



Who can afford a Mirena® for contraception?

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Locality Medical Adviser



Aim

- What are LARCs and why do we like them?
- What are potential barriers to use of LARCs
- Example from New Zealand where cost of device is a barrier to uptake of the Mirena®

LARCs in New Zealand

Copper IUD



Choice TT38:
Standard 10 years
Short 5 years



Choice Load 375
5 years

Implant – Jadelle®



5 years



Mirena® 5 years
Jaydess® 3 years

Why Larcs?

- Lower failure rate
 - Those using 'short-acting' reversible contraception (such as the pill) are over 22 x more likely to experience an unintended pregnancy compared to people using LARCs¹
- Cost effective

1. McNicholas C, Madden T, Secura G, Peipert JF. The Contraceptive CHOICE Project Round Up. *Clin Obstet Gynecol.* 2014; **57** 635–43.

Barriers to access^{2,3}

2. Bateson D, Kang S, Paterson H, Singh K. A review of intrauterine contraception in the Asia-Pacific region. *Contraception*. 2017; 95 40–9
3. Rose SB, Garrett SM. Regional variation in post-abortion initiation of long-acting reversible contraception in New Zealand. *Aust N Z J Obstet Gynaecol*. 2016; **56** 315–22

Barriers to access^{2,3}

- Cost of device
- Cost of insertion – to client and service provider
- Clinician knowledge and training
- Misinformation
- Client awareness
- Getting to a clinic where the service is provided

2. Bateson D, Kang S, Paterson H, Singh K. A review of intrauterine contraception in the Asia-Pacific region. *Contraception*. 2017; 95 40–9
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Subsidised LARCS in New Zealand

Copper IUD



Choice TT38:



Choice Load 375

Implant – Jadelle®



5 years

Levonorgestrel-releasing intrauterine systems

For contraception, the cost at Family Planning:

Mirena® \$340

Jaydess® \$275



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A Mirena® is subsidised (cost of device to patient \$5) if:

- the woman has a diagnosis of heavy menstrual bleeding and
- is unable to tolerate or has failed to respond to subsidised therapies and
- has either a haemoglobin of less than 120g/l or ferritin less than 16mcg/l

Why do the Study?

- Mirena® is a popular choice. In a New Zealand study⁴ the uptake of Mirena® in an abortion clinic increased from 6% to 36% when the barrier of cost was removed and education provided.
- Question: Is the frequency of use of LNG-IUS (Mirena® and Jaydess®), copper IUD and Jadelle® influenced by socio-economic group or ethnicity?

4. Rose SB, Lawton BA, Brown SA. Uptake and adherence to long-acting reversible contraception post-abortion. *Contraception*. 2010 Oct;82(4):345-53

Methods

- Identify all the LNG-IUS (special authority for HMB and self-funded), IUDs and Jadelles® inserted in Family Planning clinics in 2015 in the Wellington region.
- Determine the deprivation quintile of current address and ethnicity for each person who had a device

How was deprivation measured?

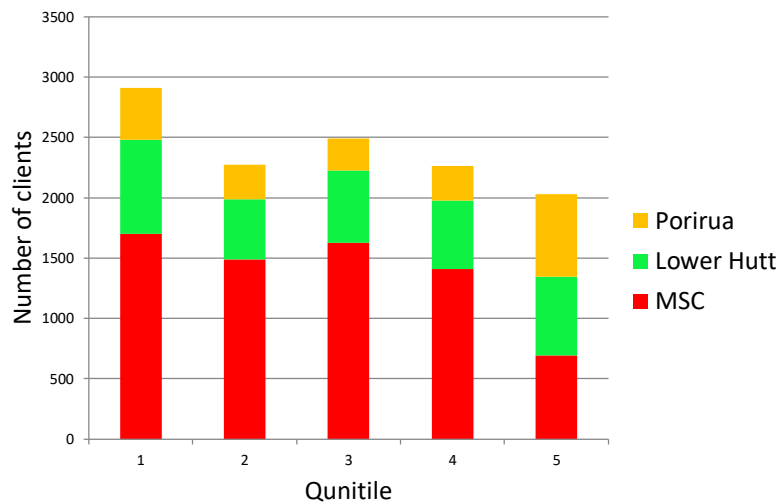
The NZ deprivation index.

- Provides a socioeconomic deprivation rating for small geographic areas of NZ.
- Is calculated from 2013 census data and uses 8 measures of deprivation to calculate a deprivation score for each small geographical area.

Quintile 1 = areas that have the least deprived scores

Quintile 5 = areas that have the most deprived scores.

Number of clients seen by deprivation quintile in 2015 in each clinic



Devices inserted in 2015 in the Wellington Region

| Device | Number inserted |
|--------------------------------|---|
| LNG-IUS (Mirena® and Jaydess®) | 320 (243 self-funded, 72 special authority for HMB) |
| Copper IUD | 574 |
| Jadelle® | 516 |
| Total | 1410 |

Number (and percentage) of people from each deprivation quintile area with each type of device

| Quintile | Special Authority Mirena® (%) | Self-funded LNG-IUS (%) | Copper IUD (%) | Jadelle® (%) |
|------------|-------------------------------|-------------------------|----------------|--------------|
| 1 | 14 (19) | 67 (28) | 140 (24) | 104 (20) |
| 2 | 19 (26) | 45 (19) | 121 (21) | 84 (16) |
| 3 | 6 (8) | 68 (28) | 112 (20) | 104 (20) |
| 4 | 16 (22) | 43 (18) | 113 (20) | 101 (20) |
| 5 | 17 (24) | 13 (5) | 81 (14) | 121 (23) |
| No address | 0 | 4 (2) | 7 (1) | 2 (0.4) |
| Total | 72 | 240 | 574 | 516 |

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Choice of device by ethnic group

| | Ethnicity (%) | | | | | | |
|---------------------------|---------------|----------|----------|---------|-----------------|---------|------------|
| Device | NZ European | Māori | European | Asian | Pacific Peoples | Other | Not stated |
| Special Authority Mirena® | 34 (4) | 15 (9.5) | 1 (0.8) | 11 (11) | 7 (9.6) | 2(3.1) | 2 (10) |
| Self-funded LNG-IUS | 182 (21) | 4 (2.5) | 26 (21) | 14 (14) | 0 (0) | 8 (13) | 6 (30) |
| IUD | 372 (43) | 41 (26) | 62 (50) | 42 (41) | 21(29) | 29 (45) | 7 (35) |
| Jadelle® | 271 (32) | 98 (62) | 36 (29) | 36 (35) | 45 (62) | 25(39) | 5 (25) |
| Total | 859 | 158 | 125 | 103 | 73 | 64 | 20 |

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Conclusion⁵



- The Mirena® is infrequently used for contraception by Māori, Pacific Peoples and people residing in areas with the greatest socioeconomic deprivation score
- Action point – advocate for universal subsidy of the device



5. Murray Catriona, Roke Christine (2018) Who can afford a Mirena® for contraception? Journal of Primary Health Care 10, 201-206.



 NEW ZEALAND
Family Planning

Whakamanahia

Equity

Access

Choice



Thanks to those at Family Planning who helped, particularly,
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No conflicts of interest

