HOME
STRETCH

# Extending care to 21 years in New South Wales

Analysis by Deloitte:
Commissioned by Home
Stretch Campaign NSW

October
2018

Contents

Charts

Tables

Figures

Acknowledgement

Glossary of acronyms

Acronym	Full name
ABS	Australian Bureau of Statistics
AbSec	Aboriginal Child, Family and Community Care State Secretariat (NSW)
AIC	Australian Institute of Criminology
AIHW	Australian Institute of Health and Welfare
AOD	alcohol and other drug
AWOTE	average weekly ordinary time earnings
CIDI	composite international diagnostic interview
CPI	consumer price index
DALY	disability adjusted life year
DSM	Diagnostic and Statistical Manual of Mental Disorders
FACS	Family and Community Services (NSW Government)
GBD	Global Burden of Disease
IHME	Institute for Health Metrics and Evaluation
NCVER	National Centre for Vocational Education Research
NSW	New South Wales
OOHC	out-of-home care
PTSD	post-traumatic stress disorder
USA	United States of America
VET	vocational education and training
VSL	value of a statistical life
VSLY	value of a statistical life year
WHO	World Health Organization
YLD	years lost to disability
YLL	years of life lost

Foreword

HOMELESSNESS

-19.5%

Reduced from
39% to 19.5%

TEEN PREGNANCY
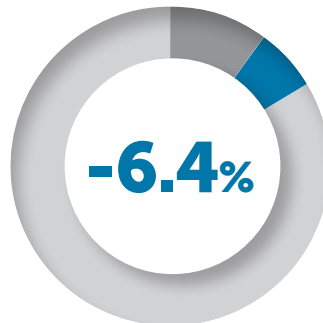
-6.4%

Reduced from
16.6% to 10.2%

EDUCATIONAL ENGAGEMENT

+9.3%

Increased from
7.0% to 16.3%, for non-parents

HOSPITALISATION

-10%

Reduced from
29.2% to 19.2%

MENTAL ILLNESS

-24.3%
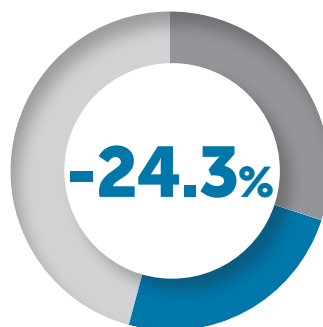
Reduced from
54.4% to 30.1%

SMOKING

-31.9%
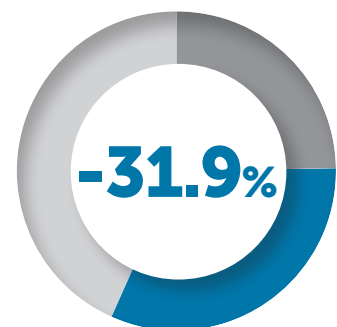
Reduced from
56.8% to 24.9%

INTERACTION IN CRIMINAL JUSTICE

-5.9%

Reduced from
16.3% to 10.4%

ALCOHOL AND DRUG DEPENDENCE

-13.3%
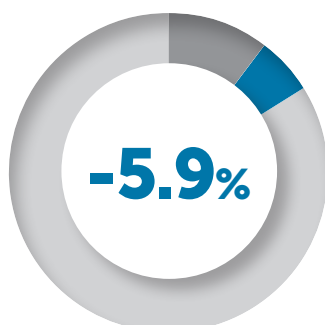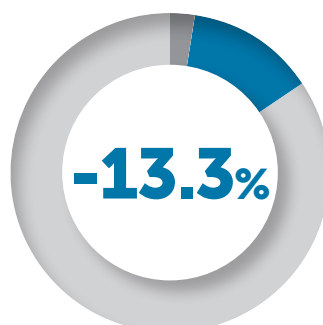
Reduced from
15.8% to 2.5%

LOST WELLBEING DUE TO ILLNESS AND ABUSE

-24.3%
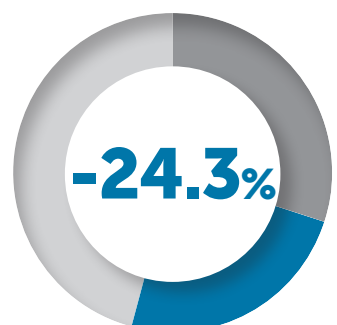
Reduced from
54.4% to 30.1%

Evidence of the dire outcomes experienced when 18-year-old people transition out of the care system has been mounting for decades. A lack of appropriate supports in the crucial post-care years is leading young people leaving care to experience high rates of homelessness, financial hardship and contact with the justice system.

The average 18 year old would struggle if forced to fend for themselves in today's world of casualised work and high rental costs. And yet we ask this of young people struggling to overcome a past history of abuse, trauma and disrupted family attachments. As the 2016 South Australian Royal Commission put it:

> "Unlike young people in the general population, care leavers embark on the challenges of adulthood without the safety net offered by a traditional family structure".

If young people leaving care are to thrive as active citizens in our community, they need more supports than the average teenager, not less.

The poor outcomes experienced by young people leaving care have costs, not only for the individual in terms of lost life opportunities, but also for government and society in terms of ongoing use of government programs, poor employment outcomes, and increased rates of crime.

Australian Government reports since the 1980s have testified to the large numbers of homeless young people with state care backgrounds. One challenge is compounding another. A lack of stability in childhood is linked to disrupted education which means young people in care are less likely to continue their education beyond the minimum school leaving age. Without formal educational achievement, securing a job is more difficult which in turn makes it harder to secure rental housing. Even care leavers' disproportionately high contact with the justice system has been linked by researchers to the issue of unstable housing arrangements.

There is consensus amongst researchers and many practitioners that providing more gradual transitions from care will improve outcomes for this group. Efforts to better prepare young people for leaving care has led to a requirement in NSW what young people must begin planning for transitions to independence at age 15. While this provides time for a plan to be put in place, it also introduces the young person to the concept that the care they are receiving, and their living arrangement, are likely to end while they are still at a vulnerable age developmentally.

This can only be described as failed policy. The human toll is heart-breaking. The financial and social cost of these outcomes impacts on every tier of government is huge. One of the headline findings in this report is that due to their higher use of government services, care leavers aged 18 to 21 years in our state alone will cost NSW taxpayers $222 million and Commonwealth taxpayers $667 million over the next 10 years.

After years of government inaction, the pressure for reform has seen a range of approaches announced across a number of states in the past 18 months. On hearing the news that Tasmania is planning to raise the

age for leaving care to 21, one 23 year-old former foster child said:

> "…Given the fact that I grew up in Tasmania, this makes me very happy. However, what is so different in Tasmania compared to Sydney? … I would like to point out that in NSW there is not any youth housing – trust me I have looked. There is a ten-year waiting list for public housing. There is no funding for people with a leaving care experience. This makes leaving care up here even more difficult, considering how expensive it is to live in Sydney."

Yet there is hope. The NSW Home Stretch Campaign Committee is arguing that all young people leaving care must be provided access to extended care arrangements until they are 21 years old. These reforms are comprised of three key strategies:

- Young people leaving care, in consultation with foster parents, are provided the option to voluntarily extend foster care supports until age 21.
- A personal case worker/mentor to help link them with education, training and job opportunities and to support their health and well-being.
- Safe, secure and supported independent living for young people leaving care, especially those exiting residential care, who cannot or choose not to take the voluntary extension of foster care supports.

One of the most startling findings in this report by Deloitte Access Economics is uncovering the very significant improved life outcomes of simply extending care supports until the age of 21. It will halve the rate of homelessness for care leavers and more than double the rate of educational achievement. For young people leaving care, these reforms would also see significant reductions in the rates of:

- hospitalisation;
- mental illness;
- interaction with the criminal justice system;
- alcohol and drug dependency; and
- lost wellbeing.

"I learnt the hard lesson that life is very difficult living on your own."

- Female care leaver, aged 23, NSW

" I left foster care when I was 18 years old, like most people who have entered the system. That was seven years ago. The care age in Tasmania [is being] raised to 21 and, given the fact that I grew up in Tasmania, this makes me very happy. However, what is so different in Tasmania compared to Sydney?

There is aftercare support funding, therefore you get funding until you are 25 years old. You are granted $2,500 a year and the amount expires every year on your birthday. There are also a lot of housing options for young people in care to keep out of risk of being homeless. One facility that I lived in before leaving Tasmania was a placed called Tyne House. It was funded through Anglicare and they also had a place in all major cities: Launceston, Devonport and Hobart.

There is a counsellor on site, a computer room with internet and a printer, a gym, cooking lessons once a week, free food every Tuesday and Thursday, a back yard with a basketball court, the option of living on your own, a movie room, and outings during the holidays. I would like to point out that in NSW there is not any youth housing – trust me I have looked. There is a ten-year waiting list for public housing. There is no funding for people with a leaving care experience. This makes leaving care up here even more difficult, considering how expensive it is to live in Sydney. You could live in a shared accommodation but most people who have been in a traumatic experience do not want to live with strangers and have to hide how they feel if they are dealing with something traumatic from their experience.

I had support from my foster family when I left foster care. My foster home were willing to take me on until I was ready to move out. I was very fortunate. That was the case for me. I left when I wanted to. But I learnt the hard lesson that life is very difficult living on your own. I was not mature enough. I tell the young people at my University who are living at home do not take it for granted [and] stay there as long as possible. They have meals taken care of, housework done and rent paid for, and they can focus on their study.

When I was 21 years old I got my first qualification and my first full time job. That would have been a more appropriate age to move out. I do believe the leaving care age should be raised to 21, however it should be the young person's choice. If they wish to leave care at 18, like most young people with parents often decide to leave at 18, then that is their decision. But if they wish to go back into foster care, they can have that option.

Please reflect on what I have said. I hope I persuaded you. "

The positive impact these reforms would have on the lives of many individual young people is incalculable. The net benefits to government should be obvious. In fact, the savings to the NSW Treasury from the proposed reforms are arguably conservative as calculating the "inter-generational cycle of care and protection" was beyond the scope of the analysis undertaken by Deloitte Access Economics. This Deloitte Access Economics report shows that extending care to 21 would see reductions in the rate of teen pregnancy. Other research has found that around half the children born to care leavers themselves end up entering the child protection system. In my view, perpetuating this "inter-generational cycle of care and protection" is one of the biggest ongoing costs to the State Government of not reforming post-care supports.

The NSW Home Stretch Committee is very supportive of the NSW Government's permanency reforms and attempts to reduce the number of young people who remain in the care system for extended periods. However the overseas evidence, particularly from the US, is that even where you can develop a strong culture of adoption there will remain a significant cohort of teenagers who will continue in care through to 18. The American evidence suggests that very few young people secure permanent outcomes such as adoption and restoration after the age of 14.

We believe that the reforms to post-care supports proposed by the Home Stretch Campaign will, as they help reduce the inter-generational cycle of care, ultimately lead to an overall reduction of the number of children entering the care system.

These reforms form an additional and critical piece of the puzzle if we are to truly fix a broken system.

Jeremy Halcrow

Chair of NSW Home Stretch Campaign Committee
CEO, Anglicare NSW South, West & ACT

"As I start to fill out my leaving care plan I'm terrified of the obstacles ahead and the challenges I have to face".

- Female care leaver, aged 16, NSW

" I am 16 years old and I live in care. I have been in care for just over 15 years with my foster mum. The reason I was put in care was that my parents didn't look after me properly and my father abused me. So I ended up in care. Growing up was harder than other kids my age. I always had to make two of everything for my real parents and foster ones. I knew I was always different but I didn't understand what was going on.

I grew up thinking I was worthless and a mistake and was bullied at school for being in foster care. As every early teen has their struggles I couldn't handle it some days. Other days were better than some. I didn't have a caseworker for years and my family had no help with raising me. But a couple years ago we got one. It was a whole new experience for me and I wasn't ready for it. In my eyes, it's an invasion on my life because I just want to be like everyone else which is hard when you've got someone coming to your house every six weeks to see what you're up to.

Even though being in care is hard and takes a lot of strength it can't be done without foster carers like mine and the final support we get. As I start to fill out my leaving care plan I'm terrified of the obstacles ahead and the challenges I have to face like taxes and cooking and housing and work and money, everything a basic adult needs. I have friends who are over 18 and still haven't gotten the extra support they needed and have ended up on the streets and had their agencies turn away from them.

Therefore I strongly believe the age for child care should be raised to 21 so children in care feel secure and like they will get taken care of. "

Executive summary

Young people who have been in Out Of Home Care (OOHC) are among the most vulnerable cohorts in Australia. They are more likely to experience homelessness, mental health issues, substance abuse and engagement with the criminal justice system, and are less likely to pursue post-school education or to be employed. A survey of NSW care leavers found that within one year of leaving care around 35% of young people had experienced homelessness.

The reasons for this are well established, and relate to the early and abrupt end to care that occurs when a young person in out of home care reaches age 18. Many young people find the process of transitioning difficult, and may not be ready to be fully independent due to various factors including past trauma, poor health and mental health, limited educational attainment, and a lack of support networks and resources. (Beauchamp, 2014)

Transitioning should be based on the maturity and needs of the young person rather than simply age. Evidence from the United States, United Kingdom and many other countries shows that extending care to age 21 improves outcomes in education, employment and other life domains.

In Australia, state and territory governments are responsible for children aged under 18 years of age who are unable to stay at home. Once they turn 18 years of age they are required to leave the care system and are therefore no longer eligible for any of the associated supports. In comparison, for young people who live with their parents or guardians, almost 50% of people aged between 18 and 24 are still living with one or both parents (Australian Bureau of Statistics (ABS), 2014).

There are programs available to help young people transition to living independently but these are more focused on specific aspects of support (for example, support with finding rental accommodation or getting a driver's licence) compared to OOHC.

Internationally, governments have introduced programs to increase the age of eligibility for care from 18 to 21 years. The outcomes from these programs have been evaluated and the evidence suggests that providing an additional three years of care, leads to better outcomes for these young people in terms of stable living arrangements, economic opportunities and their wellbeing.

Drawing on the international evidence on extended care, this report analyses the costs and benefits of the proposal to extend care for young people in OOHC in New South Wales to 21 years of age.

Out-of-home care in New South Wales

In New South Wales, there were 17,879 children in OOHC as at 30 June 2017, of which approximately 865 were aged 17 years of age (Australian Institute of Health and Welfare (AIHW), 2018a). The number of children in OOHC in New South Wales has been consistent over the last five years. The rate at which children are in OOHC in New South Wales is 10.3 per 1,000 children, which is higher than the national rate of 8.7 per 1,000 children.

There are different types of OOHC in Australia. In New South Wales, the majority of children (96%) are in home-based care, which includes foster care, relative/kinship care, guardianship and third-party parental care. Home-based care is where the child is placed in the home of a carer who is reimbursed (or who has been offered but declined reimbursement) for expenses for the care of the child. Another 3% of children are in residential care, where they are looked after by paid staff. The remainder are in other types of care – such as family group homes, independent living or boarding schools (AIHW, 2018a).

Children in OOHC are disproportionally of Aboriginal and Torres Strait Islander background. As at 30 June 2017, 38% of children in OOHC were Indigenous, a rate of 72.8 per 1,000 children. This is more than 10 times the rate of OOHC service utilisation for non-Indigenous children.

The New South Wales Government has been actively working to reform the OOHC system over the last six years. There have been changes to the overarching legislative framework as well as introducing specific small scale or pilot programs to support young people transitioning out of care. While the problem of how best to support young people after leaving care has been widely recognised for some time, there is currently no single transition program in operation, either in Australia or internationally, which has demonstrated effectiveness in addressing the needs of all care leavers.

In addition, some pilot programs are aimed at a relatively narrow target population, for example young people up to 17 or 15 years of age (the Premier's Youth Initiative and the Homeless Youth Assistance Program respectively) or young people who are 'motivated to work or complete study or training to help obtain a job' (Rent Choice Youth). Given the history of trauma many young people are still grappling with at this age, this may result in young people 'falling between cracks' in service eligibility requirements.

Methodology

Our analysis compares two scenarios – one in which extended care is offered and a young person leaves care at 21, and one in which a young person leaves care at 18. We examined outcomes in relation to: housing; education and employment; early parenthood; hospitalisation; the non hospital costs of mental illness and smoking; interaction with the justice system; and alcohol and drug dependency. The analysis also quantifies the impact on wellbeing of mental health conditions for care leavers.

The modelling results consider the benefits of a voluntary model of extended care to the age of 21, with an uptake rate of 24.95%, which is based on figures from the Department of Education in the United Kingdom on the rate of uptake of the Staying Put program (Children and Young People Now, 2015).

The socioeconomic cost benefit analysis takes a 40-year perspective of an individual's life (that is, it looks at outcomes for care leavers from age 18 to age 57). This longer-term perspective is justified on the basis that investments made in young people are likely to materialise over a longer-term basis (with a

lag). The model assumes that all participants who elect to take up the program in the first year remain in the program over the entire three-year period.

Intervention

The proposed intervention is to extend access to care for young people to the age of 21. Thus, the eligible population for extended OOHC are young people aged 17 who are discharged from care on their 18th birthday. Remaining in care would be optional and subject to the agreement of both the young person in care and, for those in foster care, their carer. Young people may also receive supported accommodation as an alternative form of ongoing care. This model has been used successfully in the US program, where young people receive extended care whether or not they are able to stay with their carer. Extending care would require government support in the form of ongoing carer reimbursements to carers and case management for the young person, or equivalent expenditure on other forms of supported accommodation with case management.

This report does not specify the exact policy settings that the New South Wales Government may wish to implement, for example, whether or not access to extended OOHC requires the young person to be undertaking further education or in employment.

For the purposes of this analysis, we have assumed that extended OOHC would only be accessed by young people in home-based care. This is because the available international evidence on the outcomes from extended OOHC relates to young people in home-based care. However, this does not preclude similar policy consideration for extended OOHC in other settings, notably the residential setting.

Costs

The costs represent the cost of providing extended care to the age of 21, as well as additional costs that arise as a result of the policy, such as increased costs for education.

It is assumed for our analysis that the type of care provided under this model will be home-based care rather than residential care. The annual cost per young person participating in the program is assumed to be equivalent to the average cost per child in home-based care in 2016-17 based on data published by the Productivity Commission (2018). The 2016-17 cost for New South Wales was inflated using the consumer price index (CPI) to 2018-19 dollars, to give an average annual program cost of $39,665 in 2018-19 dollars.

Findings

Quantifiable Benefits

The benefits include avoided costs, such as lower welfare payments, as well as financial benefits, such as increased wages calculated based on the change in probability of different outcomes depending on the age at which the young person exited care. Our analysis found that young people who stay in care until the age of 21 experienced the following

outcomes relative to those who leave care at 18 years of age:

- Homelessness halved from 39% to 19.5%;
- Rate of teen pregnancy reduced from 16.6% to 10.2%;
- Educational engagement increased from 7.0% to 16.3%, for non-parents;
- Hospitalisation rates reduced from 29.2% to 19.2%.
- Rate of mental illness reduced from 54.4% to 30.1%;
- Rate of smoking reduced from 56.8% to 24.9%;
- Interaction with the criminal justice system reduced from 16.3% to 10.4%;
- Alcohol and drug dependence rates reduced from 15.8% to 2.5%; and
- Lost wellbeing due to mental illness and substance abuse reduced from 54.4% to 30.1%.

Broader benefits

In addition to the benefits that we have quantified, there are broader benefits that may also accrue from the policy including better outcomes for the children of care leavers, improved physical health outcomes and greater social connectedness and civic participation.

The modelling for this project only considers the impacts on the individual receiving extended OOHC and the costs avoided by governments as a result of that individual's receipt of OOHC support. In light of the link between higher employment and income, improved education and reduced criminal activity from extending care to 21 years, together with the link between higher parental income and child outcomes, extending care beyond 18 years could reduce the intergenerational disadvantage experienced by the children of care leavers, in addition to the care leaver themselves (Mayer, 2002). However, measurement of such additional potential longer term benefit is beyond the scope of this analysis.

The difference in physical health outcomes between 18-year-old care leavers and those who stay in care to age 21 is likely to extend beyond the modelled differences in hospitalisation costs, smoking rates, and alcohol and drug dependency. Young people who remain in care longer may experience physical health benefits as a result of improved education and employment outcomes associated with remaining in care longer than people who leave care at 18 years (Raman et al., 2005). Moreover, by offering the possibility of extended care with associated greater potential stability in accommodation and care arrangements, children may experience greater continued connection to individuals where they had forged positive relationships, leading to greater improved emotional wellbeing and social benefits for young people in extended care (Department of Families, Housing, Community Services and Indigenous Affairs & National Framework Implementation Working Group, 2011). Again, excluding these health and wellbeing benefits due to scope and data limitations suggests the analysis may be conservative in its findings.

Results

Our analysis found that extending care to the age of 21 is estimated to generate a return of $2.10 for every $1 spent on the program. When wellbeing costs are included, the return on investment increases to $3.40 for every $1 spent. Thus, based on this analysis we consider that extending care is a worthwhile investment for government, as over time governments will pay less for services to support this cohort relative to the cost of extending care.

In 2017-18, there were 865 children in OOHC care aged 17, who would be 18 in 2018-19, the first year of analysis. Based on our uptake assumption, this implies that 216 of these young people would have opted into the program if it had been available. Table i provides a summary of the results for the cohort of 18 year olds in 2018-19, who are assumed to have access to extended care. The expected net financial benefits of the program are $27.6 million, or $59.5 million including wellbeing benefits.

Table i Present value (2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018-19

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	24.7	24.7
Total benefits	52.2	84.2
Net benefits	**27.6**	**59.5**
Benefit to cost ratio	**2.1**	**3.4**

Source: Deloitte Access Economics analysis. Note: Discount rate used is 7% and uptake rate is 24.95%. Numbers may not add due to rounding.

Our analysis also looked at the long-term impact on government budgets – due to higher rates of government service use amongst those who leave care at 18 – of supporting young people in OOHC until age 21. The financial impact of the current cohort of care leavers aged 18 to 21 years due to higher usage of government services is estimated to be $222 million for the New South Wales Government and $667 million for the Commonwealth Government over the next 10 years, giving a total impact of $889 million.

Costs to the New South Wales Government are dominated by the cost of housing and homelessness services and hospitalisation, as shown in Chart i.

Chart i Share of total costs to the New South Wales Government of life domains

Pie chart showing: Housing and homelessness, 67%; Hospitalisations, 17%; Other mental health, 4%; Alcohol and Drugs, 1%; Crime, 10%; Smoking, <1%; Education, <1%
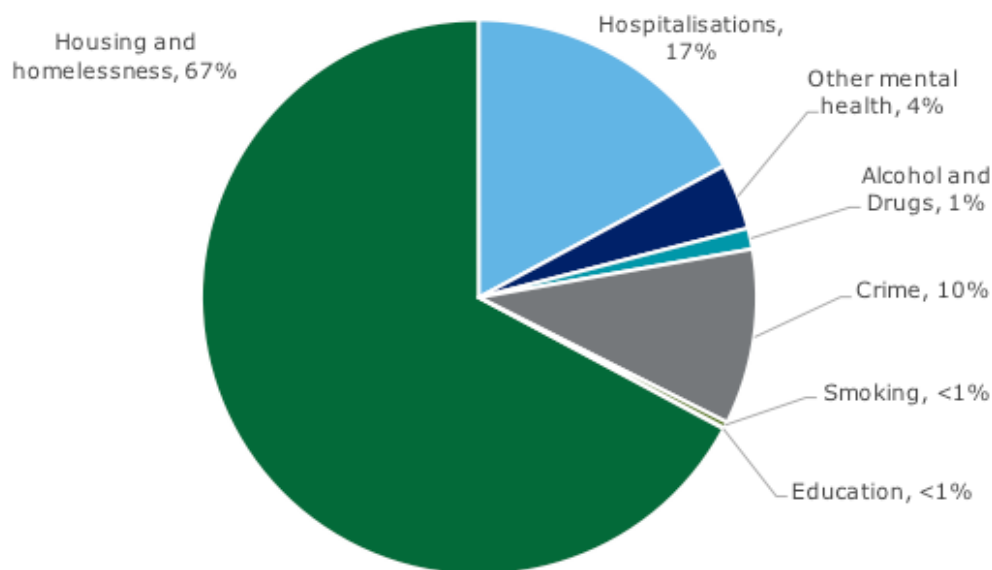
Source: Deloitte Access Economics.

Conclusion

The disparities in care-pathways between children in OOHC and those in traditional care structures is highlighted in the abrupt end of formal state care at the age of 16-18 years. The state, as the effective parent, ceases to provide ongoing financial, social and emotional support as a caregiver. In contrast, for children who live with their parents or guardians, almost 50% of people aged between 18 and 24 are still living with one or both parents (ABS, 2014).

Care leavers represent a small but highly disadvantaged group of young people, who on average experience poor life outcomes across a range of domains. The ongoing costs to governments of providing services to this cohort to ameliorate the impacts of poor life outcomes is significant.

International experience suggests that extending OOHC to the age of 21 can lead to substantial improvements in the life outcomes of these young people. Our analysis shows that across the life time of these young people the costs of extending care to 21 years of age will be more than recouped through the reduction in the value and volume of other government services they require.

Our analysis found that extending care to the age of 21 is estimated to generate a return of $2.10 for every $1 spent on the program. When wellbeing costs are included, the return on investment increases to $3.40 for every $1 spent. Thus, based on this analysis we consider that extending care is a worthwhile investment for governments to fund extending care, as over time governments will pay less for services to support this cohort relative to the cost of extending care.

Deloitte Access Economics

1. Introduction

This chapter provides an overview of the number of children in OOHC in NSW and their characteristics. It also provides a summary of extended care programs that have been implemented overseas and where available the evidence from these programs of the benefits of extending care to the age of 21. Finally, it sets out the proposal to extend care in New South Wales to the age of 21 and the structure of this report.

1.1   Out-of-home care in New South Wales

In Australia, state and territory governments have a statutory responsibility for ensuring children are protected from harm caused by abuse and neglect. In cases where the home environment is not safe, children may be placed in OOHC, which involves the placement of a child or young person with alternate caregivers who have legal custody of the child until 18 years of age. The majority of children placed in OOHC are subject to child protection intervention (AIHW, 2018a).

In New South Wales, as at 30 June 2017 there were 17,879 children in OOHC. The rate at which children are in OOHC in New South Wales is 10.3 per 1,000 children, which is higher than the national rate of 8.7 per 1,000 children (AIHW, 2018a).

Chart 1.1 Number of children in OOHC in New South Wales

Number of children in OOHC (LHS)   Rate per 1,000 children (RHS)
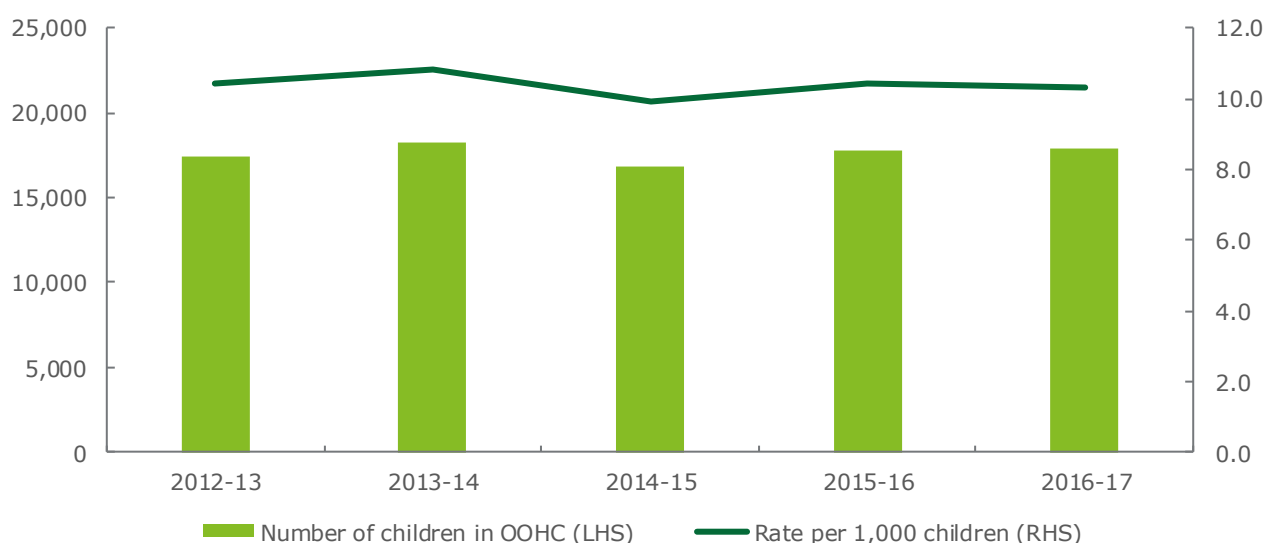
Source: AIHW, 2018a. Note: The Safe Home for Life legislative reforms, effective 29 October 2014, transitioned eligible children/young people to the independent care of their guardian. These children/young people exited and were no longer counted in OOHC.

Under current policy settings, children and young people aged from birth to 17 years of age are supported in OOHC where needed. Chart 1.2 shows the number and proportion of children and young people in different age brackets.

Chart 1.2 Age of children in OOHC in New South Wales

Less than 1 year of age, 436 children, 2%

Aged 15 to 17 years, 2,591 children, 14%

Aged 1 to 4 years, 3,327 children, 19%

Aged 10 to 14 years, 6,026 children, 34%

Aged 5 to 9 years, 5,498 children, 31%
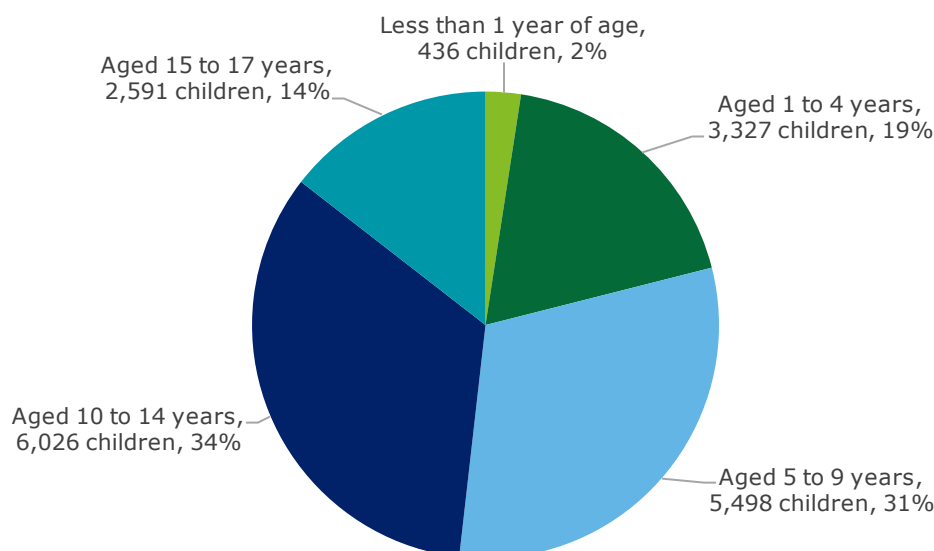
Source: AIHW 2018a.

There are different types of OOHC in Australia. In New South Wales, the majority of children (96%) are in home-based care, which includes foster care, relative/kinship care and third-party parental care. Home-based care is where the child is placed in the home of a carer who is reimbursed (or who has been offered but declined reimbursement) for expenses for the care of the child. Another 3% of children are in residential care, where they are looked after by paid staff. The remainder are in other types of care – such as family group homes, independent living or boarding schools (AIHW, 2018a).

Table 1.1 Number and proportion of children in different types of OOHC in New South Wales as at 30 June 2017

	Number of children	Proportion of children
Home-based care	17,066	95.5%
Residential care	599	3.4%
Family group homes	23	0.1%
Independent living	76	0.4%
Other/unknown	115	0.6%
Total	**17,879**	**100%**

Source: AIHW, 2018a.

Residential care is mainly used for children who have complex needs. However, in many jurisdictions, priority is given to keeping siblings together, which sometimes results in periods of residential care for larger family groups (AIHW, 2018a). Older children are more likely to be in residential care than in home-based care, although at all age groups the majority of children and young people are in home-based care (as shown in Table 1.2).

Table 1.2 Children in home-based care and residential care by age in New South Wales as at 30 June 2017

	Home-based care	Residential care (including family group homes)
Less than 1 year of age	436	0
Aged 1 to 4 years	3,322	2
Aged 5 to 9 years	5,434	40
Aged 10 to 14 years	5,697	251
Aged 15 to 17 years	2,176	305
Total	**17,065**	**599**

Source: AIHW, 2018a.

As at 30 June 2017, 38% of children in OOHC were Indigenous, a rate of 72.8 per 1,000 children. This is more than 10 times the rate of OOHC service utilisation for non-Indigenous children (Chart 1.3).

Chart 1.3 Number and proportion of children in OOHC in New South Wales by Indigenous status as at 30 June 2017
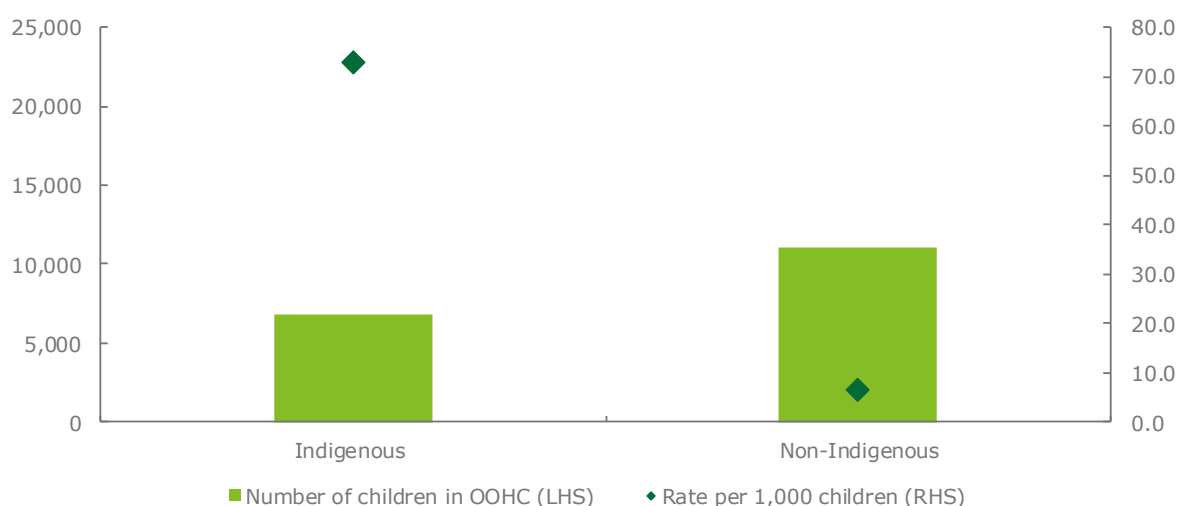
Source: AIHW, 2018a. 1.2

1.2   Outcomes for care leavers

A vast body of literature documents the relatively poor life outcomes experienced by those leaving OOHC. The relative disadvantage experienced by this group spans from a number of interrelated factors including a history of abuse or neglect, ongoing poor physical and mental health, substance abuse, homelessness, poverty, unemployment and violence.[1]

Recent research on brain development shows that critical parts of the brain required for effective decision-making are not fully developed until the mid-twenties. The pre-frontal cortex, which is involved with social interaction and self-awareness and checks risk-taking behaviour, is the part of the brain that changes most during adolescence. Brain development of children who have suffered trauma is delayed (Beauchamp, 2014).

Table 1.3 Comparison of outcomes for care leavers compared to the general population for selected indicators

Indicator	General population	Care leavers
Completed Year 12	79%	35%
Undertaking post-school education	42%	11%
Unemployment rate	9.7%	29%
Experienced homelessness	**1%** of 19-24 year olds were homeless on census night	**35%** experience homelessness in the first year of leaving care

Sources: ABS, 2017b. McDowall, 2009. Harvey et al., 2015. Parliament of Australia, Community Affairs References Committee, 2015. Notes: The data on educational attainment for the general population use the rates for 20 to 24 year olds.

Traditional support structures – family, friendship circles and community – are more likely to be broken for those exiting OOHC, limiting the social support individuals can leverage to break the cycle of disadvantage which, if left unaddressed, has the potential to span several generations.

The disparities in care-pathways between children in OOHC and those in traditional care structures is highlighted in the abrupt end of formal state care at the age of 16-18 years. The state, as the effective parent, ceases to provide ongoing financial, social and emotional support as a caregiver. In contrast, for children who live with their parents or guardians, almost 50% of people aged between 18 and 24 are still living with one or both parents (ABS, 2014).

Thus the key question for policy makers is whether young people aged 15 to 18 – who have already faced challenging life circumstances – have sufficiently developed independent living skills at an age where their peers

---

[1]   See for example: Mendes, P, Johnson, G., Moslehuddin, B (2011); Care Leavers Australasia Network (2008); Osborn, A. and Bromfield, L (2007).

are afforded the option to continue growing while under care, allowing for development of gradual rather than immediate independence.

1.3 International experience: extending care to the age of 21

Internationally, however, there are examples of countries which have extended care and support to the age of 21 (or in some cases beyond), including the United States of America (USA), the United Kingdom, Canada and New Zealand. Studies of these programs have reported benefits including improved education and employment outcomes, reduced engagement with the justice system; improved physical and mental health outcomes and improved housing stability.

1.3.1 United States of America

In the USA, the Fostering Connections to Success and Increasing Adoptions Act of 2008 was signed in late 2008 to allow states to receive federal funding (Title IV-E) for care provided up to 21 years of age.

This Act allows states the option to continue providing federal government reimbursable foster care, adoption, or guardianship assistance payments to young people aged 19, 20 and 21 years. As each state is responsible for establishing specific foster care practices and managing individual cases, there is flexibility for states to design their programs according to the needs of their youth.

Funding is borne through a 50-50 split between the state and the federal government, in accordance with the latter's commitment to matching state funds through the Fostering Connections Act. Eligibility for funding is dependent on the youth's participation in education or employment.

Forty-five states and the District of Columbia have extended foster care beyond the age of 18 years, either under this act or as a state-initiated program (Juvenile Law Centre, 2018). For the majority of states, care is extended to the age of 21 (Juvenile Law Centre, 2018). Some states also provide other extended services to youth beyond the age of 18, such as transitional living services, housing and educational assistance (National Conference of State Legislatures, 2017).

Figure 1.1 States that have introduced extended care
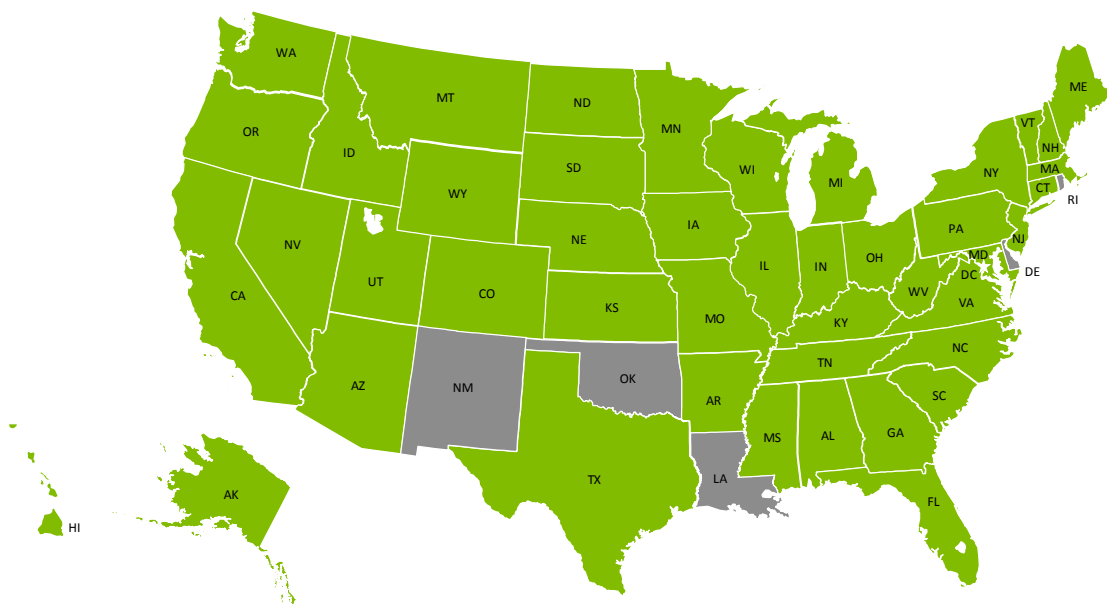
California, in particular, was one of the first states to extend care and receive financial incentives under the Fostering Connections Act. In 2010, California passed Assembly Bill 12 to optionally extend foster care to the age of 21 years, and provide assistance for housing, healthcare, food and support programs (Mosely & Courtney, 2012). Findings from the California model suggested a high uptake rate for support, and improved education and employment outcomes (Courtney et al., 2013; Netzel & Tardanico, 2014).

- Education. Among the sample of 426 youth (aged 18 to 22 years), 66.4% had completed Year 12 or equivalent and 50.5% were engaged in college or vocational training at the time. The duration of extended care was found to be a statistically significant positive factor in educational outcomes, with 68.4% of youth not attending college or participating in vocational training during the first 6 months of their stay.
- Employment. Across the sample, 19.7% were working 80 hours or more per month. This figure increased to 31.0% for those who had been in extended care for two or more years. Overall, duration in care was found to have a statistically significant positive effect on employment outcomes for youth in care.

A number of studies have observed outcomes across various domains for foster youth who had received care extensions through the Fostering Connections Act (see Chapter 4 for more details), with many comparing these outcomes with those for young who exited at age 18. These outcomes have been used to derive estimates for the model, and are presented at Table 1.4. The outcomes for youth exiting at age 18 are broadly similar to those identified in numerous studies of youth exiting at age 18 in Australian jurisdictions.

Table 1.4 Summary of estimates based on the extended care programs in the USA that were used in the model

Study name; setting	Finding from study
Dworsky & Courtney (2010) Based on the Midwest evaluation; Illinois, Iowa and Wisconsin	An additional year of foster care was linked to a 38% reduction in parenthood at 19
Courtney et al. (2007) Based on the Midwest evaluation; Illinois, Iowa and Wisconsin	At 21 years of age, 19.2% of the Illinois foster youth population[2] had at least one hospitalisation episode in the previous year
Courtney & Dworsky (2006) Based on the Midwest evaluation; Illinois, Iowa and Wisconsin	29.2% of young people who had left care aged 19 and below had experienced at least a single admission in the previous year
Washington State Institute for Public Policy (2010) Population studied included those with care extensions to 21; USA	Proportion of individuals leaving care at the age of 18 who were arrested within the following two years was 16.3%, compared to 10.4% of those who had chosen to stay on until a later age, up to 21
Courtney et al. (2011) Based on the Midwest evaluation; Illinois, Iowa and Wisconsin	25% of care leavers were soon arrested after exit, 22% of care leavers had engaged in medium criminal activity, 4% were engaged in violent crime
Courtney et al. (2007) Based on the Midwest evaluation; Illinois, Iowa and Wisconsin	Proportion of individuals leaving care at the age of 18 with alcohol and/or drug dependency, measured at age 21, was 15.8%
Narendorf and McMillen (2010) Population studied included those with care extensions past 18; USA	Those in foster care at 19 had a 52.5% lower rate of having a recent episode of drunkenness, and a 60% lower rate of marijuana use
Pecora et al. (2005) Northwest Foster Care Alumni Study; Oregon and Washington	54.4% of foster care alumni had at least one mental health problem
Kessler et al. (2008) Population included those with care extensions past 18; Oregon and Washington	Those in an 'enhanced' foster care program reported 44.7% less 12 month mental health disorders than those from the public program

2   The Illinois sample of foster care leavers included those who had received foster care extensions to 21 years of age.

1.3.2 United Kingdom

England has extended care provisions intended to model the role of a parent. This assists youth in care until they are 21 or 24, where the young person is in school or training. The Children and Families Act 2014 legislates a duty for local authorities in England to support a 'Staying Put' arrangement, which is a voluntary, opt-in model whereby a young person, when they reach 18 years of age, makes an agreement with their foster carer to remain living with that person up to the age of 21 years (The Children's Partnership, 2015). Eligibility for the program is dependent on age (16 or 17 years old), a minimum time of 14 weeks spent in foster care since age 14, and being in a care arrangement that includes not just their foster carer but a local authority too.

In Scotland specifically, under new provisions in Part 11 of the Children and Young People (Scotland) Act 2014 and from April 2015, young persons in foster, kinship or residential care are eligible to remain in their current care placement until they turn 21. This is called Continuing Care. We note that being a relatively recent development, the outcomes of children in the Continuing Care initiative have yet to be studied.

For the Staying Put program, the Department for Education found in 2015 that a quarter of young people (1,370 of 5,490) in foster care who turned 18 since the 'Staying Put' legislation was introduced had remained with their foster carers (Children and Young People Now, 2015). It was suggested this uptake rate may have been lower than if less stringent entry criteria were adopted and/or more adequate funding had been provided to local authorities to support foster carers (Children and Young People Now, 2015).

An evaluation of the pilot of the Staying Put: 18+ Family Placement Programme (Munro et al., 2010) for young people remaining in extended care found that at 19 years of age:

- **Education**. Across the sample, 55% of those who 'stayed put' were enrolled in full-time education, compared to 22% of those who exited care.[1] Additionally, 25% of young people who 'stayed put' were engaged in full time training and employment, in contrast to 22% of those who left care.
- **Housing**. Across the sample, 41% of young people had taken a direct housing pathway, which involved moving straight from care to stable independent living in council or privately rented property. Of these individuals, 67% were those who 'stayed put'.

---

1   Differences in education between the two groups may be driven by selection bias, in that to be eligible for the program, participants had to be in either education and employment, and thus the analysis may not control for confounding factors that may bias the results.

1.3.3 Canada

Ontario is the only province that currently offers extended funding and social support past 18. While this does not include foster care arrangements, youth who are 18 years of age and transitioning from care are eligible to receive financial supports of $850 per month as well as guidance up to the age of 21. These supports are intended to help youth meet their goals in transitioning to adulthood, and are offered subject to meeting employment and education eligibility criteria (Ministry of Children and Youth Services, 2018).

In Ontario, a 2012 cost benefit study '25 is the new 21' showed that for every $1 the province of Ontario spends supporting its youth by extending foster care and support to age 25, Ontario and Canada will save or earn an estimated $1.36 over the working lifetime of that person (Provincial Advocate for Children and Youth, 2012). Noting that the benefit cost ratios for Canada only reflect benefits in terms of improved educational outcomes (employment and social support) and reduced incarceration rates. Hence, the true benefit from an extension program is likely to be larger.

1.3.4 New Zealand

New Zealand committed to extending care as part of a broader set of reforms to the care and protection system. As of July 2019, young people in care will be able to remain with or return to living with a caregiver until the age of 21. Care leavers may also receive extended support up to 25 years of age. Provisions for extended care include financial assistance to meet the 'necessary costs' of the ongoing living arrangement and monitoring against specific care standards (Ministry of Social Development, 2018).

Providing extended care until the age of 21 and additional support until the age of 25 is designed to provide 'stepped-down support' that allows for advice and assistance to taper off as young people become more independent (Office of the Minster of Social Development, 2016).

1.4 Extending care to 21 years in New South Wales

This report analyses the costs and benefits of the proposal to extend care for young people in OOHC in New South Wales to 21 years of age. Remaining in care would be optional and, for foster care, subject to the agreement of both the young person in care and their carer. Extending care would require government support in the form of ongoing carer reimbursements to carers (or alternative accommodation for the young person) and case management.

This report does not specify the exact policy settings that the New South Wales Government may wish to implement, for example, whether or not access to extended OOHC requires the young person to be undertaking further education or in employment.

For the purposes of this analysis, we have assumed that extended OOHC would only be accessed by young people in home-based care.

This is because the available international evidence on the outcomes from extended OOHC relates to young people in home-based care.

1.5 This report

The objectives of this report are to:

- quantify the cost of higher use of government services by care leavers to provide an estimate of how much young people who exit care at 18 years of age are currently costing governments; and
- estimate the potential financial benefits that may be realised over a forty-year period – both to the individual and to the public – from extending care from the age of 18 to the age of 21 years in New South Wales. An estimate is also provided of the quantum of public expenditure on such a program that, in the long run, would see the public investment as net-neutral.

Noting that no extended care program is currently operational in Australia, the paper draws upon international research to determine the marginal impact of providing extended care to young people in OOHC across several life domains. Specifically, the model considers the financial impacts of: improved housing stability; reduced rates of early parenthood; improved access to education and, relatedly, employment; reduced interaction with the justice system; improved access to healthcare; and reduced incidence of alcohol and/ or drug dependence. The model also estimates the wellbeing benefits to the young person from reduced rates of mental illness and substance abuse.

This report is structured as follows:

- **Chapter 2. Current policy landscape**. An overview of the existing policies that relate to care leavers at the national level and specifically for New South Wales.
- **Chapter 3. Methodology**. An overview of the methodology used, the inputs and outputs of the model, and the limitations of the analysis.
- **Chapter 4. Outcomes for care leavers.** The key modelling assumptions that relate to the current outcomes for care leavers and the expected effect of extending care to the age of 21 based on international experience.
- **Chapter 5. Results**. Presents the results and their interpretation/implications.
- **Conclusions**. What the results of this further analysis suggest should be done to help care leavers.

2. Current policy landscape

This chapter provides policy and program context for the analysis of extending care in New South Wales.

2.1   National policy framework

While state and territory governments are responsible for OOHC and associated policies for children up to the age of 18, the Commonwealth is concerned about the treatment of young people in and leaving care and provides a leadership role in protecting children. As a signatory to the United Nations' Convention on the Rights of the Child, Australia has a responsibility to protect children, provide the services necessary for them to develop and achieve positive outcomes, and enable them to participate in the wider community.

In 2011, the Department of Families, Housing, Community Services and Indigenous Affairs together with the National Framework Implementation Working Group released An outline of National Standards for out-of-home care, which is a priority project under the National Framework for Protecting Australia's Children 2009-2020. In 2015, the Senate's Community Affairs Reference Committee undertook an inquiry into OOHC in Australia. The Committee concluded that:

> 'Governments of all levels have a responsibility to ensure that all children and young people removed from their families and placed in out-of-home care are provided with safe and nurturing living arrangements.' Parliament of Australia, Community Affairs References Committee (2015, p.275).

The Commonwealth Government also currently provides a payment of up to $1,500 called the Transition to Independent Living Allowance to help young people aged between 12 and 25 years of age to cover some costs as they leave OOHC (Department of Social Services, 2018). Many care leavers do not access this payment, often because they are not aware of the entitlement until they contact an 'aftercare' support provider, often some years after leaving care and experiencing episodes of financial crisis.

2.2   New South Wales Government policies and programs

State government departments have a statutory responsibility for ensuring children are protected from harm caused by abuse and neglect. In New South Wales, this responsibility is exercised by the Department of Family and Community Services. Principles for OOHC in New South Wales are legislated in the Children and Young People (Care and Protection) Act 1998 (Children and Young People Act, 1998).

There are currently three different types of OOHC in New South Wales. Statutory OOHC is provided following an order of the Children's Court for a period of more than 14 days. Supported OOHC is a more informal arrangement supported by the Director-General and may include temporary care arrangements. Voluntary OOHC is a voluntary arrangement made by parents with a designated agency or agency registered with the New South Wales Children's Guardian, where Community Services has no involvement in the placement (Department of Family and Community Services (FACS), 2018c). Statutory OOHC services are provided by designated agencies, which are accredited by the New South Wales Government

Office of the Children's Guardian. Current policy is that children under the age of 12 are not placed in residential care, unless the child is part of a sibling group, or has needs that cannot be adequately met in a family-based, foster care placement.

2.1.1 Reforms to OOHC

Child Protection Legislative Reforms were proposed in November 2012 through a discussion paper, after which findings from the feedback process and future direction regarding the proposed reform were published in the A Safe Home for Life report in 2013 (FACS, 2013). In November 2015, the New South Wales Government commissioned an independent review of the OOHC system in New South Wales by David Tune. The outcomes and reform directions from the independent review were published in Their Futures Matter: A new approach (FACS, 2015), and in August 2016 the Cabinet approved the approach in response to the Independent Review of OOHC in New South Wales. The key aspects of the Their Futures Matter reform are:

- provision of needs-based support;
- provision of one connected response which is easy to navigate; and
- existence of a smart system which brings together data, evidence and investment (NSW Government, 2018).

The reforms in response to the Independent Review by David Tune began in 2017, including changes under the Permanency Support Program on 1 October 2017. The Permanency Support Program is run by FACS to support safety, wellbeing and positive life outcomes for children and young people in the child protection and OOHC systems in New South Wales. The Permanency Support Program is a significant aspect of reform to child protection policies and programs in New South Wales, and the full program was set to have begun on 1 July 2018 (FACS, 2018a).

Within the Permanency Support Program, the goal is that every child achieves a permanent home within two years. Changes since October 2017 have included renewed outcome-based contracts with Foster Care and Aboriginal Foster Care providers, new case management policies, appointment of new permanency coordinators, and a Central Access Unit overseeing and coordinating residential care referrals. The Permanency Support Program changes have also included work with the Aboriginal Child, Family and Community Care State Secretariat (NSW) (AbSec) to develop an Aboriginal Case Management Policy (FACS, 2017a).

As of 30 June 2018 Connecting Carers NSW and Fostering NSW ceased services to carers, and Adopt Change were commissioned by New South Wales Government Family and Community Services to operate My Forever Family NSW. This program aims to provide recruitment, training and support to a range of carers, including guardians, adoptive families, and short term foster carers (to look after children until they can return home to birth family) (Adopt Change, 2018). While there are policy movements towards permanency, in which adoption may play a large role, it is noted by some peak bodies that adoption may not be the best option for Aboriginal children, as this may "risk permanently severing the link between a child and those factors that form their Aboriginal identity" (AbSec, 2017). There are also sector concerns that the

drive towards permanency within two years means that children who remain in the system are likely to be those with higher levels of disadvantage.

In New South Wales, state care currently ends for young people at 18 years of age. Section 165 of the Children and Young Persons (Care and Protection) Act 1998 does contain provisions for assistance of children at or above 15 who leave OOHC to receive assistance until they reach the age of 25, as is considered necessary by the minister. It is stated in the Act that this may include provision of information about available resources and services, financial assistance and assistance for obtaining accommodation, setting up house, education and training, finding employment, legal advice and accessing health services, and counselling and support (Children and Young Persons Act, 1998). New South Wales Government Department of Family and Community Services has published Guidelines for the provision of assistance after leaving out-of-home care (FACS, 2017b). The guidelines set out eligibility requirements for leaving and aftercare assistance if the person:

- leaves OOHC at the age of at least 15 years;
- was in the parental responsibility of the Minister immediately before leaving care;
- has been in this parental responsibility for a cumulative period of at least 12 months;
- has not left this care as a result of an adoption or guardianship order; and
- is under the age of 25 years (assistance for those over 25 may continue to be provided at the Minister's discretion).

The Guidelines state that all young people leaving care are to have a plan developed by the agency managing the placement, which includes tailored steps to prepare the young person for independence. Development of the care plan commences at 15 years of age and is developed by the agency responsible for care provision with involvement of the young person, parents, carers and significant others where applicable. The plan is informed by a needs assessment and based on this includes steps preparing the young person for independence, covering financial assistance, finding accommodation and employment, setting up house, education and training, legal advice and accessing health services including counselling. Plans are also to address knowledge and understanding of personal history and cultural background, contact with family members, independent living skills including financial management, and obtaining a provisional driver's licence (FACS, 2017b).

The Guidelines state that "wherever available, care leavers are referred to mainstream services such as Centrelink or providers within the public health system to support their ongoing needs" (FACS, 2017b). Based on the Guidelines the agency responsible for supervising a young person's last placement of more than 12 months are to offer follow up to the care leaver at regular intervals after their exit from care, which may include a review of the leaving care plan, ongoing advice, support and advocacy and assistance where appropriate (FACS, 2017b). If further assistance is required, this is based on an assessment of the young person's needs and their risk of not making a successful transition to independent

living (FACS, 2017b). A time limited 'aftercare allowance' or other one off payments may be available depending on a range of circumstances (FACS, 2017b).

2.1.2   Programs to support care leavers

Noting that the sector is going through a period of reform, a number of programs in New South Wales may assist young people leaving OOHC in New South Wales in addition to potential aftercare provided by the responsible agencies, however these tend to be relatively small programs that do not have capacity to service the entire cohort of care leavers, including many that are currently operating as pilots. All of these programs provide support for the young person post-care, which means that the young person is still required to participate in development of a plan for their exit from care at age 18.

2.3   Policies in other jurisdictions

In other Australian states and territories, some recently elected governments have committed to providing young people in public care the option of accessing formal care and support beyond the age of 18. The Tasmanian government has committed $3 million over three years to provide extended care (up to a maximum age of 21) (Tasmanian Liberals, 2017). The South Australia Government has similarly committed to extending foster care and kinship payments for young people up to 21 years of age (Liberal South Australia, 2018).

3. Methodology

This chapter explains the overarching methodology that we have used for the analysis. The model has been designed to quantify the total cost to governments of children leaving care at the age of 18, and to estimate the net benefits of offering children in OOHC the option to receive extended support to the age of 21.

3.1   Model structure

The model compares two scenarios – one in which the program is offered on a voluntary basis, and one in which the program is not offered (base case).

Figure 3.1 Model structure overview, program versus base case

Program offered?   Program uptake?   Expected value
of life outcomes
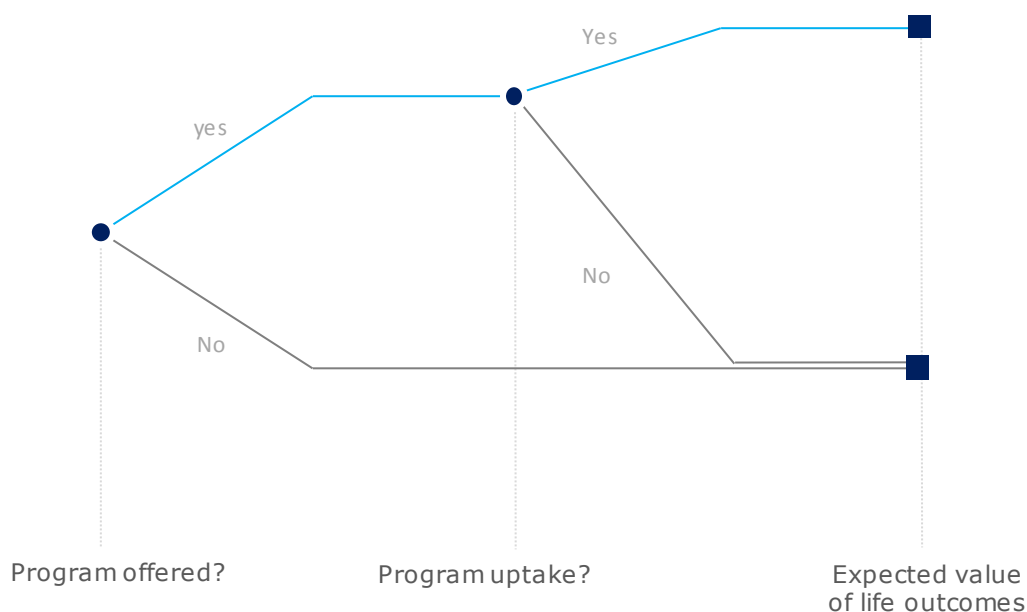
Outcomes differ based on whether an individual participates in the program or does not participate in the program, and are estimated based on international experience as summarised in section 1.2. The model allows for the estimation of monetary outcomes (costs/savings) across nine categories: housing; education and employment; early parenthood; hospitalisation; the non-hospital costs of mental illness and smoking; interaction with the justice system; and alcohol and drug dependency (detailed assumptions for each category are provided in Chapter 4). The model also quantifies the impact on wellbeing of mental health conditions for care leavers.

The probability of experiencing benefits (e.g. a higher wage) or avoiding costs (e.g. reduced justice system costs) is dependent upon program participation (Figure 3.2). It is assumed that the individuals who choose not to take up the program have the same outcomes as individuals who were never offered the program in the first place. The implicit assumption is there is no characteristic difference between those who choose the program and those who do not, except for their choice.

The main model inputs are the probabilities associated with each pathway and the annualised value in 2018 19 dollars of each outcome.

Individuals are assumed to remain on the same pathway for the whole of the period of analysis. The inputs also include any costs associated with a particular pathway, such as the cost of education. Using these inputs, the model calculates the expected value of each pathway.

Expected value weights the value of possible outcomes by the probability that they will occur. For example, a 50% chance of the present value of $100 in savings is equivalent to 0.5*100=$50.

Figure 3.2 Model structure
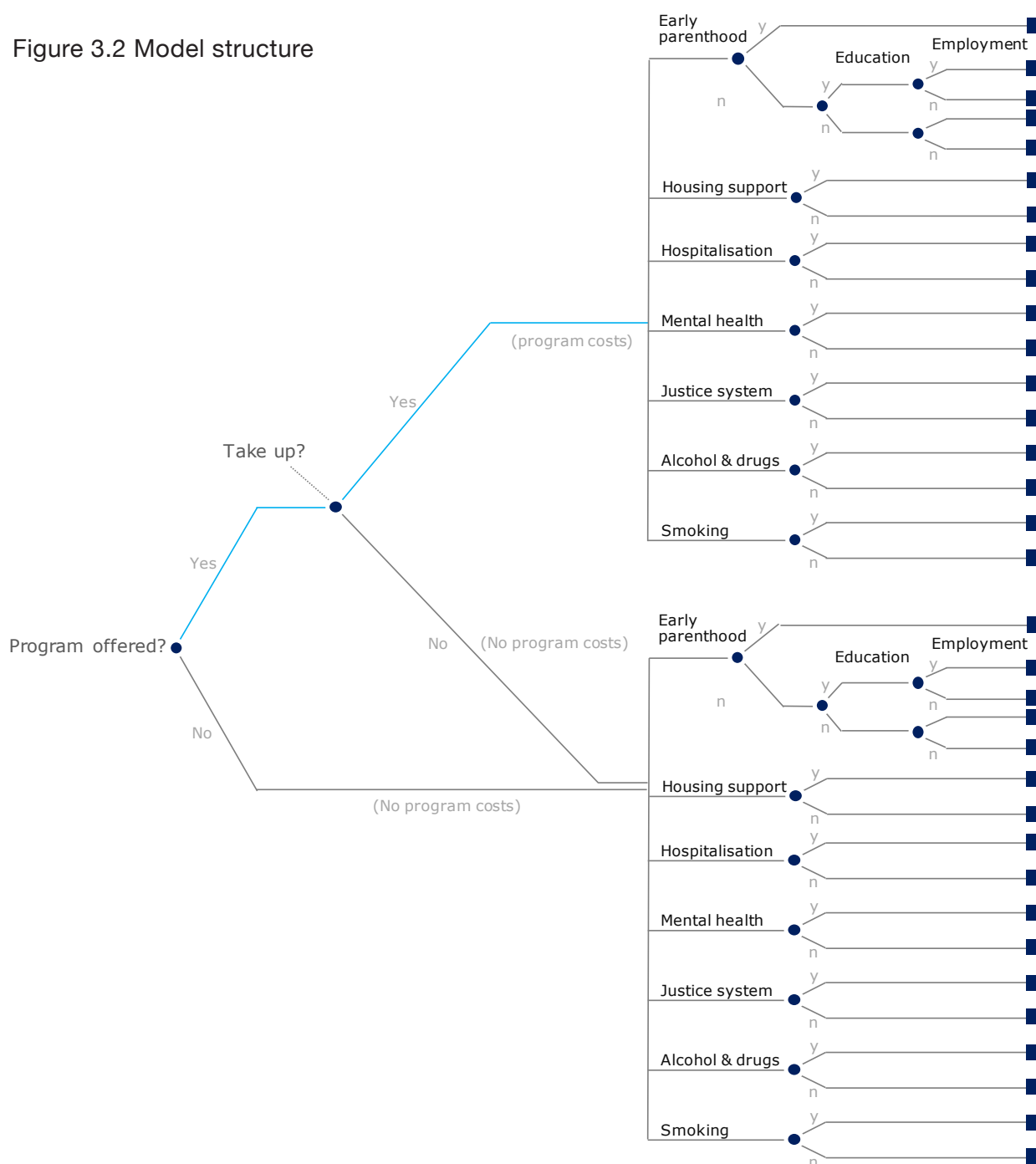
3.2 Model inputs

3.2.1 Population of interest

The eligible population for extended OOHC consists of young people aged 17 who are discharged from care on their 18th birthday. To determine the number of young people in the eligible population, we used the data on the number of children in OOHC by age group (Table 3.1). The data were not available for individual age groups. To determine the number of 17-year olds in care, we divided the number of children in care who were aged 15 to 17 years of age by three. To project the number of children in care for 2017-18, which was needed for the analysis, we used a straight-line projection of the number of 15- to 17-year olds in care over the last five years. This was considered reasonable as the number of 15- to 17-year olds in OOHC in New South Wales over the last 5 years has been relatively stable (Chart 3.1). The eligible population used for the analysis is also shown in Table 3.1 and Chart 3.1.

Table 3.1 Children in OOHC in New South Wales, 2012-13 to 2017-18

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18 (forecast)
15- to 17-year olds	2,588	2,738	2,582	2,547	2,591	2,594
17-year olds	863	913	861	849	864	865

Sources: Deloitte Access Economics analysis based on AIHW, 2014, 2015, 2016, 2017 and 2018a.

Chart 3.1 Children in OOHC in New South Wales, 2012-13 to 2017-18
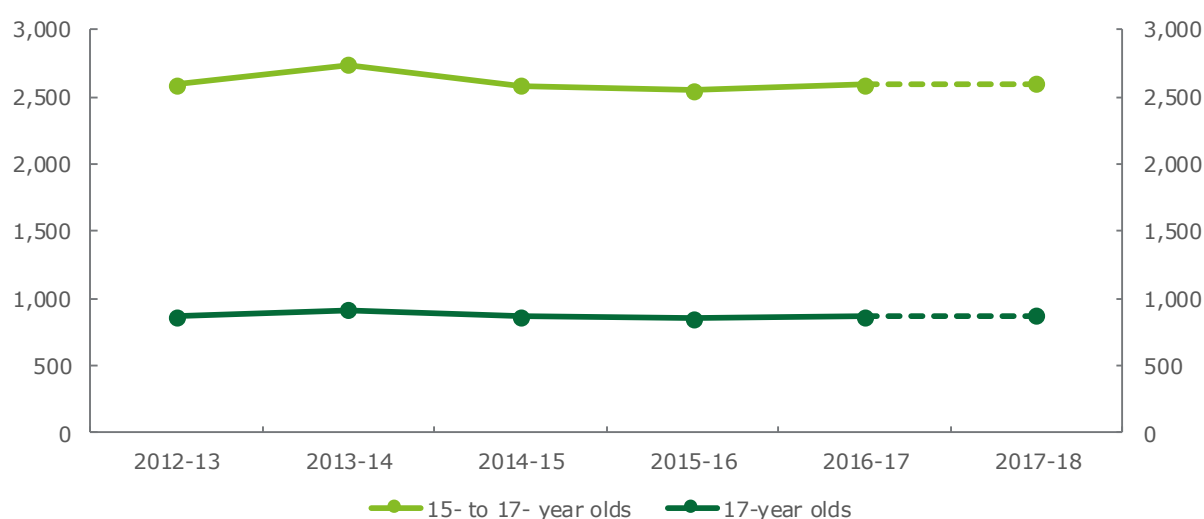
Sources: Deloitte Access Economics analysis based on AIHW, 2014, 2015, 2016, 2017 and 2018a. Note: The dashed line shows the forecast data point. 3.2.2   Policy parameters

3.2.2 Policy parameters

Participation rate

Program participation is assumed to be voluntary. It is assumed that every eligible individual for the program will have some probability of choosing to enter the program and, conversely, of choosing to not enter the program. The average probability of an individual choosing to enter the program is termed the 'uptake rate'.

This study uses an uptake rate of 24.95% of eligible individuals, which is based on figures from the Department of Education in the United Kingdom on the rate of uptake of the Staying Put program (Children and Young People Now, 2015). Participants are assumed to remain in care until 21 for the purposes of the model, as the evidence on outcomes from the overseas programs did not distinguish whether the participants had stayed in care for one, two or three years.

This rate may underestimate the likely participation rate depending on the policy settings used to implement the program in Australia. This is because participation in the English program required that participants meet one of a number of other criteria such as conditional participation in education and or training.

To provide an appropriate range for the benefits calculation, we have undertaken sensitivity analysis around the uptake rate in section 5.4.

Program cost

As discussed in Chapter 1, the way in which programs that extend support beyond the age of 21 are designed is highly varied across settings. Programs differ in the care that is provided – from blocks of financial support, to specified care arrangements. Programs also differ in who care is offered to – for example, whether residential care is included or not included. Conditions may be attached to participation such as the need to be enrolled in training or participating in education. Programs may also vary in whether participants can exit and re-enter care over time. Each of these structural elements of a program will significantly affect how much the program costs and what outcomes can be expected.

It is assumed for our analysis that the type of care provided under this model will be home-based care rather than residential care. The annual cost per young person participating in the program is assumed to be equivalent to the average cost per child in home-based care in 2016-17.

The Productivity Commission (2018) does not report residential and non-residential OOHC costs separately for New South Wales. The average cost for residential OOHC and all types of OOHC are published. To estimate the non-residential OOHC costs, we have calculated the proportionate difference between the expenditures on "all OOHC services" for NSW against those for the other jurisdictions where the data are published separately, and applied that to average cost of the program per child in New South Wales.

The 2016-17 cost for New South Wales was inflated using CPI to 2018-19 dollars, to give an average program cost of $39,665 in 2018-19 dollars, which was used in the analysis.

The average cost of non-residential OOHC was used to reflect the level of support which is provided in the international programs from which this paper derives its impact estimates (studies from the USA and England). This assumption is employed to allow for the use of available international data, not on the basis that these international models are the best model for the Australian context. Indeed, the optimal model would need to be determined with careful consideration of the needs of the Australian OOHC population.

3.2.3 Attribution of costs to government, care leavers and society

Costs and benefits are attributed to the Commonwealth Government, the New South Wales Government, and care leavers. Table 3.2 outlines the overall attribution of costs for each modelled outcome.

Table 3.2 Attribution of costs and benefits

Outcome	Commonwealth Government	New South Wales Government	Care leavers
Housing and homelessness	31%	69%	0%
Hospitalisations	43%	57%	0%
Other mental health care	56%	44%	0%
Smoking	68%	32%	0%
Crime	0%	100%	0%
Alcohol and drugs	39%	61%	0%
Early pregnancy	100%	0%	0%
Unemployment	100%	0%	0%
Increased wages	0%	0%	100%
Increased taxes	100%	0%	0%
Wellbeing impacts	0%	0%	100%

Source: Deloitte Access Economics analysis. Note: The data sources used to estimate the costs for each outcome and hence some categories do not include costs borne outside government, although these do exist. For this reason, the benefit cost ratio of extending care is considered conservative.

The majority of costs and benefits included in the modelling are financial costs borne by government. Even in areas where the States and Territories have policy responsibility, there is often a significant contribution from the Commonwealth Government in terms of specific purpose payments made to states and territories.

The Commonwealth, state and territory governments have shared responsibility for funding housing and homelessness services. Using the total state and territory expenditure on social housing and homelessness in 2016-17 (Productivity Commission, 2018) less payments made by the Commonwealth under the National Affordable Housing Specific Purpose Payment and the National Partnership on homelessness (Commonwealth of Australia, 2017), we have estimated that the Commonwealth bears 31% of housing and homelessness costs and state and territory governments bear the remaining 69%.

The cost of hospitalisations is apportioned 43% to the Commonwealth Government and 57% to state and territory governments, based on their shares of government funding for public hospitals in 2015-16 (AIHW, 2017). We assume that care leavers requiring hospitalisation are treated in public hospitals, do not have private health insurance and do not make individual contributions towards the cost of their treatment.

Other mental health costs are attributed 56% to the Commonwealth Government and 44% to state and territory governments, reflecting the share of expenditure by each level of government in the included categories (AIHW, 2017).

The costs of smoking are attributed 68% to the Commonwealth Government and 32% to the Commonwealth, and includes the costs of medical care (excluding hospital costs), pharmaceuticals, ambulances and fire services. This is a weighted average of the cost of each of these components, with fire services attributed to New South Wales, pharmaceutical costs to the Commonwealth and medical and ambulance costs shared, with New South Wales bearing 14% and 2% of costs respectively (AIHW, 2017).

The costs of crime are attributed to state and territory governments. While the Commonwealth Government contributes approximately 40% of government funding for legal aid, legal aid only makes up approximately 2% of overall costs. As a result, for simplicity, all costs of crime are attributed to the New South Wales Government.

The costs of drug and alcohol dependency is attributed 39% to the Commonwealth and 61% to state and territory governments. This is based on analysis of the relative contributions of both levels of government by Ritter et al. (2014).

The cost of teen parenthood and the costs of unemployment are attributed to the Commonwealth Government, as the costs included in the model are welfare payments and Commonwealth employment services. The benefits of education, realised in the form of improved employment outcomes and higher wages, are attributed to care leavers and the Commonwealth Government. Wages (less taxes) are a benefit to care leavers and taxes are a benefit to Government. As the model only includes personal income tax, increased tax revenues are attributed to the Commonwealth Government.

Wellbeing costs resulting from mental health conditions and substance abuse are attributed wholly to care leavers.

3.3   Model outputs

There are two key outputs from the model. The first is the total cost of care leavers in New South Wales over a ten-year period. The second output is a socioeconomic cost benefit analysis, which estimates the net benefit of extending care to the age of 21 in New South Wales.

Socioeconomic cost benefit analysis

The socioeconomic cost benefit analysis takes a 40-year perspective of an individual's life (that is, looks at outcomes for care leavers from age 18 to age 57). This longer-term perspective is justified on the basis that investments made in youth are likely to materialise over a longer-term basis (with a lag). It is assumed that individuals are a part of the program for a three-year period. This means that to unlock the benefits of extended care over the young person's lifetime, there is an upfront public funding cost.

A benefit cost ratio is calculated by comparing the relative present value of costs and benefits for the scenario where a program is offered against a scenario where the program is not offered. The benefit cost ratio

Cost benefit analysis and present value

Present value is used to estimate the financial worth of a stream of costs or benefits that occur over time, and is expressed in terms of the value of a dollar today ($2018-19). It is calculated to account for the fact that the value of money that is spent or saved in the future is not equivalent to the value of that same amount if it were realised today, due to factors such as inflation, risk, and positive time preference. To calculate the present value of outcomes, this study employs a nominal discount rate of 7%.

Costs are inflated annually using price indexes. Wage are inflated by average weekly ordinary time earnings (AWOTE) growth of 4.1% per annum in nominal terms (ABS, 2017a), housing costs are inflated by 3.8% per annum based on the national housing group within the CPI, and health costs are inflated by 4.1% based on the health group within the CPI (ABS, 2018). All other costs are inflated by CPI of 2.5%, in line with the Reserve Bank of Australia's inflation target.

provides a measure of the level of return that can be expected for every dollar invested in a program. The model also calculates the maximum spend that would, in present value terms, equalise spending on the program and long-term program benefits.

Financial impact of higher government service use by care leavers

The purpose of this part of the analysis is to estimate the current cost to governments of providing services to care leavers once they have left care

to assess the larger financial impact of care leavers as a result of the higher level of use of government services. The cost to governments is calculated over a four-year and a ten year period for care leavers who are 18, 19 or 20 in 2018-19[1], in the base case where no program is offered. This time period is used to provide an indication of the shorter term financial impact of care leavers on government budgets. These costs are not relative to any other group, that is, they do not calculate costs such as unemployment or forgone taxes relative to the broader population where there is a base level of unemployment and labour market participation. Reflecting the fact that different costs grow at different rates, wage, housing and health costs are indexed to their real inflation rate, with all costs presented in $2018-19 terms.

Because the cost to governments of a care leaver is not constant over their life, the cost for the corresponding age of each cohort is included in each financial year. This means that the costs to governments from 2018-19 to 2027-18 include the costs of current 18 year olds until they are 27, current 19 year olds until they are 28 and current 19 year olds until they are 29.

3.4   Model limitations and interpretation

As is the case with all modelling exercises, the model presented in this paper presents a stylised representation of reality. The interaction between a young person's care experiences and their outcomes as an adult is complex and individualised. There is no set pathway that individuals will pursue based on outcomes realised as teenagers or young adults, however, the model necessarily makes the simplifying assumption that outcomes will remain constant for an individual throughout the period of analysis. We have also assumed that government policy settings will not change for the period of analysis, with the exception of the policy intervention to extend OOHC until the age of 21.

The model only estimates outcomes within the specified outcomes (as described in more detail in Chapter 4). In reality, the impact of extended OOHC is likely to impact more life outcomes and result in a far broader range of tangible and non tangible outcomes. There are also numerous other complicating considerations relevant to this population group. For example, children in OOHC may experience fragmented relationships with next of kin due to the physical separation brought about (and often legally required) through the OOHC arrangements, as well as because of the source of family abuse or neglect itself. Many have also not been able to forge lasting friendships due in part to unstable living and schooling arrangements. As a result, OOHC and foster youth have a higher rate of disengagement with key societal institutions such as the family, education, business (employment) and the wider community. These institutions exert a stabilising effect on the wellbeing of both the individual and society in general. It is important that such impacts are considered qualitatively alongside the quantitative outputs of the model.

---

1   The number of care leavers in each of these age groups is the number of 17 years olds in OOHC in 2015-16, 2016-17 and 2017-18 as described in section 3.2.1.

The model also does not quantify the impact of foster care on the next generation. Extending care and the resulting improvements in the life outcomes of these care leavers may also have flow-on impacts to their children. While not quantified, these potential benefits are discussed qualitatively in section 5.3.

Further, the model assumes that, with the exception of early parenthood, education and employment, life outcomes are independent, that is, they do not interact with one another. This assumption is unlikely to hold in reality. For example, the propensity to develop an alcohol or drug dependency is strongly related to employment outcomes. Alcohol and drug dependency is also likely to make an individual more likely to commit crime. For tractability and due to data limitations, these interactions are not explicitly modelled. However, they should be considered in the interpretation of modelling results.

The modelled results are a stylised representation of the future, derived from the best available evidence, to allow decision makers to weigh a representation of the lifetime benefits of extended care against immediate program costs. The modelled results must be considered with reference to the nature of underlying assumptions. In addition, there are other potential intangible benefits, such as improved wellbeing, that have not been quantified in the analysis, but nonetheless are important considerations for determining whether to fund social services.

4. Improved outcomes for care leavers

The chapter explains each of the outcomes that we have analysed for care leavers. For each of the outcomes, we have set out the approach that we have taken to estimate the base case and the intervention, that is extending care to the age of 21. The outcomes were estimated using a series of assumptions informed by available literature. This chapter provides an overview of these assumptions and the rationale for their use in the analysis.

4.1   Homelessness and housing support

Australian and international OOHC systems have seen a high correlation between being in care and experiencing both immediate and long-term housing instability, including homelessness (Parliament of Australia, Community Affairs References Committee, 2015). The range of housing outcomes generally entered into by care leavers includes homelessness, public housing services, and independent private housing rental, usually with government rental assistance (Johnson et al., 2010).

Many care leavers experience long-term housing instability as they often lack strong social connections with their original families, foster carers, friends and/ or support workers. This makes it more difficult for such individuals to seek appropriate advice, borrow money or request temporary accommodation when independent housing means break down. Housing instability can lead to poor mental health outcomes, unemployment and alcohol and/or drug dependence.

4.1.1   Probability with and without intervention

A study by Forbes et al. (2006) of Victorian care leavers found that the proportion of individuals leaving care at the age of 18 who are reliant on housing support was 39%. While this prevalence rate was found for a sample study in 2006, it is considered to be appropriate for the current model since there is no evidence of either and increase or decrease subsequently.

Data from the evaluation of the Staying Put program has been used to estimate the proportion of individuals exiting care at the age of 21 who subsequently become reliant on public housing support. In England, of those who were able to directly enter stable housing, 67% had remained in stable housing until a later age in the system, compared to 33% who had left the system at 18 (Munro et al., 2010). As a result, the public housing support reliance rate for those exiting care at 21 is considered to be half that of those exiting at 18. The model therefore assumes that 19.5% of those who leave care at 21 would be reliant on public housing support.

We note that the Midwest study suggests that extending foster care may delay rather than reduce homelessness (Dworsky & Courtney, 2010). However, due to the lack of longitudinal research measuring this effect, there is still no conclusive evidence of whether lowered homelessness rates are sustained with time or simply delayed to a later time. In light of this, we have chosen to use the 'Staying Put' study's homelessness estimates in our model based on similarities between the English and Australian populations.

4.1.2 Monetary assumptions

The average annual unit cost of housing support by state and territory governments was estimated to be $12,301 in 2011 dollars, as per research conducted by Zaretzky & Flatau (2015). The cost was inflated to $20,230 in 2018-19 dollars. While housing support are administered by state and territory governments, the Commonwealth Government provides some of the funding for housing and homelessness. The attribution between different levels of government is explained in section 3.2.3.

These costs were annualised and weighted by the proportion of Indigenous and non-Indigenous children in care. Indigenous and non-Indigenous costs need to be considered as there is a significant difference between the two values, with the cost of Indigenous housing support close to four times that of general housing support. As Indigenous children are also substantially overrepresented in the OOHC system, this is likely to substantially impact costs for the overall care leaver population.

4.1.3 Summary of assumptions

Figure 4.1 provides a summary of cost and probability assumptions used in this study, as derived above.

Figure 4.1 Housing and homelessness support model assumptions
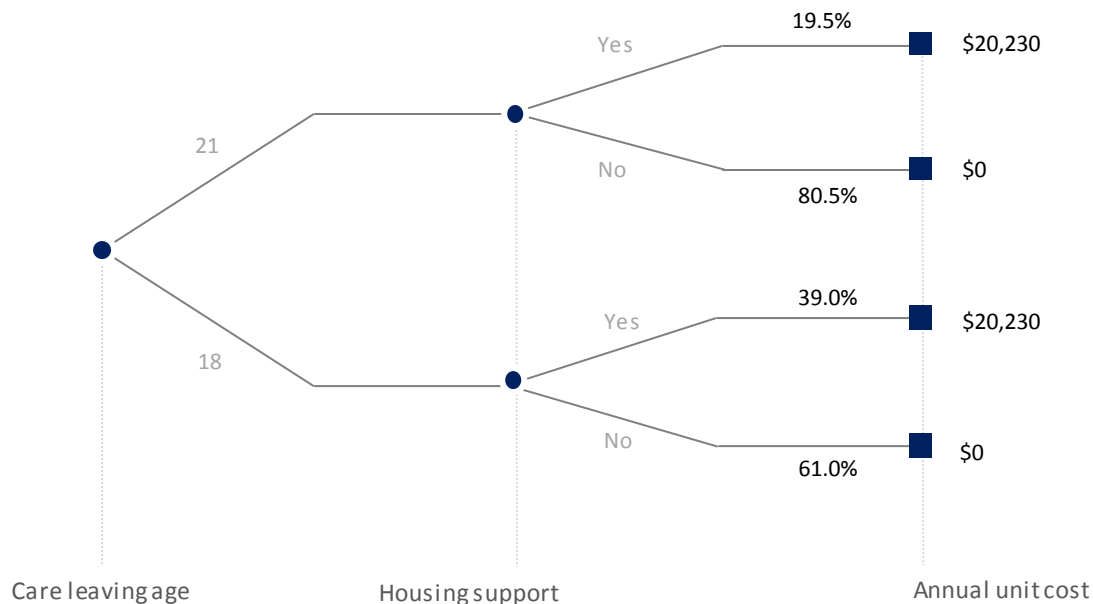
4.2 Employment and education

Young people in OOHC experience a number of barriers to educational success, including placement instability, the trauma of past neglect, health issues, mental health issues and lack of family support (Harvey et al., 2015). Studies find that young people with lower levels of education are more likely to become unemployed and stay unemployed for extended periods of time. If they are employed, they

are likely to be employed in lower paid jobs (Rumberger & Lamb, 2003). As such, these individuals are likely to earn lower wages, rely more heavily on welfare payments and accumulate lower levels of wealth across the span of their lives.

4.2.1   Probability with and without intervention

Harvey et al. (2015) found that within a sample of Australian care leavers, 11% had pursued further education beyond school. As such, the model in this paper assumes that a child exiting care at 18 has a probability of 11% of pursuing further education. The base case probability of further education was adjusted for the 5-year average expected rate of Vocational Education and Training (VET) course completion in New South Wales for full-time students, aged 25 years and under, with no prior post-school program completion (53.4%) to equal 5.9% (National Centre for Vocational Education Research (NCVER), 2017a).

In England, Munroe et al. (2010) reported that for young people who continued to remain in care at 19, the probability of pursuing education was 55%, compared with 22% for those who left care before 18 years of age. That is, a young person in extended care was 2.5 times more likely to continue in education. This finding is consistent with the Midwest study, which reported that youth who extended foster care to the age of 21 were more than twice as likely to have completed at least a single year of college by age 21 (Courtney et al., 2007). The model assumes that a child exiting care at 21 has a probability of 14.7% (5.9%*2.5) of pursuing (and completing) further education.

The model adjusts the probability of education to account for the fact that a proportion of those who do not go on to education are early parents, a group considered separately in the model (see section 4.3 for further details). Excluding the 16.6% probability of early parenthood, the probability of completing VET education becomes 5.87%/83.4%=7.0% for those who leave care at 18 years of age. For people leaving care at 21 years of age, excluding the 10.2% probability of early parenthood, the probability of completing VET education becomes 14.7%/89.8%= 16.4%.

The average probability of employment for young people with VET certificates was estimated to be 58% (ABS, 2015a). We employ this assumption in our analysis, however, caveat that the ABS survey was cross sectional, and as such, does not provide a measure of sustained employment. The figure is conservative compared with NCVER (2017b) estimates of employment in the six months following graduation from a VET course (78%).

The same survey reports that for individuals who complete year 12, the probability of employment is 41% (ABS, 2015a). For individuals who do not complete year 12, the probability falls to 26%. McDowall (2009) found that 35.3% of care leavers in Australia complete year 12. Accordingly, it is assumed that the weighted probability of employment for individuals who do not pursue VET is (41%*35%) + (26%*65%) = 31.3%.

4.2.2 Monetary assumptions

The relationship between education and employment is clearly not standardised across individuals – the lifetime earnings of an individual is dependent upon a number of factors in addition to education. However, in order to incorporate this relationship into the model presented in this paper, a number of simplifying assumptions have been made:

- **Employment pathway.** In practice, individuals drop in and out of the workforce, change jobs and change the trajectory of their pay scale as a result of these decisions. In this model, it is assumed that once an individual enters employment or unemployment, they remain in that state and at that their wage is inflated by AWOTE for the next 40 years. A wage differential is applied for individuals who enter employment after further education versus individuals who enter employment with no post-schooling education. wage costs were calculated from the ABS Report 'Education and Training Experience in Australia' and inflated using AWOTE growth rates to inflate to 2018-19 dollars (ABS, 2005). An individual with no higher education is assumed to earn $52,192 annually, while an individual with a VET qualification is assumed to earn $68,115 annually. This is comparable to NCVER estimates of starting salaries for post-VET graduates of $55,000 (NCVER, 2017b), noting that we have assumed a constant salary across the 40 years of the analysis, adjusted only for wage growth, thus these salary assumptions price in the increase in skills and experience, which would be expected to accrue with age.

- **Cost and duration of education**. It is assumed that individuals who pursue education post-schooling will engage in a VET course for a single year. This is considered a reasonable assumption as a recent study found that the majority of care leavers (90%) enrolled in institutions of higher learning were doing so in vocational institutions (Harvey et al., 2015). The annual cost of education for a VET Certificate-level course in New South Wales of $2,986 based on the average fee ranges for a Certificate-level course is included in the model (Independent Pricing and Regulatory Tribunal of New South Wales, 2013). Individuals who do not pursue VET are not disaggregated. That is, no distinction is made in the model between those who complete year 12 and those who would not have completed schooling.

- **Welfare payment for unemployment.** The welfare payment that individuals received if unemployed varies by circumstance. The model assumes that all individuals who are unemployed receive the maximum rate of Newstart Allowance, inflated to 2018-19 dollars using CPI to $14,510.

- **Unemployment services.** In addition to welfare payments, governments spend money providing services to unemployed people, for example through the Jobactive program. Annual costs of providing employment services have been estimated using the average of 'partial outcome' payments for Stream C jobseekers (the most disadvantaged stream) who have been unemployed for less than 24 months and 24-59 months, plus administration fees, totalling $2,428 (Department of Jobs and Small

...

Business, 2017). Thus the total cost of providing unemployment payments and services is $16,939. The use of partial outcome payments reflects that the model assumes that this group remains in a state of unemployment.

4.2.3 Summary of assumptions

Figure 4.2 provides a summary of assumptions used in the education and employment section of this study.

Figure 4.2 Wage and welfare modelling assumptions
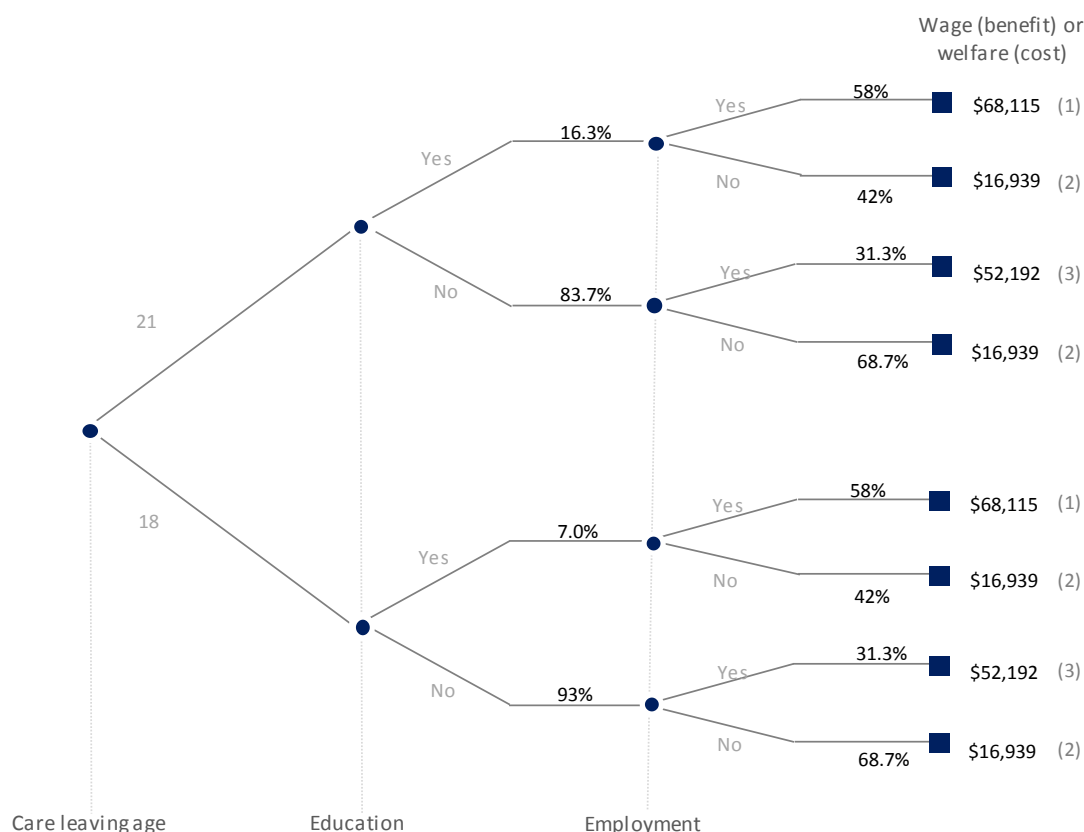
Notes: (1) This amount represents the average annual wage received by the care leaver after having completed one year of VET. The model also includes the cost of one year of VET per person, which is an average of $2,968. (2) This amount represents the average annual cost of unemployment benefits (Newstart). (3) This amount represents the average annual wage received by the care leaver who has not completed any post-school study

4.3   Early parenthood

Teenage parents in general are a group that is associated with broader disadvantage than their peers – largely due to their younger age, reduced access to education, employment and social support (AIHW, 2018c). At a time where many would be grappling with periods of rapid biological, psychological and social change, teenage parents are also having to look after the needs of their young children (Price-Robertson, 2010).

Teenage mothers are reported to be at risk of social stigma, with teen motherhood potentially affecting social determinants of health that include

access to education, employment and social support because having a baby at a young age often disrupts education and increases the barriers to finding and keeping a job (AIHW, 2018c and Department of Social Services, 2016).

There are also indications of intergenerational disadvantage to this group. Teenage mothers are 2.2 times more likely to have a child placed in foster care than those who delay child bearing until age 21 (Hoffman, 2006). Children born to teenage parents are at risk of lower health and wellbeing outcomes, in addition to being in poorer socio-economic positions (Lipman et al., 2011; Price-Robertson, 2010). For teenage mothers ageing out of foster care, it is expected that their challenges and the intergenerational impacts would be more pronounced.

The presence of intergenerational impacts from teenage parenthood can mean that the broader costs to the Commonwealth government are likely to be multiplicative and potentially very large. However, due to difficulty in establishing causal pathways between teenage parenthood and its effects on the next generation, we restrict analysis of the impacts of teen parenthood only in relation to the first generation (that is, the teenage parents in foster care). The impact of intergenerational disadvantage is discussed qualitatively in section 5.3.

4.3.1 Probability with and without intervention

To derive the probability of early parenthood at 21 with the OOHC extension, an estimate of the protective effect of extended care on the likelihood of early parenthood was applied to the probability of early parenthood for 21 year olds who left OOHC at 18 years of age. It was assumed that early parenthood only impacted on female care leavers, who made up 48.4% of children in OOHC in 2016-17 (AIHW, 2018a).

It is assumed that staying in care until the age of 21 would result in a 38% reduction in the likelihood of pregnancy, compared to those who left care at 18 years of age. This is based on data from the Midwest study, which found that those who stayed on in care till 19 years of age had a reduced likelihood of parenthood of 38% compared to those who had left at 18 years of age (Courtney & Dworsky, 2006).

The probability of parenthood for a 21-year-old (who left OOHC at 18) is assumed to be 34%. This is based on a longitudinal study of the Australian care leaver population that reported 57% of the female care leaver population had become parents by 23 years of age (Cashmore, 2006). It is assumed that the proportion of young parents increased based on a linear trend between the ages of 18 and 23. Thus, a 21-year-old has a 34% (3/5*57%) probability of being a parent

The probability of early parenthood at 21 with the OOHC extension was thus derived to be the probability of being a parent at the age of 21 adjusted for the reduced likelihood of being a parent if the young person remained in extended care, applied only to female care leavers [(0.34*(1 0.38)*0.484)*100=10.2%].

4.3.2 Monetary assumptions

The financial cost of teenage parenthood was estimated based on the average amount received by a teenage parent in social support payments. The higher cost of teenage parenthood is due to higher expected rates of government payments compared with older parents who are expected received less government support (due to higher earning capacities of older parents, and lower access to social support funding). As such, it is assumed that the costs included in the early parenthood calculations would be limited to the support payment types afforded to a teenage parent that would not be afforded to an older parent who is likely to be in a better socio-economic position.

As literature shows that a high percentage of mothers in foster care reside with their children and fathers in foster care are less likely to live with their children (Courtney et al., 2011), it is assumed that payments are made to a single mother. Research also shows that the average age of having a first child among the foster care group is 19, thus costs of early parenthood have been applied from age 19 (Carpenter, 2001). It is also assumed that teenage mothers in care between the ages of 18 and 21 would have only one child for the duration of the OOHC extension to be conservative.

Based on the current payment rates published by the Department of Human Services (2018), the social support payments included in the cost calculations are:

- Parenting payments (taking the maximum amount for a single parent): $762.40 per fortnight;
- Pharmaceutical allowance: $6.20 fortnightly per child, up till the child is 8 years old;
- Newborn Upfront payment $540 per child;
- Newborn Supplement: $1,618.89 for the first child, and $540.54 for each subsequent child;
- Newstart allowances: base rate, and additional payment based on having dependents; and
- Family Tax Benefit: A (rate 1 & 2), B (rate 2).

As such, the cost of early parenthood in terms of social support payments (per teen parent) varies annually, and decreases over time. The maximum annual cost is estimated to be $32,616, in the year a child is born and comprises parenting payments, pharmaceutical allowance, newborn supplement and Family Tax Benefits A and B[1]. Further information on these payments is at Appendix A.

4.3.3 Summary of assumptions

Figure 4.3 provides a summary of assumptions used in the early parenthood section of this study, together with education and employment probabilities and financial flows derived in the next section.

---

1   The average annual cost during the years a child is 2-17 years old is $26,566 and comprises parenting payment or Newstart (single with dependent children) and Family Tax Benefits A and B. After this, costs revert to the base rate of Newstart ($14,510 annually). The cost of providing unemployment services is included when the Newstart allowance is received.

Figure 4.3 Early parenthood modelling assumptions
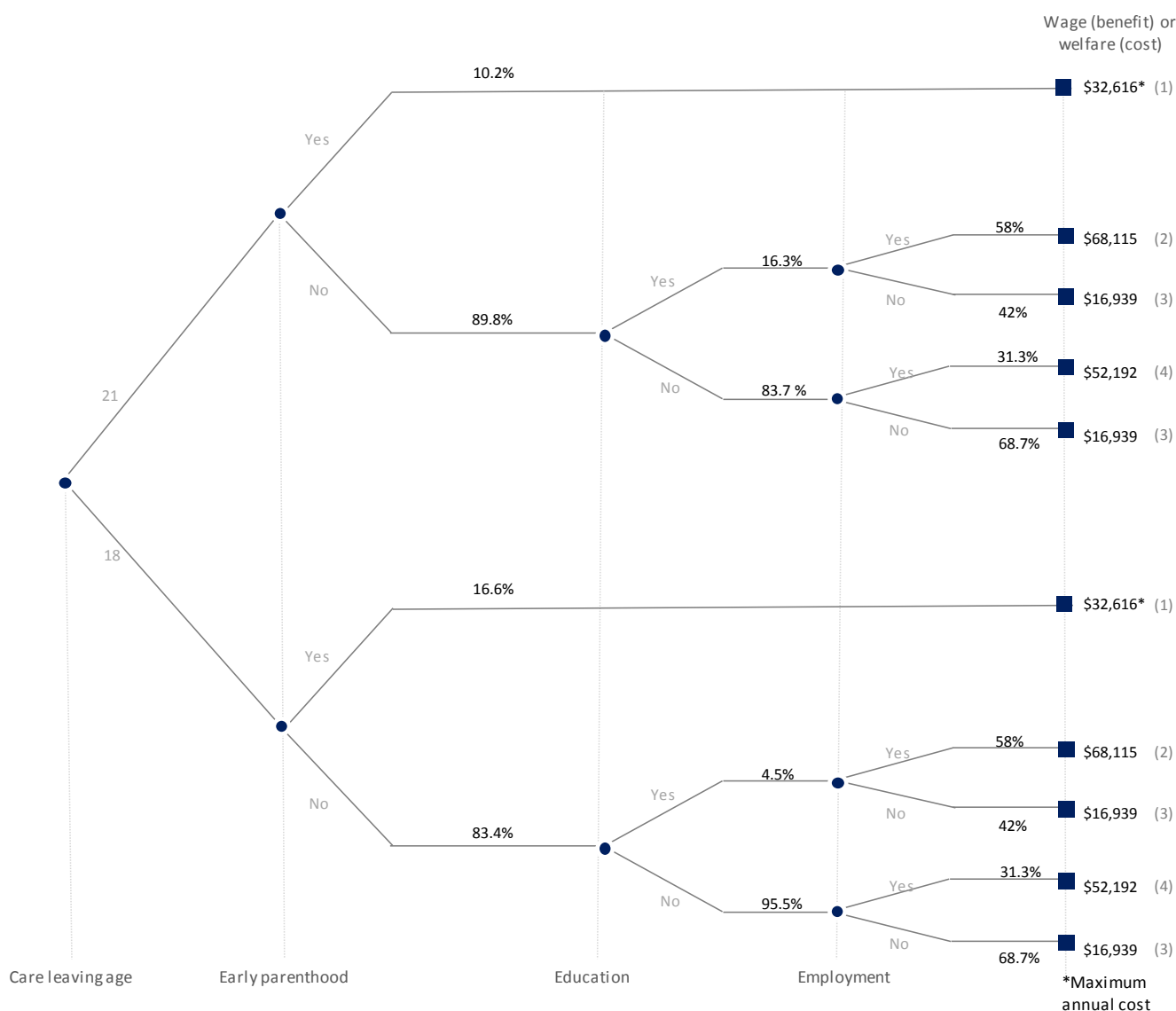
Notes: (1) This amount represents the cost of payments to a parent in the year their child is born, this reduces over time as described in Section 3.1.2 as the government support is lower for older children. (2) This amount represents the average annual wage received by the care leaver after having completed one year of VET. The model also includes the cost of one year of VET per person, which is an average of $2,968. (3) This amount represents the average annual cost of unemployment benefits (Newstart). (4) This amount represents the average annual wage received by the care leaver who has not completed any post-school study.

4.4   Hospitalisations

The Midwest study reported a lower proportion of hospitalisations over a one-year period among 21-year-olds who had accessed extended care compared with 19-year-olds who were no longer in care (Courtney et al., 2007). The causal link between extended care and reduced hospitalisation rates is due to three potential drivers: better access and more appropriate use of primary care; delayed pregnancy (owing to improved family planning); and reduced rates of injury.

4.4.1 Probability with and without intervention

The Midwest evaluation reported that, at 21 years of age, 19.2% of the Illinois foster youth population, who had access to foster care until 21 years of age, had at least one hospitalisation episode in the previous year (Courtney et al., 2007). Another study conducted in Illinois reported that 29.2% of young people who had left care aged 19 years or younger had experienced at least a single admission in the previous year (Courtney & Dworsky, 2006). Although the population surveyed comprised youth who experienced a year more of care than our modelled population, it also included those who had left care prior to 18 years of age. These effects are likely to work in opposite directions, so it is considered that 29.2% is a reasonable assumption to use in our model to represent the risk of hospitalisation on average for the 18-year-old care leaver.

4.4.2 Monetary assumptions

In order to estimate the cost incurred by hospitalisations, the following assumptions were employed to model the impact of the proposed intervention on hospital care costs:

- **Number of hospitalisations avoided.** The Midwest study found that at least one third of all individuals who reported hospitalisation during a year had more than one hospital admission in the year (Courtney et al., 2007). The modelled number of hospitalisations avoided is 1*0.63+2*0.37=1.37.

- **Hospitalisation cost.** The average cost of admitted acute care in a public hospital, weighted by case complexity, was $5,430 dollars in New South Wales per separation from the 2015-16 National Hospital Care Data Collection (Independent Hospital Pricing Authority, 2018). Multiplied by the average number of separations per year for the sample population (1.37), the annual cost of hospitalisation was estimated at $8,249, after inflating to 2018-19 using the national CPI growth for the health group of 4.0% during this period (ABS, 2018b). The same index was used to inflate health costs over the projection period.

4.4.3 Summary of assumptions

Figure 4.4 provides a summary of the assumptions used to estimate the cost of hospitalisations for care leavers in the base case and for those who are able to access extended OOHC, as derived above.

Figure 4.4 Hospitalisation modelling assumptions

Care leaving age	Hospitalisation	Annual unit cost
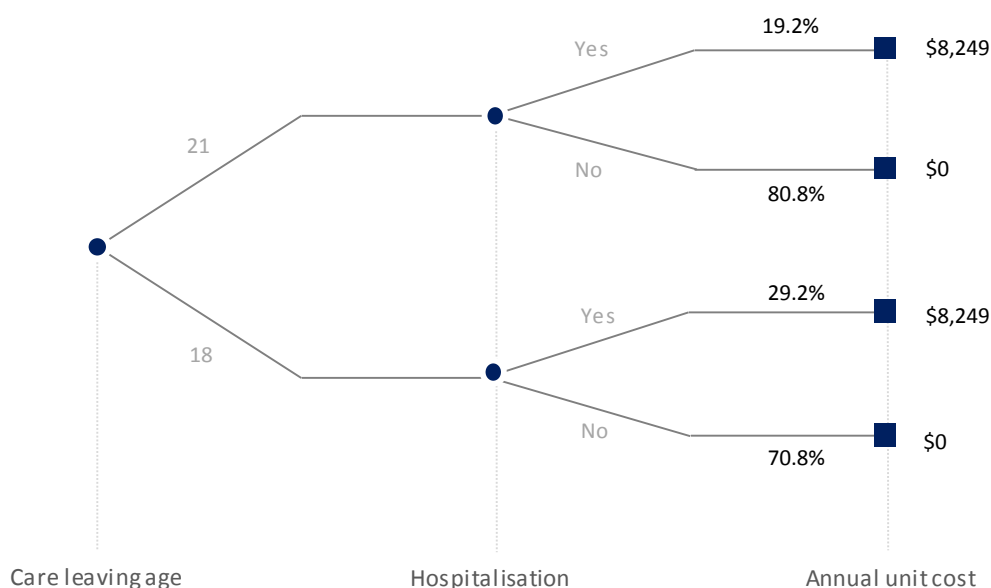
4.5   Mental health costs

As children and young people in OOHC are generally placed in the system due to violence, neglect or abuse in their family environment, there is a high likelihood of mental illness among this population. There is a large body of evidence that shows that unstable and damaging family experience at a young age is strongly related to a range of mental illnesses, including post-traumatic stress disorder, depression and anxiety[1]. In addition, foster youth with mental illnesses are also associated with other sub-optimal social outcomes – being an over-represented group among those affected by homelessness, and those incarcerated (Fowler et al., 2009; Cusick, 2012).

4.5.1   Probability with and without intervention

Due to a lack of Australian prevalence data for mental illness specific to the care leaver population, data from the USA was used. We assumed that the probability of mental illness in the care leaver population was 54.4%, based upon a 2005 observational study in the USA on foster care alumni who had reported at least one mental health problem (Pecora et al., 2005). Using data from the USA was considers reasonable given the similarities between the prevalence rates for mental illness in the general population in the USA and Australia - 22% in the USA (Pecora et al., 2005), and 20% for Australia in 2007 (ABS, 2008).

To derive the probability of mental illness for those remaining in OOHC until 21 years of age, an estimated effect size was applied to the probability of mental illness for care leavers at 18 years of age. A study in the USA found that youth who received an 'enhanced' foster program (the Casey Program) reported a

---

1   See for example: Australian Institute of Family Studies, 2014 and Department of Families, Housing, Community Services and Indigenous Affairs, 2011.

44.7% reduction in 12-month mental health disorders than those from the public program (Kessler et al., 2008). This was even after controlling for variables that include time in care, number of placements, duration per placement, and adverse prior events. As the Casey Program is associated with increased funding, more support and greater placement stability for its youth, the estimate of 44.7% for an effect size was considered reasonable to use as a proxy for extended OOHC.

Applying the 44.7% reduction to the 54.4% probability of mental illness among 18 year old care leavers, the probability for mental illness among 21 year old care leavers is assumed to be 31% (0.544*(1-0.447)=0.31).

4.5.2   Monetary assumptions

The costs of mental illness are also likely to be captured in the costs of hospitalisation, crime and homelessness which have been calculated separately. Thus, only the non-hospital health costs of mental illnesses are included here.

The cost of mental illness to government was estimated using 2015-16 mental health expenditure reported by the AIHW (2018b). Expenditure on hospitals, veterans, research, private health insurance rebates and advisory bodies was excluded. The total cost to government excluding these components was $4.9 billion in 2015-16.

To calculate an annual cost of mental illness per affected individual, we estimated the number of people with a mental illness in 2015-16. To do this, the mental illness prevalence rates of 13.9% for the 4- to 17-year age group and 20% for the '18 and above' age groups were applied to the total population in these age groups in 2016 to produce an estimate of 4.36 million people with a mental illness in 2016. The annual cost of mental illness to the Commonwealth government per affected individual in 2016 was thus estimated to be $1,141 in 2015-16, and after adjusting for inflation was $1,279 in 2018-19 dollars.

4.5.3   Summary of assumptions

Figure 4.5 provides a summary of the assumptions used to estimate the cost of mental illness for care leavers in the base case and for those who are able to access extended OOHC, as derived above.

Figure 4.5 Mental health modelling assumptions
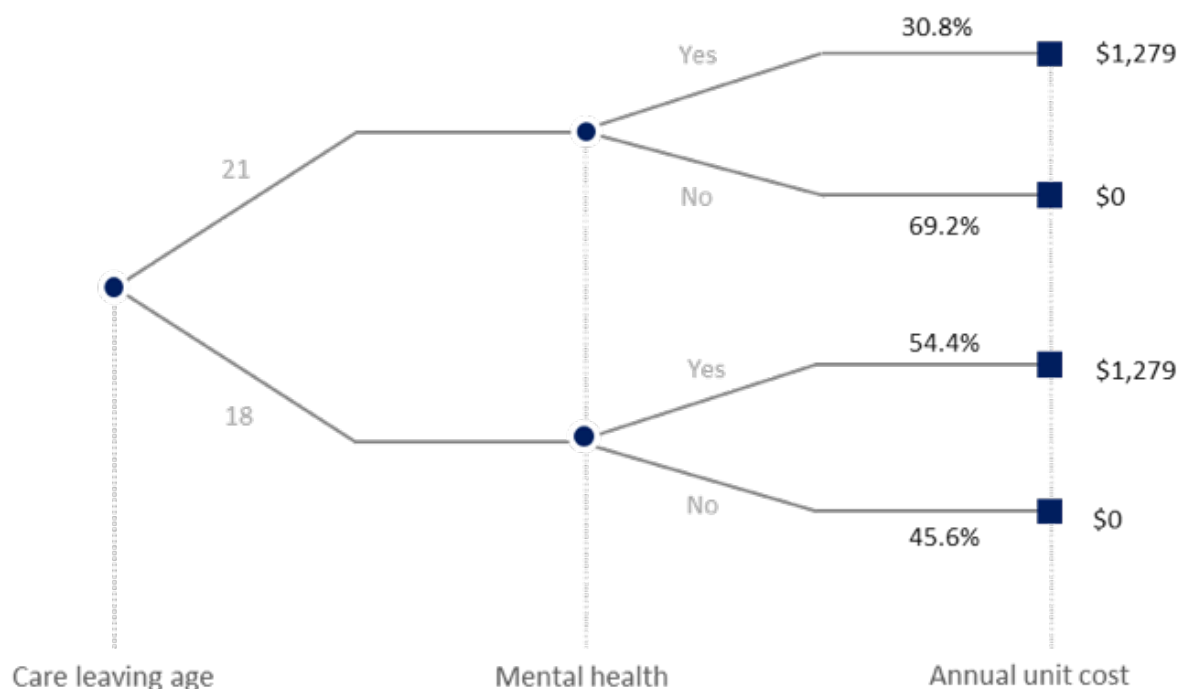
4.6 Costs of crime

Researchers in Australia and overseas have reported on the over-representation of care leavers in the justice system[1]. A number of factors may lead to this over-representation including homelessness, poor education, underlying anger and resentment towards the state care system, and the absence of effective legal advocacy and support (Parliament of Australia, Community Affairs References Committee, 2005). It has been suggested that reducing arrests may make a significant difference in the lives of these former foster youth, since an arrest in early adulthood may have long-term consequences on the ability to participate fully in society (Lee et al., 2014).

4.6.1 Probability with and without intervention

The proportion of care leavers arrested in the two years following their exit from care was used to estimate the proportion of care leavers interacting with the justice system, based on the assumption that arrests are the principal point of entry into the criminal justice system. The Washington State Institute for Public Policy study found that the proportion of individuals leaving care at the age of 18 years who were arrested within the following two years was 16.3%, compared to 10.4% of those who left care at 21 years of age (Washington State Institute for Public Policy, 2010).

While the Midwest study found comparable outcomes, it also reported that the benefit was more likely to be realised in females than males. It

---

1   See for example: Department of Human Services, 2011 and Forbes, Inder and Raman, 2006.

was estimated in the Midwest study that 18-year-old care leavers were approximately twice as likely to be arrested as those who had stayed in foster care until a later age, with 22% of women being arrested after leaving care at 18, compared to 10.5% of women who had remained longer in care.

For this analysis, we applied the more conservative estimates from the Washington State Institute study across the population irrespective of gender.

4.6.2   Monetary assumptions

The cost of crime was estimated using data from the Australian Institute of Criminology (AIC, 2014). It includes police costs, prosecution costs, court costs, corrective services and legal aid. As this estimate does not include medical costs for victims, victims' compensation or intangible costs such as pain and suffering, it is a conservative estimate of the total cost of crime.

Cost of crime

A weighted average unit cost was calculated using AIC data for low, medium and high criminal involvement incidents:

- The cost of a **low criminal involvement** incident, including thefts from vehicles, shop theft, other theft, and criminal damage, was estimated to be $1,913 per incident in 2011-12 dollars.
- The cost of a **medium criminal involvement** incident, including robbery, burglary, vehicle theft and assault, was estimated to be $4,280 per incident in 2011-12 dollars.
- The cost of a **high criminal involvement,** including homicide and sexual assault, was estimated to be $63,816 per incident in 2011-12 dollars.

The weighted average cost per incident was calculated by multiplying the share[1] of young people committing each type of crime (categorised as the levels described above) by the cost of that level of crime. The weighted average cost of crime is $4,676 per incident, inflated to $5,392 in 2018-19 dollars.

It is acknowledged that the type of crime and the number of times a young person interacts with the justice system over a lifetime will realistically vary for each individual. The model assumes that for any given year, of the individuals who ever enter the justice system, the average weighted annual unit cost would be incurred.

4.6.3   Summary of assumptions

Figure 4.6 provides a summary of the assumptions used to estimate the costs of crime, as derived above.

---

1   The proportions of each type of crime committed are: low (63%), medium (33%) and high (3%) 5,391 (AIC, 2014)

Figure 4.6 Cost of crime modelling assumptions
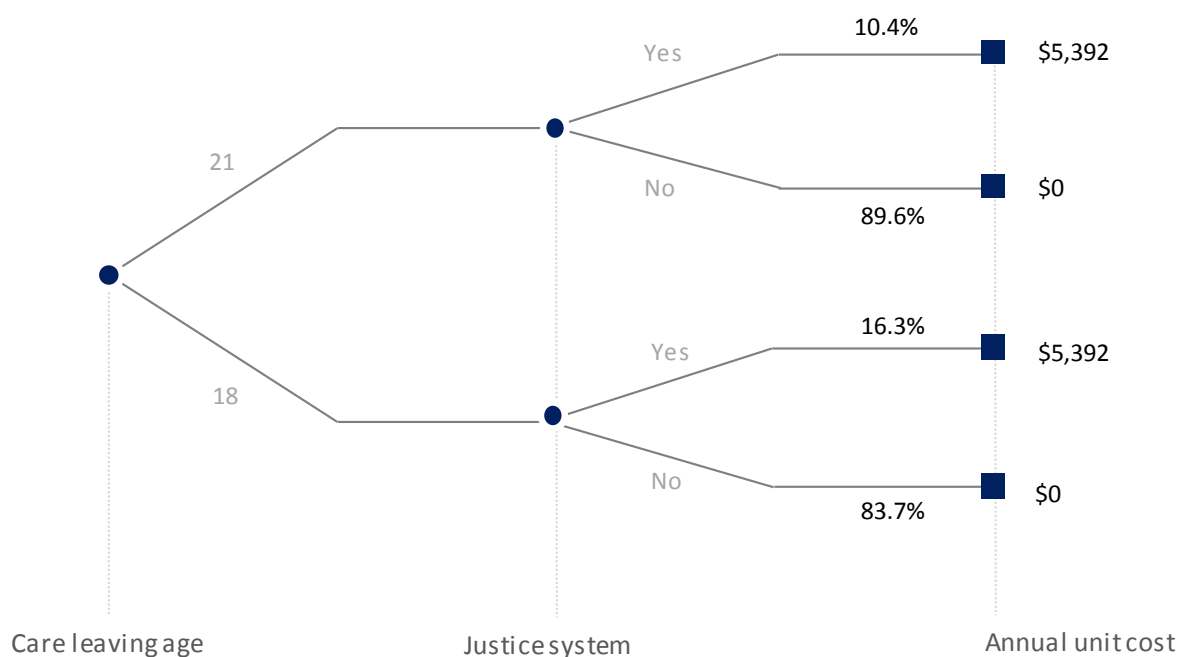
4.7   Alcohol and drug dependence

Research indicates that the strength of social engagement and social networks in youth impacts upon the propensity to engage in risky behaviours including alcohol/drug abuse into adulthood. As a result, evidence suggests that care leavers are more likely to experience substance abuse than other young people. The model uses an average cost per case of alcohol and/or drug dependency to determine a standardised cost per person.

4.7.1   Probability with and without intervention

The Midwest study estimated that the proportion of individuals leaving care at the age of 18 with alcohol and/or drug dependency, measured at age 21, was 15.8% (Courtney et al., 2007)[1]. As a comparable statistic was not available for Australian care leavers, it is assumed that the probability of alcohol or drug dependence for a child exiting care at the age of 18 is 15.8%.

No research was found that isolated the impact of extended care on alcohol and/or drug dependency for youth in the years after they left care (Best & Lubman, 2012). As such, the strength of social engagement and social networks was used as a proxy for the effect of additional care on the probability of alcohol and/or drug dependency was employed. Participation in formal education is one mechanism for fostering improved social engagement and the formation of social networks (Best & Lubman, 2012). The 2014-15 National Health Survey found that youth who complete year 12 are 84.4% less likely to abuse alcohol

---

1   Please note, prevalence rates in the study were calculated on the basis of sex. As such, a weighted average of the two rates has been calculated, based on the proportion of females and males in the study.

in adulthood than youth who leave school before year 10 (ABS, 2015b).

The reduction in alcohol and drug dependency owing to engagement with education (a reduction of 84.4%) is used to calculate the impact of extended support on the likelihood of alcohol and drug dependency. Applying an 84.4% decrease to the probability of alcohol or drug abuse in the absence of extended care, it is assumed the likelihood of dependency under the scenario of extended care is 2.5%.

4.7.2 Monetary assumptions

Owing to the complexities in estimating lifetime costs for alcohol and/or drug dependency, the following simplifying assumption is employed to model the impact of the proposed intervention on alcohol and other drug (AOD) associated costs:

- **AOD pathway**. It was assumed that the cost imposed on society due to alcohol and/or other drug dependency by an individual is constant across their lifetime. The implication of this assumption is that where the true nature of costs is likely to be episodic – with peaks and troughs following episodes of relapse over an individual's life – the model considers a continuous, constant cost burden.

- **Average cost of AOD:** The annual cost of drug and alcohol dependency was estimated to be $852 per person in 2012-13 dollars, inflated to $1,013 in 2018-19 dollars. This is based on estimates from Ritter et al. (2014) and includes alcohol and drug specific treatment (and grants to treatment organisations), as well as allied health and pharmaceutical costs. Expenditure on services delivered in hospitals and expenditure by individuals and philanthropists is excluded. Per person costs are calculated based on the prevalence rate of 5% citied by Ritter et al. (2014).

4.7.3 Summary of assumptions

Figure 4.7 provides a summary of the assumptions used to estimate the cost of alcohol and drug dependency for care leavers in the base case and for those who are able to access extended OOHC, as derived above.

Figure 4.7 Alcohol and drug dependency modelling assumptions
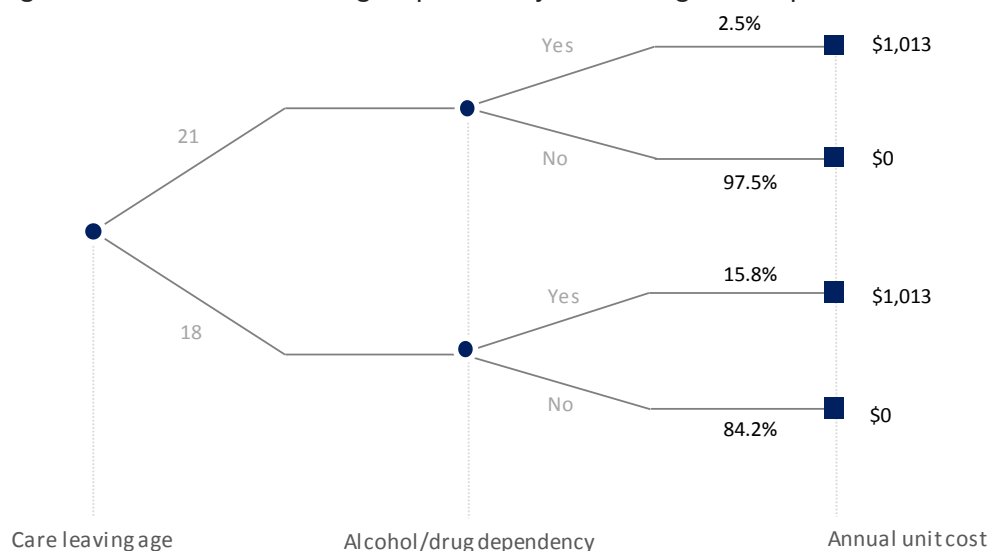
4.8 Smoking

While making the transition to adulthood is already difficult for many in the general population, the path out of foster care and into independence presents additional challenges – putting foster youth at high risk of turning to tobacco use as a way in which to cope with stress (Braciszewski, & Colby, 2015). Some of the short term health consequences among young people include respiratory and non-respiratory effects, addiction to nicotine and the risk of other drug use that is a further detriment to health and wellbeing (Department of Health and Human Services, 2017).

4.8.1 Probability with and without intervention

To calculate the probability of smoking among 18-year-old care leavers, an estimate from a Victorian study by Corrales (2015) was used, which showed that among the youth placed in OOHC with Anglicare Victoria, 56.8% were smoking by the age of 17.

For the probability of smoking among 21-year-old care leavers, an estimate of the effect size of extended OOHC on 'risky behaviour' was applied to the probability of 18-year-old care leavers. This is due to the lack of data on the effects of extended care on smoking specifically. To calculate the effect size of 'risky behaviour', data were used from a study comparing recent drunk episodes and marijuana use among foster children who were in extended care against those who had left at 18 years of age.

Narendorf and McMillen (2010) found that among 19 year olds who have spent time in foster care, those still in foster care were 52.5% less likely to have experienced a recent episode of drunkenness (21% for those in care, compared to 40% for those who had left care); and were 60% less likely to have used marijuana (15% for those in care, against 25% for those who had left care).

Taking the average effect size of extended OOHC on 'risky behaviour', it is estimated that extended OOHC would result in a 56.25% reduction in 'risky behaviour'. Applying this to the probability of smoking among 18 year-old care leavers, it is estimated that the probability of smoking for those in remaining in OOHC until 21 years of age is 24.85% (0.568 * (1-0.5625) = 0.2485).

4.8.2 Monetary assumptions

The costs of tobacco use are also likely to be captured in the costs of hospitalisation, which have been calculated separately. Thus, only the non-hospital health costs of tobacco use are included here.

The cost of smoking in New South Wales was sourced from data reported in Collins & Lapsley (2010). Collins and Lapsley found that the cost of smoking in 2006-07 was $117.7 million, comprising of costs attributed to medical (non-hospital) expenditure, pharmaceuticals, ambulances and fire services Hospital expenditure was excluded as it is already included in the model (see section 4.4).

The prevalence of smoking in 2006-07 in New South Wales was 18.6% (Collins & Lapsley, 2010), equivalent to 1.0 million people when applied to the

number of people aged over 15 in New South Wales in 2007 (ABS, 2018a).

Thus, the annual cost of smoking in New South Wales (per smoker) in 2006-07 was estimated to be $117. This value was inflated using the health CPI (ABS, 2018b), resulting in a final estimate of $154 in 2018 19 dollars.

4.8.3   Summary of assumptions

Figure 4.8 provides a summary of the assumptions used to estimate the cost of tobacco use for care leavers in the base case and for those who are able to access extended OOHC, as derived above.

Figure 4.8 Smoking modelling assumptions
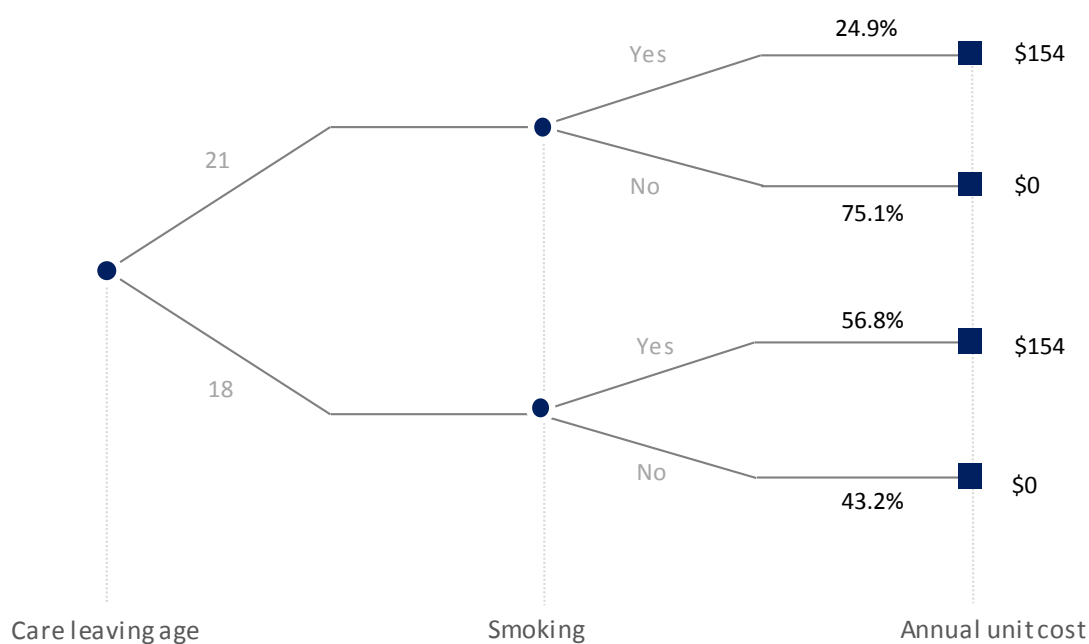
4.9   Wellbeing

In addition to the financial costs outlined in this report, poor outcomes for care leavers lead to a significant loss of wellbeing. In particular, the high rates of mental health conditions and substance abuse cause significant pain and suffering to individuals care leavers. This report estimates wellbeing costs using the burden of disease methodology developed by the World Health Organization (WHO), which is a comprehensive measure of mortality and disability.

4.9.1   Valuing life and health

The burden of disease methodology was developed by the World Health Organization (WHO) and is a comprehensive measure of mortality and disability from conditions for populations around the world. The burden of disease methodology is a non-financial approach, where life and health can be measured in terms of disability-adjusted life years (DALYs). Disability weights are assigned to various health states, where zero represents a year of perfect health and

one represents death. Other health states are given a weight between zero and one to reflect the quality of life that is lost due to a particular condition. For example, a disability weight of 0.2 is interpreted as a 20% loss in the quality of life relative to perfect health for the duration of the condition.

DALYs are composed of premature mortality (years of life lost due to premature death – YLL) and morbidity (years of healthy life lost due to disability – YLD) components:

$$\text{DALYs=YLLs+YLDs}$$

The analysis in this report includes only the YLD component. While there is mortality associated with mental health disorders (particularly with depression and substance abuse), our model assumes that each person remains alive for the 40-year period of analysis. This approach means that our wellbeing estimates are conservative, as they do not include the costs of premature death.

The burden of disease as measured in DALYs can be converted into a dollar figure using an estimate of the value of a statistical life (VSL). The VSL is an estimate of the value society places on an anonymous life. The Department of Prime Minister and Cabinet (2014) provided an estimate of the 'net' VSLY (that is, subtracting financial costs borne by individuals). This estimate was $182,000 in 2014 dollars, which is $196,636 in 2018 19 dollars for the VSLY after inflating by CPI.

4.9.2 Probability with and without intervention

As discussed in sections 4.5 and 4.7, care leavers experience high rates of mental illness and substance abuse. As in the previous sections, we apply a prevalence of mental illness of 54.4% for those leaving care at 18, reducing to 30.8% for young people leaving care at 21 (Pecora et al., 2005; Kessler et al., 2008).

As displayed in Table 4.1, care leavers report a high prevalence of mental health conditions compared to the general population. For example, the one-year prevalence of post-traumatic stress disorder (PTSD) was 25.2% among care leavers, relative to 4% in the general US population and 15% for Vietnam veterans. The prevalence of major depression is almost twice as high among care leavers (20.1%) compared to the general population (10.2%) (Pecora et al., 2005).

A significant number of care leavers have more than one mental health diagnosis, with 19.9% having three of more diagnoses (Table 4.1). As data are not available on comorbidity patterns for care leavers (the rates at which multiple mental health conditions occur at the same time), we have used the top-line estimates of 54.4% and 30.8% of (younger and older) care leavers with at least one mental health condition.

Table 4.1 Prevalence of mental health conditions of care leavers

	Percentage with lifetime symptoms	Percentage with symptoms in the last 12 months
At least one CIDI DSM Diagnosis*	-	54.4
Three or more CIDI diagnoses	-	19.9
Major depression episode	41.1	20.1
Panic syndrome	21.1	14.8
Modified social phobia	23.3	17.1
Generalised anxiety disorder	19.1	11.5
Alcohol dependence	11.3	3.6
Drug dependence	21.0	8.0
PTSD	30.0	25.5
Anorexia	1.2	0.0
Bulimia	4.9	3.6

*The Composite International Diagnostic Interview is a comprehensive, standardized instrument for assessment of mental disorders using classifications from the Diagnostic and Statistical Manual. Source: Pecora et al. 2005

4.9.3 Monetary assumptions

Estimates of the years of healthy life lost to disability are sourced from the 2016 Global Burden of Disease (GBD) study, which is based out of the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. The GBD study provides a standardised analytical approach for estimating prevalence and YLDs by age, sex, cause, year, and location.

Data for Australians aged 15-49 has been used as the best approximation for the age group captured by our model (18-58). Estimates for 'all mental disorders' (which includes substance abuse disorders) have been used, however to the extent that care leavers have more severe forms of mental health conditions than the general population, this is likely to be a conservative estimate.

The GBD study estimates that mental disorders result in 476,868 YLDs, with a prevalence of 3,003,228 people. This equates to 0.1588 YLDs per person with a mental disorder. Applying the value of a statistical life year, the wellbeing cost of having a mental health condition is $31,223 annually[1].

4.9.4 Summary of assumptions

Figure 4.9 provides a summary of the assumptions used to estimate the wellbeing costs of mental health conditions and substance abuse for care leavers in the base

---

1   (476,867.99/ 3,003,228.46) * 196,636 = $31,222.87

case and for those who are able to access extended OOHC, as derived above.

Figure 4.9 Wellbeing modelling assumptions

| | Care leaving age | Mental health | Annual unit cost |
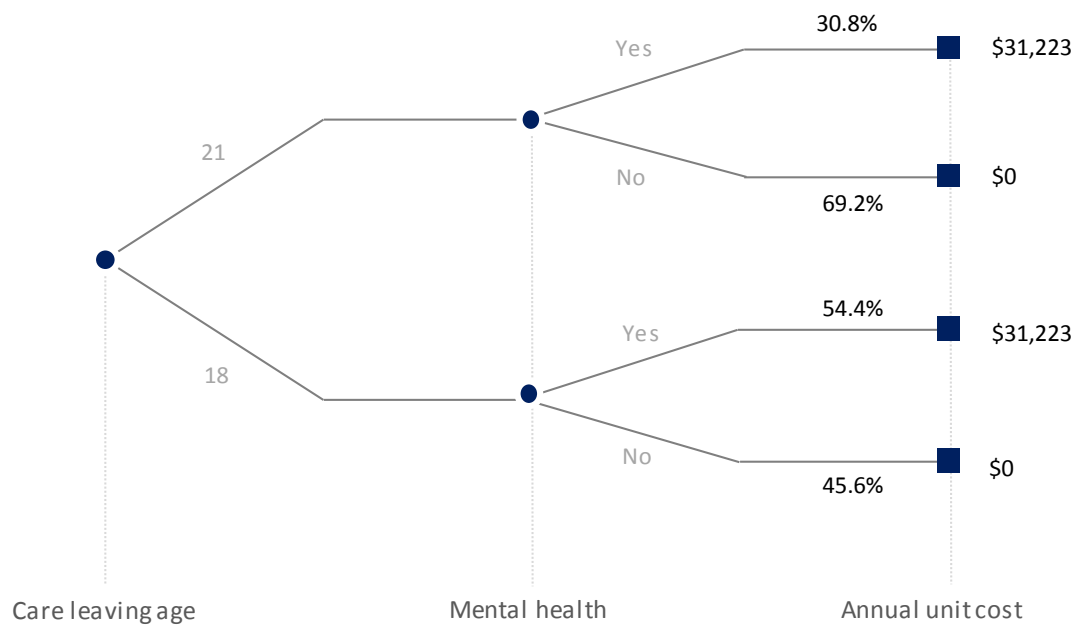
5. Results

Extending care to the age of 21 is estimated to generate a return of $2.10 for every $1 spent on the program. When wellbeing costs are included, the return on investment increases to $3.40 for every $1 spent. The financial impact of the current cohort of care leavers aged 18 to 21 years due to higher usage of government services is estimated to be $222 million for the New South Wales Government and $667 million for the Commonwealth Government over the next 10 years, giving a total impact of $889 million.

5.1 Socioeconomic cost benefit analysis

The modelling results consider the benefits of a voluntary model of extended care, with an uptake rate of 24.95%. The model assumes that all participants who elect to take up the program in the first year remain in the program over the entire three-year period. Other inputs are described in detail in Chapter 4. Detailed results are at Appendix B.

Table 5.1 provides a summary of the results per eligible 18-year-old. Results are presented for the financial costs only, and for both financial and wellbeing costs.

Table 5.1 Present value ($2018-19) of costs and benefits over 40 years, per 18-year-old participating in extended care

Difference between program offered/not offered	Financial costs and benefits ($)	Wellbeing and financial costs and benefits ($)
Total costs	114,281	114,281
Total benefits	241,995	390,067
Net benefits	127,713	275,786
Benefit to cost ratio	2.1	3.4

Source: Deloitte Access Economics analysis. Note: Discount rate used is 7%. Numbers may not add due to rounding.

In 2017-18, there were 865 children in OOHC care aged 17, who would be 18 in 2018-19, the first year of analysis. As such, this assumption implies that 216 of these young people would have adopted the program if it had been available. Costs and benefits are calculated over 40 years and are present value figures in 2018 19 dollars. Table 5.2 provides a summary of the results for the cohort of 18 year olds in 2018-19, who are assumed to have access to extended care. Multiplying expected costs and benefits over the care leaver population of 865 reveals that expected net financial benefits of program roll-out would be $27.6 million, or $59.5 million including wellbeing costs.

Table 5.2 Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018-19

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	24.7	24.7
Total benefits	52.2	84.2
Net benefits	**27.6**	**59.5**
Benefit to cost ratio	**2.1**	**3.4**

Source: Deloitte Access Economics analysis. Note: Discount rate used is 7% and uptake rate is 24.95%. Numbers may not add due to rounding.

5.2   Financial impact of higher government service use by care leavers

The cohort of care leavers who are 18, 19 or 20 in 2018-19 will have a financial impact on the New South Wales Budget of $222 million over the next 10 years as a result of a greater reliance on government services. In addition, the Commonwealth Government bears a further $667 million of costs, bringing the total financial impact for governments to $889 million.

The financial impacts on the New South Wales Government include education, housing and homelessness costs, hospitalisations, mental health costs, substance abuse costs and justice system costs. Some of these costs are shared with the Commonwealth Government, which also bears the costs of early pregnancy and unemployment. Wellbeing costs and wages are not included, as these costs and benefits accrue to individuals.

Table 5.3 provides a summary the total estimated financial impact of care leavers over the next ten years, including the allocation between the Commonwealth government and the state and territory governments.

HOME STRETCH

Table 5.3 Financial impact to governments of care leavers by life domain over 10 years ($2018-19)

Cost	Cost to NSW ($ million)	Cost to Commonwealth ($ million)	Total cost to Governments ($ million)
Education	0.2	-	0.2
Housing and homelessness	148.8	66.9	215.7
Hospitalisations	38.0	28.7	66.8
Other mental health	8.5	10.8	19.3
Smoking	0.8	1.7	2.4
Alcohol and Drugs	2.7	1.7	4.4
Crime	22.7	-	22.7
Early pregnancy	-	124.0	124.0
Unemployment	-	244.3	244.3
Forgone taxes	-	188.9	188.9
Total	**221.7**	**666.9**	**888.6**

Source: Deloitte Access Economics analysis. Note: These program costs are not relative to any other population group. As such, they provide an estimate to the total cost of government services used by this cohort for the selected areas where this cohort tends to experience relatively poorer outcomes. Numbers may not add due to rounding.

Table 5.4 provides a summary the total estimated financial impact of care leavers over the next four years.

Table 5.4 Costs to governments of care leavers by life domain over 4 years ($2018-19)

Cost	Cost to NSW ($ million)	Cost to Commonwealth ($ million)	Total cost to Governments ($ million)
Education	0.2	-	0.2
Housing and homelessness	57.2	25.7	82.9
Hospitalisations	14.5	10.9	25.4
Other mental health	3.2	4.1	7.3
Smoking	0.3	0.6	0.9
Alcohol and Drugs	1.0	0.7	1.7
Crime	9.1	-	9.1
Early pregnancy	-	50.6	50.6
Unemployment	-	97.5	97.5
Forgone taxes	-	72.0	72.0
Total	**85.5**	**262.2**	**347.7**

Source: Deloitte Access Economics analysis. Note: These program costs are not relative to any other population group. As such, they provide an estimate to the total cost of government services used by this cohort for the selected areas where this cohort tends to experience relatively poorer outcomes. Numbers may not add due to rounding.

In 2017-18, there were 865 children in OOHC care aged 17, in 2016-17 there were 864 children in OOHC care aged 17 and in 2015-16 there were 849 children in OOHC care aged 17. This group makes up the current cohort of 2,578 care leavers aged 18, 19 and 20 years. Using the estimate of the total financial impact, the impact per care leaver over ten years is estimated to be $344,730 or $34,473 per care leaver annually (see Table 5.5).

Table 5.5 Average costs to the NSW and Commonwealth governments, per care leaver

Cost	Ten years ($)	Four years ($)	Average annual cost over ten years ($)
Cost to NSW	85,989	34,473	8,599
Cost to Commonwealth	258,741	103,496	25,874
Total	344,730	137,892	34,473

Source: Deloitte Access Economics analysis. Note: These program costs are not relative to any other population group. As such, they provide an estimate to the total cost of government services used by this cohort for the selected areas where this cohort tends to experience relatively poorer outcomes. Numbers may not add due to rounding.

Costs to the New South Wales Government are dominated by the cost of housing and homelessness services and, secondarily, by hospitalisation costs, as shown in Chart 5.1.

Chart 5.1 Share of total costs to the New South Wales Government of life domains
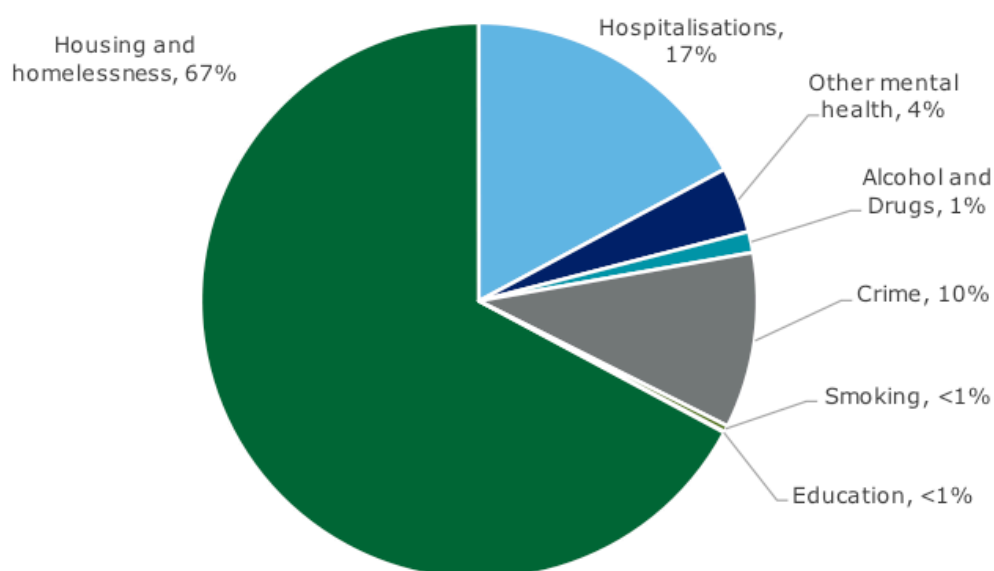
Source: Deloitte Access Economics.

5.3   Intangible and other benefits

The calculation of costs and benefits in this analysis has focused on financial costs and savings. However, there are other benefits that may accrue from extending care to the age of 21. Intangible and other benefits that may also accrue

from the policy are: better outcomes for the children of care leavers, improved physical health outcomes; and civic participation and social connectedness.

5.3.1 Impact on children of care leavers

The modelling for this project only considers the impacts on the individual receiving extended OOHC and the costs avoided by governments as a result of that individual's receipt of OOHC support. The model does not account for intergenerational impacts of extending care. Intergenerational benefits of extended care are realised if and to the extent that these flow-on impacts serve to permanently alter the course of not only the individual participant's prospects, but the prospects of their children.

By encouraging continued education, extended care raises the probability of employment and the average income of care leavers. Given that children's outcomes (health, education, income) have been found to be significantly associated with their parents' earnings and socio-economic status, extending care may bring future benefits to the children of those receiving extended care and support (Mayer, 2002).

The same may be said of the impact of reducing the incidence of criminal activity through extended care, since having a history of conviction has been linked with a reduced probability of securing employment (Mendes et al., 2012). Furthermore, the penalty for having a history of conviction may be especially severe for certain minority groups and thus also have a negative impact on disposable income (Pager, 2003).

In light of the link between higher employment/income and both improved education and reduced criminal activity from extending care to 21 years, together with the link between higher parental income and child outcomes, extending care beyond 18 years could reduce the intergenerational disadvantage experienced by the children of care leavers, in addition to the care leaver themselves.

5.3.2 Improved physical health outcomes

Young people in OOHC have been found to experience poorer physical health outcomes compared with the general population (Courtney et al., 2011). The main physical health challenges for care leavers have been identified as higher rates of illness and disability, higher rates of teenage pregnancy, risk-taking behaviour and self-harm and poor access to dental, optical and aural health services (McDowall, 2009).

The difference in physical health outcomes between 18-year-old care leavers and those who stay in care to age 21 is likely to extend beyond the modelled differences in hospitalisation costs, smoking rates, and alcohol and drug dependency. Young people who remain in care longer may experience physical health benefits as a result of improved education and employment outcomes associated with remaining in care longer than people who leave care at 18 years (Raman et al., 2005).

As noted above, sustained engagement in high quality education is directly

related to the realisation of more positive life outcomes for individuals and societies.[1] As care leavers at 21 were found to experience higher levels of education and employment, the higher expected future earnings associated with this population presents an increased ability to afford private health insurance or make out of pocket payments for health services. Higher income may facilitate quicker access to elective medical services and high-demand procedures which typically involve long waiting periods (e.g. some organ transplant surgeries).

Lower formal education engagement rates among OOHC youth also raises the possibility of lower health literacy levels within the population. By increasing the time spent both in formal schooling and with an adult carer exerting a positive influence, extended care could also potentially increase levels of awareness, and usage, of healthcare services that monitor and prevent future ill health (e.g. blood pressure and weight monitoring). As is the case with all preventative healthcare measures, although there can be short term costs of these services and actions, typically they lead to higher cost savings in the long run (Vos et al., 2010).

By improving education and thus potentially prevention and early intervention activities and reducing risk factors (e.g. alcohol and other drugs), extending care to 21 years could also potentially reduce the incidence of costly lifestyle-related diseases like certain respiratory, cardiac and liver illnesses.

5.3.3   Increased civic participation and social connectedness

Children in OOHC are less likely to reach educational milestones, be employed, and more likely to experience mental illness. They may also experience fragmented relationships with next of kin due to the physical separation brought about (and often legally required) through the OOHC arrangements, as well as because of the source of family abuse itself (Osborn & Bromfield, 2007). Many have also not been able to forge lasting friendships due in part to unstable living and schooling arrangements (Tilbury et al., 2015). As a result, OOHC and foster youth have a higher rate of disengagement with key societal institutions such as the family, education, business (employment) and the wider community.

Many researchers have now identified the pivotal role that stability and connectedness play in establishing better outcomes of children in foster care (Tilbury & Osmond, 2006). It is believed that connectedness facilitates access to opportunities and resources and provides a sense of belonging that strengthens a child's resilience (Bowes & Hayes, 2004). An Australian study by Mason and Gibson (2004) surveyed children, young people, carers and workers in New South Wales who identified that the child's 'connections with others' was the overarching factor that impacted on their wellbeing.

By offering the possibility of extended care with associated greater potential stability in accommodation and care arrangements, children may experience greater continued connection to individuals where they had forged positive relationships, leading to greater improved emotional wellbeing and social benefits for young people in extended care

---

1   See for example: Johnston, 2004; Levin, 2003; and Hannusek and Woessmann, 2010.

(Department of Families, Housing, Community Services and Indigenous Affairs & National Framework Implementation Working Group, 2011).

5.4   Sensitivity analysis

The modelling is reliant on a number of assumptions including those which relate to program uptake, program cost and timing. This section considers the sensitivity of the findings to these key assumptions. Sensitivity analysis was conducted for the socioeconomic cost benefit analysis only.

5.4.1   Program uptake

The base model presented in this paper assumes that 24.95% of eligible individuals adopt the program where it is offered. However, uptake rates vary in the literature, for example, the uptake rate reported in the Midwest evaluation was 80%. To test the sensitivity of the results to this assumption, the model was also run using an uptake rate of 50%, with results presented in Table 5.6. This change provides for a proportional impact in both costs and benefits, the benefit to cost ratio is not sensitive to the assumption.

Table 5.6 Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018-19

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	49.4	49.4
Total benefits	104.7	168.7
Net benefits	55.2	119.3
Benefit to cost ratio	2.1	3.4

Source: Deloitte Access Economics analysis. Note: Discount rate used is 7% and uptake rate is 50%. Numbers may not add due to rounding.

The base model assumes that individuals who adopt the program at 18 remain in extended care until the age of 21. That is, it assumes a 0% attrition rate. As a voluntary program, individuals will have the opportunity to leave – and, depending on the program design, re-enter – at various points between these ages. The model was re-estimated assuming an initially high uptake rate (80%) and then allowing for year-on-year attrition such that 50% participated in two years of the program and only 25% of individuals participated in three years of the program. It cannot be assumed that an individual who completes the program for a single year will receive the same benefits as an individual who remains in the program for three years. No analysis was found which allowed for the estimation of the marginal benefit attributable to every additional year of program participation. As such, the model assumes that benefits decline in a linear manner according to years of program participation. Table 5.7 summarise the results of this scenario.

Table 5.7 Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018-19

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	51.9	51.9
Total benefits	116.9	185.4
Net benefits	**65.0**	**133.6**
Benefit to cost ratio	**2.3**	**3.6**

Source: Deloitte Access Economics analysis. Note: Discount rate used is 7%. Uptake rate is 80% in year 1, 50% in year 2 and 25% in year 3. Numbers may not add due to rounding.

5.4.2   Program cost

The base model in this analysis assumes that the cost of the program is $39,655 annually per program participant. The positive benefit to cost ratio suggests, however, that it is possible for this cost to rise considerably before the program is net-negative.

Break-even analysis revealed that the program could cost approximately $84,100 per program participant per year before the program had a financial benefit cost ratio below 1.

Sensitivity analysis was also conducted for program costs 25% lower and higher than the base case. A reduction in program costs of 25% to $29,741 results in a benefit cost ratio of 2.8 for financial benefits only and a benefit cost ratio of 4.5 when wellbeing costs are included (Table 5.8). When program costs are increased by 25% to $49,569, the benefit cost ratio falls to 1.7 for financial benefits only, or 2.7 including wellbeing benefits (Table 5.9).

Table 5.8 Present value ($2018-19) of costs and benefits over 20 years, for the 18-year-old population in OOHC in 2018 19, program cost reduced by 25% to $29,741.

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	18.5	18.5
Total benefits	52.2	84.2
Net benefits	**33.7**	**65.7**
Benefit to cost ratio	**2.8**	**4.5**

Source: Deloitte Access Economics analysis. Note: Uptake rate is 24.95%. Discount rate used is 7%. Numbers may not add due to rounding.

Table 5.9 Present value ($2018-19) of costs and benefits over
20 years, for the 18-year-old population in OOHC in 2018
19, program costs increased by 25% to $49,569.

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	30.8	30.8
Total benefits	52.2	84.2
Net benefits	**21.4**	**53.4**
Benefit to cost ratio	**1.7**	**2.7**

Source: Deloitte Access Economics analysis. Note: Uptake rate is 24.95%. Discount rate used is 7%. Numbers may not add due to rounding.

5.4.3   Timeframe for analysis

The base model adopts a 40-year time perspective on the basis that evidence provides that investments in the development of young people can have impacts well into adulthood. To test the sensitivity of the modelling results to this timeframe, the model was re-calculated on a 20-year timeframe.

Table 5.10 provides a summary of outcomes from this sensitivity analysis. The benefit to cost ratio is lower than the base model however still indicates positive returns to investment.

Table 5.10 Present value ($2018-19) of costs and benefits over 20 years, for the 18-year-old population in OOHC in 2018 19

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	24.7	24.7
Total benefits	36.1	58.6
Net benefits	**11.5**	**33.9**
Benefit to cost ratio	**1.5**	**2.4**

Source: Deloitte Access Economics analysis. Note: Uptake rate is 24.95%. Discount rate used is 7%. Numbers may not add due to rounding.

5.4.4   Discount rate

The base model uses a nominal discount rate of 7%. Sensitivity analysis was conducted using discount rates of 10% and 4% (Table 5.11 and Table 5.12). The benefit to cost ratio differs from that in the base model, while remaining a net positive in both scenarios.

Table 5.11 Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018 19, discount rate of 10%

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	24.0	24.0
Total benefits	36.9	59.5
Net benefits	**12.9**	**35.5**
Benefit to cost ratio	**1.5**	**2.5**

Source: Deloitte Access Economics analysis. Note: Uptake rate is 24.95%. Numbers may not add due to rounding.

Table 5.12 Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018 19, discount rate of 4%

Difference between program offered/not offered	Financial costs and benefits ($ million)	Wellbeing and financial costs and benefits ($ million)
Total costs	25.4	25.4
Total benefits	82.5	132.5
Net benefits	**57.1**	**107.2**
Benefit to cost ratio	**3.3**	**5.2**

Source: Deloitte Access Economics analysis. Note: Uptake rate is 24.95%. Numbers may not add due to rounding.

Conclusions

Care leavers are a highly disadvantaged group of young people, who on average experience poor life outcomes across a range of life domains relative. Currently, young people are no longer able to access OOHC once they turn 18 and are expected to operate as adults, while a majority of their peers remain living at home receiving significant family support. Navigating the transition to adulthood requires a range of services and support that necessitates significant investment by all levels of government.

Some Australian states and territories have already committed to providing young people in state care the option of accessing formal care and support beyond the age of 18. The Tasmanian government has committed $3 million over three years to provide extended care (up to a maximum age of 21) and the South Australia Government has similarly committed to extending foster care and kinship payments for young people up to 21 years of age. International experience from the USA, the United Kingdom, Canada and New Zealand suggests that extending care to the age of 21 can lead to substantial improvements in the life outcomes of these young people, including improved education and employment outcomes, reduced engagement with the justice system; improved physical and mental health outcomes and improved housing stability.

There are a number of programs and initiatives designed to help care leavers transition to adulthood in New South Wales. However, the majority are aimed at assisting care leavers to access mainstream services rather than to providing holistic care for young people. In addition, some are aimed at a relatively narrow target population, for example young people up to 17 or 15 years of age, such as the Premier's Youth Initiative and the Homeless Youth Assistance Program, or young people who are 'motivated to work or complete study or training to help obtain a job', such as Rent Choice Youth. This may result in young people falling through cracks in service eligibility requirements. As such, there is likely to be a role for extended care to sit alongside these programs.

The analysis presented in this report compares two scenarios – one in which extended care is offered and a young person leaves care at 21, and one in which a young person leaves care at 18. We examined outcomes across nine categories: housing; education and employment; early parenthood; hospitalisation; the non hospital costs of mental illness and smoking; interaction with the justice system; and alcohol and drug dependency. The analysis also quantifies the impact on wellbeing of mental health conditions for care leavers.

Our analysis found that extending care to the age of 21 is estimated to generate a return of $2.10 for every $1 spent on the program. When wellbeing costs are included, the return on investment increases to $3.40 for every $1 spent. Furthermore, the financial impact of the current cohort of care leavers aged 18 to 21 years due to higher usage of government services is estimated to be $222 million for the New South Wales Government and $667 million for the Commonwealth Government over the next 10 years, giving a total impact of $889 million. Thus, it is a worthwhile investment for governments to fund extending care, as over time governments will pay less for services to support this cohort relative to the cost extending care.

References

Aboriginal Child, Family and Community Care State Secretariat (AbSec). (2017). Adoption not an option for Aboriginal Children. Retrieved from https://www. absec.org.au/news-adoption-not-an-option-for-Aboriginal-children.html

Adopt Change. (2018). My Forever Family NSW. Retrieved from https:// www.adoptchange.org.au/page/94/my-forever-family-nsw

Australia Bureau of Statistics. (2008). National Survey of Mental Health and Wellbeing: Summary of Results, 2007. (No. 4326.0). Retrieved from http://www.abs.gov.au

Australian Bureau of Statistics. (2014). Australian social trends, 2014 (No. 4102.0). Retrieved from http://www.abs.gov.au

Australia Bureau of Statistics. (2015a). Education and Work, Australia, May 2015, (No. 6227.0). Retrieved from http://www.abs.gov.au

Australia Bureau of Statistics. (2015b). National health survey: first results, 2014-15. (No. 4364.0.55.001). Retrieved from http://www.abs.gov.au

Australian Bureau of Statistics. (2017a). Average Weekly Earnings, Australia, Nov 2017 (No. 6302.0). Retrieved from http://www.abs.gov.au

Australian Bureau of Statistics. (2017b). Education and Work, Australia, May 2017 (No. 6227.0). Retrieved from http://www.abs.gov.au

Australian Bureau of Statistics. (2018a). Australian Demographic Statistics, Dec 2017 (No. 3101.0). Retrieved from http://www.abs.gov.au

Australian Bureau of Statistics. (2018b). Consumer Price Index, Australia, Mar 2018 (No. 6401.0). Retrieved from http://www.abs.gov.au

Australian Institute of Criminology. (2014). Counting the costs of crime in Australia: A 2011 estimate. Retrieved from: http://www.aic. gov.au/media_library/publications/rpp/129/rpp129.pdf

Australian Institute of Family Studies. (2014). Effects of child abuse and neglect for children and adolescents. Retrieved from https://aifs.gov.au/cfca/ publications/effects-child-abuse-and-neglect-children-and-adolescents

Australian Institute of Health and Welfare. (2014). Child protection Australia: 2012-13. Child welfare series no. 58. Cat. no. CWS 49. Canberra: AIHW.

Australian Institute of Health and Welfare. (2015). Child protection Australia: 2013-14. Child welfare series no. 61. Cat. no. CWS 52. Canberra: AIHW.

Australian Institute of Health and Welfare. (2016). Child protection Australia: 2014-15. Child welfare series no. 63. Cat. no. CWS 57. Canberra: AIHW.

Australian Institute of Health and Welfare. (2017). Child protection Australia: 2015-16. Child welfare series no. 66. Cat. no. CWS 60. Canberra: AIHW.

Australian Institute of Health and Welfare. (2018a). Child protection Australia: 2016-17. Child welfare series no. 68. Cat. no. CWS 63. Canberra: AIHW.

Australian Institute of Health and Welfare. (2018b). Mental health services in Australia. Retrieved from https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/summary

Australian Institute of Health and Welfare. (2018c). Teenage mothers in Australia. Retrieved from https://www.aihw.gov.au/reports/mothers-babies/ teenage-mothers-in-australia-2015/contents/table-of-contents

Beauchamp, T. (2014). Young people transitioning from out-of-home care to adulthood, a review of program approaches in Australia and overseas. Retrieved from https://uniting.org/__data/assets/pdf_file/0006/126906/UCCYPF-young-people-transitiioning-from-OOHC-to-adulthood.pdf

Best, D. W. & Lubman, D. I. (2012). The recovery paradigm: a model of hope and change for alcohol and drug addiction. Retrieved from http://www.racgp.org.au/afp/2012/august/the-recovery-paradigm/

Bowes, J. M. & Hayes, A. (2004) Contexts and consequences: impacts on children, families and communities, in J. M. Bowes (ed) Children, Families and Communities: Contexts and Consequences, Melbourne: Oxford University Press.

Braciszewski, J. M., & Colby, S. M. (2015). Tobacco Use among Foster Youth: Evidence of Health Disparities. Children and Youth Services Review, 58, 142–145.

Care Leavers Australasia Network (CLAN). (2008). A terrible way to grow up: The experience of institutional care and its outcomes for care leavers in Australia. Sydney: CLAN.

Carpenter, S., Clyman, R., Davidson, A., Steiner, J. (2001) The Association of Foster Care or Kinship Care With Adolescent Sexual Behavior and First Pregnancy. American Academy of Pediatrics. 108(3). E46.

Cashmore, J. & Paxman, M. (2006). Wards leaving care: Follow up five years on. Children Australia. 31, 18-25.

Children and Young People (Care and Protection) Act 1998 (NSW). (Austl.).

Children and Young People Now. (2015). Only a quarter of young people in foster care 'stay put' past 18. Retrieved from http://www.cypnow.co.uk/cyp/news/1153334/only-a-quarter-of-young-people-in-foster-care-stay-put-past-18#sthash.4cBahZ55.N9B6UZ71.dpuf

Collins, D.J. & Lapsley, H.M. (2010). The Social Costs of Smoking in NSW in 2006/07 and the Social Benefits of Public Policy Measures to Reduce Smoking Prevalence. Sydney: NSW Department of Health.

Commonwealth of Australia. (2017). Federal Financial Relations - Budget Paper No. 3. Retrieved from https://www.budget.gov.au/2017-18/content/bp3/download/bp3_consolidated.pdf

Corrales, T. (2015). Anglicare Victoria Children in Care Report Card. Melbourne: Author.

Courtney, M., & Dworsky, A. (2006). Midwest Evaluation of the Adult Functioning of Former Foster Youth from Illinois: outcomes at age 19. Chicago: Chapin Hall Center for Children.

Courtney, M. E., Dworsky, A., Brown, A., Cary, C., Love, K., & Vorhies, V. (2011). Midwest evaluation of the adult functioning of former foster youth: Outcomes at age 26. Chicago: Chapin Hall Center for Children.

Courtney, M., Dworsky, A., Cusick, G. R., Havlicek, J., Perez, A. & Keller, T. (2007). Midwest evaluation of the adult functioning of former foster youth: outcomes at age 21. Chicago: Chapin Hall Center for Children.

Courtney, M. E., Dworsky, A., & Napolitano, L. (2013). Providing foster care for young adults: Early implementation of California's Fostering Connections Act. Chicago: Chapin Hall Center for Children.

Cusick, G., Havlicek, J. & Courtney, M. (2012). Risk for arrest: the role of social bonds in protecting foster youth making the transition to adulthood. American Journal of Orthopsychiatry. 82(1), 19-31.

Department of Family and Community Services. (2013). A Safe Home for Life. Report on the outcomes of public consultation on the child protection legislative reforms discussion paper 2012. Retrieved from https://www.facs.nsw.gov.au/__data/assets/file/0018/279000/A_Safe_Home_For_Life_Consultation_Report.pdf

Department of Family and Community Services. (2015). Their Futures Matter: A new approach – Reform directions from the Independent Review of Out of Home Care in New South Wales. Retrieved from https://www.childabuseroyalcommission.gov.au/sites/default/files/WEB.0189.001.1036.pdf

Department of Family and Community Services. (2017a). What you need to know… About the changes from 1 October 2017. Fact sheet for FACS-funded NGOs. Retrieved from https://www.facs.nsw.gov.au/download?file=436618

Department of Family and Community Services. (2017b). Guidelines for the provision of assistance after leaving out-of-home care. Retrieved from http://www.community.nsw.gov.au/__data/assets/pdf_file/0004/322258/Ministerial-Guidelines-Publication-version-June-2017.pdf

Department of Family and Community Services. (2018a). About the Permanency Support Program. Retrieved from https://www.facs.nsw.gov.au/families/permanency-support-program/about

Department of Family and Community Services. (2018b). Our homelessness programs. Retrieved from https://www.facs.nsw.gov.au/providers/funded/programs/homelessness/specialist-services/our-programs

Department of Family and Community Services. (2018c). Legislation covering child protection and child wellbeing services in NSW. Retrieved from https://www.facs.nsw.gov.au/providers/children-families/interagency-guidelines/legislation/chapters/out-of-home-care

Department of Family and Community Services. (2018c). Rent Choice Youth. Retrieved from https://www.facs.nsw.gov.au/housing/factsheets/rent-choice-youth

Department of Families, Housing, Community Services and Indigenous Affairs & National Framework Implementation Working Group. (2011). An outline of National Standards for out-of-home care: a priority project under the National Framework for Protecting Australia's Children 2009-2020. Retrieved from https://www.dss.gov.au/sites/default/files/documents/pac_national_standard.pdf

Department of Health and Human Services. (2017). Smoking: but it is the least of their problems…. Retrieved from https://www.dhhs.tas.gov.au/__data/assets/pdf_file/0017/141614/Smoking,_But_its_the_least_of_their_problems....pdf

Department of Human Services. (2011). Exploring the challenges faced by young Centrelink customers as they transition from supported state care to independence. Melbourne: Department of Human Services.

Department of Human Services. (2018). A Guide to Australian Government Payments. Retrieved from https://www.humanservices.gov.au/sites/default/files/2018/03/co029-1803.pdf

Department of Jobs and Small Business. (2017). jobactive Deed 2015-2020. Retrieved from

https://docs.jobs.gov.au/documents/final-jobactive-deed-2015-2020

Department of Prime Minister and Cabinet. (2014). Best Practice Regulation Guidance Note: Value of Statistical Life, Canberra: Australian Government.

Department of Social Services (2016). Priority Group – Young Parents. Retrieved from https://engage.dss.gov.au/wp-content/uploads/2016/12/TTL-Fund-Tranche-1-Priority-Group-Data-Young-Parents-20161208.pdf

Department of Social Services (2018). Transition to Independent Living Allowance. Retrieved from https://www.dss.gov.au/our-responsibilities/families-and-children/benefits-payments/transition-to-independent-living-allowance-tila

Dworsky, A., & Courtney, M. (2010). The risk of teenage pregnancy among transitioning foster youth: Implications for extending state care beyond age 18. Children and Youth Services Review, 32(10), 1351-1356.

Forbes, C., Inder, B. & Raman, S. (2006). Measuring the cost of leaving care in Victoria. Retrieved from https://www.monash.edu/business/econometrics and business statistics/research/publications/ebs/wp18-06.pdf

Fowler, P. J., Toro, P. A., & Miles, B. W. (2009). Pathways to and from Homelessness and Associated Psychosocial Outcomes Among Adolescents Leaving the Foster Care System. American Journal of Public Health, 99(8), 1453–1458.

Hannusek, E.A. & Woessman, L. (2010) The high cost of low educational performance: the long-run economic impact of improving PISA outcomes. Paris: OECD.

Harvey, A., McNamara, P., Andrewartha, L. & Luckman, M. (2015). Out of care, into university: Raising higher education access and achievement of care leavers, Final Report, March 2015.

Hoffman, S. D. (2006). By the numbers: the public costs of teen childbearing. The National Campaign to Prevent Teen Pregnancy. Retrieved from http://www.thenationalcampaign.org/resources/pdf/pubs/BTN_Full.pdf

Independent Hospital Pricing Authority. (2018). National Hospital Cost Data Collection Australian Public Hospitals Cost Report 2015-16, Round 20. Retrieved from https://www.ihpa.gov.au/sites/g/files/net4186 /f/publications/nhcdc_cost_report_round_20_financial_year_2015-16_0.pdf

Independent Pricing and Regulatory Tribunal of New South Wales. (2013). Pricing VET under Smart and Skilled. Retrieved from https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/investigation-legislative-requirements-section-9-review-of-vocational-education-and-training-vet-under-smart-and-skilled/final_report_-_pricing_vet_under_smart_and_skilled_-_october_2013.pdf

Institute for Health Metrics and Evaluation (IHME). GBD Results Tool. Seattle, WA: IHME, University of Washington, 2018. Available from http://ghdx.healthdata.org/gbd-results-tool

Johnson, G., Natalier, K., Mendes, P., Liddiard, M., Thoresen, S., Hollows, A. & Bailey, N. (2010). Pathways from out-of-home care. Melbourne: Australian Housing and Urban Research Institute Limited.

Johnston, G. (2004). Healthy, wealthy and wise? A review of the wider benefits of education. New Zealand Treasury, working paper 04/04.

Juvenile Law Centre. (2018). Extended Foster Care. Retrieved from

https://jlc.org/issues/extended-foster-care

Kessler, R., Pecora, P., Williams, J., Hiripi, E., O'Brien, K., English, D., White, J. (2008) Effects of enhanced foster care on the long term physical and mental health of foster care alumni. Archives of General Psychiatry. 65(6), 625-33.

Lee, J. S., Courtney, M. E., & Tajima, E. (2014). Extended foster care support during the transition to adulthood: Effect on the risk of arrest. Children and Youth Services Review. 42, 34-42.

Levin, B. (2003). Approaches to equity in policy for lifelong learning. Retrieved from: https://www.oecd.org/education/school/38692676.pdf

Liberal South Australia. (2018). Stability in Foster Care - A Strong Plan for Real Change. Retrieved from https://strongplan.com.au/wp-content/uploads/2018/01/66-STABILITY-IN-FOSTER-CARE.pdf

Lipman, E.L., Georgiades, K. & Boyle, M.H. (2011). Young adult outcomes of children born to teen mothers: effects of being born during their teen or later years. Journal of the American Academy of Child and Adolescent Psychiatry. 50(3), 232-241.

Mason, J. & Gibson, C. (2004). The needs of children in care: A report on a research project: Developing a model of out-of-home care to meet the needs of individual children, through participatory research. Retrieved from http://www.burnside.org.au/content/The%20needs%20of%20children%20in%20care%20 20June %2004.pdf

Mayer S.E. (2002). The influence of parental income on children's outcomes. New Zealand: Knowledge Management Group, Ministry of Social Development.

McDowall, J. (2009). CREATE Report Card 2009 – Transitioning from care: tracking progress. Retrieved from http://create.org.au/wp-content/uploads/2014/12/05.-CREATE-Report-Card_Transitioning-From-Care-Tracking-Progress_November-2009.pdf

Mendes, P., Snow, P. & Baidawi, S. (2012). Young people transitioning from out-of-home care in Victoria: Strengthening support services for dual clients of Child Protection and Youth Justice. Melbourne: Monash University.

Ministry of Children and Youth Services (Canada). (2018). Youth leaving care. Retrieved from http://www.children.gov.on.ca/htdocs/English/childrensaid/leavingcare.aspx

Ministry of Social Development (2018). Investing in New Zealand's Children: legislative reform. Retrieved from

https://www.msd.govt.nz/about-msd-and-our-work/work-programmes/investing-in-children/investing-in-new-zealands-children-legislation-changes.html

Mosley, J. & Courtney, M.E. (2012). Partnership and the politics of care advocates' role in passing and implementing California's law to extend foster care. Chicago: Chapin Hall Center for Children.

Munro, E. R., Lushey, C., Maskell-Graham, D., Ward, H. & Holmes, L. (2010). Evaluation of the Staying Put: 18 plus family placement programme: final report. Retrieved from https://www.gov.uk/ government/uploads/system/uploads/attachment_data/file/183518/DFE-RR191.pdf.

Narendorf, S., & McMillen, J. (2010). Substance use and substance use disorders as foster youth transition to adulthood. Children and Youth Services Review, 32(1), 113-119.

National Centre for Vocational Education Research. (2017a). Australian vocational education and training statistics: VET program completion rates, 2011–15. Adelaide: Author.

National Centre for Vocational Education Research. (2017b). Australian vocational education and training statistics: VET student outcomes 2017. Adelaide: Author.

National Conference of State Legislatures. (2017). Extending foster care beyond 18. Retrieved from http://www.ncsl.org/research/human-services/extending-foster-care-to-18.aspx

Netzel, K. S. & Tardanico, M. B. (2014). Outcomes for young adults in extended foster care. Electronic theses, projects, and dissertations. Paper 59. Office of Graduate Studies – California State University, San Bernardino.

NSW Government. (2017). Reducing youth homelessness. Retrieved from https://www.nsw.gov.au/improving-nsw/premiers-priorities/reducing-youth-homelessness/

NSW Government. (2018). Their Futures Matter – Reform overview. Retrieved from https://www.theirfuturesmatter.nsw.gov.au/about-their-futures-matter/reform-overview

Office of the Minister for Social Development (2016). Investing in children legislative reform: Paper Seven – transition to independence – discretion to support young people up to age 25. Retrieved from

https://www.msd.govt.nz/documents/about-msd-and-our-work/work-programmes/investing-in-children/cabinet-paper-transition-up-to-25.pdf

Osborn, A. and Bromfield, L. (2007). Outcomes for Children and young people in care. Research Brief, published in the Australian Institute of Family Studies. No. 3.

Pager, M. (2003). The mark of a criminal record. American Journal of Sociology, 108(5), 937-75.

Parliament of Australia, Community Affairs References Committee (2005). Protecting vulnerable children: A national challenge. Second report on the inquiry into children in institutional or out-of-home care. Senate Printing Unit, Parliament House, Canberra.

Parliament of Australia, Community Affairs References Committee (2015). Out-of-home care. Senate Printing Unit, Parliament House, Canberra.

Pecora, P. J., Kessler, R.C., Williams, J., O'Brien, K., Downs, A. C., English, D., …, Holmes, K. (2005). Improving Family Foster Care: Findings from the Northwest Foster Care Alumni Study. Retrieved from: https://caseyfamilypro-wpengine.netdna-ssl.com/media/AlumniStudies_NW_Report_FR.pdf

Price-Robertson, R. (2010) Supporting young parents. Retrieved from https://aifs.gov.au/cfca/publications/supporting-young-parents

Productivity Commission. (2018). Report on Government Services 2018. Retrieved from https://www.pc.gov.au/research/ongoing/report-on-government-services/2018

Provincial Advocate for Children and Youth. (2012). 25 is the new 21. Ontario: The Office of the Provincial Advocate for Children and Youth.

Raman, S., Inder, B., & Forbes, C. (2005). Investing for success: The economics of supporting young people leaving care. Melbourne: Centre for Excellence in Child and Family Welfare.

Ritter, A., Berends, L., Chalmers, J., Hull, P., Lancaster, K. & Gomez, M. (2014). New Horizons: The review of alcohol and other drug treatment services in Australia. Retrieved from

http://www.health.gov.au/internet/main/publishing.nsf/content/
FD5975AFBFDC7013CA258082000F5DAB/$File/The-Review-of-
alcohol-and-other-drug-treatment-services-in-Australia.pdf

Rumberger, R. & Lamb, S. (2003). The early employment and further education
experiences of high school dropouts: a comparative study of the United
States and Australia. Economics of Education Review, 22(4), 553-556.

Tasmanian Liberals. (2017). Generational Change for Children and Families. Retrieved
from https://www.tas.liberal.org.au/sites/default/files/Children%20and%20families.pdf

The Children's Partnership. (2015). Staying put good practice guide.
Retrieved from http://www.ncb.org.uk/media/1154341/staying_put.pdf

The Home Stretch. (2018). Who we are. Retrieved from http://thehomestretch.org.au/about/

Tilbury, C. & Osmond, J. (2006). Permanency Planning in Foster Care: A Research
Review and Guidelines for Practitioners. Australian Social Work, 59(3), 265-280.

Tilbury, C., Creed, P., Buys, N., Osmond, J. & Crawford, M. (2015). Making a
connection: school engagement of young people in care. Retrieved from http://
www98.griffith.edu.au/dspace/bitstream/ handle/10072/65454/98989_1.
pdf;jsessionid=C982D7D3 F08D73C718028FEC18957A0B?sequence=1

Vos, T., Carter, R., Barendregt, J., Mihalopoulos, C., Veerman, J.L., Magnus, A., …,
Wallace, A.L. (2010). Assessing Cost-Effectiveness in Prevention (ACE–Prevention):
Final Report. University of Queensland, Brisbane and Deakin University, Melbourne.

Washington State Institute for Public Policy. (2010). Extending foster
care to age 21: measuring costs and benefits in Washington State.
Retrieved from http://www.wsipp.wa.gov/Reports/10-01-3902

Zaretzky, K. & Flatau, P. (2015). The cost-effectiveness of Australian
tenancy support programs for formerly homeless people. Melbourne:
Australian Housing and Urban Research Institute Limited.

Appendix A - Model assumptions

Table A.1 Base model assumptions and sources

Variable	Assumption (Costs are annual and have been inflated to 2018 19 dollars)	Source
Program uptake		
Program uptake rate	0.2495	Department of Education (United Kingdom); Children and Young People Now (2015)
Housing and homelessness support		
Housing support	$20,230	Derived using Zaretzy & Flatau (2015), and AIHW Child Protection Australia 2013-14 (2015)
Pr. Housing Support (Age 18)	0.390	Forbes et al. (2006)
Pr. Housing Support (Age 21)	0.195	Derived using Forbes et al. (2006), and Munro et al. (2010)
Employment and Education		
VET qualification; wage	$68,155	ABS (2005)
No VET qualification; Employed ($2015)	$52,192	ABS (2005)
Newstart base rate	$14,510	Department of Human Services (2018)
VET course (one year)	$2,986	Derived using, Victoria Polytechnic (2016)
Pr. Further education (Age 18, non parent)	0.059	Harvey et al. (2015)
Pr. Further education (Age 21, non parent)	0.147	Derived using Harvey et al. (2015), and Munro et al. (2010)
Pr. Employment (with VET)	0.580	ABS Education and Work (2015)
Pr. Employment (No VET)	0.313	Derived using ABS Education and Work (2015), and McDowall (2009)
Average income tax rate (VET)	22%	Deloitte Access Economics
Average income tax rate (No VET)	18%	Deloitte Access Economics
Early parenthood		
Parenting payment	$20,268	Department of Human Services (2018)
Newborn supplement	$2,208	Department of Human Services (2018)
Newstart (single, dependent children)	$15,696	Department of Human Services (2018)
Newstart (base rate)	$14,510	Department of Human Services (2018)

Variable	Assumption (Costs are annual and have been inflated to 2018 19 dollars)	Source
FTB A (per child aged 0-12)	$5,628	Department of Human Services (2018)
FTB A (per child aged 12-19)	$7,095	Department of Human Services (2018)
FTB B (Youngest child under 5)	$4,512	Department of Human Services (2018)
FTB B (Youngest child 5-19)	$3,262	Department of Human Services (2018)
Pr. Early parenthood (Age 18)	0.166 Probability adjusted for the fact that 48.4% of children in OOHC are female	(Cashmore & Paxman, 2007)
Pr. Early parenthood (Age 18)	0.102 Probability adjusted for the fact that 48.4% of children in OOHC are female	(Courtney & Dworsky, 2006)
Hospitalisation		
Cost of Hospitalisation annually	$8,249	IHPA Independent Hospital Pricing Authority (2013) National Hospital Care Data Collection 2012-13
Pr. Hospitalisation (Age 18)	0.292	Courtney et al. (2006)
Pr. Hospitalisation (Age 21)	0.192	Courtney et al. (2007)
Other mental health costs		
Other mental health costs	$1,279	(AIHW, 2015)
Pr. Other mental health costs (Age 18)	0.544	(Pecora et al., 2005)
Pr. Other mental health costs (Age 21)	0.301	(Kessler et al., 2008)
Smoking		
Smoking costs	$154	Collins & Lapsley (2004)
Pr. Smoking (Age 18)	0.586	Corrales (2015)
Pr. Smoking (Age 21)	0.0248	Narendorf & Millen (2010)
Justice		
Cost to Justice system	$5,392	Derived using Australian Institute of Criminology (2014) and Courtney et al. (2011)
Pr. Justice (Age 18)	0.163	Washington State Institute for Public Policy (2010)
Pr. Justice (Age 21)	0.104	Washington State Institute for Public Policy (2010)
Alcohol and drug (AoD) dependence		
Cost of AoD dependency	$1,013	AIHW (2011)
Pr. AoD dependency (Age 18)	0.158	Courtney et al. (2007)

Variable	Assumption (Costs are annual and have been inflated to 2018 19 dollars)	Source
Pr. AoD dependency (Age 21)	0.025	Derived using Courtney et al. (2007), and ABS National Health Survey 2014-15 (2015)
Burden of disease		
Wellbeing costs of mental health disorders and substance abuse		
Wellbeing cost	$31,223	(IMHE, 2018)
Pr. Other mental health costs (Age 18)	0.544	(Pecora et al., 2005)
Pr. Other mental health costs (Age 21)	0.301	(Kessler et al., 2008)

Appendix B - Detailed results

Table B.1 Base model. Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018-19, uptake rate 24.95%, discount rate 7% nominal

Cost/benefit category	Program not offered	Program offered	Difference in cost/benefit	% change
Costs				
Program costs	0.0	24.6	24.6	–
Costs of Education	0.2	0.2	0.1	37%
Total costs	**0.2**	**24.8**	**24.7**	
Outcomes				
Housing and homelessness	-160.3	-137.9	22.5	-14%
Employment, education and early parenthood	-229.9	-224.5	5.3	-2%
Hospitalisation	-51.2	-45.8	5.4	-10%
Other mental health costs	-14.8	-12.9	1.9	-13%
Smoking	-1.9	-1.6	0.3	-15%
Alcohol and Drugs	-3.4	-2.6	0.8	-22%
Crime	-14.8	-13.7	1.1	-7%
Wages*	254.6	266.2	11.7	5%
Taxes*	57.8	61.2	3.4	6%
Wellbeing	-286.5	-254.5	32.0	-11%
Total financial costs	**-163.9**	**-111.7**	**52.2**	
Total costs (incl. wellbeing)	**-450.4**	**-366.2**	**84.2**	
Net financial benefits	**-164.1**	**-136.5**	**27.6**	
Total benefits (incl. wellbeing)	**-450.6**	**-391.0**	**59.5**	

Source: Deloitte Access Economics analysis. Note: Negative numbers represent costs, positive number represent benefits, that is, a number becoming less negative indicated a reduction in costs. Early parenthood, education and employment are presented together as the probability of employment is dependent on both early parenthood status and education.

Table B.2 Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018-19, uptake rate 50%, discount rate 7% nominal

Cost/benefit category	Program not offered	Program offered	Difference in cost/benefit	% change
Costs				
Program costs	0.0	49.3	49.3	-
Costs of Education	0.2	0.3	0.1	75%
Total costs	**0.2**	**49.6**	**49.4**	
Outcomes				
Housing and homelessness	-160.3	-115.3	45.0	-28%
Employment, education and early parenthood	-229.9	-219.2	10.7	-5%
Hospitalisation	-51.2	-40.4	10.8	-21%
Other mental health costs	-14.8	-11.0	3.8	-26%
Smoking	-1.9	-1.3	0.6	-31%
Alcohol and Drugs	-3.4	-1.9	1.5	-45%
Crime	-14.8	-12.7	2.2	-15%
Wages*	254.6	277.9	23.4	9%
Taxes*	57.8	64.6	6.8	12%
Wellbeing	-286.5	-222.5	64.0	-22%
Total financial costs	**-163.9**	**-59.3**	**104.7**	
Total costs (incl. wellbeing)	**-450.4**	**-281.7**	**168.7**	
Net financial benefits	**-164.1**	**-108.8**	**55.2**	
Total benefits (incl. wellbeing)	**-450.6**	**-331.3**	**119.3**	

Source: Deloitte Access Economics analysis. Note: Negative numbers represent costs, positive number represent benefits, that is, a number becoming less negative indicated a reduction in costs. Early parenthood, education and employment are presented together as the probability of employment is dependent on both early parenthood status and education.

Table B.3 Present value ($2018-19) of costs and benefits over 40 years,
for the 18-year-old population in OOHC in 2018-19, uptake rate 80%
in year 1, 50% in year 2, 25% in year 3, discount rate 7% nominal

Cost/benefit category	Program not offered	Program offered	Difference in cost/benefit	% change
Costs				
Program costs	0.0	51.7	51.7	-
Costs of Education	0.2	0.3	0.1	78%
Total costs	**0.2**	**52.0**	**51.9**	
Outcomes				
Housing and homelessness	-160.3	-112.5	47.8	-30%
Employment, education and early parenthood	-229.9	-224.6	5.2	-2%
Hospitalisation	-51.2	-39.8	11.4	-22%
Other mental health costs	-14.8	-10.8	4.0	-27%
Smoking	-1.9	-1.3	0.6	-33%
Alcohol and Drugs	-3.4	-1.8	1.6	-47%
Crime	-14.8	-11.8	3.0	-20%
Wages*	254.6	288.5	33.9	13%
Taxes*	57.8	67.1	9.2	16%
Wellbeing	-286.5	-217.9	68.6	-24%
Total financial costs	**-163.9**	**-47.1**	**116.9**	
Total costs (incl. wellbeing)	**-450.4**	**-265.0**	**185.4**	
Net financial benefits	**-164.1**	**-99.1**	**65.0**	
Total benefits (incl. wellbeing)	**-450.6**	**-317.0**	**133.6**	

Source: Deloitte Access Economics analysis. Note: Negative numbers represent costs, positive number represent benefits, that is, a number becoming less negative indicated a reduction in costs. Early parenthood, education and employment are presented together as the probability of employment is dependent on both early parenthood status and education.

Table B.4 Base model. Present value ($2018-19) of costs and benefits over 20 years, for the 18-year-old population in OOHC in 2018-19, uptake rate 24.95%, discount rate 7% nominal

Cost/benefit category	Program not offered	Program offered	Difference in cost/benefit	% change
Costs				
Program costs	0.0	24.6	24.6	-
Costs of Education	0.2	0.2	0.1	37%
Total costs	**0.2**	**24.8**	**24.7**	
Outcomes				
Housing and homelessness	-103.8	-88.4	15.4	-15%
Employment, education and early parenthood	-168.2	-163.8	4.4	-3%
Hospitalisation	-32.5	-28.7	3.8	-12%
Other mental health costs	-9.4	-8.1	1.3	-14%
Smoking	-1.2	-1.0	0.2	-16%
Alcohol and Drugs	-2.2	-1.7	0.5	-22%
Crime	-10.4	-9.1	1.3	-12%
Wages*	161.0	168.2	7.2	4%
Taxes*	36.5	38.6	2.1	6%
Wellbeing	-201.3	-178.9	22.5	-11%
Total financial costs	**-130.1**	**-94.0**	**36.1**	
Total costs (incl. wellbeing)	**-331.5**	**-272.9**	**58.6**	
Net financial benefits	**-130.3**	**-118.8**	**11.5**	
Total benefits (incl. wellbeing)	**-331.6**	**-297.7**	**33.9**	

Source: Deloitte Access Economics analysis. Note: Negative numbers represent costs, positive number represent benefits, that is, a number becoming less negative indicated a reduction in costs. Early parenthood, education and employment are presented together as the probability of employment is dependent on both early parenthood status and education.

Table B.5 Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018-19, uptake rate 24.95%, discount rate 10% nominal

Cost/benefit category	Program not offered	Program offered	Difference in cost/benefit	% change
Costs				
Program costs	0.0	24.0	24.0	-
Costs of Education	0.2	0.2	0.1	37%
Total costs	**0.2**	**24.2**	**24.0**	
Outcomes				
Housing and homelessness	-109.1	-93.1	16.0	-15%
Employment, education and early parenthood	-165.1	-161.0	4.1	-2%
Hospitalisation	-34.5	-30.6	3.9	-11%
Other mental health costs	-10.0	-8.6	1.3	-14%
Smoking	-1.3	-1.1	0.2	-16%
Alcohol and Drugs	-2.3	-1.8	0.5	-22%
Crime	-10.5	-9.5	1.0	-9%
Wages*	171.2	178.9	7.7	4%
Taxes*	38.9	41.1	2.2	6%
Wellbeing	-202.5	-179.9	22.6	-11%
Total financial costs	**-122.6**	**-85.7**	**36.9**	
Total costs (incl. wellbeing)	**-325.2**	**-265.7**	**59.5**	
Net financial benefits	**-122.8**	**-109.9**	**12.9**	
Total benefits (incl. wellbeing)	**-325.3**	**-289.8**	**35.5**	

Source: Deloitte Access Economics analysis. Note: Negative numbers represent costs, positive number represent benefits, that is, a number becoming less negative indicated a reduction in costs. Early parenthood, education and employment are presented together as the probability of employment is dependent on both early parenthood status and education.

Table B.6 Base model. Present value ($2018-19) of costs and benefits over 40 years, for the 18-year-old population in OOHC in 2018-19, uptake rate 25%, discount rate 4% nominal

Cost/benefit category	Program not offered	Program offered	Difference in cost/benefit	% change
Costs				
Program costs	0.0	25.3	25.3	-
Costs of Education	0.2	0.2	0.1	37%
Total costs	**0.2**	**25.5**	**25.4**	
Outcomes				
Housing and homelessness	-262.8	-227.5	35.3	-13%
Employment, education and early parenthood	-353.0	-345.4	7.6	-2%
Hospitalisation	-84.9	-76.6	8.3	-10%
Other mental health costs	-24.5	-21.5	3.0	-12%
Smoking	-3.1	-2.6	0.5	-15%
Alcohol and Drugs	-5.6	-4.4	1.3	-22%
Crime	-23.2	-22.0	1.2	-5%
Wages*	422.7	442.4	19.7	5%
Taxes*	96.0	101.7	5.7	6%
Wellbeing	-448.7	-398.7	50.1	-11%
Total financial costs	**-238.4**	**-155.9**	**82.5**	
Total costs (incl. wellbeing)	**-687.1**	**-554.6**	**132.5**	
Net financial benefits	**-238.6**	**-181.4**	**57.1**	
Total benefits (incl. wellbeing)	**-687.3**	**-580.1**	**107.2**	

Source: Deloitte Access Economics analysis. Note: Negative numbers represent costs, positive number represent benefits, that is, a number becoming less negative indicated a reduction in costs. Early parenthood, education and employment are presented together as the probability of employment is dependent on both early parenthood status and education.

Limitation of our work

General use restriction

This report is prepared solely for the use of Anglican Community Services. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose of analysing the proposal to extend OOHC from 18 to 21 years of age in New South Wales. You should not refer to or use our name or the advice for any other purpose.

Notes

Notes