Hospital Handover Delays for Patients in Ambulances: Options Appraisal to Reduce Harm

Scope

This document is designed to inform and support those executives and senior managers within acute hospitals, ambulance services, and healthcare systems who have operational responsibility for ambulance handovers. This document was last revised in August 2024.

Background

The problem of Emergency Department (ED) 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. However, in the UK, many EDs have become unable to fit more patients inside. This has resulted in increasing numbers of ambulances waiting outside, with patients still inside their vehicles. This has made the problem more visible and has generated further risk for patients. Crowding is not inevitable when healthcare policy makers, systems, and organisations afford appropriate priority to urgent and emergency care.

Patients may suffer harm or die unnecessarily when they cannot get an ambulance in time, when they are held in ambulances on arrival in ED, or when they are treated in crowded EDs. The cumulative impact of these challenges can contribute to poorer health outcomes and underscores the urgent need for systemic solutions to enhance patient flow and resource allocation. Whilst these problems have long been the subject of advocacy from RCEM and COP, hospital handover delays have more recently been raised as a concern by several of HM Coroners and recorded within Prevention of Future Deaths Reports.

RCEM and COP agree that it is important to return ambulances to active service as soon as it is possible and safe to do so. Unfortunately, delaying hospital handovers has become normalised in many systems, whereas it should be a last resort. Ambulances should not be used as additional majors cubicles and are not appropriate environments for patients to wait for prolonged periods from a basic comfort and personal care perspective. Prolonged handover times delay emergency and urgent care for incoming patients and reduce the availability of ambulances to respond to emergencies in the community.

Emergency Departments should be seeing patients who need the specific capability they offer and must have sufficient capacity to meet demand, so that they do not become crowded and can continue to accept patients from ambulances. This means having the right space, equipment, staff, and flow to perform their role, with the right system functioning around them. Without this they, and ambulance services, will not be able to keep patients and staff safe. When these

prerequisites are not in place, then it is the responsibility of system and local leaders to mitigate the risk, and to ensure that this risk is appropriately balanced and shared across the system.

We observe that it is common for system leaders to look for "sticking plaster" rather than long-term solutions. Mitigation is commonly focused at the front door of the hospital, rather than being directed at the root causes of the problem. Where this happens, the relative risk for patients waiting in the community, waiting in ambulances, and waiting in crowded EDs, is not known. Without supporting evidence, it cannot be stated with confidence that any particular patient groups carry the most risk. Strategies to offload ambulances at all costs cannot be recommended over strategies to avoid corridor care in hospitals, and vice-versa. We are additionally concerned that where one particular approach is being advocated over another, there is potential for conflict between professional groups who are being asked to adhere to directives focused on one organisation, rather than on a more cross-organisational approach.

This options appraisal examines the most commonly considered strategies which focus on the front door of the hospital, whilst strongly advocating that the only viable long-term solutions, lie elsewhere in the patient pathway.

Options that are commonly considered, and why most are not acceptable

Acceptable

1. Improving organisational processes and utilising the whole resource of the hospital and system over extended hours and across the working week. This includes social and community-based care. Have available options so that unnecessary admissions are avoided, that patients ready for discharge can be discharged, and escalate so that patients can be promptly admitted to assessment areas and wards when appropriate.

Temporary mitigation

2. Opening staffed post-ED clinical areas (not corridors) for patients who have been assessed and managed, to act as a buffer between the ED and admission areas (so-called Priority Admission Unit).
3. Expanding the Emergency Department footprint with appropriate increased staffing.

Unacceptable

4. Expanding the Emergency Department footprint without increasing staffing or changing organisational processes.
5. Holding ambulances outside of Emergency Departments.
6. Diverting ambulances to other hospitals.
7. Holding patients in Emergency Department corridors after initial Emergency Medicine assessment ("reverse queueing").

8. Erecting a tent or building a temporary holding area at the front of the hospital.
9. Redesignating clinical areas in the existing Emergency Departments as ambulance offload areas.
10. Holding patients from ambulances in corridors awaiting initial Emergency Medicine assessment.
    - These last two may involve the ambulance service maintaining care for these patients (either the crews, or a cohorting crew) or the organisation taking over care.

Option one is the only desirable option, and the only sustainable one. Option two represents a "least-worst" mitigation. Option three is prevarication. Patients are still not receiving the right care in the right place, and without improvements in systems is not a long-term solution. Option four places unreasonable pressure on already critically overstretched EDs and will eventually result in a more dangerous crowding problem.

Option six is generally a distraction when used as a mitigation tool. It should be distinct from conveyancing strategies designed to get patients directly to the organisation most likely to meet their needs. The remaining choices are poor, do not work, represent system and organisational failure, and result in unnecessary harm to patients and staff. They increase pressure on ambulance services and ED teams. They do not solve the underlying problem.

Table 1: Appraisal of recommended and temporary options when faced with delayed hospital handovers

	Recommended option	Temporary mitigation only	
	Utilise the whole resource of the hospital and system. Escalate so that patients can be admitted to assessment areas and wards from the ED	Open up staffed post- ED clinical areas for assessed and managed patients awaiting admission	Expand the ED footprint with increased staffing
Ambulance freed up to go to another patient	✓	✓	✓
Patient treated in their nearest appropriate hospital	✓	✓	✓
Patients looked after with appropriate staffing ratio	✓	✓	✓
Patients can undergo active treatment and receive oxygen	✓	✓	✓
Deteriorating patient can be identified early	✓	✓	✓
Patient has undergone assessment and initial treatment in the ED	✓	✓	✓
Risk of cross infection minimised	✓	✓	✓
Patient privacy and dignity preserved	✓	✓	✓
Patient safety improved for patient in question	✓	Varies	Varies
Patient safety improved for other patients	✓	Varies	Varies
Hospital handover measurement improved	✓	✓	✓
ED flow metrics improved	✓	✓	X

Table 2: Appraisal of unacceptable options when faced with delayed hospital handovers

	Unacceptable options						
	Expand the ED footprint without increasing staffing or changing organisation processes	Hold patients in ambulances	Divert ambulances away from the nearest hospital	Hold patients in corridor after initial assessment in the ED	Erect a tent or build a temporary holding area at the front of the hospital	Redesignating clinical areas in the existing Emergency Departments as ambulance offload areas	Hold patients in corridors awaiting initial ED assessment
Ambulance freed up to go to another patient	Until ED full	X	X	Until corridor full	Until structure full, usually immediately	Until area full	Until corridor full
Patient treated in their nearest appropriate hospital	✓	✓	X	✓	✓	✓	✓
Patients looked after with appropriate staffing ratio	X	✓	✓	X	X	Varies	X
Patients can undergo treatment and receive oxygen	Varies	✓	Varies	X	X	Only for patients offloading from ambulances, other patients displaced to corridors	X
Deteriorating patient can be identified early	Varies	✓	Varies	X	X	Only for patients offloading from ambulances, other patients displaced to corridors	X
Patient has undergone assessment and initial treatment in the ED	✓	X	X	Varies	X	X	X
Risk of cross infection minimised	✓	Yes for patient, uncertain for crews	✓	X	X	Only for patients offloading from ambulances into individual spaces, other patients displaced to corridors	X
Patient privacy and dignity preserved	✓	✓	✓	X	X	Only for patients offloading from ambulances into individual spaces, other patients displaced to corridors	X
Patient safety improved for patient in question	Varies	X	Varies	X	X	✓	X
Patient safety improved for other patients	Varies	X	X	X	X	X	X
Hospital handover measurement improved	✓	X	Varies	Varies	Varies	Varies	Varies
ED flow metrics improved	X	X	X	X	X	X	X

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Review

Usually within three years or sooner if important information becomes available.

Conflicts of interest

None.

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Disclaimers

We recognise that patients, their situations, Emergency Departments, ambulance services, 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

Keywords for search

Ambulance; handover delays; Emergency Department crowding