

# STATISTICAL REPORT

## Use of long-acting reversible contraception in New South Wales, Australia between 2018 and 2022



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## Publication information

Use of long-acting reversible contraception in New South Wales, Australia between 2018 and 2022.

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### Disclosure of conflict of interest

Family Planning Australia has published this monograph to provide data on the use of long-acting reversible contraception in New South Wales, Australia. No external funding was received for this project.

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## Key indicators

- Pharmaceutical Benefits Scheme (PBS) claims for hormonal intrauterine devices (IUDs)
- Medicare Benefits Schedule (MBS) claims for the insertion and removal of IUDs (both hormonal and copper)
- PBS claims for contraceptive implants
- MBS claims for the insertion and removal of implants
- In NSW between 2018 and 2022 by age, remoteness, metropolitan and non-metropolitan areas, Local Health Districts (LHD), and Local Government Areas (LGA)
- Prevalence of current IUD and implant users in NSW and in Australia in 2022

## Primary data sources

- Aggregated PBS data from Services Australia
- Aggregated MBS data from Services Australia
- Aggregated online Medicare statistics

## Purpose of this report

- To describe trends in PBS and MBS claims for IUDs and implants in NSW
- To describe trends in PBS and MBS claim for IUDs and implants across different population subgroups in NSW
- To estimate prevalence of current IUD and implant users in NSW and in Australia in 2022
- To identify areas for further data development

## Note on language

Throughout this document we refer to women where data provided has referred to LARC users as women, and in recognition that the majority of people who are using LARCs identify as women. However, we acknowledge that this data may include LARC users who do not identify as women, including trans, gender diverse and non-binary people.

## Definitions and acronyms

**ABS:** Australian Bureau of Statistics

**Age-specific contraceptive rate:** The number of women in a specific age group using a contraceptive method per 100 women in that age group

**Contraceptive rate:** The number of women of reproductive age using a contraceptive method per 100 women of reproductive age

**IUD:** Intrauterine device, including both copper and hormonal IUDs

**LARC:** Long-acting reversible contraception

**MBS:** Medicare Benefits Schedule

**Medicare data:** Refers to both Medicare Benefits Schedule and Pharmaceutical Benefits Scheme data

**NSW:** New South Wales

**PBS:** Pharmaceutical Benefits Scheme

**Reproductive age:** 15-49 years for women, unless specified

**S\*** Suppressed values. To protect privacy in small populations, values are suppressed when there are between 1 and 5 patients/services or where one provider provides more than 90% of services or two providers provide more than 85% of services.

**WHO:** World Health Organization

## Data sources

Information presented in this report was derived from MBS and PBS data provided by Services Australia and from online Medicare statistics. The Australian government subsidises healthcare costs for Medicare-eligible individuals. Claims for reimbursement are recorded in PBS data for contraceptive-related products and MBS data for contraceptive-related medical procedures.

## Limitations

Medicare rebates are available only to Australian or New Zealand citizens, Australian permanent residents, or citizens from countries with a reciprocal Health Care Agreement. Overseas students or visitors are ineligible for Medicare rebates, so data on their contraceptive use are not captured.

## IUDs

The PBS covers hormonal IUDs, but not copper IUDs. There are two brands of hormonal IUDs available in Australia, Mirena® and Kyleena®. Mirena® has been available in Australia since 2001 and was listed on the PBS in 2003. Mirena® is PBS-listed for contraception and for the management of heavy menstrual bleeding. Clinically it is also prescribed as the progestogen component of hormonal replacement therapy. Kyleena® has been available on the PBS for contraception since 2020. However, PBS data only reflect the number of prescriptions filled, not the actual number of users. For instance, it is unclear from PBS data alone whether a woman who fills a prescription for an IUD has the device inserted.

The MBS data includes procedures for both hormonal and copper IUDs. Procedures may not be captured by MBS data if they are provided by an ineligible health practitioner or if the service is provided to an individual who is ineligible for Medicare.

Additionally, MBS claims for IUD removal can only be made when the procedure is performed under general anaesthetic, which excludes the majority of removals conducted in primary care settings.

## Implants

There is one brand of hormonal contraceptive implant available in Australia, Implanon NXT™, commonly referred to as Implanon. Both MBS item numbers for implant insertion —14206 (administration of a hormone implant via cannula) and 30062 (removal of implant)—can only be claimed during replacement if the new implant is inserted at a different site, rather than through the same incision used for removal. Interpretation of this rule varies in practice. Further complicating matters, the recommended insertion site for Implanon was revised during the reporting period, meaning many replacements during this time would have required re-

siting of the implant and thus met the criteria for claiming both item numbers. It is important to note that the implant insertion item (14206) is not specific to Implanon; it is also used for the insertion of other hormonally active subdermal implants, such as Zoladex® (goserelin) and estrogen implants.

### **Both IUDs and implants**

Information about the duration a person has used a specific contraceptive method or whether multiple methods were used simultaneously is unavailable from the PBS and MBS data.

A number of women might claim through PBS but not MBS, and vice versa. Therefore, the data were likely to underestimate the total number of women making PBS and/or MBS claims.

Finally, due to the long-acting nature of LARC (up to 10 years for copper IUDs, up to eight years for hormonal IUD and three years for implants), the annual number of Medicare claims does not reflect the prevalence of users. A number of assumptions are needed to estimate the current LARC users.

## Executive Summary

This is the first comprehensive report analysing all Pharmaceutical Benefits Scheme (PBS) and Medical Benefits Schedule (MBS) claims related to long-acting reversible contraception (LARC) in NSW. Covering the period from 2018 to 2022, the report highlights key trends and patterns across age groups, remoteness, metropolitan and non-metropolitan local health districts, and local government areas.

### **Intrauterine devices (IUDs)**

#### *IUD claim rates in Australia*

Between 2018 and 2022, Australia recorded 665,056 claims for hormonal IUDs under the PBS. The majority were for Mirena® (95.5%) while Kyleena® only accounted for 5.5%. During the same period, 388,264 claims were made for IUD insertion procedures under the MBS, a ratio of 58% compared to PBS claims. Both PBS and MBS claims increased until 2021 then declined in 2022. The claim rates per 100 women aged 15-49 years in 2022 were 2.3 for PBS and 1.4 for MBS. The total cost for IUD Medicare claims over five years was \$160.0 million.

#### *IUD claim rates in NSW*

From 2018 to 2022, NSW had 186,279 PBS claims (93.8% for Mirena®) and 114,396 MBS claims for IUD insertion (a ratio of 61% compared to PBS claims). PBS claims in NSW accounted for 30% of all Australian claims, while MBS claims made up 28%. Although the claim rates in NSW followed the national trend (increasing until 2021 and then decreasing in 2022), they remained consistently below the national average. In NSW in 2022, claim rates per 100 women aged 15-49 years were 2.1 for PBS and 1.3 for MBS, consistently lower than the national average. The total cost for IUD Medicare claims in NSW over five years was \$43.9 million.

#### *IUD claim rates in NSW by subpopulation groups*

Claim rates varied significantly by age and region. Women aged 15-19 years had the lowest PBS claim rates, while those aged 40-49 years had the highest (e.g., PBS claim rate of 1.0 vs. 2.5 per 100 women in 2022). Women in very remote areas had the lowest PBS claim rates, while those in inner regional areas had the highest (e.g., PBS claim rate of 0.9 vs 2.6 per 100 women in 2022).

Metropolitan Local Health Districts (LHDs) had lower PBS claim rates compared to non-metropolitan LHDs (e.g., PBS claim rate of 1.7 vs. 2.4 per 100 women in 2022). Among the metropolitan LHDs, South-Western Sydney had the lowest PBS claim rates, while Illawarra Shoalhaven had the highest. In non-metropolitan LHDs, Far West NSW had the lowest PBS

claim rate, and Murrumbidgee had the highest. Significant variations in PBS claim rates were observed between Local Government Areas (LGAs) within each LHD.

### IUD removal claims

Between 2018 and 2022, there were 15,207 MBS claims for IUD removals in Australia (3.9% of insertions) and 5,215 in NSW (4.6% of insertions). It is important to note that the IUD removal MBS item number utilised in this report reflects the number of IUDs removed under sedation. In most other settings, an IUD removal is subsidised by Medicare through submission of a standard consultation item number that is non-specific to the procedure itself.

The IUD removal rate under sedation remained stable at 0.04 per 100 women aged 15-54 years for Australia but decreased from 0.05 in 2018 to 0.04 in 2022 for NSW, notably among age groups 35-44 years and 45-54 years. In 2022, the IUD removal claim rate in NSW was lowest among young women aged 15-24 years (0.02 per 100 women) and highest among women aged 25-34 years (0.05 per 100 women).

### Estimated prevalence of IUD current users

In 2022, it was estimated that there were 462,687 current IUD users in Australia, representing a prevalence rate of 7.7%. In NSW, there were 129,557 current IUD users, with a lower prevalence rate of 6.9% compared to the national average.

## **Implants**

### Implant claim rates in Australia

Between 2018 and 2022, there were 521,074 PBS claims and 466,260 MBS claims for the implant in Australia (a ratio of 89% compared to PBS claims). Both PBS and MBS claim rates increased to 2019 but consistently declined afterward. In 2022, the PBS claim rate for implants was 1.6 per 100 women aged 15-49 years, and the MBS claim rate was 1.2 per 100. The total cost of Medicare claims for implants in Australia over five years was \$101.7 million.

### Implant claim rates in NSW

From 2018 to 2022, NSW recorded 132,772 PBS claims and 119,200 MBS claims for implant (a ratio of 90% compared to PBS claims). Claim rates in NSW followed the national trend, initially increasing before declining after 2019. However, they consistently remained below the national average. In 2022, the PBS claim rate was 1.3 per 100 women, and the MBS claim rate was 1.2 per 100 women. The total cost of Medicare claims for implants in NSW over five years was \$31.4 million.

### Implant claim rates in NSW by subpopulation groups

Women aged 15-19 years consistently had the highest claim rates, while those aged 40-49 years had the lowest (e.g., PBS claim rate of 2.2 vs. 0.6 per 100 women in 2022). Women in major cities had the lowest rates, while those in outer regional areas had the highest (e.g., PBS claim rate of 1.1 vs. 2.3 per 100 women in 2022).

Non-metropolitan LHDs consistently had higher implant claim rates than metropolitan LHDs (e.g., PBS claim rate of 1.8 vs. 1.0 per 100 women in 2022). Among metropolitan LHDs, the highest claim rate was in Illawarra Shoalhaven, and the lowest was in Northern Sydney. Among non-metropolitan LHDs, Far West NSW had the highest claim rate, and Northern NSW had the lowest. Implant claim rates varied significantly between LGAs within each LHD.

### Implant removal claims

Between 2018 and 2022, there were 455,758 claims for implant removals among women aged 15-54 years in Australia (a ratio of 91% compared to insertions) and 108,629 in NSW (a ratio of 85% compared to insertions). The implant removal rate in NSW was consistently lower than the national average (e.g., 1.0 vs. 1.2 per 100 women aged 15-54 years in 2022). Implant removal rates decreased with age, e.g., from 1.4 per 100 women aged 15-24 years to 0.3 per 100 women aged 45-54 years in 2022.

### Estimated prevalence of implant current users

In 2022, it was estimated that there were 215,702 current implant users in Australia, representing a prevalence rate of 3.6%. In NSW, there were 54,850 current implant users, with a lower prevalence rate of 2.9% compared to the national average.

Combined with IUD users, the total number of LARC users in Australia was estimated at 678,389, with an overall prevalence rate of 11.2%. In NSW, the total number of LARC users was 184,407, representing a prevalence rate of 9.8%.

## Conclusions

The use of LARC in NSW and Australia was low, with claim rates for both IUDs and implants remaining below 3 per 100 women aged 15–49 years. Only 9.8% of women in NSW and 11.2% of women in Australia were estimated to be using any type of LARC in 2022. Although the claim rates in NSW followed national trends, they were consistently lower than the national rates. Notably, claim rates for IUDs were higher than those for implants. Significant variations were observed in claim rates across different age groups, levels of remoteness, metropolitan versus non-metropolitan LHDs, and LGAs within each LHD.

To enhance LARC use, targeted strategies should include increasing consumer awareness about LARC as effective contraceptive options, improving access to health services that offer

LARC, and providing training for general practitioners. Increasing the MBS rebate associated with LARC MBS item numbers to adequately remunerate LARC provision would also likely increase LARC use and enhance access. Expanding the roles of registered nurses and midwives to offer counselling, support, and LARC insertion, improving Medicare claim practices at local health facilities, establishing women's support groups, and fostering integration among reproductive and sexual health services are also key strategies, especially for women in groups with lower prevalence of LARC use.

Future data collection should differentiate between IUDs used for contraception versus other purposes, as well as between copper and hormonal IUDs. Leveraging linked data with other sources will provide a more comprehensive understanding of LARC utilisation in NSW and across Australia.

## 1. Introduction

Up to one-third of Australian women experience an unintended pregnancy in their lifetime.<sup>1</sup> Forty percent of all pregnancies in Australia are unintended.<sup>2</sup> Unintended pregnancies can have severe consequences for women, children, and families, including heightened risks of congenital anomalies, spontaneous abortion, premature delivery, and low birth weight.<sup>3</sup>

An unintended pregnancy occurs when a woman either does not wish to conceive or conceives earlier than desired. While contraception can mitigate this risk, 17% of women at risk of unintended pregnancy in Australia do not use contraception.<sup>4</sup> Even when contraception is used, not every method is effective or properly utilised. Nearly three quarters of the women who experienced an unintended pregnancy in Australia reported using contraception at the time, with the oral contraceptive pill the most frequently cited method (39%).<sup>5,6</sup>

Long-acting reversible contraception (LARC), including the intrauterine device (IUD) and contraceptive implant, are highly effective with efficacy rates exceeding 99%. They offer long-term protection, up to 5-10 years for IUDs and 3 years for implants and there are few absolute contraindications to use.<sup>7</sup> Unlike some other methods, LARC are not dependent on user motivation and adherence, making them crucial in reducing unplanned pregnancies.<sup>8,9</sup>

Globally, approximately 18.8% of women of reproductive age use IUDs, and 2.4% use implants.<sup>10</sup> In Australia, IUD utilisation rates are notably lower than the world average, ranging from 3.2% in 2011<sup>11</sup> to 4.5% in 2015<sup>12</sup> to 6.3% in 2018<sup>13</sup> but implant use are higher, from 3.6% in 2011<sup>11</sup> to 5.1% in 2015<sup>12</sup> but reduced to 4.5% in 2018.<sup>13</sup>

Despite their effectiveness, LARCs are used much less in Australia than short-acting methods like oral contraception or condoms (E.g. 9.6% used LARC compared to 33% used oral contraception and 24% used condom in 2015).<sup>4,11,12</sup> Barriers to LARC use in Australia can include side effects, negative experiences with health services, contraceptive failure, difficulty with accessing contraception,<sup>14</sup> insufficient information<sup>14,15</sup> and lack of confidence among health professionals.<sup>16</sup> LARC use in Australia also varies by state, remoteness, and age group.<sup>11-13,</sup>

The Australian Government subsidises the cost of medicines through the Pharmaceutical Benefits Scheme (PBS) and the cost of health professional services through the Medicare Benefits Schedule (MBS). Australian or New Zealand citizens, Australian permanent residents, or citizens from countries with a reciprocal Health Care Agreement can claim Medicare rebates. Annual prescription rates for hormonal IUD among Australian women aged 15-49 years increased from 1.5% in 2011<sup>11</sup> to 1.6% in 2012<sup>17</sup> and 2.3% in 2018<sup>12</sup> while implant use increased from 1.5% in 2011<sup>11</sup> to 1.6%<sup>18</sup> and 2.0% in 2018.<sup>12</sup>

NSW has a population of more than 8 million and is the most populous state in Australia. A large proportion of NSW residents were born overseas (31.0%). The top five countries of birth are China, England, India, New Zealand and Philippines.<sup>19</sup> NSW comprises 15 Local Health Districts (LHDs), encompassing metropolitan, regional, remote, and very remote areas. Each LHD includes multiple Local Government Areas (LGAs). Use of LARCs among women of reproductive age in NSW ranged from 2.3% in 2016<sup>12</sup> to 3.3% in 2018<sup>13</sup> and was consistently lower than in other states. However, these data were outdated and data on population subgroups in NSW are lacking.

The aims of this report were to provide comprehensive information on Medicare claims on LARC utilisation in NSW between 2018 and 2022, disaggregated by age group, remoteness, metropolitan status, LHD, and LGA. Another aim was to estimate the number of current LARC users in 2022 in NSW and Australia. The findings will be invaluable for health services seeking to enhance LARC uptake and improve reproductive health outcomes.

## 2. Methods

### 2.1 Data

Aggregated PBS and MBS data from 2018 to 2022 were obtained from Services Australia.

#### 2.1.1 IUD

##### 2.1.1.1 IUD-PBS

IUDs require a prescription from either a medical or nurse practitioner. Copper IUDs are not on the PBS, so are a private prescription. There are two PBS items for hormonal IUDs<sup>20</sup>:

8633J: Levonorgestrel 52 mg intrauterine drug delivery system, 1 system, brand name Mirena® has several clinical indications:

1. Contraception. Mirena® IUD is 99.8% effective in preventing pregnancy. It is licensed for contraceptive use up to 8 years.
2. Menstrual control. Mirena® is effective for the management of heavy menstrual bleeding.
3. The progestogen component of Menopausal Hormonal Therapy for people with perimenopausal and menopausal symptoms. 5 years for this indication

11909T: Levonorgestrel 19.5 mg intrauterine drug delivery system, 1 system, brand name Kyleena®, used for contraception only and 99.7% effective. It is licensed for contraceptive use up to 5 years. Kyleena® IUD is smaller than Mirena® and is suitable for younger women,

women with a small uterus and those who have never had a child. Kyleena® was included in the PBS in 2020.

Copper IUD has immediate effect with a high success rate (99.5%) and can be used for 5-10 years depending on type of device but is not listed on the PBS.

#### 2.1.1.2 IUD-MBS

The IUD needs to be inserted by a health professional in a health setting. The MBS claims can only be made for IUD removals performed under general anaesthetic. Most IUD removals occur without a general anaesthetic and are claimed through a general time-based consultation MBS item number. The levonorgestrel IUD (Kyleena® and Mirena®) needs to be removed after five to seven years depending on the hormonal IUD type, age at insertion and indication for use. Copper IUD requires removal after five to 10 years depending on device type. However, IUDs may be removed earlier for many reasons such as desire for pregnancy, dissatisfaction, complications, or side effects. Although the copper IUD is not listed on the PBS, MBS IUD item numbers for IUD insertion and removal are applicable to the copper IUD. There are separate MBS item numbers for IUD insertion and removal:

35503: A procedure to insert a device (IUD) into the uterus/womb to prevent pregnancy, for abnormal uterine bleeding or for endometrial protection during oestrogen replacement therapy.<sup>21</sup>

35506: A procedure to remove a device (IUD, intra uterine contraceptive device) from the uterus/womb, under general anaesthesia.<sup>21</sup>

### 2.1.2 Contraceptive implant

A contraceptive implant is a small, thin, flexible rod that is inserted under the skin on the inside of the upper arm. The implant is 4 cm long. It continuously releases etonogestrel, suppressing ovulation and preventing pregnancy for up to three years. Like IUDs, implants may be discontinued and removed at any time within the three-year period.

#### 2.1.2.1 Contraceptive implant-PBS

08487Q: Etonogestrel 68 mg, brand name Implanon NXT®<sup>22</sup>

#### 2.1.2.2 Contraceptive implant-MBS

There are separate item numbers for insertion and removal of implants.

14206: Hormone or living tissue implantation by cannula

30062: Etonogestrel subcutaneous implant, removal of, as an independent procedure

Both MBS item numbers can only be claimed during replacement of Implanon (removal and reinsertion) if the new implant is inserted at a different site rather than through the same incision as the removed implant. Interpretation of this rule is varied however, and to complicate things further during the reporting period of this report, the insertion location for Implanon was revised meaning that a lot of Implanon replacements during this period would have required re-siting of the implant and therefore claiming of both numbers at the time of Implanon replacement.

Also, the implant insertion MBS item is not just used for insertion of Implanon - it is also used for insertion of other implants including Zoladex (goserelin) and estrogen implants.

## 2.2 Data analyses

Location data were used to allow comparison with other studies.<sup>13,17</sup> Claim rates were presented as the number of claims among women aged between 15-49 years per 100 women from the same age group for the same years. Suppressed values were also determined based on when between 1 and 5 patients/services or one provider provides more than 90% of services or two providers provide more than 85% of services, and therefore outline when between 1 to 5 patients/services are obtaining or providing implants/IUDs, or when 1 or 2 providers provide the majority of services. In this report, they are represented by s\*.

Data were analysed by age group, remoteness, metropolitan status, LHD and LGA. Trends and changes over time were identified. In this report, the cost refers to the government benefit paid, obtained from [Medicare online](#) data, reported separately for PBS and MBS. The figures in the report include only those services that are performed by a registered provider, for services that qualify for Medicare Benefit and for which a claim has been processed by Services Australia. They do not include services provided by hospital doctors to public patients in public hospitals or services that qualify for a benefit under the Department of Veterans' Affairs National Treatment Account. 'Total cost' in this report refers to the sum of PBS and MBS costs.

Despite claim rates representing women up to 49 years, there were claims for IUD and implant removal among women aged up to 54 years. Data for removal of devices were downloaded from the publicly available Medicare online.<sup>23</sup> Number of women in each age group was obtained from the Australian Bureau of Statistics<sup>24</sup> for calculation of claim rates.

Since hormonal IUDs can last up to five years (during the time this data period covers) and implants up to three years, the number of Medicare claims does not directly reflect the number of current users. To estimate the number of current LARC users in 2022, annual continuation

rates for IUD and implant users<sup>25</sup> (Table 1) were applied. As continuation rates for the Levonorgestrel 19.5 mg IUD were not available, they were assumed to be the same as those for the Levonorgestrel 52 mg IUD. The estimated number of users in 2022 was calculated by summing the adjusted number of users over the past five years for IUDs and the past three years for implants. Rates were calculated by dividing the number of users by the number of women aged 15–49 years in 2022.<sup>26</sup>

**Table 1. Assumed LARC continuation rates used in estimating number of users**

	Year 1 (%)	Year 2 (%)	Year 3 (%)	Year 4 (%)	Year 5 (%)
Levonorgestrel 52 mg IUD					
Average	84	77	73	60	47
Upper Limit	88	79	73	60	47
Lower Limit	75	72	52	50	40
Etonogestrel Implant					
Average	75	70	65	NA	NA
Upper Limit	88	75	72	NA	NA
Lower Limit	70	58	42	NA	NA

Reference: Concepcion K, Lacey S, McGeechan K, Estoesta J, Bateson D, Botfield J. Cost–benefit analysis of enhancing the uptake of long-acting reversible contraception in Australia. *Aust Health Rev.* 2020; 44(3): 385-391.

Data were analysed in Excel and Stata 18.<sup>27</sup> Number of decimal places is presented following Cole’s guidelines<sup>28</sup>: 0 for percents between 10 and 90, and over 100; 1 for per cents between 0.1 and 10, and between 90 and 100, and exactly 0; 2 for per cents under 0.1; 3 for per cents under 0.01; and 4 for per cents under 0.001 but greater than 0.

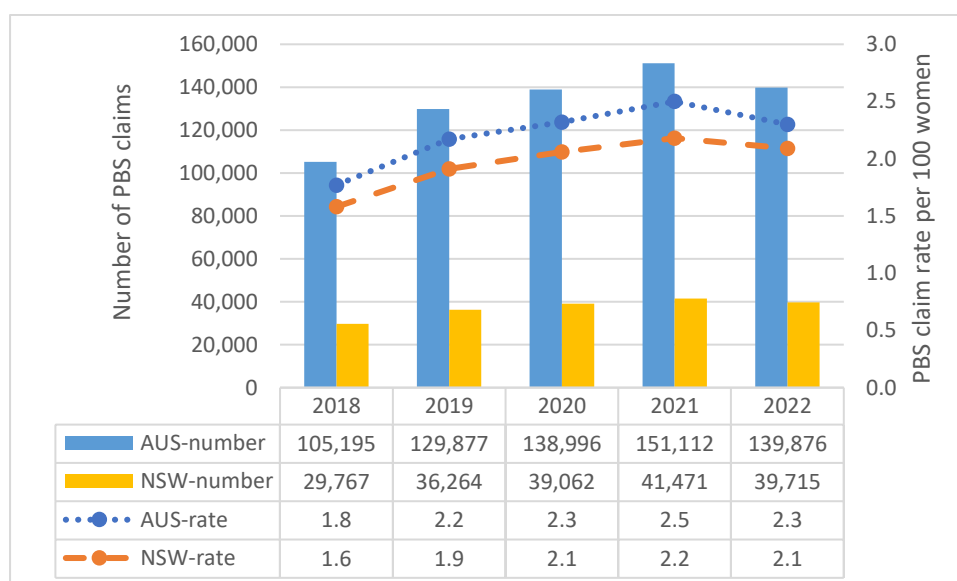
### 3. Claim rates for IUD

#### 3.1 Claim rates for IUD in Australia

Between 2018 and 2022, there were 665,056 PBS claims for hormonal IUD in Australia. The majority of the claims were for Mirena® (628,798 or 95.5%). Kyleena® only accounted for 36,267 claims (5.5%). During the same period, 388,264 claims were made under the MBS for IUD insertion. The ratio between MBS and PBS claims was 58%. Both PBS and MBS claims increased between 2018 and 2021, then slightly declined in 2022. In 2022, the PBS claim rate was 2.3 per 100 women aged 15-49 years (Figure 1) and the MBS claim rate was 1.4 per 100 women in the same age group (Figure 2).

Over the five-year period, the total PBS government expenditure on IUDs in Australia was \$136.3 million (\$131.4 million for Mirena® and \$4.9 million for Kyleena®), while MBS expenditure was \$23.6 million. The combined total cost for both PBS and MBS benefits was \$160.0 million.

**Figure 1.** PBS claim rates for intrauterine contraception in Australia and in NSW among women aged 15-49 years between 2018 and 2022

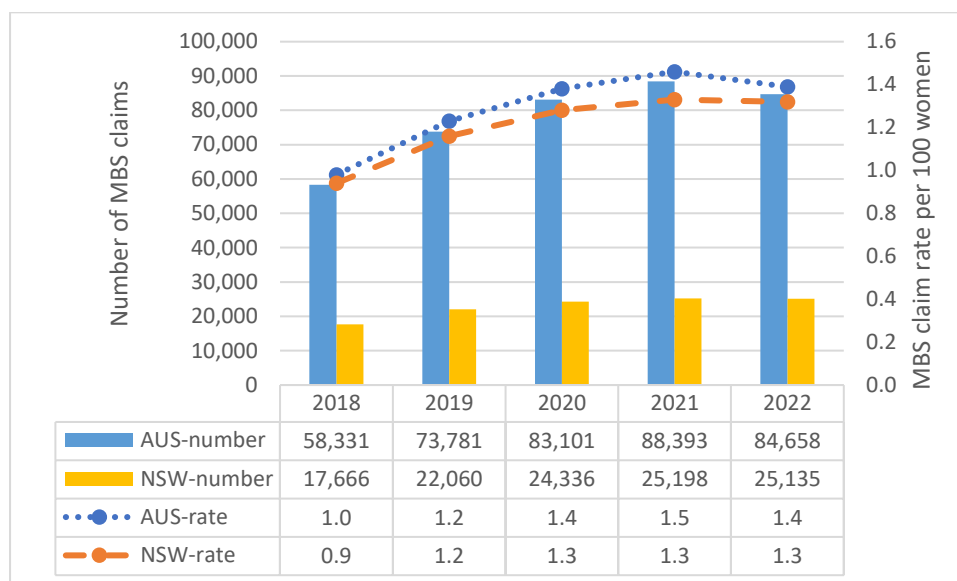


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 2.** MBS claim rates for intrauterine contraception in Australia and in NSW among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.2 Claim rates for IUD in NSW

From 2018 to 2022, there were 186,279 PBS claims (93.8% for Mirena®) and 114,396 MBS claim rates for IUDs in NSW. PBS claims in NSW accounted for 30% of all Australian claims, while MBS claims accounted for 28%. Claim rates for both PBS and MBS increased until 2021, then decreased slightly in 2022, consistently remained below the national average. In 2022, the PBS claim rate was 2.1 per 100 women aged 15-49 years (Figure 3), and the MBS claim rate was 1.3 in the same age group (Figure 4). The ratio between MBS and PBS claims was 61%.

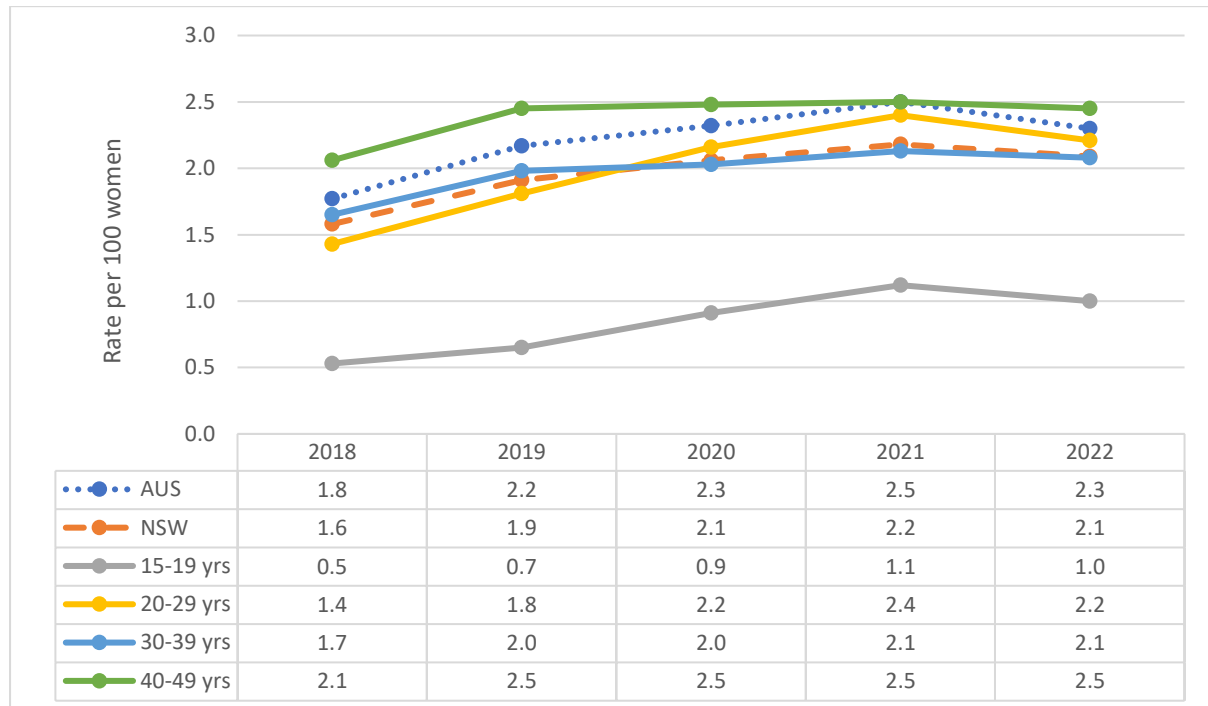
During the five-year period, the PBS benefit cost for NSW was \$36.7 million (\$35.3 million for Mirena® and \$1.4 million for Kyleena®) while the MBS expenditure was \$7.0 million (20% the cost of PBS). The total cost for both PBS and MBS for IUD over five years was \$43.8 million.

### 3.3 Claim rates for IUD in NSW by age group

The PBS claim rate increased slightly for all age groups in NSW between 2018 and 2021 then decreased in 2022. For example, the claim rate per 100 women aged 15-19 years increased from 0.5 in 2018 to 1.1 in 2021 then decreased to 1.0 in 2022. Women aged 15-19 years consistently had the lowest claim rate, in 2022 the claim rate for this group was less than half of the 40-49 years group (Figure 3).

The MBS claim rates for most age groups followed the same pattern of the PBS claim rate, increased slightly between 2018 and 2021 then decreased in 2022, except for women aged 40-49 years which had a slight increase rate in 2022 (Figure 4).

**Figure 3.** PBS claim rates for intrauterine contraception in NSW by age group, among women aged 15-49 years between 2018 and 2022

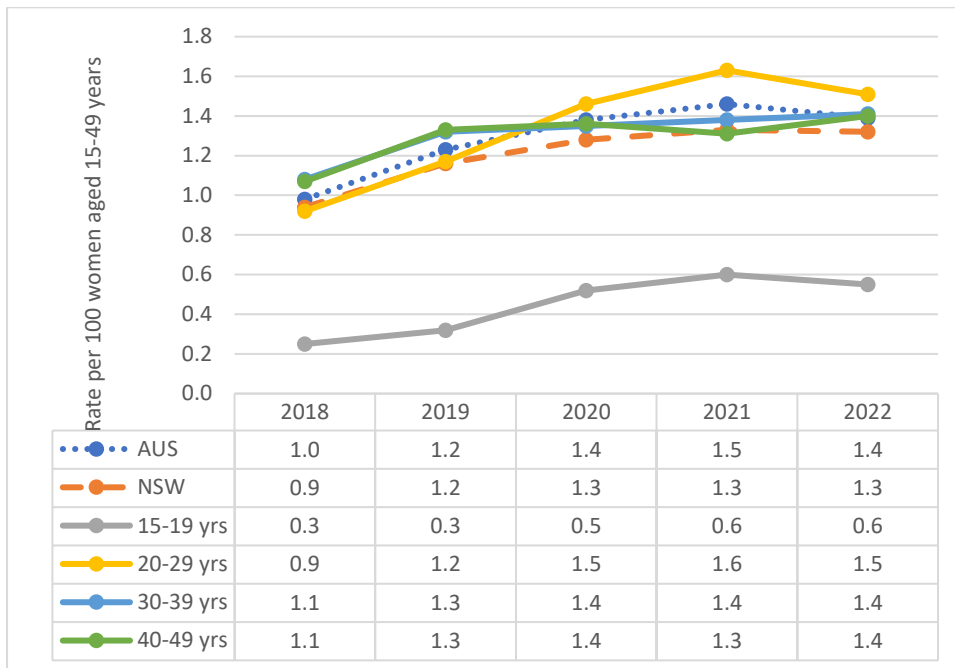


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 4.** MBS claim rates for intrauterine contraception and in NSW by age group, among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.4 Claim rates for IUD in NSW by remoteness of location

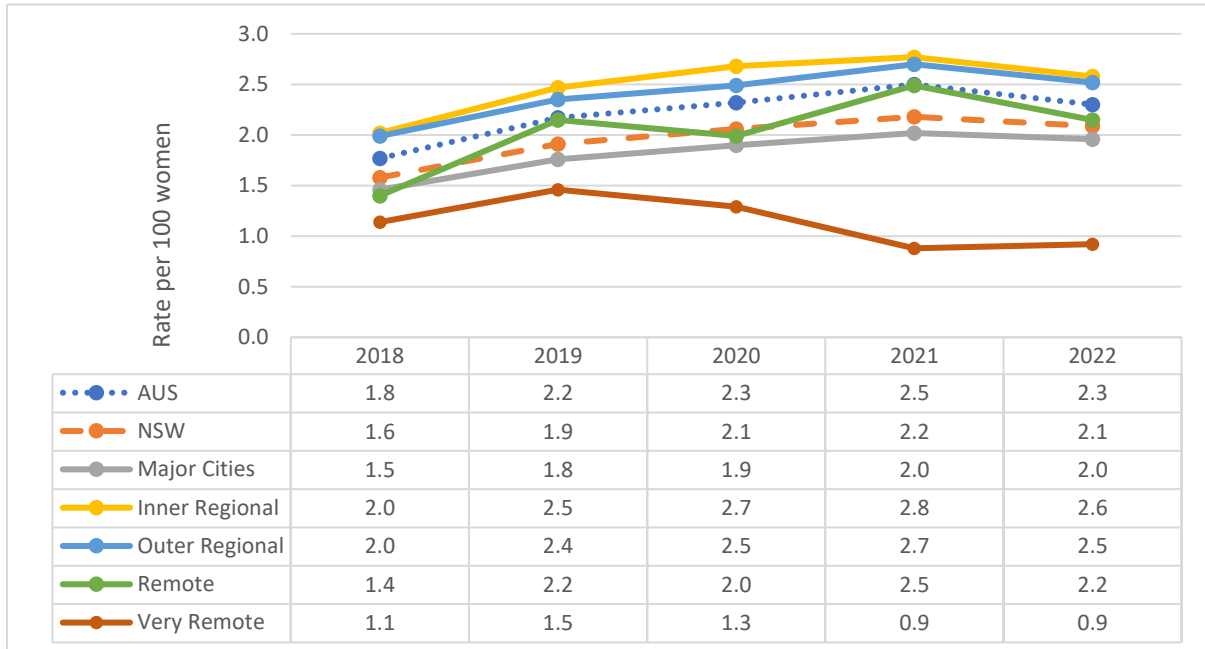
The PBS claim rates for most areas of remoteness of location followed the state trend, increasing until 2021 and then declining in 2022. An exception was the very remote areas, which saw an increase in claim rates in 2019 but experienced a decline thereafter (Figure 5). Notably, this trend was observed mainly for Mirena® (PBS item number 8633J), because there were suppressed rates of Kyleena® (11909T) claims, an indication of low activity, in remote areas in 2020, and very remote areas in all the years since it was released (2020-2022; data not shown).

The MBS claim rates for most areas of remoteness was also shown to be increasing until 2021 and then declining in 2022, except remote and very remote areas, which had increased claim rates up to 2019 but declined after that (Figure 6).

Women living in very remote areas consistently had the lowest claim rates (e.g. PBS claim rate of 0.9 and MBS claim rate of 0.5 per 100 women in 2022). In contrast, women living in inner regional areas consistently had the highest claim rates (e.g. PBS claim rate of 2.6, three

times the rate in the very remote areas, and MBS claim rate of 1.5 per 100 women in 2022, also three times the rates in very remote areas) (Figures 5 and 6).

**Figure 5.** PBS claim rates for intrauterine contraception in NSW by remoteness, among women aged 15-49 years between 2018 and 2022

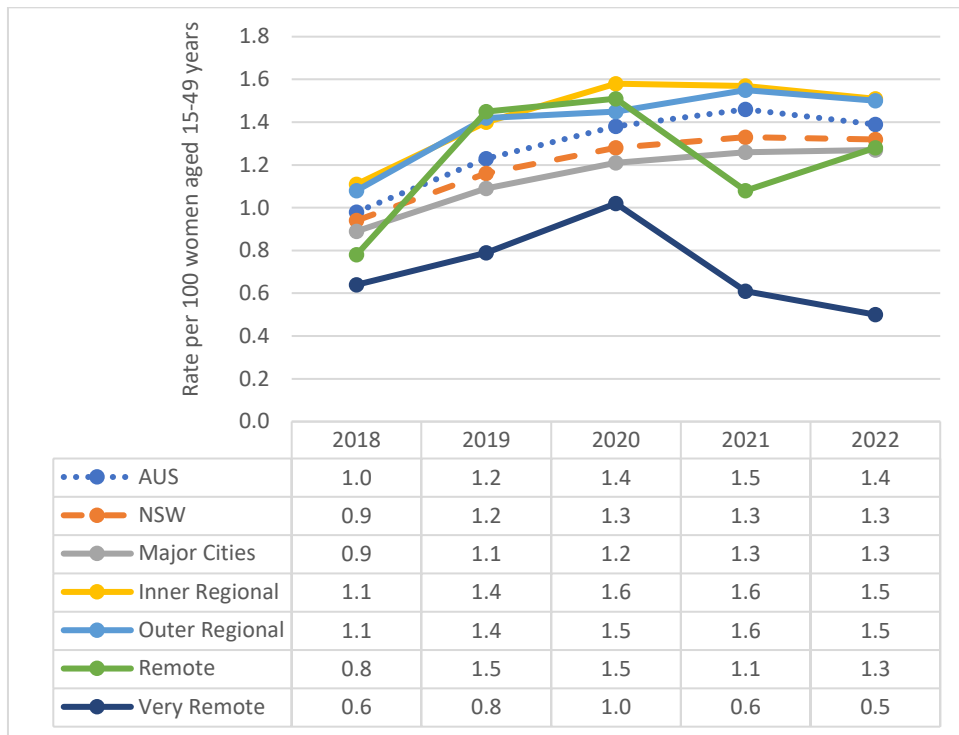


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 6.** MBS claim rates for intrauterine contraception in NSW by remoteness, among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

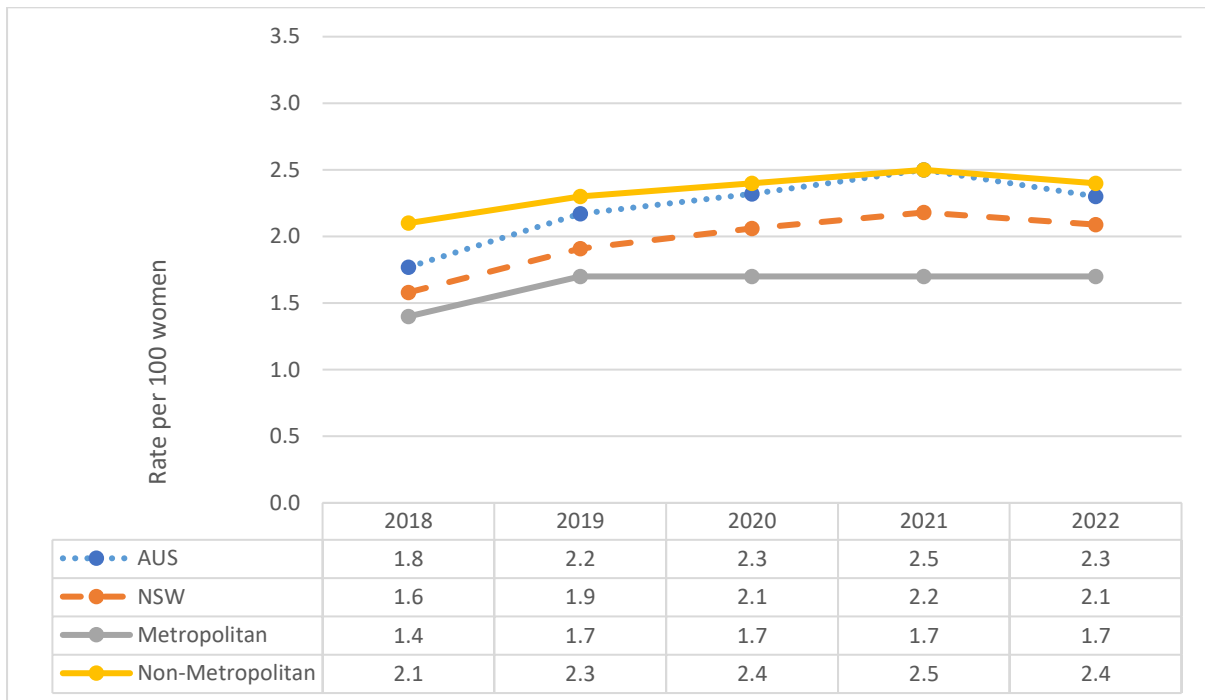
MBS item: 35503

### 3.5 Claim rates for IUD in NSW metropolitan and non-metropolitan LHDs

The PBS claim rates in non-metropolitan areas increased until 2021 and then declined in 2022, while PBS claim rates in metropolitan areas remained unchanged since 2019 (Figure 7). The MBS claim rates in metropolitan areas increased until 2021 and remained stable in 2022. In non-metropolitan areas, the MBS claim rate increased from 2019 to 2022 (Figure 8).

Women living in metropolitan LHDs consistently had the lower PBS claim rate (e.g. a PBS claim rate of 1.7 per 100 women and an MBS claim rate of 1.2 per 100 women in 2022). Conversely, women living in non-metropolitan LHDs had higher claim rates (e.g. a PBS claim rate of 2.4 per 100 women and an MBS claim rate of 1.4 per 100 women in 2022 (Figures 7 and 8).

**Figure 7.** PBS claim rates for intrauterine contraception in metropolitan and non-metropolitan Local Health Districts in NSW, among women aged 15-49 years, between 2018 and 2022

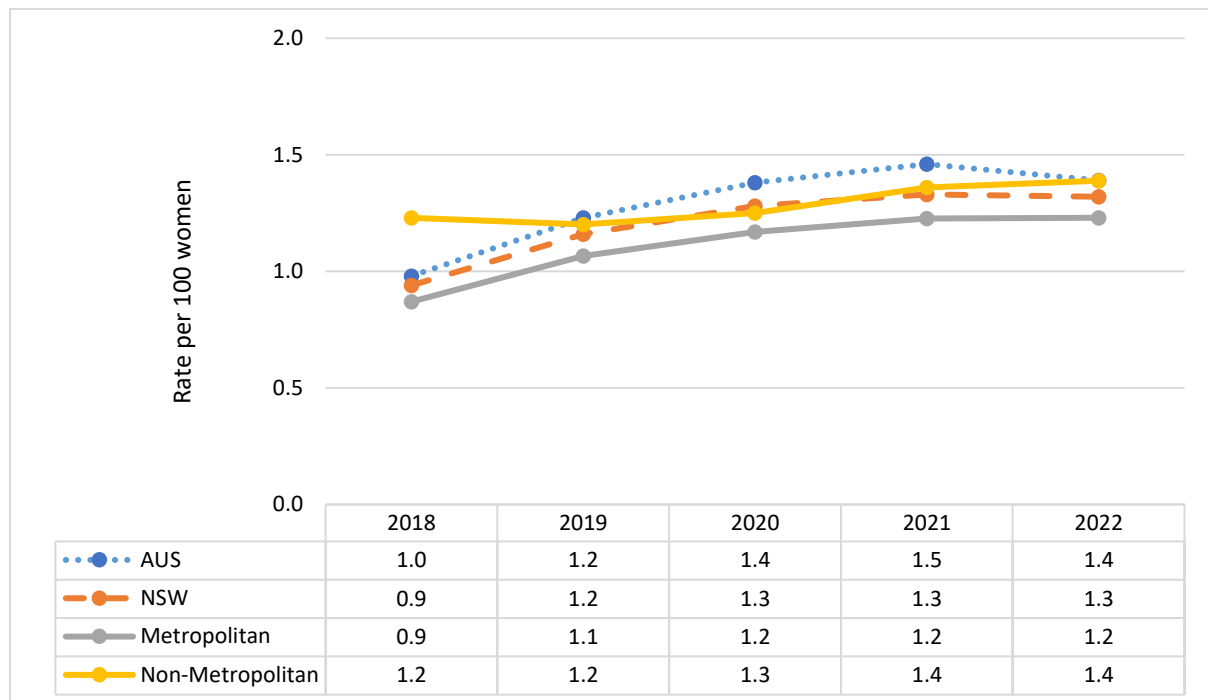


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 8.** MBS claim rates for intrauterine contraception in metropolitan and non-metropolitan Local Health Districts in NSW, among women aged 15-49 years, between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

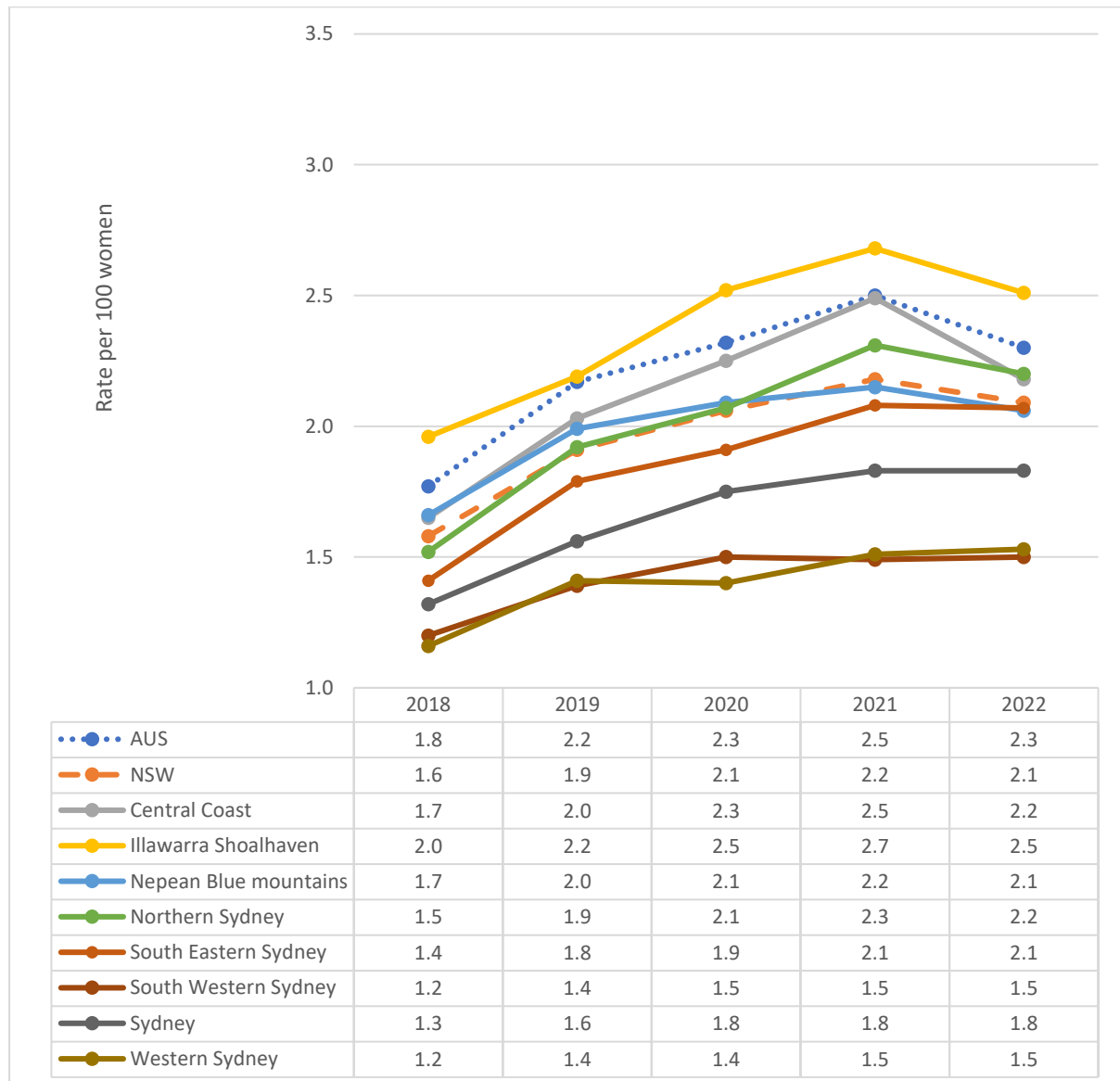
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.5.1 Claim rates for IUD in NSW metropolitan LHDs

Both PBS and MBS claim rates for IUDs increased from 2018 to 2021 then decreased in 2022 across most metropolitan LHDs. Southwestern Sydney had the lowest rates (e.g. PBS claim rate of 1.5 per 100 women and an MBS claim rate of 0.9 per 100 women in 2022) while Illawarra Shoalhaven consistently had the highest rates (e.g. PBS claim rate of 2.5 per 100 women and an MBS claim rate of 1.6 per 100 women in 2022) throughout this period (Figures 9 and 10).

**Figure 9.** PBS claim rates for intrauterine contraception in metropolitan Local Health Districts in NSW, among women aged 15-49 years, between 2018 and 2022

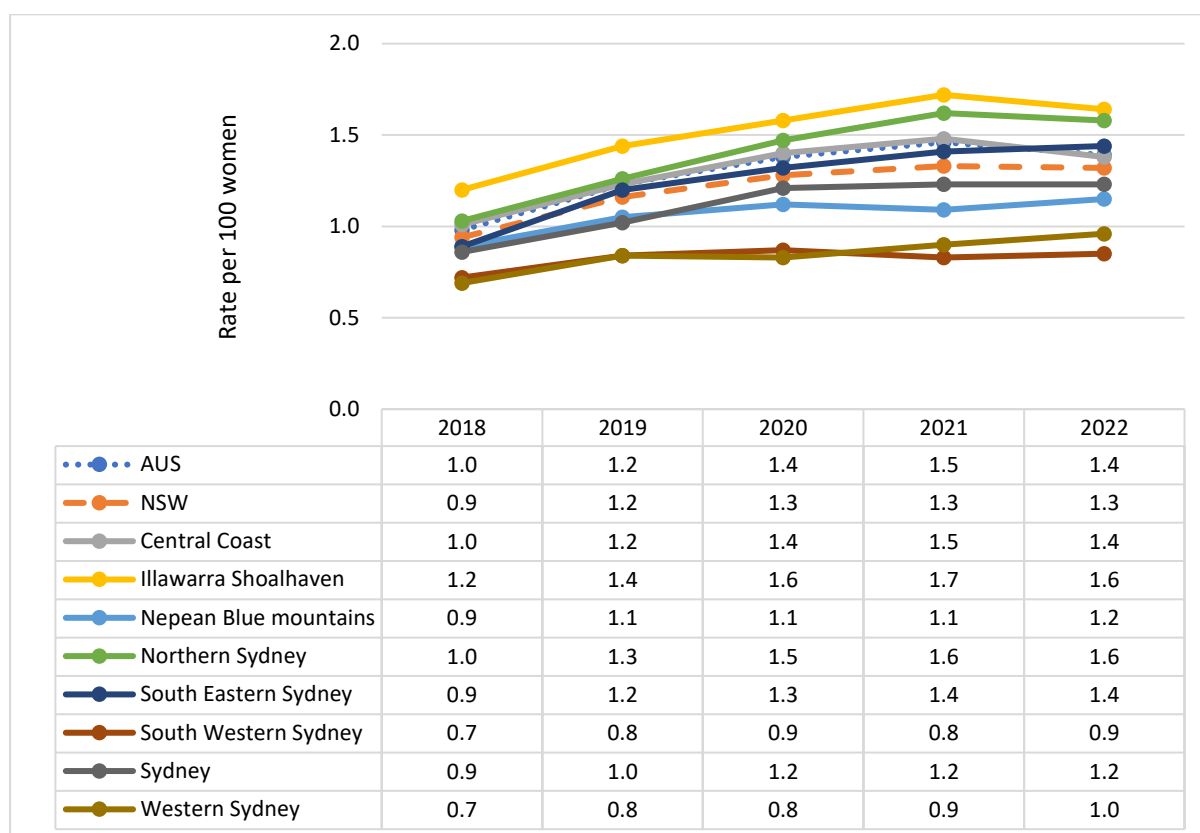


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 10.** MBS claim rates for intrauterine contraception in metropolitan Local Health Districts in NSW, among women aged 15-49 years, between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.5.2 Claim rates for IUD in NSW non-metropolitan LHDs

The PBS and MBS claim rates for IUDs increased between 2018 and 2021 and then decreased in 2022 for most non-metropolitan LHDs. Exceptions were the Far West NSW LHD and Southern NSW LHD, where claim rates began to decline after 2020. In 2022, the claim rates were lowest in Far West NSW LHD, with a PBS claim rate of 2.1 and an MBS claim rate of 0.8 per 100 women (Figure 11). Conversely, the highest claim rates were observed in Murrumbidgee, with a PBS rate of 3.0 and an MBS claim rate of 1.7 per 100 women. Hunter and New England also had the highest MBS claim rate of 1.7 per 100 women in 2022 (Figure 12).

**Figure 11.** PBS claim rates for intrauterine contraception in non-metropolitan Local Health Districts in NSW, among women aged 15-49 years, between 2018 and 2022

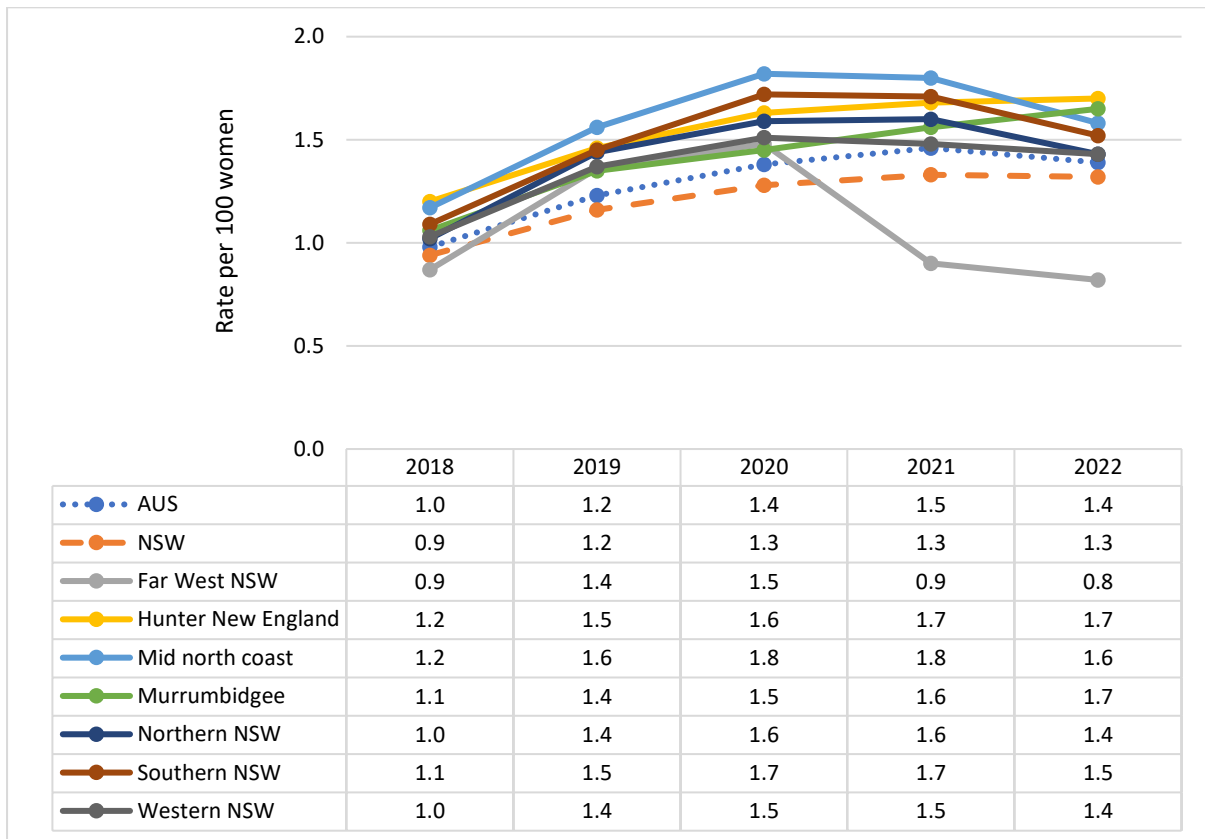


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 12.** MBS claim rates for intrauterine contraception in NSW by Local Health District, among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

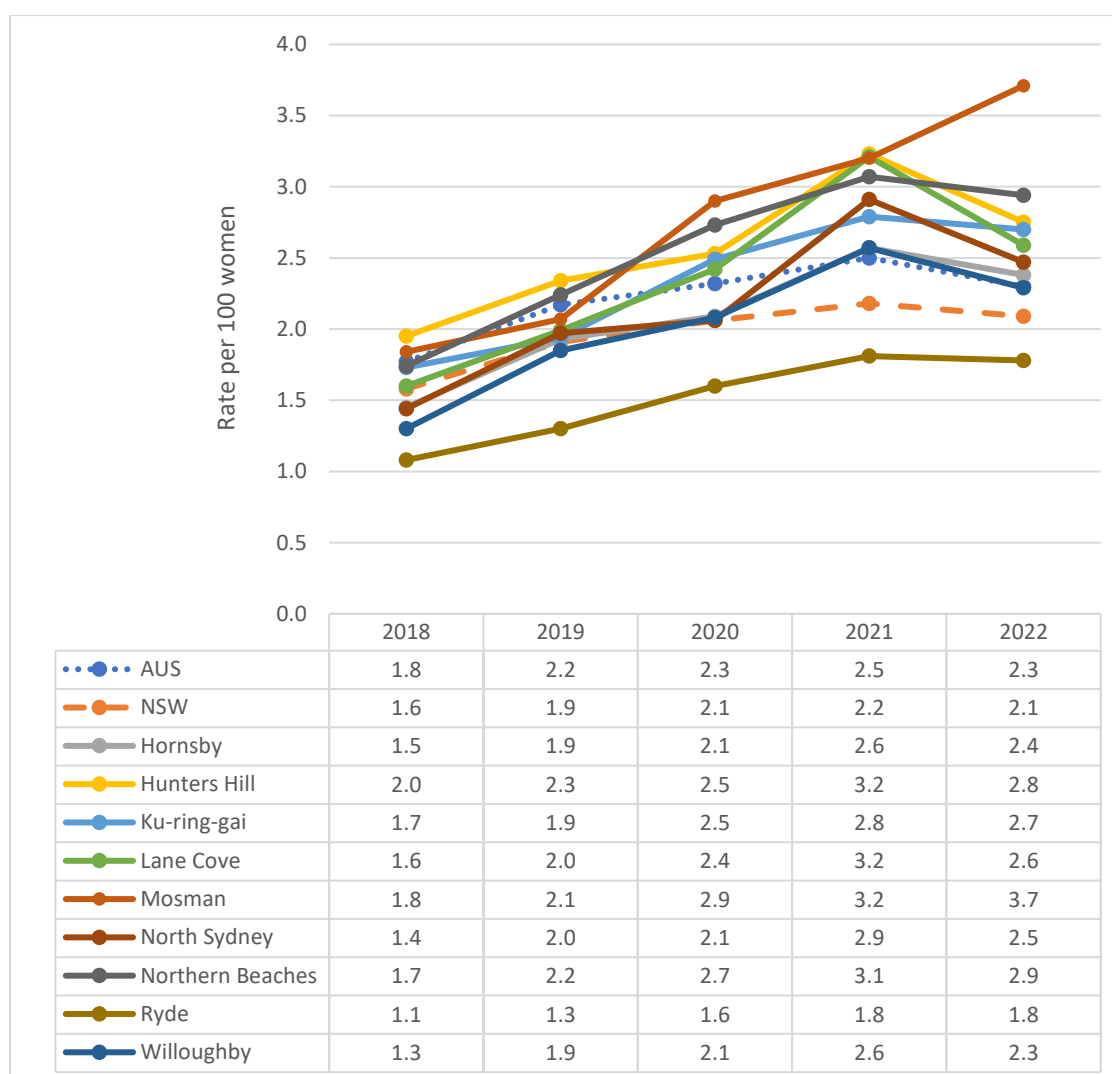
MBS item: 35503

### 3.6 Claim rates for IUD in NSW metropolitan LHDs by LGA

#### 3.6.1 Claim rates for IUD in Northern Sydney LHD by LGA

Most Local Government Areas (LGAs) in Northern Sydney LHD saw a decline in claim rates since 2021, except for Mosman, where both PBS and MBS claim rates continued to increase. In 2022, the lowest IUD claim rates were in Ryde, with a PBS claim rate of 1.8 and an MBS rate of 1.0 per 100 women. In contrary, Mosman had the highest claim rates, with a PBS rate of 3.7 and an MBS rate of 2.3 per 100 women.

**Figure 13.** PBS claim rates for IUD in Northern Sydney LHD by LGA, 2018 to 2022

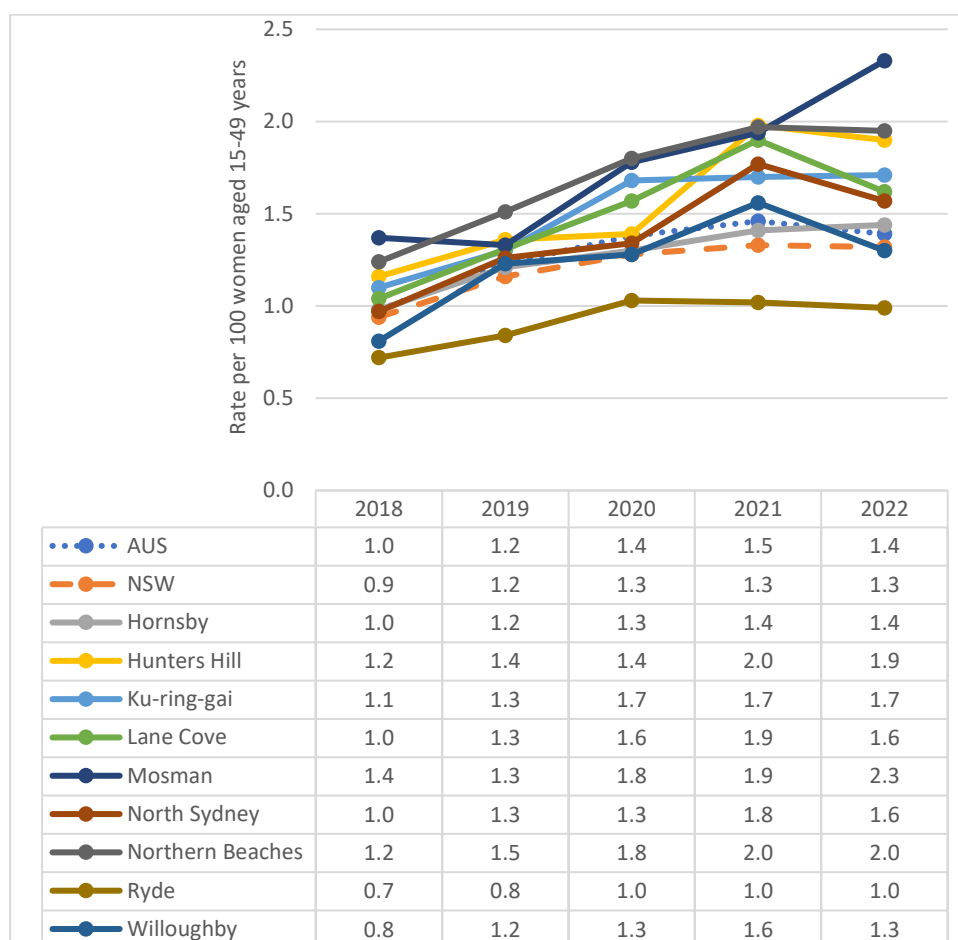


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 14.** MBS claim rates for IUD in Northern Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

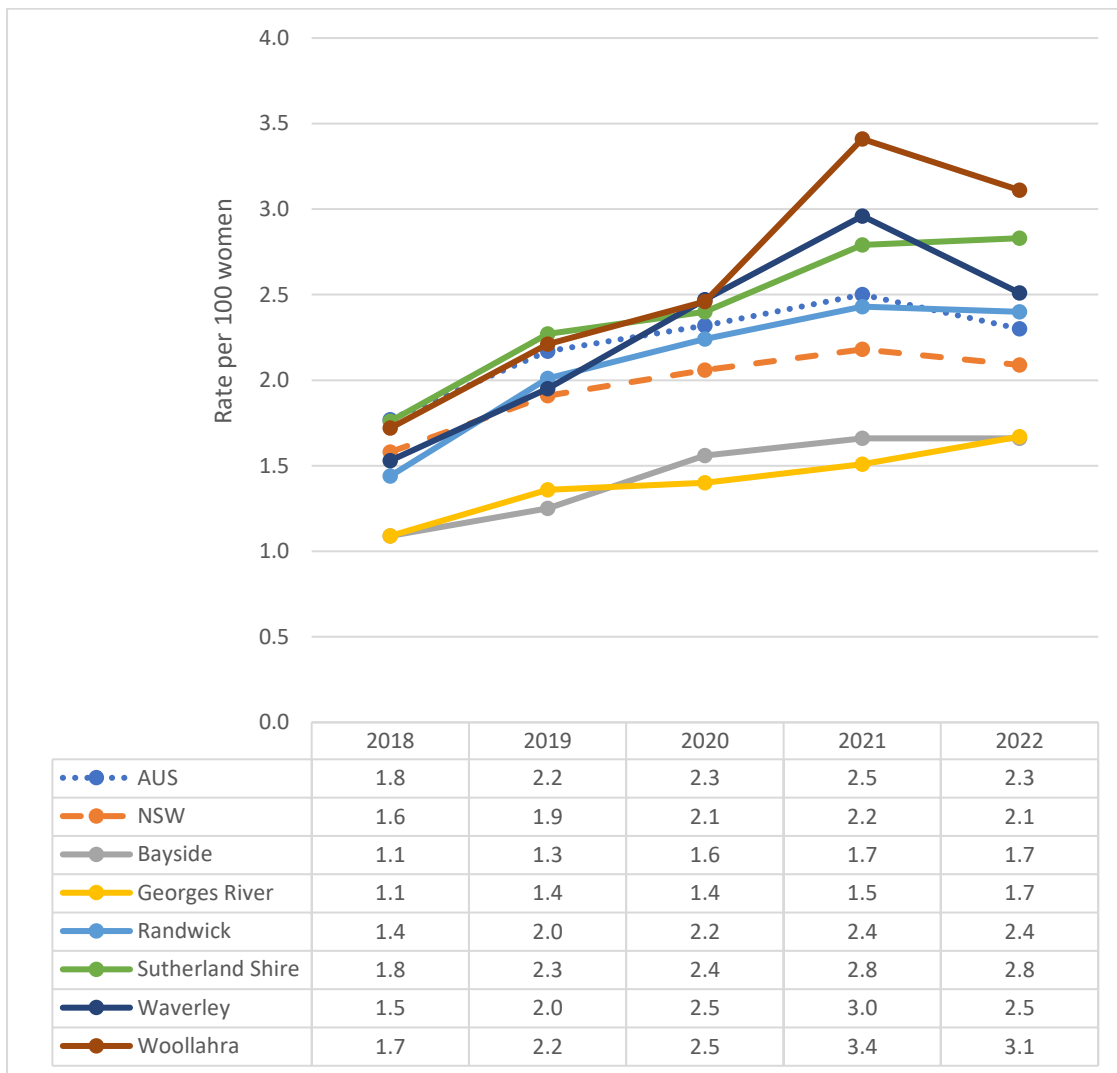
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.6.2 Claim rates for IUD in South-Eastern Sydney LHD by LGA

The claim rates for all LGAs increased between 2018 and 2021. The claim rates for most LGAs continued to increase in 2022, except for Woollahra, where both PBS and MBS claim rates decreased in 2022, and Waverley, where the MBS claim rate declined in 2022. In 2022, the lowest claim rates were in Georges River, with a PBS rate of 1.7 and an MBS rate of 0.9 per 100 women and was highest in Woollahra with a PBS rate of 3.1 and an MBS rate of 2.1 per 100 women (Figures 15 and 16).

**Figure 15.** PBS claim rates for IUD in South-Eastern Sydney LHD by LGA, 2018 to 2022

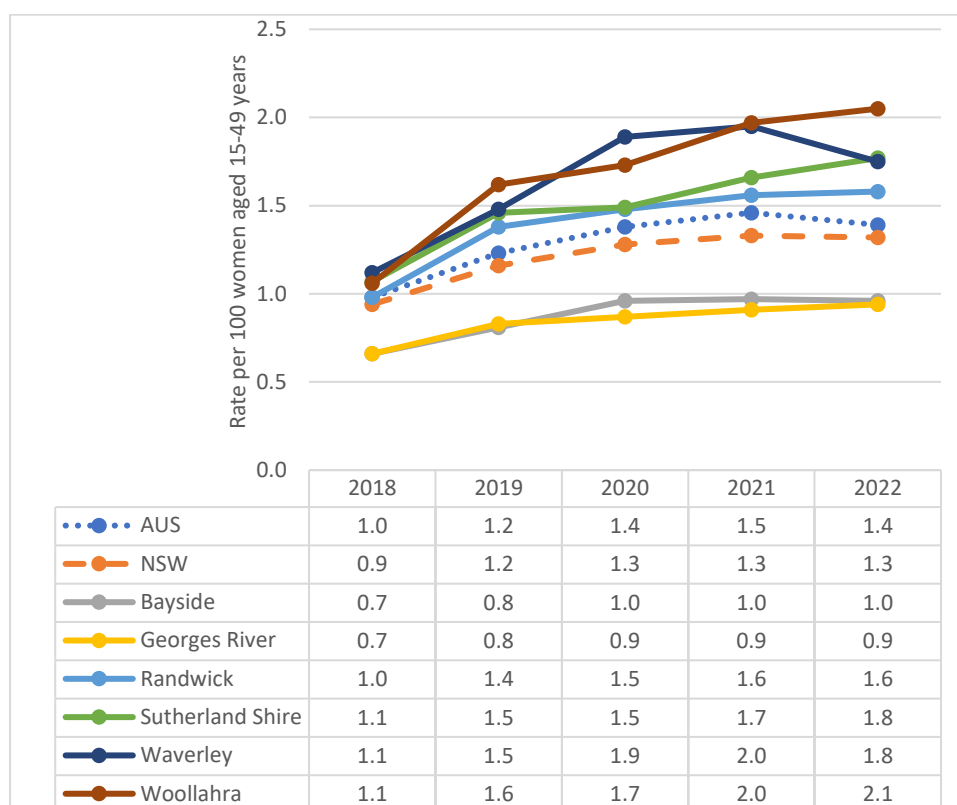


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 16.** MBS claim rates for IUD in South-Eastern Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

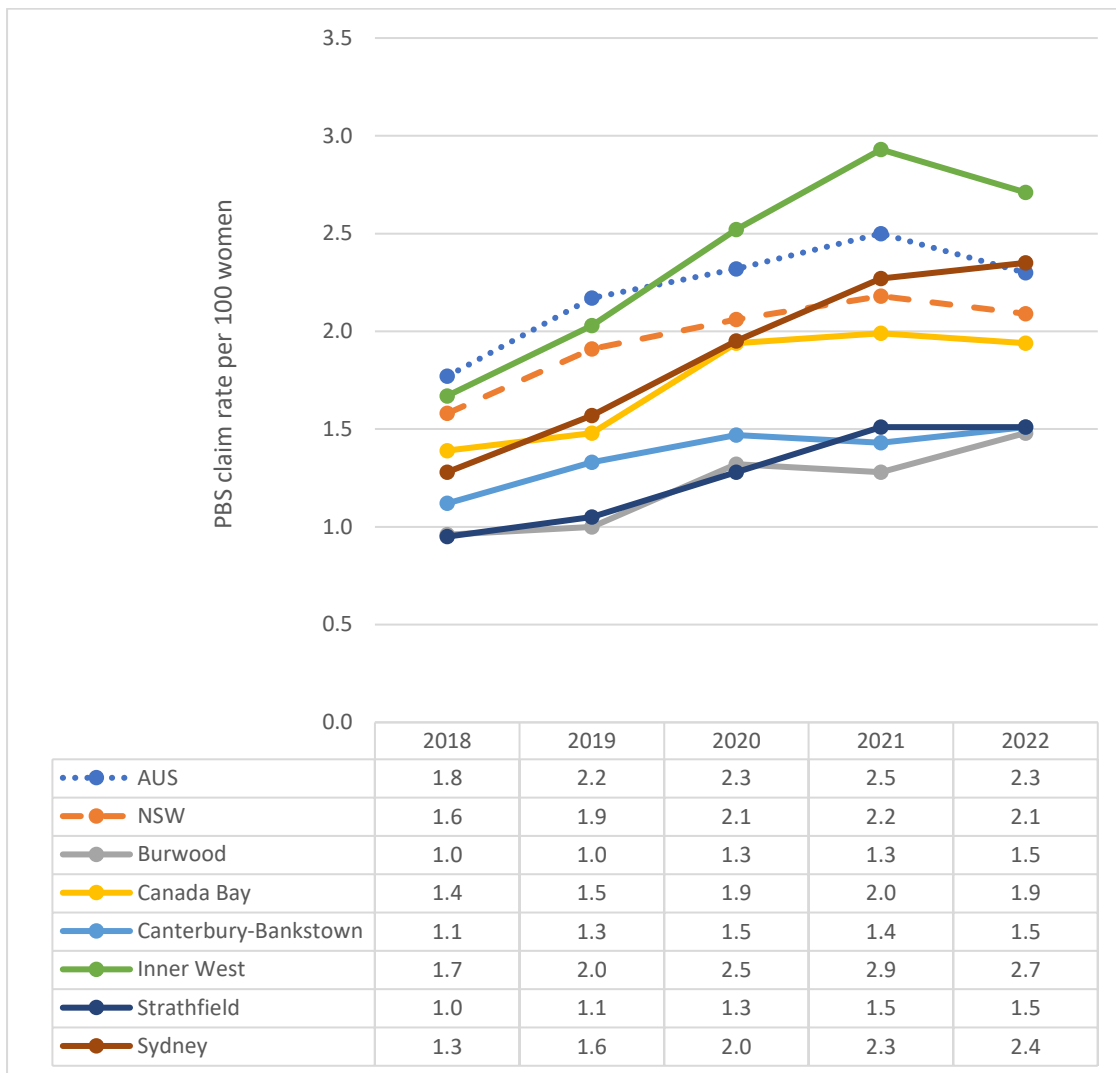
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.6.3 Claim rates for IUD in Sydney LHD by LGA

The PBS claim rates continued to increase until 2022 in most LGAs, except for Burwood and Canada Bay, where the claim rates decreased in 2022. Similarly, MBS claim rates increased until 2022 in most LGAs, except for Burwood, Inner West, and Canterbury-Bankstown, where the claim rates decreased either in 2022 or earlier. In 2022, the Inner West had the highest claim rates, with a PBS rate of 2.7 and an MBS rate of 1.7 per 100 women. The lowest PBS claim rate was in Burwood (1.5 per 100 women), while the lowest MBS claim rate was in Strathfield (0.7 per 100 women) (Figures 17 and 18).

**Figure 17.** PBS claim rates for IUD in Sydney LHD by LGA, 2018 to 2022

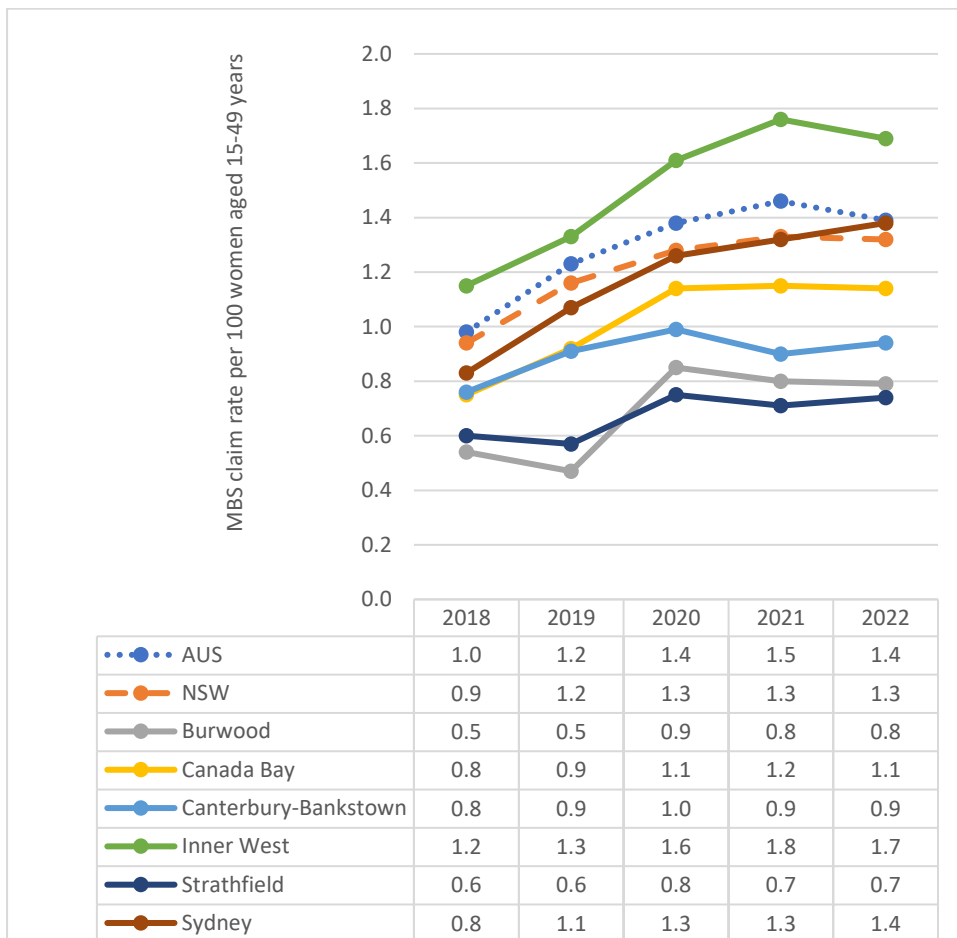


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 18.** MBS claim rates for IUD in Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

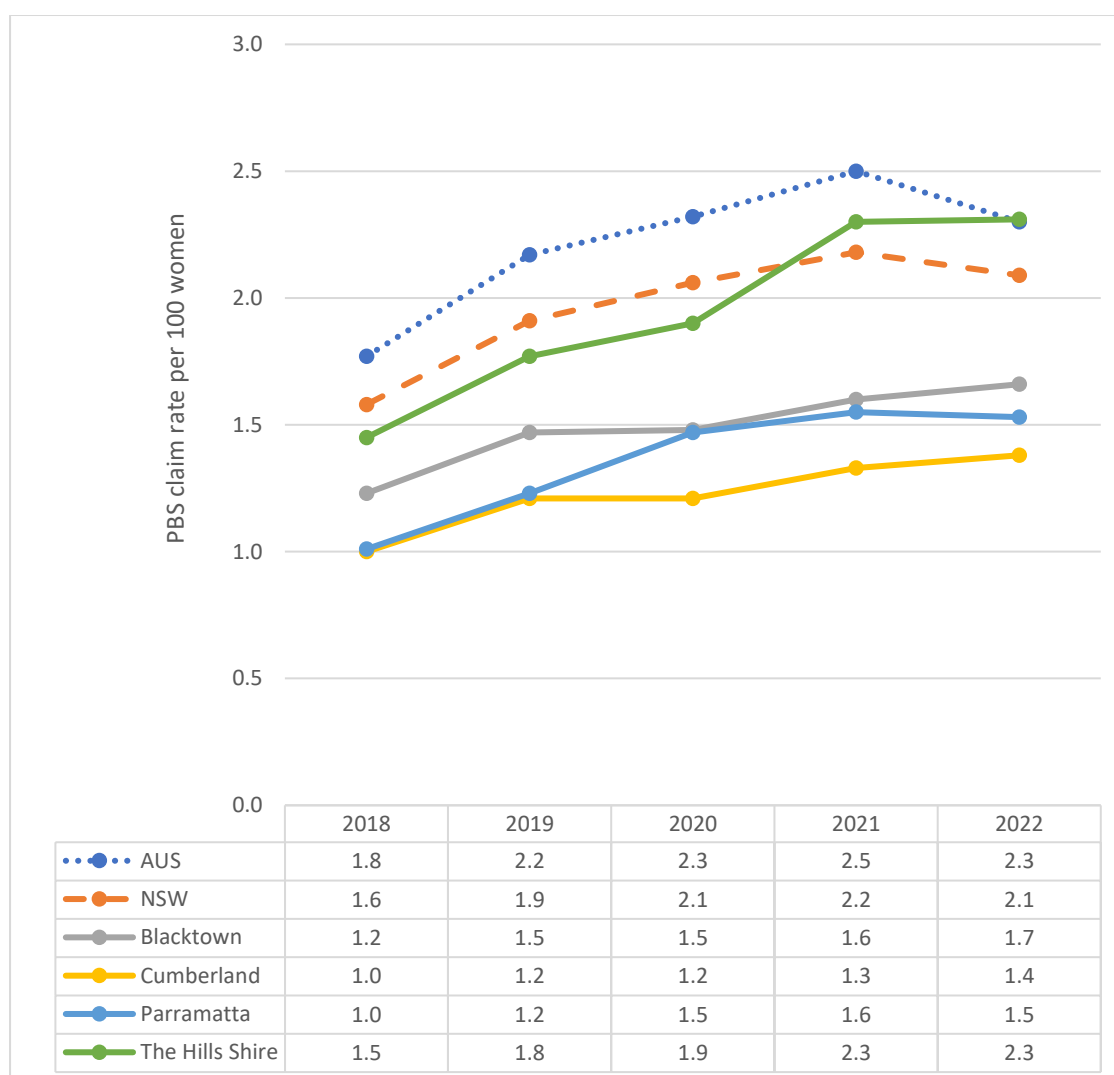
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.6.4 Claim rates for IUD in Western Sydney LHD by LGA

Most LGAs experienced increased claim rates, except for Parramatta, where the claim rates decreased in 2022. In general, claim rates in most LGAs were lower than the NSW average, with the exception of the Hills Shire. In 2022, the lowest claim rates were in Cumberland, with a PBS claim rate of 1.4 and an MBS claim rate of 0.8 per 100 women. Conversely, the highest claim rates were in the Hills Shire, with a PBS rate of 2.3 and an MBS rate of 1.3 per 100 women (Figures 19 and 20).

**Figure 19.** PBS claim rates for IUD in Western Sydney LHD by LGA, 2018 to 2022

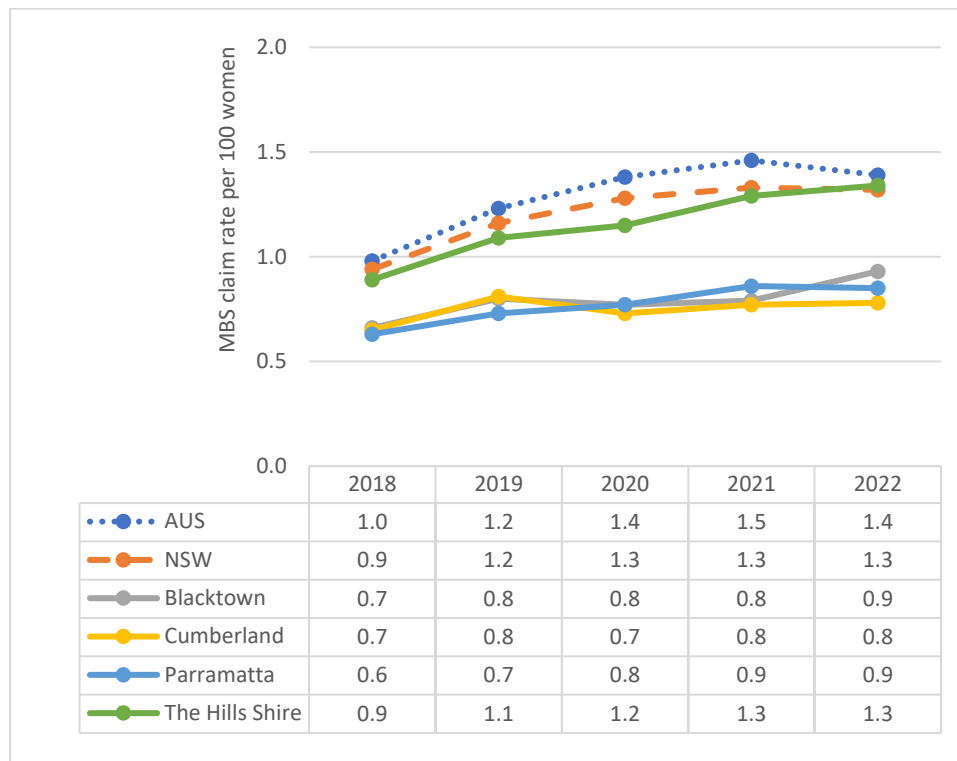


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 20.** MBS claim rates for IUD in Western Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

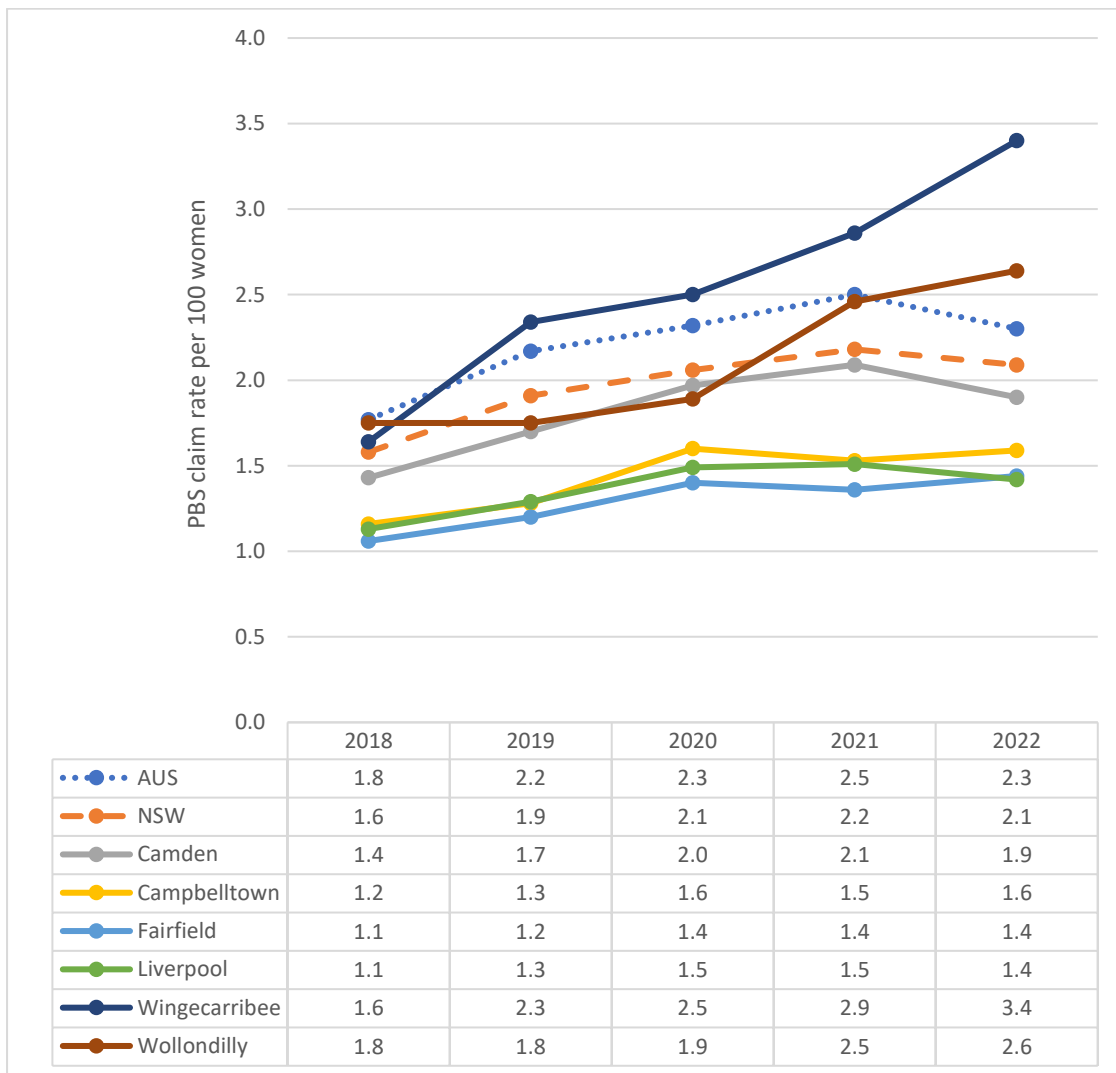
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.6.5 Claim rates for IUD in Southwestern Sydney LHD by LGA

Most LGAs saw claim rates increase until 2021, with only slight changes afterward, except for Wingecarribee and Wollondilly, where both PBS and MBS claim rates increased sharply in 2022. In 2022, Wingecarribee had the highest claim rates for both PBS and MBS, at 3.40 and 1.58 per 100 women, respectively. In contrast, the lowest PBS claim rate was in Liverpool (1.42 per 100 women), and the lowest MBS claim rate was in Campbelltown (0.62 per 100 women) (Figures 21 and 22).

**Figure 21.** PBS claim rates for IUD in South-Western Sydney LHD by LGA, 2018 to 2022

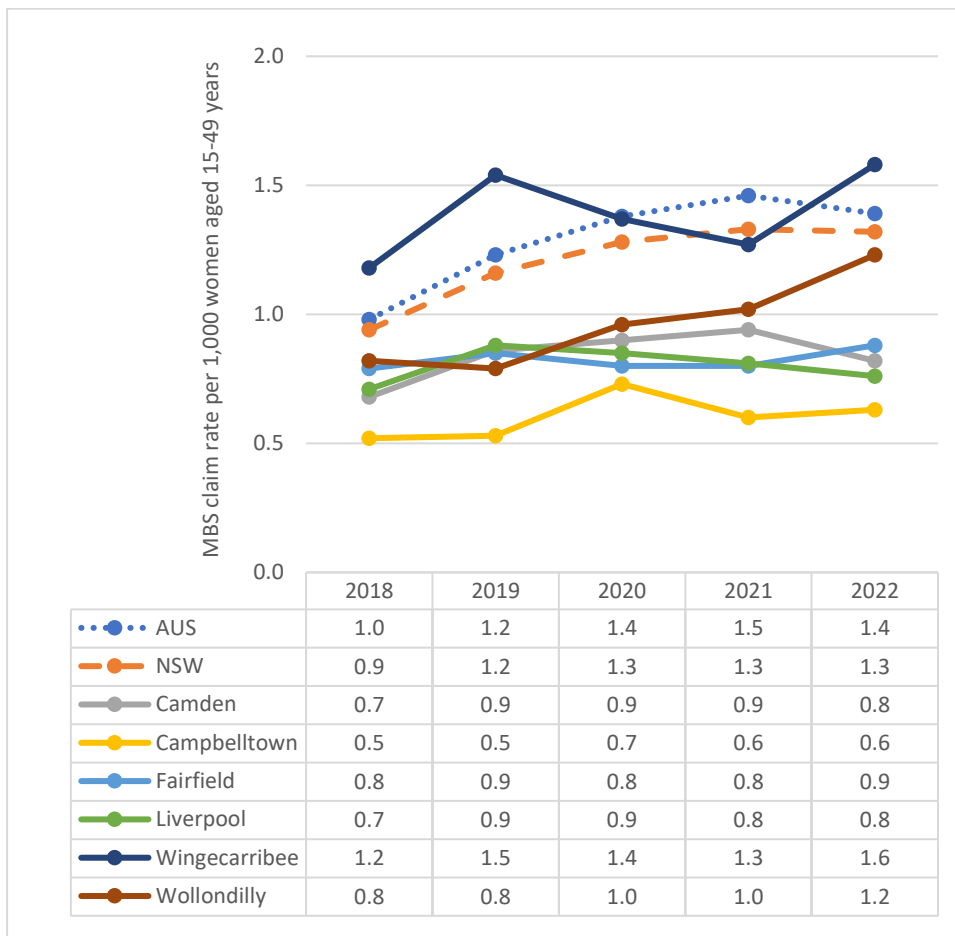


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 22.** MBS claim rates for IUD in South-Western Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

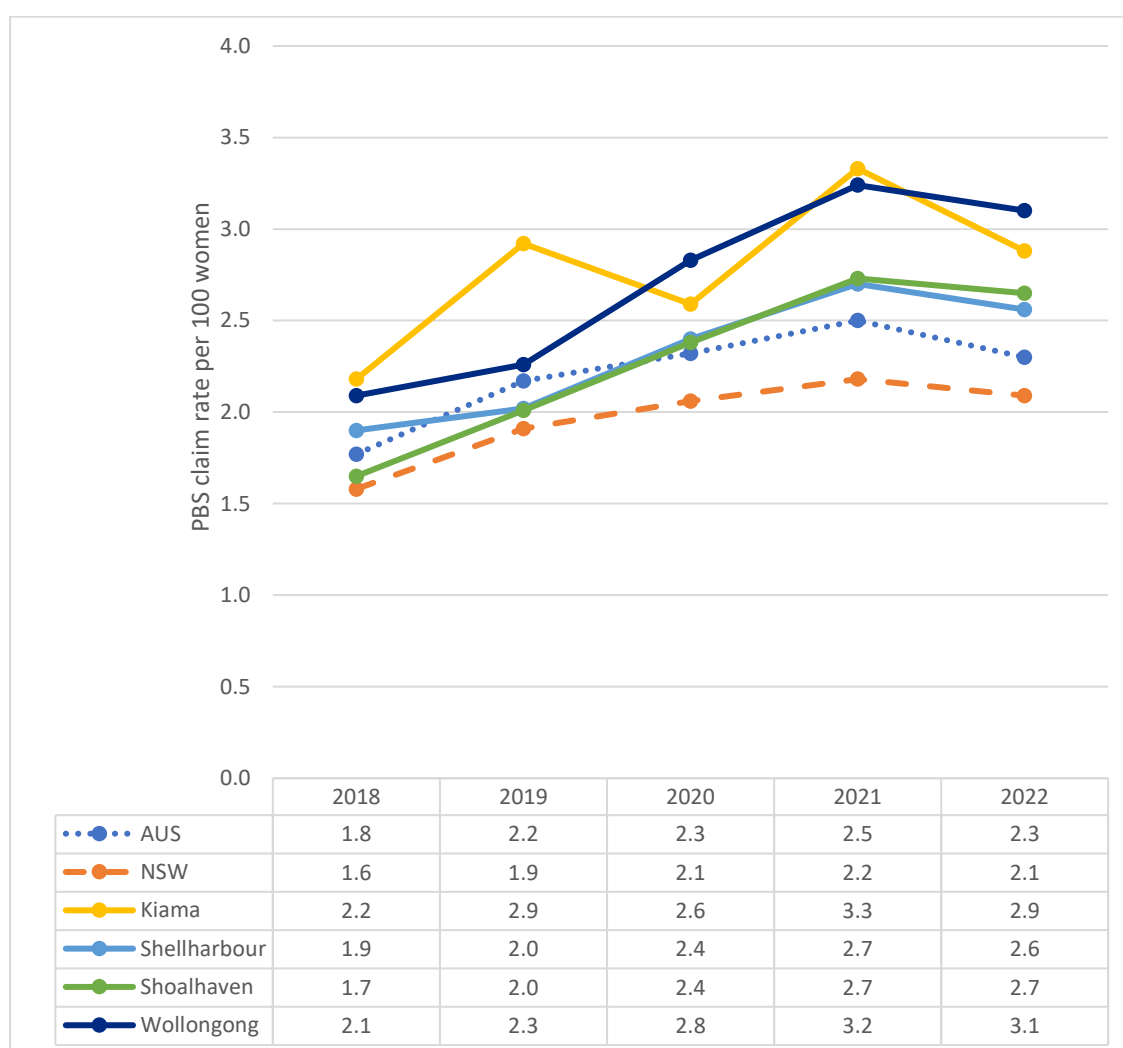
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.6.6 Claim rates for IUD in Illawarra Shoalhaven Sydney LHD by LGA

In most LGAs in Illawarra Shoalhaven LHD, the claim rates increased up to 2021 and then decreased in 2022, except the MBS claim rate in Kiama continued to rise. The claim rates in all LGAs within the region were above the state level and mostly above the national level. In 2022, Shellharbour had the lowest claim rates, with a PBS claim rate of 2.6 and an MBS claim rate of 1.4 per 100 women. Conversely, Wollongong had the highest PBS claim rate (3.1 per 100 women), and Kiama had the highest MBS claim rate (2.2 per 100 women) (Figures 23 and 24).

**Figure 23.** PBS claim rates for IUD in Illawarra Shoalhaven LHD by LGA, 2018 to 2022

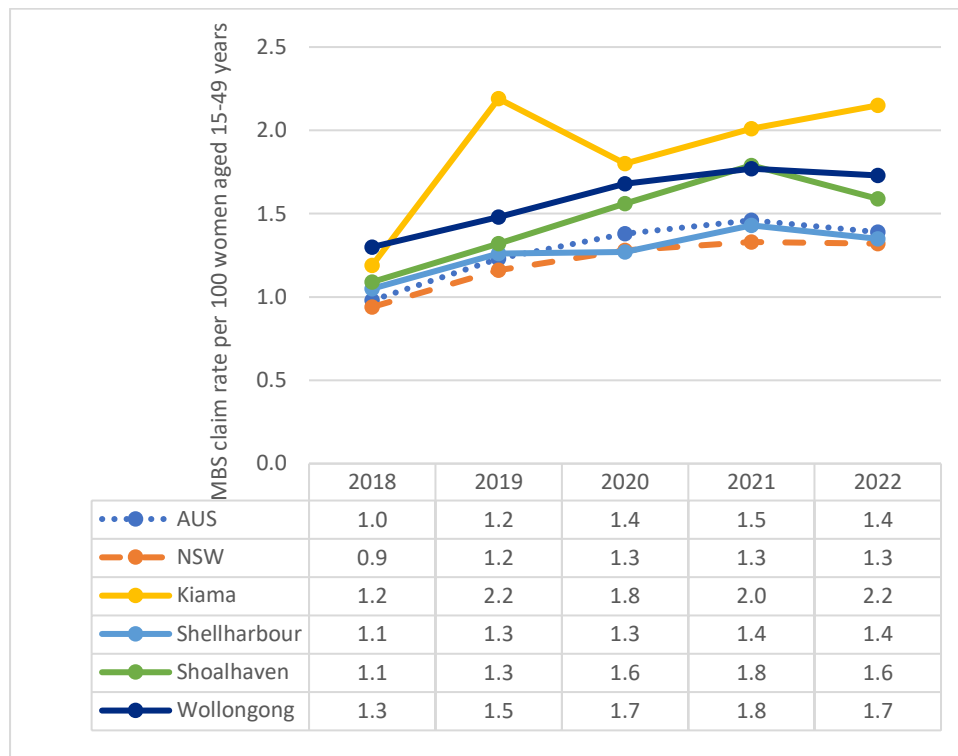


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 24.** MBS claim rates for IUD in Illawarra Shoalhaven LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

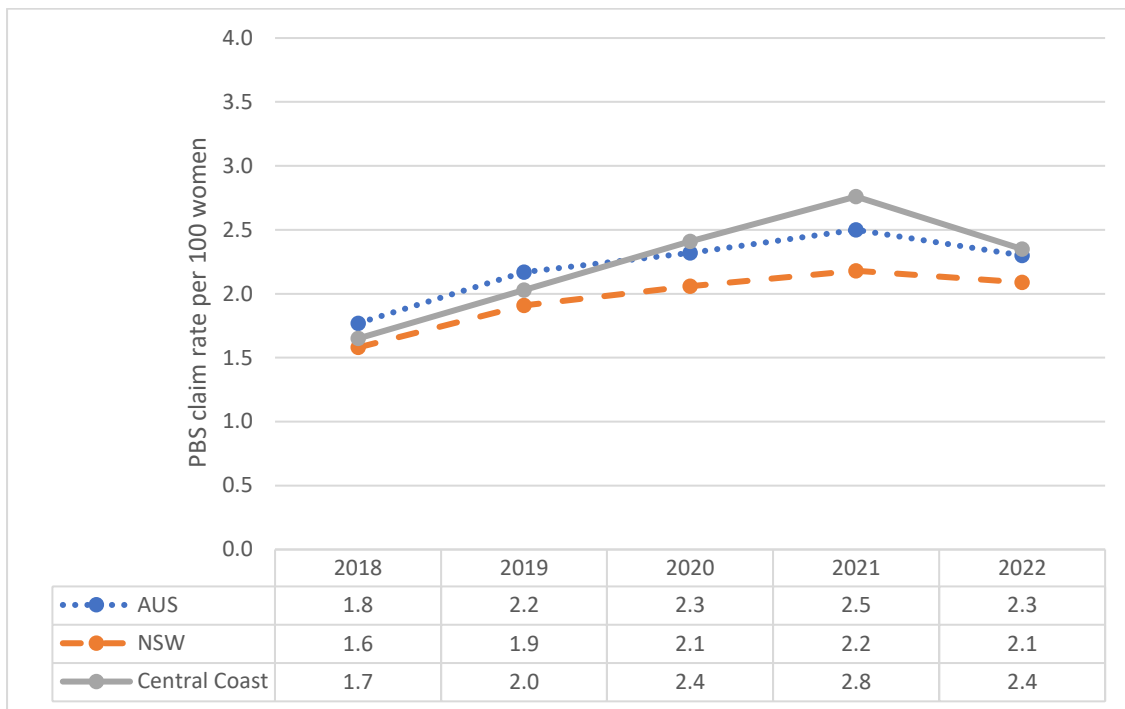
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.6.7 Claim rates for IUD in Central Coast LHD by LGA

Both the PBS and MBS claim rates in the Central Coast LGA increased until 2021 and then decreased in 2022. The rates were consistently higher than the state levels. The PBS claim rates were higher than the Australian levels in 2021 and 2022. The MBS claim rates were identical to the national levels. The PBS and MBS claim rates in the Central Coast LGA in 2022 were 2.4 and 1.4 per 100 women, respectively (Figures 25 and 26).

**Figure 25.** PBS claim rates for IUD in Central Coast LHD by LGA, 2018 to 2022

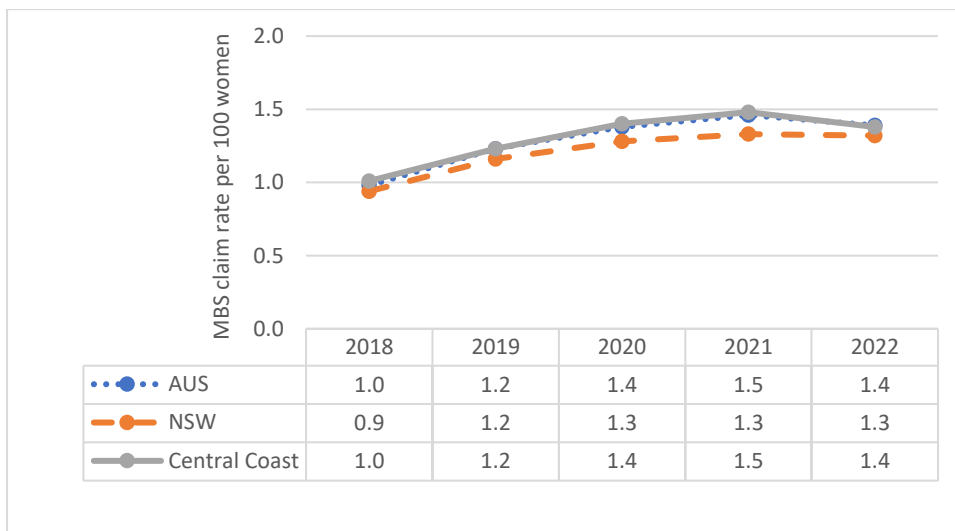


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 26.** MBS claim rates for IUD in Central Coast LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

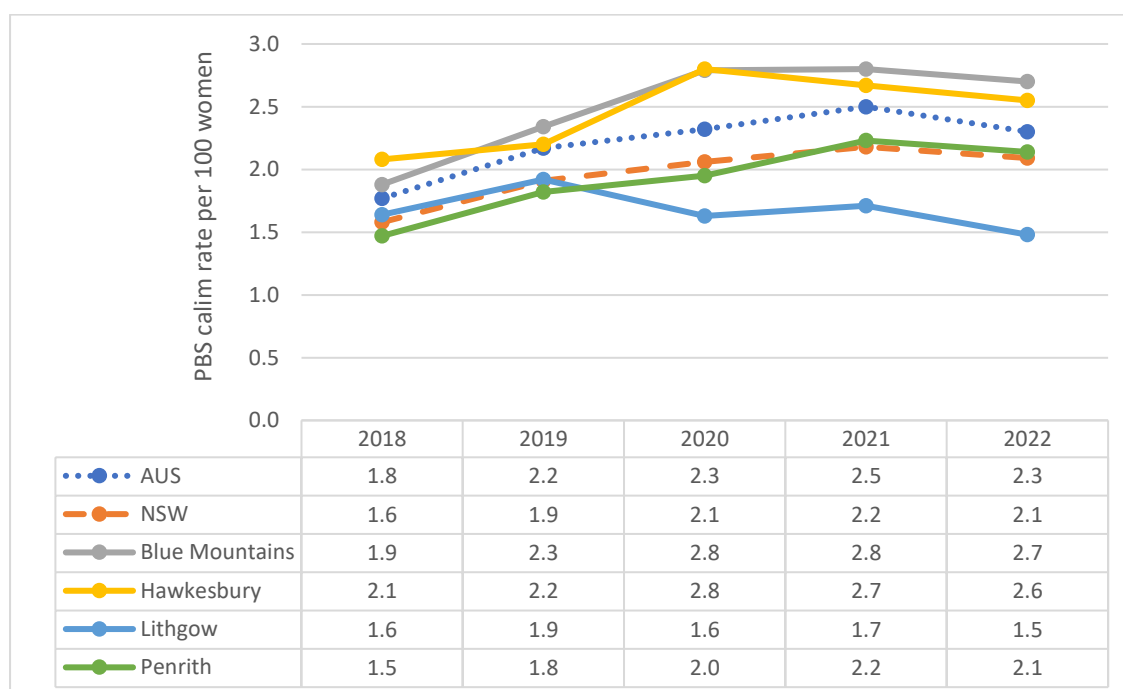
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.6.8 Claim rates for IUD in Nepean Blue Mountains LHD by LGA

Most of the PBS claim rates in Nepean Blue Mountains either reduced in 2022 (Penrith and Lithgow LGAs) or in 2021. In the meantime, the MBS claim rate increased slightly or remained unchanged. In 2022 the claim rate was lowest in Lithgow (PBS claim rate of 1.5 and MBS rate of 0.5 per 100 women) and highest in Blue Mountains (PBS claim rate of 2.7 per 100 women and MBS rate of 1.5 per 100 women) (Figures 27 and 28). Lithgow also had a suppressed PBS claim rate for 11909T (Kyleena®) prescriptions in 2020 and 2022 (data not shown), so the PBS rates presented in Figure 27 refer exclusively to the Mirena® PBS claim rate.

**Figure 27.** PBS claim rates for IUD in Nepean Blue Mountains LHD by LGA, 2018 to 2022

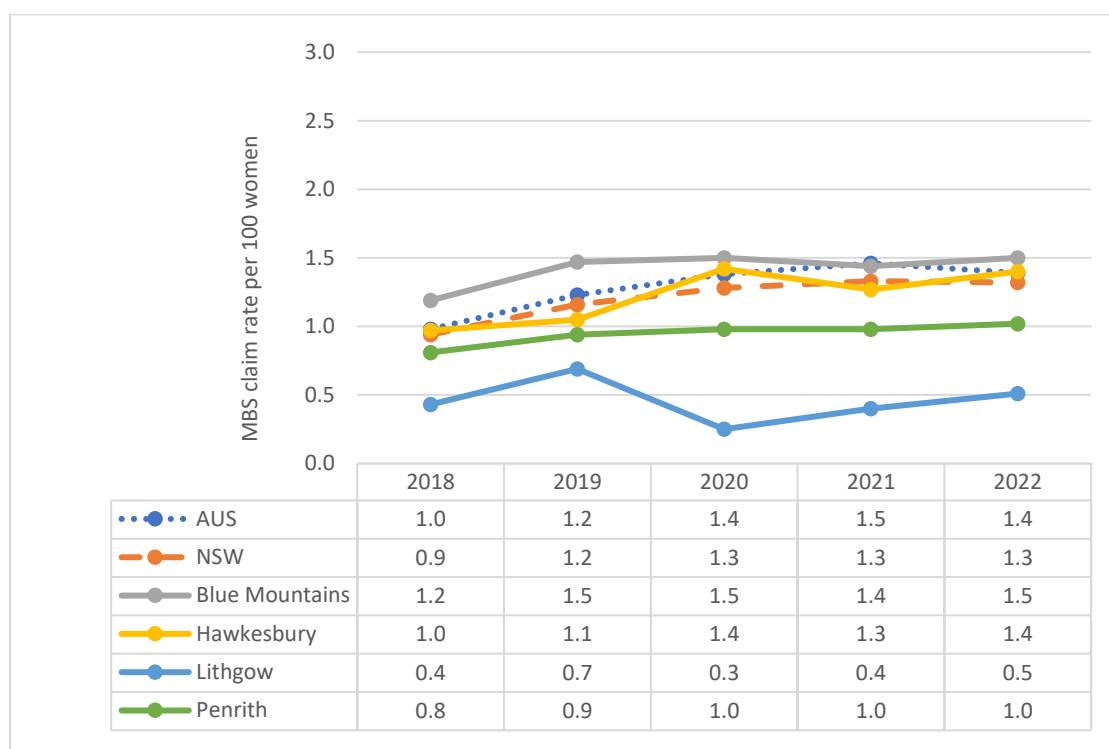


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 28.** MBS claim rates for IUD use in Nepean Blue Mountains LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS item: 35503

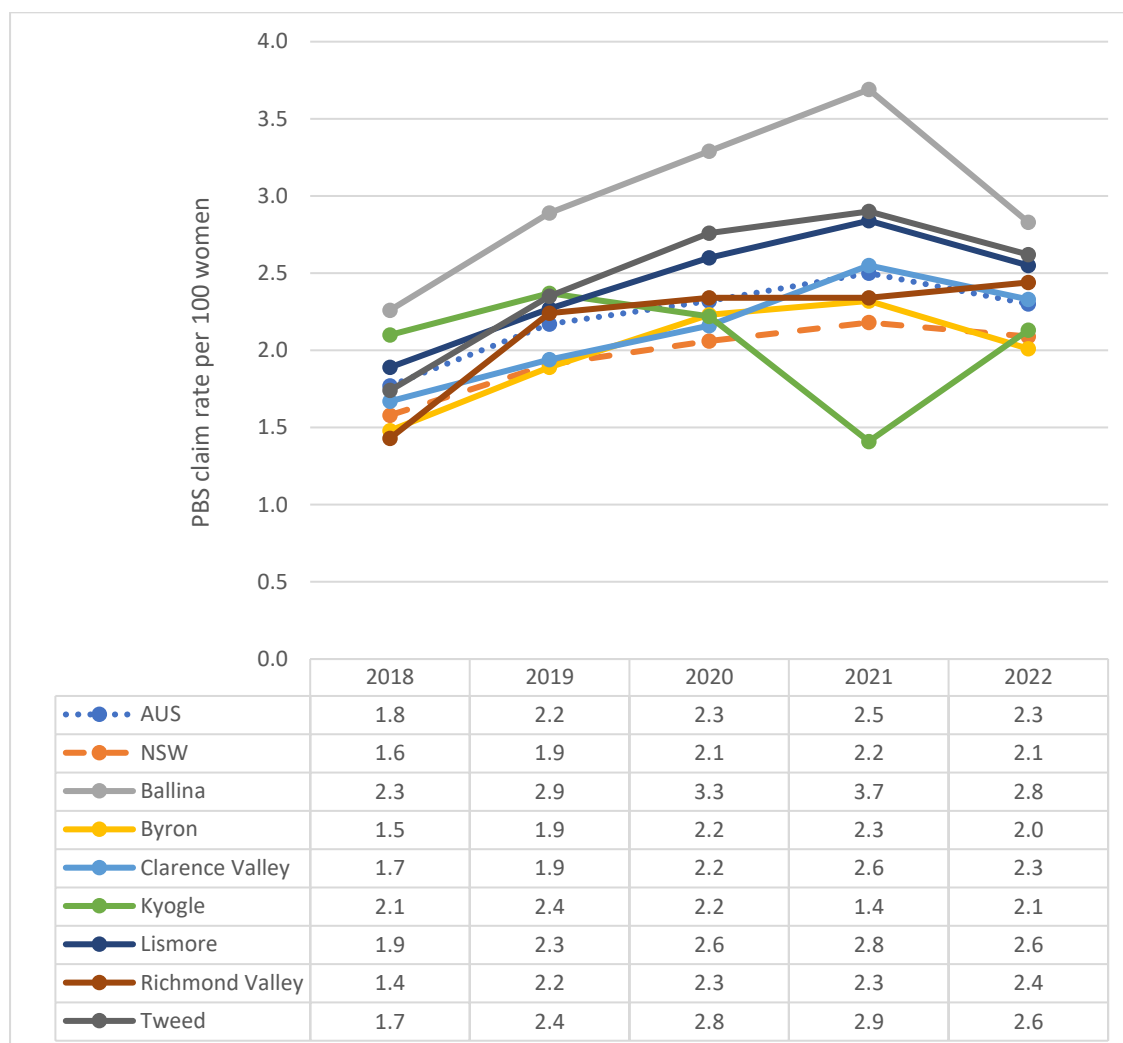
### 3.7 Claim rates for IUD in NSW non-metropolitan LHDs by LGA

#### 3.7.1 Claim rates for IUD in Northern NSW LHD by LGA

In most LGAs within Northern NSW LHD, the claim rates increased until 2021 and then decreased in 2022, with exceptions in Kyogle LGA where the claim rates decreased in 2021, and in Richmond Valley where the PBS claim rate increased in 2022. Kyogle also had a suppressed PBS claim rate for 11909T (Kyleena®) prescriptions between 2020 and 2022 (data not shown), so the PBS rates presented in Figure 29 refer exclusively to the Mirena® PBS claim rate for that period.

In 2022, the PBS claim rate ranged from 2.0 per 100 women in Byron LGA to 2.8 per 100 women in Ballina LGA, while the MBS claim rate ranged from 1.0 per 100 women in Clarence Valley to 1.6 per 100 women in Tweed LGA. The claim rates for both PBS and MBS in Ballina, Tweed, and Lismore were consistently higher than the national level (Figures 29 and 30).

**Figure 29.** PBS claim rates for IUD in Northern NSW LHD by LGA, 2018 to 2022

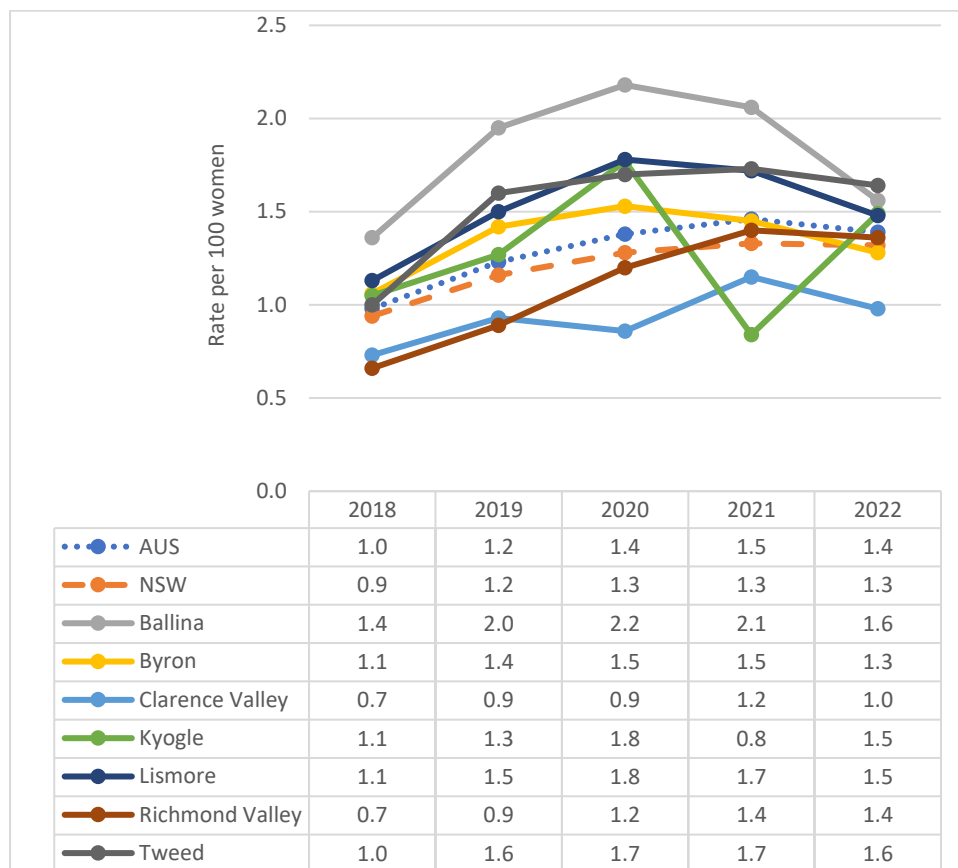


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 30.** MBS claim rates for IUD use in Northern NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

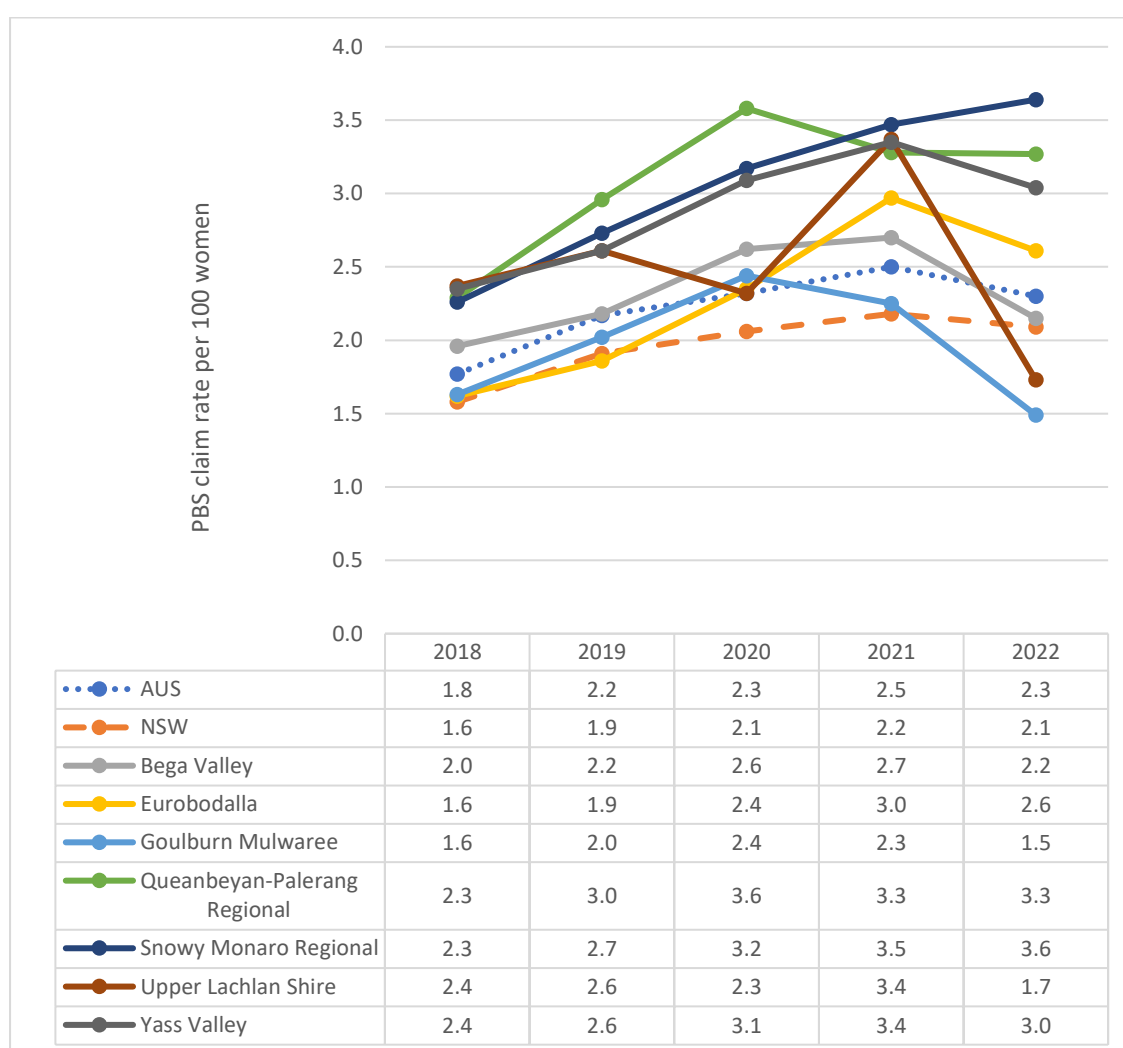
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.7.2 Claim rates for IUD in Southern NSW LHD by LGA

Generally, claim rates in LGAs within Southern NSW LHD increased between 2018 and 2022. In 2022, the lowest claim rates for IUD use per 100 women in Southern NSW were in Goulburn Mulwaree LGA, with a PBS claim rate of 1.5 and an MBS claim rate of 0.5. The highest claim rates were in Snowy Monaro Regional, with a PBS claim rate of 3.6 and an MBS claim rate of 2.4. With the exceptions of Goulburn Mulwaree and Upper Lachlan Shire, other LGAs in Southern NSW had higher claim rates than both the national and state averages (Figures 31 and 32). Interestingly, there were suppressed rates of PBS claims (indicating low activity) for 11909T (Kyleena®) devices in Goulburn Mulwaree (in 2021 and 2022), Upper Lachlan Shire (in 2020 and 2022) and Yass Valley LGA (in 2020). This means that the PBS claim rates shown in Figure 31 in these LGAs for those periods represents Mirena® claim activity alone.

**Figure 31.** PBS claim rates for IUD use in Southern NSW LHD by LGA, 2018 to 2022

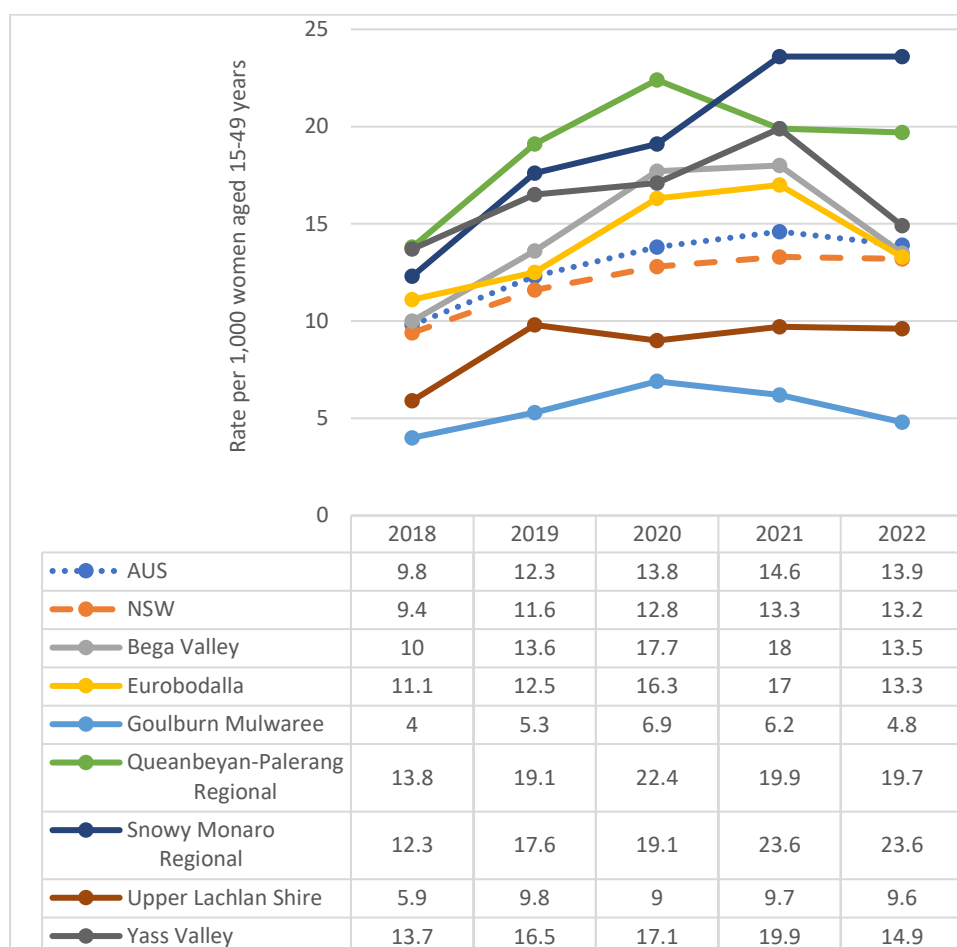


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 32.** MBS claim rates for IUD use in Southern NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

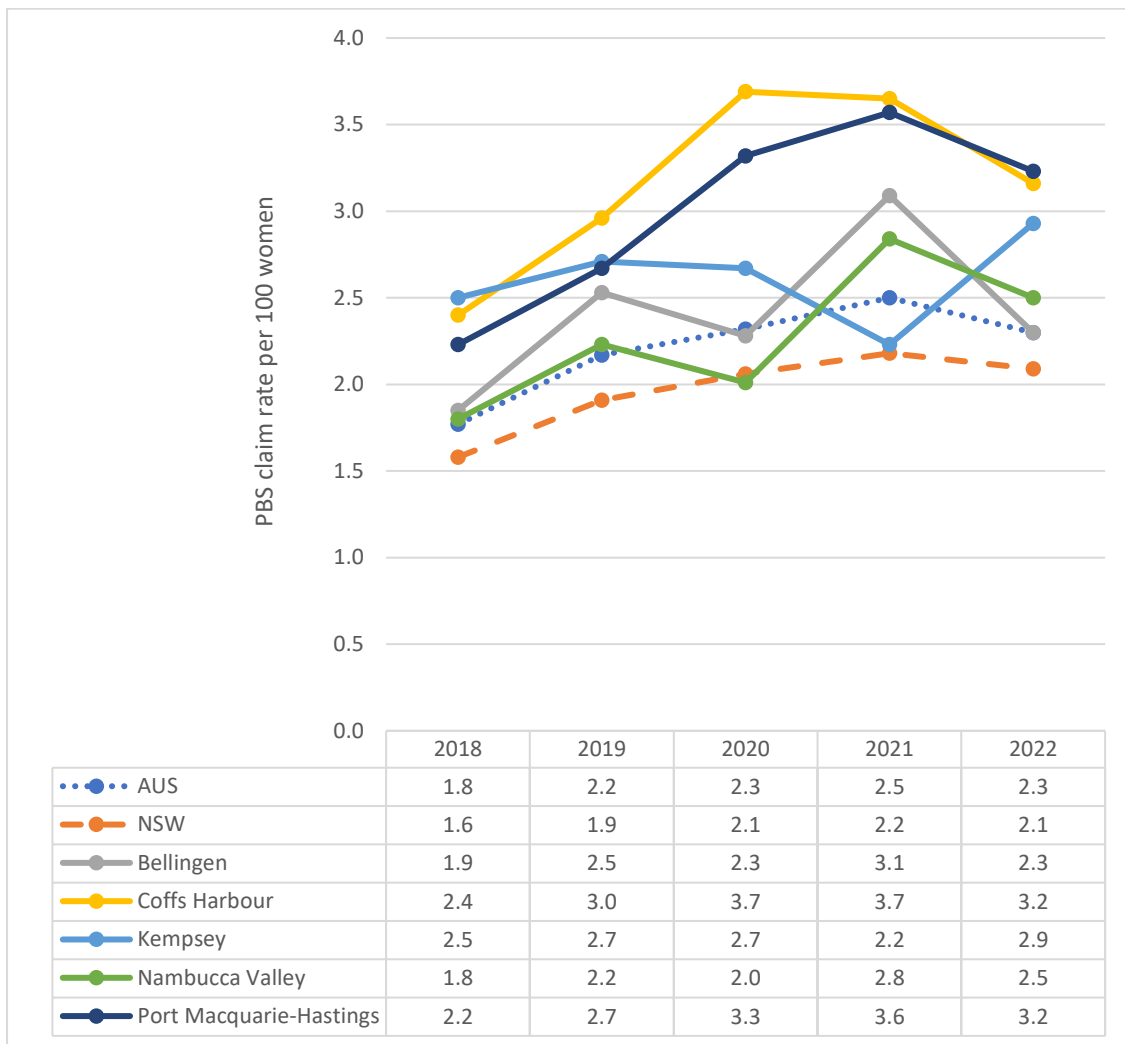
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.7.3 Claim rates for IUD in Mid North Coast NSW LHD by LGA

All LGAs in Mid North Coast LHD had increased claim rates over time to varying degrees. All claim rates were higher than the state averages except PBS rate for Nambucca Valley LGA in 2020 and MBS rates also for Nambucca Valley in 2019 and 2020. There was suppressed PBS claim rates for 11909T (Kyleena®) in Nambucca Valley in 2020, so PBS claim rates for that period represent only Mirena®. In 2022, the PBS claim rates for IUD use per 100 women in the Mid North Coast NSW LHD ranged from 2.3 in Bellingen LGA to 3.2 in Port Macquarie-Hastings LGA (Figure 33), with suppressed claim rates for Kyleena® in Bellingen in 2020 (data not shown). The MBS claim rates per 100 women ranged from 1.2 in Kempsey to 1.9 in Coffs Harbour (Figure 34).

**Figure 33.** PBS claim rates for IUD use in Mid North Coast LHD by LGA, 2018 to 2022

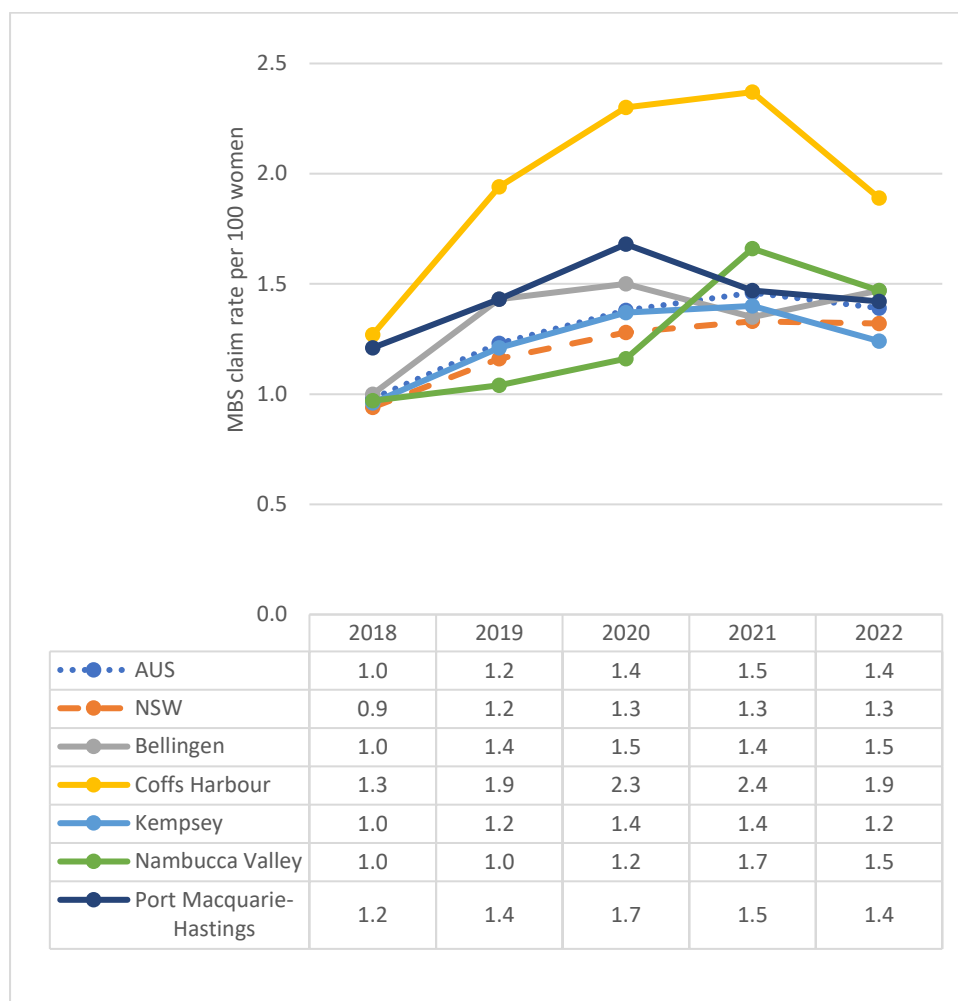


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 34.** MBS claim rates for IUD use in Mid North Coast LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.7.4 Claim rates for IUD in Murrumbidgee NSW LHD by LGA

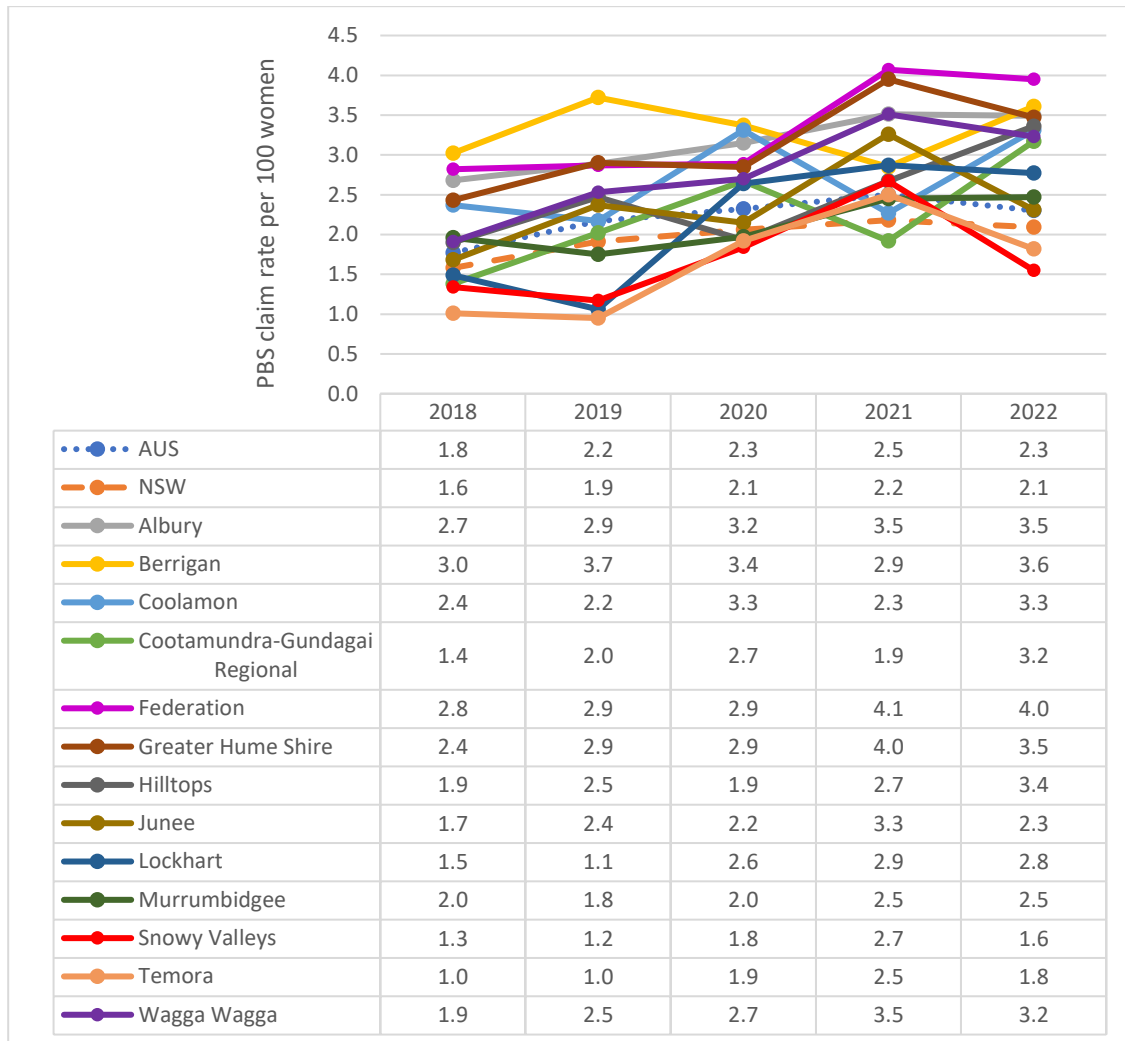
Because of the large numbers of LGAs in Murrumbidgee LHD, data are separated for Eastern and Western Murrumbidgee.

#### 3.7.4.1 Claim rates for IUD in Eastern Murrumbidgee LHD by LGA

There was an overall increase in claim rates across most LGAs between 2018 and 2022. In 2022, the claim rates for IUD use per 100 women were lowest in Snowy Valleys (PBS claim rate of 1.6 and MBS rate of 0.8) and were highest in Federation (PBS claim rate of 4.1 and MBS rate of 2.7) (Figures 35 and 36). Of the 13 LGAs in Eastern Murrumbidgee LHD, ten were above the state average in 2022. Twelve of the 13 LGAs had suppressed data for 11909T PBS claims (Kyleena®) in one or more years between 2020 and 2022; an indicator of low

activity for this IUD. The LGAs of Coolamon, Greater Hume Shire, Lockhart, Murrumbidgee, and Snowy Valleys had suppressed data for the whole period Kyleena® was available on the PBS (2020-2022), meaning that claim rates published for these locations for that period come from Mirena® alone (data not shown).

**Figure 35.** PBS claim rates for IUD use in Eastern Murrumbidgee LHD by LGA, 2018 to 2022

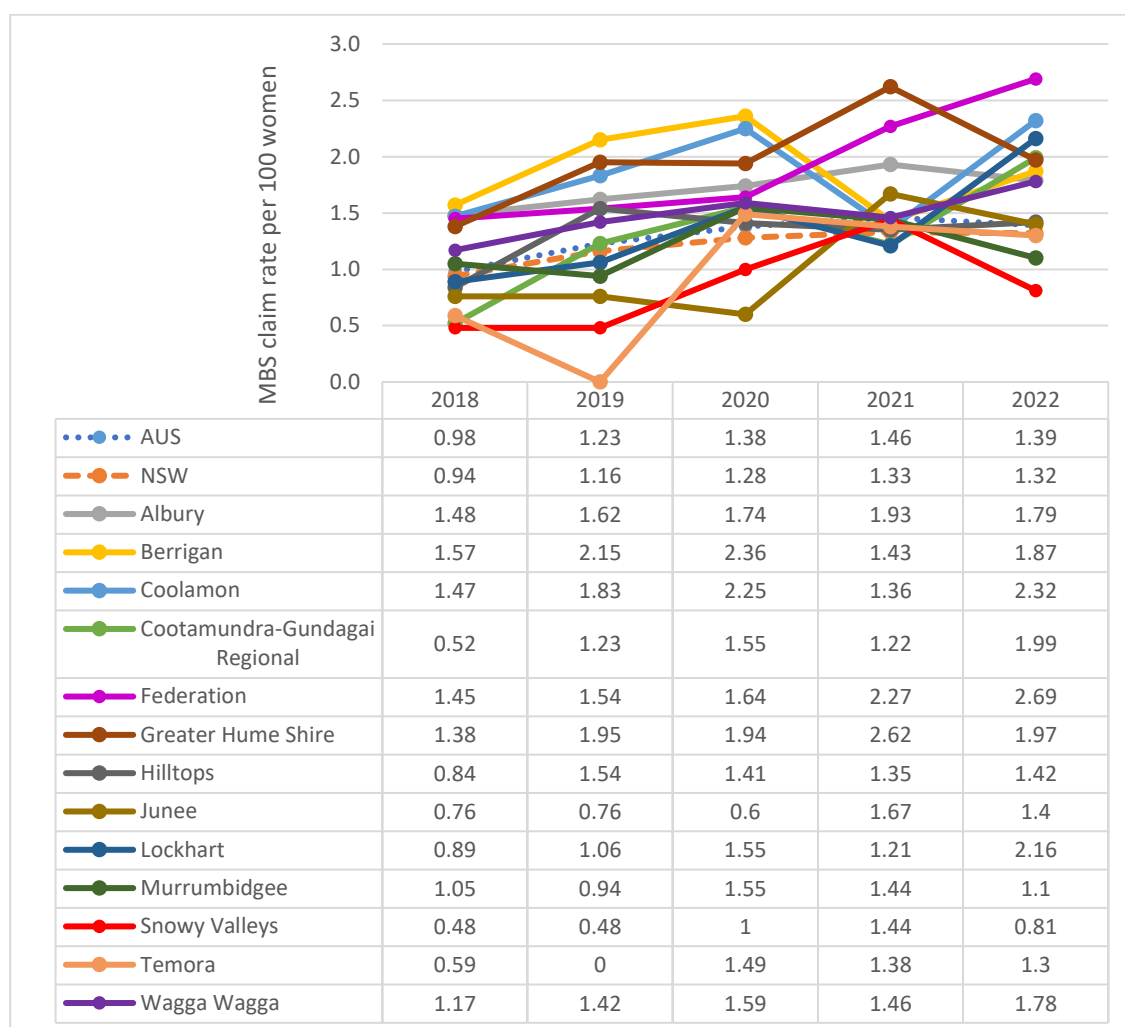


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 36.** MBS claim rates for IUD use in Eastern Murrumbidgee LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS item: 35503

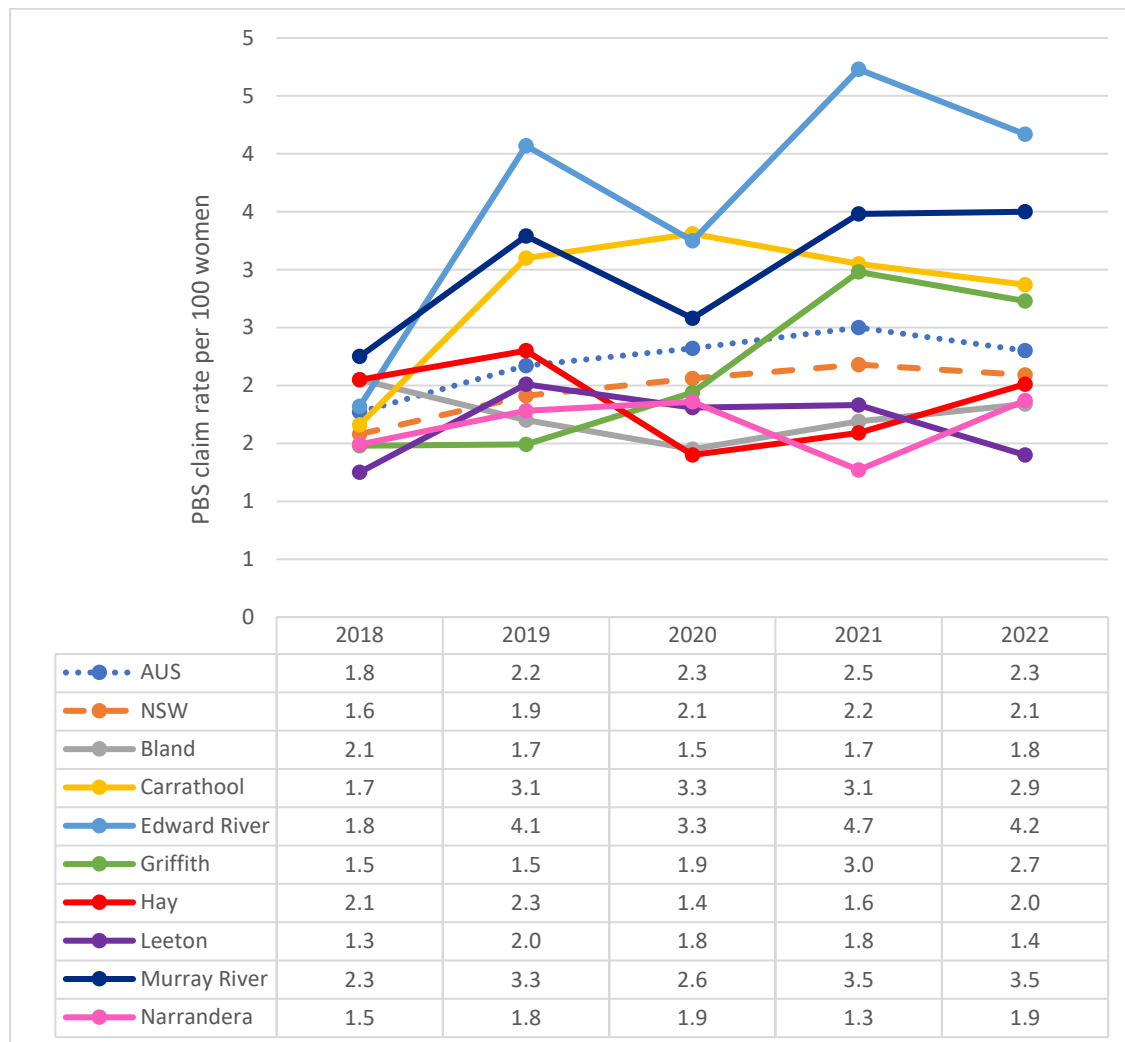
### 3.7.4.2 Claim rates for IUD in Western Murrumbidgee LHD by LGA

Claim rates generally increased in Edward River, Murray River, and Griffith, while remaining unchanged in other LGAs. In 2022, the claim rates for IUD use per 100 women in the Western Murrumbidgee LHD were lowest in Leeton, with a PBS claim rate of 1.4 and an MBS rate of 0.5. Conversely, the highest claim rates were in Edward River, with a PBS claim rate of 4.2 and an MBS rate of 2.3 (Figures 37 and 38). The claim rates were above state averages for half the LGAs of Western Murrumbidgee LHD.

Seven of the eight LGAs had suppressed PBS claim data for 11909T, Kyleena®, in one or more years between 2020 and 2022; an indicator of low activity for this device (data not shown). The LGAs of Carrathool, Edward River, Leeton, and Murray River had suppressed

data for the whole period 11909T was available on the PBS (2020 onwards), meaning that claim rates published for these locations for that period come from Mirena® only. Carrathool LGA had suppressed MBS claim rates for 2018 and 2021, Hay LGA also had a suppressed MBS claim rate in 2018.

**Figure 37.** PBS claim rates for IUD use in Western Murrumbidgee LHD by LGA, 2018 to 2022

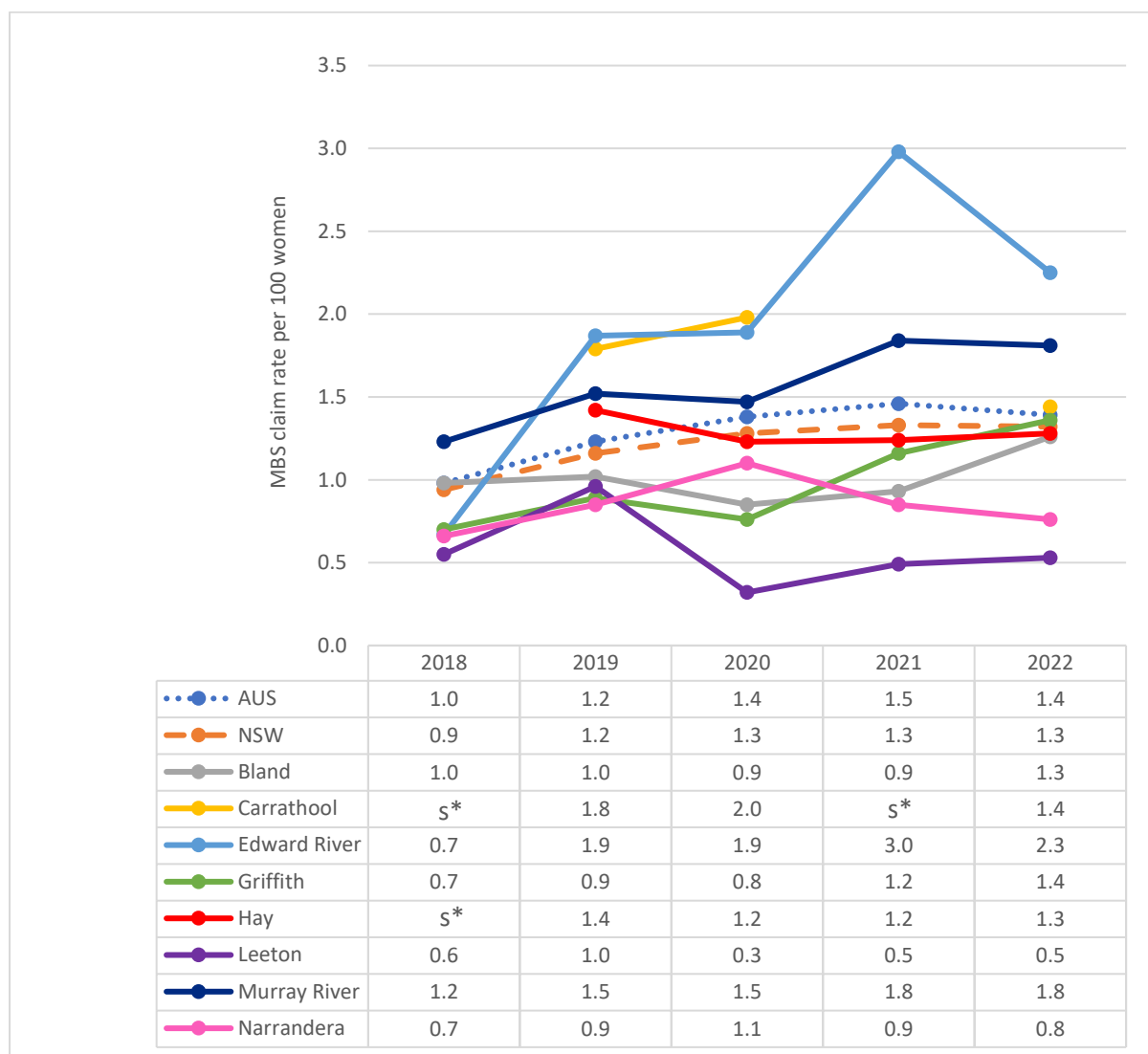


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 38.** MBS claim rates for IUD use in Western Murrumbidgee LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

MBS item: 35503

### 3.7.5 Claim rates for IUD in Hunter New England LHD by LGA

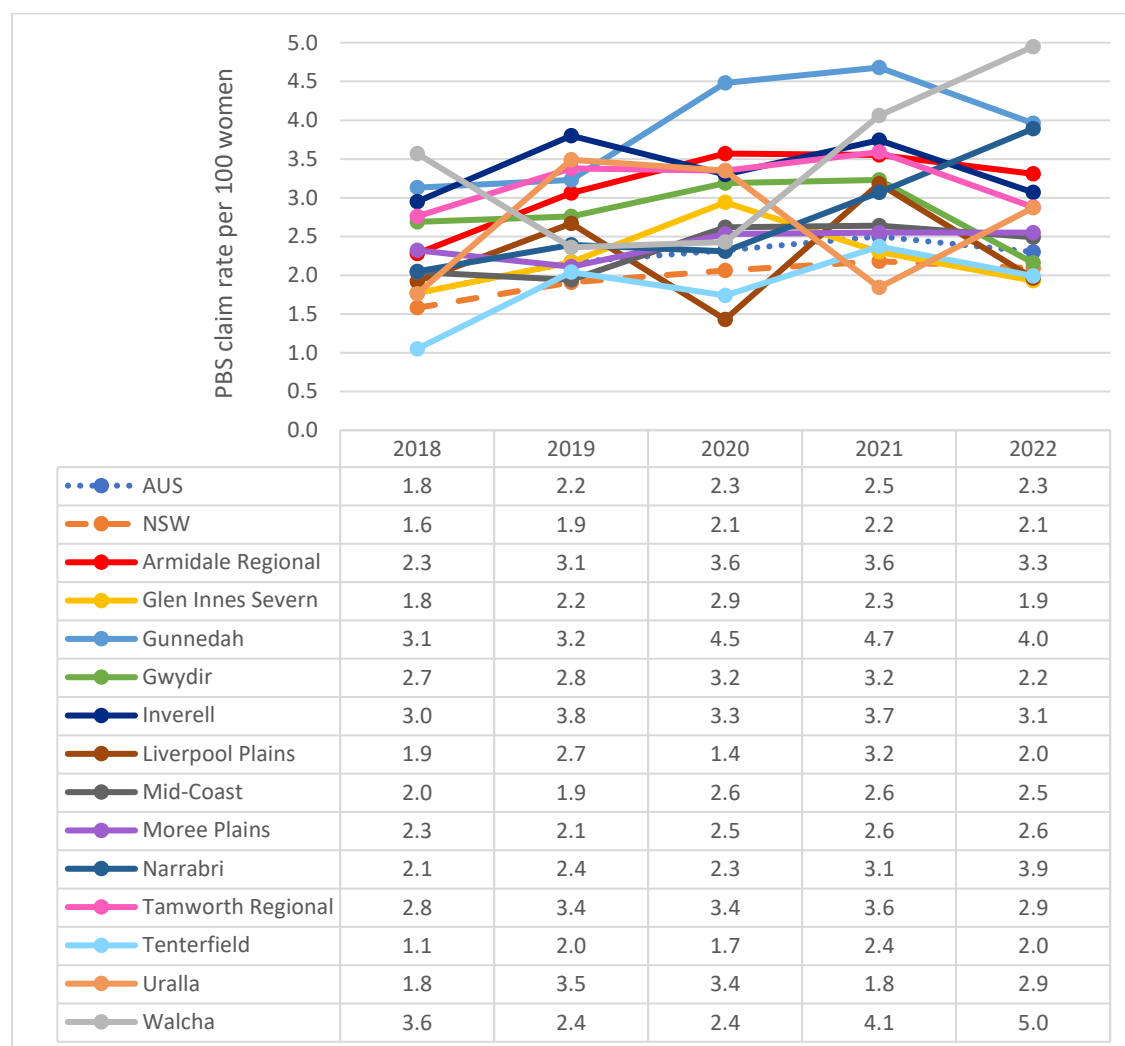
Due to the large numbers of LGAs, data are presented separately for Northern and Southern Hunter New England LHD.

#### 3.7.5.1 Claim for IUD use in Northern Hunter New England LHD by LGA

Over the five-year period, most LGAs experienced small increases in claim rates, with the exception of Walcha, where the rate increased by 39% for PBS claims and 77% for MBS. In 2022, the lowest claim rates for IUD use per 100 women in the Northern Hunter New England LHD were in Tenterfield LGA, with a PBS claim rate of 2.0 and an MBS rate of 0.9. In contrast,

the highest claim rates were in Walcha LGA, with a PBS claim rate of 5.0 and an MBS rate of 3.9 per 100 women (Figures 39 and 40). There was suppressed data, indicating low activity, for 11909T (Kyleena®) in one or all the years it was available on the PBS (2020 onwards) in all LGAs except Armidale Regional, Mid-Coast and Tamworth Regional. Therefore, claim rates for the other LGAs primarily represent Mirena® (data not shown).

**Figure 39.** PBS claim rates for IUD use in Northern Hunter New England LHD by LGA, 2018 to 2022

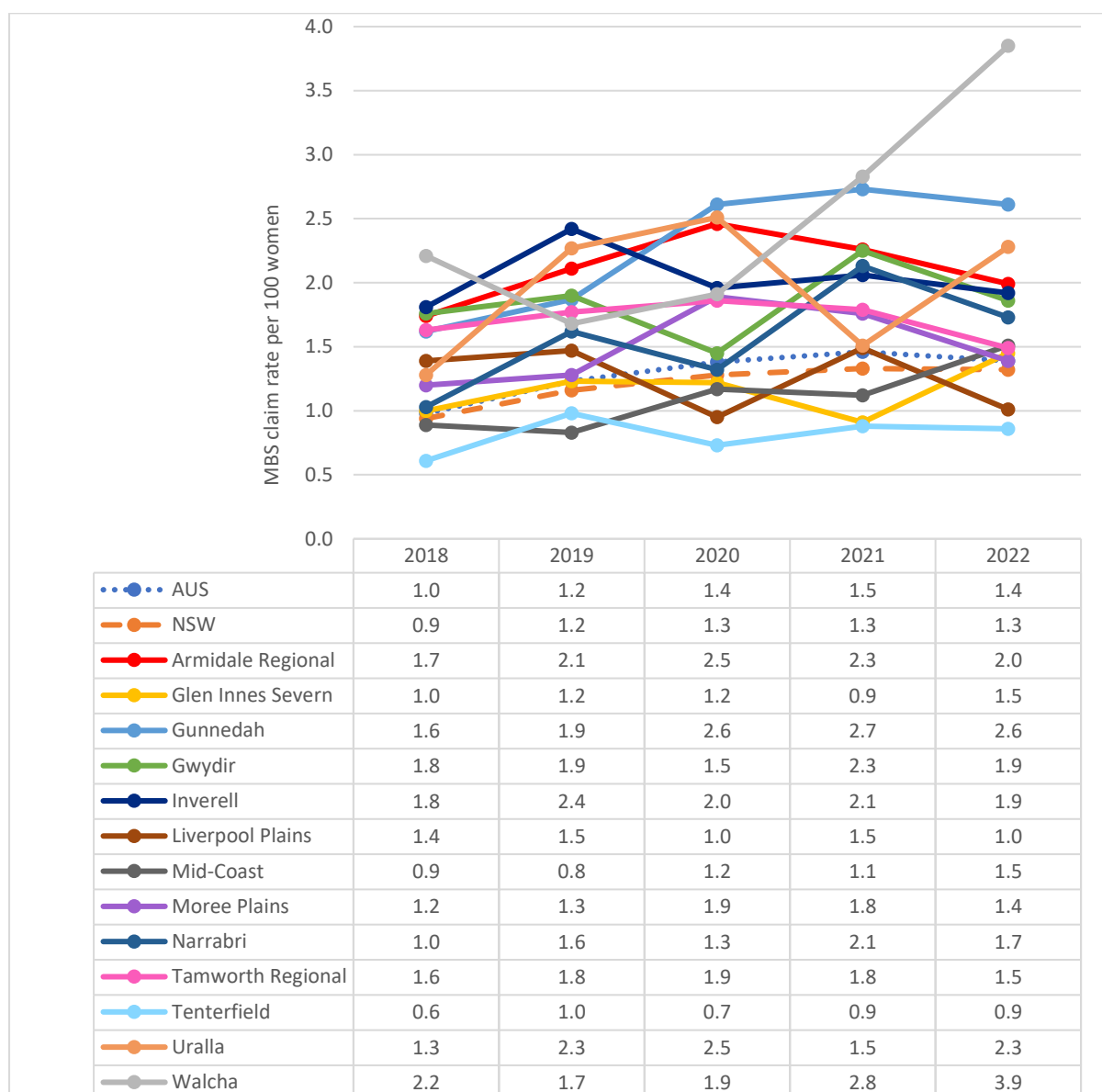


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 40.** MBS claim rates for IUD use in Northern Hunter New England LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

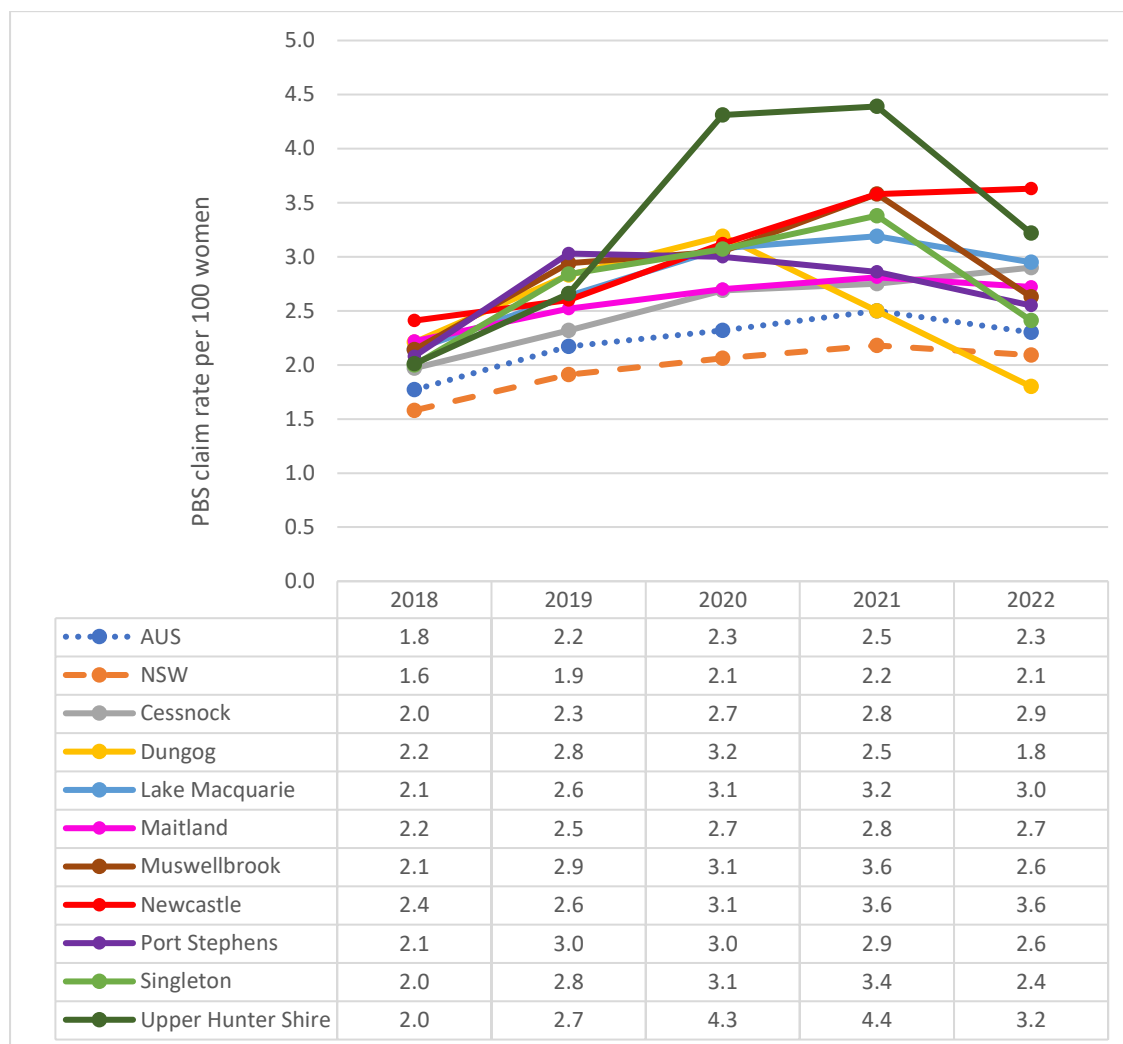
MBS item: 35503

### 3.7.5.2 Claim rates for IUD in Southern Hunter New England LHD by LGA

Similar to LGAs in the Northern Hunter New England LHD, most LGAs in the Southern Hunter New England LHD experienced small increases in claim rates. In 2022, the PBS claim rates for IUD use per 100 women in the Southern Hunter New England LHD ranged from 1.8 in Dungog LGA to 3.6 in Newcastle LGA. PBS claim rates were suppressed for 11909T Kyleena® in 2020 in Muswellbrook and Dungog, and again for Dungog in 2022 (data not

shown), meaning that claim rates for these periods in Figure 41 represent Mirena® only. The MBS claim rates per 100 women ranged from 1.8 in Dungog LGA to 2.2 in Upper Hunter Shire (Figures 41 and 42).

**Figure 41.** PBS claim rates for IUD use in Southern Hunter New England LHD by LGA, 2018 to 2022

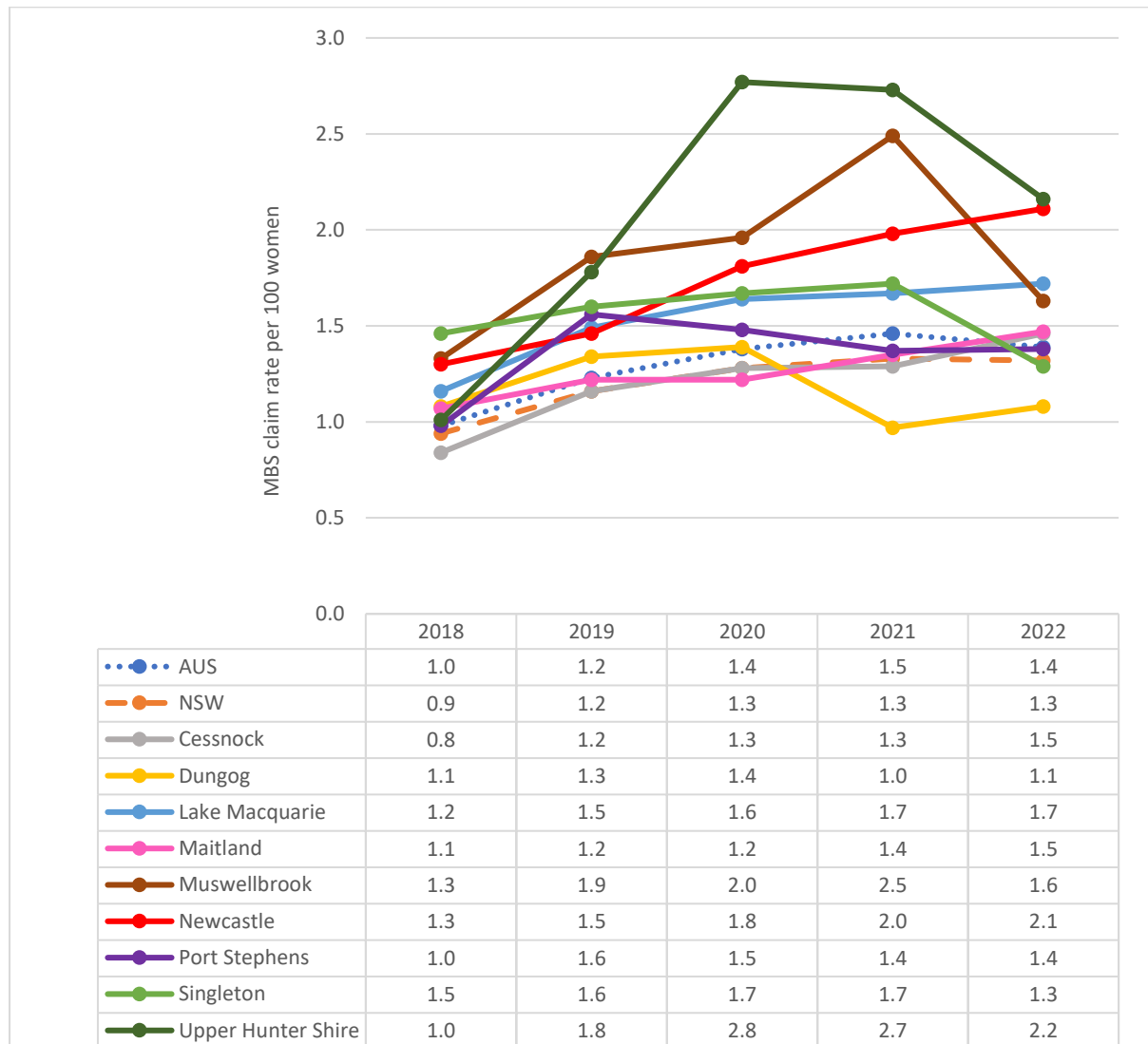


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 42.** MBS claim rates for IUD use in Southern Hunter New England LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

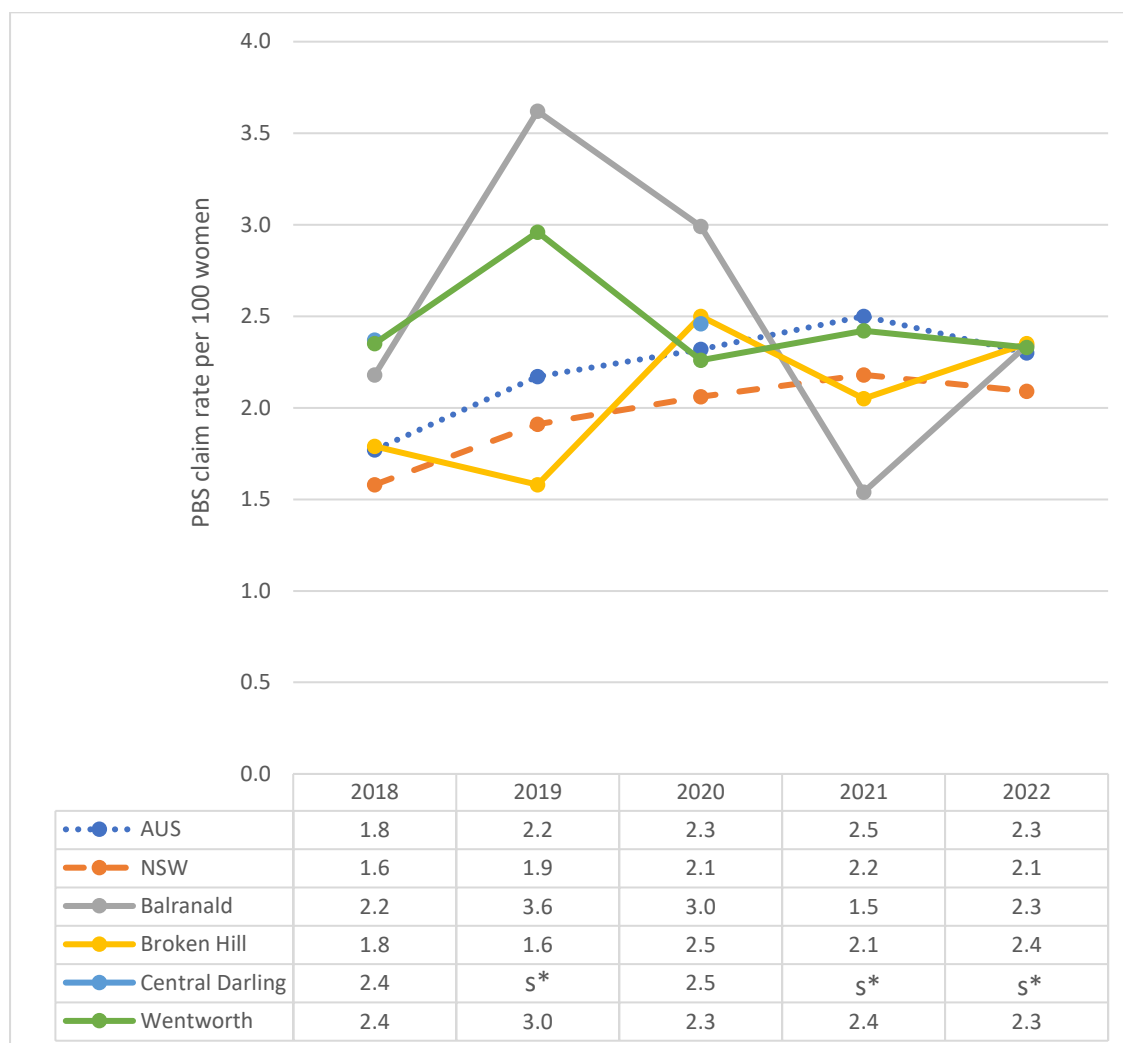
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.7.6 Claim rates for IUD in Far West NSW LHD by LGA

Between 2018 and 2022, the PBS claim rates in LGAs within the Far West NSW LHD were unstable (Figure 43). In 2022, the PBS claim rate ranged from 2.3 per 100 women in Wentworth LGA to 2.4 per 100 women in Broken Hill LGA. Central Darling had no 11909T Kyleena® claims in Central Darling, and suppressed claim rates for Mirena® in 2019, 2021 and 2022. There was other suppressed PBS data, indicating low activity, for 11909T in the LGAs of Broken Hill and Wentworth for the years 2020 and 2021 (data not shown), so claim rates for these periods represent Mirena® only.

**Figure 43.** PBS claim rates for IUD use in Far West NSW LHD by LGA, 2018 to 2022



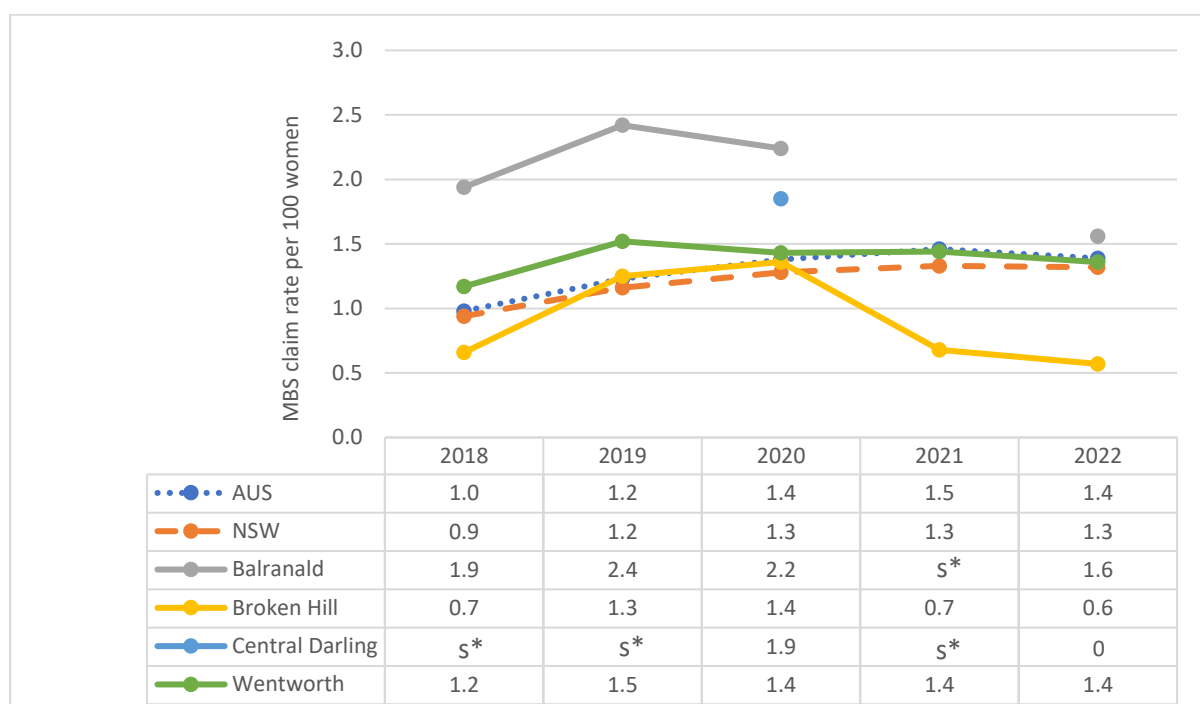
Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

The MBS claim rate ranged from 0.6 per 100 women in Broken Hill to 1.6 per 100 women in Balranald LGA (Figure 44). Notably, there were no MBS claims in Central Darling LGA for 2022 and suppressed claim rates in Balranald LGA in 2021.

**Figure 44.** MBS claim rates for IUD use in Far West NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

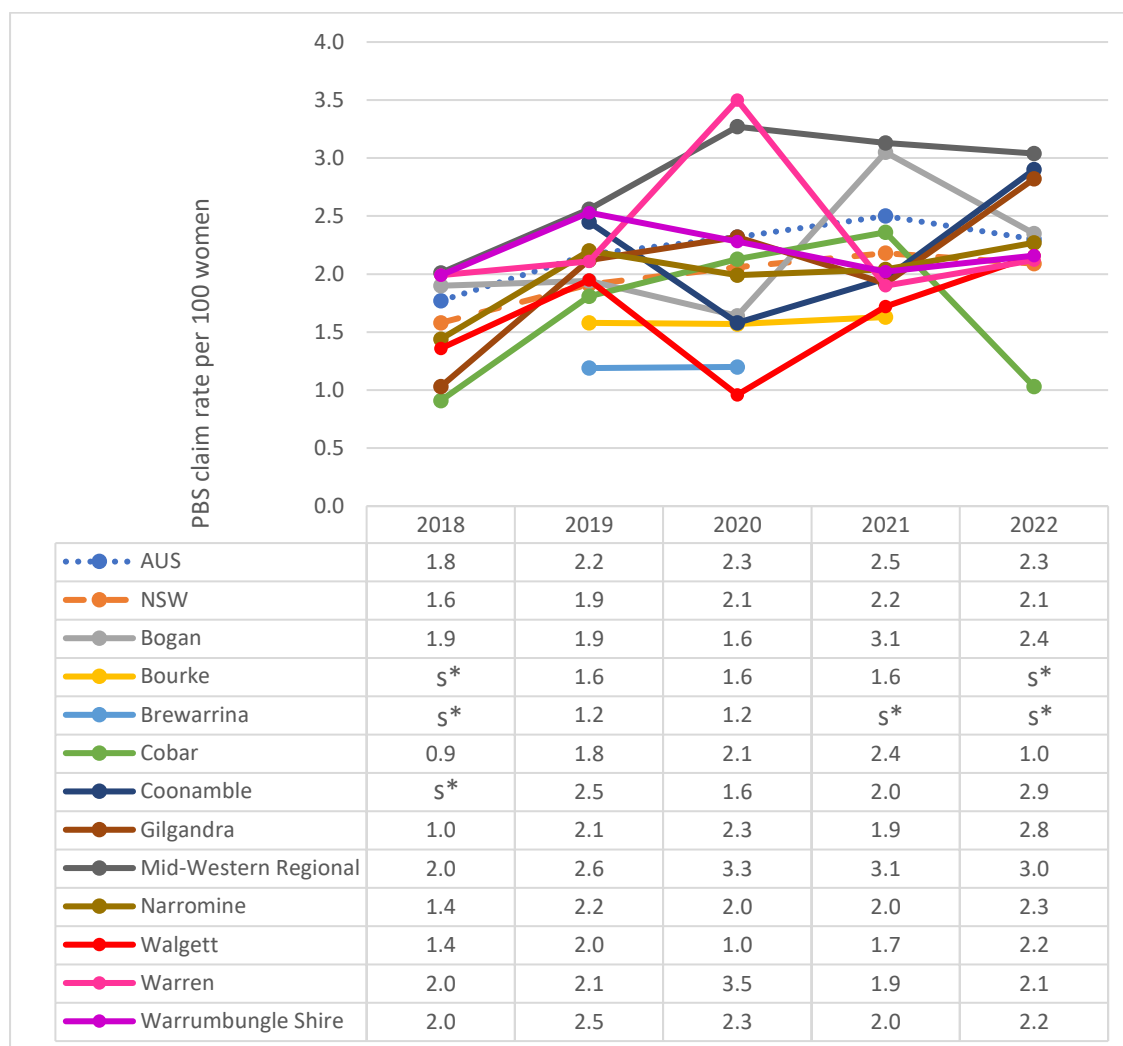
MBS item: 35503

### 3.7.7 Claim rates for IUD in Western NSW LHD by LGA

#### 3.7.7.1 Claim rates for IUD use in Northern Western NSW LHD by LGA

Between 2018 and 2022, PBS data were suppressed for Brewarrina LGA for 2018, 2021 and 2022, in addition to Bourke LGA for 2018 and 2022 (Figure 45). Among the LGAs with available data, PBS claim rate per 100 women was lowest in Cobar in 2018 (0.9) and was highest in Warren in 2020 (3.5). The claim rate changed the most in Warren, increased from 2.0 in 2018 to 3.5 in 2020 and reduced to 2.1 in 2022. In 2022, the PBS claim rate ranged from 1.0 per 100 women in Cobar to 3.0 per 100 women in Mid-Western Regional LGA. Seven of the eight LGAs had suppressed PBS claim rates for 11909T Kyleena® in one or more years between 2020 and 2022; an indicator of low activity for this IUD (data not shown). The LGAs of Carrathool, Edward River, Leeton, and Murray River had suppressed data for the whole period 11909T was available on the PBS (2020 onwards), meaning that claim rates published for these locations for that period come from Mirena® only.

**Figure 45.** PBS claim rates for IUD use in Northern Western NSW LHD by LGA, 2018 to 2022



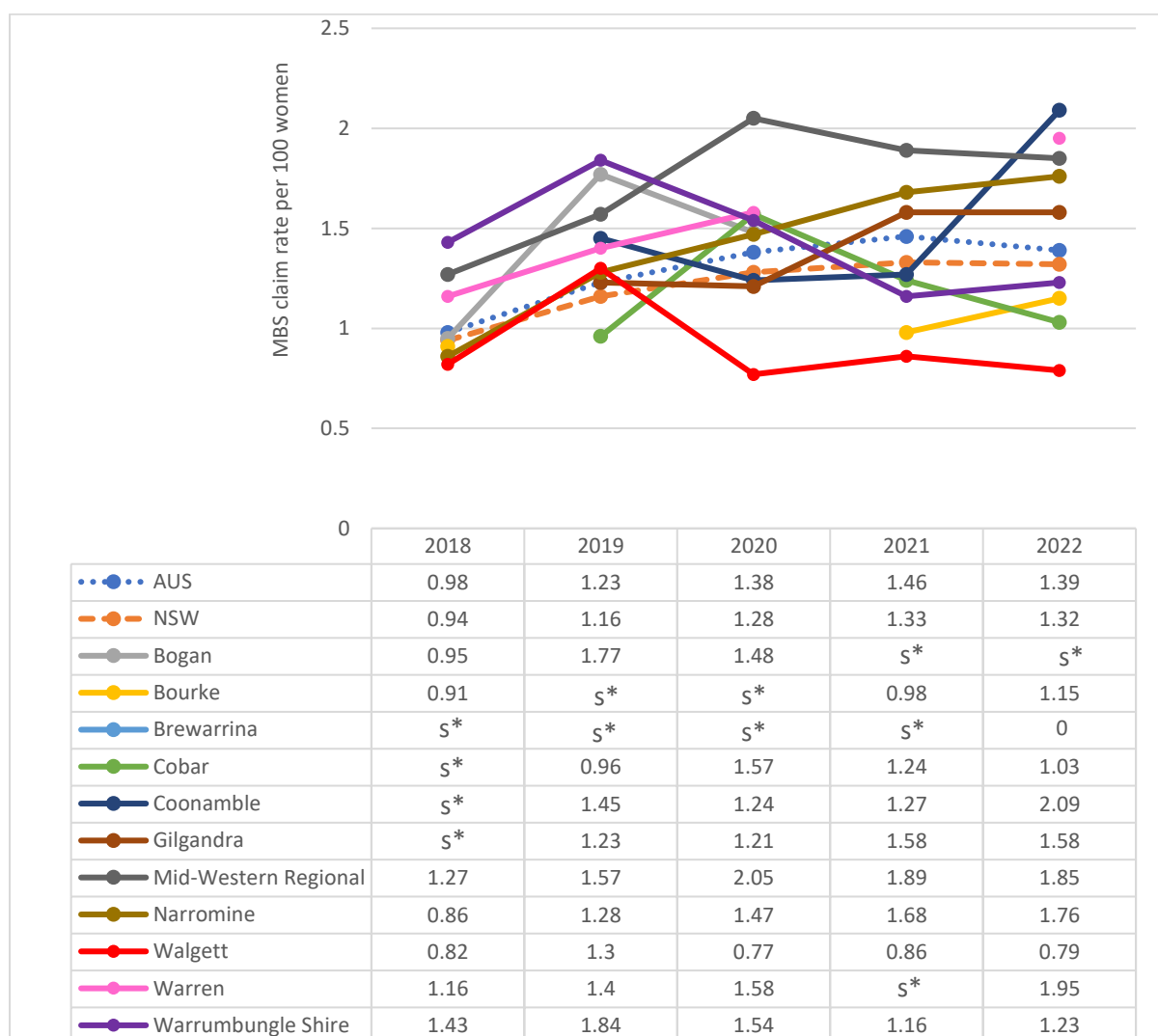
Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

In 2022, the MBS claim rate ranged from 0.8 per 100 women in Walgett to 2.1 per 100 women in Coonamble (Figure 46). There were no MBS claims in Brewarrina LGA in 2022, which was preceded by suppressed claim rates since 2018. 2018 also saw suppressed MBS claim rates in the LGAs of Cobar, Coonamble and Gilgandra, while Bogan LGA had suppressed claim rates from 2021-22.

**Figure 46.** MBS claim rates for IUD use in Northern Western NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

MBS item: 35503

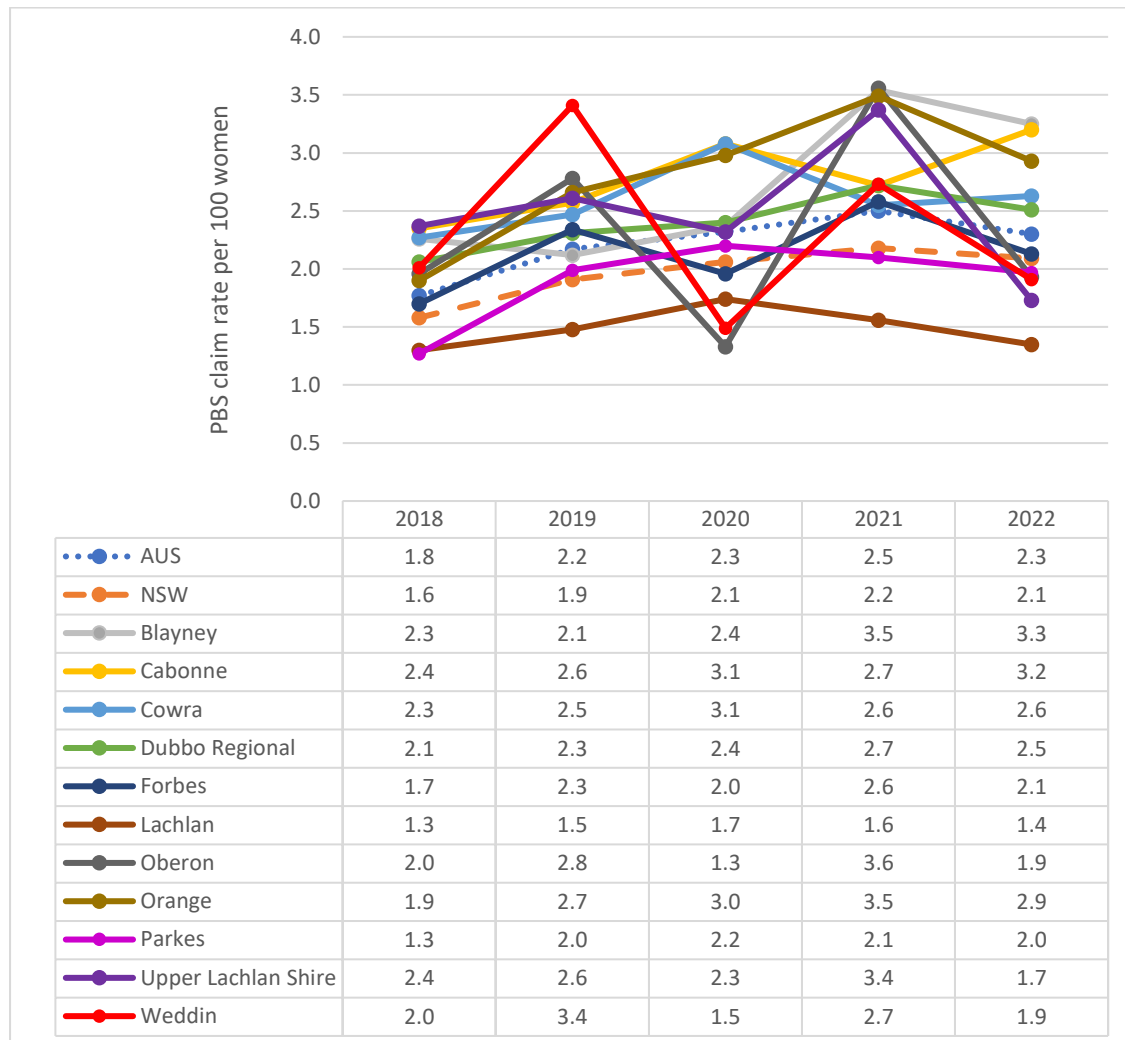
### 3.7.7.2 Claim rates for IUD use in Southern Western NSW LHD by LGA

Between 2018 and 2022, despite the fluctuation in some LGAs, the overall trend for all LGAs increased slightly (Figures 47 and 48). Changes in PBS claim rates were mostly observed for Weddin LGA, increasing to 3.4 per 100 women in 2019 and reducing to 1.5 in 2020 and for Oberon LGA, increasing from 1.3 2020 to 3.6 also in Oberon in 2021. Change in MBS claim rates were also observed for Oberon, from 1.19 in 2019 to 0.1 in 2020.

In 2022, the PBS claim rate ranged from 1.4 per 100 women in Lachlan to 3.3 per 100 women in Blayney. The MBS claim rate ranged from 0.9 per 100 women in Lachlan to 2.1 per 100

women in Weddin. In 2022, more than half of LGAs in Western NSW LHD had PBS and MBS claim rates above the state average.

**Figure 47: PBS claim rates for IUD use in Southern Western NSW LHD by LGA, 2018 to 2022**

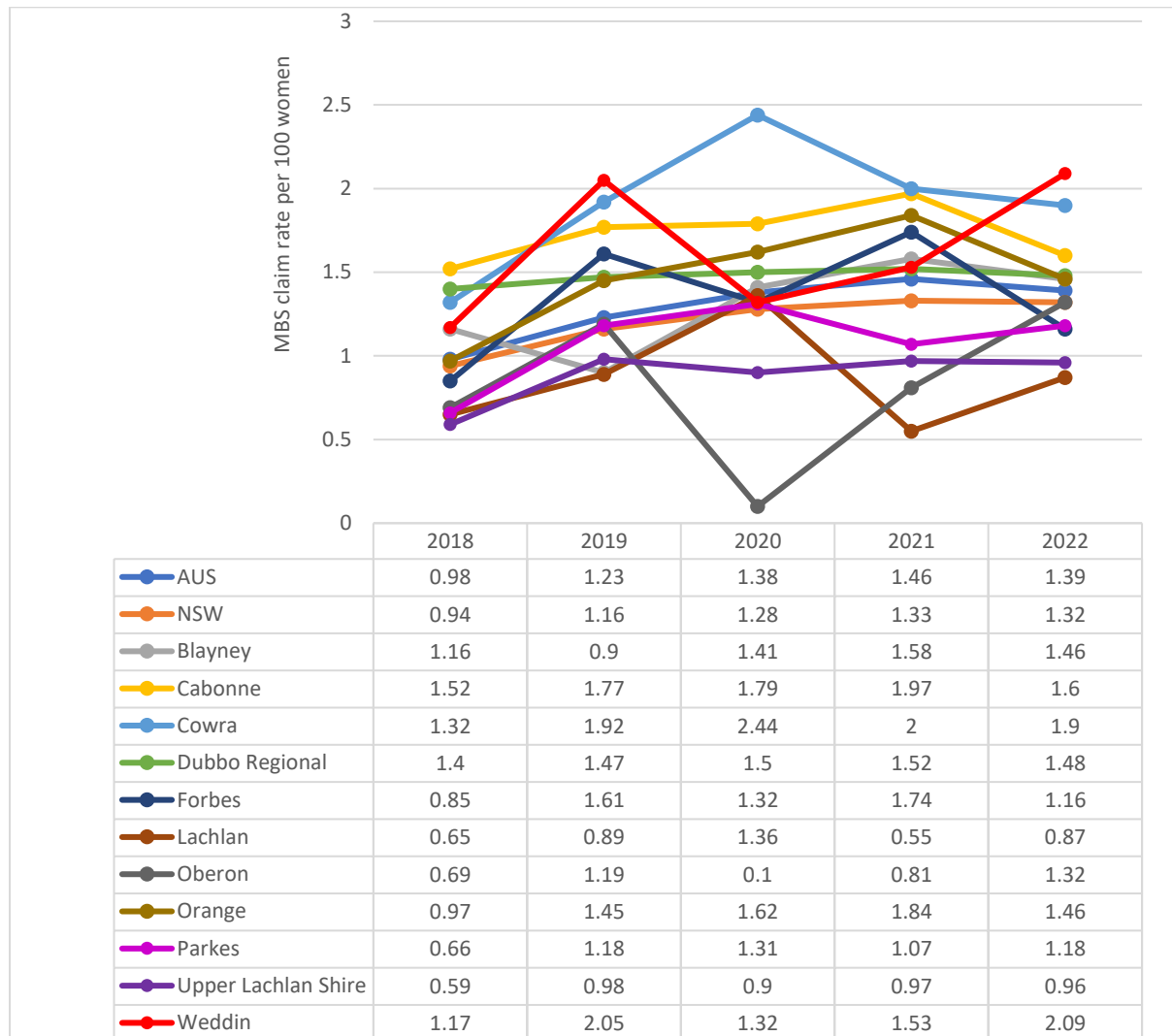


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

**Figure 48.** MBS claim rates for IUD use in Southern Western NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

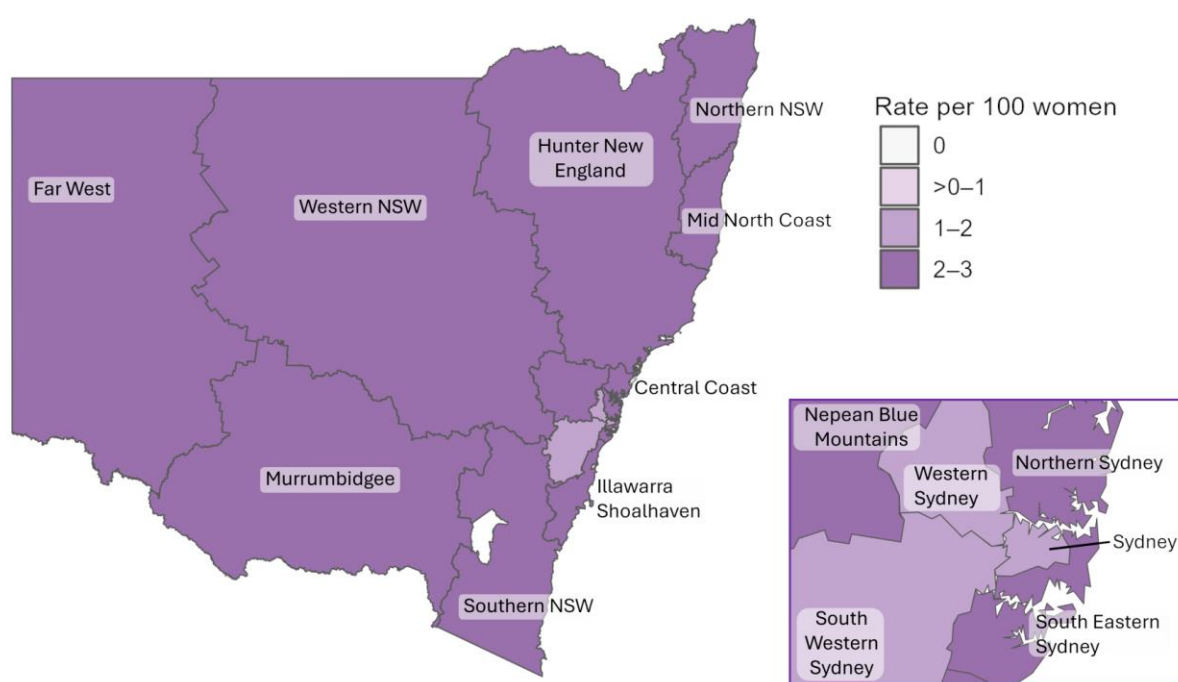
MBS item: 35503

### 3.8 Claim rates for IUD across all NSW in 2022

#### 3.8.1 Claim rates for IUD across all NSW LHDs in 2022

In 2022, PBS claim rates across all NSW LHDs varied, ranging from 1.5 per 100 women aged 15-49 years (light purple) to 3.0 per 100 women (dark purple) (Map 1). Claim rates were higher in more regional areas, such as Murrumbidgee and Hunter New England, and lower in metropolitan areas like Southwestern Sydney and Western Sydney.

**Map 1.** PBS claim rates for intrauterine contraception across all NSW LHDs, among women aged 15-49 years in 2022



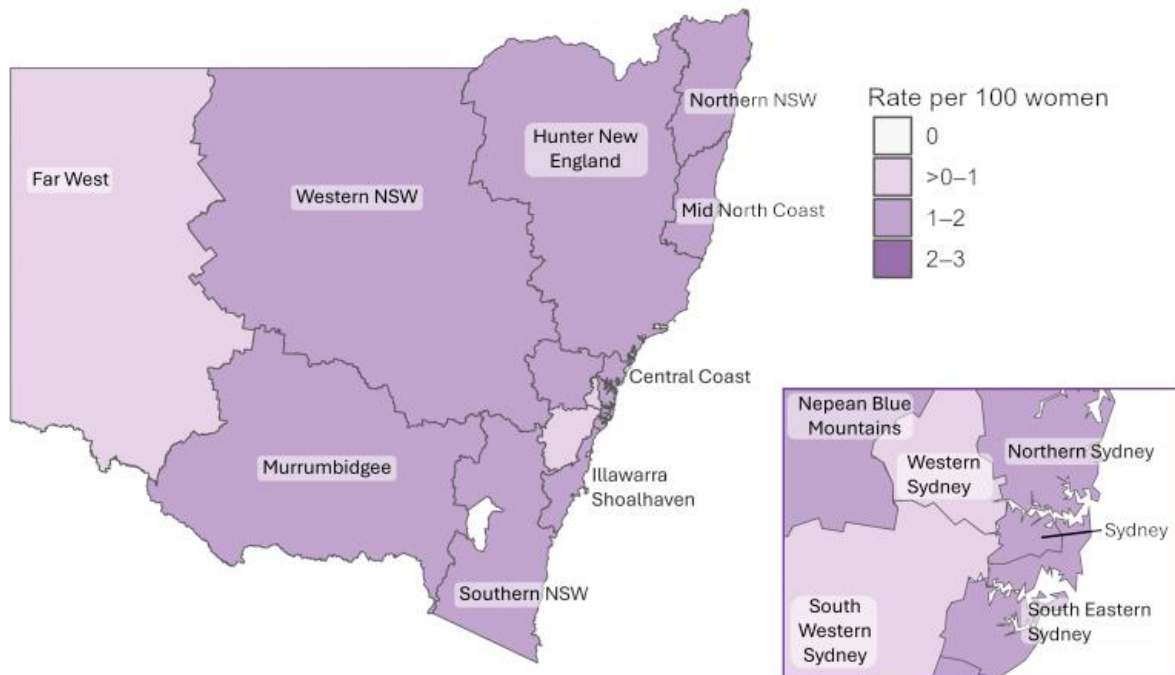
Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

In 2022, MBS claim rates across all NSW LHDs ranged from 0.9 per 100 women aged 15-49 years (light purple) to 1.7 per 100 women (dark purple) (Map 2). Similar to PBS claim rate, MBS claim rates were also higher in more regional areas, such as Murrumbidgee and Hunter New England, and lower in metropolitan areas like Southwestern Sydney and Western Sydney.

**Map 2.** MBS claim rates for intrauterine contraception across all NSW LHDs, among women aged 15-49 years in 2022



Source: Australian Government. Services Australia. Data available on request

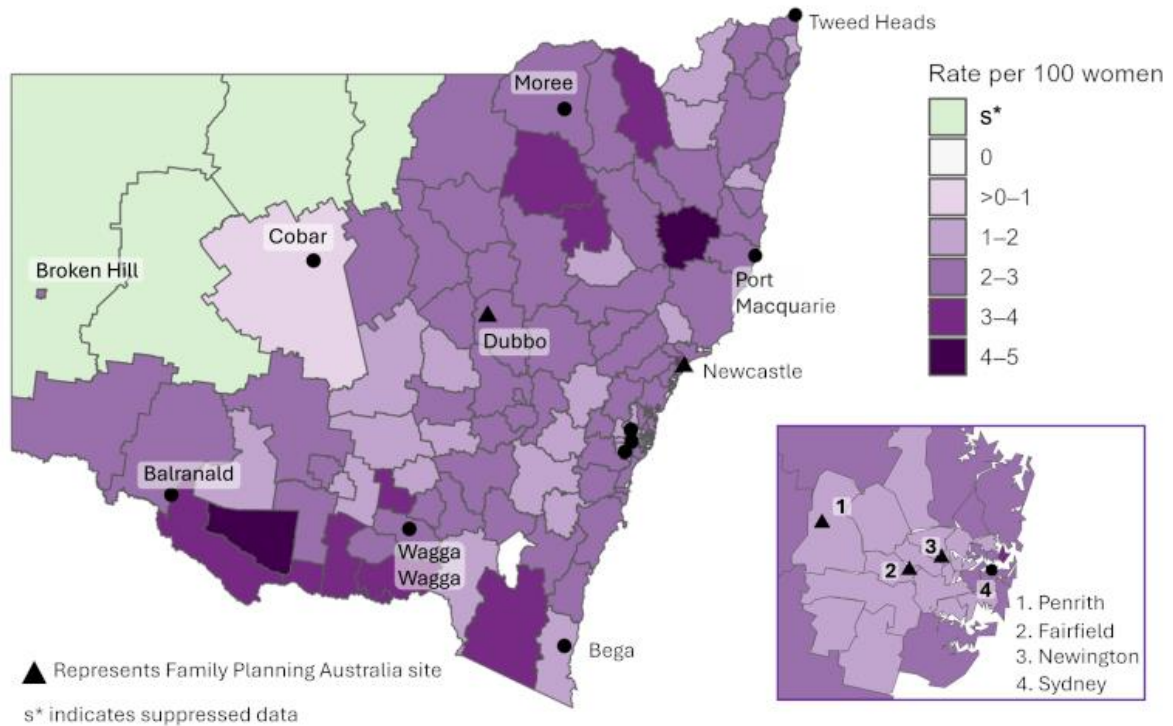
Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.8.2 Claim rates for IUD across all NSW LGAs in 2022

In 2022, PBS claim rates across all NSW LGAs varied, ranging from 1.0 per 100 women aged 15-49 years (light purple) to 5.0 per 100 women (dark purple) (Map 3). Claim rates were higher in some regional LGAs such as Walcha and Edward River, and lower in metropolitan areas like Fairfield and Cumberland. Only four LGAs had suppressed data on Mirena® but there were 40 LGAs had suppressed data on Kyleena®, resulting in four LGAs with the total suppressed data (light green colour).

**Map 3.** PBS claim rates for intrauterine contraception across all NSW LGAs, among women aged 15-49 years in 2022



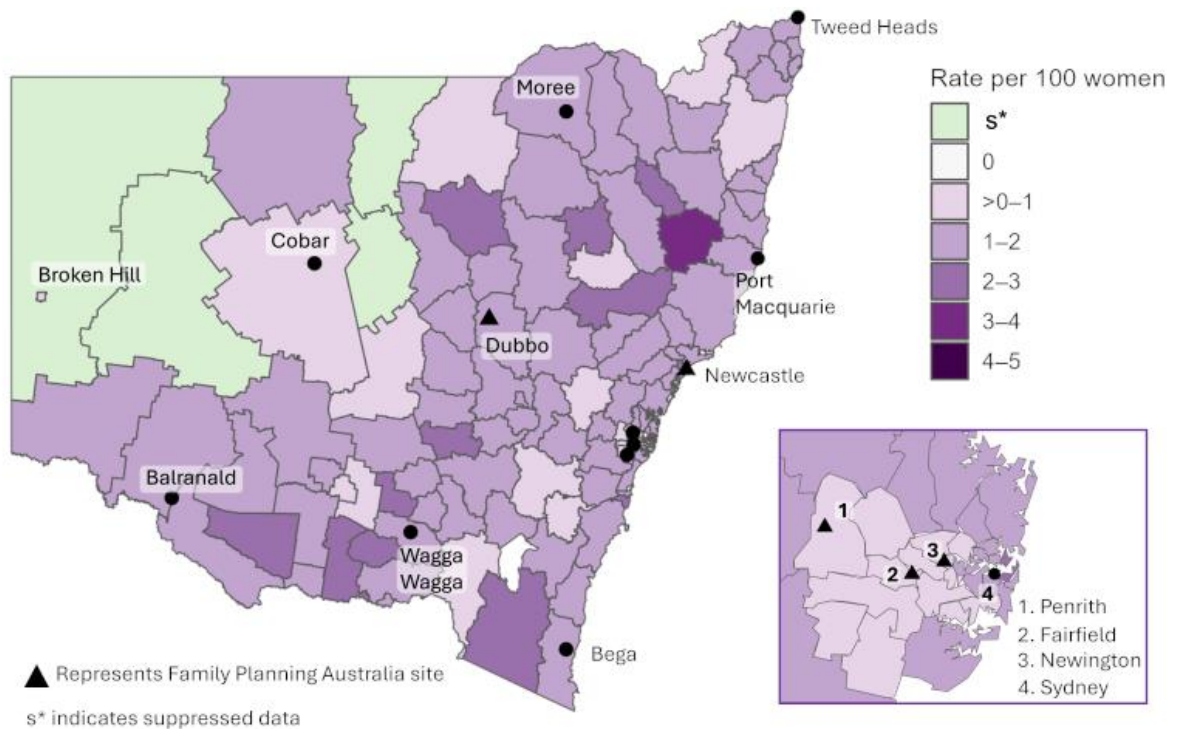
Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Items: 8633J (Mirena®) & 11909T (Kyleena®)

In 2022, MBS claim rates across all NSW LGAs ranged from 0.5 per 100 women aged 15-49 years (light purple) to 3.9 per 100 women (dark purple) (Map 4). Claim rates were higher in some regional LGAs such as Walcha and Federation, and lower in areas like Goulburn Mulwaree and Lithgow. Only four LGAs had suppressed MBS data (light green colour).

**Map 4.** MBS claim rates for intrauterine contraception across all NSW LGAs, among women aged 15-49 years in 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS item: 35503

### 3.9 Claim rates for IUD removal

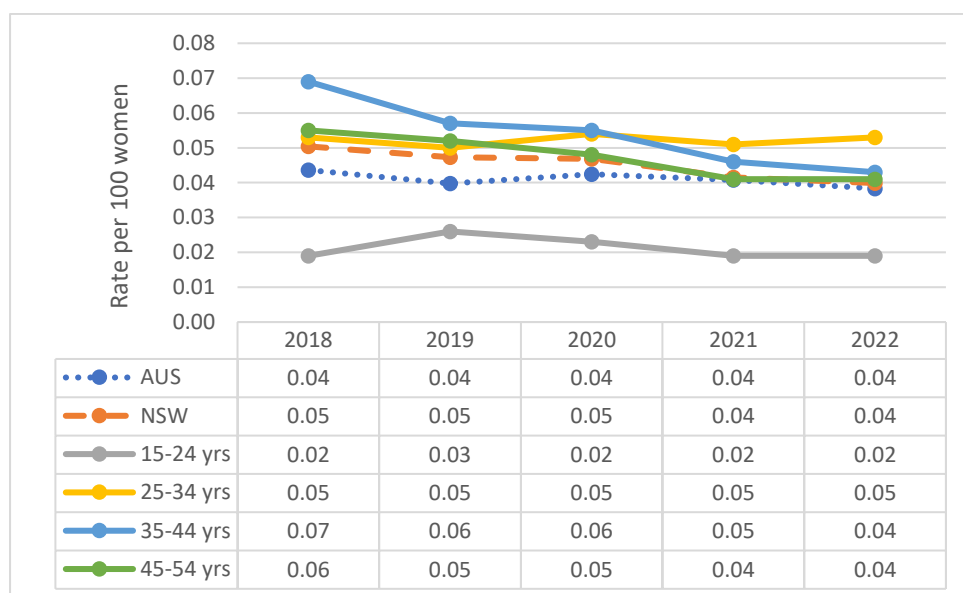
Due to the significant number of women aged 50 to 54 years who had IUD removals, this age group was included in the analysis. The MBS IUD removal item can only be claimed when an IUD is removed under general anaesthetic, therefore data should be interpreted with caution. Between 2018 and 2022, a total of 15,207 MBS claim rates for IUD removal were recorded in Australia. Of these, NSW accounted for more than one-third (5,215 or 34%). The ratio of removal claims to insertion claims was 3.9% for Australia and 4.6% for NSW. The cost for removal claims was \$243,452.

The IUD removal rate per 100 women aged 15-54 years in NSW decreased from 0.05 in 2018 to 0.04 in 2022. Removal rates for NSW were lower than the national rates between 2018 and 2020 but were similar to the national rate in 2021 and 2022 (0.04 per 100 women aged 15-54 years).

By age group, the IUD removal rate was lowest among women aged 15-24 years (0.02 per 100 women in 2022) and highest among women aged 25-34 years (0.05 per 100 women in

2022). The removal rate per 100 women decreased among the age groups 35-44 years (from 0.07 in 2018 to 0.04 in 2022) and 45-54 years (from 0.06 in 2018 to 0.04 in 2022) (Figure 49).

**Figure 49.** IUD removal rate in NSW and Australia between 2018 and 2022



Source:

Australian Government. Services Australia. Medicare Item Reports.

[http://medicarestatistics.humanservices.gov.au/statistics/mbs\\_item.jsp](http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp)

Australian Bureau of Statistics. <https://www.abs.gov.au/statistics/people/population/population-clock-pyramid>

Note: Rate per 100 women aged 15-54 years

MBS item: 35506

### 3.10 Estimated prevalence of IUD current users across all NSW in 2022

In 2022, it was estimated that there were 462,687 current IUD users in Australia, representing a prevalence rate of 7.7%. In NSW, there were 129,557 current IUD users, with a lower prevalence rate of 6.9% compared to the national average.

**Table 2.** Estimated prevalence of IUD current users across all NSW

	2022	2021	2020	2019	2018	Total	Rate (%)
<b>AUSTRALIA</b>							
Number of females 15-49*	6,039,405						
Number of PBS claims	139,876	151,112	138,996	129,877	105,195	665,056	
Number of remaining current users							
Average	117,496	116,356	101,467	77,926	49,442	462,687	7.7

Upper Limit	123,091	119,378	101,467	77,926	49,442	471,304	7.8
Lower Limit	104,907	108,801	72,278	64,939	42,078	393,002	6.5
NSW							
Number of females 15-49*	1,877,642						
Number of PBS claims	39,715	41,471	39,062	36,264	29,767	186,279	
Number of remaining current users							
Average	33,361	31,933	28,515	21,758	13,990	129,557	6.9
Upper Limit	34,949	32,762	28,515	21,758	13,990	131,975	7.0
Lower Limit	29,786	29,859	20,312	18,132	11,907	109,996	5.9

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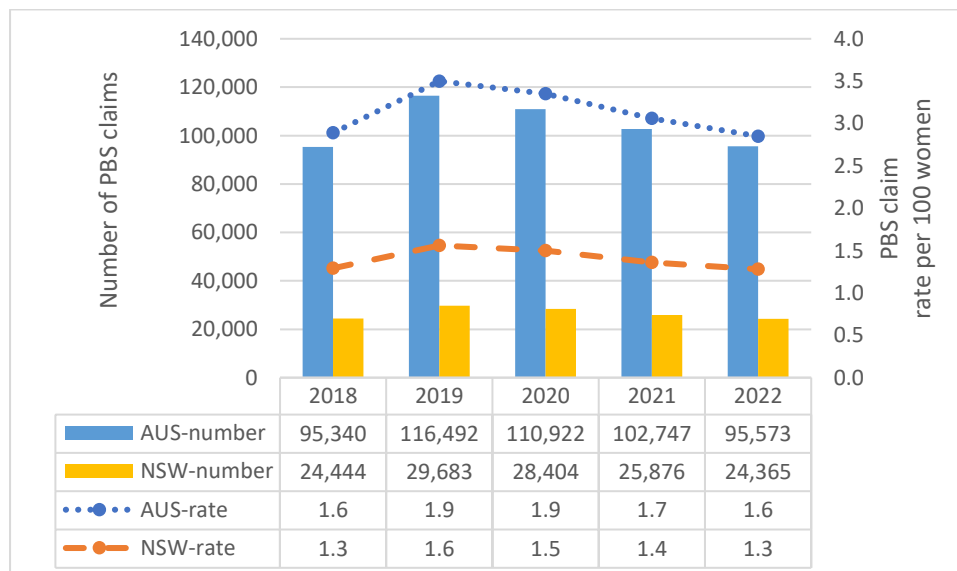
\* Australian Bureau of Statistics. Regional population by age and sex, 2022

## 4. Claim rates for implant

### 4.1 Claim rates for implant in Australia

Between 2018 and 2022, there were 521,074 PBS claims for the etonogestrel implant and 466,260 MBS claims for hormonal insertions in Australia. The ratio between MBS and PBS claims was 89%. Both PBS and MBS claim rates increased between 2018 and 2019 but have since consistently declined. For example, the PBS claim rate per 100 women increased from 1.6 in 2018 to 1.9 in 2019 and then declined to 1.6 in 2022 (Figures 50 and 51). In five years, the Medicare cost for PBS claim rates for implant in Australia was \$80.8 million and for MBS claims was \$20.9 million, making the total government expenditure cost \$101.7 million.

**Figure 50.** PBS claim rates for etonogestrel implant in Australia and in NSW among women aged 15-49 years between 2018 and 2022

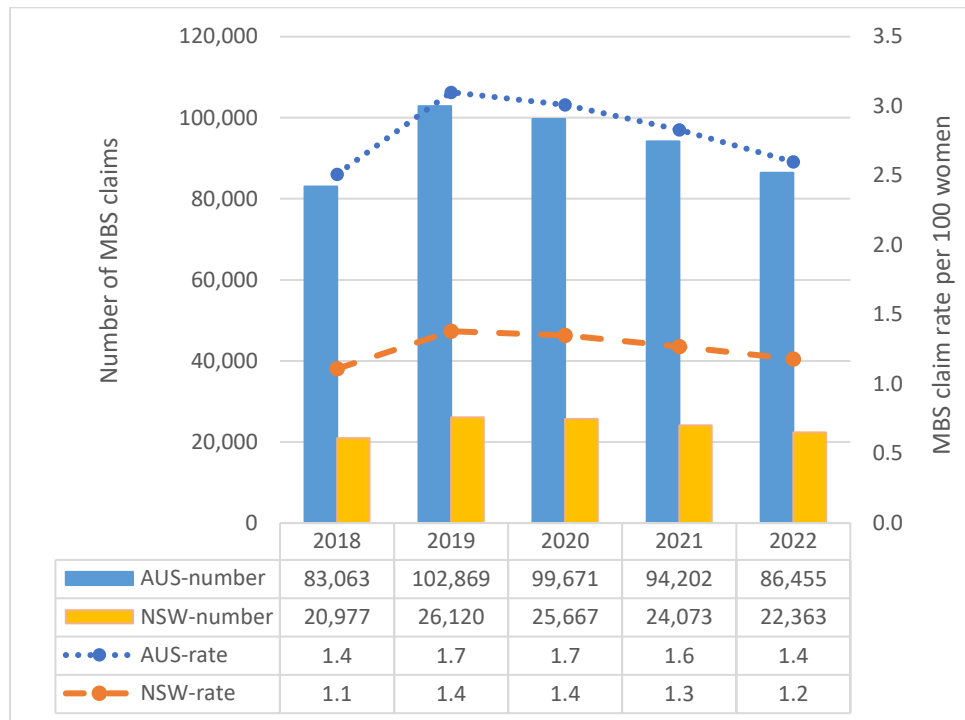


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

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**Figure 51.** MBS claim rates for hormonal implant insertion in Australia and in NSW among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

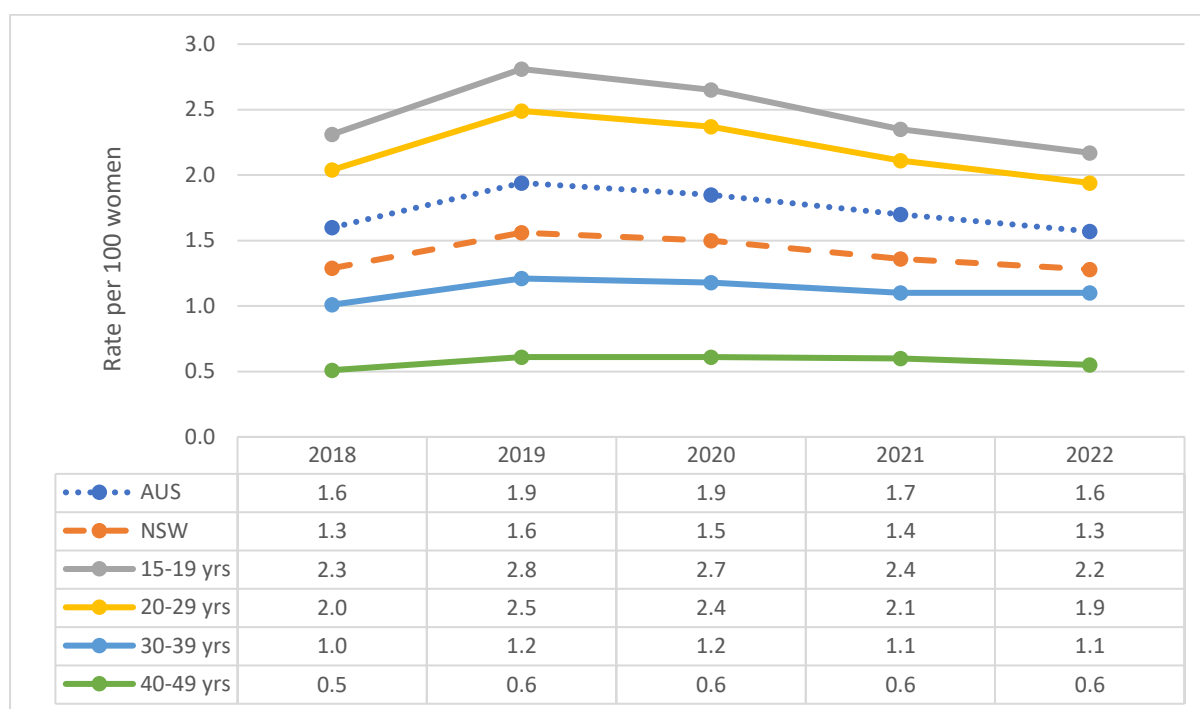
#### 4.2 Claim rates for implant in NSW

There were 132,772 PBS claims for the etonogestrel implant and 119,200 MBS claim rates for hormonal implant insertion in NSW between 2018 and 2022. The ratio between MBS and PBS claims was 90%. The trends in NSW followed the trends for Australia. For example, the PBS claim rates for NSW increased from 1.3 per 100 women in 2018 to 1.6 per 100 women in 2019 and then declined to 1.3 per 100 women in 2022. Both PBS and MBS claim rates for NSW were lower than that of Australia throughout the period 2018 to 2022 (Figures 50 and 51). In five years, the cost for PBS claims in NSW was \$20.1 million and for MBS claims was \$5.5 million (total cost of \$25.6 million).

### 4.3 Claim rates for implant in NSW by age group

The trend seen nationally, and in NSW, was observed across all age groups. There was an increase in the rate of claim rates for implant from 2018 to 2019 followed by reductions to 2022. The highest rate of PBS claim rates for implant were among women aged 15 to 19 (2.2 per 100 women in 2022) and the lowest among those aged 40 to 49 (0.6 per 100 women) (Figure 52). The trend in MBS claim rates was similar to the PBS claim rates but with lower reductions in rates after 2019 particularly among older women (Figure 53).

**Figure 52.** PBS claim rates for etonogestrel implant in NSW by age group, among women aged 15-49 years between 2018 and 2022

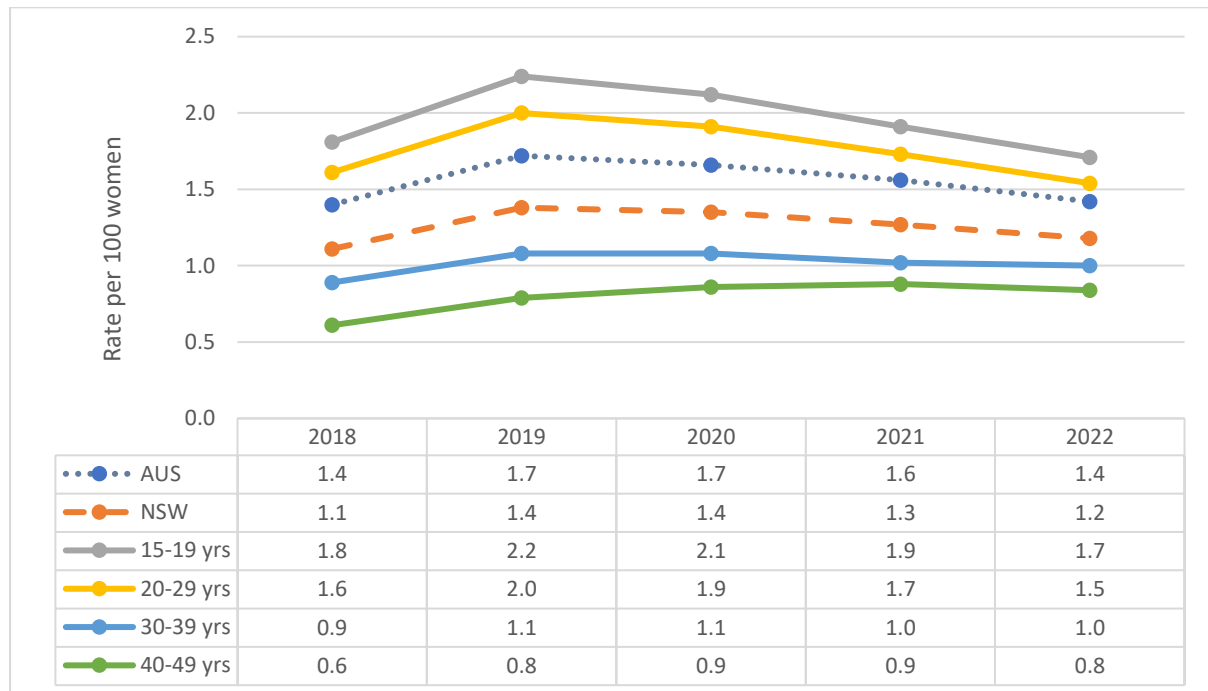


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 53.** MBS claim rates for hormonal implant in NSW by age group, among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

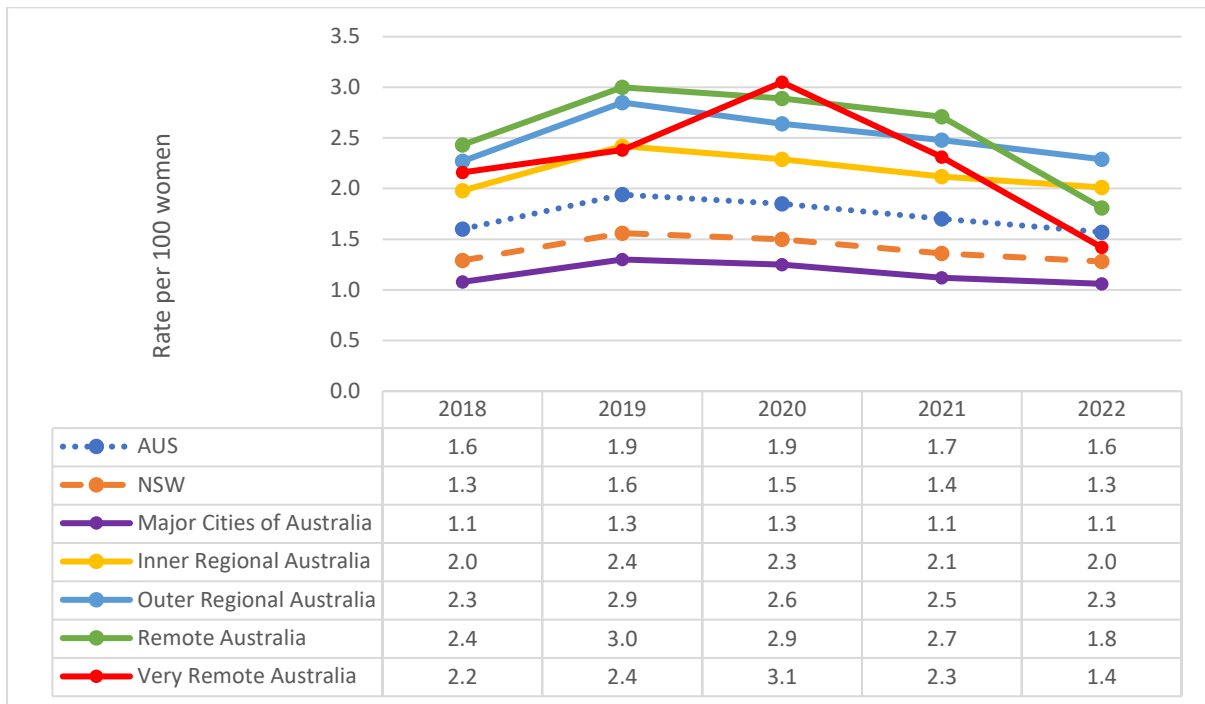
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.4 Claim rates for implant in NSW by remoteness

The PBS and MBS claim rates for etonogestrel implants followed similar patterns with women living in major cities consistently having the lowest rates compared to women in regional and remote areas. For example, in 2022 the PBS claim rate among women from major cities was 1.1 per 100 women and 2.3 per 100 women for women from outer regional areas (Figures 54 and 55).

**Figure 54.** PBS claim rates for etonogestrel implant in NSW by remoteness, among women aged 15-49 years between 2018 and 2022

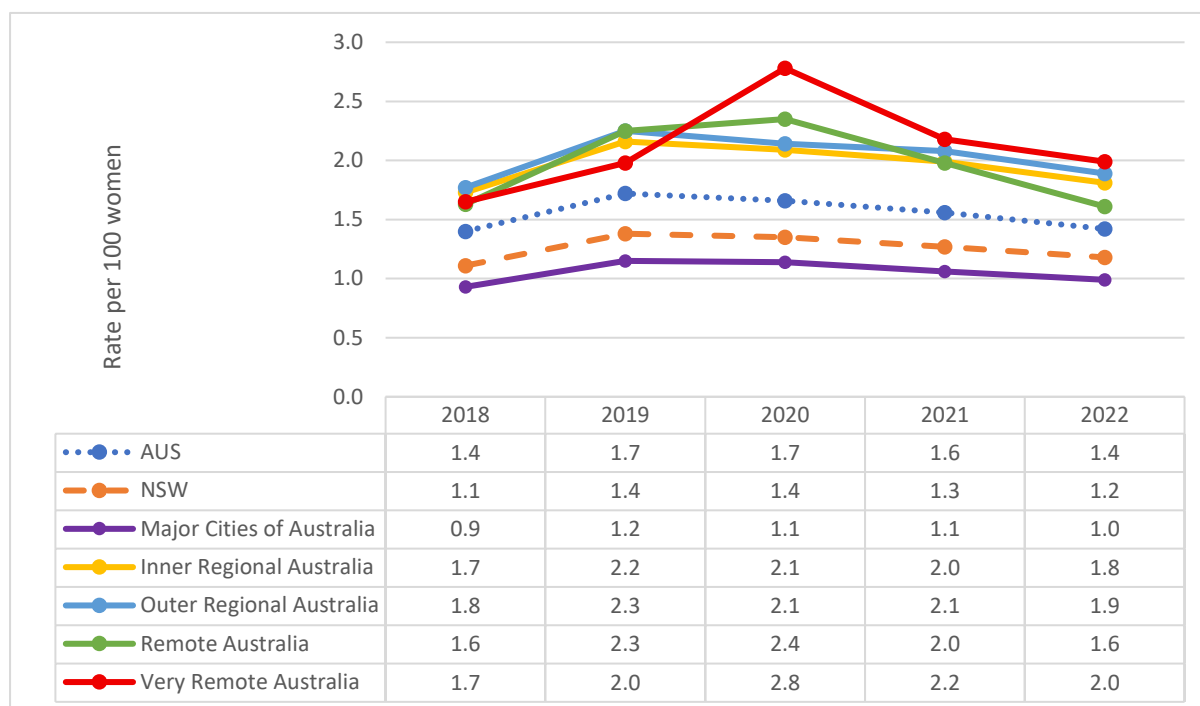


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 55.** MBS claim rates for hormonal implant in NSW by remoteness, among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

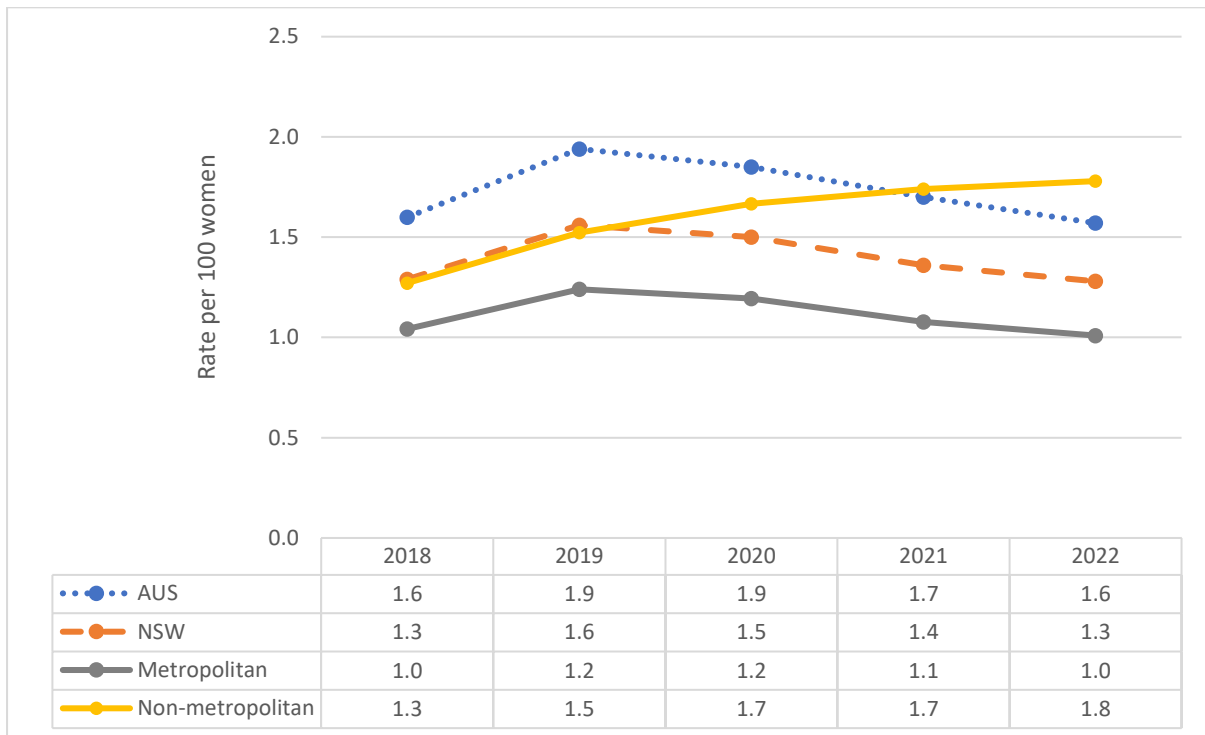
MBS Item: 14206

#### 4.5 Claim rates for implant in NSW metropolitan and non-metropolitan LHDs

The PBS and MBS claim rates for implants in metropolitan LHDs increased between 2018 and 2019, then decreased in the years after. The PBS and MBS claim rates for implants in non-metropolitan LHDs continuously increased between 2018 and 2022 and were higher than that of metropolitan LHDs.

In 2022, the PBS claim rates for etonogestrel implants in non-metropolitan LHDs was 1.8 per 100 women compared to 1.0 for metropolitan LHDs and the MBS claim rates for hormonal implants in non-metropolitan LHDs was 1.6 per 100 women compared to 1.0 in metropolitan LHDs (Figures 56 and 57).

**Figure 56.** PBS claim rates for etonogestrel implant in NSW metropolitan and non-metropolitan Local Health Districts, among women aged 15-49 years between 2018 and 2022

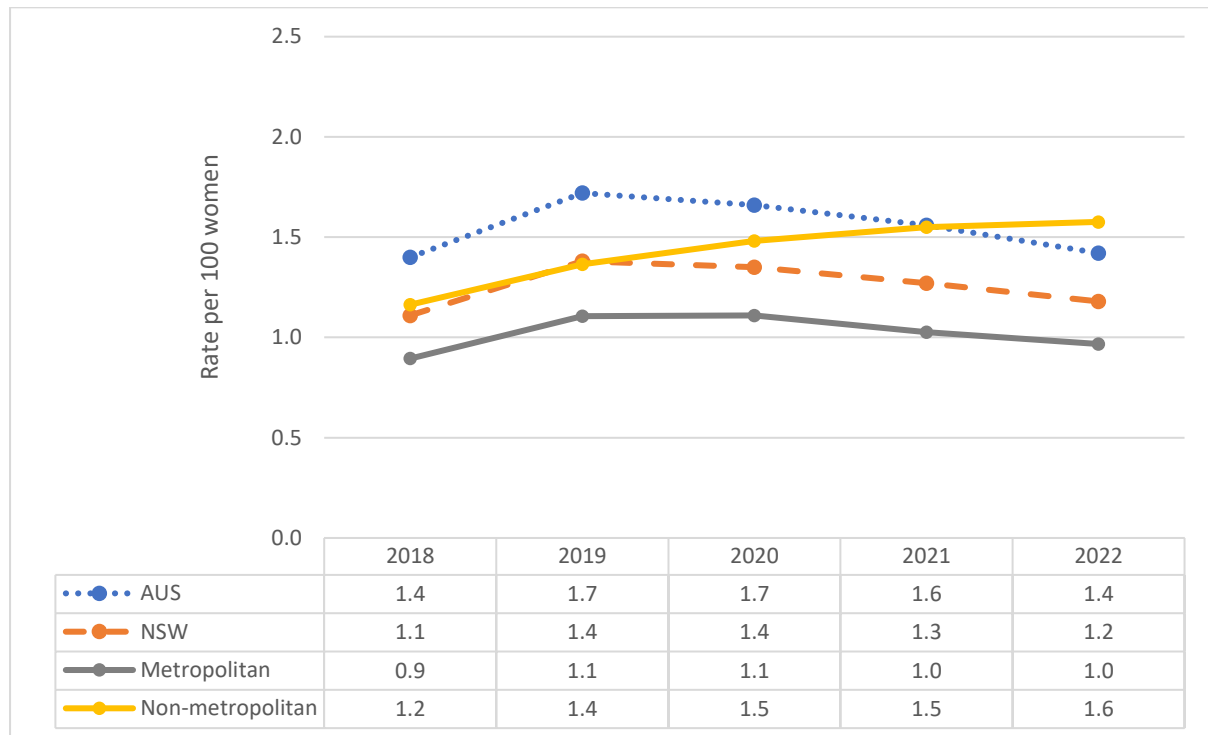


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 57.** MBS claim rates for hormonal implant in NSW metropolitan and non-metropolitan Local Health Districts, among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

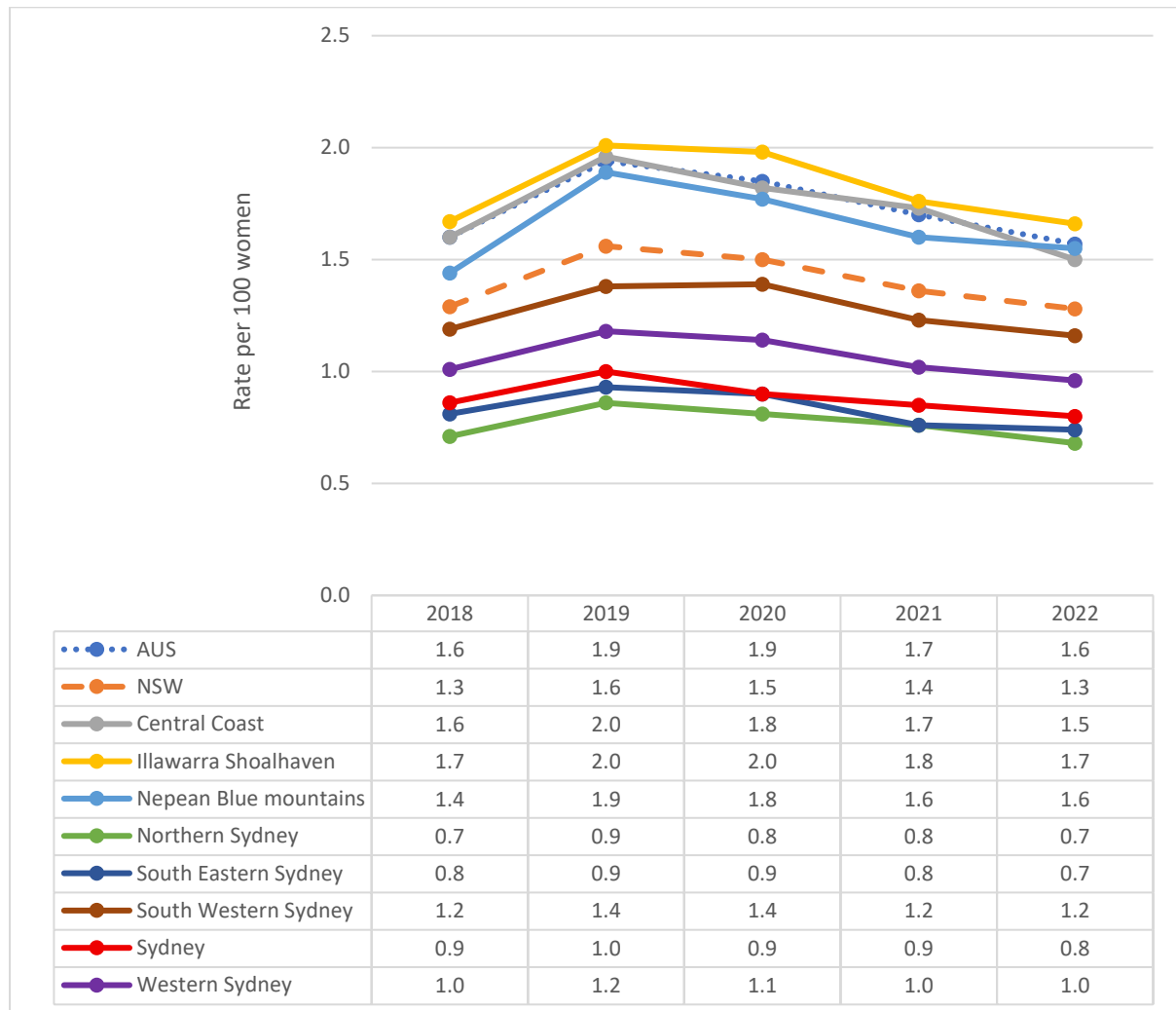
MBS Item: 14206

#### 4.5.1 Claim rates for implant in metropolitan NSW LHDs

The PBS claim rates for etonogestrel implants in all metropolitan LHDs increased in 2019 but decreased in the years after. The MBS claim rate in most metropolitan LHDs also followed the similar pattern, except in Southwestern Sydney where the peak was in 2020 (1.3 per 100 women). In some LHDs, both PBS and MBS claim rates in 2022 were lower than those in 2018.

In 2022, the PBS claim rates for etonogestrel implants was highest in Illawarra Shoalhaven (1.7 per 100 women) and was lowest in Northern Sydney (0.7 per 100 women). The MBS rate for hormonal implants was highest in Nepean Blue mountains LHD (1.7 per 100 women) and was lowest in Southeastern Sydney (0.7 per 100 women) (Figures 58 and 59).

**Figure 58.** PBS claim rates for etonogestrel implant in NSW metropolitan Local Health Districts, among women aged 15-49 years between 2018 and 2022

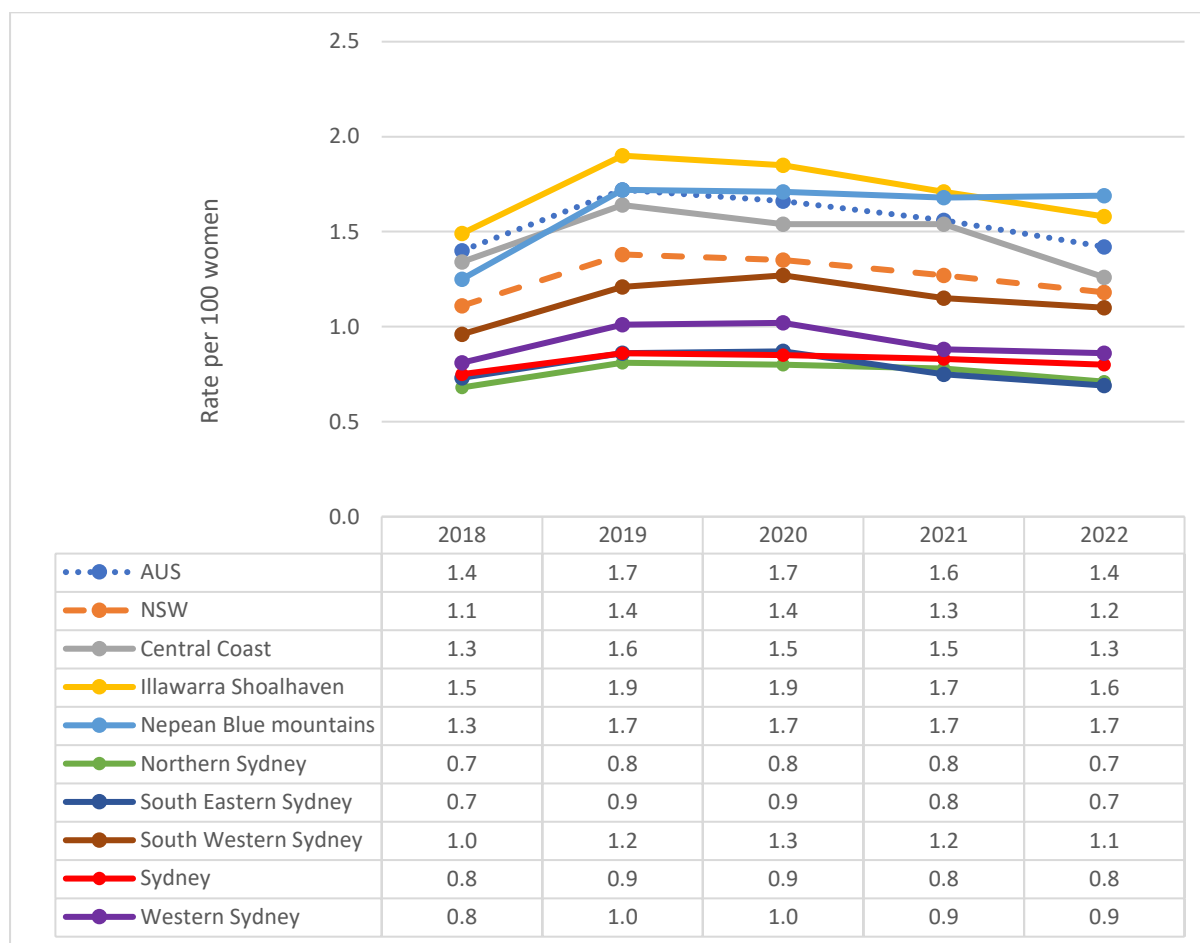


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 59.** MBS claim rates for hormonal implant in NSW metropolitan Local Health Districts, among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

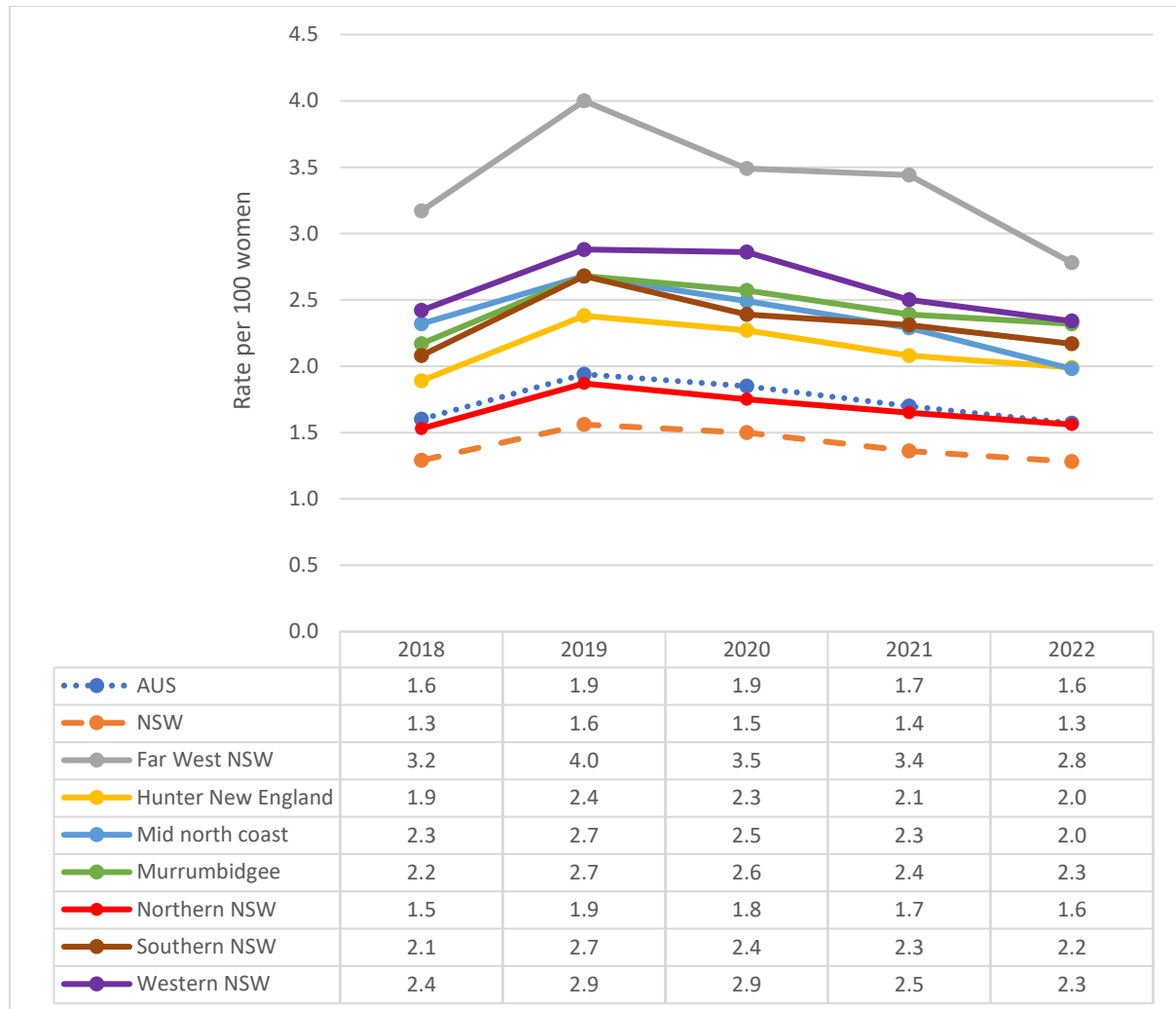
#### 4.5.2 Claim rates for implant in non-metropolitan NSW LHDs

The PBS claim rates for etonogestrel implants in all non-metropolitan LHDs increased in 2019 but decreased in the years after. The MBS claim rate for insertion of hormonal implants in most non-metropolitan LHDs also follow this pattern, except Western NSW and Mid North Coast had the highest rate in 2020 (2.5 per 100 women and 2.4 per 100 women, respectively). For both MBS and PBS claims, almost half of non-metropolitan LHDs had an overall decrease in the rate of claim rates for implants from 2018 to 2022.

In 2022, the PBS claim rates for etonogestrel implants was highest in Far West NSW (2.8 per 100 women) and was lowest in Northern NSW (1.6 per 100 women). The MBS rate was

highest in Western NSW (2.2 per 100 women) and was lowest in Northern NSW (1.3 per 100 women) (Figures 60 and 61).

**Figure 60.** PBS claim rates for etonogestrel implant in NSW non-metropolitan Local Health Districts, among women aged 15-49 years between 2018 and 2022

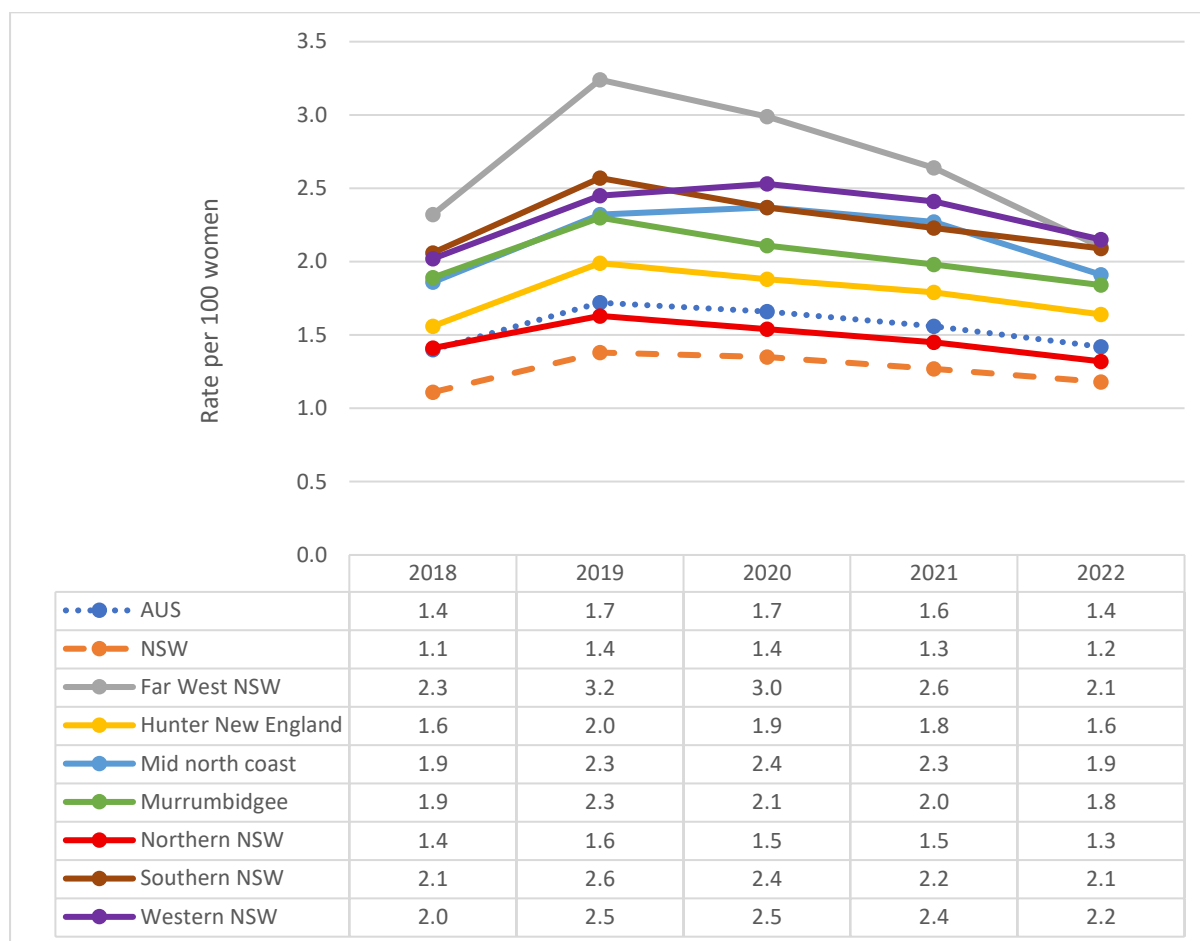


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 61.** MBS claim rates for etonogestrel implant in NSW non-metropolitan Local Health Districts, among women aged 15-49 years between 2018 and 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.6 Claim rates for implant in metropolitan NSW LHDs by LGA

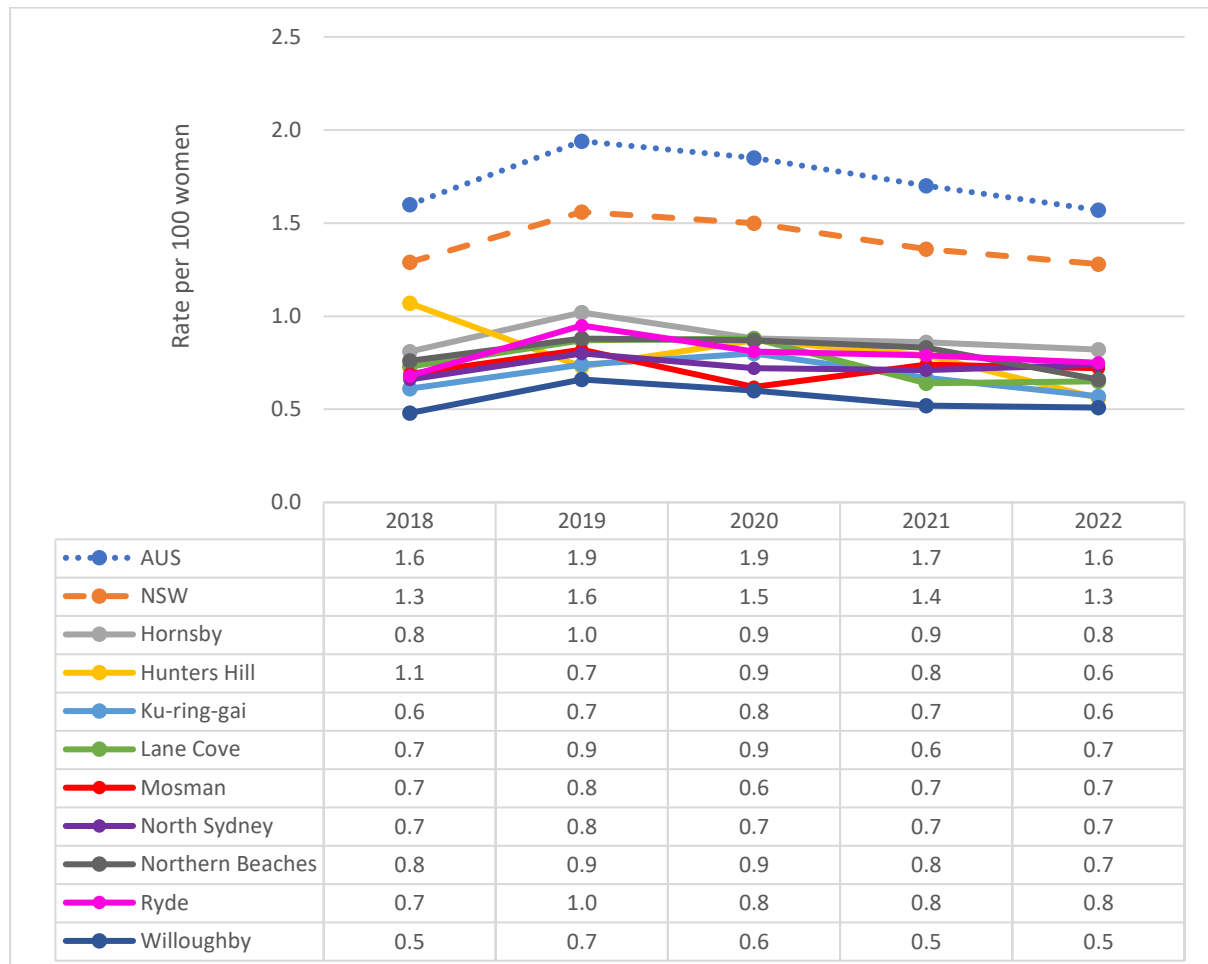
##### 4.6.1 Claim rates for implant in Northern Sydney LHD by LGA

The claim rates for all LGAs, except the MBS claim rates for Hunters Hill in 2021, were lower than the NSW average. All claim rates were lower than the national average. Most of the claim rate increased between 2018 and 2019 but declined since 2019, except for Hunters Hill, where PBS and MBS claim rates declined in 2019 then increased in 2020 but declined in the years after.

The claim rates for implants in 2022 were lowest in Willoughby LGA (PBS claim rate of 0.51 per 100 women and MBS rate of 0.43 per 100 women) and highest in Hornsby LGA (PBS claim rate of 1.28 per 100 women) and Hunters Hill (MBS rate of 1.21 per 100 women) as

seen in Figure 62. There was a sharp increase in MBS claim rates in Hunters Hill from 2020 to 2021, see Figure 63.

**Figure 62.** PBS claim rates for etonogestrel implants in Northern Sydney LHD by LGA, 2018 to 2022

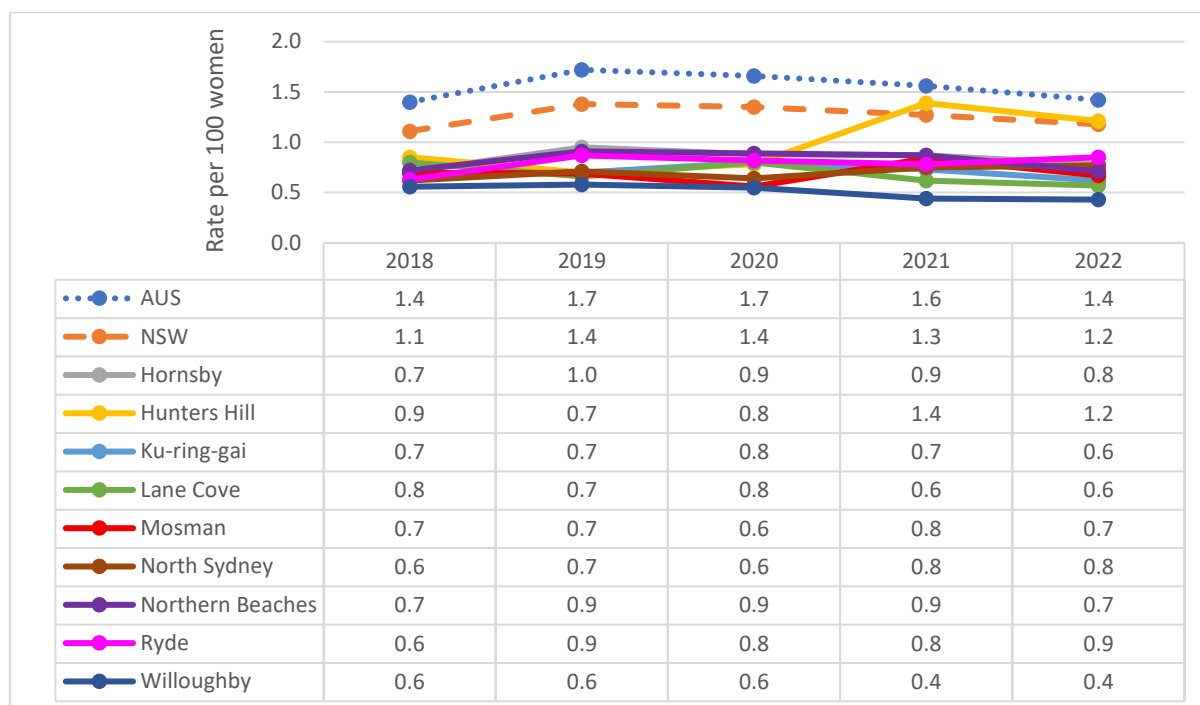


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 63.** MBS claim rates for insertion of hormonal implants in Northern Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

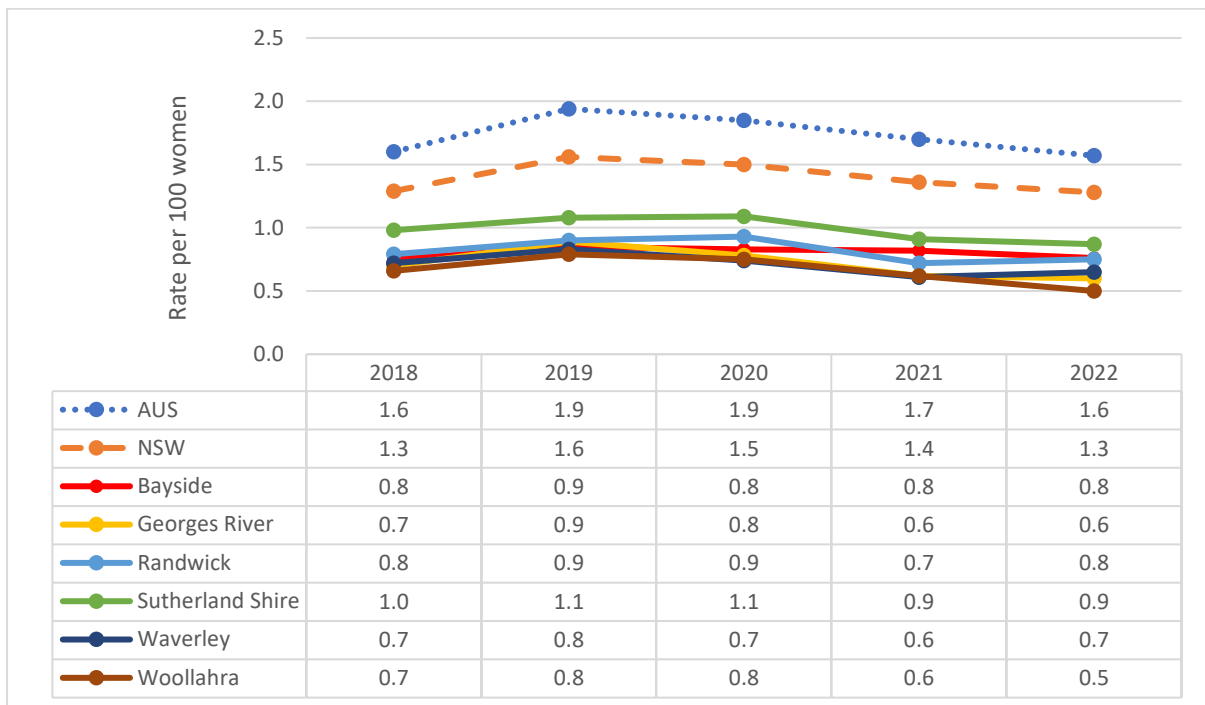
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.6.2 Claim rates for implant in South-Eastern Sydney LHD by LGA

The claim rates in all LGAs remained below the national and NSW rates between 2018 and 2022 (Figures 64 and 65), and all LGAs displayed a similar trend to the national and NSW averages (increases between 2018 and 2019 followed by decline). In 2022, both the PBS and MBS claim rate was lowest in Woollahra and highest in Sutherland Shire. However, there was little difference in the rate between these LGAs, as their claim rates ranged between 0.5 and 0.9 claims per 100 women aged 15-49.

**Figure 64.** PBS claim rates for implant in South-Eastern Sydney LHD by LGA, 2018 to 2022

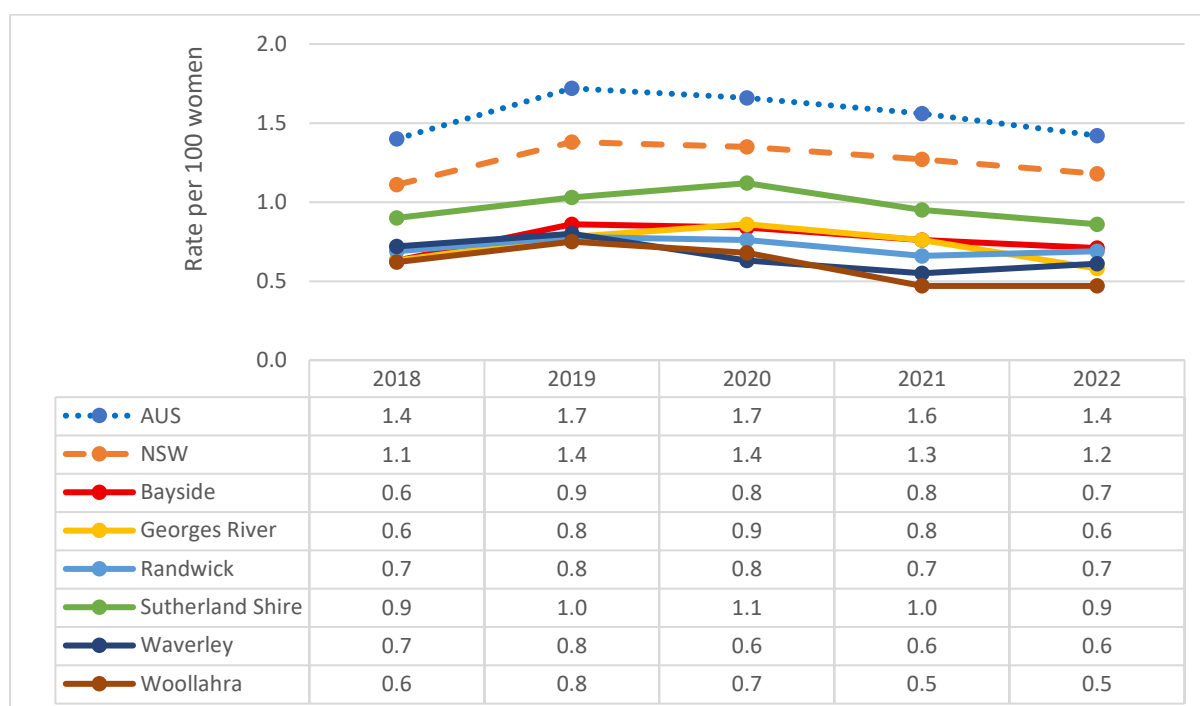


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 65.** MBS claim rates for implant in South-Eastern Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

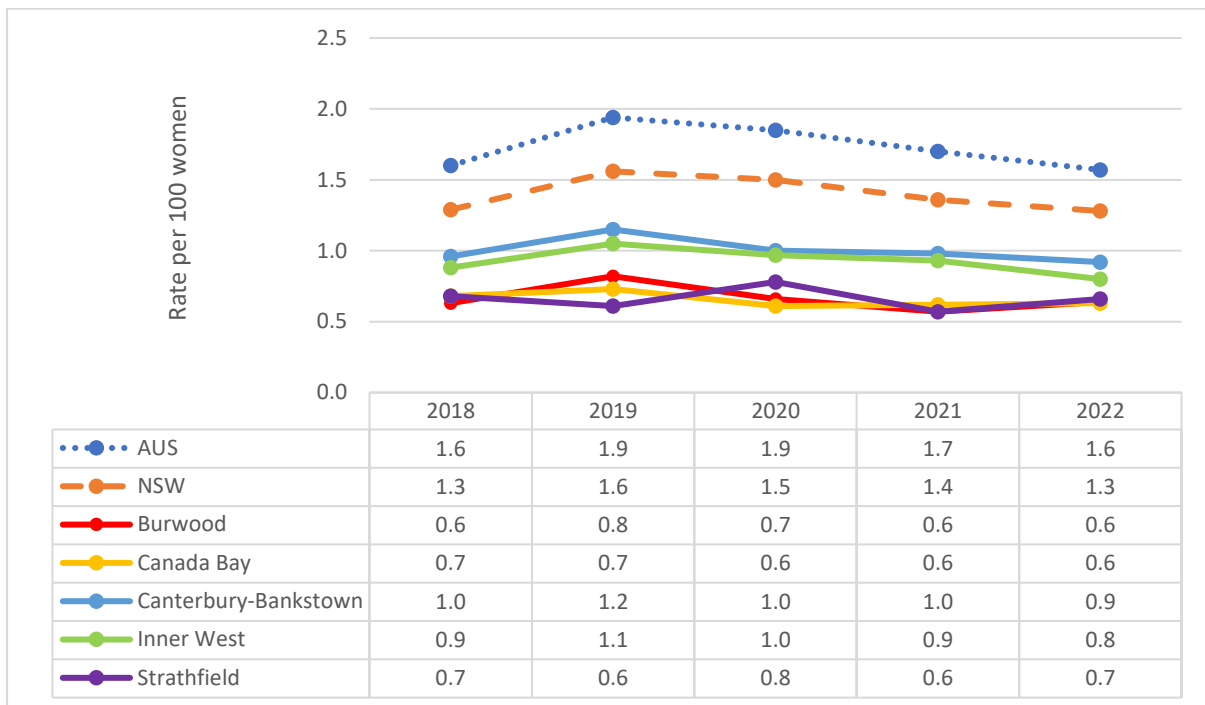
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.6.3 Claim rates for implant in Sydney LHD by LGA

Claim rates across all Sydney LHD LGAs were lower than the state and national averages. Except for Strathfield, PBS claim rates in other LGAs increased in 2019, then declined in the subsequent years (Figure 66). For MBS claim rates, there was an increase in 2019 across all LGAs, except Strathfield (Figure 67). However, only Canterbury-Bankstown LGA and Inner West LGA saw a decline in claim rates in the following years. In the remaining LGAs, MBS claim rates fluctuated after 2019. In 2022, the PBS claim rate was lowest in Canada Bay LGA and Burwood (0.63 and 0.64 per 100 women, respectively) and highest in Canterbury Bankstown (0.92 per 100 women). The claim rates remained below the NSW average throughout the period.

**Figure 66.** PBS claim rates for implant in Sydney LHD by LGA, 2018 to 2022

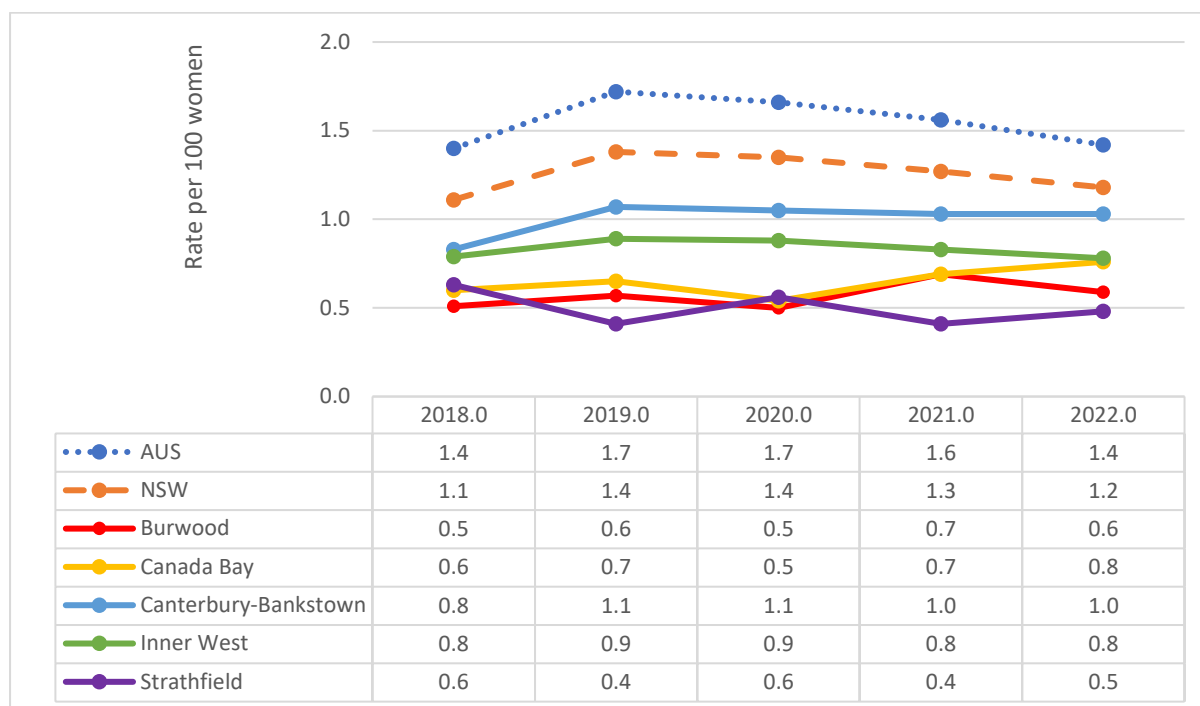


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 67.** MBS claim rates for hormonal implants in Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

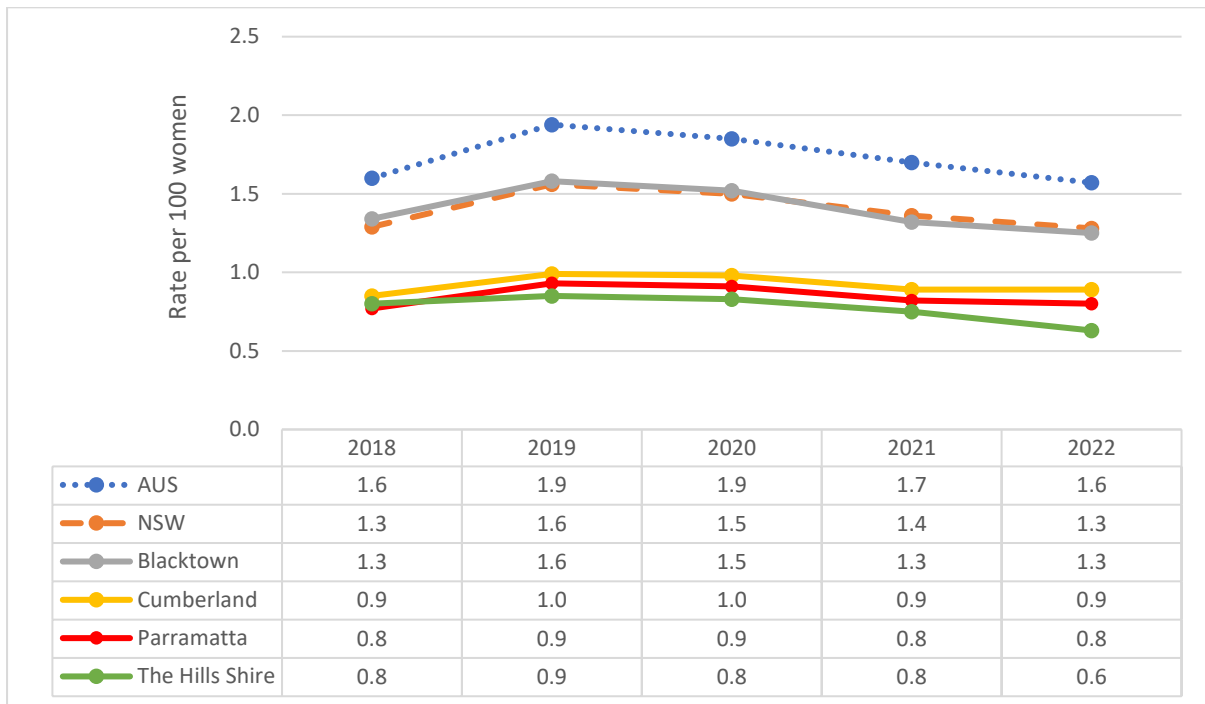
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.6.4 Claim rates for implant in Western Sydney LHD by LGA

Except for PBS claim rates in Blacktown LGA, which were similar to those of NSW, all PBS and MBS claim rates in the LGAs within the Western Sydney LHD were lower than the state and national averages (Figures 68 and 69). Claim rates across these LGAs followed the national and state trends, increasing in 2019 and declining afterward. In 2022, the claim rate was lowest in the Hills Shire LGA (e.g. PBS claim rate of 0.63 per 100 women) and highest in Blacktown (1.25 per 100 women).

**Figure 68.** PBS claim rates for etonogestrel implant in Western Sydney LHD by LGA, 2018 to 2022

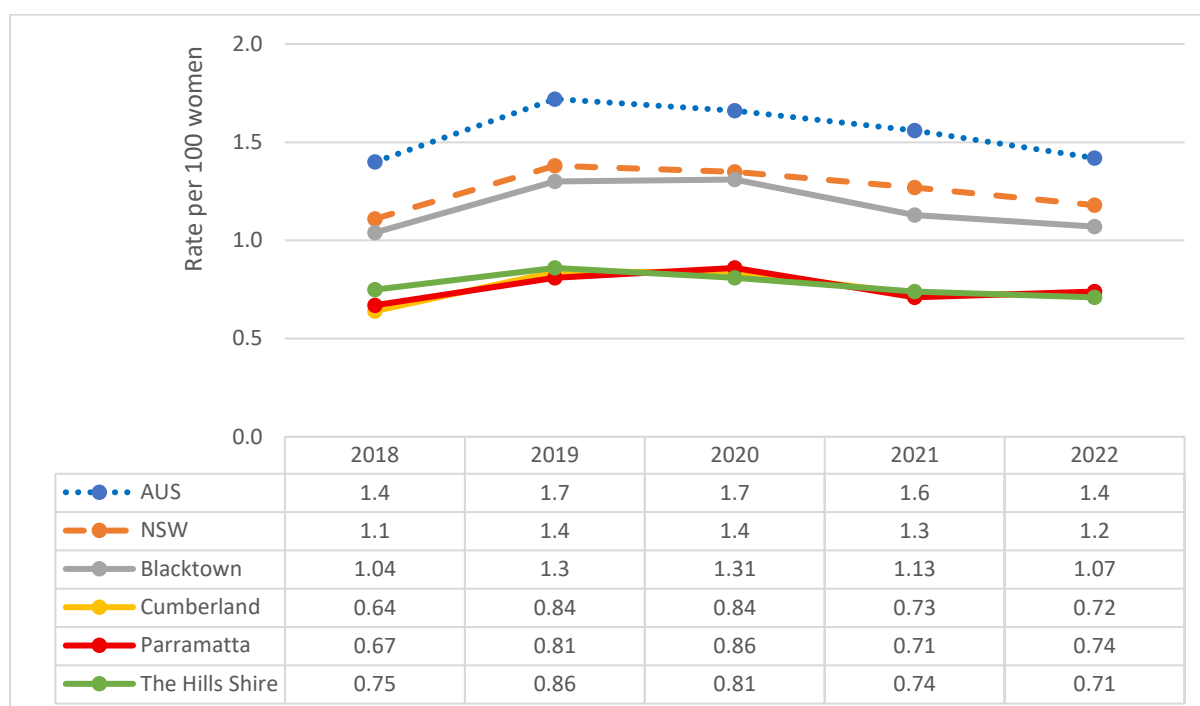


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 69.** MBS claim rates for implants in Western Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

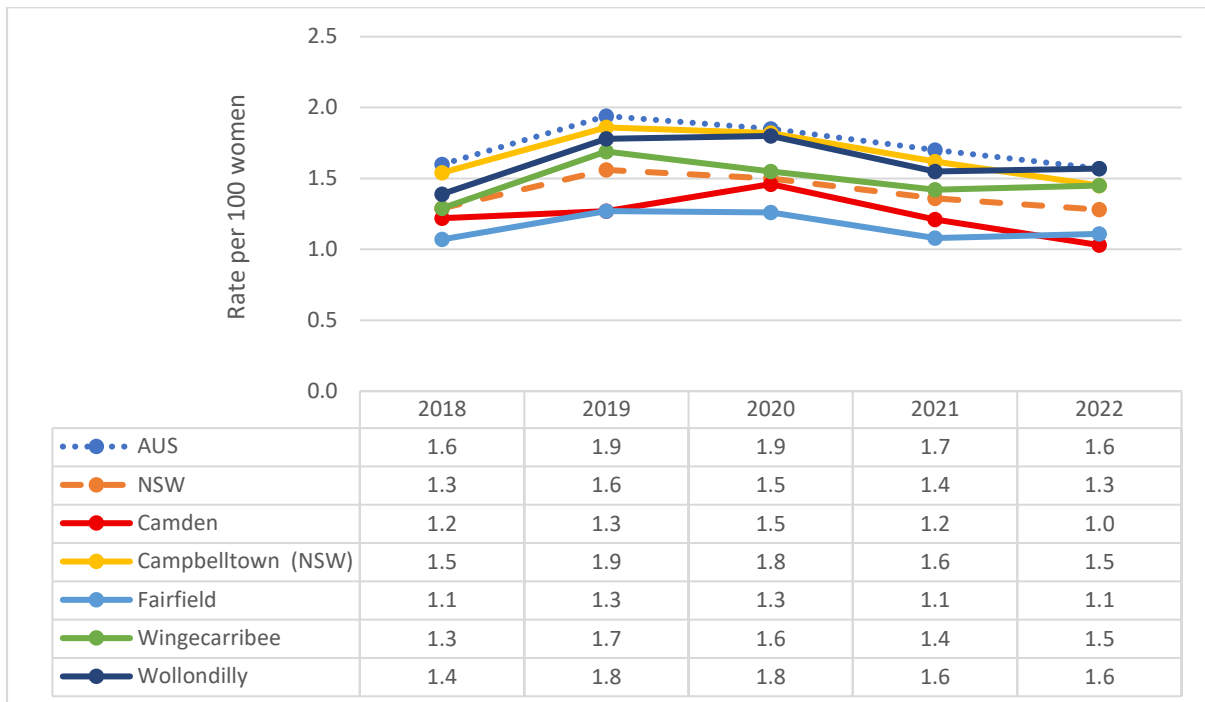
MBS Item: 14206

#### 4.6.5 Claim rates for implant in Southwestern Sydney LHD by LGA

Except for the PBS rate in Camden LGA, which peaked in 2020, other PBS claim rates followed the overall trend of increasing in 2019 before declining thereafter (Figure 70). For MBS claim rates, only Campbelltown LGA followed this trend. Wollondilly LGA's MBS claim rate showed a continuous increase, while Camden's MBS claim rate mirrored the PBS claim rate trend, peaking in 2020 (Figure 71).

In 2022, the PBS claim rate was lowest in Camden (1.03 per 100 women), and the MBS claim rate was lowest in Fairfield LGA (0.95 per 100 women). Wollondilly had the highest claim rates for both PBS and MBS (1.57 and 1.73 per 100 women, respectively). The claim for Wollondilly and Campbelltown remained above the average for NSW between 2018 and 2022.

**Figure 70.** PBS claim rates for etonogestrel implant in South-Western Sydney LHD by LGA, 2018 to 2022

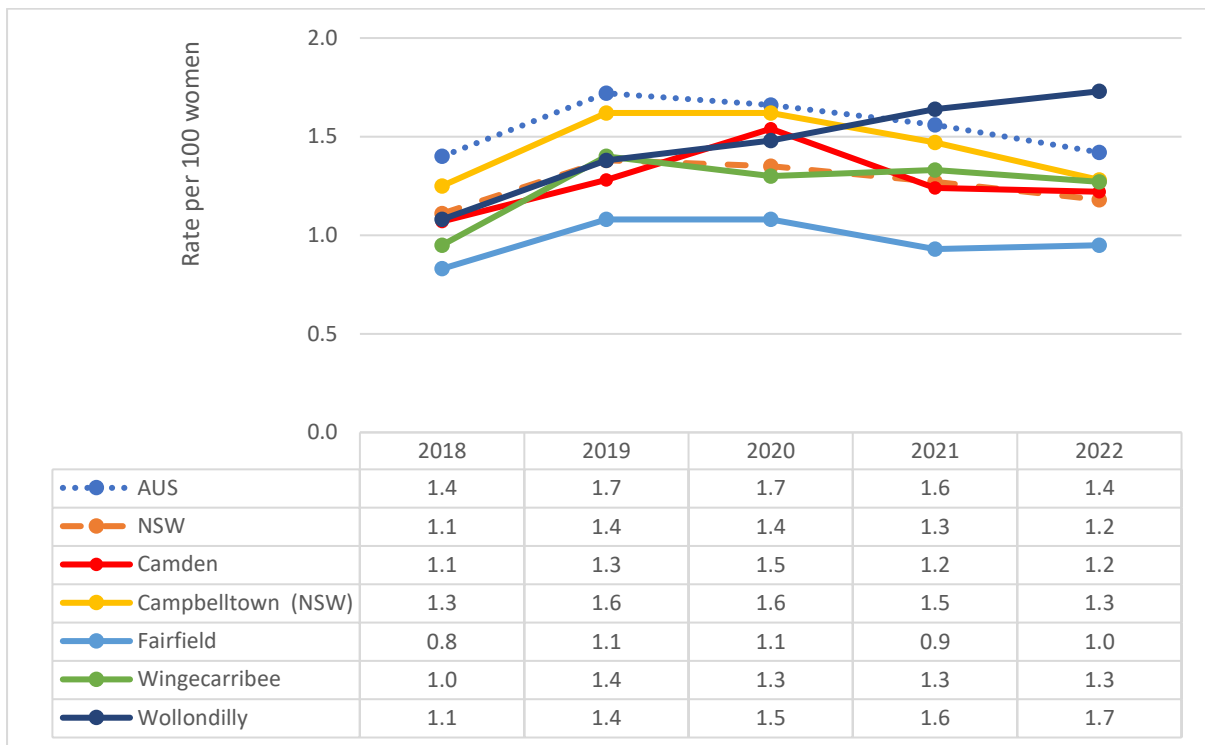


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 71.** MBS claim rates for implants in South-Western Sydney LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

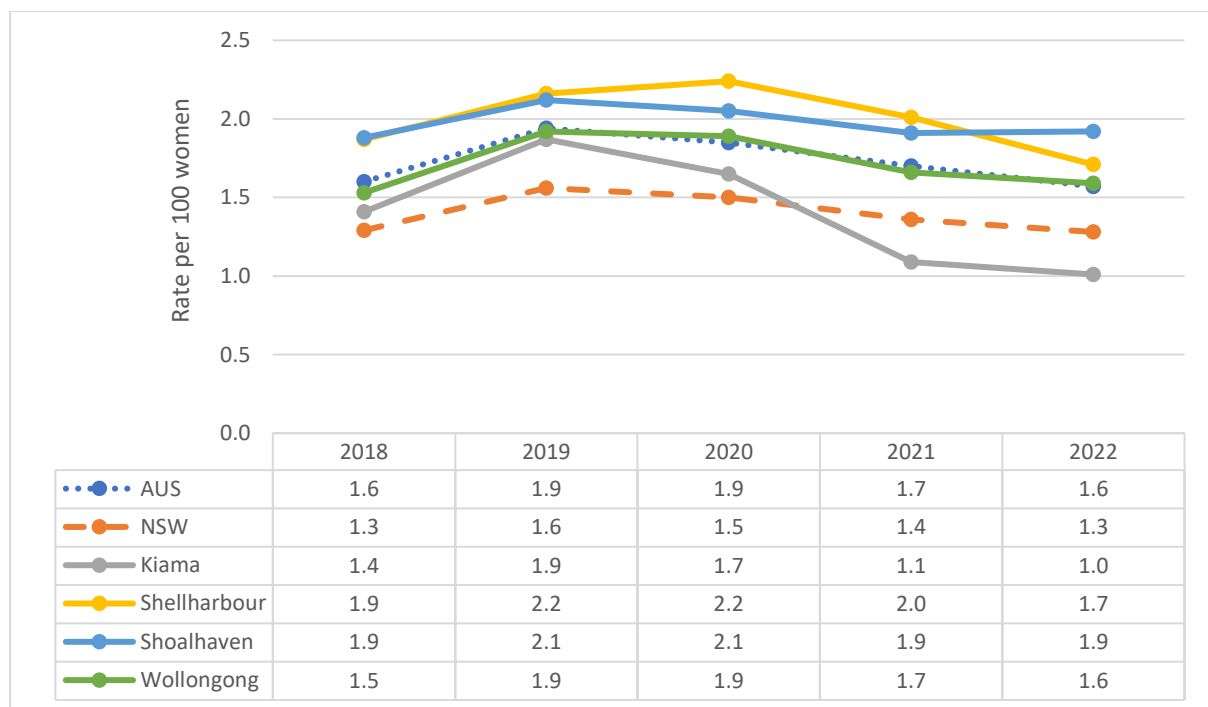
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.6.6 Claim rates for implant in Illawarra Shoalhaven Sydney LHD by LGA

In Illawarra Shoalhaven LHD, the PBS claim rate ranged from 1.01 per 100 women in Kiama LGA to 1.92 per 100 women in Shoalhaven LGA in 2022 (Figure 72). The MBS claim rate ranged from 1.4 per 100 women in Shellharbour LGA to 2.2 per 100 women in Kiama in 2022 (Figure 73). The PBS claim rate in all LGAs were above the state level except for the PBS claim rate in Kiama which fell below the state level in 2021 and 2022.

**Figure 72.** PBS claim rates for etonogestrel implants in Illawarra Shoalhaven LHD by LGA, 2018 to 2022

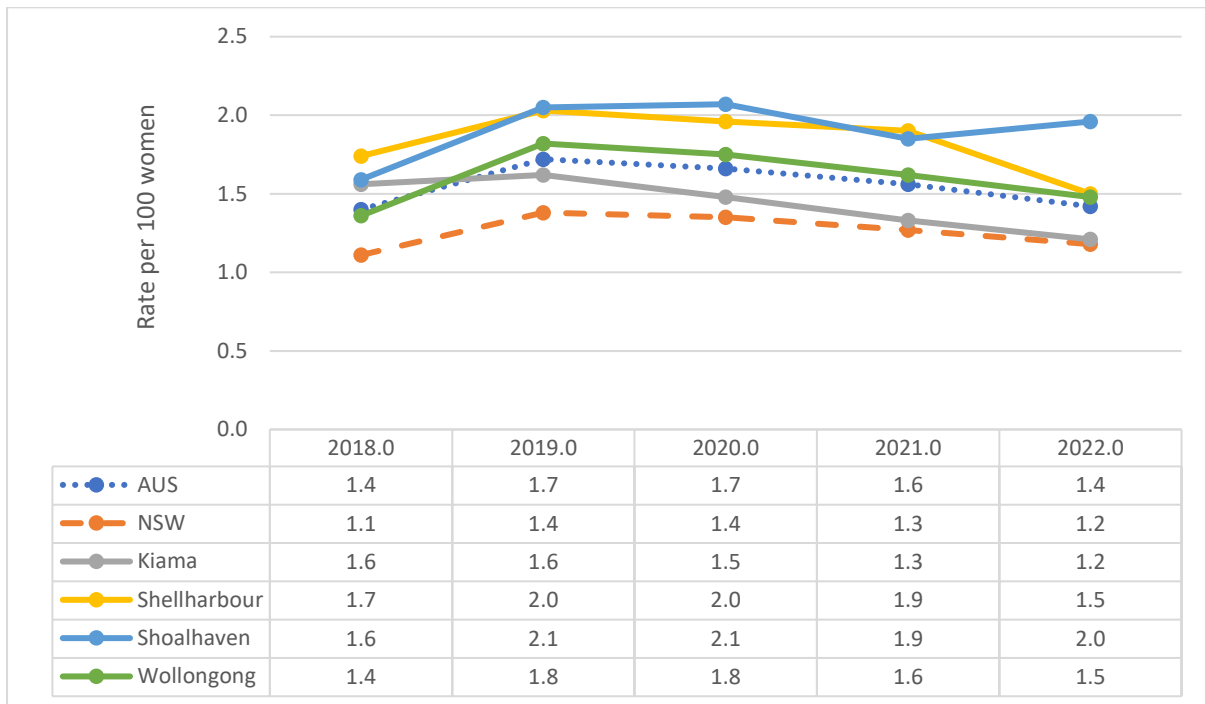


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 73.** MBS claim rates for hormonal implants in Illawarra Shoalhaven LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

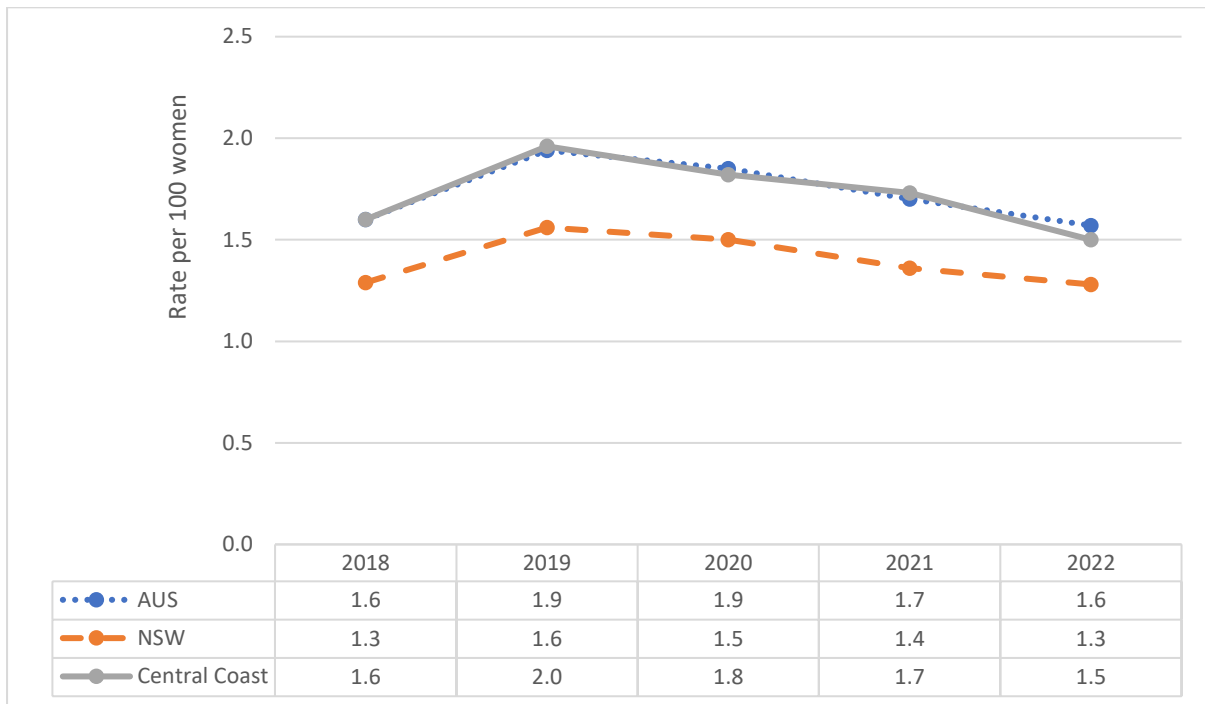
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

### ***Claim rates for implant in Central Coast LHD by LGA***

The PBS and MBS claim rates in Central Coast LGA in 2022 were 1.5 and 1.3 per 100 women, respectively. Both the PBS and MBS claim rates in Central Coast LGA were consistently lower than the state level but followed a similar trend over the period (Figures 74 and 75).

**Figure 74.** PBS claim rates for etonogestrel implants in Central Coast LHD by LGA, 2018 to 2022

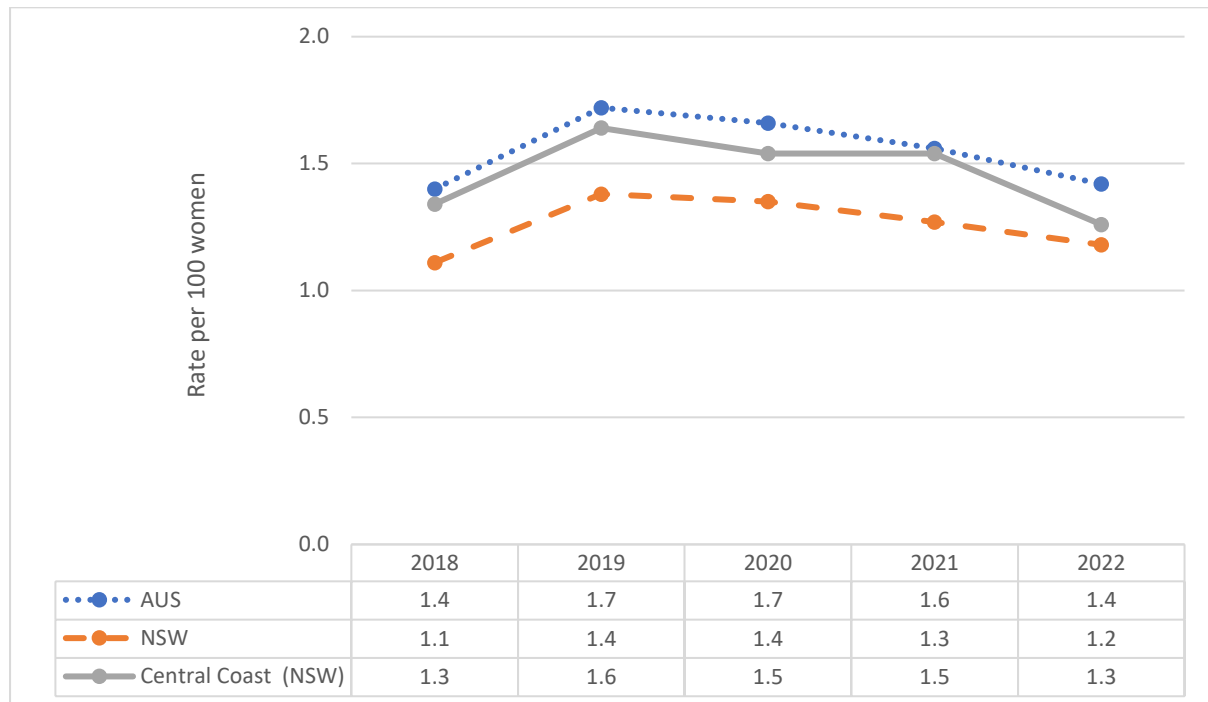


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 75.** MBS claim rates for hormonal implants in Central Coast LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

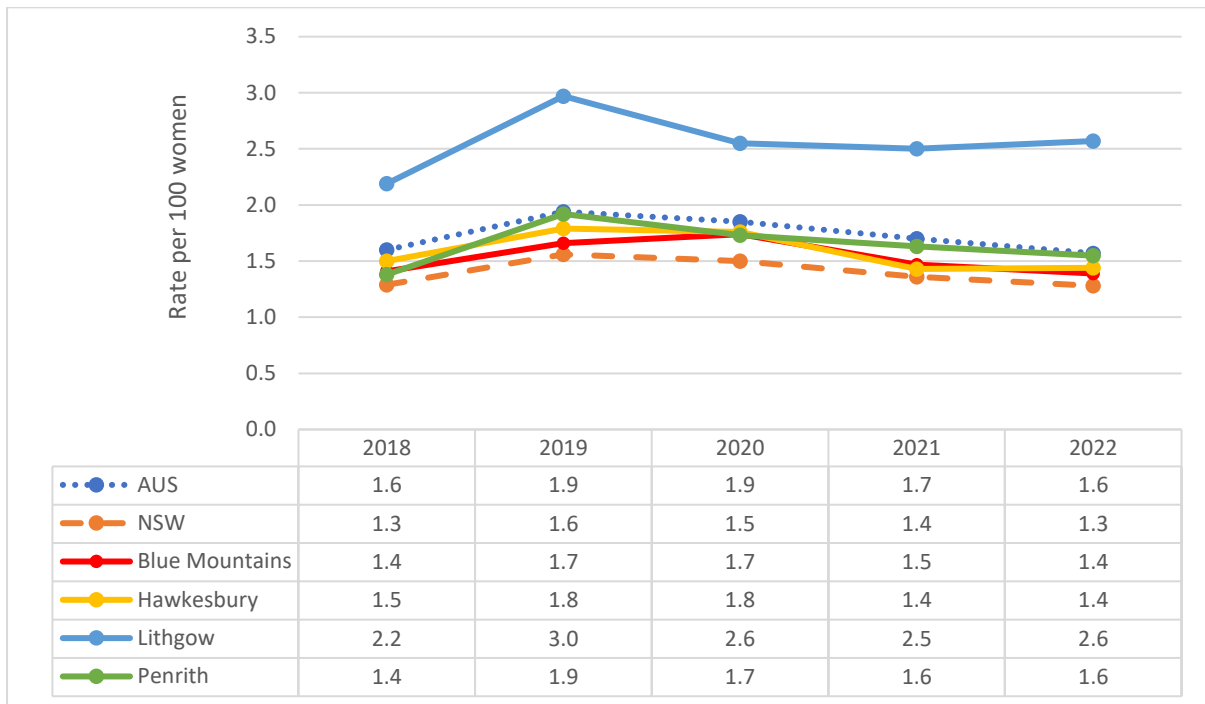
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.6.7 Claim rates for implant in Nepean Blue Mountains LHD by LGA

In Nepean Blue Mountains LHD, the claim rate in 2022 was highest in Lithgow LGA (PBS claim rate of 2.57 per 100 women and MBS rate of 3.28 per 100 women) and lowest in Blue Mountains LGA (PBS claim rate of 1.39 per 100 women and MBS rate of 1.50 per 100 women). The PBS and MBS claim rates in Lithgow were higher than the state and national average throughout 2018 to 2022. All other LGAs had a PBS claim rate between the state and national averages (Figure 76), and MBS rate above the state averages (Figure 77).

**Figure 76.** PBS claim rates for etonogestrel implants in Nepean Blue Mountains LHD by LGA, 2018 to 2022

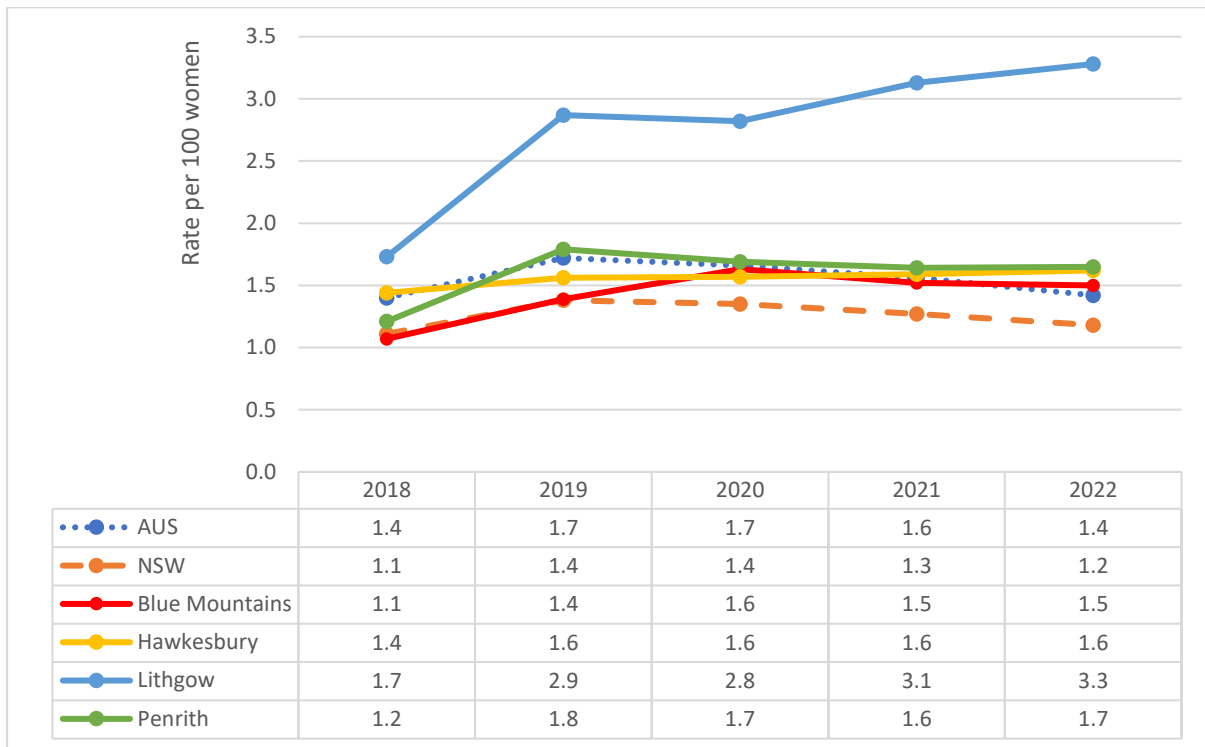


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

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**Figure 77.** MBS claim rates for hormonal implants in Nepean Blue Mountains LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

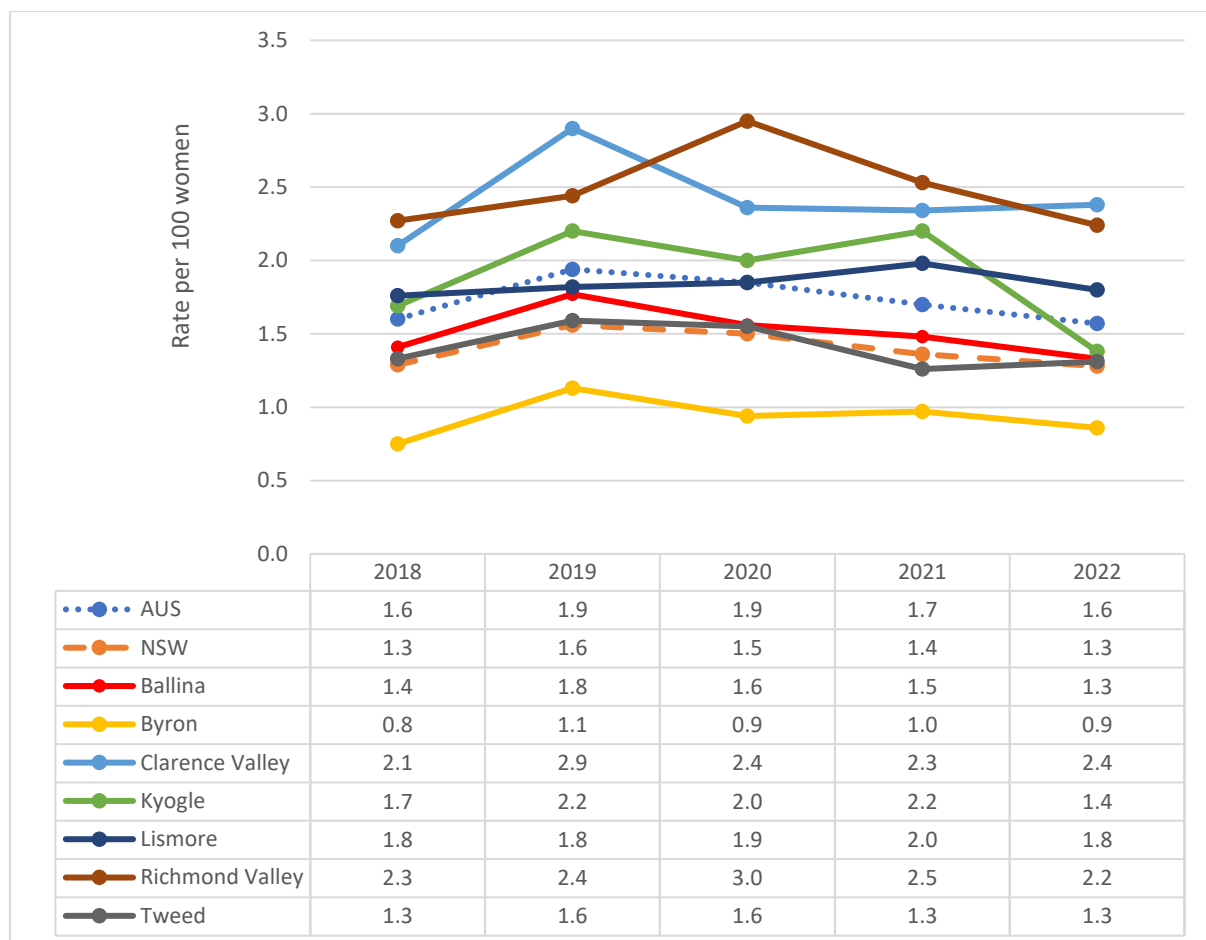
MBS Item: 14206

## 4.7 Claim rates for implant in non-metropolitan NSW LHDs by LGA

### 4.7.1 Claim rates for implant in Northern NSW LHD by LGA

In 2022, the PBS claim rate ranged from 0.86 per 100 women in Byron LGA to 2.38 per 100 women in Clarence Valley LGA (Figure 78), while the MBS claim rate ranged from 0.88 per 100 women in Byron to 2.02 per 100 women in Richmond Valley LGA (Figure 79). In all LGAs except Byron, the claim rates were close to or higher than the state average.

**Figure 78.** PBS claim rates for etonogestrel implants in Northern NSW LHD by LGA, 2018 to 2022

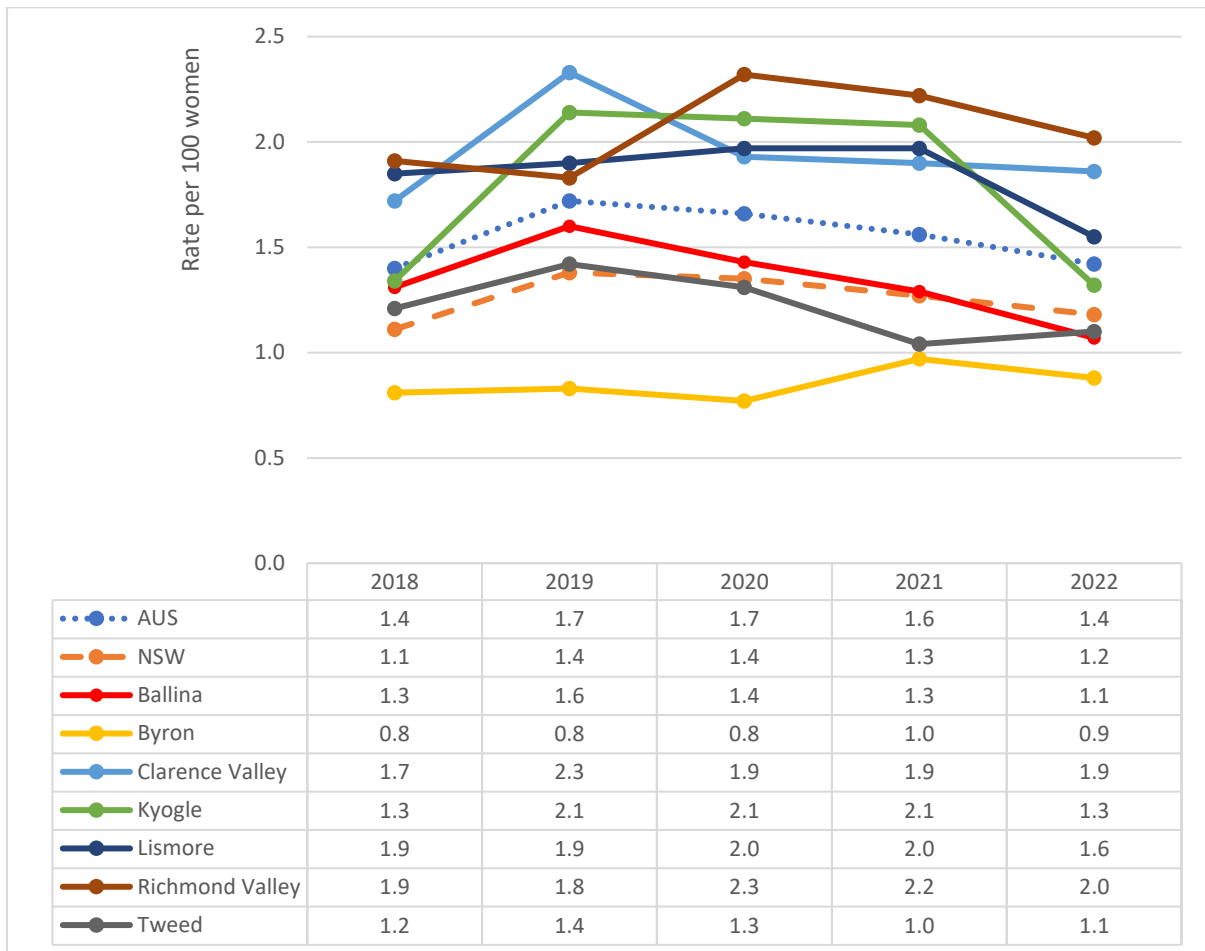


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 79.** MBS claim rates for hormonal implants in Northern NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

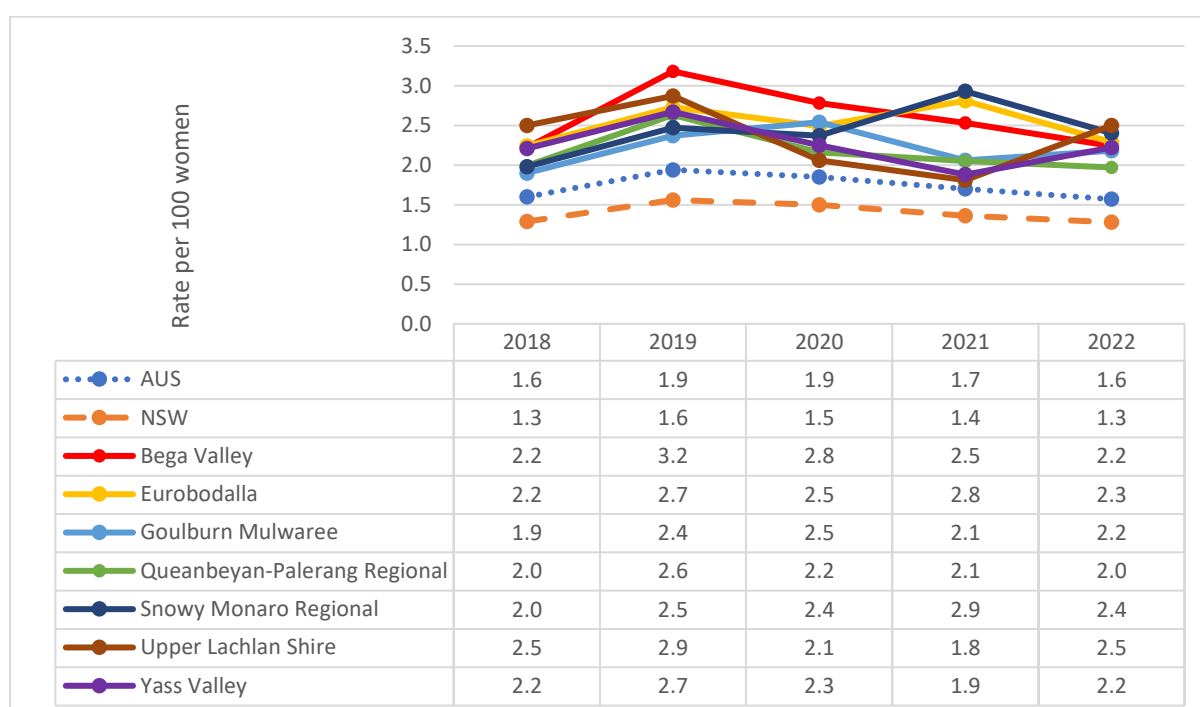
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.7.2 Claim rates for implant in Southern NSW LHD by LGA

Over the five-year period from all LGAs in Southern NSW LHD had rates at or above the state and national averages for PBS and MBS claims (Figures 80 and 81). In 2022, the PBS claim rates for etonogestrel implants per 100 women in Southern NSW was lowest in Queanbeyan-Palerang Regional LGA (1.97) and highest in Upper Lachlan Shire LGA (2.50). During the same year, the MBS claim rates per 100 women ranged from 1.7 in Yass Valley LGA to 3.4 in Upper Lachlan Shire.

**Figure 80.** PBS claim rates for etonogestrel implants in Southern NSW LHD by LGA, 2018 to 2022

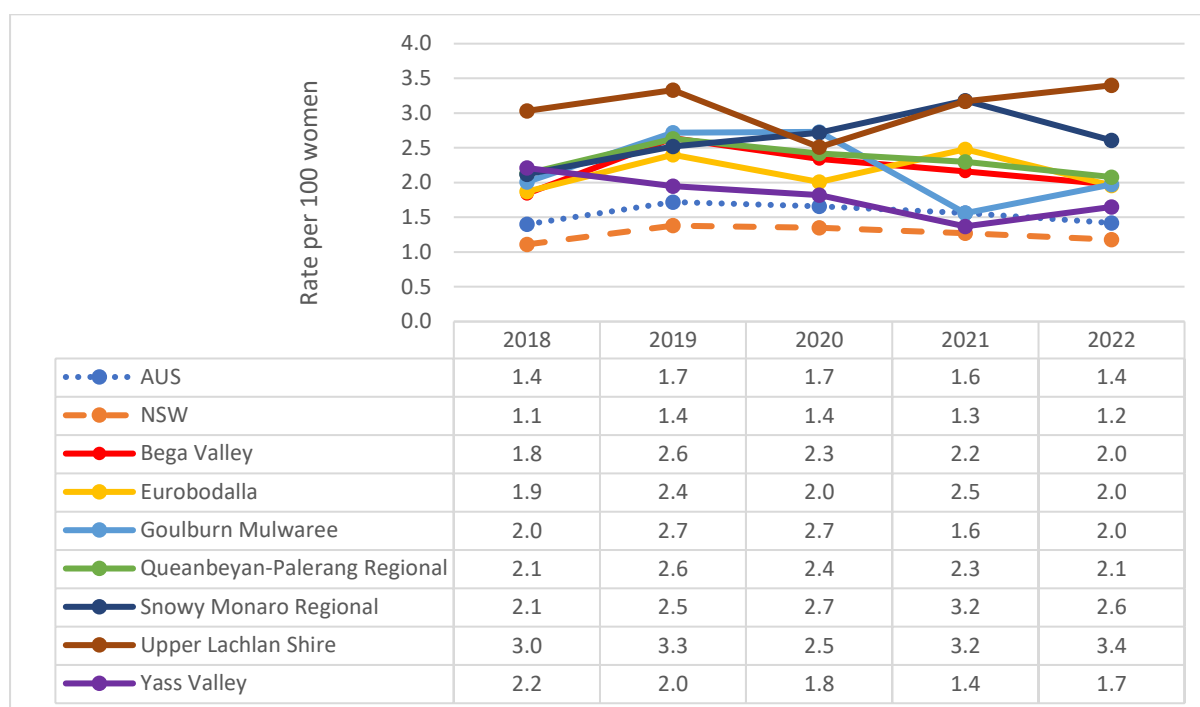


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 81.** MBS claim rates for hormonal implants in Southern NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

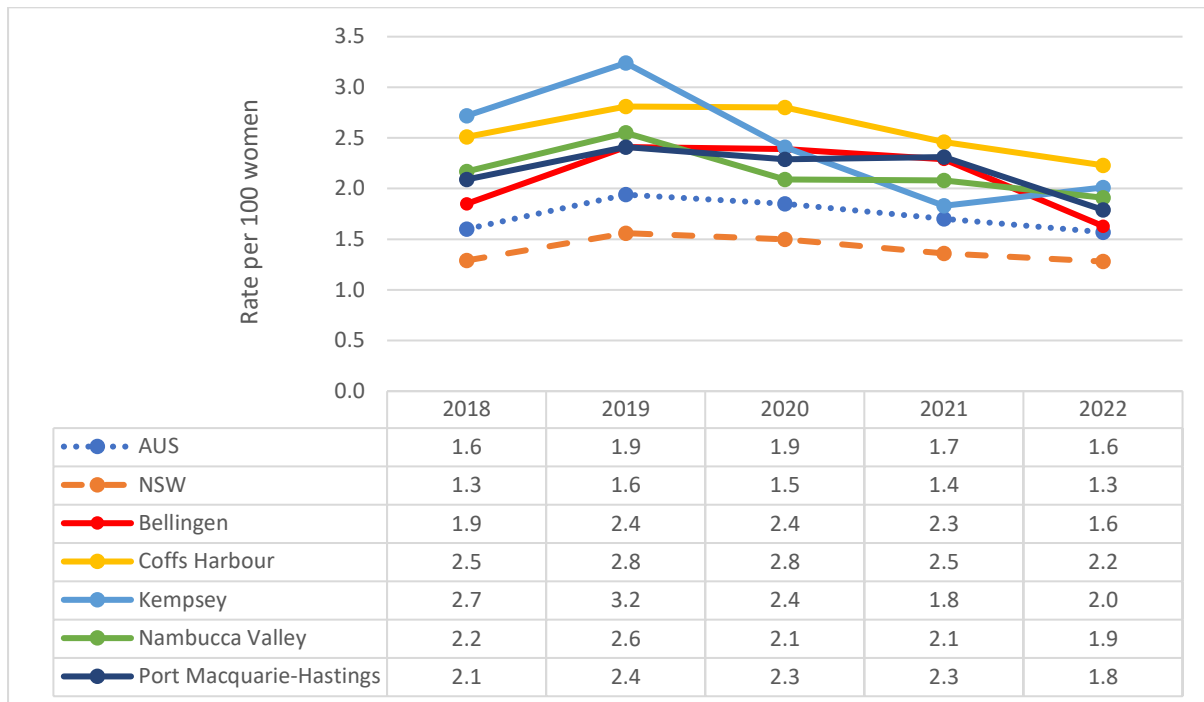
Note: Rate per 100 women aged 15-49 years

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### 4.7.3 Claim rates for implant in Mid North Coast NSW LHD by LGA

All LGAs had PBS and MBS claim rates higher than the national and state average, except for Bellingen LGA in 2022 when the MBS claim rate dipped below the national average. All LGAs in Mid North Coast LGA experienced an overall decrease in the implant PBS claim rate in the five-year period (Figure 82). All LGAs had a decreased or unchanged MBS claim rate from 2018 to 2022, except Port Macquarie-Hastings LGA and Kempsey LGA which increased slightly (Figure 83). In 2022, the PBS claim rates for etonogestrel implants per 100 women in Mid North Coast NSW LHD ranged from 1.79 in Port Macquarie-Hastings to 2.23 in Coffs Harbour LGA. The MBS claim rates per 100 women ranged from 1.32 in Bellingen to 2.03 in Port Macquarie-Hastings.

**Figure 82.** PBS claim rates for etonogestrel implants in Mid North Coast LHD by LGA, 2018 to 2022

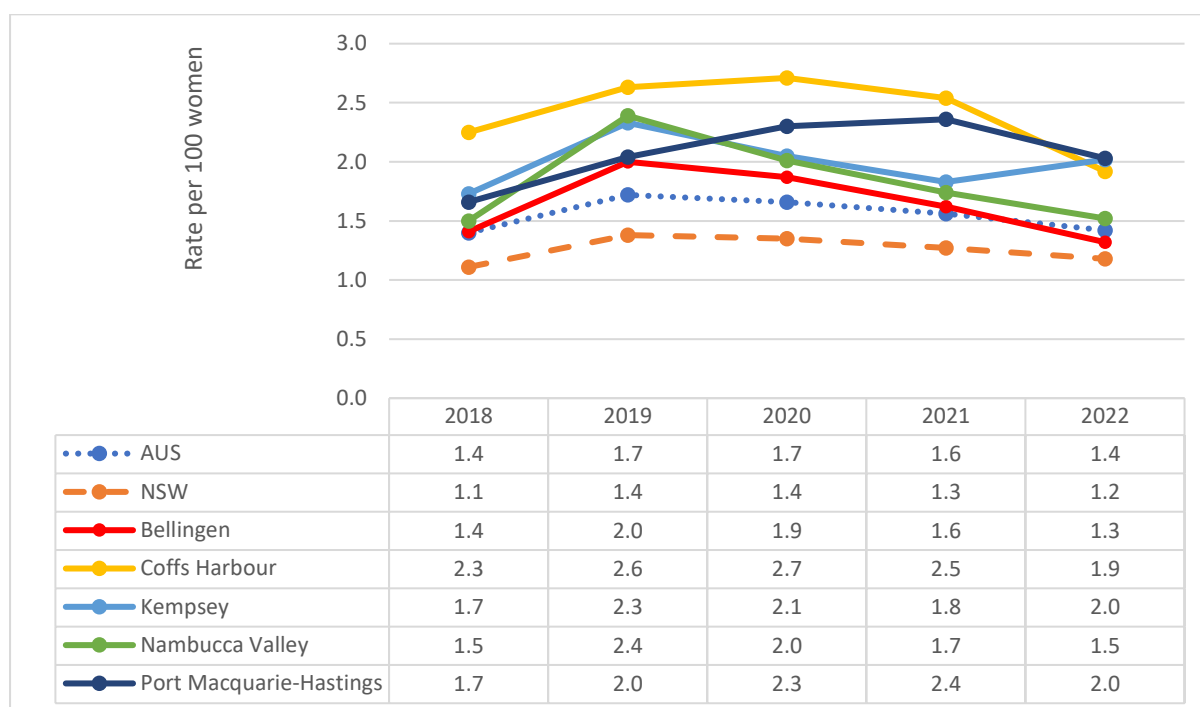


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

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**Figure 83.** MBS claim rates for hormonal implants in Mid North Coast LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

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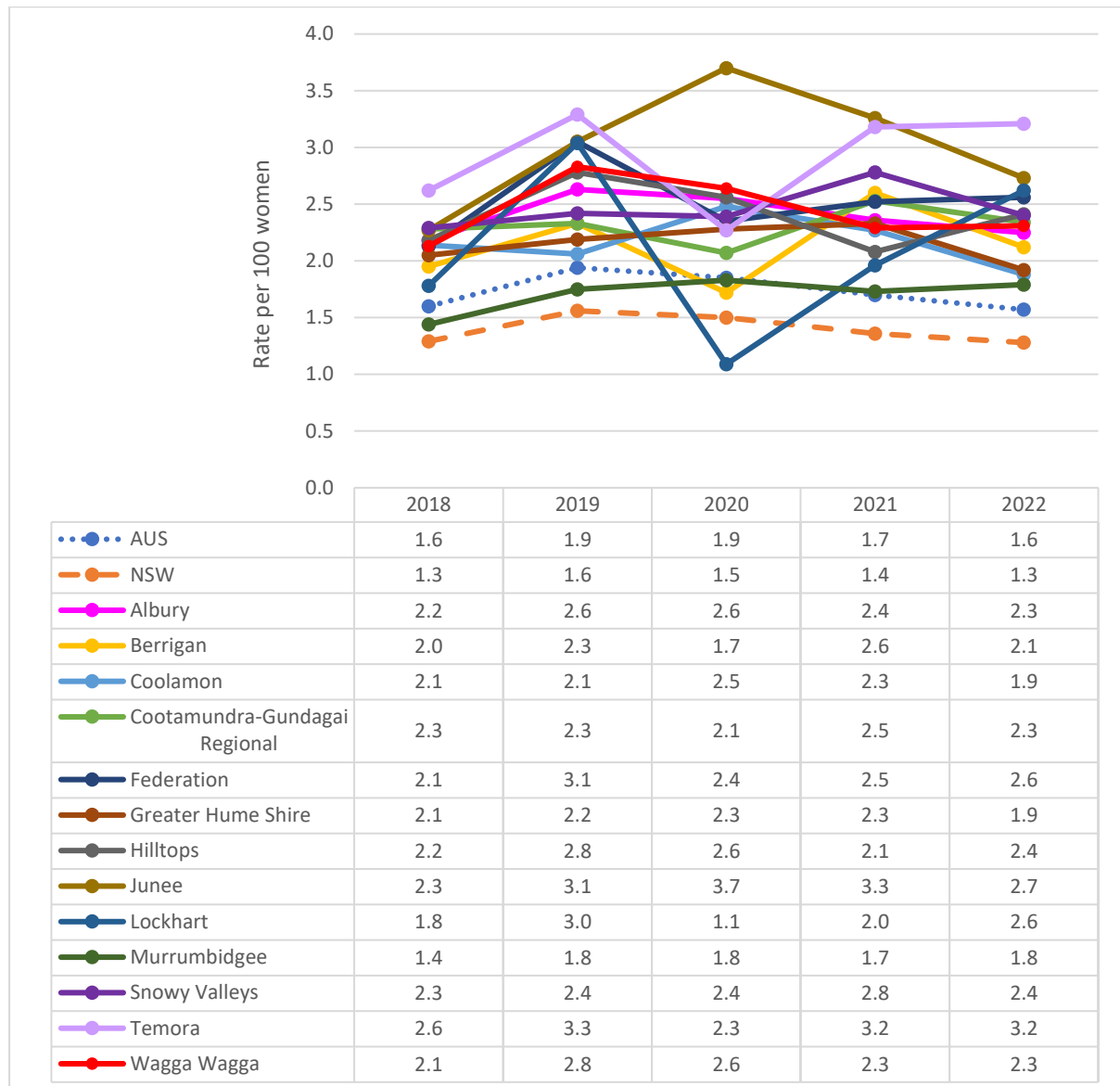
#### 4.7.4 Claim rates for implant in Murrumbidgee NSW LHD by LGA

Because of the large numbers of LGAs in Murrumbidgee LHD, data are separated for Eastern and Western Murrumbidgee.

##### 4.7.4.1 Claim rates for implant in Eastern Murrumbidgee LHD by LGA

Most PBS claim rates were higher than the state and national averages, except in Lockhart LGA in 2020 and Murrumbidgee across all years (Figure 84). Most LGAs saw an overall increase in the PBS claim rate between 2018 and 2022, with the exceptions of Coolamon LGA and Greater Hume Shire LGA. In 2022, the PBS claim rates for etonogestrel implants per 100 women was lowest in Murrumbidgee LHD (1.79) and highest in Temora (3.21), while the MBS rate was lowest in Coolamon (1.21) and highest in Junee (3.72) as seen if Figure 85.

**Figure 84:** PBS claim rates for etonogestrel implants in Eastern Murrumbidgee LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

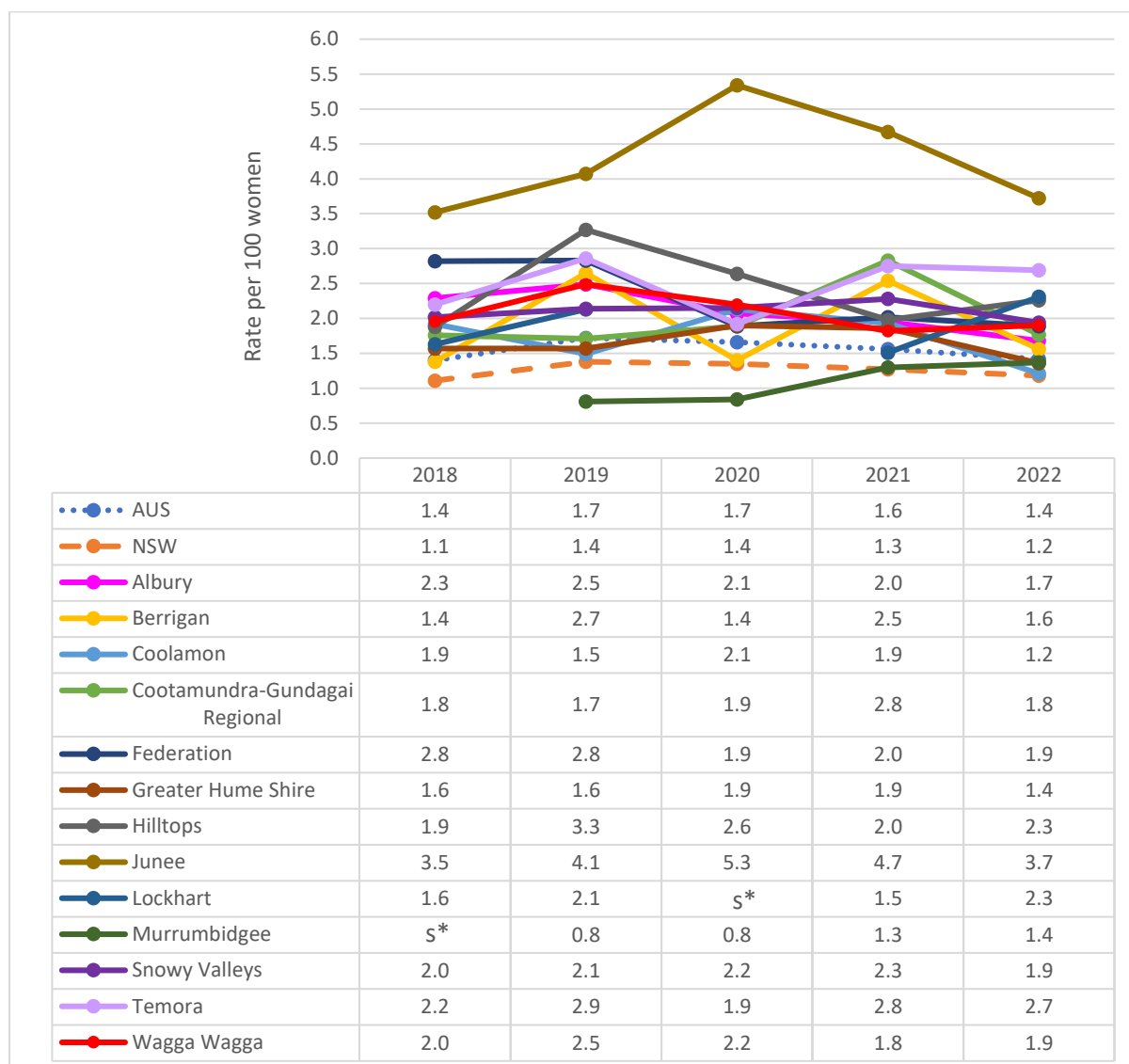
Note: Rate per 100 women aged 15-49 years

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MBS claim rates declined in LGAs Albury, Coolamon, Federation, Greater Hume Shire, Snowy Valleys, and Wagga Wagga between 2018 and 2022. Junee LGA had a significantly higher MBS rate compared to the other LGAs. In 2020, its rate was more than double that of the next highest LGA (Hilltops), and while it decreased in 2022, it remained at least 1 per 100 women higher than all other LGAs. However, MBS claim rates were suppressed in Lockhart LGA in 2020, and Murrumbidgee LGA in 2018.



**Figure 85.** MBS claim rates for hormonal implants in Eastern Murrumbidgee LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

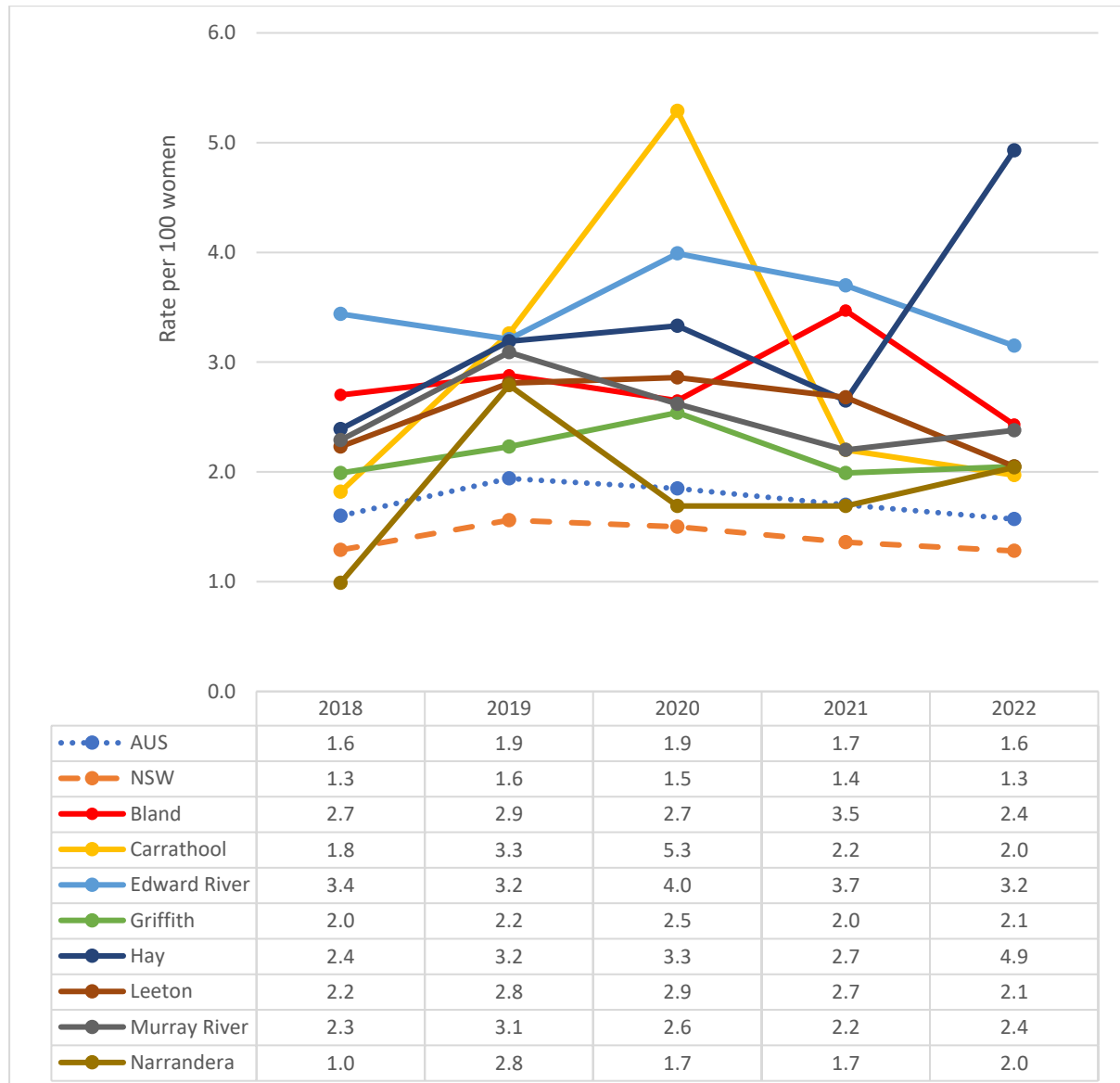
MBS Item: 14206

#### 4.7.4.2 Claim rates for implant in Western Murrumbidgee LHD by LGA

The PBS and MBS claim rates for all LHDs were generally above the state average except for the MBS rate for Narranderra LGA which was below the state average throughout the period (Figures 86 and 87). The PBS and MBS rates for Hay LGA both displayed sharp increases between 2021 and 2022. For example, the PBS claim rate increased from 2.65 to 4.93 per 100 women from 2021 to 2022. Carrathool LGA experienced a substantial increase in the PBS and MBS claim rates from 2019 in 2020, which dropped by more than half for PBS claims, and

dropped to 2.7 for MBS claims in 2022. Carrathool LGA also had a suppressed MBS claim rate in 2021.

**Figure 86.** PBS claim rates for etonogestrel implants in Western Murrumbidgee LHD by LGA, 2018 to 2022

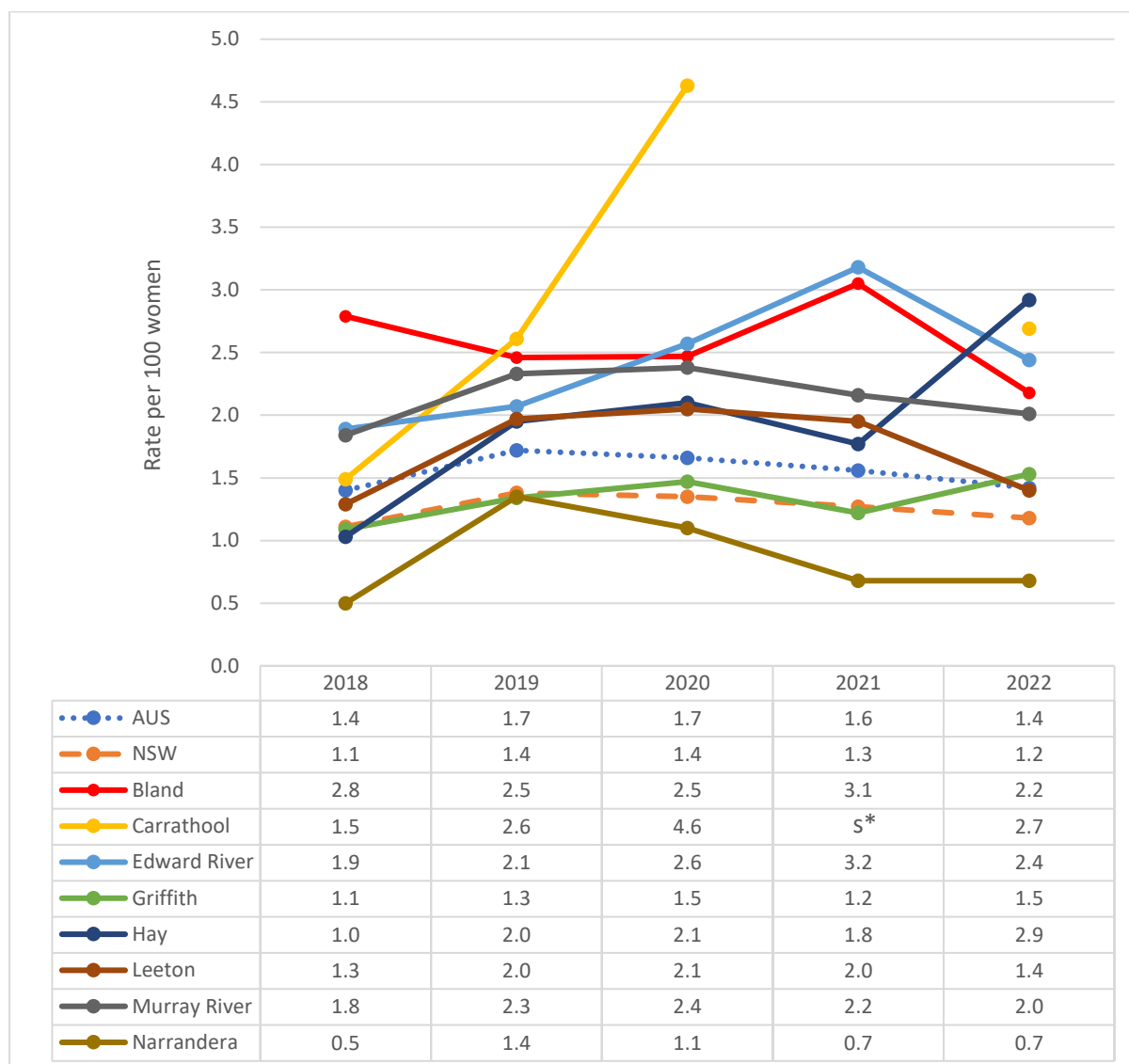


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

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**Figure 87.** MBS claim rates for etonogestrel implants in Western Murrumbidgee LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

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#### 4.7.5 Claim rates for implant in Hunter New England LHD by LGA

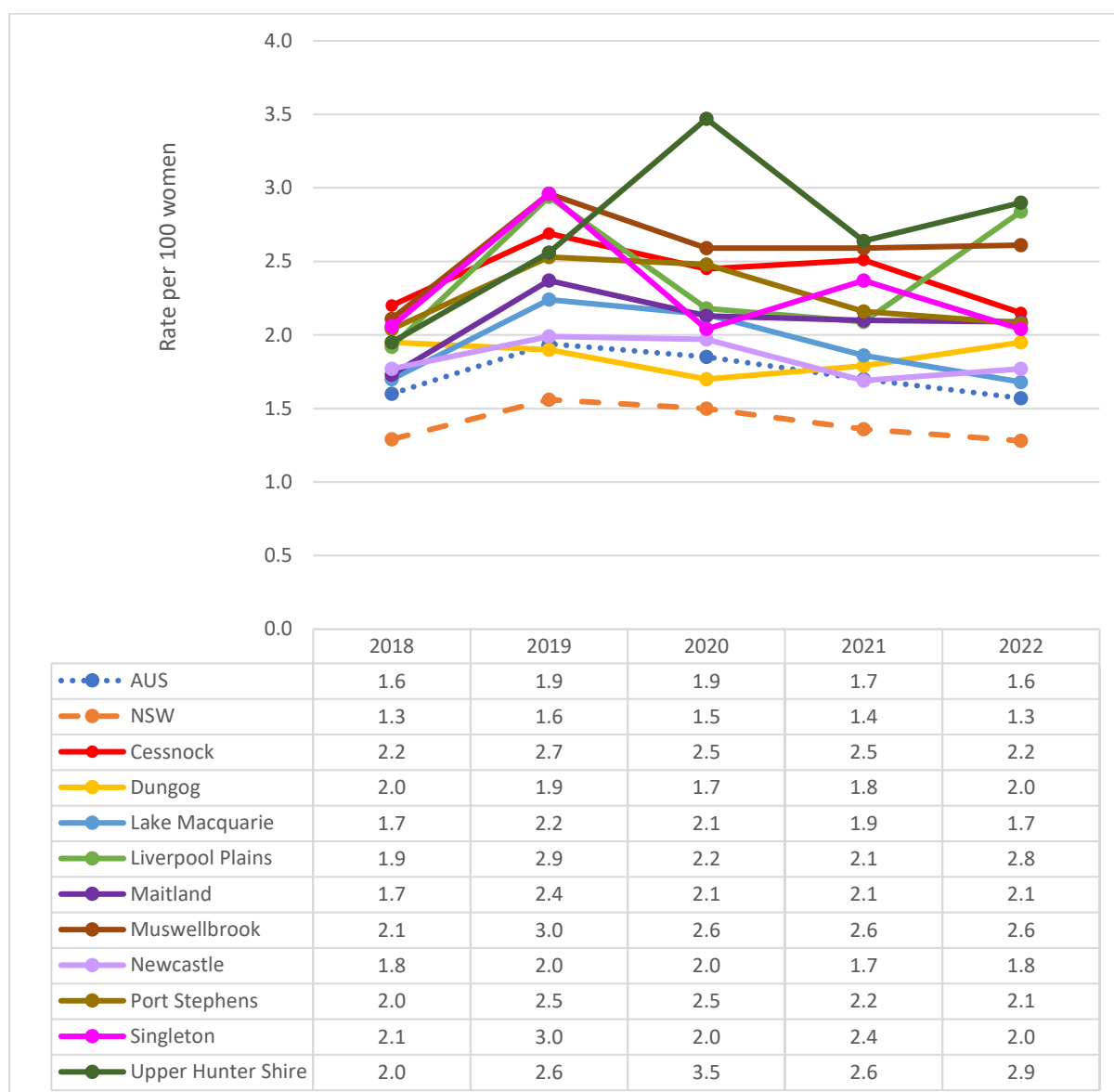
Due to the large numbers of LGAs, data are presented separately for Southern and Northern Hunter New England LHD.

##### 4.7.5.1 Claim rates for implant in Southern Hunter New England LHD by LGA

In 2022, the PBS claim rates for etonogestrel implants per 100 women in Southern Hunter New England LHD ranged from 1.68 in Lake Macquarie LGA to 2.90 in Upper Hunter Shire LGA (Figure 88). All PBS claim rates were above the state average, with three LGAs (Lake

Macquarie, Newcastle, Upper Hunter Shire) exhibiting a stable or declining overall rate between 2018 and 2022. The MBS claim rates for insertion of hormonal implants per 100 women ranged from 1.4 in Newcastle Plains LGA to 2.64 in Upper Hunter Shire (Figure 89). All MBS claim rates were also above the state average, except for Liverpool Plains in 2018 and 2020. Four LGAs (Cessnock, Dungog, Newcastle, Port Stephens) experienced a stable or declining overall MBS rate over the five-year period.

**Figure 88.** PBS claim rates for etonogestrel implants in Southern Hunter New England LHD by LGA, 2018 to 2022

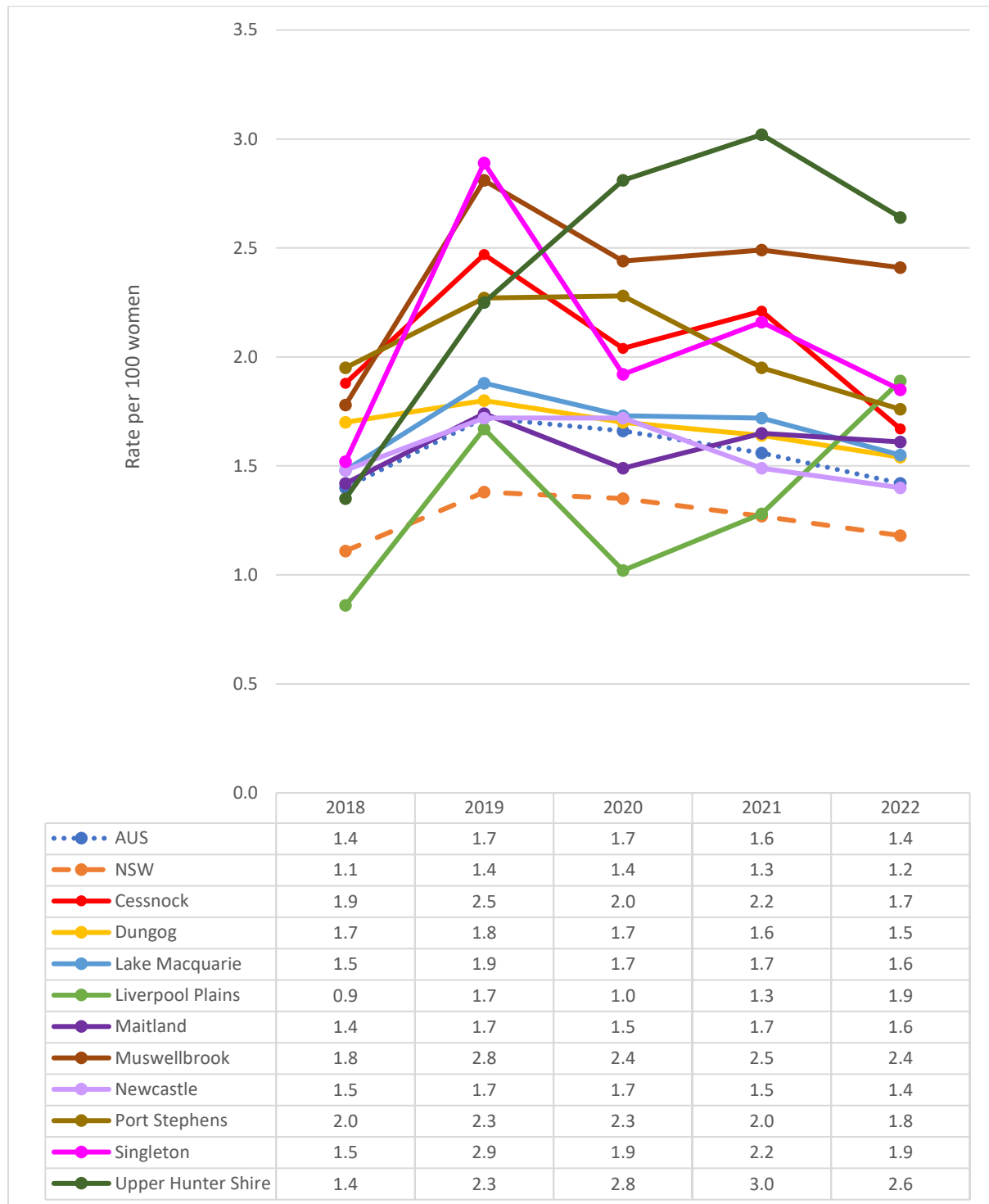


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 89.** MBS claim rates for hormonal implants in Southern Hunter New England LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

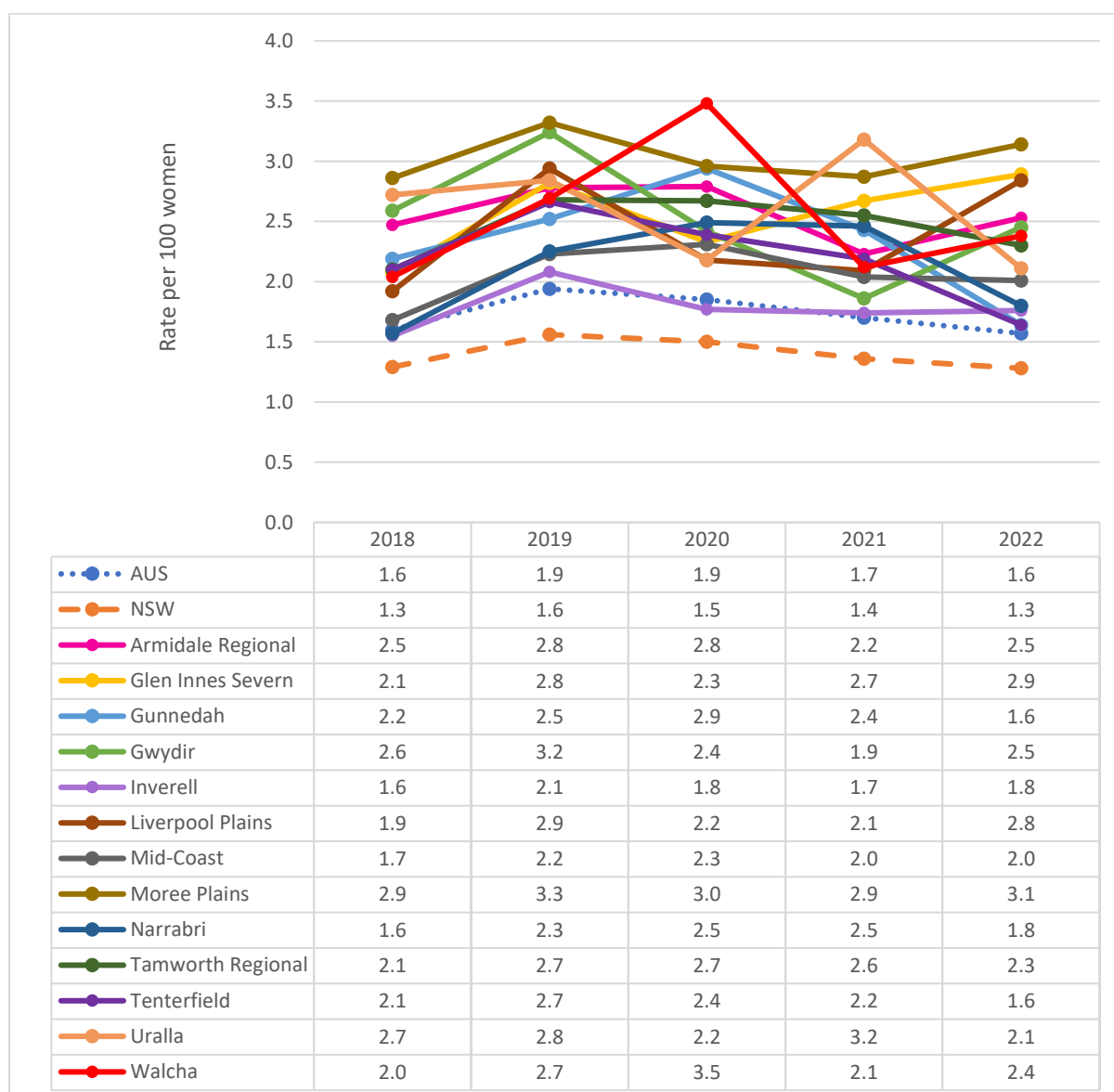
Note: Rate per 100 women aged 15-49 years

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#### 4.7.5.2 Claim rates for etonogestrel implants in Northern Hunter New England LHD by LGA

All the PBS claim rates in Northern Hunter New England LGAs were above the state and national levels, except Inverell LGA in 2020 (Figure 90). However, MBS claim rates in several LGAs were under the state and national levels (Figure 91). In 2022, the PBS claim rates for etonogestrel implants per 100 women in Northern Hunter New England LHD was lowest in Gunnedah LGA (1.64 per 100 women) and highest in Moree Plains LGA (3.14), while the MBS rate was lowest in Narrabri (0.99) and highest in Gwydir (2.35).

**Figure 90.** PBS claim rates for etonogestrel implants in Northern Hunter New England LHD by LGA, 2018 to 2022

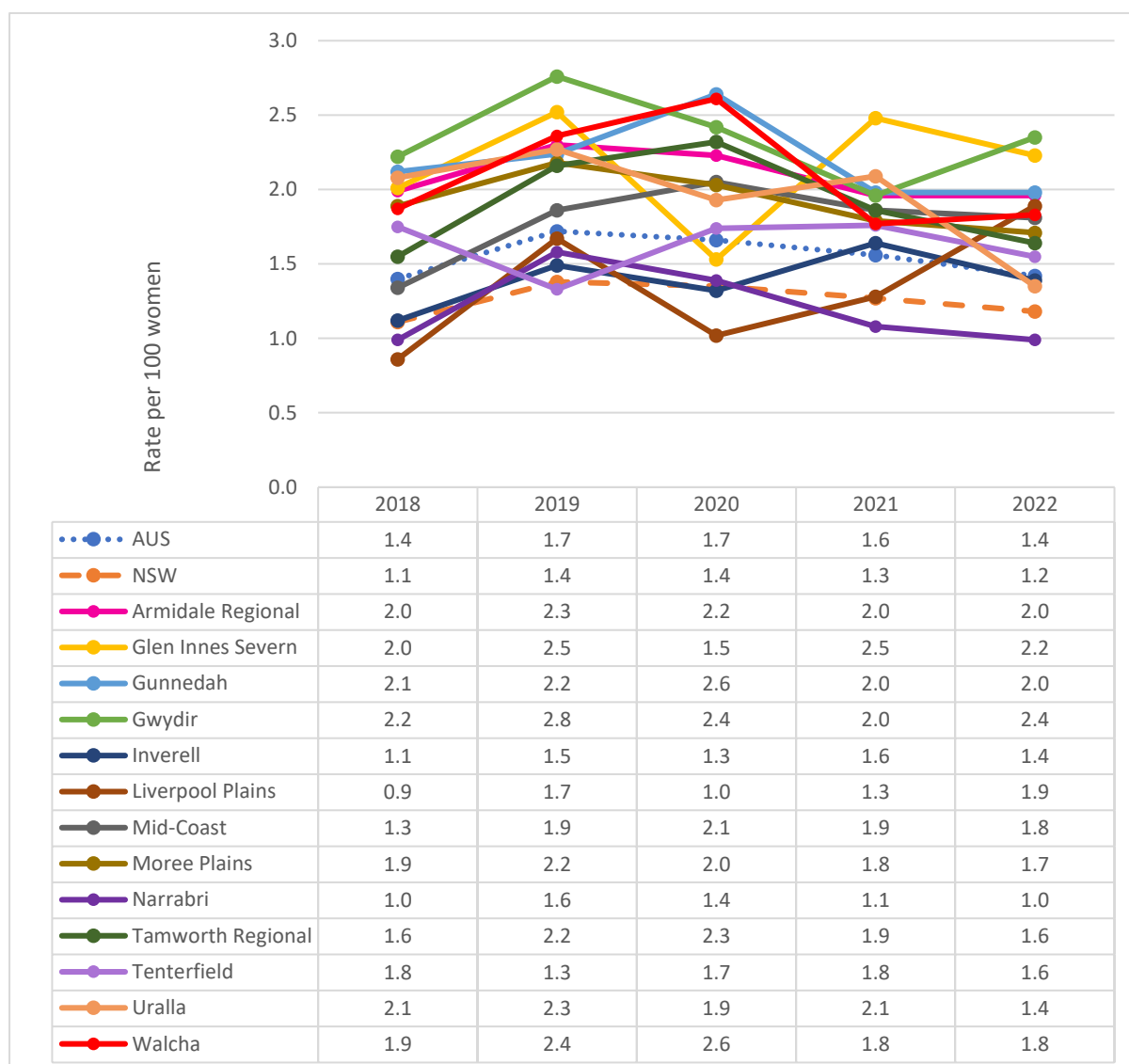


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 91.** MBS claim rates for hormonal implants in Northern Hunter New England LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

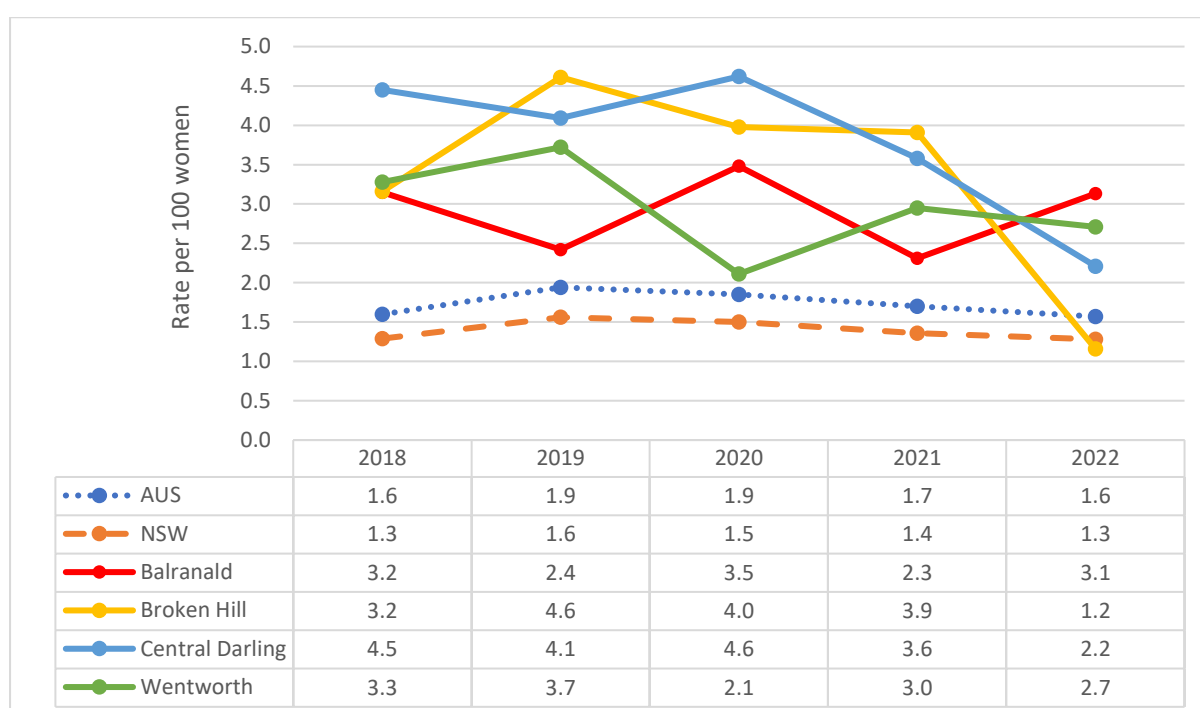
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.7.6 Claim rates for implant in Far West NSW LHD by LGA

The PBS claim rates per 100 women in Far West NSW LHD were higher than the state and national averages, except for Broken Hill LGA which saw a very large decline between 2021 and 2022 (from 3.91 to 1.16). The MBS claim rates were also higher than the state and national levels, except for Wentworth LGA in 2021 (1.5). In 2022, the PBS claim rates per 100 women ranged from 1.2 in Broken Hill to 3.1 in Balranald (Figure 92), while the MBS claims rates ranged from 1.5 in Wentworth to 4.1 in Central Darling (Figure 93). Central Darling LGA had a suppressed MBS claim rate in 2018; an indicator of low activity in the area.

**Figure 92.** PBS claim rates for etonogestrel implants in Far West NSW LHD by LGA, 2018 to 2022

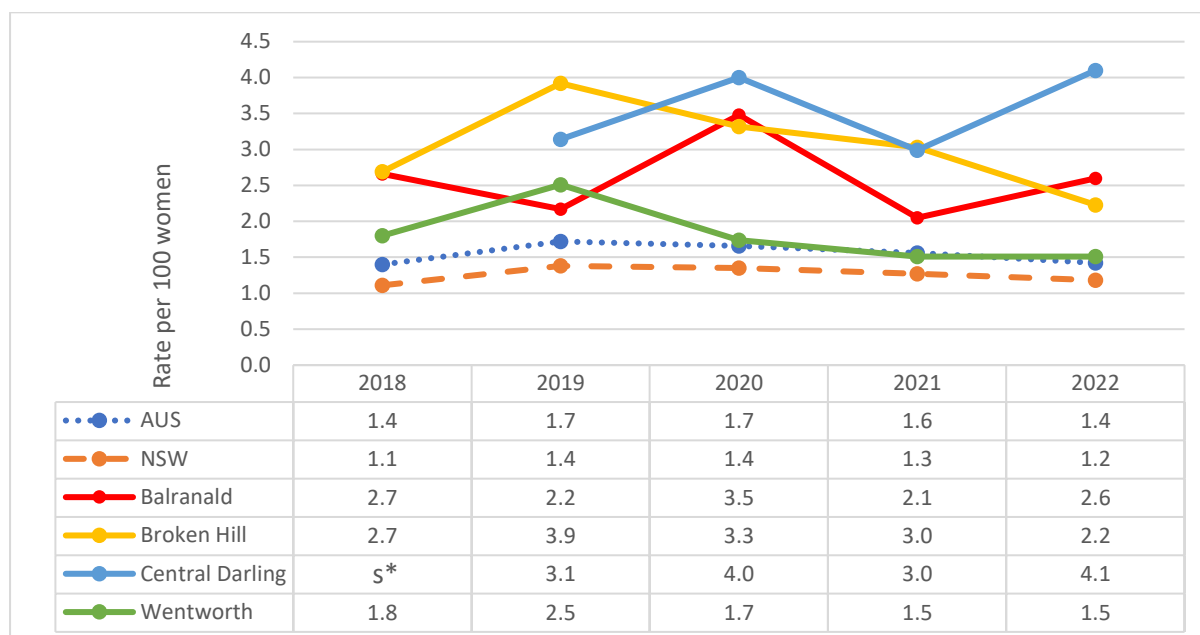


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

**Figure 93.** MBS claim rates for hormonal implants in Far West NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

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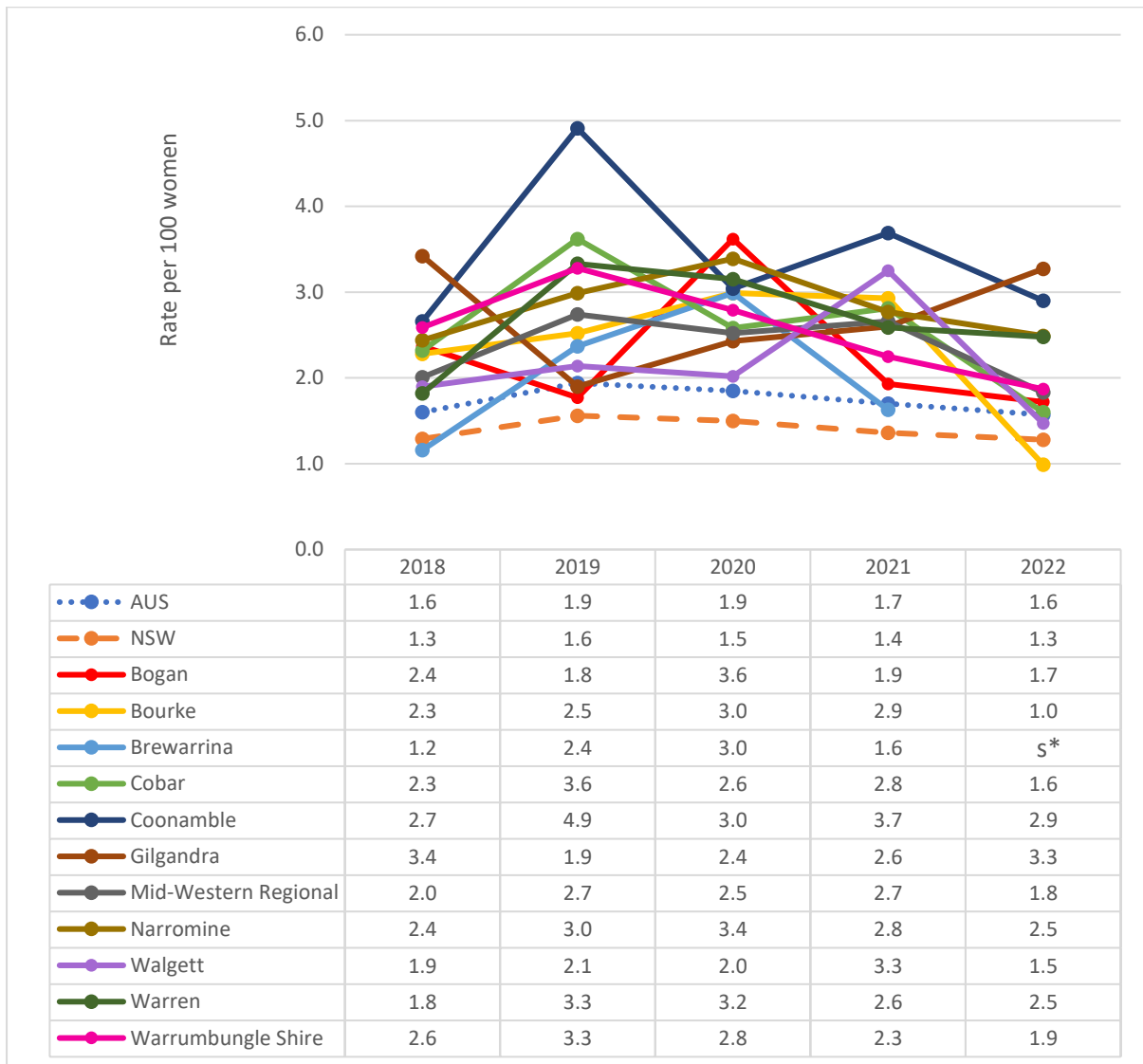
#### 4.7.7 Claim rates for implant in Western NSW LHD by LGA

##### 4.7.7.1 Claim rates for etonogestrel implants in Northern Western NSW LHD by LGA

The PBS claim rates in 2022 ranged from 0.99 per 100 women in Bourke LGA to 3.27 per 100 women in Gilgandra LGA and all LGAs had claim rates above the state average, with the exception of Bourke (Figure 94). The MBS rates were also above the state average in 2022 for all LGAs except for Cobar and Walgett (Figure 95).

Over the five-year period, all LGAs except Coonamble and Narromine experienced an overall decrease in the PBS claim rate, with Brewarrina LGA reporting suppressed PBS claim rates in 2022. MBS claim rates were also suppressed for Brewarrina (in 2021 and 2022), and Bourke (2018).

**Figure 94.** PBS claim rates for etonogestrel implants in Northern Western NSW LHD by LGA, 2018 to 2022

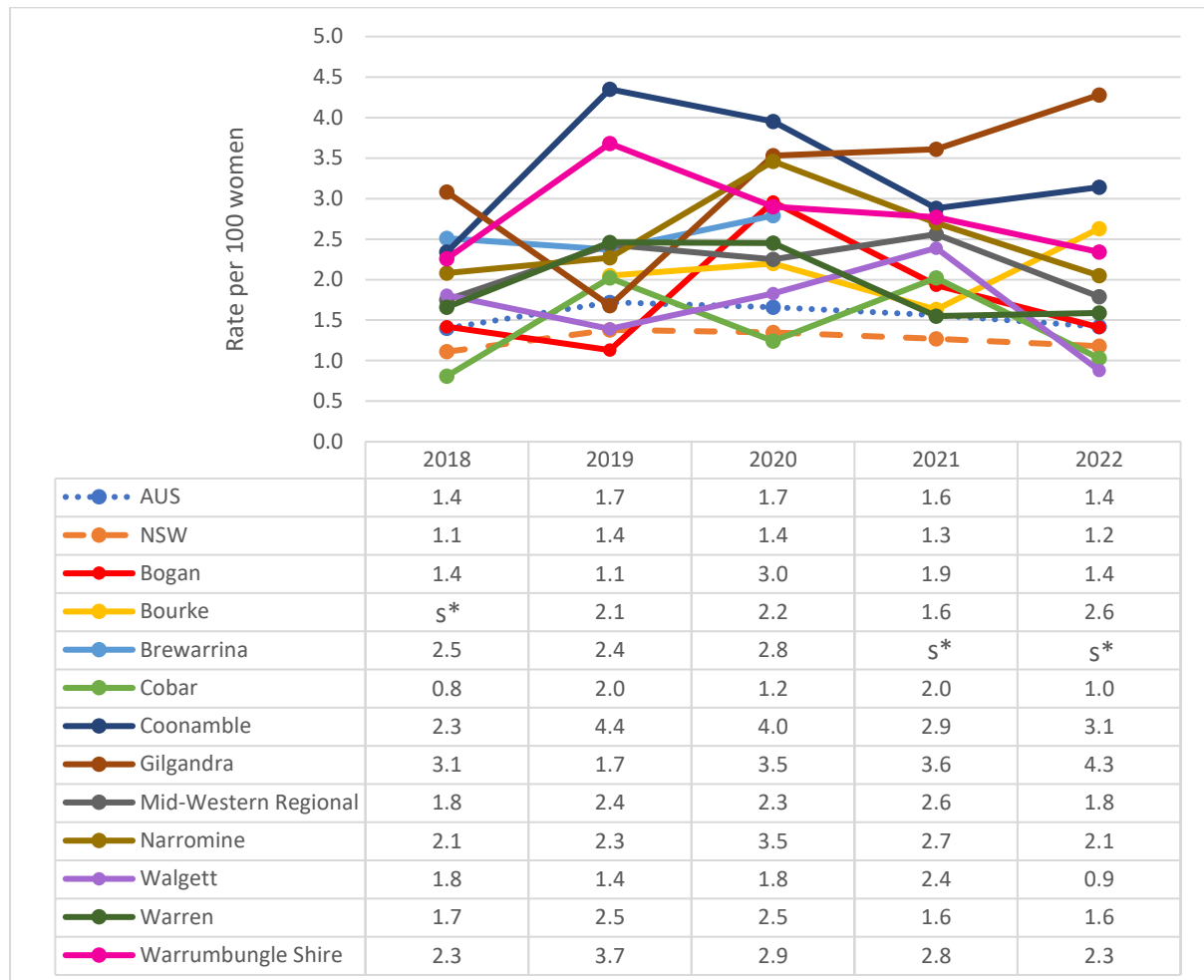


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

PBS Item: 8487Q (Implanon NXT)

**Figure 95.** MBS claim rates for hormonal implants in Northern Western NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

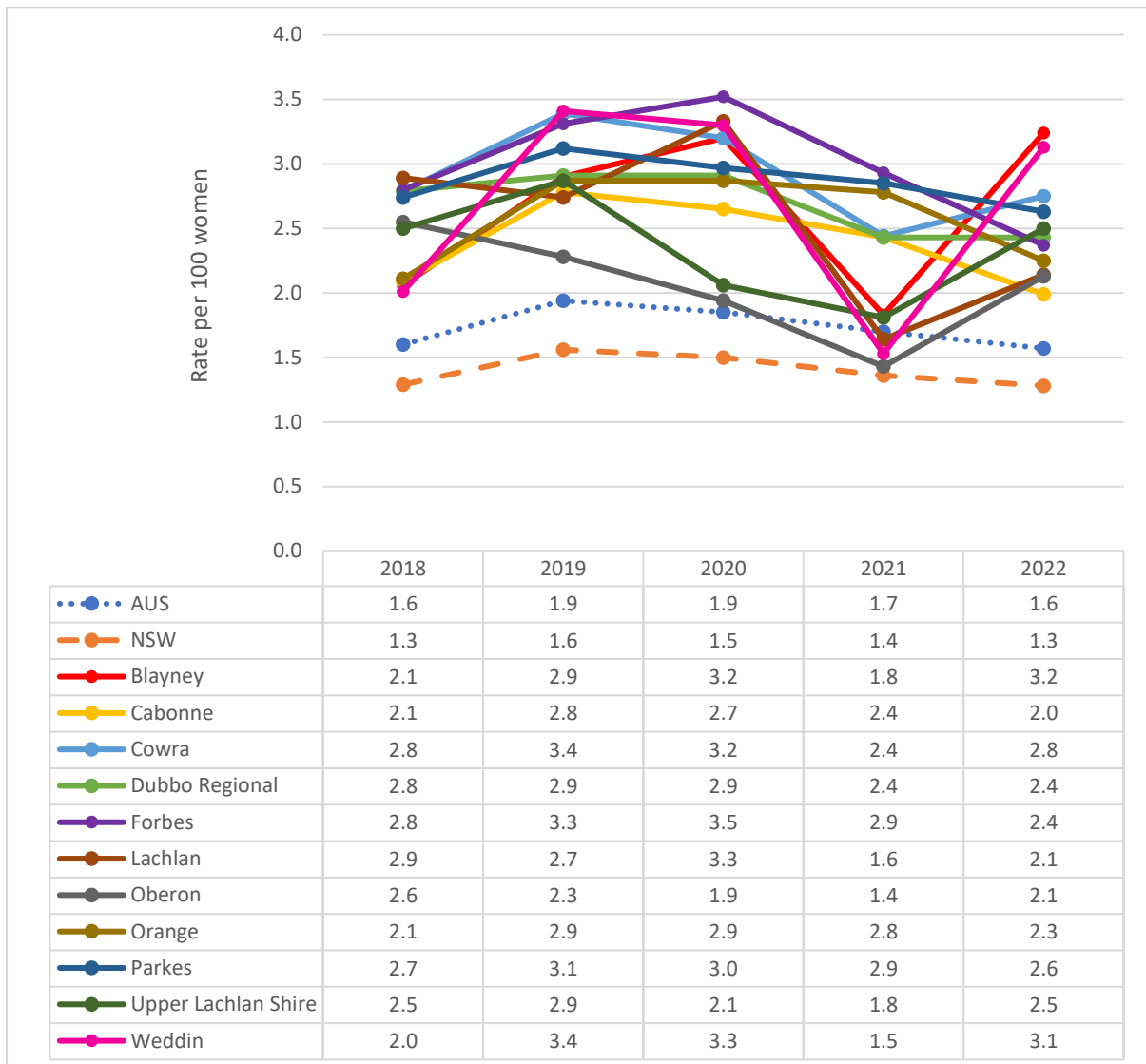
Note: Rate per 100 women aged 15-49 years; s\* indicates suppressed rate

MBS Item: 14206

#### 4.7.7.2 Claim rates for etonogestrel implants in Southern Western NSW LHD by LGA

Throughout the period of 2018 to 2022 both the MBS and PBS claim rates were above the state average for LGAs in the Western NSW LHD with the exception of Lachlan and Oberon in 2021. However, over this time all but three LGAs experienced an overall decline in PBS claim rate (Figure 96), and the MBS claim rates of six LGAs stayed the same or decreased (Figure 97). Blayney LGA had the highest PBS claim rate in 2022 (3.24 per 100 women) while Upper Lachlan Shire LGA had the highest MBS claim rate (3.40 per 100 women).

**Figure 96.** PBS claim rates for etonogestrel implants in Southern Western NSW LHD by LGA, 2018 to 2022

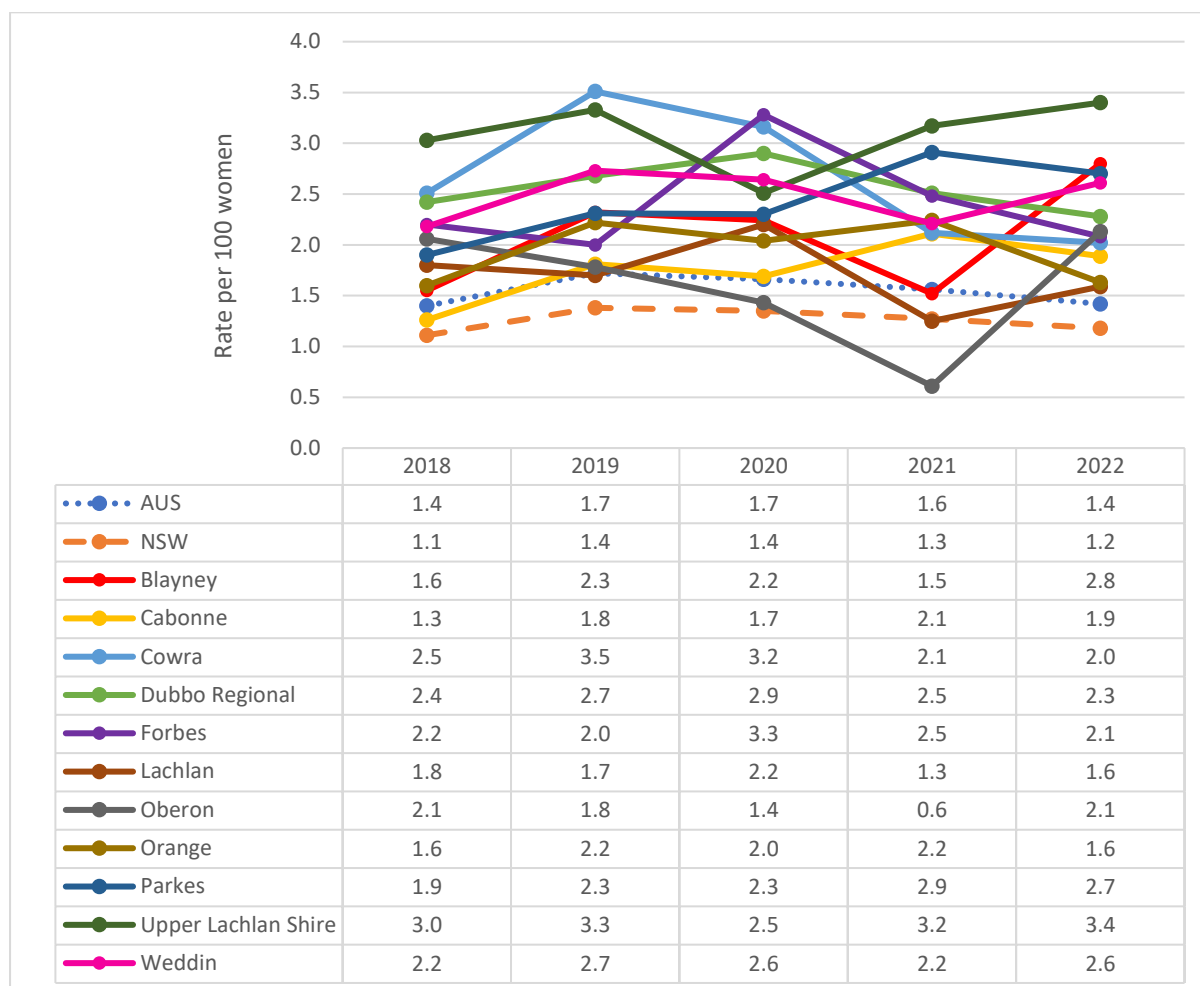


Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

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**Figure 97.** MBS claim rates for hormonal implants in Southern Western NSW LHD by LGA, 2018 to 2022



Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

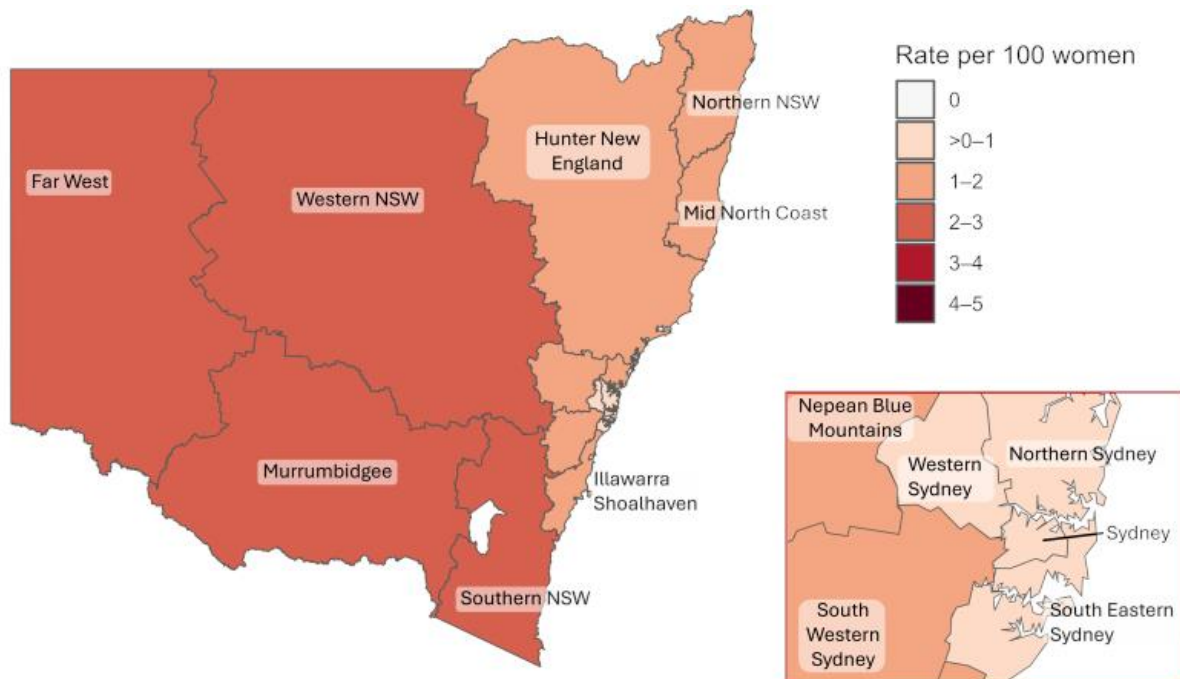
MBS Item: 14206

## 4.8 Claim rates for etonogestrel implants across all NSW in 2022

### 4.8.1 Claim rates for etonogestrel implants across all NSW LHDs in 2022

In 2022, the PBS claim rates for etonogestrel implants ranged from 0.7 per 100 women aged 15-49 years (light orange) to 2.8 per 100 women (dark orange), with the highest rate being four times that of the lowest. The claim rates were higher in more regional areas and lower in metropolitan areas. The highest PBS claim rates were observed in the Far West LHD, while the lowest rates were found in metropolitan LHDs in the Greater Sydney region such as the Northern Sydney and Southeastern Sydney (Map 5).

**Map 5.** PBS claim rates for etonogestrel implants across all NSW LHDs, among women aged 15-49 years in 2022



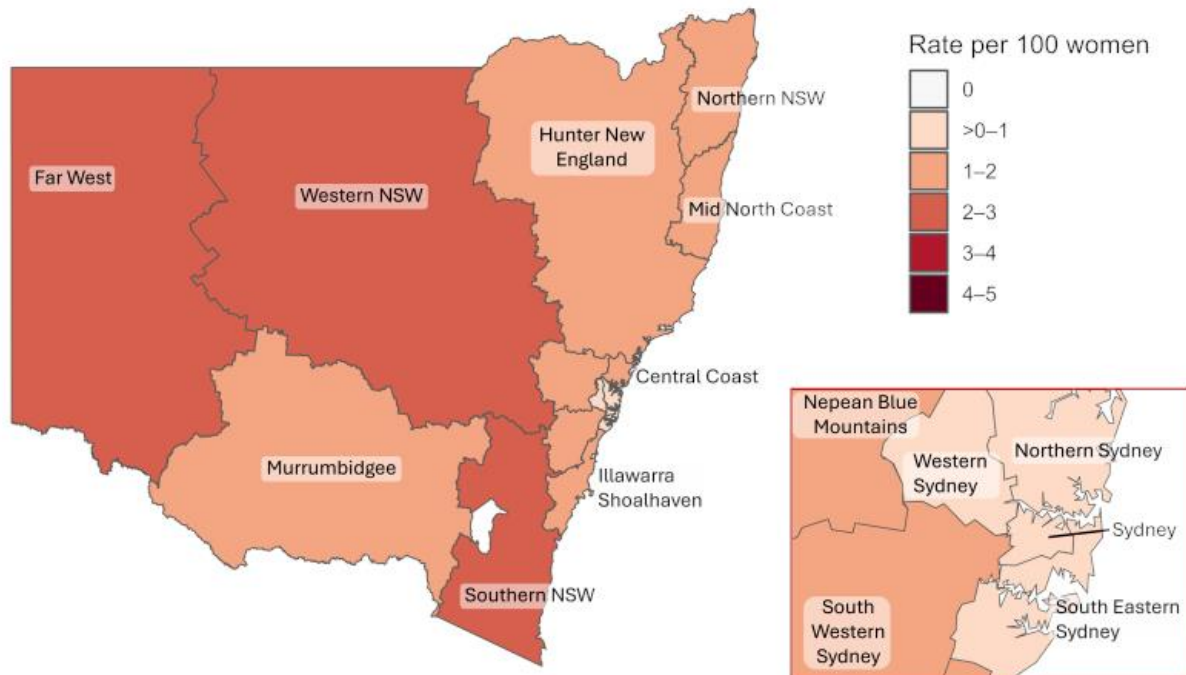
Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

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In 2022, the MBS claim rates for etonogestrel implants ranged from 0.7 per 100 women aged 15-49 years (light orange) to 2.2 per 100 women (dark orange) (Map 6), with the highest rate being three times that of the lowest. The claim rates were higher in regional areas and lower in metropolitan areas. The highest PBS claim rates were observed in Western NSW LHD, while the lowest rates were found in Northern Sydney and Southeastern Sydney.

**Map 6.** MBS claim rates for etonogestrel implants across all NSW LHDs, among women aged 15-49 years in 2022



Source: Australian Government. Services Australia. Data available on request

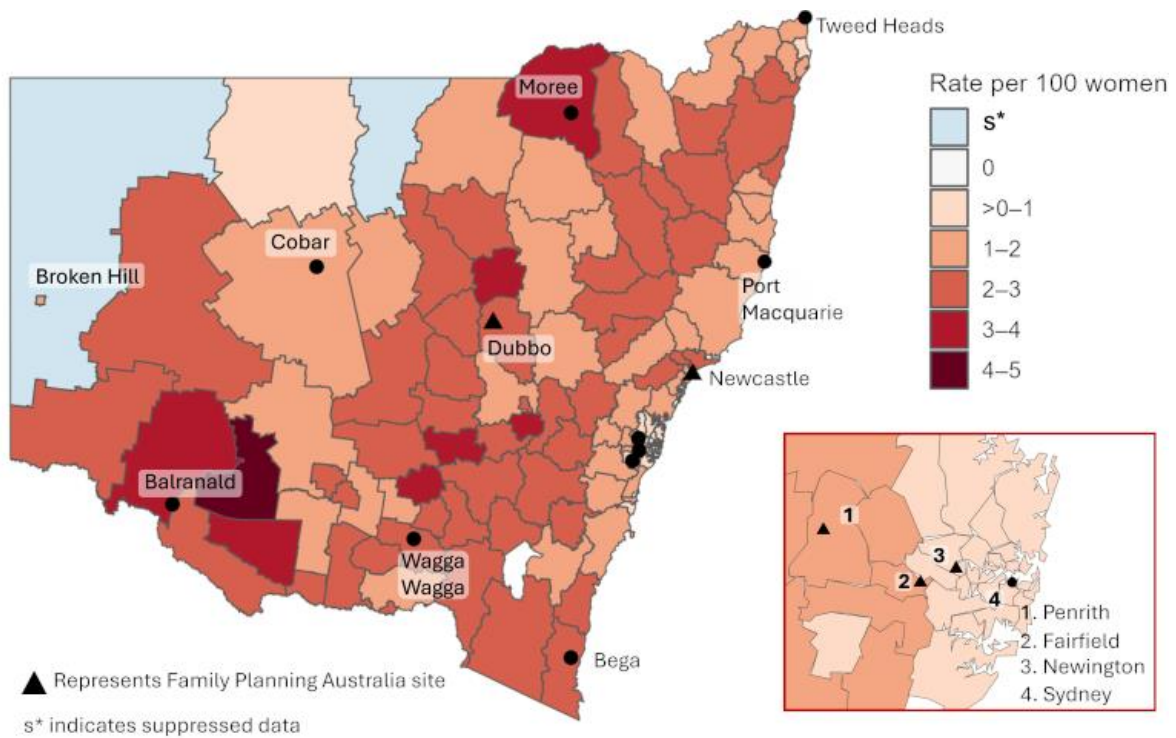
Note: Rate per 100 women aged 15-49 years

MBS Item: 14206

#### 4.8.2 Claim rates for etonogestrel implants across all LGAs in 2022

The PBS claim rates for etonogestrel implants across all NSW LGAs in 2022 ranged from 0.5 per 100 women aged 15-49 years (light orange) to 4.9 per 100 women (dark orange) (Map 7), with the highest rate being ten times that of the lowest. The claim rates were higher in some regional areas such as Hay in Western Murrumbidgee and Gilgandra in Northern Western NSW and lower in other regional areas and metropolitan areas including Greater Regional Sydney such as Woollahra and Willoughby. Across all NSW LGAs, two had suppressed PBS rates (light blue).

**Map 7.** PBS claim rates for etonogestrel implants across all NSW LGAs, among women aged 15-49 years in 2022



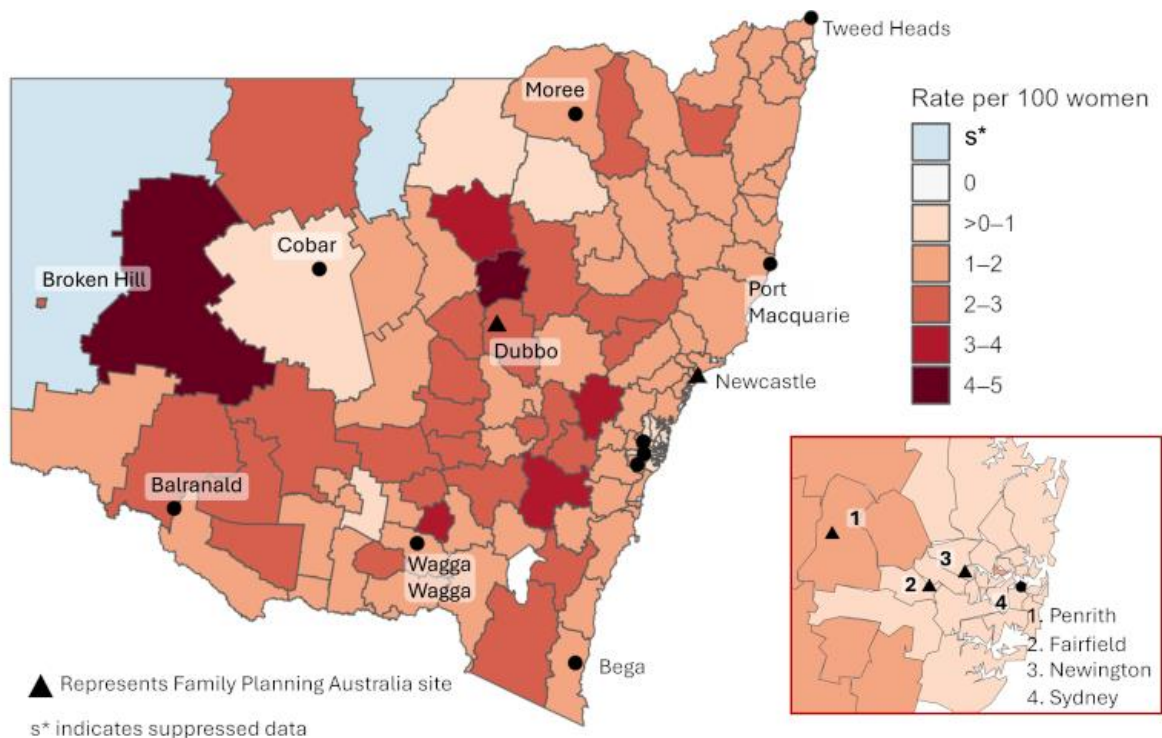
Source: Australian Government. Services Australia. Data available on request

Note: Rate per 100 women aged 15-49 years

PBS Item: 8487Q (Implanon NXT)

The MBS claim rates for etonogestrel implants across all NSW LGAs in 2022 ranged from 0.4 per 100 women aged 15-49 years (light orange) to 4.3 per 100 women (dark orange) (Map 8), with the highest rate being ten times that of the lowest. The claim rates were higher in some regional areas such as Central Darling in Far West NSW and Gilgandra in Northern Western NSW and lower in other regional areas and metropolitan areas including Greater Regional Sydney such as Woollahra and Willoughby. Across all NSW LGAs, two had suppressed PBS rates (light blue).

**Map 8.** MBS claim rates for etonogestrel implants across all NSW LGAs, among women aged 15-49 years in 2022



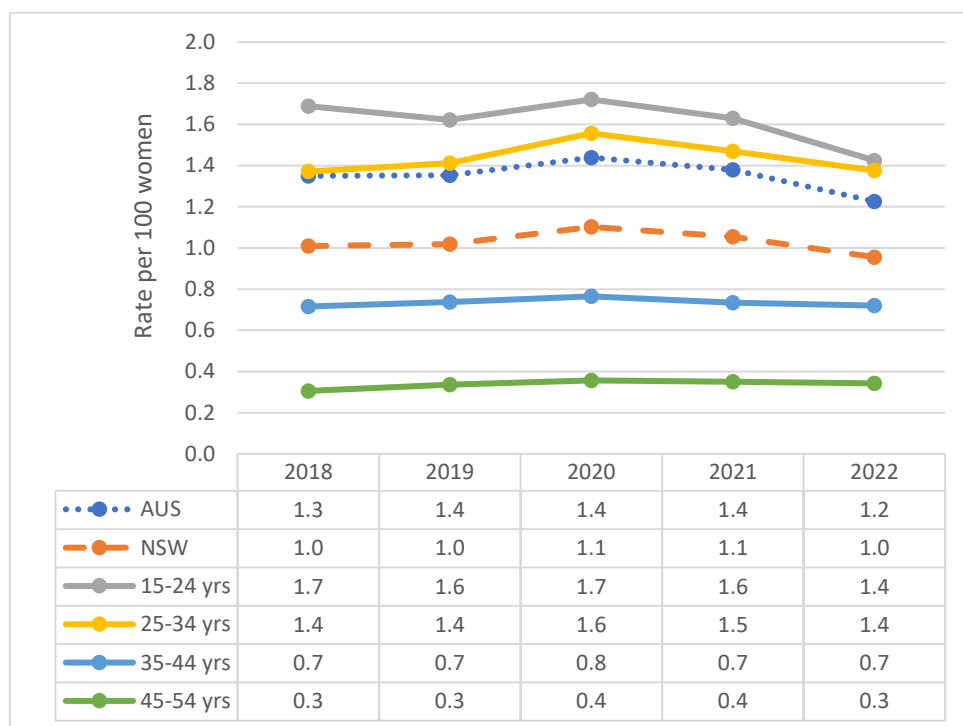
Source: Australian Government. Services Australia. Data available on request  
 Note: Rate per 100 women aged 15-49 years  
 MBS Item: 14206

#### 4.9 Claim rates for implant removal

A total of 455,758 claim rates for implant removals among women aged 15-54 years were recorded in Australia between 2018 and 2022. NSW accounted for 108,629 or 24% of all removal claims, costing \$5.8 million. The number of claim rates for insertions for the same age group of 15-54 years was 500,723 for Australia and 128,095 for NSW, resulting in the ratio between removal claims per insertions of 91% for Australia and 85% for NSW. However, implant removal MBS number is not always co-claimed with insertion item number at the time of an Implanon replacement so the data might be underestimated.

Implant removal rate per 100 women aged 15-54 years in NSW was consistently lower than that of Australia. For example, the implant removal rate per 100 women aged 15-54 years in NSW in 2022 was 1.0 compared to 1.2 for Australia. Implant removal rate reduced with age, from 1.4 per 100 women aged 15-24 years to 0.3 per 100 women aged 45-54 years in 2022.

**Figure 98.** Implant removal rate in NSW and Australia between 2018 and 2022



Source: Australian Government. Services Australia. Medicare Item Reports

[http://medicarestatistics.humanservices.gov.au/statistics/mbs\\_item.jsp](http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp)

Note: Rate per 100 women aged 15-54 years

MBS item: 30062

Australian Bureau of Statistics

<https://www.abs.gov.au/statistics/people/population/population-clock-pyramid>

#### 4.10 Estimated prevalence of implant current users across all NSW in 2022

In 2022, it was estimated that there were 215,702 current implant users in Australia, representing a prevalence rate of 3.6%. In NSW, there were 54,850 current implant users, with a lower prevalence rate of 2.9% compared to the national average.

Combined with IUD users, the total number of LARC users in Australia was estimated at 678,389, with an overall prevalence rate of 11.2%. In NSW, the total number of LARC users was 184,407, representing a prevalence rate of 9.8%.

**Table 3.** Estimated prevalence of implant current users across all NSW in 2022

	2022	2021	2020	Total	Rate
<b>AUSTRALIA</b>					
Number of females 15-49	6,039,405*				
Number of PBS claims	95,573	102,747	110,922		
Number of remaining current users					
Average	71,680	71,923	72,099	215,702	3.6
Upper Limit	84,104	77,060	79,864	241,028	4.0
Lower Limit	66,901	59,593	46,587	173,082	2.9
<b>NSW</b>					
Number of females 15-49	1,877,642*				
Number of PBS claims	24,365	25,876	28,404		
Number of remaining current users					
Average	18,274	18,113	18,463	54,850	2.9
Upper Limit	21,441	19,407	20,451	61,299	3.3
Lower Limit	17,056	15,008	11,930	43,993	2.3

\* Australian Bureau of Statistics. Regional population by age and sex, 2022

## 5. Discussion

### 5.1 IUD use

Between 2018 and 2022, the highest annual claim rates for IUDs in Australia reached 2.5 PBS claims per 100 women in 2021, notably higher than previous studies<sup>13,11</sup> and from 2008 to 2012.<sup>29</sup> This suggests an increase in the uptake of hormonal IUDs over time.

The ratio between MBS and PBS claims was 58%. The relatively low ratio suggested that a large proportion of insertion were carried out in facilities or health professionals that do not claim Medicare rebate. This could also represent failed insertions or prescribing not translating to insertion due to change of mind. Additionally, Medicare rebates are not available for nurses or midwives carrying out LARC-related procedures, despite their growing involvement in providing these services.<sup>30-32</sup>

The IUD claim rates increased until 2021, as noted in previous studies.<sup>11,13,29,33</sup> The estimated prevalence of IUD users in Australia (7.7%) and NSW (6.9%) in 2022 was also higher than previous years.<sup>11,12,13</sup> This rise was likely attributed to efforts to promote LARC<sup>34</sup> and a rebound effect following the COVID-19 pandemic.<sup>33</sup> In addition, promotion of nurse-led insertion<sup>30-32</sup> could also contribute to the increase. However, a slight decrease in IUD claims in 2022, as reported by D'Arcy et al,<sup>33</sup> may suggest that women are exercising contraceptive choice. Despite the increase, IUD use in NSW and in Australia is still much lower than the global average of 18.8%.<sup>10</sup>

The total cost for IUD claims in Australia over five years was \$160 million, excluding the costs associated for consultation with IUD, copper IUDs and for insertions not billed to Medicare. Due to the long term effect (up to 10 years), intrauterine contraception is more cost-effective than other methods.<sup>25,35,36,37,38</sup> However, claim rates for IUD in Australia has been consistently much lower than other methods such as oral contraception,<sup>11,12</sup> suggesting potential barriers to access or preferences for alternative contraceptive methods among women.

Factors influencing IUD use include concerns about side effects,<sup>39</sup> misinformation regarding infection risks and unsuitability for younger women,<sup>15,40</sup> changed bleeding patterns, cost, time and distance,<sup>40</sup> and health professionals' lack of confidence and support in LARC insertion.<sup>16,40</sup> Training for health professionals on LARC<sup>16</sup> and increased role of nurses in LARC counselling and insertion could enhance uptake.<sup>40</sup>

NSW is the most populous state, therefore accounted for the largest number of claims in Australia (30% of all PBS and 28% of all MBS claims), but the rates were consistently lower than the national average (2.1 per 100 women vs. 2.3 in 2022). Similar results on the lower claim rates have been reported in previous studies.<sup>4,41</sup>

The IUD claim rates were lowest among the youngest group of women aged 15-19 years and higher among older groups, aligning with previous findings.<sup>11</sup> The hormonal IUD can also be used for heavy menstrual bleeding during the peri-menopause,<sup>42,43</sup> are more likely to be used by older women.

Claim rate varied by location. Consistent with findings from other studies,<sup>29,44</sup> women in non-metropolitan areas had higher claim rate than women in metropolitan areas. Future research should explore the underlying factors contributing to these geographical differences.

The number of MBS claim rates for IUD removal was very small compared to the number of insertions with ratios of 3.9% for Australia and 4.6% for NSW. This discrepancy is due to the fact that the IUD removal item can only be billed when the procedure is performed under general anaesthetic. Most IUD removals, however, take place in primary care or family planning settings, where time-based MBS item numbers are used instead.

## 5.2 Implant use

Between 2018 and 2022, implant claim rates in Australia reached up to 1.9 PBS claims per 100 women aged 15-49 years, surpassing rates reported during previous periods,<sup>11,12,18</sup> indicating an increasing trend. However, these rates in this study were lower than findings from a study between 2006 and 2018 among women aged 15-44 years.<sup>13</sup> A potential explanation for this difference could be that this report included women aged up to 49 years. Research from the American College of Obstetricians and Gynaecologists, reports that older woman may be less likely to use implants due to concerns about irregular and unpredictable bleeding.<sup>45</sup> Further research is required to investigate this in an Australian context.

Both PBS and MBS claim rates for implant insertions increased from 2018 to 2019, followed by a consistent decline. However, these data should be interpreted with caution. Both MBS item numbers for Implanon replacement—removal and reinsertion—can only be claimed if the new implant is inserted at a different site, rather than through the same incision as the removed implant. This, combined with a revision to the recommended insertion site during the reporting period, may have influenced claiming patterns. Furthermore, the MBS item number for implant insertion is not exclusive to Implanon; it is also used for other subdermal implants, such as Zoladex and estrogen implants.

The recommendation to extend implant use to four years during the Covid-19 pandemic<sup>46</sup> might have contributed to this decline. There might be other factors for the decline given that the claim rate had plateaued between 2015 and 2018, well before the pandemic.<sup>13</sup> Issues such as dissatisfaction with bleeding patterns,<sup>47</sup> abnormal bleeding,<sup>48,49</sup> and mood changes<sup>50</sup> have

also been shown impact continuation and uptake. Despite the decline, the prevalence of implant current users in NSW (2.9%) and Australia overall (3.6%) was still slightly higher than the global average of 2.4%.<sup>10</sup> Over the five years, the total cost of implant claims in Australia was \$101.7 million. Alongside IUDs, implants are among the most cost-effective contraceptive methods<sup>25,35-38</sup> but have lower uptake compared to other methods.<sup>11,12</sup>

The implant claim rates in NSW mirrored the national trend but were consistently lower, aligning with previous findings.<sup>11</sup> In contrast to IUD claim rates, which increased with age, implant claim rates decreased with age—a pattern consistent with findings from previous studies.<sup>11,13</sup> While it is unclear what is driving this difference, there is evidence of misconceptions about the unsuitability of IUDs for nulliparous women.<sup>9</sup> Similar to IUD claim rates, implant claim rates were consistently lower in metropolitan areas, while non-metropolitan areas reported the higher rates.

### 5.3 Data development

To enhance understanding of contraceptive use in Australia, it is crucial to link contraceptive products and procedures obtained from facilities such as public hospitals, youth clinics, and sexual health clinics with Medicare data.

Recently, PBS and MBS data have been securely joined with various other datasets, including National Public and Private Hospital Morbidity Databases, Emergency and Outpatient Services, National Death Index and Residential Aged Care data<sup>51</sup>, up to June 2019. Future studies should use these linked datasets to enable comparisons across different population subgroups and to evaluate side effects, duration of contraceptive use, changes in methods, and the circumstances surrounding method changes. To facilitate meaningful comparisons, studies should employ consistent age group classifications.

## 6. Conclusions

This is the first comprehensive report analysing all PBS and MBS Medicare claims related to LARC in NSW. Covering a five-year period from 2018 to 2022, the report highlights key trends and patterns across age groups, remoteness areas, metropolitan and non-metropolitan Local Health Districts (LHDs), and Local Government Areas (LGAs). The information is essential for identifying areas of unmet need and informing more targeted service delivery.

Although use of both IUDs and implants was low compared to other contraceptive methods, IUD claim rates were higher than those for implants. While the claim rates in NSW followed national trends, they were consistently lower. LARC claim rates initially showed slow growth but have declined in recent years. Significant variations were observed in claim rates across

different age groups, levels of remoteness, metropolitan versus non-metropolitan LHDs, and (LGAs) within each LHD.

To improve LARC use, targeted strategies should include increasing consumer awareness about LARC as effective contraceptive options and improving access to health services that offer LARC, training for general practitioners, expanding the roles of registered nurses and midwives to provide counselling and support of consumers and also to insert LARC, improving Medicare claim practices at local health facilities, establishing support groups for women and integrating reproductive and sexual health services, especially for those who may face additional, systemic barriers to LARC use.

For future studies, leveraging linked Medicare data with other sources will provide a more comprehensive understanding of LARC utilisation in NSW and across Australia.

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