PAEDIATRICS

A NATIONAL MODEL OF CARE FOR PAEDIATRIC HEALTHCARE SERVICES IN IRELAND

CHAPTER 27: GENERAL PAEDIATRICS

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ROYAL COLLEGE OF PHYSICIANS OF IRELAND

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27.0 INTRODUCTION

"General paediatrics is the diagnosis from symptoms, signs, and investigations, of undifferentiated referred infants, children and young people. The general paediatrician then initiates treatment which can be delivered personally or by another person or team, according to the needs of the child." (Wacogne et al., 2006)

Sick children can have simple or complex diseases and the paediatrician needs to know how to manage these independently or by working with other colleagues. The general paediatrician looking after children with complex multisystem illness can facilitate the holistic care of the child while ensuring adequate subspecialty input. General paediatricians should have the competencies to deal with acute presentation of illness affecting concurrently one or more organ systems, and administration of all necessary immediate care. While the development of paediatric subspecialists has benefited children immensely, the general paediatric service is a core part of efficient and effective paediatric healthcare services.

The roles of general paediatricians include:

- Outpatient general paediatric clinics (routine and rapid access)
- Acute unscheduled care (inpatient areas, short stay observation units)
- Day care (food challenges, vaccinations, medical assessment)
- Coordination of care for patients with complex needs
- Providing paediatric care in special care baby units (SCBUs)
- Developing areas of special interest

Often general paediatricians will have an area of special interest, in which they have undergone additional training, and will develop services in this area locally with links to tertiary subspecialist services as appropriate.

There are several drivers for change in paediatric services currently, which can all be positively influenced by further development of general paediatric services in Ireland:

- European Working Time Directive (EWTD) for non-consultant hospital doctors (NCHDs)
  - Increasing consultant-delivered care reduces the burden and workload on NCHDs, provides greater support and learning opportunities for trainees
- The need for cost containment
  - General paediatricians can provide an effective means of 'filtering' patients to more expensive aspects of paediatric care services, including investigations and admissions.
- The introduction of a new under six contract for general practitioners
  - There needs to be greater connectivity with primary and community care services.
- Shift towards greater levels of ambulatory care and the 'hospital in the home' concept

27.1 CURRENT SERVICE PROVISION

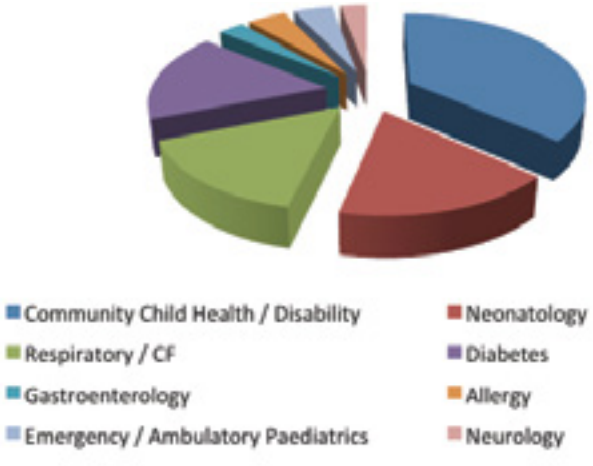
The development of general paediatrics, especially in Dublin, has lagged behind the development of tertiary subspecialties. Currently, a very significant deficit exists whereby patients are often referred directly from primary care to tertiary paediatric services. This has the effect of overloading tertiary paediatric services, resulting in lengthy waiting lists and difficulty in the adequate provision of outreach clinics.

A survey undertaken by the National Clinical Programme for Paediatrics and Neonatology in June 2015 indicated that there were approximately 86.3 whole time equivalent (WTE) consultant general paediatricians, distributed nationally as follows:

Hospital Group	General Paediatricians (WTE)
Children's Hospital Group (3 hospitals)	9.7
Dublin Midlands (1 hospital)	2.5
Ireland East (3 hospitals)	13.8
RCSI Hospitals (2 hospitals)	12
South-South West (5 hospitals)	20.8
UL Hospitals (1 hospital)	5.5
Saolta (5 hospitals)	22

At the time of the survey, almost 20% of posts were filled by locum consultants. Many consultant general paediatricians reported having an area of special interest, which may or may not involve protected time.

The most common areas of special interest were:



27.2 PROPOSED MODEL OF CARE

General Paediatrics will play a central role in the future development of child health services in Ireland, and should be a core component of the new children's hospital ensuring far greater efficiencies in terms of acute care delivery and scheduled care.

Scheduled Care

General Paediatric Outpatient Clinics

Initial referral from primary care should be to general paediatric medicine. Access to tertiary care will be via general paediatrics in the main, other than in circumstances where direct referral is indicated, e.g. where blood film shows evidence of leukaemia. The majority of children will not need tertiary care and, following a protocol-

led comprehensive assessment, general paediatricians will determine which children require referral to tertiary paediatric subspecialist services. On occasion, agreed and timely onward referral to tertiary care will be appropriate as per agreed referral and care pathways. In terms of scheduled care, the general paediatrician will see referrals from primary care, community services and the emergency department. Close working relationships with primary and community care (source of referrals) and tertiary care (for the small number that require additional tertiary expertise) are essential. Education of those working in primary care and community care services is essential to ensure that referrals are appropriate. The development of clinical nurse specialist roles and nurse-led clinics are critical for this service to be delivered. In conjunction with this, there needs to be a dedicated allocation of health and social care professionals to general paediatrics to enable the delivery of best care across the broad spectrum of childhood illness.

Rapid Response Clinics

Rapid response outpatient clinics, where the child is seen within two weeks, are very important to ensure that children who require to be seen sooner are fast-tracked. Rapid response clinics for the new children's hospital will take place in the two satellite centres and the main site, and outside of Dublin in local and regional paediatric units where appropriate. Children may require one follow-up visit in addition to the initial new consultation. Nurse-led clinics (using both clinical nurse specialists and advanced nurse practitioners) can run in tandem with general paediatric clinics and are a proven model. The suggested casemix for both rapid access and routine general paediatric outpatient clinics is detailed in the Model of Care for Urgent and Ambulatory Care Centres (2015) developed by the National Clinical Programme for Paediatrics and Neonatology and the National Emergency Medicine Programme.

Special Interest Clinics

General paediatricians should develop special interest and expertise in areas such as respirology (in particular asthma), dermatology (common skin conditions, in particular eczema), cardiology (approach to the child with chest pain, syncope, palpitations and a likely innocent murmur), community child health (developmental paediatrics and child protection), gastroenterology (constipation, recurrent abdominal pain), emergency and ambulatory care, or allergy.

Nurse-led Clinics

The development of nurse-led clinics in areas such as eczema / asthma education / constipation and enuresis should run in tandem with general paediatric outpatients, and will help to reduce the burden of review appointments and improve the quality of services provided. Intravenous teams and phlebotomy services are vital for both scheduled and unscheduled care in paediatrics.

Acute Inpatient and Unscheduled / Emergency Care

Inpatient care is firmly underpinned by the principle of consultant-led and -delivered care. All children should initially be under the care of a general paediatrician. For those children with specific and complex conditions, under the care of a specialist service, there may be circumstances when the child would benefit from the ongoing involvement of the general paediatrician and this should be facilitated. The general paediatrician can facilitate continuity of care and ensure that effective communication channels are maintained between services. Robust handover mechanisms (using ISBAR) and Paediatric Early Warning Systems (PEWS) are important. The primary responsibility for admitted patients rests with the consultant on call and he/she will request multidisciplinary team (MDT) involvement, radiology and other investigations, and tertiary subspecialist consultation as required.

Most urgent care problems are not life-threatening; and help, advice and simple treatments for patients and families should be delivered as close to home as possible. Parents, families and the wider public want to know that if a problem arises they can access a service that will ensure that the right care is given when they need it. We need to ensure that there is absolute clarity and transparency about what services each paediatric unit will offer, and direct children and their parents and families to the service that can best treat their problem. The Model of Care for Urgent and Ambulatory Care Centres (2015) describes in detail how services for acute unscheduled care should be delivered.

Intensive Care

Infants and children admitted to the intensive care unit (ICU) will be under the combined care of a paediatric intensivist (or anaesthetist on call) and a general paediatrician (unless they are under the care of a tertiary specialist), and ongoing care post-ICU admission will be via the general paediatrician. Children may also require input from other members of the MDT such as CNSs and health and social care professionals.

Health Promotion and Education

Health promotion and education are implicit components of the work of a general paediatrician. Training and teaching of medical students, nursing students and non-consultant hospital doctors in general paediatric medicine will be a key role.

Safeguarding and Child Protection

Safeguarding and child protection is a core responsibility of all paediatricians. It is an obligation of the general paediatrician to be alert to the possibility that a child may have suffered physical abuse, emotional abuse, sexual abuse or neglect from a carer or other adult known or unknown to them. Child abuse (physical, sexual, psychological or emotional) is neither simple to diagnose, nor easy to manage. General paediatricians will lead the management of suspected non-accidental injury, and other forms of suspected child abuse, in conjunction with all paediatricians, surgical specialists and other health and social care professionals who have special expertise in this area.

Liaison Psychiatry

Increasingly, close collaboration and co-management with child and adolescent mental health services (CAMHS) and liaison psychiatry is required. Children and adolescents with deliberate self-harm, eating disorders and functional symptoms are admitted under joint care and close working relationships are essential.

MDT Support

Educational support, especially in relation to diet and exercise, plays a key role in the treatment of general paediatric medical conditions. Such support will be delivered by all team members, in particular CNSs, ANPs and health and social care professionals. The key objectives of this intervention are the provision of information, training and education to meet international standards for both parents and children on an individual basis. Education programmes will be delivered in hospital and also via web-based learning tools. Outreach education and information support should be provided by staff in the tertiary centres (and new children's hospital in the future) to health care professionals working in paediatric primary care services.

Consultant-delivered Care

Consultant-delivered care indicates active consultant presence during times of peak activity, seven days a week. It facilitates early access to senior decision makers within the paediatric care setting, while providing flexiblity in work patterns. There are many potential benefits of consultant-delivered care, including:

- Enhanced safety, quality of care, and child/family experience
- Significant reduction in acute overnight admissions – estimated 25-33%
- Decreased length of stay – estimated 25%
- Consultant-led medical handover providing opportunities both for risk assessment and training
- Reduction in investigations (laboratory, radiology and others) leading to reduction in associated costs
- Consultant capacity to develop special interests for non-acute care, e.g. community child health, cardiology, endocrinology/diabetes, asthma, allergy, adolescent health and dermatology; and collaboration with tertiary subspecialist services for research and local service provision
- Improved staff satisfaction
- Improved training experience and defined career pathways

Given the low base of general paediatricians in Ireland at present, consultant-delivered care is not likely to be feasible in all settings over the next 5-10 years, however it represents a potential model for service delivery in some settings including the new children's hospital and satellite centres.

Local and Regional Paediatric Units

For general paediatrics outside of Dublin, it is imperative that local and regional hospitals have a clear understanding of their role. General paediatricians appointed to these units (other than neonatologists) should partake fully in the on-call rota and be involved in both acute and scheduled care of children.

Core Components of Local Paediatric Units	Core Components of Regional Paediatric Units
• Should be staffed by a minimum of 6WTE paediatricians • Should consider the development of consultant extended day service with increase in consultants to 8-10WTE • Acute paediatric urgent and ambulatory care, and close liaison with primary care • Strategic development of consultants with a special interest in cardiology, respiratory, community child health and endocrinology • Development of special interest clinics with involvement of nursing and HSCPs • Shared care service for oncology • Should develop a strong ambulatory and community focus	• Should be staffed by a minimum of 12WTE consultant paediatricians • Special interest areas in respiratory, endocrinology, cardiology, allergy, neurology, dermatology, infectious diseases, paediatric emergency medicine and community child health with outreach clinics to local hospitals within group • Regional hub for non-specialist paediatric surgery, orthopaedics, ophthalmology and ENT • Comprehensive anaesthetic, pathology and radiology back up • Regional child sexual assault service • Close links to new children's hospital with co-run outreach clinics • Expanded roles for clinical nurse specialists and HSCPs • Shared care service for oncology

27.3 REQUIREMENTS FOR SUCCESSFUL IMPLEMENTATION OF MODEL OF CARE

Staffing

General paediatric services in Dublin require a minimum of 6WTE consultants to run both satellite centres and 16.5WTE to run the acute paediatric service (initially across three sites but then in the new children's hospital and satellite centres) - thus a total of 22.5WTEs are required. This should be supported by two tiers of trainees that are fully EWTD compliant, and requires the development of other supporting roles such as ANPs, CNSs, HSCPs and paediatric qualified GPs.

Development of general paediatrics services in Dublin prior to the opening of the new children's hospital will ensure that each child attending the hospital receives the correct level of care, in the right place every time. All children, especially those with complex, multi-system conditions, would benefit from the involvement of a general paediatrician in their care (the basis of the Medical Home model). Development of general paediatric medicine as a specialty requires investment in training and leadership. There is also the potential for expanded scope of practice for nursing and health and social care professionals (HSCPs), with development of ANP and CNS roles, as well as expansion of the roles of dietitians, physiotherapists and occupational therapists.

Based on current staffing levels nationally and proposed consultant numbers for local and regional units, there is a deficit of approximately 46WTE consultant general paediatricians in local and regional paediatric units. When increasing the numbers of general paediatricians nationally, there will be a requirement for greater support services such as nurses and HSCPs due to increased activity and throughput.

27.4 PROGRAMME METRICS AND EVALUATION

A set of 10 national standards have been applied in the UK (RCPCH, 2011) and their adoption should be considered in Ireland.

These standards are:

1. Every child or young person who is admitted to a paediatric department with an acute medical problem is seen by a consultant paediatrician or registrar within four hours of admission.
2. Every child or young person who is admitted to a paediatric department with an acute medical problem is seen by a consultant paediatrician within the first 24 hours.
3. Every child or young person with an acute medical problem who is referred for a paediatric opinion is seen by, or has the case discussed with, a consultant paediatrician, specialist registrar or paediatric registrar, or a registered children's nurse who has completed a recognised programme to be an advanced practitioner.
4. All SSOUs have access to a paediatric consultant (or equivalent) opinion throughout all the hours they are open.
5. At least one medical handover in every 24 hours is led by a paediatric consultant (or equivalent).
6. A paediatric consultant (or equivalent) is present in the hospital during times of peak activity.
7. All general paediatric inpatient units adopt an attending consultant (or equivalent) system.
8. All general acute paediatric rotas are EWTD compliant.
9. Specialist paediatricians are available for immediate telephone advice for acute problems for all specialties, and for all paediatricians.

10. All children and young people, children's social care, police and health teams have access to a paediatrician with child protection experience and skills available to provide immediate advice and subsequent assessment, if necessary, for children and young people where there are child protection concerns. The requirement is for advice, clinical assessment and the timely provision of an appropriate medical opinion, supported with a written report.

27.5 KEY RECOMMENDATIONS

- General paediatrics has a central role in the future development of child health services in Ireland
- Local and regional hospitals must have a clear understanding of their role in relation to provision of paediatric services
- The number of general paediatricians needs to be increased nationally, and roles developed for ANPs, CNSs and HSCPs
- Standards for paediatric units should be audited regularly

27.6 ABBREVIATIONS AND ACRONYMS

ANP	Advanced Nurse Practitioner
CAMHS	Child and Adolescent Mental Health Services
CNS	Clinical Nurse Specialist
EWTD	European Working Time Directive
GP	General Practitioner
HSCP	Health and Social Care Professional
ICU	Intensive Care Unit
MDT	Multidisciplinary Team
PEWS	Paediatric Early Warning System
RCPCH	Royal College of Paediatrics and Child Health
SSOU	Short Stay Observation Unit
WTE	Whole Time Equivalent

27.7 REFERENCES

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