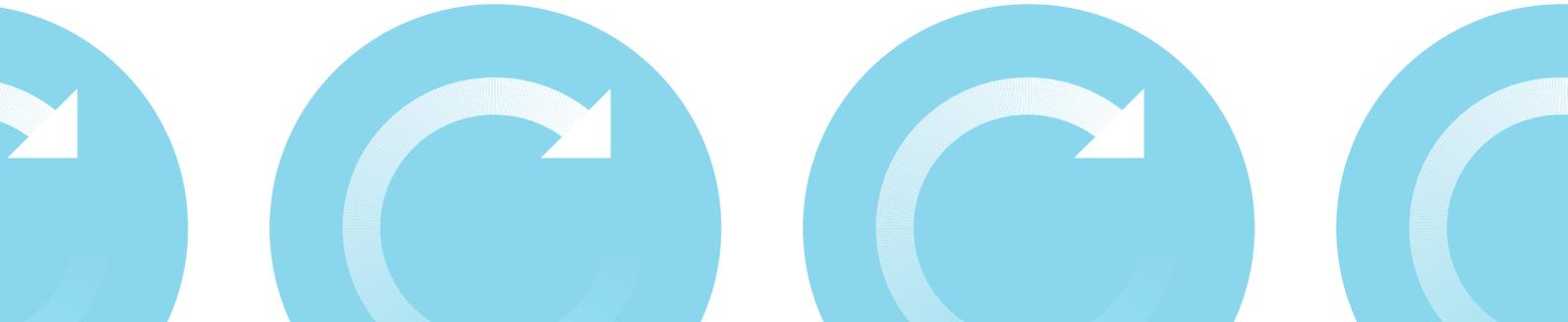




Ambulatory Emergency Care A Safe and Proven Approach to Resolve Emergency Care Challenges



A Safe and Proven Approach to Resolve Emergency Care Challenges.

Northwick Park Hospital is a 500-bed district general hospital in North West London, serving the Boroughs of Brent, Harrow and Ealing.

The challenges facing A&E in 2013 meant that the hospital needed to take rapid action to release beds. Bed occupancy was greater than 98% across the hospital; and at 100% plus in A&E. This led to the hospital being on constant divert to our sister hospital Central Middlesex Hospital. The introduction to limited A&E opening times at Central Middlesex Hospital, from 24 hours to 14 hours (08:00-22:00) created additional pressures, coupled with the financial challenges, was the catalyst for Consultant Physician, Shahir Hamdulay, from the Department of Medicine, to look at how they could improve Emergency and Urgent Care.

“We needed a safe, proven approach that would free up beds and improve capacity without compromising patient care,” explains Shahir. “Ambulatory Emergency Care was attractive to us because we believed it would fulfil all of these criteria. We looked at the numbers of patients admitted to the hospital who had a length of stay of less than 72 hours and, using the Directory of Ambulatory Care, we identified which of these patients had the potential to be treated in an ambulatory way. We found that approximately 46% of total acute medical admissions could be managed in an ambulatory setting.

Figure 1

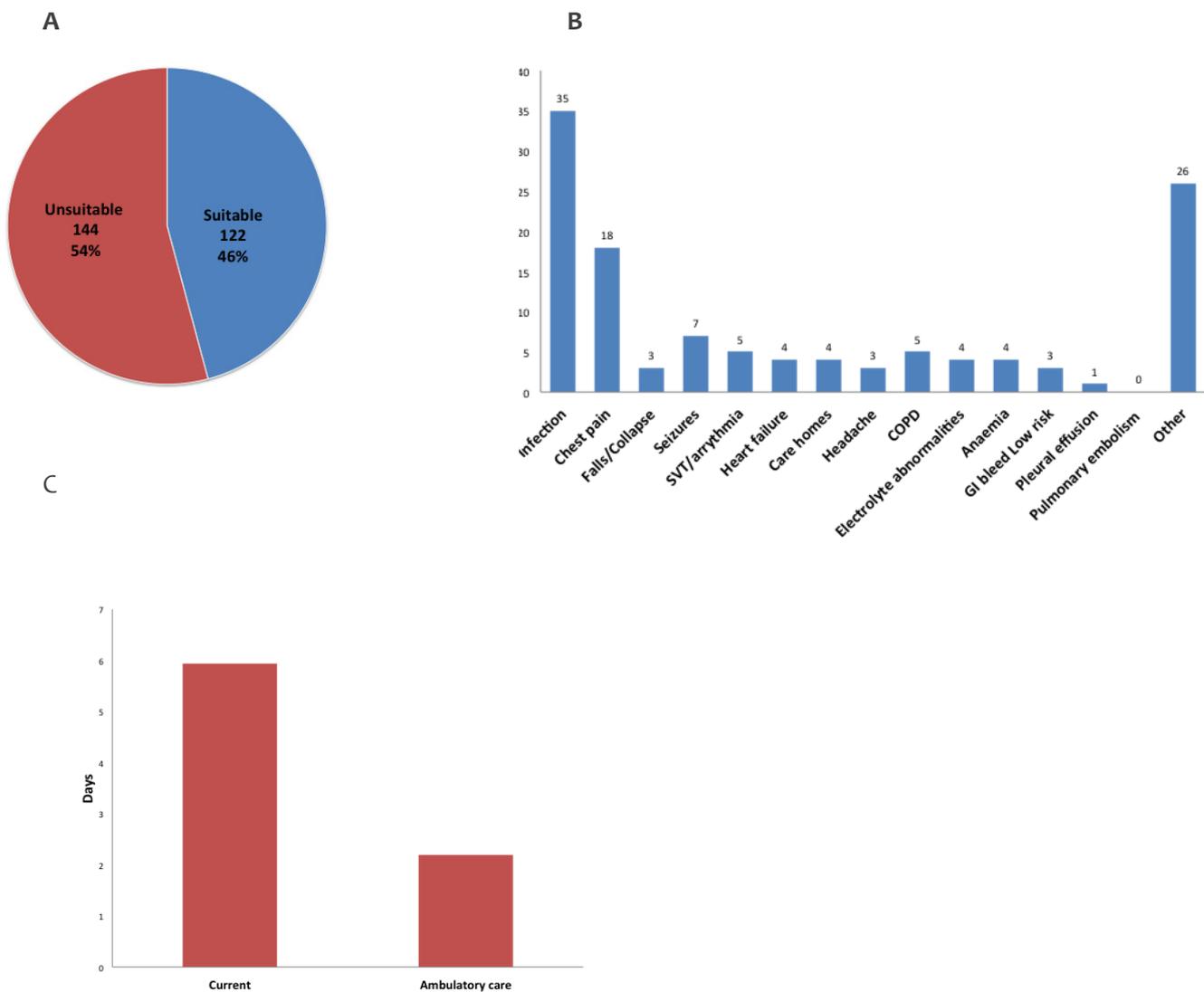


Figure 1 - Potential for Ambulatory Care

- A. One week retrospective audit identified up to 122/266 (46%) acute medical patients which could have been managed in an ambulatory care unit.
- B. Disease groups with potential for ambulatory care treatment
- C. Average length of stay for patients in acute unit and with ambulatory care

We presented a case to the Trust Board and commissioners for developing an Ambulatory Care Service and they agreed, initially, to fund a 6 month pilot. Eighteen months later the service is going from strength to strength.”

What is Ambulatory Emergency Care?

The traditional model of acute medicine involves the admission of patients to hospital to be assessed by a Consultant and facilitate access to investigations and treatment. Ambulatory Emergency Care is based on the idea that medical emergencies can be managed in an outpatient or a daycase setting, providing that the appropriate diagnostic and therapies are available. There is no ‘one size fits all’ approach and each Trust needs to develop its own Ambulatory Care model, based on local circumstances and patient need.

Ambulatory Care Pathways

Hospitals often begin their journey into Ambulatory Emergency Care by developing pathways for some of the most common conditions that present in A&E. This was the approach taken by Northwick Park. Initially they developed 10 ambulatory care pathways, including; DVT, low risk PE, cellulitis, chronic anaemia and ascites.

However, they also agreed in principle to take some patients outside these pathways, based on the AMB score, which sets out a range of criteria to help hospitals determine whether or not a patient may be suitable for Ambulatory Emergency Care.

The Ambulatory Emergency Care Unit opened in January 2013 on half a ward, located 2 floors above the acute floor, shared with a Surgical Assessment Unit. Its stated aims were to:

- To provide rapid access to medical services for patients who were identified as ambulatory;
- To avoid admissions wherever possible, and;
- to facilitate inpatient discharge

In the first 3 months, the Ambulatory Emergency Care Unit built upto a weekly intake of 100 medical patients. By October 2013, the Ambulatory Emergency Care Unit and the Surgical Assessment Unit had expanded to the entire ward, with four clinic rooms, six trolleys and six chairs.

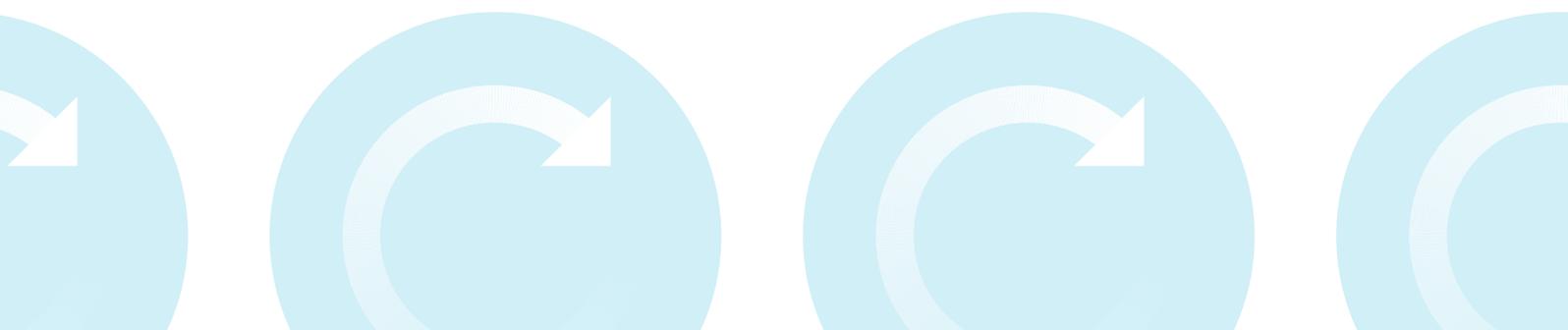


At the same time, the team began moving away from the pathway model towards a process driven approach. Shahir said:

“When you take a pathway approach to Ambulatory Emergency Care, you know exactly what you are dealing with. A process approach states that you will consider any patient as potentially ambulatory unless there are clear reasons not to. This increases the breadth of conditions you can treat in Ambulatory Emergency Care, it is less restrictive but increases risk. We rely on our clinicians to manage this risk. We depend on them to make a safe and accurate diagnosis and, if it is an out of hours consultation, to assess whether it is safe for patient to go home and return to the unit the following day.”

The unit receives referrals from A&E, GPs, Community Nurses, the Urgent Care Centre, and Outpatient and Inpatient areas. “The Medical Team reviews all referrals into Ambulatory Emergency Care,” explained Sarah Ingham, General Manager. “The doctors who run the unit are a separate team from the acute medical take, however, all doctors will now rotate through the Ambulatory Emergency Care Unit as part of their training. When we have doctors throughout the hospital who understand what Ambulatory Emergency Care is, we will have an even more effective service.”

The Ambulatory Emergency Care Unit is open seven days a week, from 9am to 8pm Monday to Friday, and from 9am to 5pm at weekends. It is staffed by a mix of Advanced Nurse Practitioners, Medical SHOs, Registrars and Acute Medical Consultants, with access to specialist medical teams.



Critical to the success of any Ambulatory Emergency Care Unit is rapid access to diagnostics. Shahir admitted: “Early on, access to diagnostics was a challenge so we negotiated with our colleagues in Pathology and Radiology and we now have a system that works well. By late 2013, Radiology provided an ultrasound machine for us to use on the unit to help us cope with winter pressures. This proved so effective that we have retained it and now have agreements in place with our diagnostic colleagues to provide access to other imaging such as CT and MRI within 72 hours.”

The Impact of Ambulatory Emergency Care

Eighteen months after launching its new Ambulatory Emergency Care Unit, up to 30% of the medical take in Northwick Park is being handled on the unit. Ambulatory Emergency Care sees an average of 170 patients per week, around 100 of which are new patients.

Figure 2

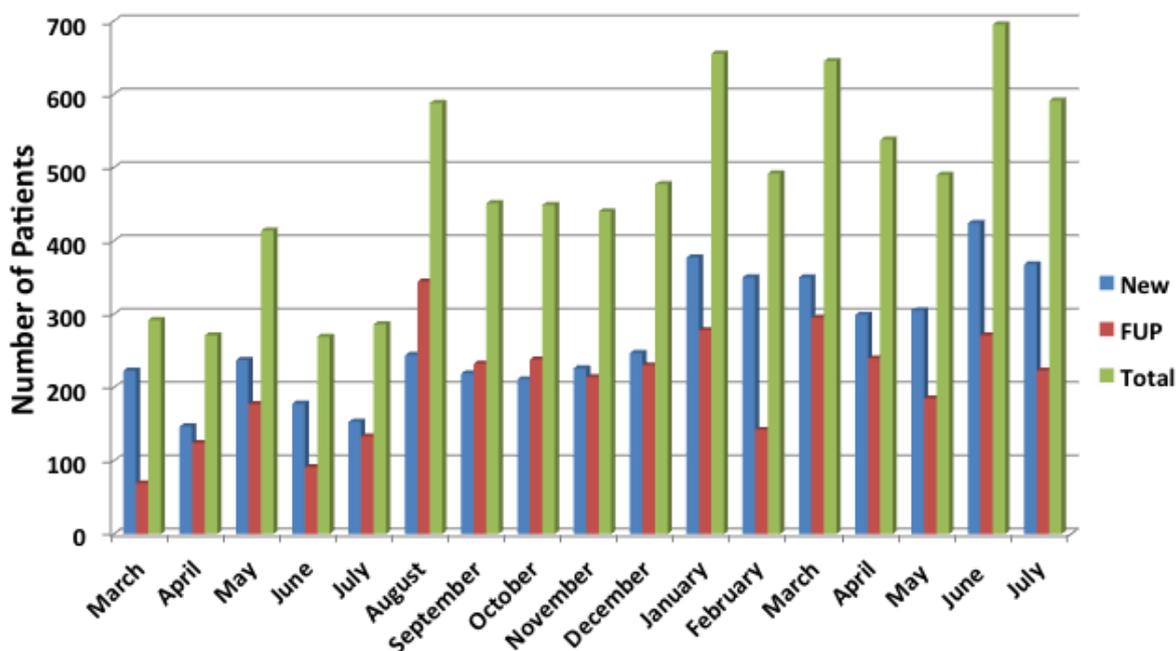


Figure 2 - Numbers Managed Through the AEC Unit

Since the unit was launched in January 2013 there has been a steady increase in patient referrals over an 18-month period. Approximately 8000 patients have been managed through the unit (4558 new and 3500 follow up).

The unit is achieving its stated aim of reducing the number of patients at the front door. The hospital’s acute medical take is down from 60 per day to 40, and has eased pressure on A&E. The Ambulatory Emergency Care

Unit's environment is calmer and less hectic. Staff are more in control and patients are happier with patient satisfaction scores consistently greater than 90%.

Tanuja Vyas, whose mother attended the unit, wrote to complement the unit:

“The team delivered excellent care for my mother, she was admitted previously and she was really unhappy to be in hospital, but your suggestion of bringing her into Ambulatory Care was great, this made her feel more comfortable than being admitted again.

I, as her daughter, was really concerned about her health issues, but the team reassured me and informed me about the treatment plan and follow up with the GP.

My mother felt much better coming into the Ambulatory Care Unit than ending up in A&E or being admitted. Her health has improved and she is feeling much better after the care and excellent service you and your team delivered.”

The team in Ambulatory Emergency Care are committed to ensuring that no patient who is potentially ambulatory is admitted to a bed. A recent audit demonstrated that greater than 98% of patients suitable for AECU were indeed seen on the unit. The impact of this is significant for one condition alone. An average of 15 patients present in A&E each week with a suspected PE. Of these, around one case of PE is confirmed every two weeks. Admitting every one of these suspected PE patients places a huge, and unnecessary, demand on hospital beds that can be entirely avoided if all PE patients are regarded, by default, as ambulatory.

Unfortunately, in Northwick Park, the forthcoming closure of A&E at its sister hospital, Central Middlesex Hospital, is likely to lessen the impact of the Ambulatory Emergency Care Unit on bed occupancy in the near future.

Specialist teams are also using the unit for admission avoidance. For example, by sending patients to the unit for ascitic drains, diagnostic procedures and specialist treatments such as intravenous methylprednisolone and iloprost.

For doctors in A&E, diverting a significant number of patients to Ambulatory Emergency Care has lessened their workload and allows them to focus their attention more effectively on the patients with more complex conditions.

Some wards are already sending inpatients to the unit to undergo whatever checks are needed prior to discharge, which is reducing length of stay per patient by as much as two days (see figures 3 and 4).



Figure 3

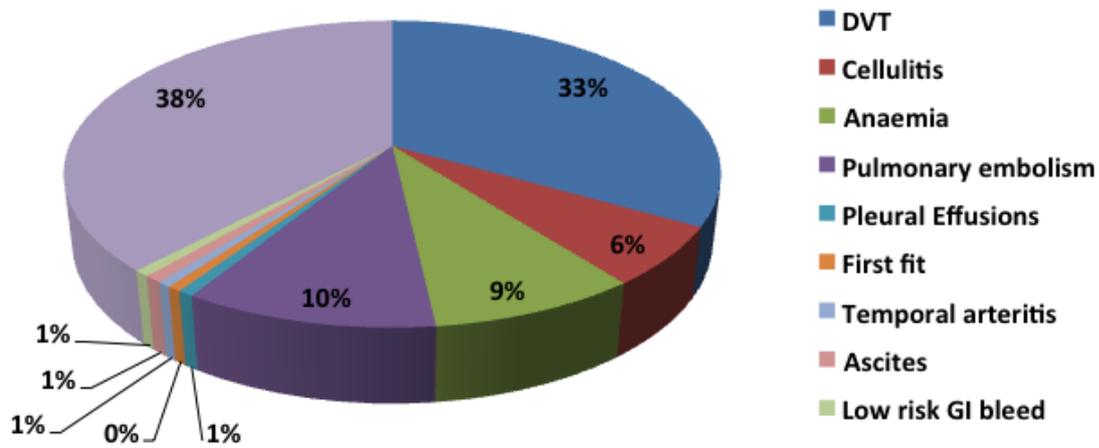


Figure 3 - Conditions Managed Through the Unit

A majority of conditions on specific pathways but up to 38% are non-pathway/miscellaneous conditions. The average age of patients managed in the AECU is 56 years (range 22-83), with a mean of 1.51 visits and an admission rate of 18%.

Figure 4

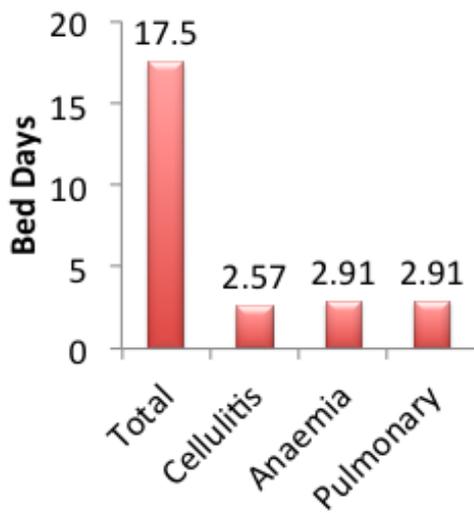


Figure 4 - Number of Beds Used

The AECU has saved 17.5 beds (95% occupancy). Beds saved for cellulitis, anaemia and pulmonary embolism pathways are indicated.



State of the Art Patient Tracking

Northwick Park has made particularly effective use of its patient tracking system, ICE. Staff from A&E are able to refer patients to the AEC Unit using ICE, which not only reduces the paperwork and phone calls, but allows the hospital to track the progress of patients more easily. Out of hours clinical staff can also refer to the unit using the same system.

Jane Porter, Advanced Nurse Practitioner explained: “If we receive a referral from the Out of Hours Team, we call the patient in the morning and arrange a time for them to come into the unit. We also book a scan slot for them, if necessary. Once we get the results of the scan, we call the patient back into the unit to review them.”

Overcoming Challenges

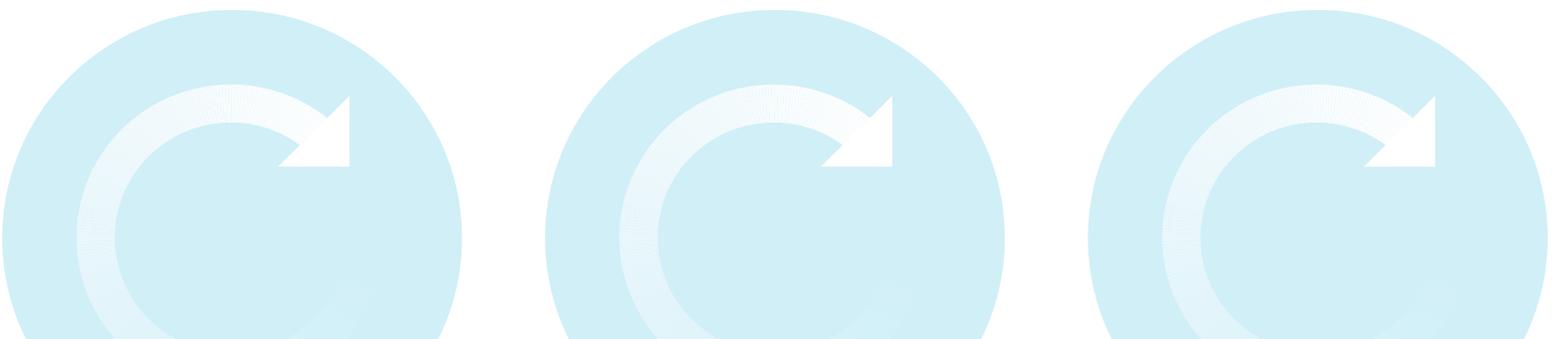
As with any new initiative, introducing Ambulatory Emergency Care has not been without its challenges for Northwick Park. Shahir commented: “One of the biggest challenges was trying to make the case for Ambulatory Emergency Care, with people at every level, with doctors, managers, the Trust, commissioners. You need data to convince people to fund the initiative and to give it their support. By joining the Ambulatory Emergency Care Network, we were able to build a stronger case for Ambulatory Care. It was also helpful to be able to see what other hospitals were doing. We based our new unit on the one we visited in Stevenage, for example.”

The team also found it challenging to get colleagues on board. Shahir said: “We need a multidisciplinary approach to make the service work effectively, we need doctors and nurses to refer patients into the unit and we need our colleagues in diagnostics to support us with timely scans. The way we overcame this challenge was to walk the corridors and negotiate in order to get what we needed. It is easy to write a pathway, but the real work is to implement it effectively.”

Staffing has been another difficult area to manage. In the early days, the new Ambulatory Emergency Care Unit relied heavily on bank and agency staff, which was not ideal as most were unfamiliar with the Ambulatory Emergency Care model. The situation has improved slowly and, with the imminent closure of its sister hospital, Northwick Park will see an influx of experienced A&E staff who will be joining the unit.

The hospital has used a mix of Best Practice Tariffs and locally agreed tariffs. Sarah admits that finding the best way to charge for Ambulatory Emergency Care is an ongoing issue, but remains confident that a solution will be found that satisfies all parties.

For most hospitals, and Northwick Park was no exception, changing the culture of admitting emergency patients to hospital is one of the toughest challenges to overcome. The team is working hard to address this and believes that rotating all junior medical doctors to Ambulatory Emergency Care will improve this over the long term.



The Future

Northwick Park is keen to develop more cardiology pathways for Ambulatory Emergency Care and the team has recently developed a business case for an echocardiography service to be located on the unit.

Overall, however, the team is recognising the benefits of taking more of a process approach to Ambulatory Emergency Care, rather than relying on pathways to identify suitable patients, and is taking steps to increase awareness of Ambulatory Emergency Care across the hospital through training. In this way the team hopes to change the culture around urgent and emergency care and encourage colleagues to see Ambulatory Care as the default approach, with patients being admitted only when absolutely necessary. “Using the AMB Score is helpful with this,” said Shahir. “Identifying patients who can be treated in an ambulatory way and who don’t need to be admitted to hospital is pivotal to our success. The AMB Score is a useful tool and helps to raise awareness that there is an alternative to admission.”

Currently, staff from the Ambulatory Emergency Care Unit are able to log into the A&E system and identify patients who may, potentially, be ambulatory. The unit is currently recruiting more advanced nurse practitioners and once additional staff are in post, the team plan to pull patients from A&E more proactively and to bring in early discharge patients from the wards. By pulling more patients through, the team hope to be able to have an even greater impact on bed occupancy.

Asked what the team is most proud of, the team concludes: “We worked together as a multidisciplinary team, nurses, doctors, managers, commissioners, to set up a completely new service in a very short period of time and it is working well. Thousands of patients have gone through the unit and we have had no major incidents. We have some great plans for the future, which will ensure that the unit goes from strength to strength.”



To find out more about Ambulatory Care
please go to:

www.ambulatoryemergencycare.org.uk
or email aec@nhselect.org.uk

