

# University Hospitals Sussex NHS Foundation Trust

How improvements to Ambulatory Emergency Care helped us to meet the COVID-19 challenge

## **Intr**oduction

The work done by Brighton and Sussex University Hospitals to improve ambulatory emergency care services meant that when COVID-19 hit in March 2020, it was well-placed to manage a huge upsurge in demand as well as maintaining social distancing in its emergency department. This is their story...

### The rationale for Ambulatory Emergency Care

Brighton and Sussex University Hospital is an acute teaching hospital working across two main sites: Royal Sussex County Hospital in Brighton and Princess Royal Hospital in Haywards Heath.

The Brighton site is a large tertiary hospital and major trauma centre. The location of its current site means there is no capacity to expand so developing any new services requires an existing part of the hospital to close. Major reconstruction work is underway but, in the meantime, this presents significant challenges for hospital managers and staff.



Steve Barden became a consultant at Brighton and Sussex University Hospital in 2005. He has a background in emergency medicine and is an advocate of ambulatory emergency care (AEC) as a way to better manage patients and reduce length of stay. Steve explained:

"AEC is a way to manage patients in secondary care without the use of a hospital bed. When I see a patient during my ward rounds, I ask myself 'if this patient was in the emergency department (ED), would I admit them?' If the answer is 'no' then I know that patient shouldn't be in hospital. Often there is a better way of managing their care without admitting them."

#### Why was AEC needed?

Brighton and Sussex University Hospital has limited space in ED and the service is overstretched. There is nowhere to do initial assessments of speciality patients referred by the GP so, prior to the creation of a dedicated AEC unit, most would sit in the waiting rooms in A&E to be seen by a surgeon or medical doctor. This delayed care for other patients in ED and so improving the care of speciality patients would not only improve their experience but also that of all patients in ED.

#### **Developing the AEC service**

In the early days, to make AEC happen it was necessary to work "out of corridors, in cupboards at the ends of wards". However, 12 years after ambulatory care began at the hospital, in 2018 an under-utilised Surgical Assessment Unit (SAU) was transformed into the first dedicated Emergency Ambulatory Care Unit (EACU). The hospital was struggling with emergency admissions at that time and Steve and his team were able to argue successfully that having more space for ambulatory emergency care would relieve pressure on ED by redirecting patients away from A&E.

The EACU has gone from strength to strength over the last three years and now sees around 50 patients a day. Steve points out that prior to AEC these patients would have needed a bed as an admitted patient, so the EACU has had a significant impact on bed days. The bed saving is assumed to be around 4489 bed days a month. This is based on a 44% surgical and 56% medical split and average inpatient stay of six days and two days respectively had they been admitted. Inspired by the success of the EACU, there are plans to open a new ambulatory care unit at its sister hospital (The Princess Royal in Haywards Heath). This will be called the Same Day Emergency Care (SDEC) Unit and the Brighton unit may also undergo a name change.

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Brighton EACU is open from 8am to 8pm, seven days a week. Patients seen in A&E during the evening may be sent home and asked to come back to the unit the following day for investigation and treatment. The unit has capacity to care for 25 patients (which has been reduced due to social distancing requirements).

#### Joining the AEC Network

Brighton and Sussex University Hospitals had already made good progress on developing an AEC service before joining the Network. However, after opening the new EACU in 2018, the hospital wanted to go further and faster, so it became part of the Network's AEC Accelerator Programme in 2020. It set out to improve AEC in a structured way, with support from the Network team. The Network team were very good at challenging the hospital team's behaviour and provided a structured audit review that allowed them to sense check the existing processes.

#### Implementing the improvements

**Project team:** The hospital began its AEC Accelerator Programme work by establishing a team to lead the improvement project. Consultant Steve Barden was Clinical Lead, with Alex Dumbleton as Service Manager. Craig Marsh, Matron and Nelso Barbon, Lead Nurse also played a key role, along with a number of the Band 6 nurses.

Data collection: An important part of the process was developing an effective data collection mechanism and support from the Network proved invaluable with this, as Steve explained:

valuable as it helped us to audit our emergency care activity, ascertain whether patients were being admitted appropriately or not, and determine whether the work we were doing was working – and in many cases it was. The data showed that the right kind of patients were coming to unit and there were not too many missed opportunities for same day

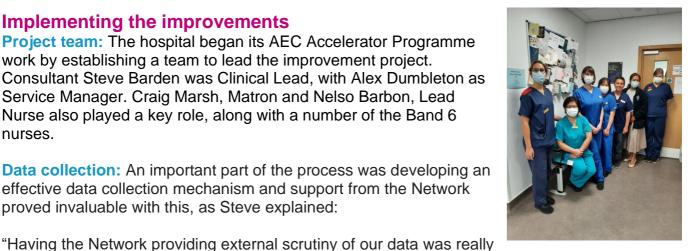
care. This validated the work that we were doing and demonstrated the value of our service."

An audit of case notes was conducted on a sample of 50 patients and only identified a further three patients who could have been seen within EACU.

Pulling more patients onto the unit: The team followed processes recommended by the Network to pull more patients into the EACU from ED. These processes included pulling patients from ED, by scanning ED software for suitable patients referred to specialty. Nurses working on the unit had previously worked in SAU and had no experience of medical outreach care, so there was lots of development work to do. The team decided to avoid a pathway approach, opting instead to say that every patient should go to the EACU unless there was a compelling clinical reason why they shouldn't.

Steve explained: "We see anyone who is well enough to be seen on the unit as this is the only truly effective way to maximise same-day emergency care. The EACU acts as a hub for all specialty assessments. Patients who need to be admitted rather than coming to the unit are those who are very sick, or in a critical condition, those who are dependent on oxygen, and patients who can't walk or who are experiencing confusion. The hospital has a very good chest pain pathway so all chest pain that could be heart-related is managed elsewhere on the site.





There is also an established GP pathway for patients with suspected DVTs so there is no benefit in them coming onto the unit until their diagnosis is confirmed. With these exceptions, all emergency patients are considered for EACU."

The normal referral pathway onto EACU is a clinical discussion between the patient's GP and the consultant on call who then decides if the patient is suitable for ambulatory care or not. Administrative staff co-ordinate times for patients to come onto the unit as described below.

Getting patients to the right place at the right time: EACU has implemented a range of measures to ensure that patient referrals are managed effectively, and it gets patients to the right place at the right time and in a carefully managed way. In particular, it has invested in good administrative systems which are used to plan patient arrival times at the unit, ensure that investigative procedures tie up with these arrival times, and that the unit isn't overbooked at certain times of the day. It also created a new administrator role and employed five full-time administrators, who Steve describes as "pivotal" to the running of the unit. He commented: "without them we'd been in chaos."

One of the current administrative challenges faced by the unit is documenting patients effectively. Steve said: "We still have a paper system which is rather inefficient. At present we use our own proformas which get scanned and uploaded into the electronic records."



**Diagnostic scheduling:** The improvement team held discussions with colleagues from diagnostics to introduce agreed time slots for imaging of EACU patients, rather than having them waiting in a hospital bed to be seen. There is a 48-hour window for diagnostic testing and some patients are sent home and asked to return to the unit the following day. In urgent cases, the unit can request tests to be done same-day. However, there is no differentiation between inpatients, ED and EACU slots so unit staff have to argue their case and priority is given to the most urgent cases.

**Development of nursing staff:** The EACU is staffed by the former SAU nursing team. As they are treating different types of patients to the ones they previously dealt with, staff support and development is crucial, as Steve explained: "We are asking nurses who had previously chosen to specialise in surgery to adapt their skills and see undifferentiated patients in an ambulatory setting. While surgery tends to be more planned and predictable, in ambulatory care the unexpected often happens. For example, a patient who comes in with headache might require neurosurgery or they might be sent home with paracetamol. While this variation and unpredictability can be exciting for nurses, there is an understandable concern, too. It is important for senior clinicians to be supportive, to reassure nurses and to help them develop their confidence and skills to deal with these new challenges."

#### Impact

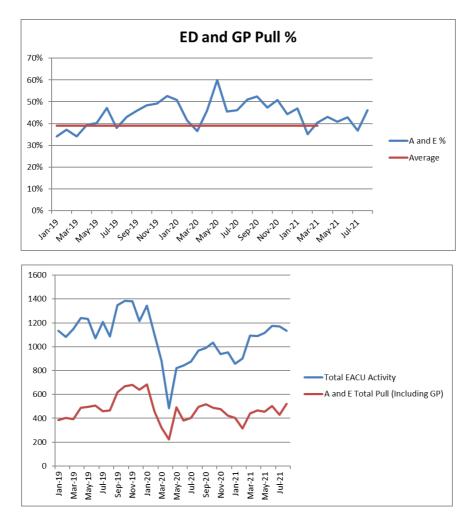
The project has had many positive and also some unpredictable benefits:

**COVIID-19 ready:** Much of the improvement work had already taken place before the start of the pandemic in March 2020. This meant that the hospital was well-prepared for the COVID-19 emergency and didn't have to introduce a raft of hastily-convened changes to meet the surge in demand and comply with social distancing rules. Measures to maximise space and limit delays had already been implemented. A&E had procedures in place to send patients home, where

appropriate, and call them back to EACU the following morning using electronic referrals. The unit was able to plan its patient intake proactively to maintain consistent capacity throughout the day, whereas previously ED had seen many peaks and troughs in demand. Less time spent waiting was not only better for the patients, but it also allowed the unit to reduce space in the waiting area in order to maintain social distancing.

Winning hearts and minds: Any clinician from within the community is able to make a referral to the EACU, including GPs, nurse practitioners, paramedics and community nurses. They call the unit to discuss the best course of action for a patient, whether it is coming for assessment on EACU or being admitted to the hospital. In the past, the sort of patients who are now treated on the unit might have been encouraged to remain with their GP or ended up in a very busy ED. Now, GPs feel confident referring them into an area where they can be quickly assessed and treated, and patients have a better experience.

Added value: In addition to providing rapid assessment and treatment for urgent and emergency patients, the EACU adds value by hosting a number of hot clinics throughout the week, such as rapid cardiology service and pleural services. There is an appetite for more of these clinics, but with limited space the unit is close to capacity. As the new SDEC unit gets underway in Haywards Heath, some of the activity will be moved there to free up space so the service can continue to expand.



Note: Data is from January 2019 till July 2021 and shows the total monthly activity

A key success of this project is that despite the fall in the EACU activity over the first wave of the pandemic, the percentage of patients seen continued to remain above the average which ensured the team were able to support the ED and patients referred from primary care.

#### **Key success factors**

The team in Brighton and Sussex believe that good communication, effective senior leadership and support for frontline staff have been vital for the success of the improvement project.

Steve explained: "It is not the clinicians who run the unit but the nurses and admin staff, ensuring that clinicians are able to see the patients in a methodical way throughout the day. There are open lines of access to more senior staff for EACU nurses in case of any problems. Most of the processes are in already place – staff don't need to make a decision about a patient's suitability to come onto the unit as most will automatically end up here.

Clinical teams value the EACU. It is a pleasant working environment, and staff and patients have a less fraught experience than they do in ED, which makes things much better for everyone."

#### Next steps

The unit is aiming to build on its success to date by improving surgical patient referrals. The surgical team currently uses a different system to the medical team which means that many surgical patients still arrive onto the unit at 8am and face long waits. The improvement team is working with surgical colleagues to change the way patients are referred, using the electronic take day software so that surgical patients can experience the same rapid treatment as medical patients.

#### For further information, please get in touch with:

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