



The best possible start in life

Statewide Neonatal Care Plan for Queensland

The health prospects for infants in Australia today are the best of any generation but we can do more. Queensland Health is committed to developing our neonatal health system to match our growing population and positively shape neonatal health services across the state.

Our vision

Improved care and outcomes for Queensland babies requiring specialised care

Our focus

1. Neonatal workforce
2. Neonatal service capability
3. Neonatal retrievals
4. Supporting systems



**Queensland
Government**



The future of neonatal services in Queensland

Queensland Health is committed to growing our public sector service so infants requiring neonatal care receive the best start in life.

Giving babies the best chance of a healthy start to life is achieved through access to high-quality health care from preconception through to birth and beyond. Recognising the importance of the antenatal period, Queensland Health is investing in several initiatives designed to support high-quality service delivery during this period.

In the past 10 years investment in neonatal services has achieved great results. However with a growing population, emerging technologies and changes in our workforce, we need a strong plan and strategies for continued success.

The Statewide Neonatal Care Plan identifies opportunities to strengthen existing neonatal services across Queensland.

Reduce risk factors

Significant opportunity exists to reduce risk factors in the antenatal period, such as maternal smoking, alcohol and drug use, and overweight and obesity

Utilise planning methods and information systems

Planning for future neonatal services can be optimised by reliable planning methodologies and information systems

Increase specialised services

Demand for specialised neonatal services will continue to grow

Care services offered closer to home

Increased demand needs to be met by building service capability closer to home where safe and feasible

Develop a skilled and resilient workforce

Sustained efforts are needed to recruit, retain and grow a skilled neonatal workforce

Offer targeted and culturally appropriate interventions

Higher risk factors and poorer outcomes for Aboriginal and Torres Strait Islander infants warrant culturally-appropriate, targeted antenatal interventions

Improve neonatal retrievals

Explore opportunities to keep improving the retrieval system for acutely unwell infants

Where are we now



Mothers and Babies

Fertility rates (2015)



1.9

babies per woman in Queensland



1.8

babies per woman in Australia



2.3

babies per Aboriginal and Torres Strait Islander women in Queensland

Fertility rates of 1.9 babies per woman will remain until 2036

Women of child bearing age

(2015)

986,249



of Queensland women were of child bearing age



6.2%



60,942

of these women gave birth



6.5%

3,952

of these were Aboriginal and Torres Strait Islander

The number of women of child bearing age is expected to grow by **12%** between 2016 and 2026

Queensland births and babies

(2016)



62,779

babies born to



61,876

mothers in Queensland



6.8%

4,320

babies born to



4,178

Indigenous mothers in Queensland



46,163

births were in public facilities

Queensland birthweight

(2016)

Low



<2500g 7.3%

Healthy



2500 - 3999g 82%

High



2500 - 3999g 10.5%

Factors contributing to birthweight

(2016)

Low birthweight baby <2500g



at least **twice as likely** for mothers who smoked during pregnancy



45%

more likely for mothers who had less than 8 antenatal visits



25%

more likely for Indigenous Queenslanders mothers



12%

more likely for mothers living in low socioeconomic areas

High birthweight baby 4000+g



50%

more likely women who were overweight at conception



9%

more likely for mothers who did not have an antenatal visit in the first trimester

In 2015 the biggest cause of neonatal morbidity was related to short gestation (prematurity) or low birthweight accounting for **10.6%** of births (6509 infants).



Trends in demand

The increasing demand on NICU and SCN services and the associated workforce pressures pose a threat to the sustainability of future neonatal services.

Workforce shortages

Projected neonatal workforce shortages are driven by:

- a move away from the traditional dual nursing/ midwifery registration career pathway
- high staff turnover rates
- limited training and education opportunities

Women giving birth 35 years or older (2015)

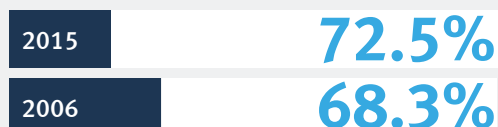


Increasing age of women giving birth

aged over 35



Increased number of babies born to public sector hospitals = increased demand on public sector neonatal services



Neonates requiring surgery



797
2015/16



Maternal health and wellbeing

A newborn baby's health shapes their health and wellbeing throughout life. Risk factors to health outcomes for mothers and babies include physical health, antenatal care and exposure to harmful behaviours.

Smoking and alcohol during pregnancy (2016)

Maternal smoking is declining but at a slower rate for teenagers, Indigenous Queenslanders mothers and those from low socioeconomic areas.



12%
of mothers smoked during pregnancy

3x higher
among teenagers

4x higher
for Aboriginal and Torres Strait Islander mothers

5x higher
for women in low socioeconomic areas



Antenatal care (2015)

fewer than five
antenatal visits

13.8%
Aboriginal and Torres Strait Islander expectant mothers

4.8%
Non-Indigenous expectant mothers

more than eight
antenatal visits

80.7%
Non-Indigenous expectant mothers

63.5%
Aboriginal and Torres Strait Islander expectant mothers

Teenage pregnancy (2015)

<20yr



nearly **2,396**

3.9% of mothers birthing in Queensland were under 20 years of age

Aboriginal and Torres Strait Islander women are over-represented among teenage mothers in Queensland and across Australia.

Where we need to be

While the health prospects of infants in Queensland are the best of any previous generation, we know we can do more. Despite significant growth and reform in the past decade in Queensland's neonatal service system, we need to continue to evolve to withstand future demands.



Neonatal workforce

Develop a neonatal nursing workforce plan that adequately meets the needs of the future

Targets

- Neonatal services staffed with a mix of highly skilled medical practitioners, nurses/midwives and allied health professionals
- Increased workforce capability (including cultural capability) through maximising staff retention and promotion of skills
- Adequate capacity at regional hospitals and these are fully utilised

Strategies

- Develop a neonatal nursing workforce plan that addresses current and future workforce requirements and maximises staff retention
- Develop and implement a framework and resources to support neonatal staff training and education, (e.g. e-learning platforms)

Success measures

- Identified neonatal nursing workforce needs are met through a business planning framework and aligned with the Clinical Services Capability Framework (CSCF)



Neonatal service capability

Provide a plan for care to be safely and sustainably provided closer to an infant's home

Targets

- More infants and their families can access special care nursery (SCN) services closer to where they live
- Neonatal intensive care units (NICUs) provide highly specialised services and allow neonates to transfer back to their local facility after intensive care

Strategies

- Provide a ten-year plan for changes to CSCF capability levels where safe and sustainable including considering maternity and other support services through statewide planning processes

Success measures

- Reduced flows/transfers to metropolitan hospitals with NICUs
- Improvements in Queensland neonatal morbidity indicators
- Improvements in the neonatal mortality component of the Queensland perinatal mortality rate



Neonatal retrievals

Develop operational processes, policies and guidelines for neonatal retrievals across the state

Targets

- Enhanced statewide neonatal medical coordination and retrieval services in Queensland
- Clinical decisions and coordination of transfer to other levels of care are supported by robust clinical information systems

Strategies

- Enhance the coordination of retrieval services for neonates and for pregnant women with babies expected to experience conditions requiring neonatal care

Success measures

- Consistent operational processes, policies and guidelines for neonatal retrieval across the state
- Electronic cot and retrieval management system is in place



Supporting systems

Develop evidence-based guidelines for projecting future service activity and capacity requirements

Targets

- Planning for future neonatal services is achieved by contemporary and reliable planning methodologies, enhanced data and reporting systems
- Planning incorporates appropriate recognition of the neonatal care provided outside the typical NICU/SCN environment

Strategies

- Review the health service planning guideline for neonatal services
- Explore options for reporting future neonatal workforce requirements
- Review the current funding framework for the treatment of newborn neonates receiving services outside a NICU/SCN

Success measures

- Accurate projections of future activity, capacity requirements and need for neonatal services through evidenced-based guidelines
- Funding of care for unqualified neonates is reviewed



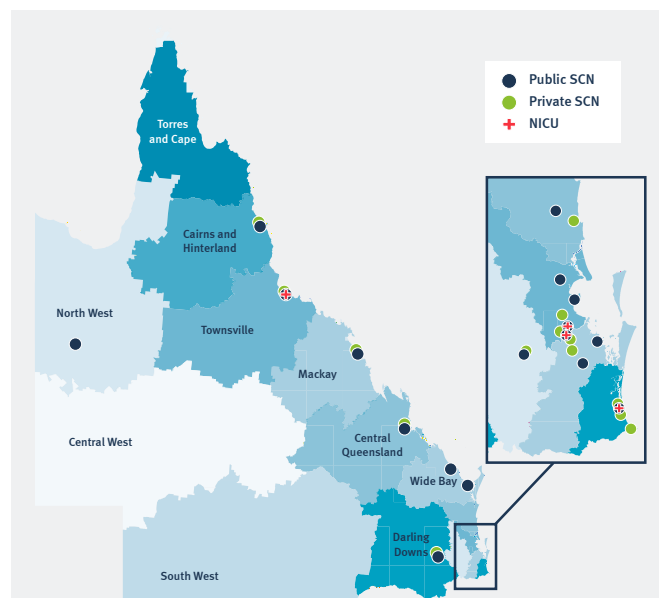
How we will do it

Queensland Health is committed to developing our neonatal health system through our Statewide Neonatal Care Plan.

Our population is growing across the state and we anticipate increased demand on services and our workforce. While our intensive care services are primarily located in the south-east corner and special care nurseries positioned along the coastline, we are working to deliver robust and responsive neonatal health services at every site.

The following steps will achieve successful implementation of the strategies in the Plan:

- communicate the plan to all stakeholders and facilitate transition to implementation
- implement the specific actions that are designed to deliver on each strategy
- consult with Hospital and Health Services and the Queensland Neonatal Services Advisory Group as appropriate
- undertake the monitoring, review and evaluation components of the planning cycle.



Current Service System

Intensive care services are mostly located in the south east corner, and special care nurseries are mostly scattered along the coastline

Queensland Health has conducted detailed service planning to support the actions in the plan. Successful implementation of the actions will require a coordinated effort across many areas of the health system.

The Departmental Policy and Planning Executive Committee will oversee the implementation process. Implementation of this plan will require:

- actions to be completed under each strategy
- lead entities responsible for implementing actions
- timeframes for implementation
- resources required
- partner agencies involved
- expected outputs from the process.



**Queensland
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System Planning Branch Department of Health

GPO Box 48

Brisbane QLD 4001

statewide.planning@health.qld.gov.au

phone (07) 3708 5485