

The cost of unresolved childhood trauma and abuse in adults in Australia

A Report for Blue Knot Foundation (formerly
Adults Surviving Child Abuse (ASCA))

DR. CATHY KEZELMAN AM; NICK HOSSACK;
DR. PAM STAVROPOULOS, PHD; PIP BURLEY

At time of publication, Blue Knot Foundation was called Adults Surviving Child Abuse (ASCA). Hence all references to the organisation are to 'ASCA' in this report.

Table of Contents

About the authors.....	4
About ASCA	5
Contact ASCA	5
About the Royal Commission into Institutional Responses to Child Sexual Abuse.....	6
ASCA and the Royal Commission	6
Clinical Treatment of Complex Trauma and Trauma informed Practice in Australia - ASCA’s internationally recognised Practice Guidelines.....	8
Executive Summary.....	10
Introduction	12
A. Childhood trauma, abuse and implications for adulthood	14
Social and psychological impairment.....	15
Education impairment	15
Work impairment.....	16
Relationship impairment	17
Criminal justice.....	18
Suicide / attempted suicide	18
Anxiety / depression	19
Risk behaviours	21
Overeating - overweight and obesity.....	22
Tobacco smoking.....	24
Alcohol consumption	25
B. Costing childhood trauma and abuse in adults.....	29
Conceptual approach.....	29
Defining a population of adults facing negative outcomes because of childhood trauma and child abuse - Variable (a)	29
Defining the costs associated with child abuse	32
What negative life outcomes are associated with childhood abuse?	33
Selecting the representative basket of cost categories to average.....	35
Costing negative outcomes associated with childhood trauma and abuse in adults.....	36
Cost of suicide and attempted suicide.....	36
Cost of alcohol abuse.....	37

Cost of depression/ anxiety	38
Obesity	39
Final calculation	39
Costs per adult survivor	39
Weighted average.....	40
Sensitivity analysis	41
Long-term impacts of childhood trauma and abuse.....	41
Child protection costs	42
C. Reducing costs of childhood trauma and abuse in adults	43
Policy context.....	43
Australia’s structural budget deficit problem.....	43
Intergenerational aspects	44
Government’s preventative health strategy.....	45
What is needed to help address childhood trauma and abuse in adults? – Active, timely and comprehensive intervention.....	46
Active investment in specialist services.....	46
More and better trained treating practitioners - counsellors/therapists.....	46
A convenient and failsafe pathway to treatment – ‘no wrong door’	47
System, services and institutional improvements	48
D. Conclusion.....	50
References.....	51
Appendix 1: Practice Guidelines for Treatment of Complex Trauma (Clinical) - Excerpt	55
Appendix 2: Practice Guidelines for Trauma-Informed Care and Service-Delivery (Organisational) - Excerpt	62

The Cost of Unresolved Childhood Trauma and Abuse in Australia
© 2015 Adults surviving Child Abuse; Pegasus Economics

Suggested citation:

Kezelman, C., Hossack, N., Stavropoulos, P., Burley, P., (2015) The Cost of Unresolved Childhood Trauma and Abuse in Adults in Australia, Adults Surviving Child Abuse and Pegasus Economics, Sydney

About the authors

Dr. Cathy Kezelman AM

Cathy is a medical practitioner and President of Adults Surviving Child Abuse (ASCA).

Cathy has her own story of recovery from child abuse, narrated in her first book, a memoir *Innocence Revisited – a tale in parts* which was published early in 2010.

In addition to her leading role with ASCA, Cathy is mental health consumer advocate, past director of the Mental Health Coordinating Council (MHCC), foundation member of the national Trauma Informed Care and Practice Advisory working Group, member of the Mental Health Community Advisory Council (NSW), and on the Advisory Panel of Tzedek. She is also co-author of ASCA's *Practice Guidelines for Treatment of Complex trauma and Trauma Informed Care and Service Delivery* – a global first in setting the standards for clinical and organisational practice.

In 2015, Cathy was awarded the Member of the Order (AM) of Australia "for significant service to community health as a supporter and advocate for survivors of child abuse".

Dr. Pam Stavropoulos

Pam Stavropoulos, PhD is Head of Research and Clinical Practice with Adults Surviving Child Abuse (ASCA). A former Fulbright Scholar, she is a member of the Scientific Committee of the International Society for the Study of Trauma and Dissociation (ISSTD), and co-author of the nationally and internationally endorsed *ASCA Practice Guidelines for Treatment of Complex Trauma and Trauma Informed Care and Service Delivery*. She has held lectureships at Macquarie University and the University of New England, and writes and supervises in trauma-related issues.

Mr. Nick Hossack

Nick Hossack is a Principal in the Sydney office of Pegasus Economics. He is a public policy consultant to a range of leading Australian businesses and non-profit organisations. His speciality is in the area of financial services regulation, monetary policy, and general financial analysis.

Prior to Pegasus, Nick was Policy Director at the Australian Bankers' Association (ABA) where he had responsibility for prudential regulation, payments system, and competition policy.

Nick speaks regularly to the media and conferences on financial sector and public policy issues. For three years, he was an Adviser to Prime Minister of Australia, John Howard, and prior to that a research economist. Nick is a Senior Executive Fellow of the Kennedy School of Government (Harvard University) and has a B.Ec. and BA from the Australian National University.

Ms. Pip Burley

Pip Burley is a third year student at the University of Technology, Sydney (UTS) where she studies communications (majoring in Social Inquiry) and International Studies. She specialises in academic research and has contributed research to a range of prominent reports for Pegasus Economics.

About ASCA

ASCA¹ is the leading national organisation working to improve the lives of Australian adults who have experienced childhood trauma and abuse. It helps adults who have experienced trauma in childhood recover. This includes people who have experienced child abuse in all its forms, neglect, domestic violence in childhood and other adverse childhood events.

Childhood trauma affects a very significant number of Australian adults. When considering child abuse alone i.e. sexual, physical and emotional there are an estimated 3.7 million adult survivors in Australia. For childhood trauma² more broadly the number is an estimated 5 million Australian adults. Many struggle day to day with their self-esteem, relationships as well as their mental and physical health.

Research has established that people who have experienced even severe early trauma can recover. It also confirms that when parents have worked through their trauma their children do better too.

ASCA provides professional phone support, information, resources, tools, workshops and a range of other services to help survivors and their friends, families, partners and loved ones live healthier meaningful participating lives. It also educates trains and provides additional services to enable health professionals and others who work with trauma survivors to better support them in their healing journey.

ASCA's national awareness day, 'Blue Knot Day' falls in October each year. On this annual day, ASCA asks all Australians to unite in support of adult survivors of childhood trauma and abuse. It is important for childhood trauma in all its forms, a long-time 'hidden' and 'invisible' burden, to be publically acknowledged and for survivors to experience the social validation and support which is both warranted and needed.

Contact ASCA

Phone: 02 8920 3611
Email: admin@asca.org.au
PO Box 597 Milsons Point NSW 1565
Office Hours: Mon-Fri, 9am-5pm

Professional Support Line
1300 657 380
Mon-Sun, 9am-5pm

For media enquiries contact
Dr Cathy Kezelman, ASCA President
0425 812 197 or ckezelman@asca.org.au

¹ <http://www.asca.org.au/About.aspx>

² Wider definitions of childhood trauma include, in addition to abuse in all its forms, neglect, growing up with domestic and community violence and the traumatic impact on children in experiencing a parental divorce or other relationship breakdown, death of a parent, an alcoholic or drug addicted parent, or a parent affected by mental illness or other significant mental health problem.



About the Royal Commission into Institutional Responses to Child Sexual Abuse

In 2012, the Commonwealth Government established the Royal Commission into Institutional Responses to Child Sexual Abuse.³ The Commission is investigating how institutions like schools, churches, sports clubs and government organisations have responded to allegations and instances of child sexual abuse.

It is the job of the Royal Commission to uncover where systems have failed to protect children so it can make recommendations on how to improve laws, policies and practices.

The Royal Commission is about creating a safer future for children as well as justice and healing for victims of all ages. It can examine any private, public or non-government organisation that is or has been, involved with children. This includes where an organisation caring for a child is responsible for the abuse and also where it fails or has failed to respond appropriately to it, regardless of where or when the abuse took place.

ASCA and the Royal Commission

ASCA has played a key role in supporting both the formation of the Royal Commission and its ongoing work. This is by way of consultation, training of staff, and provision of services to adult survivors and others coming forward to provide testimony to the Commission.

ASCA's role in the Royal Commission is recognised by the Royal Commission Chair, The Hon. Justice Peter McClellan AM. At a parliamentary briefing session on Blue Knot Day 2014, Justice McClellan said:

I would like to acknowledge and thank Dr Kezelman and ASCA for the work they do every day to help survivors of sexual and other abuse. In particular can I thank Dr Kezelman for her support of the Royal Commission? Dr Kezelman has been working with us, together with many other people, to develop our recommendations for redress – more of that in a moment.

Blue Knot Day is a reminder that there are many Australians who are survivors of childhood trauma and abuse. The strength, courage and resilience of those who have come forward to the Royal Commission to tell us their story shows us that

³ <http://www.childabuseroyalcommission.gov.au/about-us>

recovery is possible. That possibility is enhanced by the work of Dr Kezelman and ASCA and the other people and organisations who assist survivors.⁴

In 2014, after publication of an Interim Report and request by the Royal Commission Chair, the Commonwealth Government extended the examination period by two years. The Commission will present its final report in December 2017.

On 30th January 2015 the Chair of the Royal Commission, Justice Peter McClellan AM released a consultation paper⁵ around redress and civil litigation. The paper proposes 3 areas of focus for redress: Direct personal response; Counselling and psychological care; Monetary payments. In discussing the area of Counselling and psychological care, the report raises the issue of service gaps.

It is clear from the description of current services about that there are many government and non-government services that currently assist survivors with counselling and psychological care.

However, we have heard from survivors, survivor advocacy and support groups, practitioners and experts that survivors' needs are not being fully met by existing services.

Our consultations through private roundtables and our expert consultations suggested that access to and delivery of counselling and psychological care to survivors should be improved.⁶

⁴ <http://www.childabuseroyalcommission.gov.au/media-centre/speeches/blue-knot-day,-adults-surviving-child-abuse>

⁵ Consultation paper Redress and civil litigation 2015 Royal Commission into Institutional Responses to Child Sexual Abuse childabuseroyalcommission.gov.au

⁶ Ibid, pg.119-120

Clinical Treatment of Complex Trauma and Trauma informed Practice in Australia - ASCA's internationally recognised Practice Guidelines

ASCA President, Dr. Cathy Kezelman and ASCA Head of Research and Clinical Practice, Dr. Pam Stavropoulos are co-authors of internationally recognised guidelines for clinical treatment of complex trauma. Prior to release of the ASCA Guidelines, trauma guidelines related to 'single incident' trauma (post-traumatic stress disorder; PTSD). This is in contrast to *cumulative, underlying, and largely interpersonally generated* ('complex') trauma.⁷ As childhood trauma in all its forms is 'complex' trauma, the ASCA Guidelines are pioneering and are widely recognised as such. The ASCA Guidelines also include guidelines for trauma-informed practice (i.e. in addition to those for clinicians) to assist services and organisations to implement policies, procedures and workplace changes conducive to the needs of adult survivors.

ASCA's *Practice Guidelines for Treatment of Complex Trauma and Trauma Informed Care and Service Delivery*⁸ present the collective wisdom of the previous two decades of national and international research in the trauma field. Their widespread implementation can significantly enhance possibilities for recovery for the large numbers of people who experience 'complex' unresolved trauma" (i.e. which includes child abuse in all its forms, neglect, family and community violence and other adverse childhood events).

The ASCA Guidelines were launched in October 2012 at Parliament House, Canberra, by the Hon. Mark Butler MP, the then Australian Federal Minister for Mental Health and Ageing.

The Guidelines have already made a substantial difference to public health outcomes. Early understanding and identification of the impacts of prior trauma, and appropriate responses to it, can reduce the huge budgetary, economic, health and social costs associated with childhood trauma and abuse. It can also substantially improve the health and happiness of the individuals, families and communities directly and indirectly affected i.e. increases national well-being.

The ASCA Guidelines have been officially recognised as an "Accepted Clinical Resource" by The Royal Australian College of General Practitioners (RACGP). Putting into practice the evidence presented in the Guidelines has the capacity to revolutionise the way in which primary care practitioners identify

⁷ For discussion of 'complex' trauma and the extensive impairments with which it is associated, see Courtois, C.A. & Ford, J.D. ed. (2009) *Treating Complex Traumatic Stress Disorders: An Evidence-Based Guide*, New York: The Guilford Press.

⁸ Available on ASCA's website: www.asca.org.au/guidelines

and respond to patients who present with complex trauma-related issues. This includes those who have experienced childhood mental, physical and sexual abuse; neglect and domestic violence.

A major international study shows that when health practitioners identify and acknowledge the prior trauma of adult patients who have experienced adverse events in childhood, there is 35% reduction in visits to doctors' surgeries, an 11% reduction in visits to emergency departments and a 3% reduction in crisis intervention.⁹

Australian General Practitioner Dr Johanna Lynch¹⁰ has commented:

"The prevalence of adults who have survived childhood trauma and neglect – or complex trauma – in our community, and its effects on physical, psychological and relational wellbeing is currently not acknowledged in general practice training. As research into this area becomes more robust, and real treatment options become validated, GPs need to become skilled in identifying, managing and providing trauma informed care.

"ASCA has led the way in defining best practice through developing the internationally acclaimed ASCA's Practice Guidelines for Treatment of Complex Trauma and Trauma Informed Care and Service Delivery. Caring for this group of people in our society needs greater awareness of the particular issues – issues that make them less likely to self-present, and to seek medical care, and the delicate task of engaging them in treatment that has the potential to be life giving to both them and their families. I fully endorse the work that ASCA is doing to provide my profession with new information and skills to better serve our community."

Excerpts of the Practice Guidelines are included in Appendices 1 & 2.

⁹ *The Impact of Early Life Trauma on Health and Disease: The Hidden Epidemic*, ed. Ruth. E. Lanius, Eric Vermetten and Claire Pain. Published by Cambridge University Press. Copyright ©Cambridge University Press 2010

¹⁰ Dr Lynch is from the Fellow of Royal Australian College of General Practitioners, Fellow of Australian Psychological Medicine Society, member of the Cannan Institute and ASCA Advisory board member. Quote available at: <http://launchgroup.com.au/wp/the-multi-billion-dollar-cost-of-unresolved-childhood-trauma-in-australia-46/>

Executive Summary

Childhood trauma including abuse affects an estimated five million Australian adults. It is a substantial public health issue with significant individual and community health, welfare and economic repercussions. Unresolved childhood trauma has short-term and life-long impacts which substantially erode both national productivity and national well-being. It needs to be seen as a mainstream public health policy issue and responded to accordingly.

Pegasus Economics estimates that if the impacts of child abuse (sexual, emotional and physical) on an estimated 3.7 million adults are adequately addressed through active timely and comprehensive intervention, the combined budget position of Federal, State and Territory Governments could be improved by a minimum of \$6.8 billion annually. In the population of adult survivors of childhood trauma more broadly i.e. a figure of 5 million adults, this estimate rises to \$9.1 billion. These figures represent a combined effect of higher Government expenditure and foregone tax revenue.

If adult survivors of childhood trauma and abuse experienced the same life outcomes as non-traumatised adults, the collective budget deficits of Australian governments would be improved, at a minimum, by an amount roughly equivalent to the entire Government outlay on tertiary education. These estimates, based on a conservative set of assumptions, indicate extraordinary cost savings. On different, but still plausible assumptions, the annual budgetary cost of unresolved childhood trauma could be as high as \$24 billion.

While child abuse includes sexual, physical and emotional abuse, childhood trauma is a broader more comprehensive category. For each, the common element is the powerlessness of the child, due to age and dependency, to prevent or minimise it. Early life trauma and abuse affect the developing brain and have many possible impacts on daily adult life. These include the coping strategies children adopt to minimise overwhelm. Such strategies, highly creative and potentially effective in the short-term, may still be used in adult life. Perpetuated when the underlying trauma is not resolved, these coping strategies are associated with health risks in adulthood.

Reducing costs of childhood trauma

Addressing child sexual, emotional and physical abuse alone could lead to a potential minimum gain of \$6.8 billion for the combined Federal, State and Territory Government budgets. The minimum gain from addressing the problem of childhood trauma more generally is \$9.1 billion. Active timely and comprehensive intervention, with appropriate support, resources, services and treatment enables adult survivors to participate more fully and productively in the Australian community.

Governments are currently exploring a range of revenue measures and expenditure cuts to restore the budget position. As Australia's population ages the long-term prognosis for the budget is for continuing strain; the main driver of deteriorating finances is forecast health expenditures. The Commonwealth Government's most recent inter-generational report (Swan, 2012) showed the major future stress on government expenditures to be in health outlays. As a percentage of GDP, health expenditure is forecast to rise from 3.9% in this current year to 7.1% in 2049-50 (an almost doubling in proportional expenditure).

Progress in reducing the impact of childhood trauma and abuse in adults can make a positive contribution not only to the health budget challenges that lie ahead but also to those related to the welfare and criminal justice systems and the lower taxation revenue associated with the impact.

Active timely comprehensive intervention will help address childhood trauma and abuse in adults

Active investment in specialist services

Specialist services are needed to spearhead policy and practice responses to adult childhood trauma and abuse survivors. Active investment to support a coordinated comprehensive model of care, including continued and increased access to effective help lines and online services, is needed. Timely active comprehensive intervention including appropriate support, counselling, resources and services promotes recovery. When survivors comprehensively overcome their trauma they and their children are freed to live productive, healthy and constructive lives.

A key by-product of addressing the impacts of childhood trauma in adults is a financial benefit to Federal, State and Territory Government budgets. People affected by unresolved childhood trauma incur significant costs on taxpayers. This occurs through higher Government expenditure on health spending, welfare support and criminal justice costs, as well as via lower taxation revenue.

More and better trained treating practitioners - counsellors/therapists

Unfortunately our public health system has evolved in a way which means that adult mental health services focus on addressing immediate health issues (such as depression and alcoholism) rather than identifying and addressing underlying causes (such as prior childhood trauma and abuse).

A convenient and failsafe pathway to treatment – No wrong door

Frontline practitioners: General Practitioners and nurse practitioners will inevitably see people who have been impacted by childhood trauma including abuse, on a daily basis. These contacts provide an opportunity to facilitate a process whereby the person who presents can start receiving the right support, either directly or through targeted referral including specialist counselling, ideally from an accredited practitioner. Training is needed to enable primary care practitioners to identify trauma survivors and to respond appropriately.

System, service and institutional improvements - Trauma-informed practice

Benefits can also be achieved by raising awareness around the possibility of unresolved trauma in people who seek diverse services across health and human service systems, agencies, organisations and institutions. Adults who experience the ongoing impacts of unresolved childhood trauma will necessarily need to access various services. Broad-based implementation of trauma-informed practice and responses will help minimise the impact of trauma and the risk of re-traumatisation of people who have experienced childhood trauma including abuse.

Introduction

Adults Surviving Child Abuse (ASCA) commissioned Pegasus Economics to provide an estimate of the cost of failure to address the needs of adult survivors of childhood trauma and abuse in Australia. As the premier national organisation which advocates for the needs of adult survivors of childhood trauma and abuse in Australia (in addition to providing associated resources, education, training and other services) ASCA is well placed to appropriately advise and address the spectrum of needs faced by adult survivors.

Childhood trauma including abuse affects an estimated five million Australian adults and needs to be seen as a *mainstream public health policy issue*. If not comprehensively addressed, trauma and abuse experienced in childhood have both short-term and life-long impacts which also affect the overall health of the nation.

A person abused as a child may appear to lead a relatively normal life in various respects. But they can also struggle in a range of ways which are often undetected and which are frequently debilitating. *The negative impacts of unresolved childhood trauma on both physical and emotional health in adulthood have been established unequivocally and need to be emphasised*¹¹ (Lanius & Shonkoff, 2012). While some survivors are more able to hide their suffering than others, they, too, can experience complex mental and physical health impairments as well as psychosocial challenges.

Childhood trauma and abuse survivors frequently adopt behaviours and coping mechanisms which while initially protective may be harmful in the medium to long term if the underlying trauma is not resolved. Coping strategies can include alcohol abuse, drug abuse, eating disorders and overeating, and smoking. Risk taking behaviour – engaged in to alleviate intolerable inner experience – can also lead adult survivors to encounters with the criminal justice system. The resultant effects of such behaviours include mental health issues, medical problems (lung and heart disease -smoking, obesity- diet, liver disease- substance abuse related, suicide); social problems (criminal convictions and jail sentences); and economic problems (loss of income, gambling debt) to name a few.

The outcome is not only costly in a personal sense to the trauma or abuse survivor but also to their families, friends and the range of people with whom they relate. It also impacts negatively on public finances. Pegasus Economics estimates that if the impacts of child abuse alone are adequately addressed, the combined budget position of Federal, State and Territory Governments could be improved by a minimum of \$6.8 billion annually.

¹¹ Lanius et al, *ibid*; Shonkoff, J.P. et al (2012) The Lifelong Effects of Early Childhood Adversity and Toxic Stress. *American Academy of Pediatrics* 129 (1):e232-246. In relation to sexual abuse specifically, see Mullen, P. E. & Fleming, J. (1998) 'Long-term Effects of Child Sexual Abuse', *Issues in Child Abuse Prevention*, No.9, National Child Protection Clearinghouse, Australian Institute of Family Studies.

This figure is based on conservative assumptions and only takes account of child sexual, physical and emotional abuse. Were all forms of childhood trauma to be included, the potential minimum annual budget savings from successfully addressing childhood trauma in adults would be in the order \$9.1 billion (this figure, too, is based on conservative estimates). On different, but still plausible assumptions, the annual budgetary cost of unresolved childhood trauma could be considerably higher (see Figure 11).

This paper has four main components:

- Part A shows the linkages between childhood trauma and abuse and negative health outcomes.
- Part B outlines a methodology for costing childhood trauma and abuse and undertakes a costing.
- Part C discusses methods and strategies to reduce these costs.
- Part D concludes.

A. Childhood trauma, abuse and implications for adulthood

Childhood trauma can result from various forms of abuse, including but not limited to sexual, physical, emotional and/or neglect.¹² Different forms of childhood trauma often co-occur. For example, an estimated 55% of Australian children have experienced physical abuse and are also exposed to domestic violence, while an estimated 40% experienced sexual abuse and are also exposed to domestic violence (Bedi & Goddard 2007).

Early life trauma affects the developing brain; changing it from a 'learning' brain to a 'survival' brain.¹³ This shift has many negative impacts both on daily functioning and the developmental trajectory as a whole. And, as noted in the previous section, childhood coping strategies to deal with overwhelming stress – which are often highly creative – can become risk factors for compromised psychological and physical health in adulthood if the underlying trauma is not resolved.¹⁴

These coping mechanisms and behaviours can be particularly harmful to survivors' long-term health and their productive capabilities. Figure 1 presents the classic pyramid which was derived by researchers from the findings of the seminal US Adverse Childhood Experiences Study (ACE).¹⁵ The pyramid traces how maltreatment in childhood can also lead to premature death or morbidity.

A child who has been abused or otherwise traumatised is at significantly higher risk of impaired social, emotional and cognitive well-being as an adult. Common conditions which are more frequently experienced by adult survivors of childhood trauma and abuse include depression and anxiety. A further compounding factor often occurs with an associated higher risk of adoption of harmful coping behaviours, such as alcohol and substance abuse. These and other behaviours are

¹² Wider definitions of childhood trauma include, in addition to abuse in all its forms, neglect, growing up with domestic and community violence and the traumatic impact on children in experiencing a parental divorce or other relationship breakdown, death of a parent, an alcoholic or drug addicted parent, or a parent affected by mental illness or other significant mental health problem.

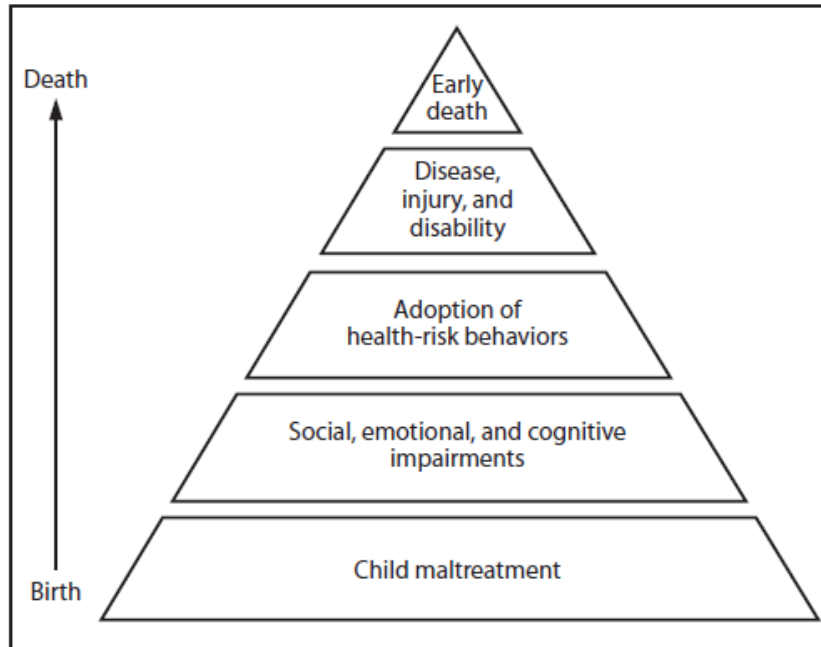
¹³ Ford in Courtois & Ford, ed. *Treating Complex Traumatic Stress Disorders*, *ibid*.

¹⁴ Felitti & Anda in Lanius, *ibid*; also see footnote 12 below.

¹⁵ The Adverse Childhood Experiences (ACE) Study is one of the largest investigations ever conducted to assess associations between childhood maltreatment and later-life health and well-being challenges. The study is a collaboration between the Centers for Disease Control and Prevention and Kaiser Permanente's Health Appraisal Clinic in San Diego. More than 17,000 Health Maintenance Organization (HMO) members undergoing a comprehensive physical examination chose to provide detailed information about their childhood experience of abuse, neglect, and family dysfunction. To date, more than 50 scientific articles have been published and more than 100 conference and workshop presentations have been made. The ACE Study findings suggest that certain experiences are major risk factors for the leading causes of illness and death as well as poor quality of life in the United States. It is critical to understand how some of the worst health and social problems in our nation can arise as a consequence of adverse childhood experiences. Realizing these connections is likely to improve efforts towards prevention and recovery. Further information see: <http://www.cdc.gov/violenceprevention/acestudy/>

well recognised risk factors for subsequent disease, injury and disability. As such, adults who have experienced childhood trauma or abuse are at greater risk of premature death and morbidity.

Figure 1 Linkages between childhood trauma and impaired life



Source: ACE study

The following sections explore some of the research which has established strong links between childhood maltreatment and social, emotional and cognitive impairment, as well as research which demonstrates links between childhood trauma and high risk behaviours. While much of the research has focussed on child sexual abuse, substantial numbers of studies show the impacts of other forms of child abuse and trauma.

Social and psychological impairment

Education impairment

Education impairment is one potential outcome of child abuse and trauma. A child who has been abused, who is living in fear of being abused again or who has experienced a traumatising event or repeated events will be less able to concentrate on studies and other positive activities ('from 'learning' brain to 'survival' brain'). As a result, these children will achieve less than their full potential as adults. There is considerable cost to adult survivors and their families from a failure of survivors to achieve their full educational potential.

There are a number ways in which a cost estimate can be derived. Ideally, the cost of an impaired education should capture the loss of income associated with it, the loss of job satisfaction due to work that is below the individual's capacity and any losses to government in terms of reduced tax revenues or higher welfare outlays. Undertaking a study that accurately captures this multi-dimensional range of costs is particularly complex.

However, by choosing some proxies, an idea of the costs involved can be illustrated.

Using ABS 2011/12 Census data, Pegasus estimates that the income difference between a student who passes year 12 and one who only stays to year 11 is around \$16,000 in income per year. Over a working life of 40 years, this differential is equivalent to around \$600,000 in today's dollars. This calculation is only a proxy for the potential cost to an individual's life income from an impaired education. But it illustrates that even relatively small impairments in education can materialise into significant economic disadvantages.

Linkage with childhood trauma

Disruption of education is a common consequence of sexual abuse during childhood (Hall & Lloyd, 1993). Many sexually abused children experience difficulties in the school environment with respect to both academic performance and behaviour. 'Educational underachievement is widespread among survivors' (Hall & Lloyd, 1993). This often results in them failing to obtain the 'necessary skills and discipline to maintain a role in the workplace'.

In addition, adult survivors of child sexual abuse often feel isolated and alienated from their peers. Many are 'prevented from having normal childhood friendships' (Hall & Lloyd, 1993, p. 66), which often leads to further isolation later in life. Similar impacts are reported by adult survivors of other forms of childhood abuse and trauma.

Work impairment

As described above, education impairment can result in work impairment. Underachievement in the workforce is experienced by many survivors of child sexual abuse, child abuse and trauma. This is a combination of previously mentioned difficulties during school, as well as other problems commonly experienced by adult survivors, such as depression and anxiety. Mental health problems often limit the capacity to achieve full 'human and economic potential'.

The impact of domestic violence on children has been associated with reduced productivity, welfare receipt, and unemployment as an adult (Flood & Fergus, 2008).

In a study performed by Russell in 1986 it was found that unemployment was much more likely in a sample of survivors of child sexual abuse, regardless of education level (Hall & Lloyd, 1993, p. 72).

A more recent Irish study¹⁶ (2009 – 2011) found that male victims of child sexual abuse are twice as likely to be out of work due to illness. A newspaper report on the research noted:

Men who have been sexually abused in childhood are twice as likely to be out of work due to sickness and disability, a major ESRI study reveals.

It is the first research into the economic impact of abuse on the lives of adult survivors and confirms the knock-on effects for household income are "real and substantial".

¹⁶ <http://www.independent.ie/irish-news/male-victims-of-child-sexual-abuse-are-twice-as-likely-to-be-out-of-work-due-to-illness-30510056.html>

The impact of child sexual abuse on women's employment was found to be much smaller and not statistically significant - but this may be due to fact that it was older age groups, who would have had lower workforce participation, who were the focus of research.

The findings are revealed in a new joint study by the ESRI and Trinity College which drew on data from the Irish Longitudinal Study on Ageing (TILDA), involving 8,500 people over 50 who are living in Ireland.

Work impairment can have a significantly detrimental impact of an individual's income, with subsequent impacts on the individual's family consumption possibilities. For example, an individual suffering severe depression is unlikely to be able to fulfil the requirements of a full-time job. Yet, the difference in potential income from full-time versus part-time work is considerable.

The differences in consumption possibilities between people who work at full capacity and people who do not are considerable i.e. as a result of lower income. For example, the difference in lifetime consumption possibilities between workers engaged in full-time versus part-time employment is in the order of \$1.5 million dollars.

In calculating this, Pegasus used 2011/12 Census data to find life-time earnings' differential between full-time and part-time workers. A full-time worker earns around \$77,000 on average, per year, compared to a part-time worker of \$38,000. In today's dollars, the expected difference over a life-time of earnings is around \$1.5 million. Even adjusting for an average 30% tax rate, the full-time worker will earn around \$1 million more than the part-time earner. Diminished earning capacity also has a significant budgetary implication i.e. a loss of \$500,000 in this example.

Relationship impairment

Difficulties in finding and maintaining healthy relationships are a very common outcome of childhood trauma. Early child maltreatment can have a negative effect on the ability of both men and women to establish and maintain healthy intimate relationships in adulthood (Colman & Widom, 2004). Child sexual abuse, in particular, can interfere with an individual's sense of self and self-esteem, can overly sexualise them, and can render them vulnerable to abusive and unhealthy relationships.

'A history of child sexual abuse is reported to be associated with insecure and disorganized attachments and increased rates of relationship breakdown' (Mullen & Fleming, 1998). Childhood is an essential time in the creation of identity and understanding of how relationships work. When child sexual abuse occurs many victims feel it as a 'blow to their construction of the world as a safe environment, and their developing sense of others as trustworthy (Mullen & Fleming, 1998).¹⁷

This early event can lead to an inability to sense trustworthiness within others and to foster intimate relationships. A study performed by the British Journal of Psychiatry in 1994 found that subjects who had experienced child sexual abuse were more likely to 'evinced a general instability in their close relationships' (Mullen & Fleming, 1998). This instability and difficulty trusting others prevents the

¹⁷ Mullen, P. E., & Fleming, J. (1998, April). Long-term effects of child sexual abuse. NCPC Issues No.9, p. Web published. Retrieved from <https://www3.aifs.gov.au/cfca/publications/long-term-effects-child-sexual-abuse-0>

fostering and development of healthy adult relationships; research shows this increases the likelihood of divorce and separation.

The costs associated with relationship breakdown are significant for both family members and governments. For example, recent research estimates the total annual cost of divorce to society at \$14 billion per year.¹⁸ Costs include the incremental welfare payments of single parent families, along with legal and child administration services. Pegasus estimates that each divorce each year costs the federal government around \$14,000.

Criminal justice

In 1992 the New South Wales Child Protection Council recognised that the probability of incarceration and arrest increased by at least 40% for people who had experienced sexual abuse and/or neglect during childhood (Updated December 2012, p. 31).

A study of Australian women in prison estimated that between 57-90% of female prisoners had experienced child sexual assault or other forms of victimization.¹⁹ These statistics indicate a clear connection between incarceration and prior child sexual assault. Adult survivors often report increased aggression, substance abuse and poor mental health - all factors that can contribute to illegal activities. Abuse and neglect have been shown to increase the likelihood of adult criminal behaviour by 28 % and violent crime by 30 % (Widom & Maxfield, 2001).

The costs of criminal activity are high, not only for individuals and their families but also for the taxpayer. In order to derive an average estimate of the costs of crime, Pegasus examined Australian Institute of Criminology (AIC) data for the year, 2005 (the latest available for disaggregated data). Four categories of crime were reviewed – assault, sexual assault, burglary and homicide. Fraud activity was excluded from the sample given an absence of per-incident estimates.

In 2005, there were 500 homicides recorded in Australia with an estimated per-incident cost of \$1.9 million. The next highest estimate was for sexual assault where the per-incident cost is estimated at \$7,500. Burglary costs are estimated at \$2,900 per incident and assault \$1,700.

A standard averaging of these costs would ascribe too much weight to homicide, so Pegasus used an incident-weighted average. This resulted in an average weighted cost of criminal activity in the order of \$3,100 per incident. This cost includes reduced productivity due to work absence, provision of justice services and intangible costs to the victims.

Suicide / attempted suicide

Suicide is a major social and public health issue in Australia. While such deaths can occur for many reasons, and many complex factors might influence a person's decision to suicide, those who complete suicide are often although not exclusively those who are less connected to support networks. This means they may be less inclined to seek help and/or less connected to people who may be alert to the need to offer or facilitate assistance.

¹⁸ <http://www.news.com.au/lifestyle/relationships/divorce-is-costing-the-australian-economy-14-billion-a-year/story-fnet09y4-1226979027353>

¹⁹ <http://www.aifs.gov.au/acssa/pubs/issue/i13/i13b.html>

Both a reluctance and inability to seek professional help are endemic in adult survivors of child sexual abuse. The current Royal Commission into Institutional Responses to Child Sexual Abuse has revealed the extent to which survivors often bury and conceal these experiences, in many cases for decades.

Of all deaths classified as suicide in 2010, over three-quarters (77%) were males (1,814), making suicide the 10th leading cause of death for males, and materially higher than that of females. In 2010, the age standardised male suicide rate was 16.4 deaths per 100,000 males compared to the female rate of 4.8 deaths per 100,000 females (Australian Bureau of Statistics, 2010).

An increased rate of both suicide and attempted suicide are associated with childhood trauma, particularly child sexual abuse. In 2010 the Medical Journal of Australia (MJA) published a paper

on a study of 2,759 Australians who have been medically ascertained as being victims of child sexual abuse (CSA) between 1964 and 1995. The study found significantly higher rates of suicide and accidental fatal drug overdose in the CSA group compared to age-limited national data for the general population. (M Cutajar, 2010)

‘Suicide is considered a symptom and a reoccurring factor’ in the experiences of adult survivors of child sexual abuse (McClellan AM, et al., 2014, p. 72). Many victims are unable to come to terms with their childhood abuse, which often manifests in a variety of mental health issues, as well as increased likelihood of suicide (Hall & Lloyd, 1993). An Australian study into child sexual abuse victims found that 32% had attempted suicide, and 43% had considered it (Plunkett, et al., 2001).

The ACE Study in the United States identified that adults who have experienced four or more adverse childhood experiences are 12 times more likely to have attempted suicide than those who have not experienced any forms of childhood trauma or abuse (Felitti, et al., 1998).

A meta-analysis of people’s recollections of past traumas showed a strong association between child abuse and neglect and attempted suicide in adults (Gilbert, et al., 2009).

Details on costing suicide and attempted suicide are provided in Section C.

Anxiety / depression²⁰

Anxiety and depression are major public health issues in Australia and have a strong association with childhood trauma. Mental health is a state of wellbeing in which individuals can cope with the normal stresses of life. Impaired mental health limits their capacity to do so and classifications of mental illness describe a number of diagnosable disorders that can significantly interfere with a person's cognitive, emotional or social abilities.

An individual's ability to relate to their family, friends, workmates and the broader community is affected by their mental health. Compromised mental functioning can cause significant distress and disability, as well as isolation of, and discrimination against, those affected.

²⁰ Following commentary in this section is generally taken from ABS Gender Indicators, Australia January 2012.

Impairments in mental health, and particularly experience of a mental health disorder, can also limit capacity to participate in the labour force. This has impacts both for the individual concerned (income, social participation and self-esteem) and wider economic implications.

The Australian Bureau of Statistics (ABS) has collected detailed data on mental health problems through various population surveys. Some key statistics are detailed here: In 2007, females aged 16-85 years had a higher rate of mental health disorders (22%) in the 12 months prior to survey interview than did males (18%) (Australian Bureau of Statistics, July 2012). A higher rate of Anxiety Disorders among females (with women almost twice as likely as men to report Post-traumatic Stress Disorder) was the main contributor to the higher overall rate of mental health disorders.

Males were more likely to have had a mental disorder at some stage in their lifetime than were females (48% compared to 43%). This was largely due to the higher proportion of men who had a Substance Use Disorder at some stage in their life.

In 2007, the data shows that almost half (45% or 7.3 million) of Australians aged 16-85 years would have met the criteria for a diagnosis of a mental disorder at some point in their life i.e. had experienced at least one of the selected mental disorders (Anxiety, Mood (affective) or Substance Use disorders) (Australian Bureau of Statistics, July 2012).

Linkage with childhood trauma

'There is now little doubt about the relationship between childhood abuse and emotional and psychological problems in later life' (Forde, 1999). A study by Columbia University has revealed that 40% of those experiencing chronic depression for at least five years had experienced sexual abuse during childhood.²¹

Enhanced understanding of the impacts of childhood trauma and abuse has extended understanding of trauma per se. The impairments associated with 'complex' (ie cumulative, underlying and largely interpersonally generated) trauma are now known to be more extensive than those associated with 'single incident' trauma alone. The complex trauma of adverse childhood experiences (which come in many forms) is now recognised to be particularly damaging because the brain is undergoing critical early development. Researchers, medical and counselling professionals have now identified diverse and often co-occurring mental health challenges associated with complex trauma from adverse childhood events.

According to NSW Health (1998), survivors of child sexual abuse accounted for 34% of all presentations across the mental health sector in 1998. Survivors of child sexual abuse constitute the greatest number of women requesting services both from the NGO and mental health sectors (Henderson, 2006). Research further suggests that, if asked, approximately 35% to 70% of female mental health patients self-report a childhood history of abuse (Briere & Jordan, 2004). A 2006 study found that growing up in a household with domestic violence could be a significant contributing factor to alcohol and drug abuse and depression (Pinheiro, 2006).

A study of health care utilisation in the US (Walker, et al., 1999) found that women who reported a history of child sexual abuse were more likely to visit hospital emergency facilities and had

²¹ <http://www.sciencedaily.com/releases/2013/11/131106084406.htm>

significantly higher annual total health care costs than those without abuse histories. These differences were observed even after excluding the costs of mental health care.

Depression is one of the most common impacts of prior child abuse or neglect (Kendall-Tackett, 2002). An American study identified that adults who had been abused as children were two and a half times more likely to have major depression and six times more likely to have Post Traumatic Stress Disorder compared to adults who had not been abused. These risks were compounded when adults had experienced parental divorce as well as child abuse (Afifi, Boman, Fleisher, & Sareen, 2009).

A prospective longitudinal US study identified that children who were physically abused or experienced multiple types of abuse were at increased risk of lifetime major depressive disorder in early adulthood (Widom, DuMont, & Czaja, 2007).

Dissociative disorders

Dissociative Disorders have been strongly associated with a history of childhood abuse and trauma. During times of high stress a child may 'slip into dissociative states to remove themselves from the situation'.²² It has been found that a high proportion of adults diagnosed with Borderline Personality Disorder (81%) or Dissociative Identity Disorder (90%) were sexually, and/or physically abused as children (Herman, Perry, & van der Kolk, 1989) (Ross, Miller, Reagor, Fraser G, & Anderson, 1990).

The recognition of Dissociative Disorders and training for clinicians to work with dissociation is an important element in appropriate responses to the impacts of childhood trauma and abuse. Current research is also revealing the relationship between dissociation as a defence against overwhelming experience and a wide range of impairments to mental health if the trauma is not resolved (Howell, 2005).

Details on costing depression/anxiety are included in Section C.

Risk behaviours

The previous section outlined some of the social and cognitive impairments associated with childhood trauma including abuse. This section lists some of the high risk behaviours often associated with such a history and consequently with those impairments. These behaviours are adopted by victims to help them cope with their trauma.

Only those behaviours that are clearly recognised to have both substantive personal and public health costs are discussed. The full spectrum of behaviours utilized by survivors to cope with early life is not addressed in this report.

Australian Bureau of Statistics as part of its Australian Health Survey²³ identifies five main health risk-factors in Australia:

- Being overweight or obese;

²² <https://www.rainn.org/get-information/effects-of-sexual-assault/Dissociative-identity-disorder>.

²³ Australian Health Survey: First Results, 2011-12.

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.001Chapter4002011-12>

- Smoking
- Excess alcohol consumption
- Poor diet and nutrition; and
- Lack of physical exercise

Clearly these factors are interrelated to some extent. For example, lack of physical exercise will contribute to obesity and excess alcohol consumption will be a factor in some people's lack of physical exercise. Thus these health risks can also be interrelated and compounding. As such, they comprise a useful starting point to recognition of the public health costs associated with childhood trauma and abuse.

Lifestyle behaviours such as tobacco smoking, risky alcohol consumption, and obesity are three of the more prominent health risks in modern Australian society.

These three risk factors alone will compromise a person's ability to work, as well as the ability to participate in other aspects of life such as family and community activities. On a broader scale each of these risks has wider implications for both society and the economy.

Both smoking and obesity are associated with social disadvantage, while excessive alcohol consumption affects society in a number of ways (e.g. through property damage, road accidents and demands on law enforcement). From an economic point of view, diseases and conditions resulting from these risk factors (e.g. diabetes, liver disease, some cancers, cardiovascular disease, mental illness, and injury) place significant demands upon Australia's health care system.

The societal cost of these negative behaviours is such that, in 2008, the Australian Government set up the Preventative Health Taskforce to focus on the burden of chronic disease to which these three risk factors contribute.²⁴ Further information on this health initiative is provided in Section D.

Overeating - overweight and obesity

While genetics plays a role in a person's propensity to gain weight, the primary cause is an imbalance between energy consumed and energy expended (World Health Organisation, 2009). Shifts towards energy-dense diets and decreasing physical activity are two factors that have contributed to increases in overweight and obesity.

Being overweight or obese increases a person's risk of developing cardiovascular disease, high blood pressure and/or Type 2 diabetes. Body Mass Index (BMI)²⁵ is a common measure for defining whether a person is underweight, of normal weight, overweight or obese. (Statistics, 2011-2012)

The ABS notes that in 2007-08, people who were overweight or obese were almost twice (1.9 times) as likely as people within the normal BMI range to have Type 2 diabetes, 1.7 times as likely to have

²⁴ ABS, Australian Social Trends, December 2009

²⁵ Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify underweight, normal weight, overweight and obesity. It is calculated from height and weight information, using the formula weight (kg) divided by the square of height (m). To produce a measure of the prevalence of underweight, normal weight, overweight or obesity in adults, BMI values are grouped according to the table below which allows categories to be reported against both the World Health Organization (WHO) and National Health and Medical Research Council (NHMRC) guidelines

high blood pressure, 1.7 times as likely to have high cholesterol and 1.4 times as likely to have heart disease (Australian Bureau of Statistics, Dec 2009). Risks of chronic conditions increased progressively with increasing BMI²⁶ and were accordingly higher at the obese end of the spectrum. People who were obese were more than two and a half times (2.7 times) as likely to have Type 2 diabetes as those within the normal BMI range.

Prevalence in Australia

In the ABS's Australian Health Survey, measured height and weight were collected to determine a person's Body Mass Index. BMI based on measured height and weight is considered to be more accurate than self-reported height and weight.

In 2011-12, 63.4% of Australians aged 18 years and over were overweight or obese, comprised of 35.0% overweight and 28.3% obese. A further 35.2% were of normal weight and 1.5% were underweight. The prevalence of excessive weight and obesity has increased considerably. In 1995, 56% of people fell into the overweight or obese category. An increase in this ratio by over 7 percentage points is a significant rise.

In terms of gender, more men are at considerably greater risk of being overweight or obese than females. Around 70.3% of men are too heavy, compared to 56.2% of women. As per the national total, both men and female populations have recorded material increases over the last twenty years.

Link to childhood trauma

Studies have established that people with a history of childhood trauma and/or abuse are more likely to experience health problems including obesity. A 2009 Californian study of more than 15,000 young adults discovered that, in later life, abuse in childhood, particularly sexual abuse, 'raised the risk of obesity by 66% in males'.²⁷

A 2007 study of more than 11,000 Californian women found that those who had been abused as children were 27% more likely to be obese as adults, compared with those who had not been abused.²⁸

Child abuse and neglect have been regularly linked with obesity in adulthood (Gilbert, et al., 2009). In one large population-based survey, both child sexual abuse and physical abuse doubled the odds of obesity in middle-aged women (Rhode, et al., 2008). Weight gain as attempted protection against further sexual abuse is commonly noted as a likely motivating factor.

Another study from UK established that severe forms of childhood trauma (including physical abuse, neglect and witnessing domestic violence) increased the risk of obesity in adulthood by between 20 and 40% (Thomas, Hypponen, & Power, 2008).

An explanation given for this link is the prevalence of those with binge eating disorder (BED). Binge eating disorder is common in obese people, and 'three to four times more common in obese people

²⁶ <http://www.who.int/mediacentre/factsheets/fs311/en/>

²⁷ <http://content.time.com/time/health/article/0,8599,1951240,00.html>

²⁸ <http://content.time.com/time/health/article/0,8599,1951240,00.html>

who report a history of childhood sexual abuse'.²⁹ Desire to 'desexualise' him/her-self so as to protect from further abuse is again proposed as a key motivating factor.

A history of abuse features in the lives of many people with eating disorders. For an individual who has experienced childhood trauma and/or abuse, rapid weight loss (or gain) can be perceived as a way of taking control in their lives.³⁰ One study shows that 'between one third and two thirds of women with an eating disorder have experienced childhood sexual abuse' (Hall & Lloyd, 1993, p. 61).

Figure 2: Schematic showing an example of how childhood abuse links with negative health



outcomes in adults

Tobacco smoking

Tobacco smoking is well recognised as a major health risk in Australia as well as globally. It is strongly associated with many negative effects, including chronic airway conditions, and a number of cancers (Gilmsn, Zhou, & (eds), 2004).

Tobacco contains the powerfully addictive stimulant, nicotine. As a result smoking can readily become a regular and long-term habit that is difficult to quit. In recent years the negative effects of passive smoking have also been highlighted, demonstrating that the risks of smoking to people other than just the smoker.³¹ (Australian Bureau of Statistics, July 2012)

Smoking is a significant risk factor for chronic disease. Research shows that smoking is associated with increased risk of coronary artery disease, stroke, peripheral vascular disease and cancer (Australia's Health, 2008).

Prevalence in Australia

Around 2.8 million Australians or 16.3% of the adult population have at least one cigarette per day. This rate has decreased consistently over the past decade, from 18.9% in 2007-08 and 22.4% in 2001. Decreasing smoking rates are consistent across all age categories, but are particularly pronounced in people below 45 years of age.

According to the ABS public health survey in 2011, around 50.9% of adults reported that they had never smoked; 31.0% were ex-smokers and the remaining 1.8% smoked, but less often than daily.

²⁹ <http://www.obesityaction.org/educational-resources/resource-articles-2/general-articles/sexual-abuse-and-obesity-whats-the-link>

³⁰ <http://www.something-fishy.org/prevention/abuse.php>

³¹ http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Passive_smoking

The data shows that male prevalence of smoking is greater than for females, 18.2% compared to 14.4%. The ABS report that these rates have decreased since 2001, when 25.4% of men and 19.5% of women smoked daily.

Smoking in younger age categories is significantly lower than in adults. In the age category 15-17 years in 2011, only 4.4% were daily smokers, 2.2% smoked less often than daily. 89.3% reported that they had never smoked.

In interpreting these prevalence numbers, the ABS notes that some under-reporting of smokers may have occurred due to social pressures, particularly in cases where other household members were present at the interview. The extent to which under-reporting may have occurred is unknown.

Link to childhood trauma

Although a relatively small sample of 57, a 2009 study³² found a very strong link between childhood abuse and smoking. This study controlled for the link between smoking and people with depression and other mental illnesses. The study found that people who had experienced severe child abuse had four times the likelihood of smoking.

This study is consistent with the US ACE study³³ that found adults with a history of childhood experiences of abuse were 2-4 times more likely to smoke. In this context, the immediate psychoactive benefits of nicotine consumption (i.e. as distinct from the longer term health risks) are also underlined by the lead investigators of the ACE Study.³⁴ As they further point out, the implications of this recognition for effective public health campaigns in relation to the risks of smoking have yet to be acted upon.

Alcohol consumption

Alcohol plays an important social role in Australia as it is consumed in a wide range of social circumstances. World Health Organisation data³⁵ shows that on a per-capita basis, Australia consumes around 12.2 litres of alcohol per year which is very high by international standards.

Often alcohol is consumed in Australia at levels of low immediate risk. However, some people drink at levels that increase their risk of alcohol-related injury, as well as their risk of developing health problems over the course of their life.³⁶

Risky or high risk drinking is associated with certain chronic conditions. These include mood and anxiety problems or a chronic condition caused by injury, such as disability resulting from a car accident. Causality can run in both directions, with mental health problems creating a vulnerability to alcohol abuse and alcohol abuse increasing the potential for mental illness.

³² <http://www.ncbi.nlm.nih.gov/pubmed/20391862>

³³ [http://www.ajpmonline.org/article/S0749-3797\(98\)00017-8/abstract](http://www.ajpmonline.org/article/S0749-3797(98)00017-8/abstract)

³⁴ Felitti & Anda in Lanius, *ibid.*

³⁵ <http://www.independent.co.uk/life-style/health-and-families/health-news/worlds-heaviest-drinking-countries-revealed--and-the-uk-doesnt-even-make-the-top-10-9357860.html>

³⁶ ABS

While excessive alcohol consumption is associated with long-term health risks, more people die from the acute effects than the long-term or chronic effects (Preventative Health Taskforce, 2008). These acute effects or short-term health risks include dangerous driving and violence.

According to the ABS 2005 Personal Safety Survey, for 625,000 people aged over 18 years the most recent experience of violence within the previous year was physical assault by a male. Alcohol was a major contributor to these assaults; three-in-five victims reported that alcohol was involved.

The 2009 National Health and Medical Research Council (NHMRC) guidelines for reducing health risks associated with the consumption of alcohol state that, for healthy men and women, 'drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury'.³⁷

Prevalence in Australia

In 2011-12, ABS data shows that 82.4% of Australians aged over 18 years had consumed alcohol in the past year. Only 9.0% reported that they had never consumed alcohol. Of all males, 87.6% had consumed alcohol in the past year while for females the proportion was lower (77.3%).

Lifetime risk

In 2011-12, 19.5% of adults consumed more than two standard drinks per day on average, exceeding the lifetime risk guidelines. This was a decrease from 2007-08, when 20.9% of Australian adults exceeded the guidelines.

Overall, Australian men were almost three times more likely to exceed the guidelines than women (29.1% compared with 10.1%, respectively). Amongst men, those aged 55-64 years were most likely to exceed the guidelines while those aged 75 years and over were least likely. A similar pattern was apparent for women.

The 2009 NHMRC guidelines also advise that on a single occasion³⁸ of drinking, the risk of alcohol-related injury increases with the amount consumed. For healthy men and women, 'drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion'.

According to this guideline, the ABS estimate that 44.7% of Australians, aged 18 years and over, exceeded the single occasion risk threshold of consuming more than 4 standard drinks at least once in the past year.

³⁷ National Health and Medical Research Council (NHMRC), 2009. Australian guidelines to reduce health risks from drinking alcohol, Canberra: NHMRC. Available from http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/ds10-alcohol.pdf

³⁸ A single occasion of drinking refers to a person consuming a sequence of drinks without their blood alcohol concentration reaching zero in between.

Link to childhood trauma and abuse

Survivors of child sexual abuse often report the misuse of alcohol as a form of self-medication.³⁹ Teenagers and young adults with alcohol abuse problems 'are twenty one times more likely to have been sexually abused than those without such problems' (Clark, McClanahan, & Sees, 1997)

In a literature review study published by the US National Institute on Alcohol Abuse and Alcoholism, it was concluded that⁴⁰

Epidemiologic studies as well as studies in treatment-seeking populations converge to support the finding that early-life trauma is common in people with alcohol dependence. There are a number of potential mechanistic explanations for the connection between early-life trauma and the development of alcohol dependence. These include psychological and developmental issues that are affected by trauma, as well as neurobiological effects of early trauma that can lead to increased vulnerability to the development of alcohol and other substance use disorders.

The US ACE study established that adults who had experienced 4 or more forms of childhood trauma were 7 times more likely to consider themselves alcoholics or to have serious problems with alcohol. A 2012 meta-analysis of child physical and emotional abuse and neglect established a strong relationship between these forms of childhood trauma and increased substance abuse (Norman, Byambaa, Butchart, Scott, & Vos, 2012).

³⁹ http://www.who.int/violence_injury_prevention/violence/world_report/factsheets/ft_violencealcohol.pdf

⁴⁰ <http://pubs.niaaa.nih.gov/publications/arcr344/408-413.htm>

Figure 3: Common risk factors for selected chronic diseases and conditions (Roxon, 2012)

Conditions	Behavioural				Biomedical		
	Tobacco smoking	Physical activity	Alcohol misuse	Nutrition	Obesity	High blood pressure	High blood cholesterol
Ischaemic heart disease	●	●	●	●	●	●	●
Stroke	●	●	●	●	●	●	●
Type 2 diabetes		●	●	●	●		
Kidney disease	●			●	●	●	
Arthritis	● (A)	● (B)			● (B)		
Osteoporosis	●	●	●	●			
Lung cancer	●						
Colorectal cancer		●	●	●	●		
Chronic obstructive pulmonary disease	●						
Asthma	●						
Depression		●	●		●		
Oral health	●		●	●			

(A) Relates to rheumatoid arthritis.
 (B) Relates to osteoarthritis.

Source: AIHW Indicators for chronic diseases and their determinants, 2008

B. Costing childhood trauma and abuse in adults

Conceptual approach

At the conceptual level, the budgetary cost of childhood trauma and abuse in adults can be determined by multiplying two key variables: (a) the weighted average cost – per survivor - of negative life outcomes associated with childhood trauma, and (b) the number (population) of adult survivors experiencing negative life outcomes due to childhood trauma. This formula is set out graphically in Figure 4.

The key challenge in estimating variable (a) is to ensure that the estimated population excludes survivors who will have experienced negative life outcomes regardless of whether they were traumatised or abused as children, while excluding those who were abused but do not appear to have experienced negative life outcomes.

The key challenge in estimating variable (b) is to ensure the average cost estimate is truly representative of the budgetary costs associated with childhood trauma and abuse. This requires identifying the range of negative life outcomes experienced in a population of Australian adult survivors, determining their relative importance, and then estimating the budgetary costs associated with each negative outcome.

Figure 4: Annual – per adult survivor - cost of childhood trauma and abuse at the conceptual level

$$\text{Annual budget cost} = \left(\begin{array}{c} \text{(a)} \\ \text{Population of adults} \\ \text{facing negative outcomes} \\ \text{because of} \\ \text{childhood trauma and abuse} \end{array} \right) \times \left(\begin{array}{c} \text{(b)} \\ \text{Cost of negative} \\ \text{life outcomes} \\ \text{associated with} \\ \text{childhood trauma and abuse} \end{array} \right) \quad 1$$

Defining a population of adults facing negative outcomes because of childhood trauma and child abuse - Variable (a)

The first step is to determine the number of Australians who experienced childhood trauma, according to a definition of what constitutes trauma. In order to build conservatism into the methodology and to better align with Australian Bureau of Statistics (ABS) data, in its initial calculations Pegasus used a relatively narrow definition of childhood trauma – that involving abuse only and of the following kinds: (a) sexual abuse, (b) physical abuse, or (c) emotional abuse.⁴¹ This

⁴¹ ASCA’s research shows that other childhood situations can cause significant trauma.

Wider definitions of childhood trauma include, in addition to abuse in all its forms, neglect, growing up with domestic or community violence and the traumatic impact on children in experiencing a parental divorce or other relationship breakdown, death of a parent, an alcoholic or drug addicted parent, or a parent affected by mental illness or other significant mental health problem.

excludes a number of additional categories of childhood trauma and hence is a clear underestimate of numbers affected (i.e. a conservative estimate of ultimate figures).

The ABS's Personal Safety Australia Survey routinely asks Australian adults to identify any abuse experienced after the age of 15. However, in 2012, a new question was added to the survey which asked adult respondents to note physical and sexual abuse experienced before the age of 15. See Figure 5 for definition of abuse.

Figure 5: ABS definition of child abuse under age of 15⁴²

Abuse before the age of 15

Abuse experienced by a person before the age of 15 years from any adult (male or female), including the person's parents. Emotional abuse is excluded.

Physical abuse - Any deliberate physical injury (including bruises) inflicted upon a child (before the age of 15 years) by an adult. Discipline that accidentally resulted in an injury is excluded.

Sexual abuse - Any act by an adult involving a child (before the age of 15 years) in sexual activity beyond their understanding or contrary to currently accepted community standards.

The survey revealed that 1.1 million men and 1.6 million women (total 2.7 million) Australian adults had been abused before the age of 15. This provides a starting point for estimating the survivor population.

The ABS survey question, however, was confined to sexual and physical abuse. To incorporate those adults who were emotionally abused, Pegasus examined child abuse 'substantiations' data recorded by child protection agencies and compiled by the Australian Institute of Health and Welfare (AIHW).

It is estimated that more than one third of all child abuse is 'emotional'. In recognition of this, Pegasus estimated the total population of Australian adults having experienced trauma due to sexual, physical and emotional abuse to be around 3.7 million⁴³. This total population was used as the starting point for analysis.

The purpose of deriving the population estimate is ultimately to reveal the impact these survivors have on government expenditure and revenue as a result of their childhood trauma. Hence, there is

ASCA estimate that using a wider definition of childhood trauma and abuse, around 5 million Australian adults have experienced significant childhood trauma.

⁴² <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4906.0Glossary12012>

⁴³ Given the majority of research into childhood trauma has involved research in sexual and physical abuse, Pegasus has reduced the weighting of emotional abuse for the purposes of calculating a total population. This adjustment had the effect of significantly reducing the total estimated population and therefore reinforces the conservative nature of the estimates.

a need to remove those individuals whose need for services has not had an adverse impact on expenditure or revenue from the total population estimate. These fall into two categories:

- (a) Those adults who have experienced negative life outcomes but have not faced negative life outcomes because of their child abuse; and
- (b) Those adults who experienced child abuse but have not experienced negative life outcomes.

Insufficient survey data in Australia meant that Pegasus Economics sourced data based on the US Adverse Childhood Experiences (ACE) Survey. The ACE Study is the most comprehensive global survey to elicit epidemiological data in relation to diverse forms of childhood trauma. This pioneering and ongoing longitudinal study (which involves large cohorts of over 17,000 participants) continues to yield strong epidemiological data the implications of which await Implementation. 'Results of this magnitude are rare in epidemiology'.⁴⁴

In a sample of 8,002 adults from this survey, it was shown that of those who experienced no adverse events as a child, 44% had still adopted at least one risk factor (i.e. negative life outcome). In comparison, of those adults who had undergone adverse experiences (which could take various forms), 72% had developed a risk factor (negative life outcome). The difference between the two percentages (72% - 44% = 28%) gives an estimate of the number of adults facing risk factors because of their child abuse.

It is salient to note that the majority of participants in the ACE Study are white middle class with some experience of college education. Notwithstanding this, the majority had experienced at least one form of adverse childhood experience, where the measurement scale used was itself conservative. Thus in addition to charting the strong and striking correlations between adverse early life experiences and subsequent adult ill health, the findings of this study reveal *the prevalence of childhood trauma even among ostensibly advantaged sections of the US population*. Given that the ACE Study is itself conservative in both the socio-demographic detail of its cohorts and its methodology (as distinct from its findings) it represents a powerful research base the implications of which must be heeded if we are to address major and ongoing challenges to public health.

Multiplying the total population of adult survivors of child sexual, physical and emotional abuse (3.7 million) by 28%, gives an estimate of how many Australian survivors of these forms of abuse experience negative life outcomes because of child abuse. This gives an estimate of 1.04 million survivors as the calculation population.⁴⁵

As is the case for the United States, this is a very conservative estimate. Anecdotally, Pegasus believes the proportion of survivors experiencing negative life outcomes due to child abuse to be significantly higher. The longstanding silence which has inhibited disclosure and which the advent of the Royal Commission is finally starting to erode) must be borne in mind. ASCA research related to those seeking support is also revealing in this context. Of the adult survivors who have phoned ASCA's 1300 Professional Support line, 49% of callers revealed negative life outcomes associated

⁴⁴ Felitti & Anda, 'The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders and sexual behaviour: implications for healthcare', in Lanius, et al, *ibid*, p.82.

⁴⁵ This is a conservative estimate. Based on anecdote and liaison with expert bodies, the proportion of child abuse survivors experiencing negative life outcomes because of their abuse is likely to be materially higher.

with their abuse. Of these, 72% reported multiple impacts.⁴⁶ Further, around 90% of those adult survivors detailed in the Royal Commission case studies have revealed negative life outcomes associated with their abuse.⁴⁷

Figure 6: Formula to determine the relevant population of adults with histories of child abuse experiencing negative life outcomes because of child abuse

$$Population = \left(\begin{array}{l} \text{No. physically and} \\ \text{sexually abused} \end{array} \right) \times \left(\begin{array}{l} \text{Uplift factor for} \\ \text{emotional abuse} \end{array} \right) \times \left(\begin{array}{l} \text{Relative population} \\ \text{difference} \end{array} \right) \quad 2$$

Hence, of the 3.7 million Australian adults who have experienced the 3 specified forms of child abuse an estimated 1.04 million, by conservative estimate, are facing negative life outcomes because of child abuse. Around 2.7 million adults have been removed from the population estimate to reflect the fact that, statistically, they may have adopted a risk behaviour, regardless of whether they were abused as a child or have not adopted risky behaviours at all. The basic formula for deriving this estimate is depicted in Figure 5.

Defining the costs associated with child abuse

Having established a calculated population of 1.04 million, the next stage is to determine the costs to government spending and revenue associated with the listed negative life outcomes. The approach adopted by Pegasus is to determine which negative outcomes are most representative of adults who have experienced childhood abuse, following which per-person budgetary costs for each of the cost categories can be derived.

A per-person estimate is simply the total annual cost (numerator) divided by the number of people (denominator) requiring the expenditure. For example, the budgetary cost of alcohol abuse is the estimated cost of risky drinking to governments each year, divided by the prevalence of risky drinkers. This will yield a per-person annual cost.

Figure 7: Formula for per person cost, per year

$$\text{Per person annual cost} = \frac{\text{Total annual budgetary cost estimate}}{\text{Number of people contributing to that cost}} \quad 3$$

⁴⁶ McMaugh. K and Dartanian. J (2014) ASCA 1300 Professional Support Line Statistics 2013-2014: A report prepared for Blue Knot Day 2014. Specific data analysis was conducted on 4, 000 cases ranging in dates from April 2013 to September 2014.

⁴⁷ Given there is no data indicating whether callers to ASCA’s 1300 Professional Support Line or the case studies published by the Royal Commission Interim Report are representative of the broader population of trauma survivors, Pegasus has used the 28% estimate.

What negative life outcomes are associated with childhood abuse?

To derive the range of negative outcomes associated with childhood abuse, Pegasus examined three sources of information.

The first was desktop analysis of the case studies published by the *Royal Commission into Institutional Responses to Child Abuse* (Interim Report Volume 2, 2014). At the time of the interim report, the Commission had received direct evidence from over 2000 survivors and family representatives of suicide victims and published 150 case studies. In receiving evidence, the Commission sought information from survivors on the ‘impact’ of their childhood abuse on their lives. This is useful information because it reflects what survivors themselves believe to be the impacts of their abuse. Responses did not have to fit within a prescribed list; people were free to use whatever descriptive terms they felt appropriate.

A second source of information relating to survivor ‘outcomes’ came from ASCA’s database report associated with its 1300 Professional Support Line Service (McMaugh & Dartanian, 2014). This database report is populated with over 4,000 case studies. It is important input both because of the large sample size and its inclusion of a large number of outcome categories.

Similar to the Royal Commission case studies, those survivors who call the ASCA 1300 line and convey their life outcomes are likely to recognise their risky behaviours and some of the challenges of those behaviours. They may not, however, have made a full connection between their prior abuse and current use of alcohol as a coping strategy to mitigate intolerable sensations, feelings and inner states. Clinical and neuro-scientific research establishes that in the absence of internal resources to self-soothe and self-regulate – one of the most damaging legacies of complex childhood trauma - external sources will be recruited (Neborsky, 2003)

One shortcoming in the 1300 Professional Support Line Service report is that not all negative life outcomes can currently be captured in the database. For example, there is no database field by which ‘tobacco smoking’ can be registered. It is also important to additionally note that as survivor contact with this ASCA service tends to be short term, (and information is elicited during the course of the contact rather than by inquiry) the numbers of recorded negative outcomes are anticipated to be underestimates.

The third source is the US ACE study (Felitti, et al., 1998). This was analysed because of the significant amount of survey design work undertaken to ensure the information collected was genuinely reflective of the range of key outcomes resulting from childhood trauma and abuse. The intersection between the three information sources is shown in

Figure 8.

Figure 8: Negative life outcomes associated with childhood trauma

Area of life impacted	Negative outcome	Royal Commission case studies	ASCA 1300 phone database	ACE study
Productive work	Adult physical health problems	✓	✓	✓
	Earnings impacted	✓	✓	
	Experienced homelessness	✓		
	Not been able to work	✓	✓	
Crime	Criminal activity	✓	✓	
	Jail	✓	✓	
Education	Didn't finish year 12	✓		
	Grades impaired	✓		
High risk behaviours	Alcohol abuse	✓	✓	✓
	Eating disorders	✓	✓	✓
	Gambling	✓	✓	
	Sexual promiscuity	✓		✓
	Smoking	✓		✓
	Substance abuse	✓	✓	
Mental health	Anger management problems	✓		
	Anxiety / depression	✓	✓	✓
	Dissociative disorders	✓	✓	
	General indication of mental health problems	✓	✓	
	Nightmares/flashbacks	✓	✓	
	Psychoses	✓	✓	
	PTSD / chronic PTSD	✓	✓	
	Self harm	✓	✓	
	Suicidal thoughts	✓	✓	

	Suicide attempt	✓	✓	✓
Relationship impairment	Divorce	✓	✓	
	Lost faith in God	✓		
	Problems maintaining a relationship	✓	✓	
	Problems with intimacy	✓	✓	
	Problems with trust generally	✓	✓	

Selecting the representative basket of cost categories to average

Three criteria were used to select the categories to compile the basket from which to derive an average cost. Firstly, all three information sources analysed needed to have had identified and collected information on the particular cost item. Secondly, sound financial information and data had to be available to derive both a numerator and denominator for each cost.

Thirdly, in order to ensure the accuracy of a per-person, per-year estimate, it was necessary to only use costs where the numerator and denominator in Australia were relatively stable over time. This ensures that over or under-estimation are minimised.

Adult physical health problems are a catchall category encompassing conditions such as cancer. All three surveys collected information on this but there was no consistency in definitions. Further, many of the adult health costs are captured within risk items such as obesity and alcohol abuse.

Four cost categories met the criteria: (a) alcohol abuse, (b) obesity, (c) anxiety/depression, and (d) suicide/attempted suicide.

Pegasus undertook analysis of whether the inclusion of only four cost categories would be sufficiently representative of the true budget costs associated with childhood trauma and abuse. One notable exclusion from the cost basket is any costing for relationship breakdown, such as divorce. Relationship breakdowns impose significant costs on governments due to increased costs associated with single parent families and child support. Indeed, the cost of divorce – very common amongst childhood trauma and abuse survivors – is the most costly of the cost categories analysed by Pegasus. As detailed above, the annual cost of each divorce is in the order of \$14,000 per year.

Smoking is another cost category not included. While reasonable budgetary cost data on smoking and sound estimates of the number of smokers in Australia is available, it is not included in the basket of cost categories because ASCA does not survey this in its phone support service. Further, the costs of smoking fall more heavily on individuals via reduced quality of life from disease and general physical impairment. The cost to the Government's budget is mitigated through the high level of tax generated through tobacco excise.

Another cost category not included in the costing basket is work impairment due to childhood trauma and abuse. Research shows that a legacy of childhood trauma is a significantly higher incidence of unemployment amongst abused males (around double) and a larger proportion who

work part-time. Costing these outcomes results in significant impacts on the Government budget through lost revenue and welfare supports. Specifically, these two costs are higher per person than the costs that were included in the basket. They also represent significant costs to survivors and their families through the associated reduction in income and consumption possibilities.

From the review, Pegasus concluded that the four cost categories - alcohol abuse, anxiety/depression, obesity and suicide/attempted suicide - were representative (yet conservative) of the budgetary costs flowing from childhood trauma.

Costing negative outcomes associated with childhood trauma and abuse in adults

Cost of suicide and attempted suicide

Several sources of information were used to determine the numerator and denominator of the annual budgetary costs of suicide and attempted suicide. Deriving these costs was not a simple exercise as the budgetary implications of completed suicides is quite different to the budgetary implications of attempted suicide. With the former, the main cost to budget is in lost taxation revenue. With attempted suicide, the primary cost relates to health care.

To determine the number of people who die each year from suicide (denominator), Pegasus analysed data from the ABS (Australian Bureau of Statistics, 2011) as well as from a report by KPMG (KPMG Health Economics, 2013). KPMG's estimate adjusted the ABS data to account for under-reporting of suicides. The estimate for deaths in 2011 was 2,614. This level has been stable for over a decade.

In 2007, the AIHW estimated attempted suicides at around 65,000 (ConNetica Consulting, 2009, p. 9). Another study reported a ratio of completed suicides to attempted suicide as 1:10-20 (Mendoza & Visser, 2009, p. 33). Pegasus adopted the ratio of 1:20 as the basis of estimating attempted suicides.

To derive the budgetary cost (numerator) for suicides, only one specific cost was taken into account – the impact of a death on the Government's taxation revenue. To derive this, Pegasus multiplied the number of suicides each year (2,614) by the workforce participation rate (0.65%⁴⁸) (Australian Bureau of Statistics, 2014), the average Australian wage level (\$58,000)⁴⁹, and finally by the average tax rate (28.3%)⁵⁰. This gave a total revenue loss of \$28 million. Dividing the numerator by the denominator gives an estimate of a revenue decline of \$11,386 per suicide.

In terms of attempted suicides, only total medical costs were included and assumed to be equivalent to government expenditure. This is a reasonable assumption given that most people who attempt

⁴⁸ Average over the last 10 years, combines both male and female participation, despite the higher incidence of males' suicide incidence. However, in terms of suicides due to the root cause of childhood trauma and abuse, there is likely to be a more even distribution of males and females.

⁴⁹ Calculated by multiplying 52 weeks by the trend-adjusted data for average weekly earnings, including full-time and part-time workers and before tax (\$1,122.90 per week) (ABS, 2014).

⁵⁰ To include all taxes, including GST, an aggregate percentage tax ratio was derived from the ABS National Accounts (Australian Bureau of Statistics, 2014). The tax rate represents total tax paid by Australian residents divided by GDP as the proxy for before tax income.

suicide are in need of urgent medical attention and crisis intervention (including hospitalisation which is predominantly supplied by public hospitals). Due to an absence of adequate cost data in Australia, Pegasus drew on a US study to derive a per suicide attempt medical cost.

The US study⁵¹ found that the additional medical costs associated with suicide attempts, among people with bi-polar disorder, was \$25,012 in the year following the suicide attempt. This compares to medical costs of \$11,467 in the year prior to the suicide attempt. Subtracting these two figures shows an average medical cost of attempted suicide of \$13,545. Adjusting this number for Australia (assuming medical costs are roughly half that of the US, and adjusting for exchange rates and inflation), Pegasus derives an estimate of medical costs per attempted suicide of \$4,900 per year.

A weighted average of the two costs results in an estimated cost of \$5,281 to the Government budget from each suicide and/or suicide attempt in Australia.

Cost of alcohol abuse

The costing of alcohol abuse is based on statistics published by the Australian Institute of Criminology (AIC)⁵² and the ABS. In April 2013, the AIC produced costs to society of alcohol abuse in 2010. These estimates were derived from a range of sources, including ABS, the Australian Institute of Health and Welfare (AIHW) and various academic studies. The AIC included four broad categories of cost into their calculations: those to the criminal justice system, health system, Australian productivity and traffic accidents.

Pegasus reviewed the detailed costs incorporated in these broad categories and deemed them to represent an accurate assessment of budgetary costs. The Australian productivity component captures the lost income from alcohol abusers who die prematurely and in situations in which normal workplace participation is impaired. The AIC included this cost in total, whereas Pegasus discounted it by multiplying it by the average tax rate -28%. This better aligned with the study objective of confining costs simply to those that impact the budget bottom-line.

The AIC cost estimates were based on data for the calendar year 2010, so a price adjustment was made to reflect 2014 costs. To adjust the criminal justice, health system and traffic accidents estimates, a public sector wage index was used. To adjust the Australian productivity component, a private sector wage growth factor was added.

Combining the cost estimates gives a total of cost to society (Government budget) of \$14.35 billion/annum. The components of the costing are shown graphically in Figure 9. This figure comprises the numerator of the per-year, per-person estimate.

The denominator (the number of people who abuse alcohol) is based on the ABS National Health Survey estimate of 2004/05 (Australian Bureau of Statistics, 2004/05). This survey found that in 2005, 13% of adults (around 2 million Australians) drank at risky levels. It is acknowledged that this information is now dated but a more recent figure has not been produced by the ABS.

However, in the first round results of the 2011 Australian Health Survey released in May 2014, the ABS notes that:

⁵¹ <http://www.ncbi.nlm.nih.gov/pubmed/20919595>

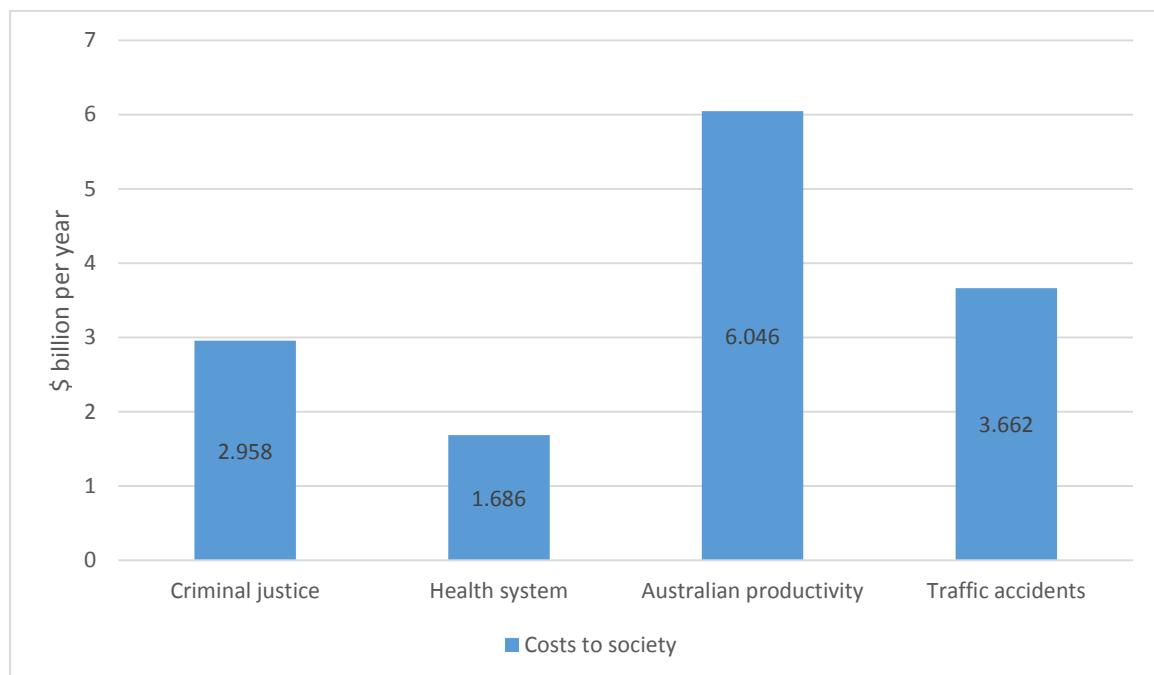
⁵² <http://www.aic.gov.au/>

‘applying the previous (2001) NHMRC short-term risk guidelines suggests that there was little change between 2004-05 and 2011-12 in the proportion of adults drinking at risky/high risk levels in the short term.’

Since 2005 Australia’s adult population has grown by over 2.5 million, an uplift factor (20%) sourced from ABS demographic data was applied. After applying this uplift, the total number of risky drinkers is estimated to be 2.26 million.

With the numerator and denominator estimated, the per-person, per-year cost to the Government budget of alcohol abuse is calculated at \$4,983.

Figure 9: Costs to society from alcohol abuse



Source: AIC, with Pegasus Economics price adjustments.

Cost of depression/ anxiety

The per-person estimate for depression and anxiety is assumed to be similar to the per-person estimate for mental health care and support generally. This assumption enables estimation without the need to undertake the fraught task of attributing mental health costs according to specific diagnostic categories (which can be particularly challenging in the area of childhood trauma which often results in complex mental health issues which occur concurrently without clear diagnostic differentiation).

Data for estimating the numerator (annual budgetary cost) was based on estimates from a landmark study into mental health expenditure undertaken by Medibank Private, Beyond Blue and the Nous Group (Nous Group, 2013) in 2013. The report divided expenditures into two broad categories:

expenditure on health-related services for people with mental illnesses and, secondly, expenditure on non-health-related services. In total, the report found an annual expenditure of \$28.5 billion dollars in support of mental illness. However, these expenditures also include private expenditures that do not impact the Government's budget.

Pegasus adjusted these numbers to isolate the expenditure to that of Government only and also made exclusions using two techniques. Firstly, detailed expenditure items that were clearly non-government related were subtracted from the total. Secondly, where it was ambiguous as to the split between Government and private expenditure, a discount factor was applied, typically 50%. To adjust for 2014 prices, an uplift factor of 6% was applied – most underlying data was sourced in 2010/11. After applying these adjustments, Pegasus estimates that the annual Government expenditure related to depression – the numerator - is around \$27 billion.

In terms of the denominator, Pegasus used ABS survey data from the ABS's National Survey of Mental Health and Wellbeing, 2007 (Australian Bureau of Statistics, 2007). This shows that 3.2 million Australians have a mental illness, including anxiety disorders, affective disorders and substance abuse disorders. The estimate was grossed up by 10% to account for population change since 2007, resulting in an estimate of 3.5 million Australians who are afflicted by mental illness. This estimate forms the denominator of the calculation. Dividing the numerator of 27 billion by the denominator of 3.7 million, gives an estimate of the annual cost to the budget of mental illness/the individual affected of \$7,686.

Obesity

Overeating and obesity are particularly costly to the Australian economy. It is estimated that \$56 billion is spent in terms of annual direct and indirect costs. (Colagiuri, et al., 2010). Considerable academic work has been done estimating the per-person, per-year cost of excessive weight and obesity.

The cost to government spending of obesity for each person affected in Australia has been estimated - on an annual basis - to be \$4,402 per year (Colagiuri, et al., 2010). This estimate excludes some key costs such as foregone tax revenue due to productivity losses of \$3.6 billion (Access Economics, 2008) and the costs of carers who look after obese people of \$1.9 billion (Thompson, 2001).

If all the relevant costs to government in terms of expenditure and foregone tax revenue are considered, Pegasus estimates that the cost of obesity is around \$6,000 per obese person.

Final calculation

Costs per adult survivor

As a means of building further conservatism into the analysis, Pegasus assumed that each of the 1 million adults experiencing negative outcomes because of childhood trauma and abuse imposes only one cost on the Government's budget.

For example, if a survivor was both alcoholic and obese, the expected cost to government would be greater than if the survivor had just one negative outcome. By limiting the calculation to including just one representative cost per person, the final estimation should be further considered as

conservative. Evidence presented before the Royal Commission into Institutional Responses to Child Sexual Abuse demonstrates that most survivors have experienced at least two negative outcomes from their prior abuse. ASCA’s 1300 data analysis established that of those reporting the impacts of their abuse, 72% had experienced multiple impacts. The assumption of survivors imposing just one budgetary cost is highly conservative.

Weighted average

Weights for the purposes of averaging costs were determined on the basis of wider population numbers, i.e. the number of Australian adults affected by the particular negative life outcome, not the population of adult survivors. If the survivor population was used to set the weights, then the depression (mental illness) and suicide costs would have been assigned greater importance. These two costs represent the two highest costs in the costing basket. Figure 10 summarises the cost and weighting information.

Figure 10: Data used to derive a weighted average cost to the budget from childhood trauma

	Total people affected per annum	Annual cost per person	Weight	Weighted annual cost per person
Depression (mental illness)	3,516,700	7,687	0.43	3,304.87
Eating disorder (obesity)	2,400,000	6,042	0.29	1,772.76
Suicide and attempted suicide	2,614	5,281	0.00	3.64
Alcohol abuse	2,260,000	4,984	0.28	1,377.03
AVERAGE		\$7,525		\$6,458

The original specification outlined in Figure 4 was:

$$\text{Annual cost to budget} = \left(\begin{matrix} (a) \\ \text{Population of adults} \\ \text{facing negative} \\ \text{outcomes} \\ \text{because of childhood} \\ \text{trauma and abuse} \end{matrix} \right) \times \left(\begin{matrix} (b) \\ \text{Cost of negative} \\ \text{life outcomes} \\ \text{associated with} \\ \text{childhood trauma and abuse} \end{matrix} \right) \quad 1$$

The estimate of the weighted annual cost to the budget from unresolved childhood trauma in adults is therefore:

$$\text{Annual cost to budget} = (\$6,458) \times (1.04 \text{ million}) = \$6.8 \text{ billion}$$

Or, using a simple average of the costs:

$$\text{Annual cost to budget} = (\$7,525) \times (1.04 \text{ million}) = \$7.8 \text{ billion}$$

Figure 11: Range of annual cost calculations for unresolved trauma⁵³

Measure	Starting survivor population	Population adjustment	Cost averaging technique	Per year
Annual budget cost	Narrow definition (child sexual, emotional and physical abuse only)	0.28	Weighted average	\$6.8 billion
Annual budget cost	Narrow definition	0.28	Simple average	\$7.8 billion
Annual budget cost	Wider (ASCA) definition (all childhood trauma)	0.28	Weighted average	\$9.1 billion
Annual budget cost	Wider (ASCA) definition	0.28	Simple average	\$10.6 billion
Annual budget cost	Wider (ASCA) definition	0.5 ⁵⁴	Weighted average	\$16 billion
Annual budget cost	Wider (ASCA) definition	0.75 ⁵⁵	Weighted average	\$24 billion

Sensitivity analysis

Pegasus Economics undertook a series of calculations based on alternative assumptions regarding the starting survivor population, the population discount factor and the cost averaging technique. These outcomes are detailed in Figure 11. As can be seen from the table, using ASCA's 5 million survivor population estimate and applying a discount of 0.75 rather than 0.28, the estimated annual cost to the Government position is \$24 billion. If a 0.5 population discount is used, then the annual estimated cost is \$16 billion.

Long-term impacts of childhood trauma and abuse

While not the only forms of childhood trauma, the emotional, sexual and physical abuse of children has been established to cause long-term impacts on an adult's wellbeing. These impacts have been

⁵³ Narrow definition: sexual, emotional and physical abuse only. Wider (ASCA) definition additionally includes, in addition to child abuse in all its forms,, neglect, growing up with domestic or community violence and the traumatic impact on children in experiencing a parental divorce or other relationship breakdown, death of a parent, an alcoholic or drug addicted parent, or a parent affected by mental illness or other significant mental health problem.

⁵⁴ Assumes that 50% of adults who faced childhood trauma adopt negative life outcomes because of this abuse. A plausible figure used for sensitivity analysis.

⁵⁵ Assumes that 75% of adults who faced childhood trauma adopt negative life outcomes because of this abuse. A plausible figure used for sensitivity analysis.

highlighted recently with the proceedings of the *Royal Commission into Institutional Responses to Child Sexual Abuse*. The Interim Report of the Commission published 150 representative case studies of people who had experienced child sexual abuse⁵⁶ (including the details of the abuse and its subsequent impact on survivors' lives and that of their families). A high proportion of children who were sexually abused were also physically and emotionally abused, so the case studies give insight into the broader picture of childhood trauma.

Based on the Commission's published case studies, the average age of a child who was sexually abused is 10 years of age. The average age of the abuse survivor giving evidence to the Royal Commission was mid-40's, revealing the length of time it can take for a survivor to come forward. The testimony also showed how abuse in childhood still severely impacts victims thirty five years and more after the abuse. A significant number of survivors who have given evidence to the Commission are over sixty years of age, and the vast majority are still struggling in their daily lives.

The long-term nature of the impacts of childhood trauma and abuse is an important consideration in designing health services which identify and specifically address unresolved underlying trauma and abuse, its manifestations, such as depression, and for all human and health services to be trauma-informed (see the second set of ASCA Guidelines for benchmark recommendations in this regard). It puts an emphasis on the need to deal actively and comprehensively with problems, and to minimise further damage. The earlier and more comprehensively this can be done, the greater the benefits to individuals, families, communities and the wider economy and society.

Child protection costs

This study did not examine Government budgetary costs associated with child protection (i.e. given the focus of the report on the costs associated with unresolved childhood trauma in adults). Such costs, however, can be significant. ASCA reports some studies into these costs on its website.

A study by the United Kingdom National Commission of Inquiry into the Prevention of Abuse estimated that the cost of child protection services, as well as the additional mental health and correctional services associated with child abuse, was over one billion pounds per year in England and Wales (cited in Kids First Foundation, 2003).

Similar figures also emerged from an American study, "Prevent Child Abuse" which conservatively claimed that US\$94 billion was spent annually in response to child abuse (cited in Kids First Foundation, 2003).

The data cited above attests to both the enormity and longevity of health impairments which are the legacy of unresolved childhood trauma, and the need for concerted and urgent national action to address it.

⁵⁶ As per the terms-of-reference. See link: <http://www.childabuseroyalcommission.gov.au/about-us/terms-of-reference>

C. Reducing costs of childhood trauma and abuse in adults

Based on the analysis in this report, large gains would likely accrue to combined Federal, State and Territory Government budgets if the public health challenge of childhood trauma and abuse were seriously and systematically addressed. Early, active, and comprehensive intervention could result in a minimum saving of \$6.8 billion from addressing of the impacts of child sexual, emotional and physical abuse in adults, alone. A minimum of \$9.1 billion could be gained from addressing the problem of childhood trauma more generally in the 5 million Australian adults affected by it. *These estimates are inherently conservative.* It needs to be emphasised that all projected figures in this report were methodologically arrived at by conservative estimates.

With appropriate support, treatment interventions and trauma informed practice, adult childhood trauma and abuse survivors can participate more fully and productively in the Australian community. Research establishes that recovery from childhood trauma is possible. (Siegel, Mindsight, 2009) (Siegel, 2003) We need the programs and pathways to translate this research into practice.

To that end, this section of the report highlights why the public health issue of childhood trauma and abuse in adult survivors should be viewed in the context of Australia's budget deficit debate and the preventative health strategy. It also outlines some specific policy initiatives.

Policy context

Australia's structural budget deficit⁵⁷ problem

The Australian economy has not experienced recession since 1991, representing 23 years of solid economic growth. This is a remarkable performance given the shock of the 1997 Asian financial crisis, the busting of the tech stock boom in 2000 and the Global Financial Crisis (GFC) of 2008-2010.

Yet despite this positive growth story, the 2013/14 Commonwealth budget deficit is expected to be in the order⁵⁸ of \$41.8 billion. Nor is there sign of a surplus in the Government's projections (see Figure 12). Commentators believe there is little prospect of budget surplus before 2020. Concerns have also emerged that Australia's highly praised AAA credit rating may come under threat if the current external debt trajectory does not abate.

⁵⁷ A budget deficit that results from a fundamental imbalance in government receipts and expenditures, as opposed to one based on one-off or short-term factors.

A government budget deficit occurs when a government spends more than it receives in tax revenue, while a structural deficit is when a budget deficit persists for some time. Structural deficits will eventually pose a problem for any government. Deficits are financed by borrowing, and continued borrowing leads to an accumulation of debt. The ability to pay off this debt is measured by a country's debt relative to its GDP, referred to as its debt-to-GDP ratio.

If a country's debt-to-GDP ratio gets too high, investors will worry that the government will either default on this debt, or will deflate its value away by monetising the debt and thereby engineer a high inflation rate. See: <http://lexicon.ft.com/Term?term=structural-deficit>

⁵⁸ http://budget.gov.au/2013-14/content/myefo/html/01_part_1.htm

Figure 12: The budget aggregates from the 2013-14 Mid-Year Economic and Fiscal Outlook

	Estimates					
	2013-14			2014-15		
	Budget	PEFO	MYEFO	Budget	PEFO	MYEFO
Underlying cash balance(\$b)(a)	-18.0	-30.1	-47.0	-10.9	-24.0	-33.9
Per cent of GDP	-1.1	-1.9	-3.0	-0.6	-1.5	-2.1
Fiscal balance(\$b)	-13.5	-25.5	-41.8	-6.3	-22.1	-31.5
Per cent of GDP	-0.8	-1.6	-2.7	-0.4	-1.3	-1.9
	Projections					
	2015-16			2016-17		
	Budget	PEFO	MYEFO	Budget	PEFO	MYEFO
Underlying cash balance(\$b)(a)	0.8	-4.7	-24.1	6.6	4.2	-17.7
Per cent of GDP	0.0	-0.3	-1.4	0.4	0.2	-1.0
Fiscal balance(\$b)	6.0	1.8	-18.8	10.8	7.8	-14.5
Per cent of GDP	0.3	0.1	-1.1	0.6	0.4	-0.8

(a) Excludes expected net Future Fund earnings.

While governments are currently looking to restore the budget position through a range of revenue measures and expenditure cuts, the long-term prognosis for the budget is for continuing strain as Australia's population ages. The main driver of deteriorating finances relates to forecast health expenditures.

The Commonwealth Government's last issued inter-generational report (Swan, 2012) showed that the major future stress on government expenditures is in health outlays. As a percentage of GDP, health expenditure is forecast to rise from 3.9% in this current year to 7.1% in 2049-50 – an almost doubling in proportional expenditure. By comparison, this growth rate compares to a small forecasted change in education spending - another major social policy area - from just 1.7% of GDP to 1.9%.

Health expenditure growth is the main driver of concerns that the long-term budget position is unsustainable. This is particularly as Australia already has high rates of corporate and personal taxes compared to our key trading partners. Without new and sustainable sources of revenue, fiscal responsibility will depend on expenditure constraint. The health system must be a key focus. Investing in effective prevention and early intervention measures can materially reduce future health outlays.

Intergenerational aspects

The societal costs of childhood trauma and abuse are not limited to the lifespan of the individual survivor. The negative effects of unresolved parental trauma on the children of survivors are well-documented but frequently not addressed in economic analysis of the cost of childhood trauma and abuse.

Additionally parents do not need to be overtly abusive for their children to be harmed. Strong evidence exists that children raised by parents suffering from mental illness, including depression, anxiety etc., or who abuse alcohol or drugs, experience intergenerational trauma. Unresolved

trauma on the part of parents – irrespective of its source – will negatively impact their children via the transmission of disrupted attachment styles.⁵⁹

It has also been established that when parents work through the effects of their trauma, their children do better.⁶⁰ Hence, comprehensive and early intervention, including targeted parenting programs, for adult survivors of all forms of childhood trauma and abuse would have long-term intergenerational benefits.

This report assesses the potential benefit to Government of active, timely and comprehensive intervention with adult survivors of childhood trauma and abuse. It recommends steps to optimise treatment, primary care and health and human system and service responses. A critical additional element in the policy discussion is the intergenerational dimension of childhood trauma and abuse, and the high probability that if not comprehensively addressed, parental trauma will impact the children of survivors, together with the attendant economic and societal costs.

Government's preventative health strategy

Addressing trauma in adult childhood trauma and abuse survivors is also fully consistent with the Government's preventative health strategy (National Preventative Health Taskforce, 2010).⁶¹ In 2010, the then Federal Minister for Health, Nicola Roxon announced a series of actions intended to make significant headway in preventative health. The initiatives included:

- *The world's toughest regime on cutting smoking rates;*
- *Establishing a national agency to guide investments in prevention;*
- *Tackling binge drinking through a \$103.5 million strategy;*
- *Reducing the impact of diabetes through a \$449.2 million reform;*
- *Providing approximately \$300 million for social marketing campaigns tackling tobacco, alcohol, obesity and illicit drugs;*
- *Helping Australians to participate more in sport and active recreation through a boost to sports funding; and*
- *Delivering the most ambitious study of Australia's health ever conducted.*

The Government's strategy to target high risk behaviours such as smoking, obesity and alcohol abuse is particularly welcome. This is because these behaviours are highly correlated with disease, impaired lifestyle and reduced lifespan. As detailed in this report, childhood trauma and abuse are significant factors which put adult survivors at risk of adopting these risky behaviours.

⁵⁹ Hesse, Main et al, in Solomon & Siegel, *Healing Trauma: Attachment, Mind, Body and Brain* 2003

⁶⁰ Siegel, *ibid*.

⁶¹ [http://www.preventativehealth.org.au/internet/preventativehealth/publishing.nsf/Content/AEC223A781D64FF0CA2575FD00075DD0/\\$File/nphs-overview-overview.pdf](http://www.preventativehealth.org.au/internet/preventativehealth/publishing.nsf/Content/AEC223A781D64FF0CA2575FD00075DD0/$File/nphs-overview-overview.pdf) and <http://www.preventativehealth.org.au/internet/preventativehealth/publishing.nsf/Content/taking-preventative-action>

If we are to prioritise responses to adults who have experienced childhood trauma and abuse we need to review our approach. *Unless and until the link between coping strategies and risk-taking behaviour is appreciated, neither public health campaigns nor treatment programs are likely to be effective.*

Effective addressing of childhood trauma requires reconceptualised strategies which includes a 'bottom up' as well as 'top down' approach to service-culture and delivery (Jennings, 2004; Harris & Fallot, 2009). The ability to tackle underlying causes of risky behaviours, not just symptoms is ultimately critical to long-term success of the preventative health strategy.

Unresolved trauma needs to be addressed at multiple levels. The second set of ASCA Guidelines (ie for introduction of trauma informed practice in agencies, organisations and institutions) can assist with the necessary workplace change, and the first set (for clinicians) addresses direct one-to-one therapy and treatment. Unresolved childhood trauma is a major risk factor and must be viewed as a priority challenge in all respects.

What is needed to help address childhood trauma and abuse in adults? – Active, timely and comprehensive intervention

Active investment in specialist services

Specialist services are needed to spearhead policy and practice responses in relation to adult childhood trauma and abuse survivors. This requires active investment which supports a coordinated comprehensive model of care including continued and increased access to assistance and treatment through effective help lines and online services. Early active comprehensive intervention including appropriate support, counselling, resources and services promotes recovery. When survivors resolve childhood trauma they are freed to live productive, healthy and constructive lives, as are their children.

A key by-product of the resolving of childhood trauma for adult survivors is a financial benefit to Federal and State Government budgets. People affected by childhood trauma require significant costs on taxpayers. This is via higher Government expenditure on welfare support, health spending, criminal justice costs, and through lower taxation revenue.

More and better trained treating practitioners - counsellors/therapists

Currently and unfortunately, our public health system has evolved in a way which means that adult mental health services focus on addressing the presenting health issues (such as depression and substance abuse) rather than identifying and addressing potential underlying causes (such as prior childhood trauma and abuse).

It is only through dealing with the root cause of problems that sustained inroads can be made in reducing system-wide health costs and helping adult survivors of childhood trauma and abuse to lead healthier lives in which they are also better able to contribute. Experience of childhood trauma and abuse is not a marker of intelligence or character. Nor is it a matter of exertion of 'will power' to simply 'move on' from it. Rather such trauma is associated with extensive neurobiological impairments. These can be effectively addressed via appropriate treatment, services, and access to various types of resources and support. When survivors are receiving the right services and supports

and the recovery process is underway, they can realise their enormous untapped potential. This is beneficial not only to survivors themselves, but to the whole of society.

Addressing only the later manifestations of prior childhood trauma and abuse is analogous to cutting the top off a garden weed. The visible sign of the weed is removed from sight for a period, but it will grow again. The only effective long-term solution to removing the weed is to extract the roots.

Similarly, in order to address many adverse behaviours in society, the underlying motivating issues must be addressed at the core. Childhood trauma is a key underlying problem that is often overlooked in health treatment services. ASCA has taken a leadership role in setting the standards for clinical practice in responding to childhood trauma and abuse⁶² and in building the capacity of the mental health workforce to improve health outcomes for adult survivors through training programs and other services.

Prior childhood trauma including abuse is not the only root cause of suboptimal health outcomes. But it is unquestionably a major one. Excitingly, it is also one which we now know can be addressed, and for which more healing can be achieved than previously thought possible. But this can only occur when it is appropriately addressed. Dealing with childhood trauma and abuse at its core - and with the complex needs of those affected by it - involves expert treatment interventions, often of an intensive nature. While for some people this will require an extended period of time, this will not be the case for others. There is no 'one size fits all'; appropriate responses also need to be tailored to the individual and attuned to gender, age, ethnicity and other forms of diversity.

Counsellors/therapists must be specifically trained to deal with the complexity of the issues involved. Counselling and therapy must also be accessible and affordable throughout the country. Widespread investment in training supported by a program to accredit practitioners of a range of disciplines is also recommended for consideration. Unless diverse practitioners are attuned to and skilled regarding the multiple and specific needs of adults who experience the impacts of childhood trauma, further harm can be done. Sadly we know that re-traumatisation can occur within the very services accessed by adult survivors for support (Jennings, 2004; Davidson, 1997). Hence the vital need for appropriate training and regulation of practitioners, and for all personnel who come into contact with survivors to operate in a trauma-informed manner.

A convenient and failsafe pathway to treatment – 'no wrong door'

Frontline practitioners: General Practitioners and nurse practitioners will, on a daily basis, inevitably see people who have been impacted by childhood trauma (**'every physician will see several patients with high ACE scores each day'** (Felitti, 2010:78) Thus there are multiple and ongoing opportunities to facilitate a process whereby the presenting person can start receiving appropriate support. Such support may be direct or via targeted referral (including specialist counselling/therapy, ideally from an accredited practitioner).

Primary care practitioners need knowledge and skills to respond appropriately to patient disclosure of childhood trauma or abuse. They also need to be attuned to the possibility of such a history in the patients they see. This is because the topic may not be raised directly by patients themselves, and

⁶² ASCA Practice Guidelines for Treatment of Complex Trauma and Trauma Informed Care and Service Delivery 2012 Kezelman, Stavropoulos

potential signs of it may continue to go unrecognised. In both cases a convenient yet failsafe referral network to appropriate assistance is required.

For example, if a GP recommends the survivor access ASCA's 1300 Professional Support Line and online services⁶³, they can be fully confident that the person will receive best-practice short-term counselling support and targeted referral. *We encourage the Government to sustain and extend funding for this critical specialist health infrastructure.* We also urge investment in the training of front-line practitioners to enable them to support, respond, and refer as required.

System, services and institutional improvements

Benefits can also be achieved by minimising re-traumatising practices within institutions, organisations and agencies accessed by people who experience the impacts of childhood trauma. As the data attests, we are talking about large numbers of people. *'Individuals with histories of violence, abuse and neglect from childhood...make up the majority of clients served by public mental health and substance abuse service systems'* (Jennings, 2004:6) The majority of people who access the mental health sector have undergone many overwhelming life experiences, interpersonal violence and adversity (Bloom, 2011; Jennings, 2004:6).

The capacity to meet this level of need requires restructuring of services to better accommodate people for whom the legacy of complex childhood trauma continues to impact their lives. ASCA's nationally and internationally recognised *Practice Guidelines for Treatment of Complex Trauma and Trauma Informed Care and Service Delivery* include guidelines which establish the benefits of trauma-informed practice for diverse services. ASCA's training programs and other services help put this research into practice.

Essentially trauma-informed practice (as outlined in these guidelines; see extract in Appendix 2) seeks to create environments and management practices that do no harm and which do not replicate the sorts of environments that gave cover to childhood abuse. The emphasis is on service cultures and delivery which are reassuring to survivors and which facilitate environments in which they do not feel that choice is being taken away from them. It is crucial that adult survivors of childhood trauma do not re-experience the sense of being trapped and disempowered, so often a feature of their early years, within service settings.

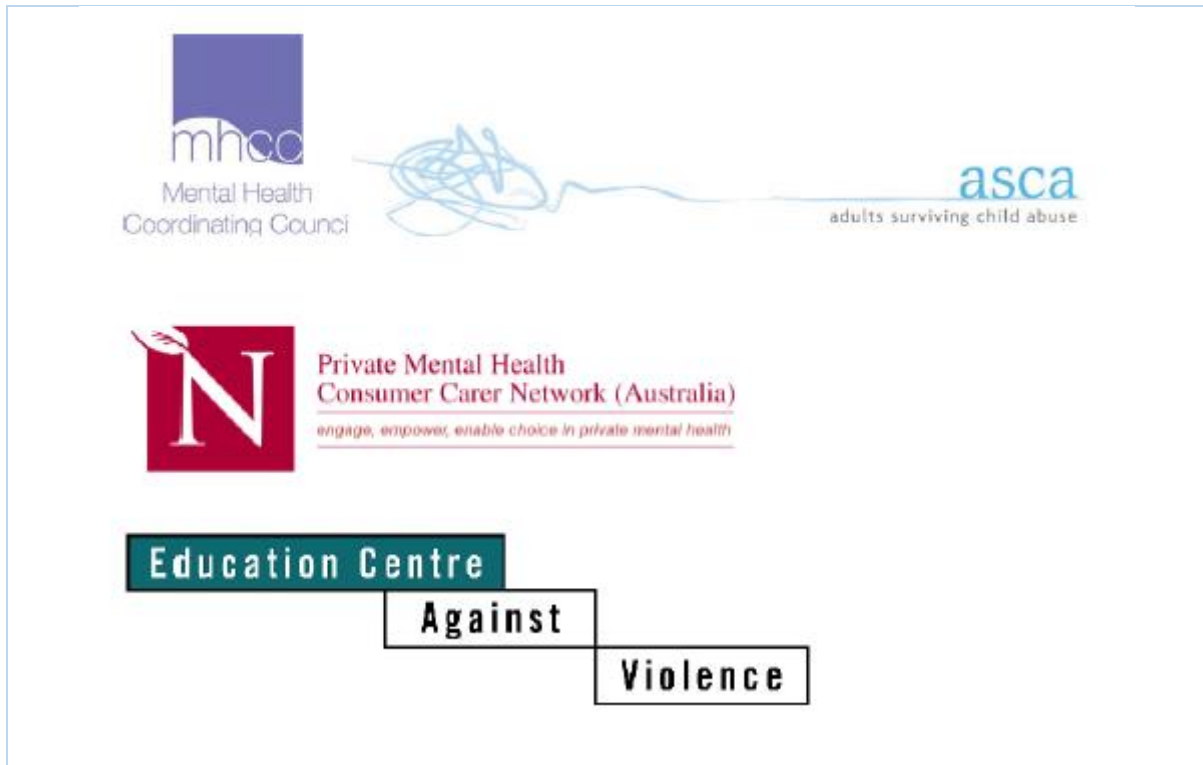
A key reason why childhood abuse is so damaging is that the normal responses to danger of 'fight or flight' are unavailable to children in abusive situations. Unable to flee, they often 'freeze'. This is another trauma response which accounts for the prevalence of dissociative responses in children. These responses need to be understood by the adults, including teachers and health professionals, on whom they are reliant [Perry, 2006].

Any replication of these sorts of environments for survivors of abuse risks further harm, compounding the problem, and high costs in all respects. ASCA's guidelines seek to minimise the probability of such outcomes. We recommend that all human service and health facilities implement the trauma-informed practice principles presented in the ASCA guidelines. This could be done via comprehensive training programs and systems review.

⁶³ ASCA's 1300 Professional Support Line and selected online services are Government funded.

Trauma-informed service delivery can reap significant benefits including improved staff-client relations, enhanced OHS and risk management. Compliance costs for its implementation would be offset through savings related to reducing the costs of ill-health and its escalation, of absenteeism, lower compensation claims, as well as the benefits of enhanced work motivation. For these reasons, and as the conservatively achieved projections of this report substantiate, we strongly urge Government to take the steps we have outlined.

Figure 13: National organisations supporting trauma-informed care (Bateman, 2012)



D. Conclusion

Pegasus Economics estimates that the fiscal (budget) cost to Australian taxpayers of unresolved childhood trauma is at least \$6.8 billion per year for child sexual, emotional and physical abuse alone. When broader definitions of childhood trauma are taken into account the estimated cost is \$9.1 billion and probably higher.

In other words, if adult survivors of childhood trauma experienced the same life outcomes as non-traumatised adults, *the collective budget deficits of Australian governments*⁶⁴ *would be improved, at a minimum, by an amount roughly equivalent to the entire Government outlay on tertiary education.*

Furthermore, these savings relate mainly to costs impacting taxation and government spending. The estimate does not include intangible costs such as the pain and suffering experienced by adult survivors and the many ensuing effects on those with whom they have contact. Addition of these intangible costs would result in multiples to the overall benefit of comprehensive addressing of childhood trauma and abuse in adults.

With active early and comprehensive intervention - appropriate support, specialist treatment and trauma-informed practice interventions - adult survivors of childhood trauma and abuse can lead healthy, positive and productive lives. Their children, too, will benefit, because the resolution of trauma in parents intercepts its transmission to the next generation. .

ASCA is the leading national organisation specialising in the policy and practice initiatives needed to improve health, welfare and economic outcomes for Australian adults affected by childhood trauma and abuse.

ASCA and Pegasus urge the Government to invest heavily in specialist services including helplines and online services, accreditation and training of treating practitioners such as counsellors and therapists, and accreditation and training of GPs and frontline services. All such services should be widely available at affordable cost. Additionally trauma informed practice initiatives need to be implemented across sectors. As the analysis and estimates of this report attest, the cost savings would be enormous and the continuing benefits would be society wide.

~*~

⁶⁴ The Australian governments refers to the budget position of both State and Federal Governments, although given the role of the Federal Government in raising taxation and spending on health and social security, the vast bulk of budget savings will ultimately be realised at the Federal budget level.

References

- ABS. (2014, May). Average Weekly Earnings, Australia. *Cat.No 6302.0*.
- Access Economics. (2008). *The growing cost of obesity in 2008: three years on*. Canberra: Diabetes Australia.
- Afifi, T., Boman, J., Fleisher, W., & Sareen, J. (2009). The relationship between child abuse, parental divorce, and lifetime mental disorders and suicidality in a nationally representative adult sample. *Child Abuse & Neglect*, 33, 139-147.
- Australian Bureau of Statistics. (2004/05). National Health Survey, Australia. *Cat.No 4364.0*.
- Australian Bureau of Statistics. (2007). National Survey of Mental Health and Wellbeing. *Cat.No. 4326.0*.
- Australian Bureau of Statistics. (2010). *Suicides, Australia*. Canberra: ABS.
- Australian Bureau of Statistics. (2011). *Suicide, Causes of death, Australia, Cat.No 3303.0*.
- Australian Bureau of Statistics. (2014, June). Australian National Accounts: National Income, Expenditure and Product. *Cat.No 5206.0*.
- Australian Bureau of Statistics. (2014, October). Labour Force. *Cat.No 6202.0*.
- Australian Bureau of Statistics. (Dec 2009). *Australian Social Trends*. Canberra: ABS.
- Australian Bureau of Statistics. (July 2012). *Gender Indicators, Australia*. Canberra: ABS.
- Australian Institute of Criminology. (2013, April). The societal costs of alcohol misuse in Australia. *Trends & issues in crime and criminal justice*, p. No.454.
- Australian Institute of Health and Welfare. (2008). *Australia's Health*. Canberra: AIHW.
- Author not cited. (2011). How investing in therapeutic services provides a clinical cost saving in the long term. *Health Service Journal*.
- Bateman, J. (2012). *Trauma Informed Care in Mental Health Services*. Sydney: Mental Health Coordinating Council.
- Bloom, S., & Farragher, B. (2011). *Destroying Sanctuary: The Crisis in Human Service Delivery Systems*. New York: OUP.
- Bravehearts. (Updated December 2012). *Child Sexual Assault: Facts and Statistics*. Queensland: Bravehearts online.
- Briere, J., & Jordan, C. E. (2004). Violence against women: Outcome complexity and implications for treatment. *Journal of Interpersonal Violence*, 19, 1205-1222.
- Clark, H., McClanahan, T., & Sees, K. (1997). Cultural Aspects of Adolescent Addiction and Treatment. *Valparaíso University Law Review*, Volv.31(2), Spr.

- Colagiuri, S., Lee, C. M., Colagiuri, R., Magliano, D., Shaw, J. E., Zimmet, P. Z., & Caterson, I. D. (2010). The cost of overweight and obesity in Australia. *Medical Journal of Australia*, 192:260-264.
- Colman, R., & Widom, C. (2004). Childhood abuse and neglect and adult intimate relationships: A prospective study. *Child Abuse and Neglect*, 28(11):1133-1151.
- ConNetica Consulting. (2009). *The estimation of the Economic Cost of Suicide to Australia*. Online: SPA, Lifeline, OzHelp, Inspire, Salvation Army, the Mental Health Council of Australia & the Brain and Mind Research Institute, University of Sydney.
- Felitti, V. J., & Anda, R. F. (2010). The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders and sexual behaviour: implications for healthcare. In R. A. Lanius, E. Vermetten, & C. Pain, *The impact of Early Life Trauma on Health and Disease: The Hidden Epidemic* (pp. 77-87). Cambridge: Cambridge University Press.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Deaths in Adults - The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventative Medicine*, p. 14(4).
- Flood, M., & Fergus, L. (2008). *An assault on our future: The impact of violence on young people and their relationships*. Sydney: White Ribbon Foundation.
- Forde, L. (1999). *Commission of Inquiry into Abuse of Children in Queensland Institutions*. Queensland: Queensland Government.
- Gilbert, R., Spatz, Widom, C., Browne, K., Fergusson, D., Webb, E., & Janson, J. (2009). Burden and consequences of child maltreatment in high-income countries. *Lancet*, 373, 68-81.
- Gilmsn, S. L., Zhou, X., & (eds). (2004). *Smoke: a global history of smoking*. Hong Kong: Reaktion Books.
- Hall, L., & Lloyd, S. (1993). *Surviving Child Sexual Abuse: A Handbook For Helping Women Challenge Their Past*. Bristol: The Falmer Press.
- Herman, J., Perry, C., & van der Kolk, B. (1989). Childhood Trauma in Borderline Personality Disorder. *Am J Psychiatry*, 164:4, 490-495.
- Kendall-Tackett, K. (2002). The health effects of childhood abuse: four pathways by which abuse can influence health. *Child Abuse & Neglect*, 26(6-7), 715-729.
- KPMG Health Economics. (2013). *The economic cost of suicide in Australia*. Online.
- Lanius, & Shonkoff, J. P. (2012). The Lifelong Effects of Early Childhood Adversity and Toxic Stress. *American Academy of Pediatrics*, 129 (1):e232-246.
- M Cutajar, P. M. (2010). Suicide and fatal drug overdose in child sexual abuse victims: *Medical Journal of Australia*, 184-187.

- McClellan AM, P., Coate, J., Atkinson AO APM, B., Fitzgerald AM, R., Milroy, H., & Murray, A. (2014). *Inerim Report*. Canberra: Royal Commission into Institutional Responses to Child Sexual Abuse.
- McMaugh, K., & Dartanian, J. (2014). *ASCA 1300 Professional Support Line Statistics, 2013-2014*. Sydney: ASCA.
- Mendoza, J., & Visser, V. (2009). *Submission to the Senate Community Affairs Committee Inquiry into Suicide in Australia*. Online: Lifeline Australia, Suicide Prevention Australia, The Inspire Foundation, OzHelp Foundation, The Salvation Army, The Mental Health Council of Australia and the Brain and Mind Research Institute, University of Sydney.
- Mullen, P. E., & Fleming, J. (1998, April). Long-term effects of child sexual abuse. *NCPC Issues No.9*, p. Web published. Retrieved from <https://www3.aifs.gov.au/cfca/publications/long-term-effects-child-sexual-abuse-0>
- National Preventative Health Taskforce. (2010). *Taking Preventative Action*. Canberra: Commonwealth of Australia.
- Norman, R. E., Byambaa, M., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse and neglect: A systematic review and meta-analysis. *Public Library of Science Medicine*, 9(11), 1-31.
- Nous Group. (2013). *The Case for Mental Health Reform in Australia: a Review of Expenditure and System Design*.
- Pinheiro, P. (2006). *World report on violence against children*. New York: UNICEF.
- Plunkett, A., O'Toole, B., Swanston, H., Oates, R., Shrimpton, S., & Parkinson, P. (2001). Suicide risk following child sexual abuse. *Ambulatory Pediatrics*, 1(5), 262-266.
- Preventative Health Taskforce. (2008). *Technical Report No 3: Preventing alcohol-related harm in Australia: a window of opportunity*. Canberra.
- PWC. (March 2014). *Creating a mentally healthy workplace: Return on investment analysis*. Melbourne: The Mentally Healthy Work Place Alliance.
- Reeve, R., & Van Gool, K. (2013). Modelling the Relationship between Child Abuse and Long-Term Health Care Costs and Wellbeing: Results from an Australian Community-Based Survey. *Economic Record*, 300-318.
- Rhode, R., Ichikawa, L., Simon, G., Ludman, E., Linde, J., & Jeffrey, R. (2008). Associations of child sexual and physical abuse with obesity and depression in middle-aged women. *Child Abuse & Neglect*, 32, 878-887.
- Ross, C., Miller, S., Reagor, P., Fraser G, B. L., & Anderson, G. (1990). Structured Interview Data on 102 Cases of Multiple Personality Disorder From Four Centers. *Journal of Psychiatry*, 147: 596-601.
- Roxon, N. (2012). *Taking Preventative Action*. Canberra: Commonwealth Government.

- Royal Commission into Institutional Responses to Child Sexual Abuse. (2014). *Interim Report Volume 2*. Canberra: Commonwealth Government.
- Siegel, D. (2003). An Interpersonal Neurobiology of Psychotherapy: The Developing Mind and the Resolution of Trauma. In Siegel, & Solomon, *Healing Trauma* (pp. 1-56).
- Siegel, D. (2009). *Mindsight*. New York: Random House.
- Statistics, A. B. (2011-2012). *Australian Health Survey: Updated Results*. Canberra: ABS.
- Swan, W. (2012). *2010 Intergenerational Report: Australia to 2050: future challenges*. Canberra: Commonwealth Government.
- Taylor, P., Moore, P., Pezzullo, L., Goddard, C., & De Bortoli, L. (2008). *The Cost of Child Abuse in Australia*. Melbourne: Australian Childhood Foundation and Child Abuse Prevention Research Australia.
- Thomas, C., Hypponen, E., & Power, C. (2008). Obesity and type 2 diabetes in mid-adult life: The role of childhood adversity. *Pediatrics*, 121, 1240-1249.
- Thompson, W. D. (2001). The medical-care cost burden of obesity. *Obes Rev*, 189-197.
- Walker, E. A., Gelfand, A., Katon, W. J., Koss, M. P., Von Korff, M., Bernstein, D., & Russo, J. (1999). Adult health status of women with histories of childhood abuse and neglect. *The American Journal of Medicine, Issue 4*, 332-339.
- Widom, C., & Maxfield, M. G. (2001). *An update on the "cycle of violence"*. Washington: National Institute of Justice.
- Widom, C., DuMont, K., & Czaja, S. (2007). A prospective investigation of major depressive disorder and comorbidity in abused and neglected children grown up. *Archives of General Psychiatry*, 64, 49-56.
- World Health Organisation. (2009, October 27). 2009. *Global Database on Body Mass Index*.

Appendix 1: Practice Guidelines for Treatment of Complex Trauma (Clinical) - Excerpt

'The Last Frontier' – Practice Guidelines for Treatment of Complex Trauma and Trauma Informed Care and Service Delivery

Guidelines (Clinical)

- (1)
Facilitate client safety
*'[A] first order of treatment is to establish conditions of safety to the fullest extent possible. The client cannot progress if a relative degree of safety is not available or attainable.'*¹

- (2)
Recognise the centrality of affect-regulation (emotional management; ability to self-soothe) as foundational to all treatment objectives and consistently foster this ability in the client
Facilitation of effective management of internal states is vital to a felt sense of safety, and as critical to experience outside the therapy session as to experience within it. Fostering of the ability to self-regulate should be a consistent task of therapy, involving, among other things, the teaching of strategies to self-monitor and self-intercept. Note that this task can be compounded in that existence of a coherent sense of self cannot be assumed (see Pt 3)

- (3)
Recognise the breadth of functioning impacted by complex trauma and that acquisition, not just restoration,² of some modes of functioning may be necessary. Particularly if it dates to childhood, complex trauma can entail developmental deficits in self-organisation which do not apply in 'single-incident' PTSD (ie where there is no prior underlying trauma) – 'As a group, clients with complex trauma disorders have developmental/attachment deficits that require additional treatment focus... treatment goals are more extensive than those directed at PTSD symptoms alone'³

- (4)
Regard symptoms as adaptive and work from a strengths-based approach which is empowering of the client's existing resources
A view of symptoms as 'expectable and adaptive' reactions to traumatic childhood experiences⁴ (ie as the outgrowth of normal responses to abnormal conditions) should inform clinical work.

1 Courtois, Ford & Cloitre, 'Best Practices in Psychotherapy for Adults', p. 91.

2 This suggestive distinction is referenced from Courtois, Ford & Cloitre ('Best Practices in Psychotherapy for Adults', p.90) regarding the need for therapeutic fostering of more secure internal working models of attachment.

3 Courtois, Ford & Cloitre, 'Best Practices in Psychotherapy for Adults', pp. 89-90; see for listing of the range of priority areas which need to be addressed.

4 Courtois, Ford & Cloitre, 'Best Practices in Psychotherapy for Adults', p. 93. Also note the following comment – 'Negative, undesirable symptoms and behaviours often do not seem to serve any purpose. On closer inspection, however, they do' (Colin A. Ross & Naomi Halpern, *Trauma Model Therapy: A Treatment Approach for Trauma, Dissociation and Complex Comorbidity* (Richardson, TX: Manitou Communications, Inc, 2009), p. 107.

- (5) **Understand how experience shapes the brain, the impacts of trauma on the brain (particularly the developing brain) and the physiology of trauma and its extensive effects**

Key aspects of this information should be sensitively communicated to the client, with a view to normalising distressing/problematic internal experience and responses for which they may otherwise hold themselves solely responsible. The effects of trauma on the brain, body and subsequent functioning should form part of the psycho-education which is a significant

component of effective trauma therapy.⁵ While self-blame is unlikely to dissolve in the wake of psycho-education alone, current insights into the physiology of trauma and its effects need to be communicated to the client.

- (6) **Encourage establishment/strengthening of support networks**

Likely impairment of relational capacity may mean that supports are lacking or non-optimal. The therapeutic relationship itself fosters relational capacity as healthy support networks are worked towards.

- (7) **Attune to attachment issues at all times and from the first contact point**

While different in presentation and levels of functioning (including at different points in their lives) complex trauma clients have sustained assaults to their ability to connect with themselves and others. Attuning to attachment issues is vital to the therapeutic alliance and to effective working within it. It also assists recognition of potential indicators of whether the client is experiencing complex or single-incident trauma. Thus there are significant reasons for therapist sensitivity, from the first contact point, to the relational style of the client (and thereby to the possibility of underlying trauma).⁶

- (8) **Understand and attune to the prevalence and varied forms of dissociative responses, the differences between hyper and hypoarousal, and the need to stay within 'the window of tolerance'**

Structural dissociation represents an extreme form of defence in the face of extreme (inescapable) threat, and is a frequent feature of complex trauma when abuse begins early in childhood.⁷ Yet there are many and milder forms of dissociative response of which the therapist needs to be aware ('The more you know about dissociation, the more you automatically watch for its markers').⁸

⁵ John Briere & C. Scott, *Principles of Trauma Therapy: A Guide to Symptoms, Evaluation and Treatment* (London: Sage, 2006).

⁶ Shapiro's 'Attachment Assessment' and 'Affect Tolerance Assessment' (Robin Shapiro, *The Trauma Treatment Handbook*, New York: Norton, 2010, pp.33-35) combine observational questions for the clinician with questions that can potentially be asked of the client (ie as appropriate). To the extent that these represent informal 'tools' that do not require training to administer, they are helpful both in orienting the clinician to attachment issues in the early stages of client contact, and in sensitising to the ability of the client to tolerate affect (which will need to be consistently gauged in all subsequent contact but early indicators of which can be valuable at several levels).

⁷ See Warwick Middleton, & Jeremy Butler, 'Dissociative Identity Disorder: an Australian series', *Australian and New Zealand Journal of Psychiatry* (32, 1998), pp.794-804.

⁸ Shapiro, *The Trauma Treatment Handbook*, p.36. To assist in attunement to dissociative responses, Shapiro provides an informal 'Dissociation Assessment' tool (ibid); note that there exist several formal and specialist dissociation assessment scales, some of which require formal training to administer. See Colin A. Ross & Naomi Halpern, *Trauma Model Therapy*, pp.227-272. For helpful orienting articles to the subject of dissociation, see relevant papers at <http://www.theclinics.com>

As responses to the experience of extreme anxiety, hyperarousal is characterised by agitation, while hypoarousal manifests as passivity, ‘shut down’ and withdrawal.⁹ Therapy must always remain within ‘the window of tolerance’; ie the threshold of feeling the client can accommodate without becoming either hyper or hypoaroused.¹⁰

(9)

Expect and be prepared to work with a variety of client responses, including a sense of shame which may not be readily apparent but which is frequently present and intense

Inability to self-regulate and to draw upon relationships to regain self-integrity¹¹ engenders deep shame to which therapists should be attuned (‘The feeling of shame is about our very selves – not about some bad thing we did or said but about what we are’;¹² ‘shame also expands the clinician’s focus from fear or anxiety to the sense of a damaged self’).¹³

(10)

Embed and apply understanding of complex trauma in all interventions

Recognising the limits of standard assessment tools and modalities in relation to complex trauma,¹⁴ but also the extent to which these can be redressed via incorporation of the new clinical and research insights (see Pt 11 below) ensure that all interventions stem from understanding of current clinical and research insights into complex trauma.

(11)

Ensure the therapeutic model/approach promotes integration of functioning, and contains the ‘core elements’ consistent with research findings in the neurobiology of attachment

These include activation of/engagement with right-brain processes, attentiveness to the role and effects of implicit memory, and engagement with physical as well as cognitive and emotional processes – ‘we must attend to all three levels: cognitive processing... emotional processing... and sensorimotor processing (physical and sensory responses, sensations and movement’).¹⁵ While there are different ways of attending to these dimensions, current research elaborates the need for all three to be addressed therapeutically (‘it is important to be able to engage the relevant neurobiological processes’).¹⁶

9 As Rothschild highlights, there is a frequent misconception that clients in ‘the freeze state’ are underaroused, with the ensuing danger that the therapist may attempt to provoke a n obvious response – ‘Every trauma client, whether frozen, dissociated, or hypervigilant, is suffering with a nervous system that is in overdrive, already provoked to the highest level’ (Rothschild, *Trauma Essentials*, New York: Norton, 2011, p.15; emphasis added). Thus ‘[r]educing pressure by removing provocation will relieve the nervous system and make mobility, calmness, and clear thinking more possible’ (Ibid)

10 Daniel J. Siegel, *The Developing Mind* (New York: The Guilford Press, 1999); *Mindsight* (New York: Random House, 2009).

11 Julian D. Ford & Christine A. Courtois, ‘Defining and Understanding Complex Trauma and Complex Traumatic Stress Disorders’, Courtois & Ford, ed. *Treating Complex Traumatic Stress Disorders*, p.17.

12 Lewis B. Smedes, *Shame and Grace* (New York: HarperCollins, 1993), p.6.

13 Ford & Courtois, citing Feiring, Taska & Lewis, 2002, ‘Defining and Understanding Complex Trauma...’, p.17.

14 Courtois, Ford & Cloitre, ‘Best Practices in Psychotherapy for Adults’, p.89; also see Preamble.

15 Pat Ogden, Kekuni Minton & Clare Pain, *Trauma and the Body*, p.140 (emphasis added)

16 Diana Fosha, ‘Dyadic Regulation and Experiential Work with Emotion and Relatedness in Trauma and Disorganized Attachment’, Marion F. Solomon & Daniel J. Siegel, ed. *Healing Trauma: attachment, mind, body, and brain*, New York: Norton, 2003), p.229.

- (12) **Recognise the extent to which the above requires *adaptation of, and supplements to, 'traditional' psychotherapeutic approaches (ie insight-based and cognitive-behavioural)***
Research in the neurobiology of attachment establishes the limits, as well as benefits, of 'talk', and the need for active addressing of physical, sensorimotor, and experiential processes as well as cognitions and verbal expression of emotion ('bottom up' and 'top down').¹⁷
- (13) **Phased treatment is the 'gold standard' for therapeutic addressing of complex trauma, where Phase I is *safety/stabilisation*, Phase II *processing* and Phase III *integration*.**
The ability to tolerate emotion (self-soothe; regulate affect) is a primary task of treatment, and accounts for the importance of Phase I. Attempts to 'process' trauma in the absence of ability to self-regulate can precipitate overwhelm and re-traumatisation. 'Processing' of complex trauma is a Stage II task and should not be encouraged in the absence of the foundational self-regulatory work of Phase I. Hence the critical importance of Phase I to therapeutic outcomes – 'Overstatement of the importance of this step is not possible; it is vital if trauma recovery is to be realised.'¹⁸
- (14) **Therapy should be tailored and individualised; 'one size does not fit all'**
'Adapt the therapy to the client rather than expecting the client to adapt to the therapy.'¹⁹
- (15) **Therapists should be culturally competent and sensitive to gender, sexual orientation, ethnicity, age, and dimensions of 'difference'**
Awareness of, and attunement to, the potential impacts of 'difference' in its various forms (age, ethnicity, socio-economic status, and so on) is important for all therapeutic work, including and especially that with complex trauma. To the extent that clients are themselves attuned to therapist ambivalence,²⁰ it is imperative for therapists of complex trauma to be highly attuned to their own responses to perceptions of cultural, gender and other 'differences' in relation to their clients, and to be conversant with some of the valuable resources which can assist in this regard.²¹

17 van der Kolk, 'Foreword', Ogden et al, *Trauma and the Body*, p.xxiv; Fosha, 'Dyadic Regulation and Experiential Work...', pp.229-230 and ch.4 in Part I of this report. Note that of the several foci which 'must' comprise therapy for complex trauma, Courtois, Ford & Cloitre include '[b]odily as well as mental functioning, including both sensorimotor integration and neurochemical and psychophysiological integrity' ('Best Practices in Psychotherapy for Adults', p.90).

18 Babette Rothschild, *Trauma Essentials: The Go-To Guide* (New York: Norton, 2011), p.57.

19 Rothschild, *Trauma Essentials*, p. 15.

20 Recall that what is not spoken and consciously articulated tends to be evoked, embodied and enacted (David J. Wallin, *Attachment in Psychotherapy*, New York: The Guilford Press, 2007).

21 For an excellent discussion of this multifaceted topic, see Laura S. Brown, 'Cultural Competence', ch.8 in Courtois & Ford, ed. *Treating Complex Traumatic Stress Disorders*, pp.166-182.

(16)

Engage in regular professional supervision

‘The intensity and complexity of transference-countertransference dynamics in complex trauma relationships are such that working without clinical consultation, at any level of helper experience, can pose great hazards for both clients and therapists.’²²

(17)

Attend to duration and frequency of sessions

Therapists should recognise that complex trauma treatment is generally longer than for many other presentations, and that while varying significantly according to the client, is ‘rarely...meaningful if completed in less than 10-20 sessions.’²³ If economic or other constraints severely limit the number of available sessions, there are strong grounds to confine therapy to the ‘stabilisation’ (Phase I) stage.²⁴

Therapy is recommended to occur on a once or twice-weekly basis, with sessions ranging between 50 and 75 minutes for individual therapy and between 75 and 120 minutes for group therapy.²⁵ Therapy should not exceed these recommended standards of frequency in the absence of compelling grounds for doing so, or destabilisation and dependence may result.

(18)

Recognise the importance of implementation of boundaries

‘Boundaries are particularly salient with clients who have been subjected to violations, exploitations, and dual relationships.’²⁶ Boundaries should be mutually negotiated, and care should be taken to ensure that the client understands their significance and does not experience them as punitive. Maintenance of boundaries is also important for therapist self-care; while this is always the case it is especially so in the demanding work of complex trauma.

(19)

Engage in collaborative care as appropriate

This entails collaboration not only with the client, but with the other professionals and services (eg prescribing physician) with which they may be in contact.

22 Laura Anne Pearlman & James Caringi, ‘Living and Working Self-Reflectively to Address Vicarious Trauma’, in Courtois & Ford, ed. *Treating Complex Traumatic Stress Disorders*, p.214 (emphasis added).

23 Courtois, Ford & Cloitre, ‘Best Practices in Psychotherapy for Adults’, p.96. Here it should be noted that the pervasiveness and depth of the impacts of complex trauma sometimes require the duration of therapy to be extensive: “For some clients, treatment may last for decades, whether provided continuously or episodically” (Ibid).

24 As recommended by Rothschild, *Trauma Essentials*, p.62.

25 Note the qualification of Courtois, Cloitre & Ford that ‘when multiple modalities are required (ie, group and individual; substance abuse treatment in addition to psychotherapy; couple and/or family work plus individual therapy; partial hospitalization in addition to or instead of individual therapy) more sessions per week are obviously needed’ (‘Best Practices in Psychotherapy for Adults’, pp.96-97).

26 Philip J. Kinsler, Christine Courtois & A. Steven Frankel, ‘Therapeutic Alliance and Risk Management’, Courtois & Ford, ed. *Treating Complex Traumatic Stress Disorders*, p.217.

(20)

Facilitate continuity of care as appropriate

Histories of betrayal and abandonment render complex trauma clients vulnerable to feelings of rejection. The ending of therapy (for whatever reason) is itself a process which represents 'a critical opportunity to support and sustain the client's gains in relational, emotional, and behavioural self-regulation.'²⁷Courtois, Ford & Cloitre note that in the event of client engagement with a new therapist or treatment provider, interventions which encourage a sense of continuity should be integrated into the client's transition process.²⁸

(21)

Diversity of clients means that recovery, too, is diverse

'Therapists must be aware of differences in clients' capacities to engage in therapy and to resolve their symptoms and distress. There are as many degrees of self- and relational impairment as there are of healing capacities and resources, resulting in different degrees and types of resolution and recovery.'²⁹

27 Ibid.

28 Ibid.

29 Courtois, Ford & Cloitre, 'Best Practices in Psychotherapy for Adults', p.98.

Appendix 2: Practice Guidelines for Trauma-Informed Care and Service-Delivery (Organisational) - Excerpt

Part I – Guidelines

Guidelines (Trauma-Informed; Organisational)

Detailed (ie expanded version; supplement to above summary)

SECTION 1: PHILOSOPHY & VISION

(1) Establish service charters of trauma-informed care

Recognising the now considerable research which shows:

- (I) the prevalence of trauma
- (II) the relationship between unresolved childhood trauma and a wide range of health problems, both psychological and physical
- (III) the transgenerational impacts of unresolved trauma
- (IV) the diverse services to which trauma survivors present and the diversity of presentations with which they present
- (V) the extent to which trauma is reproduced by and within mainstream social institutions and services (administrative, educational, legal, medical) *including health services and settings*
- (VI) that experience of mainstream service provision has been re-traumatising for many people with experiences of unresolved trauma

Trauma-informed care (TIC) service charters should be constructed and referenced as sources of guiding principles according to which health services should be designed, developed and delivered.

Such charters should formally acknowledge that unresolved trauma becomes 'a central reality around which profound neurobiological and psychosocial adaptations occur'.¹ They should further acknowledge that services themselves need to adapt to this reality if recovery, rather than re-traumatisation, is to occur.

Service charters of trauma-informed care should also note the comprehensiveness of the service modifications required at informal as well as formal levels. They should stipulate that no aspect of service-delivery (direct or indirect; practice, infrastructural or administrative) should be exempt from requirement to comply with trauma-informed principles.

¹ Roger D. Fallot & Maxine Harris, 'Creating Cultures of Trauma-Informed Care (CCTIC): A Self-Assessment and Planning Protocol' (Washington, DC: Community Connections, 2009), p.1.

- (2) **Articulate and enshrine explicit commitment to service which is recovery oriented and which is predicated on five foundational principles of TIC: ie 'safety', 'trustworthiness', 'choice', 'collaboration' and 'empowerment'²**

Explicitly acknowledge in the service charter the extent to which translation of these principles into practice requires major shifts from the 'pre trauma-informed' era of service delivery. This will require:

- (a) *a shift from 'caretaking' to 'collaborative' ways of working*
- (b) *movement from an illness/symptom-based model to one of skills acquisition ('strengths-based')*
- (c) *replacement of the question 'What's wrong with you?' with 'What happened to you?'*³

Explicitly note within the charter that :

*'Without such a shift in both perspective and practice, the dictum to 'Do no harm' is compromised, recipients of mental health services are hurt and re-traumatised, recovery and healing are prevented, and the transformation of mental health care... will remain a vision with no substance in reality.'*⁴

-
- (3) **Promote as fundamental to health and mental health an understanding of the impacts of trauma, and promote care coordination across service systems**

*Also promote reduction and elimination of disparities in system functioning within, and as far as possible, between collaborating services.*⁵

2 Fallot & Harris, *Ibid*, p.3.

3 Ann Jennings, 'Models for Developing Trauma-Informed Behavioral Health Systems and Trauma-Specific Services', Report produced by the National Association of State Mental Health Program Directors (NASMHPD) and the National Technical Assistance Center for State Mental Health Planning (NTAC) United States, 2004, p.60.

4 *Ibid*

5 Jennings, 'Trauma-Informed Services...', pp.60 & 62.

(4) Commit to consumer participation at all levels as a defining characteristic of trauma recovery

This involves respect for and attentiveness to the lived experience of clients, and ongoing compliance with the five principles of TIC as noted in Point 2.

(5) Commit to all forms of diversity as foundational to trauma-informed systems of care

This means respect for, and attunement to, issues pertaining to gender, ethnicity, sexual orientation, socio-economic status, age and disability ('Cultural issues regarding trauma should be addressed for all populations, including refugees, racial and ethnic minorities, and rural populations').⁶

(6) Incorporate a message of optimism and hope into all interactions between service-providers and clients⁷

Feedback from adult survivors of child abuse suggests that a sense of optimism regarding the process of recovery is far from common within many areas of existing service provision (this is when childhood trauma is recognised at all).⁸ Indeed, the experience of many survivors is that an opposite message is conveyed. This is not only a harmful message to transmit, but in light of the now solid research findings to the contrary, an illegitimate one. Resolution of trauma, including of adverse childhood experiences, is now shown to be possible, and best-practice trauma-informed care should consistently convey this message in all respects and at all levels.⁹

⁶ Jennings, 'Trauma-Informed Services...', p.66.

⁷ As is consistent with research findings that insecure attachment can be converted to secure attachment, and that longstanding childhood trauma – not just 'single-incident' trauma – can be resolved. See Daniel J. Siegel, 'An Interpersonal Neurobiology of Psychotherapy: The Developing Mind and the Resolution of Trauma', Siegel & Solomon, ed. *Healing Trauma: attachment, mind, body, and brain* (New York: Norton, 2003), p.16.

⁸ 'Every day ASCA receives calls from child abuse survivors who feel they have been failed by the system and don't know where to turn... Every day consumers call recounting how they have been let down by one arm of the health system or another, by an agency, a worker or a practitioner. By a GP who was uninformed, who didn't inquire about trauma, despite symptoms which were highly suggestive. By a worker who didn't know how to respond to a disclosure, a counsellor, psychologist or psychiatrist they felt had minimized or dismissed their feelings and experiences rather than listening empathically and validating them' <http://cathykezelman.com/trauma-informed-care/359/>

⁹ 'Today we have the clinical tools to repair deeply embedded and disrupted neural networks. We are living in an age in which an interpersonal neurobiology is becoming a reality' (Robert J. Neborsky, 'A Clinical Model for the Comprehensive Treatment of Trauma Using an Affect Experiencing-Attachment Theory Approach', Siegel & Solomon, *Healing Trauma*, p.319). While relating most obviously to clinical (ie trauma-specific) work, awareness of the potential for healing should also underlie best practice for service provision which is trauma-informed (i.e. so that recognition, appropriate engagement and potential referral can be made).

SECTION 2: MAPPING TO PRACTICE

In implementing the philosophy and vision of trauma-informed care (Section I) it should be noted that:

- *'whatever affects a component of the mental health system will reverberate throughout the rest of the human service delivery system because of the interrelated nature of human problems and efforts to resolve those problems.'*¹⁰
- *'Both administrative and clinical experience suggests that attributes of the system 'as a whole' have a very significant impact on the implementation and potentially the effectiveness of any services offered.'*¹¹

While noting some potential areas of overlap, the following guidelines for translation of trauma-informed principles to practice distinguish between (A) SYSTEM LEVEL and (B) SERVICE LEVEL.¹²

(A) SYSTEM LEVEL

(1) ***Promote collaboration and coordination across systems of care which serve people with trauma histories, and include a life-span perspective***¹³

- *'Because abuse trauma may result in multiple vulnerabilities and affect many aspects of a survivor's life, coordination across systems is essential. **Integration of trauma, mental health and substance abuse is absolutely critical.**'*¹⁴
- Collaboration across systems should include 'the full range of human services'¹⁵ (ie health, social services, education and criminal justice systems).

10 Sandra L. Bloom & Brian Farragher, *Destroying Sanctuary: The Crisis in Human Service Delivery Systems* (New York: Oxford University Press, 2011), p.39.

11 Fallot & Harris, 'Creating Cultures of Trauma-Informed Care', p.5.

12 In this they follow the orientation of Fallot & Harris, 'Creating Cultures of Trauma-Informed Care'

13 (Slightly reworked) Pt 7 under the heading 'Administrative Policies/Guidelines Regarding the System', in 'Appendix: Criteria for Building a Trauma-Informed Mental Health Service System', Jennings, 'Models for Developing Trauma-Informed Behavioral Health Systems...'; p.66.

14 Ibid (emphasis added)

15 Ibid.

16 | Adults Surviving Child Abuse (ASCA) www.asca.org.au

(2) Policy and procedure

- Systematically revise all policies and procedures to accord with the principles of trauma-informed care
- Develop and implement mechanisms for compliance with, and quality assurance of, TIC principles
- Hiring of new staff should include interview questions about existing knowledge of trauma (eg. 'What do you know about child abuse and its potentially long-term impacts? What do you know about different types of trauma?')¹⁶
- All policies should respect culture, gender, ethnicity, age, disability and socio-economic status (see Pt 7)

(3) Facilitate involvement of consumers in the systems which serve them, and articulate and uphold trauma-informed rights¹⁷

- 'The voice and participation of consumers, including those who identify themselves as trauma survivors, **should be at the core of all systems activities** – from policy and financing to training and services.'¹⁸
- 'Consumers with trauma histories should be significantly involved and play a lead role in the creation of State Mental Health Plans,¹⁹ the improvement of access and accountability for mental health services, and in orienting the mental health system toward trauma and recovery.'²⁰
- 'Special attention should... be paid to the rights of people with trauma histories (eg, right to trauma treatment, freedom from re-traumatisation) and to the ways in which these rights may be systematically violated.'²¹

Institute supportive practice to enable consumers to engage in all governance matters

16 Adapted from Fallot & Harris, 'Creating Cultures of Trauma-Informed Care, p.17.

17 (Slightly reworked) Pt 5 (ibid) and as per Pt 4 of Section I ('Philosophy and Vision') of these (ASCA) guidelines.

18 Ibid (emphasis added)

19 While the points under this heading are addressed to the context of the United States, their pertinence and applicability to the Australian context should likewise be noted.

20 Jennings, 'Models for Developing Trauma-Informed Behavioral Health Systems...'; p.66.

21 Ibid (emphasis added)

(4) **Education & training**

- Review education and training to incorporate trauma-informed principles. Education in TIC principles and practice should be an organisational requirement for all employees, volunteers, board members and stake-holders ('bottom up' as well as 'top down')
- 'Trauma sensitivity' should comprise ongoing criteria according to which individual and collective performance are assessed ('[It is] the shared responsibility of staff and administrators to become 'trauma sensitive' to the ways in which past and present overwhelming experiences impact individual performance, leadership styles, and group performance')²²
- All staff (ie including administrative and casual) should receive basic training about trauma and its impact 'with a primary goal of sensitization to trauma-related dynamics and avoidance of retraumatization.'²³
- *All staff should receive basic education in the maintenance of personal and professional boundaries which are also trauma-informed. This should include not only 'standard' training regarding confidentiality, dual relationships, and respect for client diversity, but **respect for diverse coping mechanisms and education in respectful engagement and sensitivity regarding all interactions, including the mundane, with all clients and at all times.** Such education should include cultural competence and gender-sensitivity, sensitivity to sexual orientation, ethnicity, socioeconomic status, age and disability*
- *All staff should understand the relationship between their own awareness, conduct and self-care and the implications for their interactions with clients. This includes understanding of the concept of vicarious traumatization, and the relationship between risk management and ethical conduct ('**a program cannot be safe for clients unless it is simultaneously safe for staff and administrators**').²⁴ Staff should be supported in their work in terms of ongoing access to mechanisms by which issues can be raised, and all clinical staff should receive regular (at least monthly) professional supervision*
- Staff should include identified persons who prioritise translation of trauma-informed principles to the various programs of service-delivery, and with whom workers can consult on an ongoing basis about issues which arise in this process.
- Ongoing education about TIC principles and practice should be central to the service culture, and to all upskilling and professional development

22 Bloom, 'Organizational Stress as a Barrier to Trauma-Sensitive Change and System Transformation', p.2.

23 Falloot & Harris, 'Creating Cultures of Trauma-Informed Care', p.16.

24 Bloom, 'Organizational Stress as a Barrier to Trauma-Sensitive Change and System Transformation', Alexandria, VA: National Technical Assistance Centre, 2006, p.2 (emphasis added) nasmhpd.org

(5) Identify and review funding requirements

Development, administration, maintenance, and quality assurance of TIC service-delivery means that funding cannot be regarded as a discrete category. Yet because of its enabling function in most areas, funding requires specific comment. The impact of research and data gathering should be part of infrastructure funding. The cost-effectiveness of implementation of trauma-informed principles should also be part of budgetary assessment.

While clearly necessary, it can be argued that 'new funds are not necessarily critical to development of a trauma-informed system'²⁵ To the extent that cultural and attitudinal change are independent of financial considerations (and even small attitudinal shifts can have disproportionate effects) it would be wrong to reduce calls for trauma-informed care to the status of 'a funding drive'. But at the same time, the need for funds to operationalise the envisaged changes in service cultures cannot be minimised ('[a]ttention to reimbursement and funding issues is key to a successful change strategy').²⁶

(6) Promote education in trauma, especially differences between single-incident (PTSD) and complex trauma, via links with universities, colleges and training organizations

- In light of the need for coordination across a wide spectrum of systems (see Pt 1) intersectoral collaboration between service-providers should also extend to links with institutions of learning and professional training institutes within and outside of the health and mental health systems. These should include research links where appropriate.
- 'Formal, ongoing efforts should be made to collaborate with institutions of higher education to create new trauma-based curriculum, revise existing curricula, ensure the teaching of evidence-based and emerging best practices in trauma, include consumer/survivors as trainers, and incorporate trauma and violence as a core part of the training of all future... health care workers in all disciplines.'²⁷

25 Jennings, 'Models for Developing Trauma-Informed Behavioral Health Systems and Trauma-Specific Services', p.67.

26 Ibid. In highlighting the need 'to find necessary sources of funding', Harris and Fallot also note that 'this sometimes requires going outside the usual funding mechanisms in a creative way' ('Creating Trauma-Informed Services', p.15).

27 From Pt 4, 'Administrative Policies/Guidelines Regarding the System', p.66.

(7) Respect culture, ethnicity, gender, age, sexual orientation, disability, and socio-economic status²⁸

- In relation to complex trauma, the stakes of attending to 'difference' are high. Research in evolutionary biology and psychology shows that we are 'wired' to notice difference in others whether this is consciously acknowledged or not.²⁹ Sensitisation to how bias affects and is registered by others is thus of major importance in the context of trauma, where limbic system responses are also on high alert. The implications of this for 'dealing with difference' should be addressed in all TIC training material.³⁰
- Some Australian service-providers are attuned to the significance of gender and cultural 'difference' in the context of trauma-informed care.³¹ But such sensitivity remains to be extended and developed systematically on a wide scale

28 Pt 6, Ibid, and as per Pt 3 of these [ASCA] guidelines and Pt 5 of Part A 'Philosophy and Vision' (Ibid)

29 Laura S. Brown, 'Cultural Competence', ch.8 in Courtois & Ford, ed. *Treating Complex Traumatic Stress Disorders: An Evidence-Based Guide*, pp.171-172.

30 The previously cited chapter by Laura Brown (Ibid, pp.166-182) provides a valuable orientation to this topic.

31 See, for example, 'Service Guidelines on Gender Sensitivity and Safety: Promoting a Holistic Approach to Wellbeing'(Department of Health, Victoria, 2011). For early and broad consideration of different gendered responses to child abuse, see Briere, *Child Abuse Trauma*, pp.155-158

(B) SERVICE LEVEL

The protocol for trauma-Informed services developed by FalLOT and Harris³² provides organisational guidelines both to assess current work practices and track progress in implementation of trauma-informed service provision. Emphasis is on creation of the cultural change within organisations which needs to take place if trauma-informed service-provision is to occur. An advantage of this 'Self-Assessment and Planning Protocol' is that **self-monitoring can be 'built into the change process'**³³ (thus simultaneously addressing quality assurance).

The five core principles of trauma-informed care (ie **safety, trustworthiness, choice, collaboration and empowerment**, see Pt 2, Section 1, 'Philosophy and Vision') are also elaborated in the assessment and planning protocol developed by FalLOT & Harris. 'Creating Cultures of Trauma-Informed Care (CCTIC): A Self-Assessment and Planning Protocol' is helpful in suggesting how these principles might be implemented in the context of service provision. In this protocol, each of the five principles is applied to a specific 'domain', and key questions are proposed to assist organisations to review the extent to which objectives of service-provision are being met.

The following four steps are drawn from the first part of this protocol.³⁴ In 'mapping to practice' the core principles of trauma-informed care, the initial part of the first of the domains³⁵ discussed by FalLOT and Harris is reproduced in slightly abbreviated form.

Step One: Identify Key Formal and Informal Activities and Settings

These can include:

- (a) listing the sequence of service **activities** in which clients are involved
- (b) identification of **staff members** who have contact with consumers at each point in this process
- (c) identification of **settings** in which the range of activities takes place (reception, waiting room, telephone, office, etc).³⁶

32 FalLOT & Harris, 'Creating Cultures of Trauma-Informed Care (CCTIC): A Self-Assessment and Planning Protocol' (Washington, DC: Community Connections, 2009), pp.1-19. <http://www.annafoundation.org/CCTICSELFASSPP.pdf> Note the qualification that this protocol relates to 'a specific understanding of trauma-informed services' (Ibid) and that other interpretations are also possible.

33 Ibid.

34 The protocol of Harris & FalLOT is comprehensive, and relates to both systems and service levels. While extensively referenced in the following comments, it is selectively drawn upon with a view to extraction of some of the key measures suggested.

35 Ie Domain 1, A-E which relate the core principles of TICP as they apply to consumers. Note that sections IF-IJ map these same principles as they apply to staff.

36 FalLOT & Harris, 'Creating Cultures of Trauma-Informed Care', p.6.

Step Two: Ask Key Questions about Each of the Activities and Settings

How do they currently operate and how might they operate differently according to principles which are trauma-informed?

Step Three: Prioritise Goals for Change

Following review of services and development of potential trauma-informed changes, issues to consider when prioritising could include:

- (1) **feasibility** (which goals are most likely to be accomplished in light of their scale and the type of change involved?)
 - (2) **resources** (which goals are most consistent with the financial, personal and other available resources?)
 - (3) **system support** (which goals have the most influential and widespread support?)
 - (4) **breadth of impact** (which goals are most likely to have a broad impact on services?)
 - (5) **quality of impact** (which goals will make the most difference in the lives of consumers?)
 - (6) **risks and costs of not changing** (which practices, if not changed, will have the most negative impact, and according to what criteria?)³⁷
-

Step Four: Identify Specific Objectives and Responsible Persons

Following prioritisation of goals, specific objectives (along with measurable outcomes and timelines for their achievement) can be articulated. Persons responsible for implementation and monitoring of the corresponding tasks can also be nominated.³⁸

³⁷ Ibid.

³⁸ Fallot & Harris, 'Creating Cultures of Trauma-Informed Care', pp.6-7.