Paediatric Emergency Medicine Considerations

The principles of Emergency Medicine-delivered healthcare apply equally to care of adults and children. Therefore, while specific reference to paediatric issues is made in other generic sections of the EMP report, core general recommendations are also applicable to care of children. This section of the EMP report is modelled on the UK ‘Red Book’ (Report of the Intercollegiate Committee for Services for Children in Emergency Departments (2007))\(^1\), and is designed to act as a companion piece to the IAEM/ACEMT/RCPI Faculty of Paediatrics document *The Development of Paediatric Emergency Medicine in Ireland* (2010).\(^2\)

**Executive Summary**

- The EMP recognises the importance of Paediatric Emergency Medicine (PEM), in the context of the National Emergency Care System and the Irish healthcare system in general. PEM should be developed through collaboration between the specialties of EM and Paediatrics;
- There are over 20 hospitals in Ireland where acutely ill or injured children receive care, with children accounting for 20-25% of all attendances at general Emergency Departments (EDs), outside Dublin, while over 110,000 children attend the 3 paediatric-only EDs (PEDs) in Dublin on an annual basis;
- Currently, paediatric emergency care is provided in regional units through a combination of Emergency Medicine and General Paediatric services, often with little integration between specialties. The future development of PEM must be based on the integration of EM, general paediatrics, paediatric trauma and surgery to meet the needs of children requiring emergency care;
- There is an urgent need to address Consultant staffing in PEM, through both increases in Consultant numbers in the dedicated PEDs in Dublin and in the appointment of PEM specialists to regional units. Each Emergency Care Network (ECN) should have a lead clinician for PEM;
- Training pathways for specialists in PEM need to be formally established, and an application will be made to have the specialty of PEM recognised by the Medical Council;
- Paediatric-trained nurses and allied staff are crucial to the appropriate delivery of paediatric emergency care;
- Infrastructural deficits in EDs need urgent attention to facilitate child and family-friendly care. Basic requirements for preparedness for care of children need to be improved;
- Observation medicine is particularly effective in the emergency care of children and should be developed as a priority area in PEM;
- Child-specific considerations must be included in ED diagnostics;
- ED information systems must include the specific needs of PEM;
- Child protection should be a fundamental concern of ECNs, and robust systems of support to protect children should be in place.
Introduction

The principles of emergency care apply equally to care of adults and children. The EMP recognises the importance of the specialty of PEM. There is consensus in EM and Paediatrics internationally regarding the primary importance of specialists in PEM when considering the provision of high quality paediatric emergency care.\(^1\)-\(^7\)

Current challenges in PEM

The most obvious challenges in the emergency care of children in Ireland lie in:

1. Constraints in ED staffing with PEM-trained clinicians (both medical, nursing and AHPs); and
2. Infrastructural deficits within EDs that preclude child and family-friendly care; and
3. Appropriate and rationalised location/configuration of services for acutely unwell or injured children.

The role of PEM needs to be developed within EM, General Paediatrics and the healthcare system as a whole.

Specific consideration of PEM issues can be undertaken in the following areas:

- Service design;
- Child and family-friendly care in ECNs;
- Clinical care of children in ECNs:
  - Direct clinical care;
  - Observation Medicine/Clinical Decision Units;
  - ED-based Review Clinics;
  - Diagnostics;
  - Information systems and data analysis.
- Staffing and training issues;
- Training of doctors sub-specialising in PEM;
- Child protection in ECNs.
Service Design

Background

There are currently over 20 hospitals in Ireland where acutely ill or injured children are seen. Nearly all of those hospitals will admit children acutely, while others will see children within the ED but will not admit e.g. Naas General Hospital, St. Columcille’s Hospital, Loughlinstown. Concurrently, over 110,000 children attend the 3 PEDs in Dublin annually. In most hospitals with EDs that see both adults and children (typically outside Dublin), approximately 20-25% of all attendances will be children, and this is consistent with international data.\textsuperscript{1,2}

With few exceptions, those hospitals that currently see acutely sick or injured children have inappropriate physical infrastructure e.g. lack of adequate child-friendly and appropriate areas within EDs. Having appropriate infrastructure has been recognised internationally as being integral to the delivery of quality paediatric emergency care.\textsuperscript{2,3}

Defining an age-limit for Paediatric Emergency Care

The age at which patients are defined as children is a complex issue, given legal impetus by the following:

- The Irish Constitution defines a child as a person aged less than 18 years;
- The Non-Fatal Offences Against the Person Act (1997) allows patients aged 16-18 years consent to, but not refuse, surgical, medical or dental treatment;
- The Mental Health Act (2001) states that patients aged 18 years or less should be assessed by Child Mental Health Services, when those services are resourced to do so;
- Gillick Competency – this has never been tested in an Irish legal setting but is deemed to have likely applicability by clinicians who care for children;
- The Law Commission will shortly produce a report on \textit{Children and the Law} which will consider issue of assuming capacity in children from 16 years i.e. patients aged 16 years and over will be assumed to be adults with capacity and can consent to/refuse treatment.

While not, strictly speaking, related to appropriate age cut-off for children, the following pieces of legislation are also important when considering emergency care of children in Ireland:

- UN Convention on the Rights of the Child (which was ratified by Ireland in 1992);
- The Child Care Act, 1991 (provides the legislative basis for dealing with children in need of care and protection);
- Children First: National Guidelines for the Protection and Welfare of Children, 1999 (not a legal document \textit{per se}, but regularly referred to as guidelines from DoHC which must be followed in practice).

In operational terms, the age cut-off for defining a child in an ED has varied between institutions, with some EDs defining a child as less than 16 years old, while others use 14 years as the division between ‘paediatric’ and ‘adult’. In recent years, the 3 PEDs in Dublin have agreed that they will only accept patients aged less than 16 years.

Considering all the above, the EMP recommends that children are defined in the National Emergency Care System (NECS), in an operational sense, as those patients \textbf{less than 16 years old}.

Standards of care

The EMP will develop draft standards for the emergency care of children, in conjunction with the Faculty of Paediatrics of the Royal College of Physicians of Ireland. These standards will be supported by Key Performance Indicators (KPIs) for the quality and efficiency of PEM.
Paediatric Emergency Care in ECNs

Paediatric emergency care should be integrated into ECNs. A prerequisite of this approach is the breaking down of traditional professional barriers between EM and paediatric clinicians. The skills of the whole network should be utilised with a flexible approach to traditional professional, organisational and/or managerial boundaries.

All ECN healthcare settings where children could potentially be seen should be resourced appropriately in terms of staffing, infrastructure, equipment and policies.\textsuperscript{10,11,12}

Each ECN should have a nominated lead clinician for PEM, who will support the Network Coordinator for EM in overseeing the provision of PEM (it is possible that in some networks, at certain times, the same Consultant in EM may undertake both roles).

Access to PEM

Children should generally only be admitted to hospitals with Type A EDs (24/7 ED and on-site Paediatrics) and those with on-site General Paediatrics. Children may be admitted to hospitals with Type B Local Emergency Units, according to predetermined protocols, developed between the ECN Lead Clinician for PEM and the General Paediatrics Lead for the hospital. Children may be admitted to a Clinical Decision Unit (CDU), according to ECN protocols. Children with non-life and limb-threatening injuries could attend a Type C Local Injury Unit, according to ECN guidelines and governance arrangements. Staff training and competencies at all such units (which are led by the network lead for PEM) must comply with national (and hence network) standards for PEM (once developed).

Certain clinical conditions should mandate immediate transfer to Type A EDs and ambulance access protocols should be consistent with the NECS protocols in relation to paediatric care e.g. major trauma, serious medical illness such as meningococcal sepsis.

Regional or national networks must be in place to develop protocols to stabilise and transfer children to a PICU.

ECNs must have systems in place to provide early advice and transfer for trauma. This includes advice for Pre-Hospital Care providers and networks for the secondary transfer and retrieval of paediatric patients from DQCC Model 3 to Model 4 hospitals.

Ambulance services should examine their practice for children against national guidelines, standardise their paediatric equipment, and ensure their staff have basic paediatric care competencies.

Quality of Care in PEM

All front-line staff delivering acute care to children must be competent in the basic skills required for safe practice, in whichever setting they work. These skills include:

- Paediatric Basic Life Support;
- Understanding and training in using paediatric-appropriate equipment and medications during paediatric resuscitation.

ECN EDs seeing a large volume of children per annum should employ a Consultant with subspecialty training in PEM. The appointment of Consultants (where more than one appointment is appropriate) from both backgrounds (EM and Paediatrics) is an advantage.

All EDs should have a named Paediatrician from within the hospital or network with designated responsibility for ED liaison.
There should robust and transparent processes in place across ECNs to provide adequate child protection.

KPIs and process measures will be implemented in PEM across the ECN, under the shared governance of the Network Co-ordinator for EM and the Lead Clinician in PEM.

Clinical audit and research are core elements of PEM and ECNs should facilitate PEM-specific research. There should be integrated ICT across the PEM network and within the ECN to support clinical audit and research.

**Liaison with Primary and Community Care**

Notification of a child’s attendance at any emergency care setting should be made in a timely way to their primary care team.

ECNs should prevent unnecessary hospital admissions by the development and utilisation of alternative options, such as CDUs, and developing care pathways for common conditions with community and paediatric colleagues.

**Reconfiguration of services**

The care of children and the provision of high quality PEM services should be a key consideration in the reconfiguration of emergency services. The proposed ECNs provide a framework to consider the reconfiguration of PEM services, which include Pre-Hospital Care, ED-based care, and paediatric in-patient care. Close liaison with Primary Care and community-based services, particularly social care and child protection services, is particularly important in the provision of appropriate systems of emergency care for children. The EMP is concerned regarding previous assumptions made in relation to paediatric emergency care (e.g. the suitability of minor injury clinics, paediatric ‘urgent care centres’, etc) which were advanced in isolation, without due consideration of their integration into a National Emergency Care System. The EMP recommends that the configuration of PEM services should be considered in the context of the overall recommendations of the EMP and advanced through collaboration between Paediatric and Emergency Medicine programmes. Where service reconfiguration takes place, it should be ensured that the safety and efficiency of the new arrangements are audited, clinical risks are fully assessed and risk mitigation measures put in place to cover the transition phases from existing to new service structures and practices.
Child and Family-centred Care in ECNs

Child- and family-centred care (CFCC) is an innovative approach to the planning, delivery, and evaluation of health care of children that is grounded in a mutually beneficial partnership among patients, families, and health care professionals. CFCC ensures the health and wellbeing of children and their families through a respectful patient/family-professional partnership.

There are significant challenges to providing CFCC for children in the ED. The lack of a previous relationship between the patient/family and ED health care professionals, as well as the acute nature of many events prompting an ED visit, can limit the ability to create an effective partnership. In addition, many cultural and societal variations constituting families compound the difficulty in identifying with certainty who, in fact, is a child’s legal guardian. Situations particular to the ED (such as arrival of a child by ambulance without family; the unaccompanied minor seeking care without the knowledge of his or her family; visits related to abuse or violence; time-sensitive invasive procedures, including attempted resuscitation; unanticipated critical illness, injury, or death of a child) require thoughtful advanced planning. Reluctance on the part of health care professionals to allow family member presence during invasive procedures or attempted resuscitation has limited family access that may be beneficial to the patient, family, and health care professional alike. Overcrowding and acuity in the ED should not be allowed to cause delay or disruption of PEM, or challenge the ability of health care professionals to provide respectful and sensitive care for children.

Despite these challenges, achieving excellence in the provision of CFCC is possible in the ED. The following recommendations have been adapted from a technical report\textsuperscript{13}, intended to supplement the joint policy statement of the American Academy of Pediatrics (AAP) and American College of Emergency Physicians published in 2006\textsuperscript{14}, which drew on previously published AAP policy statements and reports and reviewed current literature to produce guidance on aspects of emergency care can reflect the practice of CFCC.

**Recommendations to embed CFCC in ECNs**

1. **EDs must accommodate the needs of children and accompanying families/guardians as far as is reasonably possible**
   - **Patient Flow** Patient flow that exemplifies CFCC does not limit the child’s access to family members or vice versa unless the demands of evolving patient independence, the need for private interview or examination, or safety of the patient, family, or staff dictate otherwise. For example, an operational patient flow that requires the parent to leave the child for registration while the child is receiving care can be made more patient and family centred with a bedside registration system. Assistance can also be provided for the single parent who arrives with an ill child in the ED set-down area so that he or she can remain with the child.
   - **Security and Identification of Family** For security reasons, EDs should have a policy of identifying family members with a “family” badge, corresponding to a “visitor” badge used on some EDs. Changing that label to read “family” is a small step that may help to reinforce the commitment to moving beyond thinking of family as visitors and acknowledging them as partners in care of the child.
   - **Family Presence** ED health care providers should enable parents to be present during procedures, such as fracture reduction, according to predetermined ECN policies.
   - **Interpretation Services and Communication** Because communication is a cornerstone of CFCC, timely access to professional interpreter services is essential for providing CFCC when a language or communication barrier exists. Children of families with language barriers are more likely to be admitted to the hospital, have more tests ordered, and have more severe disease and are less likely to get good follow-up care.\textsuperscript{15} The common practice of using family members or accompanying friends as translators, particularly in
the setting of unfamiliar medical terms or sensitive information, runs the risk of allowing faulty communication and may compromise patient privacy and safety as well.

- **Comfort Care** The routine measurement of patient pain, anxiety, and comfort as part of initial and continuing patient assessment is central to CFCC, as is the commitment to respond to identified needs for comfort with interventions such as pharmacological and non-pharmacological treatment, play therapy, and psychosocial and spiritual support.

- **Discharge Planning and Instructions** Standard discharge instructions can be a vehicle for CFCC when they can be customised to reflect solicited family preferences that are incorporated into the family’s assumption of care at discharge and include appropriate input from and follow-up with the patient’s primary health care professional.

2. **ED infrastructure must accommodate the needs of children and their families**

   This requires:
   - Audio-visual separation from adults, including a dedicated paediatric waiting area and separate triage area;
   - There must be at least one clinical cubicle or trolley space for every 1,100 annual child attendances dedicated to children;
   - Consideration of security issues, including the appropriate resourcing of EDs for managing child mental health emergencies;
   - The availability of food and drink;
   - The provision of baby-changing and breast-feeding areas;
   - Access to hygienic, safe play facilities;
   - An appropriate ED infrastructure that embodies CFCC will accommodate family members, including well siblings, and provide restrooms. It should provide children protection from the sights, sounds, and smells of emergency care of other ED patients and ensure adequate privacy on-site for sensitive interviews and for families who are experiencing grief or loss. Adolescents should have access to quieter waiting and treatment areas, and age-appropriate toys, music or films.

3. **Families and service users should be included in the decision making regarding changes in PEM services and in PEM education and training**

   - New policies, practices, or infrastructural changes are more likely to reflect a CFCC philosophy if family representatives are included in the planning stages. For example, patients or family representatives should be enabled to provide input to drafts of printed materials and participate in the design of new ED facilities.
   - Providing clinical supervision and teaching to trainees at the bedside, with the active participation of the patient and family, is an opportunity to model CFCC. Curricula that include precepts of CFCC or use families and patients as teachers reflect further enhancement of PEM care. Irish PEM should engage in research to examine the relationship of specific CFCC practices and short-term and long-term outcomes for both patients and health care professionals to ensure that progress toward the goals of CFCC is sustained.
Clinical Care of Children in ECNs

Multi-Specialty Collaboration in the Emergency Care of Children

It is imperative to the future provision of emergency care for children that there should be an integration of service delivery across the specialties of PEM, general paediatrics, paediatric trauma surgery, paediatric surgery in general and paediatric diagnostic imaging, and that this approach should be reflected in national care pathways, protocols and agreed standards of care.

Currently, in a significant number of EDs where both adults and children attend, ‘surgical’ paediatric cases are usually managed by EM, while ‘medical’ paediatrics is usually managed by General Paediatrics. Paediatric trauma (including major trauma), acute abdominal pain etc, will be seen as the remit of EM, while acute illness will be the remit of Paediatrics. Conversely, serious medical illness requiring resuscitation is often managed by EM, with Paediatrics consulting. Oftentimes, children with ‘medical’ illness will be reviewed on a General Paediatric ward or day unit after initial registration and triage in the ED. The EMP contends that this separation of acute care of children into silos, typically physically and professionally distinct, should not continue. The EMP supports a flexible and inclusive approach to traditional professional, organisational and/or managerial boundaries. The acute care of children should be delivered in a dedicated clinical area which is used by all specialties involved in the emergency care of children, where staffing and other resources are shared across disciplines and where the primacy of PEM care is accepted. This area should be audio-visually separated from the adult ED, but should be adjacent to the general ED.

Separating care of children into cohorts where the sickest children are initially cared for by practitioners who are not regularly seeing the majority of mild and moderately unwell children is unsafe practice and is not supported by the EMP.

Direct Clinical Care

Patient Reception and Triage

1. All children attending EDs must be visually assessed within minutes of arrival, to identify an unresponsive or critically ill child.
2. A brief clinical assessment should occur within 15 minutes of arrival.
3. Triage tools should be fit-for-purpose for paediatric patients. Paediatric triage typically takes longer to complete than in adults and traditional tools, such as MTS, are not ideal for use in children. Therefore, the Paediatric Triage tool recommended by the EMP (appendix X) should be employed in all ECN units at which children attend. At times of peak activity, a contingency system of prioritisation for full assessment must be in place if the waiting time exceeds 15 minutes.
4. Initial assessment must include a pain score when appropriate.
5. Registration details must include specific additional information (e.g. primary care team, school, public health nurse, accompanying adult).

Resources for the care of children

6. All facilities receiving sick or injured children must be equipped with an appropriate range of drugs and equipment. \(^{10,11}\)
7. Urgent help must be available for advanced airway management. **Paediatric anaesthesia should only be carried out by competent staff.**
8. All hospitals receiving acutely ill or injured children must have the facilities and staff required to establish high dependency care, and intensive level care for airway and respiratory support. ED doctors and nurses should be familiar with ECN PEM guidelines and know when and how to access more senior or specialist advice promptly for children.
9. Systems must be in place to ensure safe discharge of children, including advice to families on when and where to access further care if necessary.
10. All emergency care attendances in children must be notified to the primary care team: ideally both the GP and the public health/school nurse.

**Observation Medicine/Clinical Decision Units**

Paediatric acute care is particularly suitable to observation medicine, with a higher proportion of children, compared to adults, presenting with mild-to-moderate illness and injury and without pre-existing co-morbidity. The international literature would strongly support the use of a CDU to complement PEM and traditional inpatient paediatrics, with many authors reporting equally favourable clinical outcomes in comparison to hospital admission with associated financial savings, reduced ED and hospital length of stay and improved patient satisfaction.

In January 2009, the Royal College of Paediatrics and Child Health (RCPCH) (UK) presented advice for commissioners and providers of care in relation to short stay paediatric assessment units. This report highlighted three alternative models of care:

- A. CDU Co-located with a paediatric ward;
- B. CDU Co-located with ED, run by the paediatric department and ED;
- C. CDU Co-located with ED, run by ED in a specialist paediatric hospital.

The relative merits of each model would need further exploration, particularly in the context of local and regional resources, beyond the scope of this document. However current senior staffing levels and infrastructural support would suggest a combination of models A and B best suits existing practice in Ireland.

There is some confusion, however, regarding terminology in this area of practice. Some authors/practitioners refer to the concept of a Paediatric Ambulatory Care Unit (PACU) and assume this to be a CDU, while others assume this to be an equivalent of the adult AMU model currently under development. It is important to ensure that practitioners and planners do not interpret a PACU as an alternative to an ED, whereby it is assumed that a large percentage of mild-to-moderately unwell children with ‘medical’ presentations can be safely and efficiently siphoned off, leaving injured and seriously unwell children to be managed by practitioners who subsequently have diminishing experience of dealing with children. This is not a model that can be supported, in terms of unacceptable clinical risk, and is not a model that has found favour internationally.

**ED-based Review Clinics**

These clinics, which are best suited to a dedicated and/or large PED, could be run on a daily, twice or thrice weekly basis and can be physically located within the ED. The service can primarily be provided by general paediatricians or emergency physicians, or both. Their purpose is to provide acute ‘outpatient’ follow-up to patients attending the ED, where a delay of longer than several days is inappropriate, but where an admission is unwarranted. This service has the advantage of not requiring additional infrastructural or junior medical staffing support and has been recently explored in the RCPCH (UK) document on the role of the Consultant Paediatrician with a subspecialty interest or training in paediatric emergency medicine.

**Diagnostics**

1. The generic recommendations contained in this report on Diagnostic Imaging and Laboratory support for the NECS and ECNs are applicable to paediatric care also.
2. Appropriate consideration will need to be given to child-friendly diagnostic infrastructure, and staff in these areas, e.g. radiographers, will need specific training in care of children.
3. A national guideline should be developed for safe procedural sedation of children, not only for diagnostics, but also for therapeutic procedures within ECN units.
4. Point-of-care testing (POCT) should be explored as a utility in acute care of children. There is expanding evidence that POCT has particular benefits in the paediatric setting, particularly in the diagnosis of seasonal viral infections.\textsuperscript{23,24,25}

\textit{Information systems and data analysis}

ICT considerations for PEM, as in other areas, have significant commonalities with those for adult/general EM. However, important specific requirements need detailing:

1. The particular needs of children, and paediatric clinicians, managers, commissioners and regulators need to be defined, and used to inform the development of ED information systems (EDIS).

2. PEM staff should participate in the national information technology agenda, and engage proactively with local service providers to configure local systems as part of a national EDIS. It is likely that significant configuration of any national EDIS will be required for exclusive PEM practice e.g. existing PEDs in Dublin or the National Paediatric Hospital (NPH) and the proposed centre at AMNCH, Tallaght.

1. There should be a minimum dataset, which incorporates the specific needs of children.

2. Surveillance of local patterns of injury should be possible.

3. Hospitals that see injured children should subscribe to a trauma registry (e.g. TARN) to assess their own outcomes for children with major trauma. This should be ideally as part of a national trauma registry within the NECS.
Staffing and training issues

Appropriate medical and nursing staff provision is recognised as being integral to the delivery of quality paediatric emergency care.\(^\text{2,3}\) It is likely that few EDs that currently care for children have appropriate levels of trained staff in PEM and the EMP staffing survey will quantify this presumed deficit.

Medical Staffing

While there are approximately 65 Consultants in Emergency Medicine (EM) in Ireland at present, there are only 5 Consultants in PEM and all are based in the 3 PEDs in Dublin. This compares most unfavourably with international standards for staffing in PEM.

1. Consultants in PEM in the existing PEDs in Dublin

   o Current staffing is as follows:
     - *Our Lady’s Children’s Hospital, Crumlin (OLCHC)*: 2 Consultants for 32,000 annual attendances
     - *Adelaide, Meath incorporating National Children’s Hospital, Tallaght (AMNCH)*: 1 Consultant for 32,000 annual attendances and a second post filled on a locum basis.
     - *Children’s University Hospital, Temple St (CUH)*: 2 Consultants for 43,000 annual attendances

   o International benchmarks are:
     - *RCH Melbourne*: 12 Consultants for 66,000 attendances
     - *Toronto Sick Kids*: 32 attending physicians (i.e. Consultant equivalents) for 60,000 attendances
     - *Children’s Hospital of Philadelphia*: 50 attending physicians for 78,000 attendances
     - *Alder Hey, Liverpool*: 8 Consultants for 60,000 attendances

While it is unrealistic to consider that Consultant in PEM numbers would approach staffing levels in North America, it is worth noting that the planned NPH proposes to care for nearly 70,000 children in the ED at the Eccles St. site, with over 55,000 attending the AMNCH unit at Tallaght. It is thought likely that these figures may change as parents opt to attend the NPH, consequently increasing the Eccles St. attendances to a figure in the region of 80,000 attendances per annum. This would make that department the busiest PED worldwide.

The benefits of increased Consultant staffing in a PEM have been previously outlined. The EMP recommends that all Type A EDs that see children should appoint at least one Consultant with recognised subspecialty training in PEM.

If the successful candidate at interview were from an EM training background, then logically that person would be an additional person for the general EM on-call rota. The same principle should apply to someone from a Paediatric background i.e. they should be on the General Paediatric on-call rota. Ideally, a specialist in PEM would be appointed from both backgrounds to units where large volumes of children attend.

The recent publication of *The Role of the Consultant Paediatrician with Subspecialty Training in Paediatric Emergency Medicine*\(^\text{22}\) by RCPCH (UK) provides valuable assistance in delineating the potential future role of such specialists, as well as highlighting the benefits of collaboration between Paediatricians and Consultants in EM.

Each ECN should appoint a specialist in PEM to coordinate the care of children within networked units. Junior medical staffing will likely comprise trainees in EM at basic and higher specialist levels, and these doctors will have mandatory training in PEM as 6-month rotations. Non-EM trainees and
other junior medical staff in ECN units should receive regular education and training in PEM as part of a generic education programme.

Finally, consideration should be given to academic appointments in PEM. There should be, nationally, at least one Chair in PEM in the future.

**Nursing Staffing**

Nurses working in emergency care settings in which children are seen require at least basic competence in both emergency nursing skills and the care of children. In ECN units where children attend, adequate numbers of nursing staff trained in paediatric emergency care are crucial in the delivery of safe and efficient care. The following should be considered:

- Nursing staff, in mixed units, should have the skills and competence to manage paediatric patients and their families. These skills can be provided through formal education programmes at post-graduate level and through needs-based in-service education as part of the continuing professional development of the multidisciplinary team. Specifically, the recognition of serious illness, basic life support, pain assessment, and identification of vulnerable patients should be addressed;

- A minimum number of nurses specifically educated and trained in paediatric emergency care is required – current recommendations suggest 1 WTE nurse per 1,250 paediatric attendances annually (or at least one per shift in mixed EDs);

- Advanced Nurse Practitioner roles in Paediatric Emergency, and Adult & Paediatric Emergency exist in EDs nationally. The development of these types of practitioner will have a role in ECN Local Injury Units and Type A EDs in particular.

All EDs receiving children should have a Paediatric-trained lead nurse for the care of children and young people and a lead nurse responsible for safeguarding children (could be the same person in smaller units).

**Allied Staffing**

Other staff groups will also need to be considered in terms of appropriate paediatric training, with some professionals having specific advanced training, dependent of the volume of paediatric care delivered in particular ECN units:

- **Administrative and Clerical staff**;

- **Health Care Assistants**;

- **Medical Social Work**: this is a particularly important consideration, because of the unique issues relating to children e.g. child protection, parental and family support, death in children;

- **Play Therapy**: this role should be developed, particularly in units where large volumes of children attend;

- **Physiotherapy**;

- **Occupational Therapy**.
The issue of training specialist doctors in PEM is dealt with in detail in the IAEM/ACEMT/RCPI Faculty of Paediatrics document *The Development of Paediatric Emergency Medicine in Ireland* (2010). The main issues highlighted in that document are:

- Unlike the UK, North America and Australasia, the specialty of PEM is not recognised by the Medical Council in Ireland;
- A six month rotation in PEM will be mandatory as part of both basic and higher specialist training in EM;
- ACEMT has decided that recognition of specialty training in PEM requires 18 months additional training in PEM and paediatric critical care. Both components of PEM training (as part of general EM training and subspecialty training) are supported by clearly defined competencies and a validated curriculum;
- PEM is currently not a mandatory component of General Paediatrics training, at either basic or higher level;
- ACEMT and the RCPI Faculty of Paediatrics have agreed to advance the development of PEM in Ireland in tandem, and have agreed a training programme which will facilitate PEM specialisation through either EM or Paediatrics (figure below).

As of late 2010, a joint process (between ACEMT and Faculty of Paediatrics) of application to the Medical Council to have PEM recognised as a specialty on the Register of Medical Specialists is being finalised.
Children First: National Guidelines for the Protection and Welfare of Children, published by the Department of Health and Children in 1999, provides an overarching template to assist in the identification and reporting of suspected child abuse in persons up to 18 years of age. These guidelines are complemented by a report produced by the Council for Children’s Hospital Care (Child Protection Guidelines for the Children’s Hospitals, 2008), the objectives of which are to:

1. Improve the identification, reporting, assessment, treatment and management of child abuse that presents in the children’s hospitals;
2. Clarify the roles and responsibilities of various professionals and individuals within the hospitals;
3. Enhance communication and co-ordination of information between disciplines, departments and the statutory agencies responsible for child protection;
4. Provide a template for the training of staff.

Over the past decade, major child abuse inquiries (e.g. The West of Ireland Farmer Inquiry, The Victoria Climbié Inquiry in the UK) have reported on situations where children have continued to be seriously harmed after presentation to hospital services and/or admission to hospital. Lessons learned include:

1. The importance of contemporaneous record keeping by all staff, and the necessity for vigilance and follow up whenever irregularities appear;
2. The importance of checking histories which may demonstrate patterns, such as repeated hospital visits, and injuries to a child which, when considered in totality, may raise the index of suspicion about child abuse or neglect;
3. The importance of listening to children when non-accidental injury is suspected;
4. The requirement to fully examine situations and challenge opinions where any doubts exist;
5. The importance of following up all recommended actions in respect of child protection;
6. The need to refer all suspicions to the statutory Child Protection Service (HSE Local Health Office) with detailed information on neglect or other concerns;
7. The need to follow through on discharge plans and make sure that the child has an identified GP;
8. The need for adequate information systems within and between hospitals for storage, retrieval and communication purposes so that if a child presents at more than one treatment centre (a common tactic to avoid suspicion), his or her history will be available.

Recommendations

1. All ECN facilities where children are seen should follow the recommendations of the Council for Children’s Hospital Care Child Protection Guidelines for the Children’s Hospitals;
2. All ECN staff (clinical and non-clinical) must receive training in safeguarding children appropriate to their posts;
3. All ECNs should nominate a lead consultant and lead nurse responsible for safeguarding children within the ED;
1. All ECNs must have guidelines for safeguarding children, specific to the ECN;
2. All ECNs must be able to access child protection advice 24 hours a day, from a paediatrician and social services. Direct or indirect access to a child protection register should be available;
3. Systems must be in place to identify children who attend frequently;
4. The child’s primary care team, including GP and public health/school nurse, should be informed of each attendance.
References


