

Child Development

In Queensland Hospital & Health Services

2 Act Now for kids 2morrow: 2021 to 2030



'Child Development in Queensland Hospital and Health Services: Act now for a better tomorrow' was developed by the Statewide Child and Youth Clinical Network's Child Development Subnetwork as a handbook for clinicians, their line managers and other stakeholders wanting to better understand Child Development as a specialist clinical service area. Initially published in 2013, this is the second edition of the Act Now handbook.

This handbook has been endorsed by the Statewide Child and Youth Clinical Network's Steering Committee.

In addition to supporting a common understanding of the roles and responsibilities of a health-based child development service, this document also:

- Describes how child development interfaces across the continuum of care
- Identifies core principles for practice for a child development service
- Includes Standards for Clinical Practice for a specialist child development stream of care

For more information please contact:
The Chair, Child Development Subnetwork,
Statewide Child and Youth Clinical Network.

© State of Queensland (Queensland Department of Health)

You are free to copy, communicate and adapt this work, as long as you attribute the State of Queensland (Queensland Department of Health).







Content

Message from the QCYCN Chair	6
Summary	8
The Queensland Child and Youth Clinical Network’s Child Development Subnetwork	9
1. What does ‘Child Development’ mean?	10
2. Defining Developmental Disorders using the International Classification of Function (ICF)	12
3. Child Development within a Public Health System Context	16
4. Child Development along the Continuum of Care	19
5. Strategy and Policy	23
6. What do we know about Developmental Disability?	25
7. Priority Populations	30
8. What we know about Queensland	36
9. CDS in the Queensland Hospital and Health Services	38
10. Standards for Clinical Practice for Specialist Child Development Services in Queensland	56
APPENDIX 1: Case Examples of Child Development along the Care Continuum	66
APPENDIX 2: Qld CDS mapped to the CSCF (based on the CSCF Clinical Matrix 2026)	68
APPENDIX 3: State and Territory comparisons (2016 Census data).	72
APPENDIX 4: Directory of Specialist Child Development Services in the Queensland Department of Health	73
APPENDIX 5: Principles of Practice Self Evaluation	75
APPENDIX 6: Service Standards Self Evaluation	76
REFERENCES	79

Message from the QCYCN Chair

I am very pleased to introduce this second iteration of our “Act Now” document (also known as “the Blue Book”), Child Development in Queensland Hospital & Health Services: 2 Act Now for kids 2morrow: 2021 to 2030

Our first “Act Now” was released in 2013 and ambitiously at that time looked to 2020, supporting standardisation of principles of practice for Child Development Services (CDSs) in our public health system across Queensland. This work has been used to guide the branding, service models and practice of our statewide CDS clinicians in their differing contexts to provide a more similar than different service for children with developmental difficulties and their families statewide. Importantly, it espoused the principles of family centred care, transdisciplinary practice, and a holistic understanding of the child in their own context, promoting strengths and hope.

Our landscape has changed markedly and so has CDS provision across our state, as our multidisciplinary clinicians and service leaders have led change within their own contexts and advocated using our first Act Now as a resource to enact understanding and change in CDS delivery.

Today, we now understand that early childhood is so important, and, that developmental disability often presents outside this period. We know that mental health & developmental disability often coexist and that there is a need for paediatric services to increase upper age limits to be more inclusive of adolescents and their developmental, mental health and physical health needs. The need for service focus beyond the early years is being embraced.

The National Disability Insurance Scheme was fully rolled out in a stepwise fashion across Queensland between 2016 and 2019. Queensland led the way in the early childhood space piloting the Early Childhood Early Intervention (ECEI) program in Townsville. With the NDIS came clear delineation of the roles of health, education and disability within the public sector, and the clarification of the important role for our CDSs to support diagnostic understanding for children and young people with developmental needs, and transitional supports.

There is continuing pressure for our services that support high levels of complexity and work in low flow high value health care context to meet the demands for service. Our clinicians continue to work collectively to develop innovative ways to support Queensland's children and young people and their families; to partner and share care and investigate different service modality platforms.

System change is hard work. Without the dedication, engagement and collective leadership of our allied health and nursing clinicians and paediatricians, from around our state, and the many health, education and disability service providers they partner with, we would not have seen the progress to date in providing CDS across the care continuum.

2 Act Now for kids 2morrow: 2021 to 2030, will support our service development journey over the next 10 years, and our statewide vision to support the best possible outcomes for infants, children, young people and their families.

Dr Kerri-Lyn Webb

Chair Queensland Child and Youth Clinical Network
Clinical Excellence Queensland

Summary

Healthy development in childhood and adolescence builds strong communities and provides children and young people with a sound foundation for good health and for success in life. Queensland Hospital and Health Services have long had a focus on supporting optimal development through investment in paediatric health care, and specifically in Child Health and CDSs. These services have grown in response to local, statewide, national and international influences, and continuously evolve to meet the needs of the communities in which they exist.

- Dedicated CDSs (located in major regional and metropolitan locations across Queensland) provide integrated multidisciplinary diagnostic and intervention services for children and young people with identified developmental concerns
- Child Health Services often focus on the health and wellbeing of infants and young children and their families through universal and primary care initiatives (including vaccination programs and developmental surveillance) as well as targeted programs for at-risk children and families
- Other nursing, allied health and medical services may support child development as part of a diversified caseload or while focusing on primary, secondary and/or tertiary care priorities

Analysis of international trends in paediatric health care indicates that there has been a shift in disease burden in children from communicable disease to complex conditions including chronic physical disorders, neurodevelopmental disabilities, and behavioural and mental health conditions ([Sawyer et.al, 2019](#)). Subsequently, child and youth development are increasingly on the agenda, with a raft of state and federal government initiatives shining a spotlight on the health and development of Australia's children and young people. Since 2009 the [Queensland Statewide Child and Youth Clinical Network's](#) Child Development Subnetwork has supported the network of specialist, allied health led (dedicated) and generalist child development service providers respond to this changing context.

While this handbook is a useful guide to support understanding of child development along the health continuum of care, the focus of this resource is to define **health system responsibilities towards children with complex developmental impairment who require an integrated multidisciplinary approach to assessment, diagnosis, intervention and support**. In addition to its clinical applicability, this handbook is an important tool for service planners when thinking about the distribution of resources at the local level.

Clinical Service Standards are crucial for reducing variation that leads to health inequities. Yet, this is not enough to ensure the provision of safe, high quality, and innovative services to children with complex developmental needs.

Each Hospital and Health Service throughout the state must understand and integrate:

- The demographic profile of their local community
- Evidence pertaining to best practice assessment, diagnosis and support for children with chronic developmental conditions
- Risks and challenges faced by developmentally vulnerable populations across their geographic catchment

Only then will teams be able to be locally responsive and innovative according to context and capacity, while working to an evidence informed framework that improves health and wellbeing outcomes for children and their families across the lifecourse.

The Queensland Child and Youth Clinical Network's Child Development Subnetwork

This publication has been developed by the Queensland Child and Youth Clinical Network's [Child Development Subnetwork](#). The Child Development Subnetwork (CDSN) was convened on 11 November 2009 following identification of the clinical service area of child development as one of four QCYCN clinical priority areas. The group was known as the Child Development Working Group until November 2012 and has met regularly since its inception.

The purpose of the group is to provide clear apolitical advice in a cooperative and collaborative fashion regarding CDSs with particular reference to:

- Service delivery and standards of clinical care
- Planning, quality, research and clinical information systems
- Present and future workforce issues
- Local policy and advocacy as they relate to the above

Membership of the group is multidisciplinary and multiregional. Members live and work in major cities, inner regional, outer regional, remote and very remote locations across Queensland, and there is representation from medical, nursing and allied health professional streams.

The CDSN has been chaired since its inception by Dr Kerri-Lyn Webb, in partnership with a rotational co-chair.



1. What does ‘Child Development’ mean?

The term ‘child development’ will mean different things according to the context in which it is being used. This can lead to confusion and miscommunication among health professionals and between treating teams and consumers. In a broad sense, child development refers to the skills children acquire throughout infancy, childhood and adolescence, and the functional application of those skills in everyday situations and across different environments. However, Child Development can also refer to specialist and dedicated multidisciplinary teams that provide integrated diagnostic and support services to children and young people with an identified neurodevelopmental concern

How children develop

A child’s development is influenced by biological and genetic factors that interact with the environment. The transactions that occur between the biological, physical, cognitive, environmental and experiential systems of any child combine to shape their developmental competence. Sensory pathways, like those for vision and hearing, develop first, followed by early language and motor skills, and then higher cognitive functions. Neural connections proliferate and prune over time, with more complex brain circuits built upon earlier circuits ([Harvard University](#)). The human brain has evolved to adapt to a wide range of early experiences which supports the rapid development of language, cognitive skills, and socio-emotional competencies.

The broad range of individual differences between children often makes it difficult to distinguish between typical variations in development, maturational delays, transient disorders, and persistent impairments.

[James Heckman](#), a Nobel Prize winning economist with a particular interest in the economic benefits of investment in children, has identified nine facts to support an understanding of why a holistic emphasis on child development is so very important ([Heckman, 2007](#)).

These are:

- Ability matters across the lifecourse
- Abilities are multiple
- Abilities are both genetic and acquired (with biology and environment influencing development, cognition and non-cognitive skills)
- Ability gaps open early in the lifecourse
- There are critical and sensitive periods of development
- There are high economic returns on early intervention, particularly for disadvantaged children
- Early intervention must be followed up along the lifecourse or the economic returns diminish
- The effect of socio-economic disadvantage depends on when it occurs in the course of a family
- Socio-emotional (non-cognitive) skills foster cognitive skills development

Delay, impairment, or disability? Why words matter

While most children achieve developmental outcomes at a similar rate and to a level of skill deemed to be within normal limits, some children do not develop cognitive, motor, language, and/or social-emotional regulation skills in a way that the wider community may expect of a child of a similar age. These children may be identified as being ‘developmentally delayed’ or ‘developmentally impaired’, or as having a ‘developmental disability’. Many people use these terms interchangeably, yet there are subtle but important differences in their meanings.

The term ‘developmental delay’ is frequently used by health and education professionals to describe a lag in the acquisition of a skill or milestone otherwise expected of a child at a particular age. This lag may be within a single domain or may be across many areas of development (global developmental delay). However, the implication of the word ‘delay’ is that this lag in development is temporary or is likely to resolve with early intervention.

The term ‘impairment’ is used to describe a condition or abnormality (acute or chronic and not always related to an identifiable diagnosis) that may likely, but not invariably, cause a difference in a person’s function or ability to participate in activity.

The term ‘developmental disability’ implies a restriction of functional activity that may or may not be attributable to an identified impairment. The CDSN endorses the use of the term ‘developmental disability’ to describe the profile of children with complex and pervasive developmental difficulties that are likely to impact on a child’s ability to participate optimally in functional activities across their lifecourse.

More generic terms, such as ‘developmental concern’ or ‘developmental problem’ may be used to flag an awareness of a child’s additional developmental needs without subscribing to a level, severity or prognosis.

Why diagnosis of neurodevelopmental disability matters

An impairment of the nervous system that results in a developmental disability may be acquired or have its origin in a child’s biology, but the functional expression of this impairment will be shaped and influenced by a range of predisposing, precipitating and perpetuating factors. We understand this through a process of biopsychosocial diagnostics, which is a responsibility of the health system and health service providers.

Diagnosing and treating neurodevelopmental disability can be challenging. Many symptoms are not unique to a single diagnostic category ([Lancet, 2013](#)), and robust diagnostic understanding generally relies on caregiver report as well as clinician [analysis of a child’s functional presentation](#). There is increasing awareness of comorbidities (including mental health), and persistence of neurodevelopmental impairment into adulthood ([WHO, 2011](#)).

The functional domains of neurologically based disability includes:

- Cognition: global (intellectual impairment) & specific (dyslexia) learning disorders
- Speech & Language
- Social (moderate - impairments in social cognition/skills; severe - autism)
- Motor (moderate - coordination problems; severe - CP, spina bifida etc.)
- Sensory (vision, hearing)
- Self-regulation (ADHD, disruptive behaviour disorders)

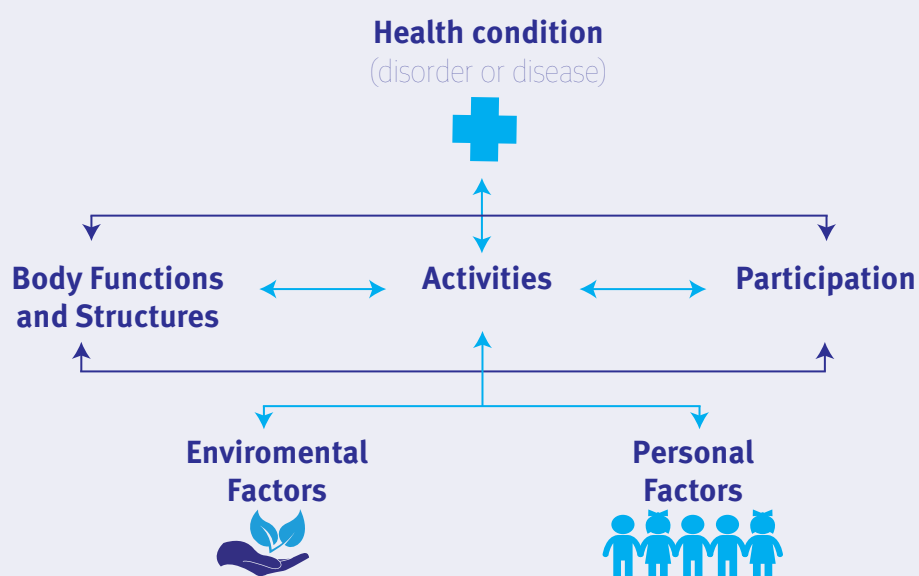
The course of a child’s development can be altered through effective interventions that change the balance between risk factors and protective elements within a child’s environment, thereby shifting the odds in favor of more adaptive outcomes. In order for appropriate intervention and support to be determined and implemented, underlying and contributing factors need to be well understood.

2. Defining Developmental Disorders using the International Classification of Function (ICF)

The World Health Organisation (WHO) defines health as a 'state of complete physical, mental and social well-being and not merely the absence of disease (WHO, 1948). In 2001, the WHO developed the [International Classification of Function](#) (ICF) to describe and document function and disability, conceptualizing function as a 'dynamic interaction between a person's health condition, environmental factors and personal factors' (WHO 2001).

The ICF provides a standard language and conceptual approach to integrating the medical and social models of disability (a biopsychosocial approach). Importantly, the ICF does not differentiate disability by aetiology or medical diagnosis. This shift in emphasis from diagnosis to function places all health conditions on an equal footing and enables problem solving focused on the individual and their needs. In 2007, the WHO released a paediatric version of the ICF called the International Classification of Function – Child and Youth (ICF-CY), however this was integrated into the ICF in 2012. Subsequently, the ICF covers the entire lifespan.

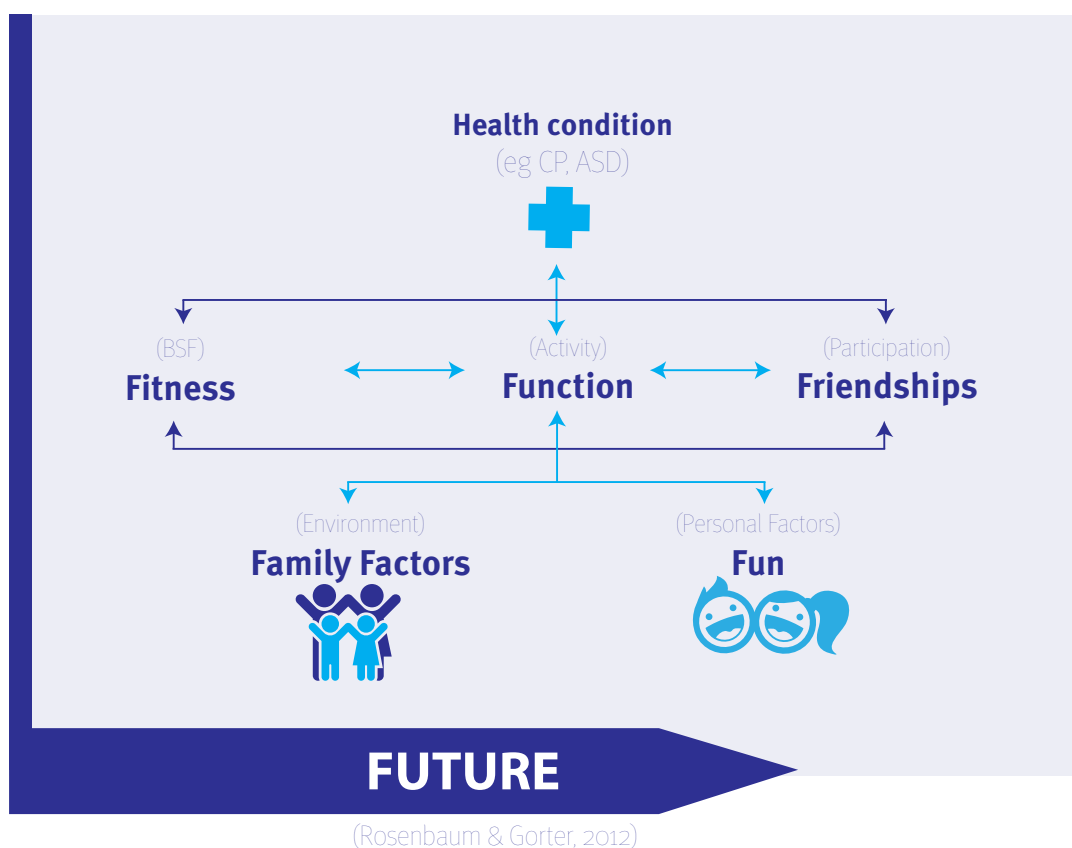
Box 1: The ICF Model: Interaction between ICF components



WHO 2001, 18

The ICF supports rights-based policies and provides a common language for both service providers and people experiencing disability. It embodies the notion that every human being, irrespective of difference in development, function or health condition, is equal in dignity and rights (WHO 2014).

In 2012, [CanChild](#) (McMaster University, Ontario, Canada) adapted the ICF Framework by mapping it into six 'F-words' (function, family, fitness, fun, friends and future) (Rosenbaum and Gorter, 2012). The aim of this adaptation was to promote a contemporary approach to understanding childhood disability, and to move away from the idea that children with developmental impairment require 'fixing'.



Understanding developmental disability as a chronic condition

While developmental delay may be transient and responsive to strategies focused on environmental enrichment and caregiver knowledge and skills, it is helpful to understand the needs of children with developmental disability in a different way. Children with a neurodevelopmental disability often have impairments that have a biological basis. Their impairment is likely to persist and will influence function over time. These children are better served when a chronic disease framework is applied (McDowell & Klepper, 2000) and a strengths-based approach to service planning.

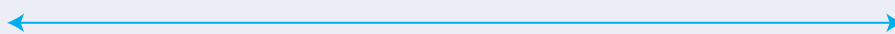
This approach diverges from a traditional model of service delivery. Children with complex neurodevelopmental needs require a transdisciplinary model of care that:

- Enables specialised clinical problem solving
- Removes the barriers that exist within and beyond our health care system with regard to interagency collaboration
- Sets strategic goals with a view to empowering carers
- And ultimately decreases the risk of maladaptive long-term outcomes.

CDSs are well placed to facilitate diagnostic understanding and to support caregivers to grow the health and systems' literacy they will need to optimize supports over time.

Traditional Model of Care

Generalist Paediatric Allied Health Model of Care: e.g. Phonological Disorder



Referral intake – assessment – goal setting – intervention – review – discharge

Chronic Disease Model of Care

Chronic Disease Model of Care: e.g. Neurodevelopmental Disability

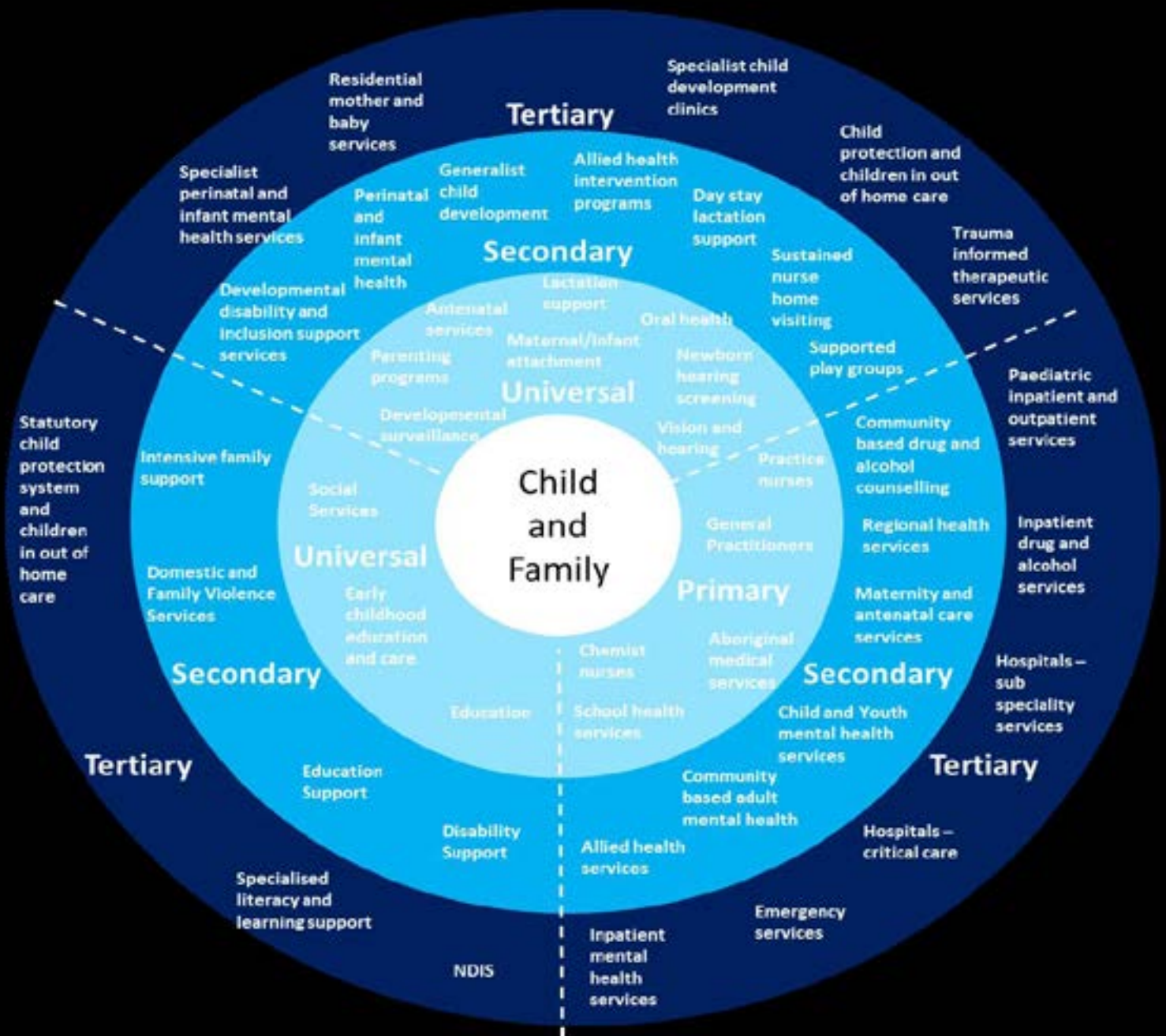
Identification – ‘Fix it?’ ‘No’ – intervention upon diagnosis (education, liaison and resources with goal to self-management and mitigation of secondary characteristics) – integrated care across contexts – episodic interactions with various agencies and providers over time.



3. Child Development within a Public Health System Context

Australian state and federal government investment in child development exists across sectors and along universal, primary, secondary and tertiary levels services. This includes mainstream service provision in health and education, as well as initiatives such as: the [Australian Early Development Census](#), the [NDIS Early Childhood Early Intervention \(ECEI\)](#) pathway and universal access to [approved Kindergarten programs](#) (Queensland).

The complex and interdependent nature of services built to meet the needs of children and families is well illustrated by this figure from the [National Framework for Child and Family Health Services – secondary and tertiary services](#) (Australian Health Ministers’ Advisory Council, 2015):



Rather than relieving publicly funded health services' responsibilities towards developmentally vulnerable children and their families, increased research and investment in children has reinforced health's unique role in the assessment of and care planning for children and young people. With survival no longer a sufficient goal of our public health service system ([Shonkoff et.al. 2012](#)), publicly funded health services are an important constituent within the network of service providers that exist to ensure a system of care for developmentally vulnerable and disabled children. Importantly, all children and young people have a basic human right to access publicly funded health services, regardless of economic status, age, diagnosis or geographic location ([Irwin et.al., 2007](#), [Queensland Government, 2019](#)).

Queensland's Hospital and Health Services provide developmental services to children with identified developmental concerns in a range of ways. A robust child health service ensures a universal platform for developmental advice and surveillance. Children who have single discipline and/or non-complex developmental concerns may access generalist paediatric allied health and medical services within their local hospital or community health centre. Children with complex and co-morbid developmental needs may require a different type of care including access to an integrated multidisciplinary service. Each HHS will determine the allocation of resources to meet community need and mitigate risk across the universal, generalist and specialist streams of care.

It is the responsibility of publicly funded health services to deliver indicated developmental assessment and intervention in an integrated way by:

- Understanding the **medical, developmental** and **psychosocial** needs of children concurrently through multidisciplinary or interdisciplinary services delivered by professionals with a specialist skill set
- Offering a comprehensive analysis of a child's current and future capabilities, regardless of diagnosis or of a child's current care arrangements or educational context
- Partnering with families and other stakeholders throughout the patient journey, from birth across the lifecourse, due to **multiple care pathways** and **entry points to services** along the continuum of care. This is particularly important for children with co-morbid developmental, health and social complexities
- Ensuring access to quality assessment, diagnosis and intervention statewide via high quality services located in regional centers throughout Queensland as outlined by the CSCF Framework

The Council of Australian Governments (COAG) differentiated the responsibilities of all mainstream service providers (including health) as they pertain to people with disability. The [Principles to Determine the Responsibilities of the NDIS and other Service Systems](#) was released in November 2015, ahead of the national roll out of the NDIS.

While health professionals have a clear responsibility to facilitate diagnostic understanding, the needs of the developing child will be met by a cross sector approach to service planning and intervention. This may include collaboration with early childhood services, primary and secondary education, disability sector providers, and family support services. While integrated care through dynamic, cross sector roles and responsibilities are becoming increasingly clear. However, there can be resistance to practice change to realign or redesign services accordingly.

Queensland Health Child Development Services and the NDIS

The [National Disability Insurance Scheme \(NDIS\)](#) is a national reform of disability sector services and supports that rolled out across Australia between 2016 and 2019. Post 2019, the sector is continuing to evolve. The NDIS funds reasonable and necessary supports for people with a permanent and significant disability so they can access the services, consumables, assistive technologies and other supports they need to live and to participate meaningfully in their community. It also funds early intervention services and supports for children with developmental delay/s and disability.

The NDIS is administered by the National Disability Insurance Agency (NDIA). Community Partners are appointed in each region to support access, planning and activation of participant plans. The Community Partner for children aged 0-6 is known as the Early Childhood Early Intervention (ECEI) provider. The Community Partner for people aged between 7 and 65 years old is known as the Local Area Coordinator (LAC). The NDIS website contains up-to-date information about the [Community Partners for each region](#).

The public health system is a key mainstream service provider that sits alongside the NDIS, along with other mainstream services including education and child safety. Children who are eligible for the NDIS will also access services and supports from the health system to meet their health care needs. Health services do not discriminate on service eligibility on the basis of disability (see [Queensland Human Rights Act 2019](#)). The health-disability interface is particularly important in the paediatric context. Conditions associated with disability are often first diagnosed and/or treated in childhood, and diagnosis of disability is a health system responsibility. When a child has a newly acquired or newly diagnosed disability, health services may then be required to support the child and their family understand and access the NDIS, or to plan for supports once they are accepted as a participant in the scheme. These responsibilities of each service system are outlined on the [NDIS website](#).

In order for the health and disability sectors to work in partnership, health professionals working in child development need to have a sound understanding of the NDIS and how it operates within their local context. This includes building robust reciprocal relationships with the NDIA and their Community Partners and maintaining an up-to-date understanding of the access pathways for different cohorts of children.

In addition to the standard access pathway, there are [specialised pathways](#) or service streams for:

- [Early childhood early intervention](#) (0-6yo)
- [Hearing impairment](#)
- Psychosocial disability
- Complex support needs
- Participants from rural and remote communities

4. Child Development along the Continuum of Care

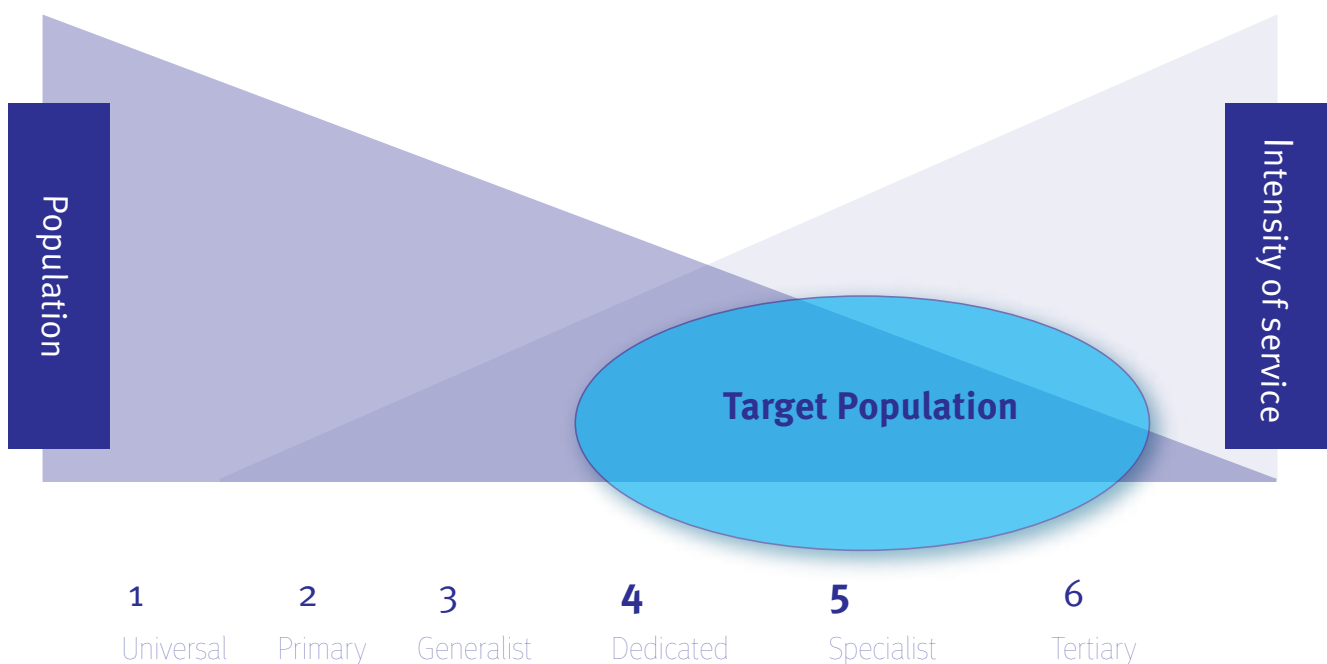
Children’s development is supported directly and indirectly at many levels across the care continuum from low acuity to high acuity health services. Community Child Health and CDSs are included within the [Children’s Medical Services Clinical Services Capability Framework](#) (CSCF v3.2) (QH, 2012a). The CSCF aligns with contemporary biological and social understandings of childhood. Subsequently, the term ‘children’ is used to refer to individuals between the ages of 0 to 18 years of age (Department of Health, Children’s Services Preamble).

Some children have functional impairment that is easily diagnosed and have clear treatment pathways. Some children have challenges that cross multiple developmental domains, reflect intersecting vulnerabilities and/or significantly impact on functional participation in everyday contexts. These children require integrated multidisciplinary assessment, diagnosis and individualised treatment planning, often across sectors (including health, disability, education and child safety).

All teams need to understand the responsibility of their HHS to deliver services at different points along the continuum of care and support a seamless approach to coordinating the patient journey, regardless of the severity or complexity of a child’s needs.

The CSCF framework identifies six levels of service provision. Each level provides services to a more targeted group. It is not a hierarchy, where level 6 is ‘expert’ and level 1 is not. Rather, service providers at each level are expert in their own business. Not all HHS are required or funded to provide services and supports at each level, but it is a right of all children to access services at the level required to meet their needs. This may need to be provided by a service in another location, including another HHS.

The CSCF assumes that the level of service provision within in a hospital or health service will include services at the preceding levels. E.g. HHS with a Level 4 specialist CDS will also provide services at Levels 1, 2 & 3.



Universal Public Health (CSCF Level 1): Survival is no longer a sufficient goal for public health services. The broad social objective of paediatric care is for children to reach their full potential and become productive members of their community. Public health initiatives that deliver increased survival rates also positively influence developmental outcomes. For example, programs to increase breastfeeding rates positively influence maternal-infant attachment and early development.

Primary Health Care/Generalist Child Development (CSCF Level 2/3): Primary health care is often the first contact a person has with the health system. Immunisation programs delivered by GPs and Child Health services are accompanied by developmental screening checks to identify children at-risk of developmental delay. Allied health professionals working in community health services may see children with developmental concerns. Parent/carer education about child development is an important component of CSCF 2/3 service provision, and brief interventions may be used to support children and their families to develop strategies or skills to mitigate a child's developmental difficulty. This may be single discipline focused or multidisciplinary in nature, including medical, allied health and/or nursing staff.

Universal, primary care and generalist service providers come from range of professions and backgrounds and understand how to direct families through existing care pathways. This may include referral to more specialised services.

Child Development Services (CSCF Levels 4/5): Some children have developmental impairments that are complex and cross domains, including developmental, biological, psycho-social, cultural, medical, demographic and/or behavioural factors. These children and their families require an integrated and coordinated approach to assessment, diagnostic formulation, and intervention from a multidisciplinary team with a specialised skill and knowledge set.

CDSs work in partnership with families and other stakeholders to support an understanding of the current and future functional impact of a child's complex impairment in order to optimise the child's long-term outcomes. This will include engaging with other service providers to best match services to needs and support the child's transition to these services.

Dedicated and Specialist CDSs are located in key regional and metropolitan locations to support children with developmental disability.

Developmental Services in Tertiary Facilities (CSCF Level 6): Some children have developmental impairments together with multi-medical and/or mental health co-morbidities. These children and their families need developmental intervention in addition to their complex medical care to ensure optimal developmental, medical and mental health outcomes.

Within tertiary and quaternary hospitals there are health professionals who can manage the interface between a child's developmental and medical needs and facilitate transition back to their community (metropolitan or regional), including to their local Child Development Service or generalist allied health team if required. There is also a responsibility for tertiary and quaternary services to provide leadership in the development and implementation of statewide guidelines, pathways and resources.

See APPENDIX 1 for case studies that represent developmental need along the care continuum, and APPENDIX 2 for a map of Queensland HHS and the CSCF.

Core Business of Specialist Child Development Services (CSCF Levels 4/5/6)

1. **Diagnostic assessment** for children with complex developmental concerns, including those with behavioural, mental health and/or medical comorbidities and intersecting vulnerabilities. Diagnostic assessment may or may not result in diagnosis but will seek to describe the aetiology of the presenting concern/s, including:
 - a. Psycho-social, biological and/or medical factors
 - b. Developmental and/or behavioural factors
 - c. Cultural and/or demographic factors
2. **Support family/carer understanding** of a child's current and future needs
3. **Facilitate improved health and occupational outcomes** for children with developmental disability through advocacy, intervention and cross sector partnership

Intervention refers to any measure undertaken with a purpose of improving the health and development of the individual. This may include individual actions or actions taken in partnership with others to influence the child's environment or experience, or to assist with improving and/or altering the course of the presenting concern/s. Intervention may or may not involve direct therapy service provision and could be described in the following ways:

- a) **Stabilising interventions** - to clarify the developmental presentation or support function following an 'acute' event (where 'acute' in this context may relate to an unexpected, recent event such as an unexpected diagnosis or deterioration in function post illness) where comorbid developmental disability plays a contributing factor
- b) **Transitional interventions** - to assist children and families to clarify their short- and long-term goals in order to access the right services and supports from disability, education and other community sectors

Core Skills and Clinical Capabilities of Child Development Services

CDS provide an integrated approach to assessment, diagnosis and intervention, within an interdisciplinary service model that is person-centred, evidence informed, and tailored to the needs of each child and his/her family.

Clinical Capabilities for Health Professionals working in Child Development (QH, 2011) clearly defined the transdisciplinary skills required to work in the context of a dedicated, specialist or tertiary CDS. This has been adapted for online learning and is now available on the Queensland Health iLearn platform. This course has been designed to support the practice of medical, allied health and nursing practitioners in Queensland Health CDSs. It is a resource well suited for onboarding new staff in CDS or for those delivering services at other points along the care continuum. This course was developed by the CHQ Child Development Program and the QCYCN CDSN.

Additional professional development opportunities may be identified through a range of agencies at a state and national level including the [Child Development Program Children's Health Queensland](#), the [Murdoch Children's Research Institute](#), [Centre for Community Child Health at the Royal Children's Hospital Melbourne](#), and the [Australian Research Alliance for Children and Youth](#). Training is also available through discipline specific professional bodies, as well as diagnosis and evidence-based intervention specific sources.

Appendix 2 outlines the CSCF Levels of the CDS statewide and makes recommendations regarding the minimum multidisciplinary team composition requirement for each level. The levels assigned are taken directly from the CSCF Matrix, and the minimum staffing requirements have been drawn from the CSCF descriptors, best practice requirements and a contextualised understanding of the clinical service area statewide.

The CDSN recommends the following as minimum staffing requirements for dedicated CDSs in Queensland (Levels 4, 5 and 6):

CSCF Level	Minimum Health Professional staffing requirement*	Access to suitably qualified health professional/s
4	Occupational Therapy, Physiotherapy, Speech Pathology	Dietetics, Psychology, Paediatrician, Social Work
5	Occupational Therapy, Physiotherapy, Psychology, Speech Pathology, Social Work; Clinical Intake; Embedded medical specialist (paediatrics)	Dietetics
6	Occupational Therapy, Physiotherapy, Psychology, Speech Pathology, Social Work; Clinical Intake; Embedded medical specialist (paediatrics), Nursing	Medical sub-specialities as per a tertiary/quaternary health service

*with dedicated hours for neurodevelopmental multidisciplinary team practice



5. Strategy and Policy

Child development is embedded within many state and federal government policies and strategic initiatives. Drawing on the guiding principles and priority action areas of these documents ensures CDSs in Queensland are future focused, evidence based and evolving in a way that aligns with organisational priorities.

Current Australian policy drivers include:

- Federal Government:
 - o Strategic Frameworks:
 - [National Action Plan for the Health of Children and Young People: 2020-2030](#)
 - [Healthy, Safe and Thriving: National Strategic Framework for Child and Youth Health \(2015\)](#)
 - [National Framework for Child and Family Health Services – secondary and tertiary services \(2015\)](#)
 - [National Aboriginal and Torres Strait Islander Health Plan 2013-2023](#)
 - o Programs and Initiatives:
 - [NDIS Early Childhood Early Intervention Pathway](#)
 - [Australian Early Development Census](#)
 - [Closing the Gap](#)
 - [Raising Children’s Network](#): the Australian parenting website
- National Research and Advocacy Bodies:
 - o [Australian Research Alliance for Children and Youth](#)
 - o [Children’s Healthcare Australasia](#)
 - o [Growing up in Australia](#)
 - o [Murdoch Children’s Research Institute](#)
 - o [Telethon Kids Institute](#)
- Queensland Government:
 - o [Queensland Child and Youth Clinical Network](#)
 - o [A great start for our children: statewide plan for children and young people’s health services to 2026](#)
 - o [Children’s Health and Wellbeing Services Plan 2018-2028 \(CHQ\)](#)
 - o [Clinical Services Capability Framework \(CSCF\)](#)

The Queensland Child Development Subnetwork has been active in working with service providers and other agencies to support integration of policy, strategy and practice. As a result, policy and strategy resources have been developed to support health service planning. These can be found on the [Queensland Child and Youth Clinical Network website](#) and include:

- Child Development in Queensland Hospital & Health Services: 2 Act Now for kids 2morrow: 2021 to 2030 (The Blue Book)
- [Understanding the Development and Participation of Children with Significant Health Care Needs](#) (The Green Book)
- [Childhood Maltreatment: Contemporary understandings and implications for children's neurodevelopmental health services in Queensland](#) (The Purple Book)
- [Supporting the long-term developmental needs of children with congenital heart disease and their families](#) (The Pink Book)
- [Culturally and Linguistically Diverse Children and their Families](#) (The Teal Book)
- [Children starting school in rural and remote Queensland – parent resource](#) (The Orange Book)
- [Best Practice Guideline for the Assessment and Diagnosis of Autism Spectrum Disorders](#)
- [Fetal Alcohol Spectrum Disorders Position Statement](#)

Engaging evidence-informed resources ensures the ongoing relevancy of child development in an ever-changing health context and supports the allocation of limited resources. Ultimately, specialist CDSs must maintain involvement in policy and strategy formation in order to ensure that the developmental needs of children are considered at all levels of service planning and clinical decision-making.

Engaging evidence-informed resources ensures the ongoing relevancy of child development in an ever-changing health context and supports the allocation of limited resources. Ultimately, specialist CDSs must maintain involvement in policy and strategy formation in order to ensure that the developmental needs of children are considered at all levels of service planning and clinical decision-making.

6. What do we know about Developmental Disability?

6.1. Prevalence

Developmental Disability is a high incidence disability category, and in developed countries the overall rate of identified developmental disability is increasing (from 12.8% to 17.8% in the USA between 1997 and 2017) (Zablotsky, 2019). Boys are more likely than girls to present with a developmental disability, and there are specific populations of children who experience higher rates of developmental disability than the general population (see Section 9). Impairments in one area of development are frequently accompanied by impairments across other developmental domains (Blanchard et.al. 2006, Close et.al. 2012, Reilly et.al. 2010). Co-morbidity is the rule, not the exception.

Prevalent developmental disabilities include:

- Autism spectrum disorder
- Intellectual disability
- Communication impairment

While there is evidence that there is growing demand for services for children with neurodevelopmental disorders (Atladottir et al, 2007; Zablotsky, 2019), it is also recognized that paediatric care providers tend to under-identify children with pervasive developmental concerns (Sheldrick et.al. 2011).

The [Australian Early Development Census](#) (AEDC) is a population measure of children's development as they enter school and is administered every three years (Commonwealth of Australia, 2019). It was rolled out by the Australian Government in 2009 (then known as the Australian Early Development Index) and was repeated in 2012, 2015, and 2018. The AEDC enables us to better understand and compare the developmental capabilities of children from communities across Australia and note changes in the population over time.

The developmental domains screened by the AEDC are:

- Physical health and wellbeing
- Social competence
- Emotional maturity
- Language and cognitive skills (school based)
- Communication skills and general knowledge

The AEDC data indicates that, while most Queensland's children are developmentally on-track, a significant proportion of children are identified by their teachers as developmentally vulnerable in the first year of formal schooling. Nearly 26% (25.9%) of Queensland's children were identified in 2018 as vulnerable (>10th percentile) by their classroom teacher in one or more developmental domains, and nearly 14% (13.9%) were identified as developmentally vulnerable in two or more domains. These rates have changed little across all administrations of the AEDC (Department of Education and Training, 2018).

It is important to note that developmental vulnerability as identified by the AEDC is an indicator of school readiness, not developmental disability. The CDSN does not endorse the use of this data as an indicator of developmental disability prevalence in a community.

When it comes to understanding the prevalence of developmental disability, the more pertinent findings of the AEDC lies in the proportion of children arriving at school with a diagnosed special need (4.6% in 2018) and those identified as needing further assessment for medical, physical, behavioural, emotional or cognitive development (13.3% in 2018). When these two rates are combined, the AEDC indicates that about 17.9% of children began school in 2018 with an established or emerging special need. This correlates with the prevalence rates of developmental disability commonly cited in literature (see above). It also reflects growing awareness amongst early childhood educators of the presence of emerging special needs, as the proportion of children identified in this category has increased on every administration of the census.

The AEDC data provides further evidence that supports our understandings of intersecting vulnerabilities. Factors associated with a higher rate of developmental vulnerability include:

- geographic location (with children living in outer regional, remote and very remote locations being identified as increasingly vulnerable)
- socio-demographic status of their community
- indigenous status
- sex
- cultural and linguistic diversity (specifically language impairment)

The most developmentally vulnerable cohort on all administrations of the AEDC, is children who are not proficient in English, and particularly children from English speaking backgrounds who are not English proficient. This group of children make up only 3% of the population but 76.9% of this cohort are identified as vulnerable on two or more domains (compared to 25.8% of Aboriginal and Torres Strait Islander children, 30.3% of children from very remote communities, and only 7.9% of children with a first language other than English but who are English proficient). This suggests that **language impairment at the time of school entry is a red flag for developmental disability more broadly.**

Understanding prevalence is somewhat complicated by our increasing understanding of the unstable nature of many developmental disabilities. Between 10% and 40% of children who receive a diagnosis of Autism Spectrum Disorder will have a change in that diagnosis over time (Close et.al. 2012), and Australian studies of emerging language and communication are finding that the diagnosis of language impairment may be relatively fluid throughout early childhood and beyond (Reilly et.al. 2010). This evidence challenges CDSs to support families to re-engage over time as their understanding of their child and his/her developmental disability changes.

Using Population Health data to better understand developmental need

A basic understanding of the characteristics of communities across Queensland and specifically the population cohorts of our Hospital and Health Services (HHS) is essential to inform understanding and planning for developmental need. Commonly held assumptions might indeed be challenged by a better understanding of local context. There are many sources of data including HHS data bases, and publicly available sources including the Australian Bureau of Statistics, the AEDC and the NDIS websites. Robust data sources must be current, population based, easily accessible, and consistently applied across jurisdictions (e.g. Australia wide). When able to explore multiple data sources we can look more broadly than a single context, enabling comparison, which further improves our understanding. Comparisons highlight that developmental vulnerability is widespread, and that every community has pockets of developmental disadvantage.

Ultimately, responsibility for improving the developmental health of Australian communities is multifaceted and requires cross sector approaches. It is not the role of a CDS to improve the AEDC results of their region or to improve NDIS ECEI access rates. However, it is the role of the CDS to be able to interpret data, advise service partners about strategies to improve developmental health, and ensure limited resources are appropriately allocated to provide services and supports aligned with health core business. To do this each CDS needs to understand local context and have some awareness of what that means comparatively across Queensland and the rest of Australia. The analysis of publicly available data is an important first step in achieving this goal.



6.2. Nature or Nurture?

In recent years it has become increasingly apparent that any distinction between the concepts of ‘nature’ and ‘nurture’ is an artificial construct. It is widely accepted that gene expression is governed by environmental conditions (Heckman, 2007). While a specific cause of an individual child’s developmental disability is often unknown, there is general consensus that a child’s development is the result of a complex interplay between their biology and their environment.

Children are born with individual characteristics (genetic and physiologic) that are the basic building blocks for their growth and development. The early years are marked by the rapid development of a child’s central nervous system during which the experiences that a child has and the environments that they have them in shape the development of their brain by the process of neural proliferation and pruning (Irwin et.al. 2007). Child development is a dynamic, reciprocal and interactive process. There is a large body of evidence that these complex interactions between genetic, environmental, psychological and familial influences both influence and shape the development and long-term function of particular brain circuits. These circuits are crucial for the development of cognitive and emotional control, including self-regulatory behaviours (Gianaros, 2011).

While children are active participants in their own development, reflecting the intrinsic human drive to explore and master one’s environment, optimal development depends on close and nurturing primary relationships. These relationships ensure that a child is protected from harm and actively supported to explore, play and learn (Heckman, 2007). Some scientists refer to this as the “serve and return” relationship between children, their caregivers and their community (Harvard University, 2020). Unreliable or inappropriate responses can alter the brain’s architecture leading to disparities in learning and behaviour.

CDSs have a responsibility to provide support to children with complex developmental impairment based on biology, function and circumstance. The World Health Organisation advocates for an equity-based approach to supporting child development, whereby improvements for at-risk children are not seen in absolute terms but in comparison to the most advantaged children within society.



Adverse Childhood Experiences and toxic stress:

Adverse childhood experiences or ACEs are potentially traumatic events that occur in childhood (CDCP, 2019). Examples of ACEs include:

- Experience of violence or abuse
- Exposure to substance misuse
- Household instability

ACEs and associated conditions can cause toxic stress (extended or prolonged stress) which, in turn, can impact on brain development with lifelong repercussions (Harvard, 2020). Some children face further exposure from toxic stress from historical and ongoing traumas including systemic racism and the impact of multigenerational poverty resulting from limited educational and economic opportunities.

ACEs are common, with up to 61% of adults in the US reporting they have experienced at least one type of ACE, although certain groups in society are at greater risk from accumulated ACEs than others.

Interventions to lessen the immediate and long-term harms that arise from ACEs are best met through community solutions that aim to promote and create safe, stable and nurturing relationships and environments where children live, learn and play. However, CDS have an important role to play in understanding the impact of ACEs on a child's health, wellbeing and development, and to work with families to alleviate the impacts of these stressors now and into the future.

6.3. Prognosis and Impact

The outcomes for children identified as having developmental disability are variable and depend on a range of factors, including: the quality of their immediate and wider social and physical environments; the quality and accessibility of evidence based early intervention services; and the specific characteristics of the developmental difficulties experienced by that child. However, there is increasing evidence that children diagnosed with a developmental disability are additionally at risk as adults across vocational, social, and physical and mental health domains (Irwin et.al. 2007). This impacts on the wider community in both social and economic ways.

There is also evidence that children with a developmental disability and their families experience additional stressors. Families often experience additional difficulties in relation to access to childcare, ability to participate in employment (particularly for mothers), quality of parent-child relationships, and overall caregiver burden (Stein et.al. 2011). Children with developmental disability often experience lower self-esteem, increased depression and anxiety, more missed school, and a lower level of community participation and involvement. These factors are known to compromise the health and wellbeing of individuals within our community, and add burden to our education, health, welfare and justice systems (Blanchard et.al. 2006).

Understanding the immediate and long-term implications of developmental disability on both the individual and on the wider community prompts professionals working in child development to consider the nature of the services being provided. In addition to advocating for greater investment in services directed to improving early childhood development, health professionals need to:

- advocate for a move away from traditional models of intervention to include increased social engagement, family support and functional problem solving for children and their families (Blanchard et.al. 2006)
- empower families to navigate the 'system' over time, particularly during periods of transition at key developmental points (Shonkoff et.al. 2012; Stein et.al. 2011)
- and prepare families for future outcomes, including supporting an improved understanding of the impact of developmental disability over the lifecourse, and the steps that can be taken to optimise individual outcomes (Stein et.al. 2011)

7. Priority Populations

The implications of developmental impairment are significant, compromising one's social, emotional, educational, and vocational outcomes, impacting on physical and mental health, and influencing one's interface with the justice system (Blanchard et.al. 2006). Most children who experience developmental difficulties may not fit a readily identified at-risk profile and there is a need for services to support children and families in an individualized way, regardless of their circumstance.

However, we do know that some broad groups of children require a coordinated and integrated approach to understanding their developmental needs with a broader contextual view, to ensure appropriately developed and delivered diagnostic understandings and interventions. This needs to happen across government and non-government agencies and between service providers, with roles and responsibilities of all stakeholders clearly defined and well understood. Business-as-usual may not be appropriate for these groups, and specialist CDSs need to be aware of this to support access and to improve outcomes for these children and their families.

In addition to understanding that some cohorts have additional vulnerabilities, it is important to understand why this is. When we understand 'why', we can identify ways to deliver a more integrated diagnostic understanding that leads to individualized interventions and appropriately designed supports and initiatives targeting individuals and groups of children and young people.

Factors that are pervasive across cohorts of children and young people who experience additional vulnerability include but are not limited to:

- Socio-economic disadvantage
 - o Poverty
 - o Education access and attainment
 - o Employment
 - o Housing
 - o Health and wellbeing
- Trauma
 - o Abuse and neglect
 - o Family violence
 - o Refugee and asylum seeker experience
 - o Medical and/or mental health comorbidities
 - o Multigenerational experience of disadvantage
 - o Cultural dislocation
- Mainstream service access barriers
 - o Health and systems literacy and confidence
 - o Language
 - o Geography

The [Australian Institute of Health and Welfare](#) makes information pertaining to disparities in health and life outcomes publicly available so service providers can make informed choices about the allocation of resources and the local delivery of services (AIHW, 2018). It is also important to understand the confounding impact of multiple intersecting identities with current and historical experiences of vulnerability and disadvantage.

7.1. Aboriginal and Torres Strait Islander Children

Aboriginal and Torres Strait Islander children and young people belong to the longest living cultures in the world, with rich traditions and a strong connection to family (CHQ, 2018). Aboriginal and Torres Strait Islander peoples comprise about 2.8% of Australia's population in total (ABS, 2017) but 6.2% of children in the first year of formal schooling (Department of Education and Training, 2018). This is a comparatively young and heterogeneous group that lives in all states and communities, from extreme remote locations to urban environments. Subsequently, generalizations about the context for Indigenous Australians are not helpful and all children and young people and their families need to be understood in an individualized way.

However, it is important for services providers to understand that Aboriginal and Torres Strait Islander children do not always enjoy the same health and wellbeing outcomes as their peers. The gap between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians exists regardless of geographic location (major cities, regional and remote) (Survey of Disability, Aging and Carers, 2012, AIHW, 2017).

The disparity between the opportunities and outcomes for Indigenous children is founded in a range of historical and socio-cultural factors that reinforce the need for a whole of society approach to supporting better outcomes. These disparities are well known, and a raft of government and non-government agency activity is underway to 'Close the Gap' (Australian Government, 2013). Specific risk factors pertaining to early childhood include:

- Smoking during pregnancy
- Drinking during pregnancy
- Stressful intra-uterine conditions
- Poor health and nutrition during pregnancy
- Challenges faced by parents
- Problems in parenting
 - o Disadvantaged socio-economic conditions
 - o Insufficient availability and effectiveness of early childhood development programs and services

Aboriginal and Torres Strait Islander children are more likely to be living in households with frequent life stressors. They are three times more likely to live in a jobless household, eight times more likely to be placed in out-of-home care, and five times more likely to be hospitalized for assault. Average school attendance for Indigenous students in primary and secondary school is lower than the national average by a gap of 9.7%, and they experience lower school completion rates (62%) (AIHW, 2017).

These factors all compromise a child and family's ability to access conventional developmental services, and challenge specialist CDS to consider how to grow services that facilitate Indigenous families to both engage and participate. The QCYCN encourages teams to contact the Aboriginal and Torres Strait Islander health workforce within their HHS or the QCYCN's Aboriginal and Torres Strait Islander Maternal, Child and Youth Health Worker Network to identify partnership and service improvement opportunities.

7.2. Children from Culturally & Linguistically Diverse Backgrounds

Australia is a multicultural country. Nearly 29% of Queensland residents were born overseas, and on the 2016 census, 45% of Queensland residents reported that one or more of their parents were born outside of Australia. Nearly 13.5% of households speak two or more languages at home (ABS, 2019). When compared to the data reported in the original Act Now document, we can see increasing cultural diversity across Queensland (QCYCN, 2012).

It is important not to assume developmental vulnerability as a result of cultural and linguistic diversity. The 2018 AEDC results indicated that the majority of children with a language background other than English were developmentally on-track entering school. However, if a child has a language background other than English (LBOTE) and is not proficient in English at the time of school entry, they are significantly more likely to be developmentally vulnerable across multiple developmental domains (not just the language domain). This aligns with our broader understanding that English language proficiency is an indicator of school readiness more broadly.

Some CALD populations have additional risk factors, and refugee children are recognized internationally as one such group (UNHCR, 1994). Adverse experiences in the early childhood period can interrupt and influence a child's developmental trajectory. Refugee children are likely to have had significant disruption to both family and community and often have a discontinuous early childhood experience in terms of differing cultural expectations, limited access to healthcare (immunisations, medications) and inadequate nutrition (Davidson et.al. 2004). Even if born into a family after resettlement, it is likely that they are influenced by parental distress, changes in family roles, and the ongoing legacy of violence and trauma. Each year, about 1800 refugees settle in Queensland under Australia's Humanitarian Program (State of Queensland, 2017). In some years, there may be circumstances where there are additional humanitarian resettlements (e.g. an additional 12,000 refugees settled in Australia in 2015 as a result of the conflicts in Syria and Iraq).

The QCYCN has produced the booklet [Culturally and Linguistically Diverse Children and their Families](#) to support CDS and other health professionals understand the context for people from a culturally and/or linguistically diverse background and assist in building responsive health services.



7.3. Children Living in Out-of-Home Care

The high incidence of developmental disability amongst children who have experienced abuse, neglect and family violence is widely reported (Miller et al. 2000; RACP, 2006). Estimates of the prevalence of developmental impairment in this population are as high as 60%, significantly greater than that of the general community (7-15%) (RACP, 2006; DoHA, 2011). While a child's physical safety is of immediate concern at the time harm is identified, childhood exposure to abuse and neglect, socioeconomic disadvantage, adverse familial mental health, substance abuse, and frequent changes in primary caregiver effect long term, complex changes to a child's developmental trajectory and ultimately to their lifecourse. It is recognized that, despite the high prevalence of social, emotional, developmental and behavioural problems in this population of children, most of these conditions were either poorly managed or previously not recognized prior to a child being taken into care (AIFS, 2018). And out-of-home placement does not always reduce a child's exposure to adverse social conditions, with up to 20% of children in care experiencing placement instability.

The number of children living away from home is increasing in Queensland. Between 2015 and 2019, there was a 16.3% increase to more than 10,000 children living in formal out of home care arrangements (Queensland Government, 2019). There are a raft of policy documents and practice frameworks for clinicians working with children in out of home care. Of the 121 recommendations coming out of the 2012 Queensland Child Protection Commission of Inquiry, two related specifically to the Health system's responsibility to be involved in development assessment and early intervention. In 2015, the Queensland Department of Health released a [Statement of Intent](#), requiring health services to prioritise children and young people in the child protection system. Despite these changes, timely and coordinated access to specialist integrated developmental services remains an unmet need for many children living in out of home care.

The QCYCN has produced the booklet [Childhood Maltreatment: contemporary understandings and implications for children's neurodevelopmental health services in Queensland](#) to support CDS and other health professionals understand the context for children who have been exposed to adverse domestic environments and trauma in the early years, and assist in building responsive health services.

7.4. Children who live with Medical and Mental Health Co-Morbidities

The developmental needs of children with co-morbid medical and mental health conditions are increasingly apparent. The past 30 years have seen amazing improvements in the life expectancy of children with serious medical conditions. For example, the five-year survival rates for childhood cancer have improved from 68% to 82% since the 1970s (Youlten et.al. 2011) while the cystic fibrosis life expectancy increased from early childhood upwards to nearly 40 years in a similar period (Cystic Fibrosis Association, 2011). Often the initial focus and priority for families with children who have potentially life limiting conditions is for intensive medical intervention. However, there is an increasing awareness of the need for specialist integrated developmental services to bridge the gap between survival and functional participation across the lifecourse.

One such group is children who have required newborn surgery for congenital conditions (including cardiac, gastro-intestinal, renal and tracheoesophageal). Survival rates in Australia for this population have risen dramatically in recent decades to 95% (Laing et.al. 2011). However, these children are at a significant risk of developmental impairment, even when socio-demographic characteristics and neonatal factors are accounted for. Two-year --old surgery survivors generally perform below average on standardised developmental assessments across physical (fine and gross motor), language and cognition domains, with a recent study identifying 41% as having a language impairment and 26% as having a motor impairment. Multidisciplinary developmental follow up and timely access to early intervention have been recommended but are not routinely available (Laing et.al 2011).

Similarly, there is increasing awareness of the significant overlap between the emotional and behavioural requirements of children referred to developmental services and those referred to child and youth mental health services (Roongpraiwan et.al. 2007). Access to specialist multidisciplinary developmental services for children with comorbid developmental and social-emotional difficulties is essential to optimise life outcomes and prevent the long- and short-term adverse health outcomes for

this vulnerable group. Current service models often preclude this population due to age, anticipated eligibility for alternative services, compliance, or inadequate team composition (absence of appropriately trained staff including psychologists, social workers, and developmental paediatricians). Greater integration and collaboration with existing child and youth mental health services is required to optimise access and appropriate care to a group of children who are particularly vulnerable.

The QCYCN has produced the booklet [Understanding the Development and Participation of Children with Significant Health Needs](#) to support CDS and other health professionals understand the impact of co-occurring health care needs on development, and assist in building responsive health services for these children and their families.

Priority groups is not a comprehensive overview of all children with additional risks and vulnerabilities. It is however a starting point for understanding the specific developmental co-morbid needs of those children with additional health and social complexities. Other populations known to be developmentally vulnerable include children living low on the socio-economic gradient, children living with domestic violence, children living in remote locations, and children who have carers struggling with mental health and/or substance abuse issues of their own. Understanding the diverse and pervasive nature of developmental disability further highlights the need for planning for developmental formulation and support at all points along the care continuum, for those from known at-risk populations as well as those who have no identifiable risk factors.



8. What we know about Queensland

Queensland is a geographically large state with a diverse population. This population is distributed across a comparatively high number of regional centers, with a significant proportion based in the Greater Brisbane Metropolitan area. Understanding the Queensland context is an important first step in understanding Queensland Health's responsibilities to children with developmental disability. The geography and demography of Queensland both influence and are influenced by a range of contemporary trends and issues that need to be understood if services are to be planned to improve access and flow.



The data below is pulled from the Australian Bureau of Statistics (ABS) website and the CHQ Population Health Dashboard V4.0. It was up to date on the 31/3/2020.

- Queensland has a population of about 4.7 million people, and a geographic area of more than 1.73million square kilometers
- Brisbane Local Government Area has a population of about 1.13 million people (24% of Queensland population)
- Greater Brisbane Regional Area (Brisbane, Caboolture, Logan, Ipswich, Pine Rivers, Redcliffe and Redlands) has a population of about 2.27 million people (48% of Queensland population)
- Queensland is home to the largest non-capital city in Australia (Gold Coast, 567 997 thousand people)
- Queensland is the only state with five regional cities that are home to more than 100 000 people each (Gold Coast, Sunshine Coast, Townsville, Cairns, and Toowoomba). This excludes Logan and Ipswich Cities which are included as part of the Greater Metropolitan Region by the ABS. The catchment areas of most of Queensland's regional centers equates to a population of between 200 000 – 300 000 people
- Queensland has a relatively high proportion of the population under 15yo (19.4%) compared to other states and territories (equal to NSW but less than the Northern Territory). However, some regional areas have amongst the highest proportion of children in the country (e.g. Torres SA2 has more than 27% of its population under 15yo)
- Queensland has the most people living in outer regional, rural and remote contexts of any Australian state or territory (714 400 or 15.2% of the population). This is nearly double the number living similarly in NSW, and four times that of most other jurisdictions (and more than three times that in the Northern Territory). Only the Northern Territory and Tasmania have a greater proportion of their population living in outer regional, remote and very remote locations, noting that this encompasses all of the NT (including Darwin)
- At the time of the 2016 census, about 186 000 Queenslanders identified as Aboriginal, Torres Strait Islander or Aboriginal and Torres Strait Islander. This is the second highest number of first nations peoples in any state or territory, with only NSW home to more Aboriginal and/or Torres Strait Islander peoples:
 - o Nearly 30% of Queensland's Aboriginal and Torres Strait Islander peoples live in the Greater Brisbane Metropolitan region
 - o 17% live in remote or very remote locations
 - o 35% are under 15yo (highest proportion in the country)

While there has been a gradual shift of Aboriginal and Torres Strait Islander peoples toward urban areas in the last 10years, Aboriginal and Torres Strait Islander people are still more likely than other Australians to live outside of major cities.

Therefore, Brisbane is the third largest city in Australia in terms of population, in the second largest state in terms of geographical area. Brisbane is the most decentralized of the mainland capitals and is the only capital city that is home to fewer than 50% of the state's population. Queensland's population is distributed in patterns that broadly map across each of the major regional centers. Queensland's population is both young and growing, with many regional areas having a greater percentage of the population under 15yo than the state capital. This percentage increases significantly in some remote indigenous communities. Each community needs to understand their profile individually.

A sound understanding of the context for Queensland is essential in terms of service planning and development. A decentralized network of specialist CDSs located in key regional sites is essential because:

- Queensland's population is relatively young and is broadly distributed over a vast geographical area, with services located both in metropolitan Brisbane and throughout major regional centers
- Developmental Disability is a high incidence disability category
- More than 50% of Queensland's population live outside of the state capital and require access to specialist level services close to their home community. Equity of access is an essential first step the provision of support that will optimise developmental outcomes for vulnerable and at-risk children
- Complexities inherent in communities vary from region to region and individualised support and problem solving requires a detailed and specific understanding of the local context. This is best provided by highly skilled and specifically trained locally based service providers

For a brief overview of Queensland in comparison to other Australian states, see APPENDIX 3

9. CDS in the Queensland Hospital and Health Services

While each Child Development Service across Queensland exists in a unique context and within a Hospital and Health Service with distinct features, the purpose and core responsibilities for teams to provide support and intervention to targeted and vulnerable populations unify and define CDSs in the Queensland. This section of Act Now identifies this purpose and care responsibilities of specialist and dedicated CDS; explores the scope of core team members; and profiles each service with consideration to their HHS context. Demographic data in this section pertaining to our Hospital and Health Services has been drawn from the CHQ Population Health Dashboard, giving our HHSs an unprecedentedly robust and reliable data source upon which to base our understandings.

9.1. CDS Purpose and Core Responsibilities

Dedicated CDS provide a unique service, being able to deliver high quality, integrated multidisciplinary support to children with complex developmental needs and their families. The services provided through a CDS care pathway are not defined by specific disability diagnoses, nor are they as broad in scope as are primary health care or generalist allied health services. Rather, CDS have an important role to play:

- Providing early intervention (prior to diagnostic assessment) to targeted populations of children who have suspected developmental difficulties, or who are identified as at-risk of a specific disability
- Working with children and their families through a diagnostic formulation process
- Providing direct and/or indirect support and intervention including but not limited to support for transition to alternative service providers where relevant and/or appropriate, and establishing shared care arrangements
- Providing consultation and/or review of children as required at key developmental transition points as they occur throughout the early years
- Providing specialist paediatric medical management (in teams with paediatric medical services)

Prior to diagnostic assessment: Early intervention may be required to support early development and to gather information that may contribute to a later diagnosis. Quality intervention prior to diagnostic assessment will support families to better understand the abilities, needs, and potential challenges facing their child, and the role they have in supporting their child's growth and development. It eliminates the need for a hurried diagnosis that may or may not describe the child over time or be in his or her best interest across the life course.

During the diagnostic process: A quality, integrated transdisciplinary approach to diagnosis recognises diagnosis as a process, not a point-in-time. A specific diagnosis may be clear and relatively straightforward in its determination, or it may be a process of inclusion and exclusion over time. Alternatively, a specific diagnosis may not be useful or appropriate for understanding and or/describing the functional performance and developmental profile a child. Families need support throughout the process of diagnostic formulation. Factors beyond the severity or type of diagnosis will influence the nature of this support, including a family's psychosocial and/or demographic circumstances.

The early post diagnostic phase: may be one of grief, loss, acceptance and/or transition for children and their families. A family that is well supported and well informed during this time will better understand their child and be better prepared to advocate for their needs and make informed choices about their child's management over time. Preparation for transition to alternative service providers starts at the beginning of the interface with the CDS.

Support and review at key transitions: Some children may be eligible for allied health therapeutic support, ongoing paediatric medical management, and/or re-engagement with the CDS around issues relevant to diagnosis that are unable to be clarified without the skills of the specialist multidisciplinary team or where there is no reasonable alternative available. The role of the allied health specialist in this instance may be consultation-liaison, advocacy and/or shared care.

9.2. Team Members' Roles and Responsibilities

The composition of each Child Development team in Queensland is unique. Each service has a cohort of team members that has evolved over time in response to local priorities and identified need. Despite these variations, multidisciplinary team composition is essential for service delivery, and a range of differentiated roles are required to provide evidence informed, efficient services to this complex clinical population.

9.2.1. CDS Team Leader

Team Leaders in specialist CDSs are responsible for more than the day-to-day administrative management of their Child Development Service. The Team Leader is required to integrate expert clinical knowledge with a broader awareness of local issues and statewide strategic direction in order to:

- Develop and lead service development initiatives in collaboration with relevant stakeholders within and beyond the HHS, including actively engaging with the community of CDS clinicians statewide
- Engage in workforce planning and design
- Provide authoritative counsel to relevant stakeholders about the provision of quality developmental services along the care continuum
- Collaborate with other service managers to ensure effective cooperation within and across HHS allied health, nursing and medical services
- Integrate demographic data with current evidence and understanding of local context
- CDS teams with a dedicated team leader have the benefit of a focused resource that sets the direction for the service, participates in broader service planning and development, and provides ongoing advocacy, while supporting individual clinicians within the team. This builds a high-performance culture that improves efficiency and accountability and ultimately supports client access and flow

9.2.2. CSCF Level 4&5 Child Development Allied Health Clinicians

Specialist CDSs require active engagement and leadership from within, provided by experienced and highly skilled clinicians with specific and proven abilities in the provision of evidence-based care to children with complex developmental needs.

Experienced senior and advanced level clinicians are uniquely placed to provide clinical leadership, advice and support to other clinicians within and outside of the Child Development Service, as well as to the Team Leader and HHS senior management on an ongoing basis. Skilled clinicians need to be actively involved in the discipline specific and transdisciplinary professional support of new, less experienced, and/or developing clinicians, and work with other senior and advanced level practitioners within the CDS to support a culture of collaboration and transparency with a foundation in the CDS Principles of Practice. Functional partnerships between the Team Leader, Senior and Advanced Clinicians and base grade staff ensure both clinical and workforce needs are met in a timely and effective way.

9.2.3. *Paediatrician embedded in a CDS*

A paediatrician embedded within a specialist Child Development Service has a pivotal role in that team's delivery of safe, quality assessment, diagnostic understanding (diagnostic formulation), and case management support. The role and responsibilities of the paediatrician cannot be accommodated by other team members, and services without appropriately trained paediatric medical support are unable to fulfill holistic care requirements for children with complex developmental needs. The ability to work effectively as a member of a multidisciplinary team is a key competency. Dedicated Child Development Service hours, free of other commitments, are required to allow adequate opportunity for team collaboration.

Specific responsibilities include:

- Detailed, accurate, biopsychosocial assessment: including the “measurement” of developmental skills; an analysis of social context (esp. family function); a search for an identifiable physical cause (e.g. neurological / genetic / metabolic conditions) or co-morbid physical condition; and consideration of the need for medical investigations. Collateral information (history from other caregivers, questionnaire data) and referral for targeted assessments by other professionals (including multidisciplinary team assessment) are undertaken as required
- Diagnostic formulation: a multidisciplinary collaborative process that draws information held by several sources into a coherent explanation for the child's presenting difficulties. The formulation should include a focus on positive features of the child and family (strengths-based approach) and encompass biological (medical) and psychosocial considerations in addition to clarifying the child's neurodevelopmental profile. The appropriateness of a formal diagnostic label is considered. The provision of quality feedback to the family & child is core to the role and may be shared with other team members
- Case management: including the discussion of management options & creation of a multi-modal management plan, either individually or in collaboration with the multidisciplinary team. The paediatrician may also provide office-based counseling and prescribe and/or monitor medical treatments. Referral for appropriate intervention, including to external providers, is undertaken as indicated and collaboration with other services (e.g.; Education) is a frequent requirement. The paediatrician may provide ongoing support & review over the short and long term and will contribute to the empowerment of parents to manage their child in order to alleviate service dependency

9.2.4. *Clinical Intake*

Clinical intake ensures a single point of contact that enables an integrated and timely support and advice service to families, caregivers and community agencies. The clinical intake role may be a designated position, or a role fulfilled by a team member on a permanent, temporary or rotational basis. The fundamental premise is that this is a clinical role, not an administrative function.

The role involves:

- **Transdisciplinary developmental screening and triage**
The clinical intake role ensures developmental referrals are appropriately triaged for complexity with consideration of co-morbidity, psychosocial perpetuates and developmental trajectory. This involves direct contact with families and often with referring agents. This role also enables accurate prioritization and coordinated access to appropriate support by the CDS or other services
- **Advocacy and support to families and carers regarding children's developmental needs**
A clinical intake officer provides timely counseling and advice at the first point of contact, as well as individualized and discreet clinical coordination of care with families and relevant agencies. This role also coordinates brokerage of services across sectors where appropriate
- **Education, information and advice**
Clinical intake provides transdisciplinary education and advice regarding child development and service pathways/opportunities to the indicated population of parents/carers. This may include a range of individual, partnership or group-based education or advice options where appropriate for population needs. The position may also provide education, advice and consultation-liaison services to professionals and professional groups

9.3. 2020 Statewide Service Network Profile

The following profile of the CDS Service Network was the current state, as of March 2020. The CSCF indicates that there are 13 HHS that have committed to a dedicated or specialist Child Development Service (CSCF L4, 5, or 6) that provides a specialist stream of care to children with additional developmental needs. This requires local clinicians and other generalist services with specific child development skills and knowledge. In this document, each CDS is profiled according to location, demography and service characteristics.

Child Development Subnetwork members contributed to these profiles and the CHQ Population Health dashboard and ABS website were the source of most demographic data.

Numbers and percentages have been rounded up and down to aid reporting. Please note that quoted numbers across all profiles may not add up perfectly to the state totals.

For some HHS, the demographic data included are best estimates, as some SA2 geographic classifications cross HHS boundaries. Where this has happened, the data has been allocated to the HHS that most closely correlates with the statistical area boundaries. This has happened between:

- Darling Downs and Central Qld (allocated to CQ)
- Metro North and West Moreton (allocated to WM)
- North West and Townsville (allocated to TSV)
- Townsville and Cairns and Hinterland (allocated to C&H)

In March 2020, the population profile of Qld was as follows:

Children and Youth Population (2019)	1.08M
Proportion of children and young people who identify as Aboriginal or Torres Strait Islander	7.9% (85.3k children)
Proportion of people in the lowest 20% of SEIFA	26%
Number of NDIS full scheme participants in Qld (31 Dec 2019)	61 583
• Aged 0-6yo	9 216
• Aged 7-14yo	14 436
• Aged 15-18yo	4 369

In March 2020, the population profile of Qld was as follows:

✓	The profession is included in the HHS' dedicated or specialist CDS
A	The dedicated CDS has access to a suitably qualified clinician from that profession, but it is not embedded as part of the multidisciplinary team.
✗	The profession is not available to the HHS' dedicated or specialist CDS

The geographic profile is based on the Australian Standard Geographical Classification standards.

The CSCF level ascribed is taken from the *Service Capability Matrix Outlook to 2026*.

9.3.1 . Cairns and Hinterland HHS



Australian Standard Geographical Classification	Outer Regional, Remote and Very Remote
Children’s Clinical Service Capability Level to 2026: Medical	Cairns: 4 to 5 (by 2026) Mossman, Mareeba, Atherton, Innisfail: 2
Children and Youth Population (2019)	66.63k (6.2% of Qld’s children)
Children and young people who identify as Aboriginal or Torres Strait Islander	17.6% (11.7k children)
Proportion of people in the lowest 20% of SEIFA	36%
NDIS Region: Cairns	2937 (all ages) 927 (0-6yo)

Cairns and Hinterland HHS is located in Far North Queensland and was established in 1985. The team provides support to children aged 0-18yo from across the HHS through an extensive outreach program (including to Innisfail, Atherton, Mareeba, Mossman and Yarrabah), as well as via services delivered from their North Cairns location. The CDS is a team of about 7fte, including a team leader and is based at the Community Health Centre as part of an Integrated Child Health service. Cairns Hospital is a secondary level facility. The Special Care Nursery has 22 beds and offers services to babies born post 29 weeks gestation.

CDS Cairns provides services to children who have complex developmental needs. An assessment and brief intervention service is available to school aged children through paediatrician referral. A community-based Speech Pathologist provides generalist paediatric services for children with communication disorders and CDS Cairns works in collaboration with generalist allied health professionals located in several outreach sites. Established partnerships between Child Health and other providers including Education Qld, Mission Australia and The Benevolent Society ensure access to services for children with developmental concerns. Clinical supervision is often part of the outreach program.

A referral from a health or education professional is required. The service is block funded.

Cairns CDS Workforce Profile: 7fte

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✗	School age only	A	A	✓

9.3.2. North West (Mt Isa)



Australian Standard Geographical Classification	Remote, Very Remote
Children’s Clinical Service Capability Level to 2026: Medical	Mt Isa: 4
Children and Youth Population (2019)	7.87k (0.73% of Qld’s children)
Children and young people who identify as Aboriginal or Torres Strait Islander	38.9% (3k children)
Proportion of people in the lowest 20% of SEIFA	25%
NDIS Region: Townsville	—

North West is a large and geographically diverse Hospital and Health Service. Despite being flagged on the CSCF as having a Level 4 paediatric medical service, North West does not have a dedicated Child Development allied health team and has limited access to paediatric services

9.3.3 . Townsville



Australian Standard Geographical Classification	Outer Regional, Remote and Very Remote
Children’s Clinical Service Capability Level to 2026: Medical	Townsville: 5 Ingham, Ayr, Charters Towers: 3
Children and Youth Population (2019)	65.02k (6% of Qld’s children)
Children and young people who identify as Aboriginal or Torres Strait Islander	13.6% (8.84k children)
Proportion of people in the lowest 20% of SEIFA	28%
NDIS Region: Townsville	4581 (all ages) 897 (0-6yo)

Dedicated developmental services have existed in Townsville since about 1985, when the local Developmental Assessment Team was founded. In 2020, CDS Townsville has a team of about 12 full time equivalent positions including a dedicated Team Leader.

CDS Townsville offers centre-based services throughout Townsville, and outreach services to regional sites to the north (Ingham), south (Ayr), east (Palm Island) and west (Charters Towers, Hughenden and Richmond). CDS Townsville hosts the Cerebral Palsy Health physiotherapy (0.4fte) and occupational therapy (0.1fte) positions, and otherwise offers Child Development Level 4 services. CDS Townsville also offers professional support to generalist paediatric allied health from throughout the HHS and is collocated at the Kirwan Community Health Centre with the Child Health and CYMHS teams.

The Townsville Hospital is a tertiary facility that offers a range of specialist services to communities across North and Far North Queensland, including a neonatal intensive care facility. There are other generalist allied health services located at Townsville University Hospital (i.e. paediatric Speech Pathology clinic for children aged 0-5 with isolated speech and language concerns) and in centres such as Ingham, Ayr, and Charters Towers.

CDS Townsville accepts community referrals and the service is funded according to activity.

CDS Townsville workforce profile: 12.37fte

SP	OT	Physio	SW	Psych	Paed	CI	Nurse	TL
✓	✓	✓	✓	✓	A	x	A	✓

9.3.4. Mackay



Australian Standard Geographical Classification	Inner Regional, Outer Regional, Remote and Very Remote
Children's Clinical Service Capability Level to 2026: Medical	Mackay: 4 Bowen, Proserpine: 3
Children and Youth Population (2019)	46.62k (4.3% of Qld's children)
Children and young people who identify as Aboriginal or Torres Strait Islander	8.7% (4.06k children)
Proportion of people in the lowest 20% of SEIFA	27%
NDIS Region: Townsville	2380 (all ages) 468 (0-6yo)

The Mackay Hospital and Health Service (HHS) provides public hospital and health services to people residing in a geographical area from Sarina in the south, Clermont in the west, Bowen in the north and Collinsville in the north-west. Despite the traditional population centers being on the coast, the region is increasingly known for the large mining communities that have grown around some inland centers such as Moranbah and Collinsville.

CDS Mackay is in the community health centre. The team provides centre based services within the city of Mackay but does accept referrals for children from across the region. The team also has links with Mackay Base Hospital (MBH), Child Health Services and generalist allied health working in MBH and in communities throughout the region.

MBH is a secondary level facility. Paediatric services at MBH are provided by dedicated allied health staff including occupational therapy, speech pathology, physiotherapy, social work, psychology and dietetics with priority to acute service delivery and children with chronic illness.

Mackay CDS accepts referrals from health professionals and is funded according to activity.

CDS Mackay workforce profile: 3fte

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✗	✓	A	✗	✗

9.3.5. Central Queensland (Rockhampton)



Australian Standard Geographical Classification	Inner Regional, Outer Regional, Remote
Children's Clinical Service Capability Level to 2026: Medical	Rockhampton: 4 Gladstone, Emerald: 3 Capricorn Coast, Biloela: 2
Children and Youth Population (2019)	61.43k (4.8% of Qld's children)
Children and young people who identify as Aboriginal or Torres Strait Islander	9.7% (5.96k children)
Proportion of people in the lowest 20% of SEIFA	30%
NDIS Region: Rockhampton	3553 (all ages) 618 (0-6yo)

Central Queensland is a large and diverse Hospital and Health Service. Rockhampton is the largest regional center within the HHS, but the population is dispersed among a number of coastal communities and inland mining hubs.

CDS Rockhampton provides both dedicated and generalist developmental services to children aged 0-8. The team is located in the Rockhampton Community and Public Health Centre. The CDS grew from the DAT service (established in 1985) and has been integrated with other paediatric community-based health teams to form the Child and Family Health Service. CDS Rockhampton provides in reach services to Rockhampton Base Hospital, and some post-acute care. Rockhampton Base Hospital is a Secondary Level facility and has a Special Care Nursery that provides care to infants from 32 weeks gestational age.

CDS Rockhampton accepts referrals from GPs and paediatricians and is funded according to activity.

Reflecting the decentralized nature of the Central Queensland HHS, there is a network of skilled clinicians who provide developmental services aligned with the Act Now service standards and principles of practice. These clinicians are in Gladstone, Biloela, and Emerald. How these clinicians operate and link across the HHS varies from location to location.

CDS Rockhampton workforce profile: 7.5fte (approx. 4.5fte for developmental services)

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✗	✓	A	✓	✓

*Clinical lead for paediatric allied health rather than a specific CDS TL.

9.3.6. Wide Bay (Bundaberg and Fraser Coast)



Australian Standard Geographical Classification	Inner Regional, Outer Regional, Remote
Children's Clinical Service Capability Level to 2026: Medical	Bundaberg, Hervey Bay: 4
Children and Youth Population (2019)	49.28k (4.6% of Qld's children)
Children and young people who identify as Aboriginal or Torres Strait Islander	8.7% (4.29k children)
Proportion of people in the lowest 20% of SEIFA	62%
NDIS Region: Maryborough	4593 (all ages) 644 (0-6yo)

The Wide Bay Health and Hospital Service encompasses a large and densely populated regional area. Health services within the region operate from three major centers (Bundaberg, Hervey Bay and Maryborough) and are supplemented by several small rural health facilities. Historically, each of these centers has evolved strong identities and a tradition of innovative local problem solving. Subsequently, Wide Bay hosts two CSCF Level 4 CDSs.

CDS Wide Bay (Bundaberg) provides multidisciplinary services to children as they transition to formal schooling. They have provided support to children with complex developmental needs since 2001. CDS Wide Bay (Fraser Coast) is a team of 3fte that works across Hervey Bay and Maryborough. This team also provides multidisciplinary early intervention services to children with complex development needs, but with an emphasis on the years prior to school entry.

Both Wide Bay locations have generalist Speech Pathology services that support children with non-complex communication needs (Level 3 services) and paediatric physiotherapy delivered at the hospital.

Both teams are block funded

CDS Wide Bay (Bundaberg): 2.4fte providing services to children aged 3-6

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✓	✓	A	✗	✗

CDS Wide Bay (Fraser Coast): 3fte providing services to children aged 0-6

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✗	✗	A	✗	✗

9.3.7. Sunshine Coast



Australian Standard Geographical Classification	Major City, Inner Regional,
Children's Clinical Service Capability Level to 2026: Medical	Sunshine Coast: 4 to 5 by 2026 Gympie: 3 Nambour: 2
Children and Youth Population (2019)	101.5k (9.3% of Qld's children)
Children and young people who identify as Aboriginal or Torres Strait Islander	4.1% (4.16k children)
Proportion of people in the lowest 20% of SEIFA	15%
NDIS Region: Maroochydore	4699 (all ages) 482 (0-6yo)

The Sunshine Coast HHS sits just north of the Greater Brisbane Metropolitan Area, ranging from south of Caloundra through to north of Gympie. This region has been a corridor of significant growth for many years and has a diverse mix of urban and rural communities.

The Child Development Service Sunshine Coast is located at the Caloundra Health Service and provides outreach to Gympie one day per week. The team of about 6.4fte clinical positions has been operating independently since 1992 and was established specifically to meet the multidisciplinary service requirements of children with complex developmental needs.

The Sunshine Coast provides multidisciplinary services to children across the age range, with a focus on the 0-8 age group. Some specialist services are provided for older children with concerns about FASD or learning. The HHS does have child health and generalist allied health services in various locations across the region. These positions have some links with the specialist CDS.

CDS Sunshine Coast accepts referrals from doctors as well as other health and education professionals. The service is block funded.

CDS Sunshine Coast workforce profile: 8.6 – 9.1FTE

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✓	✓	A	A	✓

9.3.8. Darling Downs (Toowoomba)



Australian Standard Geographical Classification	Inner Regiona, Outer Regional
Children's Clinical Service Capability Level to 2026: Medical	Toowoomba: 4 Kingaroy, Dalby, Warwick, Goondiwindi: 3 Stanthorpe: 2
Children and Youth Population (2019)	73.98k (6.8% of Qld's children)
Children and young people who identify as Aboriginal or Torres Strait Islander	9.2% (6.62k children)
Proportion of people in the lowest 20% of SEIFA	35%
NDIS Region: Toowoomba	4690 (all ages) 669 (0-6yo)

Darling Downs HHS has a large population and occupies a vast geographical area inclusive of inner and outer regional communities. The Paediatric Allied Health Outpatient Service at the Toowoomba Hospital aligns with the CDSN services standards and principles of practice and works in close consultation with the Paediatric Outpatient Department and Child Development Nurse Coordinator to provide services to children in the pre-schooling years. It also provides some time-limited, goal directed consultations and support to children requiring OT and PT assessment/intervention up until the age of 12 years.

Paediatricians provide support, developmental and behavioural care for children up to the age of 12years with support from the nurse coordinator. The allied health professionals are operationally managed by the relevant Allied Health Director and the nurse coordinator is operationally managed by a Nurse Unit Manager.

Referrals to individual professions are preferred.

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✗	✓	A	✓	✗

9.3.9. West Moreton (Ipswich)



Australian Standard Geographical Classification	Major City, Inner Regional
Children’s Clinical Service Capability Level to 2026: Medical	Ipswich: 4 to 5 by 2026
Children and Youth Population (2019)	93.26k (8.6% of Qld’s children)
Children and young people who identify as Aboriginal or Torres Strait Islander	6.9% (6.43k children)
Proportion of people in the lowest 20% of SEIFA	36%
NDIS Region: Ipswich	5548 (all ages) 1006 (0-6yo)

West Moreton HHS (known as WMH) is located in South East Queensland. Ipswich is the largest population centre in the HHS and is surrounded by rural communities including Gatton, Laidley, Esk, Tagooloowah and Boonah. This region is characterized by rapid population growth and high levels of developmental need and comorbidities.

CDS Ipswich began as a Developmental Assessment Team in the mid-1980s and has two locations: Ipswich Health Plaza and Goodna Community Health (both co-located with community and primary care services).

The team provides specialist child development assessment and diagnostic services to children aged from 0-18yo. The expansion of service provision to school aged children has signaled a shift to greater inclusive practice in service delivery. Due to a lack of dedicated paediatric allied health services at Ipswich Hospital, this team also provides some limited in-reach services.

CDS West Moreton accepts referrals from GPs via Smart Referrals to Paediatrics OPD and other medical specialists, as well as from allied health and nursing. CDS West Moreton is a mixture of block and activity based funding.

CDS West Moreton workforce profile: 9.2fte

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✓	✓	A	✓	✓

9.3.10. Gold Coast



Australian Standard Geographical Classification	Major City, Inner Regional
Children's Clinical Service Capability Level to 2026: Medical	Gold Coast: 5 Robina: 3
Children and Youth Population (2019)	150.9k (13.9% of Qld's children)
Children and young people who identify as Aboriginal or Torres Strait Islander	3% (4.53k children)
Proportion of people in the lowest 20% of SEIFA	9%
NDIS Region: Robina	5685 (all ages) 881 (0-6yo)

The Gold Coast is the city with largest population outside of a capital city in the whole of Australia. There is significant demographic variation across the Gold Coast region.

CDS Gold Coast was initially established as an outreach site from the Mt Gravatt DAT team in 1985. The team is based at Southport within the Southport Health Precinct, with outreach sites at Upper Coomera, Helensvale and Palm Beach. Services offered by the team are focused on children in the preschooling years, but some multidisciplinary allied health assessment clinics are available to primary and secondary aged children. The medical clinics are available to children up to 10years of age. A range of generalist CDSs, including screening and support services delivered by child health teams, are also available across the region.

CDS Gold Coast accepts referrals from medical, other health and education professionals and is funded according to activity.

CDS Gold Coast Workforce profile: 32fte

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✓	✓	✓	✓	✓

9.3.11. Children's Health Queensland (Bris. North & South)



Australian Standard Geographical Classification	Major City, Inner Regional Statewide and tertiary health services to all regions
Children's Clinical Service Capability Level to 2026: Medical	QCH: 6 Other areas: 4
Children and Youth Population (2019)	342.8k (31.7% of Qld's children)
Children and young people who identify as Aboriginal or Torres Strait Islander	4.5% (15.4k children)
Proportion of people in the lowest 20% of SEIFA	20%
NDIS Region: Brisbane, Beenleigh, Caboolture/Strathpine	22913 (all ages) 3192 (0-6yo)

Greater Metropolitan Brisbane may have a relatively small geographic footprint (in comparison to other Qld HHS) but is home to 49% of Queensland's population. While the Australian Bureau of Statistics identifies the Greater Metropolitan region as encompassing the Brisbane local government area as well as the local government areas of Logan, Redlands, Redcliffe, Caboolture, and Ipswich, this does not match the Children's Health Queensland HHS metropolitan boundaries, which includes all of these local government jurisdictions except West Moreton.

The CHQ Child Development Program (CDP) includes four regionally defined teams (North, Central, South, Queensland Children's Hospital (QCH)) that provide services across at least 13 sites. The combined fte is more than 70 and includes some professional groups rarely embedded in other CDS statewide, including dietetics and nursing. The context is further complicated by the presence of multiple tertiary and secondary hospital facilities, and the overlay of CHQ across Metro North and Metro South geographic boundaries. Both Metro North and Metro South HHS provide some development services and supports.

CHQ is home to the only tertiary/quaternary paediatric facility in QLD (QCH) which provides sub-specialist level services to children from across Queensland and interstate.

CDP accepts medical referrals and is block funded. Intake is supported by a whole of community intake team.

CDP workforce profile: 78fte

SP	OT	Physio	SW	Psych	Paed	CI	TL
✓	✓	✓	✓	✓	✓	✓	✓

9.3.12. Queensland HHS without a CSCF L4, 5 or 6 CDS

Torres and Cape



Australian Standard Geographical Classification	Remote, Very Remote
Children's Clinical Service Capability Level to 2026: Medical	Thursday Island, Weipa, Cooktown: 2
Children and Youth Population (2019)	9.02k (0.8% of Qld children)
Children and young people who identify as Aboriginal or Torres Strait Islander	78.2% (7.05k children)
Proportion of people in the lowest 20% of SEIFA	65%
NDIS Region (2019): Cairns	—

Central West



Australian Standard Geographical Classification	Very Remote
Children's Clinical Service Capability Level to 2026: Medical	Longreach: 3
Children and Youth Population (2019)	2.37k (0.22% of Qld children)
Children and young people who identify as Aboriginal or Torres Strait Islander	13.3% (308k children)
Proportion of people in the lowest 20% of SEIFA	24%
NDIS Region (2019): Rockhampton	—

South West



Australian Standard Geographical Classification	Outer Regional, Remote, Very Remote
Children's Clinical Service Capability Level to 2026: Medical	Roma, St George, Charleville: 3
Children and Youth Population (2019)	6.3k (0.58% of Qld children)
Children and young people who identify as Aboriginal or Torres Strait Islander	18.7% (1.2k children)
Proportion of people in the lowest 20% of SEIFA	32%
NDIS Region (2019): Cairns	—

10. Standards for Clinical Practice for Specialist Child Development Services in Queensland

Standards for Clinical Practice for Specialist CDSs have been developed to provide clinicians and service managers with a practical framework that supports increased consistency in service planning and provision, and guides quality improvement and professional development. These standards are divided into three components that focus on how services are:

- conceptualised (Principles of Practice)
- structured (Standards for the Delivery of Care)
- and delivered (Methods of Service Delivery)

Clinicians and clinical managers need to consider local issues, strategic directions, and legislative requirements when integrating current practice with these standards. In doing so, each Child Development Service will develop a Model of Care that is based on a common framework yet is inherently adaptable, locally responsive, and innovative according to context. This will enable the broader agenda of a network of service providers throughout Queensland to continue to evolve supporting their communities in an equitable, efficient and high-quality way.

These service standards were developed following extensive stakeholder consultation through the SCYCN CDWG, and review of current clinical standards documents from Canada, the United Kingdom and Australia across Child Health, Child Development and Mental Health clinical contexts.

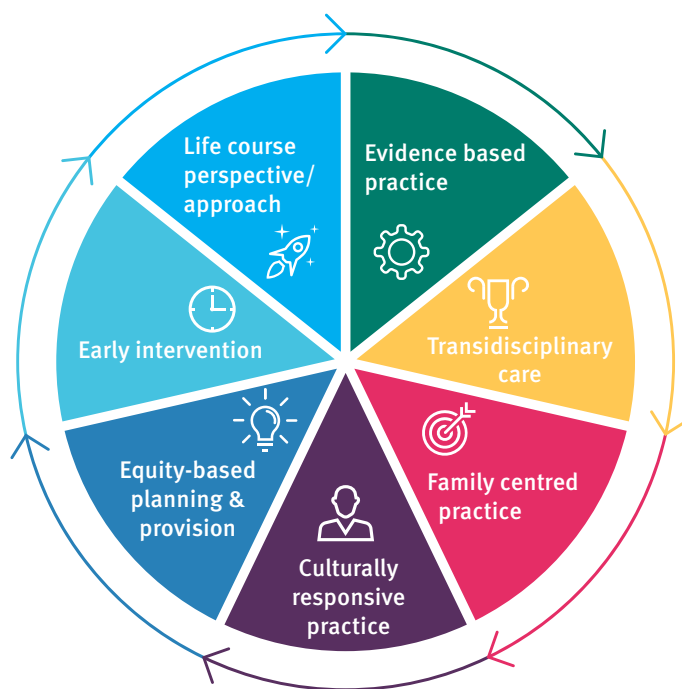
10.1. Principles of Practice

CDSs within Queensland Hospital and Health Services are based on a set of Principles of Practice. These principles support a consistent understanding of Child Development as a clinical service area within a health context and enable a consistent approach to clinical decision making statewide. The CDS Principles of Practice are outlined in this resource as well as via the Child Development Clinical Capabilities iLearn Training Modules.

Principles of practice

To develop high quality Child Development Services, several principles of practice need to guide and inform service delivery. These principles Equity are described briefly below and include:

1. Life course perspective and approach
2. Early intervention
3. Evidence informed practice
4. Family-centred practice
5. Equity-based service planning & provision
6. Inter-professional & transdisciplinary care



Underlying the CDS Principles of Practice is a fundamental understanding of the ecological model of development as described by Uri Bronfenbrenner in the 1970s and 1980s. All children require productive and complimentary interactions across multiple environmental settings (e.g. home, school and community), and robust individual characteristics, both internal and relational. The driving force behind development is the optimal interplay between the developing brain and the environment, facilitated by nurturing caregivers.

10.1.1. *Life Course perspective*

- Experiences during the early years sets a critical foundation for a child's lifecourse including their school success, economic participation, social citizenry, and physical and mental health
- The 'age of paediatrics' is in a state of flux. How we understand the maturing brain and body, as well as social change that sees the shift to adult responsibility now occurring well into a person's 20s, means that there is pressure on policy makers and clinicians to shift their understanding of childhood, adolescence and adulthood
- Many adult challenges, including chronic disease (e.g. adverse mental health, obesity, and heart disease), have their foundation in compromised development in early childhood
- Understanding that childhood is part of a journey requires clinicians to integrate bio-psycho-social context over time into diagnostics and intervention

10.1.2. *Timely Access/Early Intervention*

- Timely access refers to the coordinated assessment, diagnosis, and/or therapeutic support offered to a child and their family as soon as possible following the identification of a developmental impairment
- This may occur at any time across the lifecourse, including the early childhood period, during primary schooling, adolescence, young adulthood or beyond. Impairment can become more apparent at significant transition points along the developmental continuum

10.1.3. *Evidence Informed Practice*

- Clinical decision making is to be based on the best available research evidence synthesised with clinical expertise and an individualised understanding of a client's characteristics, values and context
- Service evaluation is required to ensure services are meeting the needs and expectations of consumers

10.1.4. *Person and Family Centered Practice*

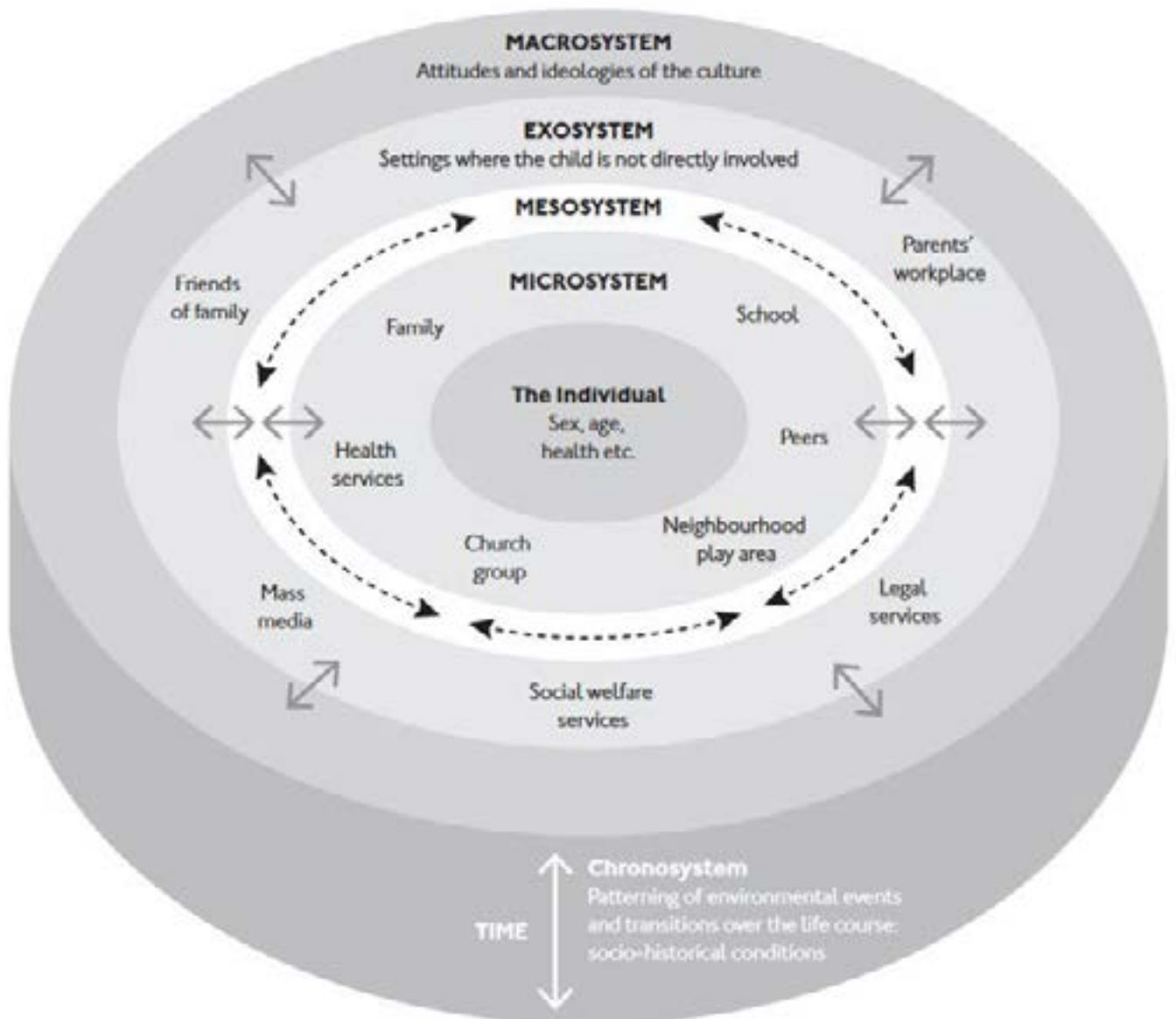
- The child and/or young person is at the heart of all that we do. Clinicians have a responsibility to engage children and young people in their own care and in partnership with key stakeholders in their family and community
- The family is the primary source of experience for a child and have the capacity to strengthen their capabilities to support their children's development
- Purpose of intervention is to understand the inherent complexity that exists for a child and their family, and to enhance the quality of life of that child and their parent/s. This will be achieved by supporting families to identify priorities that they are able to practically work towards, and to work together to determine meaningful and tangible solutions to complex problems

10.1.5. *Inclusive and Culturally Responsive Practice*

- Inclusive practice ensured services create environments that make all feel safe and welcome
- Health professionals are knowledgeable and respectful of diversity and provide services in flexible ways that are responsive to each family’s cultural, racial, language, and social characteristics
- Culturally responsive practice may have traditionally referred to ethnic cultural practices but may in fact include a wide range of factors that reflect a person or family’s intersecting identities

10.1.6. *Equity-Based Service Planning and Provision*

- For improvements in short- and long-term health outcomes, services must aim for improvements for those most disadvantaged children, both in absolute terms and in comparison to the most advantaged children in the community
- Understanding of the demographics of local community including areas of unmet developmental need is required for service planning and development. This can be done using resources such as the AEDI community profiles and the ABS and local demographic reports



Grace, R., Hayes, A., & Wise, S. (2017).

10.1.1. *Life Course perspective*

- Experiences during the early years sets a critical foundation for a child's lifecourse including their school success, economic participation, social citizenry, and physical and mental health
- The 'age of paediatrics' is in a state of flux. How we understand the maturing brain and body, as well as social change that sees the shift to adult responsibility now occurring well into a person's 20s, means that there is pressure on policy makers and clinicians to shift their understanding of childhood, adolescence and adulthood
- Many adult challenges, including chronic disease (e.g. adverse mental health, obesity, and heart disease), have their foundation in compromised development in early childhood
- Understanding that childhood is part of a journey requires clinicians to integrate bio-psycho-social context over time into diagnostics and intervention

10.1.2. *Timely Access/Early Intervention*

- Timely access refers to the coordinated assessment, diagnosis, and/or therapeutic support offered to a child and their family as soon as possible following the identification of a developmental impairment
- This may occur at any time across the lifecourse, including the early childhood period, during primary schooling, adolescence, young adulthood or beyond. Impairment can become more apparent at significant transition points along the developmental continuum

10.1.3. *Evidence Informed Practice*

- Clinical decision making is to be based on the best available research evidence synthesised with clinical expertise and an individualised understanding of a client's characteristics, values and context
- Service evaluation is required to ensure services are meeting the needs and expectations of consumers

10.1.4. *Person and Family Centered Practice*

- The child and/or young person is at the heart of all that we do. Clinicians have a responsibility to engage children and young people in their own care and in partnership with key stakeholders in their family and community
- The family is the primary source of experience for a child and have the capacity to strengthen their capabilities to support their children's development
- Purpose of intervention is to understand the inherent complexity that exists for a child and their family, and to enhance the quality of life of that child and their parent/s. This will be achieved by supporting families to identify priorities that they are able to practically work towards, and to work together to determine meaningful and tangible solutions to complex problems

10.1.5. *Inclusive and Culturally Responsive Practice*

- Inclusive practice ensured services create environments that make all feel safe and welcome
- Health professionals are knowledgeable and respectful of diversity and provide services in flexible ways that are responsive to each family’s cultural, racial, language, and social characteristics
- Culturally responsive practice may have traditionally referred to ethnic cultural practices but may in fact include a wide range of factors that reflect a person or family’s intersecting identities

10.1.6. *Equity-Based Service Planning and Provision*

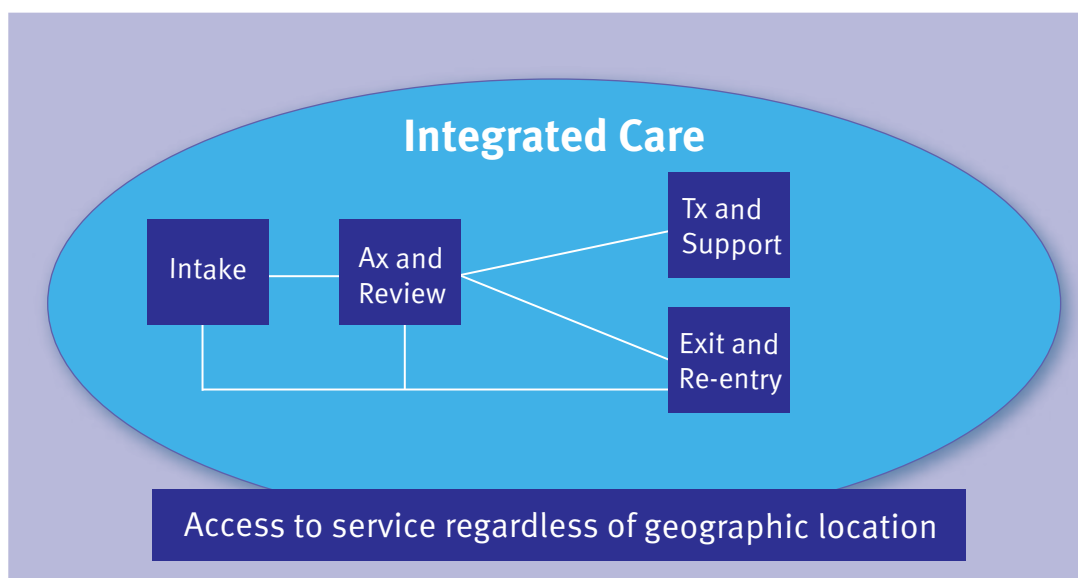
- For improvements in short- and long-term health outcomes, services must aim for improvements for those most disadvantaged children, both in absolute terms and in comparison to the most advantaged children in the community
- Understanding of the demographics of local community including areas of unmet developmental need is required for service planning and development. This can be done using resources such as the AEDI community profiles and the ABS and local demographic reports

10.1.7. *Transdisciplinary and Interprofessional Care*

- Interprofessional practice occurs when multiple health workers from different backgrounds provide comprehensive services to deliver the highest quality of care
- Health professionals working in specialist CDS will share aspects of each other’s roles to achieve the best outcome for children and their families. This will include activities or responsibilities that may be considered outside of the ‘usual’ role of a particular discipline group. This may reflect transdisciplinary practice
- Transdisciplinary and Interprofessional care does not refer to the development of generic allied health workers within a specialist CDS
- Transdisciplinary and interprofessional care both enhances and relies upon the specific expertise and clinical perspectives each discipline brings to the team

10.2. *Standards for the Delivery of Care*

- Many ambulatory services are comprised of a sequence of components that make up a client’s journey, beginning with their capacity to access and gain entry to a service, through to the discharge of that client at an appropriate point in time, and reentry to the service if required



While the sequence of components remains fairly consistent the detail following each of the components is often specific to clinical service areas. In this instance, the detail contained within the Standards for the Delivery of Care enable CDSs to deliver specialist care to children with complex developmental needs.

10.2.1. *Access*

Queensland is a geographically large state with a relatively dispersed population. Children with additional developmental needs and their families require access to quality specialist CDSs. For most children, this should be located close to their homes. Services close to home enable service providers to understand a child's local context and provide appropriate advice and support. For a smaller proportion of children, this access will need to be made via linkages across HHS. A visible statewide network of providers supports equity of access to CDSs for children in metropolitan, regional and rural locations across Queensland.

Discrimination on the basis of age, geographic location, or disability diagnosis contravenes a child's basic human rights (Queensland Human Rights Act 2019). If a child or young person has a developmental disability that is poorly understood, they may be eligible to access CDS.

Core Standards:

- Each CDS maintains active engagement with the QCYCN CDSN and the network of CDS statewide
- Each CDS is responsible for understanding the context of child development across their HHS and communicating this with stakeholders including government and non-government service providers in communities throughout the Health and Hospital Service/s within which they operate
- Each CDS is comprised of a Team Leader and a functional mix of specialist paediatric services including, but not limited to, medical (paediatrician), speech pathology, occupational therapy, physiotherapy, social work and psychology. This ensures a holistic perspective of child development across developmental domains and enables comprehensive, specialist level assessment, diagnosis and support

10.2.2. *Entry/Intake*

CDS operate in a context where demand for services exceeds service availability, and where children in need often wait for long periods for assessment, diagnosis and intervention. There is evidence that a structured and adequately resourced clinical intake process supports children to access services provided by the right person at the right place and at the right time, improving outcomes for children and their families and reducing burden on the public health service system. This may be

Core Standards:

- Clinical intake is planned and coordinated. This may be a Clinical Intake position, or clinical hours specifically allocated to intake and entry. This needs to be a consistent appointment over time
- Clinical intake is likely to involve direct contact with families and this activity is identified as an 'intervention' regardless of whether the child and his/her family were deemed eligible for CDS
- Prioritisation for service and discipline access are clearly define according to local context with consideration given to the Child Development Principles of Practice
- Dedicated and Specialist CDS will accept referrals from across the HHS, and/or support generalist teams in other centers within the HHS to provide services to a child with complex developmental needs and his/her family closer to home
- Families will be oriented to the CDS including understanding of: rights and responsibilities; clinical pathways; and ways of working in a partnership model

10.2.3. *Integrated Care*

Children with complex developmental needs live within their family and as part of their community. They access a wide range of formal and informal supports and services. Health services are only one aspect of their care. Some children and their families will require support transitioning from the CDS to other services or systems, while others will continue to receive care from multiple service providers including the CDS. Periods of transition and understanding complex intersecting systems can be a source of anxiety and concern for children and their families. CDS has an important role to play in coordinating this as well as supporting families grow the health and systems literacy they need to be active participants and drivers of health care.

Core Standards:

- CDS will endeavor to understand the contexts within which a child and their family exists
- immediate or long term need for shared care will be identified by the CDS at the beginning or as near to the beginning of the patient journey as possible, and preparations begun to support transitions in care
- The CDS will collaboratively develop a care plan with families and other stakeholders that clearly identifies roles and responsibilities toward that child and family, to support family expectations in terms of ongoing care and/or partnerships

10.2.4. *Assessment and Review*

Core to the business of dedicated and specialist CDSs is the capacity to facilitate an understanding of a child's developmental status and the functional implications of their additional developmental needs. This is achieved through a comprehensive assessment process, usually at the beginning of a child's interface with the CDS and may be reviewed at intervals over time.

The CDSN does not endorse diagnosis specific assessment pathways. This approach is based on predetermined assumptions about diagnosis made by third parties. The CDSN recommends an individualized and person-centered approach to assessment, diagnosis and review.

Core Standards:

- CDS teams employ both standardised and non-standardised assessment, administered, implemented and integrated in an evidence informed way
- CDS teams employ an inter-disciplinary approach to assessment, with team members making observations and collecting data over time and across contexts if required
- Multidisciplinary diagnostic formulation and case conferencing is available for children for whom diagnosis may be difficult, and co-morbidities are evident
- The assessment process informs multidisciplinary planning for a child's individualised care pathway and supports the development of supporting documentation such as a care plan
- The CDS has a responsibility to ensure reporting is done in a way that supports access to interfacing systems, including the NDIS
- Supporting documentation such as the assessment report and/or care plan is written in a clear, concise way that is free of jargon; that focuses on analysis of function; and that integrates the findings of the multidisciplinary team

10.2.5. *Treatment and Support*

Quality intervention programs nurture all aspects of a child's development (physical, social, emotional, language and cognition), are delivered in everyday contexts, and are developed in partnership with key stakeholders, particularly a child's primary care giver/s. Intervention may be provided by single or multiple members of a multidisciplinary team, or by other stakeholders, and always with consideration given to a transdisciplinary approach to care. Intervention may be directly or indirectly delivered.

Core Standards:

- Clinicians are responsible for working in partnership with the child and their family to determine priorities for support, including setting functional and achievable goals
- Clinicians working in CDS select and implement intervention strategies in a rigorous and objective way
- Clinicians employ multi-level interventions that address factors that directly and/or indirectly shape a child's development and function
- Intervention includes preparing the family of a child with developmental disability for known or likely future outcomes including transitions at key developmental points
- CDS support access to other government and non-government agencies and service providers that offer treatment and support programs or initiatives for particular children and their families. This may be done through a transition process or via a shared care arrangement
- Clinicians within the CDS emphasise treatment that addresses a child's difficulties as they impact on that child's functional capacity, particularly within their family and their community. This includes a focus on community engagement and participation
- Clinicians within the CDS apply a strengths and resiliency-based approach to intervention and reporting

10.2.6. *Exit and Re-Entry*

The outcomes for children with a developmental disability are variable and depend on a range of factors. Children with developmental disabilities may no longer require CDS services once they are well understood by key stakeholders or when they are on track to achieving optimal developmental outcomes according to their individual capabilities. Planning for discharge begins at the beginning of the client journey. However, developmental disability is not static, and it is not unusual for children to require re-entry to a CDS, or partnership between the CDS and other health services (particularly CYMHS) or supports in other sectors (particularly education and disability).

Core Standards:

- CDS ensures that families are linked into alternative or subsequent service providers if required and where possible upon completion of the episode of care
- Discharge planning is a clear and collaborative process that involves stakeholders including clinicians and care givers and that begins upon entry to the service
- CDS must establish re-entry pathways for children who have:
 - o a diagnosis that no longer supports an understanding of their needs or that adequately describes their functional status. These children may require a revised diagnostic formulation, especially at key transition points along the lifecourse
 - o increasing or new functional difficulties that require a team-based approach for problem solving at a point in time post discharge from the CDS
 - o medical complexities comorbid to developmental impairment will require periods of support from integrated multidisciplinary teams in a range of contexts. This may require an understanding of how systems and services work across acute and community contexts

10.3. *Methods of Service Delivery*

- CDSs support improved developmental outcomes for children with complex needs in many ways. This includes direct interventions for children and their families, as well as ongoing advocacy with a view to improvements to services access and the developmental health of the wider community
- Intervention is a broad concept and may occur at various positions along the care pathway, including entry, assessment, diagnosis, therapeutic support, and transition. Health professionals working in specialist CDSs employ the following methods of service delivery

10.3.1. *Partnership*

- A partnership-based approach to engaging with key stakeholders, including families, is the cornerstone of the specialist CDS. This partnership may be between the family and the clinicians/ service provider, and between service providers
- Each CDS prioritises the coordination and integration of services at the local level according to local context. These inter-service partnerships will be across the health care continuum (primary to acute to tertiary/quaternary services), and between the health, education, disability and community sectors

10.3.2. *Advocacy*

- Advocacy supports stakeholders to better understand the abilities, challenges and needs of children with complex developmental impairments. Enhanced understanding enables others to facilitate a child's functional participation across contexts and support improved developmental outcomes for both the individual and for others throughout the wider community
 - o Individual: the needs of individual children and families may need to be clearly communicated to a wide range of stakeholders including other family members, education, disability and health professionals, and other community groups
 - o Wider Community: communicate the importance of a public health approach to development across universal, targeted and indicated populations, and advocate for each of these groups in terms of workforce allocation and health service planning
 - o Government: input into and development of policy at local, state and federal government agency level regarding quality assessment, diagnosis and intervention for children with complex development needs

10.3.3. *Therapy as intervention*

- Therapy as intervention in a CDS may be single discipline, multidisciplinary or transdisciplinary, and may be provided through an individual, group or a consultative intervention model
- CDS facilitate creative and innovative solutions to a child's complex developmental problems, as orthodox approaches, including direct therapy in a clinical setting, often fail to reduce inequalities and prevent adverse health outcomes across the lifecourse

10.3.4. *Education to build health and systems literacy*

- Education is an important and overarching component of intervention for children with developmental impairments and their families. Education may be: incidental or overt; delivered via groups or directly with the individual; and single discipline, multidisciplinary or transdisciplinary in nature. Education must be, where possible, tailored to the needs of the individual, their family and their wider context/s
- Clinicians working within CDS have a responsibility to support our service partners in health and education to grow their understanding of child development including: expected and impaired developmental trajectories, the lifecourse implications of developmental impairment, and the interface of developmental and medical comorbidities



APPENDIX 1: Case Examples of Child Development along the Care Continuum

CSCF Level 1&2: Universal Public Health

Case example: Ethan is 12 months old. He is attending a Child Health Immunisation Clinic and Aboriginal and Torres Strait Islander health workers partner with his mother to complete a developmental screen. Ethan is not yet walking but neither his mother nor the health worker is concerned, and health worker talks with Ethan's mother about how to support his development during play and other daily activities.

CSCF Level 3: Targeted Primary Health Care/Generalist Child Development

Case study 1: Bella is 4yo. Her speech is characterised by phonological errors that make her communication very difficult for unfamiliar listeners to understand. She is shy when interacting with her peers and her day care teacher has identified that she prefers to play one-on-one with other children, rather than in groups. She is otherwise developmentally on track.

Case study 2: Kai is 20 months old. His mother reports a vocabulary of only a few words and has noticed Kai becoming very frustrated when his message is not understood. Kai uses a lot of gesture to communicate with others and understands language well. There are no other developmental concerns. His parents are both worried as his sister, who is 18 months older than Kai, developed language earlier and was using sentences by the time she was two.

Case study 3: James is a 5yr old boy. His mother presents because his teacher at Kindy is concerned about his fine motor skills. He avoids tabletop tasks, has a very light pencil pressure & struggles to even hold scissors. He will be entering Prep next year. His language is a relative strength, and he presents as a happy from a very caring family.

CSCF Levels 4&5: Allied health and medically led Child Development Services

Case study 1: Ben is 30 months old and was born at 26 weeks gestation. He is the only survivor of a twin pregnancy following multiple miscarriages. Ben was initially referred because of concerns about his development when he was 9 months old, but his family soon disengaged from the service when his father began a new job as a fly-in-fly-out mine worker. Ben has recently been re-referred because of concerns about poor motor coordination, tactile sensitivity, and delayed receptive and expressive language skills. He is socially motivated and engages easily with others but becomes anxious when separated from his mother.

Case study 2: Tarnie is nine years old. She was diagnosed with ASD when she was 2yo and has responded well to early intervention. Some difficulties persist but Tarnie's father is concerned that the ASD diagnosis no longer describes Tarnie's strengths and challenges and that it negatively influences the way in which Tarnie is supported at school. Tarnie's mother is concerned that challenging the diagnosis will disadvantage Tarnie in terms of support within the classroom and her access to NDIS funding. There is not a common understanding of Tarnie's difficulties and there is disagreement in terms of priorities for support, both between Tarnie's parents (who are separated but share custody of Tarnie), and between the family and the school. Tarnie's father wants to remove her from her school. Her mother is very concerned about this as Tarnie is familiar with and happy in her current educational context.

Case study 3: Fiona is 3 years old and has been referred for physiotherapy because her mother is concerned that she is flat footed and walks “a bit funny”. She is assessed by the physiotherapist. Fiona does not talk at all during the assessment and appears shy and agitated. Fiona’s mother tells the physio that she is worried that Fiona just ‘isn’t right’ but that she might have difficulty getting to regular appointments as she is in the process of finding somewhere to rent. Her partner is a long-term drug user who has been violent in the past and they are in the process of separating. Fiona and her mother are living with Fiona’s maternal grandmother. The physiotherapist identifies that Fiona’s needs are complex and that a specialist, multidisciplinary care pathway is required.

CSCF Levels 6: Developmental Services in Tertiary Facilities

Case Study: John is a 6-year-old boy who is a long-term inpatient at QCH following onset of intractable seizures. He received a diagnosis of Tuberous Sclerosis not long after he was born and had his first seizure when he was four months old. John responded well to medication and he has been seizure free until recent months. John is an NDIS participant through the ECEI pathway, with a relatively small package used to support access to language therapy from a Speech Therapist in private practice near their home. Unfortunately, John’s day to day function has significantly deteriorated since the seizures began again, and he has become almost totally dependent on others for all cares and interactions. John is now non-verbal and incontinent. His mobility has also been impacted. It is anticipated that these changes will be permanent. His school placement (Prep) had become tenuous and there is concern on the part of his parents & teachers about how he will be able to re-enter school following this admission. John’s parents are also aware that he will now need a lot more support at home, and that it is likely that continence consumables need to be included in his NDIS plan. They approach the health service to help them to gather the evidence of functional impairment required to support the NDIS review prior to their discharge home.



APPENDIX 2: Qld CDS mapped to the CSCF (based on the CSCF Clinical Matrix 2026)

Level	Service Description	Service Requirements	Workforce Requirements
1	Health promotion and prevention initiative/s for universal, selective and indicated populations.	Staff trained in health promotion activities; referral pathways for child health and CDSs if required	Access to nursing and allied health professionals, as well as child protection liaison officers and Aboriginal and Torres Strait Islander health worker where appropriate.
2	Planned ambulatory care for healthy children (usually rural and remote locations)	Staff trained in health promotion activities; referral pathways for child health and CDSs if required	Access to a range of medical, nursing and allied health staff.
3	Some planned and unplanned ambulatory care and subspecialty referral	Staff from a range of professions with experience and qualifications in general paediatric principles and practice. May include some visiting specialist outreach services.	Access to allied health professionals who provide treatment to children in community clinics.
4	Multidisciplinary developmental assessment. Integrated care with paediatric medical services if required.	Community based multidisciplinary team including well-established community child development service. Clear links to Level 5 and 6 services for educational support and referral.	Well-developed multidisciplinary team including access to: dietician, occupational therapist, physiotherapist, psychologist, speech pathologist and social worker. Access to designated registered medical specialist with credentials in paediatrics.
5	Stand-alone multidisciplinary CDSs	Well-developed dedicated child development specialist service (inclusive of medical specialist). Dedicated clinical intake officer for CDSs.	Allied health as for L4 but with a dedicated child development medical specialist with credentials in paediatrics that supports the ambulatory child development service.
6	Specialist child development service for most complex cases	Advanced knowledge and skills including specific subspecialty training, telehealth services, and a leadership role in development and implementation of clinical guidelines.	Medical as for L5 but also lead allied health clinicians in all allied health disciplines and a designated specialist nurse.

HHS	CSCF Level	Service Description	Service Requirements	Workforce Requirements
Cape and Torres	2	Ambulatory care for healthy children	Developmental health promotion and referral pathways	Access to generalist medical, allied health and nursing
Cairns and Hinterland	5	CDS – medical and AH	Specialist Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: child development specialist Intake officer
North West.	4	CDS – AH led	Dedicated Child Development Service.	AH access: dietician, OT, PT, psych, SP, SW Medical access: paediatrician
Townsville	5	CDS – medical and AH	Specialist Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: child development specialist Intake officer
Mackay	4	CDS – AH led	Dedicated Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: paediatrician
Central West	3	Child health and development	General child development	Access to allied health who provide treatment in the community
Central Queensland	4	CDS – AH led	Dedicated Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: paediatrician
Wide Bay	4	CDS – AH led	Dedicated Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: paediatrician
Sunshine Coast	5	CDS – medical and AH	Specialist Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: child development specialist Intake officer

HHS	CSCF Level	Service Description	Service Requirements	Workforce Requirements
South West	3	Child health and development	General child development	Access to allied health who provide treatment in the community
Darling Downs	4	CDS – AH led	Dedicated Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: paediatrician
West Moreton	5	CDS – medical and AH	Specialist Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: child development specialist Intake officer
Metro North	4	CDS – AH led*	Dedicated Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: paediatrician
Metro South	4	CDS – AH led*	Dedicated Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: paediatrician
Gold Coast	5	CDS – medical and AH	Specialist Child Development Service	AH access: dietician, OT, PT, psych, SP, SW Medical access: child development specialist Intake officer
Children’s Health Queensland	6	CDS – medical, AH and nursing	Quaternary Child Development Service	AH: lead clinicians across all professions Medical: specialist Nursing: specialist



APPENDIX 3: State and Territory comparisons (2016 Census data).

State	Capital and population	Largest other city (SA3/4) + popn	Other cities with 100k + pop	Geographical area (land)	Number and % pop <15yo
Aust. Cap. Territory 396 857	Canberra	NA	NA	2280 km ²	19.1% 80 248
New South Wales 7.48 million	Greater Sydney 4.82 million 64% of state	Newcastle 163 884	Central Coast Wollongong	800 642 km ²	18.7% 1.49 mill
Northern Territory 228 833	Darwin incl Palmerston 136 828 60% of territory	Central NT (incl Alice Springs) 36 077	NA	1 349 129 km ²	21.6% 53 513
Queensland 4.7 million	Greater Brisbane (including Logan and Ipswich cities) 2.27 million 48% of state	Gold Coast 569 997	Sunshine Coast Townsville Cairns Toowoomba	1 730 648 km ²	19.5% 980 374
South Australia 1.68 million	Adelaide 1.29 million 77% of state	Mt Barker 35 545	NA	379 725 km ²	17.7% 306 998
Tasmania 509 965	Hobart 222 356 44% of sta	Launceston 67 449	NA	68 401 km ² r	17.8% 93 711
Victoria 5.97 million	Melbourne 4.49million 75% of state	Geelong 201 924	NA	237 629 km ²	18.4% 1.19mill
Western Australia 2.47 million	Perth 1.94 million 79% of state	Mandurah 85 302	NA	2 529 875 km ²	19.5% 507 245

APPENDIX 4: Directory of Specialist Child Development Services in the Queensland Department of Health.

CDS Cairns & Hinterland:

Address: 381 Sheridan St, Cairns North, Qld, 4870
Postal: PO Box 1055, Cairns North, Qld, 4870
Email: CDS-Cairns@health.qld.gov.au
Phone: 07 4226 4323

CDS Central Queensland (Rockhampton):

Rockhampton

Address: 82-86 Bolsover Street, Rockhampton, Qld, 4700
Postal: PO Box 501, Rockhampton, Qld, 4700
Phone: 07 4920 6907
Contact: Gabby Hennessy
Email: RockhamptonChildDevelopment@health.qld.gov.au

Gladstone/Banana

Address: Gladstone Hospital, Park Street, Gladstone, Qld, 4680
Postal: PO Box 299, Gladstone, Qld, 4680
Phone: 07 4976 3387
Contact: Dana McGregor – ph. 4976 3387
Email: GladstoneAlliedHealth@health.qld.gov.au

Paediatric Allied Health Outpatients Service Darling Downs (Toowoomba):

Postal: PMB 2, Toowoomba, Qld, 4350
Phone: 07 4616 5049

CDS Gold Coast:

Address: 16-30 High Street, Southport, Qld, 4215
Email: CDSGoldCoast@health.qld.gov.au
Phone: 07 5687 9183

CDS Mackay:

Address: Carlyle Community Health Centre, 40 Carlyle Street, Mackay, Qld, 4740
Postal: 40 Carlyle Street, Mackay, Qld, 4740
Phone: 07 4885 7750
Email: CYFHReception@health.qld.gov.au

CDS Sunshine Coast:

Postal: Caloundra Health Service, 2B West Terrace, Caloundra, Qld, 4551
Phone: 07 5436 8910
Phone: 07 5436 8910
Email: child_development_service@health.qld.gov.au

CDS Townsville:

Address: Kirwan Health Campus, 138 Thuringowa Drive, Kirwan, Qld, 4817
Postal: PO Box 1596, Thuringowa Central QLD 4817
Phone: 07 4433 9000
Email: THHS-ChildDevelopmentService-Health&Wellbeing@health.qld.gov.au

CDS Wide Bay:

Bundaberg:

Address: Margaret Rose Centre, 312 Bourbong Street, Bundaberg, Qld, 4670

Phone: 07 4303 8590

Email: cds.bundaberg@health.qld.gov.au

Fraser Coast:

Address: Hervey Bay Hospital

Postal: PO Box 592 HERVEY BAY, Qld, 4655

Phone: 07 4122 8733

Email: CDS-FRASERCOAST@health.qld.gov.au

CDS Brisbane Metropolitan:

Central Access and Booking Service

Children's Health Queensland

Phone: 1300 366 039 (Please select option 2, then option 2)

CDS West Moreton:

Address: Ipswich Community Health Plaza, 21 Bell Street, Ipswich, Qld, 4305

Postal: PO Box 878, Ipswich 4305

Phone: 07 3817 2324 , (Team leader: 07 3817 2359: Mobile: 0435699065_

Email: WM_CDS@health.qld.gov.au

Contacts for HHS that do not have a CSCF L4, 5 or 6 CDS:

Torres and Cape:

Thursday Island Senior Speech Pathologist

Email: TCHHS-North-Speech-Pathology@health.qld.gov.au

Phone: 07 4030 6188

Central West

South West

A/Director Children's Services

Address: 59 Arthur Street, Roma, Qld, 4455

APPENDIX 5: Principles of Practice Self Evaluation

Principle	Evidence of Application	Apply	Don't apply	Apply in part
Life Course Perspective				
Timely Access/Early Intervention				
Evidence Informed Practice				
Person and Family Centered Practice				
Inclusive and Culturally Responsive Practice				
Equity-Based Service Planning and Provision				
Transdisciplinary and Interprofessional Care				

APPENDIX 6: Service Standards Self Evaluation

Standard Area	Core Minimum Standards	Met	Unmet	Met in Part
10.2.1 Access	Each CDS maintains active engagement with the QCYCN CDSN and the network of CDS statewide			
	Each specialist CDS is responsible for understanding the context of child development across their HHS and communicating this with stakeholders including government and non-government service providers in communities throughout the Health and Hospital Service/s within which they operate.			
	Each CDS is comprised of a Team Leader and a functional mix of specialist paediatric services: medical, speech pathology, occupational therapy, physiotherapy, social work and psychology (embedded or accessible). This ensures a holistic perspective of child development across developmental domains and enables comprehensive, specialist level assessment, diagnosis and support			
10.2.2 Entry/Intake	Clinical intake is planned and coordinated. This may be a clinical intake position or clinical hours allocated to intake and entry. This needs to be a consistent appointment over time			
	Clinical intake will involve direct contact with families and this activity is identified as an 'intervention' regardless of whether the child and his/her family were deemed eligible for CDS			
	Prioritisation for service and discipline access are clearly define according to local context with consideration given to the Child Development Principles of Practice			
	Each CDS will accept referrals from across the HHS, and/ or support generalist teams in other centers within the HHS to provide services to a child with complex developmental needs and his/her family closer to home			
	Families will be oriented to the CDS including understanding of: rights and responsibilities; clinical pathways; and ways of working in a partnership model.			

Standard Area	Core Minimum Standards	Met	Unmet	Met in Part
10.2.3 Integrated Care	Each CDS will work to understand the contexts within which a child and their family exists			
	The immediate or long term need for a shared approach to care will be identified by the CDS at the beginning or as near to the beginning of the patient journey as possible, and preparations begun to support transitions in care			
	The CDS will collaboratively develop a care plan with families and other stakeholders that clearly identifies each team's roles and responsibilities toward that child and family, and that clarifies the family's expectations in terms of ongoing care			
10.2.4 Assessment and Review	CDS teams employ both standardised and non-standardised assessment, administered, implemented and integrated in an evidence informed way			
	CDS teams employ a transdisciplinary approach to assessment, with team members making observations and collecting data over time and across contexts			
	Multidisciplinary diagnostic formulation and case conferencing is available for children for whom diagnosis may be difficult, and co-morbidities are evident			
	The assessment process informs multidisciplinary planning for a child's individualised care pathway and supports the development of supporting documentation such as a care plan			
	Reporting supports access to interfacing systems including the NDIS			
	Supporting documentation such as the assessment report and/or care plan is written in a clear, concise way that is free of jargon; that focuses on analysis of function; and that integrates the findings of the multidisciplinary team			
10.2.5 Treatment and Support	Clinicians are responsible for working in partnership with child and their family and other health professionals to determine priorities for support			
	Clinicians working in CDS select and implement intervention strategies in a rigorous and objective way (CCCH Policy Brief 21)			
	Clinicians employ multi-level interventions that address factors that directly and/or indirectly shape a child's development and function (CCCH Concept Brief 24)			

Standard Area	Core Minimum Standards	Met	Unmet	Met in Part
cont.... 10.2.5 Treatment and Support	Intervention includes preparing the family of a child with developmental disability for known or likely future outcomes including transitions at key developmental points (Stein 2011)			
	CDS support access to other government and non-government agencies and service providers that offer treatment and support programs or initiatives for particular children and their families.			
	Clinicians within the CDS emphasise treatment that addresses a child's difficulties as they impact on that child's functional capacity, particularly within their family and their community. This includes a focus on community engagement and participation			
	Clinicians within the CDS apply a strengths and resiliency-based approach to intervention and reporting			
8.2.6 Exit and Re-Entry	CDS ensures that families are linked into alternative or subsequent service providers if required and where possible upon exiting the service			
	Discharge planning is a clear and collaborative process that involves stakeholders including clinicians and care givers and that begins upon entry to the service			
	CDS must establish re-entry pathways for children who have: <ul style="list-style-type: none"> • a diagnosis that no longer supports an understanding of their needs or that adequately describes their functional status. • medical complexities comorbid to their developmental impairments 			

REFERENCES:

- Atladdottir, Parner, Schendel, Dalsgaard, Thomsen & Thorsen. 2007. Time Trends in Reported Diagnoses of Childhood Neuropsychiatric Disorders. *Archives of Pediatric and Adolescent Medicine*. 161. 193-198
- Australian Bureau of Statistics. 2019. *2016 Census: Aboriginal and/or Torres Strait Islander Peoples Quickstats*. Available at Australian Bureau of Statistics. 2019. Available at http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/3?opendocument&navpos=220
- Australian Bureau of Statistics. 2019. *2016 Census QuickStats: Queensland*. Available at https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/3?opendocument
- Australian Government. 2010. *National Standards for Mental Health Services*. Commonwealth of Australia. Canberra. Available at: [https://www1.health.gov.au/internet/main/publishing.nsf/content/CFA833CB8C1AA178CA257BF001E7520/\\$File/servst1ov2.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/content/CFA833CB8C1AA178CA257BF001E7520/$File/servst1ov2.pdf)
- Australian Health Ministers' Advisory Council, 2015. *National Framework for Child and Family Health Services – secondary and tertiary services*. Australian Government. Available at: <http://www.coaghealthcouncil.gov.au/Portals/o/National%20Framework%20for%20Child%20and%20Family%20Health%20Services%20-%20updated.pdf>
- Australian Institute of Family Studies. 2018. *Children in Care Snapshot*. Available at: <http://www.aifs.gov.au/cfca/pubs/factsheets/a142092/index.html#a8>
- Australian Institute of Health and Welfare, 2017. *Closing the Gap Targets Australian Government*. Available at: <https://www.aihw.gov.au/getmedia/e48ac649-2fdd-490d-91cf-4881ab5ef5c2/aihw-ihw-193.pdf.aspx?inline=true>
- AIHW, 2018. *Australia's Health 2018*. Available at: <https://www.aihw.gov.au/getmedia/110ef308-c848-4537-boe7-6d8c53589194/aihw-aus-221-chapter-6-2.pdf.aspx>
- Blanchard, Gurka & Blackman. 2006. Emotional, Developmental and Behavioural Health of Australian Children and their Families: a Report from the 2003 National Survey of Children's Health. *Pediatrics*. 117;e1202. doi:10.1542/peds.2005-2606
- CanChild, 2020. *F-Words in Childhood Disability*. McMaster University. Available at: <https://www.canchild.ca/en/research-in-practice/f-words-in-childhood-disability>
- Centres for Disease Control and Prevention, 2020, *Adverse Childhood Experiences (ACEs)*. Available at: <https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/index.html>
- Centre for Community Child Health. 2011a. *Evidence-based practice and practice-based evidence: What does it all mean? Policy Brief 21*. The Royal Children's Hospital. Melbourne. https://www2.rch.org.au/emplibrary/econnections/Policy_Brief_21_-_Evidence_based_practice_final_web.pdf
- Children's Health Queensland, 2018. *Aboriginal and Torres Strait Islander Health and Wellbeing Services Plan 2018-2023*. State of Queensland (Queensland Health). Available at: <https://www.childrens.health.qld.gov.au/wp-content/uploads/PDF/our-strategies/atsi-health-wellbeing-services-plan.pdf>
- Children's Health Queensland, 2018. *Children's Health and Wellbeing Services Plan 2018-2028*. State of Queensland (Queensland Health). Available at: <https://www.childrens.health.qld.gov.au/wp-content/uploads/PDF/our-strategies/chq-health-wellbeing-services-plan.pdf>

Children's Health Queensland, 2019. *Population Health Dashboard. State of Queensland* (Queensland Health).

Close, Lee, Kaufmann & Zimmerman. 2012. Co-occurring Conditions and Change in Diagnosis in Autism Spectrum Disorder. *Pediatrics*. 129:e305. doi:10.1542/peds.2011-1717

Council of Australian Governments, 2015. *Principles to determine the responsibilities of the NDIS and other service systems. Australian Government*. Available at: <https://www.coag.gov.au/sites/default/files/communique/NDIS-Principles-to-Determine-Responsibilities-NDIS-and-Other-Service.pdf>

Cystic Fibrosis Foundation. 2020. *About Cystic Fibrosis*. Available at: <http://www.cff.org/What-is-CF/About-Cystic-Fibrosis/>

Davidson, Skull, Chaney, Frydenberg, Isaacs, Kelly, Lampropoulos, Raman, Silove, Buttery, Smith, Steel & Burgner. 2004. Comprehensive health assessment for newly arrived refugee children in Australia. *Journal of Paediatrics and Child Health*. 40. pp 562-568.

Department of Child Safety, Youth and Women, 2018-2020. *Living away from home*. Queensland Government. Available at: <https://www.csyw.qld.gov.au/child-family/our-performance/ongoing-intervention-phase/living-away-home>

Department of Education and Training, 2018. Australian Early Development Census National Report 2018. Australian Government. Available at: <https://www.aedc.gov.au/resources/detail/2018-aedc-national-report>

Department of Education and Training, 2019. *Research Snapshot: Trends in the number of children starting school with additional health and developmental needs from 2009 to 2015*. Australian Government. Available at: <https://www.aedc.gov.au/resources/detail/research-snapshot-trends-in-the-number-of-children-starting-school-with-additional-health-and-developmental-needs-from-2009-to-2015>

Department of Education and Early Childhood Development. 2011. *Refugee Status Report: a report on how refugee children and young people in Victoria are faring*. State of Victoria. Melbourne. Available at <https://www.education.vic.gov.au/Documents/about/research/refugeestatusreport.pdf>

Department of Health. 2011. National Clinical Assessment Framework for Children and Young People in Out-of-Home Care. Australian Government. Canberra. Available at: <https://www1.health.gov.au/internet/publications/publishing.nsf/Content/ncaf-cyp-oohc-toc>

Gianaros, P. 2011. Socioeconomic health disparities: A health neuroscience and lifecourse perspective. *Psychological Science Agenda*. American Psychological Association. Available at: <http://www.apa.org/science/about/psa/2011/01/health-disparities.aspx>

Grace, R., Hayes, A., & Wise, S. (2017). Child development in context. In R. Grace, K. Hodge, & C. McMahon (Eds.), *Children, families and communities* (5th ed., pp. 3-25). South Melbourne, Victoria: Oxford University Press.

Harvard University. 2020. *Inbrief: The science of early childhood development*. Available at: <https://developingchild.harvard.edu/resources/inbrief-science-of-ecd/>

Heckman, J. 2007. The economics, technology and neuroscience of human capability formation. *Proceedings of the National Academy of Sciences*. 204 (33). pp13250-13255

Heckman, J. 2008 *The Case for Investing in Disadvantaged Young Children. Big Ideas for Children: Investing in Our Nation's Future*. Pp. 49-58. Available at: <http://www.heckmanequation.org/content/resource/case-investing-disadvantaged-young-children>

- Irwin, Siddiqi, & Hertzman 2007, [Early Child Development: a Powerful Equalizer](#). Final report for the World Health Organisation's Commission on the Social Determinants of Health. WHO. Geneva.
- Laing, Walker, Ungerer, Badawi & Spence. 2011. Early development of children with major birth defects requiring newborn surgery. *Journal of Paediatrics and Child Health*. 47. pp 140-147. doi:10.1111/j.14401754.2010.01902.x
- Miller. 2000. Developmental Issues for Young Children in Foster Care. *Pediatrics*. 106 (5). Pp. 1145-1150.
- McDowall & Klepper, 2000. A 'chronic disorder' health-care model for children with complex developmental disorders. *Journal of Paediatrics and Child Health*. 36 (6). pp 563-568
- National Disability Insurance Agency, *NDIS Home Page*. Available at: <https://www.ndis.gov.au/>
- Queensland Health. 2011. *Clinical Capabilities for Health Professionals working in Child Development – Infants to Adolescents*. Queensland Government. Brisbane
- Queensland Health. 2019. *Children's Medical Services Clinical Services Capability Framework V3.2*. Queensland Government. Brisbane https://www.health.qld.gov.au/_data/assets/pdf_file/0024/444435/cscf-medical-childrens.pdf
- Queensland Government, 2019. Human Rights Act 2019. Available at: <https://www.legislation.qld.gov.au/view/html/asmade/act-2019-005>
- Queensland Health 2017. *Refugee Health and Wellbeing: a policy and action plan for Queensland 2017-2020*. Queensland Government. Available at: https://www.health.qld.gov.au/_data/assets/pdf_file/0031/646078/refugee-policy.pdf
- Queensland Health, 2018 *Statement of Intent regarding the prioritisation of health services for children and young people in the child protection system*. Queensland Government. Available at: https://www.health.qld.gov.au/_data/assets/pdf_file/0021/147432/qh-gdl-426.pdf
- Reilly, Wake, Ukoumunne, Bavin, Prior, Cini, Conway, Eadie & Bretherton. 2010. Predicting Language Outcomes at 4 Years of Age: Findings from early Language in Victoria Study. *Pediatrics*. 126;e1530. doi:10.1541/peds.2010-0254
- Roongpraiwan, Efron, Sewell & Mathai, 2007. Comparison of mental health symptoms between children attending developmental/behavioural paediatric clinics and child and adolescent mental health service. *Journal of Paediatrics and Child Health*. 43. pp. 122-126. doi:10.1111/j.1440-17542007.01030.x
- Rosenbaum and Gorter, 2011. *The F-Words in childhood disability: I swear this is how we should think!* *Child Care Health and Development*. 38(4): 457-63. Available at: <https://www.researchgate.net/publication/51757758> [The 'F-Words' in childhood disability I swear this is how we should think](#)
- Royal Australian College of Physicians. 2008. *Health of Children in "Out-of-Home-Care" – Paediatric Policy*. RACP. Sydney. Available at: <https://www.racp.edu.au/docs/default-source/advocacy-library/health-of-children-in-out-of-home-care.pdf>
- Sawyer, McNeil, Francis, Matskarofski, Patton, Phutta, Esangbedo & Klein. 2019 The Age of Paediatrics *The Lancet Child & Adolescent Health*, Vol. 3, No. 11, p822–830 [https://doi.org/10.1016/S2352-4642\(19\)30266-4](https://doi.org/10.1016/S2352-4642(19)30266-4)
- Stein, Blum & Barbaresi. 2011. Developmental and Behavioural Disorders through the Life Span. *Pediatrics*. 128;364. doi:10.1542/peds.2011-0266

Sheldrick, Merchant, Ellen & Perrin. 2011. Identification of Developmental-Behavioural Problems in Primary Care: a Systematic Review. *Pediatrics*. 128 (2), pp. 356-363. doi 10.1542/peds.2010-3261

Shonkoff, Richter, van der Gaag, & Bhutta 2012. [An Integrated Scientific Framework for Child Survival and Early Childhood Development](#). *Paediatrics*: 129: e460: originally published online January 4, 2012; DOI: [10.1542/peds.2011-0366](#)

United Nations High Commission for Refugees (UNHCR). 1994. *Refugee Children: Guidelines on Protection and Care*. United Nations. Geneva. Available at: <https://www.unhcr.org/en-au/protection/children/3b84c6c67/refugee-children-guidelines-protection-care.html>

World Health Organisation. 2001. *International Classification of Functioning Disability and Health*, ICF. World Health Organisation. Geneva. Available at: <https://www.who.int/classifications/icf/en/>

World Health Organisation. 2012. *10 facts about early child development as a determinant of health*. Available online at http://www.who.int/maternal_child_adolescent/topics/child/development/10facts/en/index.html

WHO 2020. *Frequently asked questions: what is the WHO definition of health?* Available at: <https://www.who.int/about/who-we-are/frequently-asked-questions>

Youlden, Baade, Valery, Ward, Green & Aitken. 2011. *Differentials in Survival for Childhood Cancer in Australia by Remoteness of Residence and Area Disadvantage*. *Cancer Epidemiology, Biomarkers and Prevention*. 20: pp 1649-1656. doi: 10.1158/1055-9965.EPI-11-0432

Zablotsky, Black, Maenner, Schieve, Danielson, Bitsko, Blumberg, Kogan and Boyle. 2019. Prevalence and trends of development disabilities among children in the United State 2009-2017. *Pediatrics* October 2019, 144 (4) e20190811; DOI: <https://doi.org/10.1542/peds.2019-0811>



