Child Development in Queensland Hospital and Health Services

Act now for a better tomorrow 2013 to 2020

Supporting our statewide vision
Statewide Child and Youth Clinical Network
Child Development Subnetwork
‘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 public health service clinical service area.

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.

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ACT NOW FORWARD

Developmental disorders are prevalent and their implications for children and families significant. They frequently coexist with other health conditions. I am constantly reminded of the cost to families and on family life, that children with complex developmental difficulties can have, financially, socially, and emotionally; and also the potential of children with developmental disorders to “outdo” the expectations of carers when appropriately understood and supported.

To appropriately navigate what can be a complex system, carers need to have an accurate understanding of their child, both their strengths and their challenges. For complex children, this is best provided in a transdisciplinary way. This approach has the potential to be an intervention in its own right as well as setting families on a path where they feel confident to access available services, and advocate for the needs of their child.

This document is the result of ongoing engagement and collaboration of child development service providers across our state of Queensland. Its purpose is to support them collectively in their own service development agendas in their local context, and also as part of an integrated statewide service network. It exists in recognition of our wish as service providers to aspire to the best possible provision of care for children with developmental disorders and their families.

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1. **Summary**

Child Development Services in Queensland Hospital and Health Services have evolved in an ad-hoc way, in response to a range of local and statewide influences. This has resulted in a loosely identifiable yet disconnected series of services and service providers across the state, and a clinical service area that has not always been well understood. However, child development is increasingly 'on the agenda' at both the state and national levels with respect to policy initiatives. These initiatives have put a spotlight on the growth and development of Australia's children. Since 2009 the Queensland Department of Health has supported the evolution of a network of like-service providers via the Statewide Child and Youth Clinical Network.

In recent years, health reform has focused on the primary and acute health care sectors, with an emphasis on better meeting the needs of people with chronic and complex conditions. This has both social and economic benefits as it supports people to live well for longer and reduces the burden on our public hospital system. Child development exists along the continuum of care, from universal primary care developmental screening and support services, through to support and intervention for children who have developmental disability along with multi-medical needs. Developmental services are provided by a range of service partners both within and outside of the public health context.

While this handbook is a useful guide to support understanding of child development broadly along the health continuum of care, the focus of this resource is the more targeted group of 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 to orient service planners when thinking about the distribution of resources at the local level.

Clinical Service Standards are crucial for reducing the variation that has existed statewide and improving both service access and flow. Yet, this is not enough to ensure the provision of safe, high quality, and innovative services to children with complex developmental needs.

Each team throughout the state must understand and integrate:

- the demographics of their local community;
- evidence pertaining to best practice assessment, diagnosis and support for children with chronic developmental conditions
- specific risk factors and characteristics of known developmentally vulnerable populations

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.
2. **Introduction to the Child Development Subnetwork**

The Child Development Subnetwork (CDSN) was convened by the Statewide Child and Youth Clinical Network (SCYCN) on 11 November 2009 following identification of Child Development as one of four clinical priority areas. The group was known as the Child Development Working Group until November 2012, and has met monthly since its inception.

The purpose of the group is to provide clear apolitical advice in a cooperative and collaborative fashion regarding child development services 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 may include representation from medical, nursing and allied health from across the state.

Membership in 2013 is as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Affiliation</th>
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<tbody>
<tr>
<td>Dr Kerri-Lyn Webb</td>
<td>Consultant Paediatrician, Child Development Program, Children’s Health Queensland HHS</td>
</tr>
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<td>Rosie Bird</td>
<td>Team Leader, CDS Cairns &amp; Hinterland</td>
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<tr>
<td>Debra Bramhall</td>
<td>Speech Pathologist, CDS Central Queensland</td>
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<tr>
<td>Elizabeth Chenoweth</td>
<td>Principal Project Officer, Clinical Networks Team, PSQ</td>
</tr>
<tr>
<td>Carly Hislop</td>
<td>Team Leader, CDS Townsville 2012/13 proxy: Karly Hutchings</td>
</tr>
<tr>
<td>Bethany Hooke</td>
<td>Project Officer, QSCD SIP</td>
</tr>
<tr>
<td>Dr Tony Leslie</td>
<td>Consultant Paediatrician, Mater Children’s Hospital</td>
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<td>Belinda Milne</td>
<td>Speech Pathologist, CDS Darling Downs</td>
</tr>
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<td>Dr Mick O’Keeffe</td>
<td>Consultant Paediatrician, Child Development Program, Children’s Health Queensland HHS</td>
</tr>
<tr>
<td>Ven-nice Ryan</td>
<td>Director, Child Development Program, CCYFHS</td>
</tr>
<tr>
<td>Dr Doug Shelton</td>
<td>Director, Community Child Health Services, CDabS Permanent proxy: Megan Free</td>
</tr>
<tr>
<td>Dr Uyen Tran</td>
<td>Staff Specialist, CDS Brisbane South</td>
</tr>
</tbody>
</table>
In addition to the members listed above, there are individuals who contribute and provide advice to support the CDSN in a consultative role:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod Boddice</td>
<td>A/Chief Operations Officer, Rockhampton</td>
</tr>
<tr>
<td>Carmel Perrett</td>
<td>District Executive Director, CCYFHS, CHQ HHS</td>
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<tr>
<td>Dr Trevor Sadler</td>
<td>Director, Barrett Adolescent Centre</td>
</tr>
<tr>
<td>Dr Deborah Sambo</td>
<td>GP representative</td>
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</table>
3. **What does ‘Child Development’ mean?**

The term ‘Child Development’ can be interpreted in a range of ways, and may mean different things according to the context in which it is being used. In a broad sense, child development refers to the skills children acquire throughout the early years (infancy, childhood and adolescence), and the functional application of those skills in everyday situations and across different environments.

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 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 child development, 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
- 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 depend on when it occurs in the course of a family
- Socio-emotional skills foster cognitive skills development

While most children achieve appropriate developmental outcomes, some children do not develop cognitive, motor, language, and/or social-emotional regulation skills at the rate or at the level of sophistication 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’. While some people may use these terms interchangeably, 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.
4. Defining Developmental Disorders using the International Classification of Function (ICF)

The World Health Organisation (WHO) defines ‘disability’ as being any restriction or lack of functional ability (resulting from an impairment of ability) to perform an activity in the manner or within the range considered normal for a human being (WHO, 2001).

In 2007, the WHO introduced a universal classification system for child health called the International Classification of Functioning, Disability and Health, version for Children and Youth (ICF-CY). The purpose of this framework is to introduce a common language to document a child’s function at the levels of their body, their person, and their society. The approach of the ICF-CY changes the focus from classifying children according to a discipline specific diagnosis to a classification based on that child’s functional capabilities (Simeonsson et al. 2006), and provides a framework that supports interdisciplinary practice.

A Developmental Disability typically refers specifically to the impact on function that arises from an impairment of the nervous system. While many types of chronic illness can cause a child to have special needs or disability, there are a substantial majority (about 90%) whose compromised quality of life and/or difficulties acquiring life skills are caused by a nervous system or neurological impairment (British Association for Community Child Health, 1999; British Paediatric Association, 1984).

An impairment of the nervous system that results in a developmental disability is likely to 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. All of these factors need to be well understood in order for appropriate intervention to be determined and implemented.

The spectrum of neurologically-based disability includes:

- Cognitive; global (intellectual impairment) & specific learning disorders (eg dyslexia)
- 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 timing of early experiences are important in shaping a child’s development, and children are both vulnerable to risks and responsive to protective factors throughout the early years and into adulthood. The course of a child’s development can be altered through effective interventions that change the balance between the risk factors and protective elements within a child’s environment, thereby shifting the odds in favor of more adaptive outcomes.
5. Child Development within a Public Health System Context

In order to optimise outcomes for individuals and for communities as a whole, targeted support for children who have developmental disabilities might be provided by a range of government and/or non-government providers. Australian state and federal governments have increased investment, both directly and indirectly, in child development, specifically through the introduction of initiatives such as: the Australian Early Development Index, Better Start for Children with a Disability, Helping Children with Autism, and universal access to quality pre-schooling programs.

Commonwealth investment in the early years over the last decade has been an indicator of Government’s commitment to enhance collaborative partnerships and to increase options for families to early intervention services. There is increasing awareness of the economic as well as social benefits of investing in child development, particularly at a population level or in targeted environmental enrichment programs with a focus on a particularly vulnerable group (e.g. socioeconomically disadvantaged families) (Heckman).

Rather than relieving publically funded health services’ responsibilities towards developmentally vulnerable children and their families, this increased investment in children has reinforced health’s unique role in the assessment and care planning for children both in the immediate and longer terms. Increasing awareness of the importance of the early childhood period for lifelong health, wellbeing and economic participation suggests that survival is no longer a sufficient goal of our public health service system (Shonkoff et.al. 2012). Publically funded health services are a crucial link between child survival and early childhood development, and are an important constituent within the network of service providers that currently exist to ensure a system of care for developmentally vulnerable and disabled children. Importantly, publically funded health services are generally accessible to all children and families, regardless of economy or geographic location (Irwin et.al., 2007).

Publically funded health services are able to deliver indicated developmental assessment and intervention in a way that no other provider can. This includes:

- Understanding the medical, developmental and psychosocial needs of children concurrently through provision of integrated 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 that 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 health and social complexities;
- Ensuring access to quality assessment, diagnosis and intervention statewide due to equitably located services in regional centers throughout Queensland.

Queensland’s Hospital and Health Services provide developmental services to children with identified developmental concerns or problems 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 and their families require a different type of care. These children require access to an integrated multidisciplinary service that provides care according to a chronic disease framework, and that can support significant others in that child’s life to optimise the child’s developmental potential and mitigate likely secondary consequences. Each HHS will determine the allocation of resources to meet community need and demand across the universal, generalist and specialist streams of care.
While health professionals have a positive contribution to make in the field of child development, the needs of the developing child can only be met by a cross sector approach to service planning and implementation. Early childhood services, education providers, and family support services have a significant role in ensuring positive life outcomes for children. The issue that remains poorly addressed within the Queensland context is the lack of clearly defined roles and responsibilities for service providers. There is a pressing need for collaborative partnerships across the sector of services (public, not-for-profit, and private) to ensure children receive timely assessment, diagnosis, treatment and appropriate medium-long term care in regard to their growth, development, learning and occupational prospects.

The 2012 Australian Early Development Index (AEDI) report noted that 10.3% of children entering school were identified by their teachers as requiring additional developmental assessment (Australian Government, 2013). Robust child development services are an integral component of the solution to this emerging problem.

**Understanding Child Development as a Chronic Condition and the Role of the Specialist Child Development Service**

Child Development services are provided at many points along the care continuum. An effective and widely available universal or primary care service model is an essential foundation to support the developmental health of the wider community. However, this is not sufficient when it comes to supporting individual children with complex developmental needs and their families. This particular clinical group requires an individualised, integrated and targeted approach to understanding and supporting the needs of the child and their family. Specialist Child Development Services are unique in their capacity to provide this type of service to children with complex developmental needs. These needs have a biological basis, will persist and influence function over time, and will be better served by applying a chronic disease framework when developing and delivering interventions (McDowell & Klepper, 2000).
This approach diverges from a traditional model of service delivery that is often provided in a single discipline way. Vulnerable children with complex developmental 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.

See **APPENDIX 1** for a comparison between traditional and chronic disease models of care.
6. Child Development along the Continuum of Care

The business of specialist Child Development Services in Queensland’s Hospital and Health Services can only be defined once the ways in which child development interfaces along the care continuum are clearly understood. Child development, along with child protection, interfaces with every level of care both within health and across services provided by inter-sectorial partners. Every child has a right to be protected from harm and every child has a right to optimal growth and development.

Child development is supported directly and indirectly at many levels across the care continuum from low acuity to high acuity services. Queensland’s HHS engage with vulnerable or at-risk families at many points. This mapping of child development along the continuum of care is based on the Children’s Medical Services Clinical Services Capability Framework (CSCF) (QH, 2012a). High functioning teams understand the roles and responsibilities of services at all points along the continuum of care, and support a seamless approach to coordinating the patient journey.

The CSCF framework is a horizontal construct, with the requirements of service provision identified at 6 levels. Each level provides services to a slightly more targeted group. It is not a vertical hierarchy, where level 6 is ‘expert’ and level 1 is not. Rather, service providers at each level are expert in their own business.

Universal Public Health (CSCF Level 1):
Survival is no longer a sufficient goal for our public health services. The broad social objective is for children to reach their full potential and become productive members of their community. Many public health initiatives delivering increased survival rates have also positively influenced child development outcomes. For example, programs to increase breastfeeding rates have positively influenced maternal-infant attachment and early development. Universal immunisation programs accompanied by developmental screening checks have identified children at-risk.

Targeted Primary Health Care/Generalist Child Development (CSCF Level 2/3):
Some children may be identified as being at risk of having additional developmental needs or as having non-complex developmental concerns. Parent/carer education about child development is an important component of service provision at this level, and brief interventions may be used to support children and their families to develop strategies or skills to mitigate a child’s developmental difficulty.

Monitoring children who are identified as being at risk ensures identification and intervention at a more specialised level.

Services offered at the universal and targeted primary care levels are delivered via stakeholders from a range of professions and backgrounds who understand how to direct families through existing care pathways.

Specialist Child Development Services (CSCF Levels 4/5):
Some children have developmental impairments that are complex and cross multiple 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 specialist multidisciplinary team.

Specialist Child Development Services 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 outcome. This will include engaging with other service providers to best match services to needs, and support the child’s transition to these services.
Specialist Child Development Services are well positioned across key regional and metropolitan locations to support children with developmental impairments.

**Developmental Services in Tertiary Facilities (CSCF Level 6):**
A small cohort of children has 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 quarternary* hospitals there are health professionals with an understanding of child development who are able to manage the interface between a child's developmental and medical needs and facilitate a child's transition back to their community (metropolitan or regional), including to their local specialist Child Development Service if required.

Quarternary level facilities do not exist in Queensland at present (2013). However, this will change in 2014 with the opening of the new Queensland Children’s Hospital.

The CSCF is based on the assumption that the level of service provision within in a district will include services at the preceding levels. Eg. Districts with a Level 4 specialist CDS will also provide services at Levels 1, 2 & 3.

See **APPENDIX 2** for Case Studies that represent appropriate levels of engagement along the care continuum.
7. Defining Core Business, Complexity and Clinical Capabilities

Once Child Development along the continuum of care is well understood, services are better able to define other core operating concepts including:

- The core business of specialist CDS
- ‘Complexity’ and how it differentiates specialist CDS from generalist child development services
- The core skills and clinical capabilities that are required for the provision of specialist CDS

Core Business of Specialist Child Development Services (CSCF Levels 4/5)
The following definition of the core business of specialist Child Development Services in the Queensland Department of Health is consistent with our understanding of child development along the continuum of care:

- To assess and diagnose (if applicable) children with complex developmental problems, including those with behavioural comorbidities
- To support optimal developmental outcomes across the lifecourse through intervention*, advocacy and support
- To support families/carers optimal understanding and management of their child’s developmental trajectory within and across relevant contexts
- To provide advocacy and interagency collaboration for the purpose of facilitating improved health and occupational outcomes for children with significant developmental disability with a focus on care coordination and problem solving on matters related to a child’s level of function

* intervention may or may not involve direct therapy services. Intervention may best be described as any measure undertaken with a purpose of improving health of the individual or partnership and/or action in partnership with others to influence environment or experiential factors relevant to the child, to assist with improving and/or altering the course of the presenting concern/s

Complexity and Specialist Child Development Services
Differentiating specialist CDS from generalist child development requires a consistent application of the concept of ‘complexity’ specifically as it pertains to children with developmental impairments:

- Not all children with developmental or behaviour problems are complex. Some have single problems that are easily diagnosed and have clear treatment pathways.
- Some children have problems that cross multiple domains* and/or significantly impact on their functional participation in everyday contexts. These children require integrated multidisciplinary assessment, diagnosis and individualised treatment planning.
- The most difficult have multiple overlapping comorbidities that are severe, requiring partnerships with sub specialties (medical/surgical/psychiatry), child safety, education and/or disabilities.

* domains may include developmental, biological, cultural, medical, demographic and/or psychosocial factors

The Core Skills and Clinical Capabilities of Specialist Child Development Services
Specialist clinical capabilities, key knowledge, and a specific skill set are required in order for a multidisciplinary team to provide specialist Child Development Services. These capabilities, skills and knowledge must be fostered by services over time, and clinicians working within specialist CDS must be actively supported to acquire them.
Specialist CDS provide an integrated approach to assessment, diagnosis and intervention, within a service model that is interdisciplinary with transdisciplinary elements, family-centred, evidence informed, and tailored to the needs of each child and his/her family. *The Clinical Capabilities for Health Professionals working in Child Development* (QH 2011) clearly defines the transdisciplinary skills required to work in the context of a specialist CDS. Professional development opportunities may be identified through a range of agencies at a state and national level including the Education Practice and Development Unit, Child Development Program Children’s Health Queensland, the Centre for Community Child Health, Royal Children's Hospital Victoria, the Australian Research Alliance for Children and Youth Australian Capital Territory; Training provided by discipline specific professional bodies, diagnosis and evidence based intervention specific sources.
8. **What we know about Developmental Disability**

8.1. **Prevalence**

Developmental Disability is a relatively high incidence disability category, with many sources citing rates of about 15% (or 1 in 6) of the paediatric population (Boyle et.al. 2008). Boys are more likely than girls to present with a developmental disability, and there are specific populations of children who are known to be more at-risk (see Section 14). 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. While there is evidence that there is growing demand for services for children with neurodevelopmental disorders (Atladottir et al, 2007), it is also recognized that paediatric care providers tend to under-identify children with developmental concerns (Sheldrick et. al. 2011).

The Australian Early Development Index (AEDI) is a population measure of children’s development as they enter school (CCCH & TICHR, 2009; Australian Government, 2013). It was rolled out by the Australian Government in 2009, and was repeated in 2012 (2012 results were beginning to become available at the time of this document’s completion). The AEDI 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 AEDI are:

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

The AEDI data indicates that, while the majority of 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. Over 26% (26.2%) of Queensland’s children were identified in 2012 as vulnerable (>10th percentile) by their classroom teacher in one or more developmental domains, and nearly 14% (13.8%) were identified as vulnerable in two or more domains. This is in addition to the 4.9% of children already diagnosed with an intellectual or physical disability. Interestingly, this correlates with the prevalence rates of developmental disability commonly cited in literature pertaining to child development, and demonstrates small improvements in comparison to the 2009 AEDI data.

The AEDI confirmed that certain factors increased a child’s risk of developmental vulnerability. These included:

- 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; and
- cultural and linguistic diversity (including language impairment).

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 emerging evidence supports a
broad conceptualisation of ‘early childhood’ (0-8 years), and challenges specialist Child Development Services to support families to re-engage over time as their understanding of their child and his/her developmental disability is challenged or changes.

Comparing AEDI 2012 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 however the AEDI has the advantage of being current, population based, easily accessible, and consistently applied Australia wide. Therefore through using this data, we are able to look more broadly than a single context. Comparison is possible, which further improves our understanding. These comparisons highlight that developmental vulnerability is widespread, and that every community has pockets of developmental disadvantage.

Some of our regions, such as Cook (Cape York) and Torres (Torres Strait) demonstrate extreme and broadly distributed developmental disadvantage. This is well understood and widely reported, and the challenges of proving services across vast geographical areas cannot be underestimated. The diversity of each and every community must be considered in an analysis of need. Perhaps not so well understood are vulnerable areas with high population density. The 30.6% of Prep children in Acacia Ridge who were identified in 2012 as vulnerable on two or more domains translates to an actual number of 30 children, about the same as the number of similarly vulnerable children living across the whole of Cape York. If percentage vulnerable is the only indicator of need, children in Woodridge may appear to be faring better than those in the Torres Strait, with ‘only’ 25.6% vulnerable on two or more domains compared with 41.4% in the Umagica/Injiono/New Mapoon region. A look at actual numbers however tells us that 57 children in Woodridge were vulnerable across developmental domains. This figure is not only more than four times the number of children identified in the Umagica/Injiono/New Mapoon region (12), but more than the total number of children identified across the whole of the Torres Strait.

Ultimately, responsibility for improving the developmental health of Australian communities is multifaceted and requires cross agency and departmental approaches. It is not the role of a specialist CDS to improve the AEDI results of their region. However, it is the role of the specialist CDS to be able to interpret data, advise service partners about strategies to improve developmental health, and to allocate limited resources to provide targeted interventions. 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 publically available data is an important first step in achieving this goal.

The AEDI website is a good place to start: http://www.rch.org.au/aedi/

8.2. 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). Unreliable or inappropriate responses can alter the brain’s architecture leading to disparities in learning and behaviour.

Children who sit high on the socio-economic gradient generally demonstrate relatively good developmental outcomes, even in the context of complex profiles. Extreme disadvantage early in life is linked not only to compromised developmental outcomes but also later chronic medical conditions and ultimately a shortened lifespan (Gianaros, 2011). The World Health Organisation advocates for an equity-based approach to supporting child development, whereby improvements for disadvantaged children are not seen in absolute terms but in comparison to the most advantaged children within society. Specialist Child Development Services have a responsibility to provide support to children with complex developmental impairment based on function and circumstance.

8.3. Prognosis and Impact on our Community

Among all the social determinants of health, ECD (Early Childhood Development) is the easiest for societies’ economic leaders to understand because improved ECD not only means better health, but a more productive labour force, reduced criminal justice costs, and reductions in other strains on the social safety net. National and international fiscal and monetary institutions need to recognize that spending on early child development is an investment and incorporate it into policy accordingly (WHO)

Key health bodies across the world, including the World Health Organisation, identify early child development as being a key social determinant of health and wellbeing across the life span (WHO, 2012). Early childhood is the time during which a child’s central nervous system can be shaped to ensure optimal life outcomes across all developmental domains (physical, language/cognition, social/emotional).

The outcomes for children identified as having developmental difficulties 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 generally have adverse outcomes 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. All of 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)
9. 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.

Data collected in the National Census in September 2011, and published on the Australian Bureau of Statistics website in 2012 (ABS 2012), tells us that:

- Queensland has a population of about 4.48 million people, and a geographic area of more that 1.73 million square kilometers
- Brisbane Local Government Area has a population of about 1.08 million people (23% of Queensland population)
- Greater Brisbane Regional Area (Brisbane, Caboolture, Logan, Ipswich, Pine Rivers, Redcliffe and Redlands) has a population of about 2.07 million people (45% of Queensland population)
- Queensland is home to the largest regional city in Australia (Gold Coast, 507 642 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). The catchment areas of most of Queensland’s regional centers equates to a population of between 200 000 – 300 000 people.
- Queensland has the greatest percentage of the population under 15yo (20%) of all states and territories except the Northern Territory with regional Queensland’s population of young people (21%) slightly higher than that of metropolitan Queensland (19%)
- Queensland has the most people living in outer regional, rural and remote contexts of any Australian state or territory (833 975 or 18.2% of the population), with nearly double the number living similarly in NSW, and four times that of most other jurisdictions (including the Northern Territory)

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 home to fewer than 50% of the state’s population. Queensland’s population is distributed in patterns that correlate broadly with 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 where up to 38% of the population is under 15yo.

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

- Queensland’s population is relatively young and is broadly distributed over a vast geographical area, with currently existing services located both in metropolitan Brisbane and throughout major regional centers
- Developmental Disability is a high incidence disability category, with children in rural and regional areas experiencing even greater developmental vulnerability than their peers in the state capital (CCCHTICHR, 2009; Australian Government, 2013)
- 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 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 4.
10. What we know about Vulnerable 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 group and there is a need for services to support children regardless of their circumstance. However, we do know that some particularly vulnerable populations require a coordinated and integrated approach to understanding their developmental needs within a pertinent wider context, and to providing specifically targeted support and intervention. 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 Child Development Services need to be aware of this to support access and to improve outcomes for these children and their families.

10.1. Aboriginal and Torres Strait Islander Children

Aboriginal and Torres Strait Islander peoples comprise about 2.5% of Australia’s population in total (AIHW, 2011) and 4.8% of children in the first year of formal schooling (CCCH & TICHR, 2009). This is a heterogeneous group that lives in all states and communities, from extreme remote locations to urban environments. While gross generalizations about the context for Indigenous Australians is not always helpful, there is widespread acknowledgement that Aboriginal and Torres Strait Islander children are over represented in terms of developmental impairment compared to their non-indigenous peers. This is reflected in the high rates of developmental vulnerability on the 2009 and 2012 AEDI, with Australian Indigenous children more than two and a half times more likely to have developmental vulnerabilities across two or more domains than the whole of sample rate in the first year of schooling (26% compared to 10.8%) (Australian Government, 2013).

The additional levels of vulnerability reported in the AEDI certainly persist into adolescence and adulthood. In 2008, 50% of Aboriginal and Torres Strait Islander people aged 15yrs and over were identified to have a disability or long term health condition, with approximately one in twelve indigenous young people assessed as having a profound/severe limitation of development, learning and/or health (AIHW, ABS 2008). Despite the significant developmental disparity between indigenous and non-indigenous children and adolescent populations, Aboriginal and Torres Strait Islander children are severely under-represented in our specialist Child Development Services, community child health and general pediatric health services.

Understanding the context for vulnerable Aboriginal and Torres Strait Islander children is important to support appropriate service planning and development, and to improve access to services for this group of children. The disparity between the opportunities and outcomes for Indigenous children is founded in a range of 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’. Gaps include:

- A reduced life expectancy: 67 for Indigenous males and 73 for Indigenous females (11.5% lower than the total life expectancy for men and 9.7% lower than for women)
- Significantly higher rates of chronic disease (including obesity, cardiovascular disease, diabetes), disability, and psychological distress
- Disproportionate numbers of households living in poverty (2.5 times more likely to be in the lowest income bracket as non-Indigenous Australians) and of homelessness (4 times the non-Indigenous rate)
Aboriginal and Torres Strait Islander children are more likely to have a very young primary caregiver (21% of all Indigenous children are born to teenage mothers, compared with a general rate of 4%), and be living in households with frequent life stressors. They are 3 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. Only 51% of all Indigenous households have access to a motor vehicle (compared to 85% of non-Indigenous households), and 22% will speak a language other than English at home (AIHW, 2011). These factors all compromise a child’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.

10.2. Children from Culturally and Linguistically Diverse Backgrounds

Aboriginal and Torres Strait Islander children are an important group of children in Australia who may come from a culturally and linguistically diverse (CALD) background, but they are not alone in this context. Australia is a multicultural country. More than 26% of Queensland residents were born overseas, and 38.6% report that one or more of their parents were born outside of Australia. Nearly 12% of households speak two or more languages at home (ABS, 2012). While these are only statistical snapshots and not a reflection of the cultural profile of a household, they are an indicator that Queensland is home to people with a range of cultural and linguistic characteristics.

The 2012 AEDI results for children with a CALD household were variable. If a child was proficient in English and another language, they were less likely to be vulnerable on the AEDI domains than any other group of children (Australian Government, 2013). However, if a child has a language background other than English (LBOTE) and is not proficient in English, they are significantly more likely to be developmentally vulnerable across multiple developmental domains (not just the language domain). Eg. About 10.8% of Australian children are vulnerable on two or more domains. Only 8.3% of LBOTE children who are proficient in English are similarly vulnerable, compared with 58% of LBOTE children who are not proficient in English. This and other data supports debate about the relative impact of cultural diversity and/or language impairment more broadly, but it is irrefutable that children from CALD backgrounds are vulnerable on a number of levels.

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. Between 1994 and 2008, more than 31 000 children entered Australia as refugees (ABS, 2012). Developmental concerns are often not raised in health consultations (Davidson et.al. 2004) resulting in a group that often have developmental issues not formally identified until the early years of schooling (Department of Education and Early Childhood Development, 2011). This supports the WHO conceptualization of early childhood service provision from 0-8yrs.

Queensland Health does have a Guideline for Multicultural Health Policy Implementation that provides direction to services to facilitate access and improved health outcomes for people from CALD backgrounds, with a particular focus on refugee and South Sea Islander populations (QH, 2012b).
10.3. Child Living in Out-of-Home Care

The high incidence of developmental disability amongst children who have experienced abuse and neglect 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 lifespan. 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, 2012).

The Royal Australasian College of Physicians released a policy document in 2006 called Health of Children in “Out-of-Home Care” (RACP, 2006). In that document it was reported that there has been a steady increase in children being placed in care (with over 7 600 children in care in Queensland in 2011 (AIFS, 2012), and that these children are a highly vulnerable group who are likely to have poorer physical, mental and developmental health than their peers. The policy recommended a developmental assessment for all children entering care within 30 days of placement, followed by a comprehensive health plan, and access to enhanced care, management and treatment services, including fast tracking therapeutic services.

This advice was incorporated into the National Clinical Assessment Framework for Children and Young People in Out-of-Home Care in 2011, which advocated for a comprehensive developmental assessment across all developmental domains within 3 months of a child entering care, with the results of this assessment reviewed every two years by a paediatrician (DoHA, 2011). This is not currently the case for children entering care in Queensland. Given that children who experience abuse and neglect are being identified and placed in care at increasingly younger ages (Miller et.al. 2000), timely and coordinated access to specialist integrated developmental services is a significant unmet need for an extremely vulnerable group.

10.4. 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. This may be due to advances in the diagnosis and treatment of previously life-limiting conditions, and in the increasing social awareness of issues pertaining to mental health and wellbeing. 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 (Youlden 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 lifespan.

One such group is children who have required newborn surgery for major birth defects (including cardiac, gastrointestinal, renal and tracheo-oesophageal). Survival rates in Australia for this population have risen dramatically in recent decades to 95% (Laing et.al. 2011). Recent investigations have found that 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 for this vulnerable group, 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.

10.5. Children who have Survived Adverse Events as Neonates

Recent decades have seen the survival of an increasing number of babies who experience adverse events in-utero, during delivery and/or in the early post-delivery period (Cheong & Doyle, 2012). This group of children has long been associated with a higher incidence of neurodevelopmental disability. Some high profile developmental disorders, such as those included within the Autism spectrum, have increasingly been associated with unfavorable events during this time (Juul-Dam et al. 2001). Perhaps the most commonly seen sub-groups within this wider cohort are those children born pre-term and/or with low birth weight. While children born at any gestational age may experience developmental difficulties, the rate of neurodevelopmental impairment increases as birth weight and gestational age decrease (Johnson, 2012).

Since 1990 there has been a 21% rise in the overall proportion of preterm births in the United States, with nearly 13% of live births now being born at <37 weeks (Johnson, 2012). This trend has been seen throughout the western world. Neonatal care has also changed over time, contributing positively to both improved survival and developmental outcomes for babies. However, despite these advances, this group, particularly those born very small and very early, continues to experience higher rates of impairment across cognitive, physical, language, sensory and behavioural domains, and is more likely to experience academic, social and emotional difficulties in adolescence and adulthood (Heinonen et al., 2012).

While there has traditionally been a focus on those born very early (<28 weeks) and/or very small (<1500 grams), the greatest number of preterm infants are born between 32 and 37 weeks (80%) and their numbers are increasing (Cheong & Doyle, 2012). These group of late preterm children have more health and neurodevelopmental morbidity than previously understood and require both ongoing developmental surveillance and subsequent timely access to early intervention services (Cheong & Doyle, 2012). This has and will continue to increase the burden on both public health and education services.

There is some indication that predictions of developmental outcomes for children who have survived adverse events as neonates may be more accurate in the early years of schooling rather than in the pre-schooling period. This is due in part to cognitive recovery over time, and the lack of accuracy of predictive assessment tools in the early years. Given that many studies demonstrate that family factors play an increasingly important role in preterm children’s outcomes at school (Bowen et al., 2002), it is important that parents and carers holistically understand each child’s capacity and learning needs in order to provide appropriate support to optimise developmental outcomes. This has significant implications for Queensland Health Child Development Services that often limit entry to children in the pre-schooling period only, or that don’t support re-entry to services following discharge or referral to alternative service providers.
This list of vulnerable groups is not comprehensive. 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.
11. **Specialist 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 Child Development Services in the Queensland. This section of Act Now identifies this purpose and care responsibilities of the specialist 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 taken from the Australian Bureau of Statistics ‘2011 QuickStats’ web pages. Given that ABS regional and HHS boundaries may or may not correlate, the demographic data included in this section is to be considered as a guide to population spread or density only rather than a definitive total.

11.1. **CDS Purpose and Core Responsibilities**

Specialist 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 specialist 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, specialist 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-liason, advocacy and/or shared care.

11.2. 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.

11.2.1 Team Leader

Team Leaders in specialist Child Development Services 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 dedicated 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.

11.2.2 Specialist Child Development Allied Health Clinicians

Specialist Child Development Services 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.
11.2.3 Paediatrician

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 (eg 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 multi disciplinary team assessment) are undertaken as required.

- **diagnostic formulation**: a multidisciplinary collaborative process that draws information held by a number of 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 (eg: 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.

11.2.4 Clinical Intake Officer

The Clinical Intake Officer (CIO) provides a unique and clear point of service at the very front end of a client’s clinical journey. The CIO ensures a single point of contact that enables an integrated and timely support and advice service to families, caregivers and community agencies.

This 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**
  The CIO 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 and advice**
  The CIO 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 CIO also provides education, advice and consultation-liason services to professionals and professional groups.

11.3. **2013 Statewide Service Network Profile**

The following profile of the CDS Service Network was the current state, as of March 2013. It is important to note that while the CDS teams have evolved according to local context, there has been an increasing opportunity to better understand and learn from each other, particularly since the inception of the SCYCN. There are 16 CDS teams that provide a specialist stream of care to children with additional developmental needs, with 10 Health and Hospital Services (HHS) providing services across at least 25 sites throughout Queensland. Most other HHS have general paediatric allied health and/or medical services for children with non-complex developmental concerns. The 16 CDS teams that provide specialist child development services may also offer universal or generalist developmental services, as well as providing outreach and in-reach services to other health areas and facilities across the state. Each CDS is profiled according to location, demography and service characteristics. Team Leaders contributed to these profiles and the ABS was the source of most demographic data.

Team composition is included below each snapshot as a table with included core disciplines identified by a tick. Most teams do not have a paediatrician embedded as part of the service, but many do have dedicated paediatric hours. This is indicated by an ‘A’ in place of the tick to indicate the position is ‘attached’. See APPENDIX 5 for a directory of services.

11.3.1 **Cairns and Hinterland**

CDS Cairns and Hinterland is located in Far North Queensland, and provides specialist developmental services to some of Queensland’s most remote communities through Cape York and the Northern Peninsula & Torres Straight. Cairns is a major regional centre, with a population of about 156 000 people, and the greater catchment area is home to more than 224 000. In this region there are a large number of Indigenous communities that have both large numbers of children and extremely high rates of developmental vulnerability (up to 90% in two or more domains on AEDI).

CDS Cairns was established in 1985 and has undergone much change from that initial 1fte. The team provides extensive outreach services and has a number of specialist funded positions including a Making Tracks OT (remote outreach and case management) and Cochlear Implant SP (0.2FTE). 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 Base 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 only to children who have complex developmental needs over a number of developmental domains. A community based Speech Pathologist provides generalist paediatric services for children with communication disorders, and there are other generalist allied health located in a number of the outreach sites. Clinical supervision is often part of the outreach program.
11.3.2  Townsville

Townsville is a geographically large and demographically diverse Hospital and Health Service, located in North Queensland. Townsville City is home to 175 000 people, with a population of the wider catchment area of about 220 000. Challenges in the Townsville HHS include many small communities across a wide geographical area, a high prevalence of developmental vulnerability, a physically isolated context, and a comparatively large indigenous population.

Dedicated developmental services have existed in Townsville since about 1985, when the Developmental Assessment Team was founded. Now with a team comprising of about 12 full time equivalent positions including a Team Leader and an Allied Health Assistant, CDS Townsville offers centre based and local visiting services throughout Townsville City, and outreach services to regional sites to the north (Ingham) and west (Charters Towers, Hughenden and Richmond). 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 level facility that offers a range of specialist services to communities from Mackay to the Cape and has a recently expanded neonatal intensive care facility. CDS Townsville hosts the Cerebral Palsy Health physiotherapy (0.4fte) and occupational therapy (0.1fte) positions, but otherwise offers Child Development Level 4 services only. There is a community based paediatric Speech Pathologist that provides Level 3 generalist services within Townsville, with other generalist allied health services located in centers such as Ingham, Ayr, and Charters Towers.

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11.3.3  Mackay

The Mackay Hospital and Health Service (HHS) provides public hospital and health services to a population of around 185,000 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. The city of Mackay (population 87 000) is located somewhat centrally within the HHS on the coast, as are some other larger towns such as Bowen and Proserpine. 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 located in the community health centre but is conceptualised as a hospital outpatient service and as such is funded through an Activity Based Funding Model. The team has approximately 7 ½ fte, and provides early intervention to children with both complex and non-complex developmental needs. CDS Mackay provides mainly centre based services within the city of Mackay, but does have links with Mackay Base Hospital and with generalist allied health working in communities throughout the region.

Mackay Base Hospital is a secondary level facility. Paediatric services at MBH are provided by dedicated allied health staff including occupational therapy, physiotherapy, social work and dietetics with priority to acute service delivery.

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11.3.1 Central Queensland (Rockhampton)

Rockhampton is located within the Fitzroy Region of Central Queensland. Rockhampton city is home to just over 60,000 people, but the Rockhampton local area has a population of over 109,000, and the greater Fitzroy Region has more than 211,000. Both coastal communities, such as Yeppoon, and mining hubs, such as Emerald, have seen significant growth with little additional health service allocation in recent years. Gladstone, to the south of Rockhampton, is a city of over 30,000, and has a history of being included and excluded from this Hospital and Health Service area. Paediatric services to the community of Gladstone are poor.

CDS Rockhampton has an fte of approximately 10, including all core allied health disciplines, and access to generalist paediatric medical services, but no dedicated Team Leader. 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 has the only Clinical Intake Officer outside of the South East of Queensland.

CDS Rockhampton provides inreach services to Rockhampton Base Hospital, and some post acute care. The team primarily offers centre based services with a focus on Rockhampton specifically, although does travel to some communities such as Woorabinda to the South West as required. Rockhampton Base Hospital is the regions major hospital. It is a Secondary Level facility and has a Special Care Nursery that provides care to infants from 32 weeks gestational age.

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11.3.5. Wide Bay (Bundaberg and Fraser Coast)

The Wide Bay Health and Hospital Service encompasses a large and densely populated regional area. It is a fast growing area with a population of approximately 275,000 people. Health services within the region operate from three major centers (Bundaberg, Hervey Bay and Maryborough) and are supplemented by a number of small rural health facilities. Historically, each of these centers has evolved strong identities and a tradition of innovative local problem solving. Subsequently a number of services have grown to meet the needs of local communities throughout the HHS, with CDS Wide Bay (Bundaberg) located within the city of Bundaberg, and CDS Wide Bay (Fraser Coast) based in Hervey Bay.

CDS Wide Bay (Bundaberg) provides multidisciplinary services to children as they transition to formal schooling. This service has had a focus on children aged 4-7 years and consists of about 2.4fte across all core discipline groups. They have provided support to children with complex developmental needs since 2001. CDS Wide Bay (Fraser Coast) was formerly known as The Early Intervention Team. This team of 3fte is based at Hervey Bay and 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).
11.3.6. Sunshine Coast

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 catchment area is home to more than 350,000 people and the population is expected to reach nearly half a million people within the next 10 years. Access to services is variable according to where children and families live. For example, Gympie (with a population of more than 45,000) has been included and excluded from the health service for many years and has poorly established links to developmental services in other locations such as Nambour.

The Child Development Service Sunshine Coast is located at the Nambour Hospital and is operationally managed by the Director of Physiotherapy. The team of about 7fte clinical positions has been operating independently since 1992, and was established specifically to meet the multidisciplinary service requirements of children with complex developmental needs. There is some uncertainty as to future operational structures and the physical location of the team at this time as there is much change within the HHS, including the construction of new facilities and possible organisational restructure.

The Sunshine Coast team has traditionally provided multidisciplinary services to children in the pre-school years, with a strong tradition of group programming. The HHS does have Speech Pathology positions in various locations that provide generalist paediatric services (CSCF L3). These positions have some links with the specialist CDS.
11.3.7. Toowoomba

Toowoomba is home to the only CDS in the Queensland Department of Health located away from a coastal region. Toowoomba sits in the Darling Downs HHS which is home to more than 260 000 people. CDS Toowoomba consists of only 4.5 fte across four disciplines (SP, OT, PT and nursing). In addition to their CDS responsibilities, this team also provides primary health care services, general paediatric outpatient care, paediatric inpatient care, post acute care, cochlear implant services and some CP health type services. Although the HHS has a large population and vast geographical area, CDS Toowoomba has historically provided services to the Toowoomba area only, with local rural generalist allied health services supporting children and families in locations across the Darling Downs.

CDS Toowoomba was founded in 1994 and is located at the Toowoomba Hospital. This team is not operationally independent, with operational management for each discipline through the allied health discipline directors and Child Youth and family Health service NUM. Allied Health Services focus on children in the pre-schooling years, but some limited brief consultations are available for children requiring OT and PT support up until the age of 12yrs. Paediatricians provide support, developmental and behavioural care for children up to the age of 12years with support from the nurse coordinator.

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11.3.8. West Moreton (Ipswich)

Ipswich city is home to more than 170 000 people and sits in the West Moreton HHS which has a population of over 270 000 including the surrounding regional communities of Gatton, Laidley, Esk and Boonah. This region has a long and proud history and is characterized by high population growth and high levels of developmental need (AEDI, 2009).

The team is known as the Therapy and Support Service for Children (TASSC), and began as a Developmental Assessment Team in the mid 1980s. The team consists of about 8fte including a designated Team Leader and administration officer and is an HHS wide service. The team is located at Ipswich Health Plaza and Goodna Community Health (co-located with community and primary care services) with outreach services to Laidley, Esk and Boonah. Professional management is via the Directors of each allied health discipline, based at Ipswich Hospital with operational line management through the Child and Family Health Service (CAFHS).

The team provides specialist child development services as well as generalist and universal services to children aged 0-18 in all discipline areas except Speech Pathology which is limited to the pre-schooling years. Historically, due to a lack of dedicated paediatric allied health services at Ipswich Hospital, this team has also provided some limited in-reach services. A service review was being conducted at the time of this document going to print. Therefore the organisational structure of TASSC and the services it provides may be altered by the processes of this review.

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11.3.9. **Gold Coast**

The Gold Coast has long been understood as a region of growth and development, and is one of the largest population centers outside of a capital city in the whole of Australia. With a population of over 500,000 people, the Gold Coast has seen many changes in regard to local infrastructure and social demand, without realizing commensurate changes to staffing numbers in Child Development. Demographic variation across the Gold Coast is significant, and the team has recently undergone a rigorous process of service development and evaluation to ensure resources are being allocated to need in an equitable and efficient way.

The team at the Gold Coast is known as the Child Development and Behaviour Service (CDABS), and was initially established as an outreach site from the Mt Gravatt DAT team in 1985. The team adopted the name CDABS shortly before the statewide Child Development Service naming convention initiative. The team is based at three locations: Bundall, Palm Beach and Helensvale. Services are allocated across CSCF Levels 3 to 5, with dedicated programs for children with complex developmental needs (Multidisciplinary Assessment and Intervention Program (MAIP) and Multidisciplinary Early Intervention Team (MEIT) programs). Children aged 0-10 are accepted at intake with eligibility for different aspects of service provision dependent on age and the severity of their developmental impairment. Services are accessed through an established Clinical Intake process. The CDABS team is comprised of nearly 16fte and is operationally independent. There are a number of leadership roles held by team members. These leadership roles are both discipline and program focused.

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11.3.10. **Metropolitan Brisbane**

Greater Metropolitan Brisbane area is home to 45% of Queensland’s population, totaling 2.07 million people, of which 19% are aged younger than 15 years (nearly 400,000 children living in the region). The Australian Bureau of Statistics identified 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.

CDS Metro includes six teams that provide services over multiple sites. The combined fte is more than 70 but this resource is not distributed evenly across sites. All teams are located in a community setting but some provide in reach to their local hospital service and a number host positions that sit outside of a child development framework. The metropolitan region includes a significant number of community based and hospital facilities. Most notably, the metropolitan region includes two tertiary level paediatric hospitals, the Royal Children’s Hospital and the Mater Children’s Hospital. These facilities provide specialist level services to children from across and beyond Queensland, and will merge in 2014 to form the Queensland Children’s Hospital, Queensland’s first quaternary level paediatric facility.

The network of specialist services and their respective detail for metropolitan Brisbane are described below:

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### 11.3.11 Tertiary and Quaternary Developmental Services

While most specialist developmental services are provided by the above mentioned Child Development Services, both of Queensland’s tertiary hospitals, the Royal Children’s Hospital (RCH) and the Mater Children’s Hospital (MCH), also have multidisciplinary child development teams. The developmental team at the RCH provides an integrated approach to understanding the developmental needs of children with co-morbid multimodal complexity. The MCH developmental clinic provides developmental assessment, formulation and diagnosis, as well as brief intervention to children with complex developmental needs more broadly across the care continuum. In 2014, the Queensland Children’s Hospital is due to open and function as the single quaternary level children health facility in Queensland. This will see a merge of the RCH and MCH. Preparations for this are being made, with significant investment in the Clinical Services Integration process underway, including a focus on integrating the metropolitan child development services broadly.
12. Strategy and Policy

Child Development has grown as a clinical service area despite existing within a relative policy vacuum. While only a few policy and strategy documents may pertain specifically to the business of a specialist Child Development Service within Queensland, integrating research and evidence from the national and international stage with regard to child health, developmental disability and early childhood development sufficiently provides a strong foundation to frame Child Development Service priorities for Queensland.

Current Australian policy drivers include:
- Federal Government programs and initiatives:
  - FaCHSIA A Better Start for Children with a Disability and Helping Children with Autism programs
  - Australian Early Development Index roll out and analysis
  - Proposed National Disability Insurance Scheme
  - Close the Gap initiatives and programs
  - Key National Indicators of children’s health, development and wellbeing
- Interstate initiatives:
  - South Australian Government’s proposed Child Development Legislation
  - Western Australian Government’s 2006 review of child development services and subsequent statewide approach
  - New South Wales Health Ministry’s Kids and Families Initiative
  - Murdoch Children’s Research Institute, Victoria
- Queensland Government:
  - Universal access to quality pre-schooling programs
  - Expansion of neonatal intensive and special care facilities in regional Qld
  - Statewide Child and Youth Clinical Network and Child Development Subnetwork activity
  - Children’s Health Queensland and the metropolitan integration process
  - Queensland Children’s Hospital
  - Blueprint for better healthcare in Queensland

Awareness of current policy drivers and research supports the direction of ongoing service planning and development. The evidence assists innovation and guides CDS leaders to better conceptualize the business of the CDS. Leaders of specialist CDS are increasingly able to better communicate the priorities and focus of health along the continuum of care with families and professional stakeholders at many levels.

The statewide Child Development Sub Network has been active in working with the service network to support integration of policy, strategy and practice. As a result a number of policy and strategy resources have been developed to support health service planning. Examples of how child development has benefited from a more integrated approach to policy and strategy include:

- Using the Children’s Medical Clinical Services Capability Framework to support an enhanced understanding of Child Development as it exists along the care continuum and as a platform for the application of commonly understood language and concepts to explain this
- Exploring the content, approach and intent of a range of service standards documents to better understand the purpose, value and most suitable structure for the development of specialist CDS standards to support greater accountability and alignment
- Cross referencing draft service standards with ACHS Accreditation standards to ensure that CD investment in change aligns with accreditation priorities
- Exploring whole of government priorities and initiatives, such as Close the Gap, to support targeted services to specific populations
• Understanding changing funding models and reporting requirements under the current health reform agenda to enable CDS to secure resources that support clinical business

Documents that champion policy initiatives and strategic priorities are generally readily available on-line. Engaging in these resources in a meaningful way ensure the ongoing relevancy of Child Development in an ever-changing health context, and support the appropriate allocation of limited resources. Ultimately, specialist Child Development Services must become more involved 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.
13 Standards for Clinical Practice for Specialist Child Development Services in Queensland

Standards for Clinical Practice for Specialist Child Development Services 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.

13.1. Principles of Practice

Child Development Services 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.

13.1.1. Understanding the Early Childhood Period as part of the Lifecourse

- Early childhood is the period from prenatal development to eight years of age
- 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
- Many adult challenges, including chronic disease (eg. adverse mental health, obesity, and heart disease), have their foundation in compromised development in early childhood
- The World Health Organisation considers the early child period as the most important developmental phase throughout the life span

13.1.2. Early Intervention

- Early intervention refers to the coordinated assessment, diagnosis, and/or therapeutic support offered to a child and his/her family as soon as possible following the identification of a developmental impairment.
- This will usually occur during the early childhood period (0-8yrs), but may also refer to interventions for school aged children over 8years at the time that complex developmental dysfunction becomes apparent or at significant transition points along the developmental continuum.
13.1.3. Ecological Model of Development

- For optimal development, 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
- Interplay of the developing brain with the environment facilitated by nurturing caregivers is the driving force behind development

13.1.4. 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.

13.1.5. 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

13.1.6. Family Centered Practice

- The family is the primary source of experience for a child
- Families 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 his/her 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

13.1.7. Transdisciplinary 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
- Transdisciplinary care does not refer to the development of generic allied health workers within a specialist CDS
- Transdisciplinary care both enhances and relies upon the specific expertise and clinical perspectives each discipline brings to the multidisciplinary team

13.1.8. Chronic Disease Approach to Child Development

- Traditional models of care are not well applied to complex developmental contexts
- Often the likelihood of ‘cure’ is limited and care with a view to self management and mitigation of secondary characteristics is required
- Challenges a traditional model of care
13.2. 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 Child Development Services to deliver specialist care to children with complex developmental needs:

13.2.1. 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 child development services located close to their homes. This enables service providers to understand a child’s local context and provide appropriate advice and support. A visible statewide network of providers supports equity of access to Child Development Services for children in metropolitan, regional and rural locations across Queensland.

Core Standards:
- Each specialist CDS maintains active engagement with the SCYCN CDWG 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 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.
13.2.2. Entry/Intake

Specialist CDS operate in a context where demand for services exceeds service availability, and where vulnerable children 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.

Core Standards:
- Clinical intake is planned and coordinated by a dedicated Clinical Intake Officer. This may be a stand-alone 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 specialist CDS.
- Prioritisation for service and discipline access are clearly defined according to local context with consideration given to the Child Development Principles of Practice including: early intervention, evidence informed practice, equity, transdisciplinary practice, and an ecological model of development.
- Each 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 specialist CDS including understanding of: rights and responsibilities; clinical pathways; and ways of working in a partnership model.

13.2.3. Shared Care

Children with complex developmental needs often require support and intervention from a range of service providers for long or short term health, educational or developmental concerns. Some children and their families will require support transitioning from the CDS to alternative services, while others will continue to receive care from two or more service providers including the CDS over time. This may be a source of anxiety and concern for children and their families and the CDS has an important role to play in ensuring this happens in a coordinated way.

Core Standards:
- The 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 each team’s roles and responsibilities toward that child and family, and that clarifies the family's expectations in terms of ongoing care.

13.2.4. Assessment and Review

Core to the business of specialist Child Development Services 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 various intervals over time.

Core Standards:
- CDS teams employ both standardised and non-standardised tools for assessment, that are 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.

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.

13.2.5. Treatment and Support

Quality intervention programs nurture all aspects of a child’s development (physical, social, emotional, language and cognition) 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 with consideration given to a transdisciplinary approach to care.

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.

13.2.6. 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 specialist CDS.

Core Standards:
- 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:
  - 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.
  - increasing or new functional difficulties that require a team based approach for problem solving at a point in time post discharge from the CDS.
- medical complexities comorbid to their developmental impairments and require periods of support from integrated multidisciplinary teams that include medical specialists and that can facilitate support and understanding across the acute and community contexts. This is particularly relevant for teams in communities that do not have tertiary facilities with teams with developmental expertise.

### 13.3. Methods of Service Delivery

Specialist Child Development Services 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. Health professionals working in specialist Child Development Services employ the following methods of service delivery:

#### 13.3.1. 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, or 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 and community sectors.

#### 13.3.2. Advocacy

- Advocacy that supports stakeholders to better understand the abilities, challenges and needs of children with complex developmental impairments may be required on a range of levels. 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.
  - Individual: the needs of individual children and families may need to be clearly communicated to stakeholders including other family members, education and health professionals, and other community groups.
  - Wider Community: communicate the importance of a public health approach to early childhood development across universal, targeted and indicated populations, and advocate for each of these groups in terms of workforce allocation and health service planning.
  - 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.

#### 13.3.3. Therapy as Intervention

- Therapy as intervention in a specialist CDS may be single discipline, multidisciplinary or transdisciplinary, and may be provided through an individual, group or consultative intervention model.
- Specialist CDS facilitate creative and innovative solutions to a child’s complex developmental problems, as orthodox approaches often fail to reduce inequalities and prevent adverse health outcomes across the lifecourse.
- Intervention needs to be conceptualized broadly and may occur at various positions along the care pathway, including entry, assessment, diagnosis, therapeutic support, and transition.
13.3.4. Education

- 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.
14. Future Considerations for Child Development in Queensland

Child Development Services in the Queensland Hospital and Health Services have benefited from the ongoing support and investment of the Statewide Child and Youth Clinical Network. Significant achievements since the 2009 formation of the Child Development Working Group (now Child Development Subnetwork) that directly impact on CDS statewide have included:

- Endorsed common vision for CDS
- Common naming initiative
- Communication Network
- FaCHSIA Clinical Decision Making Paper
- Core Concepts in Child Development
- Standards for Clinical Practice for Specialist Child Development Services in Queensland Health

Future opportunities for ongoing activity include:

- Development of care pathways for priority populations
- Growing partnerships with internal and external stakeholders
- Statewide consumer engagement
- Support for service review and evaluation
- Standardisation of data collection and reporting
- Active participation in policy and strategy formation and implementation
- Growing a centre of excellence and clinical leadership for Child Development in the Queensland public health service system.
APPENDIX 1:

Child Development according to a Chronic Disease Model of Care

<table>
<thead>
<tr>
<th>Traditional Models of Care</th>
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<tbody>
<tr>
<td><strong>Basic Orthopaedic Model of Care: Broken Leg</strong></td>
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<tr>
<td><em>Emergency care – surgery – rehabilitation – discharge</em></td>
</tr>
<tr>
<td><strong>Generalist Paediatric Allied Health Model of Care: Phonological Disorder</strong></td>
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<tr>
<td><em>Referral intake – assessment – goal setting – intervention – review – discharge</em></td>
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<tr>
<th>Chronic Disease Model of Care</th>
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<tbody>
<tr>
<td><strong>Chronic Disease Model of Care: Juvenile Diabetes</strong></td>
</tr>
<tr>
<td><em>Diagnosis – ‘Fix it’? ‘No’ – intensive intervention upon diagnosis (education, liaison and resources with goal to self management and mitigation of secondary characteristics) – shared care with appropriate service providers – episodic care and interaction over time depending on need and capacity</em></td>
</tr>
<tr>
<td><strong>Chronic Disease Model of Care: Complex Developmental Impairment</strong></td>
</tr>
<tr>
<td><em>Identification – ‘Fix it’? ‘No’ – intensive intervention upon diagnosis (education, liaison and resources with goal to self management and mitigation of secondary characteristics) – shared care with appropriate service providers – episodic care and interaction over time depending on need and capacity</em></td>
</tr>
</tbody>
</table>
APPENDIX 2:

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 the Child Health Nurse works with his mother to complete a developmental screen. Ethan is not yet walking but neither his mother nor the Child Health Nurse are concerned, and the Child Health Nurse talks with Ethan’s mother about how to support his motor 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 5 yr old boy. His mother presents because his teacher at the C & K Kindy he attends 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: Specialist 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:
Tannie is six years old. She was diagnosed with ASD when she was 2yo and has responded well to early intervention. Some difficulties persist but Tannie’s father is concerned that the ASD diagnosis no longer describes Tannie’s strengths and challenges and that it negatively influences the way in which Tannie is engaged at school. Tannie’s mother is concerned that challenging the diagnosis will disadvantage Tannie in terms of funding for support within the classroom. There is not a common understanding of Tannie’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 the school. Her mother is very concerned about this as Tarnie is familiar with and happy in her current educational context, and finds unfamiliar social environments very stressful.

**Case study 3:**
Fiona is 3 year old who 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 during the session. During discussions with her mother, the physio is told 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 4 year old boy who has a history of delayed acquisition and poor functional application of language, motor and social skills. He has Tuberous Sclerosis and requires periodic follow up by his paediatric neurologist. He has recently required hospital admission (QCH) because of the onset of intractable seizures. His day to day functioning has been deteriorating over the last 3 months and it is unclear whether this is related to more subtle unrecognised seizures. His school placement (Prep) had become very 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.
## APPENDIX 4:

### National Population Analysis

Australian population 12/4/2012 = 22,874,962  
Population data from ABS and based on estimates as of 20/9/2011

<table>
<thead>
<tr>
<th>State</th>
<th>Capital and population</th>
<th>Largest other city + population</th>
<th>5th largest city + population *</th>
<th>Geographical area (land)</th>
<th>Number and % pop &lt;15yo</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aust. Capital Territory</strong> 365 600</td>
<td>Canberra 365 240 (99.9%)</td>
<td>NA</td>
<td>NA</td>
<td>2280 km²</td>
<td>18.4% 66 000</td>
</tr>
<tr>
<td>New South Wales 7.32 million</td>
<td>Sydney 4.63 million (63%)</td>
<td>Newcastle 517 511</td>
<td>Coffs Harbour 53 798</td>
<td>800 642 km²</td>
<td>18.7% 1.36 mill</td>
</tr>
<tr>
<td>Northern Territory 230 400</td>
<td>Darwin incl Palmerston 128 100 (56%)</td>
<td>Central NT (incl Alice Sp) 41 021</td>
<td>NA</td>
<td>1 349 129 km²</td>
<td>23.1% 53 100</td>
</tr>
<tr>
<td>Queensland 4.58 million</td>
<td>Brisbane 2.07 million (45%)**BMR</td>
<td>Gold Coast 536 480</td>
<td>Toowoomba 132 936</td>
<td>1 730 648 km²</td>
<td>20% 916 000</td>
</tr>
<tr>
<td>South Australia 1.66 million</td>
<td>Adelaide 1.21 million (73%)</td>
<td>Mt Barker 31 068</td>
<td>Port Lincoln 14 739</td>
<td>379 725 km²</td>
<td>17.8% 293 200</td>
</tr>
<tr>
<td>Tasmania 510 519</td>
<td>Hobart 216 656 (42%)</td>
<td>Launceston 106 655</td>
<td>NA</td>
<td>68 401 km²</td>
<td>19.2% 97 600</td>
</tr>
<tr>
<td>Victoria 5.64 million</td>
<td>Melbourne 4.14 million (74%)</td>
<td>Geelong 180 805</td>
<td>Mildura 50 909</td>
<td>237 629 km²</td>
<td>18.3% 1.02 mill</td>
</tr>
<tr>
<td>Western Australia 2.35 million</td>
<td>Perth 1.74 million (74%)</td>
<td>Mandurah 89 559</td>
<td>Kalgoorlie 32 841</td>
<td>2 529 875 km²</td>
<td>18.9% 445 800</td>
</tr>
</tbody>
</table>

Report of the Queensland Statewide Child and Youth Clinical Network, Child Development Subnetwork
APPENDIX 5:

Directory of Specialist Child Development Services in the Queensland Department of Health

CDS Cairns & Hinterland:
Address of primary location: 381 Sheridan St, Cairns North
Postal Address: PO Box 1055, Cairns North, Qld, 4870
Phone: 07 4226 4323

CDS Central Queensland (Rockhampton):
Address of primary location: 82-86 Bolsover Street, Rockhampton, 4700
Phone: 07 4920 6900 (reception)

CDS Darling Downs (Toowoomba):
Address of primary location:
Postal Address: PMB 2, Toowoomba, 4350
Phone: 07 4616 6812

Child Development and Behaviour Service (Gold Coast):
Address of primary location: Bundall Community Health Centre, level 6/8-10 Karp Court, Bundall
Postal Address: PO Box 5699, Bundall, 9726
Phone: 07 5570 8553
Fax: 07 5570 8595

CDS Mackay:
Address of primary location: Mackay Community Health, Nelson Street, Mackay, 4740
Phone Reception: 07 4968 3863
Phone Clinical Lead: 07 4968 3751
Fax: 07 4968 3875

CDS Sunshine Coast:
Address of primary location: Block 2 Level 1 Nambour Hospital, Hospital Rd, Nambour
Postal Address: PO Box 547, Nambour, 4560
Phone Reception: 07 5470 6191
Phone Team Leader: 07 5470 6193
Fax: 07 5470 6766

CDS Townsville:
Address of primary location: Kirwan Health Campus, 138 Thuringowa Drive, Kirwan, 4814
Phone: 07 4799 9000

CDS Wide Bay:
Bundaberg:
Address of primary location: Bundaberg Hospital
Postal Address: PO Box 34, Bundaberg, 4670
Phone: 07 4303 8590
Fax: 07 4303 8599
Fraser Coast:
Address of primary location: The Village, Hervey Bay
Postal Address: PO Box 1073, Hervey Bay, Qld, 4655
Phone: 07 4122 8733
Fax: 07 4128 5449

CDS Brisbane Metropolitan:

CDS Bayside:
Address of primary location: Wynnum Health Service Centre, 128 Whiles Rd, Lota, 4179
Phone: 07 3893 8111
Fax: 07 3893 8110

CDS Keperra:
Address of primary location: North West Community Health Centre, Corrigan Street, Keperra, 4854
Phone: 07 3335 8888

CDS Strathpine:
Address of primary location: 568 Gympie Road, Strathpine
Phone: 07 3817 6367

CDS Brisbane South:
Location 1: Upper Mt Gravatt
Address: Level 3, 12 Mt Gravatt-Capalaba Road, Upper Mt Gravatt, Qld, 4122
Phone: 07 3343 4104
Fax: 07 3219 2108

Location 2: Inala
Address: 64 Wirraway Parade, Inala, Qld, 4077
Phone: 07 3275 5482
Fax: 07 3275 5319

CDS Logan-Beaudesert:
Address of primary location: Browns Plains Community Health Centre, Corner Middle Road and Wineglass Drive, Hillcrest, 4118
Phone: 07 3412 3100

CDS Northlakes:
Address of primary location: 9 Endeavour Boulevard, Northlakes, 4509
Phone: 07 3049 1523
Fax: 07 3049 1567

Therapy and Support Services for Children (West Moreton):
Address of primary location:
Ipswich Community Health Plaza, 21 Bell Street, Ipswich 4305
Postal address: PO Box 878, Ipswich 4305
Phone: 07 3817 2324
Fax: 07 38172453 (Community Health Central Intake Number)
### APPENDIX 6:

#### Other Jurisdictions’ Service Standards Documents Reviewed

<table>
<thead>
<tr>
<th>Document; Publication Date; Organisation</th>
<th>Structure of Document</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>From Best Practices to Standards: The Ontario Association for Infant and Child Development’s Experience in the Pursuit of Excellence</em>&lt;br&gt;March 2009&lt;br&gt;Ontario Association for Infant and Child Development&lt;br&gt;28pg excluding appendices</td>
<td>Introduction and background to project to deliver standards (6 pages)&lt;br&gt;8 Area Statements&lt;br&gt;24 Standard Statement (grouped under AS)&lt;br&gt;1-5 Indicators per Standard Statement&lt;br&gt;Sources of Measurement (multiple per Indicator)</td>
</tr>
<tr>
<td><em>Standards for Child Development Services: a guide for Commissioners and Providers</em>&lt;br&gt;April 1999&lt;br&gt;British Association for Community Child Health Child Development and Disability Group&lt;br&gt;28pg total</td>
<td>Descriptive Guide (16 pages in total)&lt;br&gt;Brief outline of Principles included&lt;br&gt;Also descriptions of primary, secondary and tertiary level services</td>
</tr>
<tr>
<td><em>Maternal and Child Health Service Program Standards</em>&lt;br&gt;October 2009&lt;br&gt;Department of Education and Early Childhood Development (Victoria)&lt;br&gt;66pg excluding appendices</td>
<td>Introduction including vision, principles, services overview (4 pages).&lt;br&gt;Background to program standards (3 pages)&lt;br&gt;6 Standards with rationale per Standard&lt;br&gt;3-5 Criteria Elements per Standard&lt;br&gt;2-9 Performance Criteria per Criteria Element&lt;br&gt;Examples of Evidence under Criteria Elements&lt;br&gt;ALSO had description of guiding principles</td>
</tr>
<tr>
<td><em>National Standards for Mental Health Services</em>&lt;br&gt;2010&lt;br&gt;Australian Government&lt;br&gt;52pg total</td>
<td>Preamble (Foreward) 3 pages&lt;br&gt;Key Principles description&lt;br&gt;10 Standards (Standard 10 also had 6 sub-standards)&lt;br&gt;5-18 Criteria per Standard or Sub-Standard</td>
</tr>
</tbody>
</table>
**APPENDIX 7:**

**Principles of Practice Self Evaluation**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Evidence of Application</th>
<th>Apply</th>
<th>Don’t Apply</th>
<th>Apply in Part</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8.1.1</strong> Understanding the Early Childhood Period a part of the Lifecourse</td>
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<tr>
<td><strong>8.1.2</strong> Early Intervention</td>
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<tr>
<td><strong>8.1.3</strong> Ecological Model of Development</td>
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<td><strong>8.1.4</strong> Equity-Based Service Planning and Provision</td>
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<td><strong>8.1.5</strong> Evidence Informed Practice</td>
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<td><strong>8.1.6</strong> Family Centred Practice</td>
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<td><strong>8.1.7</strong> Transdisciplinary Care</td>
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<tr>
<td><strong>8.1.8</strong> Chronic Disease Approach to Care</td>
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### APPENDIX 8:

#### Service Standards Self Evaluation

<table>
<thead>
<tr>
<th>Standard Area</th>
<th>Standard Area</th>
<th>Met</th>
<th>Unmet</th>
<th>Met in Part</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8.2.1 Access</strong></td>
<td>Each specialist CDS maintains active engagement with the SCYCN CDWG and the network of CDS statewide</td>
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<td></td>
<td>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.</td>
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<td></td>
<td>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. This ensures a holistic perspective of child development across developmental domains and enables comprehensive, specialist level assessment, diagnosis and support</td>
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<tr>
<td><strong>8.2.2 Entry/Intake</strong></td>
<td>Clinical intake is planned and coordinated by a dedicated Clinical Intake Officer. This may be a stand-alone Clinical Intake position, or clinical hours specifically allocated to intake and entry. This needs to be a consistent appointment over time</td>
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<td>Standard Area</td>
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<td>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</td>
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<td><strong>8.2.4 Assessment and Review</strong></td>
<td>CDS teams employ both standardised and non-standardised tools for assessment, that are administered, implemented and integrated in an evidence informed way</td>
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<td>Multidisciplinary diagnostic formulation and case conferencing is available for children for whom diagnosis may be difficult, and co-morbidities are evident</td>
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<td></td>
<td>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</td>
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<td>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 findings of the multidisciplinary team</td>
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<td>Standard Area</td>
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<td><strong>8.2.5 Treatment and Support</strong></td>
<td>Clinicians are responsible for working in partnership with child and their family and other health professionals to determine priorities for support</td>
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<td></td>
<td>Clinicians working in CDS select and implement intervention strategies in a rigorous and objective way (CCCH Policy Brief 21)</td>
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<td>Clinicians employ multi-level interventions that address factors that directly and/or indirectly shape a child’s development and function (CCCH Concept Brief 24)</td>
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<td>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)</td>
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<td>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</td>
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<td>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</td>
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<td>Clinicians within the CDS apply a strengths and resiliency based approach to intervention and reporting</td>
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<td><strong>8.2.6 Exit and Re-Entry</strong></td>
<td>CDS ensures that families are linked into alternative or subsequent service providers if required and where possible upon exiting the service</td>
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<td>Discharge planning is a clear and collaborative process that involves stakeholders including clinicians and care givers and that begins upon entry to the service</td>
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<td>CDS must establish re-entry pathways for children who have:</td>
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<td>• a diagnosis that no longer supports an understanding of their needs or that adequately describes their functional status.</td>
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<td>• medical complexities comorbid to their developmental impairments</td>
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