Short Stay Paediatric Assessment Units

Advice for Commissioners and Providers

January 2009

Royal College of Paediatrics and Child Health

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Committee Members

Dr Ffion Davies	Chair
Dr John Bache	College of Emergency Medicine
Dr Kathleen Berry	Royal College of Paediatrics and Child Health
Mrs Sally Carroll	Lay member
Mr Alan Charters	Royal College of Nursing
Mr Steve Donnell	British Association of Paediatric Surgeons
Dr Angelo Fernandes	Royal College of General Practitioners
Dr Fiona Jewkes	Joint Royal Colleges Ambulance Liaison Committee
Dr Simon Lenton	Royal College of Paediatrics and Child Health
Dr Ian Maconochie	Royal College of Paediatrics and Child Health
Dr Tina Sajjanhar	Royal College of Paediatrics and Child Health
Dr Martin Smith	College of Emergency Medicine
Dr Stephanie Smith	Association of Paediatric Emergency Medicine

Co-opted Advisor:

Dr Edward Wozniak	Adviser on paediatrics to the Department of Health (England)

Terms of reference of the Committee

a) To act as an expert advisory group on the emergency care of children.
b) To influence policy development proactively at national level.
c) To respond reactively to consultation documents relevant to the emergency care of children.
d) To support practitioners and inspection agencies in the improvement of services by developing standards and measurements of those standards.
e) To identify and disseminate best practice.

Introduction

This report aims to inspire discussion about Short Stay Paediatric Assessment Units (SSPAUs) among NHS commissioners and providers of hospital paediatric care.

It proposes that SSPAUs can improve the provision of safe emergency services for children and that they should be developed more widely. Some models that might promote improvements in practice are examined.

This paper should be read in conjunction with the Royal College of Paediatrics and Child Health (RCPCH)'s recently-published guidance on 'The role of the consultant paediatrician with subspecialty training in paediatric emergency medicine'[1].

Background

In recent years, attendance by children in Emergency Departments (ED) has been increasing[2]. Over the last ten years, children's emergency admissions have risen by 18 per cent [2] and over half of these are via the ED. At the same time, the overall length of stay for paediatric hospital admissions has fallen, with many children staying under 24 hours in hospital [2, 3, 4, 5].

The contributory factors are complex. They include higher parental anxiety about minor illness, lower thresholds for admission amongst doctors in training, changes in 'out-of-hours' provision in England, and the necessity for EDs to take early decisions on admission as a consequence of the 4 hour waiting time target.

In the early stages of any illness it is difficult to distinguish minor conditions from more serious disorders without further assessment and observation. However, the time frame for assessment and observation tends to be much shorter in paediatric than in adult medicine[6].

In adult Emergency Medicine, Clinical Decision Units (CDUs) are now commonplace and have proved popular with patients and staff. They allow greater efficiency and turnover of patients with straightforward conditions who require a period of observation or limited investigations.

This suggests an increasing need for more widespread development of SSPAUs, where observation, investigation and treatment can be safely carried out in a child-focused environment.

An SSPAU is a facility within which children with acute illnesses, injuries or other urgent referrals (from GPs, Community Nursing teams, Walk-in Centres (WICs), NHS Direct (NHSD), EDs) can be assessed, investigated, observed and treated without recourse to inpatient areas.

The impetus to develop such units has been further increased by the current drive to reconfigure inpatient paediatric services [(7)]. There is currently a focus on delivering urgent care using different providers, going beyond the traditional primary/secondary care model. These include NHSD, WICs, and Urgent Care Centres. Such services need to be integrated with children's urgent / emergency services[(7, 8, 9, 10)].

This calls for new ways of thinking through problems and poses additional challenges to medical and nursing care. It is necessary to ensure that SSPAUs take the appropriate children, are effectively managed by staff with the right competencies, and provide both a good patient experience and safe outcomes.

What is the Role of an SSPAU?

Currently, children requiring a further period of assessment are often admitted to wards. This results in a longer period of stay due to traditional ward processes. The solution could be short stay facilities for children that mirror CDUs developed in the adult emergency setting. Patients can stay in such units for up to 23:59 hours and then be admitted if necessary. Such units enable automatic inpatient admission to be avoided, and provide a more efficient clinical service for patients who have self-limiting illnesses. The length of stay in the SSPAU can be tailored to the condition for which the child is being observed (e.g. 4 hours, 8 hours, 12 hours), leading to more effective use of both the clinical workforce and beds.

Conditions particularly suitable for management in an SSPAU include breathing difficulties, fever, diarrhoea and vomiting, abdominal pain, seizures and rash, as well as head injury and non-intentional poisonings. These are some of the most common reasons for attendance in the ED[(11)]. In areas where full inpatient hospital beds for children are difficult to access or are distant from the initial point of contact, provision of such units in a patient's geographical area will mean fewer young children with minor-to-moderate self-limiting illnesses being transferred to secondary inpatient units[(5, 12, 13)]. This avoids overloading the referral centre with children too early in the course of their illness to assess for admission, and is better for children, parents and carers.

Alternatives to inpatient care have also been extensively reviewed by the NHS Institute for Innovation and Improvement, which looked specifically at emergency and urgent care pathways for children and young people[(14)].

Benefits of an SSPAU

The key benefit of an SSPAU is that patients can be discharged earlier. In addition, anecdotal evidence confirms that there is no change in re-attendance rates compared to conventional ward-based care.

A reduction in full hospital admissions may enable fewer inpatient beds although it should be recognised that the casemix will alter, and it is likely that inpatient wards will have a greater proportion of patients with a higher dependency scoring. The SSPAU itself will need relatively high levels of staffing but overall the remodelling of the existing capacity should allow for greater efficiency.

There is also potential for a reduction in cost due to the reduced number of admissions. Current tariff arrangements make economic evaluation of this model of care difficult. It is suggested that local commissioners should conduct their own modelling, bearing in mind that one of the main concerns of paediatric management is to minimise length of stay in hospital[15].

Examples of Models of Care

Attendance at Children's EDs varies by area, demography, social factors, provision of primary and community care, and resources available[16]. These local factors will affect the planning of provision for emergency attendances and will affect the model needed to meet local demand.

The ideal SSPAU model will depend on local circumstances, such as presence of an inpatient paediatric unit, support from community nursing teams, ED structure, and presence of a liaison paediatrician. The models outlined below are currently functioning in the UK, and should serve as a guide to producing local models of care.

The following requirements should apply to all SSPAUs, regardless of the specific model of care:

- Senior clinical staff should be involved in gate-keeping and should be pivotal in decision making, providing effective training and delivery of services.
- Senior clinical staff should be available at times of peak demand, including during evenings and weekends.
- Bed numbers in the SSPAU should be sufficient for needs and should accommodate variable admission rates.

- There should be good access to diagnostics.
- The expectation should be discharge rather than later admission.
- Discharges can be nurse-led according to pre-set criteria with robust safety netting and clear re-attendance policies.
- Access to enhanced community care nursing teams is essential, and there should be close links with the acute unit to allow early discharge and home review (7 days / week).

Type A: Co-location with the paediatric ward

Many paediatric departments run SSPAUs to manage patients requiring shorter stays[(17)]. These units are usually adjacent to the inpatient ward and take referrals from a variety of sources, including GPs and EDs. It is not clear how many paediatric departments have admission / short stay units, but a recent survey by the RCPCH looking at SSPAU provision has been completed and the preliminary results are summarised in the Appendix on page 9.

Published studies have shown these units are popular with patients, reduce admissions, and decrease length of stay[(4,11,18)].

Lessons learned

- Opening hours can be limited to an 'extended day' due to support from the adjacent 24 hour inpatient ward.
- Continuity of documentation avoids duplication and saves work when re-clerking patients referred into the ward for an extended admission.

Pitfalls

SSPAUs on children's wards should be deemed safe for the initial reception of emergency admissions only if they have an appropriately equipped and staffed emergency room for reception, triage and resuscitation[(19)].

Type B: Co-location with ED, run by the paediatric department and ED

An alternative model of care is for the units to be jointly run by the paediatric department and paediatric emergency medicine specialists, and to be situated adjacent to the ED. There is encouragement from the Academy of Medical Royal Colleges and the College of Emergency Medicine to consider the development of such facilities, as on-site inpatient paediatric services become less prevalent. There is less published evidence from these units, but what has been published is encouraging[20, 21].

Lessons learned

- Units of this type will be easier to staff if the critical mass of staff is increased (i.e. combining paediatric and ED staff into one rota).
- Opening hours will be dependent on local pathways of care. These can vary - for instance, ‘8-till late’ or ‘24 hour’- to ensure safe discharge of ‘out-of-hours’ presentations. Maximum lengths of stay will depend on local patterns of attendance to the ED and adjacent facilities.
- Staff with appropriate competencies should be available to provide support for resuscitation or major trauma cases.
- There needs to be close liaison and support for paediatric training and Continuing Professional Development.
- Clear protocols and integrated care pathways are necessary; these units should be developed within the context of a local paediatric emergency care network.

Pitfalls

- Limited opening hours may increase transfer rate (although not in the more established units where alternative pathways are being established).
- There is potential for de-skilling of existing ED staff – a rotation policy is therefore needed to ensure core competencies are maintained.
- Social services, paediatricians and health visitors should be actively involved in the department to handle Child Protection Safeguarding issues.

Type C: Co-location with ED, run by ED in a specialist paediatric hospital

This type of unit is also likely to be staffed by dedicated Paediatric ED staff, including consultants. There may be variable levels of liaison with the paediatric department. These assessment units will be adjacent to large paediatric EDs with a critical mass of numbers and staffing.

Increasing evidence shows this type of observation unit to be efficient and safe for children[22, 23, 24].

Lessons learned

- 24/7 provision can be more easily delivered since the ED is open 24/7.
- These units can improve patient flow in both the ED and the inpatient wards.
- Co-operation with the general paediatric department is essential when admission is required.

Pitfalls

- Without a well policed, maximum assessment / observation time-limit, the unit could be used as an admission facility or to stop the 4 hour clock in situations where there is constraint on inpatient beds.
- The unit can act as an effective safety net, especially for patients presenting in the middle of the night, but there needs to be a senior ward round at 8 am daily and a second round in the early evening.
- Reliable round-the-clock cover by competent ED doctors is essential, otherwise model B should be used (joint staffing with paediatrics).

Summary

As urgent and emergency care services evolve, and hospitals are increasingly involved in reconfigurations, there will be opportunities for the rationalisation and improvement of both paediatric and emergency departments. This document shows that the development of SSPAUs is likely to benefit patients and increase efficiency. Suggestions for developing such units are provided, although the exact model of care will depend on local circumstances and services already available.

Appendix

This appendix contains some models of successful SSPAUs already in existence in the UK. As already noted, Acute Trusts and commissioners will need to look at the needs of the local population, the existing skills of the medical workforce, the requirements of national guidance, and the services in the surrounding network when developing their own units.

Type A Unit

This type of unit is widespread in the UK

A questionnaire was sent by the RCPCH in 2007 to all paediatric clinical leads requesting information about SSPAU facilities.

Out of about 250 questionnaires, 53 responses were received. Forty-five units had or planned to have an SSPAU. Opening times varied considerably, but the majority were open from 8am until 8pm, 10pm, or midnight; and over half were open during the weekend. The majority (except for three units) were managed and staffed by the paediatric department (the questionnaire was not sent to ED leads).

The number of SSPAUs has increased over the past 10 years due to the reconfiguration of services and changes in clinical need.

Type B Unit

Hope Hospital, Salford Royal Foundation Trust

Hope Hospital does not have an inpatient paediatric service, but has a 12-bedded children and young people’s observation and assessment unit co-located with the Department of Emergency Medicine.

The unit is staffed by dedicated paediatric and emergency medicine staff and is consultant-led. Advanced Nurse Practitioners (ANP) play a significant role in the primary assessment of patients, guided by their consultant colleagues. There is consultant presence in the unit on an ‘extended day’ basis. Emergency on-site middle-grade cover is provided through the co-located ED team.

A dedicated team of children's community nursing staff supports integrated care between the unit and primary care services, by working within the unit alongside hospital-based children's nurses. The community nurses ease the referral process, enabling early discharge, community-based acute treatment, and appropriate follow-up.

Gate-keeping by senior clinicians identifies those patients needing more than 24 hour in-hospital treatment. These patients are directly referred to a neighbouring secondary care provider with inpatient facilities. Following assessment, a patient can be admitted to the unit for a period of observation that will extend up to 23.59 hours when fully functional.

It should be recognised that in this model of care there is a reliance on the ANP, and local solutions need to be considered as to how best to staff the department. The cost of a consultant-led service needs to be balanced against the quality and efficiency of service provided.

Type C Unit

Birmingham Children's Hospital

The paediatric ED at Birmingham Children's Hospital has published a review of their observation unit [(25)].

The unit operates 24 hours every day. It has eight beds/cots and is staffed by one or two ED nurses. In 2005 total attendances to the ED were 43,000 per year and about 10 per cent of these were admitted to the observation unit. Of these, 76 per cent were discharged and 24 per cent were admitted. Overall, 92 per cent of patients stayed for eight hours or less. The busiest time was between midday and midnight. Having the observation bay resulted in a reduction of four patients each day being admitted to the wards.

This unit demonstrates that any department seeing a large paediatric population should have a paediatric observation bay with appropriate senior medical and nursing staff, and cooperation from the general paediatric medical department.

The authors of all examples cited have given permission to be contacted for further information on their role. This can be done via krishn@rcpch.ac.uk

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Royal College of Paediatrics and Child Health

5-11 Theobalds Road, London WC1X 8SH

Telephone: 020 7092 6000 Fax: 020 7092 6001

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