Emergency admissions to hospital: managing the demand
## Key facts

<table>
<thead>
<tr>
<th><strong>5.3m</strong></th>
<th><strong>£12.5bn</strong></th>
<th><strong>47%</strong></th>
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</thead>
<tbody>
<tr>
<td>emergency admissions to hospital in 2012-13</td>
<td>cost of NHS emergency admissions in 2012-13</td>
<td>increase in emergency admissions, over the last 15 years</td>
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</table>

- **124 per cent** increase in short (less than two days) hospital stays as a result of an emergency admission over the last 15 years.
- **26 per cent** of patients attending a major accident and emergency (A&E) department were then admitted to hospital in 2012-13.
- **24 per cent** of patients were admitted from an A&E department between 3 hours and 50 minutes and 4 hours of arriving in 2012-13.
- **0.83 million** acute bed days were lost due to delayed discharges in 2012-13.
- **50 per cent** of emergency medicine training posts were unfilled in 2011 and 2012.
Summary

1. The number of emergency admissions to hospitals – admissions that are not planned and happen at short notice because of perceived clinical need – continues to rise at a time when NHS budgets are under significant pressure. In 2012-13, there were 5.3 million emergency admissions to hospitals, representing around 67 per cent of hospital bed days in England, and costing approximately £12.5 billion.

2. A system such as the NHS needs simple, easily understood pathways guiding patients to the most appropriate treatment. Without this, some patients may end up in the more easily available and visible elements of the system inappropriately. Avoiding unnecessary emergency hospital admissions and managing those that are admitted more effectively is a major concern for the NHS, not only because of the costs associated with these admissions, but also because of the pressure and disruption they can cause to elective healthcare and to the individuals admitted. During winter 2012-13, many hospitals found it difficult to cope with levels of demand for services.

3. All parts of the health system have a role to play in managing emergency admissions and ensuring that patients are treated in the most appropriate setting (Figure 1 overleaf). For example, to reduce avoidable emergency admissions:
   - primary, community and social care can help to manage patient’s long-term conditions better;
   - ambulance services can reduce conveyance rates to A&E departments by conveying patients to a wider range of care destinations; and
   - hospitals can ensure prompt initial senior clinical assessment and prompt access to diagnostics and specialist medical opinion.

Once patients are admitted, hospitals, working with community and social care services, can ensure that patients stay no longer than necessary and are discharged promptly.

4. Ensuring that patients are treated in the right part of the NHS requires appropriate incentives throughout the system. Where these do not exist there is a risk that some parts of the system could be operating at levels which are not efficient. NHS England is currently undertaking a review of urgent and emergency care services in England, and is due to report the outcomes of an engagement exercise in Autumn 2013. The review will continue throughout 2014-15 and should influence the NHS’s 2015-16 planning round. This review aims to address a range of issues including sustainability, access, patient experience and outcomes.

5. This report examines how well emergency admissions are managed. We set out our audit approach in Appendix One and our evidence base in Appendix Two.
**Figure 1**

Patient routes that may lead to an emergency admission to hospital

The effective management of the flow of patients through the health system is at the heart of managing emergency admissions.

- **Individual patient**
  - **NHS Direct/111**
  - **GP out-of-hours service**
  - **Other services**

- **Over 300 million GP consultations a year**
  - **GP practice**
    - 0.8 million patients admitted to hospital by GP – down 34 per cent since 1997-98
    - 0.9 million GP referrals to A&E

- **21.7 million A&E attendances overall – up 14 per cent since 2007-08**
  - **Accident and Emergency (A&E)**
    - Major A&E (type 1)
    - Single specialty department (type 2)
    - Other A&E/minor injuries unit (type 3)
  - 3.7 million patients admitted from type 1 A&E; 0.05 million from type 2 and type 0 A&E

- **9.1 million calls to 999, resulting in 7.0 million emergency responses**
  - **999 ambulance service**
    - 2.7 million responses to the most severe category (A) – up 50 per cent since 2007-08
    - 5.0 million ambulance journeys to A&E – up 18 per cent since 2007-08
    - 4.5 million of these journeys to type 1 & 2 A&E, of which 2.2 million are admitted

- **5.3 million emergency admissions – up 12 per cent since 2007-08**
  - **Hospital admission**
    - Bed occupancy has recently been running at higher levels (over 90 per cent) than is deemed efficient (85 per cent)

- **Home**
  - **Social care**
    - (0.4 million delayed bed days)
  - **Community care**
    - (0.9 million bed days lost mostly due to delays to other parts of the NHS)
  - **Other**

**Note**

1. Data is for 2012-13, except GP consultations which is for 2008-09.

Source: National Audit Office review of a range of health statistics.
Key findings

Trends in emergency admissions

6 The increase in emergency admissions over the last 15 years has come almost entirely from patients being admitted from major accident and emergency (A&E) departments who have a short hospital stay once admitted. Patients can be admitted to hospital via several different routes including A&E departments, walk-in centres and GP referrals directly on to the hospital ward. Over the last 15 years, short-stay (less than two days) admissions have increased by 124 per cent, whereas long-stay (two days or longer) admissions have only increased by 14 per cent (paragraphs 1.11 and 1.16).

7 More patients who are attending major A&E departments are now being admitted. In 2012-13, over a quarter of all patients attending major A&E departments were admitted to hospital, up from 19 per cent in 2003-04. This increase accounts for three-quarters of the rise in emergency admissions through major A&E departments, while an increase in the number of people attending major A&E departments accounts for the remaining quarter (paragraph 1.13).

8 The causes of the increase in emergency admissions include systemic issues, policy changes, changing medical practices, demographic changes and the fact that A&E departments are under increasing pressure. It is not possible to say what contribution each factor has made because they are interlinked, but the main factors are:

- A&E departments and admission to hospital are seen as the default route for urgent and emergency care. Despite the high cost of hospitalisation the NHS has been slow to develop comprehensive effective alternatives to admission (paragraphs 2.14 and 3.4).

- The introduction, by the Department of Health (the Department), of the four-hour waiting standard for A&E departments, which required 98 per cent of patients attending A&E to be seen, treated and either admitted or discharged in under four hours. This has focused resources, improved the decision-making process and reduced waiting times. However, it has reduced the hospital's ability to keep a patient in the A&E department for monitoring and observation and is likely to be one of the main reasons for the increase in short-stay emergency admissions (paragraphs 1.17 and 2.2).

- Changing medical practices and models of care. For example, there has been a drive to carry out more elective procedures as day cases. While this has clear benefits for the patient, a minority (about 3 per cent) develop complications that can lead to an emergency admission. This has led to an increase in the number of emergency readmissions, which accounts for about one-tenth of the increase in emergency admissions (paragraphs 2.7 to 2.9).
- An increasingly frail elderly population who are living with one or multiple long-term conditions. These people are far more likely to have immediate or chronic health problems, more likely to need urgent care and more likely to go to an A&E department, and are more likely to be admitted into hospital once in an A&E department (paragraphs 2.10 and 2.11).

- A&E departments are facing increasing pressure and there is evidence that at times of increased pressure there is a greater tendency to admit patients. Urgent access to primary care is variable and has been linked to higher A&E attendances. Some evidence also indicates that the severity of patients in major A&E departments is worsening, with higher proportions of patients arriving via ambulance and a sharp increase in the percentage of patients attending A&E departments who are then admitted (paragraphs 2.12 and 2.15).

- The change in the payment system for acute medicine from block contracts (where a fixed annual payment was made irrespective of the number of patients treated, to a system where each unit of care provided receives a set price (payment by results) may have given hospitals a financial incentive to admit more patients (paragraph 2.23).

Reducing unnecessary admissions

9 There is limited evidence on what works in reducing avoidable emergency admissions. There are many local initiatives to prevent avoidable emergency admissions including risk prediction tools, case management, hospital alternatives and telemedicine, but limited evidence on what works. We estimate that at least one-fifth of admissions could be managed effectively in the community (paragraph 3.4).

10 There are large variations in performance across the organisations that play a role in preventing avoidable admissions, some of which are avoidable, suggesting scope for improved outcomes. For example, in 2012-13, there were large variations in: GP referral rates for hospital admissions (0 to 95 per 1,000 population); ambulance conveyance rates to destinations other than major A&E departments (22 per cent to 52 per cent), and the percentage of patients attending an A&E department that were admitted (12 per cent to 48 per cent) (paragraph 3.3).

11 There is a lack of alignment between hospital services and other health services. Although patients become acutely ill twenty-four hours a day, seven days a week, the current drive towards seven-day working in secondary care is not matched by community and social services. This compromises efforts to avoid out-of-hours hospital admissions and prolongs the length of stay for inpatients unable to access pathways out of hospital seven days a week, disrupting the capacity to manage new admissions (paragraph 3.14).
12 Rapid access to consultant advice and diagnostics in A&E departments can reduce admissions but is not always available. Patients’ access to consultants, specialists and diagnostics may be reduced or unavailable in the evenings or at weekends. Senior clinicians are better able to balance risk and make key decisions. In addition, a 50 per cent vacancy rate of emergency medicine training posts is resulting in a shortfall of senior trainees and future consultants (paragraphs 3.13 and 3.18).

Managing emergency admissions

13 Hospitals have become more efficient at managing emergency admissions:

- Waiting times in A&E departments have reduced over time but have been rising over the last few years. The introduction, in 2004, of the four-hour A&E standard reduced waiting times considerably. The relaxation of the standard from 98 per cent to 95 per cent in 2010 has seen an increase in waiting times in major A&E departments. Between January and March 2013, 63 per cent of trusts with major A&E departments did not meet the new four-hour waiting time standard (paragraphs 1.17 to 1.19).

- The length of stay in hospital for those admitted as an emergency has reduced. Although emergency admissions have continued to rise over the last 15 years, the total number of emergency admission bed days has reduced by 11 per cent from 36 million to 32 million. This reduction in bed days has been driven by a reduction in the average length of stay from 9.7 to 5.8 days over this period (paragraph 1.20).

- Outcomes for people admitted as an emergency have improved overall, but are worse for those admitted over the weekend. Mortality rates for those admitted as an emergency have been falling. However, those admitted at the weekend have a significantly increased risk of dying compared to those admitted on a weekday. Reduced service provision throughout hospitals is associated with this higher weekend mortality rate (paragraphs 1.25 and 1.26).

14 The average amount of time that hospital beds are occupied has risen, limiting the capacity of some hospitals to cope with fluctuations in emergency admissions in winter. Between 2001-02 and 2012-13, the average occupancy rate of general and acute hospital beds across England increased from 85 per cent to 88 per cent. Over the winter months pressure on beds is even greater; between January and March 2013, bed occupancy rates averaged 89.7 per cent, with over one-fifth of trusts reporting rates over 95 per cent (paragraph 1.22).
15 Delayed discharges from hospital are also placing more pressure on bed availability. The number of bed days lost due to delays in the discharge of patients increased in 2012-13. Reported data on delayed discharges from hospital suggests that the number of delayed discharges to other parts of the NHS is increasing, whereas those to social care are decreasing. However, there is concern that the data reported do not accurately reflect the scale of the problem (paragraphs 1.23 and 1.24).

16 There are large variations in performance across hospitals, some of which are avoidable, suggesting scope for improved outcomes. For example, in 2012-13, there were large variations in: the percentage of patients admitted in the last ten minutes of the four-hour A&E waiting target; average length of hospital stay (two to eight days); bed occupancy rate (53 per cent to 100 per cent) and the number of bed days lost due to delayed discharges as a percentage of total bed days (0 per cent to 8 per cent) (paragraph 3.3).

17 Additional funding to support winter pressures has not been provided by commissioners in a timely manner to allow trusts to plan ahead. Trusts receive additional funding from the Department, normally in December, to support the additional workload they face in winter. This short notice meant that trusts could not plan ahead and may have had to use more expensive temporary or agency staff to meet demand. In August 2013, the Prime Minister announced an additional £500 million over the next two years to help struggling urgent and emergency care systems prepare for winter (paragraph 3.11).

Barriers to improving the management of emergency admissions

18 Financial incentives across the system are not aligned. Currently the main financial incentives (paying a reduced rate for emergency admissions over an agreed limit and non-payment for readmissions) to reduce emergency admissions sit with the hospitals. These incentives have not been consistently applied by commissioners of health services and emergency admissions have continued to rise, albeit at a slower rate. All parts of the system have a role to play in reducing emergency admissions. Commissioners and GPs have some financial incentives to reduce avoidable emergency admissions, but community and social care providers are not financially incentivised to reduce emergency admissions to hospital (paragraphs 3.8 and 3.9).

19 Better integration across health services is seen as key to managing emergency admissions. Most health sector providers and commentators told us that better integration and communication between hospitals, primary and community care and social services has the potential to reduce unnecessary A&E attendances and admissions, and enable people to return home sooner. This, in turn, could free up hospital beds so patients who need admission can be admitted quickly. A number of barriers to closer integration were cited including differences in funding, performance management, culture and the ability to share patient information (paragraphs 3.15 and 3.16).
Local oversight is needed to bring about change across the health system.
Urgent care boards have been established to bring together the statutory bodies (clinical commissioning groups, NHS England and local authorities) responsible for the delivery of health and social care services with local providers of care. These groups aim to learn from best practice and identify how urgent care services can best be delivered locally. However, decisions about the use of resources will be the responsibility of the individual budget-holding organisations, and it is unclear who will drive change across local urgent and emergency care systems. Local commissioners and urgent care boards need a clear understanding of demand, activity and capacity across the system, but this understanding is variable (paragraphs 3.6 and 3.7).

The proportion of a hospital’s activity that is emergencies may be a major factor in the financial performance of some trusts. There is evidence that the cost of delivering A&E services and care for emergency admissions is greater than the revenue that trusts receive for these services. Elective care, on the other hand, is profitable. Hospitals with a higher proportion of emergency activity, compared to elective activity, are more likely to have a poorer financial performance (paragraph 3.10).

Conclusion on value for money

Over the last 15 years, the management of emergency admissions has become more efficient. Waiting times in A&E departments and lengths of stay in hospital have reduced and outcomes for patients admitted to hospital have improved. However, at the heart of managing emergency admissions is the effective management of patient flow through the system. There are large variations in performance at every stage of the patient pathway, some of which are avoidable, suggesting scope for improved outcomes.

Many admissions are avoidable and many patients stay in hospital longer than is necessary. This places additional financial pressure on the NHS as the costs of hospitalisation are high. Improving the flow of patients will be critical to the NHS’s ability to cope with future winter pressures on urgent and emergency care services. This will require both short-term interventions to manage the winter pressures over the next few years and long-term interventions to create a more accessible and integrated urgent and emergency care system. Until these systemic issues are addressed, value for money in managing emergency admissions will not be achieved.

Recommendations

The Department, NHS England, Health Education England and NHS trusts need to develop both short- and long-term strategies to address staffing shortages in A&E departments. In the short term, this may involve changing the mix of staff in A&E, for example greater use of geriatricians. In the longer term, the Department needs to consider how more doctors can be encouraged to work in A&E departments.
b NHS England should set out clearly who will drive service change across local urgent and emergency care systems and what role urgent care boards will have in these systems. For example, NHS England should set out how urgent care boards will be able to influence local commissioning decisions and what these boards will be accountable for.

c The Department, NHS England and Monitor should consider how best to align incentives across the health system to reduce emergency admissions. For example:

- Payment mechanisms should reflect the fact that different providers need to work together to manage the flow of patients through the system and make sure patients get the best treatment. All parts of the health system need to be encouraged to reduce emergency admissions.

- Monitor should assess whether emergency care services provided by hospitals are loss-making and ensure that remuneration for these services covers the costs of providing a safe and efficient service.

d The Department and NHS England should examine what the barriers are to seven-day working in hospitals and take action to remove these barriers. For example, the Department should review the consultants' contract, which gives consultants the right to refuse to work outside 7am to 7pm Monday to Friday.

e NHS England needs to ensure that best practice in reducing avoidable emergency admissions and managing the flow of patients through the system is shared effectively. For example:

- Many local initiatives are under way that aim to reduce admissions and improve the discharge process including through better integration and joint working. Clinical commissioning groups need to assess which of these initiatives are working and NHS England needs to ensure that successful initiatives are promoted more widely.

- Urgent care boards are developing whole-system metrics to monitor performance across urgent and emergency care. Good practice needs to be disseminated.

f NHS England should review the suitability of the measure for delayed discharge. Reliable information is required if this blockage to patient flow is to be tackled effectively.

g The Department and NHS England should explore how key patient information can be shared between health organisations. This is particularly important between GP practices, out-of-hours providers and secondary care, but applies to all providers along the whole patient pathway.