

**Disinvestment in
Australia
OSTEBA 25 years with
Euroscan**

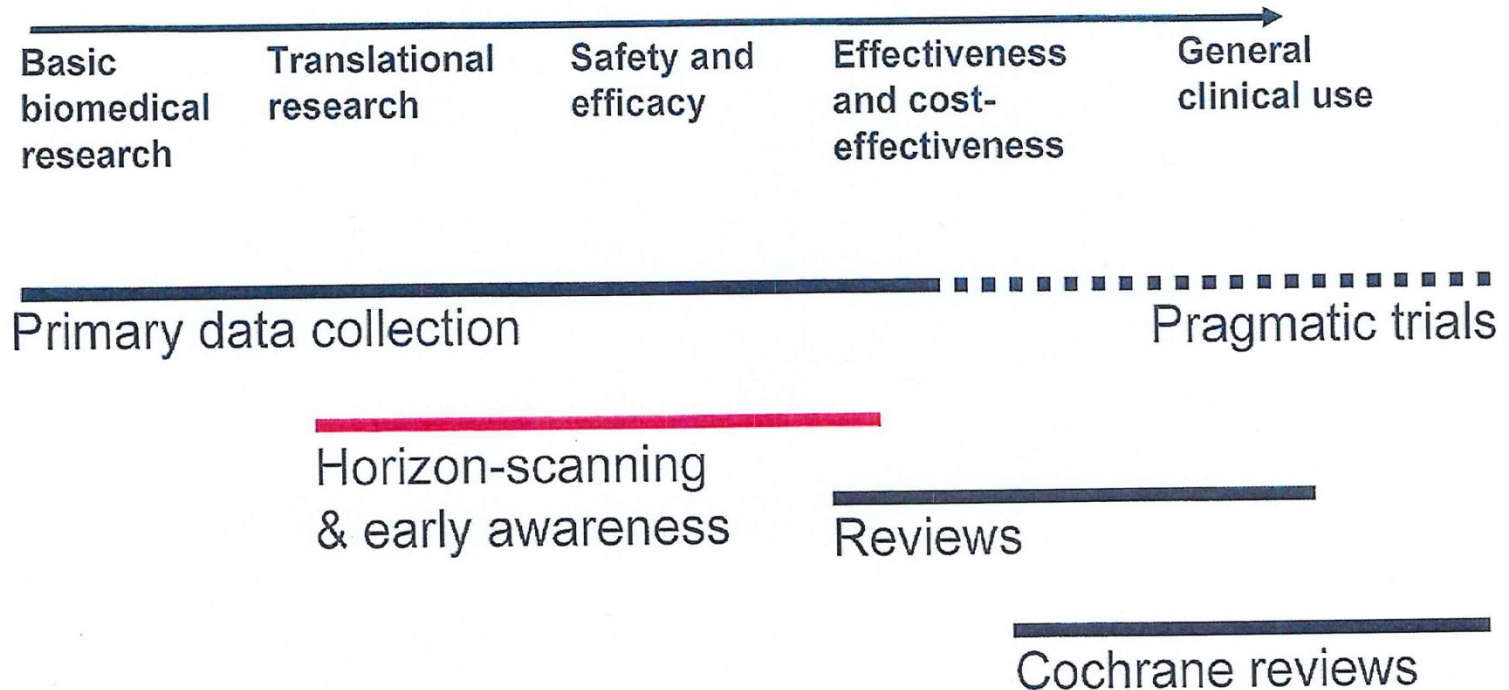
Bilbao October 2017

Prof Brendon Kearney

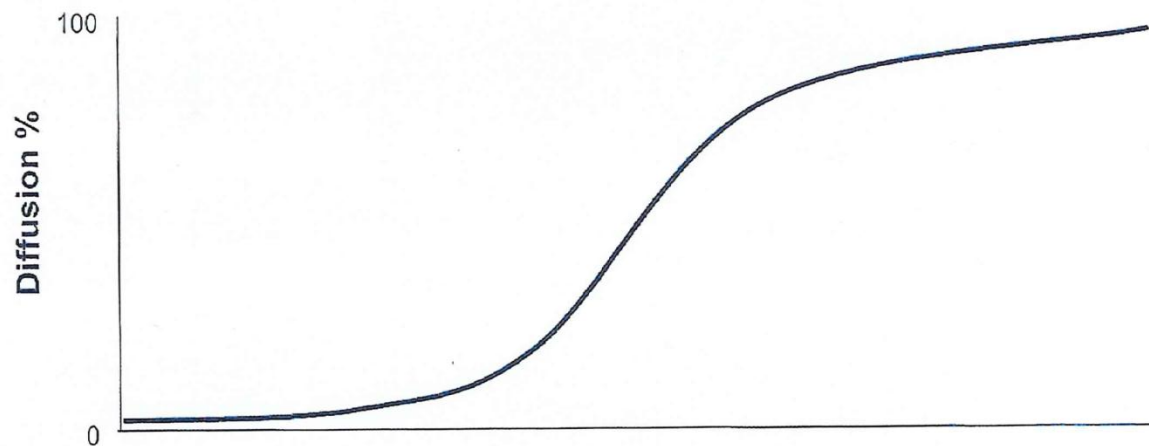
Disinvestment

Disinvestment relates to the process of withdrawing health resources, either partially or completely, from existing healthcare practices (including procedures, devices, diagnostics, programmes and pharmaceuticals) that are deemed to deliver no or low health gain for their cost, and are thus not efficient health care resource allocations. Released resources can then be reinvested in clinical practices and technologies that deliver safe and effective healthcare for all patients, therefore representing efficient health resource allocation

The HTA sequence



Adoption and diffusion





Life cycle of technology

- Future technology – technology not yet developed
- Emerging technology – technology prior to adoption
- New technology – technology in the phase of adoption
- Accepted technology – technology in general use
- Obsolete technology – technology that should be taken out of use

Passive Disinvestment and natural attrition

Many interventions become outmoded

e.g. Diagnostic ERCP
 Epoetin β
 Pegfilgastrin
 Tonsillectomy
 Appendicectomy

Active Disinvestment

Active strategies used in a more directive approach to reduce the practice of unnecessary, ineffective, inefficient or harmful interventions

Review of Medicare Benefits Schedule

More than 5000 items

- often no descriptors
- mostly no HTA

Remove obsolete items

Review high cost/volume items

e.g. Colonoscopy

Coronary artery stenting

Comprehensive and ongoing

Choosing Wisely Australia

5 years

30 organisations

- Medical colleges
- Societies
- Medical
- Nursing
- Pharmacy

Choosing Wisely Australia

More than 300 recommendations

Information for Clinicians and Patients

Established 5 years

Operated by NPS medicine wise

Funded by Australian Government

First annual meeting 2017

Evaluation planned

Hospital involvement

Health PACT

Technology Briefs designed to
Change practice

Tavi

Renal nerve denervation

IVC filters

IV canulae in antibiotic use

Mitraclip

Bioresorbable stents

Gynaecological mesh

Pulmonary stents

State Health Department And based HTA committees

All states and New Zealand have
Active programmes

e.g. Auckland hospital

- Catheter ablation for AF
- Grommots

Pharmaceutical Benefits Scheme

Use of biosimilars generics

Limited expenditure growth to 1%

Hepatitis C – Public health QALY of \$14,000

PBS Costs

↑ by 13% from 1994 to 2005

| | |
|------|------|
| 2005 | 2.7% |
| 2006 | 4.3% |
| 2007 | 9.4% |
| 2008 | 9.2% |
| 2009 | 9.3% |
| 2010 | 5.7% |

Reduced since then by use of

- generics
- biosimilars
- but funding new high cost drugs

QALY

Used in PBAC assessments

No set amount

Can vary widely

PBAC

HPV Vaccine

High Quality

Population Health approach

- reduction in cervical cancer and precursor lesions
- changes to cervical cancer screening programme

PBAC

Hepatitis C

- Industry submitted to PBAC for listing
- Request for approx \$3 billion dollars
- PBAC looks at Population Health approach to eliminate Hepatitis C from Australia
- Currently 230,000 patients
- PBAC Quality assessed at \$15000
- PBAC/Health negotiates with industry to fund all drugs and genotypes
- 10 year agreement for approx. \$1 billion
 - Volume vs. price
 - risk for Government and Industry
- 30,000 treated in first six months
- Generic scheme ceased
- Associated public health programme

| Genotype | No Previous Treatment (naïve) | | Previously Received Treatment (experienced) | |
|--------------|--|--|--|--|
| | No cirrhosis | With cirrhosis | No cirrhosis | With cirrhosis |
| 1 a/b | Ledipasvir/sofosbuvir (8 or 12 Weeks) | Ledipasvir/sofosbuvir (12 Weeks) or Sofosbuvir and Peg-Interferon alfa-2a/ribavirin (12 weeks) | Ledipasvir/sofosbuvir (12 Weeks) or Sofosbuvir and Peg-Interferon alfa-2a/ribavirin (12 weeks) | Ledipasvir/sofosbuvir (24 Weeks) or Sofosbuvir and Peg-Interferon alfa-2a/ribavirin (12 weeks) |
| 1 a/b | Daclatasvir and sofosbuvir (12 weeks) | Daclatasvir and sofosbuvir and ribavirin (12 weeks) or Daclatasvir and sofosbuvir (24weeks) | Daclatasvir and sofosbuvir (12 or 24 weeks) | Daclatasvir and sofosbuvir and ribavirin (12 weeks) or Daclatasvir and sofosbuvir (24weeks)* |
| 1a | Paritaprevir-ritonavir, ombitasvir, dasabuvir and ribavirin (12 weeks) | Paritaprevir-ritonavir, ombitasvir, dasabuvir and ribavirin (12 weeks) | Paritaprevir-ritonavir, ombitasvir, dasabuvir and ribavirin (12 weeks) | Paritaprevir-ritonavir, ombitasvir, dasabuvir and ribavirin (12 or 24 weeks) |
| 1b* | Paritaprevir-ritonavir, ombitasvir and dasabuvir (12 weeks) | Paritaprevir-ritonavir, ombitasvir and dasabuvir (12 weeks) | Paritaprevir-ritonavir, ombitasvir and dasabuvir (12 weeks) | Paritaprevir-ritonavir, ombitasvir and dasabuvir (12 weeks) |
| 2 | Sofosbuvir and ribavirin (12 weeks) | Sofosbuvir and ribavirin (12 weeks) | Sofosbuvir and ribavirin (12 weeks) | Sofosbuvir and ribavirin (12 weeks) |
| 3 | Daclatasvir and sofosbuvir (12 weeks) or Sofosbuvir and ribavirin (24 weeks) | Daclatasvir and sofosbuvir (24weeks) or Sofosbuvir and ribavirin (24 weeks) | Daclatasvir and sofosbuvir (12 weeks) or Sofosbuvir and ribavirin (24 weeks) | Daclatasvir and sofosbuvir (24 weeks) or Sofosbuvir and ribavirin (24 weeks) |

Australian Safety and Quality Commission

2nd Atlas of variation in Healthcare 2017

Developed Chronic disease management programs

COPD

Heart Failure

Diabetes

| Data item | Range across local areas ^a per 100,000 | Times difference | Times difference excluding top and bottom 10% | Number over one year |
|---|---|------------------|---|----------------------|
| 1.1 Chronic obstructive pulmonary disease Hospitalisations, all ages | 63 to 990 | 15.7 | 3.3 | 66,250 |
| 1.2 Heart failure Hospitalisations, all ages | 90 to 632 | 7.0 | 2.1 | 55,511 |
| 1.3 Cellulitis Hospitalisations, all ages | 102 to 1,262 | 12.4 | 2.9 | 59,466 |
| 1.4 Kidney and urinary tract infections Hospitalisations, all ages | 140 to 899 | 6.4 | 2.2 | 73,277 |
| 1.5 Diabetes complications Hospitalisations, all ages | 52 to 601 | 11.6 | 2.8 | 43,737 |

^a Statistical Area 3

| Data item | Range across local areas^ per 100,000 | Times difference | Times difference excluding top and bottom 10% | Number over one year |
|--|---------------------------------------|------------------|---|----------------------|
| 2.1 Acute myocardial infarction Hospitalisations, people aged 35–84 years | 105 to 905 | 8.6 | 2.6 | 32,388 |
| 2.2 Atrial fibrillation Hospitalisations, people aged 35 years and over | 192 to 740 | 3.9 | 1.7 | 58,608 |

^ Statistical Area 3

Recommendations

2a. State and territory health departments to examine variation in the timeliness and access of patients to appropriate investigations and interventions for suspected acute myocardial infarction.

2b. The Commission to develop a clinical care standard on the management of atrial fibrillation.

4. Surgical interventions

| Data item | Range across local areas [^] per 100,000 | Times difference | Times difference excluding top and bottom 10% | Number over one year |
|---|---|------------------|---|----------------------|
| 4.1 Knee replacement Hospitalisations, people aged 18 years and over | 128 to 507 | 4.0 | 1.9 | 52,039 |
| (See table below for 4.2 and 4.3) | | | | |
| 4.4 Laparoscopic cholecystectomy Hospitalisations, all ages | 89 to 392 | 4.4 | 2.0 | 49,874 |
| 4.5 Appendicectomy Hospitalisations, all ages | 103 to 360 | 3.5 | 1.7 | 40,752 |
| 4.6 Cataract surgery Hospitalisations, people aged 40 years and over | 835 to 3,279 | 3.9 | 1.6 | 245,797 |

| Data item | Range across local areas [^] per 100,000 | Times difference | Times difference excluding top and bottom 10% | Number over three years |
|--|---|------------------|---|-------------------------|
| 4.2 Lumbar spinal decompression Hospitalisations, people aged 18 years and over | 30 to 156 | 5.2 | 2.0 | 44,169 |
| 4.3 Lumbar spinal fusion Hospitalisations, people aged 18 years and over | 10 to 69 | 6.9 | 2.5 | 14,746 |

[^] Statistical Area 3

| Data item | Range across local areas [^] per 100,000 | Times difference | Times difference excluding top and bottom 10% | Number over one year |
|-----------|---|------------------|---|----------------------|
|-----------|---|------------------|---|----------------------|

| | | | | |
|--|------------|-----|-----|--------|
| 3.1 Hysterectomy | 115 to 763 | 6.6 | 2.1 | 27,586 |
| Hospitalisations, women aged 15 years and over | | | | |

| Data item | Range across local areas [^] per 100,000 | Times difference | Times difference excluding top and bottom 10% | Number over three years |
|-----------|---|------------------|---|-------------------------|
|-----------|---|------------------|---|-------------------------|

| | | | | |
|--|-----------|------|-----|--------|
| 3.2 Endometrial ablation | 19 to 390 | 20.5 | 4.2 | 28,606 |
| Hospitalisations, women aged 15 years and over | | | | |

| | | | | |
|--|-----------|------|-----|--------|
| 3.3 Cervical loop excision cervical laser ablation | 23 to 408 | 17.7 | 2.1 | 43,920 |
| Hospitalisations, women aged 15 years and over | | | | |

| Data item | Range across local areas [^] per 1,000 selected women | Times difference | Times difference excluding top and bottom 10% | Number over three years |
|-----------|--|------------------|---|-------------------------|
|-----------|--|------------------|---|-------------------------|

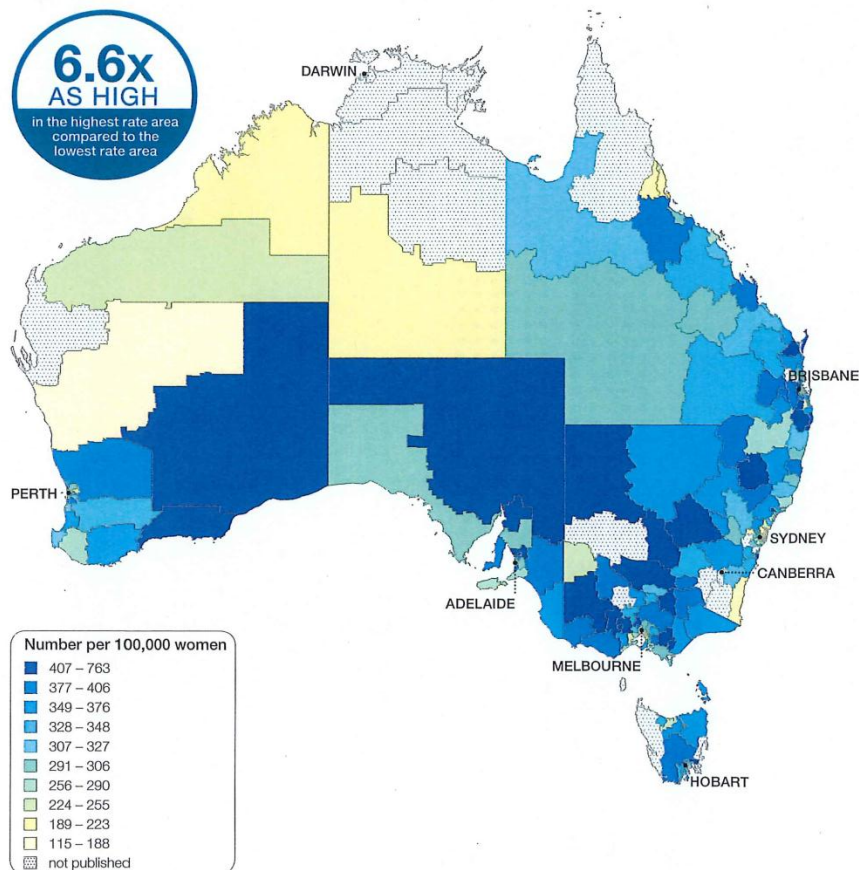
| | | | | |
|--|------------|-----|-----|--------|
| 3.4 Caesarean section, selected women aged 20–34 years | 147 to 438 | 3.0 | 1.5 | 75,018 |
|--|------------|-----|-----|--------|

| Data item | Range across local areas [^] per 1,000 vaginal births | Times difference | Times difference excluding top and bottom 10% | Number over three years |
|-----------|--|------------------|---|-------------------------|
|-----------|--|------------------|---|-------------------------|

| | | | | |
|---|---------|------|-----|--------|
| 3.5 Third- and fourth-degree perineal tears, all vaginal births | 6 to 71 | 11.8 | 2.9 | 18,463 |
|---|---------|------|-----|--------|

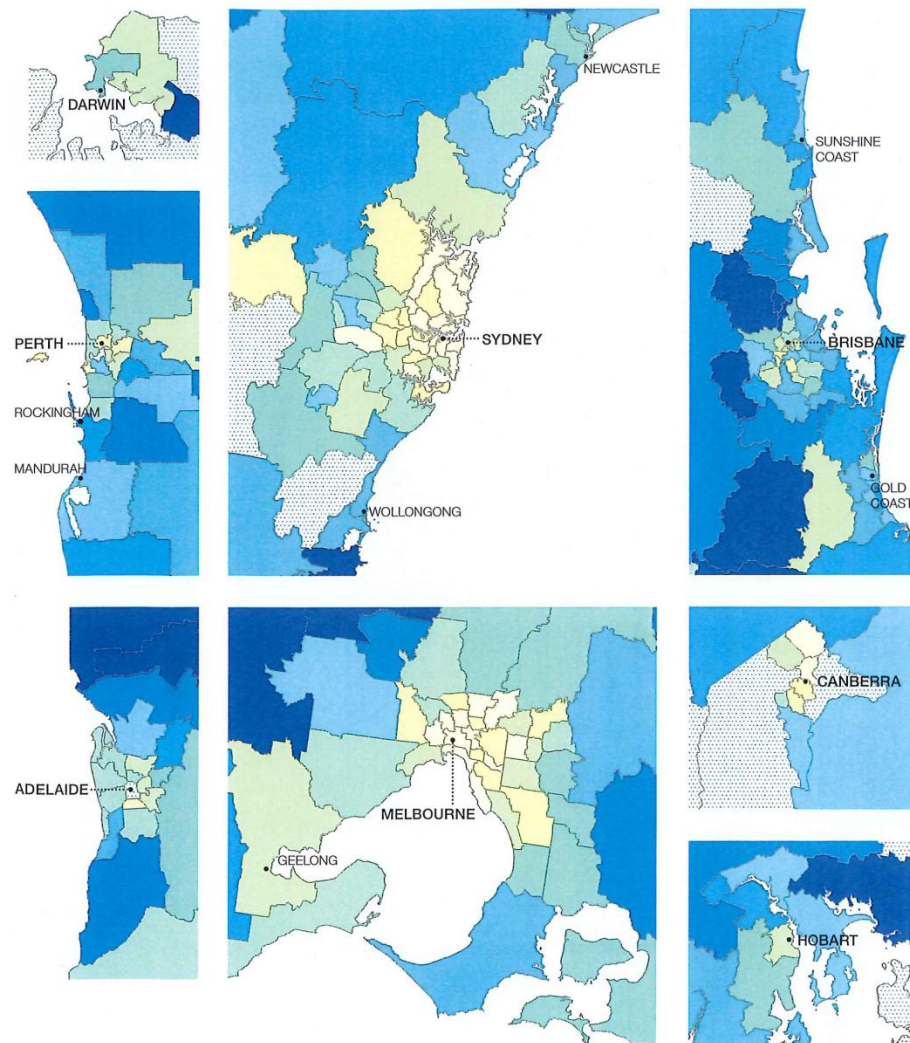
Hysterectomy hospitalisations 15 years and over

Figure 3.4: Number of hospitalisations for hysterectomy per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), 2014–15: Australia map



Notes:
Rates are age standardised to the Australian female population in 2001.
Rates are based on the number of hospitalisations in public and private hospitals (numerator) and women in the geographic area (denominator).
Analysis is based on the patient's area of usual residence, not the place of hospitalisation.
For further detail about the methods used, please refer to the Technical Supplement.
Sources: AIHW analysis of National Hospital Morbidity Database 2014–15 and ABS Estimated Resident Population 30 June 2014.

Figure 3.5: Number of hospitalisations for hysterectomy per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), 2014–15: capital city area maps

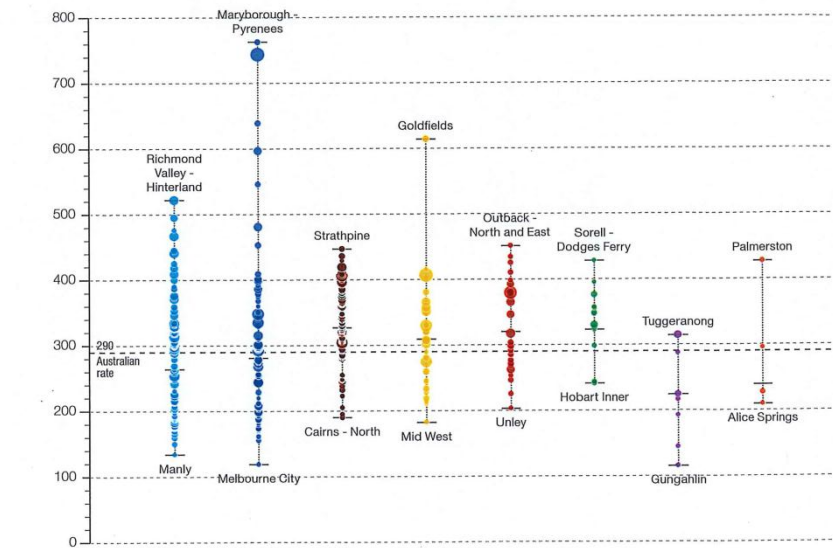


Notes:
Rates are age standardised to the Australian female population in 2001.
Rates are based on the number of hospitalisations in public and private hospitals (numerator) and women in the geographic area (denominator).
Analysis is based on the patient's area of usual residence, not the place of hospitalisation.
For further detail about the methods used, please refer to the Technical Supplement.
Sources: AIHW analysis of National Hospital Morbidity Database 2014–15 and ABS Estimated Resident Population 30 June 2014.

Hysterectomy hospitalisations 15 years and over

Figure 3.6: Number of hospitalisations for hysterectomy per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), state and territory, 2014–15

| | NSW | Vic | Qld | WA | SA | Tas | ACT | NT |
|----------------------|-------|-------|-------|-------|-------|-----|-----|-----|
| Highest rate | 522 | 763 | 447 | 614 | 451 | 428 | 314 | 427 |
| State/territory | 264 | 281 | 327 | 309 | 320 | 323 | 224 | 239 |
| Lowest rate | 134 | 119 | 190 | 182 | 203 | 241 | 115 | 209 |
| No. hospitalisations | 8,058 | 6,750 | 6,193 | 3,113 | 2,228 | 674 | 337 | 211 |



Each circle represents a single SA3. The size indicates the number of hospitalisations.

Notes:
Rates are age standardised to the Australian female population in 2001.
Rates are based on the number of hospitalisations in public and private hospitals (numerator) and women in the geographic area (denominator).
Analysis is based on the patient's area of usual residence, not the place of hospitalisation.
For further detail about the methods used, please refer to the Technical Supplement.
Sources: AIHW analysis of National Hospital Morbidity Database 2014–15 and ABS Estimated Resident Population 30 June 2014.

Figure 3.7: Number of hospitalisations for hysterectomy per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), remoteness and socioeconomic status, 2014–15

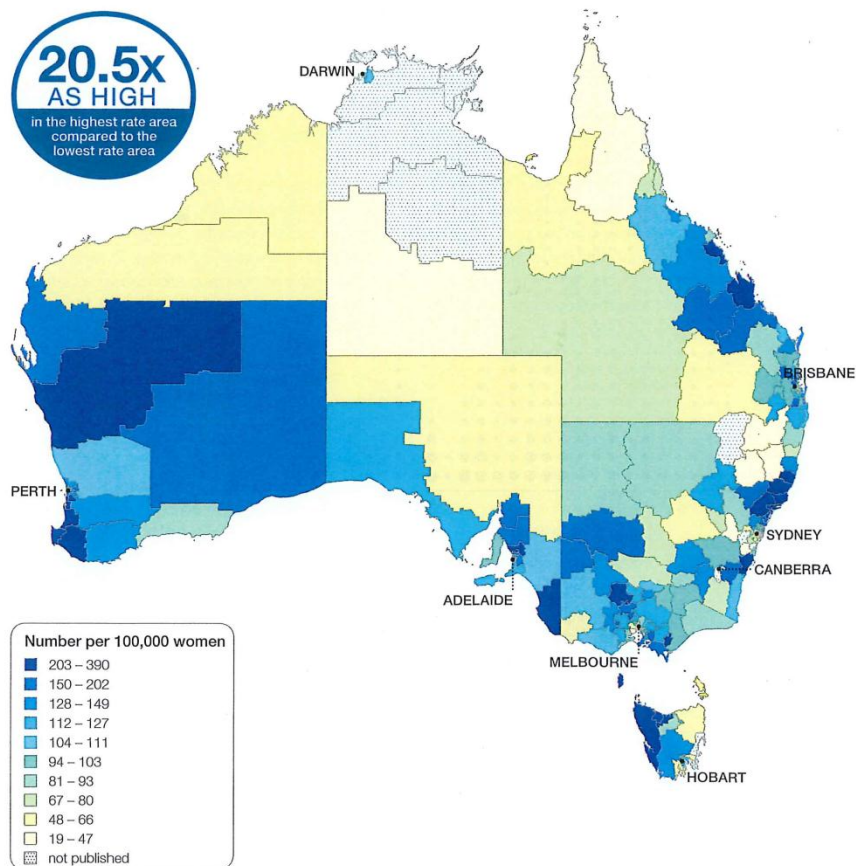


Each circle represents a single SA3. The size indicates the number of hospitalisations.

Notes:
Rates are age standardised to the Australian female population in 2001.
Rates are based on the number of hospitalisations in public and private hospitals (numerator) and women in the geographic area (denominator).
Analysis is based on the patient's area of usual residence, not the place of hospitalisation.
For further detail about the methods used, please refer to the Technical Supplement.
Sources: AIHW analysis of National Hospital Morbidity Database 2014–15 and ABS Estimated Resident Population 30 June 2014.

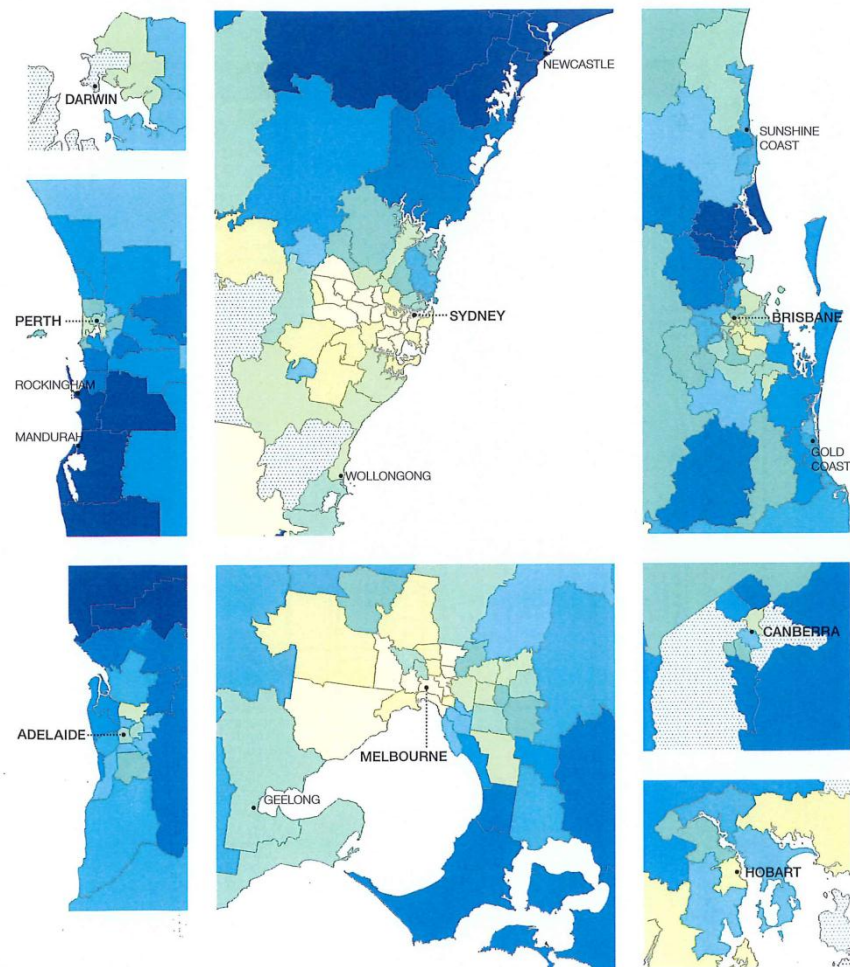
Endometrial ablation hospitalisations 15 years and over

Figure 3.11: Number of hospitalisations for endometrial ablation per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), 2012–13 to 2014–15: Australia map



Notes:
Rates are age standardised to the Australian female population in 2001.
Rates are based on the number of hospitalisations in public and private hospitals (numerator) and women in the geographic area (denominator).
Analysis is based on the patient's area of usual residence, not the place of hospitalisation.
For further detail about the methods used, please refer to the Technical Supplement.
Sources: AIHW analysis of National Hospital Morbidity Database 2012–15 and ABS Estimated Resident Population 30 June 2012 to 2014.

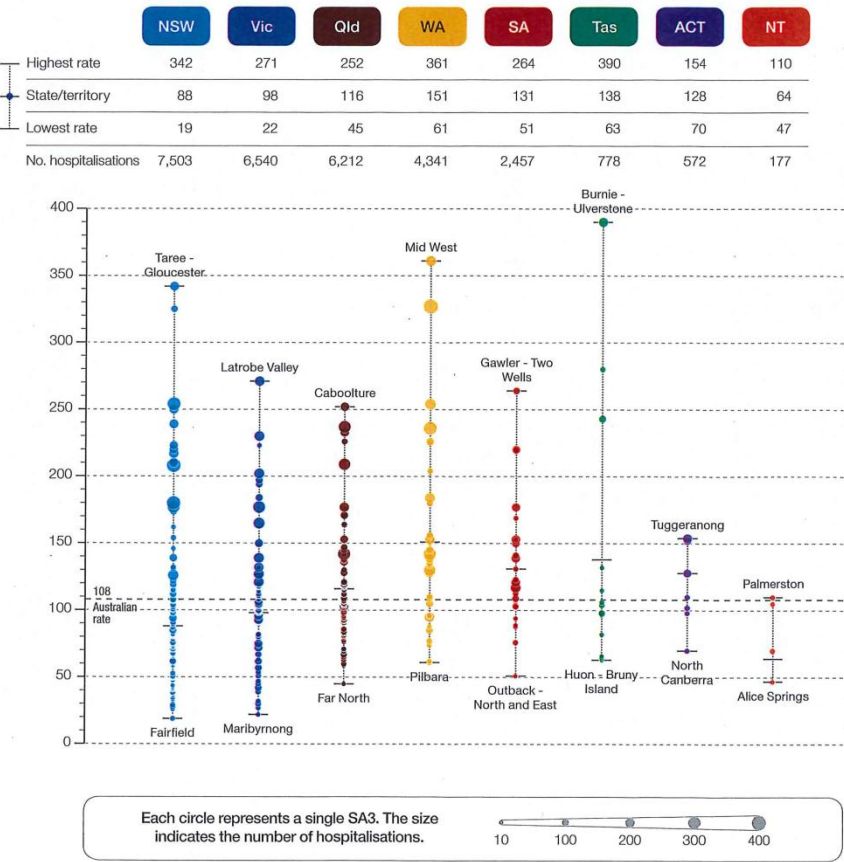
Figure 3.12: Number of hospitalisations for endometrial ablation per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), 2012–13 to 2014–15: capital city area maps



Notes:
Rates are age standardised to the Australian female population in 2001.
Rates are based on the number of hospitalisations in public and private hospitals (numerator) and women in the geographic area (denominator).
Analysis is based on the patient's area of usual residence, not the place of hospitalisation.
For further detail about the methods used, please refer to the Technical Supplement.
Sources: AIHW analysis of National Hospital Morbidity Database 2012–15 and ABS Estimated Resident Population 30 June 2012 to 2014.

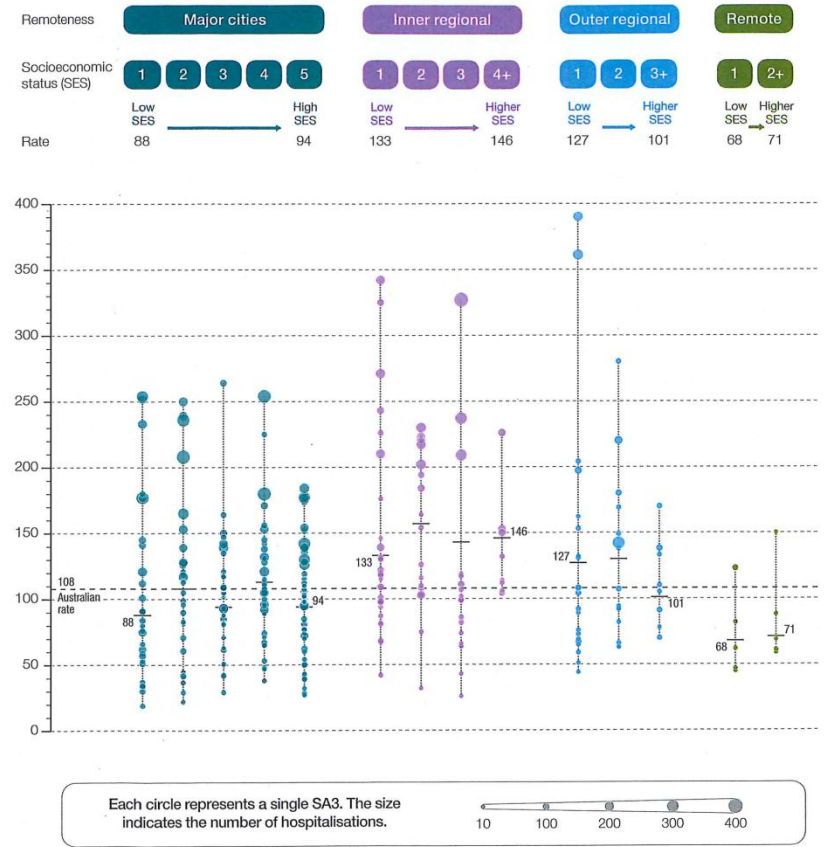
Endometrial ablation hospitalisations 15 years and over

Figure 3.13: Number of hospitalisations for endometrial ablation per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), state and territory, 2012–13 to 2014–15



Notes:
Rates are age standardised to the Australian female population in 2001.
Rates are based on the number of hospitalisations in public and private hospitals (numerator) and women in the geographic area (denominator).
Analysis is based on the patient's area of usual residence, not the place of hospitalisation.
For further detail about the methods used, please refer to the Technical Supplement.
Sources: AIHW analysis of National Hospital Morbidity Database 2012–15 and ABS Estimated Resident Population 30 June 2012 to 2014.

Figure 3.14: Number of hospitalisations for endometrial ablation per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), remoteness and socioeconomic status, 2012–13 to 2014–15



Notes:
Rates are age standardised to the Australian female population in 2001.
Rates are based on the number of hospitalisations in public and private hospitals (numerator) and women in the geographic area (denominator).
Analysis is based on the patient's area of usual residence, not the place of hospitalisation.
For further detail about the methods used, please refer to the Technical Supplement.
Sources: AIHW analysis of National Hospital Morbidity Database 2012–15 and ABS Estimated Resident Population 30 June 2012 to 2014.