

## SUBMISSION

to The Royal Commission into the Prevention and Detention of Children in the NT  
by Professor Leonie Segal, Chair Health Economics & Social Policy,  
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25<sup>th</sup> May 2017

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### CREDENTIALS – SOURCE OF FINDINGS AND CONCLUSIONS

My comments reflect an 11 year research program that I have developed and conducted with a small team of researchers and PhD students focused on Child Maltreatment. This represents a most substantial body of work on the causes and consequences of child maltreatment and how maltreatment and harms can be prevented. This knowledge and expertise was recognised in an invitation by NSW Treasury to contribute to a NSW Interagency Taskforce to address child maltreatment, an invited presentation and funded contributions to the Queensland Inquiry into their child protection system, summons to provide evidence to the SA and Victorian Inquiries into their child protection systems.

Relevant research includes the following:

1. ***What is effective in reducing child maltreatment and out-of-home care (OHC) placement***  
Collation and reinterpretation of evidence regarding what is effective in reducing the incidence of child maltreatment and associated harms, based on reviews of infant home visiting ([Segal et al 2012](#)), early childhood education ([Dalziel et al 2015](#)), mental health and family support programs ([App F, Segal et al 2013](#)).
2. ***What is Cost – Effective in addressing child maltreatment and harms*** – Estimating cost per case of child maltreatment prevented or OHC avoided; across infant home visiting, early childhood, family support and mental health programs. Also determining the relative efficiency of more targeted (high risk) vs population-level approaches ([App F, Segal et al 2013, Dalziel & Segal 2011; Gospodarevskaya & Segal 2011](#)).
3. ***Evaluation/economic evaluation of Australian interventions to address child abuse & neglect:***
  - ***PPACT*** – a trauma focused psychotherapy working with mothers and children in highly distressing relationships involving intergenerational patterns of child maltreatment ([Furber et al 2016](#))
  - ***PUP*** parents under pressure - an attachment based parenting program for highly vulnerable parents, including substance using parents and incarcerated ([Dalziel et al 2015](#))
  - ***HOF***: preliminary evaluation of the Queensland Helping out Families initiative to create an alternate response to child protection notifications ([App E, Nguyen & Segal 2013](#)).
4. ***Evaluation of family-based interventions for Aboriginal Australians to prevent child abuse and neglect or to prevent placement in out-of-home care***
  - Intensive family support services, delivered by Central Australian Aboriginal Congress in Alice Springs (Segal & Nguyen 2014)
  - Infant home visiting, delivered by central Australian Aboriginal Congress in Alice Springs (Nguyen et al 2017 submitted)
  - Description of complexity in Aboriginal families
  - Inspir=Ed nature-based parenting program – developed for vulnerable populations, including Aboriginal children – a focus on mechanisms of action ([Hanckel & Segal 2016](#)).

### **5. Causes and consequences of child abuse and neglect**

- Family based adversities and development of profound psychological distress in children and numbers at risk ([Guy et al 2016](#); Segal et al 2017a in press)
- Family based adversities and development of profound psychological distress in Indigenous children (Twizeyemariya et al, in press)
- Predictors of child maltreatment and economic causes and consequences of child maltreatment drawing on the Australian Temperament Project (ATP) ([Doidge et al 2016a](#), [Doidge et al 2016b](#)).

### **6. Justice involved mothers and child maltreatment** – using linked WA data

- Impact of maternal incarceration on likelihood of child protection involvement and placement in out-of-home care for the child, for Indigenous and non-Indigenous women ([Dowell et al 2017a](#), Dowell 2017b)

### **7. Prison as an opportunity for changing outcomes for mothers and their children**

- using WA linked data - in progress (Myers et al 2017, submitted).

### **8. Methodological studies**

- Methods in understanding child maltreatment data ([Doidge et al 2016](#)).

### **9. Understanding the mechanisms of intergenerational transmission of maltreatment** ([Amos, Furber, Segal 2011](#); [Amos, Segal, Cantor 2015](#); Amos PhD thesis 2017).

- Why do mothers (and fathers) maltreat their own children; drawing on attachment theory, evolutionary theory, trauma theory?
- What are the clinical implications – what are the clinical goals for disrupting the intergenerational cycle?
- What does it mean for the necessary service system response? (Segal and Furber 2017).

### **10. Interface between psychological distress and adversity**

- To what extent do psychological distress and adversity co-occur in Australian children and Indigenous children, drawing on the longitudinal study of Australia children (LSAC), and the longitudinal study of indigenous children (LSIC). This study is in effect a test of the Developmental Origins conceptualisation of psychological distress/poor mental health. ([Guy et al 2016](#), Segal et al 2017a in press, Twizeyemariya et al in press).

### **11. A needs-based Service & Workforce model to address infant, child & adolescent mental health.**

- Estimating the service and workforce required to address current levels of trauma and associated psychological distress in parents (to be), infants, children and adolescents to disrupt intergenerational cycles of maltreatment and domestic violence (Furber and Segal 2017, Segal et al 2017a in press).
- Knowing the workforce required to address trauma in infancy, childhood and adolescence is the best chance of disrupting cycles of abuse and neglect. This is the first time the needs based child and adolescent mental health workforce has been determined, internationally.

### **12. Economics of child protection**

- Exploring the complex relationship between child abuse and neglect and engagement with the child protection system ([Segal 2015](#)).

### **13. Justice-involved Aboriginal youth**

- An analysis of systems issues: highlighting the extreme challenges for adolescents and youth with intellectual impairment and/or poor mental health ([Krieg et al 2016](#)).

**Selected Research Outputs, Health Economics & Social Policy Research Group**

1. Amos J, Furber G, Segal L 2011, 'Understanding maltreating mothers: a synthesis of relational trauma, attachment disorganization, structural dissociation of the personality and experiential avoidance', *Journal of Trauma and Dissociation*, 2011;12(5):495-509, doi: 10.1080/15299732.2011.593259.
2. Amos J, Segal L, Cantor C 2015, 'Entrapped mother, entrapped child: agonistic mode, hierarchy and appeasement in intergenerational abuse and neglect', *Journal of Child and Family Studies*, 2015;24(5):1442-1450, doi: 10.1007/s10826-014-9950-3.
3. Amos J 2017, *When wounds from infancy collide: The mother child relationship as trauma, trigger, and treatment*, PhD thesis, May 2017, University of South Australia.
4. Dalziel K, Halliday D, Segal L 2015, 'Assessment of the cost-benefit literature on early childhood education for vulnerable children: What the findings mean for policy', *SAGE Open*, 2015;5(1), doi: 10.1177/2158244015571637
5. Dalziel K, Dawe S, Harnett PH, Segal L, 'Cost-effectiveness evaluation of the Parents Under Pressure Programme for methadone-maintained parents', *Child Abuse Review*, 2016;24(5):317-331, doi: 10.1002/car.2371.
6. Doidge JC, Delfabbro P, Higgins DJ, Edwards B, Toumbourou JW, Vassallo S, Segal L 2016a, 'Risk factors for child maltreatment in an Australian population-based birth cohort', *Child Abuse & Neglect* 2016;64:147-160, doi: 10.1016/j.chiabu.2016.12.002.
7. Doidge JC, Delfabbro P, Higgins DJ, Segal L 2016b, 'Economic predictors of child maltreatment in an Australian population-based birth cohort', *Children and Youth Services Review (special edition)*, 2016;72:14-25, doi: 10.1016/j.childyouth.2016.10.012.
8. Doidge J, 'Responsiveness-informed multiple imputation and inverse probability-weighting in cohort studies with missing data that are non-monotone or not missing at random', *Statistical Methods in Medical Research*, doi: 10.1177/0962280216628902, published online 16 March 2016.
9. Dowell C, Preen D, Segal L, 2017a 'Quantifying maternal incarceration: a whole-population linked data study of Western Australian children born 1985-2011', *Australian & New Zealand Journal of Public Health*, 2017;41(2):151-157, doi:10.1111/1753-6405.12613.
10. Dowell C, Mejia G, Preen D, Segal L 2017b. 'Infant children of Western Australian women prisoners: maternal incarceration, child protection, and infant mortality', to be submitted to *Health & Justice*, June 2017
11. Furber G, Leach M, Guy S, Segal L 2016, 'Developing a broad categorisation scheme to describe risk factors for mental illness, for use in prevention policy and planning', *Australian and New Zealand Journal of Psychiatry*, 2016;51(3):230-240 doi: 10.1177/0004867416642844
12. Furber G and Segal L 2017, 'A needs-based child and adolescent Mental Health workforce' Symposium presentation, *Addressing child & adolescent mental health: The key to disrupting intergenerational disadvantage*, Adelaide, 23 March 2017.
13. Gospodarevskaya E, Segal L 2012, 'Cost-utility analysis of different treatments for post-traumatic stress disorder in sexually abused children', *Child and Adolescent Psychiatry and Mental Health* 2012;6:15, doi: 10.1186/1753-2000-6-15.
14. Guy S, Furber G, Leach M, Segal L 2016, 'How many children in Australia are at risk of adult mental illness?', *Australian and New Zealand Journal of Psychiatry*, 2016;50(12):1146-1160 doi: 10.1177/0004867416640098.
15. Hanckel J and Segal L 2016, 'The Inspi=Ed Project, a holistic early childhood project for enhancing parent-child well-being', *Childhood Education* 2016;92(1):10-21, doi: 10.1080/00094056.2016.1134236.

16. Krieg A, Guthrie J, Levy M, Segal L 2016, 'Good kid, mad system: The role for health in reforming justice for vulnerable communities', *Medical Journal of Australia*, 2016;204(5):177-179, doi: 10.5694/mja15.00917.
17. Myers H, Segal L, Lopez D, Li I, Preen D, 'Impact of family-friendly prison policies on outcomes for incarcerated mothers and their dependent children: a cohort study protocol' submitted to BMJ Open February 2017.
18. Nguyen H, Segal L 2013, 'A preliminary cost effectiveness analysis of the Queensland Helping out Families initiative, a report to the Queensland Child Protection Inquiry', report in Appendix E to *Taking Responsibility: a roadmap for Queensland Child Protection*, report by Queensland Child Protection Commission of Inquiry, 28 June 2013
19. Nguyen H, Zarnowiecki D, Boffa J, Gent D, Silver B, Segal L; 2017, Successful implementation of the Australian Nurse-Family Partnership Program in an Aboriginal community in Central Australia, submitted to *Prevention Research*, May 2017
20. Segal L, Dalziel K, Papandrea K 2013, 'Where to invest to reduce child maltreatment – a decision framework and evidence from the international literature', report as Appendix F to *Taking Responsibility: a roadmap for Queensland Child Protection*, report by Queensland Child Protection Commission of Inquiry, 2013;pp 619-641.
21. Segal L and Dalziel K 2011, 'Investing to protect our children: Using economics to derive an evidence-based strategy', *Child Abuse Review* 2011;20(4):274-289, doi: 10.1002/car.1192.
22. Segal L, Opie RS, Dalziel K 2012, 'Theory! The missing link in understanding the performance of neonate/ infant home visiting programs for the prevention of child maltreatment: A systematic review', *Milbank Quarterly* 2012;90(1):47-106.
23. Segal L, Nguyen H 2014, 'Final Report: Evaluation of the Intensive Family Support Services (IFSS) implemented by Central Australian Aboriginal Congress Aboriginal Cooperation', report to Central Australian Aboriginal Congress Aboriginal Cooperation, 26 August 2014
24. Segal L, Guy S, Furber G 2017a, 'What is the current level of mental health service delivery and expenditure on infants, children, adolescents, and young people in Australia?' *Australia and New Zealand Journal of Psychiatry*, 2017a, in press
25. Segal L and Furber G 2017b, 'How many children need mental health services' Symposium presentation *Addressing child and adolescent mental health: The key to disrupting intergenerational disadvantage*, Adelaide, 23 March 2017b.
26. Segal L, Amos J, Swift G, McEvoy P, 2017c, 'Round and round the mulberry bush no more, disrupting intergenerational transmission of mental illness' Australia & NZ College of Psychiatry, National Conference, Adelaide, May 2017c
27. Segal L 2015, 'Economic issues in the community response to child maltreatment', in: *Mandatory reporting laws and the identification of severe child abuse and neglect*, Child Maltreatment: Contemporary Issues in Research and Policy, Volume 4, Chapter 10, pp 193-216, B Mathews & D Bross (eds), Springer: New York, March 2015
28. Twizeyemariya A, Guy S, Furber G, Segal L 2017, 'Risks for mental illness in Indigenous Australian Children: a descriptive study demonstrating high levels of vulnerability', MS#16-111 in press *Milbank Quarterly* 8 February 2017

## A KEY FINDINGS FROM THIS RESEARCH

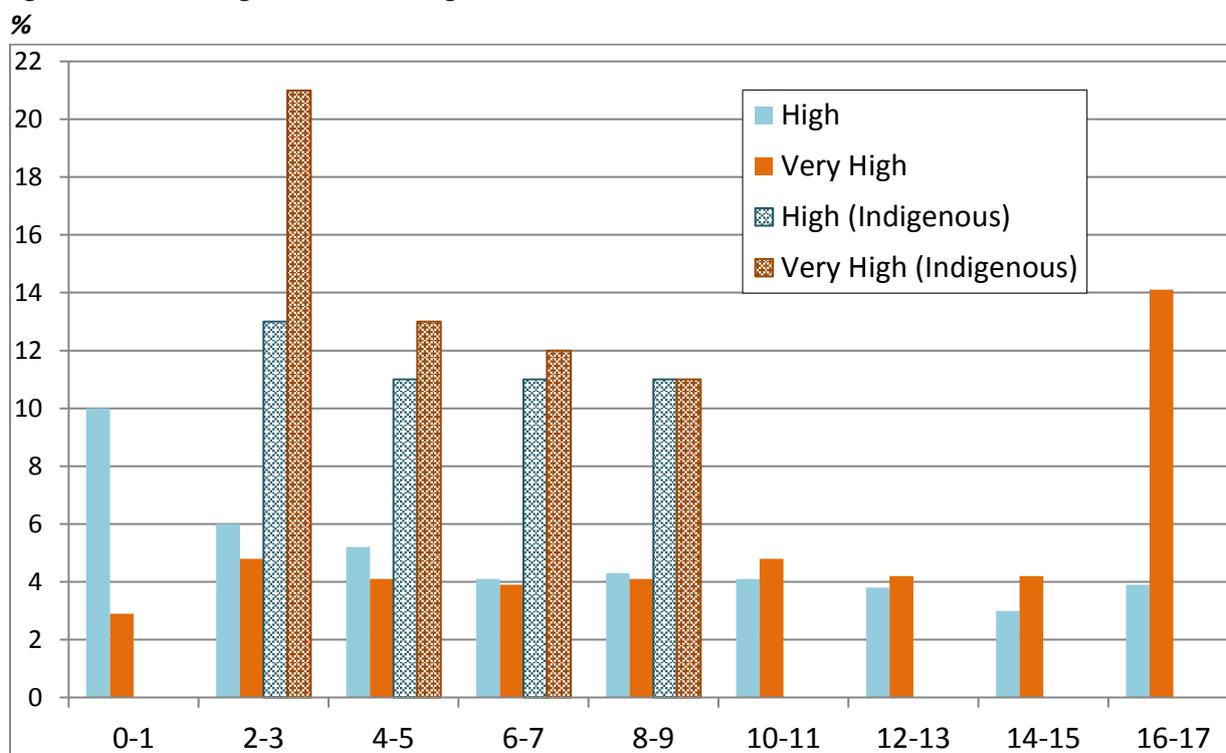
### 1 Early life trauma and psychological distress act as cause and consequence of child maltreatment and incarceration.

It is only by understanding the mechanisms of intergenerational transmission of child maltreatment and the links between early childhood trauma and accumulation of harms - including incarceration - that we can determine the best way of intervening to disrupt these destructive cycles.

#### 1.1 High levels of psychological distress in Australian children and adolescents from infancy

Drawing on high quality data from the Longitudinal Study of Australian children (LSAC) and the Longitudinal Study of Indigenous Children (LSIC), also known as footprints in time and the ABS, Young Minds Matter Survey (YMM), it is clear that high levels of psychological distress are present in Australian children from infancy and across childhood and adolescence. Levels of distress are based on responses to the Strength and Difficulties Questionnaire (SDQ) for ages 4 to <16 years, for ages 16 to <18 years the Diagnostic interview, for toddlers the Brief Infant, Toddler Social and Emotional scale (BITSEA) and for babies/infants measure of parental distress. Young people aged 16 to <18 years who had attempted suicide in the last 12 months or had 3+ episodes of self-harm were included in the prevalence estimates of very high distress. From infancy through to age 15, we find around 4% of children experiencing high levels of distress and a similar number experiencing very high distress levels. By mid-late adolescence prevalence rates of very high psychological distress are considerably greater at 14% of persons aged 16 to <18 years. Across the 2 to 10 year age groups for which we have data on Indigenous children, we find rates of psychological distress are considerably greater than for the general Australian sample. See Figure 1.

**Figure 1 High and Very High Psychological distress Annual Prevalence in Australian Children infancy to age <18, and in Indigenous children aged 2 to <10.**



Source Analysis of LSAC, LSIC, YMM, by Segal, Guy, Furber, Twizeyemariya

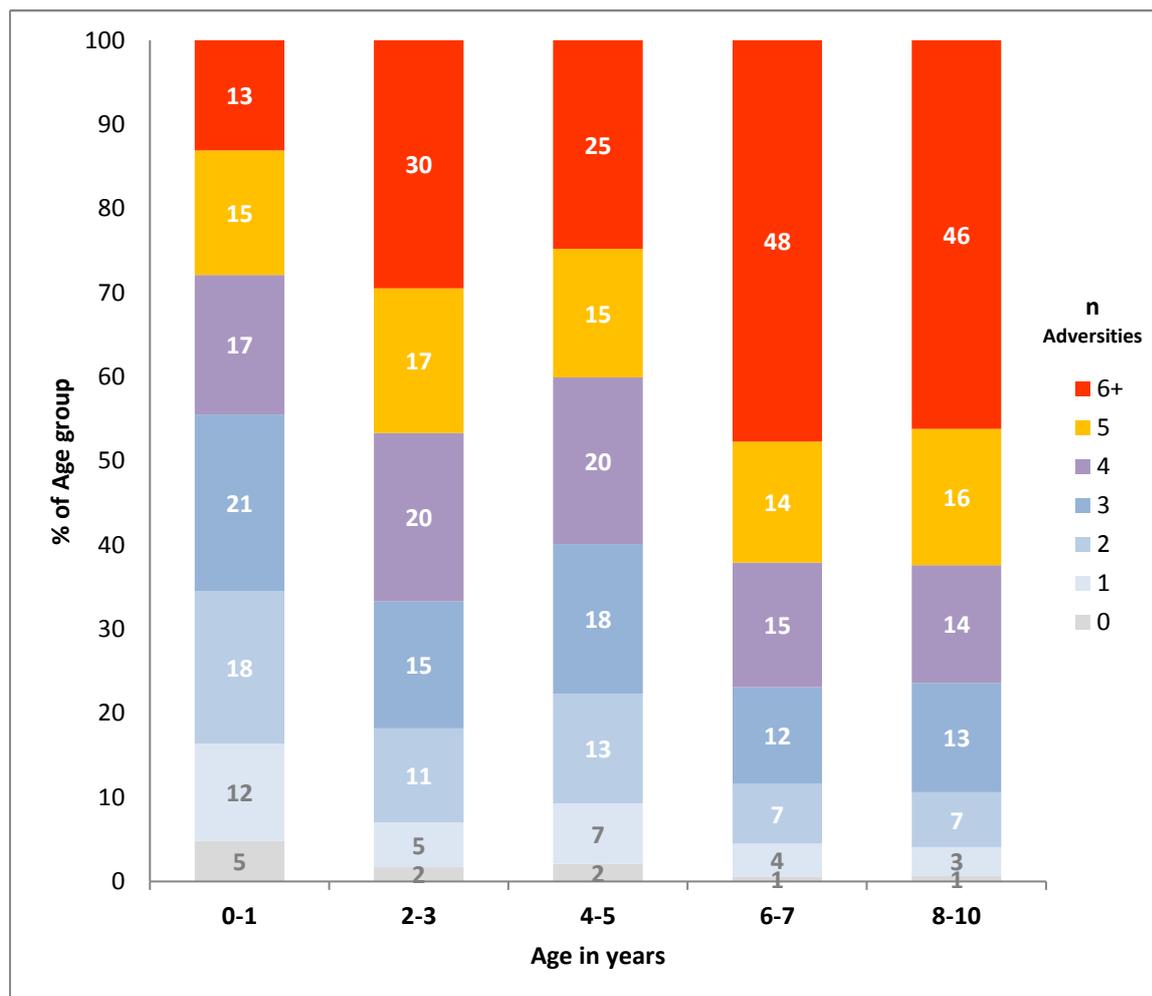
### 1.2 Indigenous children face High levels of adversity

From LSIC we estimated the adversities faced by children in the previous 12 months - including domestic violence, separated families, parental mental illness, drug and alcohol dependence, financial distress, experience of racism, death of family member, incarceration of family member. We found that the trauma load carried by indigenous children is immense (see Figure 3), with for example over 45% of children aged between 6 and 10 exposed to 6+ serious adversities in the previous 12 months. And this tally does not include all possible trauma a child is exposed to. It does not for example take account of the legacy of historic trauma of colonisation and dispossession.

Given the extreme rates of adversity faced by Indigenous children from early in life, levels of psychological distress are perhaps less than might be expected, suggesting considerable resilience.

*Many Indigenous children are exposed to very high levels of early life adversity, including child abuse and neglect, resulting in serious Psychological distress a predictor of poor social, economic and health outcomes.*

**Figure 2. Percent Indigenous children experiencing 0 to 6+ serious adversities in previous**

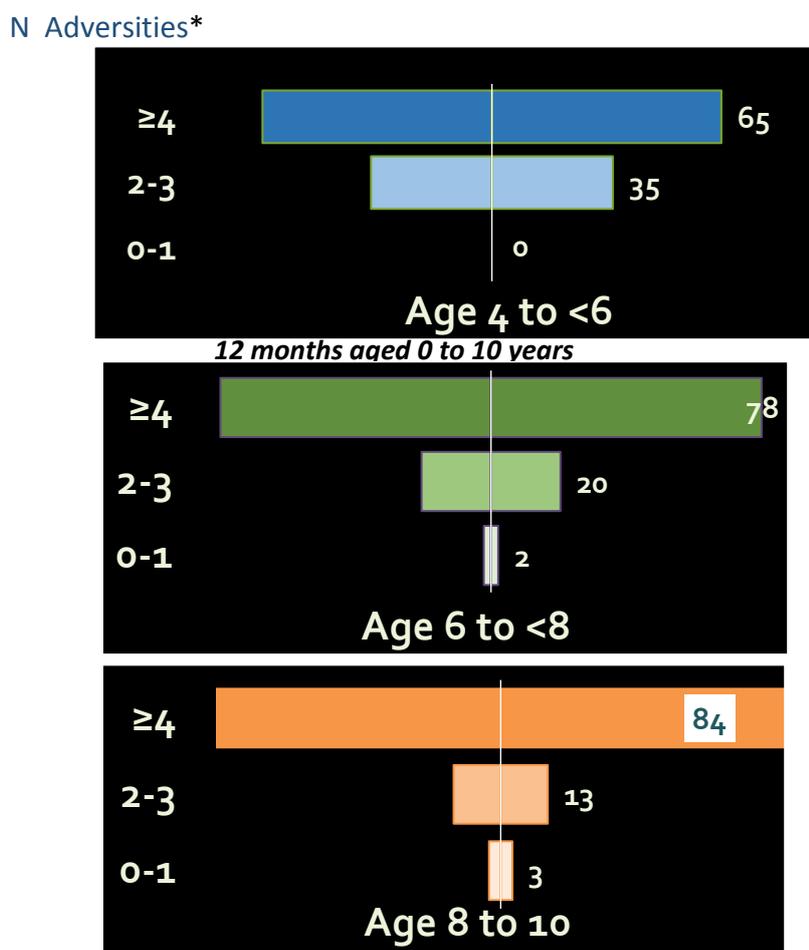


**1.3 Child maltreatment and other childhood family-based adversities as the primary cause of high levels of psychological distress in young people**

It is now established that psychological distress is primarily a consequence of early life trauma; a conceptualisation known as the ‘developmental origins’ of childhood distress/mental illness (e.g. Shonkoff et al 2011, Seigel et al 1980). It is based on well-described mechanisms of the toxic effect of childhood trauma (especially child abuse and neglect) on the developing brain and is supported by empirical research (eg the Adverse Childhood Experiences study, Felitti et al (1998), also Doidge et al 2016a, 2016b). Family-based trauma of child physical, sexual and emotional abuse, witnessing domestic violence, all forms of neglect, separated families, financial distress, incarceration etc. are the primary source of early life trauma.

Drawing on LSAC and LSIC data we explored the relationship between high levels of psychological distress and childhood adversities. We find that psychological distress is almost always associated with very high levels of multiple adversity (Twizeyemariya et al 2017, Segal et al 2017). See Figure 2. In Indigenous families, where we find exposure to multiple adversities, including child maltreatment, is extreme, this is almost certainly driving high rates of psychological distress in children as shown in Figure 1. We find that by age 8 to 10, almost all Indigenous children experiencing very high psychological distress have experienced 4+ serious adversities in the previous 12 months (just 3% had experienced no identified adversities).

**Figure 3 Indigenous children aged 4 to 10, experiencing very high psychological distress, prevalence by number of current adversities.**



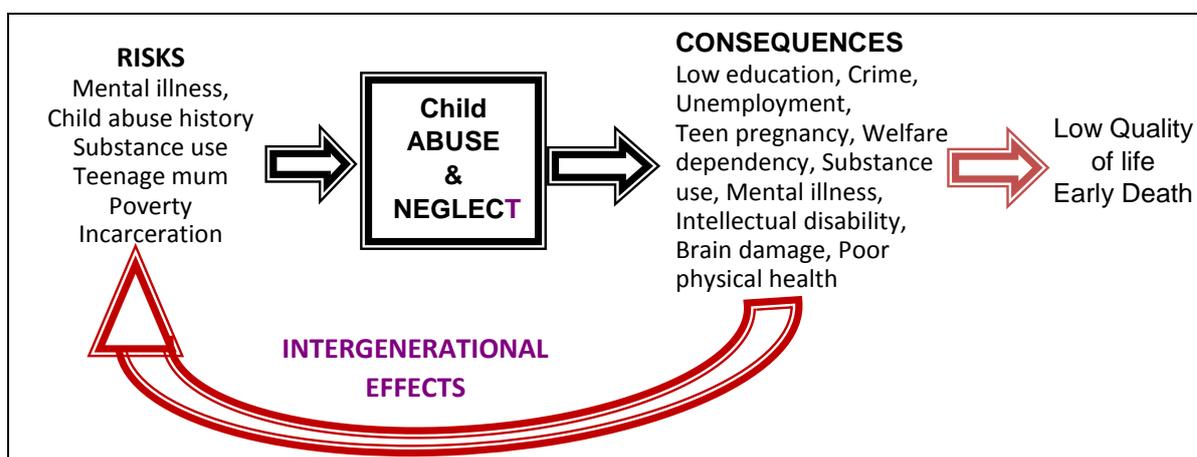
## 2 Intergenerational transmission of maltreatment and Implications for prevention.

### 2.1 Intergenerational pattern of maltreatment predicted by the overlap between consequences and risk

*The consequences of Child Maltreatment are risk factors for Child Maltreatment and implicated in an intergenerational cycle of abuse and neglect, poor health and profound social and economic disadvantage*

Intergenerational maltreatment is widely accepted as the common pathway into maltreatment. A parent with a child maltreatment history is more likely to struggle to provide a safe and nurturing environment for their child. It is predicted by the considerable overlap between risks for and consequences of child maltreatment (See Figure 4) and confirmed in empirical studies. (Published studies will often under-estimate the intergenerational transmission pathway, as they typically adjust for attributes such as mental illness, unemployment, extreme poverty, drug and alcohol abuse, intellectual disability, criminal involvement, as confounders, rather than part of the cause consequence pathway.)

**Figure 4. Child Maltreatment Cause / Consequence intergenerational cycle**



### 2.2 Theory and mechanism of intergenerational transmission of child maltreatment

The causal mechanisms are increasingly well understood and explain how child maltreatment affects the child's development, his or her emotional responses and their way of engaging in relationship. We now know that early childhood trauma is toxic to the developing brain. In short, child maltreatment sets up the very conditions in the victim - such as poor emotional regulation, low impulse control, poorly developed sense of self, difficulty with intimate relationships, likely use of substances to alleviate distress, intellectual impairment - that represent high risk as a parent to abuse or neglect of their own child.

*The intergenerational cycle of child abuse means that almost any effective program to prevent child abuse and neglect, or address the consequences, or heal the trauma will also constitute primary prevention for the next and subsequent generations.*

The application of evolutionary theory and trauma theory provides new theoretical understandings of why parents are unable to provide a safe and nurturing environment for their children. This work by Dr Amos, a senior child and adolescent psychiatrist, completed as part of PhD research, further supports intergenerational abuse and neglect as the primary pathway into child maltreatment (Amos et al 2011, 2015; Amos 2017). In her research she has developed an internationally recognised model that describes clearly the mechanisms of intergenerational transmission of child maltreatment.

The theory proposes that for parents who were victims of child maltreatment, their new baby will trigger their childhood trauma history creating an overwhelming sense of distress, disrupting the quality of their relationship with their child, undermining their capacity to parent well. This work also explains why early childhood trauma results in such entrenched patterns of behaviour – including lack of compassion, hyper-vigilance, poor impulse control, dominance/submissive view of relationship, poorly developed sense of self with little sense of agency in the world. Intensive and focused effort is required to address the damage and prevent intergenerational transmission of child maltreatment. From this research it is clear that the problem for these parents is not primarily a knowledge gap or even about role models, but rather profound and serious emotional damage.

*Parents typically know what it takes to nurture a child – it is their own damaged self that gets in the way of being the parent they would like to be. The solution is repair and healing and creating a sense of self with agency. Standard parenting programs, are often unsuccessful in parents with early histories of traumas.*

### 3. Justice involvement and Child Maltreatment as cause as well as outcome

**3.1 Child maltreatment → Justice Involvement:** It is well-established that a history of child maltreatment and involvement with the child protection system is associated with a higher risk of involvement with criminal behaviour, crime as victim, the juvenile justice system and adult corrections. A NSW survey of incarcerated adolescents found not just high rates of child maltreatment history but also very high rates of mental illness and harmful drug and alcohol use, history of brain injury and intellectual disability (see Table 1).

Mental illness, brain damage and substance use are core features of youth justice populations, representing some of the most serious consequences of childhood trauma. Addressing psychological distress must be an early intervention priority.

**Table 1 Characteristics of juveniles incarcerated in NSW 2009**

Attribute	male	female	ATSI
Parent ever in prison	44	48	61
Placed in care	25	40	38
Any child abuse or neglect	57	81	59
Drunk ≥weekly year prior to custody	66	68	69
<b>Alcohol or substance use disorder</b>	<b>63</b>	<b>64</b>	<b>69</b>
<b>Use illicit drugs ≥weekly year prior to custody</b>	<b>65</b>	<b>65</b>	<b>72</b>
<b>Any psychological disorder</b>	<b>86</b>	<b>92</b>	<b>92</b>
Attention/behavioural disorder	68	82	75
<b>2+ psych disorders</b>	<b>70</b>	<b>92</b>	<b>79</b>
Ever self-harm	14	35	18
Ever attempted suicide	8	23	11
<b>Low IQ &lt; 80</b>	<b>54</b>	<b>31</b>	<b>59</b>

### **3.2 Justice involvement → child maltreatment**

What has been far less well studied is the extent to which the children of justice-involved parents come into contact with the child protection system. Criminal justice involvement can be viewed as both a marker of extreme vulnerability and complexity and often histories of trauma which may impact on the quality of poor parenting. Justice involvement and especially incarceration creates further distress for the child and family and may increase the risk of child protection system involvement.

Research by my team, led by Caitlin Dowell, PhD student, is using WA linked data to explore outcomes for children of mothers with a history of incarceration during pregnancy up to 18 years post child's birth (Dowell et al 2017). Early findings (Dowell et al 2017a, under review) indicate that a large proportion of young children whose mothers are imprisoned are involved in the child protection system, including entering out-of-home care. The finding of substantial excess risk is observed for both Indigenous and non-Indigenous mothers and children.

This has important implications for intervention options. Working with mothers involved in the justice system is a logical target for intensive service support. It also highlights prison as an opportunity for creating a therapeutic environment to support the changes needed for these mothers to be able to better parent their children. Boronia Pre-release Centre, a women's prison facility in Perth, was established with a strong therapeutic and rehabilitative philosophy in which infants and young children can live-in with their mothers. A primary aim is to ensure more successful mother/child relationships as a way of disrupting intergenerational cycles of profound disadvantage, and reducing rates of recidivism for the mothers and also reducing child protection involvement for the children. Whether this has been successful is the subject of current research by PhD student (Helen Myers, through the University of Western Australia).

### **3.3 Overview of evidence concerning the pathways into child maltreatment**

The dominant path into maltreatment and involvement in the child protection system is via highly distressed and troubled families reinforced by inter-generational transmission. There is little to suggest that low risk families contribute a large pool of maltreated children. The population health paradigm equating prevention/early intervention with low risk - or phrases like 'shifting the curve' - simply make no sense in relation to child maltreatment.

Early intervention is best understood as early in life. But, because of the importance of intergenerational transmission, primary prevention must also encompass the next generation and highlights that intensive programs for teenagers and young people can also be considered primary prevention.

## **4 Effectiveness and cost-effectiveness of interventions to prevent child maltreatment and reduce harms**

Drawing on a comprehensive study of the cost-effectiveness of interventions to address child maltreatment (Segal et al 2013) I will now comment on the issue of targeting and what might constitute an effective and cost-effective 'population' approach. My research conducted a few years ago estimated cost per case of maltreatment prevented, or out-of-home care placement averted or reunification with birth family. The research covered >30 infant home visiting programs (across the risk spectrum from low risk/general population to extreme risk), one early childhood program (Chicago Parent-Child Centres), more than 20 family support programs (from early intervention

family support to imminent placement prevention and reunification) plus a number of mental health programs. The results are published in the Appendix to the Inquiry into the Queensland Child Protection System (Segal et al 2013).

The broad conclusions of that work are summarised here:

1. *Whole of population/low risk programs are neither effective nor cost-effective in addressing child maltreatment.* It is costly to cover all families/children and the benefits are low. This conclusion is consistent with the clustering of risks for child maltreatment in identifiable vulnerable families.
2. *Programs targeting high/extreme risk families/children/pregnant women can be highly effective and cost-effective* – If well-designed based on a sound understanding of the needs of the target population, and including components that can deliver the service/therapeutic goals, use a highly skilled well-trained workforce, and are funded at a level that will support delivery at the necessary intensity.
3. *Service response should start early in life* – with newborns/infants/toddlers, pregnant women, adolescents – especially parents/parents-to-be with known risk factors, particularly child maltreatment history, mental illness (current or history of), drug or alcohol abuse, justice involvement, intellectual disability. *All pregnant women/new parents in these categories should have access to high quality programs that, at a minimum, need to include highly skilled mental health clinicians expert in trauma and attachment work.*
4. *Research is urgently needed to evaluate promising interventions in a current Australian context.* While effective and cost-effective programs have been identified, for example involving pregnant women and infants, much of this evidence is many decades old and gathered on overseas populations living in very different social and service context. For example, the Olds family partnership program and Perry preschool and Abecedarian were developed in the 1960s or 1970s for the USA the later<sup>2</sup> as very small programs and with little evidence of replicative success.
5. *Community platforms can be a highly effective way of identifying mothers/pregnant women or fathers at risk of maltreating their children/children exposed to abuse or neglect.* Ideally universal platforms include:
  - Maternity services, where risk screening can be conducted and relationships established early with women
  - Early childhood centres/playgroups/parent child centres – where families engage over an extended period, where it is a welcoming space for all, including vulnerable families, where children at risk can be identified and can use existing relationships with parents to facilitate access by families to services.
6. *Trauma-focused mental health programs are highly effective and cost-effective for children and families with history of abuse.* These should be widely available, and offered to all in need at a therapeutic level of intensity.

### **Elements of Desirable Service System Response**

1. *The current service systems across Australia are simply inadequate for addressing the level of psychological distress, mental illness and trauma present in infants, children, adolescents and families.*
  - There is inadequate funding to work with the more complex families. A large increase in mental health funding has gone into the MBS Better Access program, which is primarily

providing services to families in more advantaged suburbs, and not getting to the more vulnerable and challenging families. Few of these services are going to young children.

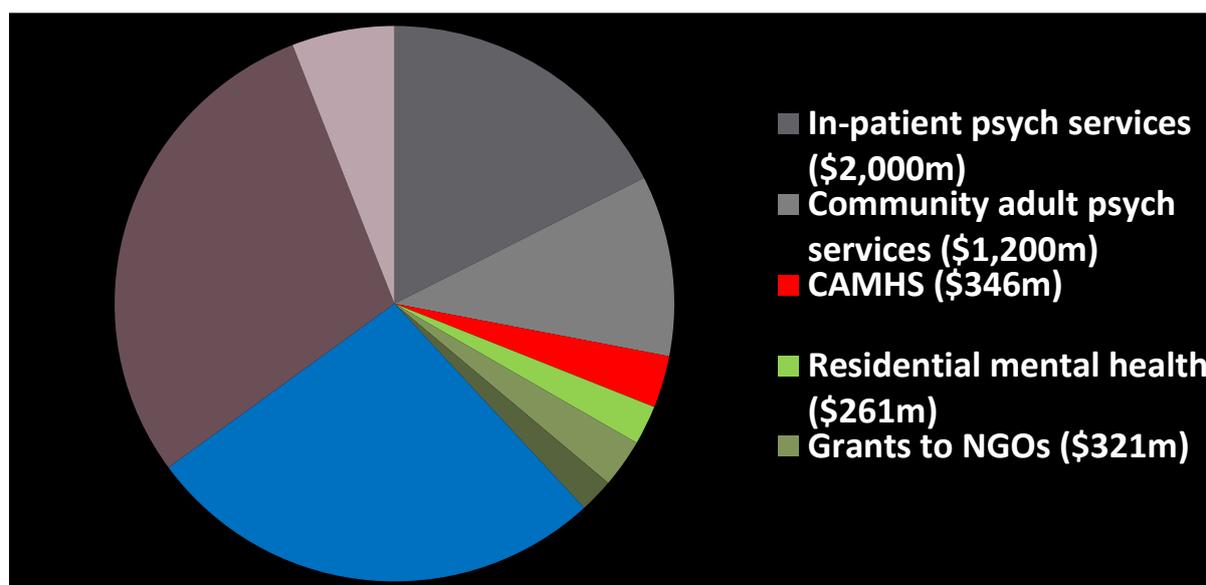
- We estimated that for South Australia just to address the most pressing need in children experiencing severe psychological distress, requires a quadrupling of budgets and service staffing of community child and adolescent mental health services. That is current service levels are just 25% of what is needed. Total funding of child of adolescent mental health services across Australia at \$346 million (see Figure 5). This is <\$60 per child and <\$600 per child facing serious psychological distress. It is simply inadequate.

2. *Skill level across the service system needs to be enhanced to work with highly traumatised and distressed families*

- to be competent to deliver therapeutic trauma services and;
- to adopt trauma informed practices across the wider service system so that all workers, especially front line staff, are able to engage with families in a way that does not continually re-traumatise them. The key is being able to operate in a way that is not shaming or judging but is inclusive and respectful. Unfortunately, much high level policy as well as practices on the ground are purposefully shaming (consider proposed drug testing of welfare recipients). This can only serve to impede any chance of recovery or healing for already traumatised and distressed families, and exacerbate anti-social behaviours.

High rates of child maltreatment are driving high levels of distress in children and gross under-provision of child and adolescent mental health services is exacerbating harms and driving intergenerational transmission

**Figure 5 State 'mental health' payments 2012-13**



Source: ROGS, 2015, *Mental Health Commission Report 2015*

## C. KEY CONCLUSIONS

## **Core components/characteristics of evidence-informed public health/integrated social and economic determinants model.**

### ***For prevention/early intervention:***

**Target those most at risk:** This will provide the best outcomes and best returns on investment. This should occur through universal as well as tertiary settings. This is often confusion between setting and target. Universal settings can be used to identify a high risk population for more intensive service delivery.

### ***Settings:***

Offer services where highly vulnerable people are:

- a) In universal services, such as early childhood/parent child centres, schools, sports clubs, maternal and child health settings, etc.
- b) High risk settings, such as justice/prisons, child protection, community mental health, ED, disability services.

**Core service principle:** Make services accessible, welcoming, non-judging, trauma-informed. It is critical that the service system across the entire human services portfolio stops re-traumatising highly vulnerable and distressed people. The trauma load is already unmanageable.

**Program Components / multi-agency / Multi-Disciplinary –** within a service or with excellent linkages between services and knowledge that requests can be promptly addressed, to ensure families can be supported around their full range of needs. These include:

- i. **literacy programs** – very high levels of low literacy in child protection and justice populations
- ii. **Secure housing** is critical to provide shelter, but also access to food storage and cooking, sleep, some control over ones space
- iii. **Nutrition** is extremely important for better mental and physical health. Note benefits of breakfast / lunch programs at early childhood centres, schools, etc.
- iv. **Education/schooling/workforce**
- v. **Therapeutic services to address mental and physical illness**

### ***Examples of types of programs to fund***

- i. PPACT (Parallel Parent Child Therapy) developed to work with intergenerational trauma. Relatively intensive, (2 therapists weekly for up to 2 years) but can be highly effective and can disrupt intergenerational transmission (Amos et al 2011; Furber et al 2013).
- ii. Inspir=Ed play group – a weekly nature-based play group program for parents (grand-parents and infants) that has been run most successfully in Aboriginal and other vulnerable communities (Hanckel and Segal 2016).
- iii. Infant home visiting –Evidence on outcomes is mixed (Dalziel and Segal 2012) - match to target population's needs is critical. Implementation in Alice Springs for the Aboriginal community of Central Australia is under evaluation (reporting by September 2017). Implementation feasibility has been established (Nguyen et al 2017 submitted)

- iv. Aboriginal and Torres Strait Islander-developed services drawing on traditional knowledge around healing – for example, involving time on country, dance, art, national parks - typically involving community elders.
- v. Early childhood – Children Centres, Child/Parent, Family centres. These can offer a range of programs for children and families from early infancy to early school age, ideally with very close links into primary school. These Centres can offer a welcoming space for vulnerable families to connect with the service system in a non-shaming way and build relationships to support better understanding of needs and how to sensitively engage. These Centres ideally are a hub for a range of services including child and adolescent mental health, parenting/play group programs, medical services (GP, Paediatrics), social and economic supports for parents (e.g. around housing, Centrelink, financial planning, justice, child protection). They could operate as a welcoming community hub for families.
- vi. High quality trauma service – any parent or child where there has been a child protection concern should have assured access to high quality therapeutic services delivered by well-qualified and highly trained individuals, with the competencies to work effectively with very complex and challenging families. Access to staff training and mentoring is critical.
- vii. Institutional settings such as correctional facilities need to be set up as rehabilitative spaces. They provide an extraordinary opportunity to work with adolescents and adults to start the process of healing, access to learning / training, support around relationships, capacity to plan and manage and better nutrition that highly vulnerable people need. The Boronia Pre-release facility in Perth is an exemplar of a prison established on rehabilitative and therapeutic basis – designed to help with women who go there to get their lives back on track. Greater capacity for parenting is a critical part of the program.

### ***Underpinning requirements***

***Adequate resourcing*** is critical if intergenerational patterns of profound disadvantage are to be disrupted. If we want to reduce involvement in crime and child maltreatment we must disrupt intergenerational pathways. The challenges are considerable given generations of trauma and accumulated adversities with associated damage to developing brains. Specifically, increasing resourcing of child and adolescent mental health services and ensuring social support services have access to high level mental health expertise within their teams.

### ***Community solutions to change community norms***

- Work with communities to identify community norms that are not protecting children and devise community lead solutions to change this. The Collingwood Magistrates Courts Model (Neighbourhood Justice Centre) is an exemplar. The local community has worked together to build a comprehensive service response (Murray 2009) to address high rates of crime and justice involved youth, child maltreatment histories, drug and alcohol abuse and racism. (<https://www.magistratescourt.vic.gov.au/jurisdictions/specialist-jurisdictions/neighbourhood-justice-centre>) The response was developed by community bodies working together - police, youth, local businesses, local council, Magistrates court and key services. A purpose built and welcoming community centre/Magistrates court was built which also provided access to a wide range of services. The solution was resourced through the Magistrates court ensuring adequate funding to implement the preferred model. This has been highly successful in reducing rates of crime and engaging disenfranchised youth (especially Aboriginal youth) in positive and affirming activities.

- **ALL** agencies need to operate in a way that is trauma informed, so that vulnerable families are not further traumatised – as happens now. This will require training for all health and welfare based services.

### **Child protection system**

- Other out-of-home care options are needed. Professional therapeutic foster care should be an available option. Under this model trained professionals such as psychologists, social workers, teachers/special education/early childhood workers, nurses, etc. would be paid a small wage to look after say two especially vulnerable and challenging children. This might be long term or for a specified period of say two years with a view to reunification, supported by a therapeutic reunification program. There is evidence that professional foster care will achieve better outcomes for children.
- Better Support and training for foster carers
- Greater help for parents whose children are removed – in part to support reunification and also in recognition of the trauma involved in child removal – parents need to be supported through this. One aim would be to delay the next pregnancy.
- Over-representation of Aboriginal and Torres Strait Islander children is observed in both the child protection systems and the criminal justice systems. Solutions will only be found once we better understand why. Theory and empirical evidence would suggest trauma and adversity load is a very large part of the story. The challenge is to do better at reducing levels of adversity and healing trauma.

### **OVERVIEW**

Child Maltreatment is trauma and early life relational trauma almost inevitably results in psychological distress for the child and child maltreatment reflects unresolved trauma and psychological distress in parents. What we see are disturbing cycles of Child Maltreatment, attracting further adversity, including possible criminal involvement, high risk of mental illness and intergenerational transmission of Child Maltreatment.

**The core task is to break this intergenerational cycle. It is *the* primary prevention pathway.**

As such, a priority must be to help high risk pregnant women, parents-to-be to heal their own histories of trauma so as to be safe to parent their own children. A priority must be to address trauma in these exposed children and parents. Universal settings can provide an opportunity to establish a relationship with vulnerable families and provide convenient access to needed services. In short, any solution must have a strong mental health focus and commitment to healing trauma. Disturbed behaviours are a direct consequence of trauma and its effect on brain development – if we don't assist people with healing, their trauma this will simply be passed on to the next generation. We need to think of trauma and associated mental illness as a communicable condition.

## REFERENCES

- Amos J, Furber G, Segal L, 'Understanding maltreating mothers: a synthesis of relational trauma, attachment disorganization, structural dissociation of the personality and experiential avoidance', *Journal of Trauma and Dissociation*, 2011;12(5):495-509, doi: 10.1080/15299732.2011.593259.
- Amos J, Segal L, Cantor C, 'Entrapped mother, entrapped child: agonistic mode, hierarchy and appeasement in intergenerational abuse and neglect', *Journal of Child and Family Studies*, 2015;24(5):1442-1450.
- Amos J, When wounds from infancy collide: The mother-child relationship as trauma, trigger, and treatment, PhD thesis, May 2017, University of South Australia.
- Dalziel K, Segal L, 'Home visiting programmes for the prevention of child maltreatment: cost-effectiveness of 33 programmes', *Archives of Disease in Childhood* 2012;97(9):787-798, doi:10.1136/archdischild-2011-300795.
- Doidge JC, Delfabbro P, Higgins DJ, Edwards B, Toumbourou JW, Vassallo S, Segal L 2016a 'Risk factors for child maltreatment in an Australian population-based birth cohort', *Child Abuse & Neglect* 2016a;64:147-160, doi: 10.1016/j.chiabu.2016.12.002.
- Doidge JC, Delfabbro P, Higgins DJ, Segal L, 2016b 'Economic predictors of child maltreatment in an Australian population-based birth cohort', *Children and Youth Services Review* (special edition), 2016;72:14-25.
- Dowell C, Preen D, Segal L, 2017a 'Quantifying maternal incarceration: a whole-population linked data study of Western Australian children born 1985-2011', *Australian & New Zealand Journal of Public Health*, 2017;41(2):151-157, doi:10.1111/1753-6405.12613.
- Felitti V, Anda R, Nordenberg D, Williamson D, Spitz A, Edwards V, Koss M, Marks, J, 1998 'Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study', *American J. of Preventive Medicine*, 1998;14(4):245-258.
- Furber G, Segal L, Amos J, Kasprzak A 2013, 'Outcomes of therapy in high risk mother-child dyads in which there is active maltreatment and severely disturbed child behaviors', *Journal of Infant, Child, and Adolescent Psychotherapy*, 2013;12(2):84-99, doi: 10.1080/15289168.2013.791166
- Hanckel J and Segal L 2016, 'The Inspire=Ed Project, a holistic early childhood project for enhancing parent-child well-being', *Childhood Education* 2016;92(1):10-21, doi: 10.1080/00094056.2016.1134236.
- Indig D, Vecchiato C, Haysom L, Beilby R, Carter, J et al 2009, *NSW Young people in Custody Health Survey: Full Report*, NSW Human Services, Juvenile Justice, NSW Health and Justice Health, Government of New South Wales:Sydney.
- Murray S 2009, 'Keeping it in the neighbourhood? Neighbourhood Courts in the Australian Context' *Monash University Law Review* 2009;35(1):74-95.
- Myers H, Segal L, Lopez D, Li I, Preen D 2017, 'Impact of family-friendly prison policies on outcomes for incarcerated mothers and their dependent children: a cohort study protocol' submitted to *BMJ Open*.
- Nguyen H, Zarnowiecki D, Boffa J, Gent D, Silver B, Segal L 2017, Successful implementation of the Australian Nurse-Family Partnership Program in an Aboriginal community in Central Australia, submitted to *Prevention Research*, May 2017
- Segal L, Addressing child and adolescent mental health: The key to disrupting intergenerational disadvantage, Symposium presentation, 23 March 2017.
- Segal L, Dalziel K, Papandrea K, 2013; 'Where to invest to reduce child maltreatment – a decision framework and evidence from the international literature', report as Appendix F to *Taking Responsibility: a roadmap for Queensland Child Protection*, report by Queensland Child Protection Commission of Inquiry, pp 619-41.
- Shonkoff JP, Garner AS, Siegel BS, Dobbins MI, Earls MF, Garner AS, et al. The Lifelong Effects of Early Childhood Adversity and Toxic Stress. *Pediatrics* 2012;129(1):e232-e246.
- Solomon MF & Siegel DJ, (Eds.), 2003, *Healing trauma: Attachment, mind, body, and brain*. New York, NY: Norton.
- Siegel DJ, *The developing mind: Towards a neurobiology of interpersonal experience*, 1999, Guilford press
- Twizeyemariya A, Guy S, Furber G, Segal L 2017, 'Risks for mental illness in Indigenous Australian Children: a descriptive study demonstrating high levels of vulnerability', MS#16-111 in press *Millbank Quarterly*.