



Report on the Trial of the Longest One Waiting Vehicle (LOWVe) in the Brighton Operating Unit

February 2019

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Rationale for the Trial

The Ambulance Response Programme (ARP) was introduced in SECamb in November 2017. With a focus on responding to the highest acuity patients as a priority, lower acuity patients could wait extended times for an ambulance response.

The Longest One Waiting Vehicle LOWVe is a pilot project within the South East Coast Ambulance NHS Foundation Trust (SECamb) working as a trial in the Brighton Operating Unit. (BOU). It is a resource to be dispatched specifically to the longest waiting CAT 2, 3 & 4 incidents or an HCP not at a hospital, within the Brighton OU. It operates from Lewes Ambulance Station. The trial has run from May 2018 to January 2019, in three stages of increasing cover through the week.

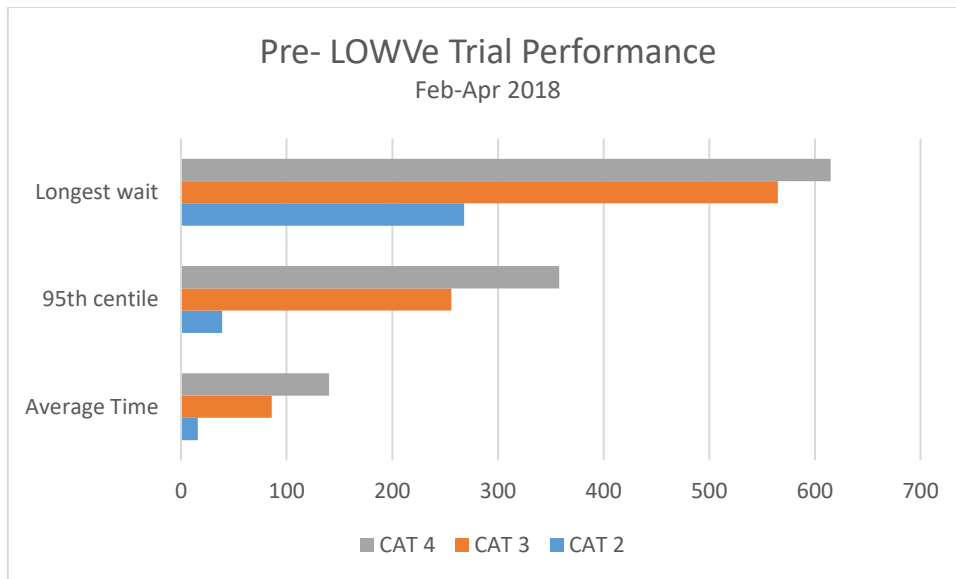
The LOWVe concept was the original idea from a Technician based at Lewes, Steve Pope. His idea had developed into a resource which has had positive effect on performance.

The Intention was to create a vehicle that can work alongside other initiatives such as the Falls, Fit to Sit and NET, but to specifically task it towards the longest outstanding patients, these patients are predominately C3 patients but on occasions C2, C4 or an HCP request not currently in a hospital.

Since the introduction of ARP, it was noted that some Patients predominately C3, had been outstanding for long periods:

Longest Waits in Brighton Operating Unit from ARP implementation prior to the introduction of LOWVe were:

Category	Hours. Minutes.
CAT 2	07.18
CAT 3	15.35
CAT 4	10.48
HCP	21.15



Often, outstanding patients are still on the stack in the morning from previous day’s activity. Some patients particularly fallers, can decompensate quickly, they suffer tissue viability issues, hypothermia and other complications that lead to hospital attendance and sometimes, admissions that may have been avoided should SECamb have responded earlier. SECamb has received a number of concerns from patients and patient’s relatives reporting through our PALS and Complaints department in relation to delays. Crews are prepared and professional in their approach to help manage this but believe that we need to focus on more timely response.

As part of developing an operational procedure for the trial, an equality analysis and a quality impact analysis were completed. Following consideration at Trust’s Clinical Innovations and Service Change Group, the trial was permitted to go ahead.

The Trial

The concept of the Longest One Waiting Vehicle, LOWVe, came from a long serving member of staff who was becoming increasingly concerned about the increasing length of time we were taking to get to patients, the secondary effects this was having on these patients conditions and the types of patients this was affecting.

Often patients that have a lower categorised call are older, frail or socially isolated members of our community. Our member of staff, Steve an Ambulance Technician, was becoming gravely concerned that we were failing these people. He started to speak about these concerns and the idea that maybe an alternative method of looking at the problem was discussed.

Traditionally ambulance services respond to patients with highest acuity first, then work down the list of calls until all are covered. If another higher acuity call comes in then the lower acuity call has to wait. This concept works fine when the number of resources is greater than the demand. But locally and nationally ambulance services have been dealing

with a continual year on year increase in call volume, a growing and ageing population and a society that wants a more instant access to the NHS.

The idea was to have a vehicle that worked from the bottom of the list up. So instead of defaulting to the highest acuity call, they would attend to the oldest call on the system regardless of call category. Whilst the rest of the ambulances in the area would work to the normal method of highest acuity first. It was hoped that with the addition of the LOWVe vehicle there would be a marked reduction in the longest time patients would have to wait.

The South East Coast Ambulance Service, SECAMB, is divided into 10 areas, called Operating Units (OU). Our OU, Brighton, takes in the city of Brighton & Hove and local towns of Lewes, Burgess Hill and Haywards Heath. Contained within this area are two hospitals. A major trauma centre, the Royal Sussex County Hospital (RSCH) in Brighton and a local A&E unit, the Princess Royal Hospital in Haywards Heath.

Due to the location of the RSCH and general size of population of Brighton, the majority of incidents and therefore location of ambulances is within the city. This has led to majority of our longest waiting calls being outside of the city in the northern half of our OU. For this reason it was felt best to base the vehicle at Lewes ambulance station.

After discussion it was felt that for the trial the vehicle would be manned by experienced Ambulance Technicians rather than paramedics. They were all well practiced in patient assessment, had a good knowledge of alternative pathways available locally and happy to call for higher clinical assistance if required.

There was discussion about using the specialist bariatric vehicle for the trial. This would bring the added bonus of having this vehicle more quickly available if required. As well as providing them with a more easily recognisable call sign, especially useful for the Emergency Operations Centre (EOC) resource dispatchers (RD). But due to logistics, training and procedural reasons this was not an option.

For governance a Standard Operating Procedure (SOP) was written and presented to Clinical Innovations and Service Change Group for approval, which was given. This SOP also contains an easy to follow flowchart for EOC.

Several visits to EOC were undertaken, as well as email correspondence, to advertise, inform and educate the EOC staff. This was very important as the concept requires the RD's to operate in an unfamiliar way. The RD's change which dispatch desk they are working on a daily bases so this process was repeated several times.

LOWVE VEHICLE EOC FLOWCHART

Crew sign on

Dispatch to oldest C3 in Brighton OU.

If there is an older C2, C4 or not at hospital HCP then it is at discretion of dispatcher. Emphasis on incidents outside of Brighton and Hove city first.

C1 calls.

LOWVe vehicle can attend C1 calls.

If very similar travel time to another DCA then allocate to other DCA.

If much shorter travel time then assign to LOWVe but back



It was decided that the trial should be staged in 3 phases and that only after review could the trial move on to the next stage. Stage 1 would consist of just one crew operating 12 hour 06.00-18.00 day shifts. They would provide cover to half the days of the week, on a rolling rota bases. The times were felt best as they would be the earliest starting time vehicle in the OU so therefore could pick up longest waiting incident from the night shift, which was shown to often be the longest in a 24 hour period.

Stage 2 would expand this to two crews, covering day shifts 7 days a week.

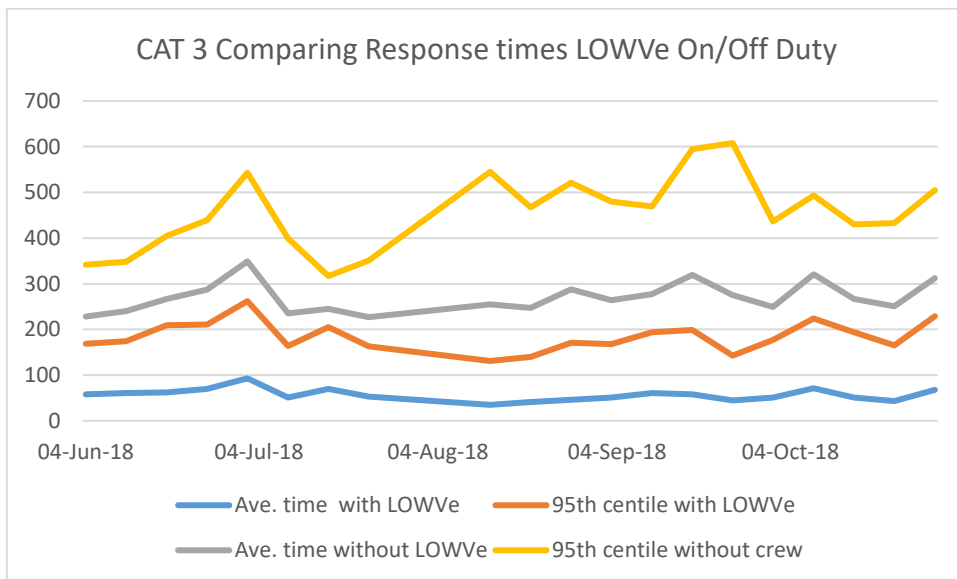
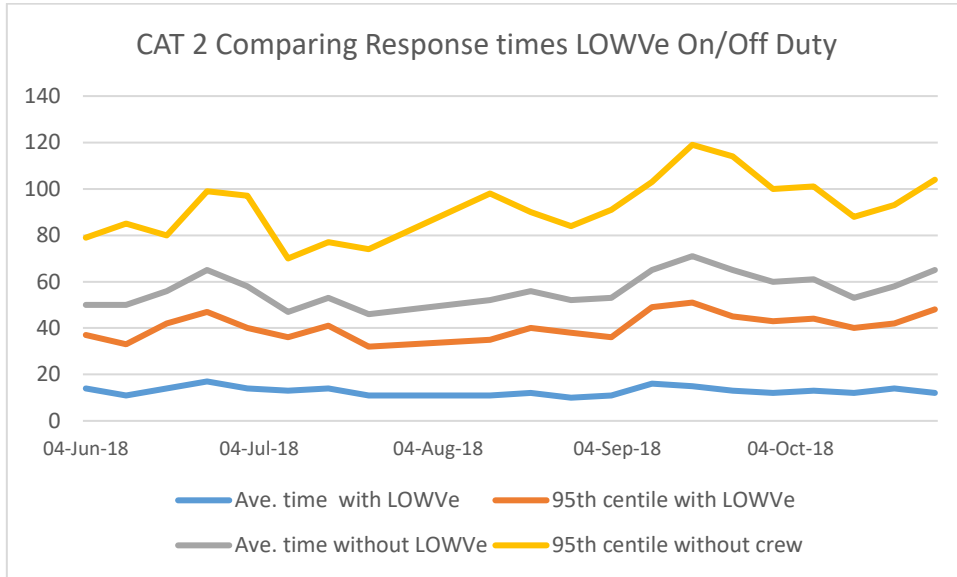
Stage 3 saw a greater expansion of cover into night hours. This was split into two, with one additional crew providing full 12 hour night duty cover for 3 nights a week. Another crew would provide cover from 18.00-02.00 for the other 4 days a week.

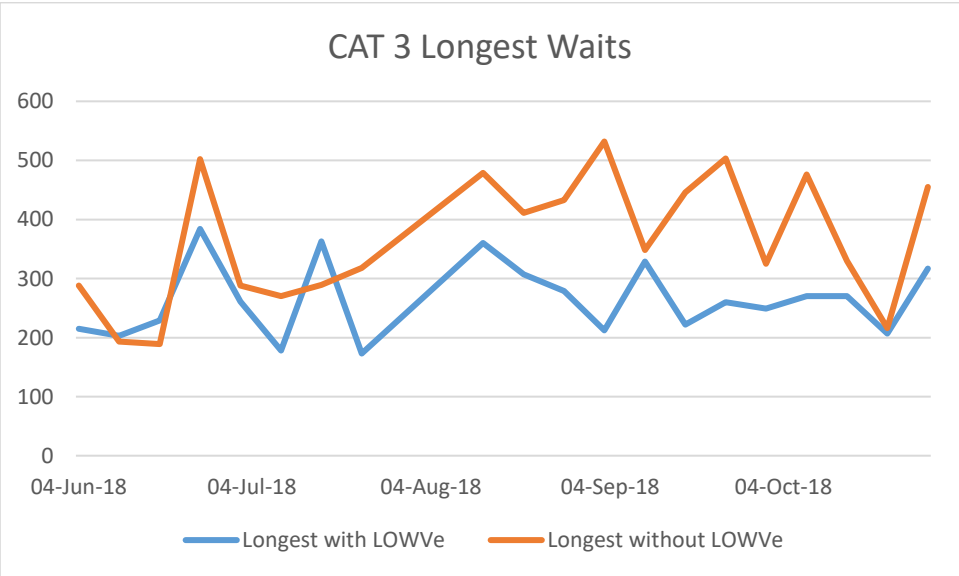
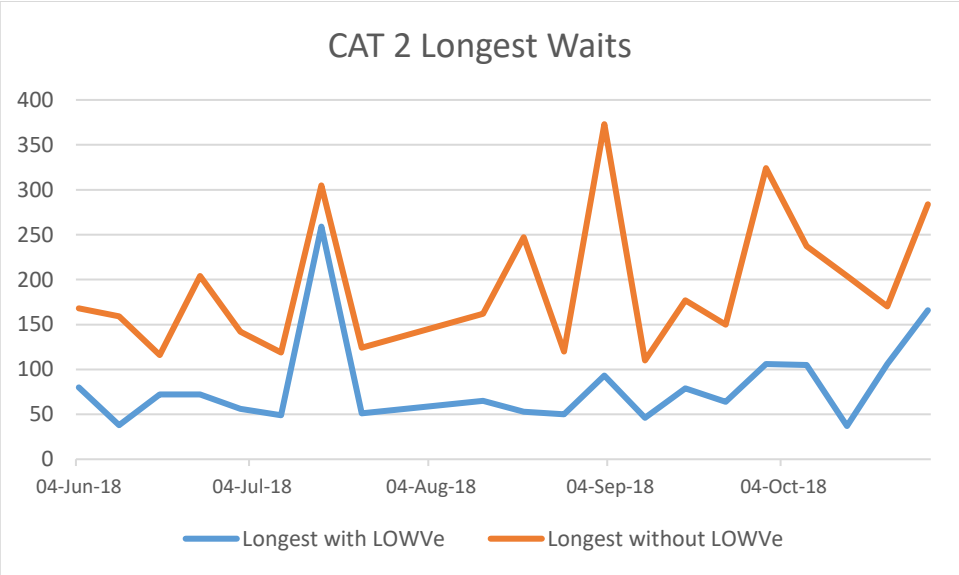
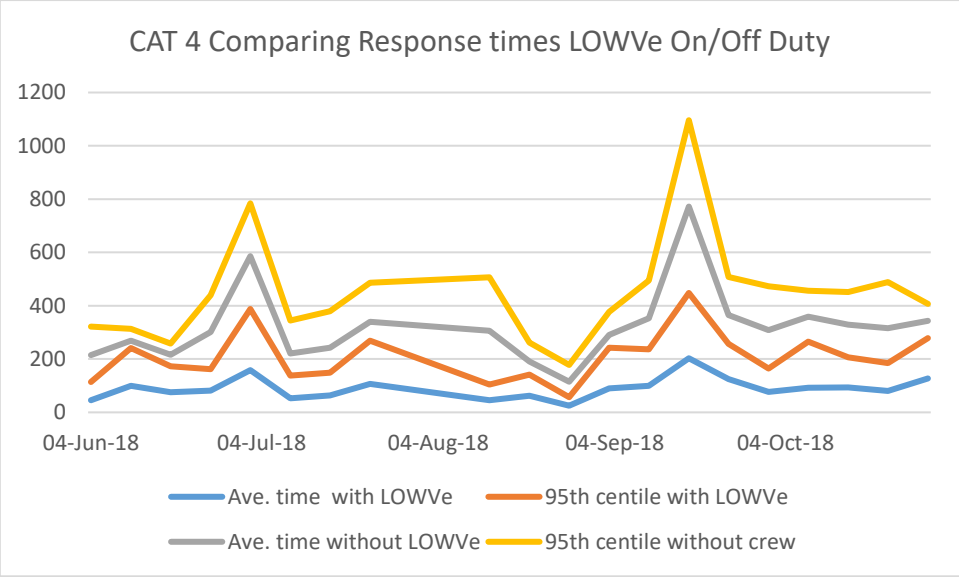
The benefit of doing the trial in stages was to provide us with contrasting data evidence to the effectiveness of the vehicle.

Stage 1 ran from 21st May 2018 to 29th July 2018. Stage 2 ran from 30th July 2018 to 11th November 2018. Stage 3 from 12th November 2018 onwards.

Results

In terms of response times and reducing long waits, the data below shows a significant improvement in performance over this period when the LOWVe has been on duty. When the LOWVe is on duty, the 95th Centile response is normally better than the average response without it.





‘A good despatcher today who did not understand the vehicle but once given the brief despatched really well’ – 18/06/18

‘It is all about education of the perceived investment of nailing those older calls paying back dividends later in the day.’ – 22/05/18

‘Excellent despatcher today, good rapport’ – 11/11/18

‘I feel a personal benefit of being suitably dispatched to LOWVe criteria. Having a consistent crewmate has also benefited patients, as a like-minded approach to patient care. My mental wellbeing has massively improved on the unit.’ – 21/01/19

‘Most effective when used appropriately’ – 21/01/19

‘Since working on the LOWVe vehicle I personally have been able to sleep a little better. Which has a big impact on my working life and mental health.’ – 21/01/19

‘Would be great to have this in all OUs’ – 21/01/19

The crews reported that due to RDs changing desks every day and their shifts transcending two EOC shifts, they often had to remind the RDs about the trials call allocation process. Once RDs had learnt the allocation process, the crews felt the vehicle was used very appropriately.

Crews felt RDs would benefit from a much more easily identifiable call sign prefix. This would assist them at extremely busy times or during breaks, where their having to remember one call sign out of a whole dispatch desks list.

EOC Feedback

‘To be honest the dispatchers also have the impression that this vehicle only attend C3.’
From early in the trial.

‘Obviously I can appreciate that there is an added risk to those who are waiting for an ambulance for an extended period of time. I along with many other Dispatchers have Dispatched on a C3 that has been outstanding so long the patient ends up going in to cardiac arrest but 1 resource cannot clear up several calls that are out of time for example. I appreciate that this trial has gone through governance. But I am really struggling to see how when questioned I can personally stand up and justify running an available resource double the amount of time/distance, or holding it way past that of its response time when it has been triage through pathways as a life threatening call for the sake or not using the LOWVe.’

'This vehicle has not changed the way in which I dispatch. I still very much dispatch in the same way – however it's helpful not to divert off of a breached c3 in onto a new c2 where the patient has called for a panic attack or because they appear to be shocked (for example)' - 21/01/19

'I have had more disagreements with this crew than others as I feel I am questioned by them more.

But otherwise has not changed the way I dispatch expect this vehicle now goes to the longest waiting.

Easier to break as will not go to a C2 when on route back to base 9 times out of ten.

Some urgent work gets down quicker but this then make the use of NET vehicles harder.' – 21/01/19

Some RDs found the switching between different of dispatch styles difficult. This resulted in the vehicle being dispatched to Cat 2 calls when there were far older Cat 3 calls in the stack. There was also some confusion about whether the vehicle could be used for crew back-up requests.

Conclusions

- We can see from this review that the LOWVe has provided a positive impact on not only reducing waiting times but also on improving patient experience.
- This can be clearly seen in the results data. If we look at the whole month of September we can see there is an over 50% reduction in both Cat 3 average times and 95th centile.
- September Cat 3 average with LOWVe 53 minutes and without 107 minutes.
- September Cat 3 95th centile with LOWVe 122 minutes and without 254 minutes.
- This drives an improvement in patient satisfaction, as is shown by the reduction in timeliness complaints and number of compliments received.
- The data for 24/7 working from November and December 2018 does not present a compelling story for night shift cover.
- The resource is not effective when sent to stand by in the City as it then tends to be dispatched to CAT 2 calls.
- There is still work to undertake to educate Dispatchers on the real difference the LOWVe can make to the performance and quality of care for patients.
- There are a significant amount of benefits to the staff involved from a well-being and job satisfaction point of view.
- This concept can be used in other areas of SECAmb.
- The LOWVe has received very positive feedback from both the Executive Walk-round and Regional Governance Review with the Executive Board.

Recommendations

1. That the vehicle is made a permanent resource as part of the establishment of Brighton OU.
2. Following the Area Governance Review, the LOWVe has been identified as valuable resource utilised as a tactic which could work effectively in any Dispatch Desk.
3. The vehicle should operate as two overlapping vehicles. A 06.00-18.00 and a 16.00-02.00, both seven days a week. This has been incorporated into the STAD rotas.
4. Whilst there is an argument that STAD will ensure that performance targets are met. LOWVe provides a better patient experience for long-waiting lower acuity patients.
5. At times of extreme pressure, LOWVe is the “Safety Valve” to maintain safe, responsive resourcing to provide quality patient care, at a level above the Non-Emergency Transport Service.
6. There is an opportunity to use the LOWVe for Bariatric patient’s response as per the original proposal for LOWVe. A small working group is progressing this concept in partnership.
7. EOC to be able to change the call sign prefix from a standard three-digit number, to a more easily identifiable prefix. I.E. LOW1. Especially important if the crews have to change their physical vehicle.
8. A new flowchart for EOC.

LOWVE VEHICLE EOC FLOWCHART

Crew sign on

Dispatch to any unassigned C1 calls or Grade 1 back-ups.

Assign to OLDEST call of any category, I.E. C2, C3, C4 or not at hospital HCP. If holding newer C2 still assign to OLDEST call, even if lower category. Emphasis on incidents outside of Brighton and Hove city first.

Stand-by. If vehicle put on stand-by, assign to outside of Brighton and Hove city.

C1 calls.

LOWVe vehicle can attend C1 calls.

If very similar travel time to another DCA then allocate to other DCA.

If much shorter travel time then assign to LOWVe but back up immediately with another DCA, so the LOWVe can be stood down.

