

People with mental health disorders and cognitive impairment in the criminal justice system

Cost-benefit analysis of early support and diversion*

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1 The case for change

People with mental health disorders and cognitive impairment are significantly over-represented in the criminal justice system. This is the case for defendants through to the population in custody. For example, in NSW people with mental health disorders and cognitive impairment currently make up a significant proportion of people entering the criminal justice system, being 3 to 9 times more likely to be in prison than the general NSW population.

A number of studies have attempted to understand and quantify the prevalence of these conditions within the criminal justice system. These studies include (but are not limited to):

- 2009 NSW inmate health survey report¹
- NSW Law Reform Commission Report on Diversion (Report 135)²
- UNSW study of a cohort of 2,731 individuals who have been in prison, and most of who have mental health disorders and/or cognitive impairment.³

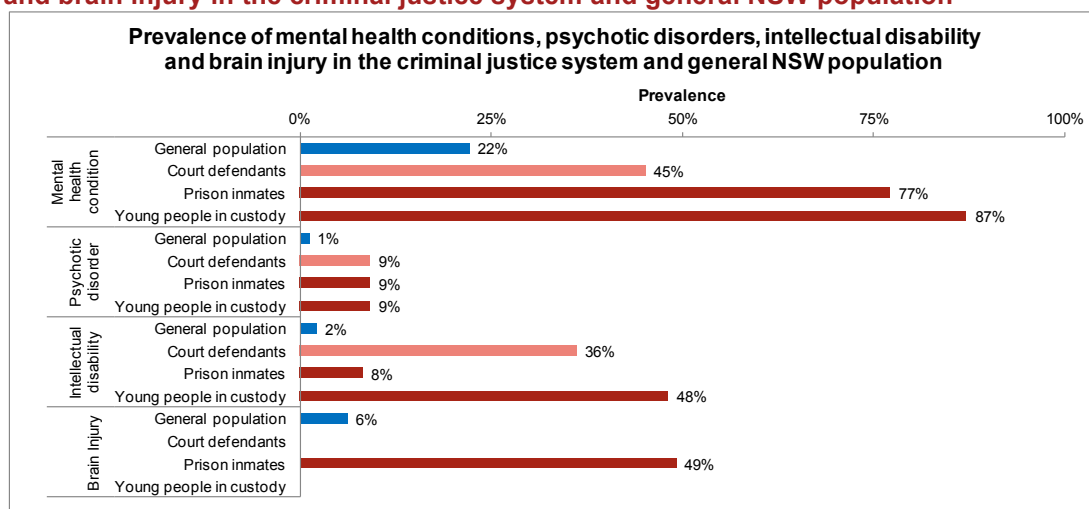
People with mental health disorder and/or cognitive impairment are

3 to 9 times

more likely to be in prison than their non-disabled counterparts in the general NSW population³

The following figure provides a summary of various studies showing the overrepresentation of people with mental health disorders and cognitive impairment in court, and in juvenile and adult custody in NSW, compared to the general NSW population. Studies in other states, for example Victoria, also show high rates of mental health disorders and cognitive impairment amongst prisoners.⁴

Figure 1: Prevalence of mental health conditions, psychotic disorders, intellectual disability and brain injury in the criminal justice system and general NSW population^{5,6,7}



¹ Indig D, Topp L, Ross B, Mamoon H, Border B, Kumar S & McNamara M. (2010) *2009 NSW Inmate Health Survey: Key Findings Report*. Justice Health. Sydney. At <http://www.justicehealth.nsw.gov.au/about-us/publications/2009-ihs-report.pdf>

² NSW Law Reform Commission (2012), *People with cognitive and mental health impairments in the criminal justice system – Diversion*, Report 135. At <http://www.lawreform.lawlink.nsw.gov.au/agdbasev7wr/lrc/documents/pdf/r135.pdf>

³ Baldry E, Dowse L, Webster I, *Australians with Mental Health Disorders and Cognitive Disabilities (MHDCD) in the Criminal Justice System Project*, at <http://www.mhdcd.unsw.edu.au/australians-mhdcd-cjs-project.html> (Accessed 14 July 2013)

⁴ See for example: 'research' at <http://www.corrections.vic.gov.au/utility/publications+manuals+and+statistics/>; and <http://www.pwd.org.au/systemic/adjc.html> (in particular the paper *No End in Sight...*)

⁵ Prevalence percentages are taken from the NSW Law Reform Commission report *People with cognitive and mental health impairments in the criminal justice system – Diversion*, Report 135. At <http://www.lawreform.lawlink.nsw.gov.au/agdbasev7wr/lrc/documents/pdf/r135.pdf>. It

Young people with mental health disorders and/or cognitive impairment are at least

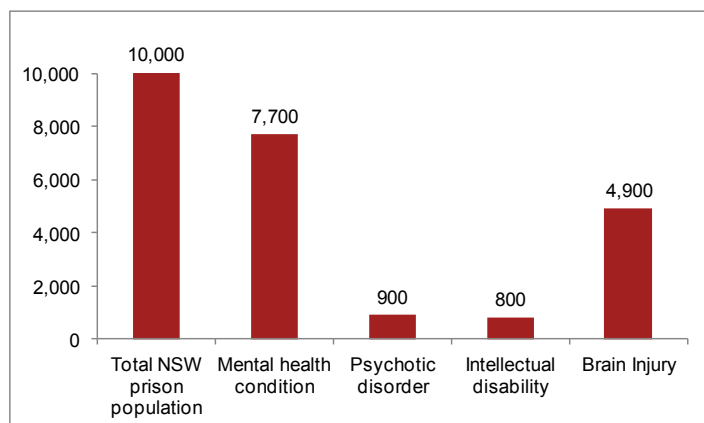
6 times

more likely to be in prison than young people without disability in the general NSW population

Despite such studies, it is still difficult to quantify how many people currently in prison have mental health disorders and/or cognitive impairment. This is due to the difficulty of assessing remand and short-term prisoners for these conditions as well as a lack of routine identification of people for specialist assessments.

In this report, we use NSW as the example for discussion as it has the best information on mental health disorders and cognitive impairment in the criminal justice system. The estimates presented here are calculated by applying the prevalence percentages in Figure 1 to the estimated 10,000 people in NSW prisons in March 2011.⁸ For example, of the 10,000 people in NSW prisons in March 2011, an estimated 8% or 800 people had an intellectual disability (below 70IQ), while 77% or 7700 people were estimated to have a mental health condition (including alcohol or other drug disorder).

Figure 2: Estimated number of people with mental health disorders and cognitive impairment in NSW prisons in March 2011



It is important to note that the rate of co-occurring and multiple disorders and impairments is not readily available. Therefore, the numbers presented are not mutually exclusive, and the overlap is not known.

Aboriginal people are over-represented in the criminal justice system. Comparison of the likelihood of entering the Juvenile Justice and adult corrections systems between Aboriginal and non-Aboriginal people shows that Aboriginal people make up a disproportionately high number in and component of the cost to the criminal justice system. This comparison can be seen in the following two figures.⁹

should be noted that the numbers presented here are collected from a variety of studies, and as such are representative only and do not form a direct controlled comparison.

⁶ Prevalence for brain injury statistics is the lifetime prevalence of head injury resulting loss of consciousness of at least 15 minutes, from the 2009 NSW Inmate Health Survey: Key Findings Report Indig D, Topp L, Ross B, Mamoon H, Border B, Kumar S & McNamara M. (2010) 2009 NSW Inmate Health Survey: Key Findings Report. Justice Health. Sydney. At <http://www.justicehealth.nsw.gov.au/about-us/publications/2009-ihs-report.pdf>

⁷ Begg S, Vos T, Barker B, Stevenson C, Stanley L & Lopez A (2007). The burden of disease and injury in Australia 2003. Cat. no. PHE 82. Canberra: AIHW. At <http://www.aihw.gov.au/publication-detail/?id=6442467990> (Accessed 8 June 2013).

⁸ ABS corrective services Australia report 4512.0, March quarter 2012, average number of persons in full-time custody on the first day of month, March quarter 2011.

⁹ Derived from a number of sources:

Figure 3: Pathways through the Juvenile Justice and adult corrections systems for Aboriginal people

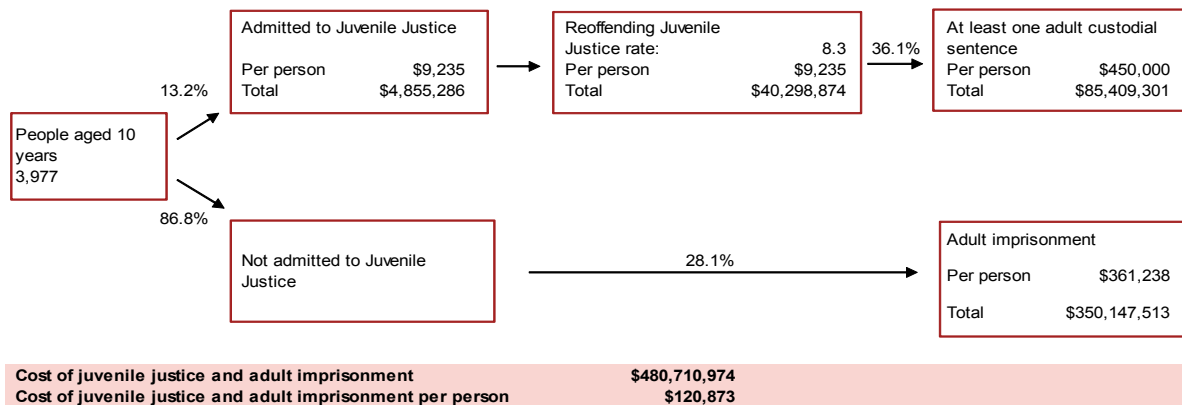
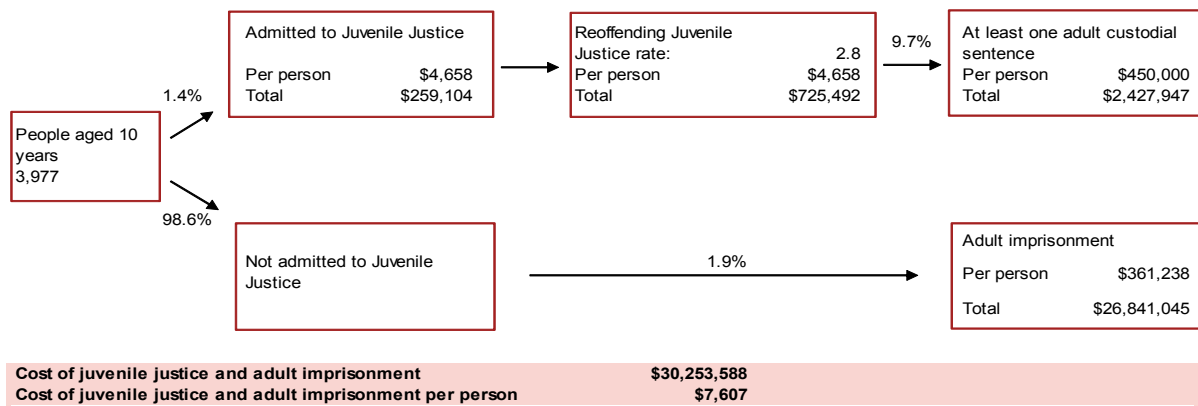


Figure 4: Pathways through the Juvenile Justice and adult corrections systems for non-Aboriginal people



The analysis shows that:¹⁰

- Aboriginal young people are far more likely to become a client of Juvenile Justice, at 13.2% of Aboriginal youth compared with 1.4% of non Aboriginal youth
- The reoffending rate for Aboriginal young people in the Juvenile Justice system is almost 3 times that for non-Aboriginal young people
- Aboriginal young people in the Juvenile Justice system are far more likely to have at least one adult custodial sentence, at 36.1% of Aboriginal youth in the Juvenile Justice system, compared with 9.7% of non-Aboriginal youth. Further, the costs for these far higher rates of Aboriginal custodies are massively more than for non-Aboriginal young people and adults.

There is a large gap between the cost of Juvenile Justice and adult imprisonment for Aboriginal and non-Aboriginal people:

\$121,000 per person compared to **\$8,000** per person

- NSW Juvenile Justice Annual Report 2008/09 and Aboriginal population projections
- daily costs of service provision (Noetic, A Strategic Review of the NSW Juvenile Justice system)
- BOCSAR Crime and Justice Bulletin, May 2005
- the annual cost of a prison place (ROGS, 2010)
- length of sentence information (NSW Corrective Service Facts and Figures, May 2010)
- ABS Prisoner Survey, 2009

¹⁰ The rates of likelihood of entering the Juvenile Justice system are based on the population aged 10-17 years old.

2 UNSW dataset study

A UNSW study on people with mental health disorders and cognitive impairment in the criminal justice system in NSW has created a dataset containing information of lifelong use of government services for a group of 2,731 people who have been in prison in NSW and whose diagnoses are known.¹¹ Data was gathered from all NSW criminal justice agencies (Corrective Services, Police, Juvenile Justice, Courts, Legal Aid) and human service agencies (Housing, Ageing Disability and Home Care (ADHC), Community Services, Justice Health and NSW Health).

De-identified case studies have been compiled of the pathways of real individuals drawn from the dataset. The data provide details of the number, length and types of criminal justice and human service agency events and interactions as well as the observations of officers or workers via case notes. Three case studies are presented here.¹²

Case study 1: Peter

Peter's lifecourse institutional costs by age 40 are

\$1,038,030

This includes 291 days in hospital over 25 admissions, and 1261 days in custody

Peter is in his early 40s and has a dual diagnosis of a mental health disorder and a mild intellectual disability. He has a history of schizophrenic and psychotic episodes and exhibits post-traumatic stress disorder, obsessive-compulsive disorder and social personality disorder. Peter has little contact with the criminal justice system until the age of 26, at which age contact is precipitated by significant mental illness.

While supported by a complex needs parole officer on a community order, Peter had no recorded offences or hospital admissions. However, without that support he returned to his previous cycle of offending and regular readmission to hospital.

Table 1: Selected agency costs over lifecourse: Peter

	10 to 15	16 to 18	19 to 21	22 to 25	26 to 35	36 to 45	Total Cost
Police	\$4,689	\$0	\$0	\$0	\$92,222	\$67,213	\$164,124
Corrective Services	\$0	\$0	\$0	\$0	\$312,271	\$84,536	\$396,807
Other agencies	\$0	\$0	\$0	\$0	\$237,982	\$237,505	\$475,487
TOTAL	\$4,689	\$0	\$0	\$0	\$642,475	\$389,254	\$1,036,418

¹¹ <http://www.mhdcd.unsw.edu.au/>

¹² Case studies taken from Baldry, E., Dowse, L., McCausland, R and Clarence, M. (2012), *Lifecourse institutional costs of homelessness of vulnerable groups*, November, <http://www.mhdcd.unsw.edu.au/sites/www.mhdcd.unsw.edu.au/files/u18/Lifecourse-Institutional-Costs-of-Homelessness-final-report.pdf>.

Case study 2: Casey

Casey's lifecourse institutional costs by age 20 are

\$5,515,293

This includes 356 police incidents, 604 days in custody and 270 days in hospital.

Casey is an Aboriginal woman in her early 20s who has an intellectual disability and has been diagnosed with a range of mental and other cognitive conditions, including Attention Deficit Hyperactivity Disorder, conduct disorders, adjustment disorders, personality disorder and bipolar affective disorder. She has a long history of self-harm, physical abuse and trauma.

Casey's intellectual disability and personality disorders are key factors precipitating her very high levels of institutional contact from a young age, particularly with police. The extreme costs of Casey's contact with the criminal justice system are significantly

reduced after she becomes a client of the NSW ADHC Community Justice Program at the age of 18.

Table 2: Selected agency costs over lifecourse: Casey

	10 to 15	16 to 18	19 to 21	Total Cost
Police	\$303,239.46	\$318,870.36		\$622,109.82
Juvenile Justice	\$215,571.40	\$262,486.08		\$478,057.48
Health	\$111,631.67	\$174,290.01		\$285,921.68
Other agencies	\$147,156.07	\$978,976.80	\$3,003,071.96	\$4,129,204.83
TOTAL	\$777,598.60	\$1,734,623.25	\$3,003,071.96	\$5,515,293.81

Case study 3: Roy

Roy's lifecourse institutional costs by age 30 are

\$1,958,292

This includes 1876 days in custody over 209 incidents, and 5110 contacts under the Pharmaceutical Drugs of Addiction System (PHDAS)

Roy is a 30 year old Aboriginal man with an intellectual disability and a social personality disorder. He has spent over 1800 days in adult custody, over 100 days in hospital for drug-related mental health and self harm matters, and has had over 5000 days of methadone treatment.

Roy's engagement with the criminal justice system at a relatively young age appears to be significantly related to the presence of cognitive impairment. His brothers and friends use his identity as an alias when committing other offences. As an adult his offending is linked to his misuse of alcohol and drugs, which also precipitate his mental health disorders. He has received some support from Centrelink and Housing, but that support has been

insufficient.

Table 3: Selected agency costs over lifecourse: Roy

	<10	10 to 15	16 to 18	19 to 21	22 to 25	26 to 35	Total Cost
Police		\$46,892.70	\$51,581.97	\$98,474.67	\$109,416.30	89,096.13	\$395,461.77
Juvenile Justice		\$70,087.72	\$308,642.24	\$17,204.88	\$0	\$0	\$395,934.84
Corrective Services		\$0	\$0	\$96,745.54	\$186,066.95	\$180,025.70	\$462,838.19
Other agencies	\$64,986.73	\$100,584.08	\$93,804.24	\$124,775.78	\$133,398.79	\$186,507.19	\$704,056.81
TOTAL	\$64,986.73	\$217,564.50	\$454,028.45	\$337,200.87	\$428,882.04	\$455,629.02	\$1,958,291.61

3 Current Initiatives in Australia

There are currently a number of programs throughout NSW, Australia and internationally that focus on investment and diversion of people with mental health disorders and cognitive impairment from the criminal justice system.

In this section we provide some examples of initiatives that have been shown to be successful in supporting people with mental health disorders and cognitive impairment, and diverting them from prison and homelessness. These include:

- the NSW Integrated Services Project (ISP), costing a median of \$207,000 (all inclusive) per client for the duration of the program¹³
- the NSW Court Referral of Eligible Defendants into Treatment (CREDIT) program
- the Victorian Court Integrated Services Program (CISP), costing on average \$2,300 per client.

NSW ISP

The NSW ISP, administered by ADHC and run together with the NSW Health Mental Health and Drug and Alcohol Office and Housing NSW, provides services to clients with mental health disorders or cognitive impairment that result in challenging behaviour. While it does not target people within the criminal justice system specifically, its clients have a very similar profile to those in the UNSW study and most have had involvement with the criminal justice system. The majority of its clients have two or more diagnoses, with mental illness, intellectual disability and alcohol and drug disorders being the most common. The program provides its clients with a comprehensive assessment and individualised care plan, supported accommodation, clinical support and therapeutic investments. Its key aim is to help individuals establish relationships with other agencies such as Housing, so that they are able to continue receiving support after the program.

While on the ISP, clients' number of hospital days reduced by an **average of 90%** of their pre-ISP level, while the number of days in custody reduced by an **average of 94%**

NSW CREDIT and Victorian CISP

While the ISP can be used as an example of intensive support for clients with more complex needs, for other clients with mental health disorders or cognitive impairment a lower level of support may be sufficient. Examples of lower level support programs include the NSW CREDIT program, or the Victorian CISP. Both of these are court diversion programs, which offer assessment prior to or during the court process, or as an outcome of a court order. These programs provide case management over 2 to 6 months to clients who are non-violent offenders with an "identifiable" mental health condition, drug or alcohol dependence, intellectual disability, or brain injury. Where such programs have been evaluated, a large proportion of clients say that their life is changed for the better by the program, and a reduction in recidivism has been observed.

¹³ The median length of time in the program being 21 months. The median size of the annual support package after the program is \$140,000.

4 Case studies of benefits of early support and diversion

This section takes the UNSW case studies discussed earlier (in Section 2) to examine how providing an early investment of support to people with mental health disorders and cognitive impairment can dramatically increase the person’s well-being, divert them from prison, and provide savings to the government over an individual’s lifetime.

The savings associated with the lifetime cost of an individual to date are presented below - that is, the savings in the cost to government of providing services (including Police, Courts, Corrections, Health, Housing, and Centrelink). In each of the case studies, a substantial saving is possible by the age the person had reached at the time the data was extracted for the UNSW study. We present the possible savings for different rates of investment success.

Case study 1: Peter

Peter’s lifecourse institutional costs by age 40 are

\$1,038,030

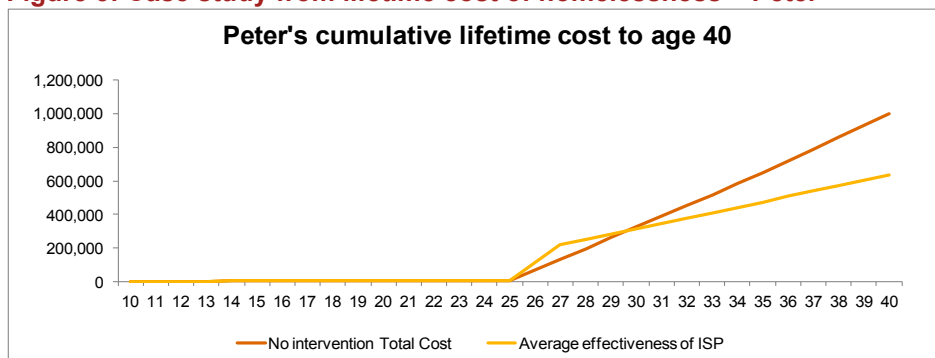
This includes 291 days in hospital over 25 admissions, and 1261 days in custody

Substantial savings and great improvements to Peter’s wellbeing could be achieved if:

- at age 26, Peter is instead provided with intensive case management support services, such as the ISP
- this support helps him to access Housing support from age 28 (after 2 years on the intensive intervention program), rather than age 35 (when he was placed with a complex needs parole officer). The annual cost of the Housing support is costed at \$27,905 pa
- the support results in reducing Peter’s court costs, prison days and hospital admissions in line with the ISP

The figure below compares the trajectory of Peter’s lifetime cost without investment to the lifetime cost of the ISP (with average effectiveness).

Figure 5: Case study from lifetime cost of homelessness – Peter



If the expected effect of the ISP is realised then the net saving at age 40 will be **\$385,990**. Even if the program is only half as effective as expected, the costs to government by age 40 are the same, but likely to result in higher wellbeing for Peter. The extra investment between ages 25 and 29 is small compared with the diminished costs and savings later.

By age 40, the benefit cost ratio is estimated to be

1.7

Case study 2: Casey

Casey's lifecourse institutional costs by age 20 are

\$5,515,293

This includes 356 police incidents, 604 days in custody and 270 days in hospital.

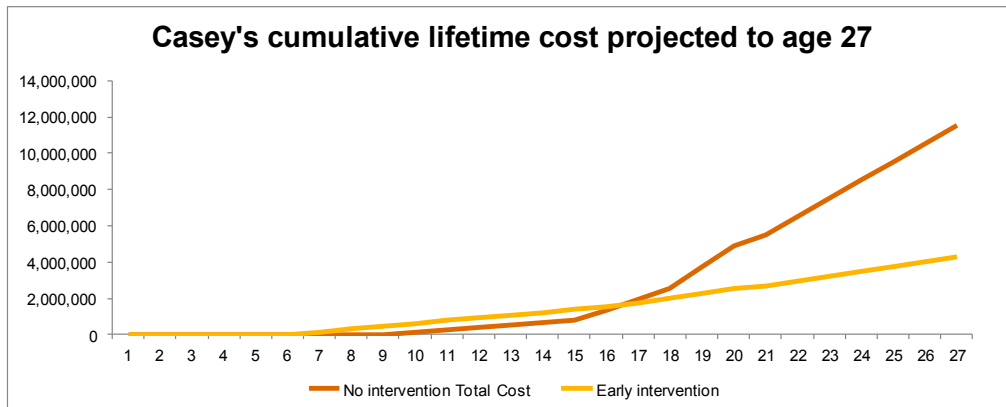
By age 20, Casey ends up on an intensive support package from ADHC and on Centrelink supports, amounting to \$1m pa. If Casey is given an early intervention from the age of seven that would mean she didn't offend, come into the criminal justice system, or end up on such an intensive package, substantial savings of up to \$2.9m could be achieved by age 20. In another five years, further savings of \$3.7m could be achieved.

The following assumptions are made in the calculation of the benefits for Casey:

- from age 7, Casey is provided with an intensive early intervention package of \$150,000 pa
- from age 18, Casey moves to an increased level of support, including accommodation, of \$250,000 pa
- these supports prevent Casey from contact with the criminal justice system and such high contact with the health system, and mean that she does not require crisis supports from ADHC.

The figure below compares the trajectory of Casey's lifetime cost without investment to the lifetime cost with early intervention. The extra investment early in Casey's life is not much more than was invested between 7 and 15 years of age.

Figure 6: Case study from lifetime cost of homelessness – Casey**



**Please note that the No Intervention Total Cost for Casey is the actual institutional cost up to age 20, plus a projected institutional cost from age 21 to age 27.

The cumulative savings from early intervention become apparent at age 16.

By age 20 the benefit cost ratio is estimated to be **2.1**

By age 27, the benefit cost ratio is estimated to be **2.4**

Case study 3: Roy

Roy's lifecourse institutional cost by age 30 is

\$ 1,958,292

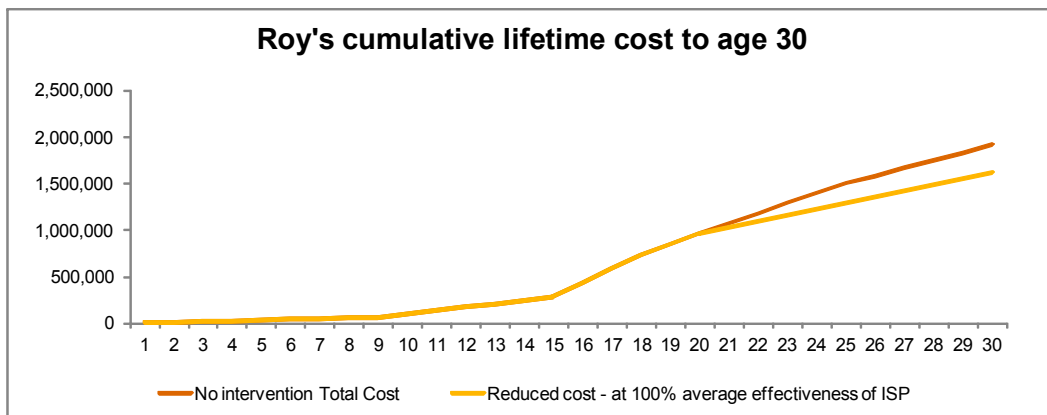
This includes 1876 days in custody over 209 incidents, and 5110 contacts under the PHDAS

Substantial savings and great improvements to Roy's wellbeing could be achieved if:

- at age 19, Roy is instead provided with intensive case management support services, such as the ISP
- this support helps him to access the following supports from age 21 (after 2 years on the intensive intervention program):
 - Housing support (at \$27,905 pa)
 - Disability Support Pension (\$19,706 pa)
 - In-home support ranging from between 4 hours per week and 2 hours per day (\$10,587 pa)
- the support results in reducing Roy's court costs, prison days and hospital admissions in line with the ISP.

The figure below compares the trajectory of Roy's lifetime cost without investment to the average effectiveness of the ISP.

Figure 7: Case study from lifetime cost of homelessness – Roy



If the expected effect of the ISP is realised then the net saving at age 30 will be **\$352,826**. Even if the program is only half as effective as expected, the costs to government by age 30 are roughly the same, but likely to result in higher wellbeing for Roy.

There is no extra investment needed in Roy's case to achieve a much better and cost effective outcome.

By age 30 the benefit cost ratio is estimated to be

1.4

5 Conclusion

Research in the field and the case studies presented in this paper demonstrate that **early holistic support is crucial** for the development and well-being of children and young people with mental health disorders and cognitive impairment, particularly Aboriginal children and young people and those from disadvantaged backgrounds.

Without such early intervention and diversion, the costs to individuals with mental health disorders and cognitive impairment, to their families and communities, as well as **the costs to government can be extremely high**. Such costs increase over time, as people with mental health disorders and cognitive impairment become entrenched in the criminal justice system and are further disadvantaged. Case studies presented in this paper illustrate that the lifetime of prison and crisis supports can be as high as \$1 million per annum per person.

However, a number of small but **successful initiatives appear to improve well being and other outcomes** for people with mental health disorders and cognitive impairment and result in diversion from the criminal justice system. Estimated benefit cost ratios in the above case studies range from 1.4 to 2.4. That is, for every dollar spent on the early investment, between \$1.40 and \$2.40 in government cost is saved in the longer term.

The estimated extra early and diversionary investment presented in the case studies is little more or no more than was being expended already, but resulting in significant savings in the long term.

Robust, holistic, targeted cross portfolio **support and intervention for people with mental health disorders and cognitive impairment would reduce the significant economic and human costs** of this group of people cycling in and out of the criminal justice system.