RECOMMENDATIONS FOR DUBLIN PAEDIATRIC SERVICES

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Royal College of Physicians of Ireland

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**Appendix I**

Model Job Description
Consultant Paediatricians in Community Health

**Appendix II**

Model Job Description
Consultant Paediatricians with a Special Interest in Child Development and Handicap

**Appendix III**

Faculty of Paediatrics, Royal College of Physicians of Ireland, Recommendations on Adolescent Medicine

References

The Convenor is indebted to Ms. Eileen Finnegan, Department of Paediatrics, University College Cork, for typing this report.
RECOMMENDATIONS FOR DUBLIN PAEDIATRIC SERVICES

Introduction

There have been substantial developments in paediatrics in sub-specialty areas and in the mode of health care delivery. A modern paediatric service needs to reflect these developments. The vast majority of admissions in the paediatric age group are acute with a good prognosis. On the other hand, paediatric sub-specialty care looks after conditions which are nearly always individually rare. Thus there is a great need for centralisation of this kind of expertise at least in terms of initial diagnosis and management. Health Care delivery needs to be very flexible with an emphasis on reducing inpatient care as far as possible. The care needs to be child centred, and all the professional staff need to have expertise in children. Children's hospitals tailor their services to the special needs of children, but this is more difficult in a general hospital where the needs of children may not be well considered. Children are different physically and emotionally from adults and for most of their years are a dependent population requiring close contact with their family. The prevention of illness is an important component of paediatric care. Social factors have a major impact on child health and disease. The adult paradigm of hospital care does not usually suit the paediatric population. For all of the above reasons there is a well defined hierarchy of care in paediatrics which combines and cooperates with community paediatrics and child psychiatry.

This report does not include recommendations for neonatology, child psychiatry, paediatric radiology, anaesthesia, microbiology, histopathology, chemical pathology, ophthalmology, otorhinolaryngology, orthopaedics, plastic surgery, neurosurgery, orthodontics and paediatric dentistry. The Faculty recently produced a report on neonatal services in Dublin. The other specialties are of great importance to paediatric services, but are represented by separate professional bodies. Joint submissions from these bodies and in the Faculty of Paediatrics would be appropriate to complete the needs of paediatric services in Dublin.

The sub-committee was originally convened to make recommendations on the development of tertiary care Paediatrics in Dublin. The group realised that the development of tertiary care Paediatrics was inevitably linked to secondary care paediatric services in Dublin. The Dean and the Faculty of Paediatrics requested that the same sub-committee would also look at secondary paediatric care services in Dublin. The sub-committee met on eight occasions in 1991 and 1992.
Definitions

1. Primary Care

Primary care is provided by general practitioners who will only refer children who cannot be treated by the primary care team. In Ireland, primary care is also provided by the accident and emergency service and this is especially true in Dublin.

2. Secondary Care

Secondary care takes place in either a general hospital or paediatric hospital following referral from a general practitioner, a hospital accident and emergency service or a maternity department.

3. Tertiary Care

Tertiary Care Unit
A tertiary care unit is a sub-specialty department staffed by at least two sub-specialties with the appropriate infrastructure and support services.

Tertiary Care Centre
A tertiary care centre is a hospital or part of a hospital, with all the major paediatric sub-specialties represented and effectively a complex of tertiary care.
Recommendations

I. The Number of Paediatric Hospitals in Dublin

The committee unanimously recommended the proposal for three paediatric units. The preliminary report on the future development of tertiary care services in Dublin recommended that there should be a single tertiary care hospital. These proposals then gel with one another, with the recommendations of a single large paediatric centre of both secondary and tertiary care paediatrics, and two smaller units of secondary care paediatrics.

The important factors which swayed the committee were, geographical convenience for patients and GPs; the needs of paediatric accident and emergency services; the development of community paediatrics for physical and mental handicap, children in need of protection, and for those with chronic illness; the teaching requirements of medical students, childrens' nurses, and training for paediatrics in general practice; medico-political factors, as there would not be competition between the secondary and the tertiary care service; the advancement of adolescent medicine; and the establishment of well defined links with the neonatal services of the maternity hospitals.

II. The Tertiary Care Hospital

It was strongly recommended that there should be a single tertiary care hospital. The option of a fragmented tertiary care centre has practical attractions in that it would be politically feasible to parcel out tertiary care units to various hospital interests. Whilst this was seen to be practical in the immediate future, it was generally agreed that the long-term interests of Irish children would be best served by a single tertiary care centre.

Tertiary care units will require to interact with one another, both for optimal care and academic development. This process is likely to become more demanding at tertiary care level with further development of services. A single tertiary care centre is the only feasible answer in Ireland for reasons of the needs of children, economy, the development of excellence, organisation and the future development of the various sub-specialties.

III. Free-Standing versus Children's Complex linked to Adult Facilities

It is very difficult to discuss this issue without being intensely aware of the practical situation as it already exists in Dublin. Nevertheless, having taken these factors into consideration, it was agreed that the most desirable model for the long-term development of tertiary paediatric care services, should be that of a children's complex, linked to adult facilities. The nature of the link could vary from a single location for adult and children's hospitals to closely affiliated hospitals on different sites. It was strongly emphasised that this children's complex would have to be
autonomous with a protected budget and independent management. On the other hand, the tertiary care services would have the advantage of co-operating with linked adult services for research and academic exchanges and the sharing of expensive diagnostic services. This development should also allow the development of adolescent care on a rational basis. (Appendix III)

IV. Consultant Staffing

Details of these staff are provided under the appropriate headings:

- 18 secondary care consultant paediatricians;
- 2 paediatric nephrologists; (+1)
- 4 paediatric cardiologists; (+2)
- 1 paediatric cardio-thoracic surgeon;
- 2 paediatric endocrinologists; (+1)
- 2 paediatric gastroenterologists; (+1)
- 4 paediatric neurologists; (+2)
- 1 paediatric rheumatologist; (+1)
- 2 paediatric pulmonologists; (+1)
- 2 paediatric oncologists; (+1)
- 2 paediatric haematologists; (+2)
- 1 paediatric radiotherapist; (+1)
- 4 paediatric surgeons;
- 3 accident and emergency consultants; (+1)
- 3 metabolic disease consultants; (+1)
- 1 dermatology consultant; (+1)
- 2 genetics consultants; (+2)
- 1 infectious diseases consultant; (+1)
- 1 clinical immunologist. (+1)
1. Secondary Paediatric Hospital Care

Background

1.1.1 All children should encounter the child health promotion and disease prevention services when they undergo regular health checks. When they are ill they may see their GP or go to a hospital accident and emergency department. Some children will require secondary and tertiary care as well. Coordination of all these services is important so that the role of each part is clear to the children and parents using the services, as well as to the staff involved; the services are provided in a consistent way with continuity of care, and wasteful duplication and inefficient use of resources is avoided. Coordination should take place at all levels, within and between hospitals and other agencies, such as local authorities responsible for education and social services. This is what is meant by an integrated child health service.

1.1.2 Since the Court Report of 1976, much attention has focused on combining parts of the child health services into one management structure as a means of achieving better coordination. The British Paediatric Association have recently defined a 'combined child health service' as including hospital and community secondary care services.

1.1.3 Combined departments of child health are desirable because they focus attention on the needs of children and options for meeting these needs in whatever setting is most appropriate, without the constraints of reconciling the interests of different providers. Much can often be done to improve coordination within existing management structures.

Workload

1.2.1 Secondary paediatric hospital care units should aim at an average occupancy of approximately seventy-five percent to cater for the marked seasonal variation in secondary paediatric care. It would be anticipated that in Winter, occupancy rates would be close to one hundred per cent.

1.2.2 The number of admissions correlates closely with deprivation indices. However, duration of stay is dependent on bed availability, and the development of community services. Studies in the UK show that there are between fifty and sixty admissions per thousand of child population per annum. Medical admissions comprise less than half of the admissions to hospital in the paediatric age-group. This is including the admissions under ENT, ophthalmic and orthopaedic services.

1.2.3 UK figures suggest a new referral figure for outpatients of thirteen to twenty-one per thousand population, with higher referral in areas of social deprivation.
1.2.4 Children with handicap have a much higher utilisation of paediatric services and there would be a need for close liaison with the community services.

1.2.5 The outpatient services would emphasise general paediatrics but there would be specialty clinics for diabetic children and cystic fibrosis. There would be community based clinics for mental and physical handicap. There should be clinics for learning and behavioural disorders in association with the psychiatric service.

1.2.6 There are about 350 undergraduates per annum requiring undergraduate teaching in paediatrics. This means that there would be a requirement of teaching space for 70 students a month, based on a 2-month paediatric clerkship and a 10 month academic year. These students could probably be catered for in three units with the tertiary care centre taking 30 students and each of the secondary care units 20 students each. At postgraduate level, there will be further requirements for GP training posts and postgraduate training in paediatrics. The demands placed by examinations are considerable as there are three final medical examinations in paediatrics; four examinations for the DCH and three examinations for the MRCPI every year.

Staffing

1.3.1 Consultant paediatricians in Ireland are responsible for easily the highest number of children per paediatrician in Europe. The numbers of children per paediatrician are well ahead of the UK figures which are next in line (Fig 1).

1.3.2 In the UK and Ireland, the low number of consultants reflects, to some extent, the hierarchial structure of staffing from senior registrars to interns; but in Ireland, the specialty of medical paediatrics has a poorly developed hierarchial structure compared with other specialties, as there are no senior registrars or interns in paediatrics. Thus, there is a real need for increasing consultant manpower. This is now being achieved in the UK quite quickly with the amalgamation of community and paediatric services.

1.3.3 There would be a need for at least six paediatricians in each of the three secondary paediatric care units. These paediatricians would need to have excellent training in general paediatrics as over 90% of medical admissions are acute and undifferentiated with respect to system. The paediatricians in secondary care paediatrics could develop areas of special interest. One of these paediatricians should be a consultant neonatal paediatrician with links to the maternity hospital. There should be at least one paediatrician with an interest in community health (Appendix 1) and a further paediatrician with an interest in handicap and developmental paediatrics (Appendix 2). The latter would provide links with the handicap services. Other possible areas of interest in a secondary care paediatrics setting would include infectious diseases, respiratory disorders and endocrinology.

1.3.4 It would be necessary to ensure a full establishment of children's nursing staff. The day-unit should be appropriately staffed. In addition, there should be the
Fig. 1.1 (Paediatrics in Europe 1993; 1: 57)
usual support services including a special social worker, a dietician, and a clinical psychologist linked to the community services.

1.3.5 There should be linked appointments between the secondary and tertiary care units. This would encourage the development of centralised tertiary care services and also would allow some tertiary care outreach clinics for example in cardiology.

Structures

1.4.1 The precise location of the secondary paediatric hospitals would depend on the site of the large paediatric hospital. Each secondary care paediatric unit would need an 80-bed unit, of which as many as ten beds may be necessary for both medical and surgical day-care.

1.4.2 The design of the unit should take into consideration the major shift of surgical procedures in children to day-care bases.

1.4.3 Ward design should respond to the fact that a third of admissions are likely to be under one year with three-quarters under five years of age.

1.4.4 Children's departments of general hospitals need to make arrangements for adolescent wards and possibly adolescent after school clinics.
2. ACCIDENT AND EMERGENCY REQUIREMENTS - PAEDIATRICS

Background

2.1.1 A paediatric accident and emergency department is a facility specifically staffed and equipped to provide care for children requiring urgent assessment, diagnosis and management of illness or injury. General accident & emergency departments that see children should provide a facility separate from the adult area.

2.1.2 Complicated social factors may be involved in the aetiology of trauma and illness. These need investigation by staff trained to work with children and their parents. Daily monitoring of attendance at the department should be carried out by a designated community care nurse so that appropriate recognition, investigation and management of problems may be carried out in the community.

2.1.3 Accidents are the leading cause of death in the 1-14 year old age group. It is therefore, extremely important that quality trauma care be available.

2.1.4 40 per cent of children attending accident and emergency departments are less than 3 years old. The assessment of acute problems in this age group requires specific expertise which does not overlap with that required in adult emergency medicine. At least 50 per cent of this age group present with medical conditions.

2.1.5 Currently, doctors who do not have paediatric experience are managing large numbers of children. The implications, for instance concerning drug prescriptions and diagnostic procedures need careful consideration.

Workload

2.2.1 Between 20 and 50 per cent of the child population are seen annually in accident and emergency departments.

2.2.2 All children under 14 years who need accident and emergency care are seen in one of the three children’s accident and emergency departments, that is to say, Temple Street Hospital for the Northside, Harcourt Street Hospital and Our Lady’s Hospital, Crumlin for the Southside.

Attendance figures:
Temple Street Hospital: 60,000 per year
Crumlin Hospital: 40,000 per year
Harcourt Street: 20,000 per year

2.2.3 There is some crossover with the adult accident and emergency departments, in that hospitals remote from children’s departments, such as James Connolly, Loughlinstown, St. Michael’s in Dun Laoghaire, will sometimes deal with children with minor trauma such as minor lacerations and minor fractures from the age of 12
to 14 years. They do not see any children under this age for either traumatic reasons for attendance or medical reasons.

2.2.4 In Temple Street, admissions through Casualty are approximately 5,000 per year, accounting for half the total hospital admissions per annum.

2.2.5 The two important groups of patients seen in the casualty department are 1) acute, life threatening medical illness and 2) major trauma.

2.2.6 Two other relevant categories of patients are 1) those patients with on-going illnesses already attending the hospital, a particular case in the point being asthmatics and 2) those patients referred directly by community care for assessment with regard to nonaccidental injury or sexual abuse.

2.2.7 The active ambulatory diagnostic medical work done in the accident and emergency departments has meant that they can function within the reduced number of inhouse beds which has been experienced over the past few years with Government cutbacks in Temple Street. There is an eight -bedded casualty observation ward, where patients can be kept for 2, 3 or 4 hours, during which certain diagnostic tests can be done, and which if appropriate allows one to send home a patient who would otherwise require admission.

Staffing

2.3.1 Consultants should be in charge of accident and emergency departments. Hospitals with significant paediatric attendances (20,000 per year) should have a paediatric accident and emergency specialist. All accident and emergency departments caring for children should have a designated paediatrician to liaise with the inpatient facility.

2.3.2 Correct management of children in accident and emergency departments requires considerable paediatric expertise (of at least Registrar grade). Rapid accurate assessment of the critically ill child is essential.

2.3.3 A physician must be immediately available to the emergency department 24 hours a day from within the hospital, who is trained to perform the following medical procedures in children: airway management; cardiac monitoring; administration of drugs for life threatening conditions and the establishment of intravenous lines.

2.3.4 A senior nurse with a children’s nursing qualification should be responsible for nursing arrangements for children in the accident and emergency department.

Structures

2.4.1 In accident and emergency departments that cater for both children and adults, separate facilities, including registration and waiting areas, are strongly
recommended. The following should be provided:

Adequate waiting areas;
Play area;
Food preparation and changing rooms;
Breast feeding facilities;
Adequate number of quiet examination rooms;
Designated resuscitation and procedure rooms fully equipped for children;
Easy access to laboratory and x-ray facilities which are competent in handling children.

2.4.2 Development of computerised accident and emergency department records is essential for monitoring children's use of accident and emergency departments, children's accidents and for developing preventive strategies. Record systems should be designed to promote liaison with community care services including the family doctor, public health nurse and social services.

2.4.3 There should be three A & E departments, one based in the tertiary hospital and one in each of the secondary care units. It is essential for the functioning of these departments to an adequate standard, that there be adequate inhouse paediatric-trained backup such as surgical, anaesthetic and medical services, including intensive care. To provide this, the inhouse paediatric bed compliment of at least 80 beds would be necessary.
3. PAEDIATRIC SURGERY

Background

3.1.1 The famous and oft quoted dictum of Sir Denis Browne that paediatric surgery sought "not to create a monopoly but to set a standard" has to be seen in the context of the difficulties he and his colleagues encountered. Most paediatric surgeons nowadays would only agree with the ideal of setting a standard, and while not necessarily seeking to establish a monopoly believe there is an increasing medical and social demand for children with surgical problems to be looked after by surgeons with special training therein.

3.1.2 Paediatric surgery is a multi-system specialty whose activities are confined by an age group rather than by functional or anatomical boundaries. Paediatric surgical departments have developed in Regional Hospital Centres usually with a University teaching connection. The nucleus of care provided by such departments is a service for the newborn, care of the pre-school child and the management of the older child with multiple handicaps or complex problems. Within the specialty many surgeons develop an interest and increasing expertise within a sub-specialty. Grouping of such surgeons in regional centres allows for the provision of a high level of expertise.

Workload/Trends

3.2.1 There is an increasing trend for surgery to be carried out at a younger age than previously, necessitating referral to those centres where, in addition to surgical expertise, the appropriate anaesthetic, diagnostic and nursing services are available.

3.2.2 There is an increasing need for paediatric surgeons, and this is well substantiated by countries such as Great Britain and Wales wherein there has been an expansion in the number of consultant paediatric surgeons from a total of 41, in 1986 to a projected figure of 76 by year 2000.

3.2.3 The birth rate in Ireland has fallen, but in terms of need for neonatal surgery, this fall has been more than offset by an increase in the survival of premature infants born. These premature infants are prone to develop serious problems, which often require the input of a paediatric surgeon in the immediate post-natal period, and subsequently in later years.

3.2.4 The unfortunate increase in malpractice claims against doctors and surgeons in particular, will give added impetus to the referral of children, particularly the very young <5 years, to paediatric surgeons.
3.2.5 The British Association of Paediatrics (BAPS), while appreciating the need for increased specialisation within its discipline, believe that the specialisation should evolve from within its own ranks.

3.2.6 Children make up a relatively small proportion of the workload in acute surgical specialties other than ENT. If the work of an individual specialty is spread amongst several surgeons and anaesthetists some of them may not deal with sufficient numbers of children to maintain the special skills, both in a professional sense and in communicating with children and their parents.

3.2.7 The National Confidential Enquiry into peri-operative Deaths (NCEPOD-Ref12) carried out in 1989, included a sample of over 1000 surgeons and 2000 anaesthetists from England, Wales and Northern Ireland. Eighty seven percent of the surgeons said they operated on children. But 24% of those operating on children aged 3-10 years did fewer than 20 such operations per year and as many as 83% did fewer than 20 operations on children aged less than 6 months. Similarly in the case of anaesthetists (where almost all of them anaesthetised children), 15% said they anaesthetised fewer than 20 children per year aged 3-10 years and as many as 76% anaesthetised fewer than 20 children under 6 months. The conclusion of the enquiry was that:

"...surgeons and anaesthetists should not undertake occasional paediatric practice. The outcome of surgery is related to the experience of the clinicians involved."

Staff

3.3.1 Scotland had achieved a figure of 2 consultants per 1,000,000 of population. The British Association of Paediatric Surgeons has, for some time, recommended that two consultants per 1,000,000 of population was the appropriate target figure.

3.3.2 Professor B. O'Donnell should be replaced by a full-time paediatric surgeon in Our Lady’s Hospital. The paediatric surgical consultant complement of Our Lady’s Hospital would then be marginally more than two full time surgeons (i.e. 69 hours).

3.3.3 A joint programme of development of liver transplantation with King’s College Hospital is currently in progress and a proleptic appointment of a surgeon (Mr G. McEntee) has been made.

Structures

3.4.1 The consultant paediatric surgeons support the principal of an independent tertiary unit, which should not in an administrative or financial sense be part of an adult hospital complex. The tertiary unit should have its own radiological, outpatient, physiotherapy, intensive care and operating room facilities etc.
3.4.2 It is the intention of the paediatric surgeons to establish in a formal manner a department of paediatric surgery, into which any new or additional consultant would be incorporated. The department would aim to provide comprehensive service for secondary and tertiary paediatric surgery to whatever major paediatric surgical units are established in the city. It is intended that within the department of surgery areas of specialisation will be identified and allocated by agreement to teams while the general spectrum of common surgical problems will continue to be looked after by each surgeon.

3.4.3 It is planned that there should be two teams;

Team A: General Paediatric Surgery and Urology
Team B: General Paediatric Surgery, Oncology and Hepato Bilary Surgery.

There is an agreement in principle on the part of the consultants involved, and identifications of other areas of specialisation is envisaged. The implementation of this plan would be easily achieved within the confines of a single tertiary care hospital (where currently all four surgeons hold an appointment) or in a defined single tertiary care unit of the future.
4. PAEDIATRIC CARDIOLOGY

Background

4.1.1 At present Our Lady's Hospital for Sick Children is the national centre for the investigation and treatment of infants and children with congenital heart defects. With a population base of 3.5 to 4 million, Ireland is ideally suited to have a single centre of excellence. This would comply with the report of the joint working party of the Cardiac Society and Royal College of Physicians of London as well as with the guidelines set out by the American Academy of Paediatrics in April 1991.

4.1.2 There is a great interdependence between the paediatric cardiology service and other paediatric sub-specialty areas for example neonatology, general paediatric surgery, genetics, neurology, nephrology, haematology, infectious disease and the back-up support services of radiology, physiotherapy, social services, psychologists and pathology. All of these services must be available within the paediatric institution where children with congenital heart disease are cared for.

4.1.3 Many of these sub-specialties are themselves dependent on the availability of paediatric cardiologists on-site. The general paediatric surgical service, the oncology service, and the orthopaedic, ENT and dental services all require cardiological evaluation.

4.1.4 For the infants and children who undergo cardiac surgery, the best results are achieved when there is a full team of highly trained paediatric intensive care nurses, paediatric cardiologists, paediatric anaesthetists and paediatric cardiac surgeons available at all times within the cardiac centre. Many of the sub-specialties mentioned above would also be required in the post-operative period. Both paediatric cardiology and paediatric cardiac surgery are highly consultant dependent specialties and need to be integrated into a complete paediatric service.

Workloads/Trends

4.2.1 Congenital heart disease is the most common major congenital abnormality and occurs in at least one percent of all live births. Based on a birth rate of 60,000 in Ireland there are 600 cases of congenital heart disease per year and half of these will ultimately need cardiac surgery.

4.2.2 There is an increasing prevalence rate as many more cases are surviving because of effective medical and surgical treatment. The majority of these cases require long term medical supervision and in up to 20% of cases a second or indeed a third surgical operation may be required during childhood years. Despite the fall in birth rate over the past ten years the clinical workload of the department of paediatric cardiology has actually increased.
4.2.3 In recent years, the incidence and prevalence of arrhythmias in infants and children has increased worldwide.

4.2.4 Some 2,500 patients are evaluated each year in cardiac outpatient clinics.

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<td>1990: 878</td>
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<td>1991: 1,321</td>
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<td>1992: 1,495</td>
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4.2.5 The cardiac service is one of the busiest in Our Lady's Hospital for Sick Children, with approximately 700 admissions each year. Despite a drop in birth rate, the number of patients is increasing.

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<th>Admissions</th>
<th>Bed Days</th>
<th>Average Stay</th>
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<tr>
<td>1990: 550</td>
<td>6,987</td>
<td>12.5</td>
<td>51</td>
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<tr>
<td>1991: 685</td>
<td>7,694</td>
<td>11.23</td>
<td>50</td>
</tr>
<tr>
<td>1992: 727</td>
<td>8,352</td>
<td>11.49</td>
<td>51</td>
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The prolonged in-patient stay is a reflection of the severity of illness of many of these infants and children.

4.2.6 A paediatric cardiology clinic is provided at the Regional Hospital Cork. Between 250 and 300 patients per year will be seen at ten clinics. Additional peripheral clinics have been requested in Limerick as well as in Sligo.

4.2.7 A consultation service for the three maternity hospitals in Dublin is provided by the cardiac department and approximately 200 neonates are seen there each year. A consultation service is also provided within the childrens' hospitals—approximately 300 cases per year.

4.2.8 The concept of a waiting list (for cardiac catheterisation or cardiac surgery) in 1993 is out-dated and undesirable. Untreated, paediatric heart disease is by its nature progressive and unreliable in its rate of progression.

Staff

4.3.1 The recommendation from the British and European paediatric cardiology groups is that there should be a minimum of one whole-time paediatric cardiologist per 1 million of the population. The American Academy of Paediatrics in their guidelines, relate the needs to the birth rate and specify a cardiac centre as serving a population with at least 30,000 deliveries per year. To support such a centre there should be two paediatric cardiologists and also two cardiac surgeons one of whom should be readily available at all times. There should be four full-time paediatric cardiologists in Ireland based at the national centre.
Electrocardiograms take 10-20 min. to perform. The procedure time is longest for infants & toddlers who may be unco-operative.

The fall in numbers since 1988 until 1992 was due in part to the loss of a clinic with Professor Ward's retirement.

We expect the numbers to increase again above 3,000 following the appointment of Dr Oslizlok in August '92.

Figures for Holter - Monitor studies or 24 hr cardioscans will also steadily increase and it takes 30 min - 1 hour to analyse these tapes.

Fig. 4.1
Each echocardiogram takes 15 min. - 1 hour to perform. Older infants and young children need sedation to facilitate complete study.

The numbers of procedures will continue to increase over the next 5 years.

The recent availability of oesophageal echocardiography will cause a further demand on consultant and technician workload.

Fig. 4.2
The Waiting List is at present > 200 i.e. approx. 1 year

Cardiac catheterisations are performed by the consultant cardiologist. They take 1.5 - 3 hours to perform and up to 6 hours for an electrophysiological study and ablation treatment. Two technicians, at least one staff nurse and a radiographer are required throughout the procedure.

Sessions have been cancelled because of lack of staff - consultants, technicians and nurses.

The gradual decrease since 1984 has been due to the increased use of echocardiography as the definitive diagnostic procedure in selected cases.

We expect the numbers to increase again however, as more interventional therapeutic procedures are performed eg. balloon valvuloplasties, umbrella closure of ducti etc.

Whilst desirable in avoiding the need for or complexity of Cardiac Surgery, therapeutic cardiac catheterisations are more time consuming (3-5 hours) and require active participation of 2 physicians (consultant & registrar).
An additional paediatric cardiologist would facilitate a linked appointment with the Mater Hospital so that adolescents and adults with congenital heart disease would receive ongoing care. This need will steadily increase and is poorly developed at present. It is generally recommended that cardiologists in the care of this group of patients should have a background training in paediatric cardiology rather than in adult cardiology.

4.3.2 We advocate the appointment of a full-time paediatric cardiac surgeon. This person could have a minor sessional link to the Mater Hospital which would facilitate surgery on adults and older adolescents with congenital heart disease. The best results are obtained when the paediatric cardiologists and paediatric surgeons have a whole-time commitment to congenital heart disease and all are working in the same institution.

4.3.3 The cardiology service requires an additional registrar and senior house officer. The post of senior registrar in paediatric cardiology should be re-established.

4.3.4 There is a major shortfall in cardiac technicians at the national centre, which is a significant factor preventing the provision of comprehensive paediatric cardiology service. The technician is needed to perform electrocardiograms Fig. 1, echocardiograms Fig. 2, and assist in the cardiac catheterisation laboratory, Fig. 3. The workload on the technicians has markedly increased over the years especially as a result of the development of echocardiography. This procedure requires a high level of expertise and the time needed for each study can be up to one hour. As can be seen from Fig. 2, the numbers of echocardiographic studies have rapidly increased over the years and will continue to do so. In addition, technicians are needed in the cardiac catheterisation laboratory to supervise haemodynamic monitoring equipment and for the measurement of oxygen saturation.

At present we have two full-time cardiac technicians and one ECG technician. There is an urgent need for a further cardiac technician and also another ECG technician. This would then facilitate the expansion of the 24-hour cardioscan (Holter) service as well as the development of exercise stress testing and electrophysiology testing.

4.3.5 Infants with cardiac disease require a patient/nurse ratio which should be similar to that in a special care area. There is a need for an additional four staff nurses in the infant cardiac ward (St. Teresa's) and an additional two staff nurses on the children's cardiac ward (St. Brigid's).

Recently a liaison nurse has been appointed to the hospital to give support to the families whose children are undergoing cardiac surgery and at the time of bereavement. The post is currently funded for a limited period from charitable funds. A second appointment should be structured within the next two to three years.
4.3.6 There is a need for a full-time social worker in the cardiac department, and at present only three sessions are available.

4.3.7 The cardiac department would need the major sessional commitment of a clinical psychologist. At present, there are only two sessions available.

4.3.8 Two radiographers (presently one) are needed.

4.3.9 Currently there are three secretaries, two assigned to the medical cardiac patients and one to the surgical. There is an urgent need for a third medical secretary.

4.3.10 There is an urgent need for a whole-time paediatric cardiac surgeon with full support staff. The importance of this appointment cannot be overemphasized. The waiting list for complex cases is currently about six months and the waiting list for routine cases also about six months.

STRUCTURES

4.4.1 At present in Our Lady's Hospital, the National Centre, there is a need to upgrade the ward facilities including the intensive care and special care areas. There is also a need to develop an adolescent section, play areas, waiting/reading/TV rooms. A non-invasive diagnostic suite is urgently required.

4.4.2 New equipment is required for electrophysiological studies, an exercise stress facility and the cardiac catheterisation laboratory needs upgrading.
5. PAEDIATRIC ONCOLOGY

Background

5.1.1 Malignant disease in childhood remains the third commonest cause of death between the ages of one and fourteen.

5.1.2 The pattern of malignant disease in childhood is quite different from that seen in the adult population.

5.1.3 It was Comhairle's view that the "best interests of the patients would be served by the establishment in Dublin of a single centre for malignant disease in childhood".

5.1.4 There are 100 newly diagnosed children with cancer each year in Ireland. It is clear that as, on average, over 80 of these newly diagnosed children are now being referred each year to Our Lady's Hospital for Sick Children oncology department, the numbers in the other hospitals are small.

5.1.5 Centralisation is recommended worldwide for the initial diagnosis, staging and treatment planning and delivery. Some subsequent treatment may be given at secondary care centre in liaison with the main centre.

5.1.6 The successful management of childhood cancer depends on specialised clinical and laboratory expertise, haematology, immunocytochemistry, cytogenetics, histopathology, chemical pathology and radiology. Treatment demands close cooperation between surgical specialists, radiotherapists and chemotherapists.

5.1.7 Close links with blood transfusion services, microbiology laboratories and intensive care units are required. The development of cardiac, renal, neurological gastrointestinal, orthopaedic, endocrine and other complications of treatment necessitates the frequent intervention of the relevant paediatric sub-specialist.

Workload

5.2.1 From September 1981 to September 1992 there have been a total of 783 new patient referrals to the oncology unit in Our Lady's Hospital.

5.2.2 Over the past 3 years, the average referral rate has increased to over 80 new referrals per year. (Fig. 4.1)

5.2.3 There has been an enormous increase in the number of admissions to the oncology unit over the years, so much so that admissions to the unit in 1990 accounted for in excess of 10% of all admissions to the hospital. (Fig. 4.2)
5.2.4 Bone marrow transplants were first performed in the unit in 1982 and to date 76 such transplants have been performed.

5.2.5 A major element of our work is an involvement in the delivery of terminal care and the provision of support and bereavement counselling to parents.

Staffing

5.3.1 It is clear from the above numbers that the unit in OLHC, with an average of over 80 new referrals per year, would qualify for the appointment of 2 additional consultant paediatric oncologists.

5.3.2 Apart from Paediatric Neurosurgery, paediatric surgical-oncology expertise exists in Our Lady's Hospital for Sick Children.

5.3.3 A consultant paediatric radiotherapist has not as yet been appointed. This deficiency requires urgent review.

5.3.4 A paediatric haematologist is essential not only for the paediatric oncology and bone marrow transplant service but also to deal with haematological problems which develop in the rest of the paediatric population.

5.3.5 A consultant child psychiatrist provides two sessions of her time to the department. This service requires expansion.

5.3.6 Two full-time oncology registrars and two senior house officers make up the NCHD complement of the oncology team.

5.3.7 The oncology unit currently has a staff nurse allocation of 30. It should have in excess of 50 staff nurses available to it instead of its allocation of 30.

5.3.8 Two social workers are currently involved on a full-time basis in the unit.

5.3.9 One of the psychologists at the hospital has an established commitment to the service.

5.3.10 One secretary and one data clerk are employed in the department and an additional part-time secretarial appointment is imminent.

Structures

5.4.1 The new unit has now been built and equipped at a cost of £1,800,000 (a grant of £300,000 was received from the National Lottery). This new unit provides all of the necessary in-patient, out-patient, day-care and parent facilities. The unit has been designed with a combined paediatric haematology and oncology service in mind. A consultant paediatric radiotherapist should have a sessional involvement in the department. A consultant paediatric haematologist is required.
Fig. 5.2
6. PAEDIATRIC ENDOCRINOLOGY

Background

6.1.1 Growth, development and endocrinology play a very important role in paediatrics in relation to the normal child, the child who suffers from any pathological condition, and the child who has a specific endocrine or growth disorder. Diabetes is one of the most common chronic diseases of childhood.

6.1.2 The field of endocrinology, and particularly growth and the use of growth hormone, is rapidly expanding, for example in the use of growth hormone in non-growth hormone deficient children, such as Turner's syndrome, renal failure, genetic disorders, and many other conditions. Other endocrine problems are those related to the pituitary, thyroid, parathyroid, adrenals, gonads, and also hypoglycaemia. The survivors of malignancy and bone marrow transplantation are increasing in number and require extensive endocrine treatment and surveillance.

6.1.3 Growth, pubertal abnormalities, thyroid disorders and diabetes are very common problems in childhood and there should be clinics and assessment facilities in all paediatric units, and not confined solely to tertiary care units.

6.1.4 This specialty has a major out-patient service involvement; and in addition involves emergency work, particularly in relation to diabetes. There is a requirement for expert laboratory support and large amount of medical time per patient.

6.1.5 There are many deficiencies in the present system. Children are being looked after by endocrinologists without training in general paediatrics and in institutions without the child orientated supports of a paediatric hospital. Children with rare complex disorders are scattered through a number of institutions which prevents the development of a major subspecialty centre. There is duplication of paramedical and laboratory supports.

6.1.6 There should be the development of a single centre for paediatric endocrinology in Dublin with at least two paediatric endocrinologists. Out-patient clinics could be based at other institutions.

6.1.7 There is clearly a need for more consultants in this specialty. In European countries with a comparable health service e.g. Denmark with 0.98 million children have 9 paediatric endocrinologists, England with 11 million children have 8 full-time paediatric endocrinologists and 18 general paediatricians compared with Ireland which has 3 general paediatricians with an interest in paediatric endocrinology.
Workload/Trends

6.2.1 The Department of Diabetes and Endocrinology (OLHSC) is a rapidly expanding service: 429 non-private endocrine outpatients in 1991 and 616 in 1992 (plus 43%). New referrals went from 68 in 1991 to 122 in 1992. Most of the work is outpatient and the admissions are mainly day cases for hormonal testing. The figures show 71 admissions in 1991 for testing and 178 in 1992.

In 1992, in the National Children's Hospital, Harcourt Street, there were 727 endocrine patient attendances in the outpatient department: 181 new referrals, and 546 returns. There is one endocrine clinic held per week. 118 children were admitted as day cases for endocrine tests. There were 65 children with diabetes attending in 1992. There were 16 newly diagnosed diabetics and 230 outpatient attendances. There is a weekly outpatient clinic for children with diabetes, including a special adolescent clinic.

6.2.2 The adolescent component of the service is large and crucial and many of the patients attend until 18 years of age. There are two specialty endocrine clinics per week and two endocrine testing sessions per week.

6.2.3 The diabetes service has 246 patients on the books in 1991, there were 727 outpatient visits and 36 new referrals, 28 of these were newly diagnosed children with diabetes. The remainder were secondary and tertiary referrals of diabetic children who were having difficulties being managed at other institutions. They run two diabetes clinics per week.

Staff

6.3.1 The requirements for a secondary care endocrine unit are:-

1. A consultant paediatric endocrinologist with a minimum of five sessions;
2. A diabetic nurse specialist, and an endocrine nurse specialist, and also a dietician with endocrine training; and
3. A registrar and a house officer.

The secondary care endocrine units based in an adult hospital would have the facility to develop adolescent endocrine clinics in conjunction with the adult endocrinologists.

6.3.2 The additional requirements for the tertiary care unit would be:

1. Three consultant paediatric endocrinologists, two of whom would have five sessions in the secondary care units. All three would have sessions in the tertiary hospital and would provide cross cover for each other in all the hospitals.
2. A senior registrar in paediatric endocrinology, as well as registrar and house officer services.

Structures

6.4.1 Our Lady's Hospital for Sick Children has a dedicated diabetes and endocrinology unit with its own telephone line, secretary, computer, photocopying facilities and office space for the two consultants and a large back-up team involved in the care of these children for example, a dietician, social worker, psychologist and psychiatrist. It provides a large consultation service to the oncology unit.

They rely upon an expert biochemical laboratory who provide the vast majority of the measurements required using the small samples of blood obtainable from children.

6.4.2 The facilities available at the National Children's Hospital, Harcourt Street comprise a team with services from a consultant paediatric endocrinologist, a junior lecturer, registrar, SHO, an endocrine nurse, and two paediatric diabetes nurse specialists. There is also a dietician, consultant psychiatrist, psychologist and a social worker closely involved with the team. A 24-hour telephone inservice is provided for the patients.

6.4.3 There should be a single tertiary centre for paediatric endocrinology in Dublin with at least three paediatric endocrinologists and preferably four attached. As growth, development and endocrinology are a very basic aspect of all paediatrics, and diabetes is one of the most common chronic diseases of childhood, it is essential to also have these services in the secondary care units. The four specialists would be involved in both the tertiary and secondary care units. This would enable the development of a tertiary centre of excellence, the development of a postgraduate training programme, good clinical research, and would provide consultant cross-cover for all paediatric endocrine services in Dublin.
7. PAEDIATRIC GASTROENTEROLOGY
(INCLUDING LIVER DISEASES)

Background

7.1.1 The Department of Paediatric Gastroenterology at Our Lady's Hospital for Sick Children in Crumlin is the national referral centre for children with intestinal and liver disease. Many of the patients admitted under this service are tertiary referrals.

Workloads/Trends

7.2.1 The following figures outline the work load of the Department in 1992

<table>
<thead>
<tr>
<th>Total number of in patients</th>
<th>495</th>
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<tbody>
<tr>
<td>Average in-patient stay</td>
<td>4.9 days</td>
</tr>
<tr>
<td>Outpatient attendances</td>
<td>920</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Special Procedures</th>
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</thead>
<tbody>
<tr>
<td>Upper endoscopies</td>
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<tr>
<td>Colonoscopies</td>
</tr>
<tr>
<td>Liver Biopsies</td>
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<tr>
<td>Polypectomy</td>
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</tbody>
</table>

7.2.2 At this time over thirty children with chronic inflammatory bowel disease are followed at the hospital. Over seventy children with chronic liver disease attend. An average of six liver transplants per year are carried out on children attending the hospital by the liver transplant group at King's College Hospital in London.

7.2.3 A large number of consults are carried out each year for the general paediatric and neonatal services at the hospital.

7.2.4 A consultation service is provided at the Children's Hospital Temple Street and the National Children's Hospital, Harcourt Street. This service is not provided for in any formal arrangements.

7.2.5 The department works in close association with the departments of anaesthesia, general surgery and general paediatrics.

7.2.6 Ideally the Paediatric gastroenterology unit based at a tertiary centre should provide a consultation service at each of the secondary care centres.
Staff

7.3.1 A paediatric gastroenterologist with fifteen hours clinical time each week directs the unit. A University lecturer at the registrar grade provides some clinical cover.

7.3.2 There are two full-time paediatric registrars, one full-time house officer and a gastroenterology nurse.

7.3.3 Bring the consultant staffing up to two full consultants or a total of twenty-two sessions per week.

7.3.4 The overall staffing requirements are:
   Consultant - twenty-two sessions per week,
   Two full-time registrars,
   One senior house officer,
   Two liaison nurses (who will also operate as procedural nurses),
   A dietician (half-time)

Structures

7.4.1 The department is presently based in a single room which is in fact an endoscopy suite. This unit is equipped with state of the art equipment for endoscopy and allied procedures.

7.4.2 A gastroenterology and liver unit will have to be developed. Two clinical rooms will need to be made available and office and desk space is required for the two liaison nurses and the two unit registrars. Secretarial office space is also imperative.
8. PAEDIATRIC NEUROLOGY

Background

8.1.1 Currently there are only two paediatric neurologists in the Republic of Ireland. One is based at Our Lady's Hospital for Sick Children, Crumlin and the other at the Children's Hospital, Temple St.

8.1.2 Patients are referred to the Neurology Service with a variety of developmental and nervous system disorders, including learning disabilities, mental handicap, epilepsy, cerebral palsy, muscular dystrophy and other neuromuscular disorders, genetic/metabolic and degenerative diseases. Epilepsy comprises the bulk of referrals.

Workload

8.2.1 The neurology department at Our Lady's Hospital provides the following services:
   - a neurology clinic;
   - a seizure clinic;
   - a ward consultation service and
   - neurophysiology (EEG, EMG, Nerve conduction, ERG and EP).

8.2.2 The total number of neurology admissions to Our Lady's Hospital for Sick Children in 1991 was 207 and 419 in 1992. This figure represents direct admissions under neurology usually from the neurology and seizure clinic or referred from outside the hospital. However, this would represent half or less of the total number of neurology cases in hospital since most are admitted under other services. The total number of neurology admissions to the Children's Hospital, Temple Street was 200 in 1991.

8.2.3 Neurological consultations on other patients under other consultants represent most of the inpatient workload and usually the patient is either transferred to the Neurology Service or is under combined management.

8.2.4 The total number of patients attending the neurology and seizure clinics in Our Lady's Hospital for Sick Children in 1991 was 1,104, and the Children's Hospital Temple Street was 935.

8.2.5 There were 2,208 attendances for electroencephalograms and 355 specialised neurophysiological tests, in Our Lady's Hospital for Sick Children. There were 700 electroencephalograms, and 120 specialised neurophysiological tests in Temple Street in 1991.
8.2.6 Neurological consultation is provided for patients admitted under the general paediatric service, the orthopaedic department, the oncology department and the neurosurgery and paediatric surgery departments.

8.2.7 The evaluation of children for epilepsy surgery is a demanding area requiring frequent EEG monitoring and other investigations. This evaluation process is performed mainly by the paediatric neurology service in conjunction with the telefactor unit at Beaumont Hospital.

8.2.8 There is considerable interaction between child psychiatry and the neurology team. An increasing number of adolescents are being jointly managed in this hospital.

8.2.9 Currently there is no genetic service in Ireland but a genetics department will be cited at Our Lady's Hospital for Sick Children. Because of the nature of paediatric neurology cases there will obviously be strong links between this department and the neurology service.

8.2.10 The metabolic service for this country is based at the Children's Hospital in Temple Street. Many children with neurological disorders have a metabolic basis and the services at Temple Street are frequently called upon in an investigation and management of patients. This area of paediatric neurology in combination with genetics is developing at a rapid rate.

Staffing

8.3.1 The present personnel attached to the neurology department are:
one consultant paediatric neurologist, one registrar, one senior house officer,
two EEG technicians (senior grade) and one neurology secretary.

8.3.2 There are only two paediatric neurologists in the Republic of Ireland.
The service is currently unable to meet the demand. The waiting list for the neurology outpatient clinic at Our Lady's Hospital is currently 5 months.

8.3.3 Because of the specialised nature of paediatric neurology this service should be based in one dedicated paediatric hospital where all the back-up expertise necessary is available. This tertiary care hospital should have the following minimum staffing levels.

There should be 4 consultant paediatric neurologists providing expertise in the areas of:
epileptology;
neonatal neurology;
neurophysiology/neuromuscular disease, and
neurometabolic/genetic disorder.
There should be 2 registrar posts and 2 house officer posts.
8.3.4 The paramedical personnel requirement would be 4 neurophysiology technicians, 2 specialty nurses, and 3 secretarial staff.

Structures

8.4.1 Important back-up services and facilities which would have to be available on site would include the following:

neuroradiology with imaging facilities for computerised axial tomography (CT) and magnetic resonance imaging (MRI), including MR spectroscopy.

8.4.2 The following services would be required on site:

paediatric neuropathology; paediatric neuro-ophthalmology; paediatric neuro-physiology and paediatric neurosurgery.

8.4.3 Much of this back-up expertise already exists but is scattered in various hospitals in Dublin. If incorporated on one site unnecessary duplication of costly services could be avoided, an efficient service could be provided for Dublin city and the rest of the country and there could also be a service to other paediatric units providing secondary paediatric care.
9. PAEDIATRIC RHEUMATOLOGY

Background

9.1.1 In Our Lady's Hospital for Sick Children there are presently over 140 children attending the Rheumatology Clinic which takes place once a month. A physiotherapist, occupational therapist with a special interest in rheumatology attends the clinic as do a social worker. 80 children attend at Temple Street Hospital.

Workload

9.2.1 One child in one thousand develops arthritis before the age of 16 years. Only a small proportion go on to develop chronic arthritis but careful management of moderately affected children can do much to reduce their morbidity. The time involved in an out-patient referral is frequently considerable.

Staff and Structures

9.3 & 4 Paediatric rheumatology should have one centre specializing for a population of three million. The support services required would be a physiotherapist, occupational therapist both with a special interest in paediatric rheumatology, orthopaedic surgeon, again with an interest, ophthalmology and dental service. There should also be a specific paediatric rheumatology outpatients with inter-disciplinary involvement.

The team should include an orthopaedic surgeon with special experience of joint surgery in children. An ophthalmologist should be available to keep those children under regular review who are at risk of chronic iridocyclitis. There should be easy access to a child psychiatry service.
10. PAEDIATRIC RESPIRATORY MEDICINE

Background

10.1.1 Paediatric respiratory disorders are largely in the domain of general paediatricians.

10.1.2 The major part of respiratory work should be by consultation with the rarer and more complex respiratory problems and respiratory problems in children referred to other tertiary specialists e.g. transplant patients.

10.1.3 Expertise will be required in refractory asthma and cystic fibrosis, and intensive care support.

Workload

10.2.1 The service requirements will be in consultations and special investigations including bronchoscopy and lung functions.

Staffing

10.3.1 There will be a need for 2 paediatric pulmonologists, one registrar, one senior registrar and 4 SHOs.

10.3.2 Support staff should include lung function technicians, physiotherapists, an asthma nurse, a cystic fibrosis nurse and a medical social worker.
11. PAEDIATRIC NEPHROLOGY

Background

11.1.1 In Dublin there are two consultant paediatricians with a special interest in nephrology.

11.1.2 In the future, paediatric nephrologists will practise the specialty whole-time because of its demanding nature, or have only a minimal commitment to general paediatrics.

Workload

11.2.1 Paediatric nephrologists will be responsible for routine inpatient and outpatient care; renal biopsies; the management of acute renal failure; the supervision of dialysis; the management of chronic renal failure; the management of end-stage renal failure including all forms of dialysis and medical aspects of renal transplantation; and liaison with paediatric urology.

11.2.2 The expected workload on dialysis will be 6-10 per year at any one time; 6-10 per year on renal transplants; 30-50 transplant follow-up, and the number of chronic renal failures has not been determined.

11.2.3 The areas of future growth will be adolescent services; intra-uterine diagnosis; neo-natal consultations; development of peripheral clinics; and haemofiltration techniques.

Staff

11.3.1 The consultant staff required will be 2 (probably 3) paediatric nephrologists, a senior registrar on rotation, "career" registrars and rotating SHOs.

11.3.2 The associated team will include a ward sister, a dialysis trained staff nurse, a medical social worker, a psychologist, a psychiatrist a dietician, a teacher and a play therapist.

Structures

11.4.1 The required equipment will include 3-5 Pac X or Xtra PD machines for CCPD, 1-2 haemodialysis machines and CAVH and CAVHD equipment.

11.4.2 There will need to be strong links with paediatric radiology, paediatric urology, genetics, and intensive care.
11.4.3 The necessary investigative facilities will include full renal biopsy LM, EM, IF techniques, renal isotope imaging (DMSA, DTPA, 51 Cr, MAG3, etc), doppler flow studies, urodynamics and dietary assessments and analyses. There will need to be access to CT and MRI scans and plasmapharesis.

11.4.4 The following nephrology clinics will need to be serviced: general nephrology; UTI and enuresis; chronic renal failure and dialysis; post-transplantation, and a multi-disciplinary spina bifida and neurogenic bladder clinic.
12. METABOLIC DISORDERS

Background

12.1.1 The service, clinical and laboratory (diagnostic and screening) for inherited metabolic disorders has been provided by Temple Street Children's Hospital for 30 years.

12.1.2 The nature of the conditions dictates that specially trained personnel are needed at laboratory and clinical level to deal with this discipline. The laboratory equipment and expertise required are becoming more complex.

12.1.3 The numbers of individuals identified are increasing annually, and once a condition is identified the patient requires lifetime treatment. New conditions are being identified continuously, and more conditions previously undiagnosed are now being found to have a metabolic cause. There is no metabolic service at any adult hospital to which patients could be referred as they get older. (International experience suggests that for a population of three or four million, only one centre can be justified.)

12.1.4 The level of approved staffing and facilities in the Laboratory are almost unchanged from the 1970's. The Department of Health recently granted funding for an expansion of the clinical staff - a dietitian, doctor, ward area and second consultant. This essential funding has allowed the provision of a basic service in an already overloaded and exacting clinical setting.

12.1.5 To identify one individual with an inherited disorder is to set in motion a process of family counselling, support, biochemical monitoring, nutritional education and specific illness management which will last for the duration of that individual's life. It will involve day to day adjustment of food based on blood levels of specific metabolites, where treatment is available in that form. In all cases genetic counselling is mandatory to ensure responsible reproduction.

12.1.6 The treatable disorders mainly require daily, life-long adherence to synthetic diets. These need biochemical monitoring weekly or monthly in the stable phase, and daily monitoring during unstable periods e.g. infection or growth. The treatments are synthetic and fraught with dangers e.g. deficiencies, unless monitored closely. Abnormal constituents (metabolites) accumulate with infection, fluctuations in growth and intake of protein (egg, fish, cheese, bread, meat not permitted).

12.1.7 Teaching the diets and encouraging adherence to distasteful foods is time consuming and labour intensive. Genetic counselling is included in the educational process. The time taken for each family to learn the difficult lifestyle varies from 1-2 hours daily for the initial week and 1-2 hours per week thereafter.
12.1.8 Some of these conditions which were heretofore untreatable are now responding to bone marrow transplants or the application of principles used in conditions like PKU e.g. mucopolysaccharidoses and adrenoleucodystrophy (ALD) - Lorenzo's Oil. The monitoring and documentation of post transplant patients and children on Lorenzo's Oil is extremely time consuming.

12.1.9 The early application of all of these treatments is essential to a successful outcome which puts a major burden on clinical staff, already working at full capacity, to identify, arrange, coordinate and document the complex detail required in each case. Failure to achieve this may result in an untreatable handicap and subsequent litigation.

12.1.10 Mental retardation arises from untreated PKU - current costs of maintaining a person in a mental institution are estimated at £12,000 to £22,000 per year.

12.1.11 Failure to continue treatment of PKU in adults may result in a 20 point drop in IQ - this can mean institutionalisation for some. Acute neurological problems have occurred in individuals who come off diets e.g. ataxia, epilepsy, and quadriaparesis (Thompson AJ, Smith I, et al. Neurological deterioration in young adults with phenylketonuria. The Lancet 1990; 336: 602-605).

12.1.12 Fertile females with these conditions give birth to babies with microcephaly and major structural defects unless on treatment at conception and during pregnancy - it has been estimated that the retarded offspring of these women will replace their mothers in mental institutions unless treatment is provided. Temple Street has identified 18 women who have delivered 23 microcephalic infants from a total of 44 pregnancies. Cataracts and ovarian damage are being identified in patients with galactosaemia whose mothers were not on diet during pregnancy.

12.1.13 Mental retardation, cerebral palsy and lifelong dependency may result from any of the other conditions.

12.1.14 A minimum of 550 of the 800 current patient numbers would require institutional care if untreated at a cost of £9,900,000 per annum (£18,000 x 550). The conservative estimation of saving per annum is approximately 6 million pounds. In addition, approximately forty patients with moderate to severe handicap are maintained on diets for metabolic conditions at present. This enables them to be managed in the community and saves on institutional care.

12.1.15 Recent advances have led to a breakthrough in the cause of coma, "cot death" or "near miss" cases (metabolic causes may be responsible for as high as 12.5%). Several family members at risk can be identified and saved from cerebral palsy or death. The investigation is expensive and time-consuming, and requires gas chromatography and mass spectrometry with specialised laboratory training for the personnel involved. Newer methodologies using high performance liquid
chromatography and polymerase chain reactions (PCR) are now used to identify family members and cases - all samples are sent to the UK or Holland at present. The delay in making these diagnoses means waiting weeks or months for a specific diagnosis. This imposes a great burden on families and medical staff if the pathway with the inherited defect is not clearly known.

Workload

12.2.1 The relative frequencies of genetic disorders are likely to go on increasing with time as presently unidentified causes of morbidity and mortality are recognised to be genetic in origin (Scrifer 1984).

12.2.2 The incidence of identification of genetic disorders is increasing sharply - 10% of paediatric admissions to university hospitals in North America (1982); 40% of paediatric admissions in Glasgow in 1988. Ireland has a higher incidence of the more commonly occurring defects. The Irish travellers have a very high incidence of galactosaemia (1 : 700) and of a rare condition called glutaric aciduria.

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Ireland</th>
<th>U.K.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenylketonuria</td>
<td>1 : 4,500</td>
<td>1 : 10,000</td>
</tr>
<tr>
<td>Galactosaemia</td>
<td>1 : 22,000</td>
<td>1 : 62,000 (est)</td>
</tr>
<tr>
<td>Homocystinuria</td>
<td>1 : 49,000</td>
<td>1 : 80,000 (est)</td>
</tr>
<tr>
<td>MSUD</td>
<td>1 : 110,000</td>
<td>1 : 250,000</td>
</tr>
</tbody>
</table>

12.2.3 Since screening was established in 1965, the programme was expanded to include 5 treatable conditions. There have been 8,445,975 tests on 1,689,195 million infants (February 1993), and 721 have been identified with treatable conditions. The 721 contribute to the numbers attending for treatment - thus preventing institutional care.

12.2.4 Blood samples from every baby born in this country are tested for 5 different conditions - the PKU test being the best known of these. The work is manual and labour intensive. A positive case has to be recalled and the diagnosis proven using other laboratory techniques. All data has to be documented for medical and medico-legal purposes.

12.2.5 The Acute Metabolic Diagnostic and Monitoring Laboratory Service is responsible for diagnosis and monitoring and must be available 24 hours a day. It provides service for all other hospitals in amino acids, lactose, etc.

12.2.6 Special tests not available in Ireland are dispatched via this laboratory. The material to be tested has to be handled in a specific manner (liquid nitrogen or cold or room temp) and dispatched, documented and labelled by the trained staff. The increase in this area has put great stress on Laboratory staff.

12.2.7 Stabilisation and establishment on treatment of new patients identified by the newborn screening programme (16 to 20 new patients per year). Monitoring of
treatment and nutritional balance for children and adults - weekly, or in acute cases daily, blood tests, followed by nutritional adjustments as indicated.


12.2.9 Outpatient clinic visits for patients who are being managed at home. (1,054 - 1989; 1,413 - 1990; 1,576 - 1992).

12.2.10 Management of pregnancies in affected mothers - an increasing workload. (Fig. 12.1)

12.2.11 Education of patients and their families, health workers, teachers. Support for families in adjusting to the difficulties of coping with life-long conditions and bereavement counselling. Genetic counselling for families with these defects. Maintaining at-risk register for pregnancies.

Staff

12.3.1 The higher incidence of inherited metabolic disorders in Ireland - twice that in other developed countries - gives rise to a major public health problem, which has to be managed as efficiently as possible with the resources available. The unit at Temple Street handles significantly larger numbers than any comparable unit in Western Europe or the United States, and it does this with less staff, and with limited ancillary support.

12.3.2 The ever-increasing numbers of patients and complexity of conditions means that the unit cannot continue to function with present staff (Fig. 12.2).

12.3.3 The existing and proposed staff numbers are as follows:

Clinical

Medical

| Existing: | 1 Consultant 1/2 Registrar |
| Additional: | 1 Consultant 1/2 Registrar |

The Registrar to be a full time Clinical Assistant
PREGNANCIES IN PKU
INCREASE IN PREGNANCIES INVOLVING MANAGEMENT OF FOETAL NUTRITION

Numbers


Fig. 12.1
**Paramedical**

<table>
<thead>
<tr>
<th>Position</th>
<th>Existing</th>
<th>Additional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary</td>
<td>4</td>
<td>2 Dietician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Psychologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Social Worker</td>
</tr>
<tr>
<td>Laboratory</td>
<td>1</td>
<td>1 Secretary</td>
</tr>
<tr>
<td>Chemical Pathology</td>
<td></td>
<td>1 Consultant (7 sessions)</td>
</tr>
<tr>
<td>Metabolic Screening</td>
<td>6</td>
<td>2 Technicians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 Typists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 Locum Cover</td>
</tr>
<tr>
<td>Metabolic Laboratory 9.5</td>
<td></td>
<td>4 Biochemist/Technician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 Porter</td>
</tr>
<tr>
<td>Required</td>
<td></td>
<td>3 Technicians to do tests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>currently sent to England</td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td>2 Technicians to cater for the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>increased laboratory workload</td>
</tr>
<tr>
<td></td>
<td></td>
<td>from a new consultant</td>
</tr>
<tr>
<td>Required</td>
<td></td>
<td>For 6 beds - 15 nurses are required.</td>
</tr>
</tbody>
</table>

**Structures**

12.4.1 Storage facilities for samples of skin, tissue, blood and urin which need specialised handling are inadequate.

- Needed: One Standard fridge 18 cubic feet
- One Standard freezer 10 cubic feet
13. PAEDIATRIC DERMATOLOGY

Background

13.1.1 Paediatric Dermatology as a subspecialty is in its infancy. During the past 10 years it has become a rapidly expanding subspecialty encompassing numerous areas of expertise. The need for this subspecialty is apparent from US figures citing that 30% of all visits to paediatricians have a primary or secondary skin component and 30% of visits to dermatologists are patients in the paediatric or adolescent age group.

13.1.2 Paediatric Dermatology services are performed by general dermatologists none of whom have a full-time position in paediatric dermatology. A small number of paediatricians who also have training in dermatology are emerging in the USA and England. The advantages of this training include a full-time commitment to paediatric dermatology and expertise in the management of life threatening paediatric disorders.

Workload

13.2.1 Two clinics per week are held at each of the three paediatric hospitals. In addition, a small paediatric population is seen in the general dermatology clinics at Hume Street Hospital.

13.2.2 Inpatient care is provided in Our Lady’s Hospital for Sick Children - approximately 4 admissions monthly, The Children’s Hospital, Temple Street - 4/month, National Children’s Hospital, Harcourt Street - 4/month.

13.2.3 Paediatric dermatology consultations are provided at Our Lady’s Hospital for Sick Children - average 25 consultations per month, The Children’s Hospital, Temple Street - 20 per month, and the National Children’s Hospital, Harcourt Street - 20 per month.

13.2.4 Cutaneous pathology is reviewed by a general pathologist. There are no facilities on site for immunofluorescence or electron microscopy. The latter services are performed by the Department of Dermatology at St. James’ Hospital and the Mater Hospital, Dublin.

13.2.5 There is close liaison with neurology and plastic and reconstructive surgery. A medical geneticist is due to be appointed to Our Lady’s Hospital for Sick Children in the summer 1993. There is a metabolic physician at the Children’s Hospital, Temple Street, who is currently available for consultation at Our Lady’s Hospital for Sick Children.
Staff

13.3.1 There are at present three part-time consultant dermatologists attending each of the children's hospitals.

13.3.2 Our Lady's Hospital for Sick Children has 2 dermatology nurses per clinic, The Children's Hospital, Temple Street has 1 per clinic, and the National Children's Hospital, Harcourt Street has 1½ nurses per clinic.

13.3.3 Our Lady's Hospital for Sick Children has one general paediatric registrar and SHO alternate attendance at weekly clinics. The dermatology registrar from St. James' Hospital attends one clinic weekly. The Children's Hospital, Temple Street has one SHO shared with general paediatrics. National Children's Hospital, Harcourt Street has one SHO shared with a paediatrician.

13.3.4 The tertiary care centre should have 11 paediatric dermatology sessions, and should have a close liaison with the secondary unit and ideally be regarded as one "department" with easy access for cross referral. This would be facilitated by sharing or consultant sessions between the units and joint conferences.

13.3.5 Three nurse specialists would be appropriate in the tertiary care centre to run outpatients clinics, the inpatient unit and the day care centre. There should be one registrar and one SHO.

13.3.6 The staffing recommended for each secondary care unit would be a dermatologist - 4 sessions, one nursing specialist and 1 SHO or registrar.

Structures

13.4.1 The concept of a tertiary care centre is an appropriate one to focus resources and liaisons with sub-specialists who are critical in the evaluation and management of patients with paediatric skin disorders. These subspecialties include neurology, plastic and reconstructive surgery, a physician specialising in metabolic medicine and infectious disease. Of paramount importance would be the need for a close liaison with a geneticist in view of the complex nature of genodermatoses, genemapping and the need for genetic counselling. Another critical association of the paediatric dermatologist is with pathology. A tertiary centre should have close association with a pathologist with a specific interest in dermatology allowing for regular clinico-pathological conferences. A tertiary centre should also play a role in education of the population and the preventative aspects of skin disease in particular, for example, ultra violet light protection.

13.4.2 Ten dermatology beds are necessary for the tertiary care centre (care of severe atopic eczema, bullous disorders, psoriasis, genodermatoses requiring further workup).
13.4.3 Five outpatient clinics weekly should provide an appropriate service for a tertiary care unit. Facilities could be developed for subspecialty clinic in dermatology such as eczema/allergy, wart clinics, genetic clinic, naevus clinic. The eczema clinic could be held in consultation with the immunologist. The genetic clinic could be jointly held with a consultant in metabolic disease and in genetics.

13.4.4 The concept of a day care centre in a tertiary care unit is appropriate for the education on and treatment of diseases such as psoriasis, scalp conditions, eczema, wound care and verruca. A phototherapy unit would be appropriate on site. Access to pulse dye laser unit ideally on site. The day care centre should contain a bath and wash hand basin for scalp treatments and an adequate hot water supply for frequent treatments.

13.4.5 These two secondary units should have a close liaison with the tertiary care unit with access for easy referral.

13.4.6 In the secondary care units there should be two dermatology beds and two outpatient clinics per week.

13.4.7 Each dermatology outpatient clinic in the secondary and tertiary unit should contain four rooms which are adequately lighted and have magnifying lamps and a room for Woods light examination available. In addition, there should be facilities for gram stain, KOH fungal preparations and Tsank stains. A light microscope is necessary in this area. Facilities for skin biopsy excision should be available including use of a hyfurcator/electrodessicator unit. A camera should be available for photography.
Appendix I

BRITISH PEDIATRIC ASSOCIATION
CONSULTANT PEDIATRICIAN COMMUNITY CHILD HEALTH

Model Job Descriptions

INTRODUCTION

In any one district it is desirable that the Consultant Paediatricians will have a range of expertise and ideally their differing roles and skills will be complementary in order to provide for the needs of children and their families. For the purposes of this paper, the terms "general paediatrics" is used to identify the kind of work conventionally practised in hospital in-patient or out-patient work. The term "Community Paediatrics" is used to identify the kind of work usually practised by paediatricians in the community. However, it is essential to stress that Community Paediatrics is frequently practised in a hospital setting and general paediatrics in the community.

The job description should therefore reflect both the health service needs of the resident childhood population, for consultant paediatrician skills and, a number of additional management, research or teaching responsibilities.

Amongst Consultant Paediatricians (Community Child Health) in a district there will be a range of differing responsibilities and therefore, skills and experience. Consequently, posts which are advertised will differ considerably one from another: and the skill mix will need to be tailored to the needs of the particular district situation. Illustrations of the differing types of post are incorporated in this paper.

At a time of evolution to a consultant-led community child health service, where staffing levels, mixture of skills, interface with other specialties and size of population vary greatly between Districts, it is not possible to produce a single job description which is universally applicable.

This paper sets out areas of consultant responsibility in support of primary care and then proposes a number of different models for job descriptions.

Obviously one single CPCCH could not cover all these areas and the job description would select only those areas requiring development or cover.

AREAS OF CONSULTANT RESPONSIBILITY

Special Needs

Identification - clinical assessment & management (including therapy)
Co-ordination of care
Service planning/evaluation/audit (may include running a register)
Training
Liaison with Education Authorities
Children in care, fostering and adoption
Liaison with Social Service Department for work arising from Children Act
Child Protection

Clinical assessment and management
Case conferences, court work, work with Area Child Protection Committee
Service planning/evaluation/audit
Training
Liaison with Police, Social Services
One CPCCH will be "designated doctor" for child protection

Pre-school Surveillance

Clinical assessment & management of referred problems
Service organisation, monitoring of child health surveillance programme, in conjunction with general practitioners and Family Health Services Authorities
Audit-evaluation
Training

School Health/Educational Medicine

Clinical assessment & management including therapy
Audit & evaluation
Liaison with Local Education Authorities including one designated doctor for education
Service planning, training

Immunisation/Infectious Disease Advice

Immunisation co-ordinator roles
Audit & evaluation
Guidance/training for practitioners

Clinical Specialties eg

Audiology
Visual impairment
Adoption, fostering and children in care
Child psychiatry
Cot Death co-ordinator
Physical disability: neurological, neuromuscular (for example cerebral palsy or muscular dystrophy) consultant work in developmental paediatrics and childhood handicap, rheumatology

Health Promotion

Monitoring Public Health
Health advocacy
Community development
Individual programme development
Liaison with Director of Public Health/
Production of Annual Report
Interface work with consultants in public health medicine
General Paediatrics

Acute general paediatrics in hospital
Outpatient general paediatrics in hospital or secondary care in a community setting or together with general practitioners.

Planning & Developing Children's Services

Information collection
Evaluation
Service & Policy development in conjunction where necessary with consultants in public health medicine

Management Roles

Personnel
Budget holding
Administration and committee work
Resource management
Advice to Health Authority
Travelling time *

Training & Research

Undergraduate and postgraduate training and teaching
(In Academic Centres, greater allocation of time will be required for teaching and research).
Personal study.
These are general areas of responsibility. Specific issues, eg counselling following a cot death or accident prevention work, could be identified under clinical specialties and health promotion respectively.

Note

In the three areas - health promotion, planning and developing children's services and management roles - the CPCCH would usually collaborate and share responsibilities with the appropriate specialist in public health and community medicine. The proportion of the work assumed by each would depend on local circumstances.

* Travelling time is a particular requirement for the CPCCH who is peripatetic by nature.

Timetable & Job Plans

The job plans appropriate for the CPCCH will depend upon the pattern of work as summarised above. For those CPCCH with a general paediatric on call commitment there will need to be attention given to restricting the expected number of fixed notional half days in a similar way to that for hospital based consultant paediatricians. (See "Workload of Consultant Paediatricians" September 1990, Joint Guidelines of the British Medical Association, the British Paediatric Association and Paediatric Committees of the Royal Colleges of Physicians of London and Edinburgh and of the Royal College of Physicians and Surgeons of Glasgow). Also recognition should be given to the very variable work patterns present from one week to the next for all CPCCHs.
Districts will need to create sufficient CPCCH posts to meet the various demands placed upon them. (See "Paediatric Medical Staffing for the 90s"). Until the point is reached when sufficient posts are created, it is likely that some of the areas detailed above will be delegated to other doctors for example senior clinical medical officers and clinical medical officers in the child health service who are needed to support the CPCCH and for whom the CPCCH will be clinically responsible. Some CPCCHs may have greater managerial responsibilities and the Medical Officers may be managerially responsible to them. Where districts do not have posts for CPCCHs there is an urgent need to create such posts in order to meet the required responsibilities of the modern child health service.

MODEL JOB DESCRIPTIONS

1. CPCCH Entirely Community Based, Mainly Non-Clinical

There is a manpower shortage in public health medicine and in Districts or provider units where there are adequate number of SCMOs to perform the clinical aspects of the service, such a post would cover most of the interface roles with public health medicine - see "Working Together for Tomorrow's Children", a discussion document from a joint working party of the Faculty of Public Health Medicine and the British Paediatric Association on the Interface between the work of Consultant Paediatricians (Community Child Health) and Public Health Physicians.

It may be that this person would be expected to be on call for child abuse.

2. CPCCH Entirely Community Based, Mainly Clinical

Ideally covering a population of about 100,000 (equating approximately to 1300 births per year) the CPCCH would be the focal point for the assessment and management of children requiring secondary tier care but not requiring hospital attention. He/she would work closely with a team of professionals allied to medicine, local authority services and voluntary groups with clinical and administrative responsibility for a defined community with or without special clinical interest. In addition to this "local" responsibility the CPCCH would have a number of district wide special interests or services to manage other than those provided by general practitioners and be responsible for providing a consultation service in the community for general practitioners.

Where there were sufficient general paediatricians to provide a 1:4 on call rota, the CPCCH would offer an on-call service for child abuse or deaths. In these circumstances the CPCCH should be able to hold specialist clinics in the hospital and to admit selected patients to the paediatric unit but without active participation in the general and emergency responsibilities of the consultant paediatric staff.
3. CPCCH Entirely Community Based, Largely Clinical Specialist

Some Districts may decide to divide their services by specialty and appoint CPCCH who have a major responsibility to only one clinical specialist area. For example fostering, adoption, audiology, child protection. For example consultants in developmental paediatrics and childhood handicap. The consultant working in a child development centre would be the commonest example. On call rotas with the other consultant paediatricians will depend upon clinical experience, training and the needs of a district.

4. CPCCH Partly Hospital and Community Based (Variable Patterns)

Many CPCCHs will work in a flexible and fully integrated way, sharing responsibilities in the hospital and community setting with the hospital based general paediatricians. Adequate and flexible working schedules will be required to allow consultants to meet their various commitments as they will share the acute on-call rota and will need to perform ward rounds and hospital outpatient sessions.

The need to cover hospital for emergencies should be organised so as not to disrupt daytime community care activities. Some CPCCHs who are hospital based, may take a lesser acute role than their other colleagues, and have administrative and on call commitments in the community. There are other CPCCHs who have sessions in the community as an extension of the hospital consultant service, but who do not have managerial or on call commitments in the community. These jobs are fairly balanced between hospital and community work and there will be considerable variation in the mixture of duties as described.

It is the view of the BPA that in future the majority of new posts will fall into the models 2 and 4 above.

These guidelines were approved by BPA Council on 28 June 1991.

14 May 1991
RM/BPA: 4
Amended 2/12/91
JT
CONSULTANT PAEDIATRICIAN WITH SPECIAL INTEREST IN CHILD DEVELOPMENT AND HANDICAP

INTRODUCTION

3 per cent of children under the age of 16 years have one or more disabilities. The majority have disorders of locomotion and/or mental handicap. For children with chronic handicap, follow up and support by a Consultant Paediatrician with a special interest in child development and handicap is necessary. This Consultant Paediatrician acts as a co-ordinator of the support services for such children over many years. While children with chronic disability may be under the care of other consultants, his/her co-ordinating role is most important.

In dealing with the children directly, the Paediatrician's role would include the assessment and management of children with severe or complex physical, sensory or mental impairment. The role would also include support, training and advice to the multidisciplinary team. This team should include a physiotherapist, speech therapist, occupational therapist and psychologist. The services should be based in a child development centre or it's equivalent.

TRAINING REQUIREMENT

General professional training should include in-patient and out-patient care of ill children, including emergency work. Care of normal and abnormal neonates is also required. Higher specialist training should include experience in:-

(1) health, behaviour and development of normal children and adolescents.

(2) developmental assessment and the identification, comprehensive assessment, management and habilitation of children with continuing disability including neurological, sensory and emotional disorders. This must include experience of working in a multidisciplinary team such as a district or regional service for handicapped children.

(3) educational medicine, including the care and surveillance of children in normal and special

(4) epidemiology of health and disease in child populations and planning and organisation of services.
One of the special interests of the Paediatrician will be in the area of child neurology and neurological disability. A distinction must be made between the diagnosis and treatment of neurological disease (the responsibility of the Paediatric Neurologist) and the diagnosis, assessment and management of any consequence handicap and disability, the responsibility of the Paediatrician with special interest in child development and physical and mental handicap.

LOCATION OF SERVICE

The Consultant Paediatrician with special interest in child development and handicap requires access to the following services.

(a) Hospital Paediatric speciality services  
(b) Ophthalmology  
(c) E.N.T./Audiology  
(d) Orthopaedics  
(e) Paediatric Neurology  
(f) Clinical Genetics  
(g) Child Psychiatry  
(h) Dental Services

These can be most efficiently provided by linking the Consultant post into a Paediatric hospital.

While the Child Development Centre or its equivalent is most appropriately placed in the Community, it is important from a point of view of liaison with colleagues that the Consultant has an appointment to a paediatric hospital. Cross appointments with the paediatric hospital also facilitate referral of children from other services to the Child Development Centre for assessment and long term management. For those children who have been referred from the Child Development Centre to the hospital, the Consultant Paediatrician can ensure that the children receive the appropriate therapy or opinion, this link being particularly important from a parent point of view.

O. Hensey,  
February, 1993
THE CARE OF ADOLESCENTS IN HOSPITAL

Adolescent Medicine encompasses the major health and developmental conditions of young people in the 2nd decade of life. 1.

In the United States, provision of health care for adolescents is an integral part of paediatrics and the paediatric subspecialty of adolescent medicine is well developed with appropriate hospital facilities and training programmes. 2. Also, in the U.S. the upper age limit of paediatric practice is continuously being extended - from 16-18 years in 1938, to 21 years in 1972, and now it has even been suggested, that for certain individuals and in special circumstances, paediatric care indefinitely might be appropriate. 3. Adolescent Medicine is not well developed in Europe. In the United Kingdom a working party of the British Paediatric Association reporting on the need and care of adolescents drew attention to their special needs in relation to physical disorders peculiar to an occurring in adolescence, emotional problems, transfer of care of children with chronic conditions to Adult Health Services, and health education and genetic counselling. 4. Special hospital services for adolescents were recommended but the concept of exclusive specialisation in adolescent medicine (as in the U.S.) was rejected. However, even among American Paediatricians there is no accepted policy on Health Care of Adolescents, the only age group in which morbidity and mortality have not fallen over the last 30 years. 5.
In Ireland in 1989 there were 22,682 admissions of young people aged 12-18 years to acute hospitals. The Cork Regional Hospital in 1990 had about 2,000 adolescent admissions; over a half were admitted to "adult" wards where there is no paediatric liaison or ambience and one-third were in the paediatric surgical ward. Relatively few (about 12%) were under direct paediatric care.

Present Policy/Practice on Adolescent Medicine in Ireland
A survey on hospital policies/facilities for adolescents (children aged 12-18 years) was carried out earlier this year and revealed interesting and important variations. The upper age limit for admission to paediatric wards or attendance at Paediatric Out-Patients varied from 12-16 years with a number of hospitals regarding all children of 12 years or more as "adult patients". Often, however, there did not seem to be definite policies or there was flexibility in implementation. In some units, children with chronic health problems were transferred to the care of Adult Physicians at the age of 12 years.

Paediatricians reported that they recommended "transfer of care" when the child wished it or felt uncomfortable in the paediatric unit and this was usually later in adolescence. For most hospitals, there was no definite information on the numbers of young people admitted to paediatric or adult wards.

Paediatricians estimated that approximately 30-50% of adolescent admissions were to the paediatric unit but where definite figures were available (e.g. Cork Regional Hospital, Waterford Regional Hospital) it was clear that the great majority were in "adult" wards. Not one hospital (Childrens' or General) had facilities specific for adolescents though sometimes they were accommodated in single rooms or special wards with patients of similar age. Paediatricians were in agreement on the need for an adolescent ward and for greater paediatric involvement in the medical problems of adolescents. With regard to the social/life style morbidities (sexual,
drug, psychological problems) there was a general, but not universal, consensus that paediatricians should become more involved. It was emphasised however, that as in the U.S. paediatricians are "uncomfortable" and ill-prepared in these areas and require training and appropriate psychiatry and social work support.

Adolescents are different and require special provision in hospital. At present, the majority are accommodated among much younger children in paediatric units or among much older adult patients. Hospitals should develop adolescent units and paediatricians, because of their training and experience in growth and development, behaviour problems, and family relationships, should become more involved in the health care of adolescents.

The recommendations of the BPA and AWCH are appropriate for Ireland too and may be summarised as follows:—
Adolescents in hospital should be together in a separate unit furnished to their needs and linked to the paediatric department. They should be cared for by appropriately trained staff who understand their physical and emotional needs and who respect their increasing need for independence. Paediatricians should take the lead but all hospital staff should take greater interest in the provision of improved facilities for adolescents in their care.

****

The following are Members of the Sub-Committee on Adolescent Medicine:—

Dr. J. McKiernan (Convenor), Dr. J. Cosgrave, Dr. B. McDonagh, Dr. E. Naughten and Dr. E. Tempany.

****
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GO'D
10.9.91
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