# Impact of unintended pregnancy report APPENDIX

REPORT PREPARED FOR ORGANON

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# **1 Epidemiology selection and validation**

## 1.1 Pregnancy estimates

## 1.1.1 All pregnancy estimates

#### Table 1.1.1 Pregnancy rates

In use	Source	Estimate	Rationale	
V	WA DoH (2019) (1)	15 – 19 years – 2.1% 20-24 years – 9.6% 25-29 years – 13.4% 30-34 years – 16.1% 35-69 years – 10.5% 40-44 years – 2.6% Report presents pregnancy rate per 1,000 women of reproductive age (including live births, still births and abortions) – value was *0.8 to include miscarriages (1 in 5 pregnancies as reported by the WA DoH).	The methodology used in this report is considered the most robust due to its comprehensive nature and coverage of the whole state population. As data was collected through the WA Hospital Morbidity Data Collection (HMDC) the methodology was considered more robust than self-reported measures.	
×	Taft (2018) (2)	A total of 1,390 women (69.1%) had been pregnancy during the past 10 years 69% / 10 = 6.9%	Taft does not provide an annual pregnancy rate, instead reporting the percentage of women who had been pregnant during the preceding 10 years. There is also no information on the number of pregnancies each women had. After being adjusted for a 10-year period, the pregnancy rate is significantly higher than other estimates.	
х	Sedgh (2014) (3)	166 pregnancies per 1,000 women ages 15-44 years 16.6%	Evidence is dated, which could justify a slightly lower rate compared to what reported by the WA DoH. Data is not broken down by age group.	

- Number of women of reproductive age = latest ABS resident population statistics, by age at 30 June 2019 (4)
- Number of women experiencing a pregnancy (**Table 1.1.1**) = number of women of reproductive age (by age group) \* (pregnancy rate (by age group) + miscarriage rate)

### 1.1.2 Unintended pregnancy estimates

Table 1.1.2	Unintended pregnancy rate
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In use	Source	Estimate	Rationale
V	Bearak (2020) (5), lower bound estimate	40% of Australian and New Zealand women (15-49 years) experiencing a pregnancy were estimated to experience an unintended pregnancy, between 2015 and 2019	A board of Australian key opinion leaders confirmed that the rate of unintended pregnancy likely lies between the rates presented by Bearak (2020) and Taft (2018). Consequently, the lower bound estimate presented in Bearak (2020) was selected as rate which best reflects unintended pregnancies in Australia (40%).
×	Bearak (2020) (5)	46% of Australian and New Zealand women (15-49 years) experiencing a pregnancy were estimated to experience an unintended	This study leveraged a new global database incorporating data from 166 countries developed as part of a World Health Organisation (WHO) country consultation process and reported data broken down by country, pregnancy outcomes, and other epidemiological metrics. This study estimated that 46% of all pregnancies in Australia and New Zealand are unintended. The rate reported by Bearak (2020) resulted in downstream numbers

		pregnancy, between 2015 and 2019	which were aligned with available abortion reports from the WA and SA government (1, 6). However, the large rural, Aboriginal and Torre Strait Islander population in these states may result in a higher rate of unintended pregnancy compared to the broader Australian population. Consequently, Bearak (2020) may overestimate the rate and consequences of unintended pregnancies in Australia
x	Taft (2018) (2)	26% of Australian women (18- 44years) who had been previously pregnant reported an unintended pregnancy	Despite being able to retrospectively assess past choice at a population level, cross-sectional surveys can underestimate unintended pregnancy due to altered rationalisation of preferences over time. Women may also be reluctant to report unintended pregnancies for social and cultural reasons – 22% of contacted women declined to participate.
x	Marie Stopes International (2008) (7)	51% of Australian women (44- 44 years) reported an unintended pregnancy	Evidence was considered dated.
×	Rowe (2016) (8)	40% of Australian women/partners aged (18-44 years) who had been previously pregnancy reported an unintended pregnancy	Evidence was considered dated. In addition, the study does not include women who experience an unintended pregnancy as their first pregnancy.

• Number of women experiencing an unintended pregnancy (**Table 1.1.2**) = number of pregnant women (by age group) \* proportion of unintended pregnancies

In use	Source	Estimate	Rationale		
$\checkmark$	Taft (2018) (2)		KOL indicated Taft (2008) being the most comprehensive study on pregnancy intensions in Australia.		
Х	Hewitt (2010) (9)		Evidence was considered dated. In addition, the study only focussed on most recent pregnancy intention.		
х	Weisberg (2008) (10)	31% MISTIMEd	Evidence was considered dated. In addition, the study only focussed on middle-aged women (52-57 years) who reported their first pregnancy intention.		

 Table 1.1.3
 Mistimed and unwanted unintended pregnancies

- Number of mistimed unintended pregnancies (**Table 1.1.3**) = number of unintended pregnancies (by age group) \* proportion of mistimed unintended pregnancies
- Number of unwanted unintended pregnancies (**Table 1.1.3**) = number of unintended pregnancies (by age group) \* proportion of unwanted unintended pregnancies
- Number of unsure unintended pregnancies (**Table 1.1.3**) = number of unintended pregnancies (by age group) \* proportion of unsure unintended pregnancies

## 1.2 Miscarriage estimates

#### Table 1.2.1Miscarriage rates

In use	Source	Estimate	Rationale
	( )()	18% mistimed 10% unwanted 9% unsure	Taft (2018) is the only study that reports different miscarriage rates by different types of unintended pregnancies. Miscarriage rates are consistent between unwanted (10%) and unsure (9%) pregnancies, whereas the rate for mistimed pregnancies is significantly higher (18%). This could be due to the fact that a higher proportion of mistimed pregnancies occur later in life, increasing miscarriage risk.
х	Marie Stopes International (2008) (7)	18%	Value can be subject to high risk of bias being obtained from market research, particularly from an organisation that specialises in abortion.
х	WA DoH (2019) (1)	20%	The WA report includes miscarriages resulting from all pregnancies. This proportion can be different for unintended pregnancies, primarily due to late initiation of prenatal care and, in some cases, refusal to follow adequate nutritional and substance use behaviours

	associated with a denial of the pregnancy. In addition, a higher proportion of unintended pregnancies will end in an early termination compared with planned pregnancies. This may lower the proportion of unintended pregnancies ending in miscarriage when compared to the general population, as most miscarriages occurs during the first trimester (11).
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- Number of mistimed pregnancies ending in miscarriage (**Table 1.2.1**) = number of mistimed pregnancies \* proportion of mistimed pregnancies ending in miscarriage
- Number of unwanted pregnancies ending in miscarriage (**Table 1.2.1**) = number of unwanted pregnancies \* proportion of unwanted pregnancies ending in miscarriage
- Number of unsure pregnancies ending in miscarriage (**Table 1.2.1**) = number of unsure pregnancies \* proportion of unsure pregnancies ending in miscarriage

## 1.3 Stillbirth estimates

Table 1.3.1 St	illbirth rates
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In use	Source	Estimate	Rationale
$\checkmark$	WA DoH (2019) (1)	20-24 years - 0.4% 25-29 years - 2.8% 30-34 years - 0.3% 35-69 years - 0.4%	The methodology used in this report is considered the most robust due to its comprehensive nature and coverage of the whole state population. Given the very low proportion of pregnancies ending in stillbirths, it is unlikely that this proportion is going to have a significant impact on the model results.

• Number of unintended pregnancies ending in stillbirth (**Table 1.3.1**) = number of unintended pregnancies (by age group) \* proportion of pregnancies ending in stillbirth (by age group)

## **1.4 Abortion estimates**

Table 1.	able 1.4.1 Abortion rates				
In use	Source	Estimate	Rationale		
		9% mistimed	Taft (2018) is the only study that reports different abortion rates by		
$\checkmark$	Taft (2018) (2)	83% unwanted	different types of unintended pregnancies. Abortion rates are, as		
		50% unsure	expected, higher for unwanted pregnancies compared to mistimed.		
Х	Bearak (2020)	15 per 1,000 women aged	Indirect estimates sourced from available scientific literature.		
~	(5)	15-49 (2015-18)			
х	Laws (2006)	18.4 per 1,000 women (15-	Study conducted before the availability of medical abortion in		
~	(12)	44 years)	Australia.		
х	Chan & Sage	19.7 per 1,000 women	Study conducted before the availability of medical abortion in		
~	(2005) (13)	aged 15-44 (2003)	Australia.		
	Keogh (2021)	17.3 per 1,000 women	The study only assesses hospital morbidity statistics and PBS		
Х	(14)	aged 15-44 years (2017 –	claims, omitting MBS data (private patients).		
	(' ')	18)			

- Number of mistimed pregnancies ending in abortion (**Table 1.4.1**) = number of mistimed pregnancies \* proportion of mistimed pregnancies ending in abortion
- Number of unwanted pregnancies ending in abortion (**Table 1.4.1**) = number of unwanted pregnancies \* proportion of unwanted pregnancies ending in abortion
- Number of unsure pregnancies ending in abortion (**Table 1.4.1**) = number of unsure pregnancies \* proportion of unsure pregnancies ending in abortion



## 1.5 Live birth estimates

### 1.5.1 All live birth estimates

- Number of mistimed pregnancies resulting in live births = number of mistimed pregnancies – number of mistimed pregnancies ending in miscarriage – number of mistimed pregnancies ending in stillbirth – number of mistimed pregnancies ending in abortion
- Number of unwanted pregnancies resulting in live births = number of unwanted pregnancies – number of unwanted pregnancies ending in miscarriage – number of unwanted pregnancies ending in stillbirth – number of unwanted pregnancies ending in abortion
- Number of unsure pregnancies resulting in live births = number of unsure pregnancies – number of unsure pregnancies ending in miscarriage – number of unsure pregnancies ending in stillbirth – number of unsure pregnancies ending in abortion

## 1.5.2 Out-of-home arrangement estimates

ladie I.	able I.S.I Living arrangement rates			
In use	Source	Estimate	Rationale	
$\checkmark$	Michelson (2007) (17)	56% parenting 2% adoption	There are limited studies on parenting arrangements for unintended pregnancies. The values reported by these studies,	
$\checkmark$	Marie Stopes International (2008) (7)	49% parenting 2% adoption	applied to the live birth estimates calculated, are consistent with the AIHW child protection system reports 2,276 children under the age of 1 being placed in out-of-home care in 2019-2020 (18). This does not include informal out-of-home arrangements, such as kinship care, which would likely be reported as 'adoptions' or 'non- parenting' in cross-sectional surveys (19).	

### Table 1.5.1 Living arrangement rates

- Number of mistimed pregnancies resulting in out-of-home arrangements (Table
   1.5.1) = number of mistimed pregnancies resulting in live births \* proportion of unintended pregnancies resulting in adoptions
- Number of unwanted pregnancies resulting in out-of-home arrangements (Table
   1.5.1) = number of unwanted pregnancies resulting in live births \* proportion of unwanted pregnancies resulting in adoptions
- Number of unsure pregnancies resulting in out-of-home arrangements (Table 1.5.1)
   number of unsure pregnancies resulting in live births \* proportion of unsure pregnancies resulting in adoptions

## **1.6 Rural unintended pregnancy estimates**

### Table 1.6.1Stillbirth rates

In use	Source	Estimate	Rationale
$\checkmark$	Rowe (2016) (8)	settings are 1.4 times more likely to experience an unintended pregnancy compared to women in non-rural	These results are consistent with the higher fertility rates for women living in remote locations, estimated to be 21 babies per 1,000 live births, compared to 3 babies per 1,000 live births in major cities (19). This could stem from reduced access to high quality, evidenced- based reproductive and sexual health services, including health promotion and education, that support women's health and wellbeing (20).

Number of women living in rural areas experiencing an unintended pregnancy = women of reproductive age by remoteness by state (2020) (by age group) (21) \* (pregnancy rate (by age group) + miscarriage rate) \* proportion of unintended pregnancies (adjusted for remoteness (Table 1.6.1))

## 1.7 Indigenous Australian unintended pregnancy estimates

 Number of Indigenous Australian women experiencing an unintended pregnancy = Indigenous Australian women of reproductive age (by age group) (22) \* (pregnancy rate (by age group) + miscarriage rate) (Table 1.1.1) \* proportion of unintended pregnancies (Table 1.1.2)

# **2** Assumptions for direct cost metrics

## 2.1 Miscarriage

### 2.1.1 Cost to Government

# Table 2.1.1Average government cost of a medical management of a miscarriage in states where<br/>provision is largely public

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Input	Cost	Calculation	Source and rationale
Cost of the medication	\$287	Costs consistent with <b>Table 2.3.1</b>	Costs consistent with <b>Table 2.3.1.</b>
Cost of consultations	\$117	MBS item 23 fee x MBS item 23 rebate x average number of MBS item 23 claims \$39 x 100% x 3	Costs of miscarriage services includes the cost of consultations by healthcare providers. Women may seek care for a miscarriage through a variety of providers (gynaecologist, obstetrician, general practitioner). General practitioner fees were used to represent the cost of a miscarriage consultation ( <b>Table 2.3.1</b> ). According to the Queensland guidelines for early pregnancy loss, medical management of a miscarriage typically requires 3 office visits (23) The fees and rebates were based off those published on the <u>MBS website</u> as of October 2021.
Cost of additional tests	\$73	(MBS item 55721 fee x MBS item 55721 rebate x average number of MBS item 55721 claims) + (MBS item 73527 fee x MBS item 73527 rebate x average number of MBS item 73527 claims) + (MBS item 69317 fee x MBS item 69317 rebate x average number of MBS item 69317 claims) + (MBS item 65090 fee x MBS item 65090 rebate x average number of MBS item 65090 claims) (\$118 x 75% x 1) + (\$10 x 75% x 5) + (\$36 x 75% x 1) + (\$12 x 75% x 1)	Relevant items and average number of claims per miscarriage were identified based off Queensland Clinical Guidelines on early pregnancy loss and validated through consultations with key opinion leaders. Relevant items included 55721 (ultrasound), 73527 (human chorionic gonadotrophin), 69317 (STI testing) and 65090 (blood grouping) (23). The fees and rebates were based off those published on the <u>MBS website</u> as of October 2021.
Cost of an additional dose	\$40	Proportion requiring an additional dose x PBS item 10211K fee 14% x \$287	According to a multicentre, double-blind, placebo- controlled, randomised trial in 28 UK hospitals, 14% of women receiving Mifepristone and misoprostol for a miscarriage require and additional dose (24). The fee was based off the Dispensed Price for Maximum Quantity (DPMQ) and weighted patient co-payment published on the <u>PBS website</u> as of October 2021.
Cost of conversion to surgical management of miscarriage (public)	\$406	((Item O05Z price weighting x national efficient price x item O05Z proportion) + (Item O63A price weighting x national efficient price x item O63A proportion) + (Item O63B price weighting x national efficient price x item O63B proportion)) x proportion of who require convention to surgery to complete a miscarriage (0.5042 x \$5,320 x 75%) + (0.5972 x \$5,320 x 4%) + (0.2136 x \$5,320 x 20%) x 17%	As there were no miscarriage specific item codes in the public sector, the hospital costs of surgical abortion were assumed to reflect hospital costs of surgical management of a miscarriage( <b>Table 2.3.1</b> ). According to a multicentre, double-blind, placebo- controlled, randomised trial in 28 UK hospitals, 17% of women require conversion to surgery to complete the miscarriage (24).
Total	\$923		
		ay not equate to total cost due to round	ling

# Table 2.1.2Average government cost of a medical management of a miscarriage in states where<br/>provision is largely private

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Input	Cost	Calculation	Source and rationale
Cost of the medication	\$287	Costs consistent with Table 2.3.1	Costs consistent with <b>Table 2.3.1.</b>
Cost of consultations	\$117	Costs consistent with Table 2.1.1	Costs consistent with <b>Table 2.1.1.</b>
Cost of additional tests	\$73	Costs consistent with <b>Table 2.1.1</b>	Costs consistent with <b>Table 2.1.1.</b>
Cost of an additional dose	\$40	Costs consistent with <b>Table 2.1.1</b>	Costs consistent with <b>Table 2.1.1.</b>
Cost of conversion to surgical management of a miscarriage (private)	\$24	Proportion of women who require conversion to surgery to complete the miscarriage x MBS item 35640 fee x MBS item 35640 rebate 17% x \$190 x 75%	According to a multicentre, double-blind, placebo- controlled, randomised trial in 28 UK hospitals, 17% of women require conversion to surgery to complete the miscarriage(24).
Total	\$542		

Note: calculated numbers may not equate to total cost due to rounding

# Table 2.1.3Average government cost of surgical management of a miscarriage in states where<br/>provision is largely public

Input	Cost	Calculation	Source and rationale
Cost of the procedure	\$2,389	Cost consistent with <b>Table 2.3.1</b>	As there were no miscarriage specific item codes in the public sector, the hospital costs of surgical abortion were assumed to reflect hospital costs of surgical management of a miscarriage ( <b>Table 2.3.1</b> ).
Cost of consultations	\$78		Costs for miscarriage services include the cost of consultations by a healthcare provider. As outlined in <b>Table 2.1.1</b> , MBS item 23 was used to represent consultation fees for miscarriage. The fee and rebate were based off those published on the MBS website as of October 2021. Follow up general practitioners consults are recommended if there are ongoing concerns (23) therefore the average number of consultations per surgical management of miscarriage was assumed to be 2.
Cost of additional tests	\$58	(MBS item 55721 fee x MBS item 55721 rebate x average number of MBS item 55721 claims) + (MBS item 73527 fee x MBS item 73527 rebate x average number of MBS item 73527 claims) + (MBS item 69317 fee x MBS item 69317 rebate x average number of MBS item 69317 claims) + (MBS item 65090 fee x MBS item 65090 rebate x average number of MBS item 65090 claims) (\$118 x 75% x 1) + (\$10 x 75% x 3) + (\$36 x 75% x 1) + \$11 x 75% x 1)	Relevant items and average number of claims per miscarriage were identified based off Queensland Clinical Guidelines on early pregnancy loss and validated through consultations with key opinion leaders. Relevant items included 55721 (ultrasound), 73527 (HCG) 69317 (STI testing) and 65090 (blood grouping)(23). The fees and rebates were based off those published on the <u>MBS website</u> as of October 2021.
Total	\$2,525		

# Table 2.1.4Average government cost of surgical management of a miscarriage in states where<br/>provision is largely private

Input	Cost	Calculation	Source and rationale
Cost of the procedure	\$184	rebate x MBS item 35643 proportion) + (MBS item 16530 fee x MBS item 16530 rebate x MBS item 16530 proportion) + (MBS item 16530 fee x MBS item 16530 rebate x MBS item 16530 proportion) (\$227 x 75% x 95%) + (\$400 x 75% x 2%) +	In states where miscarriages are privately provided, the procedure costs are mostly covered by the MBS. MBS claims for surgically managed miscarriage prior to 14 weeks gestation are coded using item 35643, 14- 15 weeks using item 16530 and 16-22 weeks using item 16531 (15). Proportion of procedure performed for each were estimated based on the number of requested Medicare items processed from January 2020 to December 2020.
Cost of consultations	\$78	Costs consistent with <b>Table 2.1.3</b>	Costs consistent with <b>Table 2.1.3.</b>
Cost of additional tests	\$58	Costs consistent with <b>Table 2.1.3</b>	Costs consistent with <b>Table 2.1.3.</b>
Total	\$320	•	

- Cost of expectant management of miscarriage = no cost
- Cost of medical management of miscarriage in states where provision is largely public (Table 2.1.1) = cost of the medication + cost of consultation + cost of additional tests + cost of additional mifepristone and misoprostol doses + cost of conversion to surgical management of miscarriage (publicly provided)
- Cost of medical management of miscarriage in states where provision is largely private (**Table 2.1.2**) = cost of the medication + cost of consultation + cost of additional tests + cost of additional mifepristone and misoprostol doses + cost of conversion to surgical management of miscarriage (privately provided)
- Cost of surgical management of miscarriage in states where provision is largely public (**Table 2.1.3**) = cost of procedure (publicly provided) + cost of consultation + cost of additional tests
- Cost of surgical management of miscarriage in states where provision is largely private (Table 2.1.4) = cost of procedure (privately provided) + cost of consultation + cost of additional tests



## 2.1.2 Cost to Women

	Arciug	e cost to women of expectant man	agement
Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$0	None	Expectant management involves waiting for the miscarriage to happen by itself naturally, without treatment (25). It was therefore estimated that this approach would have a negligible financial impact.
Total	\$0		

### Table 2.1.5 Average cost to women of expectant management

# Table 2.1.6Average cost to women of a medical miscarriage in states where provision is largelypublic

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Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$O	Costs consistent with <b>Table 2.3.5</b>	The out-of-pocket costs of medical management of miscarriages was assumed to reflect the cost of a medical abortion.
Total	\$0		

# Table 2.1.7Average cost to women of a medical miscarriage in states where provision is largely<br/>private

Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$604	Costs consistent with Table 2.3.6	The out-of-pocket costs of medical management of miscarriages was assumed to reflect the cost of a medical abortion.
Out-of-pocket costs of additional dose	\$85	Proportion requiring an additional dose x out of pocket cost of medical management of miscarriage 14% x \$604	According to a multicentre, double-blind, placebo- controlled, randomised trial in 28 UK hospitals, 14% of women receiving Mifepristone and misoprostol for a miscarriage require and additional dose (24).
Out-of-pocket costs of conversion to surgery	\$124	Proportion converted to surgical abortions x out of pocket cost of private surgical abortions 17% x \$720	According to a multicentre, double-blind, placebo- controlled, randomised trial in 28 UK hospitals, 17% of women receiving mifepristone and misoprostol require surgical intervention to complete the miscarriage (24). The out-of-pocket costs of conversion to surgery was assumed to reflect the out-of-pocket costs of a surgical abortion ( <b>Table</b> 2.3.8)
Total	\$812	•	

Note: calculated numbers may not equate to total cost due to rounding.

# Table 2.1.8Average cost to women of a surgical miscarriage in states where provision is largely<br/>provided publicly

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Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$O	Costs consistent with <b>Table 2.3.3</b>	The out-of-pocket costs of surgical management of miscarriages was assumed to reflect the cost of surgical abortion.
Total	\$0		

# Table 2.1.9Average cost to women of a surgical miscarriage in states where provision is largely<br/>provided privately

Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$730	Table 7 3 8	The out-of-pocket costs of surgical management of miscarriages was assumed to reflect the cost of surgical abortion.
Total	\$730		

- Cost of a medical miscarriage in states where provision is largely public (
- Table 2.1.6) = no out-of-pocket cost

- Cost of a medical miscarriage in states where provision is largely private (
- **Table 2.1.7**) = out-of-pocket cost of medical miscarriage + out-of-pocket cost of conversion to surgical miscarriage (privately admitted)
- Cost of a surgical miscarriage in states where provision is largely public (
- Table 2.1.8) = no out-of-pocket cost
- Cost of a surgical miscarriage in states where provision is largely private (
- **Table 2.1.9**) = out-of-pocket cost of surgical miscarriage (privately admitted)

## 2.2 Stillbirth

### 2.2.1 Cost to Government

#### Table 2.2.1 Average government cost of stillbirth

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Input	Cost	Calculation	Source and rationale
Government cost of stillbirth	\$9,292	\$4,677 + \$2,183 + \$437 + \$1403 + \$14 + \$184	Costs of stillbirth are based on the results presented by Callander (2016). This study utilised a dataset of all women who gave birth in the Australian state of Queensland (July 2012 - June 2015). Costs in this study were presented in 2017/18 Australian dollars.
Total	\$9,594	/	

Note: calculated numbers may not equate to total cost due to rounding

### 2.2.2 Cost to women

#### Table 2.2.2 Average stillbirth cost to women

Input	Cost	Calculation	Source and rationale
Out-of-pocket cost of stillbirth	\$968	Total cost (\$927) was based on 2017/18 Australian dollars. Adjusting for an	Costs of stillbirth are based on the results presented by Callander (2016). This study utilised a dataset of all women who gave birth in the Australian state of Queensland (July 2012 - June 2015). Costs in this study were presented in 2017/18 Australian dollars.
Total	\$1,000		

## 2.3 Abortion

## 2.3.1 Cost to Government

Table 2.3.1	Average government cost of a medical abortion in states where provision is largely
	public

Input	Cost	Calculation	Source and rationale
mput	CUSI	Calculation	Medical abortions are mostly covered by the PBS.
Cost of the medication	\$287	PBS Item 10211K fee - weighted patient co-payment \$319 - \$31	PBS claims for medical abortions are covered under item 10211K (Mifepristone and misoprostol)(15). The fee was based off the Dispensed Price for Maximum Quantity (DPMQ) published on the PBS website as of October 2021. The weighted patient co-payment was calculated using proportion of patients claiming with general safety net, concessional ordinary, concessional free, RPBS ordinary and RPBS safety net, as reported by Services Australia in 2020.
Cost of consultations	\$98	MBS item 23 fee x MBS item 23 rebate x average number of MBS item 23 claims \$39 x 100% x 2.5	Costs for abortion services include the cost of consultations by a healthcare provider. Although abortions may be provided by gynaecologists and other specialists, largely it is performed through primary healthcare by a general practitioner. Consultations with general practitioner attendances are non-specific and time-based (MBS items 3, 23, 36, or 44). MBS item 23 is the most commonly billed item for general practitioner consultations and was therefore used to represent consultation fees for abortions. The fee and rebate were based off those published on the MBS website as of October 2021. Medical abortions typically required 2-3 office visits (26), therefore the average number of consultations per surgical abortion was assumed to be 2.5.
Cost of additional tests	\$151	(MBS item 55721 fee x MBS item 55721 rebate x average number of MBS item 55721 claims) + (MBS item 73527 fee x MBS item 73527 rebate x average number of MBS item 73527 claims) (MBS item 69317 fee x MBS item 69317 rebate x average number of item 69317 claims) + (MBS item 65070 fee x MBS item 65070 rebate x average number of MBS item 65070 claims) + (MBS item 65090 fee x MBS item 65090 rebate x average number of MBS item 65090 claims) (\$118 x 75% x 1) + (\$10 x 75% x 2) + (\$36 x 75% x 1) + (\$10 x 75% x 2) + (\$36 x	Relevant items and average number of claims per abortion were identified based off Queensland Clinical Guidelines on termination of pregnancy and validated through consultations with key opinion leaders. Relevant items included 55721 (ultrasound), 73527 (human chorionic gonadotrophin), 69317 (STI testing), 65070 (full blood count) and 65090 (blood grouping) (23). The fees and rebates were based off those published on the MBS website as of October 2021.
Cost of conversion to surgical abortion	\$115	75% x 1) + (\$17 x 75% x 1) + (\$11 x 75% x 1) ((Item O05Z price weighting x national efficient price x item O05Z proportion)) + (Item O63A price weighting x national efficient price x item O63A proportion) + (Item O63B price weighting x national efficient price x item O63B proportion)) x proportion of women undertaking a medical abortion who experience incomplete abortion requiring surgical intervention ((0.5042 x \$5,320 x 75%) + (0.5972 x \$5,320 x 4%) + (0.2136 x \$5,320 x 20%)) x 5%	In an Australian study of 13,078 women, 5% of women undertaking a medical abortion had an incomplete abortion requiring surgical intervention (27). The average cost of a publicly provided surgical abortion is outlined in <b>Table 2.3.3</b> .
Total	\$651	5% x \$2,389	
iulai	4031		

privat	e	
Cost	Calculation	Source and rationale
\$287	Cost consistent with Table 2.3.1	Cost consistent with <b>Table 2.3.1.</b>
\$98	Cost consistent with Table 2.3.1	Cost consistent with <b>Table 2.3.1.</b>
\$151	Cost consistent with <b>Table 2.3.1</b>	Cost consistent with <b>Table 2.3.1.</b>
\$7	Proportion of women undertaking a medical abortion who experience incomplete abortion requiring surgical intervention x MBS item 35640 fee x MBS item 35640 rebate	In an Australian study of 13,078 women, 5% of women undertaking a medical abortion had an incomplete abortion requiring surgical intervention (27).
\$543	5/0 × \$150 × 75/0	
	Cost \$287 \$98 \$151	<ul> <li>\$287 Cost consistent with Table 2.3.1</li> <li>\$98 Cost consistent with Table 2.3.1</li> <li>\$151 Cost consistent with Table 2.3.1</li> <li>\$151 Proportion of women undertaking a medical abortion who experience incomplete abortion requiring surgical intervention x MBS item 35640 fee x MBS item 35640 rebate 5% x \$190 x 75%</li> </ul>

# Table 2.3.2Average government cost of a medical abortion in states where provision is largely<br/>private

Note: calculated numbers may not equate to total cost due to rounding

# Table 2.3.3Average government cost of a surgical abortion in states where provision is largely<br/>public

Input	Cost	Calculation	Source and rationale
Cost of the procedure	\$2,389	(Item O05Z price weighting x national efficient price x item O05Z proportion)) + (Item O63A price weighting x national efficient price x item O63A proportion) + (Item O63B price weighting x national efficient price x item O63B proportion) (0.5042 x \$5,320 x 75%) + (0.5972 x \$5,320 x 4%) + (0.2136 x \$5,320 x 20%)	In states where abortions are publicly provided procedure costs are mostly covered by the hospital budget. The NHMD includes data on all episodes of care in Australian hospitals and day procedure clinics, categorising separations according to Australian Refined Diagnosis-Related Groups (AR- DRG). Relevant AR-DRG's, identified through consultations with key opinion leaders, were O05Z (Abortion W GIs), O63A (Abortion W/O GIs, Major Complexity) and O63B (Abortion W/O GIs, Major Complexity). The cost was estimated using the national efficient price and cost weights obtained through the National Efficient Price Determination 2021–22. Proportion of procedures were calculated based on the number of separations obtained through the NHCDC – Separations for AR-DRG Version 10.0, Round 23 (2018-19). Costs for abortion services include the cost of consultations by a healthcare provider, as outlined in <b>Table 2.3.1.</b> MBS item 23 was used to represent
Cost of consultations	\$59	MBS item 23 fee x MBS item 23 rebate x average number of MBS item 23 claims \$39 x 100% x 1.5	consultation fees for abortions. The fee and rebate were based off those published on the MBS website as of October 2021. Surgical abortions typically required 1-2 office visits (26), therefore the average number of consultations per surgical abortion was assumed to be 1.5.
Cost of additional tests	\$136	(MBs item 55721 fee x MBS item 55721 rebate x average number of MBS item 55721 claims) + (MBS item 69317 fee x MBS item 69317 rebate x average number of MBS item 69317 claims) + (MBS item 65070 fee x MBS item 65070 rebate x average number of MBS item 65070 claims) + (MBS item 65090 fee x MBS item 65090 rebate x average number of MBS item 65090 claims) (\$118 x 75% x 1) + (\$36 x 75% x 1) + (\$17 x 75% x 1) + (\$11 x 75% x 1)	Relevant items and average number of claims per abortion were identified based off Queensland Clinical Guidelines on early pregnancy loss and validated through consultations with key opinion leaders. Relevant items included 55721 (ultrasound), 69317 (STI testing), 65070 (full blood count) and 65090 (blood grouping)(23). The fees and rebates were based off those published on the MBS website as of October 2021.
Total	\$2,584		

# Table 2.3.4Average government cost of a surgical abortion in states where provision is largely<br/>private

Input	Cost	Calculation	Source and rationale
Cost of the procedure	\$184	(MBS item 35643 fee x MBS item 35643 rebate x MBS item 35643 proportion) + (MBS item 16530 fee x MBS item 16530 rebate x MBS item 16530 proportion) + (MBS item 16531 fee x MBS item 16531 rebate x MBS item 16531 proportion) (\$227 x 75% x 95%) + (\$400 x 75% x 2%) + (800 x 75% x 3%)	In states where abortions are privately provided, the procedure costs are mostly covered by the MBS. MBS claims for surgical induced abortions prior to 14 weeks gestation are coded using item 35643, 14-15 weeks using item 16530 and 16-22 weeks using item 16531 (15). Proportion of procedure performed for each were estimated based on the number of requested Medicare items processed from January 2020 to December 2020.
Cost of consultations	\$59	Cost consistent with Table 2.3.3	Cost consistent with <b>Table 2.3.3</b>
Cost of additional tests	\$136	Cost consistent with <b>Table 2.3.3</b>	Cost consistent with <b>Table 2.3.3</b>
Total	\$379		

Note: calculated numbers may not equate to total cost due to rounding

- Cost of a medical abortion in states where provision is largely public (Table 2.3.1) = cost of medication + cost of consultations + cost of additional tests + cost of conversion to surgical abortion (publicly admitted)
- Cost of a medical abortion in states where provision is largely private (
- **Table** 2.3.2) = cost of medication + cost of consultations + cost of additional tests + cost of conversion to surgical abortion (privately admitted)
- Cost of a surgical abortion in states where provision is largely public (**Table 2.3.3**) = cost of procedure (publicly admitted) + cost of consultations + cost of additional tests
- Cost of a surgical abortion in states where provision is largely private (Table 2.3.4) = cost of procedure (privately admitted) + cost of consultations + cost of additional tests

## 2.3.2 Cost to Women

# Table 2.3.5Average cost to women of a medical abortion in states where provision is largely<br/>public

Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$0	INODE	Abortions are mostly free in states where provision is public (no cost to patient)
Total	\$0		

# Table 2.3.6Average cost to women of a medical abortion in states where provision is largely<br/>private

Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$604	Valued at \$560 in 2015 and inflated over 5 years, at an average rate of 1.5% ( <u>Reserve bank of Australia inflation</u> <u>calculator</u> )	As private patients are largely treated in Marie Stopes clinics, out-of-pocket costs were estimated based on a cross-sectional survey of 2,326 women attending these practices (28).
Out-of-pocket costs of conversion to surgery			In an Australian study of 13,078 women, 5% of women undertaking a medical abortion had an incomplete abortion requiring surgical intervention (32). The average out-of-pocket cost of a privately provided surgical abortion is outlined in <b>Table 2.3.8.</b>
Total	\$639		

# Table 2.3.7Average cost to women of a surgical abortion in states where abortions are largely<br/>provided publicly

Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$0	None	Abortions are mostly free in states where provision is public (no cost to patient)
Total	\$0		

# Table 2.3.8Average cost to women of a surgical abortion in states where abortions are largely<br/>provided privately

Input	Cost	Calculation	Source and rationale
Out-of-pocket costs	\$730	3%)	As private patients are largely treated in Marie Stopes clinics, out-of-pocket costs were estimated based on a cross-sectional survey of 2,326 women attending these practices. Out of pocket costs were reported for women receiving a medical/ surgical abortion at less than 12 weeks, 13-19 weeks and beyond 19 weeks. Proportion of women undertaking an abortion at less than 12 weeks, 13-19 weeks and beyond 19 weeks were based on the number procedures performed for item 35643 (suction curettage), item 16530 (management of pregnancy loss 14-15 weeks) and item 16531 (management of pregnancy loss 16-22 weeks).
Total	\$730		

- Cost of a medical abortion in states where provision is largely public (**Table 2.3.5**) = no out-of-pocket cost
- Cost of a medical abortion in states where provision is largely private (
- **Table** 2.3.6) = out-of-pocket cost of medical abortion + out-of-pocket cost of conversion to surgical abortion (privately admitted)
- Cost of a surgical abortion in states where provision is largely (**Table 2.3.7**) = no outof-pocket cost
- Cost of a surgical abortion in states where provision is largely private (
- **Table** 2.3.8) = out-of-pocket cost of surgical abortion (privately admitted)

## 2.4 Birth

### 2.4.1 Cost to Government

#### Table 2.4.1 Average government cost of maternity and early childhood healthcare over the first 100 days following birth

Note: calculated numbers may not equate to total cost due to rounding

### 2.4.2 Cost to women

#### Table 2.4.2 Average cost to women for maternity and early childhood healthcare over the first 100 days following birth

Input	Cost	Calculation	Source and rationale
Out-of-pocket costs over the first 100 days following birth	\$1,282	hospital x proportion) + (Cost for public patient in public hospital x proportion) + (Cost for private patient in public hospital x proportion)	Out-of-pocket costs of maternity and early childhood health are based on the results presented by Callander (2020). The cost of maternity and early childhood healthcare varied depending on if the patient was a private patient in a private hospital (\$3,132, n = 264,987, 29%), a public patient in a public hospital (\$479, n = 601,511, 67%) a private patient in a public hospital (\$1,087, n = 35,334, 4%). As Callander (2020) utilised a whole population database, the distribution of women giving birth in private and public hospitals is expected to reflect distribution in the Australian Healthcare system.
Total	\$1,282		

# **3** Assumptions for indirect cost metrics

## 3.1 Miscarriage

### 3.1.1 Cost to women

# Table 3.1.1Indirect out-of-pocket costs (travel, accommodation, GP referrals and medical tests,<br/>childcare and lost wages)

	Source and rationale
Indirect out-of-pocket costs \$66	Indirect costs of a miscarriage are assumed to be comparable to the indirect costs of an abortion. See <b>Table 3.3.1</b>

Note: calculated numbers may not equate to total cost due to rounding

### 3.1.2 Cost to employers

Variable	Input	Source and rationale
Total	\$14X	Cost of paid leave for a miscarriage assumed to be comparable to cost of paid leave an abortion. See <b>Table 3.3.2</b>

## 3.2 Stillbirth

## 3.2.1 Cost to women

Table 3.2.1 Lost income		
Variable	Input	Source and rationale
Proportion of women who did not return to work	10%	Economic impact of stillbirth survey conducted by PWC on behalf of the Stillbirth foundation Australia (29).
Average yearly earning in Australia	\$69,768	Calculated. 2020 is a leap year which has 366 days in total. In Australia, there are 104 weekends and 7 national public holidays corresponding to 255 working days. This does not include public holidays specific to each state and territory. Average salary was based on the mean hourly wage (\$36.00)(30) multiplied by the average hours of work per day (7.6 hours) (31) and number of working days in a year (255 days).
Total	\$6,977	Calculated. Proportion of women who did not return to work x average yearly earning in Australia

Note: calculated numbers may not equate to total cost due to rounding

## 3.2.2 Cost to employers

#### Table 3.2.2 Cost of paid leave

Variable	Input	Source and rationale
Employment rate (women >15 years)	58%	February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
% Employed with leave entitlements (non- casual/permanent)		February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (33).
Number of days absent from work	3 days	Economic impact of stillbirth survey conducted by PWC on behalf of the Stillbirth foundation Australia (29).
Average daily earning in Australia	\$274	Calculated. Average daily salary was based on the mean hourly wage (\$36.00) (30) x average hours of work per day (7.6 hours) (31)
Total	\$373	Calculated. Employment rate (women >15 years) x % employed with leave entitlements (non- casual/permanent) x number of days absent from work x average daily earning in Australia

## 3.2.3 Government

Variable	Input	Source and rationale
Average stillborn baby payment	\$3,606.81	February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
Proportion eligible for payment	22%	Economic impact of stillbirth survey conducted by PWC on behalf of the Stillbirth foundation Australia (29).
Total	\$806	Calculated. Average stillborn baby payment x proportion eligible for payment

#### Table 3.2.3Stillborn baby payment

Note: calculated numbers may not equate to total cost due to rounding

Table 3.2.4Unemployment benefits

Variable	Input	Source and rationale
Average yearly unemployment benefit	\$16,290	Price published by Services Australia as of October 2021 (fortnightly price multiplied by 26) (34).
Proportion who did not return to work and are eligible for the benefit	22%	Economic impact of stillbirth survey conducted by PWC on behalf of the Stillbirth foundation Australia (29).
Total	\$3,641	Calculated. Average stillborn baby payment x proportion eligible for payment

Note: calculated numbers may not equate to total cost due to rounding

## 3.3 Abortion

### 3.3.1 Cost to women

# Table 3.3.1Indirect out-of-pocket costs (travel, accommodation, GP referrals and medical tests,<br/>childcare and lost wages)

Variable	Input	Source and rationale
Indirect cost of abortion	\$162	Indirect out-of-pocket costs were estimated based on a cross-sectional survey of 2,326 women attending these practices (28). Survey asked women to estimate indirect expenditure incurred for transportation and accommodation, childcare, GP referral, medical tests, as well as lost wages. Indirect out-of-pocket costs were valued at \$150 in 2015 and inflated over 5 years, at an average rate of 1.5% ( <u>Reserve bank of Australia inflation</u> calculator).
Proportion impacted	41%	About 41% reported indirect costs related to travel and accommodation, GP referrals and medical tests, childcare and lost wages (28).
Total	\$66	Indirect cost of abortion x proportion impacted. Adjusting for an average annual inflation rate of 1.5%, the total cost in 2020 was estimated to be \$66 (Reserve bank of Australia inflation calculator).

Note: calculated numbers may not equate to total cost due to rounding

## 3.3.2 Cost to employer

#### Table 3.3.2 Indirect employer cost of paid leave for an abortion

		•
Variable	Input	Source and rationale
Employment rate (women >15 years)	58%	February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
% Employed with leave entitlements (non- casual/permanent)	78%	February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (33).
Average days of leave (medical abortion)	1 day	Medical versus surgical abortion efficacy, complications and leave of absence compared in a partly randomised study (n=1135) (35).
Average days of leave (surgical abortion)	2 days	Medical versus surgical abortion efficacy, complications and leave of absence compared in a partly randomised study (n=1135) (35).
Mean daily wadge	\$274	Calculated. Average salary was based on the mean hourly wage (\$36.00) (30) multiplied by the average hours of work per day (7.6 hours)(31).

Employer cost of paid leave (medical abortion)	\$90.45	Calculated. Employment rate (women >15 years) x % employed with leave entitlements (non- casual/permanent) x average days of leave (medical abortion) x mean hourly wage x average hours of work per day
Employer cost of paid leave (surgical abortion)	\$180.90	Calculated. Employment rate (women >15 years) x % employed with leave entitlements (non- casual/permanent) x average days of leave (surgical abortion) x mean hourly wage x average hours of work per day
Proportion of women receiving medical abortions	36%	WA Government (2019) and SA Government (2020) abortion notification reports (1, 6).
Proportion of women receiving surgical abortions	64%	WA Government (2019) and SA Government (2020) abortion notification reports (1, 6).
Total	\$148	Calculated. (Employer cost of paid leave (medical abortion) x proportion of women receiving medical abortions) + (employer cost of paid leave (surgical abortion) x proportion of women receiving surgical abortions)

Note: calculated numbers may not equate to total cost due to rounding

## 3.4 Raising a child

### 3.4.1 Cost to government

Variable	Input	Source and rationale
Employment rate (women >15 years)	58%	February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
% of women who take leave after giving birth	93%	Findings from the Pregnancy and Employment Transitions survey in 2017 (36).
Average weeks of paid maternity leave	5 weeks	2005 Parental Leave in Australia Survey (PLAS), in which Mothers of the infant cohort were asked a range of questions relating to their employment before and after the birth of their child and the types of leave taken (37).
Parental Leave Pay	\$773	Parental Leave Pay is based on the weekly rate of the national min wage (38).
Average yearly earning in Australia	\$69,768	Calculated. 2020 is a leap year which has 366 days in total. In Australia, there are 104 weekends and 7 national public holidays corresponding to 255 working days. This does not include public holidays specific to each state and territory. Average salary was based on the mean hourly wage (\$36.00)(30) multiplied by the average hours of work per day (7.6 hours) (31) and number of working days in a year (255 days).
Total	\$2,096	Calculated. Employment rate (women >15 years) x % of women who take leave after giving birth x average weeks of paid maternity leave x parental leave pay An average employed individual would receive this payment as parental Leave pay is provided to all adjusted taxable incomes less than \$151,350 (2020- 21) which is higher than the Australian average yearly earning calculated in the above row (\$73,440).

Note: calculated numbers may not equate to total cost due to rounding

#### Table 3.4.2 Government cost of unemployment benefits for parents

Variable	Input	Source and rationale
Employment rate (women >15 years)	58%	February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
Unemployment rate (women >15 years)	42%	February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
% of women who permanently left their job after giving birth (% of previously employed women)	23%	Findings from the Pregnancy and Employment Transitions survey in 2017 (39).
% of women who permanently left their job after giving birth (% of all women)	13%	<b>Calculated.</b> Employment rate (women >15 years) x % of women who permanently left their job after giving birth
% of unplanned pregnancy	39%	Data based on the Millennium Cohort Study (MCS), which is a nationally

who are first time mothers		representative UK-based prospective cohort study tracking the lives of infants born to 18,552 families between 2000 and 2002(40). Unemployment benefits are only applied to unplanned pregnancies in first time mothers given that women with existing children are assumed to already be covered by this subsidy.
% single parent families	17%	Labour Force estimates of families produced from data collected in the June 2021 Labour Force Survey (LFS) (32).
% coupled families	83%	Labour Force estimates of families produced from data collected in the June 2021 Labour Force Survey (LFS) (32).
Single maximum fortnightly parenting payment (2021)	\$850.20	Price published by Services Australia as of October 2021 (41).
Single maximum yearly parenting payment (2021)	\$22,105.20	Calculated. Single maximum fortnightly parenting payment (2021) x 26 (fortnights per year)
Coupled maximum fortnightly parenting payment (2021)	\$573.30	Price published by Services Australia as of October 2021 (41).
Coupled maximum yearly parenting payment (2021)	\$14,905.80	Calculated. Coupled maximum fortnightly parenting payment (2021) x 26 (fortnights per year)
Estimated yearly parenting payment	\$16, 079	Calculated. (% single parent families x single maximum yearly parenting payment (2021)) + (% coupled families x coupled maximum yearly parenting payment (2021))
Total	\$3,411	Calculated. (Estimated yearly pareting payment x unemployment rate (women >15)) + (Estimated yearly pareting payment x % of women who permantenly left their job after giving birth)) Assuming that women who are unemployed following birth require income support (parenting payments). This included women who were unemployed prior to birth and women who permanently left their job following birth.

Note: calculated numbers may not equate to total cost due to rounding

#### Table 3.4.3Government cost of family tax benefits

Variable	Input	Source and rationale
% of unplanned pregnancy who are first time mothers	39%	Data based on the Millennium Cohort Study (MCS), which is a nationally representative UK-based prospective cohort study tracking the lives of infants born to 18,552 families between 2000 and 2002 (40). The family tax benefit only applied to unplanned pregnancies in first time mothers given that women with existing children are assumed to already be covered by this subsidy
Average yearly earning in Australia	\$69,768	Calculated. 2020 is a leap year which has 366 days in total. In Australia, there are 104 weekends and 7 national public holidays corresponding to 255 working days. This does not include public holidays specific to each state and territory. Average salary was based on the mean hourly wage (\$36.00)(30) multiplied by the average hours of work per day (7.6 hours) (31) and number of working days in a year (255 days).
Average family Tax Benefit Part B yearly payment (single parents)	\$4,228	A single parent is eligible for the maximum rate of FTB Part B if their income is equal to or below the primary earner income limit (\$100,900 per annum). Based on the average Australian average yearly earning (\$73,440), Family Tax Benefit Part B is \$4,228 (42, 43).
Average family Tax Benefit Part B yearly payment (coupled parents)	\$0	Families are not eligible for FTB Part B if the primary earner earns more than \$100,900. If they earn less, payments will reduce by 20 cents for each dollar of income earned for the secondary earner over \$5,840. If both income earners earn an average salary, they will not be eligible for FTB (42, 43).
% single parent families	17%	Labour Force estimates of families produced from data collected in the June 2021 Labour Force Survey (LFS) (32).
% coupled families	83%	Labour Force estimates of families produced from data collected in the June 2021 Labour Force Survey (LFS) (32).
Total	\$269	Calculated. (Single parents average family Tax Benefit Part B yearly payment x % single parent families) + (coupled parents average family Tax Benefit Part B yearly payment x % coupled parent families)

## 3.4.2 Cost to women

Variable	Input	Source and rationale
Food for child starting at 6 months	\$915.00	
Home improvements and fittings	\$1,375.00	
Baby clothes	\$754.00	Descerch developed by international a commerce platform based on rateil
Baby care products	\$791.00	Research developed by international e-commerce platform based on retail prices in online stores in Australia, as of May 2020 (44).
Baby transport	\$868.00	
Mother's clothes and accessories	\$700.00	
Hospital bag	\$119.00	
Total	\$5,522	Calculated. Sum of the above

#### Table 3.4.4 Expense of raising a child in the first year

Note: calculated numbers may not equate to total cost due to rounding

#### Table 3.4.5Cost of unpaid leave

Variable	Input	Source and rationale
Employment rate (women >15 years)	58%	February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
% of women who take leave after giving birth	93%	Findings from the Pregnancy and Employment Transitions survey in 2017 (36).
Average weeks of unpaid leave	30 weeks	2005 Parental Leave in Australia Survey (PLAS), in which Mothers of the infant cohort were asked a range of questions relating to their employment before and after the birth of their child and the types of leave taken (37).
Average weekly earning in Australia	\$1,368	Calculated. Average weekly salary was based on the mean hourly wage (\$36.00)(30) x average hours of work per week (38 hours) (31)
Total	\$22,251	Calculated. Employment rate (women >15 years) x % of women who take leave after giving birth x average weeks of unpaid leave x average weekly earnings in Australia

Note: calculated numbers may not equate to total cost due to rounding

#### Table 3.4.6 Lost income

Variable	Input	Source and rationale
% of women who permanently left their job after giving birth (% of all women)	13%	Calculated. Employment rate (women >15 years) x % of women who permanently left their job after giving birth. See Table 3.4.2
Average yearly earning in Australia	\$69,768	Calculated. 2020 is a leap year which has 366 days in total. In Australia, there are 104 weekends and 7 national public holidays corresponding to 255 working days. This does not include public holidays specific to each state and territory. Average salary was based on the mean hourly wage (\$36.00)(30) multiplied by the average hours of work per day (7.6 hours) (31) and number of working days in a year (255 days).
Total	\$9,355	Calculated. % of women who take leave after giving birth x average yearly earnings in Australia

Note: calculated numbers may not equate to total cost due to rounding

## 3.4.3 Cost to employers

#### Table 3.4.7Cost of paid leave

Variable	Input	Source and rationale
Employment rate (women >15 years)		February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
% Employed with leave entitlements (non- casual/permanent)		February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (33).

% of women who take leave after giving birth	93%	Findings from the Pregnancy and Employment Transitions survey in 2017 (36).
Average weeks of paid leave	3 weeks	2005 Parental Leave in Australia Survey (PLAS), in which Mothers of the infant cohort were asked a range of questions relating to their employment before and after the birth of their child and the types of leave taken (37).
Average weekly earnings in Australia	\$1,368	Calculated. Average weekly salary was based on the mean hourly wage (\$36.00) (30) x average hours of work per week (38 hours) (31)
Total	\$1,736	Calculated. Employment rate (women >15 years) x % of women who take leave after giving birth x average weeks of paid leave. x average weekly earnings in Australia

Note: calculated numbers may not equate to total cost due to rounding

## 3.5 Out-of-home care

## 3.5.1 Cost to government

#### Table 3.5.1 Government cost of family tax benefits

Variable	Input	Source and rationale
% of adopting families who had no other children	64%	2019-2020 AIHW data on adoptions of Australian children and children from overseas (45). Family tax benefit was only applied families who adopted with no other children given that families with existing children are assumed to already be covered by this subsidy.
Average yearly earning in Australia	\$69,768	Calculated. 2020 is a leap year which has 366 days in total. In Australia, there are 104 weekends and 7 national public holidays corresponding to 255 working days. This does not include public holidays specific to each state and territory. Average salary was based on the mean hourly wage (\$36.00)(30) multiplied by the average hours of work per day (7.6 hours) (31) and number of working days in a year (255 days).
Average family Tax Benefit Part B yearly payment (single parents)	\$4,228	A single parent is eligible for the maximum rate of FTB Part B if their income is equal to or below the primary earner income limit (\$100,900 per annum). Based on the average Australian average yearly earning (\$73,440), Family Tax Benefit Part B is \$4,228 (42, 43).
Average family Tax Benefit Part B yearly payment (coupled parents)	\$0	Families are not eligible for FTB Part B if the primary earner earns more than \$100,900. If they earn less, payments will reduce by 20 cents for each dollar of income earned for the secondary earner over \$5,840. If both income earners earn an average salary, they will not be eligible for FTB (42, 43).
% single parent families	17%	Labour Force estimates of families produced from data collected in the June 2021 Labour Force Survey (LFS) (32).
% coupled families	83%	Labour Force estimates of families produced from data collected in the June 2021 Labour Force Survey (LFS) (32).
Total	\$447	Calculated. % of adopting families who had no other children x (single parents average family Tax Benefit Part B yearly payment x % single parent families) + (Coupled parents average family Tax Benefit Part B yearly payment x % coupled parent families)

Note: calculated numbers may not equate to total cost due to rounding

#### Table 3.5.2 Government cost of paid parental leave

Variable	Input	Source and rationale
Employment rate (>15 years)		February 2020 ABS dataset, which represents the period before the impacts of the COVID-19 pandemic (32).
Maximum weeks of paid leave	18	Given that maternity leave options are limited for adopting families, it was assumed that the maximum of 18 weeks of paid parental leave were taken.
Parental Leave Pay	\$773	Parental Leave Pay is based on the weekly rate of the national min wage (38).
Total	\$8,696	Employment rate (>15 years) x max weeks of paid leave x Parental Leave Pay.

## 3.5.2 Cost to out-of-home carers

Variable	Input	Source and rationale
Food for child for the first 12 months	\$1,830	Research developed by international e-commerce platform based on retail prices in online stores in Australia, as of May 2020 (44).
Home improvements and fittings	\$1,375.00	
Baby clothes	\$754.00	
Baby care products	\$791.00	
Baby transport	\$868.00	
Total	\$5,618	Calculated. Sum of the above

#### Table 3.5.3Expense of raising a child in the first year

# **4** References

- 1. Garrao M, Hutchinson, M. Joyce, A. Induced Abortion in Western Australia 2016-2018. Sixth Report of the Western Australian Abortion Notification System, Department of Health, Western Australia; 2019.
- 2. Taft A, Shankar M, Black K, Maza D, Hussainy S, Lucke J. Unintended and unwanted pregnancy in Australia: a cross-sectional, national random telephone survey of prevalence and outcomes. MJA. 2018;209(9):407-8.
- 3. Sedgh G, Singh S, Hussain R. Intended and unintended pregnancies worldwide in 2012 and recent trends. Stud Fam Plann. 2014;45(3):301-14.
- 4. Australian Bureau of Statistics. Births, Australia 2019 [cited 27 August 2021]. Available from: <u>https://www.abs.gov.au/statistics/people/population/births-australia/latest-release</u>.
- 5. Bearak J, Popinchalk A, Ganatra B, Moller AB, Tunçalp Ö, Beavin C, et al. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990-2019. Lancet Glob Health. 2020;8(9):e1152-e61.
- 6. South Australian Abortion Reporting Committee. Annual Report for the Year 2018. In: Government of South Australia, editor. 2021.
- 7. Marie Stopes International. Women, contraception and unplanned pregnancy 2008.
- 8. Rowe H, Holton S, Kirkman M, Bayly C, Jordan L, McNamee K, et al. Prevalence and distribution of unintended pregnancy: the Understanding Fertility Management in Australia National Survey. Australian and New Zealand Journal of Public Health. 2016;40(2):104-9.
- 9. Hewitt B, England P, Baxter J, Shafer E. Education and Unintended Pregnancies in Australia: Do Differences in Relationship Status and Age at Birth Explain the Education Gradient? Population Review. 2010;49.
- Weisberg E, Bateson D, Read C, Estoesta J, Lee C. Fertility control? Middle-aged Australian women's retrospective reports of their pregnancies. Aust N Z J Public Health. 2008;32(4):390-2.
- 11. Dugas C, Slane VH. Miscarriage. StatPearls. Treasure Island (FL): StatPearls Publishing

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- 12. Laws PJ, Grayson N, Sullivan EA. Australia's mothers and babies 2004. 2006.
- 13. Chan A, Sage LC. Estimating Australia's abortion rates 1985-2003. Med J Aust. 2005;182(9):447-52.
- 14. Keogh LA, Gurrin LC, Moore P. Estimating the abortion rate in Australia from National Hospital Morbidity and Pharmaceutical Benefits Scheme data. Med J Aust. 2021;215(8):375-6.
- 15. Wright S, Bateson D, McGeechan K. Induced abortion in Australia: 2000-2020. Family Planning NSW: Ashfield, Australia 2021.
- 16. Chae S, Desai S, Crowell M, Sedgh G. Reasons why women have induced abortions: a synthesis of findings from 14 countries. Contraception. 2017;96(4):233-41.
- 17. Michelson J. What women want when faced with an unplanned pregnancy. Sexual Health. 2007;4(4):297-.
- 18. Australian Institute of Health and Welfare. Child Welfare series. Canberra: AIHW; 2020.
- 19. Australian Institute of Health and Welfare. Australia's children 2020 [cited 21 October 2021]. Available from: <u>https://www.aihw.gov.au/reports/children-youth/australias-</u> <u>children/contents/health/teenage-mothers</u>.

20. Family Planning NSW. Inquiry into health outcomes and access to health and hospital services in rural,

regional and remote New South Wales. 2020.

- 21. Australian Bureau of Statistics. Remoteness structure 2016 [cited 25 October 2021]. Available from: <u>https://www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure</u>.
- 22. Australian Institute of Health and Welfare. Aboriginal and Torres Strait Islander Health Performance Framework 2017 report. Canberra: AIHW; 2017.
- 23. Queensland Clinical Guidelines. Early pregnancy loss2017 10 October 2021.
- 24. Chu JJ, Devall AJ, Beeson LE, Hardy P, Cheed V, Sun Y, et al. Mifepristone and misoprostol versus misoprostol alone for the management of missed miscarriage (MifeMiso): a randomised, double-blind, placebo-controlled trial. The Lancet. 2020;396(10253):770-8.
- 25. Royal Womens Hospital. Treating miscarriage18 Nov 2021]. Available from: <u>https://www.thewomens.org.au/health-information/pregnancy-and-birth/pregnancy-problems/treating-miscarriage</u>.
- 26.Mazza D, Burton G, Wilson S, Boulton E, Fairweather J, Black K. Medical abortion. Australian Journal for General Practitioners. 2020;49:324-30.
- 27.Goldstone P, Walker C, Hawtin K. Efficacy and safety of mifepristone-buccal misoprostol for early medical abortion in an Australian clinical setting. Aust N Z J Obstet Gynaecol. 2017;57(3):366-71.
- 28.Shankar M, Black KI, Goldstone P, Hussainy S, Mazza D, Petersen K, et al. Access, equity and costs of induced abortion services in Australia: a cross-sectional study. Aust N Z J Public Health. 2017;41(3):309-14.
- 29.Stillbirth Foundation. The economic impacts of stillbirth in Australia2016 16 October 2021]. Available from: <u>https://stillbirthfoundation.org.au/wp-content/uploads/2020/08/Economic-Impacts-of-Stillbirth-2016-PwC.pdf</u>.
- 30. Australian Bureau of Statistics. Employee earnings2020 18 Nov 2021]. Available from: <u>https://www.abs.gov.au/statistics/labour/earnings-and-work-hours/employee-earnings/aug-</u> 2020#methodology.
- 31. Fair Work Ombudsman. Maximum weekly hours2017 18 Nov 2021]. Available from: <u>https://www.fairwork.gov.au/tools-and-resources/fact-sheets/minimum-workplace-entitlements/maximum-weekly-hours</u>.
- 32. Australian Bureau of Statistics. Labour Force, Australia2021 18 Nov 2021]. Available from: <u>https://www.abs.gov.au/methodologies/labour-force-australia-methodology/aug-</u> <u>2021#introduction</u>.
- 33. Australian Bureau of Statistics. Characteristics of Employment, Australia2020 [cited 20 October 2021. Available from: <u>https://www.abs.gov.au/statistics/labour/earnings-and-work-hours/characteristics-employment-australia/latest-release</u>.
- 34. Services Australia. JobSeeker Payment2021 19 Nov 2021]. Available from: <u>https://www.servicesaustralia.gov.au/women/services/centrelink/jobseeker-payment/how-much-you-can-get</u>.
- 35. Rørbye C, Nørgaard M, Nilas L. Medical versus surgical abortion efficacy, complications and leave of absence compared in a partly randomized study. Contraception. 2004;70(5):393-9.
- 36.Australian Bureau of Statistics. Pregnancy and employment transitions2018 27 October 2021]. Available from: <u>https://www.abs.gov.au/ausstats/abs@.nsf/mf/4913.0</u>.
- 37. Baxter. Timing of mothers' return to work after childbearing 2008 15 October 2021]. Available from: <u>https://aifs.gov.au/publications/timing-mothers-return-work-after-childbearing#:~:text=Overall%20maternal%20return%2Dto%2Dwork%20patterns&text=At%20 three%20months%20old%2C%2011,months%2C%2054%25%20had%20returned.</u>

- 38.Services Australia. Parental Leave Pay2021 18 Nov 2021]. Available from: <u>https://www.servicesaustralia.gov.au/women/services/centrelink/parental-leave-pay</u>.
- 39.Australian Bureau of Statistics. Pregnancy and Employment Transitions, Australia, Nov 20172018 18 Nov 2021]. Available from: <u>https://www.abs.gov.au/ausstats/abs@.nsf/mf/4913.0</u>.
- 40. Barton K, Redshaw M, Quigley MA, Carson C. Unplanned pregnancy and subsequent psychological distress in partnered women: a cross-sectional study of the role of relationship quality and wider social support. BMC Pregnancy and Childbirth. 2017;17(1):44.
- 41. Services Australia. Parenting Payment2021 12 October 2021]. Available from: https://www.servicesaustralia.gov.au/women/services/centrelink/parenting-payment.
- 42. Services Australia. Family tax benefit2021 27 October 2021]. Available from: <u>https://www.servicesaustralia.gov.au/women/services/centrelink/family-tax-benefit/how-much-you-can-get/ftb-part-b-payment-rates</u>.
- 43. FA(Admin)Act section 20 Determination of rate may be based on estimate, indexed estimate or indexed actual income, section 20A Indexed estimates, section 20B Indexed actual incomes, (2021).
- 44. Picodi. Birth of a child: what are the expenses during pregnancy and baby's first year?2020 27 October 2021]. Available from: <u>https://www.picodi.com/au/bargain-hunting/birth-of-a-child-what-are-the-expenses-during-pregnancy-and-baby-s-first-year</u>.
- 45. Australian Institute of Health and Welfare. Adoptions2021 13 October 2021]. Available from: <u>https://www.aihw.gov.au/reports/australias-welfare/adoptions</u>.

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