Ambulatory Emergency Care
Calderdale and Huddersfield

As one of the original AEC Network sites, the Trust is no stranger to ambulatory care and has well-established models of medical and surgical AEC. It has now re-joined the Network to go even further and increase the uptake, capacity and efficiency of its ambulatory assessment units.

www.ambulatoryemergencycare.org.uk
Introduction

Calderdale and Huddersfield NHS Foundation Trust is no stranger to ambulatory emergency care. The Trust first opened an Ambulatory Assessment Unit (AAU) at the Huddersfield Royal Infirmary and Calderdale Royal Hospital in 2011. Three years ago, it launched surgical ambulatory assessment and joined the Ambulatory Emergency Care (AEC) Network for the second time to help it to spearhead the next phase of its improvement work. This is their story...
Calderdale and Huddersfield is a two-site hospital employing around 6,000 staff. In recent years it has seen A&E attendances rise to around 450 a day. It experiences a high number of outliers and some long lengths of stay, primarily caused by delayed transfers of care or a lack of timely intervention at the front door.

Five years ago, the Trust joined the (AEC) Network seeking support to launch a medical AAU on each of its two sites for patients requiring urgent medical care. Three years later, it opened two surgical AAUs to provide an alternative to hospital admission for patients requiring emergency surgery and supervision. Surgical AAU enables patients to have their surgery and be discharged same-day without the need for admission to a hospital bed.

By 2016, Calderdale and Huddersfield had a well-established medical and surgical model of AEC. Having laid such solid foundations, the Trust wanted to increase the uptake, capacity and efficiency of its AAUs with the aim of saving more bed days, reducing length of stay, reducing outliers and reducing the number of winter escalation beds needed. Calderdale and Huddersfield re-joined the AEC Network at the same time as launching an ambitious Trust-wide patient flow programme called SAFER.

SAFER Patient Flow Programme
Bev Walker is Associate Director of Urgent Care, and appointed to lead the development of SAFER. She explained:

“We were committed to improving urgent care flow and brought several strands of work together into one single coordinated patient flow programme. Our primary objectives were to bring care closer to home and reduce the number of outliers and escalation beds (we had opened 144 additional beds in Q4 2015/16). There are three key strands to the SAFER programme:

- Bed avoidance – focusing on the development of frailty and AEC services
- Bed efficiency – focusing on patient flow and the roll-out of SAFER
- Bed alternatives – focusing on end of life care and rehabilitation

AEC was a key component of our bed avoidance strategy. It was already working well but we wanted to be bolder and to go further in our ambition to treat more patients in an ambulatory setting.”
Building on solid foundations

Calderdale and Huddersfield wanted to relocate its medical and surgical AAUs to be closer to ED, as well as developing new AEC pathways, including chest pain, and encouraging ambulatory to become the default setting for the majority of patients. This was achieved by adopting clear exclusion criteria. Any patient with the following is deemed as unsuitable for ambulatory care:

- Acute confusion
- GCS<15
- New oxygen requirement
- NEWS ≥ 4
- Troponin positive / HEART score ≥ 4

The Trust believed that increasing its capacity for same-day emergency treatment would help it to avoid opening additional beds during times of pressure. It had good links with commissioners, community services and social care and was keen to extend these further.

Support from the top

Calderdale and Huddersfield formed an AEC project group in 2016, (covering both medical and surgical ambulatory care). The group met fortnightly and reported to the SAFER Programme Board monthly. The team also reported to the A&E Delivery Board and met informally with Chief Operating Officer, Helen Baker, who was fully in support of the vision for extending ambulatory care.

Helen commented:

“As a Trust we developed a patient flow improvement programme called the SAFER Patient Flow Programme with three clear themes of bed avoidance, bed efficiency and bed alternates. We scoped out all of our pathways and services to identify areas for improvement.

“We had participated in the original cohort of the AEC Network and services on both sites worked well. However, they were not reaching their full potential as they had not developed beyond the original scope which was restricted to only a few specific pathways. We believed that there were significant opportunities for improved patient experience through increased ambulatory care and that we could, in parallel, improve staff satisfaction and the delivery of the emergency care standard. It was particularly important to manage the ever-increasing demand for non-elective care without the need to increase inpatient beds (and all the associated risks of deconditioning once patients were admitted). Nurse recruitment is a continuing challenge and we believed ambulatory care was a much safer option.

“Most importantly, we had an enthusiastic clinical team who were passionate about improving patient care through the development of ambulatory emergency care. That enthusiasm was infectious and, as such, it was an easy decision to make this one of our priorities.”

The approach

Calderdale and Huddersfield’s AEC project group developed a detailed project plan setting out its ambitions for ambulatory care. It used PDSA (Plan, Do, Study, Act) methodology to develop and test each proposed improvement prior to full implementation.
New bolder ambulatory criteria

In the early days, the AAUs would only take patients who were ambulant (able to mobilise independently). The team believed that many potential AEC patients were being excluded and they wanted to extend the type of patients who could be seen in the unit, to include immobile and higher risk patients. They agreed that all patients should be considered as ambulatory unless they met specific exclusion criteria.

In addition, they carried out a case note review of common conditions presenting for emergency treatment, assessing them against the 2x2 matrix. This methodology was used for patients who were admitted for up to 24 hours and then discharged. It demonstrates when there has been a missed opportunity to have managed the patient through ambulatory care.

<table>
<thead>
<tr>
<th>Was patient sent to AEC?</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could patient have been sent to AEC?</td>
<td>Inappropriate</td>
<td>Missed opportunity</td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
<td></td>
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From this, they concluded that a number of commonly occurring conditions were suitable for AEC and developed the following new pathways:

**Low risk cardiac chest pain**

Previously, low risk patients with cardiac chest pain would have been put into beds. The new Acute Coronary Syndrome pathway incorporated a zero and six hour Troponin with a HEART score. All patients with a score greater than 4 are now sent to AAU.

**Self-harm (low risk patients)**

Case note reviews revealed that asymptomatic self-harm patients who needed a short observation period were often put into a hospital bed. Observation and admission periods were often well over the period recommended by Toxbase. It was felt that AAU was a suitable environment to observe self-harm patients until they were deemed medically fit and the team developed a new self-harm pathway.

**Iron deficiency anaemia**

Previously Cosmofer was provided as a four to six hour infusion in acutely presenting new anaemia patients. It was typically administered as a medical day case, often more than a fortnight later. The new pathway means that Ferrinject is now given in AAU over a 15-minute period. Addressing the symptoms sooner means that patient outcomes are better and blood transfusion is also now being introduced into AAU.

**Cellulitis**

Some cellulitis patients were being treated as inpatients. They were given IV antibiotics on the Emergency Department’s (ED) Clinical Decision Unit and several days later referred to OPAT or discharged. The new cellulitis pathway allows patients to be referred into AAU for OPAT straight from ED during daytime hours. Out of hours, patients are invited to return to AAU the next day.

**Think Home First**

The project team developed Think Home First posters to remind staff in ED and Acute Medicine about the wide range of conditions that can be treated as ambulatory. The posters advise staff to consider every patient as potentially ambulatory, excluding a small number of conditions such as acute confusion and a new oxygen requirement.

**Increasing GP referrals**

Although the Trust had good links with commissioners, community services and social care, GP engagement was poor. Data analysis showed that around 70% of referrals into AAU were from GPs, following a telephone conversation with a nurse coordinator. Many GP practices were still not using the service and the team was keen to engage with primary care to increase referrals. It conducted a stakeholder analysis to work out who they needed to influence and engage and how they could do this most effectively.

They hosted a local GP event to raise awareness of AAU and developed a consultant-led telephone line service to provide advice and enable GPs to refer directly to AAU rather than ED.
Improving efficiency and diagnostics
The unit also needed to shorten time to diagnostics. There were not sufficient sessions to meet demand and it wanted to enable advanced nurse practitioners to order diagnostics. The team worked with diagnostics to give ambulatory care patients equal priority with inpatients.

Surgical ambulatory assessment
Calderdale and Huddersfield was one of the first trusts to introduce a surgical AAU, allowing patients to have same day emergency surgery without admission. The surgical AAU unit opened in 2014. The unit is consultant-led and is moving towards a process approach, whereby senior clinicians assess whether someone is suitable to receive ambulatory care rather than care being condition-specific. Members of the team visit ED throughout the day to identify potentially suitable patients and pull them into AAU. It is also considering attending ED board rounds to increase the volume of patients coming onto the unit. Surgical AAU is developing some pathways for its high volume conditions including Urology and Orthopaedics.

Since the introduction of surgical AEC the number of patients going through ambulatory care has increased by 11%. The daily discharge rate has increased by 20% to 33%, mortality rates have halved, and length of stay has decreased by 2.5 days for emergency patients.

A new, state of the art AAU
In 2017, the Trust co-located its medical AAU onto the Cedarwood Unit on the ground floor of the Huddersfield Royal Infirmary near to ED. The new unit has external access so ambulances can drop patients off directly. The long term plan is to provide multi-speciality ambulatory care, and a task and finish group has been set up to look at the first phase which will include Urology, Vascular and Orthopaedics. Bringing together surgical and medical ambulatory care makes it easier to collaborate and share resources. Many of the processes (particularly for the nursing team) are very similar, thereby maximizing the workforce.

When the new AAU opened in January 2017 it expanded its opening times from five days a week to seven days a week, from 7am-8pm. It has consulting rooms, trolleys, treatment chairs, a large treatment room, phlebotomy space, clinical rooms, and a waiting area. Both medical and surgical AAUs were frequently bedded overnight - this has now ceased.

Impact
Length of stay has steadily reduced, with the most significant reduction since January 2017.

The number of patients seen in each unit is increasing month on month.
Key success factors

Calderdale and Huddersfield believes that the following key factors have contributed to the success of its ambulatory care work:

Executive vision and Trust-wide enthusiasm. The Chief Operating Officer had a clear vision for AEC and appointed senior managers to oversee the process. Bev Walker commented: “It has been challenging at times to get everyone engaged but the passion of the clinical teams and the commitment of our Executive Board has driven the process forward.”

Clinical leadership. The team acknowledges that strong clinical leadership in both medical and surgical AAUs has been a key factor in the success of ambulatory care.

A new state of the art AAU with its own access. Relocating the AAUs to Cedarwood created a superior physical space for same-day care.

AEC was just one component of a Trust-wide initiative to transform urgent care.

A sound project plan. Having already implemented a number of AEC initiatives, the Trust developed solid improvement methodologies, including a project team with strong clinical and executive leadership, PDSA cycles to test changes prior to full implementation and data to show impact.

AEC Network. The Network proved pivotal in gaining sufficient credibility and acceptance for the ambulatory approach. Bev commented: “We wouldn’t have got this far without the support of the AEC Network. People took notice because we were working with a nationally-recognised organisation. It gave us the credibility we needed.”