

# *Valuing perinatal health*

The consequences of  
not treating perinatal  
depression and anxiety





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## *Perinatal depression and anxiety*

*The perinatal period (including pregnancy and the following year) is a time of great change in a woman's life, and it is common for women to experience a wide range of emotions.*

Perinatal depression and anxiety is a common complication associated with childbearing. Vulnerability to psychological distress and disorder is accentuated in the perinatal period not only for parents, but also their infant, and other family.

Following birth, the postnatal period is a time of risk for the development of serious mood disorders. While for some mothers this resolves, where it remains, poor maternal mental health can significantly affect the emotional, social, physical and cognitive development of her child, and is associated with increased incidence of chronic disease. The perinatal phase is a critical development period, both in terms of the attainment of parenting skills and secure parent infant attachment.

A challenge for policy makers has been to understand the potential scale and scope of perinatal depression and anxiety. This research directly addresses the challenge.

# The potential cost of perinatal depression and anxiety

*This study poses a unique scenario where we estimate the potential impact of perinatal depression and anxiety if the condition is not treated.*

Organisations such as *beyondblue* and the Commonwealth, state and territory governments have initiatives and resources in place (for example, routine screening and education) which mean that this scenario is hypothetical only, and represents the potential cost to society if this support as well as that provided by other individuals and organisations were not available.

The key messages of this analysis are:

- The impacts to children of parents whose perinatal depression is not treated are substantial and long lasting. They can experience health costs at the beginning of their lives through to being more likely to experience depression themselves and adverse impacts to their productivity in adulthood.
- Both mothers and fathers that suffer perinatal depression and anxiety may relapse, incurring higher health costs and a reduction in workplace productivity.
- There are limits to the extent that the impacts of perinatal depression and anxiety can be quantified due to research gaps. As such, this is a conservative estimate because known impacts such as anxiety, marital breakdown and reduced productivity of carers have not been valued.

## Who is affected by perinatal depression and anxiety?

Most obviously, perinatal depression and anxiety can affect mothers and fathers. We estimate that up to 10% of women experience depression during pregnancy, while 15.7% of mothers (i.e. 45,426 women) and 3.6% of fathers (i.e. 10,104 men) will experience postnatal depression in Australia this year. Rates of anxiety remain unknown, but are estimated to be even higher.

Additionally, perinatal depression and anxiety produce impacts that are broad reaching and long lasting. It is not just the mother or father experiencing perinatal depression or anxiety that is affected; Impacts extend to:

- their offspring, as a baby, child and potentially as an adult
- other family members, including siblings and spouses not experiencing the condition itself.

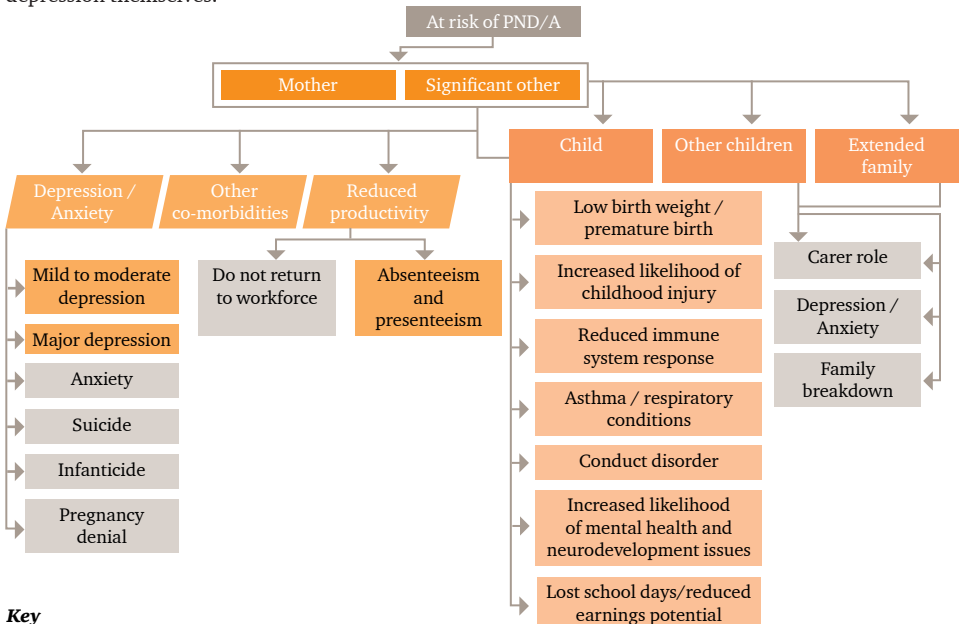
## The nature of impacts

The following diagram depicts a number of impacts that can be experienced by those affected in some way by perinatal depression and anxiety if it is not addressed and treated.

		Impacts			
		Short term	Medium term	Intergenerational	
Affected	Parent (Mother and Father)	Health and Economic			
Impacted	Offspring	Health	Health	Health and economic	
	Other	Health			

Impacts include health related costs, as well as lower productivity and social costs. Not all of them can be quantified, but all need to be acknowledged.

A particular feature of perinatal depression and anxiety is that, if not treated, the impacts are lasting. This can be to the extent that they affect a child far into their adult years. The following schema shows how we conceptualised cost by person affected over time. Parents with untreated perinatal depression and anxiety use more health services and are less productive in the work place over a number of years. Their children could experience health impacts during infancy, childhood and reduced earnings potential in adulthood. Others impacted by untreated perinatal depression or anxiety may face depression themselves.



### Key

■ Cost impacts have not been valued due to research gaps

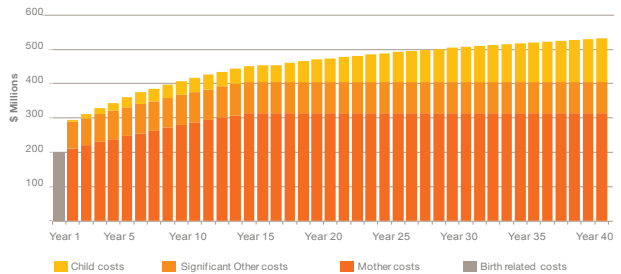
# Quantifying the costs of untreated perinatal depression and anxiety

*We identify and quantify, where possible, the cost of not treating perinatal depression and anxiety associated with the birth of children in 2012.*

We have done this by undertaking a literature scan and engaging with academic and clinical experts in perinatal mental health, to develop a framework that identifies the relevant impacts. Data and assumptions from literature were then collated to quantify the net present value (NPV) cost associated with the impacts of not treating perinatal depression and anxiety.

**In a 20 year period, we estimate the NPV cost of not treating perinatal depression and anxiety to the Australian community to be \$660 million.** When including adulthood for that child (including reduced earning potential) this cost increases to \$728 million.

The cumulative costs after birth borne by the different stakeholders over time, including productivity costs of the child are presented below.



The costs borne by particular groups are explained in the following sections.

## Impacts to parents with untreated perinatal depression and anxiety

If new parents in 2012 are not treated for perinatal depression and anxiety, these conditions are likely to extend beyond the first 12 months following birth. In turn, the associated health costs to mothers could be up to \$70 million in one year/\$91 million over 10 years/\$103 million over 20 years. This cost is driven by hospital and primary service usage, and other medical costs such as pharmaceuticals.

Early intervention or assistance to help the mother showing symptoms of perinatal depression can bring significant cost savings. If the number of women affected by perinatal depression were reduced by 5% (2300 women) in 2012, total costs in the first two years/10 years/20 years could be reduced by \$136 million/\$178 million/\$203 million.

If new fathers in 2012 are not treated for perinatal depression and anxiety, the health costs could be up to \$16 million in one year/\$18 million over ten years/\$19 million over 20 years. This cost is driven by hospital and primary service usage, and other medical costs such as pharmaceuticals.

In addition, women and men experiencing depression and anxiety are likely to miss more days at work compared to their counterparts who are not depressed, if not treated for perinatal depression and anxiety. The cost of this lost productivity for depression alone is \$142 million for mothers in one year if postnatal depression is not addressed (\$188 million over 10 years/\$211 million over 20 years) and \$62 million for fathers (\$70 million over ten years/\$73 million over 20 years).

### Impacts to children of parents with untreated perinatal depression and anxiety

The child of a parent with untreated perinatal depression and anxiety is significant - with an increased likelihood of low birth weight or preterm birth. The cost of these impacts is \$200 million.

As they grow, other health costs due to increased likelihood of emergency department presentations, asthma, depression and conduct disorder amount to \$6.2 million in one year/\$18 million in 10 years/\$53 million in 20 years.

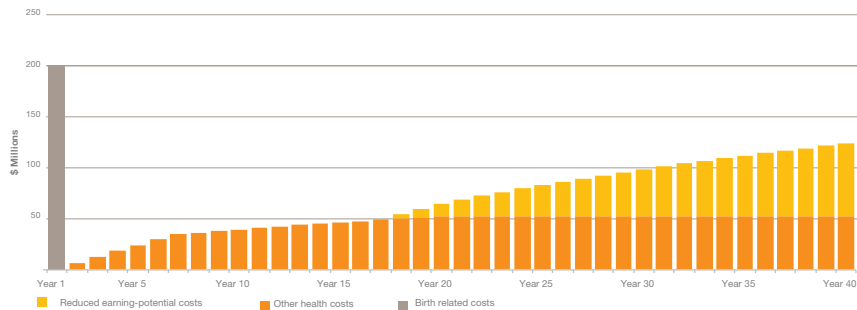
The cost associated with conduct disorder on its own is \$24 million which represents the cost of intervening in early childhood and does not include the potential costs of undetected or untreated conduct disorder which research shows can escalate to substance abuse and crime.

The impacts to children can continue into adulthood, where reduced education attainment and long term health impacts are realised in terms of reduced earnings potential. This cost amounts to \$7 million each year/\$40 million over 10 years/\$69 million over 20 years.

### Impacts to other family members of parents with untreated perinatal depression and anxiety

Impacts can extend to others in the family, including siblings and extended family who may need to care for the affected mother or child or may also experience depression themselves.

Further, family breakdown is associated with untreated perinatal depression and anxiety. These costs have not been quantified because the research is limited and is not conclusive on the extent of these impacts where perinatal depression and anxiety is left untreated.



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