Ambulance Handover Delays: Options Appraisal to Support Good Decision Making

Scope
This document is designed to inform and support senior managers within acute hospitals and ambulance services with operational responsibility for ambulance handovers.

Background
The problem of Emergency Department crowding has long been “hidden” within the walls of the ED, where it has become normalised for EDs to soak up risk and continue accepting patients in a manner not expected in any other part of the NHS. With the advent of concerns about the effect of crowding on cross infection, this problem has now become more visible as handover delays have dramatically increased, leading to ambulances waiting outside EDs with their patients still inside.

RCEM thinks is that it is important to return ambulances to active service whenever possible and safe to do so. Holding patients in ambulances creates two problems. Firstly, the patient in the ambulance receives unnecessary delays to their care. Secondly, a seriously ill or injured patient who requires an ambulance will have to wait longer. There are additional concerns that ambulance staff may be exposed to an increased risk of nosocomial infection.

Ambulance handover delays are almost entirely caused by crowding in emergency departments. Delaying ambulance handovers should be a last resort.

RCEM also thinks that we cannot safely look after patients, protect them from acquired infections such as COVID, and protect staff from nosocomial infection, if departments are crowded (i.e.) above maximum occupancy. Crowding always was unacceptable and dangerous for patients. It is unthinkable now.

Experience during the first phase of the COVID pandemic showed that crowding is not inevitable when organisations afford appropriate priority to urgent and emergency care.

Emergency Departments must have sufficient capacity to meet demand, and constant flow from the Emergency Department into inpatient beds, otherwise they will not be able to keep patients and staff safe.
When this does not happen there are a number of options available to leadership teams. It is important that there are clear lines of communication between acute hospital and ambulance service operations teams.

**Potential Options**

1. Improving organisational processes and utilising the whole resource of the hospital and system. Have available options to that unnecessary admissions are avoided and escalate so that patients can be promptly admitted to assessment areas and wards from the Emergency Department.
2. Opening staffed holding areas to act as a buffer between the ED and admission areas (so-called Priority Admission Unit)
3. Expanding the Emergency Department footprint with increased staffing.
4. Expanding the Emergency Department footprint without increasing staffing or changing organisation processes.
5. Holding ambulances outside Emergency Departments.
6. Diverting ambulances to other hospitals.
7. Holding patients in corridors after initial Emergency Medicine assessment (“reverse queueing”)
8. Erecting a tent or build a temporary holding area at the front of the hospital.
9. Holding patients from ambulances in corridors awaiting initial Emergency Medicine assessment. This option may involve the ambulance service maintaining care for these patients (either the crews, or a cohorting crew) or the organisation taking over care.

Option 1 is the most desirable option, and the only sustainable one. Option 2 represents a “least worst” mitigation. Option 3 is essentially deferring, and without improvements in systems is not a long-term solution. Option 4 places unreasonable pressure on already critically overstretched EDs and will eventually result in a more dangerous crowding problem. The last five options represent system and organisational failure.
<table>
<thead>
<tr>
<th>Action</th>
<th>Recommended good practice</th>
<th>Ambulance freed up to go to another patient</th>
<th>Patient treated in their nearest appropriate hospital</th>
<th>Patient looked after with appropriate staffing ratio</th>
<th>Patients can undergo active treatment and receive oxygen</th>
<th>Deteriorating patient can be identified early</th>
<th>Patient has undergone assessment and initial treatment in the ED</th>
<th>Risk of cross infection minimised</th>
<th>Patient privacy and dignity preserved</th>
<th>Patient safety improved for patient in question</th>
<th>Patient safety improved for other patients</th>
<th>Ambulance handover measurement improved</th>
<th>Flow metrics improved</th>
<th>Desirable in the longer term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilise the whole resource of the hospital and system. Escalate so that patients can be admitted to assessment areas and wards from the ED</td>
<td>✓</td>
<td>Some support</td>
<td>Maybe</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Open up staffed post-ED holding areas for patients awaiting entry to assessment areas or wards</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Expand the ED footprint with increased staffing</td>
<td>Expand the ED footprint without increasing staffing or changing organisation processes</td>
<td>Hold patients in ambulances</td>
<td>Divert ambulances away from the nearest hospital</td>
<td>Hold patients in corridors after initial assessment in the ED</td>
<td>Erect a tent or build a temporary holding area at the front of the hospital</td>
<td>Hold patients in corridors awaiting initial ED assessment</td>
<td></td>
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Review
Usually within three years or sooner if important information becomes available.

Conflicts of Interest
None

Disclaimers
The College recognises that patients, their situations, Emergency Departments, and staff all vary. This guideline cannot cover all possible scenarios. The ultimate responsibility for the interpretation and application of this guideline, the use of current information and a patient’s overall care and wellbeing resides with the treating clinician.

Research Recommendations
None

Audit standards
None

Key words for search
Ambulance; handover delays; Emergency Department crowding