

The case for a dedicated Paediatric Emergency and Trauma department at Southampton Children's Hospital



Part of University Hospital Southampton NHS Foundation Trust

Overview

We're seeking £2m capital cost investment, with a further £2m funded through charitable donations, to build a dedicated Paediatric Emergency and Trauma Department (PETD). The new unit will incorporate our paediatric major trauma centre and short stay assessment unit.

Background

The first in-patient facility caring for sick children in Southampton was opened in 1884 with just four beds. Today University Hospital Southampton provides every specialist service* under the umbrella of Southampton Children's Hospital. These services are housed in separate locations across our estate, alongside our adult services. Our ambition is to build a children's hospital where all of our paediatric services are brought together in one purpose-built unit and creating a dedicated PETD is a critical first stage of this journey.

Our Paediatric Emergency Department (PED) is a major trauma centre receiving critically ill children by air or road from the entire south central and south west region, including the Isle of Wight and the Channel Islands. Our Paediatric Assessment Unit (PAU) provides acute assessment for primary care, emergency department and regional speciality referrals. Our paediatric team provide **year round, 24 hour care, 7 days a week**.

We're proud of the service we deliver:

- In 2015 the Care Quality Commission rated the care we provide as 'outstanding' but highlighted that our current environment and facilities need to improve.
- We have many of the best outcomes in the country (for cardiac surgery and paediatric intensive care) with lower than average mortality rates.
- A major trauma peer review described the service as 'exemplary'.
- Our thriving research and development programme gives patients access to pioneering treatments.
- We are award-winning national leaders of the 'Ready, Steady, Go' programme which transitions young adults with long-term medical needs from paediatric to adult care.

Despite our successes, in order for us to provide exceptional paediatric emergency facilities that can meet future demand, we need investment.

*except burns and transplant

The challenge

- Whilst there is currently a separate area for children within our emergency department, it is located in the middle of a busy adult emergency department.
- The area was originally designed for adult patients with minor injuries.
- Space is limited with the area only offering four trolley bays, one isolation cubicle and an observation area with space for three children.
- The resuscitation room has six bays; two are equipped for children but the remainder are also used for adult patients.
- The PAU is located four floors above the PED. The unit was last refurbished in the 1980s and doesn't conform to new building standards. Despite seeing a high volume of patients it currently has 10 beds and a stabilisation room.
- The separation of PED and PAU leads to a duplication of facilities and a fragmented approach to the delivery of acute care, to the detriment of the patient experience.

The solution

We propose creating a 1391m² dedicated paediatric emergency and trauma department. The total £4m investment would create:

- A dedicated children's reception, triage and waiting area.
- Access to a resus facility via new link corridor.
- Single en suite rooms (which are flexible to use as examination rooms if required)
- An 8 bedded observation area for patients requiring short stay assessment.
- 11 individual glass fronted, sound proofed, cubicles allowing privacy and observation for acute assessment and treatment of patients; these also allow for the sensitive care of children in crisis (including paediatric mental health patients).
- A large observed treatment area/procedural sedation room.
- Dedicated nurse practitioner room.
- Children's x-ray room.
- Supporting staff facilities.

Our vision for the new PETD

Creating the new PETD will improve the patient and family experience from point of entry to discharge; strengthen clinical networks between primary and secondary care and provide a welcoming, state of the art environment which is fit for the future.

Benefits for patients

- Provide a welcoming, calm and friendly environment designed for children.
- Reduce the delays in assessment and initiation of treatment.
- Ensure early identification of serious injury or illness and initiation of treatment.
- Minimise delays in admissions.
- Facilitate a seamless transition from acute assessment to admission, thereby decreasing the risk to patients and unnecessary duplication of processes.
- Provide much needed privacy and dignity for young patients and their families, which is particularly crucial for children in crisis.
- Enable the effective isolation of patients where required.
- Young patients with minor injuries and illnesses will receive faster treatment.
- Patients will be able to receive care as close to home as possible (ambulatory approach to care).

Wider benefits

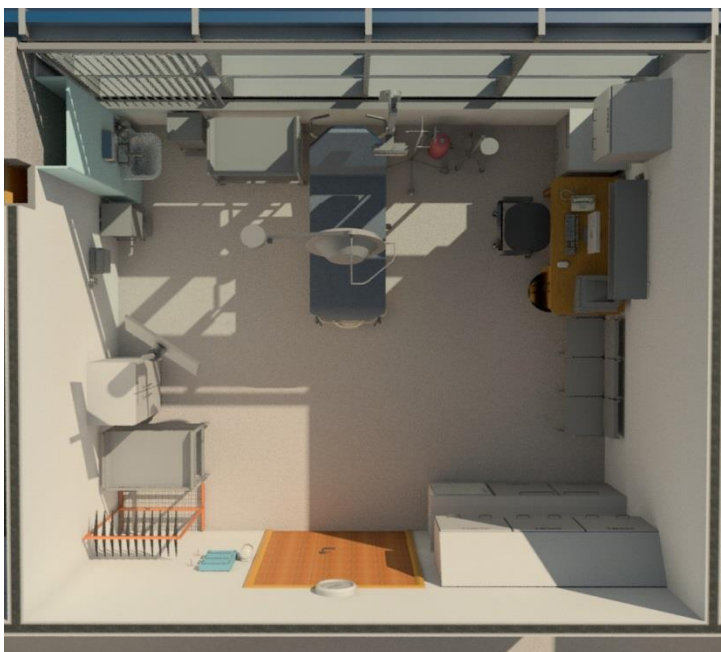
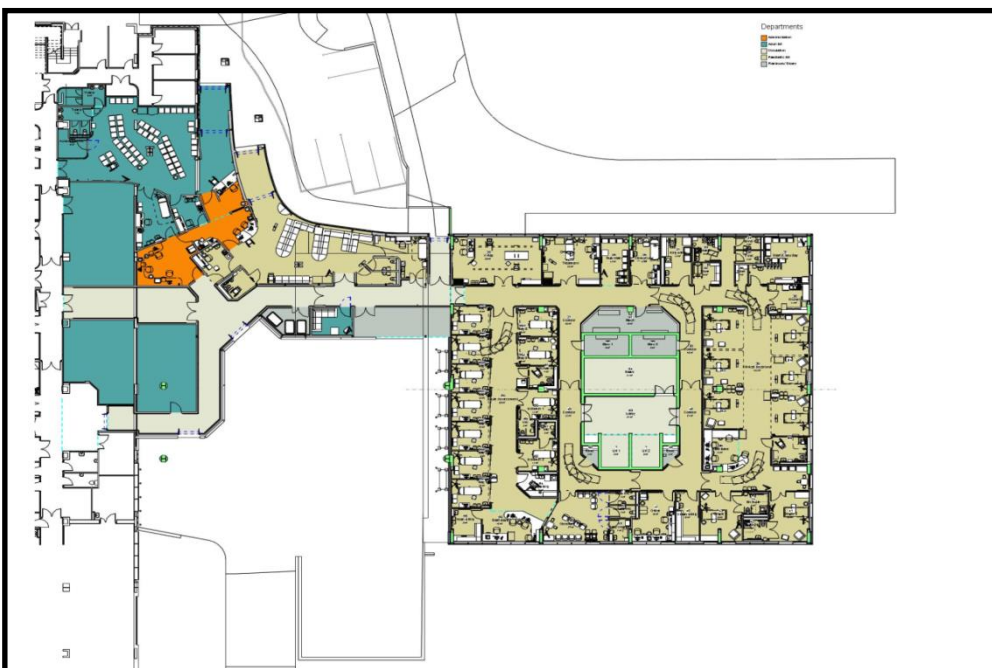
- Adult patients will also benefit from faster emergency care and better outcomes.
- It will release space to provide specialist tertiary services for children in the region and to support elective activity.
- Enables us to provide a world-class model of care; increasing efficiencies and ambulatory care and decreasing admissions.
- The department will be a training ground for GPs in paediatrics and for specialists developing paediatric emergency skills.
- It will support the development of paediatric emergency nursing staff and enable career progression.
- It will provide an environment to test cutting edge practices and develop new best practice models for wider NHS use.
- Staff will be able to work more effectively with the removal of split site working.
- The space released through this investment will provide additional opportunity for further development of tertiary services meeting the forecasted 4-5% annual increase in demand.
- The new department will ensure that we comply with national standards for Children & Young people in Emergency Care settings as described in 2012.
- It's a first step towards the development of a purpose-built Southampton Children's Hospital.

Developing the design

The original design was developed by a multidisciplinary user group and was subsequently stress tested in an innovative large scale, day long, simulation using staff and patient actors (the first time this has been done in the UK). The simulation highlighted areas of the design that needed to be adapted to overcome challenges in:

- overseeing the adult and children's department
- patient streaming and flow
- privacy and dignity for patients

The outcome of the simulation exercise was critical in creating a design that worked for patients, their families and staff. It also delivered a saving of £500,000 against the original build cost due to a reconfiguration of the bay area.





Staffing the new unit

We have invested in paediatric staffing over recent years and, whilst some areas of the new PETD will require additional staff, we will also be able to deliver efficiencies by combining the PED and PAU.

Working in partnership

The multi-professional teams throughout our region are highly motivated to provide the best possible care for all children and to achieve this as close to their homes as possible. By working together:

- We have successfully established effective networks using The “Great South” Model of Care, for general and sub-specialty services with our district hospital colleagues across the region.
- Our paediatric intensive care unit (PICU), neonatal and paediatric major trauma centres provide world-class support for the transfer and management of children across our region.
- Our successful collaboration with Oxford Children’s Hospital has enabled us to deliver better quality, cohesive specialist services and, in particular, the safe and sustainable delivery of paediatric cardiology and cardiac surgery.

- We have partnerships through 'Wessex Healthier Together' to improve the quality of children's services in primary care.
- Our partnership with Health Education Wessex and our newly created Paediatric Innovation Education and Research network (PIER) has helped make us recognised leaders in the development of multi-professional team based training of our work force.
- Our clinical trials network across the region means that many of the children accessing our services have the opportunity to be included in innovative studies from which they and other children might benefit.
- We are currently looking at innovative ways of working with two local DGHs to ensure fully integrated secondary care across Wessex. This will ensure that patients are seen by the right team first time, reducing duplication and variation. One of the biggest barriers to achieving this is the lack of capacity within Southampton Children's Hospital.
- In 2014 the Ronald McDonald House charity opened a substantial 'home from home' on our grounds, containing 56 ensuite bedrooms and communal family spaces. It was created to help those accessing our services from outside the region to stay close to their children.

Our strategic direction

"The creation of this new unit is part of our longer term ambition to provide our young patients and our partners with a single site children's hospital, housing all paediatric specialities. This development is a crucial part of our strategy. As a regional centre, including major trauma centre, our children's services are vital to our patients and partners across a large geographical area. To achieve our mission to be better every day and to manage the forecasted increase in demand, it is essential that we update, support and grow our children's hospital'. We cannot do this without additional investment and we thank everyone in advance for their support of this vital project which will make such a difference to the children and families we serve". **Fiona Dalton, chief executive.**