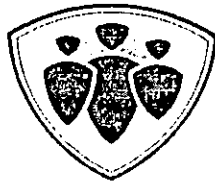


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MID-WESTERN
HEALTH BOARD

Regional Child Development Service

Draft Proposal for a Regional Child Development Service, providing a multidisciplinary assessment, diagnostic and intervention service for children with developmental delay.

Final Draft

Glossary of Terms

Assessment: involves gathering of information by health service personnel to make critical decisions about a child. Assessment provides the basis for clinical problem solving, decision-making, selection and modification of intervention techniques or approaches to management. A variety of methods are used to gather assessment information, including observations of the child, physical examination, interviews with the family, checklists and rating scales, informal tests and standardized, formal tests. Standardised and non-standardised assessment tools may also be used. Assessment can be considered as the initial phase of, or precursor to, intervention as it provides a baseline and focus for treatment and programme implementation.

Diagnosis: is a more intensive evaluation than screening, which is a cursory method for obtaining general information about a child's development and detecting any potential problems. During the diagnostic process, information is obtained through observation, examination, interviews, case history, and informal and standardized tests. The diagnosis is made by the medical director, in consultation with the other members of the disciplinary team. Information collected through the diagnostic process leads to decisions about the nature and severity of the problem and assists in planning appropriate intervention.

Intervention: involves the managed treatment of a formally assessed and diagnosed condition with a view to the amelioration of the condition, within the biological and psychological limits of the condition. Generally, the earlier the intervention is delivered following diagnosis to the person who has the condition the more positive and long-term the outcome of the intervention for the person. This is particularly the case with young children whose developmental, neurological and psychological functioning is more malleable than is the case with older children and adults whose neurological and psychological functioning is significantly more set.

Mainstreaming: refers to the state policy process whereby services previously provided to persons with a disability in special settings, cut off from mainstream society, are instead provided in settings common to the mainstream of society. The state policy of mainstreaming is linked to the principle that, although persons with a disability have a handicap, they are no different from any other member of society in terms of rights and mainstreaming service provision enables the breaking down of the social barriers that turn a handicap into a disability

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Executive Summary

a) Statement of Need:

Of the group of children who have chronic illnesses that cause them to have a disability or special needs, a substantial group (*about 90% of the total group*) have a disability that is caused by impaired functioning of the nervous system. Some children exhibit developmental delay or disorder in one or more areas such as, language or motor development, whereas some have global developmental delay. Impairment of hearing, vision, fine or gross motor control, feeding and communication may affect others.

Most paediatricians would concur that such children require a dedicated multi-disciplinary service that differs from that of an standard paediatric consultation. Facilities that enable such children and young people with a disability achieve the maximum possible individual development and social integration are best provided in the context of a dedicated Child Development Service that provides assessment, diagnosis and appropriate intervention services. Due to the specialist nature of certain interventions required following assessment the regional service to be developed should incorporate elements of management and intervention.

No comprehensive specialist service is currently provided to the full range of children with developmental delay in the Mid-West Region. Presently many children from the Mid-West Region with complex developmental, physical/sensory and intellectual disability problems have to travel to other centres outside the region to access specific assessment and intervention services.. Assessments for specific disabilities can involve lengthy travel, disruption of family/work situations and the incurring of additional cost to the family. There is a need to develop a 'one-stop-shop' approach to the delivery of these services

No. of Potential Clients Accessing Child Development Service Annually:

No valid Irish incidence rates exist due to the absence of an Irish Congenital Anomaly Register. (The genesis of an Irish Register has been developed in the Southern Health Board and, to a lesser extent in the Western Health Board). In the absence of comprehensive Irish incidence rates, Irish and international prevalence rates (where available) have been used to compute statistics of the potential number of clients who would annually require the child development service in the region. (See Appendix 1). The computation yields the following data:

Table 1: Estimated Number of Potential Clients Requiring Child Development Service Annually Using Prevalence Rates Computation.

Area	No. (0-5 yrs.) Base Data	+ 30% for Outruling ¹	Gross Total (0-5 yrs.)	% of Total Population of Mid-West
Mid-West Region	2436	731	3167	1%

Note: A certain percentage of clients referred to the service will be clients who will be eventually ruled out of having the condition for which they were referred for assessment. A figure of 30% for outruling of clients requires to be added to the base data in order to arrive at an estimate of the gross number of clients who will access the overall service

An additional estimate can be derived, based on the experience of UK Child Development Centres, whereby an estimate of the numbers accessing Regional Child Development Centres would be 2.5 % of the annual number of births in the catchment area and an estimate of the numbers accessing the Satellite Child Development Centres would be 6 –8 % of the annual number of births. Table 2 below sets out the estimated number of first referrals accessing the service based on these criteria.

Table 2: Estimated Number of First Referrals Accessing Child Development Service Annually (Using UK Experience as Basis of Computation).

Annual Number of Births in Mid-West Region (2000)	Percentage of 1 st Referrals Annually Accessing Regional CDC (2.5%)	Percentage of 1 st Referrals Annually Accessing Satellite CDCs (6 – 8%)	Total No. of 1 st Referrals annually Accessing CDS
4,800	120	288 - 384	408 - 504

b) Proposed Service:

The development of a multidisciplinary Regional Child Development Service is proposed for children with developmental delay that will enable the mainstreaming of assessment, diagnostic and intervention services for children with physical/sensory and intellectual disability. The presentation of the proposed Child Development Service is outlined under the following headings: (i) Ethos of Service and (ii) Geographic Model of Service.

⌘ Ethos of Service:

Principles governing the operation of the service should include:

- 1) The needs of the child are paramount
- 2) Services should be needs-led
- 3) Services should be child-friendly
- 4) Partnership with parents and carers
- 5) Integrated services
- 6) Services should be appropriate for the child's cultural background
- 7) Families should have effective representation and complaints procedures.
- 8) Quality control of services should be established through monitoring and review/audit/clinical governance.

⌘ Geographic Model of Service:

The proposed model involves:

The development of a Regional Child Development Centre (CDC) in Limerick City and satellite Child Development Centres in Ennis, Nenagh and Newcastle West. In order to have ease of access to diagnostic facilities and specialist consultant

services the centres require to be located close to acute hospital centres, as far as possible.

The Regional Centre would have a dual function of:

- ④ providing specialist assessment, diagnosis and intervention services for the region and
- ④ providing initial 'examinations', reviews, maintenance, specialist referrals to the Regional CDC and other centres, together with an outreach service to Limerick City & East Limerick at a satellite centre incorporated into the Regional Centre.

Regional Services Envisaged for the Regional Child Development Centre include:

- ③ **Specialist Medical Consultations**
- ③ **Consultations by Therapists**
- ③ **Access to Specialist Secondary Services:**
- ③ **Specialist Tertiary Consultations**
- ③ **Regional Assistive Technology Service**
- ③ **Sensory Integration Programme**
- ③ **Regional Paediatric Feeding Service**
- ③ **Chiropody/Podiatry Service.**
- ③ **Social Work & Community Welfare Service**
- ③ **Counselling Service to families**
- ③ **Regional Information Resource Centre**
- ③ **Referrals to Regional Audiology Service**
- ③ **Referrals to Seating Clinics.**
- ③ **Active Input from Education Sector**

Services Envisaged for the Satellite Child Development Centre include:

Dedicated local CDCs, operating as satellite centres of the regional CDC, require to be strategically located throughout the region in recognition of the need to provide locally-based centres close to the community and home of the individual user of the service and in pursuance of the Board's commitment to geographic equity of service provision. The satellite centres would act as the first point of access to the Regional Child Development Service by providing a multidisciplinary 'paediatric examination' of children referred to the local service. Children would only go to the Regional CDC if a specialist input that could not be provided locally was required. A lead clinical role in the operation of the satellite CDCs will be taken by the Community Paediatrician, with a special interest in children with a disability.

- ③ Initial 'paediatric examinations'
- ③ Reviews
- ③ Maintenance of ongoing interdisciplinary interventions
- ③ Specialist referrals to the Regional CDC (as required)
- ③ Outreach early intervention service.
- ③ Family support services
- ③ Referrals to Audiology Clinic
- ③ Referrals to Seating Clinic.

The Child Development Service, as outlined in this proposal, is an outline of the services as currently envisaged. The experience in the United Kingdom of their Child Development Services over a period of more than 15 years is that significant refinement and adaption of the original concept was required in order to arrive at the current state of service delivery to those accessing the service. The concept and model outlined in the present proposal will be subject to evolutionary change and adaption as implementation of the service dictates.

Regional Child Development Service

(1) Statement of Need:

Of the group of children who have chronic illnesses that cause them to have a disability or special needs, a substantial group (*about 90% of the total group*) have a disability that is caused by impaired functioning of the nervous system. Some children exhibit developmental delay or disorder in one or more areas such as, language or motor development, whereas some have global developmental delay. Impairment of hearing, vision, fine or gross motor control, feeding and communication may affect others. Such children require a different form of service and approach to that provided by hospital or other paediatric clinics. This client group includes children, at one end of the spectrum, that have multiple disabilities, complex neurological problems or physical problems that are augmented by behavioural and psychological difficulties. At the other end, it includes a group of children who at times require reviews by a multidisciplinary team of professionals with skills and experience that are complementary, while at other times the child and family might be better dealt with by one member of the group. Most paediatricians would concur that such children require a dedicated multi-disciplinary service that differs from that of an standard paediatric consultation. (BACCH, 1999:1 - British Association for Community Child Health).

Facilities that enable such children and young people with a disability achieve the maximum possible individual development and social integration is a right to which they and their families are entitled. These facilities are best provided in the context of a dedicated Child Development Service that provides assessment, diagnosis and appropriate intervention services. (BACCH, 1999:2).

In Child Development Centres, assessment and diagnosis should be a multi-disciplinary process that:

- ③ Involves the parents.
- ③ Involves contact with the home.
- ③ Includes specialist assessment of hearing and vision.
- ③ Includes appropriate medical investigations, with access to diagnostic facilities.
- ③ Assesses the needs of the family as a whole.
- ③ Includes an assessment summary, containing not only the medical diagnosis but particular functional problems specific to the child.
- ③ Includes a process for the coordination of treatment plans.

- ③ Includes a written holistic treatment programme that should be produced with specific intervention goals which correlate with the problem oriented assessment.
- ③ Produces a written report for relevant professionals that is also given to parents.
- ③ Includes feedback to parents.
- ③ Includes a periodic review system. (BACCH, 1999: 3)

Due to the specialist nature of certain interventions required for many of this client group following assessment the regional service to be developed should incorporate elements of management and intervention.

The elements of an early intervention service include:

- ③ The service should be delivered by a multidisciplinary team comprising the following core members: medical doctor, nurse, occupational therapist, physiotherapist, speech and language therapist, psychologist, educator, social worker and parent.
- ③ The early intervention team should be led by a team coordinator.
- ③ The service should be delivered in partnership with parents, including partnership with respect to policy making.
- ③ Parents should be involved in all decisions relating to their child. Services should be structured in such a way as to permit maximum flexibility in order to meet the needs of the families and to support them in the care of their child with a disability at home and in their community.
- ③ Parents should be provided with clear information regarding the diagnosis of their child's disability, a statement of needs and a statement of the services from which the child would benefit.
- ③ Comprehensive family counselling services should be available. These would include crisis counselling, grief and bereavement counselling, genetic counselling and ongoing counselling in relation to changing needs. Onward referral to specialist counselling services should be made where appropriate.
- ③ A flexible in-home support service, which would be available to take into account the families needs. These support services would be available to families where there is a very dependent and/or ill child, a child with significant challenging behaviour or a family where there are a number of children with a disability.

- ③ A variety of service delivery structures should be available to meet the needs of the family and child, acknowledging that these needs can change over time. These include:-
 - ξ Home based programmes;
 - ξ Centre based programmes;
 - ξ Combination of home and centre based programmes;
 - ξ Adequate crisis and respite services;
- ③ A flexible system of home support for the children with significant needs, who live in rural areas and cannot attend specialist services.
- ③ Parent, sibling and extended family support groups: professional facilitation of these support groups is necessary particularly for parents of very young children with disability.
 - ξ Parent Training: a diverse range of courses and workshops to be available for parents and families, including residential intensive courses that would allow parents to thoroughly access information on their child's condition. (NAMHI, 1)

Presently many children from the Mid-West Region with complex developmental, physical/sensory and intellectual disability problems have to travel to other centres outside the region to access specific assessment and intervention services. Assessments for specific disabilities can involve lengthy travel, disruption of family/work situations and the incurring of additional cost to the family. In some cases, social or emotional difficulties may militate against some families availing of services at such remove from their locality. (DOH, 1996: 1) The need for a regional response to the above pattern of access to assessment and intervention services has been identified by specialist staff of the Mid-Western Health Board and parents of such children. No comprehensive specialist service is currently provided to the full range of children with developmental delay in the Mid-West Region.

Number of Potential Clients Accessing Child Development Service Annually:

Ideally, the number of potential clients accessing the service annually would be computed by identifying the list of potential conditions that the service would be expected to deal with initially and by obtaining Irish incidence rates for these conditions to compute a composite potential number of clients, using the census data for the Mid-West Region. However, no valid Irish incidence rates exist due to the absence of an Irish Congenital Anomaly Register. (The genesis of an Irish Register has been developed in the Southern Health Board and, to a lesser extent in the Western Health Board).

In the absence of Irish incidence rates, Irish and international prevalence rates (where available) have been used to compute statistics of the potential number of clients who would annually access the child development service in the region. (See Appendix 1). The computation yields the following data:

Table 1: Estimated Number of Potential Clients Requiring Child Development Service Annually Using Prevalence Rates Computation.

Area	No. (0-5 yrs.) Base Data	+ 30% for Outruling ¹	Gross Total (0-5 yrs.)
Clare	753	226	979
Limerick Co. Borough	393	118	511
Limerick County	848	254	1102
Tipperary (N.R.)	442	133	575
Mid-West Region	2436	731	3167

Note: A certain percentage of clients referred to the service will be clients who will be eventually ruled out of having the condition for which they were referred for assessment. A figure of 30% for outruling of clients requires to be added to the base data in order to arrive at an estimate of the gross number of clients who will access the overall service

An additional estimate can be derived, based on the experience of UK Child Development Centres, whereby an estimate of the numbers accessing Regional Child Development Centres would be 2.5 % of the annual number of births in the catchment area and an estimate of the numbers accessing the Satellite Child Development Centres would be 6 –8 % of the annual number of births. Table 2 below sets out the estimated number of first referrals accessing the service based on these criteria.

Table 2: Estimated Number of First Referrals Accessing Child Development Service Annually (Using UK Experience as Basis of Computation).

Annual Number of Births in Mid-West Region (2000)	Percentage of 1 st Referrals Annually Accessing Regional CDC (2.5%)	Percentage of 1 st Referrals Annually Accessing Satellite CDCs (6 – 8%)	Total No. of 1 st Referrals annually Accessing CDS
4,800	120	288 - 384	408 - 504

The following comments apply to both sets of computed data:

- ⊙ Unlike in many other countries, abortion, is not legally an option in this country for future parents of children diagnosed in the womb, through the procedure of amniocentesis, as suffering from a disability. This implies that the incidence of children born with congenital developmental delay would be higher in this country than international prevalence rates or experience would suggest.
- ⊙ International rates for childhood survivors of traumatic brain injury has not been possible to source but, though the numbers regionally would be small,

they require an enormous amount of care and effort and consume considerable resources.

- ⑨ Children with speech delay are an exceedingly important sub-group as early intervention in some of them makes a significant difference in the long-term. A high single percentage would have isolated speech delay and while this would be maturational in the majority of them it is not evident early on whether it is an isolated problem or part of generalised developmental delay. These children often end up being assessed and the conclusion is drawn that all they need is speech therapy and they don't have other developmental delay.
- ⑨ A lot of the children who will attend the Regional Child Development Centre will tend to get recurrent illnesses and will often need to be seen acutely there when they develop problems.
- ⑨ Children with Cerebral Palsy are now living longer because of better nutritional care and control of epilepsy. This means that they get a lot more intercurrent illnesses and workload with this group has consequently substantially increased.

(2) National and Regional Policy:

National and regional policy supports the thrust of argument for development of the above service:

- ⑨ The Report of the Commission on the Status of People with Disabilities, '*A Strategy for Equality*', emphasised the need for multidisciplinary based assessments that are person-centred, include user involvement and involve services that are locally-based and accessible. (DOE&LR, 1996: 1)
- ⑨ The Report of the Review Group on Health and Personal Social Services for People with Physical or Sensory Disabilities, '*Towards an Independent Future*', which outlined the development of services for persons with a physical or sensory disability, recommended the establishment of regional child assessment teams in each health board region that should be headed by a professional with special competence in disability. The team envisaged would include a consultant paediatrician, physiotherapist, speech & language therapist, occupational therapist, psychologist, social worker and family support worker. (DOH, 1996: 2)
- ⑨ The Mid-Western Health Board's *Strategy Statement on Child Health* proposed the development of a multidisciplinary assessment facility that would allow joint assessment, treatment planning, progress evaluation and communication between hospital and community based professionals concerned with this client group. (MWHB, 1999, 1)
- ⑨ The Mid-Western Health Board's *Strategy Statements on Intellectual Disability and on Physical or Sensory Disability* structure services within a continuum of support that is adaptable and flexible in response to the complex needs of client groups with a disability. The components of the model are:

- ③ **Preventative Support** : there are a range of preventative measures that can be implemented to reduce the incidence of disability.
- ③ **Anticipatory Support**:services and structures are required that anticipate the needs of persons with a disability.
- ③ **Home and Community Support**: provision of effective home and community services that can be adapted to individual needs is central to the objective of enabling persons with a disability to live as independently as possible in the community.
- ③ **Respite/Residential Support**: There is an ongoing need for the provision of respite support and a continued need for residential support facilities.

The Strategy Statements buttressed the proposal for development of a regional diagnostic and assessment service that would offer a 'one stop shop' professional service in the context of the 'anticipatory support' element of the continuum. (MWHB, 2000; 1 & 2)

(3) Proposed Service:

The development of a multidisciplinary Regional Child Development Service is proposed that will enable the mainstreaming of diagnostic, assessment and intervention services for children with physical/sensory and intellectual disabilities.

The Child Development Service, as outlined in this proposal, is an outline of the services as currently envisaged. The experience in the United Kingdom of their Child Development Services over a period of more than 15 years is that significant refinement and adaption of the original concept was required in order to arrive at the current state of service delivery to those accessing the service. The concept and model outlined in the present proposal will be subject to evolutionary change and adaption as implementation of the service dictates.

The presentation of the proposed Child Development Service is outlined under the following headings: (a) Ethos of Service (b) Geographic Model of Service and (c) Operational Model of Service.

(a) Ethos of Service:

The ethos of the service would reflect the recommendations of the Report, 'A Strategy for Equality', that assessments of persons with a disability should be broadened beyond a medically-based procedure to that of a comprehensive multidisciplinary, person-centred assessment of disability that "could involve disciplines like occupational therapy, rehabilitation, psychology, occupational psychology, compensatory education, medical services and social services." (DOE&LR, 1996: 1). The emphasis placed in the report, 'Towards an Independent Future', on developing a service-user centred health service, which utilises "a holistic

approach designed around the needs of individual service users rather than around the organisational structures of the services" would be adopted. (DOH, 1996: 3).

Principles, governing the operation of the service, should include:

- ③ The needs of the child are paramount
- ③ Services should be needs-led
- ③ Services should be child-friendly
- ③ Partnership with parents and carers
- ③ Integrated services
- ③ Services should be appropriate for the child's cultural background
- ③ Families should have effective independent representation and complaints procedures
- ③ Quality control of services should be established through monitoring, inspection and review/audit/clinical governance. (BACCH, 1999: 4 & NEHB, 2000: 1)

In line with the guiding principles of the UN Convention on the Rights of the Child:

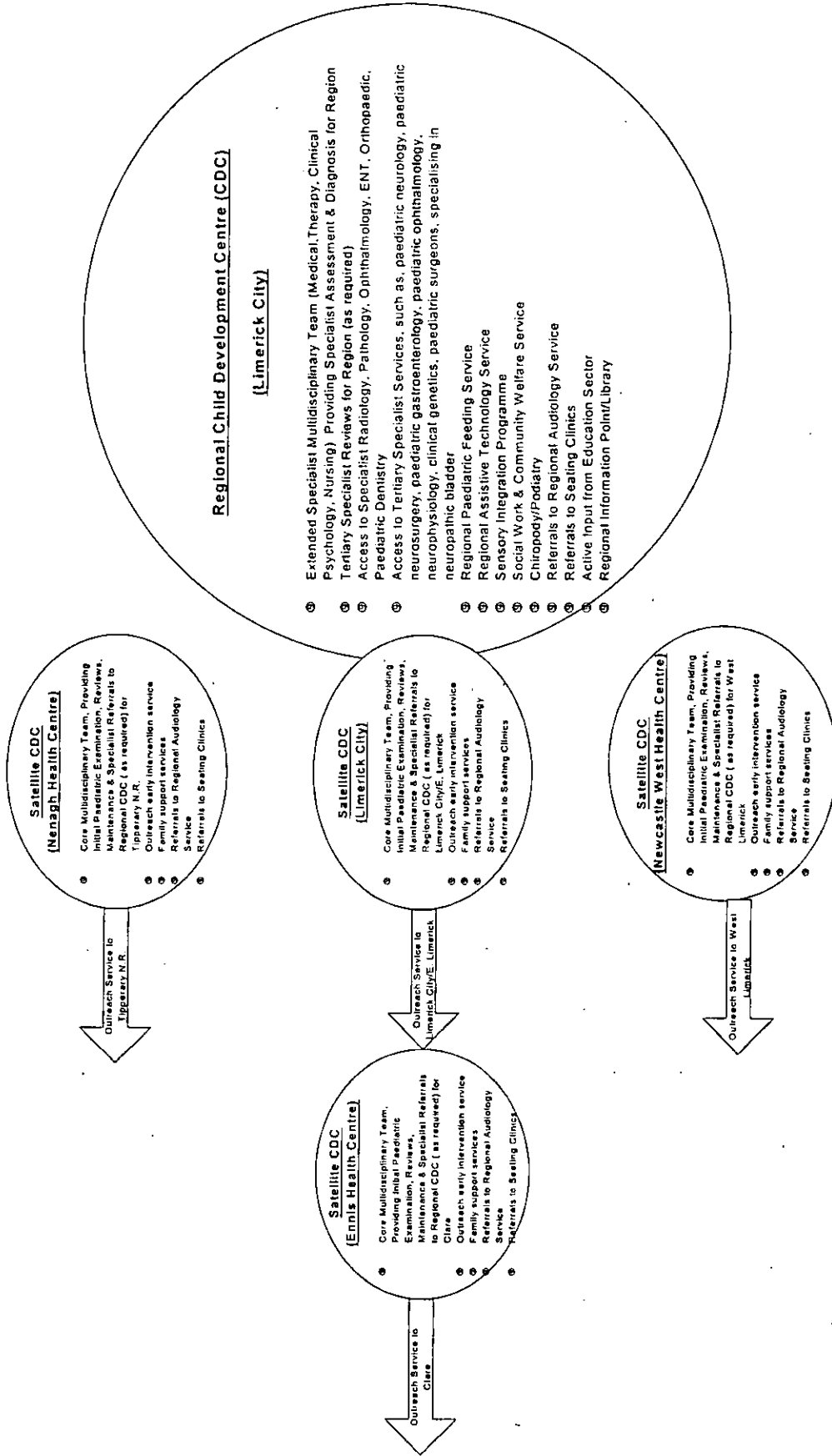
- ξ The best interests of the child should be the primary concern of decision-making
- ξ The views of children must be taken into account in matters affecting them.
- ξ The child with a disability has a right to special care (Article 23). (DOH& C, 2000: 1)

) **(b) Geographic Model of Service:**

The proposed model involves:

The development of a Regional Child Development Centre (CDC) in Limerick City and satellite Child Development Centres in Ennis, Nenagh and Newcastle West. In order to have ease of access to diagnostic facilities and specialist consultant services the centres require to be located close to acute hospital centres, as far as possible.

Geographic Model of Regional Child Development Service



(1) The Regional Centre would have a dual function of:

- ⑨ providing specialist assessment, diagnosis and intervention services for the region and
- ⑨ providing initial 'examinations', reviews, maintenance, specialist referrals to the Regional CDC and an outreach service to Limerick City & East Limerick at a satellite centre incorporated into the Regional Centre.

(i) Regional Services Envisaged for the Regional Child Development Centre include:

- ⑨ **Specialist Medical Consultations:** by paediatricians with a major interest in child development. These will be provided by consultant paediatricians and paediatric registrars operating from the Mid-Western Regional Hospital with particular expertise in diagnosis and assessment of children with developmental delay. Psychiatric consultations will also be provided on a sessional basis by the Health Board's Consultant Child/Adolescent Psychiatrists.
- ⑨ **Access to Specialist Secondary Services:** in the MWRH such as, specialist Radiology, Pathology, Ophthalmology, Paediatric Dentistry, Orthopaedic Surgery and ENT. The location of the Regional Child Development Centre on the campus of the Mid-Western Regional Hospital will facilitate access to these services.
- ⑨ **Specialist Tertiary Consultation:** including, paediatric neurology, paediatric neurosurgery, paediatric gastroenterology, paediatric ophthalmology, paediatric surgeons specialising in neuropathic bladder, neurophysiology, paediatric cardiology, clinical genetics, on a visiting sessional basis.
- ⑨ **Referrals to Regional Audiology Service:**
Permanent childhood hearing impairment (PCHI), which is defined as more than 40 decibel (dB) hearing loss, affects a child's social, emotional, intellectual and communicative development. Hearing-impaired children identified late are at risk of delay in acquiring language and communication skills; this is likely to affect educational achievement, mental health and quality of life. Audiology (hearing assessment) services in the Mid-West, which serve to identify the occurrence of hearing impairment, are provided both in the acute hospital setting and in the community. Audiology services require to be provided both to children and adults. Audiology referrals for children arise mainly for the following reasons:

Screening:

Primary screening is carried out by the AMO and PHN between the ages of 7-9 months using the distraction test to detect hearing loss. However because of staff shortages the timing varies and when carried out over the age of 10 months is less reliable. Children who do not pass the test are

retested one month later; if there is still a doubt they are currently referred for the diagnostic and assessment stage to Community audiology services.

Developmental Delay:

Many children who pass the distraction test are later referred for hearing assessment to the Community Audiology Service to outrule hearing impairment as a cause of developmental delay – they may be referred either by paediatricians, GPs or the Community Child Health Services. Children referred for Speech and Language therapy frequently require an up-to-date hearing assessment in order to exclude a hearing loss as a causative or contributory factor.

Otitis Media with Effusion (OME):

Otitis Media with Effusion [OME] is a condition where fluid in the middle ear cavity may impede transmission of sound to the inner ear - it may and often does produce a conductive hearing loss for the duration it exists. OME is treated by the surgical insertion of grommets where hearing loss is confirmed but has a high rate of natural resolution. For this reason children may need repeat audiological assessments prior to surgery which can be carried out in hospital for older age-groups– in the under 4 age-group these children may need to be referred to the Community Audiology service.

School Screening Service:

Children in the MWHB have their hearing screened at age 5-6 years (Senior Infants) and at varying intervals during primary school depending on the policy in the community care area. Children who fail a repeat test are referred for assessment to the Community Audiology service and subsequently to ENT services if indicated but with current waiting times may face long delays.

Future Service Development:

In parallel with national developments, consultants in the disciplines of paediatrics and ENT in the Mid-West have expressed concerns locally to the health boards management regarding unsatisfactory access to specialist audiology services for children, particularly infants at high-risk of hearing loss. The consensus has emerged that a single Audiology Service for the Region would best meet the needs of both hospital and community services because of the shortage of trained professionals and the crossover of patients between hospital, community and primary care services. Specialist opinion concurs that the 'hub and spoke' model would be the most suitable, with staff based in a central unit (Regional Audiology Centre), ideally on the Mid-Western Regional Hospital campus, to allow for integration with ENT and Paediatric services, with satellite service provision in Clare, Tipperary and, possibly, West Limerick. (MWHB, 2001: 1)

The optimum location for the proposed Regional Audiology Centre on the campus of the Mid-Western Regional Hospital would be on the ground

floor of the planned Maternity Unit. In the initial stages of development of the Regional Audiology Service referrals will be made from the Regional Child Development Centre to the Regional Audiology Centre where a specialised and dedicated service will be provided for children under five years of age, inclusive of those with developmental delay. Planning and construction of the Regional CDC will include the provision of a sound-proofed audiology room within the building, where, at a later stage of development of the Regional Audiology Service, audiology sessions will be held by the Audiological Scientist and support staff.

(A Working Party on Universal Neonatal Hearing Screening has been established by the Department of Health and Children to examine the issues surrounding the introduction of universal neonatal hearing screening for infants. Following completion of the Working Party's report, it is hoped to introduce a universal screening service over the coming years, as funding becomes available).

⑨ **Regional Assistive Technology Service:**

The objective of the regional AT Service would be to provide a regional consultancy and support service for local centres/services in the region.

The functions of the Regional AT Service would include:

- ③ Conduct assessment and issue recommendations
- ③ Support assessment procedures
- ③ Support local centres/services
- ③ Provide training to service users and relevant staff
- ③ Support equipment needs, provide information resource and a loan facility
- ③ Deliver an outreach service. (NEHB, 1999: 2)

⑩ **Sensory Integration Programme:**

A Sensory Integration Programme would be provided for children with coordination, sensory and motor difficulties and would consist of the provision of an intensive assessment and treatment programme to children with Sensory Motor Coordination problems, through a sensory integration programme. The core specialist team would comprise occupational therapy, speech & language therapy and physiotherapy. (NEHB, 2000: 3)

⑪ **Regional Paediatric Feeding Service:**

One of the most common and significant problems in Cerebral Palsy is a very high rate of feeding problems. These include, dysphagia, oral motor problems, risk of aspiration, reflux and developmental problems. (NEHB, 2000: 3) "The term dysphagia is used to describe difficulties in swallowing. These difficulties may co-exist with neurological or orofacial disorders...Dysphagia may result in inadequate/unsafe nutrition regimes and detailed diagnosis and intervention is necessary. Intervention in this

area requires a specialist multidisciplinary team and in many cases the use of radiographic techniques is necessary to ensure that diagnosis and intervention programmes are promoting safe nutrition."

"The consequences of oro-pharyngeal dysphagia can be severe: dehydration, malnutrition, aspiration, choking, pneumonia and death." (MWHB, 2001: 2)

Children with difficulties have been identified as a nutritionally vulnerable group. Infants and children with neuro-developmental difficulties are at risk of receiving inadequate due to the compromised position to swallow and chew. (MWHB, 2001: 2)

Aims & Principles of Service Delivery:

An assessment and intervention service would be provided.

- The aim of therapy is to ensure safe nutrition in an atmosphere that promotes the development of skills and positive communication.
- The child and his/her carer should be viewed holistically, their overall needs being taken into account.
- Eating and drinking should be viewed as a pleasurable event.
- The service will be provided in the context of a multi-disciplinary team with shared assessments, aims and objectives of therapy. (MWHB, 2001: 2)

□ **Chiropody/Podiatry Service:**

This resource is particularly needed by children with cerebral palsy and spina bifida.

□ **Counselling Service:**

Many families of children with a disability, including siblings, will have a need for counselling on issues arising from the occurrence of disability in their family. An on-site counselling service will be required to address this need.

□ **Social Work & Community Welfare Service:**

Social workers can provide a social assessment of the overall needs of this client group and assist in mobilising the appropriate services, in conjunction with other health and personal social service personnel. Together with client counselling, social workers will provide information and advocacy to families of this client group.

A close relationship has been shown to exist in a number of studies between disability and poverty. The families of children with a developmental delay or disability have to meet additional costs arising from the disability, including the need for aids and appliances, special food, medication, adaptations to their home and additional personal transport costs. A dedicated community welfare service is required, in conjunction with the Child Development Service, which will provide an

information role on entitlements to services and client focused work that will process specific requests to entitlements for families of this client group.

⑨ **Pre- School Support Service:**

Provision of early intensive support services in a pre-school environment of children under 5 years that is directed at their placement in mainstream pre-schools within their communities through provision of a comprehensive range of day services. Service provision will also include support to children with a disability or developmental delay who are attending integrated pre-schools by the early intervention team. (The provision of service to children with a disability in special pre-schools or in mainstream integrated pre-schools depends on the degree of disability, the preferences of the parents, the degree of accessibility of pre-school premises and the extent of staff, trained in service provision to children with a disability). (NEHB, 2000: 4)

⑨ **Active Liaison & Input from Education Sector:**

Children with a developmental delay or disability have special educational needs that inhibit them from benefiting adequately from the education, which is normally provided for pupils of the same age. Because of the close interaction of health and educational needs of such children actively operated structures that facilitate liaison between the two sectors, in respect of each individual child require institution. The recent decisions of the Department of Education and Science to fastrack the creation of the National Council for Special Education and to decentralise a number of the functions of the Department to Regional Offices that will be the first point of contact with the Department on many issues will facilitate such interaction. The issue of basing professionals from the Department of Education and Science in the Regional CDC will be actively examined.

⑨ **Regional Information Resource Centre:**

A freephone/Lo-call telephone information/helpline could be provided for region in the Regional CDC. A Regional Information Resource Centre, staffed part-time by an information officer, will offer a central point of information for parents, families and professional staff involved in accessing or providing a Child Development Service.

(ii) **Satellite Services for Limerick City & E. Limerick Envisaged for the Regional Child Development Centre include:**

- ③ Initial 'paediatric examinations'
- ③ Reviews
- ③ Maintenance of ongoing interdisciplinary interventions
- ③ Specialist referrals to the Regional CDC (as required)
- ③ Outreach early intervention service.
- ③ Family support services
- ③ Referrals to Audiology Clinic
- ③ Referrals to Seating Clinic.

(2) Satellite Child Development Centres:

Satellite CDCs would be located in Nenagh, Ennis and Newcastle West that would provide for Tipperary N.R., Clare and West Limerick (respectively):

The range of services envisaged for these satellite centres is the same as envisaged for the satellite service for Limerick City and E. Limerick incorporated into the Regional Child Development Centre. A possible location for the satellite CDCs is the health centres in Nenagh, Ennis and Newcastle West. (An alternative location, with the possibility of joint MWHB/Voluntary Organisation capital funding is the development of purpose built local CDCs).

(c) Operational Model of Service:

1) Regional Child Development Centre:

The regional assessment and intervention model at the Regional CDC would focus on the child within all his environments – family, pre-school, school and community – and the perceptions of the child and his/her family/carers on his/her problems and potential outcomes. Following comprehensive assessment an Individual Care Plan (ICP) that would integrate all elements of intervention would be agreed between the child, family and the team. In order to ensure that intervention is appropriately focused, progress monitored and resources deployed optimally each ICP would be reviewed at agreed intervals. (NEHB, 2000: 5)

(a) *The staffing of the Regional CDC will include a core multidisciplinary team including:*

- ③ Consultant community paediatrician (with specialist training in development and disability)
- ③ senior paediatric registrar (2 WTE)
- ③ senior physiotherapist
- ③ physiotherapist
- ③ senior speech and language therapist
- ③ speech and language therapist
- ③ senior occupational therapist
- ③ occupational therapist
- ③ clinical psychologist
- ③ family counsellor
- ③ nursing staff (qualified in the care of ill children)
- ③ play therapist
- ③ social worker
- ③ community welfare officer (0.5 WTE)
- ③ secretarial/administrative support (NEHB, 2000: 6)

(b) Additional Staffing:

- ③ audiological scientist
- ③ audiologist

(c) Sessional staffing at the Regional CDC will include:

- ③ paediatric neurologist
- ③ paediatric neurosurgeon
- ③ paediatric ophthalmologist and orthoptist (may include optometrist)(**expertise available locally**)
- ③ paediatric surgeon, specialising in neuropathic bladder
- ③ paediatric dental surgeon (**expertise available locally**)
- ③ paediatric gastroenterologist (**expertise available locally**)
- ③ neurophysiologist
- ③ cardiologist
- ③ clinical geneticist (**expertise available locally**)
- ③ orthopaedic surgeon (**expertise available locally**)
- ③ child psychiatrist (**expertise available locally**)
- ③ senior dietitian (**expertise available locally**)
- ③ resource worker – deaf/blind (BACCH, 1999: 5 & NEHB, 2000: 6)

(c) Regional Assistive Technology Service:

Staffing of the AT Service will include:

- ③ speech and language therapist
- ③ senior occupational therapist
- ③ senior technician/engineer
- ③ sessional input may be required from physiotherapy and clinical psychology services (NEHB, 2000: 6)

(d) Staffing of the Sensory Integration Service will include:

- ③ senior occupational therapist
- ③ psychologist (0.5 WTE) (NEHB, 2000: 6)

(e) Staffing of the Regional Paediatric Feeding Service:

The core team members are:

- ③ Senior Speech and Language Therapist
- ③ Senior Dietician
- ③ Senior Occupational Therapist

With support of: Clerical Grade IV.

Additional Team Members:

The involvement of other health service personnel is essential:

- ③ **Paediatric Consultants:** The Paediatric Consultant has responsibility for the medical management of the child, including area of medical history taking, impact of the medical condition on feeding and prescription of medication.
- ③ **Radiologist:** Videofluoroscopy will be a necessary part of assessment for some, but not all clients. Access to a specified radiology service is essential. The Speech & Language Therapist must attend videofluoscopic assessment and joint reporting by the Radiologist and Speech & Language Therapist is recommended.
- ③ **Clinical Psychologist:** There may be important issues around feeding for a client and their family e.g. parents attitude to food, psycho-social aspects of feeding, moving from tube feeding to oral feeding that can be assisted by a psychologist.
- ③ **Physiotherapist:** Involvement of a physiotherapist will be necessary in some cases, especially when advice on chest care is necessary. (MWHB, 2001: 3)

(f) *Family Support Services will include:*

- 1) Counselling and support to the child, parents and siblings.
- 2) Development of support group for parents/carers of children of early intervention services
- 3) Development of support group for children of school-going age

(g) *Other Services at the Regional CDC will include:*

- 1) Therapeutic summer camps for children attending the centre
- 2) Incorporation of transport **services** (NEHB, 2000: 7)

2) Satellite Child Development Centres:

Dedicated local CDCs, operating as satellite centres of the regional CDC, require to be strategically located throughout the region in recognition of the need to provide locally-based centres close to the community and home of the individual user of the service and in pursuance of the Board's commitment to geographic equity of service provision. The satellite centres would act as the first point of access to the Regional Child Development Service by providing a multidisciplinary 'paediatric examination' of children referred to the local service. Children would only go to the Regional CDC if a specialist input that could not be provided locally was required. Staff from the satellite centre that are familiar with the child's case history, would accompany each child referred to the Regional CDC.

A lead clinical role in the operation of the satellite CDCs could be taken by the Community Paediatrician, with a special interest in children with a disability. The staffing of the satellite CDCs would include:

- ③ senior physiotherapist
- ③ senior occupational therapist
- ③ senior speech and language therapist
- ③ senior clinical psychologist
- ③ senior social worker
- ③ nurse, qualified in the care of ill children
- ③ play therapist
- ③ secretarial /administrative support
- ③ sessional services of consultant community paediatrician (NEHB, 2000:4)

Specialist sessional staffing would be provided from the Regional CDC, as required, to assist in the 'paediatric examination' process.

Although much of the activity of the team would take place in the satellite centres, the team would also provide home based services as required. This would particularly be the case with the delivery of the area early intervention services that would operate out of the satellite CDCs. The early intervention services will be developed from the model of pilot early intervention service, currently being developed in West Limerick by the Brothers of Charity.

3) Partnership Staffing:

Additional staffing for specialist services may be recruited through partnership arrangement with specialist voluntary organisations providing services to children with a disability.

(4) Schedule of Accommodation:

(i) Regional Child Development Centre:

An area of circa 7,500 sq. feet would be required, involving the following space areas:

- 1) A room for the Physiotherapists
- 2) A room for the Speech Therapists
- 3) A room for the Occupational Therapists
- 4) A room for the Clinical Psychologist
- 5) A room for the Social Worker
- 6) A room for the Dietician
- 7) A procedures room for the Nurses
- 8) A room to enable measurement and weighing of children
- 9) A room for phlebotomy
- 10) A room for vision testing
- 11) A room for the paediatric feeding service

- 12) A suitably equipped room for ophthalmology.
- 13) 1 sound-treated rooms for the Audiology Service
- 14) Assisitive technology area
- 15) Sensory Integration area (shared)
- 16) Rooms for staff members (shared)
- 17) Internal play/pre-school activity area
- 18) A large treatment area that would be set out like a gymnasium with special aids
- 19) A suite of Consulting Rooms (some with observation facilities)
- 20) Observation rooms linked to assessment/treatment rooms by 2-way mirrors and AV linkup.
- 21) Large room for conferences/meetings
- 22) Facilities for office staff and case record storage.
- 23) Wheelchair accessible toilets and shower facility
- 24) Sluice room
- 25) Facilities to store equipment
- 26) Waiting areas for parents and children with soft play facilities, information area, quiet room for discussions between staff and parents, proper kitchen facilities and adequate toilet facilities (including a changing area).
- 27) Centre Library that would also include a separate computer room to facilitate the children's expertise in computer literacy and contain PCs with peer-reviewed literature on disability for access by parents and carers.

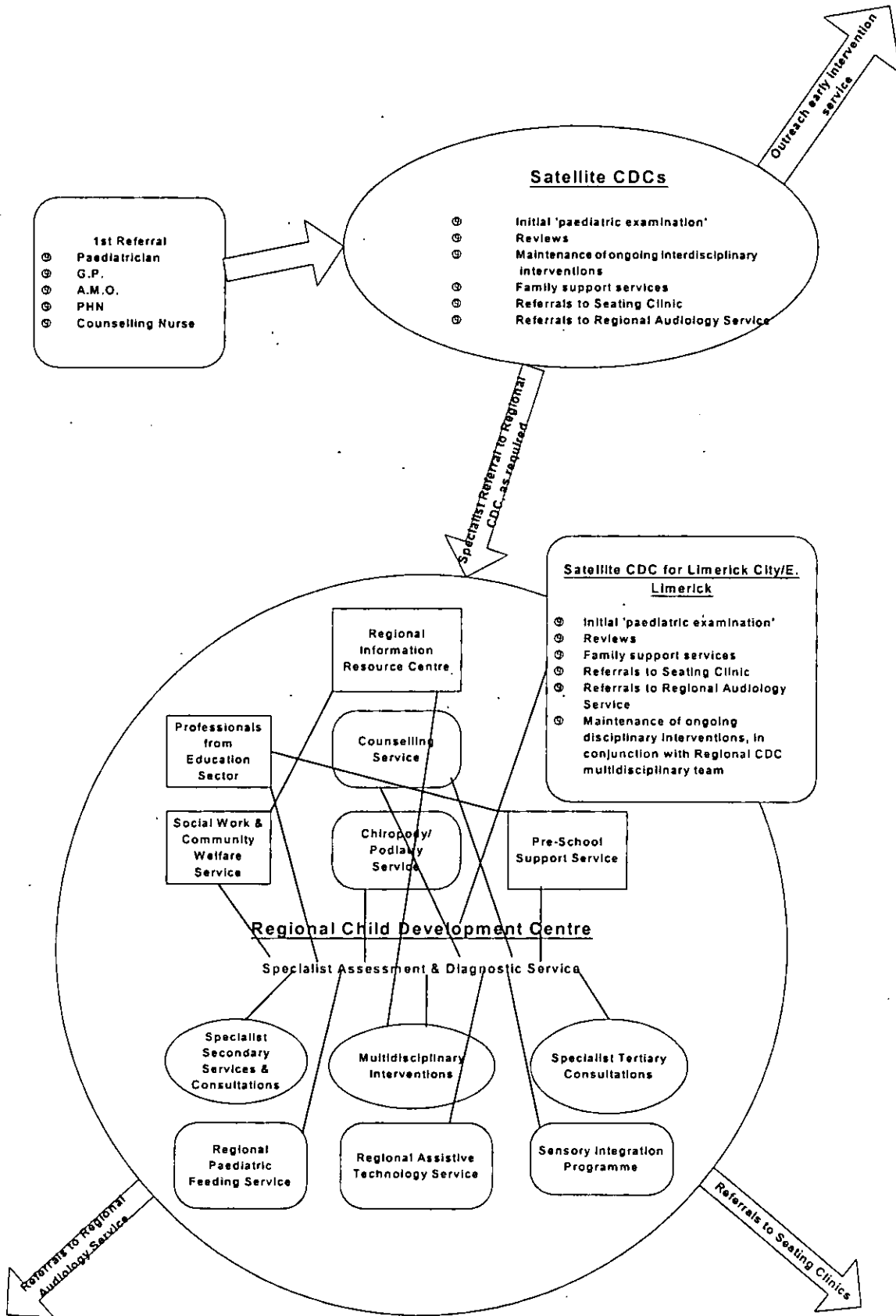
(ii) Satellite Child Development Centres:

- a) 2 large rooms for physio/occupational therapy
- b) 1 room for speech & language therapy
- c) 2 bookable rooms for other services, including Social Work, Psychology etc.
- d) General Consulting rooms
- e) Room for phlebotomy
- f) Nurses procedures room
- g) Sluice room
- h) A room to enable measurement and weighing of children
- i) Assistive technology area
- j) Sensory Integration facility
- k) Internal play area.
- l) Waiting areas for parents and children with soft play facilities, information area.
- m) Many rooms could be shared

All ground floor accommodation required (or some accommodation upstairs could be used for individual sessions, if accessible by lift) .

All buildings to comply with 'Buildings for Everyone' specification and be designed in child-friendly format, similar to the 'Children's Ark' at the Mid-Western Regional Hospital.

(5) Referral Pathways:



(6) Schedule of Pay Costs:

(a) Regional Child Development Centre:

Grade of Staff	Number (WTE)	Cost €
Senior Registrar	2	105,576
Senior Physiotherapist	1	39,296
Physiotherapist	1	31,612
Senior Speech & Language Therapist	1	39,296
Speech & Language Therapist	1	31,612
Senior Occupational Therapist	1	39,296
Occupational Therapist	1	31,612
Senior Clinical Psychologist	1	61,085
Family Counsellor	1	49,389
Senior Dietitian	1	39,296
Nurse	1	28,247
Senior Play Therapist	1	39,296
Social Worker	1	38,169
Community Welfare Officer	0.5	15,831
Audiological Scientist	1	38,404
Senior Audiologist	0.5	15,992
Administrative Grade IV	1	26,543
Secretarial Grade 3	2	44,385
TOTAL	19	714,937

(b) Satellite Child Development Centres:

Grade of Staff	Number (WTE)	Cost €
Senior Physiotherapist	4	157,180
Senior Occupational Therapist	4	157,180
Senior Speech & Language Therapist	4	157,180
Senior Clinical Psychologist	4	244,340
Senior Social Worker	4	181,264
Nurse	4	112,988
Play Therapist (Basic)	4	129,704
Secretarial Grade 3	4	88,768
TOTAL	32	1,228,604

(c) Combined Pay Costs - Regional and Satellite Child Development Centres:

Centre	Number (WTE)	Cost €
Regional CDC	18.5	714,937
Satellite CDCs	32	1,228,604
TOTAL	50.5	1,943,541

APPENDIX 1: Estimated Number of Potential Clients Requiring Child Development Service Annually (Census 1996 Data).

(1) Clare

No. of Children in Area (Census 1996):- (0 – 5 years): 6,701		
<i>Condition</i>	<i>Prevalence Rate</i>	<i>No. of Potential Clients (0 – 5)years</i>
(a) Motor Impairments		
(i) Cerebral Palsy:	2.5 per 1,000 ¹	17
Hemiplegia	30%	5
Diplegia	20%	3
Other Types	50%	9
(ii) Neural Tube Defects	1 per 1,000 ¹	7
(iii) Hydrocephalus	0.1 per 1,000 ¹	1 (approx.)
(iv) Clumsy Child Syndrome:		
Developmental Coordination Disorder	5% (Est.) ¹	335
Deficits in Attention, Motor Control and Perception	1 – 3% (Est.) ¹	67 - 201
(b) Neuromuscular Disorders		
(i) Duchenne muscular dystrophy	3 per 100,000	-
(ii) other neuromuscular disorders	no prevalence rate available	
(c) Other Chronic Neurological Disorders		
(i) Neurodegenerative Disorders	no prevalence rate available	
(ii) Survivors of Brain Infections (meningitis, encephalitis)	no prevalence rate available	
(iii) survivors of traumatic brain injury	no prevalence rate available	
(iv) Epilepsy (usually associated with other disorders to require Child Development Service)	0.8 % ¹	54

(d) Speech, Language and Communication Disorders		
(i) Isolated Speech Delay	1 per 1,000 ¹ (at school entry)	(approx.) 7
(ii) Severe Language Disorder	5 per 1,000 ¹	34
(iii) Autistic Spectrum Disorders (including Kanner Autism & Aspergers Syndrome)	58 per 10,000 ²	39
(e) Visual Impairment		
(i) Partially Sighted	0.4 per 1,000 ¹	(approx.) 3
(ii) Blind	0.3 per 1,000 ¹	2
(i) Significant Impairment (>50db loss in better ear)	1.5 per 1,000 ¹	10
(f) Intellectual Disability		
(i) Moderate Intellectual Disability	2.66 per 1,000 ³	(apprx.) 18
(ii) Severe Intellectual Disability	1.09 per 1,000 ³	7
(iii) Profound Intellectual Disability	0.31 per 1,000 ³	2

Sources:

- (1) 'Standards for Child Development Services: A Guide for commissioners and providers', British Association for Community Child Health - Child Development and Disability Group, 1999, p. 23.
- (2) Proposal for a Comprehensive Service for Children and Adults with Autistic Spectrum Disorder- Limerick City and County, July 2001, p.5.
- (3) Annual Report of the National Intellectual Disability Database - 1998/1999, 2000, p.5.

(2) Limerick Co. Borough

No. of Children in Area (Census 1996):- (0 – 5) years: 3,523		
Condition	Prevalence Rate	No. of Potential Clients <i>(0 – 5) years</i>
(a) Motor Impairments		
(i) Cerebral Palsy:	2.5 per 1,000	8
Hemiplegia	30%	(approx.) 3
Diplegia	20%	(approx.) 1
Other Types	50%	4
(ii) Neural Tube Defects	1 per 1,000	(approx.) 4
(iii) Hydrocephalus	0.1 per 1,000	-
(iv) Clumsy Child Syndrome:		
Developmental Coordination Disorder	5% (Est.)	176
Deficits in Attention, Motor Control and Perception	1 – 3% (Est.)	35 - 106
(b) Neuromuscular Disorders		
(i) Duchenne muscular dystrophy	3 per 100,000	-
(ii) other neuromuscular disorders	no prevalence rate available	
(c) Other Chronic Neurological Disorders		
(i) Neurodegenerative Disorders	no prevalence rate available	
(ii) Survivors of Brain Infections (meningitis, encephalitis)	no prevalence rate available	
(iii) Survivors of traumatic brain injury	no prevalence rate	
(iv) Epilepsy (usually associated with other disorders to require Child Development Service)	0.8 %	28

(d) Speech, Language and Communication Disorders		
(i) Isolated Speech Delay	1 per 1,000 (at school entry)	(approx.) 4
(ii) Severe language Disorder	5 per 1,000	20
(iii) Autistic Spectrum Disorders (including Kanner Autism & Aspergers Syndrome)	58 per 10,000	20
(e) Visual Impairment		
(i) Partially Sighted	0.4 per 1,000	(approx.) 1
(ii) Blind	0.3 per 1,000	1
(f) Hearing Impairment		
(i) Significant Impairment (>50db loss in better ear)	1.5 per 1,000	5
(i) Moderate Intellectual Disability	2.66 per 1,000	(approx.) 9
(ii) Severe Intellectual Disability	1.09 per 1,000	(approx.) 4
(iii) Profound Intellectual Disability	0.31 per 1,000	1

(3) Limerick County:

No. of Children in Area (Census 1996):- (0 - 5) years: 7,549		
<i>Condition</i>	<i>Prevalence Rate</i>	<i>No. of Potential Clients (0 - 5) years</i>
(a) Motor Impairments		
(i) Cerebral Palsy:	2.5 per 1,000	19
Hemiplegia	30%	6
Diplegia	20%	4
Other Types	50%	9
(ii) Neural Tube Defects	1 per 1,000	(approx.) 8
(iii) Hydrocephalus	0.1 per 1,000	(approx.) 1
(iv) Clumsy Child Syndrome:		
Developmental Coordination Disorder	5% (Est.)	378
Deficits in Attention, Motor Control and Perception	1 - 3% (Est.)	76 - 227
(b) Neuromuscular Disorders		
(i) Duchenne muscular dystrophy	3 per 100,000	
(ii) other neuromuscular disorders	no prevalence rate	
(c) Other Chronic Neurological Disorders		
(i) Neurodegenerative Disorders	no prevalence rate available	
(ii) Survivors of Brain Infections (meningitis, encephalitis)	no prevalence rate available	
(iii) survivors of traumatic brain injury	no prevalence rate available	
Epilepsy (usually associated with other disorders to require Child Development Service)	0.8 %	60

(d) Speech, Language and Communication Disorders		
(i) Isolated Speech Delay	1 per 1,000 (at school entry)	(approx.) 8
(ii) Severe Language Disorder	5 per 1,000	38
(iii) Autistic Spectrum Disorders (including Kanner Autism & Aspergers Syndrome)	58 per 10,000	44
(e) Visual Impairment		
(i) Partially Sighted	0.4 per 1,000	3
(ii) Blind	0.3 per 1,000	2
(f) Hearing Impairment		
(i) Significant Impairment (>50db loss in better ear)	1.5 per 1,000	11
(g) Intellectual Disability		
(i) Moderate Intellectual Disability	2.66 per 1,000	20
(ii) Severe Intellectual Disability	1.09 per 1,000	8
(iii) Profound Intellectual Disability	0.31 per 1,000	(approx.) 2

(4) Tipperary N.R.

No. of Children in Area (Census 1996):- (0 – 5) years: 3,936		
Condition	Prevalence Rate	No. of Potential Clients
		(0 – 5) years
(a) Motor Impairments		
(i) Cerebral Palsy:	2.5 per 1,000	10
Hemiplegia	30%	3
Diplegia	20%	2
Other Types	50%	5
(ii) Neural Tube Defects	1 per 1,000	4
(iii) Hydrocephalus	0.1 per 1,000	-
(iv) Clumsy Child Syndrome:		
Developmental Coordination Disorder	5% (Est.)	197
Deficits in Attention, Motor Control and Perception	1 – 3% (Est.)	39 -118
(b) Neuromuscular Disorders		
(i) Duchenne muscular dystrophy	3 per 100,000	-
(ii) other neuromuscular disorders	no prevalence rate	
(c) Other Chronic Neurological Disorders		
(i) Neurodegenerative Disorders	no prevalence rate available	
(ii) Survivors of Brain Infections (meningitis, encephalitis)	no prevalence rate available	
(iii) survivors of traumatic brain injury	no prevalence rate available	
Epilepsy (usually associated with other disorders to require Child Development Service)	0.8 %	32

(d) Speech, Language and Communication Disorders		
(i) Isolated Speech Delay	1 per 1,000 (at school entry)	4
(ii) Severe Language Disorder	4 per 1,000	20
(iii) Autistic Spectrum Disorders (including Kanner Autism & Aspergers Syndrome)	58 per 10,000	22
(e) Visual Impairment		
(i) Partially Sighted	0.4 per 1,000	(approx.) 2
(ii) Blind	0.3 per 1,000	1
(f) Hearing Impairment		
(i) Significant Impairment (>50db loss in better ear)	1.5 per 1,000	6
(g) Intellectual Disability		
(i) Moderate Intellectual Disability	2.66 per 1,000	11
(ii) Severe Intellectual Disability	1.09 per 1,000	4
(iii) Profound Intellectual Disability	0.31 per 1,000	1

(5) Mid-West Region:

No. of Children in Area (Census 1996): (0 – 5) years: 21,709		
Condition	Prevalence Rate	No. of Potential Clients (0 – 5) years
(a) Motor Impairments		
(i) Cerebral Palsy:	2.5 per 1,000	54
Hemiplegia	30%	(approx.) 17
Diplegia	20%	(approx.) 10
Other Types	50%	27
(ii) Neural Tube Defects	1 per 1,000	(approx.) 23
(iii) Hydrocephalus	0.1 per 1,000	(approx.) 2
(iv) Clumsy Child Syndrome:		
Developmental Coordination Disorder	5% (Est.)	1,086
Deficits in Attention, Motor Control and Perception	1 – 3% (Est.)	217 - 652
(b) Neuromuscular Disorders		
(i) Duchenne muscular dystrophy	3 per 100,000	-
(ii) other neuromuscular disorders	no prevalence rate available	
(c) Other Chronic Neurological Disorders		
(i) Neurodegenerative Disorders	No prevalence rate available	
(ii) Survivors of Brain Infections (meningitis, encephalitis)	No prevalence rate available	
(iii) survivors of traumatic brain injury	no prevalence rate available	
(iii) Epilepsy (usually associated with other disorders to require Child Development Service)	0.8 %	174

(d) Speech, Language and Communication Disorders		
(i) Isolated Speech Delay	1 per 1,000 (at school entry)	(approx.) 23
(ii) Severe Language Disorder	4 per 1,000	(approx.) 110
(iii) Autistic Spectrum Disorders (including Kanner Autism & Aspergers Syndrome)	58 per 10,000	125
(e) Visual Impairment		
(i) Partially Sighted	0.4 per 1,000	(approx.) 9
(ii) Blind	0.3 per 1,000	6
(f) Hearing Impairment		
(i) Significant Impairment (>50db loss in better ear)	1.5 per 1,000	32
(g) Intellectual Disability		
(i) Moderate Intellectual Disability	2.66 per 1,000	(approx.) 58
(ii) Severe Intellectual Disability	1.09 per 1,000	(approx.) 23
(iii) Profound Intellectual Disability	0.31 per 1,000	(approx.) 6

Estimate of Gross Total Number of Potential Clients Accessing Service Annually:

Note (1): A certain percentage of clients referred to the service will be clients who will be eventually ruled out of having the condition for which they were referred for assessment. A figure of 30% for outruling of clients requires to be added to the base data in order to arrive at an estimate of the gross number of clients who will access the overall service

Area	No. (0-5 yrs.) Base Data	+ 30% for Outruling¹	Gross Total (0-5 yrs.)
Clare	753	226	979
Limerick Co. Borough	393	118	511
Limerick County	848	254	1102
Tipperary (N.R.)	442	133	575
Mid-West Region	2436	731	3167

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