

**High quality care for all, now and for future generations:  
transforming urgent and emergency care services in  
England –**

**the Evidence Base from the Urgent and Emergency Care Review**



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# **High quality care for all, now and for future generations: transforming urgent and emergency care services in England –**

*the Evidence Base from the Urgent and Emergency Care Review*

First published: June 2013

**Prepared by: Urgent and Emergency Care Review Team**

## Contents

<b>Executive summary</b> .....	<b>10</b>
<b>1. Introduction</b> .....	<b>14</b>
<b>2. The Urgent and Emergency Care Review</b> .....	<b>16</b>
<b>3. Current provision of urgent and emergency care services</b> .....	<b>17</b>
3.1 Increasing demand and costs of urgent and emergency care .....	17
<b>4. Patient experience</b> .....	<b>22</b>
<b>5. Self-care and self-management</b> .....	<b>29</b>
<b>6. Telephone consultations</b> .....	<b>34</b>
6.1 NHS Direct and NHS 111 .....	34
6.2 GP consultations and out-of-hours services .....	35
<b>7. Face-to-face care</b> .....	<b>37</b>
7.1 Access to primary care .....	37
7.2 Urgent care walk-in services .....	40
<b>8. 999 emergency services and accident and emergency departments</b> .....	<b>44</b>
8.1 999 emergency calls.....	44
8.2 Pre-hospital emergency care.....	46
8.3 Accident and emergency departments .....	49
<b>9. Access to quality back up services</b> .....	<b>58</b>
<b>10. Emergency admissions to hospital</b> .....	<b>61</b>
<b>11. Urgent and emergency care workforce</b> .....	<b>67</b>
<b>12. Effective urgent and emergency care networks</b> .....	<b>70</b>
<b>13. Conclusion</b> .....	<b>72</b>
<b>Glossary</b> .....	<b>74</b>

## Foreword

### 'High quality care for all, now and for future generations'

By Sir David Nicholson

Chief Executive, NHS England

This is the first in a series of initiatives to challenge our thinking on the future of health and care and how we organise NHS services so we can provide high quality care to every patient, every time it is needed, sustainably. It is our responsibility to ensure that the NHS is here for our children and their children.

How do we want the NHS to be in the future? This is a question for us as citizens and patients, and for the communities in which we live. It is a question for everybody who works in health and care. The NHS belongs to us all, and it is for all of us to shape its future.

In July, to mark the 65th anniversary of the founding of the NHS, we will be publishing 'The NHS belongs to us all: a call to action' which will invite everybody to take part in a series of local and national conversations about the long term future of health and care services. We live in a time of financial constraint and rising demand for health services and we need to ask some big questions: what is the future shape of care services? How can we support citizens and patients to take more control of their health and care? How can we transform the patient experience?

We will be asking people how the NHS should develop and expand primary care services and which NHS services should be planned and paid for centrally because they are highly specialised. We want to start a debate about how the internet and digital technology can transform both NHS services and every patient's experience of accessing the right care.

Working with NHS staff we'll be studying the role of commissioning; how our services are organised and paid for locally and what levers exist in this area for improving quality and financial efficiency. We'll be looking at the role of our hospitals in the future and developing ideas for how they can become beacons of excellence, where patients can expect to get the most effective and advanced treatments.

The Urgent and Emergency Care Review opens a key conversation: how can our A&E services deliver the best outcomes for patients and for our communities in the future?

Our A&E departments are under considerable pressure: staff are saving lives and helping people recover from injury using the best clinical expertise and technologies in the world. In some cases, such as heart attack and stroke, we have learnt that patients get better outcomes by going straight to specialist centres and not to A&E. We also know that some people who present at A&E, and who we treat there, would have more appropriate care and a better patient experience if they were seen in a primary or community care setting. These may be people with long term conditions that need careful management, or people who are having problems getting an appointment at their local GP surgery.

One of the issues we are dealing with is the fact that patients find it hard to navigate between primary care, our hospitals and social care services. In many cases some of our most vulnerable patients need careful management and input from a number of different agencies and sometimes they, or their carers, are just not able to understand and work with this range of services, and find themselves in A&E as a last resort. This falls short of the high quality care we want to give every patient.

I want to thank everyone who takes part in this conversation. Every response will be used to build understanding and better solutions for patients.

A handwritten signature in black ink, appearing to read 'D Nicholson', with a long horizontal stroke extending to the right.

**Sir David Nicholson**  
**Chief Executive, NHS England**

## Foreword

By Professor Sir Bruce Keogh  
Medical Director, NHS England

Our NHS is founded on values that epitomise the social conscience of our country. Nowhere is this better reflected than in the Accident and Emergency department of a hospital which offers sanctuary, safety and hope for people when they need help unexpectedly.

Twenty years ago most A&E departments could treat most patients safely and effectively by the clinical standards of the day. But things have changed. The inexorable and accelerating advances in medical science mean that treatments improve and acceptable standards continuously evolve. This means there is now no A&E department in the country that can treat everything that comes through the door. In fact, most A&E departments can no longer offer the best treatments for the two major killers – serious heart attacks and stroke – because they now require a high level of specialist expertise and technology to offer the best chance of recovery.

So the way we offer emergency care needs to change to keep up with medical science and to ensure that everyone in the land, wherever they live, has the best chance of the best, most up-to-date care as close to home as is reasonably possible. Balancing the requirement for centralisation of some complex services for common, serious conditions against the provision of safe care close to home will require detailed thought and debate between clinical professionals, the public and politicians.

A debate based on good evidence where it exists, but which also recognises where evidence is weak or absent, will be an informed and productive debate and more likely to alight on innovative and effective principles and solutions. These may vary in different metropolitan and rural areas.

Last year, NHS England committed to reviewing the provision of urgent and emergency care as part of a drive to promote more extensive seven-day services in the NHS. We established an Urgent and Emergency Care Review to support this, and I am now pleased to present the evidence base which has emerged from the Review so far, along with some principles which I hope will help initiate the debate which is so urgently needed.

The current concerns around A&E performance should be seen as a stimulus and opportunity to improve the way we offer care between our hospitals, primary and community care and social services. Better integration and communication between these services could reduce unnecessary attendances at A&E and enable people in hospital to return home sooner. This in turn could free up hospital beds so patients who need admission from A&E would not be kept waiting so long

I hope that you will work with us to develop and improve our evidence base for change, and help us to develop the principles and system design objectives on which we will build a stronger, more sustainable urgent and emergency care system for everyone.

A handwritten signature in black ink that reads "Bruce Keogh." The signature is written in a cursive style and is underlined with a single horizontal line.

**Professor Sir Bruce Keogh**  
**Medical Director, NHS England**



## Foreword

By Professor Keith Willett

National Director for Domain 3: Acute Episodes of Care, NHS England

What we all want is to be able to deliver the best service for patients and the public – one that not only meets, but often exceeds, the minimum standards. To get there we need the whole NHS system, in the community and in hospitals, to work seamlessly to deliver acute care at the time it is needed and with continuity where an acute episode is part of a long-term problem.

As the Chair of the Urgent and Emergency Care Review I, like Professor Sir Bruce, am very pleased to present our work so far. We are now looking to the expertise of professionals across the breadth of the NHS and to draw on the experiences of patients to help us develop new models of care that will be successful for the future.

There are no simple or easy solutions for improving the delivery of urgent and emergency care, and I would like to pay tribute to the way in which this Review's Steering Group has grappled with the issues which the Review has brought up – which are many and complex.

We have developed an initial evidence base, and we have used this to generate emerging principles for change, some design objectives and some possible options for how these might be implemented. It is now time to present these to a wider audience for comment, challenge, and improvement.

We look forward to hearing your views on our work so far, and we will use this to help us as we move forward to the next phase of the Review – which will be to develop practical proposals and solutions to help us to deliver an urgent and emergency care system which is robust, efficient, and responsive to the needs of patients and the public for years to come.

It is my intention to continue this dialogue with NHS staff and patients throughout the review.



**Professor Keith Willett**

**National Director for Domain 3: Acute Episodes of Care, NHS England**

## **Executive summary**

The evidence base sets out to review the urgent and emergency system in England and draw out evidence to illustrate the main challenges it currently faces. Starting with overall patient experience, this document goes on to highlight issues within each part of the urgent and emergency care system in order of the perceived levels of patient need that it addresses, these are:

- Self care and self management;
- Telephone care;
- Face to face care;
- 999 emergency services;
- A&E departments; and
- Emergency admissions to hospital.

Two final sections follow, one examines the capacity and sustainability of the current workforce, and the other outlines the potential of urgent and emergency care networks to create a whole-system approach capable of addressing many of the current issues. A number of key messages emerge from each section of the evidence base. These are listed below.

## **Key messages**

### **Current services**

- The number of GP consultations has risen over recent years and despite rapid expansion and usage of alternative urgent care services, attendances at A&E departments have not reduced. This indicates either unmet demand across the whole system or supply induced demand: increased uptake as a result of increased provision of services.
- Growth in the number of people using urgent and emergency care is leading to mounting costs and increased pressure on resources.
- Overall fragmentation of the system means that many patients may not be able to access the most appropriate urgent or emergency care service to suit their needs, leading to duplication and over-use of the most expensive services, at significant cost to the NHS.

### **Patient experience**

- There is significant variation in patient experience between GP practices. Data shows that some patients who have a good experience of their GP are less likely to use A&E departments.
- Patient experience of both the NHS Direct telephone service and pilots of NHS 111 has been found positive; however transition from nurse-led triage to calls answered by trained advisors, supported by experienced clinicians has led to some incidences of poor patient experience during the early implementation of NHS 111.
- The wide range of urgent care services available and lack of standardisation of services and labelling results in patient confusion over how to access the right healthcare quickly; this leads to duplication, delay, increased clinical risk and poor patient experience.

- There are variations in the way patient experience is monitored and acted upon in urgent care and this falls short of what is achieved in other parts of the NHS.
- Consistently positive patient experiences of ambulance services, and confusion surrounding other areas of healthcare, are factors that may have contributed to an increased use of the emergency (999) number and ambulance services by patients with non-urgent healthcare needs.
- A&E performance (operational and clinical), and therefore patient experience, varies significantly between trusts, with a few performing far worse than the rest. Additionally, there are signs that overcrowding of A&E departments is causing a deterioration of performance and impacting negatively on patient experience.

### **Self-care and self-management**

- Self-care for minor ailments and self-management of long-term conditions are effective at improving quality of life and reducing dependency on urgent and emergency care services; however there is a lack of awareness surrounding how to access self help and the demographic groups most likely to benefit are least likely to be aware.
- There are a range of programmes available to support self-management of long-term conditions but provision and uptake of these is variable across the NHS.
- Variable management of long-term conditions in primary care may have contributed to a rise in the number of emergency admissions to hospital.
- Community pharmacy services can play an important role in enabling self-care, particularly amongst patients with minor ailments and long-term conditions; however there is little public awareness of the range of services provided by pharmacists.

### **Telephone care**

- Telephone advice can prevent many unnecessary attendances at NHS facilities. However it is sometimes difficult to accurately triage patients over the phone and, without clinical input, call handlers may sometimes over-triage if they cannot rule out a serious condition.
- Telephone consultations are becoming increasingly popular, are less resource-heavy for general practice than face-to-face consultations and their systematic use is linked to reduced use of A&E departments. However some patients lack confidence in telephone advice and are likely to pursue a second opinion inappropriately, leading to duplication of service provision, in some cases.

### **Face-to-face care**

- Urgent access to GP appointments across England is variable. Additionally, in urban areas where demand is high and transient populations exist, many may use an A&E department as their first point of urgent and emergency care.
- Primary care can struggle to manage some patients with long-term conditions effectively, including those with mental health problems. This may lead to avoidable A&E attendances and emergency admissions to hospital.
- Most out-of-hours services work effectively to deliver a high standard of care to patients who need urgent care when their GP practices are closed. However there are variations in

the standard of care provided and commissioners are not always able to hold providers to account.

- The fragmentation and diverse nomenclature of urgent care services across England causes confusion amongst patients and healthcare professionals in terms of services offered. This can lead to patients presenting at services that may not best suit their needs.
- Urgent care services are characterised by variation and a lack of standardisation and clear information. This contrasts with the strong identity of A&E departments. Variation in acceptance and quality of care provided can result in delayed treatment or multiple contacts and a poor experience of care, as well as inefficient use of expertise and resources.

### **999 emergency services and Accident and Emergency departments**

- Appropriate staffing is integral to an effective A&E department; however doctors in training are relied on heavily to provide the service due to insufficient numbers of senior emergency medicine trained doctors.
- Consultant-delivered care and senior clinical input improves patient outcomes in A&E departments; however the shortage of emergency medicine trained senior (middle grade and consultant) doctors is a problem for nearly all A&E departments and large variation in consultant 'shop floor' coverage is seen across England.
- Patients with mental health needs are a key challenge facing A&E departments but access to psychiatric support out-of-hours is poor for the majority of services.
- Crowding in A&E departments is a growing threat to patient safety and can have a significant impact on all patients. Timely access is required from supporting specialties to enable appropriate admission and transfer of patients to improve patient flow within A&E departments.
- To ensure high-quality and safe care in an A&E department, access to inpatient beds and support from other specialties in the hospital or rapid transfer to the right hospital is required.

### **Emergency admissions to hospital**

- Growth in the number of emergency admissions to hospital has been associated with a large rise in short or zero stay admissions. The reasons for this are multifactorial but some studies have attributed it to a lack of early senior review, risk averse triage and A&E departments trying to avoid breaching the four hour standard.
- Reduced service provision, including fewer consultants working at weekends, is associated with England's higher weekend mortality rate. Consistent services across all seven days of the week are required to provide high quality and safe care.
- There are clear recommendations from the Temple report that training needs to take place in a consultant delivered service yet this is not practised across the majority of hospital services.

## **Workforce**

- National workforce analysis highlights a growth in the GP workforce in England however, local variation exists in unequal access to GPs between areas of high and low deprivation. Analysis highlights that the GP workforce is under with insufficient capacity to meet needs.
- The involvement of senior doctors 24 hours a day and consultant presence at times of peak activity seven days a week is required to ensure timely patient care and flow in an A&E department. Many A&E departments do not have the recommended number of emergency medicine consultants or middle grade doctors to support such a rota.

## **Urgent and emergency care networks**

- Urgent and emergency care networks can improve patient outcomes and experience, however there is variation in the organisation, scope and functionality of networks across the country.
- There are wide variations in the way information is shared between providers of urgent and emergency care leading to potential duplication within the system causing delay and poor patient experience.

## 1. Introduction

The NHS should consistently provide safe and high quality urgent and emergency care 24 hours a day, seven days a week. Millions of people in England have non-life threatening short-term illnesses or health problems for which they need prompt and convenient treatment or advice. Others have pre-existing health problems which fluctuate or deteriorate. A much smaller number suffer from serious illness or have a major injury which requires swift access to highly-skilled, specialist care to give them the best chance of survival and recovery. To meet these needs an improvement in information and advice and access to timely and appropriate urgent and emergency care, across the 24-hour period within the NHS, is required.

It is suggested that the current system of urgent and emergency care is unaffordable and unsustainable and consuming NHS resources at a greater rate every year<sup>1,2</sup>. Urgent or unplanned care – when there is a need to access care quickly – leads to at least 100 million NHS calls or visits each year, which represents about one third of overall NHS activity and more than half of the costs<sup>3,4</sup>. Growing numbers of frail elderly patients, increasing morbidities, more treatable illnesses and an increased public expectation of healthcare have all contributed to ever greater pressure on health and social care services<sup>5,6</sup>. In urgent and emergency care, this has led to more people:

- using GP services
- using urgent care, walk-in centres and minor injury units;
- accessing the most expensive types of urgent and emergency care; and
- being admitted to hospital through emergency services<sup>7</sup>.

Further to this, the fragmentation of the system is causing confusion amongst patients resulting in duplication of efforts for the same episode of care and inappropriate attendances and emergency admissions to hospital.

For emergency admissions, a patient admitted to hospital in an emergency has little choice about where or when they attend. The public expect that the NHS will provide them with a consistently high quality and safe service; this expectation should underpin the way that all services are commissioned and delivered. Whilst the NHS provides a high quality service for many patients admitted as an emergency, significant variations exist in patient outcomes and service arrangements both between hospitals and also within hospitals depending on whether the patient is admitted on a weekday or weekend<sup>8, 9, 10, 11, 12, 13, 14</sup>.

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<sup>1</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust:

<sup>2</sup> Fernandes, A. (2011) Guidance for commissioning integrated urgent and emergency care: a whole system approach; Royal College of General Practitioners Centre for Commissioning

<sup>3</sup> NHS Alliance (2012) A practical way forward for clinical commissioners; NHS Alliance on behalf of NHS Clinical Commissioners and sponsored by NHSCB

<sup>4</sup> Primary Care Foundation (2011) Breaking the mould without breaking the system

<sup>5</sup> Anandaciva, S (2012) Why do people end up at A&E?: a presentation given at the 'Leading the way: getting the most out of the reforms in urgent and emergency care' conference, November 2012, London

<sup>6</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust

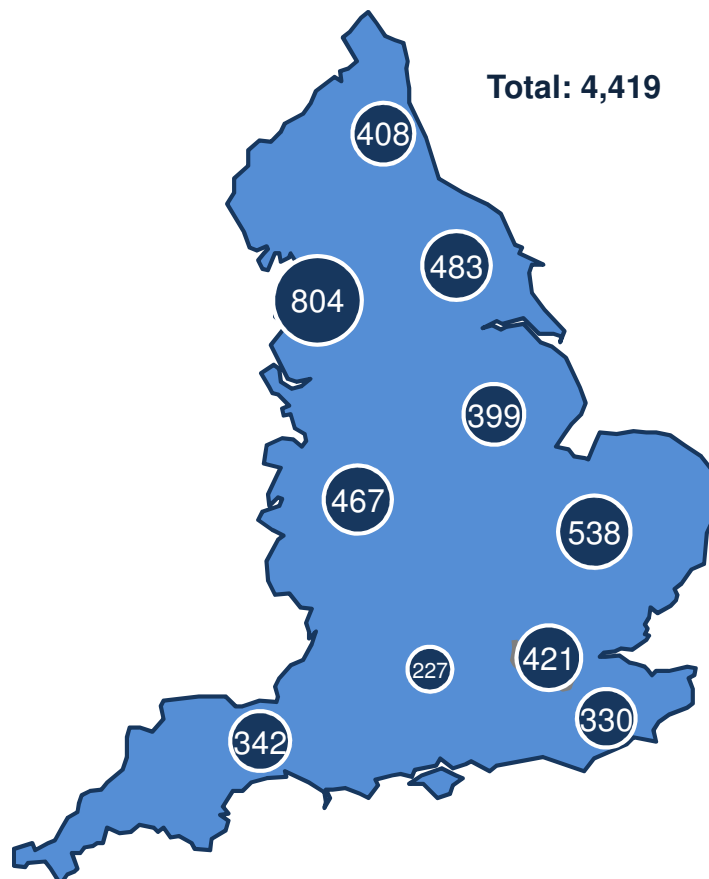
<sup>7</sup> Roberts, A et al (2012) The funding pressures facing the NHS from 2010/11 to 2021/22: A decade of austerity?; Nuffield Trust

<sup>8</sup> Aylin, P. et al (2010). Weekend mortality for emergency admissions. A large multicentre study, *Quality and Safety in Health Care*, 19: 213-217

<sup>9</sup> Bell, M. D., Redelmeier, D. A. (2001). Mortality among patients admitted to hospitals on weekends compared with weekdays *The New England Journal of Medicine* 345: 9

Analysis demonstrates that in England patients admitted to hospital as an emergency at the weekend have a significantly increased risk of dying compared to those admitted on a weekday. Data shows that around 4,400 lives in England could be saved every year if the mortality rate for patients admitted at the weekend was the same as for those admitted on a weekday. Figure 1 demonstrates the number of lives that could be saved in the different regions in England if there was no difference in weekend and weekday mortality rates.

**Figure 1: Number of lives that could be saved if there was no difference in weekend and weekday mortality rates**



Reduced service provision throughout hospitals, including fewer consultants working at weekends, is associated with this higher weekend mortality rate. This suggests that a change in workforce arrangements is required to ensure that the right number of experienced and highly qualified staff are always available, alongside a change in service arrangements across the whole system to ensure the availability of support services.

This review sets out to improve urgent and emergency care services within the whole system, in England, 24 hours a day, seven days of the week.

<sup>10</sup> Barba, R., Losa, J. E., Velasco, M., Gujjarro, C., Garcia de Casasola, G. & Zapatero, A. (2006). Mortality among adult patients admitted to the hospital on weekends *The European Journal of Internal Medicine* 17: 322-324

<sup>11</sup> Schmulewitz, L., Proudfoot, A. & Bell, D. (2005). The impact of weekends on outcome for emergency patients. *Clinical Medicine*, 5: 621-5

<sup>12</sup> National Confidential Enquiry into Patient Outcome and Death. (2007). *Emergency admissions: A step in the right direction*, NCEPOD

<sup>13</sup> Ricciardi, P. (2011) Mortality rate after non-elective hospital admission. *Arch. Surg.* 2011; 146(5): 545-551

<sup>14</sup> NCEPOD (2010) *An age old problem? Elective and emergency surgery in the elderly.* NCEPOD 2010

## **2. The Urgent and Emergency Care Review**

Improving the quality and safety of urgent and emergency care is outlined as a priority in *Everyone Counts: Planning for Patients 2013/14*.

The aims of the review of urgent and emergency care in England are to:

- Put patients and the public first;
- Create consensus among clinicians on options for organising urgent and emergency care;
- Produce evidence to support proposed models of care, based on quality, workforce and economic considerations; and
- Create a climate in which Clinical Commissioning Groups can commission for change and improvement in their localities.

It is suggested that the current system of urgent and emergency care in England, is unsustainable and unaffordable and there is a need to review the way the NHS responds to and receives emergency patients. The review outlines the issues within the current system and has developed principles for the future delivery of urgent and emergency care. Subject to wider engagement on the evidence base for improvement and emerging principles for urgent and emergency care, the work will continue to develop a framework for commissioning these services. This will ultimately aim to address the current issues of sustainability, access challenges, patient experience and outcomes and the provision of urgent and emergency care across the whole system in England.

### **Who was involved in the programme?**

The urgent and emergency care review is clinically-led. Professor Keith Willett, National Director for Domain 3: Acute Episodes of Care, NHS England, chairs an Urgent and Emergency Care Steering Group which has representation from clinicians and commissioners across the NHS, National Voices, and the wider clinical body.

The review aims to ensure that the needs of patients and the public are given primacy and are central to determining the priorities for patients when accessing care.

### **Approach**

Development of the evidence base for change was undertaken through desk-top research and review of available data such as Hospital Episode Statistics (HES). Supporting evidence was drawn from national guidance and reports from the wider clinical body including the Primary Care Foundation, College of Emergency Medicine, Royal College of General Practitioners and other Royal Colleges, as well as opinion from the Steering Group members and through wider engagement with clinical commissioning groups and key stakeholders.

The evidence base and emerging principles for urgent and emergency care in England have been published for a period of wider engagement from 17 June to 11 August 2013.



### 3. Current provision of urgent and emergency care services

The most recent data available shows that there were:

- An estimated 438 million visits to a pharmacy in England for health related reasons in 2008/09<sup>15</sup>;
- More than 300 million GP consultations in 2008/09<sup>16</sup>;
- Approximately 24 million calls to NHS urgent and emergency care telephone services
  - 8.49 million calls to emergency 999 services in 2011/12<sup>17</sup>;
  - 4.4 million calls to NHS Direct in 2011/12<sup>18</sup>;
  - 2.7 million calls to NHS 111 in 2012/13<sup>19</sup>;
  - 8.6 million calls to GP out-of-hours services in 2007/08<sup>20</sup>;
- 6.71 million emergency ambulance journeys in 2011/12<sup>21</sup>;
- 21.7 million attendances at A&E departments, minor injury units and urgent care centres in 2012/13<sup>22</sup>; and
- 5.2 million emergency admissions to England's hospitals in 2012/13<sup>23</sup>.

#### 3.1 Increasing demand and costs of urgent and emergency care

##### Consultations and attendances

In England, the average number of GP consultations per patient rose from 3.9 to 5.5 per year between 1995 and 2008<sup>24</sup>. This increased pressure on primary care means that some patients may have found it more difficult to access their GP quickly, leading to a rising demand for other urgent and emergency care services<sup>25</sup>.

In A&E departments this has led to increasing numbers of patients with less urgent healthcare needs adding to the number of those with life-threatening conditions. To tackle this, in the last decade there has been a huge growth in spending on unplanned care services across England, designed to provide the public with quick access to a clinician when urgent care needs arise<sup>26</sup>. This means that most A&E departments are now able to stream patients to an alternative urgent care facility when appropriate. Despite this, attendances at major and single specialty

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<sup>15</sup> Based on an estimate by the Department of Health that 1.2m people visit their pharmacy each day for health related reasons – source: Department of Health (2008) Pharmacy in England

<sup>16</sup> HSCIC (2009) Trends in Consultation Rates in General Practice 1995/1996 to 2008/2009: Analysis of the QResearch® database: Final Report to the NHS Information Centre and Department of Health

<sup>17</sup> Health & Social Care Information Centre (2012) Ambulance Services - England, 2011-12

<sup>18</sup> NHS Direct (2013) Business Plan 2011/12 to 2015/16: Our Update for 2012/13

<sup>19</sup> Department of Health (2013) National MDS NHS 111 Statistics

<sup>20</sup> Agnelo Fernandes (2011) Guidance for commissioning integrated urgent and emergency care: A 'whole system' approach

<sup>21</sup> Health and Social Care Information Centre (2012) Ambulance Services – England, 2011/12

<sup>22</sup> NHS England A&E quarterly activity statistics, NHS and independent sector organisations in England 2012-13

<sup>23</sup> NHS England A&E quarterly activity statistics, NHS and independent sector organisations in England 2012-13

<sup>24</sup> The Information Centre for Health and Social Care (2009) Final Report to the NHS Information Centre and Department of Health Trends in Consultation Rates in General Practice 1995 to 2008: Analysis of the QResearch® database

<sup>25</sup> The Information Centre for Health and Social Care (2011) GP Patient Survey respondent demographics - Comparing A&E attendances with results from the GP Patient Survey

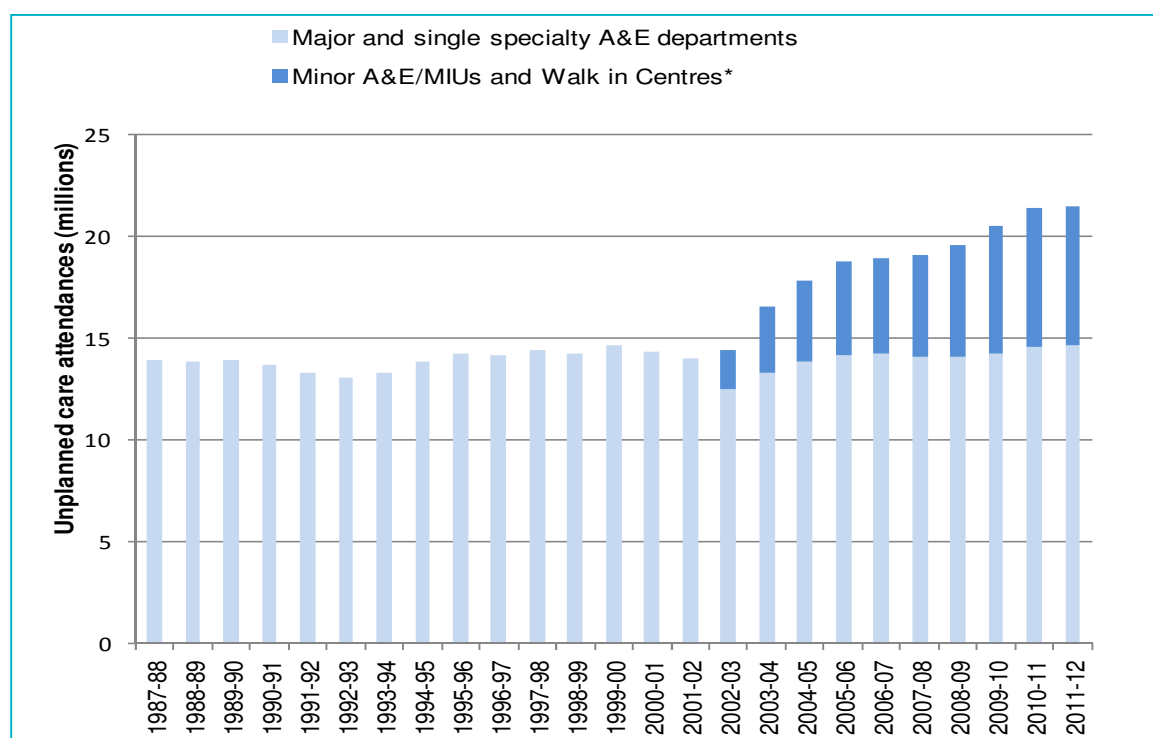
<sup>26</sup> C.Salisbury (2003) Do NHS Walk in Centres in England provide a model of integrated care?; International Journal of Integrated Care; Vol. 3

A&E departments have continued to increase by about 18 per cent between 2003 and 2011 (or about 2 per cent a year). In comparison, attendances at walk in centres and minor injury centres have increased by around 12 per cent per year since data was recorded<sup>27</sup>.

Attendance to an A&E department often reflects the availability or awareness of alternative sources of help. Patients know what an A&E department does and that its services are available 24 hours a day, seven days a week. This is in contrast to other components of the urgent and emergency care system, which offer less consistent responses and are less well understood by patients. This indicates that some patients may default to A&E departments when they are unsure about which service is most appropriate to their needs.

Since 2003/04 when the A&E attendance statistics began to include figures from walk in centres and minor injury units<sup>28</sup> there has been significant variation in the services offered and a steady increase in combined attendance numbers. Attendances to A&E departments, minor injury units and walk in centres combined altogether rose by more than 50 per cent in the ten years from 2001 to 2011<sup>29,30</sup>. One interpretation of this is that the new services are meeting a previously unmet need. Alternatively, it could be that the increased provision has led to supply induced demand and therefore increased uptake, or failure demand caused by a failure to do something earlier on in the urgent and emergency care pathway or system.

**Figure 2: Unplanned care attendances 1987 – 2011**



Source: Department of Health\*<sup>31</sup>

<sup>27</sup> Department of Health (2011) Timeseries A&E Attendance data

<sup>28</sup> Fernandes, A. (2011) Guidance for commissioning integrated urgent and emergency care: a whole system approach; Royal College of General Practitioners Centre for Commissioning

<sup>29</sup> Department of Health (2011) Timeseries A&E Attendance data

<sup>30</sup> Dr David Carson et al (2012) Urgent Care Services: What works best? – Review of Urgent Care Services; Primary Care Foundation

<sup>31</sup> \*data for minor A&E/MIUs and Walk in Centres was not collected before 2002-03 and figures are included under major and single specialty A&E departments

### Key message

The number of GP consultations has risen over recent years and, despite rapid expansion and usage of alternative urgent care services, attendances at A&E departments have not reduced. This indicates either unmet demand across the whole system or supply induced demand: increased uptake as a result of increased provision of services.

### Rising costs

The average cost of accessing urgent and emergency care varies considerably depending on how and where it is accessed, ranging from lower cost services such as NHS Direct to the highest level of urgency with 999 services and hospital admissions.

The total cost of A&E services varies due to changes in definitions and the way information has been collected, making it difficult to estimate the costs associated with the rise in urgent care. However spending on major A&E services in England is thought to be between £760m and £1.5bn per year, with the average cost of an attendance thought to be about £68<sup>32,33,34,35,36,37</sup>.

Rising costs across urgent and emergency care services can be associated with fragmentation of the current system of urgent and emergency care. This fragmentation leads to confusion among patients about how and where to access the care they need<sup>38</sup>, and many people are unable to navigate to the level of care appropriate to their condition, leading to multiple calls or attendances and unnecessary use of A&E or ambulance services<sup>39</sup>. It is estimated that around three-quarters of A&E attendances relate to serious or life-threatening conditions and about one quarter could have been treated elsewhere<sup>40,41,42</sup>. However there is variation between different A&E departments, with deprived urban areas having the highest proportion of patients who did not require hospital treatment<sup>43</sup>. This suggests that NHS resources are being used inefficiently because more people are accessing:

- urgent and emergency care in several places for a single episode of care, often referred on by health professionals<sup>44</sup>; and
- more expensive areas of urgent and emergency care than necessary.

<sup>32</sup> Foundation Trust Network (October 2012) Briefing on Driving Improvement in A&E Service

<sup>33</sup> National Audit Office (2004) Improving Emergency Care in England, Report by the Comptroller and Auditor General

<sup>34</sup> Fernandes, A. (2011) Guidance for commissioning integrated urgent and emergency care: a whole system approach; Royal College of General Practitioners Centre for Commissioning

<sup>35</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009)

<sup>36</sup> National Audit Office (2004) Improving Emergency Care in England, Report by the Comptroller and Auditor General

<sup>37</sup> Dr David Carson et al (2012) Urgent Care Services: What works best? – Review of Urgent Care Services; Primary Care Foundation

<sup>38</sup> NHS Alliance (2012) A practical way forward for clinical commissioners; NHS Alliance on behalf of NHS Clinical Commissioners and sponsored by NHSCB

<sup>39</sup> Bickerton, J. et al (2012). Streaming primary urgent care: a prospective approach. *Primary Health Care Research & Development*, 13(2), pp. 142-152.

<sup>40</sup> Cooperative Pharmacy (2011) Reducing needless A&E visits could save NHS millions

<sup>41</sup> NHS Networks (2011) New Choose Well Campaign

<sup>42</sup> Self Care Forum (2012) Over 2 million unnecessary A&E visits “wasted”

<sup>43</sup> McLellan, A (2011) Analysis: patients in poorer regions using A&E over GP; *Health Service Journal*, 13<sup>th</sup> December 2011

<sup>44</sup> RCGP, RCN, RCPCH & CEM (2012) Right care, right place, first time?: Joint Statement by the Royal College of General Practitioners (RCGP), Royal College of Nursing (RCN), Royal College of Paediatrics and Child Health (RCPCH) and the College of Emergency Medicine (CEM) on the urgent and emergency care of children and young people

### Key messages

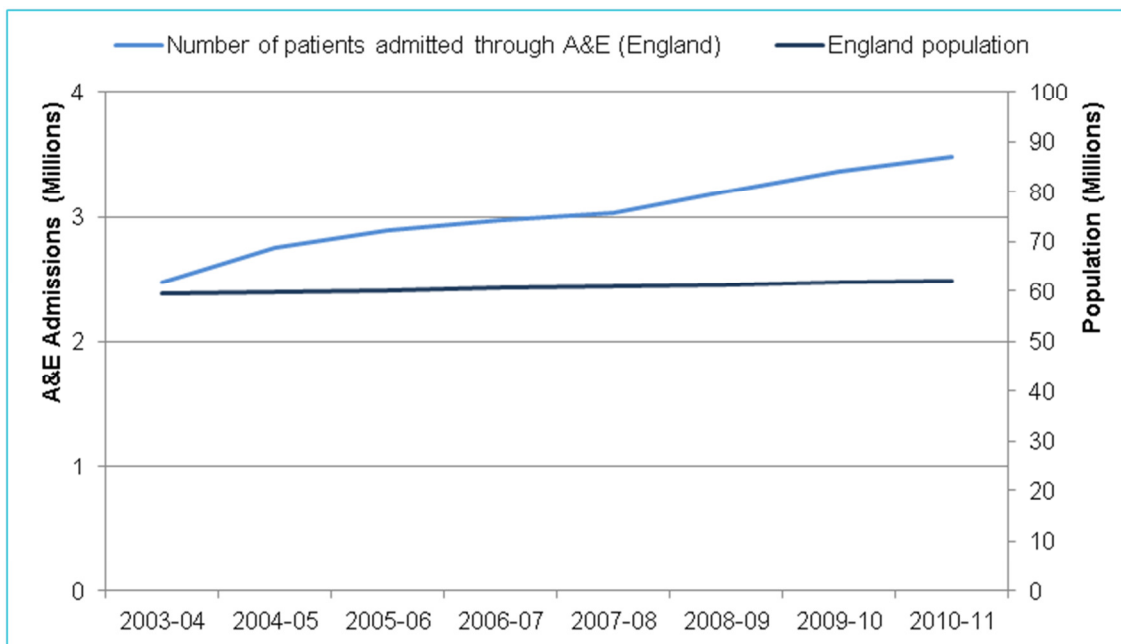
Growth in the number of people using urgent and emergency care is leading to mounting costs and increased pressure on resources.

Overall fragmentation of the system and inconsistent service provision means that many patients may not be able to access the most appropriate urgent or emergency care service to suit their needs, leading to duplication and over-use of the most expensive services, at significant cost to the NHS.

### Increasing emergency admissions to hospital

Emergency admissions to hospital in England are also increasing, with a rise of 40 per cent between 2003/04 and 2010/11<sup>45</sup> (this includes short-stay and zero length of stay admissions). A 2010 review of trends in emergency admissions between 2004 and 2009 found that, in 2009, emergency admissions to hospital cost the NHS about £11bn and were increasing at a rate of about £83 million per annum<sup>46</sup>. Activity has risen at a much greater rate than the national population over the same period, indicating that population growth plays a minor role in the increase in emergency admissions (figure 3).

**Figure 3: Trends in admissions through A&E compared to population (England)**



Sources: Office for National Statistics (Population Estimates) and Department of Health (A&E Admissions)

<sup>45</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust

<sup>46</sup> Department of Health (2011) Emergency Admissions through A&E; Datasets 03/04 Q1 to 2010/11 Q4

There are various factors that have contributed to the rise in emergency admissions including:

- a rise in the proportion of older adults within the population;
- a rise in the number of people living with long-term conditions and acute exacerbations of these conditions;
- an increase in short-stay admissions; and
- an increase in emergency re-admissions (see section 10).

The evidence base for improving urgent and emergency care in England sets out to review the evidence in different service areas, ranging across patients' perceived levels of need, in terms of a patient's level of anxiety or perception of the seriousness of their complaint. These are as follows:

- Self care and self management;
- Telephone care;
- Face to face care;
- 999 emergency services;
- A&E departments; and
- Emergency admissions to hospital.

## 4. Patient experience

In 2012, NHS England set out its aims to deliver a patient-centred, customer-focussed NHS<sup>47</sup>. The Government's mandate to NHS England for 2013-2015 states that the quality of care is as important as quality of treatment, but the public are less confident about consistency of care provision than they are about treatment<sup>48</sup>. In urgent and emergency care, quality of care can significantly impact the way patients choose to access services, with many choosing not to use the services most appropriate to their needs. This causes duplication and a poorer experience for many patients.

Patient experience is difficult to capture for this type of healthcare. For example 22 per cent of patients in A&E departments are under 16 years and 20 per cent are over 65 years<sup>49</sup>. Many patients cannot communicate easily, are in pain or experience fear or stress, and have different expectations of care from those in less acute settings. While it is possible to implement systems to measure patient experience in groups such as children using urgent and emergency care services, a review of survey a review of national surveys within the NHS found that the voice of under-16 year olds is not included in most national surveys. In the 2004 Inpatient Surveys, in which they were included, children and young people were significantly less likely to than adults to feel confidence and trust in their doctors or that they were treated with dignity<sup>50</sup>.

### Patient experience of general practice

The NHS and Social Care Services Surveys show that overall satisfaction with GP services has traditionally been high (although it has declined slightly from a high of 80 per cent in 2009 to 74 per cent in 2012)<sup>51</sup>. However the 2011-12 GP patient survey shows that there was significant variation between GP services and across different geographic areas. Practices in London and those located in more deprived areas were much more likely to under-perform on both clinical outcome measures and patient experience<sup>52</sup>.

A recent study of patients accessing their GPs over the telephone<sup>53</sup> found that the two factors most likely to affect patient experience were speed of access and continuity of care. In the study of 1,328 patients across 15 practices, patients who said they were 'very unsatisfied' waited an average of 129 minutes to speak to a GP, whilst those who were 'very satisfied' waited an average of 46 minutes. Of those who were very unsatisfied, only 38 per cent spoke to their usual GP whereas, of those who were very satisfied, 73 per cent spoke to their usual

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<sup>47</sup> NHS England (2012) Everyone Counts: Planning for Patients 2013/14

<sup>48</sup> Department of Health (2012) The Mandate: A mandate from the Government to the NHS Commissioning Board: April 2013 to March 2015; Department of Health

<sup>49</sup> RCPCH and Picker Institute (2012) Patient Reported Experience Measure (PREM) for urgent and emergency care, Royal College of Paediatric and Child Health and the Picker Institute

<sup>50</sup> Hargreaves, D. and Viner, R. M. "Children's and young people's experience of the National Health Service in England: a review of national surveys 2001-2011" *Archives of Disease in Childhood* 2011: 10.1136

<sup>51</sup> The King's Fund (2012) Satisfaction with NHS and social care services – results ; the King's Fund, London UK

<sup>52</sup> The King's Fund (2012) Data briefing: improving GP services in England: exploring the association between quality of care and experience of patients; King's Fund, London UK

<sup>53</sup> Longman, H (2013) What matters to patients in general practice, for satisfaction and support of change?: A study of 1328 patient responses from 15 practices; Patient Access; [www.patient-access.org.uk](http://www.patient-access.org.uk)

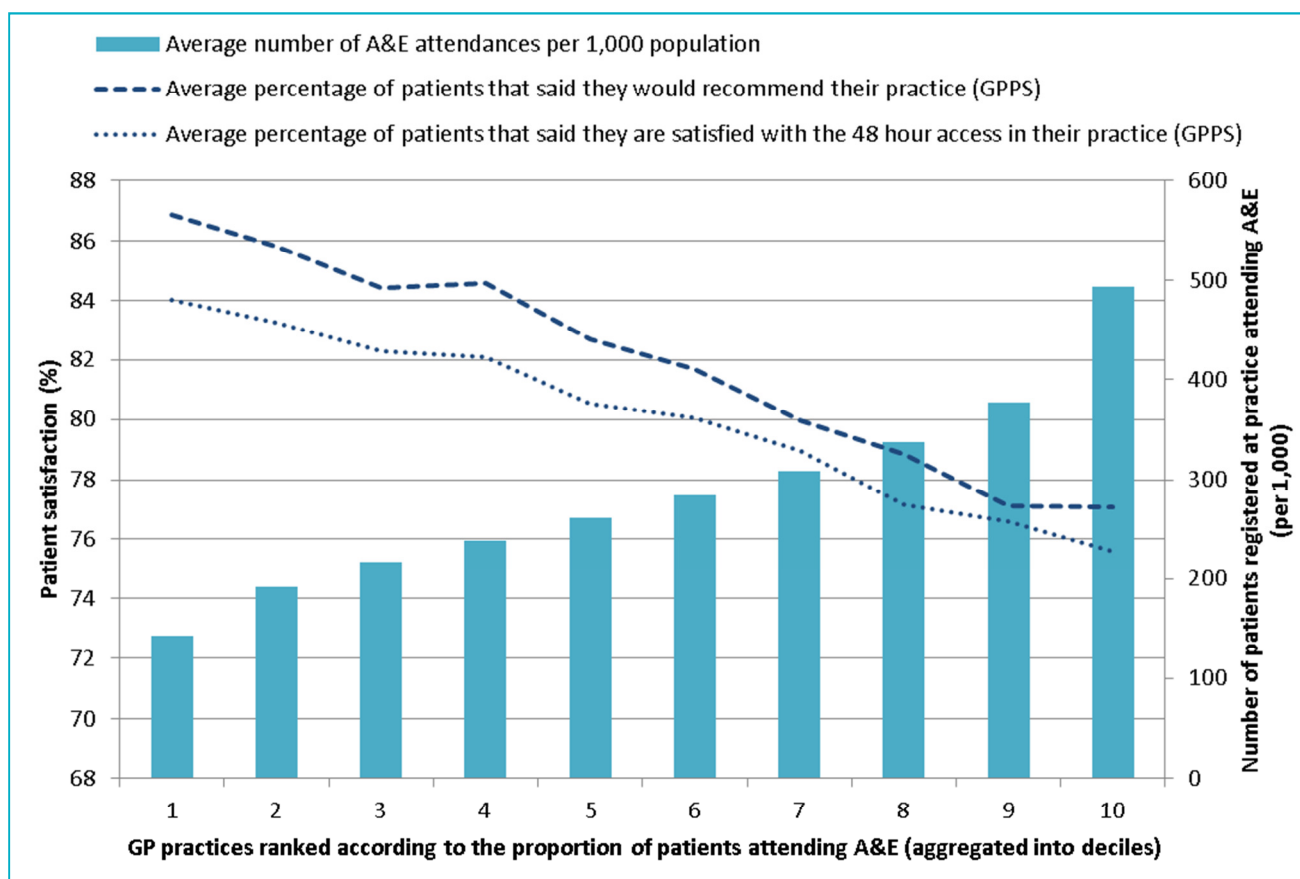
GP. Most of the time, patients report good access to their GP, but there are variations in access between practices and across geographic areas<sup>54</sup>.

A 2012 King’s Fund study found that patient satisfaction with access to general practice consistently showed a strong association with clinical quality. Evidence suggests that patient experience of GP services, particularly when related to ease of access, affects uptake and interaction with primary care. This affects the way in which patients choose to access health care because patients that are not satisfied with their GP practice are more likely to:

- resort to using urgent and emergency care services for primary care needs; or
- only seek help when they become acutely ill, increasing the risk of emergency admission<sup>55</sup>.

Analyses of GP patient survey data have found a correlation between the ability of patients to access their GP quickly and overall satisfaction with their GP surgery. There is also an inverse correlation between these variables and how frequently a patient is likely to use A&E services (figure 4).

**Figure 4: the relationship between A&E attendances and results from the 2011-12 GP Patient Survey (GPPS)**



Source: Health and Social Care Information Centre

<sup>54</sup> Goodwin et al (2011) Improving the quality of care in general practice: Report of an independent inquiry commissioned by The King’s Fund; The King’s Fund, London

<sup>55</sup> The King’s Fund (2012) Data briefing: improving GP services in England: exploring the association between quality of care and experience of patients; King’s Fund, London UK

There is insufficient evidence to demonstrate a causal link between these factors. However a recent analysis concluded that a patient's experience of GP services, particularly regarding ease of access, is likely to be a factor in the way patients interact with other areas of healthcare<sup>56</sup>. Variables such as levels of deprivation, proximity to A&E services and numbers of patients with long-term conditions, will also influence the proportion of patients accessing A&E services. Analyses of A&E attendances and levels of multiple deprivation statistics show that patients living in areas with high levels of deprivation are more likely to use A&E services<sup>57</sup>.

### **Key message**

There is significant variation in patient experience between GP practices. Data shows that some patients who have a good experience of their GP are less likely to use A&E departments.

### **Patient experience of telephone services**

The NHS Direct telephone number provided the public with access to healthcare advice over the telephone and, if necessary, directed them to the NHS service most appropriate to their health needs. Public satisfaction with this service in 2012 was high: 90 per cent of those using the telephone service said they were satisfied with the way the call was handled, and 90 per cent followed the advice the service gave them<sup>58</sup>. However, a major criticism of the NHS Direct number was the length of time patients could wait to be called back for medical advice or referral<sup>59</sup>. A report by the National Audit Office also concluded that advice given by NHS Direct staff could vary under similar circumstances and generally call handlers erred on the side of caution<sup>60</sup>. Although many patients were advised to self-care when they would have otherwise visited their GP, the service did not appear to have an influence on the number of people using urgent and emergency services<sup>61</sup>.

In 2013, the NHS Direct telephone number was replaced by NHS 111. The objective of the new service is to transform the delivery of urgent and emergency care by directing patients to the "right service, first time", with clinical assessment and referral taking place within the same phone call<sup>62</sup>. The service also encourages different providers of urgent and emergency care to come together to consider the way in which the current system works and furthermore, tackle any deficits. It is envisaged that NHS 111 will use fewer clinicians to the previous NHS Direct telephone number, with the majority of call handlers relying on the support of NHS Pathways – an electronic clinical assessment system which enables callers to any service to have their clinical need assessed by the call handler they speak to, and then be referred directly to the most appropriate provider in their local area. NHS Pathways has developed a shared NHS view on how to manage risk for issues that initially present on the phone. This has been achieved through extensive piloting and constant review from an independent National Clinical Governance Group chaired by the Royal College of General Practitioners and including

<sup>56</sup> The King's Fund (2012) Data briefing: improving GP services in England: exploring the association between quality of care and experience of patients; King's Fund, London UK

<sup>57</sup> Department of Health A&E statistics comparison with Office of National Statistics data on levels of multiple deprivation.

<sup>58</sup> NHS Direct (2012) NHS Direct facts and figures

<sup>59</sup> Turner, J et al (2012) Evaluation of NHS 111 pilot sites; University of Sheffield

<sup>60</sup> Bourn, J (2002) NHS Direct in England: report by the comptroller and auditor general; National Audit Office, Hc 505 session 2001-2002: 25 January 2002

<sup>61</sup> Ibid

<sup>62</sup> Turner, J et al (2012) Evaluation of NHS 111 pilot sites; University of Sheffield



representatives from the College of Emergency Medicine, the British Medical Association and other organisations involved in the delivery of urgent and emergency care.

An evaluation of three pilot sites in 2012 found that patient satisfaction with the NHS 111 service was very high, but using the service did not improve overall patient experience, or reduce the use of other urgent and emergency care services<sup>63</sup>. Additionally some concerns were raised by a number of NHS 111 providers, particularly in those areas that went 'live' in March 2013 when some patients experienced long delays before they were advised or referred, due to operational failures to provide adequate staffing for the service and call volumes<sup>64</sup>.

### **Key message**

Patient experience of both the NHS Direct telephone service and pilots of NHS 111 has been found positive; however transition from nurse-led triage to calls answered by trained advisors, supported by experienced clinicians has led to some incidences of poor patient experience during the early implementation of NHS 111.

### **Fragmentation of urgent care services**

Urgent care services are highly fragmented and difficult to navigate causing many patients to experience difficulty choosing the service most appropriate to their needs<sup>65,66,67</sup>. Variations in opening hours, clinical expertise, access to diagnostics and nomenclature can lead to confusion and referrals to a number of urgent care services within the same episode of care. This increases cost, delay and clinical risk and leads to poor patient experience<sup>68</sup>. The Primary Care Foundation's review of urgent care in 2011 found that<sup>69</sup>:

- There was significant variation in the case mix that urgent care centres provide for, with some seeing minor illnesses only, some minor injuries only and some seeing both. In some services this could depend on whether or not the right member of staff happened to be working at that time or not;
- There were no standard operating hours for urgent care centres: with, for example, some open 24/7, some only open on weekday daytimes and some only open out-of-hours; and
- An increasing number were situated in or close to the acute hospital, but many others remain distant, which made streaming of patients attending A&E departments much more difficult.

The lack of standardisation and inconsistent terminology of service names leads to fundamental misconceptions amongst patients regarding the types of services offered by urgent care, resulting in widespread patient confusion<sup>70</sup> and frustration with selecting these services. Furthermore, this can lead to patients accessing a higher acuity service.

<sup>63</sup> Turner, J et al (2012) Evaluation of NHS 111 pilot sites; University of Sheffield

<sup>64</sup> BMA (2013) GPs implore government to delay NHS 111; British Medical Association, 28 March 2013

<sup>65</sup> The King's Fund (2011) Managing urgent activity – urgent care

<sup>66</sup> Booker et al (2013) Patients who call emergency ambulances for primary care problems: a qualitative study of the decision-making process; Emergency Medicine Journal

<sup>67</sup> Primary Care Foundation (2011). Breaking the mould without breaking the system. Primary Care Foundation.

<sup>68</sup> Primary Care Foundation (2011). Breaking the mould without breaking the system. Primary Care Foundation.

<sup>69</sup> Primary Care Foundation (2011). Breaking the mould without breaking the system. Primary Care Foundation.

<sup>70</sup> Booker et al (2013) Patients who call emergency ambulances for primary care problems: a qualitative study of the decision-making process; Emergency Medicine Journal

### **Key message**

The wide range of urgent care services available and lack of standardisation of services and labelling results in patient confusion over how to access the right healthcare quickly; this leads to duplication, delay, increased clinical risk and poor patient experience.

In 2012, NHS England made 'listening to patients' one of the key principles behind planning clinically-led commissioning<sup>71</sup>. Capturing feedback regularly, consistently and accurately then acting on that information to improve patient experience is expected of all NHS services<sup>72</sup>. The clinical quality indicators, introduced as part of the Operating Framework for the NHS in England 2011/2012, require A&E departments to assess the experience of patients and describe improvements made to the service as a result<sup>73</sup>. This helps provide A&E departments with the tools and intelligence required to sustain high quality patient experience. However there is currently no equivalent requirement for urgent care centres, minor injury units, walk-in centres or GP out-of-hours services<sup>74</sup>. This means that these services lack consistency and regularity in their arrangements for capturing patient feedback. In a 2012 study, the Primary Care Foundation found that, in some cases, there had been a long gap since the last survey had been conducted; in others, the questions had been changed so that it was impossible to compare results to find out whether recent changes had improved the experience of patients<sup>75</sup>.

The absence of a consistent mechanism for feedback means that it is difficult to assess the standard of patient experience across all urgent and emergency care services. It also means that many urgent care centres may not understand where they are falling short of patient expectations.

### **Key message**

There are variations in the way patient experience is monitored and acted upon in urgent care and this falls short of what is achieved in other parts of the NHS.

### **Patient experience of '999' emergency services**

Patient experiences of '999' emergency services are consistently positive and patients have a high level of trust and confidence in ambulance staff who attend to them. A 2008 Care Quality Commission (CQC) survey of category C patients (those with 'non urgent or life-threatening conditions') calling '999' found that experiences of using the service were overwhelmingly positive, with 98 per cent of patients rating the service as good or better<sup>76</sup>. This compares with 74 per cent patient satisfaction with GPs and 61 per cent satisfaction with NHS services overall<sup>77</sup>. The differences in patient experience found in the survey may go some way to explaining why many people with non-urgent or life-threatening conditions seek help from '999' emergency services.

<sup>71</sup> NHS England (2012) Everyone Counts: Planning for Patients 2013/14

<sup>72</sup> Primary Care Foundation (2012) Urgent care: what works best – review of urgent care centres; a discussion paper from the Primary Care Foundation

<sup>73</sup> Imperial College Healthcare (2013) A&E quality indicators; <http://www.imperial.nhs.uk/patients/ourstandards/emergency-care-quality-indicators/index.htm>

<sup>74</sup> Primary Care Foundation (2012) Urgent care: what works best – review of urgent care centres; a discussion paper from the Primary Care Foundation

<sup>75</sup> Primary Care Foundation (2012) Urgent care: what works best – review of urgent care centres; a discussion paper from the Primary Care Foundation

<sup>76</sup> CQC (2009) National NHS patient survey programme: Survey of Category C ambulance service users 2008; Care Quality Commission

<sup>77</sup> The King's Fund (2012) Satisfaction with NHS and social care services – results;

A recent qualitative study of patients who use '999' emergency services for primary care needs found that many people used ambulance services because they were not aware of, or confused by the alternative offerings<sup>78</sup>. The 2008 CQC survey found that only 31 per cent of callers considered calling another service<sup>79</sup>, suggesting that there is an inherent over-reliance on '999' emergency services and the public are reluctant to use alternatives.

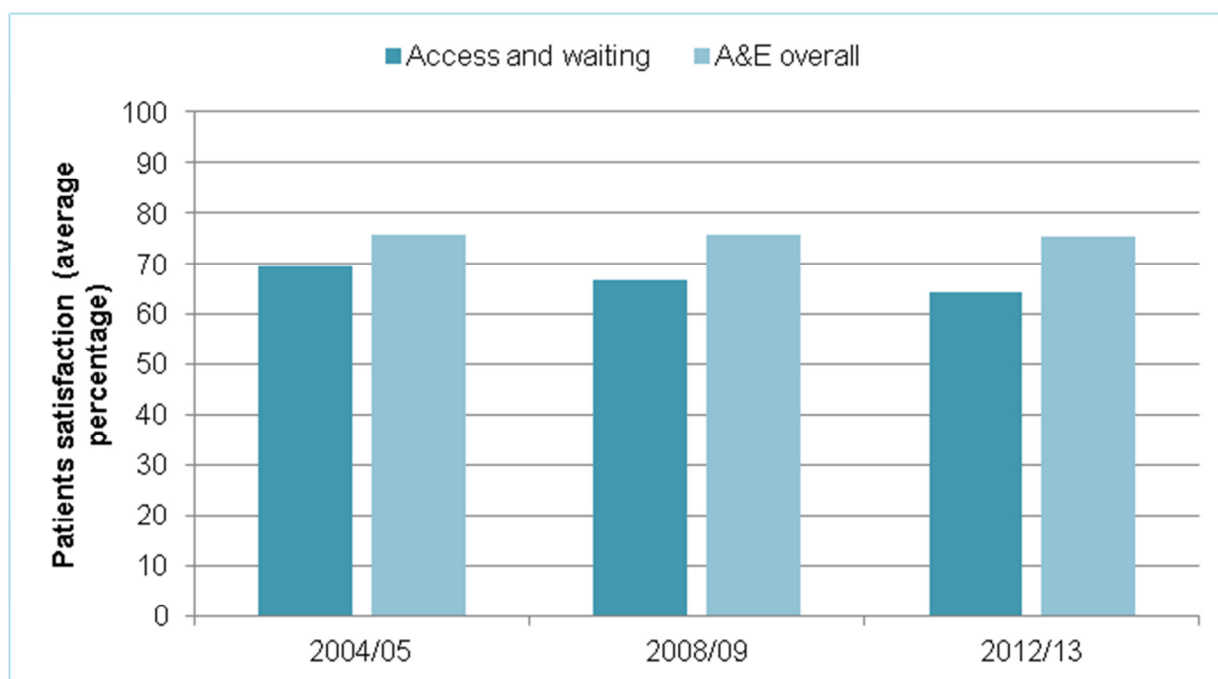
**Key message**

Consistently positive patient experiences of ambulance services, and confusion surrounding other areas of healthcare, are factors that may have contributed to an increased use of the emergency (999) number and ambulance services by patients with non-urgent healthcare needs.

**Patient satisfaction in A&E departments**

Accident and Emergency departments are understood and trusted by the public; they provide 24/7 access to anyone using the service. However, the 2012 national NHS patient survey for A&E departments<sup>80</sup> indicated that overall patient satisfaction with A&E services had decreased slightly over the last decade.

**Figure 5: Patient satisfaction with A&E departments**



Source: National NHS Patient Survey Programme: Accident and Emergency Department Survey 2012

Most of the overall downward trend is a result of a marked decrease in patient satisfaction with access and waiting. In 2012/13, thirty-three per cent of respondents said they waited more

<sup>78</sup> Booker et al (2013) Patients who call emergency ambulances for primary care problems: a qualitative study of the decision-making process; Emergency Medicine Journal;

<sup>79</sup> CQC (2009) National NHS patient survey programme: Survey of Category C ambulance service users 2008; Care Quality Commission

<sup>80</sup> CQC (2012) National NHS patient survey programme Accident and Emergency Department Survey 2012: full results with 2004 and 2008 comparisons

than half an hour before they were first seen by a doctor or nurse – up from 24 per cent in 2004 and 29 per cent in 2008. This is despite the number of patients waiting more than four hours from the time of arrival to admission or discharge falling dramatically over that period<sup>81</sup>. Fifty-nine per cent of patients in 2012/13 said they had not been told how long they would have to wait to be treated – an increase of six per cent since 2008.

Recent data shows that the number of patients waiting more than four hours from the time of arrival at an A&E department to admission or discharge increased from 1.73 per cent to 4.1 per cent between 2009/10 and 2012/13. In addition to sick or anxious patients' negative experience of long waits for treatment or discharge, overcrowding is thought to be a key factor affecting patient experience in A&E departments because it leads to delayed treatment, impediment of pain management and poorer clinical outcomes<sup>82</sup> (see section 8.3). The 2012 national NHS patient survey for A&E departments found that 17 per cent of patients thought hospital staff did not do everything they could to help them control their pain, which was a rise of four per cent from 2008<sup>83</sup>. There were also variations between A&E providers in terms of overall patient experience<sup>84</sup>. Findings highlighted that 30 trusts performed consistently above average. Foundation Trust and Teaching Hospital status and proportion of white inpatients were positively associated with performance. Six trusts in England were below average on each domain and these were located in London and were not foundation trusts. They were also found to have the highest deprivation scores and the lowest percentage of white inpatients.

#### **Key message**

A&E performance (operational and clinical), and therefore patient experience, varies significantly between trusts, with a few performing far worse than the rest. Additionally, there are signs that overcrowding of A&E departments is causing a deterioration of performance and impacting negatively on patient experience.

#### **Meeting patients' expectations in hospital**

Patients want the highest standard of care and their experience can be enhanced by consultant involvement – their stay in hospital may be shortened and their clinical outcome improved. Studies have also found that patient experience is a good indicator for the quality of services and it is therefore becoming an increasingly important measure of the quality of hospital care<sup>85,86</sup>.

A recent study of patient ratings of all NHS acute hospital trusts, submitted on NHS Choices, found that hospitals with better patient ratings tend to have lower mortality rates and lower re-admission rates. Findings showed that the top quartile of hospitals compared to the bottom quartile had five percent lower mortality rates and 11 percent lower re-admission rates<sup>87</sup>.

<sup>81</sup> Department of Health weekly A&E SitReps 2003/04 – 2012/13

<sup>82</sup> Collins et al (2010) Adverse effects of overcrowding on patient experience and care; *Emergency Nurse*; Volume 18, no 8, pp34-39

<sup>83</sup> CQC (2012) National NHS patient survey programme Accident and Emergency Department Survey 2012: full results with 2004 and 2008 comparisons

<sup>84</sup> Raleigh et al, An analysis of patient experience across acute care surveys in English NHS Trusts, 2012

<sup>85</sup> Jha, A.K. et al (2008) Patients' Perception of Hospital Care in the United States. *The New England Journal of Medicine*. 359:1921-1931. October 2008

<sup>86</sup> Isaac, T. et al (2010) The Relationship between Patients' Perception of Care and Measures of Hospital Quality and Safety. *Health Services Research*. 45(4):1024-1040. 2010

<sup>87</sup> Greaves, F. et al. (2012) [Associations between web-based patient ratings and objective measures of hospital quality](#). *Archives of Internal Medicine*. 13 February 2012

It is recognised that patient experience is a far from perfect indicator but findings do certainly show a general trend that where patients rate a hospital highly the clinical quality of hospital care is also good.

## 5. Self-care and self-management

Self-care for minor ailments and self-management of long-term conditions play a crucial role in influencing the level of demand for urgent and emergency care. It is thought that about 80 per cent of health problems are treated or managed at home, without resorting to the use of NHS services. Because the number of minor ailments and long-term conditions dealt with through self-care and self-management is very large, minor changes in behaviour have significant potential to affect demand for formal health care, including urgent and emergency services<sup>88</sup>.

Improving access and encouraging the use of support for self-care of minor ailments could help to free capacity in primary care and prevent unnecessary use of urgent and emergency care services. The treatment of minor ailments within primary care accounts for about 20 per cent of total available GP workload and is estimated to cost the NHS about £2bn<sup>89</sup>.

There has been rapid growth in the use of online health tools over the last ten years and there is an increasingly wide variety of options available to patients. Recent estimates have found, for instance, that there are over 40,000 medical applications available for download on tablets and smartphones and so far the market is unregulated for both doctors and patients<sup>90</sup>. A study into NHS Direct's online symptom checker found that most users were young (71 per cent under 45 years old) and most were female (67 per cent) which indicates wide use for this cohort of patients. Although, approximately 44 per cent of users sought consultation with a health professional after using the NHS Direct website symptom checker and most of those who did not, fell into the younger age group categories<sup>91</sup>.

Evidence suggests that if more members of the public are supported to undertake self-care and self-management, fewer patients will access unscheduled care within the same episode of care<sup>92</sup>. There is, however, some inconsistency in the level to which health professionals are thought to recommend and support self-care and self-management and it is suggested that many people do not have the necessary confidence, or health literacy, to treat or manage their condition themselves<sup>93,94,95</sup>.

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<sup>89</sup> Self Help Forum (2013) Self Care: the story so far

<sup>90</sup> Bower, C (2012) Will medical apps be to healthcare what ATMs are to banking?; British medical journal online: <http://blogs.bmj.com/bmj-journals-development-blog/2012/08/02/will-medical-apps-be-to-healthcare-what-atms-are-to-banking/>

<sup>91</sup> Powell et al (2011) The Characteristics and Motivations of Online Health Information Seekers: Cross-Sectional Survey and Qualitative Interview Study; Journal of Medical Internet Research; no. 13(1)

<sup>92</sup> Poole R et al (2010) Exploring patients' self-reported experiences of out-of-hours primary care and their suggestions for improvement: a qualitative study. Family Practice 2011; 28: 2010-219.

<sup>93</sup> Bower et al (2012) A cluster randomised controlled trial of the clinical and cost-effectiveness of a 'whole systems' model of self-management support for the management of long- term conditions in primary care: trial protocol; Implementation Science 2012, 7:7

<sup>94</sup> Banks I. Self Care of Minor Ailments: A Survey of Consumer and Healthcare Professional Beliefs and Behaviour. SelfCare 2010; 1:1-13

<sup>95</sup> Department of Health (2007) Self Care: A National View in 2007 Compared to 2004-05; Department of Health

The extent to which a patient is actively involved in their own care is strongly linked to health outcomes. Research shows that, by supporting self-care, the NHS can improve health outcomes and increase patient satisfaction. However, self-care requires the ability to:

- assess one's own health care needs;
- acquire an understanding of the options available; and
- select and access the most appropriate option.

Previous research has demonstrated that some people with minor ailments abandon self-care earlier than they need to, and depend too highly on support from formal healthcare services because they do not have the confidence or knowledge necessary<sup>96,97</sup>.

It is possible for patients to be educated to manage their own condition, reducing the likelihood of future exacerbations and hospital admission, through contact with the NHS. Although there is limited evidence to demonstrate that this is cost-effective across the health economy, self-management programmes have been shown to improve patient experience, adherence to treatment and medication and reduce emergency admissions to hospital<sup>98</sup>. Approximately 80 to 90 per cent of patients with long-term conditions, as well as their carers, can be supported to actively manage their own health<sup>99</sup>. Some people with long-term conditions consistently say that they want more access to information and support to help them understand and manage their condition<sup>100</sup>. This suggests that there is significant scope for the NHS to improve health literacy and help people manage and prevent their own illness and injury through improved self-care and self-management<sup>101,102</sup>. However, analyses of self-management courses have found that their impact is also somewhat limited because they are dominated by the most affluent and educated patient groups with long-term conditions, who already consider themselves to be effective self-managers<sup>103,104</sup>. The vast majority of patients with long-term conditions are not aware of self-care and self-management support options and there is sometimes a lack of awareness surrounding how to access the necessary resources<sup>105</sup>.

### Key message

Self-care for minor ailments and self-management of long-term conditions are effective at improving quality of life and reducing dependency on urgent and emergency care services; however there is a lack of awareness surrounding how to access self help and the demographic groups most likely to benefit are least likely to be aware.

There are a number of well established self-management programmes designed to give patients better access to the necessary tools and information to manage long-term conditions

<sup>96</sup> PAGB (2009) Making the case for self-care of minor ailments

<sup>97</sup> Self Help Forum (2013) Self Care: the story so far

<sup>98</sup> Imison et al (2011) Transforming our health care system: Ten priorities for commissioners; The King's Fund, London UK

<sup>99</sup> Da Silva D (2011). Helping People Help Themselves: A review of the evidence considering whether it is worthwhile to support self-management. London: Health Foundation.

<sup>100</sup> Department of Health (2012) Long Term Conditions Compendium of Information - Third Edition; Department of Health guidance

<sup>101</sup> Department of Health (2005) Self Care – A Real Choice: Self Care Support – A Practical Option; Department of Health

<sup>102</sup> RCGP (2012) Making integrated out of hospital care a reality; Royal College of General Practitioner and NHS Confederation

<sup>103</sup> Rogers, A (2008) The United Kingdom Expert Patients Programme: results and implications from a national evaluation; The Medical Journal of Australia; 189 (10): 21

<sup>104</sup> Ryan et al (2009) Factors associated with self-care activities among adults in the United Kingdom: a systematic review; Public Health; 9:96

<sup>105</sup> Department of Health (2007) Self Care: A National View in 2007 Compared to 2004-05; Department of Health

effectively. For example, the Expert Patient Programme (EPP) consists of courses aimed at educating patients and enabling them to take control of and manage their long-term conditions<sup>106</sup>. The Department of Health found that courses can be effective at improving patient outcomes and also reducing their subsequent utilisation of formal health services, with a seven per cent decrease in GP consultations and a 16 per cent reduction in A&E attendances<sup>107</sup>. However self-management programmes based on the EPP model are normally aimed directly at patients and can struggle to recruit sufficient numbers to have widespread impact. This is because they are limited by the numbers of patients able or willing to access and engage with them<sup>108,109,110</sup>.

Peer support groups offer a forum for patients with long-term conditions, where a communication exchange can take place and where more experienced patients can offer advice on the choices and journey a new patient may take<sup>111</sup>. Although peer support groups are widespread, and are thought to be very effective, research into their impact on the wider health economy is limited<sup>112</sup>. Health coaching, where a patient is supported by a health worker to help them achieve their personal goals, is shown to reduce patient's use of acute services, with a number of studies also demonstrating that the approach can also offer value for money<sup>113</sup>.

There have been attempts to embed self-management support into primary care due to GPs' knowledge of the needs of their patients. Continuity of care means that self-management support can take place over a long period of time and be delivered according to the need of the individual. However, competing clinical priorities and limited time, can sometimes mean that self-management support is difficult to achieve within the current primary care framework<sup>114</sup>. Despite the range of programmes available, the provision of self-management support is variable. For example, only 43 per cent of people in England who had a heart attack, bypass surgery, or an angioplasty took part in cardiac rehabilitation, despite evidence that this can reduce mortality and improve quality of care<sup>115</sup>. Additionally, less than 50 per cent of people with diabetes were given the opportunity to discuss their own goals for self-management<sup>116,117</sup>.

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<sup>106</sup> Kennedy, A et al (2007) The effectiveness and cost effectiveness of a national lay-led self care support programme for patients with long-term conditions: a pragmatic randomised controlled trial; *Journal of Epidemiology & Community Health* 2007;61:254-261

<sup>107</sup> Phillips et al (2010) self care reduces costs and improves health - the evidence

<sup>108</sup> Protheroe J, Nutbeam D, Rowlands G. Health literacy: a necessity for increasing participation in health care. *Br J Gen Pract* 2009;59:721-3.

<sup>109</sup> Vassilev I, Rogers A, Blickem C, Brooks H, Kapadia D, Kennedy A, et al. Social networks, the 'work' and work force of chronic illness self-management: a survey analysis of personal communities. *PLoS One* 2013;8:e59723.

<sup>110</sup> Ryan A, Wilson S, Taylor A, Greenfield S. Factors associated with self-care activities among adults in the United Kingdom: a systematic review. *BMC Public Health* 2009;9:96.

<sup>111</sup> NHS Kidney Care (2013) You're not alone: Peer support for people with long term conditions

<sup>112</sup> Greenhalgh, T (2009) Chronic illness: beyond the expert patient; *BMJ*, Volume 338, pp629-631

<sup>113</sup> Huffman MH. Health coaching: a fresh approach for improving health outcomes and reducing costs. *AAOHN J* 2010;58(6):245-250

<sup>114</sup> Kennedy, A (2013) Implementation of self management support for long term conditions in routine primary care settings: cluster randomised controlled trial; *BMJ*, Volume 346

<sup>115</sup> Richmond Group (2012) From vision to action: Making patient-centred care a reality; The King's Fund, London

<sup>116</sup> Richmond Group (2012) From vision to action: Making patient-centred care a reality; The King's Fund, London

<sup>117</sup> Royal College of General Practitioners (2011) Care Planning: Improving the Lives of People with Long Term Conditions; Royal College of General Practitioners: Clinical Innovation and Research Centre

### Key message

There are a range of programmes available to support self-management of long-term conditions but provision and uptake of these is variable across the NHS.

The effect of the growing frail elderly population and increasing morbidity necessitates a change in focus in healthcare from treatment of episodic periods of illness towards management of long-term conditions<sup>118</sup>. The Department of Health estimates there to be around 15 million people in England with at least one long-term condition and this is set to rise by a further 23 per cent over the next 25 years<sup>119,120,121</sup>. Good self-management is proven to be an effective way of reducing A&E attendances and emergency admissions to hospital amongst people with long-term conditions<sup>122,123</sup>.

Evidence suggests that care planning can improve a patient's ability to self-manage and reduce emergency admissions to hospital for patients with long-term conditions that are prone to rapid deterioration. A care plan enables identification of the issues related to a patient's condition and helps them develop ways to self-care; improving their quality of life and reducing the likelihood of their condition deteriorating<sup>124,125</sup>. However patient survey data found that only about 12 per cent of patients with long-term conditions report that they had been told they had a care plan<sup>126,127</sup>. A recent qualitative study of patients with long-term conditions found that patients generally received some elements of care planning but a structured, comprehensive process was not evident<sup>128</sup>. In the ten years from 2001 to 2011 the number of emergency admissions to hospital for conditions that could be successfully managed in primary care in England increased by an estimated 40 per cent<sup>129</sup>. They now account for approximately one in every six emergency admissions to hospital in England and cost around £1.42bn a year<sup>130,131</sup>.

### Key message

Variable management of long-term conditions in primary care may have contributed to a rise in the number of emergency admissions to hospital.

It is estimated that approximately 18 per cent (or 51 million) GP consultations per year concern minor ailments alone, which could largely have been dealt with through self-care with support

<sup>118</sup> The King's Fund (2011) The evolving role and nature of general practice in England

<sup>119</sup> Department of Health (2013) Long Term Conditions; Department of Health

<sup>120</sup> Jacobs, S () Expert Patients Programme: A community interest company; NHS Trusts Association

<sup>121</sup> Royal College of General Practitioners (2011) Care Planning: Improving the Lives of People with Long Term Conditions; Royal College of General Practitioners: Clinical Innovation and Research Centre

<sup>122</sup> Purdy, S (2010) Avoiding hospital Admissions: What does the research evidence say?; Kings Fund

<sup>123</sup> Hibbard et al (2004) Development of the Patient Activation Measure (PAM): Conceptualizing and Measuring Activation in Patients and Consumers; Health Services Research 2004 August; 39 (4 pt 1)

<sup>124</sup> Purdy, S (2010) Avoiding hospital Admissions: What does the research evidence say?; Kings Fund

<sup>125</sup> Newbould et al (2012) Experiences of care planning in England: interviews with patients with long term conditions; BMC Family Practice 2012, 13:71

<sup>126</sup> Ham et al (2012) Transforming the delivery of health and social care: the case for fundamental change; King's Fund

<sup>127</sup> Burt et al (2012) Prevalence and benefits of care plans and care planning for people with long-term conditions in England; Journal of health services research and policy; January 2012 vol. 17 no. suppl 1 64-71

<sup>128</sup> Newbould et al (2012) Experiences of care planning in England: interviews with patients with long term conditions; BMC Family Practice 2012, 13:71

<sup>129</sup> Bardsley M, Blunt I, Davies S, et al. (2013) Is secondary preventive care improving? Observational study of 10-year trends in emergency admissions for conditions amenable to ambulatory care; BMJ Open 2013;3

<sup>130</sup> Imison et al (2011) Transforming our health care system: Ten priorities for commissioners; The King's Fund, London UK

<sup>131</sup> The King's Fund (2012) Emergency hospital admissions for ambulatory care-sensitive conditions: identifying the potential for reductions



from community pharmacy services<sup>132</sup>. These services can also be an important source of advice and support for patients managing long-term conditions. With approximately 10,500 community pharmacies across England, the widespread availability of services means they are usually easy to access, with 99 per cent of people in England able to get to their local pharmacy within 20 minutes by car and 96 per cent by walking or using public transport<sup>133</sup>. Many community pharmacies have long opening hours, which means they can provide a source of medical advice or treatment for some patients when their GP surgery is closed, potentially reducing the need for them to use out-of-hours GP services<sup>134</sup>.

The traditional role of community pharmacies is to support patients in the safe use of over-the-counter and prescription medicines. More recently this role has expanded significantly to include: providing advice and treatment for common minor ailments, promoting healthier lifestyles, and supporting people with long-term health conditions<sup>135,136</sup>. Increasingly, pharmacies are being encouraged to provide enhanced services designed to reduce the need for GP and urgent care services. Eighty-five per cent of pharmacies have a consultation room, which enables pharmacists to provide services traditionally delivered by GPs. These include:

- Minor Ailment Schemes, where pharmacists provide consultations for patients with common minor ailments; and
- The New Medicine Service, where a pharmacist supports patients with selected chronic conditions using new medicines.

Small-scale evaluations of minor ailment schemes have found that treatment of common conditions in a pharmacy setting can be cost effective and can release healthcare resources, particularly GP appointments<sup>137</sup>. However, studies have found that a lack of awareness and public trust in the range of services provided by community pharmacists poses a barrier to increased uptake of the services. A 2010 survey found that only 23 per cent of pharmacy users considered pharmacies to be the best place from which to seek general health advice, with patients preferring to consult their GP<sup>138</sup>. Research suggests that pharmacists still spend the majority of their time involved in activities associated with dispensing medicine and are less confident when it comes to providing other areas of healthcare<sup>139</sup>.

### Key message

Community pharmacy services can play an important role in enabling self-care, particularly amongst patients with minor ailments and long-term conditions; however there is little public awareness of the range of services provided by pharmacists.

<sup>132</sup> PAGB (2010) PAGB annual review: the campaign for real self-care; Proprietary Association of Great Britain

<sup>133</sup> Fernandes, A (2011) Guidance for commissioning integrated urgent and emergency care: a 'whole system' approach

<sup>134</sup> Pharmaceutical Services Negotiating Committee (2013)

<sup>135</sup> Department of Health (2005) Choosing health through pharmacy: a programme for pharmaceutical public health 2005–2015. London

<sup>136</sup> Krska et al (2010) Views of the general public on the role of pharmacy in public health; Journal of pharmaceutical health services research; volume 1, issue 1, pp 33-38, March 2010

<sup>137</sup> Baqir et al (2011) Cost analysis of a community pharmacy 'minor ailment scheme' across three primary care trusts in the North East of England; Journal of Public Health; Vol 33, No 4, pp 551-555

<sup>138</sup> Krska et al (2010) Views of the general public on the role of pharmacy in public health;

<sup>139</sup> Hassell et al (2011) Workload in community pharmacies in the UK and its impact on patient safety and pharmacists' well-being: a review of the evidence; Health & Social Care in the Community, Volume 19, Issue 6, pages 561–575, November 2011

## 6. Telephone consultations

When patients are unable to manage their condition through self-care or self-management, the quickest way to access urgent and emergency care is usually through a telephone call. Telephone services can help patients access healthcare quickly, enabling them to obtain reliable clinical advice and provide reassurance to reduce worry. Under the current system there are a number of different numbers available for patients to use including:

- 999 (see section 8);
- NHS Direct;
- NHS 111; and
- GP in-hours and out-of-hours services.

### 6.1 NHS Direct and NHS 111

NHS Direct was introduced in 1997 in order to provide “easier and faster advice and information for people about health, illness and the NHS so that they are better able to care for themselves and their families”, and in the hope that the new service would also reduce or limit the demand on other areas of the NHS<sup>140</sup>. Since the development of NHS Direct, the range of urgent and emergency care services available has increased the complexity of decision-making for patients<sup>141</sup>. This has precipitated a number of policy initiatives highlighting the need for a single point of access to urgent and emergency care<sup>142,143,144</sup>.

2013 brings the national implementation of NHS 111, replacing NHS Direct along with the telephone triage elements of other urgent and emergency care services such as GP out-of-hours services. NHS 111 uses a clinical triage system to assess symptoms for severity and, where appropriate, can give healthcare advice and support over the phone. Where this is not possible, NHS 111 utilises a directory of services to direct patients to the most appropriate NHS service.

Triage over the telephone can be very accurate in some cases however, sometimes it can be inaccurate, and can lead to more patients receiving the wrong care in the wrong place and duplication within the system because there is a lack of visual or other clues. Additionally, triage services are not always aware of the alternatives to A&E services. Telephone triage is dependent on a clinical triage system and may be more likely to be risk averse and direct patients to a higher acuity of care than necessary. There is less incidence of over-triage in Australia and North America where clinical input is offered early on in the process.

#### Key message

Telephone advice can prevent many unnecessary attendances at NHS facilities. However it is sometimes difficult to accurately triage patients over the phone and, without clinical input, call handlers may sometimes over-triage if they cannot rule out a serious condition.

<sup>140</sup> Munro et al (2000) Impact of NHS Direct on demand for immediate care: observational study; *BMJ* 2000;321:150;

<sup>141</sup> Turner et al (2012) Evaluation of NHS 111 pilot sites; The University of Sheffield

<sup>142</sup> Department of Health (2001), *Raising Standards for Patients*

<sup>143</sup> Department of Health (2001) *Reforming Emergency Care*

<sup>144</sup> Department of Health (2005) *Taking Healthcare to the patient*

## 6.2 GP consultations and out-of-hours services

Telephone consultations have been used increasingly over the last few years in order to improve patient access to healthcare and optimise clinical time. Recent years have seen the proportion of GP consultations conducted over the telephone rise from three per cent in 1995 to 11 per cent in 2007<sup>145,146</sup>. The move to telephone consultations has been driven by increased demand for healthcare and pressure on GPs to provide more flexible, faster access and out-of-hours services<sup>147</sup>. Telephone consultations are conducted both in and out-of-hours.

Although there is some evidence to suggest that easier access to clinical advice through telephone consultations may also perpetuate a culture of seeking help for minor conditions<sup>148</sup>, telephone consultations are particularly effective at providing fast, convenient and cost-effective follow-up care and helping patients to manage chronic or long-term conditions<sup>149</sup>.

A 2009 study found that telephone consultations for patients seeking advice during normal working hours took, on average, half the time of face-to-face consultations (4.6 minutes compared to 9.7 minutes) and patient satisfaction appeared to differ little between consultation types<sup>150</sup>. Some studies of GP out-of-hours services have shown that the elderly usually prefer face-to-face contact with a familiar doctor<sup>151,152</sup>. There are also some risks that may arise from the lack of visual clues and medical history being available to clinicians, particularly for patients with urgent and life-threatening conditions<sup>153,154</sup>. However, telephone consultations are popular with many patients. Additionally, telehealth devices for monitoring patients with long-term conditions have been found to be effective at reducing hospital admissions (by around 20 per cent), and effective at reducing mortality rates but not necessarily effective at reducing health costs – which were found to be equivocal<sup>155</sup>.

Proven and tested systems exist in England, where telephone consultations are used routinely in general practice, whilst other developed systems include telephone assessment of all patients prior to attending the practice. The 'Doctor First' model is used in some practices across England and encourages an effective use of clinical time. The system enables all patients to have their first doctor contact over the telephone, which can result in either advice, referral to another care provider or being given an appointment to visit; the system has effectively freed up capacity, with up to 80 per cent of patients, being able to see a doctor on the same day as their telephone call. The 'Doctor First' model has demonstrated a cost saving of approximately £100k per practice through prevention of avoidable attendance and

<sup>145</sup> Campbell et al (2013) The effectiveness and cost-effectiveness of telephone triage of patients requesting same day consultations in general practice: study protocol for a cluster randomised controlled trial comparing nurse-led and GP-led management systems (ESTEEM); *Trials* volume 14

<sup>146</sup> McKinstry et al (2010) The quality, safety and content of telephone and face-to-face consultations: a comparative study; *BMJ Quality and Safety in Health Care* 2010;19:298-303

<sup>147</sup> Patient.co.uk (2009) Telephone Consultations

<sup>148</sup> Pynall, S. (2010). Telephone Triage – The missing Link. *Telephone Consultation Services*

<sup>149</sup> Car et al (2003) Telephone Consultations; *BMJ*. 2003 May 3; 326(7396): 966–969

<sup>150</sup> McKinstry et al (2010) The quality, safety and content of telephone and face-to-face consultations: a comparative study; *BMJ Quality and Safety in Health Care* 2010;19:298-303

<sup>151</sup> Poole R et al (2010). Exploring patients' self-reported experiences of out-of-hours primary care and their suggestions for improvement: a qualitative study. *Family Practice* 2011; 28: 2010-219

<sup>152</sup> Foster et al (2001) A qualitative study of older people's views of out-of-hours services; *British Journal of General Practice*; 2001 September; 51(470): 719–723

<sup>153</sup> Pynall, S. (2010). Telephone Triage – The missing Link. *Telephone Consultation Services*

<sup>154</sup> McKinstry et al (2010) The quality, safety and content of telephone and face-to-face consultations: a comparative study; *BMJ Quality and Safety in Health Care* 2010;19:298-303

<sup>155</sup> Stevenon et al (2012) The impact of telehealth on use of hospital care and mortality; Nuffield Trust

admissions to hospital and a time saving of between five and ten hours per week<sup>156,157</sup>. Additionally, a recent analysis of the GP patient survey, A&E attendance data and deprivation found that GP practices using systematic telephone consultations, such as the 'Doctor First' model, are associated with a 20 per cent lower A&E usage, irrespective of deprivation<sup>158</sup>.

Telephone consultations require fewer resources and are a useful tool for the GP and patient. However, a recent qualitative study of out-of-hours care found that some patients often seek more information and help for their condition from other health services prior to a telephone consultation or immediately after, using the second interaction as a conformation of what has been discussed with them. This results in duplication within the system<sup>159</sup>.

### **Key message**

Telephone consultations are becoming increasingly popular, are less resource-heavy for general practice than face-to-face consultations and their systematic use is linked to reduced use of A&E departments. However some patients lack confidence in telephone advice and are sometimes more likely to pursue a second opinion inappropriately, leading to duplication of service provision, in some cases.

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<sup>156</sup> Dr Stephen Clay & Harry Longman. Transformation of Urgent Care: How evidence based GP Practice is Reducing Emergency Admissions

<sup>157</sup> Productive Primary Care – Doctor First. <http://www.productiveprimarycare.co.uk/doctor-first.aspx>

<sup>158</sup> Longman, H et al (2012) Comparison of mode of access to GP telephone consultation and effect on A&E usage; Patient Access; url: [www.patient-access.org.uk](http://www.patient-access.org.uk)

<sup>159</sup> Poole R et al (2010). Exploring patients' self-reported experiences of out-of-hours primary care and their suggestions for improvement: a qualitative study. Family Practice 2011; 28: 2010-219.

## 7. Face-to-face care

There are many different routes that a patient can follow if they are seeking a face-to-face consultation, which over the last decade have included a large increase in nurse-led consultations. These include:

- Booking a GP appointment at the patient's own practice;
- Attending a walk in centre, where the patient does not have to be registered (these have a range of nomenclature including: urgent care centres, minor injury units, or 8-8 centres); and
- Attending an A&E department.

In many cases patients prefer to see their own GP but default to the other options if they are not confident of an urgent appointment at a time convenient to them.

These multiple access points can cause confusion among patients over where they should seek help from and when, and it is common for the first point of contact to refer on to another<sup>160</sup>. This often leads to duplication and added costs.

### 7.1 Access to primary care

General practice consultation activity levels have been steadily increasing over the last 10 years. Research has shown that the average patient has increased their number of GP consultations from 3.9 consultations per year in 1995 to 5.5 consultations in 2008<sup>161</sup>.

There are important variations in access to GP services across England; the King's Fund study into inequalities in GP access and improving care highlights that the availability of general practitioners is inequitable, ranging from fewer than 50 to more than 80 per 100,000 population. The study demonstrated that in rural areas, access was far more limited than it was in high population and urban areas, but also concluded that GPs in rural areas treated more patients wholly within the practice. Rural patients were less likely to attend an A&E department or an urgent care centre: this was likely to be due to reduced access to these services. Evidence suggests that in primary care, a higher continuity of care with a GP is associated with lower risk of admission<sup>162</sup>. The report also highlighted demographic pressures, such as an ageing population which will impact on this further.

The GP Patient Survey: January – September 2012 highlighted that only one in five patients were able to get an appointment on the same day and around one in eight said they were not able to book ahead for their appointment, with the same amount saying they could not see their preferred clinician. Whilst most of these people accepted an alternative time, date or clinician, the survey showed that a small minority decided to go elsewhere for their treatment – nine per cent visited an A&E department, four per cent had a consultation over the phone and three per cent went to a pharmacist. Because of the volume of patients using GP surgeries

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<sup>160</sup> RCGP, RCN, RCPCH & CEM (2012) Right care, right place, first time?: JOINT STATEMENT by the Royal College of General Practitioners (RCGP), Royal College of Nursing (RCN), Royal College of Paediatrics and Child Health (RCPCH) and the College of Emergency Medicine (CEM) on the urgent & emergency care of children and young people

<sup>161</sup> Trends in Consultation Rates in General Practice 1995 to 2008: Analysis of the Q Research database; The Information Centre, 2009

<sup>162</sup> Purdy, S, Avoiding hospital admissions, 2010

daily, even a small proportion of patients choosing to go elsewhere can have a large impact on other urgent and emergency care services.

Furthermore, England's urban areas contain increasingly transient populations, including migrants from other countries<sup>163</sup>. These populations will include people who do not have a registered GP and who may not have any knowledge or experience of using the NHS. There are also large numbers of vulnerable and often inaccessible groups including drug and alcohol users and people with mental health problems<sup>164</sup>. Unfortunately, many of the areas with this population mix are under-doctored, which creates further potential for these patients to access an A&E department as their first point of contact<sup>165</sup>.

### Key message

Urgent access to GP appointments across England is variable. Additionally, in urban areas where demand is high and transient populations exist, many may use an A&E department as their first point of urgent and emergency care.

Management of patients with long-term conditions in primary care plays a key role in preventing acute episodes of illness and resultant A&E attendances and emergency admissions to hospital. Evidence suggests that there is variation in the management of this cohort of patients within primary care services<sup>166</sup>. This is illustrated by recent studies, which found:

- A fivefold variation among PCTs in emergency admissions to hospital rates for asthma patients aged under 18 years old<sup>167</sup>;
- Fifty-one per cent of people with type 2 diabetes and only 32 per cent of people with type 1 diabetes received the appropriate care according to NICE guidelines<sup>168</sup>; and
- Significant variation in the ability of GPs to identify dementia early, preventing patients from being able to access help and support<sup>169</sup>.

More than four million people in England with a long-term physical health condition also have a mental health problem, and many of them experience significantly poorer health outcomes and reduced quality of life as a result<sup>170</sup>. For example an estimated three-quarters of people with depression or crippling anxiety disorders do not receive treatment in primary care<sup>171</sup>. Although there has been major progress in providing evidence based treatments for depression (one of the most common conditions in primary care in the past few years) only 15 per cent of patients can access this care<sup>172</sup>. Patients with a co-morbid mental health condition are likely to have poorer levels of self-care and experience exacerbations, resulting in increased use of urgent

<sup>163</sup> Primary Care Foundation (2010). Primary Care and Emergency Departments. Primary Care Foundation.

<sup>164</sup> Ibid.

<sup>165</sup> Ibid.

<sup>166</sup> Alshamsan, R (2010) Impact of pay for performance on inequalities in health care: systematic review; Journal of Health Services Research & Policy

<sup>167</sup> Goodwin et al (2010) Managing people with long-term conditions; The King's Fund, London UK

<sup>168</sup> Ibid

<sup>169</sup> Ibid

<sup>170</sup> Naylor et al (2012) Long-term conditions and mental health: the cost of co-morbidities. The King's Fund, London, UK.

<sup>171</sup> LSE (2012) How mental illness loses out in the NHS; a report by the Centre for Economic Performance's Mental Health Policy Group

<sup>172</sup> LSE (2012) How mental illness loses out in the NHS; a report by the Centre for Economic Performance's Mental Health Policy Group

and emergency care services<sup>173,174</sup>. A 2012 King's Fund report found that links between mental health professionals and primary care, where most people with mental health problems are supported, have been neglected in many areas<sup>175</sup>. A report by the Schizophrenia Commission identified that:

- There is a lack of clarity around the role and responsibility of GPs regarding mental health conditions; and
- Primary care practitioners often lack the confidence to support patients with chronic mental health conditions<sup>176</sup>.

### **Key message**

Primary care can struggle to manage some patients with long-term conditions effectively, including those with mental health problems. This may lead to avoidable A&E attendances and emergency admissions to hospital.

Out-of-hours services provide primary care to patients who need to be seen quickly when their GP practice is closed. Since 2004 GP practices have been able to opt out of providing out-of-hours care and responsibility for commissioning these services has been transferred to local commissioning organisations. When this arrangement was introduced, nine out of ten GP practices decided to opt out of providing out-of-hours care, handing over provision to a range of different types of organisations.

These organisations operate independently of local GP (in-hours) services and are often orientated around large walk in centres, where face-to-face care can be provided centrally. The Urgent and Emergency Care Clinical Audit Toolkit states that all GP out-of-hours services are to be routinely monitored<sup>177</sup>. A 2010 Department of Health study found that most GP out-of-hours services in England were good but standards varied unacceptably<sup>178</sup>. Primary Care Foundation data supports this, showing large differences between geographic areas (the study compared areas covered by primary care trusts in 2010) in how quickly patients can access face-to-face care through out-of-hours services. In many areas, all emergency patients calling their out-of-hours service are seen face-to-face within one hour; however in at least four areas, the local providers were only able to comply with this standard in 60 per cent of cases<sup>179</sup>. In an investigation into one out-of-hours provider, which had been delivering a poor standard of care, many of the issues were attributed to the local commissioners' lack of ability to challenge services and enforce standards of care<sup>180</sup>.

<sup>173</sup> RCGP (2011) Primary Care Guidance: Treating Depression in people with Coronary Heart Disease (CHD);

<sup>174</sup> Naylor et al (2012) Long-term conditions and mental health: the cost of co-morbidities. The King's Fund, London, UK.

<sup>175</sup> Naylor et al (2012) Long-term conditions and mental health: the cost of co-morbidities. The King's Fund, London, UK.

<sup>176</sup> The Schizophrenia Commission (2012) The Abandoned Illness;

<sup>177</sup> Royal College of General Practitioners, Royal College of Paediatrics and Child Health and the College of Emergency Medicine (2010) Urgent and Emergency Care Clinical Audit Toolkit

<sup>178</sup> Colin-Thome et al (2010) General Practice Out-of-Hours Services: Project to consider and assess current arrangements; Department of Health

<sup>179</sup> Primary Care Foundation (2011) Out of Hours Services Benchmark

<sup>180</sup> Stern, R (2010) Improving out-of-hours care; GP Commissioning in association with NHS Alliance, article 19<sup>th</sup> November 2010;

### Key message

Most out-of-hours services work effectively to deliver a high standard of care to patients who need urgent care when their GP practices are closed. However there are variations in the standard of care provided and commissioners are not always able to hold providers to account.

## 7.2 Urgent care walk-in services

Urgent care walk-in services were developed to have a 'see and treat' approach to less serious yet immediate illness or injury<sup>181</sup>. This approach was set up to address the problems associated with demand management and treatment waiting times in A&E<sup>182</sup>. However, in addition to the numerous names given to facilities providing urgent care there is significant variation in the care offered between them for different conditions and for patients of different age groups, and within services of the same name, across different geographies. This can be in respect of the services provided, clinical staffing, opening hours, protocols or overall quality of care<sup>183</sup>.

Currently, urgent care walk-in services across England range from large integrated care services that encompass a 24/7 urgent care centre, GP services in and out-of-hours, a dentist, a rapid response team and radiology services to a minor injuries unit that has variable access to essential healthcare professionals and diagnostics, and may not be available out-of-hours. These variations are confusing and can be overwhelming to an individual that needs urgent medical attention, causing services to be utilised in a way that may not best suit a patient's needs.

The Primary Care Foundation categorised facilities that deliver urgent care into three main types<sup>184</sup>:

- Full case mix urgent care centres co-located with an emergency department
- Full case mix stand alone urgent care centres; and
- Restricted case mix urgent care centres.

This categorisation serves to further highlight the variation in urgent care services but also the different extent to which they rely on healthcare professionals and the public's ability to access them appropriately in order to be effective in providing urgent care. Urgent care services are highly fragmented and generate confusion among patients<sup>185</sup>. The co-located urgent care centre relies on accurate triage by an 'in house' healthcare professional and arguably can provide effective services without the patient even knowing of its existence; whereas the stand alone and restricted case mix centres are entirely dependent on patients and 'external' healthcare professionals having knowledge of both their existence and their services. Evidence suggests that walk-in centres are not effective in reducing A&E department attendances except when they are co-located and integrated with A&E departments<sup>186</sup>.

<sup>181</sup> Royal College of General Practitioners (RCGP) (2011). Guidance for commissioning integrated urgent and emergency care. A 'whole system' approach. RCGP

<sup>182</sup> Primary Care Foundation (2010). Primary Care and Emergency Departments. Primary Care Foundation

<sup>184</sup> Primary Care Foundation (2012). Urgent care centres: What works best? A discussion paper. Primary Care Foundation.

<sup>185</sup> The King's Fund (2011) Managing urgent activity – urgent care

<sup>186</sup> The King's Fund (2013) Urgent and Emergency Care, A review of NHS South of England



In this respect, information to help patients choose the appropriate service for their medical condition is not easily accessible or available<sup>187</sup>. This can lead to further complications in terms of patients not being seen by the appropriately skilled group that is most likely to be able to treat their condition safely because the patient may have made the wrong choice of service<sup>188</sup>. A study found that an A&E department with a co-located urgent care service had a number of signs for urgent and emergency care but did not state or have assistance to explain what each of the services delivered<sup>189</sup>.

The combined effect of the vast nomenclature of urgent care services, the diversity and variation of services provided at these facilities and a lack of information makes it difficult for patients to navigate to the right service for their urgent care need. Conversely, most people know that an A&E department will be open 24/7 and when faced with uncertainty about the service options available or their level of need, they know that A&E will provide a definitive point of care.

### **Key message**

The fragmentation and diverse nomenclature of urgent care services across England causes confusion amongst patients and healthcare professionals in terms of services offered. This can lead to patients presenting at services that may not best suit their needs.

The variation in quality of care delivered within urgent care services can also influence where patients choose to attend when they require urgent care. Variation exists in the way clinical protocols are adhered to, and advice given to the patient. Nationally, there is no protocol or policy that exists for staff in urgent care services to follow-up patients that have used the service. This lack of follow-up care can lead to patients presenting to an A&E department due to a lack of sufficient information or the medical problem recurring. This can result in a duplication of resources by both urgent and emergency care services; inefficiency and reinforcing the patient perception that A&E departments are where definitive treatment will be given.

Variation also exists in access to different urgent care services. A review of urgent care centres<sup>190</sup> found variation in acceptance criteria for treatment. Some services allowed patients to walk in, others only following streaming via the A&E department; some treated all routine cases within their ability, others treated only the urgent need and referred patients back to their GP. Evidence has demonstrated that a number of patients from vulnerable groups in the community are more likely to use A&E departments when the services may not best suit their needs due to a number of reasons that are linked to their social wellbeing and reduced access to services within primary care that address these issues<sup>191</sup>. There is a danger that if these groups are turned away from emergency care or re-directed to use different services they may not receive any care at all<sup>192</sup>. Therefore it is necessary to ensure primary care is able to provide individuals with the support they need, in order to reduce the number of acute episodes. In order to have a sustainable urgent and emergency care service, there needs to be

<sup>187</sup> Primary Care Foundation (2010). Primary Care and Emergency Departments. Primary Care Foundation

<sup>188</sup> Ibid.

<sup>173</sup> Primary Care Foundation (2010). Primary Care and Emergency Departments. Primary Care Foundation

<sup>190</sup> Primary Care Foundation (2012). Urgent Care Centres: What works best? A discussion paper. Primary Care Foundation.

<sup>191</sup> Primary Care Foundation (2010). Primary Care and Emergency Departments. Primary Care Foundation.

<sup>192</sup> Primary Care Foundation (2010). Primary Care and Emergency Departments. Primary Care Foundation.

effective integration between a number of public service interdependencies<sup>193</sup> in the community to support and promote the health and wellbeing of the public.

National Reporting and Learning System (NRLS) data illustrates that there are significant patient safety issues for children who attend minor injury units where the medical cover is provided by out-of-hours GPs. The incidents suggest that staff at minor injury units were sometimes unable to direct or transfer patients to the care service most appropriate to their needs. Examples of incidents reported can be summarised under themes including: lack of equipment, inability to deal with child's presenting condition, delay in ambulance transfer out of the minor injury unit for children, children presenting although the minor injury unit is closed, failure to recognise safeguarding issues and critically ill children.

#### **Extracts from NRLS data**

*A poorly child arrived at a minor injury unit with an unidentified rash covering both legs and body. An emergency call was made to request an ambulance one minute after the patient arrived. The caller advised control that the case needed to be top priority. However no ambulance had arrived after 30 minutes and, with the child's condition deteriorating, a second emergency call was made, this time control advised that the ambulance was one minute away.*

*An asthmatic teenager arrived at a minor injury unit at 1am. The patient was able to talk but struggling to breathe. The minor injury unit was closed at that time so the newly qualified nurse who met him was unable to offer treatment. The nurse did not know where to send him, being unsure that his symptoms were severe enough to warrant calling 999. The nurse said that this was one of a few similar incidents that took place while on duty overnight.*

#### **Workforce capacity and skill mix**

The quality of patient care and experience is influenced by the clinical staff available and the seniority of staff available<sup>194</sup>. The availability of staff is too often dependent on the time of the day. This variation occurs in urgent care services right across England, and such variation prompts patients to avoid these services and go directly to an A&E department, where they are assured that they will have access to the clinical staff and diagnostics needed, even if their situation is not life-threatening. Patients need reassurance from the urgent care services that when they present to the service, they will have access to the appropriate services and staff; this is not currently happening consistently. Some patients are not treated at the centre to which they present due to the variability of skills and capabilities of clinical staff as well as the availability of diagnostic tools for a restricted period<sup>195</sup>; this can lead to a delay in the patient treatment pathway and is not the prompt service a patient should receive when they use an urgent care service.

Recent research has shown that urgent care centres that are able to see and treat patients within one consultation, rather than patients being seen by various people demonstrated improvement in the patient experience<sup>196</sup>. The Primary Care Foundation recommend this approach, highlighting this method as beneficial in terms of patient safety as it reduces patient

<sup>193</sup> Royal College of General Practitioners (RCGP) (2011). Guidance for commissioning integrated urgent and emergency care. A 'whole system' approach. RCGP.

<sup>194</sup> Commission for Healthcare Audit and Inspection (2008). Not just a matter of time. A review of urgent and emergency care services in England. Healthcare Commission.

<sup>195</sup> Primary Care Foundation (2012). Urgent care centres: What works best? A discussion paper. Primary Care Foundation.

<sup>196</sup> Primary Care Foundation (2012). Urgent care centres: What works best? A discussion paper. Primary Care Foundation.

waiting times, which can improve the patient experience. However, this approach is not commonly found in urgent care services across England. Instead, patients can be referred to a number of services which leads to an inefficient duplication of efforts and a negative impact on patient experience.

Additionally, a study into clinical pathways for children with a fever in urgent care found that patient contacts ranged from one to 13 across all services during their illness, despite the child's episode of illness lasting only three days on average. Approximately half of repeat contacts (221 of 350) were initiated by the services themselves, rather than by parents<sup>197</sup>.

**Key message**

Urgent care services are characterised by variation and a lack of standardisation and clear information. This contrasts with the strong identity of A&E departments. Variation in acceptance and quality of care provided can result in delayed treatment or multiple contacts and a poor experience of care, as well as inefficient use of expertise and resources.

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<sup>197</sup> Department of Health (2010) To understand and improve the experience of parents and carers who need advice when a child has a fever (high temperature)

## 8. 999 emergency services and accident and emergency departments

### 8.1 999 emergency calls

There has been a significant rise in the volume of calls to the 999 emergency service from 4.7 million in 2001/02 to over 8 million (2010/11)<sup>198</sup>. Many calls relate to non life-threatening conditions and there is increasing concern that many calls to 999 services are based on fundamental misconceptions about the types of treatment other urgent-care options can provide<sup>199</sup>.

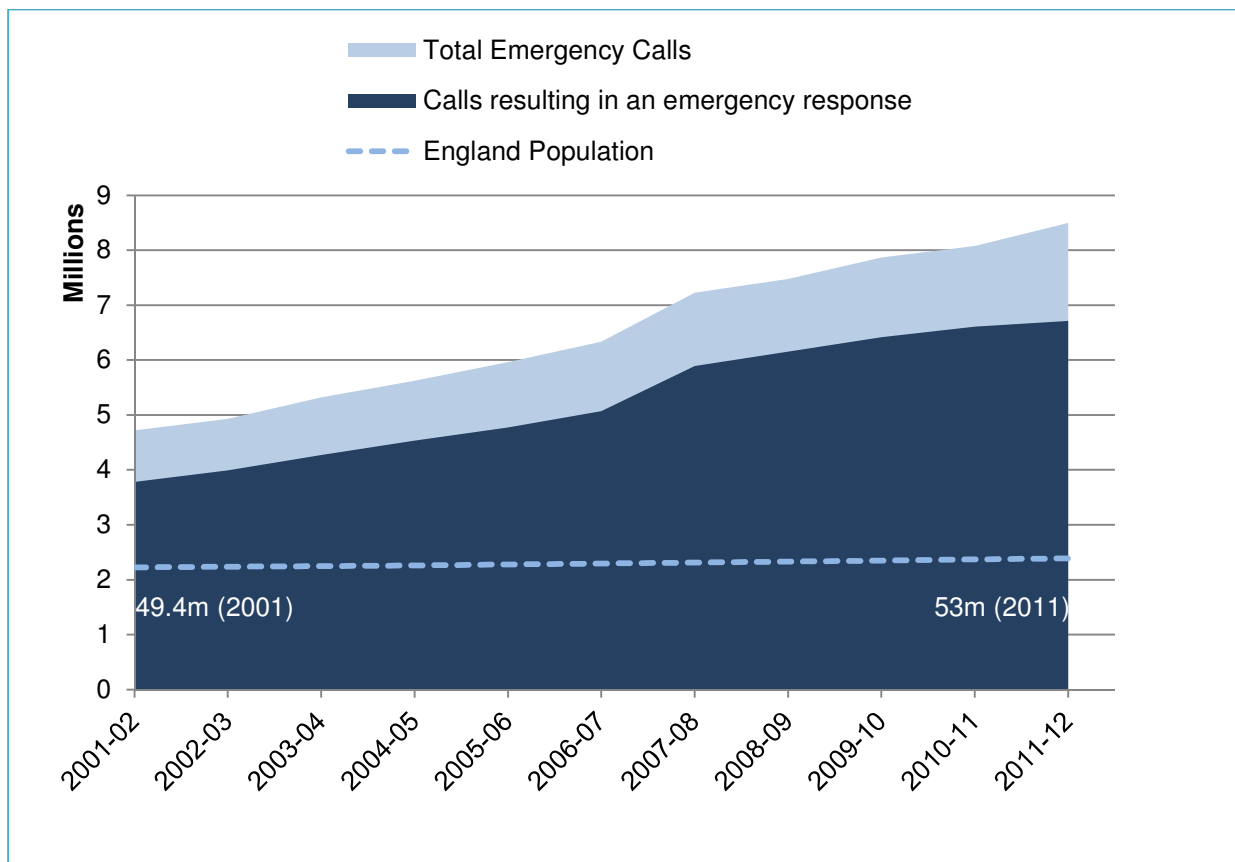
Ambulance call outs are by far the most expensive way for patients to access urgent and emergency care. The cost of ambulance services in England is estimated to be about £1.1bn per year and is rising at about four per cent per annum<sup>200</sup>. Although 999 emergency call outs are associated with only two per cent of urgent and emergency care cases, they are thought to be responsible for about 22 per cent of the commissioning costs<sup>201</sup>.

The volume of calls and incidents resulting in a 999 emergency response has increased in the last ten years, and this will cause added pressure in the future as ambulance trusts attempt to reduce spending. Most 999 calls result in an emergency response and the rise in emergency calls reflects the rise in emergency responses (figure 6). There is increasing concern that the general NHS approach to triage, which is to assume seriousness, is leading to more emergency responses than necessary, at significant cost to the NHS<sup>202</sup>.

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<sup>198</sup> Agnelo Fernandes (2011) Guidance for commissioning integrated urgent and emergency care: A 'whole system' approach  
<sup>199</sup> Booker et al (2013) Patients who call emergency ambulances for primary care problems: a qualitative study of the decision-making process; *Emergency Medicine Journal*;  
<sup>200</sup> Fernandes, A. (2011) Guidance for commissioning integrated urgent and emergency care: a whole system approach; Royal College of General Practitioners Centre for Commissioning  
<sup>201</sup> PA Consulting Group (2008) Healthcare for London: Study of Unscheduled Care in 6 Primary Care Trusts, Central Report  
<sup>202</sup> H Snooks and J Nicholl (2007) Sorting patients: the weakest link in the emergency care system; *Emergency Medicine Journal*, 2007 February; 24(2): 74

**Figure 6: Emergency calls and incidents resulting in emergency response 2001/02-2011/12**



Source: Ambulance Services England

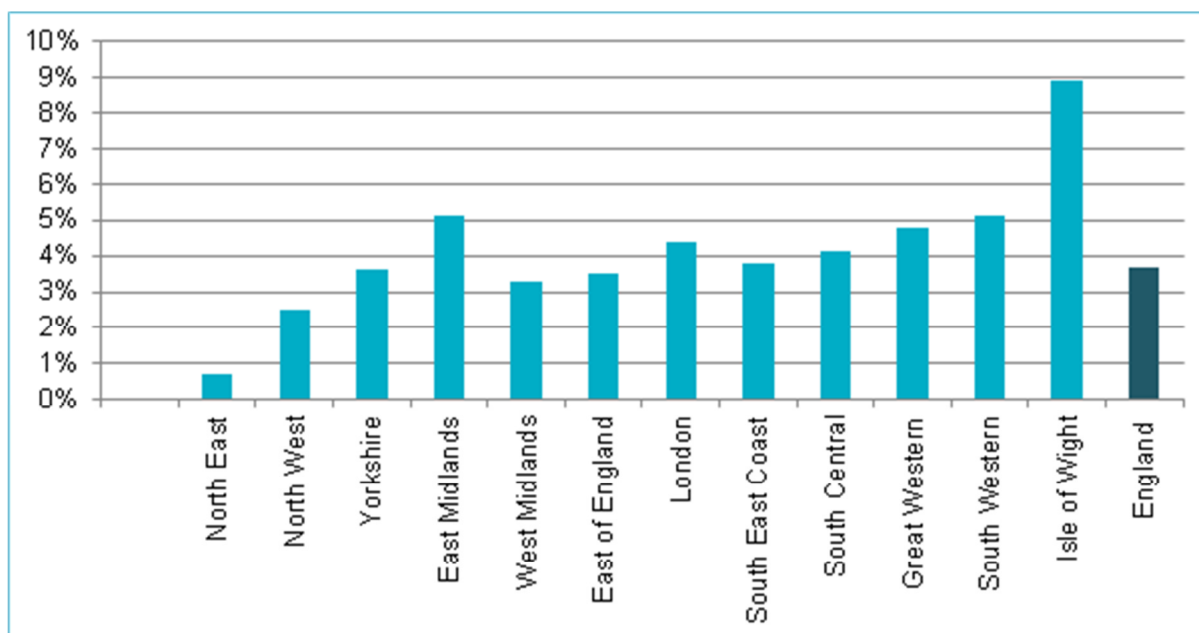
Sending an ambulance to care for a patient who would be better treated elsewhere wastes valuable time as well as resources. To avoid this, NHS emergency dispatch staff are trained to give advice by telephone to deal with non-urgent cases. Patients may be advised on self-care, or to seek help from an alternative source, such as GP out-of-hours services or a minor injuries unit.

However, only a small number of calls are currently closed with telephone advice only: 3.7 per cent overall in England. The highest proportion is in the Isle of Wight and the lowest in the north east area<sup>203</sup>. By comparison, in France, due to differences in the urgent and emergency care system including enhanced triage, only about 65 per cent of emergency calls actually receive an ambulance response<sup>204</sup>.

<sup>203</sup> Note: Department of Health recorded data from LAS for Oct to Dec 2012 shows a slightly higher figure c.5.8-7% - figures are inconsistent between [www.data.gov.uk](http://www.data.gov.uk) and <http://transparency.dh.gov.uk/2012/06/19/ambqdownloads/>

<sup>204</sup> Nikkanen HE, Pougès C, Jacobs LM. Emergency medicine in France. *Annals of Emergency Medicine* (1998). 31: 116–120

**Figure 7: Emergency calls closed with telephone advice only**



Source: Ambulance Services England

In many cases where an ambulance is sent out in England, it is later found that one was not required<sup>205</sup>. Comparison of the number of cases resolved by telephone advice alone and the number of cases found not to require an ambulance by a responding team suggests that the former represents a small proportion of the possible number of cases that could either be dealt with remotely or by directing patients to more appropriate healthcare facilities.

National Reporting and Learning System data also demonstrates that incidents also occur where the wrong type of response is sent to a call, for example a technician crew is sent when a paramedic response was requested.

#### **Extract from NRLS data**

*A patient needed to be transferred from one hospital to another in order to treat severe internal bleeding that had taken place overnight. A paramedic crew had been requested to oversee the transfer but a technician crew was sent. During the transfer, the patient experienced another bleed and went into cardiac arrest. On arrival at A&E, medical staff attempted to revive the patient using CPR but could not prevent the patient from dying.*

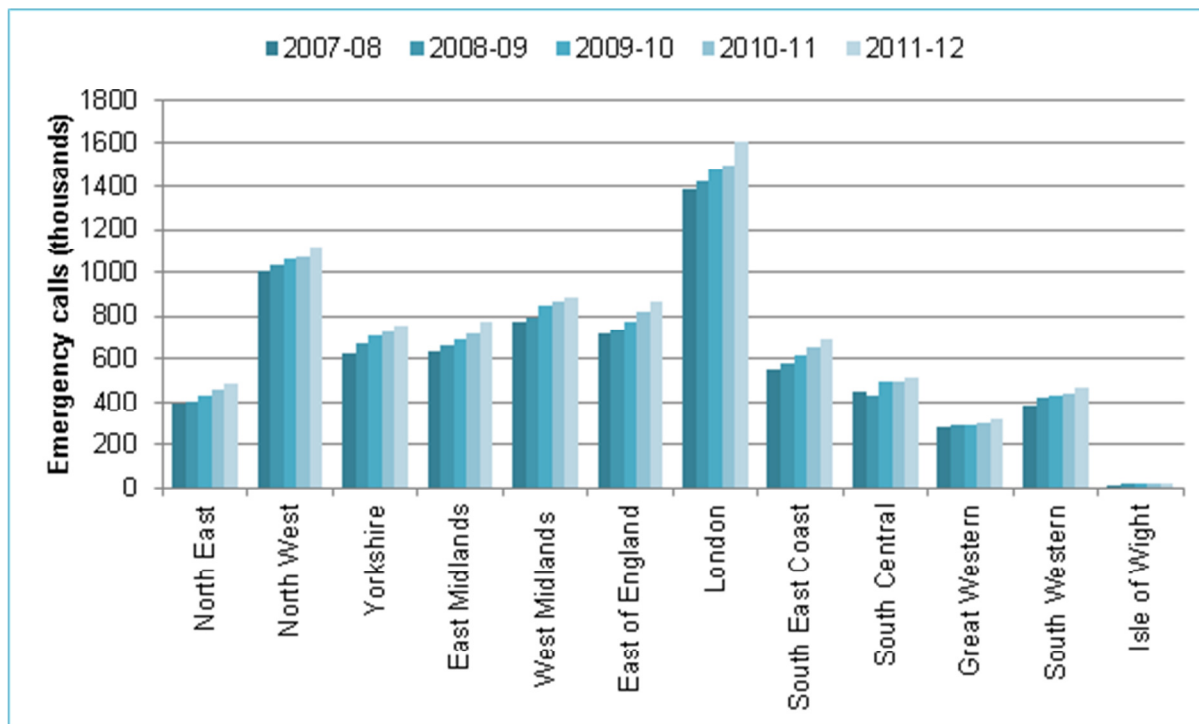
## **8.2 Pre-hospital emergency care**

Many 999 calls relate to non-life threatening or non-serious conditions. This may be because of a perceived or actual lack of alternative options in the area, or because a patient's symptoms are both worrying and unclear. While there are a range of alternatives to A&E departments for people with less serious conditions, the differences between the services offered and their hours of operation means that the public's default position in a crisis is often to either call 999

<sup>205</sup> HM Government, Data.gov.uk. Ambulance Services England – 2011-12. (<http://www.data.gov.uk/dataset/ambulance-services-england-2011-12/resource/ed7cde68-a4e6-4a49-80dc-7b007fafce6a>). Note, significant fluctuation between years in some areas; nonetheless, significant wasted resource indicated.

or to take the patient (or self-present) to their local A&E department. Numbers of emergency calls have risen steadily across all areas of England<sup>206</sup>.

**Figure 8: Rise in emergency calls in England 2007 – 2012**



Source: Ambulance Services England

There have been attempts to develop pre-hospital services in England to enable patients to be treated at the scene or at home, and to therefore avoid unnecessary attendance at A&E departments. Despite these measures, however, a high proportion of emergency 999 calls still result in an attendance at hospital with patients who could receive treatment elsewhere.

The ambulance service in England, like that of the USA, was developed predominantly to transport emergency patients as quickly as possible to a facility where they can be treated by a more specialist team. In contrast, many other European and Scandinavian countries use a system whereby more care is delivered at the scene by medical or nursing staff<sup>207</sup>.

In Sweden, for example, a registered nurse with specialist training to deliver advanced care in the field is present in all emergency ambulances<sup>208</sup>. In France, some response units are staffed by a qualified physician, a nurse and/or an emergency medical technician. The physician may conduct a full set of observations, examinations and interventions on site, and may decide to admit the patient directly to hospital, bypassing an A&E department altogether. In such systems, the ambulance is likely to spend longer at the scene compared with the English ambulance service. However, there is a lack of evidence that this improves overall outcomes.

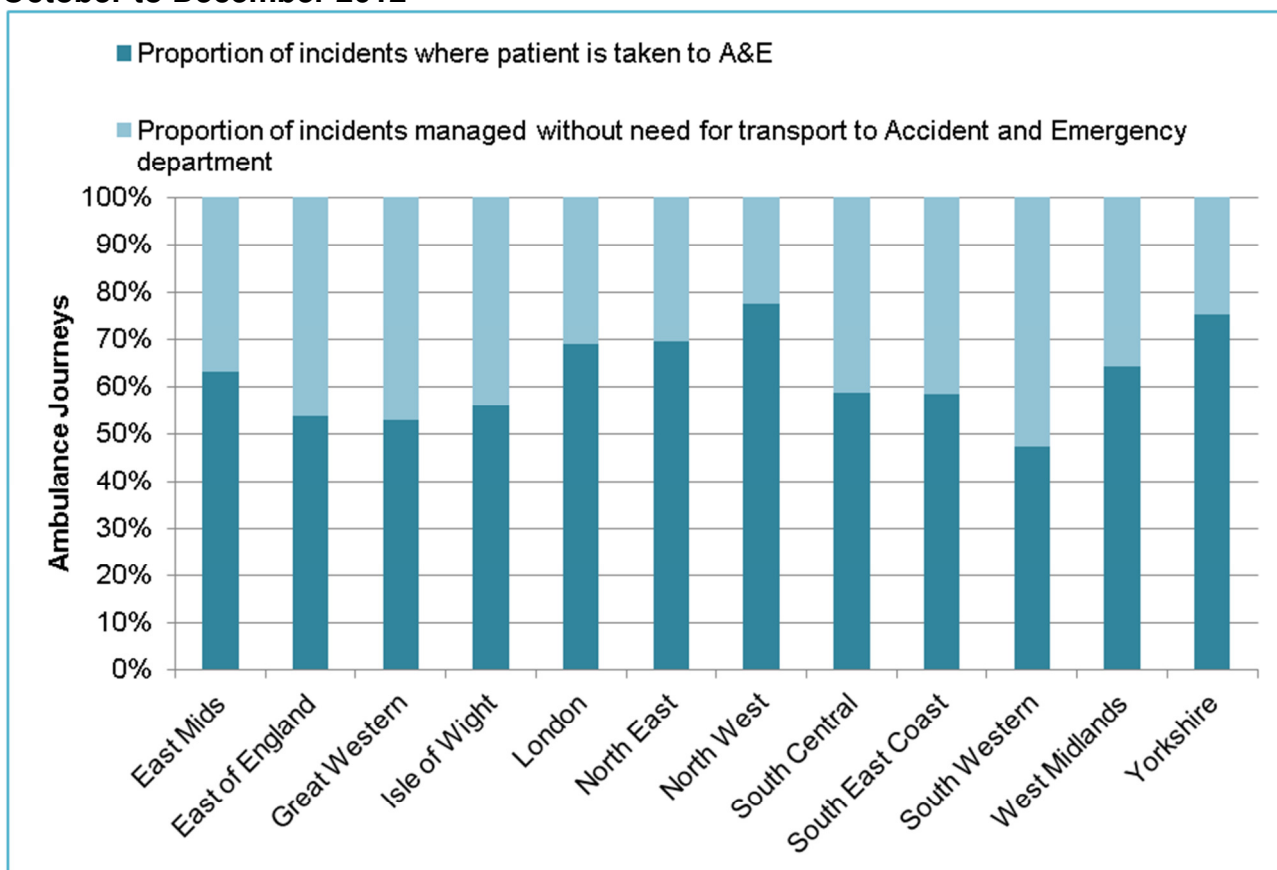
<sup>206</sup> HM Government, Data.gov.uk. Ambulance services England – 2011-12. <http://www.data.gov.uk/dataset/ambulance-services-england-2011-12/resource/ed7cde68-a4e6-4a49-80dc-7b007fafce6a>

<sup>207</sup> Dick WF. "Anglo-American vs. Franco-German emergency medical services system". *Prehospital Disaster Medicine* (2003) Jan-Mar;18

<sup>208</sup> Saddock, J., Arnjhjort, T, Malmquist, P. and Aujalay, N. "Emergency Medicine in Sweden", *American Academy of Emergency Medicine* (2007);14:14,16-17. Check – this was a target for 2007

In England, many patients are treated at the site of the incident by ambulance teams. In 2011/12, 1,809,300 patients (21.3 per cent) received treatment in their homes or at the scene by ambulance staff and did not require onward transport. This included both category A patients (those with apparently life-threatening conditions) and less serious category C patients. Nonetheless, a relatively high number of cases (around 64 per cent in England overall) are transported by ambulance to an A&E department<sup>209</sup>. Some degree of over-triage by ambulance services is expected – protocols are designed to err on the side of caution to ensure patient safety. A similar degree of over-triage might therefore be expected across different areas. However, while the average for England in the last quarter of 2011/12 was around 64 per cent, this figure rose to around 77 per cent in the north west and fell to 47 per cent in the south west (figure 9). This demonstrates significant variation in practice and scope for improvement in some areas.

**Figure 9: Patients taken to A&E and those transported elsewhere or discharged at scene, October to December 2012**



Source: Ambulance Services England

Some of this variation may be due to casemix and differences in the healthcare facilities available to ambulance crews in the different regions – for example, numbers of urgent care centres available in the area. However, it suggests that different protocols or practices, or uniform availability of alternative sources of care, could result in more patients either being treated at the scene, or transported to a more appropriate care setting. This would reduce the

<sup>209</sup> Department of Health, 2012. Ambulance quality indicators data downloads (<http://transparency.dh.gov.uk/2012/06/19/ambqidownloads/>)



number of patients transported to an A&E department and allow more patients to remain in their homes, or to receive care in more appropriate settings.

### 8.3 Accident and emergency departments

Unlike some urgent care offerings, patients are guaranteed access to an A&E department 24 hours a day, seven days a week. The work of an A&E department is unbounded; it provides care for emergency conditions – illness, mental health problems and injury of all severities – of all types and for patients of all ages. There has not been a reduction in attendances to A&E departments over recent years – many of which are self-referral – despite a large growth in the availability of other options, placing greater demand on the service.

Due to the unplanned nature of patient attendance; A&E departments must be able to provide initial treatment for a broad spectrum of illnesses and should also have the required staffing and skills to treat illness and injury for all age groups.

In some hospitals, patients who have already been seen by a GP, who has recommended hospital admission, bypass the A&E department and go directly to the acute medical or surgical unit or specialty inpatient beds<sup>210</sup>. In some hospitals these patients are seen by an initial assessment team in case there is scope for rapid investigations, diagnosis and discharge. In other areas these patients are directed through the A&E department, with in-patient resources devoted to this stream of patients in A&E.

Proper staffing is the ‘single most important factor’ in providing a high quality, timely and clinically effective service to patients<sup>211</sup>. There is a need to ensure a balanced workforce within an A&E department in order to provide a safe service. The UK’s historical model of staffing within A&E departments, which resulted in the majority of care being delivered by ‘inexperienced junior doctors’, is inappropriate<sup>212</sup>. More recent studies of the performance of doctors in training highlight that they are seeing fewer patients than their predecessors<sup>213</sup> and feel less confident in their clinical skills<sup>214</sup>.

#### Key message

Appropriate staffing is integral to an effective A&E department; however doctors in training are relied on heavily to provide the service due to insufficient numbers of senior emergency medicine trained doctors.

Most A&E departments have an area set aside for children. A separate paediatric emergency department, with its own staff, is available in some larger A&E departments; however in most A&E departments there is a mix of both general and paediatric trained professionals seeing and assessing children. Skilled assessment by an experienced and trained professional, sometimes with a short period of observation, may be useful to differentiate a minor condition from a life-threatening condition<sup>215</sup>. However, the GEMACH (The Confidential Enquiry into Maternal and Child Health) pilot study *Why Children Die* outlined that errors were repeated and

<sup>210</sup> Emergency Care Intensive Support Team, Effective approaches in urgent and emergency care, 2011

<sup>211</sup> The College of Emergency Medicine, The Way Ahead 2008-2012, 2008

<sup>212</sup> The College of Emergency Medicine Emergency Medicine Operational Handbook, 2011

<sup>213</sup> Armstrong, PAR. et al “Senior house officer and foundation year doctors in emergency medicine: do they perform equally?” *Emergency Medicine Journal* 2008;25:725-7

<sup>214</sup> Croft, S.J., Mason, S. “Are emergency department junior doctors becoming less experienced in performing common practical procedures?” *Emergency Medicine Journal* 2007;24:657-8

<sup>215</sup> Ibid.

compounded by the fact that the principal assessment of a child was being performed by a junior doctor with no postgraduate training in paediatrics, in settings where there was no supervision by an experienced specialist/ paediatrician<sup>216</sup>. The 2012 *Services for Children in Emergency Departments* document recommends that a consultant with sub-speciality training in paediatric emergency medicine be appointed for each emergency department with greater than 16,000 annual paediatric visits<sup>217</sup>.

Furthermore, despite the majority of urgent care being delivered in the primary cares setting, an increasing number of older people are attending A&E departments – over the next 20 years, the number of people aged 85 and over is set to increase by two-thirds compared with a 10 per cent growth in overall population<sup>218</sup>. This indicates a growth in older people accessing care from A&E departments. The last few years have seen an increase in the use of end-of-life pathways. Improvements in end-of-life care can have a high impact on patient experience as well as the experience of family members and carers. Evidence suggests that, where these are absent or poorly scripted, uncertainty in the end-of-life pathway often results in A&E attendances or emergency admissions to hospital that are, in retrospect, deemed to be unnecessary<sup>219</sup>.

The 2010 Temple report concluded that consultant-delivered care, as opposed to consultant-led or consultant-based care, was the only viable model for the future of medical care in the UK. This is because consultants “make better decisions more quickly and are critical to reducing the costs of patient care while maintaining quality”<sup>220</sup>. The Temple report defines consultant-delivered care as “24 hour presence, or ready availability”.

There is evidence to suggest that consultant-delivered care in an A&E department improves outcomes for some patient groups. For example, the introduction of Major Trauma Networks in the capital with consultant-led resuscitation and assessment of severely injured patients saved 58 lives in London in the first year of operation<sup>221</sup>. Other improved outcomes and benefits include:

- Enhanced and more timely clinical decision making;
- Increased supervision of more junior members of the team;
- Reduced numbers of serious untoward incidents;
- Less unplanned returns to the A&E department; and,
- Fewer misinterpreted x-rays that result in missed diagnoses.

Recent studies<sup>222,223</sup> also found that consultant-delivered care in A&E departments contributed to cost savings and increased service efficiency. Additionally, a recent study highlighted that a

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<sup>216</sup> Confidential Enquiry into Maternal and Child Health (2008) *Why Children Die: A pilot study 2006*

<sup>217</sup> Royal College of Paediatrics and Child Health. The role of the consultant paediatrician with sub-speciality training in paediatric emergency medicine. London: RCPCH, August 2008

<sup>218</sup> Jay Banerjee et al Quality care for people with urgent and emergency care needs, 2012

<sup>219</sup> Addicott, R (2009) Delivering better care at end of life: the next steps - Report from the Sir Roger Bannister Health Summit, Leeds Castle, 19–20 November 2009

<sup>220</sup> Temple J. Time for training, 2010

<sup>221</sup> The London Trauma Office

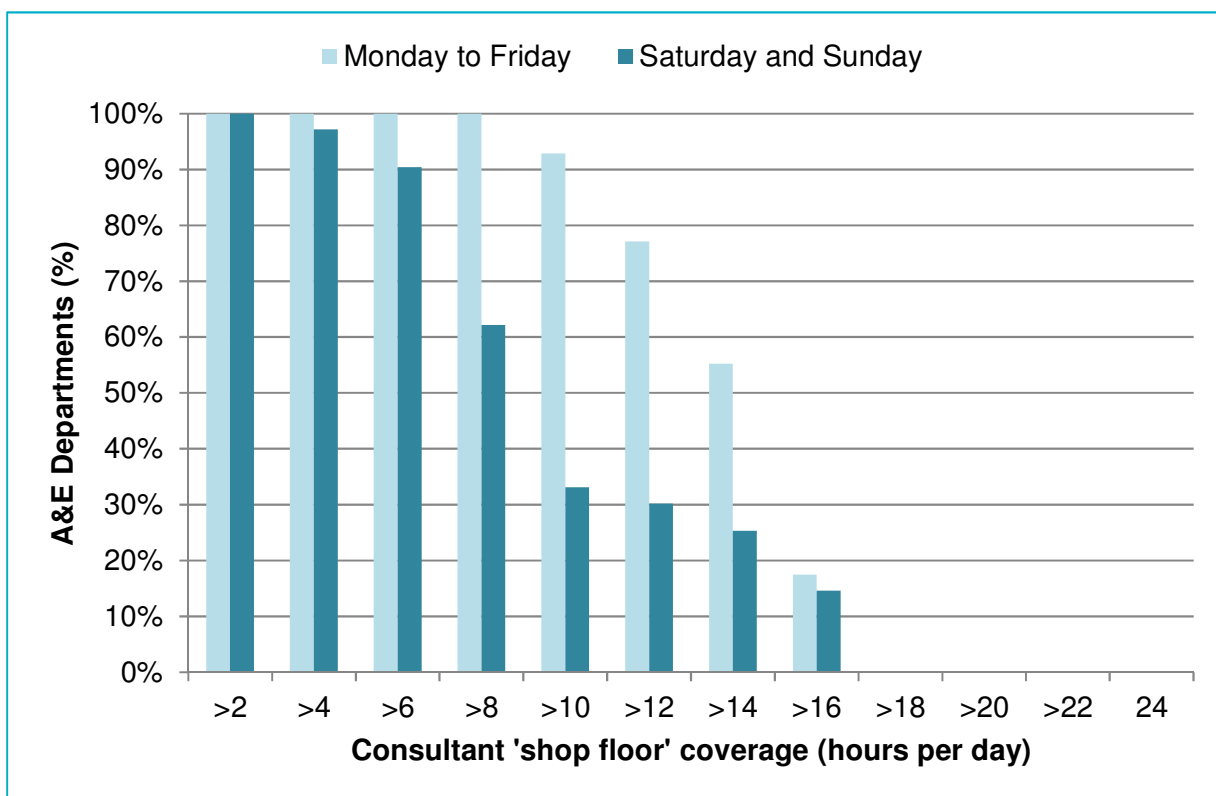
<sup>222</sup> Positive impact of increased number of emergency consultants. Geelhoed GC, Geelhoed EA Arch Dis Child 2008;93:62-64

<sup>223</sup> White AL, Armstrong PAR, and Thakore S. “The impact of senior clinical review on patient disposition from the emergency department” *Emergency Medicine Journal*, 2010;27:262-265

consultant based service offers many advantages that cannot be matched by either junior or middle grades<sup>224</sup>.

Variation exists in the number of hours that consultants are present in A&E departments across the country. Additionally there is a variation in the number of consultants employed by A&E departments (see section 11). Internationally, comparing emergency medicine consultant staffing in England with similar models in Australasia and North America, the current consultant numbers in emergency medicine in England are less than half those that would be provided in similar departments in these regions<sup>225</sup>. A recent study of A&E departments in the United Kingdom, of which nearly 60 per cent of respondents were in England, carried out by the College of Emergency Medicine<sup>226</sup> highlighted the variation in consultant ‘shop-floor’ cover to help maintain quality and safety in A&E departments, with the situation worsening over the weekend. Seventy-seven per cent of responding UK A&E departments reported that they had at least one emergency medicine consultant present in the A&E department over 12 hours on weekdays, but only 17 per cent reported such presence for 16 hours. At weekends the number of A&E departments with consultant ‘shop-floor’ cover for at least 12 hours each day is just 30 per cent.

**Figure 10: Consultant ‘shop-floor’ coverage – hours per day in A&Es (UK)**



To ensure the delivery of high quality emergency medicine, the involvement and input of experienced and competent emergency medicine doctors 24 hours a day is required, as

<sup>224</sup> Sen, A. et al. “The impact of consultant delivered service in emergency medicine: the Wrexham Model” *Emergency Medicine Journal* 2012;29:366-371

<sup>225</sup> *Emergency Medicine Consultants Workforce Recommendations*, The College of Emergency Medicine, April 2010

<sup>226</sup> College of Emergency Medicine (2013) *The drive for quality; How to achieve safe, sustainable care in our Emergency Departments?*

recommended by the College of Emergency Medicine<sup>227</sup>. Middle grade doctors (Specialty Registrars, Specialty Doctors and Trust Grades) provide the vital safety net of experienced medical care and supervision round the clock. However, A&E departments across the country struggle to provide this level of cover as vacancy rates at this grade are high both for the training grade registrars and other non-training grades (see section 11).

### Key message

Consultant-delivered care and senior clinical input improves patient outcomes in A&E departments; however the shortage of emergency medicine trained senior (middle grade and consultant) doctors is a problem for nearly all A&E departments and large variation in consultant 'shop floor' coverage is seen across England.

The senior review of patients has a positive impact on patient outcomes. A study undertaken to assess the influence and effect of 'real-time' senior clinician supervision on patient disposition in a UK A&E department found that senior review of 556 patients reduced inpatient admissions (by 11.9 per cent) and reduced admissions to the acute medical unit specifically (by 21.2 per cent). Furthermore, inappropriate discharge was prevented in 9.4 per cent of cases, improving patient safety, and the appropriate use of outpatient facilities resulted in a rise of 34.6 per cent in outpatient appointments<sup>228</sup>.

An A&E department also requires designated nursing staff based on minimum levels to meet service requirements, however there is significant variation in nursing management across A&E departments. Several reports<sup>229,230</sup> have highlighted high rates of nursing vacancy and inadequate skill mix within the A&E, which can lead to poorer outcomes for patients<sup>231,232</sup>. Several reports<sup>233,234</sup> highlight that where care has been found to be poor, the majority of care was delivered by unregistered staff with insufficient nurses to supervise them. It has been demonstrated<sup>235</sup> that as the percentage of healthcare assistants rises, combined with increased bed occupancy, mortality rates can rise.

### A&E attendances related to mental health issues

Mental health disorders account directly for approximately five per cent of A&E attendances and most patients who frequently re-attend A&E departments do so because of an untreated mental health problem<sup>236</sup>. However A&E attendances are usually defined by the presenting symptoms and not the underlying condition, which is often mental-health related. Alcohol

<sup>227</sup> The College of Emergency Medicine, *The Way Ahead 2008-2012*, 2008

<sup>228</sup> White AL, Armstrong PAR, and Thakore S. "The impact of senior clinical review on patient disposition from the emergency department" *Emergency Medicine Journal*, 2010;27:262-265

<sup>229</sup> Independent Enquiry into the care provided by Mid Staffordshire NHS Foundation Trust, Jan 2005-March 2009.

<sup>230</sup> Care Quality Commission, October 2011: Investigation report: Barking, Havering and Redbridge University Hospital NHS Foundation Trust

<sup>231</sup> Kane R, et al (2007) "The association of registered nurse staffing levels and patient outcomes: systematic review and meta-analysis", *Medical Care* 45(12). Pp1195-1204

<sup>232</sup> Twigg, D et al (2012) "Impact of skill mix variations on patient outcomes following implementation of nursing hours per patient day staffing: a retrospective study", *Journal of Advanced Nursing* [Available at: <http://www.ncbi.nlm.nih.gov/pubmed/22384993>]

<sup>233</sup> The Patient Association (2010) *Listen to patients, speak up for change*. Tinyurl.com/listen-patients

<sup>234</sup> Care Quality Commissioning (2011) *Dignity and Nutrition Inspection Programme. National Overview*. Newcastle Upon Tyne. CQC.tinyurl.com/dignity-overview

<sup>235</sup> Jarman, B, et al (1999) Explaining differences in English hospital death rates using routinely collected data. *BMJ*, 318, 15150-1520

<sup>236</sup> Joint Commissioning Panel for Mental Health (2012) Guidance for commissioners of liaison mental health services to acute hospitals;

abuse, for instance is one of the most significant factors affecting demand for A&E services. Alcohol-related chronic conditions, intoxication and secondary effects of alcohol abuse such as injuries from alcohol-related violence contribute to approximately 35 per cent of A&E attendances<sup>237,238,239</sup>. Dementia is an underlying factor in 42 per cent of emergency admissions for patients over 70 years old and these patients often find the pace and noise in A&E departments difficult to cope with<sup>240</sup>.

Self-harm is one of the most common reasons for emergency care in England and Wales, accounting for around 200,000 visits to hospital each year<sup>241</sup>. Research shows that attendance at an emergency department for self-harm is associated with future suicide, with one quarter of suicides preceded by acts of self-harm within the previous year<sup>242</sup>. One study of suicides in north west England found that over 40 percent of people who had committed suicide had attended an A&E department in the year prior to their death, with the majority of attendances due to self-harm or requests for psychiatric help<sup>243</sup>. Seventy-five per cent of suicides are completed by people not known to mental health services<sup>244</sup>. The National Reporting and Learning System has identified a number of suicides that have taken place in emergency departments.

### Extract from NRLS data

*Patient attended A&E after it had been reported that they had attempted to throw themselves under a moving car as a possible means of attempting self-harm. There were significant capacity issues within the department, with patients queuing in the ambulance corridor, which meant the senior nurse was unable to undertake immediate nurse triage. A visual assessment suggested that the patient did not need to move forward in the queue for nurse triage but, by the time the senior nurse was able to undertake triage, the patient had left the department. The patient re-attended an hour and a half later after being found collapsed in the road after he had walked in front of an oncoming car. The patient sustained a cardiac arrest while in the department.*

Often, patients requiring a mental health assessment experience long waits or are admitted to a general hospital unit while awaiting mental health assessment; this is inappropriate. The care of patients with mental health problems is of great concern across the emergency care pathway. There is a need to ensure that patients attending an A&E department who require a mental health assessment receive this within the same timescale as those who have other conditions. Delays to assessment should not be created by the need to manage a concomitant physical health problem. Evidence suggests that access to expert psychiatric support on weekdays between 09.00 and 17.00 is generally good but access at other times is often poor putting additional pressure on A&E departments to deliver clinical care and manage referrals

<sup>237</sup> HSCIC (2012) Statistics on Alcohol: England, 2012

<sup>238</sup> Institute of Alcohol Studies (2009) The impact of alcohol on the NHS: IAS factsheet

<sup>239</sup> NHS Choices (2011) Drink causes a million hospital visits a year

<sup>240</sup> RCN (2010) Improving quality of care for people with dementia in general hospitals: essential guide; Royal College of Nursing supported by the Department of Health

<sup>241</sup> NIHR (2013) Multicentre study of Self-harm in England; National Institute of Health Research, Department of Health

<sup>242</sup> Mark Broadhurst & Paul Gill (2007) Repeated self-injury from a liaison psychiatry perspective; *Advances in Psychiatric Treatment* vol. 13, pp228–235

<sup>243</sup> Cruz, D (2010) Emergency department contact prior to suicide in mental health patients; *Emergency Medicine Journal*;28:467-471

<sup>244</sup> The National Confidential Inquiry (2006) Avoidable Deaths: Five year report of the national confidential inquiry into suicide and homicide by people with mental illness. Manchester: The University of Manchester;2006.

for patients with mental health needs<sup>245</sup>. More appropriate provision, particularly out-of-hours, for these patients would be beneficial to both the patient and hospital system<sup>246</sup>.

### **Key message**

Patients with mental health needs are a key challenge facing A&E departments but access to psychiatric support out of hours is poor for the majority of services.

### **The four hour standard**

Many reviews have examined A&E attendances and initiatives to reduce waiting times<sup>247</sup>. Across England, compliance with the four hour standard is decreasing. Compliance means that 95 per cent of patients should be seen, treated and discharged within four hours. The latest available data (quarter 3, 2012/13) for the four-hour A&E standard in England show an increase in the number of patients waiting more than four hours from the time of arrival to admission, transfer or discharge, when compared with the previous quarter (quarter 2, 2012/13). Although this is consistent with seasonal variance in other recent years, it is the highest proportion since 2003/04<sup>248</sup>.

During quarter 4 of 2012/13, a total of 310,000 patients across England waited more than four hours in A&E from the time of arrival to admission, transfer or discharge. This marked a 35 per cent increase over the previous quarter (quarter 3, 2012/13) and a 39 per cent increase over the same quarter of the previous year (quarter 4, 2011/12). Despite this increase, the total number of people attending A&E departments fell in each quarter of 2012/13 and quarter 4 of 2012/13 was down 0.65 per cent on the same period in 2011/12.

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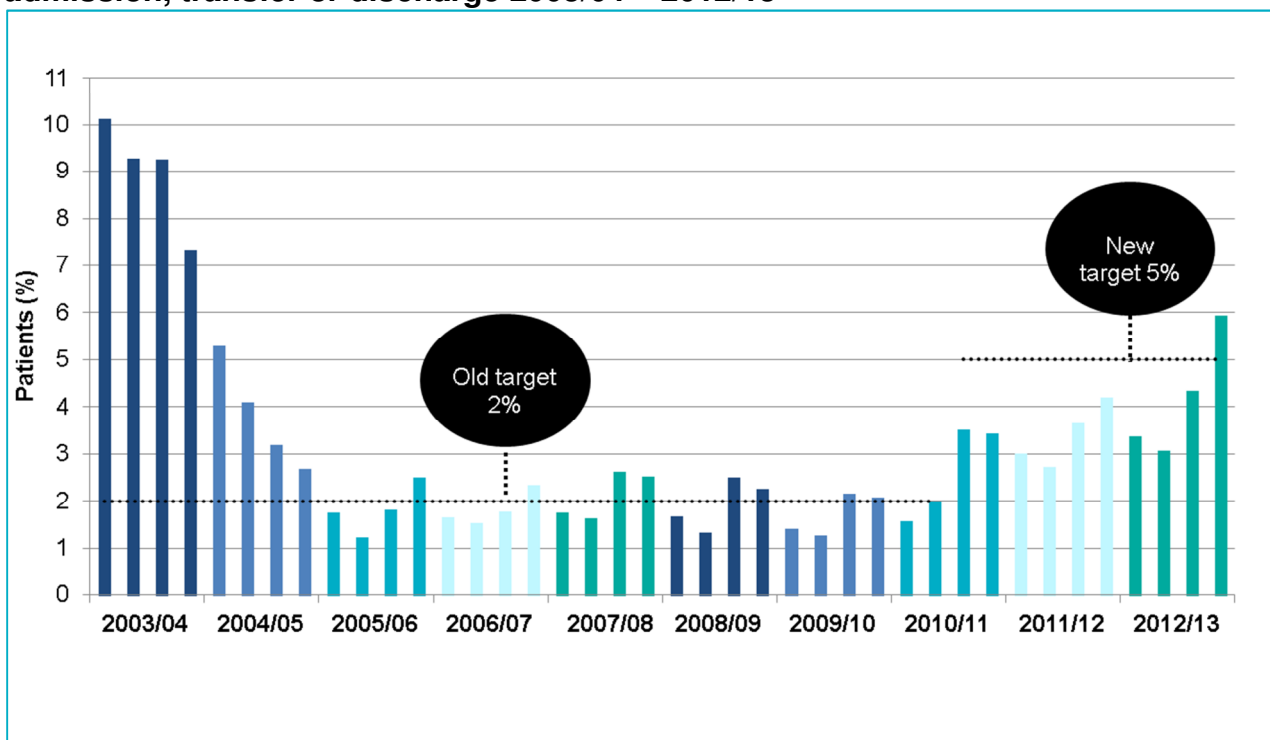
<sup>245</sup> Foundation Trust Network (October 2012) Briefing on Driving Improvement in A&E Service

<sup>246</sup> Lynch, R. M. & Greaves, I. (2000) Regular attenders to the accident and emergency department; *Journal of Accident and Emergency Medicine*, 17, 351-354

<sup>247</sup> Health Services and Research Delivery Programme (2005) Reducing attendance and waits in emergency departments: A systematic review of present innovations

<sup>248</sup> The King's Fund, How is the NHS performing?, 2013

**Figure 11: Percentage of patients waiting more that four hours in A&E from arrival to admission, transfer or discharge 2003/04 – 2012/13**



Source: Department of Health weekly A&E SitReps 2003/04 – 2012/13

### Crowding and patient flow

Ensuring patient flow through an A&E department is a vital element of providing a high-quality and safe service. Crowding in A&E departments is associated with delays in assessment and treatment<sup>249,250,251</sup>. Significantly, a study into the effects of overcrowding in A&E departments found a 30 per cent increase in ten day mortality rates in A&E departments during crowded periods<sup>252,253</sup>.

A study of emergency admissions to hospital in Australia found that in-patient length of stay is also closely linked to the length of time patients had spent in A&E<sup>254</sup>. The study found that patients spending between four and eight hours in A&E, on average, spent 1.9 days longer in hospital than those admitted within four hours. Patients spending between eight and 12 hours in the A&E department spent 2.9 days longer and those spending more than 12 hours in the A&E spent an average of 3.5 days longer in hospital.

<sup>249</sup> Richardson DB. Increase in patient mortality at 10 days associated with emergency department overcrowding. *Med J Aust* 2006;184:213-6

<sup>250</sup> Collis (2010) Adverse effects of overcrowding on patient experience and care; *Emergency Nurse*; Volume 18, no 8, pp34-39

<sup>251</sup> Collins, J (2010) Adverse effects of overcrowding on patient experience and care; *Emergency Nurse*, Volume 18, Number 8, December 2010

<sup>252</sup> Richardson DB. Increase in patient mortality at 10 days associated with emergency department overcrowding. *Med J Aust* 2006;184:213-6

<sup>253</sup> Collis (2010) Adverse effects of overcrowding on patient experience and care; *Emergency Nurse*; Volume 18, no 8, pp34-39

<sup>254</sup> Liew et al (2003) Emergency department length of stay independently predicts excess inpatient length of stay; *MJA* 2003; 179; 524-526

A study of the acute admissions timeline by the Primary Care Foundation found that many patients present at hospital towards the end of the day following a home visit from their GP, which typically takes place in the afternoon<sup>255</sup>. Length of stay in A&E departments is generally greater during this period when departments are busiest and staffing and support services are often reduced.

If patient flow is not addressed through the timely availability of senior staff, support services and available hospital beds, patient safety, privacy and dignity are compromised by overcrowded conditions. An 11-year study of factors influencing A&E waiting times, published in 2007, found that team working practices had a significant impact on the length of time patients had to wait between arrival in the department and admission to hospital or discharge. The study found that departments where clinicians and nursing staff routinely worked together in teams (not just in specific emergency events) were more effective at making quick clinical decisions<sup>256</sup>.

The safe delivery of care in an A&E department depends on timely access to diagnostics and investigations. Early access to diagnostics can also prevent unnecessary admission to hospital, therefore providing better outcomes for patients. Accident and emergency departments should have unrestricted access to imaging to allow immediate investigation of potentially life threatening conditions. Additionally, poor patient flow and department overcrowding<sup>257</sup> can be associated with a lack of support from inpatient specialties and a lack of swift access to inpatient beds. This in turn often represents problems in outflow from the admissions units to longer-stay wards, and from longer-stay wards to community discharge.

NHS England has stated 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<sup>258</sup>. However, in 2012, 24 per cent of ambulance patients surveyed said they had to wait over 15 minutes with the ambulance crew before they could be handed over to A&E staff<sup>259</sup>. Five per cent said they had to wait over an hour to be handed over.

### **Key message**

Crowding in A&E departments is a growing threat to patient safety and can have a significant impact on all patients. Timely access is required from supporting specialties to enable appropriate admission and transfer of patients to improve patient flow within A&E departments.

### **Clinical Quality Indicators (CQIs)**

Clinical Quality Indicators (CQIs) were introduced by the Department of Health in April 2011 to balance the potentially adverse effects of over-focus on the four hour standard and encourage continuous improvement<sup>260</sup>. The introduction of CQIs aims to shift the focus away from waiting time targets towards a range of measures based on quality (including clinical outcomes, safety

<sup>255</sup> Primary Care Foundation (2012). Urgent care centres: What works best? A discussion paper. Primary Care Foundation

<sup>256</sup> Mason et al (2006) What are the organisational factors that influence waiting times in Emergency Departments; Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation R & D (NCCSDO)

<sup>257</sup> Higginson, I. "Emergency department crowding", Journal of Emergency Medicine 2012, Vol. 29, Number :437e443

<sup>258</sup> NHS England (2012) Everyone Counts: Planning for Patients 2013/14

<sup>259</sup> CQC (2012) National NHS patient survey programme Accident and Emergency Department Survey 2012: full results with 2004 and 2008 comparisons

<sup>260</sup> Cooke, M (2013) Intelligent use of indicators and targets to improve emergency care; Emergency Medicine Journal



and patient experience) and is expected to encourage transparency and continuous improvement in A&E departments<sup>261</sup>. The eight CQIs are:

- Ambulatory Care;
- Unplanned Re-attendance Rate;
- Total Time Spent in A&E;
- Left without Being Seen Rate;
- Service Experience;
- Time to Initial Assessment;
- Time to Treatment; and
- Consultant Sign-off.

A&E departments are encouraged to locally publish information on the A&E indicators in the form of a clinical dashboard that is available to patients and the public, other providers and local commissioners. The information gathered for the CQIs combine data with knowledge and observation of the underlying processes. They are expected to encourage discussion about how good the care provided is and how it can be improved, aid decision making processes, identify issues early and address areas where immediate, targeted decisions can benefit patients<sup>262</sup>.

### **Clinical decision/ observation areas**

Many A&E departments run clinical decision/ observation areas as part of the drive to improve patient care and view these facilities as an integral part of emergency medicine. Clinical decision/ observation areas maximise the use of available resources and are viewed as a better alternative for patients than an inpatient admission as they provide a period of observation or treatment, typically for four to twelve hours, for those patients with an expected recovery time or a short, defined period of active treatment for specific diagnoses<sup>263</sup>. These areas also allow time to investigate and to safely rule out serious diagnoses, preventing both unsafe discharges and inpatient admissions. Significantly, research has shown that patient satisfaction increases with the presence of clinical decision/ observation units, with fewer problems associated with poor care, communication, emotional support and physical comfort<sup>264</sup>. Overall, clinical decision/ observation areas can provide patients with shorter lengths of stay. These are most effective when they are ring-fenced areas exclusively managed by emergency medicine doctors and nurses with clear operational policies<sup>265</sup>. However, not all A&E departments have access to such a facility and there is considerable variation in the way in which they function.

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<sup>261</sup> Ibid

<sup>262</sup> Department of Health (2011) A&E Clinical Quality Indicators: Best Practice Guidance for Local Publication; Department of Health Urgent and Emergency Care

<sup>263</sup> Cooke, M et al (2003) Use of emergency observation and assessment wards: a systematic literature review; Emergency Medicine Journal, Volume 20, pp138-142

<sup>264</sup> Cooke, M et al (2003) Use of emergency observation and assessment wards: a systematic literature review; Emergency Medicine Journal, Volume 20, pp138-142

<sup>265</sup> Hassan, T. (2003) Clinical decision units in the emergency department: old concepts, new paradigms, and refined gate keeping, Emergency Medicine Journal; 2003;20:123–125

## 9. Access to quality back up services

Accident and emergency departments have evolved to become increasingly sophisticated, employing more specialist staff in greater numbers and requiring a more complex system of acute hospital services to support them<sup>266</sup>. To ensure high-quality and safe care in an A&E department, access to inpatient beds, speciality clinical opinion and support from other specialities in the hospital is required. Patients waiting in an A&E department (often on hospital trolleys) due to a lack of inpatient beds is sub-optimal and evidence suggests that patients with prolonged ‘trolley times’ have longer lengths of stay in hospital once admitted with possible increased morbidity and mortality<sup>267</sup>. Although improvements have been made, this still remains a problem in many hospitals<sup>268</sup>.

Relationships with supporting specialties can be inconsistent. Therefore, the College of Emergency Medicine recommends that as a minimum an A&E department must have support from the ‘seven key specialities’: critical care, acute medicine, imaging, laboratory services (including blood bank), paediatrics, orthopaedics and general surgery. This should ensure timely assessment to senior clinical decision makers within inpatient teams, to improve the flow of the A&E department. Where these teams are not on-site there must be robust policies and procedures to ensure rapid access to a senior clinical decision maker, and transfer to an inpatient bed if required. The following extract from NRLS data illustrates why this is essential for ensuring patient safety:

### Extract from NRLS data

*A patient attended A&E after vomiting blood and was seen to by the A&E registrar, medical registrar, anaesthetic registrar and two senior A&E nurses. The team needed to carry out an emergency endoscopy but was unable to locate anyone able to do this, despite attempting to contact the relevant personnel at their home. The patient continued to bleed and died in the A&E department due to no out-of-hours endoscopy service available.*

Recent work from the College of Emergency Medicine highlights that in spite of the College’s recommendations, there is no on-site supporting service that is universally available to all A&E departments, with the exception of anaesthesia and orthopaedics in major trauma centres. The supporting services most commonly available on site are acute medicine (86 per cent), critical care (87 per cent), anaesthesia (88 per cent), general radiology (87 per cent), general paediatrics (79 per cent) general surgery (84 per cent), care of the elderly (86 per cent) and orthopaedics (84 per cent). Additionally, only 10 per cent of A&E departments have a co-located urgent care centre, and 36 per cent have a co-located out of hours GP service<sup>269</sup>.

Much of the evidence, both national and international, on treatment for emergency patients and where and when they should attend relates to urban environments. Rural and remote patients present a specific challenge due to the density of the population and the distances involved. The low-density population of rural areas means that healthcare facilities are spread far apart, and there may not be the critical mass necessary to provide a fully functional major acute

<sup>266</sup> HCL (2013) The Real Emergency in Emergency Departments: Is the chronic shortage of England’s A&E doctors reaching crisis point?; HCL workforce solutions

<sup>267</sup> The College of Emergency Medicine, The Way Ahead 2008-2012, 2008

<sup>268</sup> Richardson D.B. “The access block effect: relationship between delay in reaching an inpatient bed and patient length of stay” Med J Aust (2002) 177:492-5

<sup>269</sup> College of Emergency Medicine (2013) The drive for quality; How to achieve safe, sustainable care in our Emergency Departments?

hospital within the region. The distance to transport patients may mean a lengthy wait before treatment can be delivered.

A hub and spoke telehealth system, whereby remote facilities are linked up to a central hospital with specialist support on hand, may represent a possible solution to some of these problems. Telemedicine is a broad description of medical and healthcare services provided by means of telecommunications. Telemedicine can be used to:

- Support more types of services;
- Bring specialist services to more people in rural and remote areas;
- Enable better on-scene treatment for medical professionals on the move;
- Enable patients and clinicians to collaborate more effectively to monitor and treat chronic conditions;
- Enable more effective monitoring and treatment of patients with chronic conditions; and
- Enable remote rehabilitation monitoring.

In recent years, technological developments have rapidly increased the number of telemedicine options available to the NHS. Telemedicine is an emerging area that holds a great deal of promise for healthcare, with many studies finding that it can facilitate better communication between healthcare providers and improve patient outcomes<sup>270</sup>. Additionally, international models such as those used by Kaiser Permanente of self-care and shared care use technology to emphasise prevention, early intervention and the active management of patients with the priority of keeping patients out of hospital<sup>271</sup>. There have been numerous pilots using telemedicine in urgent and emergency care and a number of studies attempting to measure its clinical and cost effectiveness. However literature around telemedicine is often a confused picture, especially regarding its cost-effectiveness, due to the wide variety of different technologies and utilisation methods available<sup>272,273</sup>.

There is broad agreement that telemedicine has significant potential for improving access to safe, high quality emergency medicine, particularly in rural and remote areas<sup>274,275,276,277</sup>. Increased sub-specialisation in medicine means that acute specialists often have less familiarity with other areas of medicine, necessitating more effective communication and collaboration between clinicians, often based in different locations<sup>278</sup>. This development in healthcare has had the greatest impact on hospitals in rural and remote areas because it is becoming increasingly difficult for them to provide the full spectrum of acute services required to treat emergency patients. Telemedicine can facilitate effective networking between providers

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<sup>270</sup> Brownsell et al (2012) Barriers and challenges to implementing telehomecare for Long Term Conditions; University of Sheffield and Sheffield Teaching Hospitals NHS Trust

<sup>271</sup> Light, D and Dixon M "Making the NHS more like Kaiser Permanente", British Medical Journal (2004) 27; 328(7442): 763–765

<sup>272</sup> NHS Improvement (2011) Heart failure – patient pathways

<sup>273</sup> Benger, J. et al (2004) The safety and effectiveness of minor injuries telemedicine; Emergency Medicine Journal; 2004;21:438–445

<sup>274</sup> Darkins, A (2012) Patient safety considerations in developing large telehealth networks; Clinical Risk, May 2012 vol. 18 no. 3 90-94

<sup>275</sup> WHO (2010) Telemedicine – Opportunities for developments in Member States: report on the second global survey on ehealth; World Health Organization

<sup>276</sup> Raza et al (2007) Pulmonary telemedicine—A model to access the subspecialist services in underserved rural areas; International Journal of Medical Informatics; Volume 78, Issue 1, Pages 53-59, January 2009

<sup>277</sup> Kulshrestha et al (2010) Journal of Telemedicine and Telecare, June 2010 vol. 16 no. 4 196-197

<sup>278</sup> Saffle, J (2006) Telemedicine for acute burn treatment: the time has come; Journal of telemedicine and telecare 2006, 12: 1-3

and allow patients to receive a wider range of clinical treatments in areas with less access to clinical expertise<sup>279</sup>.

There are several documented examples of telemedicine working effectively to improve access to specialist clinical expertise in remote areas or where there is a local shortage of expertise. There is a considerable literary evidence to support the feasibility and effectiveness of telemedicine, particularly for specific applications such as stroke management, cardiology, neurology, burns and ophthalmology, where a high-degree of specialist expertise is often required. Most studies showed some potential for improving rapid evaluation and treatment of patients whilst reducing ambulance transfers and emergency admissions to hospital<sup>280,281,282</sup>.

However, implementation of telemedicine systems tends to be piecemeal and barriers to implementation of telemedicine systems include<sup>283</sup>:

- High cost of setup and maintenance of systems;
- A lack of systematic analysis of impact on wider healthcare costs; and
- Ethical and legal concerns surrounding patient confidentiality and physical indemnity.

#### **Key message**

To ensure high quality and safe care in an A&E department, access to inpatient beds and support from other specialties in the hospital or rapid transfer to the right hospital is required.

<sup>279</sup> Jonathan Birns (2010) British Journal of Neuroscience Nursing, Vol. 6, Iss. 2, 12 Feb 2010, pp 66 – 69

<sup>280</sup> Jonathan Birns (2010) British Journal of Neuroscience Nursing, Vol. 6, Iss. 2, 12 Feb 2010, pp 66 – 69

<sup>281</sup> Wechsler et al (2013) Teleneurology applications; Neurology February 12, 2013 vol. 80 no. 7 670-676

<sup>282</sup> Kulshrestha et al (2010) Journal of Telemedicine and Telecare, June 2010 vol. 16 no. 4 196-197

<sup>283</sup> WHO (2010) Telemedicine – Opportunities for developments in Member States: report on the second global survey on ehealth; World Health Organization

## 10. Emergency admissions to hospital

### Rising number of emergency admissions to hospital

With a significant rise in the number of acute hospital admissions, which represent around 65 per cent of all hospital bed days in England<sup>284</sup>, there is a need to reduce unnecessary admissions, not only because of the high and rising costs associated with these, but because of the pressure and disruption that emergency admissions to hospital put on the elective health care system for example: increased waiting lists and cancellations. An emergency admission to hospital can also be known to be a disruptive and unsettling experience for patients, particularly the frail elderly, which exposes them to new clinical and psychological risks<sup>285</sup>.

Evidence highlights that the majority of adult patients who are admitted to hospital with an acute illness seek professional help from primary care in the first instance. Those who attend an A&E department generally perceive their problem as more urgent or severe, or have an ambulance called on their behalf<sup>286</sup>. For children, there is a continuing increase in very short-term admissions for those with common infections – 28 per cent over the last decade<sup>287</sup> – and research suggests that this may be due to a systematic failure of both primary care and hospital care (by emergency departments and paediatricians) in the assessment of children with acute children that could be managed in the community, which can be attributed to the change in the GP contract and providing out-of-hours care and the introduction of the four-hour standards in A&E departments<sup>288</sup>. Further research suggests that general practice and the paediatric community now have the opportunity to rise to this challenge and improve outcomes for children across the urgent and emergency care pathway<sup>289</sup>.

There is variation across the country in the proportion of emergency admissions to hospital, with people from lower socio-economic groups being more at risk of emergency admission to hospital. Additionally, those who live in urban areas have higher rates of emergency hospital admission than those in rural areas<sup>290</sup>. What is uncertain about this difference is whether it is due to better management of patients in the community in rural areas, demographic factors or because patients who live further from secondary care have more difficulty accessing services<sup>291</sup>.

There are a number of factors that contribute to the rising number of emergency admissions to England's hospitals. A growing frail elderly population means that many more people are living with a long-term condition without sufficient and systematic support to self-manage, many of whom are vulnerable to exacerbations resulting in hospital admission<sup>292</sup>. The Department of

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<sup>284</sup> Purdy, S (2010) Avoiding hospital admissions

<sup>285</sup> Imison, C et al (2012) Older people and emergency bed use: exploring variation; The King's Fund, London

<sup>286</sup> Bengler, J. & Jones, V. (2008) Why are we here? A study of patient actions prior to emergency hospital admission; *Emergency Medicine Journal* 2008;25:424–427

<sup>287</sup> Powell, C. (2013) Do we need to change the way we deliver unscheduled care?; *Archives of Disease in Childhood*; 2013;98:5:319-320

<sup>288</sup> Gill, P. et al (2013) Increase in emergency admissions to hospital for children aged under 15 in England, 1999-2010: national database analysis; *Archives of Disease in Childhood*; 2013;98:328-334

<sup>289</sup> Powell, C. (2013) Do we need to change the way we deliver unscheduled care?; *Archives of Disease in Childhood*; 2013;98:5:319-320

<sup>290</sup> Bengler, J. & Jones, V. (2008) Why are we here? A study of patient actions prior to emergency hospital admission; *Emergency Medicine Journal* 2008;25:424–427

<sup>291</sup> O'Donnell, 2000

<sup>292</sup> The King's Fund (2011) The evolving role and nature of general practice in England

Health estimates there to be around 15 million people in England with at least one long-term condition and this is set to rise by a further 23 per cent over the next 25 years<sup>293,294</sup>. An estimated two-thirds of older people currently live with more than one long-term condition<sup>295</sup>. This cohort is the biggest user of the NHS accounting for 50 per cent of all GP appointments and 70 per cent of all hospital admissions equating to about 70 per cent of the total spend<sup>296</sup>.

Introduction of the four hour standard for discharge from A&E departments, increased use of clinical protocols and standards set by commissioners have helped improve patient outcomes but may have led to an increase in short-stay emergency admissions to hospital. Fifty per cent of emergency admissions to hospital are for stays of one day or less and short-stay admissions account for most of the total increase<sup>297</sup>. It has also been suggested that some trusts will admit patients when they are close to breaching the four hour standard in A&E departments, resulting in an emergency admission lasting only a few hours<sup>298,299</sup>. There was a demonstrable acceleration in the rise of short-stay admissions after the four hour standard was introduced; however much of this increase has also been attributed to more effective treatment and discharge<sup>300</sup>. Many UK hospitals have introduced an acute medical admissions unit to facilitate an efficient emergency admission process and evidence demonstrates improved outcomes for patients such a reduction in waiting in an A&E department, length of hospital stay and mortality<sup>301,302</sup>.

An association between the introduction of payment by results (PbR) in acute medicine and an increase in short-stay admissions was also found by the Nuffield Trust in their study of trends in emergency admissions to hospital between 2004 and 2009. The change from block contracts to PbR (Payment by Results) in acute medicine may have given hospitals a financial incentive to admit more patients<sup>303,304</sup>. However the introduction of a 30 per cent tariff on admission activity in excess of 2008-09 levels, removed this incentive, but has not prevented emergency admissions to hospital increasing by about three per cent per year<sup>305</sup>. For the majority of trusts, the cost of providing A&E services exceeds the income received from commissioners, which suggests other factors are driving the increase<sup>306</sup>.

Other factors in the rise in short-stay admissions are thought to be an increased use of clinical protocols and lowering of clinical thresholds, leading to the admittance of less severe cases<sup>307,308,309</sup>. The NHS has traditionally taken a risk averse approach to hospital admission

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<sup>293</sup> Department of Health (2013) Long Term Conditions; Department of Health

<sup>294</sup> Jacobs, S () Expert Patients Programme: A community interest company; NHS Trusts Association

<sup>295</sup> Newbould et al (2012) Experiences of care planning in England: interviews with patients with long term conditions; *BMC Family Practice* 2012, 13:71

<sup>296</sup> Department of Health (2011) Millions of patients set to benefit from a modern NHS; Department of Health press release

<sup>297</sup> The King's Fund (2011) Emergency bed use: what the numbers tell us; King's Fund, London UK

<sup>298</sup> Information Centre for Health and Social Care (2009) Further Analysis of the Published 2007-08 A&E HES Data (Experimental Statistics)

<sup>299</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust

<sup>300</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust

<sup>301</sup> Maloney D. et al (2005) Impact of an acute medical admission unit on length of hospital stay, and emergency department 'wait times'; *Quarterly Journal of Medicine* 2005; 98:283-289

<sup>302</sup> Scott, I et al (2009) Effectiveness of acute medical units in hospitals: a systematic review; *International Journal for Quality in Health Care* 2009; 21,6:397-407

<sup>303</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust

<sup>304</sup> Jones R (2009) Trends in emergency admissions. *British Journal of healthcare Management*, 15(4): 188-196

<sup>305</sup> Foundation Trust Network (October 2012) Briefing on Driving Improvement in A&E Services

<sup>306</sup> Foundation Trust Network (October 2012) Briefing on Driving Improvement in A&E Services

<sup>307</sup> Silby, E et al (2007) Short stay emergency admissions to a West Midlands NHS Trust: a longitudinal descriptive study, 2002-2005; *Journal of Emergency Medicine* 2007;24:553-557

as it is clinically appropriate to assume seriousness if there is any doubt over the diagnosis; however there is a suggestion that an increased threat of litigation in recent years has led to more defensive medicine<sup>310,311</sup>. This may also contribute to avoidable admissions.

Evidence suggests that there is a correlation between clinician experience and the likelihood that they will admit inappropriately. Senior clinician availability to review emergency patients has been shown to decrease emergency admissions to hospital by 12 per cent<sup>312</sup>. However wide variations have been found in admission rates between GPs working in out-of-hours services, and there is a suggestion that those with less experience of emergency medicine, may be more likely to assume seriousness and admit patients unnecessarily<sup>313</sup>.

Good management of the transition to community or primary care after discharge is a significant factor in preventing hospital re-admissions<sup>314</sup>. However there is concern that increased emergency admissions to hospital and an overall reduction in bed numbers has put pressure on hospitals to discharge patients rapidly and without adequate assessment or transfer to community services<sup>315</sup>. This has led to an increase in re-admissions which puts further pressure on the system and costs the NHS £1.8bn per year<sup>316</sup>. The number of episodes where patients are discharged by a hospital but readmitted within 30 days rose 51 per cent between 2003/04 and 2010/11 to 650,000, making up approximately 23 per cent of the total<sup>317</sup>.

### Key message

Growth in the number of emergency admissions to hospital has been associated with a large rise in short or zero stay admissions. The reasons for this are multifactorial but some studies have attributed it to a lack of early senior review, risk averse triage and A&E departments trying to avoid breaching the four hour standard.

### Outcomes for emergency admissions to hospital

Recommendations from clinical evidence over a number of years have been resoundingly clear: early and consistent input by consultants improves patient outcomes. Early consultant involvement in the management of patients admitted as an emergency is one of the most important factors in patient care<sup>318</sup> but too often working patterns are not set up to support this. Delays to both consultant reviews and a lack of senior involvement in patient care have been linked to poor outcomes, including mortality<sup>319, 320, 321, 322, 323, 324, 325, 326, 327, 328</sup>.

<sup>308</sup> H Snooks and J Nicholl (2007) Sorting patients: the weakest link in the emergency care system; *Emergency Medicine Journal*, 2007 February; 24(2): 74

<sup>309</sup> Bardsley M, Blunt I, Davies S, et al. (2013) Is secondary preventive care improving? Observational study of 10-year trends in emergency admissions for conditions amenable to ambulatory care; *BMJ Open* 2013;3

<sup>310</sup> H Snooks and J Nicholl (2007) Sorting patients: the weakest link in the emergency care system; *Emergency Medicine Journal*, 2007 February; 24(2): 74

<sup>311</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust

<sup>312</sup> Purdy, S (2010) Avoiding hospital Admissions: What does the research evidence say?; Kings Fund

<sup>313</sup> Purdy, S (2010) Avoiding hospital Admissions: What does the research evidence say?; Kings Fund

<sup>314</sup> SG2 Healthcare Intelligence (2011) Sg2 Service Kit: Reducing 30-day Hospital Readmissions

<sup>315</sup> Dr Foster Intelligence (2012) Fit for the future? Doctor Foster Hospital Guide 2011

<sup>316</sup> Dr Foster Intelligence (2012) Fit for the future? Doctor Foster Hospital Guide 2012

<sup>317</sup> Department of Health (2013) New data on emergency readmissions

<sup>318</sup> National Confidential Enquiry into Patient Outcome and Death. (2007). *Emergency admissions: A step in the right direction*, NCEPOD

<sup>319</sup> Nafsi et al. (2007). Audit of deaths less than a week after admission through an emergency department: how accurate was the ED diagnosis and were any deaths preventable? *Emergency Medicine Journal*. 24: 691 - 695

<sup>320</sup> NCEPOD. (2009). *Caring to the end? Review of patients who died within 4 days of hospital admission*. NCEPOD

<sup>321</sup> NCEPOD (2007). Op. cit

To provide consistent high quality hospital care, the NHS needs to ensure that the right consultants and teams are available seven days a week, and for some groups of patients, 24 hours a day. The Academy of Medical Royal Colleges recently published a report on the benefits of consultant delivered care across all services<sup>329</sup>. These can be summarised as improved outcomes; efficient and effective use of resources; meeting patient expectations, improved patient experience and enhanced junior doctor training.

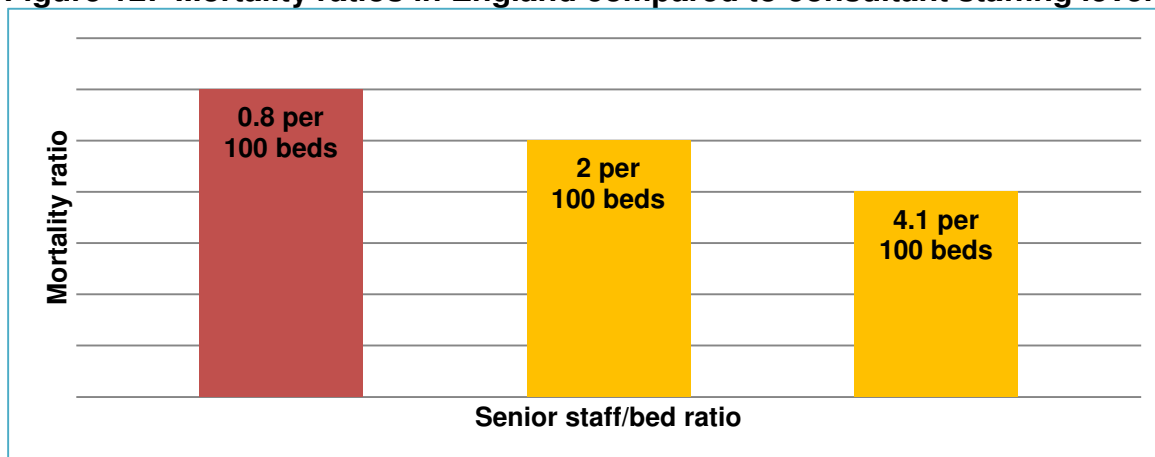
Consultants are the most skilled and experienced doctors. They are therefore able to make rapid and appropriate decisions to ensure patients receive the correct diagnostics and that they enter on the right pathway of care at an early stage. This leads to better patient outcomes including mortality. This is echoed in findings from numerous National Confidential Enquiry into Patient Outcome and Death (NCEPOD) reports published in the last twenty years linking improved outcomes with senior assessment and ongoing management of acutely ill patients<sup>330,331,332</sup>, as well as recommendations from the Royal College of Physicians and Society of Acute Medicine<sup>333</sup>. There is also mounting evidence demonstrating a variation in outcomes for patients depending on the time of day or day of the week that they are admitted to hospital as an emergency<sup>334, 335, 336, 337, 338, 339, 340</sup>.

The 2011 Hospital Guide published by Dr Foster demonstrated the impact of senior staffing levels on mortality. Across England senior staffing levels were mapped at a trust level and compared to data on the number of beds and weekend mortality analysis. Findings showed that more senior staffing at the weekend is associated with a lower weekend mortality rate. This is demonstrated in figure 12. Data also shows that around 4,400 lives in England could be saved every year if the mortality rate for patients admitted at the weekend was the same as for those admitted on a weekday.

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- <sup>322</sup> NCEPOD (2007). Op. cit
- <sup>323</sup> Nafsi et al. (2007). Audit of deaths less than a week after admission through an emergency department: how accurate was the ED diagnosis and were any deaths preventable? *Emergency Medicine Journal*. 24: 691 - 695
- <sup>324</sup> NCEPOD. (2009). Op. cit.
- <sup>325</sup> NCEPOD (2007). Op. cit
- <sup>326</sup> Hillier, J. (2009) Trainee reporting of computed tomography examinations: do they make mistakes and does it matter? *Clinical Radiology* Volume 59. 2: 159-162
- <sup>327</sup> Briggs, R.H. et al. (2010) Provisional reporting of polytrauma CT by on-call radiology registrars. Is it Safe? *Clinical Radiology*, 65(8): 616-622
- <sup>328</sup> Bates, J. (2003). Extending the provision of ultrasound services in the UK. British Medical Ultrasound Society. Also available at: <http://www.bmus.org/policies-guides/pg-protocol01.asp>
- <sup>329</sup> Academy of Royal Colleges (2012) The Benefits of Consultant-delivered Care
- <sup>330</sup> National Confidential Enquiry into Patient Outcome and Death (2007) Emergency admissions: A step in the right direction, NCEPOD
- <sup>331</sup> NCEPOD (2010) An age old problem? Elective and emergency surgery in the elderly. NCEPOD 2010
- <sup>332</sup> NCEPOD. (2009). Caring to the end? Review of patients who died within 4 days of hospital admission. NCEPOD
- <sup>333</sup> Royal College of Physicians, London (2012) Acute Care Toolkit 4 - Delivering a 12 hour 7 day consultant led service on the Acute Medical Unit
- <sup>334</sup> Aylin, P. et al (2010). Weekend mortality for emergency admissions. A large multicentre study, *Quality and Safety in Health Care*, 19: 213-217
- <sup>335</sup> Bell, M. D., Redelmeier, D. A. (2001). Mortality among patients admitted to hospitals on weekends compared with weekdays *The New England Journal of Medicine* 345: 9
- <sup>336</sup> Barba, R., Losa, J. E., Velasco, M., Guijarro, C., Garcia de Casasola, G. & Zapatero, A. (2006). Mortality among adult patients admitted to the hospital on weekends *The European Journal of Internal Medicine* 17: 322-324
- <sup>337</sup> Schmulewitz, L., Proudfoot, A. & Bell, D. (2005). The impact of weekends on outcome for emergency patients. *Clinical Medicine*, 5: 621-5
- <sup>338</sup> National Confidential Enquiry into Patient Outcome and Death. (2007). Emergency admissions: A step in the right direction, NCEPOD
- <sup>339</sup> Ricciardi, P. (2011) Mortality rate after non-elective hospital admission. *Arch. Surg.* 2011; 146(5): 545-551
- <sup>340</sup> NCEPOD (2010) An age old problem? Elective and emergency surgery in the elderly. NCEPOD 2010



**Figure 12: Mortality ratios in England compared to consultant staffing levels**



Source: Dr Foster Hospital Guide 2011

This variation in staffing is seen right across services in England. In the capital, improvements in heart attack, major arterial surgery, major trauma and stroke services have been made by providing consistent, consultant-delivered care, seven days a week and patient outcomes have improved. For example, since operating a consultant-delivered service seven days a week London's heart attack centres now observe no difference in mortality rates between the week and at the weekend – demonstrating that where systems are in place to respond seven days a week, there is a direct effect on mortality rates. The potential impact on patient outcomes of developing and delivering consultant-delivered care, consistently across seven days a week across all emergency care in England, is significant.

As clinical leaders, consultants are also best placed to ensure the most efficient and effective use of resources. Consultants' greater knowledge and experience and therefore rapid diagnosis leads to the most appropriate investigations and interventions first time. Their direct involvement in patient care consequently leads to a reduction in unnecessary admissions to hospital, lengths of stay and re-admission rates. This is of particular importance at present as the increasing number of patients with multiple medical conditions increase the difficulty of making generic treatment algorithms work.

Contributors to the Academy of Medical Royal Colleges' report were also clear that greater consultant presence would not only improve patient care and experience but also improve the opportunities for learning and the quality of training for doctors, thereby improving safety now and creating a sustainable workforce for the future<sup>341</sup>.

The implementation of the European Working Time Directive (EWTD) has resulted in shorter sessions of work for training grade junior doctors with complex rotas and more frequent handovers. The Collins and Temple reports both found that training grade doctors were often poorly supervised and sometimes expected to act beyond their competence<sup>342,343</sup>.

<sup>341</sup> Academy of Royal Colleges (2012) The Benefits of Consultant-delivered Care

<sup>342</sup> Canter, R. (2010) Impact of reduced working time on surgical training in the United Kingdom and Ireland. The Surgeon. Article in Press.

<sup>343</sup> Temple (2010) Time for training? A Review of the impact of the European Working Time Directive on the quality of training

**Key messages**

Reduced service provision, including fewer consultants working at weekends (in emergency medicine and acute in-patient specialties), is associated with England's higher weekend mortality rate. Consistent services across all seven days of the week are required to provide high quality and safe care.

There are clear recommendations from the Temple report that training needs to take place in a consultant delivered service yet this is not practised across the majority of hospital services.

## 11. Urgent and emergency care workforce

The urgent and emergency care workforce faces mounting pressures across all specialties. General practice is the largest medical specialty group and GPs see more patients everyday than any other part of the NHS. There has been both a significant growth in the size of the NHS medical workforce and its shift from general practice towards secondary care. The number of GPs has grown by 29 per cent between 1995 and 2011 which was in line with total growth in NHS staff over the same time period. This is in contrast to the total number of consultants in other medical specialties which doubled over that period.

In 2011 there were 67.8 GPs per 100,000 population in England, compared to 58.1 in 2000. The Centre for Workforce Intelligence projects that this ratio will rise to 83-84 GPs per 100,000 population by 2030, if the 2015 target of 3,250 trainee places is achieved and maintained, although there is considerable uncertainty about the future GP workforce supply. It is suggested that the national picture also masks local variation such as unequal access to GPs between areas of high and low deprivation<sup>344</sup>. Analysis of the available evidence on the demand for GP services points to a workforce under considerable strain. The existing GP workforce has insufficient capacity to meet current and expected patient needs<sup>345</sup>.

With regard to urgent and emergency care out-of-hours services, a recent study looking at the changing workforce patterns highlighted examples of workforce and skill mix change. A wide range of new roles were observed for nurses and allied health professionals. Although there were differences in how these were deployed in different cases. The majority of examples were of non-medical professionals substituting for GPs in telephone triage and assessment; out-of-hours home visiting; face-to-face consultations with patients in treatment centres; prescribing medicines and admitting patients directly to hospital in an emergency<sup>346</sup>.

### Key message

National workforce analysis highlights a growth in the GP workforce in England however, local variation exists in unequal access to GPs between areas of high and low deprivation. Analysis highlights that the GP workforce is under with insufficient capacity to meet needs.

For A&E departments, whilst the demand for clinical involvement has increased, an insufficient number of doctors are choosing to specialise in emergency medicine because of concerns over the intensity and nature of the work, unsociable hours and working conditions. Recent drives to deliver consistent care seven days a week, together with a recognised need for consultant-delivered care mean that recruitment issues represent a serious threat to the sustainability of A&E services.

In 2011 and 2012, less than 50 per cent of ST4 posts for the A&E specialty were successfully filled. This has raised serious concerns over the supply of future consultants and the ability of A&E services to maintain current standards of care, which require consultant presence for 16 hours, seven days a week<sup>347</sup>. In 2012 approximately 36 per cent of trusts already had

<sup>344</sup> Centre for Workforce Intelligence (2013) GP in-depth review: Preliminary findings

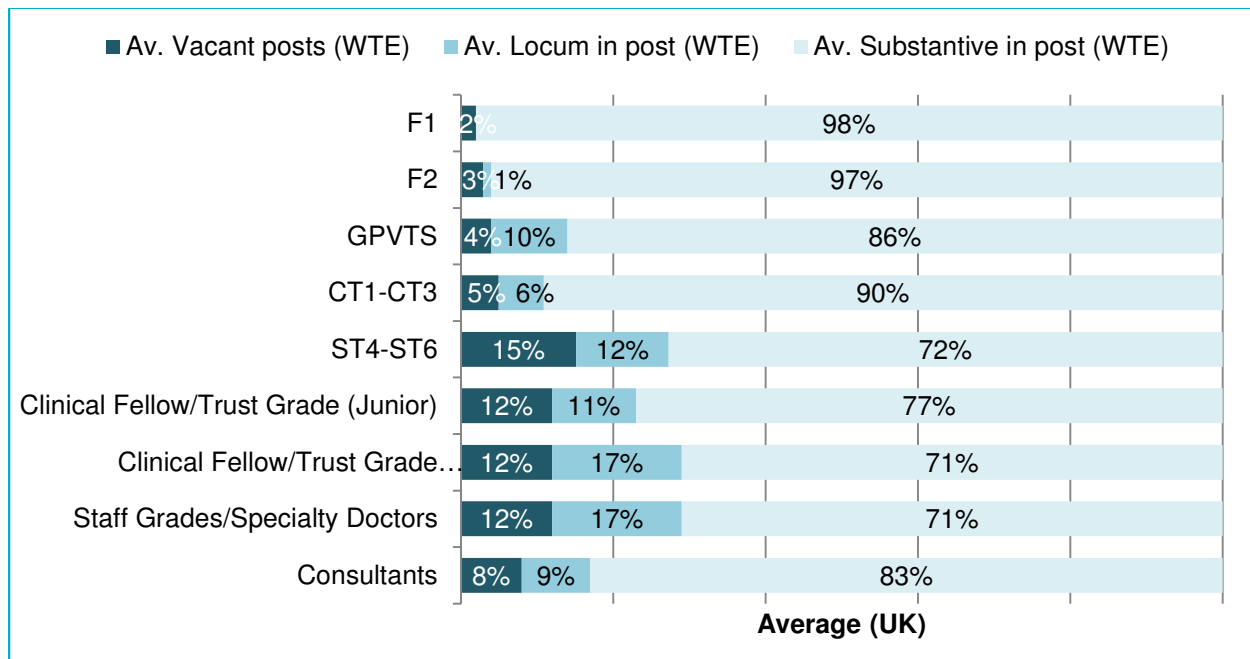
<sup>345</sup> Centre for Workforce Intelligence (2013) GP in-depth review: Preliminary findings

<sup>346</sup> National Institute for Health Research Service Delivery and Organisation Programme (2010) The impact of changing workforce patterns in emergency and urgent out-of-hours care on patient experience, staff practice and health system performance

<sup>347</sup> NHS Employers Medical Workforce Forum notes (August 2012)

vacancies for consultants and 19 per cent had vacancies for middle-grade doctors<sup>348</sup>. A more recent study<sup>349</sup> of the breakdown of posts carried out by the College of Emergency Medicine shows a heavy reliance on locums to fill senior doctor positions across the UK (figure 13).

**Figure 13: Average breakdown of substantive, locum and vacant positions 2011/12 (UK)**



The average number of whole time equivalent (WTE) consultants per A&E department in 2011/12 was 7.4, compared to 3.8 in 2007/8. The average number of Higher Specialist Trainees (ST4-6) posts available has risen slightly in the same five year time period (2007-12), but the well-documented reduction in recruitment into ST4-6 posts has created significant vacancy or locum rates of 29 per cent for specialist trainees<sup>350</sup>.

The recruitment shortage is set to compound the effects of the European Working Time Directive (EWTd), which limited the number of hours trainee doctors are allowed to work; effectively restricting the ability of hospitals to provide appropriate middle-grade cover, especially during out of hours periods<sup>351</sup>. The inability of trusts to recruit doctors to substantive posts in A&E departments has already led to an increase in the use of locums to deliver services<sup>352,353</sup>. Between 2008/09 and 2010/11 the average annual spend on medical locums in A&E departments rose by 30 per cent from £496,000 to £643,000. A recent report into the

<sup>348</sup> HCL (2013) The Real Emergency in Emergency Departments: Is the chronic shortage of England's A&E doctors reaching crisis point?; HCL workforce solutions

<sup>349</sup> College of Emergency Medicine (2013) The drive for quality; How to achieve safe, sustainable care in our Emergency Departments?

<sup>350</sup> College of Emergency Medicine (2013) The drive for quality; How to achieve safe, sustainable care in our Emergency Departments?

<sup>351</sup> Royal College of Physicians: Implementation of the European Working Time Directive by August 2004 for specialist registrars in acute hospital medicine. Commentary, Jan/Feb 2003, supplement no. 1

<sup>352</sup> Broad, M (2010) Spending on locums rockets due to EWTd; hospital doctor news 12th November 2010

<sup>353</sup> RCS Policy Unit (2010) Locum doctor costs in NHS Trusts in England: Results of a study from the Royal College of Surgeons of England

shortage of doctors specialising in emergency medicine found that expenditure on locum staff for A&E is putting increasing pressure on acute trust resources<sup>354</sup>.

**Key message**

The involvement of senior doctors 24 hours a day and consultant presence at times of peak activity seven days a week is required to ensure timely patient care and flow in an A&E department. Many A&E departments do not have the recommended number of emergency medicine consultants or middle grade doctors to support such a rota.

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<sup>354</sup> HCL (2013) The Real Emergency in Emergency Departments: Is the chronic shortage of England's A&E doctors reaching crisis point?; HCL workforce solutions

## 12. Effective urgent and emergency care networks

Fragmented and diverse services present a confusing and complex picture to patients, who may find it extremely difficult to access care when they need it most. In addition, a lack of communication between these services may result in poor patient experience, duplication of effort (for example, history taking) and risk (for example, over-medication).

Linking services together into networks may result in an improved experience for patients, as well as a more efficient system overall. A review of urgent and emergency services by the Healthcare Commission found that the 33 per cent best performing areas worked together to provide care in an integrated way, as well as providing prompt access to services<sup>355</sup>. Networks are also more likely to have linked reporting and patient information systems. This not only allows clinicians working in different locations to access detailed patient information, but also allows the collation of data for research purposes, driving improvement in treatment for the future<sup>356</sup>.

Additionally, in a joint statement, the Royal Colleges of Physicians, GPs and Nursing, the College of Emergency Medicine and the British Geriatrics Society stressed the need for integration of services across primary, secondary, health and social care to provide the best care for frail older people. In particular, for A&E departments to be aligned with geriatricians and other services. It also stressed the need for GPs to provide early and targeted interventions in the community for older people with long term conditions. Such integration could reduce admission and re-admission rates and length of stay in hospitals<sup>357</sup>.

Urgent and emergency care networks exist in some areas of England: in 2007, 96 out of the 152 (63 per cent) PCTs reported some network involvement in urgent and emergency care. Although guidance on their development was produced there was considerable variation in the organisation, scope, function and maturity of the networks<sup>358</sup>. One third of networks identified themselves as informal and most had a focus on implementing change across organisational boundaries.

Additionally, information sharing across the urgent and emergency care pathway is of paramount importance as better integration across information systems can improve the handover and referral processes for patients as they move between care providers<sup>359</sup>. However a 2011 study found that there was a lack of formal integration between providers of urgent and emergency care operating in the same area<sup>360</sup>. A 2010 study of eight out-of-hours urgent and emergency care providers also found that, in some organisations, access to patient records was difficult, and incompatible or unsophisticated IT systems created barriers for passing on patient information to other providers<sup>361</sup>. This meant there was a high probability

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<sup>355</sup> Healthcare Commission. September 2008. Not just a matter of time. Review of urgent and emergency healthcare services in England

<sup>356</sup> Shobha N, Fang J, and Hill MD. 'Do lacunar strokes benefit from thrombolysis? Evidence from the Registry of the Canadian Stroke Network', International Journal of Stroke (2012)

<sup>357</sup> Royal College of Physicians, College of Emergency Medicine, the British Geriatrics Society, the Royal College of General Practitioners and the Royal College of Nursing, 2012. *Joint statement on the emergency care of older people*

<sup>358</sup> University of Sheffield 2009. Medical Care Research Unit Final Report 2006-2010  
<http://www.shef.ac.uk/content/1/c6/05/91/04/final%20report.pdf>

<sup>359</sup> National Ambulance Commissioners Group (2010) Achieving integrated unscheduled care

<sup>360</sup> Primary Care Foundation (2011). Breaking the mould without breaking the system. Primary Care Foundation.

<sup>361</sup> Lattimer, V et al (2010) The impact of changing workforce patterns in emergency and urgent out-of-hours care on patient experience, staff practice and health system performance; Final report for the National Institute for Health Research Service Delivery and Organisation programme.

that some services were not aware of a patient's previous attendance elsewhere, forcing patients to repeat their stories at several stages in the same pathway. This disorder within the system compounds the issues of increased cost, poor patient experience, delay and clinical risk caused by patient confusion.

### **Key messages**

Urgent and emergency care networks can improve patient outcomes and experience, however there is variation in the organisation, scope and functionality of networks across the country.

There are wide variations in the way information is shared between providers of urgent and emergency care leading to potential duplication within the system causing delay and poor patient experience.

There is clearly room to increase and improve the number and consistency of emergency and urgent care networks in England, drawing on examples of good practice among other networks, including those from other areas of medicine.

Stroke networks, for example, link together ambulance services, hyper-acute stroke units, local stroke units and rehabilitation services. Ambulance crews take patients directly to the most appropriate location and patients are likely to receive the best treatment, such as thrombolysis, within the recommended time. Patients can then be sent to more local dedicated stroke units closer to home, ideally within three days<sup>362</sup>.

The trauma system in London also represents a well-developed network. It includes four trauma networks, each centred on a major acute hospital. These centres are supported by a number of trauma units located in A&E departments, where patients with less serious injuries are treated. Ambulance protocols developed alongside the system mean that trauma patients with severe injuries are taken directly to those centres that are best equipped to treat them. In the unusual event of such patients being taken to another A&E department, they are transferred directly. The development of specific trauma patient pathways has led to significant improvements in outcomes.

A whole-system approach to commissioning more accessible, integrated and consistent services is required to meet patients unscheduled care needs.

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<sup>362</sup> Department of Health, 2007. National Stroke Strategy

### 13. Conclusion

Urgent or unplanned care – when there is a need to access care quickly – leads to at least 100 million NHS calls or visits each year, which represents about one third of overall NHS activity and more than half the costs<sup>363,364</sup>. Growing numbers of frail elderly patients, increasing morbidities, more treatable illnesses and an increased public expectation of healthcare have all contributed to ever greater pressure on health and social care services<sup>365,366</sup>. This has led to greater pressure on the urgent and emergency care system and indications that the current system of urgent and emergency care is unaffordable and unsustainable and consuming NHS resources at a greater rate every year<sup>367,368</sup>. Further to this, the widespread fragmentation and varied nomenclature of the system is causing confusion amongst patients resulting in an inability to navigate the system effectively, duplication of efforts and patients' needs not being met in the right place, first time, by those with the right skills.

The evidence base for improving urgent and emergency care in England indicates that there is variation in access to primary care services across England leading to many patients accessing urgent and emergency care services for conditions that could be treated in primary care<sup>369</sup>. There is also variation in the management of patients with long-term conditions by primary care services.

Although telephone consultations are becoming increasingly popular and are less resource-heavy for general practice than face-to-face consultations, some patients lack confidence in telephone advice and are likely to pursue a second opinion inappropriately, leading to duplication of service provision, in some cases. Additionally, it is sometimes difficult to accurately triage patients over the phone and, without clinical input, call handlers may be likely to over-triage if they cannot rule out a serious condition.

Fragmentation and variation in urgent care services emphasise the problems of patient confusion and limited ability to navigate the current system. This leads to poor patient experience, duplication of efforts and resources and in some cases, patients defaulting to the familiarity of an A&E department, despite this not being the most appropriate service for their needs.

Calls to 999 emergency services are rising and, while ambulances are not always sent to callers, with some calls resolved with telephone advice alone, many are dispatched only to find an ambulance was not required. Some patients may be discharged at the scene following treatment; others are taken to non-emergency care facilities. The majority, however, are transported to A&E departments. While all emergency patients attending A&E departments should be able to expect specialised care of the highest quality, these departments are under increasing pressure due to rising patient numbers.

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<sup>363</sup> NHS Alliance (2012) A practical way forward for clinical commissioners; NHS Alliance on behalf of NHS Clinical Commissioners and sponsored by NHSCB

<sup>364</sup> Primary Care Foundation (2011) Breaking the mould without breaking the system

<sup>365</sup> Anandaciva, S (2012) Why do people end up at A&E?: a presentation given at the 'Leading the way: getting the most out of the reforms in urgent and emergency care' conference, November 2012, London

<sup>366</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust

<sup>367</sup> Blunt, I et al (2010) Trends in Emergency Admissions (2004-2009); Nuffield Trust:

<sup>368</sup> Fernandes, A. (2011) Guidance for commissioning integrated urgent and emergency care: a whole system approach; Royal College of General Practitioners Centre for Commissioning

<sup>369</sup> Booker et al (2013) Patients who call emergency ambulances for primary care problems: a qualitative study of the decision-making process; Emergency Medicine Journal;



Many patients presenting to A&E, or calling 999, do not need the specialised care offered at by these services, and would be better served elsewhere. They may be unaware of the options such as the NHS 111 services, which gives access to real time information about clinical services in order to locate an available service with the right skills. Additionally, feeling unwell and vulnerable, patients may go for the option they most closely identify with being able to provide care in a crisis, 24 hours a day. Whatever the reason, the current system is failing either to signpost patients to the appropriate level of care effectively, and, or in some cases to provide an obvious and easily-accessible alternative to A&E departments.

The public expect that the NHS will provide them with a consistently safe and high quality service; this expectation should underpin the way that all services are commissioned and delivered. Whilst the NHS provides a high quality service for many patients admitted as an emergency, significant variations exist in patient outcomes and service arrangements, both between hospitals and also within hospitals depending on whether the patient is admitted on a weekday or weekend<sup>370, 371, 372, 373, 374, 375, 376</sup>. This variation is also true of access to high quality back up services and specialised services.

With rising demand and greater costs, the urgent and emergency care system is consuming resources at a greater rate each year. Fragmented and diverse services present a confusing and complex picture to patients, who may find it extremely difficult to access care when they need it most. There is a clear need to adopt a whole-system approach to commissioning more accessible, integrated and consistent urgent and emergency care services to meet patients unscheduled care needs.

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<sup>370</sup> Aylin. P. et al (2010). Weekend mortality for emergency admissions. A large multicentre study, *Quality and Safety in Health Care*, 19: 213-217

<sup>371</sup> Bell, M. D., Redelmeier, D. A. (2001). Mortality among patients admitted to hospitals on weekends compared with weekdays *The New England Journal of Medicine* 345: 9

<sup>372</sup> Barba, R., Losa, J. E., Velasco, M., Guijarro, C., Garcia de Casasola, G. & Zapatero, A. (2006). Mortality among adult patients admitted to the hospital on weekends *The European Journal of Internal Medicine* 17: 322-324

<sup>373</sup> Schmulewitz, L., Proudfoot, A. & Bell, D. (2005). The impact of weekends on outcome for emergency patients. *Clinical Medicine*, 5: 621-5

<sup>374</sup> National Confidential Enquiry into Patient Outcome and Death. (2007). *Emergency admissions: A step in the right direction*, NCEPOD

<sup>375</sup> Ricciardi, P. (2011) Mortality rate after non-elective hospital admission. *Arch. Surg.* 2011; 146(5): 545-551

<sup>376</sup> NCEPOD (2010) An age old problem? *Elective and emergency surgery in the elderly*. NCEPOD 2010

## Glossary

**Academy of Medical Royal Colleges:** The Academy's role is to promote, facilitate and where appropriate co-ordinate the work of the Medical Royal Colleges and their Faculties for the benefit of patients and healthcare. The Academy comprises the Presidents of the Medical Royal Colleges and Faculties who meet regularly to agree direction.

**Acute medicine:** That part of general (internal) medicine concerned with the immediate and early specialist management of adult patients suffering from a wide range of medical conditions who present to, or from within, hospitals, requiring urgent or emergency care.

**Acute trust:** NHS acute trusts manage hospitals. Some are regional or national centres for specialist care; others are attached to universities and help to train health professionals. Some acute trusts also provide community services.

**Algorithms:** A step by step process for calculations used for data processing.

**Ambulatory care-sensitive conditions (ACSCs):** Conditions for which effective management and treatment should limit emergency admissions to hospital.

**Arterial surgery:** Surgery of the blood vessels which carry blood away from the heart.

**Asthma:** A common chronic inflammatory disease of the airways characterised by variable recurring symptoms, such as reversible airflow obstruction.

**Blood bank:** A cache or bank of blood or blood components, gathered as a result of blood donation, stored and preserved for later use in blood transfusion.

**Cardiology:** The medical specialty dealing with disorders of the heart.

**Care Quality Commission (CQC):** This is an organisation funded by the Government to make sure that care provided by hospitals, dentists, ambulances, care homes and services in people's own homes and elsewhere meets national standards of quality and safety.

**Chronic condition:** A health condition or disease that is persistent or otherwise long-lasting in its effects.

**College of Emergency Medicine:** A charity founded in 2010 which champion a culture of innovation, prevention and patient collaboration in medicine.

**Confidential Enquiry into Maternal and Child Health (CEMACH):** This organisation aims to improve the health of mothers, babies and children by carrying out confidential enquiries on a nationwide basis and by widely disseminating the findings and recommendations.

**Critical care:** A branch of medicine concerned with life support for critically ill patients.

**Department of Health:** The government department responsible for public health issues and which exists to improve the health and wellbeing of people in England.

**Diabetes:** A group of metabolic diseases in which a person has high blood sugar.

**Diagnosis:** The identification of the nature and cause of anything.

**Dr Foster:** The leading innovator in benchmarking public services and communicating information about services to the public.

**Elective care:** Scheduled care which does not involve a medical emergency.

**Emergency 999 service:** The official emergency UK telephone number for the caller to contact emergency services and for emergency assistance.

**Emergency admission:** An admission that is unpredictable and at short notice because of clinical need.

**Emergency department (ED):** Also known as accident and emergency (A&E), or casualty department, is a medical facility specialising in acute care for patients who present without prior appointment, either by their own means or by ambulance.

**Ethnic group:** Socially defined category based on common culture or nationality.

**European Working Time Directive (EWTD):** A collection of regulations concerning hours of work, designed to protect the health and safety of workers.

**Expert Patient Programme (EPP):** A self-management programme for people and carers living with long-term health conditions.

**Foundation Trust:** Part of the NHS and has gained a degree of financial and managerial independence from the Department of Health and local NHS strategic health authorities.

**Foundation Trust Network:** A membership organisation for the NHS public provider trusts, who represent every variety of trust.

**Frontline staff:** Staff who work directly with service users.

**General practitioner (GP):** A medical practitioner who treats acute and chronic illnesses and provides preventative care and health education to patients.

**Health literacy:** Method used to help people manage and prevent their own illness and injury better through self care and self management.

**Hyper-acute stroke unit (HASU):** Specific units created to deliver care for patients presenting with new onset of stroke symptoms.

**Hypertension:** A chronic medical condition in which the blood pressure in the arteries is elevated. Also known as high blood pressure.

**Information Centre for Health and Social Care (ICHSC):** A data information and technology resource for the health and social care system.

**Imaging:** The process used to create images of the human body for clinical purposes seeking to reveal, diagnose, or examine disease.

**Inpatient:** A patient who is admitted to the hospital and stays overnight for an indeterminate time.

**King's Fund:** An independent charity working to improve health and healthcare in England, by helping to shape policy and practice through research and analysis.

**Laboratory services:** A facility that provides controlled conditions in which scientific research experiments and measurement may be performed.

**London Trauma Office:** An NHS department which oversees the management of the capital's trauma system ensuring the delivery of a world class system.

**Major Trauma Networks:** NHS networks established nationally to specifically manage serious injuries.

**Minor injury units (MIU):** NHS units established to specifically treat non-serious injuries.

**Morbidity:** Refers to the disease state of the patient, or the incidence of illness in the population.

**Mortality rates:** Refers to the incidence of deaths in a population.

**National Audit Office:** A government agency responsible for scrutinising public spending on behalf of Parliament.

**National Confidential Enquiry into Patient Outcome and Death (NCEPOD):** A national organisation whose purpose is to assist in maintaining and improving standards of medical and surgical care for the benefit of the public by reviewing the management of patients, by undertaking confidential surveys and research, and by maintaining and improving the quality of patient care and by publishing and generally making available the results of such activities.

**Neurology:** The medical specialty responsible dealing with disorders of the nervous system.

**NHS 111:** A three digit telephone service introduced to improve access to NHS urgent care services.

**NHS Choices:** Information from the National Health Service on conditions, treatments, local services and healthy living.

**NHS Constitution:** The constitution sets out rights for patients, public and staff, and outlines NHS commitments and responsibilities owed to one another to ensure that the NHS operates fairly and effectively.

**NHS Direct:** A website set up by the NHS to provide health advice and information to patients and the public.

**NHS Employers Medical Workforce Forum:** An organisation established to provide an authoritative voice of workforce leaders, experts in human resources, and negotiate fairly to get the best deal for patients.

**NHS England:** Established in April 2013, the main aim of NHS England is to improve the health outcomes for people in England.

**NHS Improvement:** This organisation is now closed. However, elements of its programmes of work have continued within NHS Improving Quality, which is hosted by NHS England.

**Ophthalmology:** Is the branch of medicine that deals with the anatomy, physiology and disease of the eye.

**Orthopaedics:** The branch of surgery concerned with the musculoskeletal system.

**Outpatient:** A patient who visits a hospital or associated facility for diagnosis or treatment who is not hospitalised for 24 hours or more.

**Paediatrics:** The branch of medicine that deals with the medical care of infants, children and adolescents.

**Paediatrician:** A medical practitioner who specialises in the medical care of infants, children and adolescents.

**Patient Association:** A national voluntary organisation run by an elected Council and independent of government and health service organisations.

**Payment by results (PbR):** A system developed by a government team responsible for the development and production of a national tariff and supporting guidance.

**Pharmacist:** Healthcare professionals who practice pharmacy, the field of health sciences focussing on the safe and effective medication use.

**Physician:** A professional who practices medicine.

**Pre-hospital care:** A term which covers a wide range of medical conditions, medical interventions, clinical providers and physical locations.

**Primary care:** The health care given by a health provider who typically acts as the principle point of consultation for patients within the healthcare system and coordinates other specialists that the patient may need.

**Primary Care Foundation:** Established in 2008 to support the development of best practice in primary and urgent care.

**Public health:** Helping people to stay healthy and protecting them from threats to their health.

**Registrar:** A new training grade used to train doctors up to the specialist level required to become a consultant.

**Respiratory:** The anatomical system that includes the lungs, airways and respiratory muscles.

**Royal College of General Practitioners:** A professional membership body for family doctors in the UK and overseas.

**Royal College of Physicians (RCP):** An independent membership organisation which supports and represents physicians and engages in physician development and raising standards in patient care.

**Royal College of Surgeons (RCS):** An independent membership organisation which provides support and training to enable surgeons to achieve and maintain the highest standards of patient care.

**Secondary care:** Healthcare services provided by medical specialists and other healthcare professionals who generally do not have first contact with patients.

**See and treat:** A system developed with the aim to reduce variation waiting times between patients, thereby reducing the maximum wait that some patients experience.

**Self care:** Personal health maintenance. Any activity of an individual, family or community, with the intention of improving or restoring health, or treating or preventing disease.

**Self Help Forum:** An online self help support forum community which allows the public to raise health related queries and concerns online.

**Social care services:** A provider of quality outcome support for care service providers and independent single assessments and reviews to the general public and local authorities.

**Socio-economic group:** A group of people who have the same social, economic or educational class.

**Telemedicine:** A broad description of medical and healthcare services provided by means of telecommunications.

**Tertiary hospital:** A hospital which provides specialised consultative care.

**Thrombolysis:** The breakdown of blood clots by pharmacological means.

**Triage:** The process of determining the priority of patients' treatments based on the severity of their condition.

**Trolley wait:** A term used for patients who cannot be admitted due to a lack of bed capacity.

**Ultrasound:** A painless test that uses sound waves to create images of organs and structures inside the body.

**Unplanned care:** Healthcare which cannot reasonably be foreseen or planned in advance.

**Unscheduled care:** A term used to describe any unplanned health or social care.

**Urgent care:** The delivery of ambulatory care in a facility dedicated to the delivery of medical care outside of the hospital emergency department.

**Walk-in centre:** A service that provides treatments for minor ailments.

**World Health Organisation (WHO):** An organisation which directs and coordinates authority for health within the United Nations system.

**X-ray:** Often used to produce images of the dense tissues inside the body, such as bone.