Statutory Child Health Services

Current Level of Service Provision

WHB 2000

1.0 Introduction

The Statutory provision for the Child Health Services, is contained in sections 63, 66, and 67 of the Health Act 1970 (1). Section 63 specifies that the Health Board "shall make available without charge medical, surgical and nursing services for children up to the age of 6 weeks": Section 66(1), states that Health Boards are obliged to "make available without charge at clinics, health centres or other prescribed places a health examination and treatment service for children under the age of six years", and section 67, "a health examination and treatment service for pupils attending a national school or a school to which the section has been applied".

The Services consist of

- ü Domiciliary visitation of pre-school children by the Public Health Nurse
- ü Six-week check by General Practitioner or Hospital
- ü Developmental Screening of all 7-9mth old babies
- ü School Screening programme for children attending Primary Schools
- ü Audiology Screening of all children failing Developmental Hearing Screening or School Hearing Screening
- ü Ophthalmology Screening of all children failing Developmental Vision Screening or School Vision Screening

The Treatment Service consists of all of the treatment services for defects suspected or picked up by screening. These are provided either by, the Community Services, or the Hospital Services.

The main Community Treatment Services are General Practitioner Services, Speech and Language Therapy and the Psychology Services. The main Hospital Services are Paediatric, ENT, Ophthalmology, General Surgery and Orthopaedics. All of these services are available to children within the WHB area.

This report focuses on the Screening and Surveillance Services provided by the Community Services for children within the Western Health Board Region.

2.0 Domiciliary Visiting by Public Health Nurses

All newborn infants in the area are visited at home by the Public Health Nurse. Scheduled visits are carried out at regular intervals. Additional visits are provided for special groups, and as considered necessary by the nurse. In some areas the Public Health Nurse also provides part of the service through baby clinics, run by the Public Health Nurse.

Table 2.0 shows the activity in the service in 1999. The Public Health Nurses also provide additional child protection and welfare services to children. Details of this are not included in this report.

Table 1 Neonatal and Pre-School Screening by Public Health Nurses, WHB, 1999

	Galway	Mayo	Roscommon
No of Births	2,642	1,405	618
Neonatal visits	8,411	6,288	2240
Pre-school visits	11,334	12,281	5205
Families visited	15,832	15,434	5297
No of infants metabolic screened	1,641	529	283
% of total births	62%	40%	46%
No of metabolic screening tests	1,676	560	293
Well Baby clinics	768	40	46
No of children attended	3,482	304	267
No of nurse led hearing clinics	Nil	30	20
No of children attended	N/A	574	93
No of other clinics	Nil	Nil	4
No of children attended.	N/A	N/A	26

3.0 Developmental Screening Service

A study of the Developmental Screening Service (3) was carried out in April 2000. The main findings on the current level of service are described below.

3.1 Target Population

The target figure for the service equates to the number of births in the previous year, (in this case 4685) plus those who move into the area and are eligible by age for the service and less those who move out of the area. A total of 5397 babies were offered first developmental assessment appointments in 1999. Table 2 shows the numbers offered and attending first appointments by county.

Table 2: Attendance at Developmental Clinics WHB 1999

	Galway	Mayo	Roscommon	Total
	No	No	No	No
Number of children offered first appointment.	3270	1613	514	5397
Number of children attending first appointment.	3062	1364	data not available	total data not available
% attending first appointment.	93%	84%	data not available.	total data not available.

The above information is insufficient;

- It does not identify the overall target population
- The Roscommon figures do not distinguish between first and recall appointments.
- It does not distinguish between the cohort of babies eligible by age for the service in any one year as the returns include all babies attending the service irrespective of year of eligibility. Uptake figures for any one cohort cannot therefore be calculated.

3.2 Age at Attendance

Age of attendance is important in relation to timing of pick-up of defects. In this study the babies age at time of attendance ranged from 7.5 to 13 months. Table 3 shows the average age of attendance of babies in each of the three counties. In Galway only 18% of babies were seen before the recommended age of 9 months, however almost 80% of babies seen were under 10 months. In Mayo and Roscommon none of the babies seen are under even 10 months of age, and in Mayo almost 40% are over 12 months of age. In addition, the clerical reports from Roscommon indicated that at the time of the survey (April 2000), a number of babies born in November and December 1998 were not yet

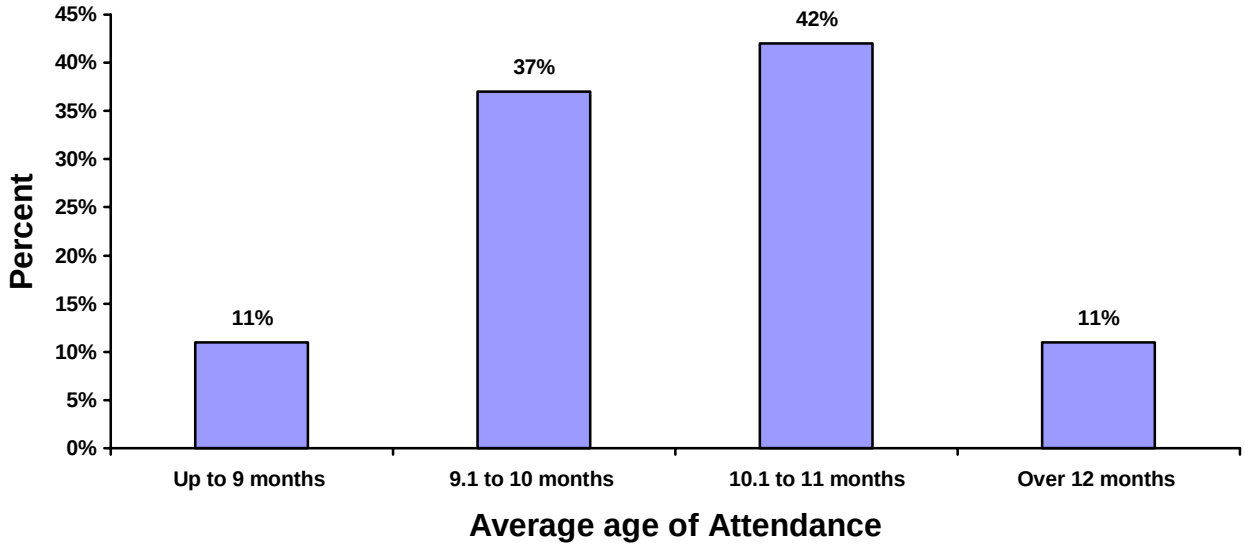
called for developmental assessment. These babies would have then been 16 and 17 months old.

Table 3: Average age of attendance at Developmental Clinics WHB 1999

Age Profile	Galway		Mayo		Roscommon		Total	
	No	%	No	%	No	%	No	%
Up to 9 months.	538	18	Nil				538	11
9.1 up to 10 months	1795	59	Nil				1854	37
10.1 up to 11 months	729	24	825	60	538	100	2092	42
11.1 up to 12 months	nil		nil				nil	nil
Over 12 months	nil		539	39			539	11
Total	3062	100	1364	100	538	100	4964	100

Fig 1 shows the overall age of attendance for the region as a whole. Overall only 11% of babies were seen before the recommended age of 9 months. Forty two percent were between 10 and 11 months and 11% were over 12 months of age

Figure 1: Age of Children Seen at Developmental Clinics WHB 1999

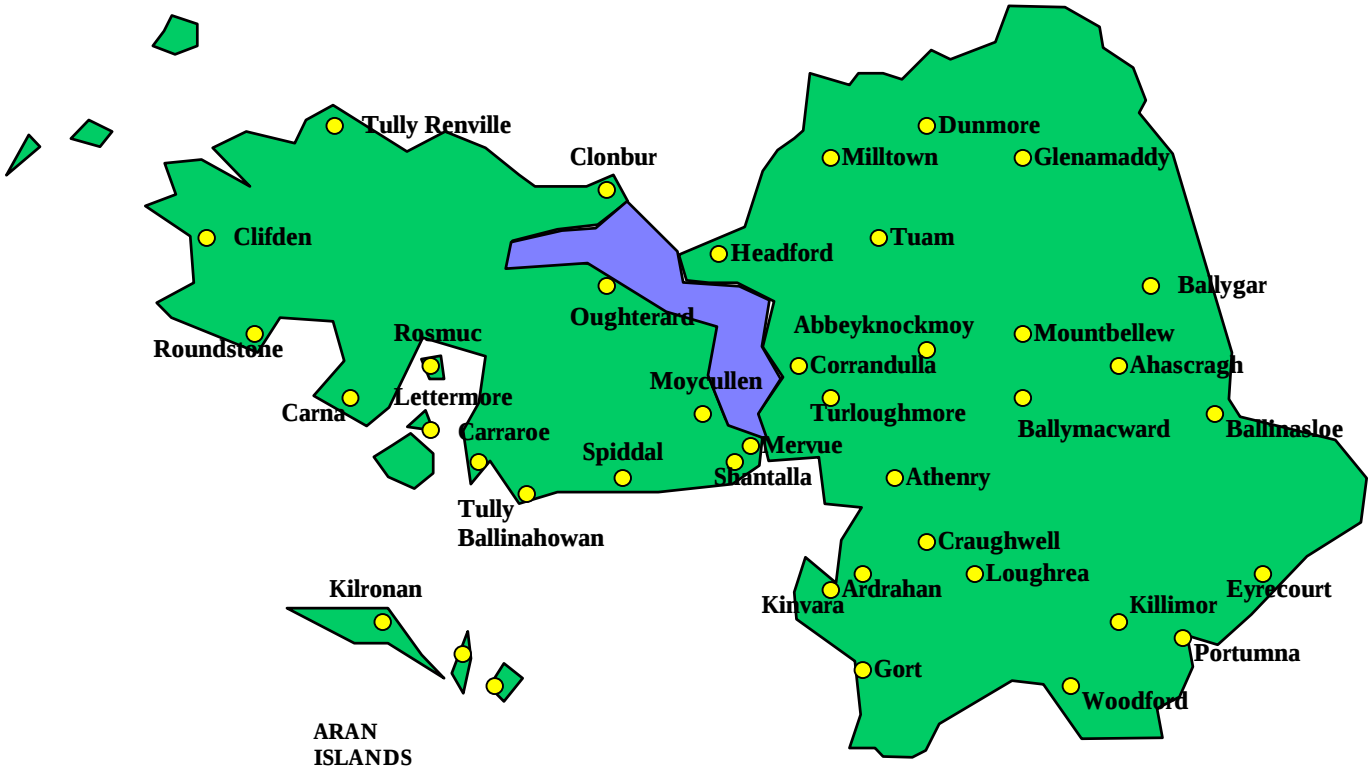


3.3 Distribution of Service

Seventy three health centres are used in provision of the service. These are well distributed throughout the region and no area is excluded from the service. Two centres provide the service in Galway city, Mervue and Shantalla. Babies from the west of the

city come in to Shantalla. The frequency of clinics varies from centre to centre depending on the population of babies scheduled to be called for assessment. This ranges from 3 per week in one centre in Galway City (Shantalla) to one or two per year on the Aran Islands. Twice monthly clinics are the most usual schedule. Figures 2, 3 and 4 show the geographic distribution of the clinics throughout the three counties.

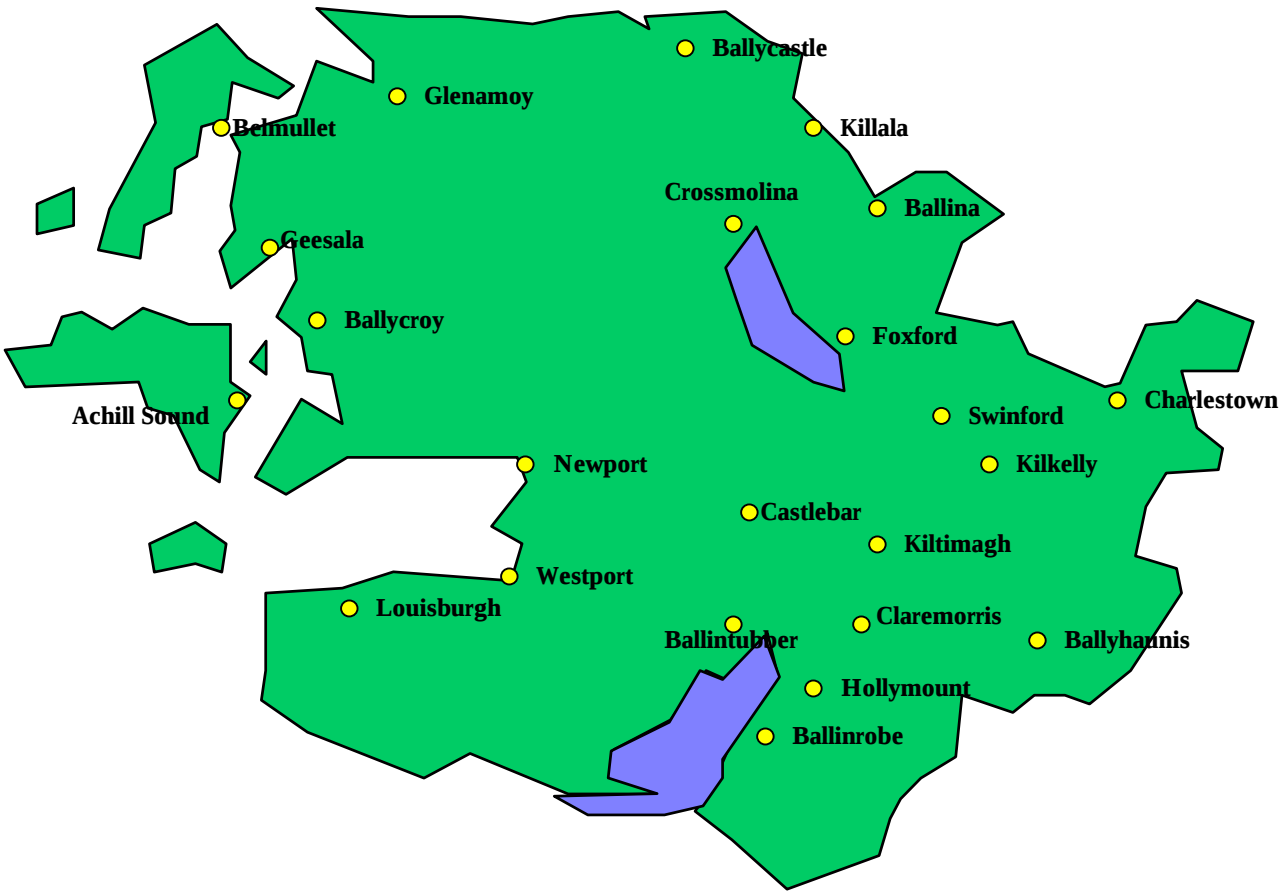
Figure 2: Location of Child Health Developmental Screening Co Galway



Key

Health centres providing child health developmental screening service

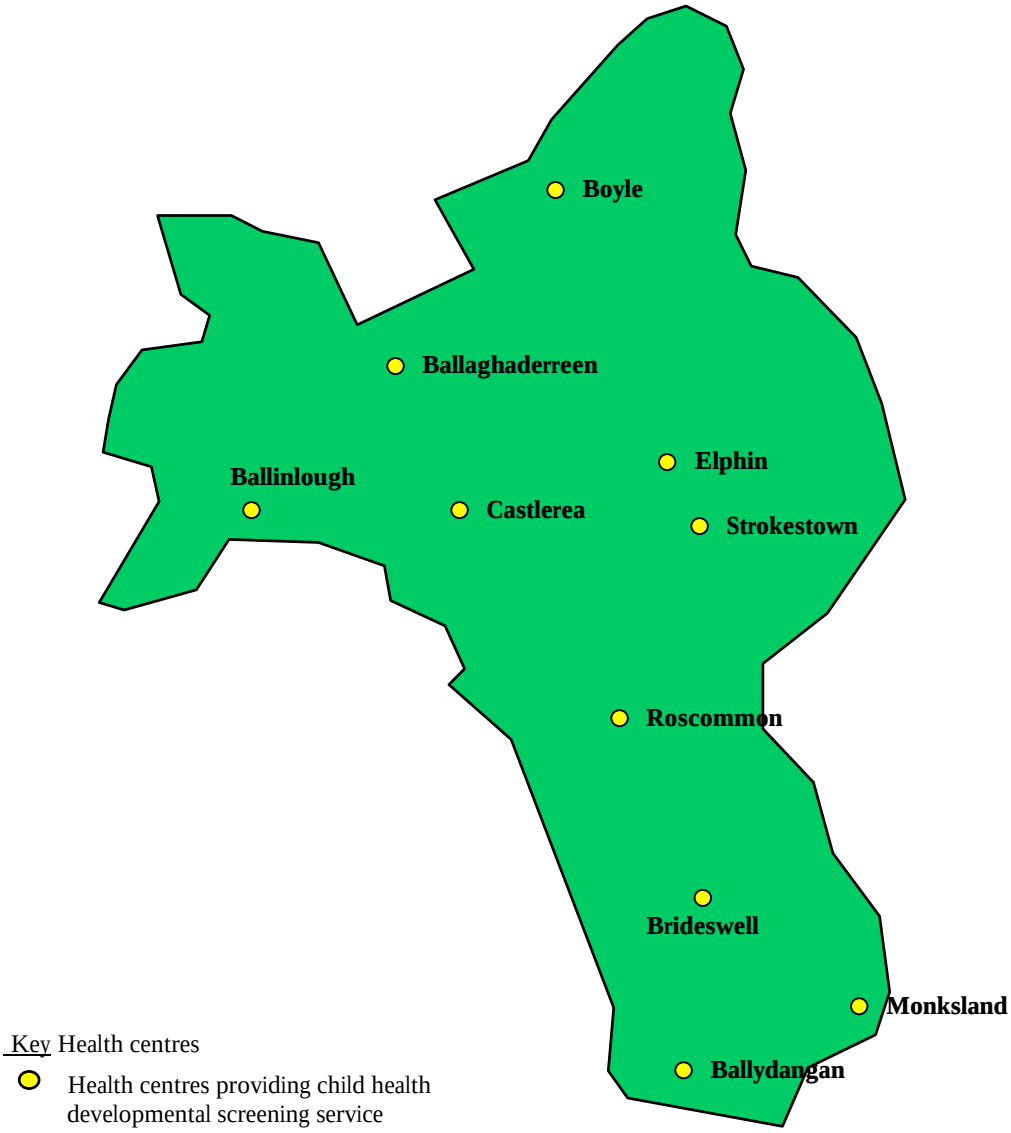
Figure 3: Location of Child Health Developmental Screening Co Mayo.



Key

Health centres providing child health developmental screening service

Figure 4: Location of Child Health Developmental Screening Co Roscommon.



3.4 Extent of the Service

The service depends on the availability of staff, and areas without Medical Officer cover have a limited service provided by cross-cover from the remaining Area Medical Officers.

The study indicated that 77% of scheduled clinics were met, with a range from 16% to 100% across the region. Galway reached the highest county target at 85%, Mayo 75% and Roscommon 49%.

In each county the reasons for omission of clinics related entirely to absence of medical staff.. In all, this amounted to a loss of 96 weeks of Area Medical cover over the three counties in 1999. Locum cover was only provided on one occasion and this commenced three months after a post became vacant.

3.5 Organisation of Clinics

The study indicated the following deficiencies in relation to organisation of the service:

- There is no overall register or database in use
- There is no standard system of call/recall
- Insufficient detail is collected
- There is inadequate clerical support
- There are no accurate statistics available on the service

3.6. Clinic Facilities

3.6.1 Access to clinic room

Area Medical Officers reported that, of the 73 centres used for developmental clinics, difficulty in having the room available to them was experienced in 19 (26%). In 16 centres the Area Medical Officer has been displaced entirely from the General Purpose / Developmental Assessment room and has been obliged to use a variety of other rooms.

3.6.2 Size of room

The National Rehabilitation Board recommends a minimum space of 4m x 5m i.e. 13ft x 16ft for rooms used for developmental hearing screening test. These measurements are required so that the examiner can be placed behind the child and the parent, and out of the child's sight (or else he/she will respond to movement and not to sound) and maintain the recommended distance of approximately 6 to 10ft between the examiner and the assistant.

Of 64 estimated recommended criteria for length and measurements only 6% (four rooms) met the recommended criteria for length and width. An additional 52% (thirty three rooms) measured 10 x 12ft or more. Some of these meet the standard on one measurement but not the other and consequently it is extremely difficult if not impossible (unless the child is particularly co-operative) to do an accurate assessment. Additionally 21 rooms were reported at 8ft or less in width- in these it is not possible to undertake a hearing assessment. Many of the Area Medical Officers also reported that the rooms used were very cluttered with filing cabinets or nursing supplies (due to non availability of alternate space), making movement to right and left behind the child very awkward

3.6.3 Satisfaction with facilities

Satisfaction with the clinics in terms of a range of criteria was assessed on a five point scale (1=v.good, 5=v.bad). The most favourably rated elements were privacy (85% scoring 1 and 2 on a five point scale), cleanliness (61% scoring 1 and 2) and the waiting area (51% scoring 1 and 2). The least favourable were furnishings (38% scoring 1and 2), and quietness for hearing assessment (only 38% scoring 1 and 2).
service.

A number of recommendations in relation to the service were made , were endorsed by the Child Health Steering Committee and referred to the Regional Manager in Community Services. A number of items have been included in the service plans for 2001.

4.0 School Health Service

The School Screening Programme at present in operation in the region, commenced in Galway in 1990 and in Mayo and Roscommon in 1993. It replaced the School Medical Inspection, which included the full physical examination of school children by Area Medical Officers and Public Health Nurses. Table 8 outlines the extent of the examination carried out within the programme in each county.

Table 8: School Screening Programme by Public Health Nurses WHB 1999

	Co Galway		Co Mayo		Co Roscommon	
Examination	**Senior infants**	**Sixth class**	**Senior infants**	**Sixth class**	**Senior infants**	**Sixth class**
Vision	yes	yes	yes	yes	yes	yes
Colour vision	no	yes	no	yes	no	yes
Hearing	yes	yes	yes	yes	yes	yes
Progress	yes	yes	no	no	yes	yes
Speech&language	yes	yes	yes	yes	yes	yes
Posture&gait	yes	yes	yes	yes	yes	yes
Hygiene	yes	yes	yes		yes	yes
Height	Selective screening	Selective screening	Selective screening	Selective screening	yes	yes
Weight	Selective screening	Selective screening	Selective screening	Selective screening	yes	yes

The service is carried out by the Public Health Nurses and is offered to all children in Senior Infants and 6th class annually and to any other child about whom concern is expressed providing there is parental consent. In Roscommon and parts of Galway, screening is also offered to children new to the area and attending school. Follow up Medical Screening is carried out as required by the Area Medical Officers at the local Health Centre. Table 9 shows the number of schools in which screening was carried out in 1999. In Mayo and Galway the targets required were not reached.

Table 9: Details of School Health Screening Service WHB 1999

	Galway	**Mayo**	**Roscommon**
No of primary Schools Mainland. Islands	238 4	185 2	96 nil
Primary School Population.	24,009	14,528	6,486
No of School PHNs.	7	5	3
Average school population per School Nurse.	3,430	3,007	2,161
No of Area Medical Officers.	7.5	4	2
No of schools where screening took place in 1999.	222(92%)	134(72%)	96(100%)
No of children for screening in school year (APROX ¼ I.E. 2 CLASSES)	6000	3632	1620
Percentage of screening target achieved	93%	3437(95%)	1620(100%)

Following the school screening programme, the Public Health Nurse can refer children as necessary to a number of services. Table 10 shows the approximate waiting times for the Community Services clinics in 1999. In Roscommon where the loss of Area Medical Officer time due to vacant posts in 1999 amounted to 39 weeks, the waiting time for referral on to the community medical services ranges from 6 to 12 months and is dependent on the availability of the remaining Medical Officers to provide some cross cover. This means that children are further delayed in having a diagnostic service and any necessary intervention or treatment is also consequently delayed.

Table.10: Waiting Time for Community Services Clinics WHB 1999

Community Child Health Service	**Galway**	**Mayo**	**Roscommon**
Medical i.e. Area Medical Officer.	Nil	Nil	6-12 mths
Ophthalmology	2-8 mths*	3-4 mths	1-24 mths*
Audiology	3-6 mths	2 mths	4-15 mths
Speech & Language	3 mths	2-4 mths•	2-4 mths•
Psychology	5-6 mths	3 mths	1-24 mths

***Depending on Health Centre.**

• In Counties Mayo and Roscommon screening assessment of children referred to the Speech and Language Therapy Services are carried out 4 monthly.

4.1 Issues which need to be addressed

- In Galway there are 8 School Health Areas each having a core team of Area Medical Officer and Public Health Nurse. However the eight area has been without a Public Health Nurse for the past number of years. This has meant that the remaining nurses have had to try and provide cross cover into that area. Targets in this area have not been met for some years. Appointment of the eighth school nurse is required.

- Clerical support for the service is inadequate with some areas of Galway and Roscommon having only a half-day per week of support. Clerical assistance is required for the following tasks;

    - Scheduling of school visits
    - Preparation of records
    - Filing of records
    - Record retrieval
    - Clinic preparation
    - Correspondence and report writing.

- Clerical staff need to be trained and permanent appointments to the service need to be made.

- Absences of School Nurses should be replaced in order to ensure that annual targets for the service are met.

- The overall staffing levels for the service should be reviewed as staff have great difficulty in meeting the target required.

- The service in Galway City needs to be reviewed in view of the large number of schools with high pupil numbers on roll.

- Proper staff accomodation needs to be provided, particularily in Galway City. This should include a facility for proper storage of current and old records.

- The facilities for Child Health School Medical follow-up examination in the local Health Centres need to be upgraded. The requirements overlap with those required for Child Health Developmental Screening outlined above in section 3. Currently in some centres vision testing has to be done in the public waiting area as there is no room of adequate size available.

These recommendations have been endorsed by the Regional Child Health Steering Committee and referred to the Regional Manager in Community Services. A number of items have been included in the service plans for 2001.

5.0 Audiology Service for Children

Screening for hearing impairment is one of the most important aspects of the Child Health Screening services. Hearing parents give birth to 90% of deaf children (Ramsey, 1989). Permanent childhood hearing impairment of moderate, severe or profound degree occurs in approximately 1 in 813 children before 5 years of age (Epidemiological study South East and Eastern Health Boards Regions 1985-1990). Almost 90% of these have congenital hearing impairment. Twenty five percent of the childhood population under 5 years of age experience some degree of hearing loss.

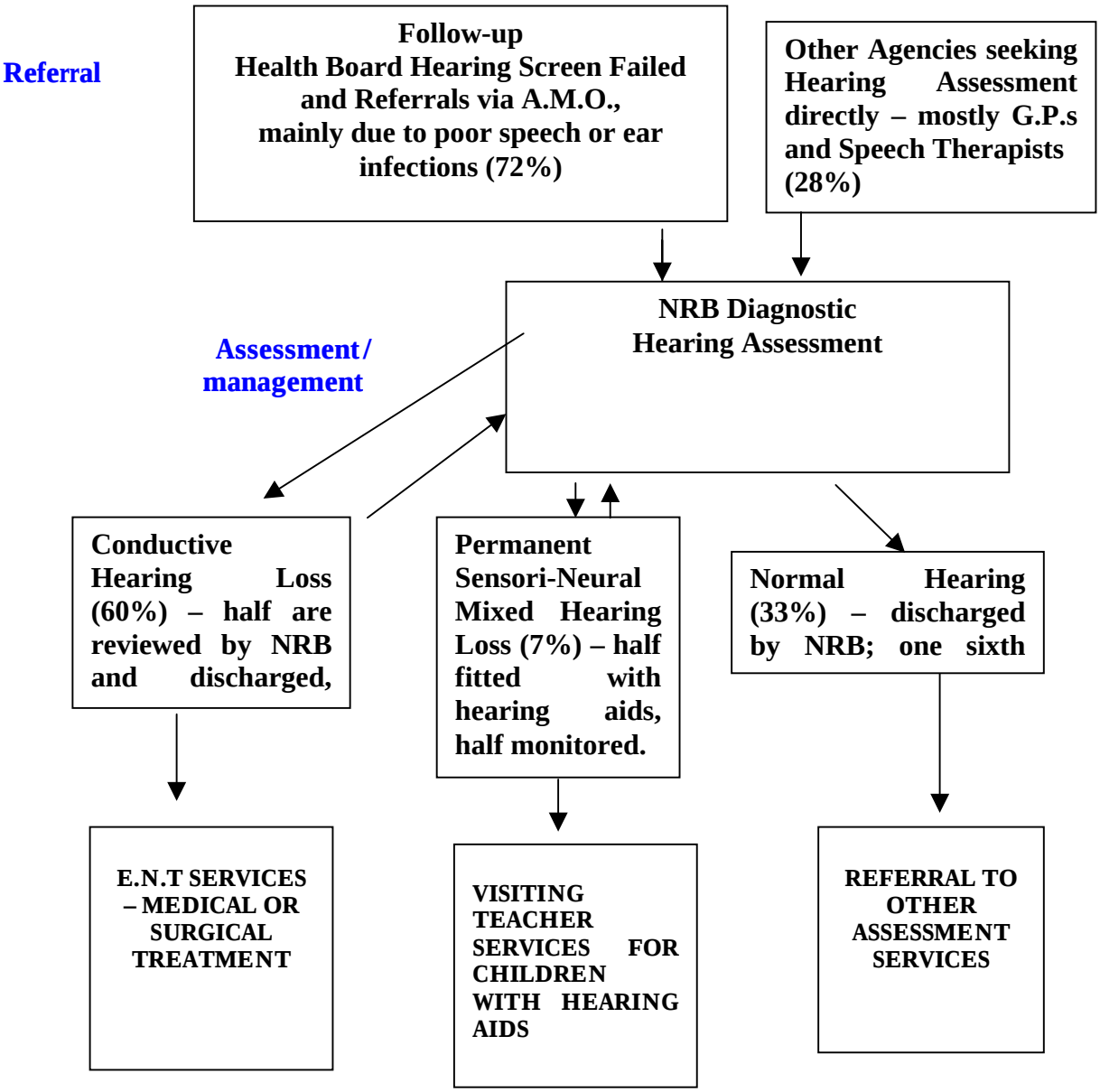
Screening of hearing is part of the routine developmental assessment of all children in the region as described above in Section 3.

Repeat screening is carried out before referral on to the National Rehabilitation Board (NRB), diagnostic service. A flow chart showing the referral paths for hearing assessment is shown in Figure 5.

Screening of hearing is also carried out as part of the School Health Service as described in Section 4. Again repeat screening is carried out before referral on to the diagnostic service of the NRB.

In recent years where there is an older child in the family with severe or profound sensori-neural hearing impairment, subsequent children are referred for screening in the first three months of life. Other children referred directly for assessment of hearing are those who have had Meningitis, those treated with cytotoxic drugs and premature babies with birth weight below 1300 grammes.

Figure 5: Referral paths for children referred for diagnostic hearing assessment : WHB region



Source: Maria-Logue Kennedy, Audiological Scientist

The earliest age of referral to the Audiological Assessment Service at present is 9-10 months. The system depends on;

- ⁄# The availability of Area Medical Officers and Public Health nurses to run the Developmental Screening Service on schedule.
- ⁄# Attendance at first appointment.
- ⁄# Scheduling of second screening.
- ⁄# Prompt referral onwards to the NRB.
- ⁄# Date of diagnostic appointment. (Currently there is only one Audiological Scientist covering the areas of Mayo, Roscommon, Galway, Clare North Tipperary and Athlone. The workload covers all diagnostic work, reviews and fitting of hearing appliances in these areas).
- ⁄# If there is a delay in the screening procedure i.e. screening not taking place to age 15months or so, it becomes more difficult to screen effectively using behavioral techniques and the child may need ongoing review until a definite diagnosis of hearing impairment or normal hearing can be secured. Late screening results in more likely referral on for assessment.

Table 11 shows the age of referral from the developmental screening test in the WHB region. This shows that in Galway, where the developmental screening clinic schedule is considered reasonably satisfactory, 60% of the total number of babies referred on for audiological assessment are over the expected age of 10 months, in Mayo the figure rises to over 80% and in Roscommon to over 90%. This means that babies who need to be fitted with hearing aids are a lot older than the optimum age when the aid is fitted. This in turn results in delayed acquisition of the child's speech and language.

Table 11: New Referrals from the Developmental Screening Service. to the NRB Diagnostic Hearing Service in the WHB Region 1999

	Galway	**Mayo**	**Roscommon**
Total no of children	90	111	12
Age of Referral	Percentage of total	Percentage of total	Percentage of total
10 months or under	42.2	11	8.3
10-12 months	25.5	20	16.7
12-15 months	18.8	27	25
15-18 months	6.6	19	16.7
18-21 months	2.2	7	25
21-24 months	3.3	3	0
Over 24 months	1.1	13.5	8.3
Total	100%	100%	100%

6.0 Ophthalmology Service for children

Screening of vision is part of the routine assessment of all children in the region and is carried out as follows;

- ü Six week check and opportunistic checks provided by General Practitioners and Hospital Consultants.
- ü Routine home visits and assessments by the District Public Health Nurses.
- ü Developmental assessment by the Area Medical Officers and Public Health Nurses at 9 months of age.
- ü Pre-school check at 3-4 years by the Public Health Nurse.
- ü Senior infants school screening by the School Public Health Nurse.
- ü Sixth class school screening the School Public Health Nurse.

Referral to the Community Ophthalmic Service comes from all of the above sources. Repeat screening is carried out before referral on to the service.

The service operates from the local Health Centres. In Galway there are 5 centres for Eye Clinics, in Mayo 9 centres and in Roscommon there are 6 regular clinic locations. The waiting lists for the service are shown in table 12.

Table 12: Waiting lists for Children's' Eye Clinics WHB 2000

Area	**No of children on waiting lists**		
	New	**Review**	**Total**
Galway	236	1815	2051
Mayo	567	5262	5829
Roscommon	380	867	1247
Total	1183	7944	9127

Source: Community Care Services WHB

The waiting time for a Community Ophthalmic appointment for a child depending on priority, is 2 months to 2 years.

6.1 Issues which need to be addressed.

A number of infrastructural deficiencies have been identified in the service. These include;

- ü An inadequate number of skilled professional personnel
- ü Insufficient clerical support
- ü Lack of standardisation of the service in the region
- ü No system for evaluation or audit of the service.

6.2 A New Model of Service for Ophthalmology

A new model of service based on *Best Health for Children* and the recommendations of the Irish College of Ophthalmologists and the Royal College of Ophthalmologists is recommended by the Child Health Steering Committee. This proposes the establishment of a Community Ophthalmic Team. The Child Health Steering Committee recommends that this be piloted initially in Roscommon.

7.0 Conclusion

These recommendations have been referred to the Regional Manager in Community Services. Inclusion in the service plans for 2001 will be dependent on the level of funding provided under *Best Health for Children.*

This report is based on data provided by the individual Community Care Areas, reports prepared by some of the members of the Child Health Steering Committee and a study carried out on the Developmental Screening Service. There is a deficiency of data relating to the overall service and further research on individual components of the service needs to be carried out. The Regional Child Health Steering Committee hopes to begin to address these issues under the implementation of *Best Health for Children* and as funding for the service becomes available.

References

1. Health Act 1970
2. Best Health for Children-Developing a Partnership with Families (1999), National Conjoint Child Health Committee. North Western Health Board
3. Child Health Developmental Screening Service-Assessing the Structural and Operational Resources of the Developmental Screening Check (2000) Department of Public Health WHB

Child Health Steering Committee, WHB, 1 March 2001.