Emergency admissions for Ambulatory Care Sensitive Conditions – characteristics and trends at national level

March 2014
Understanding how emergency admissions for ambulatory care sensitive conditions (ACSCs) vary at national level may raise questions to be investigated locally and identify areas for improvement.

This slide pack provides some analysis of the latest published data for the rate of hospital emergency admissions for these conditions as measured by the NHS Outcomes Framework indicators 2.3i (on long-term ACSCs) and 3a (on acute ACSCs).

This document includes:

• A short definition of ambulatory care sensitive conditions

• Analysis of the rate of admissions for ACSCs from 2003/04 to 2012/13 at:
  • National level
  • and for the following breakdowns at national level:
    • Gender
    • Age
    • Conditions
Introduction

• Ambulatory care sensitive conditions (ACSCs) are conditions where effective community care and case management can help prevent the need for hospital admission. Even if the ACSC episode itself is managed well, an emergency admission for an ACSC is often a sign of the poor overall quality of primary and community care.

• The NHS outcomes Framework (NHSOF) includes two indicators that measure the age-sex standardised rate of emergency admissions per 100,000 population for people of all ages:
  • Unplanned hospitalisation for chronic ambulatory care sensitive conditions (all ages) – NHSOF 2.3.i
    • This indicator indicates how successfully the NHS manages long-term (LTCs) or chronic conditions (such as asthma, diabetes, epilepsy, hypertensive disease, dementia and heart failure) where optimum management can be achieved in the community.
  • Emergency admissions for acute conditions that should not usually require hospital admission – NHSOF 3a
    • This indicator looks at conditions that should usually be managed without the patient having to be admitted to hospital such as ear-, nose- and throat infections, kidney- and urinary tract infections as well as acute heart disease.

• This slide pack presents key findings from the latest published data for emergency admissions for ACSCs – they cover the period from 2002/03 to 2012/13 and were published on the February 2013 by the Health and Social Care Information Centre (https://indicators.ic.nhs.uk/webview/)

[For further detail on the definitions, please go to: https://indicators.ic.nhs.uk/webview/ (on the left column: NHS Outcomes Framework > Domain 2 > Improvement Areas > Reducing time spent in hospital by people with long-term conditions; NHS Outcomes Framework > Domain 3 > Overarching indicators > 3a Emergency admissions for acute conditions that should not usually require hospital admission)]
Over the period, the rate of age-gender standardised emergency admissions (per 100,000 population) decreased for long-term ACSCs and increased for acute ACSCs.

An acute condition may be caused by the frailty of people with multiple long-term conditions, so looking at these indicators separately may provide a partial and artificial picture (e.g., some acute conditions may have been prevented by better management of long-term conditions).

From 2003/04 to 2012/13:
- The combined trend of the rate of emergency admissions shows an average increase of 2% per year for all ACSCs (indicators 2.3i and 3a);
- The admission rate decreased on average 1% per year for long-term ACSCs (indicator 2.3.i);
- And increased 4% per year for acute ACSCs (indicator 3a).
The rate of admissions decreased for female and male patients for long-term ACSCs

For long-term ACSCs:

- Wide difference in rates for male and female patients in 2003/04 with around 880 admissions per 100,000 populations for female patients compared to around 1,000 admissions for male patients.

- The gap disappears over time with hardly any difference noticeable between rates across genders in 2012/13.
The rate of admissions increased for female and male patients for acute ACSCs

For acute ACSCs:

- The gap between male and female patients has widened significantly from 2003/04 to 2012/13 with admission rates for both genders below 850 per 100,000 population in 2003/04 compared to rates of 1,136 and 1,270 respectively for males and females in 2012/13.
The rate of admissions for both long-term and acute ACSCs increased more for female patients than for male patients.

Comparing the rate of emergency admissions for male and female patients for both long-term and acute ACSCs:

- The rate of admissions for female patients increased on average 2% per year from 2003/04 to 2012/13.
- This is the double of the average increase for male patients over the period – 1%.
The rate of emergency admissions for ACSCs decreased for long term ACSCs and increased for acute ACSCs, mainly for ages 60+

For long-term ACSCs:

- The older the person the higher the rate of emergency admissions.
- The rate in 2013/13 was highest for 85-89 years old and 90 years old and older with around 5,000 to 5,500 emergency admissions per 100,000 population, respectively. Patients aged 60 and over had a rate from 1,000 to 4,000 admissions per 100,000 population.
- A slightly higher rate of emergency admissions in 2012/13 can be seen for 0 to 4 year olds and 5 to 9 year olds (around 400 and over admissions per 100,000 population). The lowest rates can be seen for 25 to 34 year olds with around 200 emergency admissions per 100,000 population.
The rate of emergency admissions for ACSCs decreased for long term ACSCs and increased for acute ACSCs, mainly for ages 60+

For acute ACSCs:
- While emergency admissions for age groups 10 to 49 are relatively low (around 400-600 admissions per 100,000 population) in 2012/13, the rate increases with age over the period 2003/04 to 2012/13 with the highest rates for the oldest age groups with almost 10,000 admissions per 100,000 population for the group aged 90 and over and almost 7,000 for the group aged 85-89.
- The third highest rate can be seen for the youngest age group of 0 to 4 year olds with almost 4,000 admissions per 100,000 population.
Five long-term ACSCs are responsible for 75% of admissions (2012/13)

- **Other chronic obstructive pulmonary disease** was the condition with the highest unplanned hospitalisation rate in all four quarters of 2012/13 with 50 emergency admissions per quarter on average.
- The table in the next slide shows the five conditions responsible for around 75% of the rate of admissions in 2012/13.

Note: The decrease in the rate of emergency admissions for heart failure and angina pectoris is likely to be related to improvements in risk factors for cardiovascular disease (e.g., with QOF), decreasing trends in smoking, increase in physical activity levels, and better treatment of cardiovascular disease itself (including increased use of relevant medicines).
Five long-term ACSCs are responsible for 75% of admissions (2012/13)

<table>
<thead>
<tr>
<th>Condition</th>
<th>% emergency admissions in 2012/13</th>
<th>Annual average change 2003/04 to 2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other chronic obstructive pulmonary disease, site not specified</td>
<td>24%</td>
<td>No change</td>
</tr>
<tr>
<td>Atrial fibrillation and flutter</td>
<td>12%</td>
<td>Increase 1%</td>
</tr>
<tr>
<td>Asthma</td>
<td>12%</td>
<td>Decrease 1%</td>
</tr>
<tr>
<td>Heart failure</td>
<td>12%</td>
<td>Decrease 3%</td>
</tr>
<tr>
<td>Angina pectoris</td>
<td>12%</td>
<td>Decrease 6%</td>
</tr>
</tbody>
</table>
Seven acute ACSCs are responsible for 75% of admissions (2012/13)

- **Urinary tract infection (site not specified)** was the condition with the highest emergency admissions rate in 2012/13 with 67 admissions per 100,000 population per quarter on average.

- It is followed by **lobar pneumonia** with 46 admissions per quarter on average.

- The table in the next slide shows the seven conditions responsible for 75% of the rate of admissions in 2012/13.

Note: Gastroenteritis cases were coded under ‘digestive’ conditions until 2010/11 and started to be coded under ‘infections’ from 2011/12. This change is highly likely to account for the huge increase in these admissions from 2011/12 to 2012/13.
Acute ACSCs responsible for 75% of admissions (2012/13)

<table>
<thead>
<tr>
<th>Condition</th>
<th>% emergency admissions in 2012/13</th>
<th>Annual average change 2003/04 to 2012/13</th>
<th>Annual average change 2003/04 to 2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urinary tract infection, site not specified</td>
<td>22%</td>
<td>Increase 7%</td>
<td>Increase 7%</td>
</tr>
<tr>
<td>Lobar pneumonia, unspecified</td>
<td>15%</td>
<td>Increase 10%</td>
<td>Increase 10%</td>
</tr>
<tr>
<td>Diarrhoea and gastroenteritis of presumed infectious origin</td>
<td>11%</td>
<td>Increase 30%*</td>
<td>Decrease 6%**</td>
</tr>
<tr>
<td>Cellulitis</td>
<td>8%</td>
<td>Increase 1%</td>
<td>Increase 2%</td>
</tr>
<tr>
<td>Acute upper respiratory infections multiple and unspecified sites</td>
<td>7%</td>
<td>Decrease 1%</td>
<td>Decrease 2%</td>
</tr>
<tr>
<td>Convulsions, not elsewhere classified</td>
<td>6%</td>
<td>No change</td>
<td>No change</td>
</tr>
<tr>
<td>Viral and other specified intestinal infections</td>
<td>6%</td>
<td>Increase 5%</td>
<td>Increase 4%</td>
</tr>
</tbody>
</table>

*Gastroenteritis cases were coded under ‘digestive’ conditions until 2010/11 and started to be coded under ‘infections’ from 2011/12. This change is highly likely to account for the huge increase in these admissions over the period.

** The rate of admissions decreases on average 6% per year in the conditions coded as ‘Diarrhoea and gastroenteritis of presumed infectious origin’ from 2003/04 to 2011/12, when the coding changes described above took place.
In sum, the key findings on the rate of emergency admissions for ACSCs from 2003/04 to 2012/13 are:

- The average increase of 2% per year for all ACSCs is made up of a decrease in the admission rate for long-term ACSCs, particularly for older people, and an increase in the admissions rate for acute ACSCs.

- The decrease in the admission rate for long-term ACSCs indicates better management of these conditions.

- Clinical advice suggests that the increase in the admissions rate for acute ACSCs, particularly for older people, seems to indicate that an acute condition may be caused by the frailty of people with multiple LTCs and that looking at these indicators separately may provide a partial and artificial picture.

- There is a small number of conditions driving up most of these admissions:
  - Five long-term ACSCs – ‘other chronic obstructive pulmonary disease’, atrial fibrillation and flutter, asthma, heart failure and angina pectoris.
  - Seven acute ACSCs – urinary tract infection (site not specified), lobar pneumonia (unspecified), diarrhoea and gastroenteritis of presumed infectious origin (which increase has been driven by coding changes in these conditions), cellulitis, acute upper respiratory infections (multiple and unspecified sites), convulsions (not elsewhere classified) and viral and other specified intestinal infections.

Other reports of interest: