined for the inclusion of recommendations and/or strategies focused on primary health and the promotion of nutrition and/or physical activity.
Results: Fifty-two documents were included in this review; 28 outlining international federal guidance and 24 Australian documents. In the USA, New Zealand, and Australia references to physical activity were often broad with minimal direction and nutrition was often neglected; the UK provided more detailed guidance to promote nutrition and physical activity among CiC.

Conclusion: There is a lack of consistency and specificity in guidelines supporting healthy lifestyle interventions for CiC both internationally and within Australia. It is recommended that: (1) specific trauma-informed health promotion guidelines are developed for CiC; and (2) trauma-informed health promotion training is provided to carers. This will ensure that care is provided in a manner where stakeholders recognise the signs and consequences of trauma in order to determine the most appropriate health interventions to improve outcomes and prevent ongoing trauma for this population.

Key words: Children in Care, Health Promotion, Nutrition, Physical Activity
Introduction

Health promotion among Children in Care (CiC)

Children in care (CiC; encompassing foster, kinship, and residential care) are a particularly vulnerable population worldwide, with significant health care needs and poor health-related outcomes.\textsuperscript{1-4} Health concerns of CiC have been consistently reported across various domains, including developmental, behavioural, physical (e.g., vision problems, poor dental health, poor immunisation levels, anaemia, sexually transmitted diseases, chronic illnesses, overweight and obesity), and emotional or mental health (e.g., anxiety, depression, and post-traumatic stress symptoms).\textsuperscript{3-9} It is well established that some of the health concerns experienced by CiC may stem from previous experiences of trauma, neglect, or abuse.\textsuperscript{10} Both the home environment and parenting styles can significantly shape a child’s health and development.\textsuperscript{11-12} Neglectful (uninvolved) or authoritarian (i.e., low responsiveness) parenting has been associated with childhood obesity, eating disorders, and poor mental health.\textsuperscript{8, 11-12} Specifically, certain eating behaviours (i.e., hoarding, binge eating) can arise from previous food deprivation, lack of access or exposure to healthy foods, and inconsistent or irregular meals.\textsuperscript{13-14} Without a trauma-informed approach to the promotion of healthy lifestyles, the impact of previous traumatic experiences can often become exacerbated while in care.\textsuperscript{15}

One of the most complex challenges that the health and child welfare sector faces internationally is how to reduce the burden of morbidity that is disproportionately shouldered by CiC. Among the general population, there is strong evidence that health promotion, that is, enabling individuals to increase control over their health, is effective in yielding positive change across various domains of health.\textsuperscript{16} Health promotion focuses on promoting health and preventing disease, using strategies that reach people in their everyday lives, backed by supportive environments and establishing ‘healthy’ norms.\textsuperscript{17} Taking a settings-based
approach to health promotion means adopting a systems-approach, and this includes the policies that govern the system. Promoting healthy lifestyle practices, such as nutrition/healthy eating and physical activity, are key factors in preventing and managing a range of health conditions affecting children in the general population.\textsuperscript{18} Nutrition and physical activity have been identified as two key areas of health promotion that require greater attention for CiC.\textsuperscript{13, 19} Indeed, health promotion has tended to be neglected across the child welfare system.\textsuperscript{13,19-22} Current initiatives to improve health and wellbeing outcomes for CiC are primarily focused on "problem-oriented" and “illness-focused” approaches, such as regulatory health assessments and health monitoring activities (e.g., primary health check within 30 days of placement).\textsuperscript{19-22} Whilst such approaches are warranted, a greater focus on health promotion in this context is needed, particularly approaches that incorporate a trauma-informed lens. The importance of regular trauma-informed training and support to help carers identify and respond to CiC’s health needs has been well-documented.\textsuperscript{23-25} However, carers are often not adequately supported or resourced to prioritise and encourage health promotion among the children in their care, resulting in lower health literacy and poor access to health promotion information.\textsuperscript{13, 23-25} Numerous independent inquiries and international reports into the health of CiC have concluded that a greater emphasis on health promotion, preventative support, and capacity building of carers to meet children’s health needs is necessary to promote their health and wellbeing.\textsuperscript{1, 26-27}

This review focuses on nutrition and physical activity, as two key health promotion domains that require prioritisation among CiC. Specifically, this review will examine how nutrition and physical activity are represented, contextualised and discussed in key CiC policy and practice documents, using a health promotion lens. This will also include examining how the documents address the need for carer training and support to promote nutrition and physical activity among CiC.
Healthy lifestyle behaviours of CiC

Nutrition and physical activity are often not prioritised among CiC, possibly contributing to poor health outcomes.\(^1,\)\(^2,\)\(^28-29\) For example, previous studies have found that nearly a third of CiC do not eat any fruit or vegetables,\(^30\) approximately 38% experience difficulty around eating and mealtimes, including binge eating and a preference for “junk” foods,\(^14\) and 51% exhibit low nutritional status and malnourishment in comparison to 13.5% in the general population.\(^31\) Children’s eating behaviours and relationships with food can be impacted adversely by early traumatic experiences or previous food insecurity and deprivation, resulting in: (1) “emotional eating” - the use of “junk” food to cope with negative feelings;\(^13,\)\(^14,\)\(^32\) (2) favouring less nutritional or a low variety of foods; and (3) food-related anxiety.\(^13\)

Further, CiC generally do not meet the physical activity recommendations of moderate to vigorous activity for 60 minutes daily.\(^30,\)\(^33\) They also face significant barriers to engaging in activities (i.e., sport, recreation and/or leisure activities) compared to their peers not in care.\(^1,\)\(^34-35\) The experience of early childhood trauma is associated with deficits in motor development, missed opportunities to build fundamental movement skills, reduced self-efficacy, and physical arousal.\(^34\) These factors often mimic responses associated with trauma, which can deter CiC from engaging in regular physical activity.\(^34\) The profound impact of trauma combined with individual and systemic barriers pose significant challenges to CiC engaging in healthy lifestyle behaviours – especially in comparison to children not in care.\(^34-36\) Subsequently, the broad health promotion guidance that is communicated to the general youth population (e.g., eat healthy food, engage in regular physical activity) may not be sufficient to meet the unique health needs of CiC. Instead, a trauma-informed approach to care is necessary to promote the development of healthy lifestyle practices among CiC. Trauma-informed care is a whole-system organisational-wide framework that seeks to
understand, recognise, and respond therapeutically to the effects of trauma. The provision of trauma-informed care is underpinned by six key principles of safety, choice, collaboration, trustworthiness, and empowerment. Young CiC are a highly vulnerable group, whose health outcomes depend on their experiences in care. That experience is undermined currently by the lack of adequate support and training for carers in trauma awareness, education, and skills. Therefore, trauma-informed health promotion and prevention must be enabled and prioritised in this sector.

Standards and guidelines for CiC

As numerous stakeholders are tasked to act as locus parents for CiC, there is significant debate around who is attributed primary responsibility for child health and health-related decision making (i.e., carers, case managers, health professionals, and/or government). Allocation of this responsibility is currently variable, diffuse and requires legislative change to make health a statutory responsibility of health services and local authorities. Internationally, various standards and/or guidelines have been developed to deliver consistency and drive improvements in the quality of care provided to CiC. The United Nations Convention on the Rights of the Child (UNCRC) states that every child has the right to grow up in a supportive, protective, and caring environment that promotes their full potential. The UNCRC provides ethical and moral guidance about the quality of health care that governments may aspire to for children in statutory care. CiC have the right to receive high quality care that addresses their needs appropriately and improves their quality of life. The United States of America (USA), the United Kingdom (UK), New Zealand, and Australia all have overarching federal/national guidelines to guide the provision of care to CiC. However, the intended stakeholder audience of such guidance differs depending on the document type and country. For example, statutory guidance is developed for government departments, with oversight of the care system, namely child welfare agencies (USA).
health boards (UK), chief executive (New Zealand) or community service organisations that provide care services (Australia). Internal departmental policies or procedures, which may be mandatory or recommended, are often written for case managers or carers who receive a financial payment for caregiving. Clinical guidelines are provided voluntarily by an independent organisation, directed primarily towards carers, health professionals, and CiC. Although there are differences across countries, these guidelines are typically informed by specific Laws, Acts, and/or Charters of Children’s Rights. Ultimately, such standards outline the responsibilities of agencies, departments, and carers towards CiC in terms of ensuring their safety, care planning, providing a nurturing environment, and meeting their developmental, physical, educational, emotional, social and health needs.

**Rationale and aims**

Despite the extensive international literature regarding poor health outcomes and healthy lifestyle practices for CiC, little is known about how health promotion is acknowledged in the standards and/or guidelines for CiC. To the authors’ knowledge, there has been no narrative synthesis or review of how health is discussed in national guidelines for CiC. Specifically, there is a lack of knowledge surrounding the extent to which health promotion and healthy lifestyle factors, including nutrition and physical activity, are described in international and local standards for CiC, or if they are even mentioned at all.

Therefore, the aim of this narrative scoping review was to explore and compare how nutrition and physical activity are discussed in CiC guidelines across selected high-income countries through a health promotion lens. This includes the extent to which such guidelines address the need for carer training to promote nutrition and physical activity among CiC. The selected countries include USA, UK (England, Ireland, Wales, and Scotland), New Zealand, and Australia, given they have similar models and placement types for CiC (i.e., foster, kinship, and residential care), as well as similar overarching federal/national guidelines. Canada was
excluded from this review because there is no overall federal guidance for CiC and the
provision of care varies greatly among different provinces. Specifically, this narrative
synthesis of evidence presents a broad overview of how health promotion, particularly
nutrition and physical activity, are discussed in the: (1) international/federal CiC standards
across each country (USA, UK, New Zealand, Australia); and (2) local state and territory
guidelines for CiC in Australia.

Method

Search strategy

A grey literature search was conducted to identify publicly available documents,
standards, policies, or guidelines for the child welfare sector, as these documents are typically
not published in conventional academic repositories. Standardised approaches to the search
strategy were applied. A combination of key words (please see Appendix A for a complete
list of search terms) were searched in Google Scholar and websites of key government,
departments, or services responsible for the oversight of CiC in the USA, UK, New Zealand,
and Australia. For the USA, federal mandates and documents outlining state guidelines were
sourced from the United States Department of Health and Human Services. For New Zealand
and the UK (i.e., England, Ireland, Scotland, and Wales), national standards were sourced
from the New Zealand Oranga Tamariki and the National Institute for Health and Care
Excellence websites, respectively. For Australia, the national standards and specific
guidelines for care in each state and territory were sought from the respective Department of
Health and Human Services websites.

Inclusion and exclusion criteria

Documents were included in this review if they described the key standards,
procedures, rights, legislations, policies or guidelines related to the provision of care to
children in any type of placement setting across the UK, USA, New Zealand, or Australia
(i.e., foster care, residential care, or kinship care). Whilst there was no date limit applied to
the search, only the most recent version of each document for each country was included to
capture the most up-to-date evidence. Documents that did not relate to the provision of
placement care for this population (i.e., documents only outlining guidance for child welfare
substantiation or risk assessment processes) or did not mention health were excluded.

Search yield

The stages of the grey literature search and data extraction process are presented in
Figure 1. The search identified a total of 76 possible documents to be screened. Twenty-four
documents were excluded at this stage, as they were older versions of more recent documents
(n=12), did not pertain to the provision of care for children in a foster, kinship, or residential
placement (n=9), or did not mention an aspect of health (n=3). Therefore, a total of 52
documents were deemed eligible for document review.

Data extraction

A document review of all 52 eligible sources was conducted to identify specific
references to health, including primary health, and health promotion (nutrition and physical
activity). Key words were identified and searched for within each document. For example, to
identify any references to nutrition, terms such as food, nutrition, eat, diet, and meal were
searched in each document. Please see Appendix B for a complete list of key terms used. If
the document included one of the identified words or phrases, the statement was reviewed to
check whether the language and context was relevant to the eligibility criteria. If so, the
information was extracted and included in Table 1 (supplementary materials). A health
promotion lens was used to inform the data extraction and analysis of the documents. This
involved exploring how nutrition and physical activity were discussed, represented and
contextualised in the documents as a way to promote and enhance health and wellbeing
among CiC - any mention of this information was extracted into Table 1 (supplementary
materials). The tabulated information was then synthesised narratively, according to country and type of document, to examine how nutrition and physical activity are discussed (using a health promotion lens) in the federal CiC standards, and across the various states and territories in Australia. Specifically, the extent to which the documents provided guidance around nutrition and physical activity for CiC from a health promotion perspective (i.e., promoting the health and social benefits of food and activity and health promotion training for carers) as opposed to simply stating nutrition and physical activity as basic needs to be met, is presented herein.

**Results**

A total of 52 documents were included in this review: 28 national-level documents across the UK, USA, New Zealand, or Australia, and 24 documents relating to state and territory guidance in Australia. There were multiple documents eligible from each included country, and all Australian States and Territories were represented. Five main types of documents were identified: (1) legislation, that is laws actioned by governing bodies that individuals and organisations are mandated to follow (i.e., Acts and Laws, n=5); (2) statutory guidance advising fund holders and those in designated roles of authority on how to comply with legislation (n=9). These stakeholders are mandated and held accountable to follow this statutory guidance; (3) internal departmental policies or procedures, requirements or guidelines usually written for case managers or carers (i.e., carer handbooks). Such documents may be either mandated (i.e., held accountable by law or audits) or recommended, n=6 international, n=19 Australian); (4) clinical guidelines, such as those provided voluntarily by an independent organisation, which outline recommendations for best practice (n=6); and (5) statements of child rights that were developed for CiC in New Zealand and each state and territory in Australia but are not enforceable by law (n=8). These types of documents have different standings, purpose, intended audience, and extent of
accountability. Overall, there were 23 mandatory documents (i.e., individuals and/or organisations are held accountable) and 29 recommended guidelines, which are not routinely enforced or audited. A summary of all references to health, including primary health, nutrition, and physical activity in each of the documents is presented in Supplementary Table 1 (supplementary material). Further, a summary of all included documents according to type of document, the author, intended audience, and extent of accountability (i.e., mandatory versus recommended), is presented in Supplementary Table 2 (supplementary material).

Federal guidance

*Primary health*

All 28 national documents, regardless of type of document, contained general statements about the health of CiC, such as “the health and safety of young people in care is of paramount concern”, “promotion of physical, mental, and emotional health and wellbeing”, “the health, wellbeing and development of each child is protected and improved”, and “child’s health needs are met”. Documents across all countries provided some general guidelines and standards associated with meeting children’s primary health needs (i.e., physical, developmental, psychosocial, and mental health needs) while in care, as well as key indicators to ensure that such standards were met. Specifically, these included identifying and responding to primary health needs, such as obtaining a health history, conducting health assessments, and receiving routine health checks (e.g., medical, immunisations, dental, optical, auditory, and mental health). These documents also stated that health should be included in children’s care plans, and that CiC should receive appropriate medical treatment where relevant. Such outcomes were often operationalised by the number of CiC who had an assessment of their health needs within a specified timeframe after entering care and that CiC received the relevant medical treatment when required.
Nutrition

In contrast to primary health needs, guidelines around health promotion and healthy lifestyle behaviours (nutrition and physical activity) were discussed less frequently and in less detail across the documents. Specifically, nutrition was only mentioned in 14 of the 28 national documents and discussed in varying levels of detail, from a health promotion perspective, across the different countries and types of documents. Overall, the mandatory guidelines consistently did not reference nutrition or were broad in their guidance, without offering direction around how “nutritious meals” could be achieved, quantified, or measured.\textsuperscript{20, 46-47, 56} In contrast, the recommended guidelines across all countries (i.e., clinical guidelines and departmental documents that are not consistently enforced or audited) often contained more specific, tailored, and relevant guidance for key stakeholders to promote nutrition among CiC.\textsuperscript{23, 25}

The Australian national standards and the national clinical assessment framework for CiC did not reference nutrition, food, or healthy eating,\textsuperscript{19, 21} nor did New Zealand’s statement of child rights.\textsuperscript{61} Three of the five legislative documents (two from the USA and one from New Zealand) broadly stated that CiC should receive nutritious food, and that the deprivation of food or drink was not an acceptable form of punishment.\textsuperscript{41, 46-47} Only two out of nine statutory documents (both from the UK)\textsuperscript{43, 36} mentioned nutrition, stating that CiC are to be provided with a healthy balanced diet, yet did not include any further guidance around what this entails from a health promotion perspective.\textsuperscript{60} In contrast, four out of six international departmental documents, all from the UK, provided more specific guidance for carers around promoting nutrition and healthy eating among CiC.\textsuperscript{40, 53-54, 59} Such guidance included: ensure that CiC are provided with nutritious, balanced, and varied meals that suit their individual needs, preferences, and dietary requirements; involve children in food shopping, and in the choosing, preparation, and cooking of meals; and promote opportunities for shared
mealtimes.\textsuperscript{40, 53-54, 59} Similarly, five of the six clinical guideline documents (one from the USA and four from the UK) provided more specific and in-depth information about nutrition, from a health promotion perspective, in terms of seeking to understand a child’s eating behaviour and promoting nutrition and healthy eating as a part of everyday lifestyle.\textsuperscript{23, 25, 40, 51, 57}

The UK documents provided the most specific health promotion guidance around encouraging healthy eating as part of a healthy lifestyle.\textsuperscript{23} The departmental and clinical guideline documents from Ireland, Scotland, England and Wales consistently stated that CiC should be provided with an adequate, appropriate, nutritious, balanced and varied diet that accounts for their personal preferences, cultural, ethnic and religious considerations, and any special dietary requirements.\textsuperscript{26, 44, 53-54, 60} They also encouraged CiC to be involved in the purchasing and preparation of healthy meals and promoted shared mealtimes where appropriate to foster the social aspects of food.\textsuperscript{44, 53-54} England and Scotland were even more specific in their clinical guidelines for carers to promote nutrition for children in residential care, including: detailed information about nutritional guidelines; strategies to encourage healthy eating; menu planning; importance of role modelling healthy food choices; listening to and involving CiC in food shopping; promoting the social aspects of mealtimes, meal planning, and cooking; and food culture and diversity.\textsuperscript{25, 57} Finally, only three out of the 28 documents (all clinical guidelines from the UK) mentioned that carers require adequate health promotion training, resources and support packages to encourage nutrition and healthy eating among the children in their care.\textsuperscript{25, 40, 57}

\textbf{Physical activity}

Physical activity was discussed in 21 of the 28 national documents, in varying levels of detail from a health promotion perspective. Similarly to nutrition, documents that were optional or not routinely audited/enforced contained more specific, measurable, and tailored health promotion guidance for child welfare agencies and carers to encourage physical
activity among CiC, in comparison to mandatory documents which offered general and less
detailed health promotion advice. The Australian national standards stated that CiC should be
supported to participate in social and/or recreational activities of their choice, which could
encompass physical activity and sporting activities. This standard was operationalised by
the proportion of CiC ‘who report they may choose to do the same sorts of things (sporting,
cultural or community activities) that children and young people their age who aren’t in care
do’. Three of the five legislative documents (two from the USA and one from New
Zealand) stated that CiC should be provided with access to adequate recreation spaces at
home and opportunities to engage in physical activities. Specifically, New Zealand’s
legislation and statement of child rights specified that children are to be provided with
adequate opportunities and support (including financial support for carers) for participation in
sport, play, and recreational activities with peers. Physical activity was mentioned broadly
across five of the nine statutory guidance documents (two from the USA and three from the
UK), in terms of encouraging child welfare agencies and carers to ensure “access to and
participation in outdoor recreational activities, such as sport”. Specifically, the
statutory guidance from the USA identified six states that sought to ensure that CiC were
provided with regular opportunities to engage in age-appropriate and developmentally
appropriate activities, such as sport. Four of the six departmental documents (all from the
UK) provided general guidance for carers around providing opportunities for engagement in
sport and exercise, similar to those afforded to children not in care. Five of the six
clinical guidelines (three from the UK and two from the USA) provided comprehensive and
specific in-depth guidance to promote physical activity among CiC.

Consistent with the nutrition-related standards, the UK provided the most detailed
guidelines for physical activity in their departmental and clinical documents. It was stated
consistently in mandatory departmental documents that all CiC, like their peers outside the
system, should have opportunities for physical activity and be encouraged and supported to participate in play, leisure, sporting, exercise or recreational activities of their interest. More specifically, the UK clinical guideline documents stipulated that it is the responsibility of carers to provide CiC with access to these activities, including transport, any relevant equipment or environment/space to encourage physical activity, and to support CiC with their healthy lifestyle choices. The Caroline Walker Trust for England specifically recommended that carers should encourage all children in their care to engage in at least one hour of physical activity at moderate intensity each day. Further, the National Institute for Health and Care Excellence (NICE) guidelines for CiC acknowledged that participating in physical activity in the wider community not only promotes wellbeing but also provides an opportunity for CiC to meet and interact with others, develop their social skills, and improve self-esteem. Finally, only four out of 28 documents (two clinical and two departmental documents) explicitly stated that carers should have the relevant skills, knowledge, training, and resources to understand, support, and promote CiC’s engagement in exercise and recreational activities.

Australian state and territory guidance

**Nutrition**

There were 17 departmental documents and seven statements of child rights identified from Australia. Nutrition was mentioned in all of the states’ and territory departmental guidelines for care except Western Australia (WA) and New South Wales (NSW). The standards of care across the other states acknowledged that CiC require access to a variety of food, and should be provided with a good quality, balanced and healthy diet that complies with community standards, and meets their cultural, religious, and dietary needs. More specifically, in the Victorian Handbook for Foster Carers, carers were advised to inform CiC when mealtimes will be provided to reduce anxiety; teach them independent
living skills, such as cooking; and to prepare and share meals with them when possible.

Further, two out of 17 departmental documents stated that the withholding or deprivation of food is not tolerated. References to nutrition were made in six of the seven Charter of Child Rights. This encompassed the right to be provided with nutritious and healthy food (Victoria [VIC], Northern Territory [NT], South Australia [SA], Tasmania [TAS], Queensland [QLD]), and the right to “choose the types of foods you like” (NSW).

Physical activity

Across all of the states and territories, physical activity was referred to as engagement in sport or recreational activities; the term exercise was not used. Seven out of 17 departmental documents stated that carers must support and provide CiC with opportunities to engage in play, leisure activities, recreation, and sport. The guidelines in NT, VIC, and NSW further emphasised that these activities should be encouraged among CiC to develop social confidence and skills in interacting with peers and the community, to assist them in learning new skills, and to improve self-esteem and a sense of purpose or identity. Finally, physical activity was mentioned in all of the Charter of Rights for CiC except QLD. This encompassed the right to engage in activities and interests that children enjoy (VIC, NSW, SA); to receive guidance and encouragement to participate in activities, such as sport (WA); to be involved in the community, such as joining a sports team (NT); and to be given the time to play (TAS).

Discussion

To date, our understanding of how health promotion is represented in national standards for CiC across Australia and high-income countries with similar models of care, has been rudimentary. Therefore, the aim of this narrative scoping review was to explore how
nutrition and physical activity are discussed in CiC guidelines at the federal/national level in
the USA, UK, New Zealand, and Australia, and across the States and Territories of Australia.
Globally, CiC have significant health care needs compared to children not in care.\textsuperscript{50}
However, to date, the health of CiC, both locally (in Australia) and internationally (USA, UK
and New Zealand), has been discussed predominantly in terms of their primary health needs
and outcomes.\textsuperscript{19, 41, 46-47} International guidance consistently reports that CiC’s primary health
needs should be identified and met, through health assessments, health care plans, routine
health checks, and the provision of appropriate medical care when relevant, encompassing
medical, dental, optical, auditory, and mental health.\textsuperscript{19, 41, 46-47} Although an important priority,
guidance that is solely focused on primary health may not be sufficient to improve the long-
term health outcomes for this specific population.\textsuperscript{18}
It is evident from the findings of this review that there is a lack of consistency in
guidelines and policies supporting healthy lifestyle intervention for CiC. In the USA, New
Zealand, and Australia, references to nutrition and physical activity from a health promotion
perspective in mandatory legislation, statutory guidelines and departmental documents were
often missing, broad or provided minimal direction around how to implement the
guidelines.\textsuperscript{19, 28, 41, 49} Nutrition was often neglected altogether.\textsuperscript{19, 28, 41, 49} However, the UK
provided more detailed guidance to promote both nutrition and physical activity among CiC
in their departmental and clinical guidelines. In addition to ensuring the provision of healthy
food and a balanced diet, the UK documents contained specific health promotion guidance
for carers around: involving CiC in menu planning, food shopping, and cooking;
acknowledging children’s food preferences; having shared mealtimes; and exposing CiC to a
variety of foods.\textsuperscript{25, 44, 53-54, 57} The UK documents were also more specific in terms of physical
activity, detailing that it is the responsibility of carers to encourage and then facilitate
engagement in physical activity,\textsuperscript{23,54} for at least one hour a day,\textsuperscript{25} in an effort to not only promote physical health but to foster children’s social skills.\textsuperscript{40}

The broad and general national standards are interpreted differently across the various Australian jurisdictions. Given the minimal guidance around health promotion in Australia’s national standards and the Commonwealth government’s lack of governance role (i.e., such standards are not enforced nor audited), it is up to the individual community service organisations who oversee the provision of care to decide how to implement such guidance.

Physical activity was discussed across all states and territories to varying degrees. Carers were consistently encouraged to facilitate CiC’s engagement in physical activity, yet there was minimal instruction or direction around how to implement this. Whilst nutrition was not mentioned in the national standards, the provision of a healthy and balanced diet was briefly referenced in at least one document from each state and territory except NSW and WA.

Specifically, Victoria provided more detailed health promotion guidance for foster carers regarding mealtime routines, involving CiC in the preparation and cooking of meals, and eating meals together when possible.\textsuperscript{42} This ambiguity in the national standards may contribute to a fragmented, variable, and inconsistent care system when it comes to health promotion, which in turn, may contribute to the health inequalities experienced by CiC in comparison to children not in care.

It is well established that healthy eating and physical activity provide much more than physical health benefits for young people. Particularly for CiC, food and activity provide opportunities to develop and maintain positive relationships, improve social confidence and self-esteem, increase a sense of belonging, develop social skills to interact with peers and the community, strengthen emotional functioning, heal from previous trauma, develop independent living skills, and improve their overall general experience in care and beyond.\textsuperscript{13,29,34,84-88} However, current legislation, statutory guidance and departmental policies
supporting health promotion for CiC international and locally, except in the UK, do not adequately capture this. The provision of broad health promotion guidance that is communicated to the general population (i.e., eat a balanced diet, engage in sport and recreational activities) is not sufficient to meet the unique health needs of CiC.

Specific health promotion guidelines should be developed within the context of the care system. Due to a history of trauma, CiC often experience challenges around mealtimes and health in general.²³ It is now recognised by key experts and stakeholders that a trauma-informed approach is necessary to address these challenges.¹ ³⁷ This involves understanding, recognising, and responding to the effects of trauma within a trauma-informed framework.³⁷ For example, trauma-informed guidance would emphasise the importance of socialisation associated with mealtimes and physical activity, using food to develop positive relationships with CiC, and empowering children to make decisions about their health. Yet, such an approach is not integrated in existing CiC guidelines around health promotion. Therefore, it is necessary that such guidance adopts a trauma-informed lens to provide a philosophical base for the promotion of healthy lifestyle practices that recognises, understands, and responds to the unique needs of CiC. The development of tailored health promotion guidance could also result in greater consistency in the messaging and approach to care for all CiC, including consistent communication of a shared purpose, that is underpinned by healthy lifestyle principles and values. This may also facilitate congruency throughout the child welfare sector and cohesiveness across the care system, which is a central purpose of developing national guidance for the child welfare sector. Finally, more detailed health promotion guidance will provide clearer objectives and measurable indicators for carers, in regard to daily care routines, mealtimes, leisure activities, and carer-child interactions, which will better ensure that guidance is translated into practice.
Social workers, carers, and other professionals who work with CiC are considered the most significant people within the child’s social care and support system.\textsuperscript{89} Ensuring that they receive the right support and training around health promotion is fundamental to the child welfare system as a whole in meeting the health needs of CiC.\textsuperscript{13} However, only six out of 28 guidelines, all from the UK, explicitly acknowledged that those involved with CiC require relevant skills, knowledge, training, resources, and support to promote healthy lifestyle practices, such as healthy eating and engagement in physical activity, among the children in their care.\textsuperscript{23, 25, 40, 53-54, 57} In contrast, health promotion training was not mentioned in the Australian or USA guidelines, reflecting a potential key knowledge to practice gap. There was also no mention of trauma-informed health promotion training, education, and support programs for carers.\textsuperscript{19-22} Such professional development and learning opportunities would reinforce and ensure that specific health promotion guidelines are being implemented in practice.

One program that is currently being implemented to address this in Australia is the Healthy Eating, Active Living Matters (HEALing Matters) program. HEALing Matters is a Victorian Government funded online modular training package and knowledge exchange platform for residential workers, foster and kinship carers.\textsuperscript{86} HEALing Matters uses a trauma-informed approach to guide carers’ understanding of how food and physical activity can be powerful ways of demonstrating trust, predictability and providing support and care that is attuned to the needs of CiC. The program currently comprises six 45-minute online training modules, including: (1) Attunement; (2) Shaping Routines; (3) Food For Thought; (4) Physical Activity For Thought; (5) Health Literacy; and (6) Take A Moment For Yourself. Specifically, HEALing Matters helps carers to understand children’s eating behaviours and relationships with food within the context of their previous trauma.\textsuperscript{86}
Through HEALing Matters, carers are encouraged and supported to provide healthy balanced meals for the children in their care and to use food to create a home-like atmosphere by having regular mealtimes, involving CiC in food preparation and cooking, and eating meals together as a ‘family’ group.\textsuperscript{33, 86} It also encourages carers to understand the socialisation of food, such as using food to communicate care and a way to develop meaningful relationships with others.\textsuperscript{33, 86} Furthermore, HEALing Matters provides a range of strategies for carers to help them promote and prioritise engagement in physical activity among the children in their care (i.e., role modelling and being active together to enhance relationships). Future policy guidance for CiC requires the provision of specific and practical strategies for carers to demonstrate how food and physical activity can improve physical, social and emotional outcomes for this population. HEALing Matters could provide a best practice model that may inform the development of such guidance for CiC.

To the authors’ knowledge, this is the first review to provide a narrative synthesis of how health is discussed in the national guidelines for CiC. However, there are some limitations to acknowledge. Due to the nature of the documents required for this review, a grey literature search was conducted. Given that grey literature information remains extensive and heterogenous, with little systematic methodological guidance, it is possible that there may be additional records that were not identified in the current review (i.e., additional clinical guideline documents). Whilst standardised approaches to the grey literature search strategy and narrative synthesis were adopted, this methodology was not particularly rigorous or comprehensive (i.e., unlike a systematic review). Notwithstanding this limitation, a strength of this review was the use of pre-determined search terms across an internet search engine and websites of key government departments, and services for each country of interest.
The significant amount of variability in the documents reviewed, in terms of type, context (associated with different child welfare systems), document authors, intended audiences, and extent of accountability and compliance associated with each document, is also a limitation in relation to making direct comparisons about how nutrition and physical activity are discussed across countries. Hence, whilst this review has provided a narrative synthesis of how health promotion is represented in the international documents pertaining to the provision of care for CiC, a clear gap remains in our capacity to compare and contrast this information across countries. Therefore, it is recommended that further research includes in-depth document reviews within countries (e.g., synthesising state guidance across the USA) to be more inclusive of, and sensitive to, the local context where such documents are implemented. This may help to better understand how health promotion is managed (relevant to different standards) in the provision of care internationally. Finally, this review did not capture how such guidance is enforced and translated into practice. Particularly in Australia, there remains uncertainty around how physical activity and nutrition are promoted among CiC, and how carers are supported to encourage and prioritise these healthy lifestyle behaviours. Therefore, future research is necessary to determine how such standards and guidelines are being implemented in practice to inform appropriate trauma-informed health promotion.

Conclusion

Overall, legislation, statutory standards and departmental guidance supporting healthy lifestyle intervention for CiC internationally and locally remains inconsistent and broad. Specific trauma-informed health promotion guidance for CiC is required to better respond to the unique health needs of CiC and improve health outcomes for this population. Specific health promotion guidance may also improve the consistency of care provision, the cohesiveness across the care system, and provide clearer objectives for carers. To address
potential knowledge to practice gaps, carers are likely to require trauma-informed health
promotion training, education, and support programs so that they are upskilled and well-
equipped to prioritise and facilitate healthy lifestyle practices among CiC, and to ensure that
the specific guidelines are being implemented in practice in an effective way.

Acknowledgments

Supporting Information

Table S1 How is primary health, nutrition and physical activity discussed in care standards
and guidelines?

Table S2 Classification of care standards and guidelines

Appendix S3

Funding and sponsorship

This research did not receive a specific grant from funding agencies in the public,
commercial, or not-for-profit sectors.

Declaration of Interest

No potential conflict of interest was reported by the authors.

Author contributions

Rachael Green: Conceptualization, Methodology, Formal analysis, Writing - original draft,
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Alexandra Chung: Conceptualization, Methodology, Formal analysis, Writing - original
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Helen Skouteris: Conceptualization, Methodology, Formal analysis, Writing - original draft,
Writing - review & editing.
References


23. Looked After Children Health Exchange. *Supporting and promoting the health needs of looked after children in Wales*. Wales: Children in Wales; 2012. Available at:


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Gateway; 2018. Available at: https://www.childwelfare.gov/pubPDFs/caseplanning.pdf.


33. Green, R., Savaglio, M., Bruce, L., Tate, R., Smales, M., Crawford-Parker, A., … Skouteris, H. How well are we meeting the nutrition and physical activity needs of young people in care? An examination of the food quality and physical activity environment of out-of-home residential care houses in Victoria. 2020; *Under Review*


42. Department of Health and Human Services [DHHS]. *Victorian handbook for foster carers*. Victoria, Australia: DHHS; 2017b. Available at:


59. Department for Education. *Guide to the children’s homes regulations including the quality standards.* England: Department for Education; 2015. Available at:


65. Parliamentary Counsel Office. *Children and young person (care and protection) Regulation 2012.* NSW Government; 2019. Available at:


71. Department of Child Safety, Youth, and Women. *Child safety policy – residential care*. Queensland, Australia: Department of Child Safety, Youth, and Women; 2017b. Available at:


**Figure 1 legend**

*n* represents sample size.

**Appendix A – Search Terms**

Standard* OR guideline* OR polic* OR regulation* OR program* OR requirement* OR statutory OR charter OR rights

Out-of-home care OR looked after child* OR child* in care OR child welfare OR corporate parent* OR foster care OR kinship care OR residential care OR therapeutic care

**Appendix B – Document Review Key Terms**

*Primary Health*

Health*

Wellbeing

Medical

*Healthy Eating*

Nutritio*
1 Food
2 Eat*
3 Diet*
4 Meal*

5

6 Physical Activity
7 Physical
8 Activ*
9 Exercis*
10 Recreation*
11 Sport*
12 Leisure
13 Move*
14 Hobby/ies
15 Community
16 Participat*
17 Play
18
19
20
21
22
23
24