Population trends and potential policy drivers of the medicalisation of childbirth in Australia

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Background – Global

- Global CS rates have almost doubled in the last 15 years
- 6.2 million excess CS performed globally each year
- CS use more frequent in births in the richest quintiles
- ‘Too little too late, too much too soon’
Maternity - Towards Normal Birth in NSW

Summary This policy provides direction to NSW maternity services regarding actions to increase the vaginal birth rate in NSW and decrease the caesarean section operation rate; to develop, implement and evaluate strategies to support women and to ensure that midwives and doctors have the knowledge and skills necessary to implement this policy.

Document type Policy Directive

The Third Australian Atlas of Healthcare Variation
2018

National core maternity indicators—stage 3 and 4

jcu.edu.au
Methods
Data linkage

- **Maternity1000 linked dataset:** hospital data; Emergency Department information System; MBS; PBS; Costing records

- All mothers who gave birth in Queensland between 2012 and 2015 (n=186,789), plus their resultant babies (n= 189,909) total n=376,698.
Population trends

- Adjusted caesarean section rates in Hospital and Health Service jurisdictions in Queensland
- Association between socio economic and demographic characteristics and birth delivery type with chi-square analysis
- Odds Ratios of likelihood of receiving obstetric intervention and having an unassisted vaginal delivery
- Confounding variables: pre-existing health condition, maternal age, previous pregnancy complications, complications arising during the current pregnancy, obesity, area-based socioeconomic deprivation, distance from the birthing facility, and smoking
- Analysis was undertaken using SAS9.4 statistical software.
Methodology – scoping review

- Scoping review of Australia’s macro level health and financing mechanisms
- Interpretative synthesis of their impact on the delivery of maternity care
- Google search engine; targeted websites; academic databases
Results
Figure 1: Caesarean section adjusted percentages by Hospital and Health Service jurisdiction
Sociodemographic characteristics of mothers receiving obstetric intervention during labour and birth in Queensland between 01/07/2012 and 30/06/2015

Caesarean section  Instrumental vaginal birth  Vaginal (non-instrumental) birth  Induction of labour  Episiotomy  Epidural
<table>
<thead>
<tr>
<th></th>
<th>Cesarean section</th>
<th>Instrumental vaginal birth</th>
<th>Vaginal (non-instrumental) birth</th>
<th>Induction of labour</th>
<th>Episiotomy</th>
<th>Epidural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR 95%CI</td>
<td>OR 95%CI</td>
<td>OR 95%CI</td>
<td>OR 95%CI</td>
<td>OR 95%CI</td>
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<tr>
<td>Indigenous</td>
<td>0.94 0.90 - 0.99</td>
<td>0.70 0.65 - 0.77</td>
<td>1.14 1.09 - 1.19</td>
<td>0.86 0.82 - 0.90</td>
<td>0.65 - 0.80</td>
<td>0.74 0.69 - 0.79</td>
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<tr>
<td>Inner Regional</td>
<td>0.96 0.93 - 0.99</td>
<td>0.92 0.88 - 0.97</td>
<td>1.06 1.03 - 1.09</td>
<td>1.10 1.10 - 1.13</td>
<td>0.84 - 0.95</td>
<td>0.98 0.94 - 1.02</td>
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<tr>
<td>Outer Regional</td>
<td>1.03 1.00 - 1.06</td>
<td>0.87 0.83 - 0.91</td>
<td>1.01 0.91 - 0.4</td>
<td>1.10 1.07 - 1.14</td>
<td>0.89 - 1.00</td>
<td>0.79 0.76 - 0.82</td>
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<tr>
<td>Remote</td>
<td>1.10 1.05 - 1.15</td>
<td>0.77 0.72 - 0.83</td>
<td>1.00 0.96 - 1.04</td>
<td>1.05 1.00 - 1.10</td>
<td>0.80 - 0.95</td>
<td>0.57 0.54 - 0.61</td>
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<td>Very remote</td>
<td>1.00 0.95 - 1.10</td>
<td>0.85 0.77 - 0.94</td>
<td>1.05 0.99 - 1.11</td>
<td>1.20 1.17 - 1.32</td>
<td>0.76 - 0.96</td>
<td>0.60 0.55 - 0.66</td>
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<td>IRSD 1</td>
<td>0.93 0.89 - 0.97</td>
<td>0.80 0.75 - 0.86</td>
<td>1.15 1.10-1.20</td>
<td>0.79 0.75 - 0.83</td>
<td>0.58 - 0.69</td>
<td>0.72 0.68 - 0.77</td>
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<td>0.85 0.81 - 0.89</td>
<td>1.11 1.08 -1.14</td>
<td>0.91 0.88 - 0.94</td>
<td>0.66 - 0.74</td>
<td>0.90 0.86 - 0.94</td>
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<td>0.90 0.85 - 0.94</td>
<td>1.04 1.01- 1.08</td>
<td>0.84 0.81 - 0.87</td>
<td>0.75 - 0.85</td>
<td>0.96 0.92 - 1.00</td>
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<td>IRSD 4</td>
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<td>1.15 1.12 - 1.19</td>
<td>0.95 0.81 - 0.87</td>
<td>0.75 - 0.85</td>
<td>1.01 0.97 - 1.10</td>
</tr>
</tbody>
</table>
Scoping review

1. Privatisation of maternity care
2. Medicalisation of maternity care
3. Funding models incentivising volume of care
4. Limiting of access midwifery continuity of care models
Policy implications – what needs to change?

- Funding based on quality indicators that preference *woman-centred outcomes* as opposed to funding models that reward *volume*

- What are the links between macro-level financing and hospital- and health provider-level approaches to maternity care?

- Prioritise publically funded midwifery continuity of carer models