

2019 Submission - Royal Commission into Victoria's Mental Health System

Organisation Name

N/A

Name

Professor Leonie Segal

What are your suggestions to improve the Victorian community's understanding of mental illness and reduce stigma and discrimination?

"I think rather we need a far more honest conversation about mental illness; about the seriousness of mental illness and the challenges for persons living with mental illness and their families, colleagues and others; and that in general people will need professional help. We need to focus on understanding the reasons for mental illness; not shy away from the role of families and acknowledgment this as a serious health issue; as serious as cancer. Seeking to reduce stigmas runs the risk of underplaying the seriousness of mental illness and recognize that mental illness can be responsible for quite bizarre ways of thinking and behaving that can be threatening and scary - but to call it what it is mental illness, not naughty, bad or evil. And yet we say we are seeking to de-stigmatize mental illness yet every-time we call violence by highly traumatized people bad behaviour we are doing just that. "

What is already working well and what can be done better to prevent mental illness and to support people to get early treatment and support?

"High quality therapeutic trauma work - as trauma sits behind most mental illness; effective trauma therapy can resolve mental illness and massively reduce symptoms and effect on other, including children. Intensive trauma-focused child parent therapy (eg PPACT) interdisciplinary trauma work plus social supports - delivered through the NGO sector (eg Centacare SA family reunification program). Nutrition services delivered by dietitians, through individual consults or group based (including cooking workshops. While demonstrated to be highly effective and cost-effective in RCTs - such services simply are not funded and the Commonwealth Government is blocking their inclusion on the MBS. This is outrageous. Having highly skilled infant/child mental health clinicians in preschool/early childhood centers in disadvantage communities- does not exist but is sorely needed. "

What is already working well and what can be done better to prevent suicide?

"We must start with infants and children - it is already apparent who is distressed / who is struggling - don't wait till adolescence to respond. Where are the mental health services for chaotic, toxic families to assist parent and children - these are few and many miss out. Schools are overwhelmed and there are no referral pathways. We need to at least treble the community mental health workforce and up their skill level and especially work with a child maltreatment population who have a SEVERAL times risk of suicide attempt. . - "

What makes it hard for people to experience good mental health and what can be done to improve this? This may include how people find, access and experience mental health treatment and support and how services link with each other.

we are ignoring family contact and not putting supports in place early enough (in terms of early in

life)

What are the drivers behind some communities in Victoria experiencing poorer mental health outcomes and what needs to be done to address this?

"We know the drivers # child maltreatment # other trauma - eg refugee, dispossession # poverty # housing insecurity # poor nutrition. # Intellectual disability and parental mental illness / drug and alcohol use All these need to be addressed through a cross-portfolio are-based approach"

What are the needs of family members and carers and what can be done better to support them?

Family member can also be struggling with their own mental health issues. More family-based approaches are required. It is too simple to say - this is the person with the mental illness and this is the person that's OK. often no-one is OK. We need better access to high quality intensive family-therapy that is not time limited in delivery. sometimes this will need to be mandated

What can be done to attract, retain and better support the mental health workforce, including peer support workers?

"Enhance quality of the training and supervision - which is inadequate and ensure resourcing commensurate with the challenges of the client population - in terms of budget, skill set, families, capacity to do out-reach work.. "

What are the opportunities in the Victorian community for people living with mental illness to improve their social and economic participation, and what needs to be done to realise these opportunities?

"They need high quality mental health services so they can be healed. prisons, day facilities etc., are an opportunity for rehabilitation and ensure quality treatment of mental illness and gaining skills and yet in general mental health services and approaches to improving communication skills into prisons are woefully inadequate. A range of trauma-based therapeutic options need to be made available; not just a focus on drugs that have many serious side effects . "

Thinking about what Victoria's mental health system should ideally look like, tell us what areas and reform ideas you would like the Royal Commission to prioritise for change?

"I will focus on the infant, child, adolescent /family space. We need a Centre of Excellence model - that can: # deliver both centre-based and outreach services - into other agencies, such as schools, early childhood centres, , # operate 24/7 and responsive to people's needs # have a highly skilled inter-disciplinary team eg of infant, child adolescent psychiatrists, psychologists, social workers, OTs, dietitians, GP, # provide training # run evidence-based programs such as circle of security. "

What can be done now to prepare for changes to Victoria's mental health system and support improvements to last?

N/A

Is there anything else you would like to share with the Royal Commission?

"There is extremely strong evidence from thousands of studies that childhood trauma and particularly child abuse and neglect is THE key risk for mental illness. This highlights opportunities for prevention. if we can do better at supporting distressed and disturbed infants. children,

adolescents and their families, we will not only reduce the distress in this population but also have the promise of preventing escalation of harms, and reducing rate of adult mental illness and the inter generational transmission of mental illness. We could dramatically reduce the prevalence of mental illness and the shocking health, social and economic burden in a generation. "

Submission to the Royal Commission into Victoria's Mental Health System

Professor Leonie Segal, Foundation Chair, Health Economics & Social Policy, University of South Australia, [REDACTED]

Dr Jackie Amos, Senior Child & Adolescent Psychiatrist, Adjunct Fellow, UniSA and Senior Clinician, Centacare SA

This submission draws on:

- an NHMRC funded study into the mental health of infants, children and adolescents in Australia and the service system requirement to address mental distress in children and prevent mental illness in adults - research reported in 8 publications (see reference list).
- a 12-year research program on intergenerational transmission of profound disadvantage, focused on the interface between child maltreatment, mental illness and other adversities.
- 20+ years of clinical experience (Dr Amos, Child and Adolescent Psychiatrist), working in CAMHS and the NGO sector (family support programmes) with children and families struggling with the consequences of intergenerational child maltreatment, including serious mental illness and emotional and behavioural disturbances in children.
- Doctoral research by Dr Amos to understand why mothers maltreat their children, in order to hone a therapeutic response to help these highly traumatised families. This work is reported under the 'Causal pathways' section of the Reference list.
- Studies of the effectiveness and cost-effectiveness of clinical nutrition therapy in mental health.

KEY UNDERSTANDINGS - THE CASE FOR PREVENTION – SUMMARY

- The primary causal pathway into psychological distress and disturbed thinking, emotions and behaviours in infants and children and subsequent mental illness in adolescents and adults is early in life child maltreatment.
- Familial child abuse and neglect disrupts normal brain development with associated cognitive, behavioural and emotional consequences.
- Familial child abuse and neglect also sets up a shame-based relational patterning (between parent and child); characterised by mistrust, hypervigilance/high reactivity to potential threat, enmeshment, lack of compassion or empathy, poorly developed sense of self.
- If these distortions are not addressed in childhood, they will tend to attract further adversity, such as bullying, drug and alcohol use, poor school performance.
- Child abuse and neglect typically occurs alongside other family adversities such as extreme poverty, homelessness, food insecurity, sleep disturbance, jobless households, parental drug and alcohol addictions and mental illness, parental separation, criminal involvement.
- Together these circumstances create the perfect storm to precipitate mental illness.

There are many opportunities to intervene all along the causal pathway and prevent progression to entrenched mental illness; and improve the health and life chances of distressed children. Given the high health, economic and social costs of mental illness, the potential gain is huge: for current and future generations.

WHAT WE NEED TO DO to disrupt trajectories into mental illness and address current psychological distress. It has to be a cross portfolio whole of government response. The mental health system in isolation cannot address the crisis in mental health.

1. Ensure access to inter-disciplinary intensive family support services incorporating high quality therapeutic mental health expertise with the required social supports targeted to:
 - Children/families involved with the child protection system:
 - eg to support safe reunification of teenagers in care with their birth families (to delay likely early parenthood and create social supports)
 - children and their families with a history of notifications, especially where this has proceeded to investigation
 - Teenagers/young adults (and their families) with history of child maltreatment, mental illness / addictions in childhood or adolescence – ideally access such services or make progress with healing – before they become parents
 - Pregnant women (impending fathers) with history as above
 - New mothers/fathers with history as above – including live-in and outreach services.
2. Target highest risk with adequately resourced programs - Programs need to be able to work with the most vulnerable, high-risk families, including those exposed to current family violence (intimate partner and child maltreatment), drug and alcohol addictions; and where parents may have limited (if any) insight, or empathy for their child. This is where the need is greatest; and the service system cannot just walk away. Services will need to be resourced to work at the most complex end. In contrast, most prenatal/infant home visiting programs have limited if any mental health expertise, despite mental illness/disturbed relational patterning characterising the more vulnerable new mothers/high risk infants.
3. Deliver Infant/child/family mental health therapeutic response in the early-childhood setting. Early childhood centres can offer a welcoming, non-judging, compassion-based space and on-going engagement for developing trusting relationships with parents and children. These centres should offer a full multi-disciplinary complement of services – including also speech therapy, nutrition programs, OT, paediatrics, and community outreach to engage the most vulnerable families.
4. Inter-disciplinary, highly skilled and flexible response
 - Encourage the NGO sector delivering family support services to employ mental health clinicians with accredited therapeutic trauma training.
 - Ensure CAMHS are able to offer a responsive service, that goes beyond the traditional 9-5 M-F Centre-based model.
5. Upskill:
 - the mental health workforce in high-level protocolised trauma-based family treatment.
 - Upskill the entire human services workforce to become trauma aware, so as to avoid re-traumatising and triggering vulnerable populations on a daily basis.
6. Provide additional resources over the next 5 years are there - but then with expected savings through reduction in mental (and physical) illness, welfare dependency, child protection and DV services, as well as increase to gross national production.

THE EVIDENCE

There is a large and convincing literature indicating psychological distress/toxic stress in childhood is the primary causal pathway into mental illness; an understanding that creates the logical possibility of preventing mental illness and the associated consequences. The implication is that as a society we need to be more alert to childhood distress and the possible escalation into adult mental illness (see Figure 1), so this can be disrupted. The primary policy task is to ensure that each child has a deeply nurturing and supportive family environment (or at least 'good enough'); that psychological distress/disturbed behaviours in children are taken seriously and addressed in a timely fashion with well-resourced effective strategies.

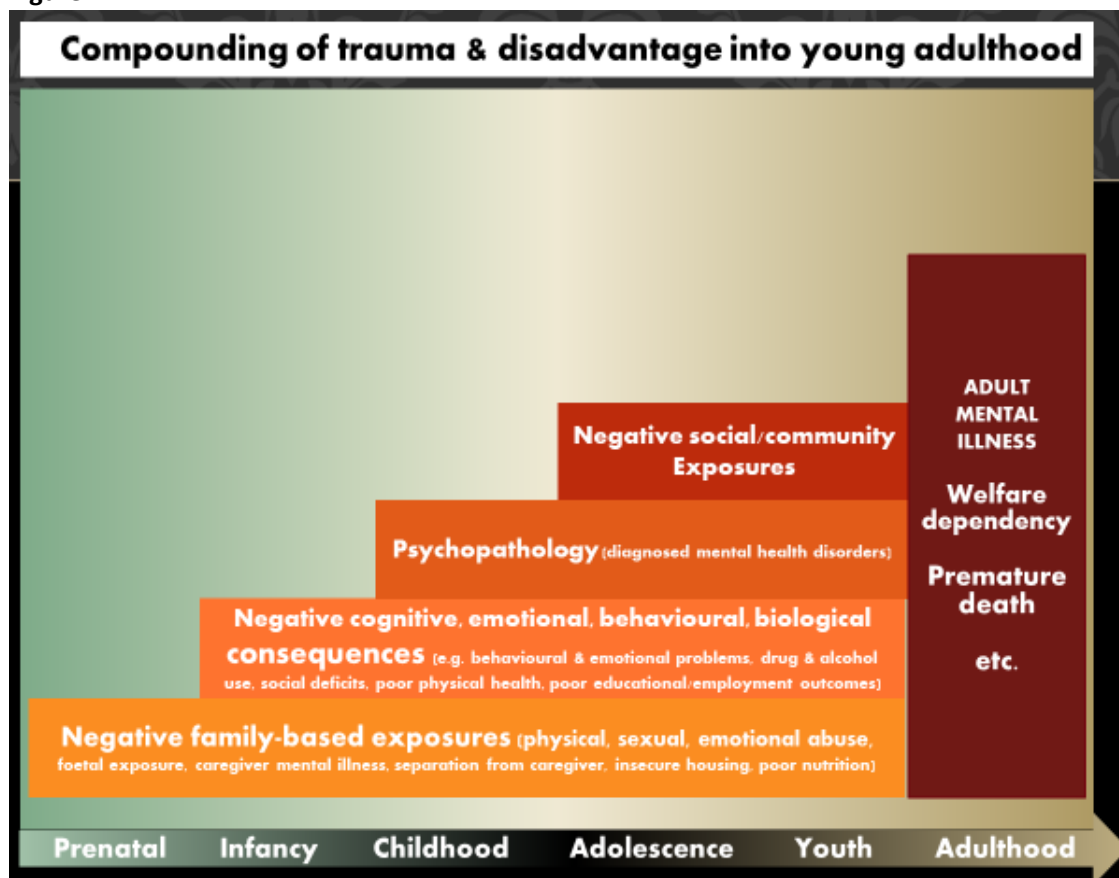
Child abuse and neglect and mental illness: The primary source of toxic stress (Shonkoff et al., 2012) is familial child abuse and neglect, which creates a profound sense of fear and shame. Other family circumstances are also pertinent, in potentially increasing the stress load such as, deep poverty, insecure housing, parental separation, parental mental illness, food insecurity, sleep deprivation, histories of trauma - child removal, dispossession, racism, exposure to community violence etc.. Early childhood trauma affects brain development in multiple ways, creating the preconditions for disturbed childhood behaviours including aggression, hypervigilance, poor impulse control, lowered capacity for reasoning and forward planning, difficulty in focus and concentration, and mental illness in childhood, adolescence and adulthood. An excellent overview of the myriad ways in which child abuse and neglect affects the developing brain is provided by The US Department of Human Services, Child Bureau, Issues Brief (2015), 'Effects of child maltreatment on the developing brain'. The science is well-established.

Familial child abuse and neglect also disrupts the capacity for healthy relationships. In seminal work by Amos, Segal and colleagues (2011, 2014, 2017, 2018), drawing on animal models and evolutionary biology, it was hypothesised that agonistic mode as described by Price (1992) and Kortmulder & Robbers, (2005) is the relational blueprint in families characterised by intergenerational patterns of child maltreatment. Agonistic mode is characterised by hierarchical dominance-submissive patterns where dominance is used for the benefit of the powerful (and exploitation of the weak), where all parties become hypervigilant and threat-driven with narrowed focus of attention. Individuals are perceived and treated as object rather than subject, and individuated sense of self with agency fails to emerge. It is a highly shame-based relational model, in which compassion and empathy have a limited place. It has profound implications for emotional and behavioural development of infants and children and sets the relational map, even when a toxic family environment is no longer present.

The combined effect of this disturbed relational pattern and disrupted brain development caused by toxic stress, undermines capacity for successful inter-personal relationships. When layered on top of likely early substance use, and compounding adversity, a path into mental illness is set, and the preconditions for potential violence and criminal involvement. There are only so many insults the brain can take, especially in the early development phase, before the disturbed thinking and behaviours identified with mental illness becomes inevitable.

The intertwining of child abuse and neglect and mental illness can, at an intuitive level, be argued thus: For parents to abuse or neglect their own children is aberrant in a deep evolutionary sense, and for a child to be maltreated by their own parent poses a primal existential threat, that will almost certainly damage mental (and often physical) wellbeing.

Figure 1



Empirical Studies Empirical studies consistently find a strong relationship between child maltreatment and mental illness. For example Fryers & Brugha's (2014) narrative review of over 400 studies, report that a strong relationships between a wide range of early life adversities (especially disturbed parenting) and later mental illness across every possible diagnosis is universally found. The US Centre for Disease Control's Adverse Childhood Experiences (ACE) research has been influential, with dozens of publications that report exponentially worse outcomes across every physical and mental health condition studied with exposure to more childhood adversities. (Figures 2 and 3 below are drawn from the US ACE study).

A US study (Duke et al., 2010) of 136,000 Minnesota high school students (grades 6, 9, 12) into the relationship between adverse experiences (physical, sexual familial/non-familial abuse, witnessing abuse, family alcohol/drug use) found all ACEs were significantly associated with risk of adolescent interpersonal violence - perpetration on others (delinquency, bullying, physical fighting, dating violence, weapon-carrying on school property), and self-directed violence (self-mutilation, suicidal ideation, suicide attempt). For example, boys exposed to familial sexual abuse were 15 times as likely to have attempted suicide than children with no abuse history. A study using a UK longitudinal cohort (Johnston et al., 2015) of intergenerational transmission of mental illness found higher transmission from mother to child than father to child, suggesting a primarily environmental (related to adversity) rather than genetic pathway. This study also found that maternal mental health has lasting effects on the child's educational attainment, future household income and probability of criminal convictions.

The conceptualisation of mental illness arising predominantly from early life adversity predicts a strong association between poor mental health and high levels of adversity in childhood, which is what is found. In an analysis of the Longitudinal Study of Australian children (LSAC) (AIFS) and Indigenous Children (LSIC) (Aust. Govt. DSS), high psychological distress in children (ages 2 to 16) was significantly associated with high levels of adversity in the previous 12 months, and good mental health with low levels of adversity. The study found for example at ages 10 to 11 in the LSAC sample, children experiencing high psychological distress on the SDQ, 77.1% had experienced 4+ adversities in the previous 12 months, while only 3.2% 0 or 1. A similar finding was observed for Indigenous children (Twizeyemariya et al., 2017); For indigenous children aged 8-10 years with an Abnormal SDQ conduct score >80% had experienced 6+ adversities in the previous 12 months and none 0 or 1.

The service system response may exacerbate rather than respond compassionately to trauma.

- The child protection (CP) system:
 - 2017-18 CP budget was allocated as follows: 23% on 'general protective services' essentially identifying which children are at high risk, out-of-home care 60%, generic family support 9% and 8% on intensive family support, high risk CP involved families.
 - Parents who have children removed, a highly disturbing situation, typically receive *no* on-going support (eg mental health services), while being exposed to circumstances that will exacerbate any existing mental illness. The CPS provides very limited (often just ½ hour per month) contact visits, an extremely traumatic opportunity to engage with their children, likely to exacerbate any pre-existing mental illness. Very limited services are allocated to work with families to create a safe emotional environment so that children can be reunified with their birth families. The perversity of governments paying others to look after children, at >\$180/night per child (>\$2,500/fortnight) (say >\$7,500 per fortnight if three children were removed), while birth families receive nothing is astonishing. This surely needs to be revisited.
- The justice system:
 - Despite it being well-established that the vast majority of persons caught up in the justice system have serious mental health issues, access to high quality mental health services in these settings is abysmally inadequate. A recent WA study of youth detention centre inmates found 89% had a severe neurodevelopmental impairment on at least one domain and 36% had FASD (Bower et al., 2018). A NSW study of youth detention found 83% met threshold criteria for at least one psychological disorder, and 63% 2 or more, and 58% met thresholds for at least one substance-related disorder (Indig et al., 2009). In women's prisons severe mental illness is identified in over 90% of inmates. Yet access to the necessary mental health care to ensure their safety and that of others and to support rehabilitation and reintegration into society is simply not available.
 - The justice system is generally poor at working with people who come into contact with police and the courts who have a mental illness or intellectual disability (Krieg et al., 2016), for example failing to grasp how brain damage might for example affect capacity to meet bail conditions. This has implications for natural justice for persons with mental illness, intellectual disability.

- The community response to family violence
 - Abusive behaviour is never justified, but a deep understanding of causal pathways is necessary to design effective solutions. Given strong evidence as outlined above of the relationship between child maltreatment, brain development and violence; it is clear that psychological strategies including approaches to healing recent and historic traumas must be a part of any effective response. The dominant feminist paradigm which attributes family violence to disrespect for women ignores the vast literature demonstrating the role of trauma, brain damage and mental illness in violence. It also ignores the existence of female perpetrated abuse in intimate partner contexts and child maltreatment. The gender construct is highly shaming and in ascribing cause to male attitudes will inevitably fail to arrive at solutions that work. It has the consequence of separating women from men, dads from their children; which while sometimes be necessary; it is critical that other options with a core therapeutic focus are also available.
- The welfare safety-net
 - Many rely on welfare benefits for their survival, especially those with serious mental health problems. And yet unemployment benefits under New Start have fallen to a level where it fails to support the most basic level of living, and access to benefits can be removed at short notice. Lack of income is a large source of stress that will undermine the capacity to stabilise mental illness. Financial stress is also an important risk factor for child maltreatment (Doidge et al., 2017a) and exacerbation of mental illness. This is simply another reason why NewStart and other benefit payments need to be set at a liveable level.
- Drug and alcohol policies - For many with mental health problems, use of alcohol and other drugs will exacerbate their mental illness and increase the likelihood of harmful consequences. Many have argued for more effective public health policies around access to alcohol.
 - Government policy on access to substances has been mixed and too often driven by the interests of suppliers (hoteliers etc). The NT has seen oscillating policies around access to alcohol, and yet when alcohol has been restricted the outcomes have dramatically improved. In October 2018, a minimum floor price for alcohol became operational together with the introduction of Police Auxiliary Licensing inspectors. Over the next 12 months there was a halving of the number of alcohol-related assaults in Alice Springs (486 to 245) (Northern Territory Police, 2019) and a similar reduction in ED attendances at Alice Springs Hospital for alcohol-related presentations (NTARIT., 2019; PAAC, 2019).
 - Application of compulsory in-facility treatment orders for justice involved mentally unwell populations who are at high risk to themselves and others could also be explored as part of an effective mental health strategy.

Desirable policy responses – When to intervene and with Whom?

If we are really interested in preventing mental illness and the consequences, waiting until a child becomes a highly distressed young person in their mid/late teens doesn't make sense. When the preconditions for heightened mental distress are readily identifiable in childhood; this is where we need to focus. By late adolescence/early adulthood early life adversities have escalated into highly disturbed behaviours including serious self-harming, development of psychotic disorders, substance use addictions, eating disorders and suicide attempt.

It will undoubtedly offer better returns, to invest in programs targeting distressed/disturbed infants and children and their families before they reach mid- or late-adolescence. And yet youth is where much of the mental health 'preventive money' has been directed. Despite this, suicide rates and rates of self-harm and mental illness are not falling. Perhaps rather than spending more money in the same space, it is time to rethink and develop a genuine mental illness prevention strategy that starts earlier in life and is family-focused.

Where to direct resources in child protection was explored by Segal and her team under an ARC grant, core findings on effectiveness and cost-effectiveness are reported the Report of the Inquiry into the Queensland child protection system (Segal, Dalziel, Papandrea, 2013). While this work was concerned with child protection, because of the intertwining of child protection and mental illness, it is highly relevant to the current Inquiry. Over 60 programs were reviewed across portfolios of family support, mental health, infant home visiting and early childhood education; as well as risk level - from low to extreme risk. We found that investing in high/extreme risk populations was in most cases more cost-effective than targeting low-risk; and that family support programs and therapeutic mental health services offered a better return on investment than other portfolios. A sound program logic, whereby program elements matched well to the client population was also critical (Segal L, Opie RS, Dalziel K, 2013). A summary of the results of this research is presented in Table1.

Core Elements of the desirable clinical/service response

Clinical model for working with traumatised children and their families: A highly skilful therapeutic response of adequate intensity will be needed to create an alternate relational pattern in children exposed to child maltreatment, built on trust and compassion, to build a sense of agency rather than victimhood (Amos and Segal, 2019). This alternate 'win/win' relational model, which must be the primary objective of therapy is dubbed hedonic mode (Price, 1995). Trauma treatment is found to be effective and cost-effective (Gospodarevskaya & Segal, 2010) in treating post-traumatic stress disorder. Specific family-based trauma therapies (Furber, Segal, Amos, et al., 2013), especially when embedded in a compassion-based social-work model, can work in this highly traumatised population characterised by intergenerational child maltreatment. The evidence is still being generated but case study analysis is clear as to efficacy.

Core elements of what is needed in a service response to help children in distress and reduce the risk of adult mental illness

We propose the serious exploration of a new *Centres of Excellence model in Infant, Child, Adolescent and Family Mental Health Service (ICAFS MHS)* to replace the current CAMHS model. ICAFS MHS would offer centre-based treatment but also have a strong presence in out-reach-based work, to organisations working with troubled families and to support clients in their homes. The ICAFS MHS would offer clinical training and supervision, employing an inter-disciplinary team. An assured funding based is critical to be able to meet the needs of those aged 0 to 18 and their families in a way that is responsive and flexible and as intensive as required. We have estimated a budget of around 5 times that of current CAHMS services will be required. But much would need to change from the current CHAMS model.

1. Philosophy - A compassion-based flexible responsive service model – that recognises possible histories of trauma and current adversity

2. Family focused, especially to include expectant parents, infants, children and adolescents and their families – to maximise opportunity to address mental health issues/heal past traumas before they escalate and become more intractable. Seek to engage fathers as well as mothers. Separated families represents a major life trauma perpetuating distress. If families can be repaired that is what we must aim for. In a comparative cost-effectiveness analysis of ways to reduce child maltreatment (and associated mental distress), trauma-based therapies and intensive family support came up as the most cost-effective approaches (Segal L and Dalziel K, 2011).
3. Inter-disciplinary, cross agency and cross jurisdictional – rather than adopting the prevalent 'refer out' model. Ideally services would be brought together into the one to deal with the high-level mental health problems in infants, children and adolescents and their parents, but also provide social and economic supports (eg income, help with driver's licence, housing, nutrition, communication/speech/language, employment).
 - Dietitians need to be a core part of the inter-disciplinary team, given strong evidence for the role of a poor diet in mental ill-health (O'Neil et al., 2013; Opie et al., 2015) and the success of dietary interventions in treatment and prevention of relapse (Parletta et al., 2017, Jacka et al., 2017, Bogomolova et al., 2018).
4. Flexible – hours per day/days of the week
5. Location / welcoming non-traumatising locations are needed to undertake therapeutic work, but in addition in locations wherever people with mental illness will be – eg early childhood centres, primary schools, centre link offices, child protection offices, housing, disability, ED, all staff need to be trauma informed, so as not to escalate mental health issues. This is in addition to employing highly skilled and trained mental health practitioners, who would retain a supervisory connection to the ICAFS MHS
6. Enhance trauma-based therapeutic training – many mental health workers are poorly equipped/ trained to deal with the most distressed and disturbed families – infants, children and adolescents. It seems usual for inadequate attention to be paid to on-going on-the-job training or support for attending special training in state-of-the-art therapeutic models (which can be very expensive and typically not supported in the workplace).
7. Combat negative male stereotyping – need for males in early childhood settings. The domestic violence debate in targeting men, without acknowledging the role of trauma and brain damage in the etiology of violence, in shaming and type-casting men, may exacerbate mental health problems in males. Especially for boys, who are the subject of child maltreatment (with mother the common perpetrator), and already feeling shamed, positive male role models are often absent, with the potential damage of the negative social stereotyping of males under the DV campaign considerable. Children are unlikely to have a male teacher until late primary school. As a society we have put effort into getting more women into science; but have done nothing in the face of a disastrous slump in male teachers in primary schools (<15% workforce), and 5% in early childhood education. More male educators in these settings could be part of a strategy to support better mental health in young boys.
8. Examples of community-based interdisciplinary models where mental health issues can be addressed:

- Collingwood Neighbourhood Justice Centre, with co-located drug and alcohol, justice, housing and other services, with staff having links back to a core agency,
- Children's Centres in SA, incorporating, community development out-reach, early childhood education, nutrition, parenting programs, OT, speech pathology – but would benefit from infant/child mental health therapeutic capacity and medical presence (eg paediatrician).
- The Children's Services Unit in CentaCare in SA has employed a child and adolescent psychiatrist with an in-depth knowledge of how to work in a non-traumatising way with distressed children and families to assist in their healing and resocialisation. The combination of specialised mental health expertise and compassion-based social work model has considerable promise.

Funding hurdles

As is the case across the health sector, funding model create a range of perverse incentives. For example, the expensive open-ended Better Access Program is delivering services to the least unwell segment of the population (refs), while community mental health services for children operate under tight budget caps regardless of need. Given that, for the most vulnerable families with serious mental health issues and more complex social and economic contexts there simply are not enough services able to deliver the support required for effective management and a pathway to healing.

Even within the Better Access Items (established to fund allied health services identified in mental health care plans), dietitian services are not covered, and this cannot be reimbursed. Attempts to rectify this shortcoming in the MBS have been stonewalled – with an MSAC submission for the inclusion of dietetic services for the treatment of depression - being repeatedly excluded from progressing to formal consideration under the MSAC process by the Department of Health, despite acknowledging the evidence-base, (see above). Dietitian interventions for treatment of mental illness are also identified as highly cost-effective (Segal et al., 2018; Chatterton, et al., 2018) and without the negative side effects of drugs, confirming that subsidising / delivering high quality dietitian services for mental illness would offer an extremely good return in investment. A funding route for dietician services needs to be identified.

More broadly, funding models are urgently needed that support family-based inter-disciplinary work in a variety of community. Essentially inter-disciplinary models are caught up in State/Commonwealth issues – so that inter-disciplinary services are under-funded and under-provided regardless of the evidence with persons with mental illness and their families and the broader economy and the tax payers the clear losers. For instance, the delivery of a group dietary intervention as part of the offerings under day-programs for persons with serious mental illness found substantial benefits for participants, in physical and mental health, but lack of funding meant the program could not be continued (Bogomolova et al., 2018).

State governments have been allocating relatively few resources to community-based child and adolescent mental health services and intensive family support services as a proportion of total 'mental health' expenditures. This is a similar situation for Commonwealth spending on mental health. See Figures 3 and 4. A valuable output of the PC Inquiry will be a current description of the breakdown of mental health services expenditure, to ascertain the allocation to prevention (early in life and intensive community-based supports).

RECOMMENDED INTERVENTION OPTIONS**Mental health promotion, prevention and early intervention, Suicide prevention p.14.**

- Persons with a child abuse history who experience several times excess risk for suicide - and also boys/men who are far more likely to kill themselves than females. Current research in SA is finding children involved with the child protection system have a far higher risk of death from external causes, starting in early childhood. (Segal, current NHMRC funded project on the consequences of child maltreatment). Given issues of shame and poor sense of self in those with high suicide risk, the adoption of shaming approaches is deeply disturbing.
- We must find better ways to support males. Men are still constructed as 'privileged' despite the reality that men die on average 4.4 years earlier than women across the globe and 4 years in Australia, are more likely to commit suicide, do more poorly at school, are more likely to suffer brain damage, and are far more likely to be involved in the criminal justice system. There is a problem of interpreting anti-social behaviour as bad, or a sign of disrespect rather than evidence of a damaged brain and traumatic upbringing which is the most likely explanation.

Mental health treatment

- Comorbidities – Think about comorbid mental illness - given the common causal pathways into a range of mental illnesses is stress and distress in infancy/childhood, comorbid mental illness and physical illness is common. But this also means the potential return on investment is considerable.
- Training upskilling – is absolutely critical – especially in community family-based responses to working with parents and children. All human services personnel require training in trauma-informed care to avoid retraumatising vulnerable individuals who represent their client populations. This should include all politicians and senior bureaucrats.
- Specific mental health training to create a workforce of highly skilled practitioners across disciplines able to deliver high quality therapeutic services. Services need to be able to demonstrate capacity to work with highly vulnerable and traumatised populations and funding of services needs to recognise the high skill level required.

Income support /welfare safety-net

- Hard to qualify for disability support or new start/unemployment allowance/benefits. And they do not provide enough to live on which *must* amplify distress. The evidence is clear that extreme poverty is causally linked with mental illness child maltreatment (Doidge et al., 2017b). It is critical society provides a genuine financial safety net to those too incapacitated to work. Otherwise their possible recovery will be seriously undermined. More broadly there is inadequate wrap-around support to this highly vulnerable and disturbed group. Rather they are treated as pariahs and further traumatised again impeding possible recovery.

Solutions – cross the human services sector

• Child Protection

The evidence concerning what works in protecting children (including assessment of impacts on mental health) is extremely limited. Support for gathering high quality evidence in this area is urgently needed. For example, to address questions such as: Under what circumstances is child removal protective and when is it more likely to exacerbate harms. Linked data provides an extraordinary opportunity to support the interrogation of such questions. Some Programs that appear promising – based on sound program logic and in some cases preliminary case-study evidence:

- *Therapy-based family support services for safe reunification of removed children.*
Example: Centacare SA reunification program to support the reunification of infants, children and adolescents with birth families. The program is led by a senior child and adolescent psychiatrist leading a team employing a support social work/trauma-based therapeutic mode. A program evaluation is underway led by Professor Delfabbro, Adelaide University and a preliminary report has been provided to the Department of Child Protection, SA – resulting in an extension of funding. A final report is to be delivered September 2019.
- Professional foster care with the objective of reunification – work with birth parents to maintain connection and seek to create a safe space for children to return to. There is considerable interest within the community (social work, education, psychology, nursing) in professional foster care, even when limited to highly troubled or disabled children (Habel et al., 2016).

• Early childhood settings:

- Employ high-level mental health clinicians (child and adolescent psychiatrists, speech pathologists, occupational therapists) in Children's Centres as per the South Australian model (SADE, n.d.), although while these Centres employ interdisciplinary teams, they are yet to employ full-time infant/child mental health specialists. The advantage of Children's Centres as a preventive setting is that they are (or can be) located in disadvantaged communities, offer a very welcoming, non-traumatising space, engage with parents as well as children and have active community outreach remit to engage with the most vulnerable and marginalised families. These centres offer a wholistic approach which can include direct nurturing of infants, early childhood learning, nutrition / provision of food, health and development assessment, access to parenting programs and other specialised services, familiarisation with primary school. A mental health presence could assist in identification of deep emotional, behavioural and development issues and a capacity to work therapeutically with children and parents to heal past traumas and attend to distressed communication patterns before problems become entrenched.

• Maternal and child health

- Pregnancy and infancy is a critical period for parents and children alike but most particularly for parents with a child maltreatment history (of which they be more or less aware) and/or history of mental illness. Post-natal depression is a considerable risk for these mothers and exacerbation of mental health issues in fathers. However, few

jurisdictions offer adequate clinical service support. While there are many infant visiting/community child-health nurse programs, few have mental health trained clinicians or the resourcing to offer a skilled therapeutic response of adequate intensity. If a mother suffers serious post-natal depression or other serious mental illness ensuring the child/children are safe and attachment relationships are intact. More therapeutic live-in programs that can accommodate mothers (and fathers) and their children are needed. We note for example that Helen Mayo House in SA, which offers an intensive trauma-and attachment-based service for women with serious mental health issues or substance use problems has just 6 beds and is unable to take all women who seek out and desperately need this service. They also have been keen to provide an outreach service, but for which there is no funding.

- *Services for Aboriginal communities*
 - Given the very high rates of histories of trauma and mental illness in the Aboriginal population, programs which are sensitive to the circumstances of the Aboriginal community are urgently needed. Exceptionally high levels of serious adversity (major financial stress, parental separation, death of persons close, domestic violence, parental mental illness etc) and associated high levels of mental distress are observed in Aboriginal children. For example, over 45% of Aboriginal children aged 6 to 10 have been exposed in the previous 12 months to 6+ serious childhood adversities and >20% were experiencing very high levels of distress/disordered behaviours or emotions (based in the Strengths and difficulties questionnaire) (Twizeyemariya et al., 2017).

Justice

- The importance of mental illness/brain damage in justice involved populations is grossly underplayed in the violence debate and replicated in lack of mental health services available for justice involved persons (Bower et al., 2019; Cumming et al, 2018).
- Fund genuine therapeutic prison environment. An example is the Boronia Women's Facility in Perth and some of the juvenile settings. But access to mental health services, both medical and other modalities is still a concern even in the more rehabilitative facilities. The impacts on children and associated costs are considerable and need to be taken into account in the planning (Dowell et al., 2018)
- Cross-portfolio Neighbourhood justice centres have been found to support a successful community-based solution for justice involved youth - that seek to involve all key player in the community - the courts, police, young people, schools, shop keepers, other businesses, local government, welfare agencies, to come up with innovative solutions. (This might include street art programs, co-located services – drug and alcohol, justice, mental health, employment, income support, financial services etc.). The Collingwood Neighbourhood Justice Centre (2019) as resulted in a reported reduction in crime, drug and alcohol use, truancy.

Knowledge of clinicians, service providers and the wider community. Urgent need for Education/ Training/Upskilling

There seems to be limited recognition that disturbed behaviours mean that the brain is not working properly. For example, children whose behaviour is problematic (for themselves and

others) will often be identified as naughty or bad, rather than a reflection that they are likely struggling and disturbed.

Upskilling of the entire human services sector, including teachers, centre-link, public housing, child protection staff. Simply funding more case finding – identifying persons at risk who need a more intensive and specialised response will achieve nothing but impose a cost if the referral pathway is non-existent. Thus, human services staff need to be trained regarding; i) the underlying source of disturbed thinking and behaviours (usually means damage to the brain) and; ii) how to deliver trauma informed practice; how to work with distressed individuals without further traumatising them, but rather reducing their distress.

Alongside high-quality mental health training in trauma-based therapies for a wide range of mental health clinicians, as well as other practitioners who work with patients with serious mental health issues including, GPs, Paediatricians, ED workers, midwives, gastroenterologists, dietitians, oncologists, pain specialist.

Any one in a clinical role needs to understand about the impact of trauma and adversity on mind and body. Access to high quality supervision, reflective practice on-going training must be mandatory in the NGO, private as well as government sector, and this must be built into contracts and funding models.

Over-reliance on medications rather than adopting a wholistic approach (family-based psychotherapeutic, with nutrition, income, workplace/school supports etc) has meant almost no progress in curing mental illness, with at best moderate modification of extreme behaviours, but typically with serious side effect profile. with mixed success. Undoubtedly a wholistic approach would work best to enhance mental health and improve participation and workforce contrition

Some Common misconceptions

Source of Mortality in person who are mentally unwell: The view that most early deaths from mental illness are from physical conditions is based on studies in adults with diagnosed mental illness. In infants, children and adolescents there is a growing body of work that would suggests that in this population a far higher proportion of premature deaths are directly related to extreme psychological distress/mental illness (including drug/alcohol dependence) resulting in excess deaths primarily from suicide and other external causes. For infants and children, parental psychological distress/mental illness (including drug/alcohol dependence), combined with a complex array of family-based adversity, can result in excess rates of premature death of young children from external causes (CDSIRC, 2019; CCYP, 2019; CDRT, 2019; FCC, 2017; OWA, 2017; CDRPC, 2018, COPMM, 2018; Segal et al., current research). Estimates of production losses due to premature death fail to include attributable deaths in infants, children and early/mid adolescence.

Meaning of prevention and early intervention - We suggest expensive advertising campaigns are unlikely to represent a good investment, given the complexity of the issues and evidence that the primary pathway into mental illness is via adversity and intergenerational trauma transmission – i.e. people are already within high-risk families. The predominant pathway is not from low-risk to high-risk. In this sense, mental illness is very different to say diabetes or heart diseases and the preventive strategies also need to be different. Given the challenges facing those at high risk, intensive on-the-ground support will have to be at the centre of an effective preventive strategy.

- Mental health promotion/prevention needs to be built on an understanding of the causal pathways into mental illness - then options for prevention become clear.
- Important to see prevention in an intergenerational context - healing a young parent might not prevent their mental illness, although could reduce risk and severity of relapse, but might represent primary prevention for their offspring.

Final note

Much of mental illness is caused by childhood trauma which damages the developing brain and relational blue-print. This is a hopeful story. It suggests that mental illness can be prevented in the young and mitigated in adults (given brain plasticity). Successful intervention studies confirm the possibility of prevention. We just need to create a service system that is consistent with the aetiology of mental illness, where the prevention of mental illness is an accepted reality and where resources are redirected to make this happen, supported by the requisite training. This does not mean taking resources from those currently experiencing distress. The healing of distressed children and parents represents a large part of the solution, if we are to disrupt intergenerational pathways into mental illness and prevent escalation of distress into more intractable scenarios characterised by multiple mental illness diagnoses carrying very high disease burden. In this way, over time, the prevalence of mental illness could be reduced and the associated burden.

Table 1 Effectiveness and cost-effectiveness of programs for addressing child maltreatment (and associated Mental illness)

Population Target	Aim/Outcome	N studies	Mean Cost \$/family*	Effectiveness N to treat**	C-E \$/ outcome \$2012
Family support programs					
Children in OOHC	Reunification	N=7	\$8,300	4	\$33,200
High risk of OOHC	Prevent OOHC	N=7	\$4,300	9	\$38,700
Families involved with CPS	Prevent CP report/substantiation	N=9	\$5,900	8	\$47,000
High/extreme risk no CP involvement	Prevent CM	N=4	\$4,500	12	\$50,000
Early childhood education					
C-E Chicago child-parent centres.	Moderate/high risk families. Prevent CM		\$9,600	20	\$181,000
Infant home visiting					
Low risk		N= 3	\$4,580	91	\$901,000
Moderate risk		N=11	\$7492	56	\$>1 million
High risk		N=14	\$9,641	24	\$660,000
Extreme risk/current abuse		N= 5	\$13,296	11	\$158,000

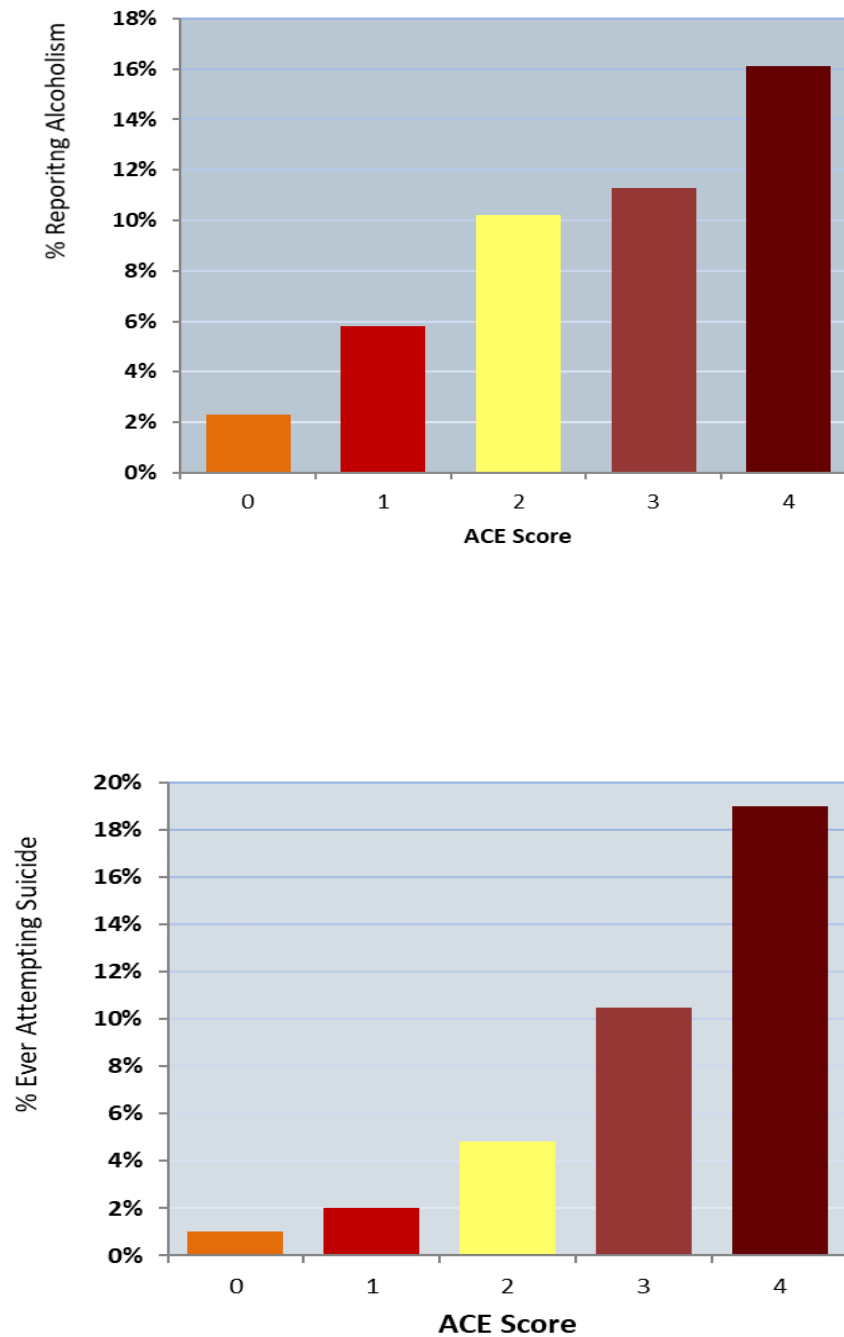
Notes: * relative to control group

** number needed to treat per successful outcome

OOHC Out-of-home care CPS Child Protection System CM Child maltreatment

Source: Segal L, Dalziel K, Papandrea K (2013)

Figures 2A and 2B Number of Adverse childhood experiences and risk of alcoholism and

suicide attempt

Source: Adapted from Felitti VJ, Anda RF, Nordenberg D, et al. (1998)

Figure 3 State Government Mental Health payments 2012-13

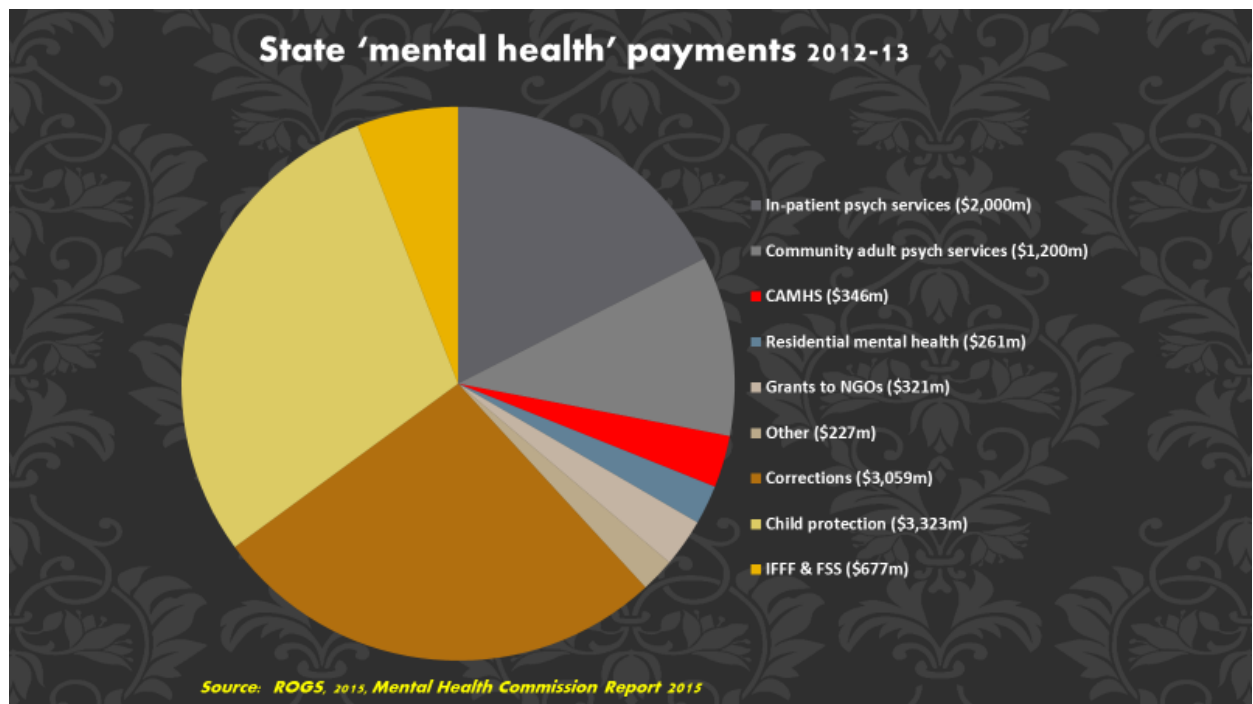
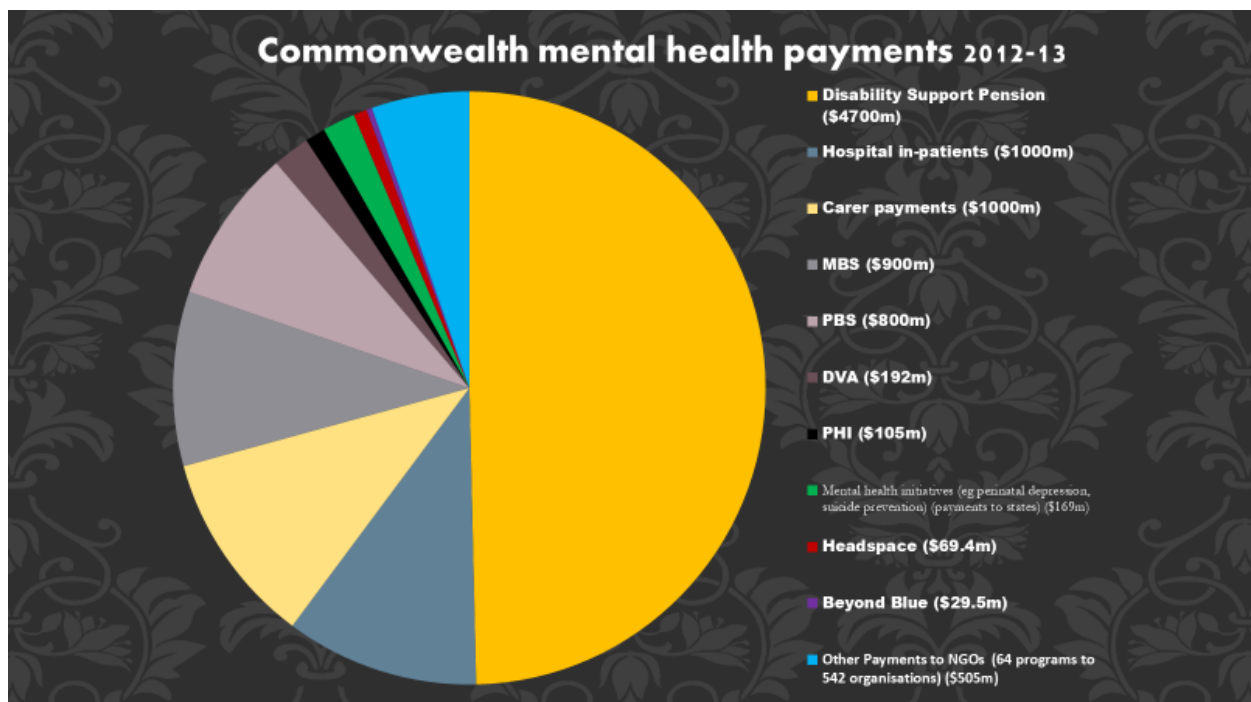


Figure 4 Commonwealth Government Mental Health payments 2012-13



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Annex: Additional Material

	Males%	Females%	ATSI%	
Parent ever in prison	44	48	61	
Attend school prior to custody	38	36	42	
Placed in OH care	25	40	38	
Child abuse or neglect	57	81	59	
Alcohol or substance use disorder	63	64	69	
Illicit drug use \geq weekly in the year prior to custody	65	65	72	
Any psychological disorder	86	92	92	
Attention/behavioural disorder	68	82	75	
2+ psychiatric disorders	70	92	79	
Low IQ < 80	54	31	59	

Source: Indig et al; 2009 NSW Young people in Custody Health Survey: Full Report NSW Human Services, Juvenile Justice; NSW Health, Justice Health