Submission No 44

SUPPORT FOR NEW PARENTS AND BABIES IN NEW SOUTH WALES

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Date Received: 23 November 2017

SUBMISSION TO THE LEGISLATIVE ASSEMBLY COMMITTEE ON COMMUNITY SERVICES INQUIRY INTO SUPPORT FOR NEW PARENTS AND BABIES IN NEW SOUTH WALES

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We are pleased to have the opportunity to make a submission to the Inquiry. Our submission focuses particularly on three of the six Terms of Reference:

- 1) The adequacy of current services and structures for new parents, especially those who need extra support, to provide a safe and nurturing environment for their babies.
- 2) Changes to current services and structures that could improve health, mental health and child protection outcomes; and
- 3) Specific areas of disadvantage or challenge in relation to health outcomes for babies. The submission provides:
 - An overview of disadvantage, trends in its incidence, prevalence and causal dynamics;
 - An example of an innovation in supporting Indigenous mothers and babies; and
 - Examples of integrated service models to address intergenerational impacts of disadvantage.

1 AN OVERVIEW OF DISADVANTAGE

While not destiny, disadvantage can negatively affect human development in ways that increase the risk of poverty, limit life choices and reduce capability (CSDH, 2008). Developmental outcomes depend on a complex interplay of multiple factors, including individual attributes, family characteristics, life events and wider social circumstances (Hayes & Hacker, 2017). These factors exhibit clear social gradients and recognisable environmental patterns (CSDH, 2008) and the circumstances of disadvantage are far from immutable. With appropriate support, individuals and families can show considerable capacity to adapt, survive and promote development (Power, 2007; E. E. Werner, 2004; Emmy E. Werner & Smith, 2001). As such, if circumstances can be improved then disadvantage is a state that is amenable to change.

Early experiences exert significant impacts on the long-term developmental trajectories of children. Services such as universal antenatal and perinatal care, early education, quality child care, and child and family health services, along with parental support, substantially improve developmental outcomes (Melhuish, 2014) and have been found to be cost effective (Reynolds, Temple, White, Ou, & Robertson, 2011). Such services can result in positive socioeconomic and educational outcomes, and reduced involvement in the justice system even into the third decade of life (Reynolds, Temple, Ou, Arteaga, & White, 2011).

While the early years are fundamental (Hayes, 2007; Keating & Hertzman, 1999; Shonkoff & Meisels, 2000), opportunities to enhance wellbeing continue across the lifespan (Brooks-Gunn, 2003). Sustaining early developmental gains requires ongoing support from a range of social systems, including families, peers, schools, work, neighbourhoods and communities, among others (Hayes, 2007; Homel, 2005; Emmy E. Werner, 2005). As such, there is a need to focus on the key influences of the developmental ecosystem throughout the life course (Hayes, 2007).

Given its ecosystemic and complex nature, disadvantage is, arguably, more than simply being poor. While limited material resources certainly contribute, other dimensions include limitations in employment, education and skills, health and ability, social support, community participation, and perceptions of personal safety (McLachlan, Gilfillan, & Gordon, 2013). Together, these dimensions conceptualise disadvantage as involving multiple forms of social exclusion. The Productivity Commission has reported on yearly shifts between various levels of social exclusion, from 2001 to 2009. It found that the largest proportion of people facing deep or very deep social exclusion in any given year experienced less exclusion the year after. However, of those who were very deeply socially excluded in any given year, 31% remained so the following year (McLachlan et al., 2013).

1.1 Groups at Higher Risk

Various demographics are associated with greater likelihood that external risk factors will result in persistent disadvantage. Some groups particularly at risk include:

- Indigenous Australians;
- Girls and women; and
- Lone parents.

1.1.1 Indigenous Australians

Indigenous Australians (aged 15 and older) show more than twice the prevalence of deep and persistent social exclusion (10.8%) compared with that for all Australians (4.4%). On virtually any measure of disadvantage, Aboriginal and Torres Strait Islander Australians are over-represented, and this tends to persist (SCRGSP, 2016). Though educational attainment for Indigenous Australians is improving, large educational gaps remain, largely due to similar improvements in attainment for non-Indigenous Australians (who typically start from a higher baseline).

1.1.2 Women

Women are consistently more likely to live in households below the poverty line than men, primarily due to their generally lower rates of employment, lower wages and the associated impacts of their greater family caring commitments (ACOSS, 2016). Nationally, in 2014, the rates of poverty for women were estimated to be 1 percentage point higher than those for men (13.8% vs 12.8%, respectively) (ACOSS, 2016). Similarly, deep and persistent social exclusion has been found to be more prevalent for women (5.2%) than for men (3.7%) (national prevalence: 4.4%) (McLachlan et al., 2013).

1.1.3 Lone Parents

Poverty and disadvantage tend to be higher for households headed by single parents (Corcoran & Chaudry, 1997). As of June 2016, the majority (83%) of the 618,900 one-parent families with dependants in Australia were single mother families (ABS, 2017). Children living in these families are more than three times as likely to be in poverty as those in two-parent families (41% vs 13%) (ACOSS, 2016). As adults, children who have experienced the absence of their fathers are more likely to move downward in the income distribution (Hancock, Edwards, & Zubrick, 2013). Being disadvantaged does not necessarily directly diminish the quality of parenting. However, the health and wellbeing of children is improved when caregivers have access to sufficient education, time and support (Engle, Menon, & Haddad, 1999; Harper, 2004a). Disadvantage tends both to increase the stresses and strains on caregivers and to reduce the resources and supports that can be deployed to nurture children.

1.2 Circumstances that Increase the Risk of Disadvantage

Circumstances and situations set key contexts that can, if left unaddressed, exacerbate the risk of disadvantage. Some of the key drivers of the move into and entrenchment of disadvantage include:

- Unemployment;
- Welfare dependency, especially lengthy periods of income support;
- Long-term health conditions;
- Limited education;
- Residing in public or insecure housing; and
- Location and place-based factors.

1.2.1 Unemployment

Loss of employment is a major life event that has marked impacts on families. For people aged over 15, the prevalence of deep and persistent social exclusion has been estimated to be more than twice as high among people who were unemployed (11%) as the national prevalence (4.4%). Jobless households with children tend to have both poorer social—emotional wellbeing, health and educational outcomes than those with employed parents (M Gray & Baxter, 2012; Matthew Gray,

Taylor, & Edwards, 2011), particularly when joblessness endures (M Gray & Baxter, 2011). These effects may extend across multiple generations (Hancock et al., 2013). Current joblessness has been found to predict future unemployment risk, lower education level and long-term individual health problems (Hérault, Kalb, & Zakirova, 2015).

1.2.2 Welfare dependency

For people dependent on income support, the prevalence of deep and persistent social exclusion (15%) is more than 3 times as high as the national prevalence of such exclusion (4.4%). People from families with intensive, multi-year income support tend to have poorer education and health outcomes, and engage in more risky behaviours (D. Cobb-Clark, 2010). Young people from families with intensive income support also have a decreased sense of control over life events. Other associated risks may also include earlier, unsafe sexual activity and a higher rate of unplanned pregnancies.

1.2.3 Long-term Health Conditions

Ill health is the most significant long-term factor affecting poor households (Harper, 2004b). The prevalence of deep and persistent social exclusion for people with a long-term health condition or disability (11%) is more than twice that of the national prevalence (4.4%). Reduced health diminishes the workforce participation which, in turn, alters household dependency ratios. Data indicate that 81% of Australians who are deeply and persistently socially excluded have a long-term health condition or disability (McLachlan et al., 2013).

1.2.4 Limited Education

Greater risks of disadvantage are associated with limited educational opportunity. The prevalence of persistent deep disadvantage among Australians with low educational attainment (9.3%) is twice that of the national average prevalence of such disadvantage (4.4%). Those with inadequate education are more likely to experience unemployment, low income, poor health and high rates of involvement with the criminal justice system (Vinson, 2007). Persistent poverty has been shown in the United States to be highest among people who have not completed high-school (Bird, 2007). In Australia, 61% of people who are deeply and persistently disadvantaged have low educational attainment (Year 11 or below).

The effects of limited education may also be intergenerational. Parents with limited education are more prevalent in households experiencing poverty and disadvantage (Aldaz-Carroll & Morano, 2001; Emerson & Souza, 2005; Falkingham & Ibragimova, 2005; Handa, Simler, & Garrower, 2004). On the other hand, increased education is a protective factor in later life (Bird, 2007). Extent of schooling correlates strongly with adult earning potential and income (Aldaz-Carroll & Morano, 2001; Emerson & Souza, 2005) and a reduced risk of housing insecurity (D. A. Cobb-Clark, Herault, Scutella, & Tseng, 2016). Educational opportunities for girls and women play an important role in interrupting persistent disadvantage, and more educated mothers are more likely to send their children to school (Christiaensen & Alderman, 2004; Rose & Dyer, 2008).

1.2.5 Residing in Public or Insecure Housing

In Australia, the highest prevalence of deep and persistent social exclusion has been estimated to be among people living in public housing (24%). Regarding insecure housing, D. A. Cobb-Clark et al. (2016) provide evidence that for those who are homeless, the older a person, the longer before they secure stable housing. They also explored gender differences for housing insecurity (for example, living with friends or in a motel) and homelessness (for example, sleeping on the street or in crisis accommodation), finding that, on average, females leave circumstances of housing insecurity around 2 months sooner than males, while, in contrast, they tended to remain homeless for around 1.4 months longer than males (although this was not statistically significant). The study attributed the longer duration of homelessness for females to their being more likely to enter crisis accommodation

(which is still classified as 'homelessness' and characterised by relatively longer stays) while males were more likely to be sleeping rough (characterised by shorter durations). There are possible intergenerational implications for homelessness with children who experience homelessness tending to have a reduced likelihood of adult employment, with men at greater risk than women (D. Cobb-Clark & Zhu, 2015).

1.2.6 Location and Place

Finally, evidence suggests that, relative to urbanised areas, disadvantage is more prevalent (Saunders & Wong, 2012) and persistent (Tanton, Gong, & Harding, 2012) in regional and remote parts of Australia than in most, though not all, capital cities. Saunders and Wong (2012) found that people in rural areas or villages experienced the highest prevalence of deprivation, social disengagement, service exclusion, and economic exclusion. People living in the inner city, in contrast, experienced lower rates of deprivation and social disengagement. Similarly, the prevalence of entrenched, disadvantage across multiple life-stages is highest in Remote and Very Remote areas of Australia, and not as prevalent in most capital cities (Tanton et al., 2012; Vinson & Rawsthorne, 2015).

1.3 The Dynamics of Disadvantage

Conceptualising disadvantage as a state that can dynamically change over the life course is foundational to public policy since it is those alterable factors – both within and around individuals – that public policy can most directly influence. Individual characteristics, such as Indigeneity, sex and relationship status, along with the circumstances that elevate risk of disadvantage, may also make for difficulty in accessing services, especially for those who are "hard-to-reach" for maternal and child health services. Section 2 outlines an innovative art health program developed and implemented in Tamworth, by Associate Professor Kym Rae. The program has been designed to reach Indigenous women and provide access to health services in a welcoming, safe and culturally congruent environment.

Disadvantage also tends to engender packages of needs that may not be met by traditional services, which can tend to focus on a specific area of health, educational or social support. Integration of services is often required to address the complex, cross-cutting needs of families and children living in circumstances of disadvantage. Section 3 briefly outlines some innovative approaches to service integration that have been developed and deployed by the University of Newcastle's Family Action Centre (FAC) to address the wider, complex social and educational support needs of those living in disadvantage.

2 AN EXAMPLE OF AN INNOVATION IN SUPPORTING INDIGENOUS MOTHERS AND BABIES

2.1 The adequacy of current services and structures for new parents especially those who need extra support to provide a safe and nurturing environment for their babies.

In rural Australia, support for new parents is largely limited to GP services, community early childhood nurses and informal mother's groups. Rural communities have poorer health outcomes overall. Significant proportions of those residing in rural communities identify as either Aboriginal or Torres Strait Islander. Indigenous populations are at higher risk for poor maternal, birth and infant outcomes when compared to the general population.

The Gomeroi gaaynggal program in Tamworth and Walgett (NSW) aims to close the gap in Indigenous health through a combination of health research (Ashman et al., 2016) with the community and a community driven ArtsHealth program. The ArtsHealth program utilises a creative, strengths-based

approach to developing health-related knowledge for Aboriginal women and their families. A strengths-based approach has been used to counteract the ongoing negative rhetoric in the wider Australian media and medical support processes to which Indigenous people are exposed.

The Aboriginal artists leading the program work collaboratively with public health professionals, private health providers, University of Newcastle staff, researchers, and health students so that health knowledge is imparted in an informal way. Other services that have worked within the *Gomeroi gaaynggal* program include financial services, TAFE, counselling services, Medicare Local, and Regional Arts NSW (Arts Northwest and Outback Arts).

Importantly, the *ArtsHealth* program is facilitated by an Elder and Aboriginal artist, who works on artworks with the mothers each week. During their weekly art sessions, representatives from a variety of health areas can attend the centre. For example, it is not unusual to have a midwife, a dietician and someone from oral health all attending the centre at the same time. Art works are created by both the mothers and the health professionals and cultural knowledge is shared at the same time. This partnered project guides Aboriginal families towards improved health behaviours and assists to develop culturally appropriate skills in the health workforce. Knowledge areas covered in the program include dietetics, physiotherapy, mental health, sexual health, population health, obstetrics and gynaecology, women's health and child/family health. Evaluation has indicated that an informal, long-term approach has the most impact in generating behaviour change.

RECOMMENDATION 2A: that support for Indigenous families be strongly linked with creative cultural approaches and utilise strengths-based approaches.

2.2 Changes to current services and structures that could improve physical health, mental health, and child protection outcomes.

2.2.1 Mental Health

In remote, rural and regional areas of Australia mental health services supporting women during the perinatal period are limited, and those supporting Indigenous women are even more limited.

Data from the *Gomeroi gaaynggal* cohort has highlighted that approximately 40% of women show evidence of PTSD symptoms during their pregnancy (Mah et al., 2017). Further, PTSD symptom scores are higher than those exhibited by European victims of crisis, including terrorism (mean score 33.4 ± 14.4 versus 20.6 ± 18.5). Cohort participants have suffered major negative life events which have no doubt contributed to their PTSD symptoms, including 49.6% suffering death of a close friend or family member, 35.9% living in overcrowded conditions, 16.4% being affected by a family member's incarceration and 12.1% experiencing relationship breakdown.

For an infant being cared for by a mother struggling with PTSD symptoms, developmental impacts include regulatory difficulties and socioemotional problems evident as early as the first year of life (Ahlfs-Dunn & Huth-Bocks, 2014). By the second year of life, infant mental health issues are evident with increased internalising and externalising behaviours (Enlow et al., 2011). Of further concern, infants with regulatory difficulties are at increased risk of abuse which could create cycles of trauma across generations Glaser (2000).

RECOMMENDATION 2B: that the number of culturally appropriate mental health services to support Indigenous women be increased, with a particular focus on the perinatal period.

2.2.2 Physical Health

Maternal obesity is high with only 27.2% participants in the *Gomeroi gaaynggal* cohort in the healthy BMI range. The cohort includes 53% that are obese or morbidly obese (BMI >30 kg/m²) (K. Pringle et al., 2015). Obesity in pregnancy has been strongly associated with development of gestational diabetes and preeclampsia, both of which place both mother and infant at significant risk of poor outcomes in pregnancy and later life. Significant work must be done in Indigenous populations prior to pregnancy to reduce obesity and ameliorate associated risks.

RECOMMENDATION 2C: that obesity reduction needs to target Indigenous women in the reproductive ages (14-40 years) to reduce obesity prior to pregnancy and reduce weight between subsequent pregnancies.

Renal disease is very prevalent within the Indigenous communities of Australia. However, it is clinically challenging to diagnose early due to limited symptoms until a patient has end stage renal disease, which requires dialysis. Participants in the *Gomeroi gaaynggal* cohort are being screened during pregnancy as a part of the study. Screening indicates extremely high prevalence of renal dysfunction in a group of relatively young women (mean age 24 years), with 12.7% having proteinuria and 13.3% having albuminuria without hypertension.

RECOMMENDATION 2D: that renal function studies are done on all Indigenous mothers in pregnancy as a routine part of antenatal clinical care as a screening tool for renal disease.

Little is known about the quality of dietary intake of pregnant Aboriginal and Torres Strait Islander women. This is pertinent given the association between poor diet quality and the increased risks of several concerns including gestational hypertension (Gresham, Collins, Mishra, Byles, & Hure, 2016), gestational diabetes (Meinila et al., 2017), delivering a child of low birth weight (Gresham et al., 2016) or preterm birth (Martin, Sotres-Alvarez, & Siega-Riz, 2015). The *Gomeroi gaaynggal* program has recently begun to research what women are eating during pregnancy, including whether pregnant women are meeting the Australian Guide to Healthy Eating (AGHE) recommendations. Only one participant (n=1/67) met all pregnancy Nutrient Reference Values (folate, iron, calcium, zinc, fibre). The median percentage of energy from saturated fat was 15%, higher than the recommended maximum of 10% in these women (Lee, Collins, Gordon, Rae, & Pringle, 2017).

Food group	% meeting AGHE during pregnancy
Dairy	32.8
Meat/alternatives	31
Vegetable	29.3
Bread and Cereal	3.5
Fruits	27.6

RECOMMENDATION 2E: that evidence-based nutrition-in-pregnancy education be delivered early in the antenatal period for Indigenous women and become a significant component of antenatal care. Further, that nutrition education begin in adolescence so that women are well-nourished and have routine healthy nutritional habits prior to falling pregnant.

2.3 Specific Areas of Disadvantage or Challenge in Relation to Health Outcomes for Babies

In the *Gomeroi gaaynggal* cohort rates of preterm delivery are approximately double that of non-Indigenous women (13.9 %) and the delivery of infants who are born small for gestational age (14.6%) and large for gestational age (10.1%) are also extremely high (KG et al., 2015). Many of these infants

remain unwell for significant periods of time following birth, requiring ongoing regular medical support to maximize the health outcomes. In addition, the families of these children also face significant geographical challenges and limited financial means. Qualitative research with the *Gomeroi gaaynggal* cohort indicates that families in this situation find attendance at follow-up medical appointments for their premature infants beyond their capacity.

RECOMMENDATION 2F: that financial assistance be available for families requiring on-going postnatal support, rather than relying on reimbursement through the IPTAAS system and greater use of Skype or video links be utilized for medical appointments for families.

Breastfeeding has health benefits for both mother and child. Positively, the *Gomeroi gaaynggal* study indicates that breastfeeding initiation is relatively high in the Indigenous community at 85.9%. However, duration is short (median 1.4 months with an interquartile range 0.5-4.0 months) and fails to meet the minimum NHMRC and WHO recommendations of exclusive breastfeeding to 12 months. Discussions with women around breastfeeding highlight a need for culturally appropriate lactation support within communities. While some support is provided by the AMIHS teams, there is still a substantial unmet need for support.

RECOMMENDATION 2G: that further funding be committed to train at least one Indigenous community lactation support staff member at each hospital.

A recent systematic review reported that up to 22% of Indigenous infants aged 2-4 were overweight or obese (Dyer et al., 2017). Infants from the *Gomeroi gaaynggal* cohort have been identified as having a high intake of sweetened drinks in infancy. It is anticipated that this will be a substantial contributor to early childhood obesity. Sweetened drinks (including juices) are not recommended for children prior to age 1 year. In this cohort, we have identified that by 12 months of age 26.1% of the infants in the *Gomeroi gaaynggal* cohort had had at least one serve of a sweetened drink (can include cordial, sports drink or soft drink) and by 5 years 50% are having this daily. Additionally, 47.8% have daily juice at 12 months and 63.3% have it by 5 years (Ashman et al., 2016). A recent analysis of the infants from the study shows 16% being overweight/obese by age 2 years (K. G. Pringle et al., 2017).

RECOMMENDATION 2H: that as a significant component of antenatal care, evidence-based nutrition education be delivered to Indigenous women with a focus on 'healthy eating for children' and as a whole-of-community education initiative, to raise awareness of when sweetened drinks/juices can be part of a child's diet, how much is appropriate and what represents an inappropriate level of consumption.

3 INTEGRATING HEALTH, SOCIAL SERVICES AND EDUCATIONAL SUPPORTS

The complex package of challenges that confront those living in disadvantaged circumstances often do not fit well with traditional service models focused on a specialised area of health, education or social support. Provision of a wrap-around of integrated supports that complement traditional service provisions has been one of the hallmarks of the work of the Family Action Centre, at the University of Newcastle. The focus on strengths-based approaches, is another hallmark of the of the Family Action Centre's practice approaches.

3.1 Hunter Outreach Project

The *Hunter Outreach Program* is a mobile support service for families in the lower Hunter area. The program offers services which build on existing community strengths and foster positive relationships within families. The Hunter Outreach team offer regular activities and groups in caravan parks,

boarding houses, social housing estates, refuges and other locations where families experiencing complex challenges live. The service is available to any family with at least one child under 18 years. All activities are offered free of charge. Referrals are accepted from individuals and support services. Services are offered to any family requesting extra support, as long as they have at least one child under 18 years. The work involves a variety of activities including advice, support, referrals and parenting programs. Outcomes and Key Performance Indicators are measured via data sets which feed into a longitudinal analysis of vulnerable families with complex problems. The Project's objectives are:

- To assist families who have children under the age of 18 who require some extra support.
- To design, deliver and support strength-based programs in collaboration with families and their communities.
- To encourage and support families to identify and achieve goals.
- To promote a sense of family belonging in communities.

The services and activities currently offered by the project include:

- Case Management
 - Experienced Family Workers visit families in their home (or at a place of their choosing) and provide information, case planning, support, encouragement and referral as needed to assist families to reach their goals. This service is also open to young parents.
 - Youth support for young people aged 12-25 provides assistance and support in seeking employment, accommodation and education and in addressing other support needs. Young people can self-refer or are referred through agencies they are involved with

Parenting Programs

- Delivered every school term, these programs provide parents with an opportunity to meet other adults and build on their existing skills to make parenting more rewarding.
- Parenting programs are developed and delivered to meet specific community needs
 i.e. families residing in refuges or in other temporary housing such as boarding
 houses.
- Practical Skills Development
 - Offered each school term, a variety of groups and topics are delivered in conjunction with other services in the local community. Topics include life skills, cooking, learning to be more creative with children, communication strategies, playing with children and understanding childhood literacy.

RECOMMENDATION 3A: that service mapping be undertaken to identify "lighthouse" examples of strength-based, integrated programs for families with children living in circumstances of disadvantage, that complement and address gaps in existing health, wellbeing, social support and educational provision.

3.2 Uni4You

Provision of educational opportunity, especially for those who have experienced limited and/or interrupted educational pathways is a key protective factor both for parents and their children. As such, it can contribute significantly to breaking the intergenerational cycle of disadvantage.

Uni4You offers intensive support to people in the University of Newcastle's Enabling Programs. Activities include study preparation workshops, learning support groups plus personalised social-emotional support. The activities provide individuals, from areas historically under-represented in the general university population, with the skills needed to prepare for university and study successfully.

The activities have been designed to support the lifelong learning continuum provided by the Widening Participation activities offered at UON. The program is funded through the Australian Government Higher Education Participation Program (HEPP). The *Uni4You* project involves The University's Family Action Centre, the English Language and Foundation Studies (ELFS) Centre and The Centre of Excellence for Equity in Higher Education (CEEHE).

The *Uni4You* project offers a suite of free activities and workshops that foster engagement and encourage enrolment in the University's pathway programs - Open Foundation, Newstep and Yapug. *Uni4You* activities and sessions are usually conducted over 10 weeks, with each session of about 2-hours duration. Parking is provided and child minding is available free from charge. Public Transport is also available.

Uni4You articulates with the suite of enabling programs offered by the University of Newcastle. These include:

- *Open Foundation* is a free program for people aged 20 years + (offered on campus and online) and gives people the chance to enter University.
- Newstep is a free program for 18 to 20 year-olds who did not complete the HSC and would like the chance to enter University.
- Yapug is a free program for Aboriginal and Torres Strait Islander people to help gain admission into undergraduate degrees.

Uni4You staff offer assistance and support via:

- Information Sessions
- Career Information
- Preparing for Study Sessions (reading, writing, lecture note taking, math)
- Library Tours
- IT assistance
- Application and enrolment assistance
- Coping with change discussions

The *Uni4You* project team work in the following NSW areas: Raymond Terrace, Karuah, Cessnock, Muswellbrook, Windale, North Lakes, Central Coast, and most recently, are extending services across the Upper Hunter.

RECOMMENDATION 3B: that the learnings from successful pre-enabling and enabling programs be leveraged to provide sustainable and scalable approaches to re-engaging young mothers whose educational opportunities have been limited and/or interrupted, given the intergenerational benefits that flow from such initiatives.

3.3 Deadly Streaming

Promoting educational participation and engagement for Indigenous learners is a key policy priority to promote health, wellbeing and access to opportunity. The *Deadly Streaming* project provides school based activities to Aboriginal and Torres Strait Islander (ATSI) students to improve school attendance, to support connection to culture, and to encourage cultural sensitivity in schools. The main objective of this project is to support ATSI students to culturally identify and promote a sense of cultural competence and to support schools to become more culturally sensitive thereby leading to improved educational outcomes for ATSI students.

Following the successful Healing Foundation Deadly Dads project (2011-2013) the Family Action Centre is now managing a similar HEPPP funded project called *Deadly Streaming*. The new *Deadly Streaming* project will support and encourage students to remain engaged in their education by providing cultural connection activities which also include their parents and /or extended families.

The *Deadly Streaming* project works with children in the primary school years (5 & 6) by mentoring them and engaging their parents in the school community. The project team are also working with children from years 7 & 8 to support them during their initial transition years into High School.

The National Indigenous Education Action Plan (NIEAP) has highlighted the importance of the time around the transition to high school when school attendance is likely to fall away for Aboriginal and Torres Strait Islander children. The *Deadly Streaming* project is designed to help these children succeed in education at a time when they are most likely to lose their drive and enthusiasm to succeed.

RECOMMENDATION 3C: that innovative initiatives targeting Indigenous learners, such as those provided by Deadly Streaming, be increased in availability to facilitate engagement, participation and successful transition to secondary school and further educational opportunities, especially given the prime potential of education to prevent the multiple consequences of disadvantage.

3.4 Muswellbrook Strong Families—Capable Community.

Many communities face the twin problems of service gaps in some areas and service duplication in others. Synergising the community services and supports, while addressing gaps and avoiding duplication, is an increasingly pressing priority. One example of an initiative to achieve service synergy that is sustainable and offers potential to be scalable to other communities is *Strong Families—Capable Communities* (SF—CC), currently being deployed in the Upper Hunter Region of NSW.

The Strong Families—Capable Communities strategy involves a collaborative partnership with the NSW Department of Premier and Cabinet (DPC) and the Muswellbrook CREATE Change Coalition (chaired by DPC and including senior representatives from the NSW Departments of Education, Family and Community Services, Health, Housing, Transport, the Police Local Area Command, the Muswellbrook Shire Council, Compass Housing, and the Family Action Centre at the University of Newcastle).

Founded on local collaboration, relationship-building, training, and accountability, the elements of the strategy aims to foster better integrated and synergized approaches to developing human capital across domains including healthcare, education, housing, child care, community services, Indigenous services, and criminal justice. The initiative works in close collaboration with state and local government, community services, and private enterprise.

Strong Families—Capable Communities employs a Collective Impact approach to addressing social problems and enhancing community strengths (Cabaj & Weaver, 2016; Kania & Kramer, 2011). Collective Impact proposes that, to be effective, it must meet five conditions: a common agenda; shared measurement systems; mutually reinforcing activities; continuous communication, and a backbone support organisation to plan, manage and facilitate effective service delivery. The initiative has a strong focus on promoting health, wellbeing and educational opportunity and is deploying an innovative prevention support system.

Strong Families—Capable Communities also seeks to develop and implement an innovative, integrated data backbone to enable the community to identify trends and track specific risk factors for social problems and key community strengths and assets and bring together multiple community, government, and industry agencies.

RECOMMENDATION 3D: that an audit be conducted of place-based, collective impact initiatives across NSW, focusing on process and outcome evaluation data, to determine the scope of such initiatives for wider translation to other communities.

RECOMMENDATION 3E: that proof of concept trials be conducted and evaluated of data linkage and integration focused on health, wellbeing and community social indicators and administrative information to identify trends, track relevant risk and protective factors and provide a basis for comprehensive implementation monitoring and outcome evaluation.

4 PUTTING MATERNAL AND INFANT HEALTH INTO COMMUNITY CONTEXT

To reduce disadvantage and improve developmental outcomes it is imperative that policy and initiatives be geared towards achieving greater equity of health, wellbeing and educational opportunity. That is, policy and initiatives need to recognize the existing inequitable distribution of disadvantage and respond in ways that maximize opportunities for all to lead lives that are secure, safe, healthy, and happy. This includes working to close gaps for those new parents and babies who face greater challenges to their wellbeing, particularly women who are Indigenous and/or lone parents.

Access to high quality health care services is a necessary foundation for improving their wellbeing. However, it is often not a lack of health care, either alone or primarily, that is driving disadvantage. As such, addressing disadvantage often requires better integration of health, social and educational services. This integration needs to be tailored to directly address locally identified drivers of disadvantage. Further, integrated services need to meaningfully involve the perspectives and preferences of those they are serving and also leverage the strengths and resources that these people can provide. This tailored integration and leveraging of local strengths and perspectives needs to be directed towards successfully, sustainably and scalably altering the ecosystem that perpetuates disadvantage. After all, as reflected by Marmot in considering the social determinants of health and wellbeing, "What good does it do to treat people and send them back to the conditions that made them sick?" (Marmot, 2016).

REFERENCES

- ABS. (2017). Main Features One Parent Families (ABS cat no. 6224.0.55.001).
- ACOSS. (2016). Poverty in Australia 2016 (5). Retrieved from Strawberry Hills, Australia:
- Ahlfs-Dunn, S. M., & Huth-Bocks, A. C. (2014). Intimate Partner Violence and Infant Socioemotional Development: The Moderating Effects of Maternal Trauma Symptoms. *Infant Mental Health Journal*, *35*(4), 322-335. doi:10.1002/imhj.21453
- Aldaz-Carroll, E., & Morano, R. A. (2001). Escaping the poverty trap in latin america: The role of family factors. *Cuadernos de economía: Latin American Journal of Economics,* 38(114), 155-190.
- Ashman, A. M., Collins, C. E., Weatherall, L., Brown, L. J., Rollo, M. E., Clausen, D., . . . Rae, K. M. (2016). A cohort of Indigenous Australian women and their children through pregnancy and beyond: the *Gomeroi gaaynggal* study. *Journal of Developmental Origins of Health and Disease*, 7(4), 357-368. doi:10.1017/S204017441600009X
- Bird, K. (2007). *The intergenerational transmission of poverty: an overview* (ID 1629262). Retrieved from Rochester, NY: https://papers.ssrn.com/abstract=1629262
- Brooks-Gunn, J. (2003). Do you believe in magic? What we can expect from early childhood intervention programs. *Social Policy Report*, *17*(1), 1-14.
- Cabaj, M., & Weaver, L. (2016). *Collective Impact 3.0: An evolving framework for community change*. Retrieved from Waterloo, Ontario:
- Christiaensen, L., & Alderman, H. (2004). Child malnutrition in Ethiopia: Can maternal knowledge augment the role of income? *Economic Development and Cultural Change*, *52*(2), 287-312. doi:Doi 10.1086/380822
- Cobb-Clark, D. (2010). Disadvantage across the generations: what do we know about social and economic mobility in Australia? *Economic Record, 86,* 13-17. doi:10.1111/j.1475-4932.2010.00661.x
- Cobb-Clark, D., & Zhu, A. (2015). *Childhood Homelessness and Adult Employment: The Role of Education, Incarceration, and Welfare Receipt*. Paper presented at the 29th Annual Conference of the European Society for Population Economics, Izmir, Turkey.
- Cobb-Clark, D. A., Herault, N., Scutella, R., & Tseng, Y.-P. (2016). A journey home: What drives how long people are homeless? *Journal of Urban Economics*, *91*, 57-72. doi:10.1016/j.jue.2015.11.005
- Corcoran, M. E., & Chaudry, A. (1997). The dynamics of childhood poverty. *Future Child,* 7(2), 40-54.
- CSDH. (2008). Closing The Gap in a Generation: Health Equity Through Action on The Social Determinants of Health: Commission on Social Determinants of Health Final Report (World Health Organization Ed.). Geneva, Switzerland: World Health Organization, Commission on Social Determinants of Health.
- Dyer, S. M., Gomersall, J. S., Smithers, L. G., Davy, C., Coleman, D. T., & Street, J. M. (2017). Prevalence and characteristics of overweight and obesity in indigenous Australian children: A systematic review. *Critical Reviews in Food Science and Nutrition*, *57*(7), 1365-1376. doi:10.1080/10408398.2014.991816
- Emerson, P. M., & Souza, A. P. (2005). *The inter-generational persistence of child labor*. Retrieved from Washington: http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/0515.pdf

- Engle, P. L., Menon, P., & Haddad, L. (1999). Care and nutrition: Concepts and measurement. *World Development*, *27*(8), 1309-1337. doi:Doi 10.1016/S0305-750x(99)00059-5
- Enlow, M. B., Kitts, R. L., Blood, E., Bizarro, A., Hofmeister, M., & Wright, R. J. (2011). Maternal posttraumatic stress symptoms and infant emotional reactivity and emotion regulation. *Infant Behavior & Development, 34*(4), 487-503. doi:10.1016/j.infbeh.2011.07.007
- Falkingham, J., & Ibragimova, S. (2005). *The Dynamics of Child Poverty in the Kyrgyz Republic*. Retrieved from London: http://www.childhoodpoverty.org/index.php?action=publicationdetails&id=92
- Glaser, D. (2000). Child abuse and neglect and the brain A review. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 41*(1), 97-116. doi:Doi 10.1017/S0021963099004990
- Gray, M., & Baxter, J. (2011). Parents and the labour market. In *The Longitudinal Study of Australian Children Annual Statistical Report 2010* (pp. 9–41). Melbourne, Australia: Australian Institute of Family Studies.
- Gray, M., & Baxter, J. (2012). Family joblessness and child well-being in Australia. In A. Kalil, R. Haskins, & J. Chesters (Eds.), *Investing in Children: Work, Education, and Social Policy in Two Rich Countries* (pp. 48-71). Washington, DC: Brookings Institution Press.
- Gray, M., Taylor, M., & Edwards, B. (2011). Unemployment and the wellbeing of children aged 5-10 Years. *Australian Journal of Labour Economics*, 14(2), 153.
- Gresham, E., Collins, C. E., Mishra, G. D., Byles, J. E., & Hure, A. J. (2016). Diet quality before or during pregnancy and the relationship with pregnancy and birth outcomes: the Australian Longitudinal Study on Women's Health. *Public Health Nutrition*, *19*(16), 2975-2983. doi:10.1017/S1368980016001245
- Hancock, K., Edwards, B., & Zubrick, S. (2013). Echoes of disadvantage across generations? The influence of unemployment and separation of grandparents on their grandchildren. In *Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)* (pp. 43-58): Australian Institute of Family Studies.
- Handa, S., Simler, K. R., & Garrower, S. (2004). *Human Capital, Household Welfare, and Children's Schooling in Mozambique. Research Report 134*. Retrieved from Washington D.C.: http://www.ifpri.org/pubs/abstract/134/rr134.pdf
- Harper, C. (2004a) Breaking poverty cycles the importance of action in childhood. In, *CHIP Policy Briefing*. London: Childhood Poverty Policy and Research Centre (CHIP).
- Harper, C. (2004b) Child ill health and mortality how can we prevent the preventable. In, *CHIP Policy Briefing*. London: Childhood Poverty Policy and Research Centre (CHIP).
- Hayes, A. (2007). Why early in life is not enough. In *Pathways and Crime Prevention: Theory, Policy and Practice* (pp. 202-225). Devon, UK: Willan Publishing
- Hayes, A., & Hacker, A. H. (2017). Persistent disadvantage in Australia: extent, complexity and some key implications. In *Australia's Welfare 2017 [forthcoming]*. Canberra: AIHW.
- Hérault, N., Kalb, G., & Zakirova, R. (2015). A study into the persistence of living in a jobless household. *Economic Record*, *91*(293), 209-232. doi:10.1111/1475-4932.12178
- Homel, R. (2005). Developmental crime prevention. In N. Tilley (Ed.), *Handbook of Crime Prevention and Community Safety* (pp. 71-106). Cullumpton, Devon, UK: Willan Publishing.
- Kania, J., & Kramer, M. (2011). Collective Impact. *Stanford Social Innovation Review, Winter* 2011, 36-41.

- Keating, D. P., & Hertzman, C. (1999). Modernity's paradox. In D. P. Keating & C. Hertzman (Eds.), *Developmental Health and the Wealth of Nations: Social, Biological and Educational Dynamics* (pp. 1-18). New York: Guildford Press.
- KG, P., L, W., Corbisier de Meaultsart, C., Keogh, L., Sands, S., CC, B., . . . KM, R. (2015). The *Gomeroi gaaynggal* cohort: A Preliminary Study of the Maternal Determinants of Pregnancy Oucomes in Indigneous Australian Women. *Journal of Pregnancy and Child Health*, 3(1). doi:http://dx.doi.org/10.4172/2376-127X.1000211
- Lee, Y. Q., Collins, C. E., Gordon, A., Rae, K. M., & Pringle, K. G. (2017). Disparities Exist between the Dietary Intake of Indigenous Australian Women during Pregnancy and the Australian Dietary Guidelines: the *Gomeroi gaaynggal* Study. *Currently under review*.
- Mah, B., Weatherall, L., Burrows, J., Blackwell, C. C., Gwynn, J., Wadhwa, P., . . . Rae, K. M. (2017). Post-traumatic stress disorder symptoms in pregnant Australian Indigenous women residing in rural and remote New South Wales: A cross-sectional descriptive study. *Australian & New Zealand Journal of Obstetrics & Gynaecology, 57*(5), 520-525. doi:10.1111/ajo.12618
- Marmot, M. (Writer). (2016). Lecture 1: Health inequality and the causes of the causes [Radio]. In L. Malcolm (Producer), *Boyer Lectures*: ABC Radio National.
- Martin, C. L., Sotres-Alvarez, D., & Siega-Riz, A. M. (2015). Maternal Dietary Patterns during the Second Trimester Are Associated with Preterm Birth. *Journal of Nutrition*, *145*(8), 1857-1864. doi:10.3945/jn.115.212019
- McLachlan, R., Gilfillan, G., & Gordon, J. (2013). *Deep and Persistent Disadvantage in Australia*. Retrieved from Canberra, ACT: http://www.pc.gov.au/research/supporting/deep-persistent-disadvantage
- Meinila, J., Valkama, A., Koivusalo, S. B., Rono, K., Kautiainen, H., Lindstrom, J., . . . Erkkola, M. (2017). Association between diet quality measured by the Healthy Food Intake Index and later risk of gestational diabetes-a secondary analysis of the RADIEL trial. *European Journal of Clinical Nutrition, 71*(4), 555-557. doi:10.1038/ejcn.2016.275
- Melhuish, E. (2014). The impact of early childhood education and care on improved wellbeing. In *If you could do one thing... Nine local actions to reduce health inequalities* (pp. 32-43). London: British Academy.
- Power, A. (2007). *City Survivors: Bringing up Children in Disadvantaged Neighbourhoods*. Bristol, UK: The Policy Press.
- Pringle, K., Weatherall, L., Corbisier de Meaultsart, C., Keogh, L., Sands, S., Blackwell, C., . . . Rae, K. (2015). The *Gomeroi gaaynggal* Cohort: A Preliminary Study of the Maternal Determinants of Pregnancy Outcomes in Indigenous Australian Women. *J Preg Child Health*, *2*(7), 211-218. doi:http://dx.doi.org/10.4172/2376-127X.1000211
- Pringle, K. G., Lee, Y. Q., Weatherall, L., Keogh, L., Smith, R., Lumbers, E. R., . . . Rae, K. M. I. o. m. a., preterm birth and birth weight centiles on early childhood obesity in an Indigenous Australian pregnancy through to early childhood cohort study. Journal of Developmental Origins of Health and Disease, Publication is currently under review. . (2017). Influence of maternal adiposity, preterm birth and birth weight centiles on early childhood obesity in an Indigenous Australian pregnancy through to early childhood cohort study. *Journal of Developmental Origins of Health and Disease, Publication is currently under review.*
- Reynolds, A. J., Temple, J. A., Ou, S.-R., Arteaga, I. A., & White, B. A. B. (2011). School-based early childhood education and age-28 well-being: Effects by timing, dosage, and subgroups. *Science*, *333*(6040), 360-364. doi:10.1126/science.1203618

- Reynolds, A. J., Temple, J. A., White, B. A., Ou, S.-R., & Robertson, D. L. (2011). Age-26 cost-benefit analysis of the child-parent center early education program. *Child Development*, 82(1), 379–404. doi:10.1111/j.1467-8624.2010.01563.x
- Rose, P., & Dyer, C. (2008). *Chronic Poverty and Education: A Review of the Literature* (Working Paper No. 131). Retrieved from
- Saunders, P., & Wong, M. (2012). Social Disadvantage and Economic Recession: Promoting Inclusion and Combating Deprivation. Retrieved from Sydney:

 http://www.sprc.unsw.edu.au/research/projects/social-disadvantage-and-economic-recession-promoting-inclusion-and-combating-deprivation/
- SCRGSP. (2016). *Overcoming Indigenous Disadvantage: Key Indicators 2016*. Retrieved from Canberra:
- Shonkoff, J. P., & Meisels, S. J. (2000). *Handbook of Early Childhood Intervention* (2nd ed.). Cambridge: Cambridge University Press.
- Tanton, R., Gong, C. H., & Harding, A. (2012). Evidence of multiple life stage disadvantage for small areas in Australia. *Economic Papers: A journal of applied economics and policy,* 31(1), 76-86. doi:10.1111/j.1759-3441.2011.00159.x
- Vinson, T. (2007). Dropping Off The Edge: The Web of Disadvantage (Speech at Parliament House, Canberra). Retrieved from http://cssa.org.au/media/latest-news/article/?id=dropping-off-the-edge-the-web-of-disadvantage#.WEjg47J96Ul
- Vinson, T., & Rawsthorne, M. (2015). *Dropping off the Edge 2015*. Retrieved from Richmond, Victoria: http://k46cs13u1432b9asz49wnhcx.wpengine.netdna-cdn.com/wp-content/uploads/0001_dote_2015.pdf
- Werner, E. E. (2004). Journeys from childhood to midlife: risk, resilience, and recovery. *Pediatrics*, 114(2), 492.
- Werner, E. E. (2005). Resilience research: past, present and future. In R. D. Peters, B. Leadbeater, & R. J. McMahon (Eds.), *Resilience in Children, Families, and Communities* (pp. 3-11). New York: Springer US.
- Werner, E. E., & Smith, R. S. (2001). *Journeys from Childhood to Midlife: Risk, Resilience, and Recovery.* Ithaca, NY: Cornell University Press.