What is…Achieving and maintaining the 4 hour emergency access target?

Many government policies have supported the reduction of the waiting time for patients in the emergency department (ED). This includes all stages of their journey through the ED, including the wait before they are seen by a clinician, the time from seeing that clinician until a decision is made to admit or discharge and the wait from decision to admit to arrival on the ward. 98% of all patients attending ED in England are now spending less than 4 hours from arrival until they leave (discharged, admitted to a ward or transferred elsewhere). However the sustainability of this has been questioned and also whether time reductions have always been achieved in a patient focused way (NAO report). Guidance is available. The remaining 2% should only spend over 4 hours in ED if it is clinically advantageous to the patient (e.g. clinical exceptions). Those needing more prolonged investigation under the ED team should benefit from a more comfortable environment that is aimed at rapid diagnostic work up, such as an observation ward or clinical decision unit. Changes should also be accompanied by improvements in the patient experience in ED and by delivering an improved patient environment. This should be guided by patient involvement. Children, older people and those with mental health problems are groups where particular guidance has been offered.

Why is it important?
Polls have consistently shown that delays in ED are the most important area of improvement to patients. Emergency admissions occupy 65% of staffed beds in the NHS with a continuing rise in this percentage.

Timely care also results in better use of staff and resources and reduced mortality.

The end result of reducing delays is more satisfied patients and a more fulfilled workforce. Many adverse effects have been demonstrated to result from prolonged delays including adverse clinical outcomes, poor staff recruitment and retention, increased violence against staff.

The “A&E” target is perhaps a misnomer. It is measured in A&E (ED) but it reflects the whole of the emergency care system. Although some changes in ED processes will improve the performance, the majority of changes are needed outside of ED to influence the other aspects of the patients emergency care journey. The first step for most people wanting to achieve the target should therefore be to undertake some process mapping and data analysis to discover the key bottlenecks in their system. Understanding where current delays occur will help focus change e.g. delays in minors flows usually need attention in ED or in primary care; delays in admitted patients often needs attention to bed management and capacity.

Nationally, the commonest sources of delay are 1) Delay in being seen by a speciality team; 2) Delay in diagnostics; 3) The initial assessment in ED; 4) Availability of beds at the correct time.

It is recognised to be an international problem. Current English performance is available from the Department of Health.

Key messages

The experience in England over the last few years has been analysed and a few key messages have evolved:

1. Quality of care should be the driver of change with time as one component. Don’t work to achieve the target, work to improve the patient’s whole experience.
2. Accurate data is vital, to understand patterns of arrival, when and why waits occur and to reduce system variability.
3. Senior executive & clinical engagement is essential from the whole system, including primary care trusts (PCTs) and local authority.
4. Incentives: financial incentives helped achieve targets.
5. Whole system engagement is required and organisational barriers must be minimised.
6. Solve problems, don’t work around them.
7. The 4 hour target should be part of a larger quality improvement programme, linked to commissioning intentions and LDP deliverables.

What do I need to do?

To achieve the 4 hour target requires work across the whole of the emergency care system.

ANALYSIS of the problem and an understanding of patient flows are vital. Clinical Systems Improvement is a technique for the management of patient flow to improve the efficiency and quality of the patient’s experience by using techniques adopted from
manufacturing industry, such as used in the Osprey Programme. Important principles including reduction of variation, planning for predicted workload. Key lessons are: 1. planning for the average will lead to under capacity 50% of the time; 2. there is rarely one cause of a 4 hour breach; 3. optimally performance should be monitored continuously using statistical process control techniques. The Department of Health has produced a toolkit to enable 7 days of activity to be analysed and interpreted to understand flows. Most flows are predictable and it is recognised that increased activity may occur at some times; planning should account for this.

In England and Wales, use of a hospital’s 2005 acute portfolio data will allow benchmarking (but beware benchmarking helps you achieve the average not to continuously improve) and highlight areas where attention is required. It is important to appreciate that flows in the whole system must be studied; it is important to note that the greatest variability in the system is with elective admissions not emergency admissions.

**A review** of evidence of innovations to reduce waits in emergency departments is available.

**INPUT**: e.g. there are many initiatives proposed to transfer work from emergency departments to primary care which are still under evaluation. Many aim at reducing the input by improved access to primary care and admission avoidance schemes available from the community and from ED. The way in which primary care out of hours services are organised may impact on emergency departments. The impact of NHS Direct is still disputed. Ambulance crews often bring patients to ED by default, they should be able to take patients to the nearest appropriate source of healthcare, including primary care centres, walk in centres and minor injury units or discharge them with advice when appropriate. The 2005 ambulance review suggested many changes in the ambulance services to reduce the numbers of 999 calls resulting in patients being taken to the ED but the evidence on many of these initiatives is still evolving, particularly related to Emergency Care Practitioners.

Use of walk-in centres and other community facilities has not yet been proven to reduce ED attendances.

Ease of access to urgent primary care is essential both during the day and out of hours. Patients with chronic disease, with repeated emergency admissions, account for a large workload. Improving chronic disease management and establishing case management systems for those with repeated admissions can reduce the frequency of ED attendance. Prevention is an important long term issue for reducing attendances and particularly around the frail elderly, alcohol problems, assaults, falls prevention and lifestyle advice.

**WITHIN ED**: Diagnostics are often a source of delay. Radiology services should be designed according to the total daily demand for investigation and have the appropriate level of capacity in elective and emergency modalities to meet the variation in demand. All common diagnostic tests should be available 24 hours per day, with near patient testing where possible. Tests should be requested by all appropriate staff including nurses and physiotherapist. But the biggest changes result from not ordering unnecessary tests and not waiting for results that are not vital to the decision process. Implementing See and Treat, covering peak hours of activity as a minimum, can reduce waits for minor cases. Match staffing levels to hourly workload. A multidisciplinary social service/Care of the Elderly team available at all times in Emergency Departments
and Assessment Units can facilitate discharge and community care and reduce unnecessary admissions. Early senior medical staff input can speed up the process, avoid unnecessary tests and admissions and improve quality of clinical care. Many new ways of working have been developed in the emergency department that can improve quality of care and flow of patients and a skills framework has been developed for these. To achieve the 4 hour target, ED departments may find it useful to focus additionally on achieving the following standards:

- All patients seen within one hour (by see and treat and majors rapid assessment teams)
- All patients needing admission referred within two hours

Some organisations have developed a balance scorecard of measures including clinical outcomes and process measures.

The system after referral to the admitting team varies in different hospitals but certain principles will help the patient experience:

1. Those obviously needing admission should go directly to an appropriate ward. This decision can usually be made by senior or middle grade staff in ED, as agreed by the Royal Colleges, and following local protocols.
2. Early assessment by senior staff improves quality of care and decreases delays. Serial clerking does not benefit the patient. Developing acute medicine as a specialty may also assist the process.
3. If a medical assessment unit is used then it must add value, not just be another staging post. It should have a distinct purpose and process from any other units in the emergency care process and be consultant led with a process of dynamic assessment and planning. [checklist]
4. Waits for the specialist team should be reduced.
5. People needing 4-12 hour evaluation with the expectation of being discharged, e.g. to rule out cardiac source of chest pain, to exclude diagnoses such as DVT, may be dealt with a rapid turnover area such as a clinical decision unit (e.g. Leeds CDU)
6. It is rare to need to wait for results to determine if admission is needed.
7. Once it is apparent the patient needs admission and urgent treatment is commenced, the patient should move to the appropriate ward.

Mental health delays are often an issue and may need specific attention. (DH guidance)

BEYOND ED: e.g. reducing bed occupancy and improving patient flow management to ensure beds are available before they are required for emergencies. Bed management must be using predictive analysis and be led by an executive director. It should link with community hospitals and neighbouring Trusts to ensure good collaborative working and optimal bed usage. This includes reducing length of stay by avoiding delays for investigations (e.g. sufficient capacity for emergency workload each day) and regular ward rounds. The planning of elective workload will have a major influence of waits for admissions. More information and case studies are available in the HOIP Good Practice guide and in the NELH Bed Management Guide.

OUTFLOW by avoiding discharge delay. Systems need to be in place to ensure patients are discharged at an appropriate time and not delayed because of organisational issues, e.g. timing of ward rounds. Daily early morning discharge rounds can help to facilitate this. Discharge planning should start on the day of admission. Most discharge do not have
complex needs, greatest benefit can be achieved by improving the simple discharges. This may involve better working with social care to ensure assessment completed early and support packages available at short notice. An NHS-social care checklist is available to assess present arrangements and a NeLH briefing is available on social care aspects of delayed discharge. The use of discharge lounges to free beds earlier in the day will also help patient flows. Key steps are 1) Matching predicted emergency and actual elective admission planning; 2) Ensuring that most patients leave the ward before midday; 3) Ensuring adequate discharge numbers at weekends.

A recent review demonstrated evidence that some initiatives may reduce unplanned hospitalisations and readmissions:
self-management education, self-monitoring, group visits to primary care, broad managed care programmes, integrating social and health care,
• Multidisciplinary teams in hospital, discharge planning, multidisciplinary teams after discharge, care from specialist nurses, nurse-led clinics, telecare telemonitoring.
There was some evidence that the following may reduce length of stay in hospital:
• Self-management education, telecare, multidisciplinary teams in hospital, discharge planning, home hospitalisation and educating professionals.
And that these interventions may reduce length of subsequent hospital stays:
• targeting people at high risk, self-management education, telemonitoring, multidisciplinary teams in hospital, multidisciplinary teams after discharge, nurse-led clinics and nurse-led follow-up and targeted assertive case management.

Initiatives often focus in specific high risk return such as
• IV Therapy in the community for cellulites and other conditions
• COPD case management
• Falls management especially amongst A&E attendees
• Effective intermediate care services linked to rapid response provision that is 24/7, including community nursing
• Access to primary care services at the front door, including district nursing and AHPs.

GENERAL ISSUES: Elective and emergency work needs to be planned together, with equal priority. Only by careful planning can delays in exiting the ED department be controlled. Much of the emergency care workload is predictable; therefore anticipatory planning can determine a framework for efficient use of resources. If forecasting systems are put in place long delays should not occur. Initial work is often best concentrated on patient groups utilising high numbers of emergency bed days.
It is vital that the whole health care system is considered and any changes result in a whole system improvement and not just a change within one unit and that such changes are sustainable. One way of achieving this integration is to have a dynamic emergency care network; some areas are developing these in to managed clinical networks.

NLH "Managing Emergency Care" gives access to more detailed resources in this area.

What are the benefits?
By improving the waits in the ED department the whole of the patient’s experience of emergency care is improved.

Whom can I contact?

The Department of Health’s Emergency Care Project team is responsible for this target. Its role is to develop policy and aid its implementation. - 11th Floor, New Kings Beam House, 22 Upper Ground, London SE1 9BW; emergencycare@dh.gov.uk.

The British Association for Emergency Medicine (BAEM) is the representative body of all specialists in Emergency Medicine within the UK.

Where can I find examples of good practice?

- NLH managing emergency care guide
- Emergency care case studies from the former Modernisation Agency
- A series of checklists is available from DH

Resources

1. NLH “managing emergency care” briefings Links to all major policy documents and examples of good practice, developing an evidence database for change.
2. Checklist for achieving the 4 hour target
3. Research in this area
4. Emergency Care Leads Bulletin
5. Summary of all government policy
6. Models for improving patient flows
7. Improvement leaders guides

References

A systematic literature review on reducing waits and attendances at emergency departments
Systematic review on Reducing unplanned hospital admissions
Emergency department overcrowding in Canada: What are the issues and what can be done?

Comments

Please address all comments, suggestions or ideas for improvement via NLH Management

Related Management Briefings

- Emergency Admissions
- Emergency Care Library Briefings

View the complete listing of Health Management Specialist Library briefings at:
Management Briefings are short briefing papers produced by experienced health management librarians. Their purpose is to provide a brief introduction to topics of current concern. Information is obtained from the HMIC database and from desk-based Web research. Readers are advised to consider further information before acting on information contained in Management Briefings.

This briefing will be reviewed and updated in November 2006.

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