Improving Ambulance Handover – Practical Approaches

“Ambulance handover and turnaround delays are not good for anybody – least of all patients. National policy direction on this issue is clear: long delays in handing patients over from the care of ambulance crews to that of emergency department (ED) staff are detrimental to clinical quality and patient experience, costly to the NHS, and should no longer be accepted”.

Zero tolerance - Making ambulance handover delays a thing of the past, NHS Confederation 2012

Introduction

This paper focuses on practical approaches to help reduce ambulance-to-hospital handover delays.

Patient handover delays are not solely the responsibility of ambulance services and emergency departments. Delays are often associated with compromised ‘downstream’ flow in acute hospitals and whole-system issues in managing demand and expediting discharge. Reducing delays requires whole system working as well as slick processes in emergency departments and ambulance services. Other papers in this series provide guidance on these wider issues, while this paper focusses more narrowly on tactical approaches to avoid delays.
1. Ambulance Services

- Understanding and managing increases in demand with targeted responses is important. Ambulance Services should complete the toolkits in *Tackling Demand Together* (DH 2009) to support analysis of the reasons for increases in demand.

- Ambulance services should aim to reduce conveyance rates to type 1 emergency departments (through ‘hear and treat’, ‘see and treat’ or alternative pathways). A useful ambition is to improve urban conveyance rates to the same level as rural conveyance rates. Schemes that have been successful in reducing conveyance rates include:
  - Alternative care pathways to take patients directly to Urgent Care Centre/Walk-in centres;
  - Falls partnership vehicles with advanced practitioners;
  - Use of ambulances in alcohol ‘hot spots’ to provide a field vehicle to treat minor injuries at the scene;
  - Increasing the scope of paramedic practice to provide treatment without the need for conveyance;
  - Emergency care practitioners doing acute home visits on behalf of GPs to avoid admission and admission surge;
  - ‘Call back’ schemes for ambulance crews both in-hours and out-of-hours to GPs;
  - High-volume service user planning in conjunction with GPs and acute Trusts;
  - Direct referral to intermediate care/community rapid response nursing services and direct conveyance to hospice.

- For patients who do need to be conveyed, ambulance services can help minimise handover delays by:
  - Reviewing patients’ conditions and needs en-route and sending details ahead to the receiving emergency department;
  - Avoiding the use of ambulance trolleys for patients who are able to walk into the department;
  - Using alternative vehicles to convey patients to the emergency department;
  - Implementing electronic patient handovers;
  - Sharing predicted activity levels with acute Trusts on an hourly and daily basis to trigger effective escalation when demand rises.

- Local operations managers should develop good working relationships with senior nurses, clinicians and managers in the emergency department and assessment units. They should meet with them on a regular basis to review waits over 30 minutes (‘wait’ being time from arrival to handover between ambulance crew and ED) and agree shared actions to reduce handover delays.

- If waits do occur and ambulances are queuing outside an emergency department, the acute trust and commissioners, working in partnership with the ambulance service, must agree the safest way to release crews back into
the field. This should be done within the context of an agreed escalation policy. Some hospitals have an agreed area in which to manage waiting patients and specific processes to support this arrangement. It is critical that such queues are managed safely and with appropriate levels of senior staffing.

- Ambulance Services should work with partner organisations to agree effective escalation procedures and interventions for periods of high demand. The *Zero Tolerance* publication contains examples of this approach.

- Ambulance Services should have in place a regional capacity management system and undertake local work to understand patient flow across the whole health economy.

- Acute Trusts and ambulance Trusts should appoint a clinical lead to oversee the development and implementation of clinical handover protocols for acute departments. These protocols should have a focus on patient safety and the need to minimise delays to assessment/treatment.

- If delays do develop for handover, patients should have access to interventions such as pain relief. This should be part of the acute Trust’s escalation procedures. In some organisations, this may be included within an ED ‘full capacity protocol’. The guidelines should make it clear whose responsibility it is to ensure the patients are assessed and pain relief and other first-line treatment given.

### 2. Primary Care

- Primary care can smooth demand for ambulance conveyance by responding rapidly to requests for urgent home visits and ensuring they are not “batched” at the end of surgeries. This helps reduce mid-afternoon arrival peaks in ED departments and assessment units that causes crowding and increases admission rates. Practical approaches include a dedicated visiting GP carrying out urgent domiciliary visits across a patch, or staggering clinic start times, so the practice has at least one GP available to do urgent visits.

- Practices should consider the guidance of the Primary Care Foundation (see [http://www.primarycarefoundation.co.uk/images/PrimaryCareFoundation/Downloading_Reports/Reports_and_Articles/Urgent_Care_Centres/Urgent_Care_May_09.pdf](http://www.primarycarefoundation.co.uk/images/PrimaryCareFoundation/Downloading_Reports/Reports_and_Articles/Urgent_Care_Centres/Urgent_Care_May_09.pdf)) to ensure that avoidable access issues do not provoke patients to call ambulances or bypass the practice to seek help in emergency departments.

- Practices should review all emergency department frequent attenders, admissions and discharges to identify local alternatives for frequent attenders or gaps in service. This should include partnership working with ambulance services and acute trusts to identify frequent ambulance users.

- CCGs should work with area teams to develop local enhanced schemes to take responsibility for care homes to avoid the need for residents to be conveyed to hospital for an urgent review. Schemes that have been
successful involve outreach geriatricians, psychiatry, therapies, pharmacy and community matrons.

- Advanced care planning for patients at high risk has been effective in some areas. United Lincolnshire Hospitals have worked with nursing homes to put in advanced care plans which have shown a reduction in admissions from homes. Patients are now much more likely to die in their place of choice, rather than in hospital.

- Ambulance services have piloted schemes where crews can make contact with the patient’s own GP before deciding whether to convey.

- Practices can work with providers to send patients to a booked appointment slot at a quieter part of the day if it is clinically safe to do so, or to an alternative entry point, such as a clinic rather than ED.

3. Community Services

- Community Services should have rapid response teams to see patients in their own homes. Best practice is for teams to reach patients within 60 minutes of a request, and never longer than two hours. Rapid response teams need a mix of nurses, therapists and care workers to support patients safely at home for a few days until they recover or a more permanent support package is put in place.
  - Some teams cover falls and can receive handover from ambulance crews.
  - Yorkshire Ambulance Service has an experienced community matron based in their West Yorkshire call centre. This matron deals specifically with calls from care homes advising them of alternatives to calling an ambulance and what constitutes a medical emergency.
  - Islington community matrons go out with London Ambulance Service crews as part of their induction to see how crews make decisions and to build relationships with the local paramedics. They have agreed a core sheet, to be left in the patient’s home, that includes basic information covering medication and what is normal for the patient.

- Some community services have multi-disciplinary teams supporting care homes by providing a range of treatments that nursing home staff do not feel confident to provide.

- In partnership with local practices, many community teams use advance care plans, especially for older people and those in care settings. Initiatives such as ‘Coordinate My Care’ are examples of this. All GP out of hours services should have special notes for care plans and all GP practices should ensure that the service has up to date information on who is on an end of life register and what their wishes are.
4. Clinical Commissioning Groups

- There are new contractual requirements for 2013/2014 relating to ambulance handover performance, detailed information is contained below. Section 2.19 of the *Everyone Counts* Planning document states:
  - “To help support the integration of services at the point a patient arrives at an A&E Department in an ambulance, we are setting the expectation that all handovers between an ambulance and A&E Department must take place within 15 minutes and crews should be ready to accept new calls within a further 15 minutes; with a contractual fine for all delays over 30 minutes, in both situations, and a further fine for delays over an hour, in both situations.”

- There are particulars in the national standard contract (44-45)

- The nationally defined definitions are in the document below from Page 95

- Commissioners should ensure that there are clear systems in place, which capture data automatically and transparently, against agreed definitions, including start and stop times. Paper based reporting systems should be avoided. In order to reduce time spent on disputes, there should be the single source of data and validation process.

- Where ambulance delays are an issue in a system, consider convening a ‘summit’ with partner organisations to agree that this is a key priority for the local health economy; commit leadership and managerial resources to tackling the issue; and agree actions to take forward improvement work. Many areas have found that the use of patient stories is a powerful way of engaging all areas of the health economy.

- Commissioners have a role in reducing demand on ambulance services and emergency departments:
  - Commissioners should monitor the levels and appropriateness of health-professional ordered ambulances.
  - Commissioned alternatives to emergency departments or acute admission may be useful (e.g. abdominal pain hot clinics; rapid access day hospital services for the elderly; and gynaecology fast track services/early pregnancy assessment units; ambulatory emergency care units)
  - Commissioners should ensure that there is a live and comprehensive Directory of Services available for the whole system. This may help increase the number of patients who can be conveyed to alternative places to ED.
• Commissioners must understand the causes of handover delays. The actions being taken to address them should be included in a whole system urgent and emergency care strategy.

5. **Emergency Departments, assessment units and other points of entry to acute hospitals**

• Emergency departments and assessment units should review their handover model to ensure it is not creating a bottleneck.

• Emergency departments and assessment units should consider introducing a rapid assessment and treatment (RAT) model. This will improve patient safety and flow by reducing assessment time, creating more effective streaming and a proactive ‘pull’ approach to the management of new patients.

• Hospitals should review the administrative support to the ambulance handover process and consider whether value could be added and delays reduced by introducing clerical support to help complete non-clinical paperwork.

• The infrastructure for patient handover should be critically reviewed:
  
  o Are there dedicated terminals to complete electronic handover in a timely manner?
  o Are terminals available in all areas that receive ambulances?
  o Is there a protected terminal that shows all crews en-route and the current status of handover times?
  o Is the ambulance handover desk/station optimally located? If it is difficult to access and creates practical problems in terms of queuing, can any work be done to improve access and experience of patients/crews queuing?

• Leads for acute and emergency medicine should work on improving the relationships between their teams and ambulance crews. This can result in less time taken up with managing and supervising crews and the creation of a shared vision for improvement.
  
  o Working in partnership, the emergency department and ambulance service should agree joint codes of behaviour that may include:
    ▪ Ambulance crews to be greeted immediately on arrival and informed of any delays.
    ▪ The clinical priority of arriving patients to be checked promptly.
    ▪ Crews to be kept informed of likely waiting time and actions being taken.
    ▪ Ambulance crews to promptly escalate any clinical concerns to the nurse in charge.
    ▪ Ambulance crews to communicate with their operations manager to inform them of delays at the emergency department.
• Emergency departments and ambulance services should undertake joint observational audits to look at patient handover processes over a number of peak periods and days. A consistent methodology should be agreed for capturing data and observations and a forum set up where these will be fed back and turned into action.

• Consider a joint, process-mapping exercise to look at ambulance delays and identify where there are hold-ups in the system that could be removed. Some Trusts are now using experience-based design to ensure that the patient experience is effectively captured and built into any changes to systems.

• Emergency department and ambulance leaders should make a commitment to address crew or hospital issues in a timely manner with appropriate feedback to parties concerned and learning fed back into the handover system improvement programme.

• Joint stores should be set up at the hospital so that crews can easily re-stock post-handover if required.

• Hospitals should provide additional wheelchairs where required to reduce delays.

• The hospital should agree the specific actions that will happen if waits exceed local trigger points (e.g. 30 or 45 minutes): who does something different; who needs to know; and what is expected of them? These should be formalised in an escalation policy that should be reviewed for effectiveness at least every six months. Escalation policies should include trigger points in advance of 30 minute waits to deal with issues arising in advance of patients waiting (for example, number of ambulances inbound versus capacity in the department).

  o There are a number of examples of escalation policies available in both the Zero Tolerance publication and also the NHS South West Ambulance Handover Guidance document

• Hospitals should review the management of ambulance queues. Can resources be moved in the short term to support handover if the constraint is people rather than assessment space?

• There should be a daily review of long waits for handover. This could be done at the same time as a four-hour review meeting. The results of this analysis should be fed into departmental and Trust-wide meetings on emergency care flows with agreed actions.

• Ambulance delays should be reported at site-wide bed meetings in order to ensure that there is a whole system response to patient handover delays when required. This also helps to maintain a focus on this issue and ensure it is a trust wide priority.
In the event that queues do occur, emergency departments should have a clear policy to manage waiting ambulances safely. This should deliver a safe waiting environment, have a clear process for escalating clinical concerns and ensure that patient privacy and dignity is considered. It should also include a clear section on communication with patients and relatives.

6. Trust Executive Teams

- There should be clear, executive level ownership of, and accountability for, the Trust’s strategy to reduce handover delays. A number of trusts who have achieved success in improving ambulance handover times have reported that this is a critical factor in their success.
  - All acute Trusts, ambulance Trusts and commissioners should identify an executive lead with responsibility for ensuring timely patient handover. There must be a commitment to working with other organisations in the local community to address the issue.

- The executive team should ensure that ambulance handover is reviewed at urgent care improvement meetings and has profile at Trust executive meetings and the Trust Board:
  - Performance on ambulance handover should be part of the hospital’s emergency care metrics and reviewed on a weekly basis.
  - Patient experience relating to ambulance handover should also be captured routinely.

- There should be a clear improvement plan with ‘SMART’ objectives to address patient handover delays. This should link into the whole system urgent and emergency care improvement programmes.

- The executive team should establish ambulance review meetings to create and sign-off turnaround improvement plans between CCG, ambulance services and acute Trusts

- Executive involvement in escalation plans when long waits occur

7. Acute Trust Assessment and Discharge Processes

- Patient handover delays are usually symptoms of delays and problems along the wider urgent and emergency pathway and may arise from:
  - Emergency department overcrowding due to ‘access block’ into the main hospital or activity surges;
  - Ambulance services diverting crews from discharges and transfers to deal with 999 calls, thus contributing to a lack of available hospital beds;
  - GP referred patients arriving in surges, due to all domiciliary visits, and thus conveyance requests taking place after morning clinics.
• It is critical that Acute Trusts look at how they can support their emergency departments by reducing overcrowding and this involves looking at the opportunities for improvement across the whole acute urgent and emergency care process:
  o Paper 1 in this series entitled *Priorities Within Acute Hospitals* focuses on good practice tactics that have been proven to improve patient flow and reduce hospital and emergency department crowding.
  o Acute trusts should critically consider whether they have implemented these interventions to improve their emergency care processes.

8. Whole System

• The *Zero Tolerance* publication (written in partnership between the Association of Ambulance Chief Executives and the NHS Confederation) provides a comprehensive set of strategic recommendations to improve ambulance handover. In summary the whole system must:
  o Develop escalation plans jointly. These should be linked to patterns of known demand and peak activity.
  o Consider implementing regional capacity and information systems. These allow hospitals and ambulances services to look at capacity in an agreed area in real time and includes processes for diverting patients at times of significant pressure. This allows clinicians and managers to make better informed decisions about patient care and use of alternative care pathways.
• There should be formalised regional plans to deal with delayed patient handovers (and system pressures that contribute to this) including defined levels of involvement by senior managers and directors and processes for escalation to Clinical Commissioning Groups and area teams of NHS England.

May 2013
References

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2. Effective Approaches in Urgent and Emergency Care: Paper 2 – Rapid Assessment and Treatment Models in Emergency Departments. ECIST, 2012

3. Effective Approaches in Urgent and Emergency Care: Paper 3 – Priorities for discharging older people from Hospital, ECIST, 2012

4. Process Mapping
   http://www.rcn.org.uk/development/practice/perioperative_fasting/good_practice/service_improvement_tools/process_mapping

   http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/process_mapping_-_a_conventional_model.html (See Note 1)

5. Ensuring timely handover of patient care – ambulance to hospital. A guide for the NHS to assist in the timely handover of patient care from the ambulance to accident and emergency, or other hospital ward or department. NHS Southwest SHA 2008

6. Tackling demand together. A toolkit for improving urgent and emergency care pathways by understanding increases in 999 demand. DH 2009

   http://www.healthyambitions.co.uk/Uploads/BetterForLess/07%20BETTER%20FOR%20LESS%20Ambulance%20Frequent%20Callers.pdf


9. A&E Clinical Quality Indicators. DH 2010 see from page 113:


**Notes**

1. The NHS Institute closed on 31 March 2013. This website is being maintained until the end of June 2013 so that registered users can download documents and view videos (but webinars are no longer available). Once this website is closed you'll be able to see all publicly available content on The National Archives website: [http://webarchive.nationalarchives.gov.uk/*http://institute.nhs.uk](http://webarchive.nationalarchives.gov.uk/*http://institute.nhs.uk).

2. ECIST would like to thank the many colleagues who contributed to this paper and in particular to our friends in ambulance services around the country, who read and commented on our several drafts.

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