South East Coast Ambulance Service NHS
NHS Foundation Trust

Medway Maritime Hospital

Live Ambulance Conveyance Review

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This review and report has been supported by the system partners below

Supporting Organisations:

Medway Maritime Hospital Foundation Trust (MFT)

South East Coast Ambulance Service NHS Foundation Trust (SECAmb)

Medway Community Healthcare MCH

Medway and Swale CCG

MedOCC - Medway Community Healthcare

Medway Practices Alliances Ltd

Review Team:

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1 Introduction

The local Medway ambulance liaison group (operational meeting between SECAmb and MFT) was established to undertake a joint piece of work to reduce ambulance handover delays. Handover delays are a long-standing issue at Medway Hospital. High numbers of patients have previously waited >60 minutes before a handover takes place This impacts both on the safety and experience of patients waiting in ED ,but also impacts on SECAmb's ability to respond to patients awaiting a 999 response in the community.

Joint working has recently enabled positive progress to be made, with a significant improvement in handover delays since the beginning of the year. It should be acknowledged however, that the numbers of conveyances to Medway hospital has increased significantly which has contributed to the pressure experienced in ED/UTC and impacted on patient flow which in turn impacts on handover times.

To gain an understanding of the reasons for the increase in the numbers of conveyances, the group agreed to undertake a live front door conveyance review. The review aims to capture the demographics and case mix of patients being conveyed by the ambulance service, and to consider the clinical rationale for conveyance to hospital, including if available appropriate community pathways were considered before deciding to convey.

This report will consider the review of ambulance conveyances with a focus on identifying any barriers that crews experienced on the day in accessing available and appropriate community pathways. The review hopes to highlight these barriers so that opportunities may be identified to address them. The review also is an opportunity to identify any gaps /inconsistencies in the availability of community pathways or to identify any opportunities for the development of community pathways.

2 Methodology

Live ambulance conveyance reviews have previously been conducted at a number of EDs within SECAmb's catchment area. Most recently, a review was conducted at St Richards Hospital in Chichester West Sussex in October 2019, and one at Conquest Hospital East Sussex in February 2020. The methodology for these reviews has been broadly similar; and this review followed a similar approach

In order to target a variety of conveyance and demand times the review was conducted over four 4-hour sessions during one week. This staggered approach ensured there was appropriate representation from in hours, out of hours, weekdays and weekend conveyance times. The review sessions were:

Monday 13/01/2020	10:00- 14:00
Wednesday 15/01/2020	18:00 – 22:00
Friday 17/01/2020	14:00 – 18:00
Sunday 19/01/2020	11:00 – 15:00

Each review session was supported by clinical representation from SECAmb and Medway Community Healthcare (including two sessions from MedOCC) and for two sessions there was representation from a GP. Data collection was conducted through the completion of a review tool, examples of the questions asked can be found in Appendix 1.

Members of the review team were situated next to the ambulance entrance at ED and next to the entrance of the collocated UTC (where the majority of ambulance arrivals are received). When an ambulance crew arrived, they were approached by a member of the review team to gain consent to be involved in the review

Once the crew had completed clinical handover and the patient transferred, the attending clinicians were interviewed by the SECAmb members of the review team for the data collection tool to be completed. Additional questions were asked by the community services /MedOCC /GP colleagues where appropriate to draw conclusions about any appropriate community pathway that could have been considered. Post review, MFT staff retrospectively reported the diagnosis, treatment and outcome of each patient captured in the review. Finally, the data was collated together and analysed to consider if any of the patients in the review could have been referred to an existing non-Medway ED/UTC pathway.

3 Conveyances Reviewed and Outcomes

In total 75 conveyances were captured during the review It should be noted that within the review period, 107 ambulances arrived at the hospital in total. It was not possible for the team to review every single ambulance conveyance and for the purpose of the review (looking at access to appropriate community pathways before deciding to convey) the team focused primarily on patients going through UTC and RAT (Rapid , Assessment and Triage) area , rather than patients going into resus or direct to other units e.g. maternity .

3.1 Source of Call

In this review, the majority of the conveyances originated from 999 calls, with calls direct from Health Care Professionals (HCP) and transfers from 111 making up a smaller percentage. It should be noted that none of the HCP requests for conveyance were expected by the hospital

Source of call	Numbers of Patient	Percentage
111	18	24%
999	47	63%
HCP (9 local GPs and one prison HCP referral)	10	13%
Total	75	100%

3.2 Age of Patient

Patient age groups were split into paediatrics (under 16), working age (16-64) and older age adults (65+). The majority of patients (48 %) were 65 or older, with paediatrics and younger adults accounting for 16% and 36% respectively.

Age Range	Number of Patients	%
Pead 0-15	12	16%
Adult 16-64	27	36%
Older Adult 65+	36	48%
Total	75	100%

3.3 Outcomes

Following the initial data collection and live review of conveyances, each of the patients captured were followed up in order to understand the outcome of their conveyance to ED/UTC.

Outcome		Percentage	Comments
Admitted	11	15%	2 went to SAU and 5 to AMU
Discharged	61	81%	3 went to SDEC and 14 to MedOCC
Not known	3	4%	Details not recorded

Of the 75 conveyances, the review team identified 10 conveyances for consideration and where the rationale for conveyance should be highlighted. Of the 10 highlighted there are 5 conveyances where crews had shown evidence of considering other appropriate pathways before conveying to ED/UTC and 5 HCP requests for conveyances where conversations between primary care /community services and or Medway hospital **may** have resulted in a safe alternative to a conveyance by ambulance to the ED/UTC

4 Community pathways and collaborative decision making

Collaborative decision making for this review involves the review team identifying any conveyance where the Ambulance crew attempted to contact/consider an appropriate community service, in order to discuss the patient's condition and/or to explore any potential community pathway. It does not include conveyances where the crew were conveying the patient under the direction of another HCP.

The review team highlighted the 5 cases below where there was evidence of crews considering community /alternative pathways (where appropriate) before conveying

Source of call	Age	Grade of Crew	Presenting complaint	Collaborative decision making	Comments	Outcome
999	65+	AP/APP	Chest Pain	Yes – SECAmb PP hub	Patient and son wanted crew to take patient to Lewisham hospital (or to self-convey) where patient is cared for normally PP desk advised conveyance to Medway as nearest hospital	ECG and monitoring in MedOCC discharged home
999	65+	AP/APP	#NOF	Attempted to access the # NOF pathway at Medway Hospital – no capacity	Received IV and Meds in ED transferred to SAU	Admitted
999	65+	Paramedic	Mental Health patient presenting with acute confusion Had undergone medical assessment today as part of dementia screening	Contacted Social Services direct to discuss alternative care pathway (out of hours call)	Social services consulted and advised crew that patient needed medical assessment even though patient had already been assessed that day , so crew conveyed to ED	Observation and bloods – "social problem" patient admitted
111	0-15	Paramedic	URTI and chest pain	Advised patient could be seen by GP/MedOCC Parent declined and insisted on being conveyed	Mother declined offer to access primary care and to stay in the community (Background of safeguarding concerns and parent highly anxious)	No treatment given, seen by MedOCC and discharged home
999	65+	Technician /Advanced Technician	Bronchitis	Attempted to refer to Virgin Local Referral Unit	Patient not suitable Antibiotic service available in Medway but not in Swale where this patient lived	COPD – IV Monitoring and Meds Discharged home

The review team highlighted 5 HCP requests to convey a patient to ED , where an additional conversation with community services and or a clinician at Medway hospital **may** have led to either a different pathway being accessed , or where the patient could have made their own way to ED rather than an ambulance conveying

Source of Call	Age of Patient	Presenting condition	Comments by the review team	Outcome
HCP	65+	Septic Arthritis?	Patient in nursing home discharged yesterday from Medway hospital following treatment for knee injury . Following results of blood tests today received at GP surgery (taken when patient was an inpatient in Medway) the GP queried septic arthritis and queried why the patient had been discharged A request was made for a conveyance based on high CRP blood results Review team thought there was no need for conveyance at that point based on the results of the blood test results and thought that the GP could have repeated bloods and then prescribed Abx if abnormal (for community management.)	Obs , meds and discharged back to nursing home
HCP	65+	? CaudiaEquina syndrome	Patient drove to surgery. Following assessment HCP requested an ambulance to convey to ED Review team queried if ambulance was necessary (could have got to hospital himself /friend transported) and if the patient could have been directly referred to AMU (patient not expected)	Caudiaequina syndrome Clinical obs and neuro obs undertaken in ED transferred to Lister (AMU)
HCP	65+	Heart Failure	Review team thought that Medway Community Health ACP and Heart Failure Team could have been considered for this patient	IV Frusomide given in ED and discharged home
HCP	65+	Heamaturia referral from Sheppey Hospital	Patient originally an inpatient at Medway but transferred to Sheppey for rehab .Was referred to SDEC and accepted by urology however 4-5 hour wait and due to tissue viability patient was unable to sit that long and so came in via ED. Review team thought no clinical need to be sent to Medway Catheter patent , no haematuria very good urine output IDT contacted by review team to repatriate patient to community hospital	Bloods , obs and discharged back to Sheppey Hospital
HCP	65+	6/7 D&V symptoms. GP home visits x 2, feels that home treatment options now exhausted.	Review team thought that Rapid Access Outreach Team could have been considered by the GP (team are able to review patients at home) Can do urgent bloods and also can have access to consultant review The team also queried if patients relatives could have transported the patient to hospital rather than the HCP call for an ambulance	Gastroenteritis Obs and IV fluids given in ED Admitted to Arethusa

The Review Team included colleagues from Medway Community Services/MedOCC who provided insight in order to identify whether any patients that were conveyed to ED/UTC, may have been considered suitable for referral to the new "Community Urgent Response Team " (if it were in place) taking into consideration the presenting condition . Five possible patients were identified.

Source of call	Age	Clinical grade of crew	Presenting complaint and comments	Hospital diagnosis and outcome
111	65+	Paramedic	Arrythmia and palpitations known to GP but not medicated as yet Awaiting Echo/ECG before initiating Treatment. Family concerned as patient more confused crew found Pt in fast AF and conveyed to ED	AF/Flutter. IV and Meds given. Obs and ECG. Patient admitted
999	65+	Paramedic	Head injury (patient on blood thinners) Would be suitable for Urgent response providing exclusion of certain blood thinners (Clopidogrel not currently required to convey)	Bruise /contusion neck abrasion Taken to streaming but redirected to RAU Obs CT head and spine – discharged home
999	65+	Paramedic	COPD and heart failure diagnosis Presenting with shortness of breath, no recent meds review ?? Bradycardic	Obs , bloods ECG – discharged home
999	65+	Paramedic	? LRTI	COPD Obs , meds and admitted
111	16-64	AP/AAP	Acute confusion elderly female lives alone no poc new onset of confusion for? 3 days. Patient denies fall but small laceration to head Crew concerned confusion related to head injury. Did not consider SECAmb PP hub as felt needed hospital review	Outcome not known Unable to trace on hospital system

In addition to the conveyances that have already been outlined, the following ones are also noteworthy

- A patient under the care of MCH respiratory service, contacted the team as his condition had deteriorated. The team had no capacity and advised the patient to call 999. The patient was subsequently conveyed to ED received IV fluids and meds and was admitted
- A patient with a similar presenting condition to the one above, would also have been suitable for the MCH community respiratory service but patient lived in the Swale area (where service is not commissioned) This patient received IV fluids and Meds in ED and was discharged home.
- Two patients were conveyed from prison with the reason for both conveyances being trauma (assault and self-harm). Neither patients were suitable for treatment at an MIU
- Out of area crew conveyed patient to ED rather conveying direct to the UTC as the crew were unaware of acceptance criteria at UTC

5 Discussion

The review of the ambulance conveyances to Medway set out to understand if there had been a shift in clinical decision behaviour that had led to an increase in conveyance activity In addition the review also sought to explore opportunities to improve the utilisation of appropriate available clinical pathways and to identify opportunities for new pathways to be considered.

The outcome of the review is that ambulance crews are making appropriate and informed conveyancing decisions based on existing appropriate and available community services It is positive to note that ambulance clinicians are attempting to utilise available non ED pathways for patients, as well as seeking additional support for clinical decision making from other health care professionals The review has however highlighted some issues around accessing pathways that were around lack of capacity or gaps in the community services currently available. It would be worth establishing a way of routinely capturing this information to inform future development opportunities

In particular the review has highlighted a cohort of patients that would be suitable for the new Community Urgent Response Team if it was in place and the review has therefore identified opportunities in the future to reduce conveyances when this team is up and running .

The review has highlighted a need for some focussed work around HCP requests to convey patients to ED. This will need to include raising awareness of existing community services that can support HCPs in keeping patients in the community wherever possible. It will also need to consider how best HCPs can liaise with Medway hospital before requesting a conveyance so that the patient is already expected/accepted and wherever possible conveyed direct to AMU/SDEC instead of ED in order to reduce congestion.

It should be noted that the review also provided an opportunity to talk to crews , community services , ED staff and GPs in order to gain a better view of the availability of community pathways A common theme in particular that came up was the lack of “alternative pathways” for patients presenting with mental health needs. It wasn’t necessarily that crews were unable to access existing pathways but rather that alternatives to conveying to ED were limited and therefore patients were often conveyed to ED because there was no choice (e.g. place of safety or where acceptance criteria needed a medical assessment) Within the review 4 patients were conveyed who had mental health needs. 2 were known to mental health services and 2 were not. All 4 were unable to access a community mental health pathway as all needed medical assessment prior to accessing suitable mental health services. Of those 4 patients one was admitted and the 3 received treatment/monitoring and discharged home.

There were also comments around the variance in services provide by GPs/primary care e.g. some services that were provided by some GP practices but not others e.g. Arrythmia service advice line meaning that patients in certain areas were more likely to be conveyed to ED than in others.

There was also some concern raised from crews about the length of time they sometimes experienced waiting for call backs from GP surgeries (in hours) e.g. when crews were wanting to refer patients to primary care , or when requesting for prescription of antibiotics In these circumstances there is a risk that patients are more likely to be conveyed to hospital.

6 Recommendations

- HCP- when requesting an emergency ambulance to transport a patient for a non-life or limb threatening condition , the patient should have had a clinical assessment by the referrer and a clinical discussion should have taken place with the receiving team at the hospital before a request is made to convey i.e. the patient should be expected by the hospital
- Crews and referring HCPs to consider if the patient could make their own way to hospital rather than being conveyed by ambulance as a default
- HCP awareness raising exercise about the availability of community services /pathways and how to access
- SECAmb to ensure all crews are aware of service finder so that crews have access to up to date information relating to available community pathways. This is particularly important where “out of area “crews are responding
- Development of a clinical referral criteria for direct GP and ambulance crew referrals to hospital non-ED destinations e.g. SDEC to reduce congestion in ED (already in progress) and also to consider direct referrals to AMU/SAU/Frailty service for GP expected patients
- Consideration of “We tried “ email or similar feedback process to capture barriers for crews accessing community pathways or to identify any gaps (including where referrals have been declined due to lack of capacity) General themes to be regularly presented at system level discussions i.e. Local A&E delivery board
- Review of the difference in availability of community services between Medway and Swale to see how they may be resolved e.g. access to MedOCC (in hours) and availability of service providing IV antibiotics
- Although this review focused on the live reasons for conveyance there may be benefit in some retrospective work to see what could have been effectively provided in the community, based on what interventions were provided at Medway. This may help to direct some decision making related to community service and identify possible opportunities. This may be particularly relevant for patients with mental health needs
- Repeat of the review in 6 months

Appendix 1

Questions to be asked on review tool

To be completed by the attending Ambulance Crew		To be completed by ED Staff	To be completed by Audit Team
Patient ID	Was there an electronic patient record / care plan available on IBIS?	Diagnosis - Hospital	Is there a community service / pathway available that could have provided same assessment and/or treatment that was considered?
Hospital number	Who was the patient record / care plan (IBIS) from?	Did the patient receive treatment / intervention in A&E?	
At Hospital Time (HH:MM)	Did you access the patient record / care plan (IBIS)?	Briefly outline the treatment given	What community service / pathway?
Source of incident	If no (did not access patient record / care plan) why?	Time/duration in department (HH:MM)	Comments around community pathway
Were you providing transport under the instruction of another clinician?	Did the patient record / care plan (IBIS) influence your clinical decision making?	Other additional comments	Other additional comments
Presenting Complaint / Impression - Crew	Is the patient EOL?		
Type of transporting vehicle	Was there collaborative decision making?		
Clinical grade of crew	If yes (collaborative decision making), was there a reason for conveyance?		
Age of patient	Is there a community service / pathway available that could have provided same assessment and/or treatment that was considered?		
Was the patient time-critical?	What community service / pathway?		
Was the patient clinically 'fit to sit'?	Did crew attempt to access community service / pathway?		
If no, why were they not fit to sit?	Comments around community pathway		
Could the patient have made their own way to A&E?	How did you attempt to contact community service / alternative pathway?		
If Yes, what was the reason for ambulance conveyance?	Did you use any clinical guidelines / assessment tools to support conveyance decision? (select dropdown)		
	Did the patient 'want' to go hospital, despite ambulance clinician recommendation for		
	Other additional comments		