

# What actions could be taken to reduce emergency admissions?



- Section 1: Introduction
- Section 2: Characteristics and trends in ACSC emergency admissions
- Section 3: Interventions that can reduce emergency admissions – evidence base
- Section 4: NHS England analysis identifying GP practice characteristics that have an impact on emergency admissions

- This resource is designed to aid commissioners by identifying strategies that can be adopted locally to reduce ambulatory care sensitive condition (ACSC) emergency admissions.
- Reducing avoidable emergency admissions improves the quality of life for people with long term and acute conditions and their families, as well as reducing pressures upon the resources of local hospitals.
- The importance of reducing emergency admissions is recognised by the inclusion of an indicator measuring this patient outcome in the quality premium, the better care fund and it is one the of outcome measures against which CCGs are required to set ambitions.
- The indicator used for each of these purposes uses the NHS OF indicators and is defined as:
  - 2.3i Unplanned hospitalisation for chronic ambulatory care sensitive conditions
  - 2.3ii Unplanned hospitalisation for asthma, diabetes and epilepsy in under 19s

## Section 1: Introduction (2)

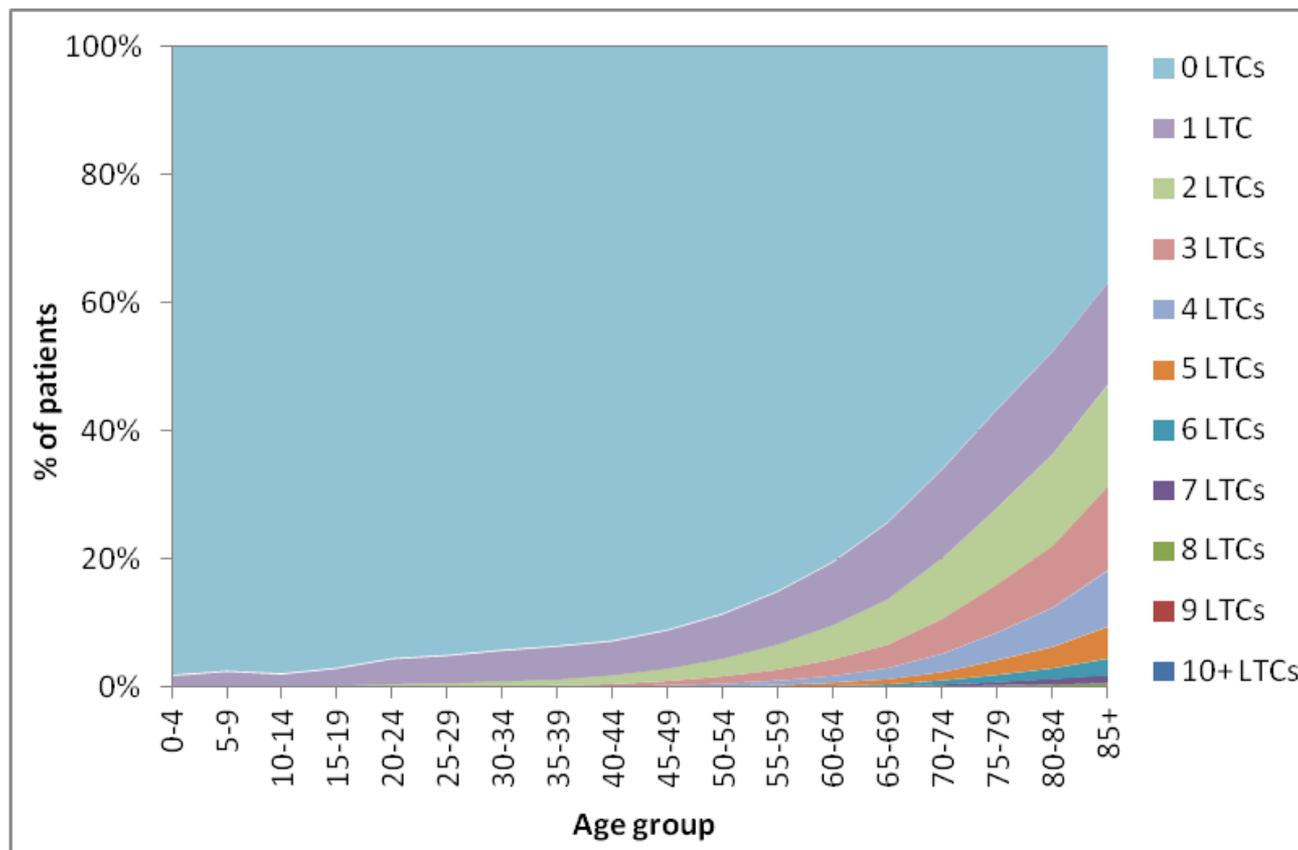
- 3a Emergency admissions for acute conditions that should not usually require hospital admission
- 3.2 Emergency admissions for children with lower respiratory tract infections (LRTI)
- This slide pack presents or provides links to:
  - analysis of trends in ACSC admissions by key characteristics,
  - some of the evidence on what can be done to reduce emergency admissions; and
  - for the first time, some NHS England analysis suggesting that access to GP services (as measured by the GP Patient Survey) has an impact on the rate of ACSC emergency admissions.
- To aid CCGs in setting and achieving levels of ambition locally, we are making available GP practice level data for the access to GP service indicators identified in the analysis as being significantly associated with lower levels of emergency admissions.

## Section 2: Characteristics and trends in ACSC emergency admissions

- 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.
- 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 – in particular the management of patients with comorbidities.
- The slide pack available at <http://www.england.nhs.uk/resources/resources-for-ccgs/out-frwrk/dom-2/> 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).

## Section 2: Characteristics and trends in ACSC emergency admissions - comorbidities

- Data from the long term conditions year of care programme<sup>1</sup> shown highlights the complexity of needs of patients and how this changes with age.
- 30% or more of patients aged over 75 years have 2 or more long-term conditions

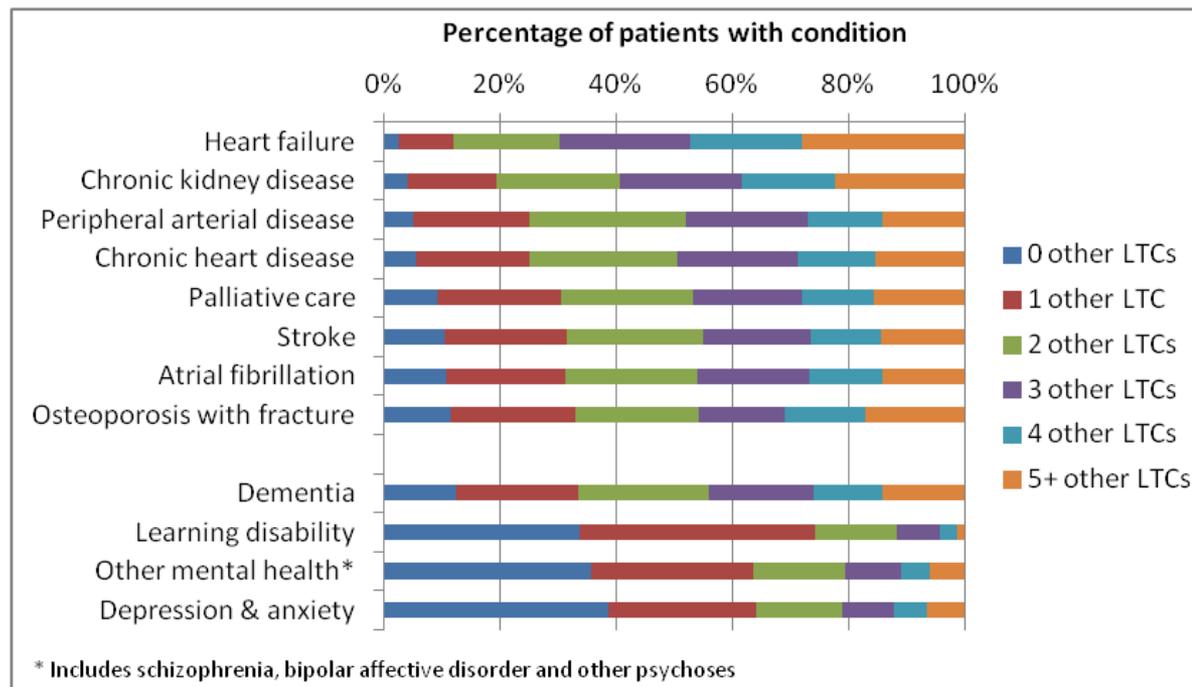


<sup>1</sup><http://www.nhs.uk/improvement-programmes/long-term-conditions-and-integrated-care/year-of-care.aspx>

<https://www.gov.uk/government/publications/qipp-long-term-conditions-year-of-care-funding-model-early-implementers>

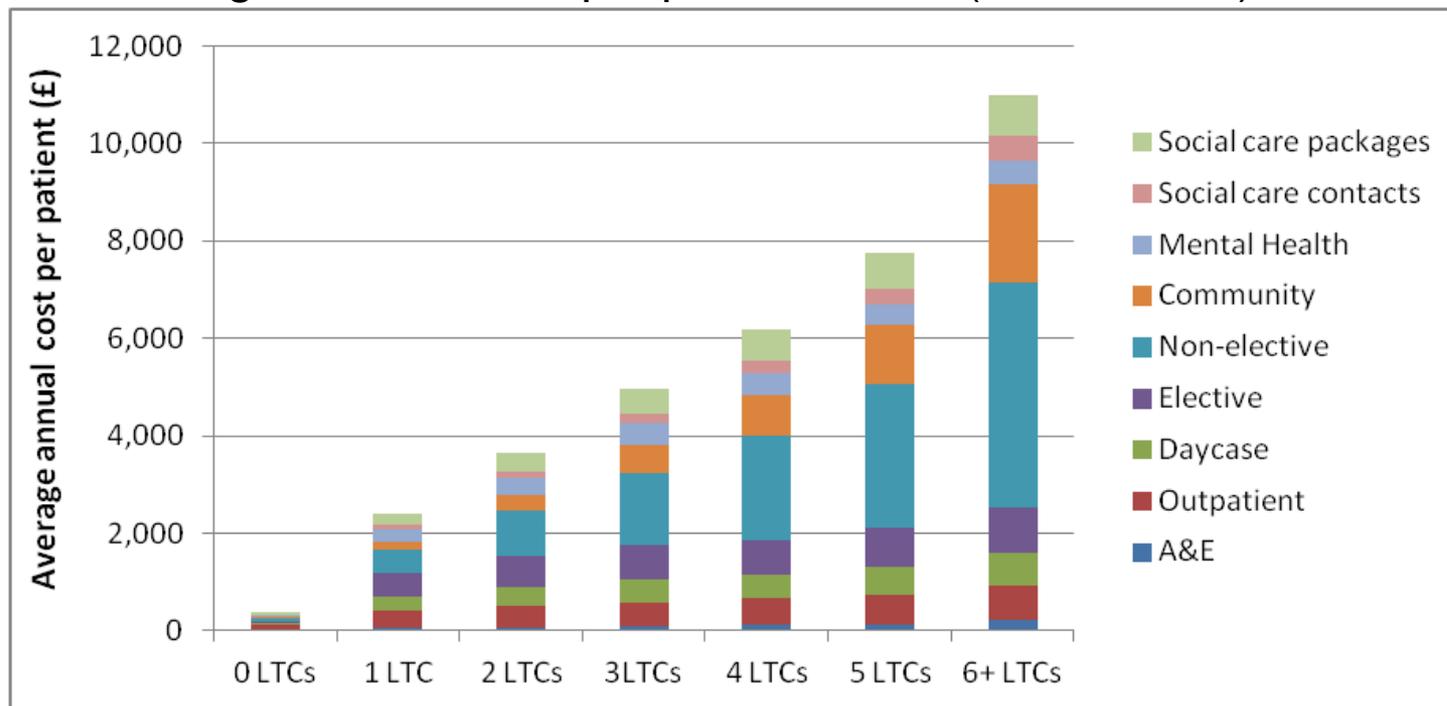
## Section 2: Characteristics and trends in ACSC emergency admissions - comorbidities

- Multimorbidity is more common than single morbidity
- Of people with a long-term condition, the percentage of people with 2 or more long-term conditions is greater than the percentage of people with only 1 long-term condition.



## Section 2: Characteristics and trends in ACSC emergency admissions - comorbidities

- The cost of health & social care increases with increased multimorbidity and increases are greater for emergency services.
- A long term conditions dashboard is being developed to support improved commissioning of services for people with LTCs (see slide 10).



## Section 3: Interventions that can reduce ACSC emergency admissions

- Work has been conducted by others to review the evidence on interventions that can have an impact on reducing emergency admissions.
- This section provides links to existing material and new evidence from NHS England analysis on interventions that can help reduce emergency admissions. This is presented in the following groups:
  - NHS England tools and programmes of work
  - Evidence from literature reviews
  - Case Studies
  - NHS England analysis to identify GP patient experience factors
- This is not an exhaustive review of the evidence but highlights areas for investigation in terms of strategies that could be explored locally for reducing emergency admissions.

## Section 3: Interventions – NHS England tools and programmes of work



- NHS England published a toolkit to help improve services and close the financial gap in 'Any town', which can be found at: <http://www.england.nhs.uk/2014/01/24/any-town>. This includes some interventions that have an impact on ASCS emergency admissions.
- There are also other NHS England programmes which we would expect to have an impact on avoidable emergency admissions. For example the urgent and emergency care review.
- NHS England is developing a resource called the House of Care which will bring together a range of materials to support commissioners, including details about interventions that support the reduction of emergency admissions. This is available at: <http://www.england.nhs.uk/resources/resources-for-ccgs/out-frwrk/dom-2/house-care-mod/>. From the end of April a dashboard for commissioners focussing on the needs of people with long term conditions will be made available at this site.

## Section 3: Interventions for reducing emergency admissions – evidence from the literature

- Recent reviews of the literature identified effective interventions – some of these are highlighted below. Further information is given in the papers referenced. They include:
  - Education and support for self management for those with long term conditions, in particular COPD, asthma and heart failure<sup>2</sup>
  - Rehabilitation for those who have recently suffered an exacerbation of COPD, exercise based rehabilitation for coronary heart disease<sup>2</sup>
  - Early review by a senior clinicians in emergency departments<sup>3</sup>
  - Structured discharge planning<sup>2</sup>

<sup>2</sup>Interventions to reduce unplanned hospital admissions: a series of systematic review (June 2012) S Purdy et al

<sup>3</sup> Avoiding hospital admissions What does the research say? (December 2010) S Purdy

## Section 3 - Interventions for reducing emergency admissions – case studies

- Regional case studies demonstrate that interventions aimed at reducing emergency admissions can make a difference but local circumstances will influence how interventions can be applied and the impact they will have.
- Integrated working between health and social care can result in lower than expected emergency admissions and reduced use of beds, as evidenced by the achievements of Torbay.
- Preventing re-admission requires active management of transitions, including timely and accurate information, good communication between hospital and primary care physicians, and a single point of co-ordination, as employed by Kaiser Permanente.
- Where clinical commissioning facilitates closer integration between general practices and other services, it has been shown to contain the growth in A&E attendances and emergency admissions, compared to national trends, as shown by experience in Cumbria.

## Section 3: Interventions for reducing emergency admissions – NHS England Analysis

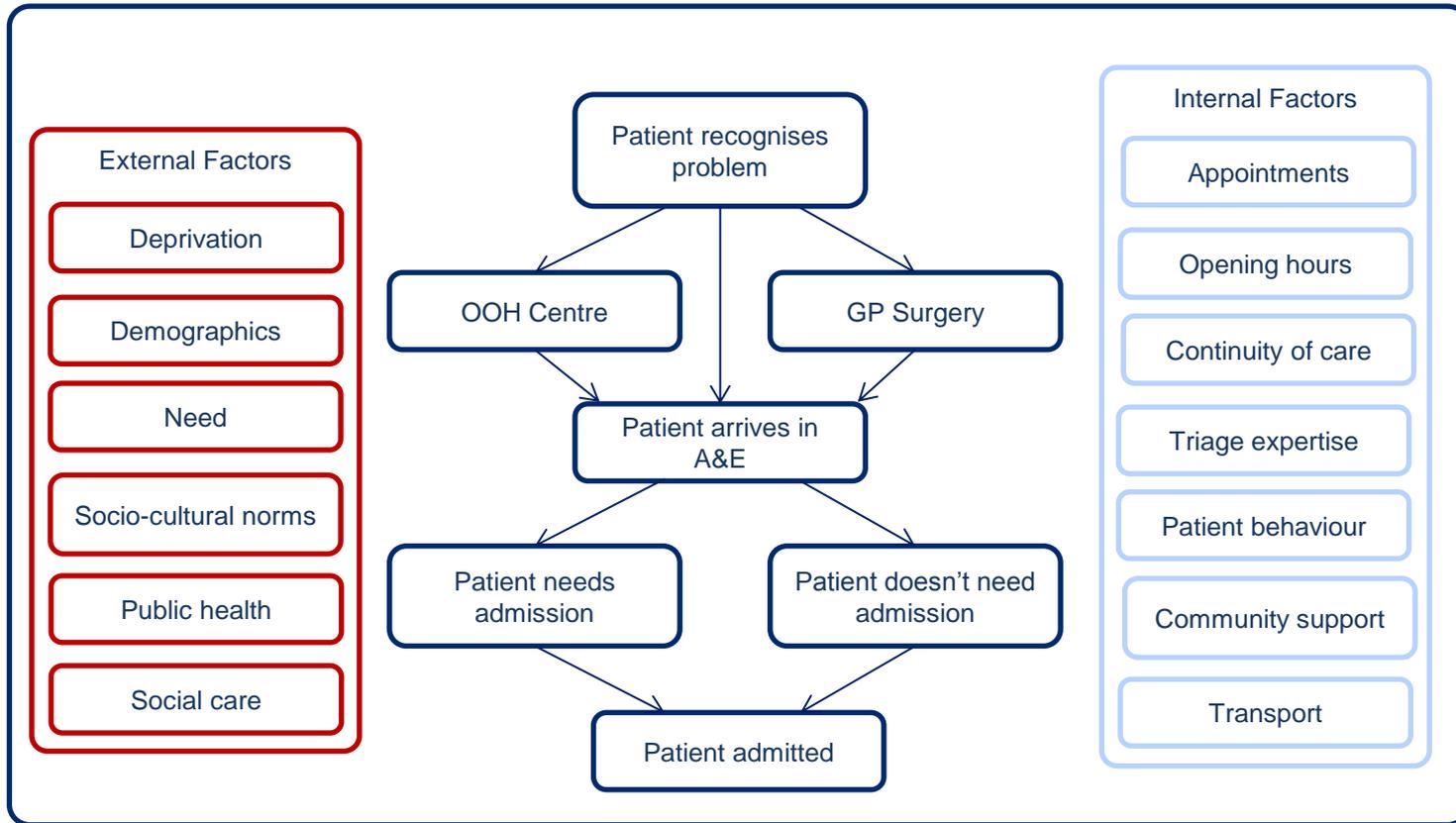
- Analysis carried out by NHS England suggests that in addition to a range of factors identified by previous research – for example deprivation, age, prevalence of long term conditions and public health measures such as smoking rates – patient experience of GPs at practice level has an impact on the rate of emergency admissions.
- The two GP practice experience indicators which were identified as have an impact on the rate of emergency admissions were:
  - the ability of patients to see their preferred GP (if they have one)
  - the proportion of patients who find it ‘very easy’ to speak to somebody at their surgery on the phone.
- Further details are provided in section 4 of this slidepack.

## Section 4: Analysis of factors influencing the number of emergency admissions – Purpose of analysis

- The aim of the analysis was to understand which factors are important in determining the rate of ACSC admissions.
- The analysis tested the importance of a range of variables both internal and external as described in the conceptual framework on the next slide and was undertaken at GP practice level.
- The purpose of this analysis was to understand whether there are factors which are important, that the NHS can have a direct impact upon and therefore influence with the aim of reducing emergency admissions.

# Section 4: Analysis of factors influencing the number of emergency admissions – Purpose of analysis

- Our model is based on Martin Roland's (2013) description of the pathway to emergency admission.



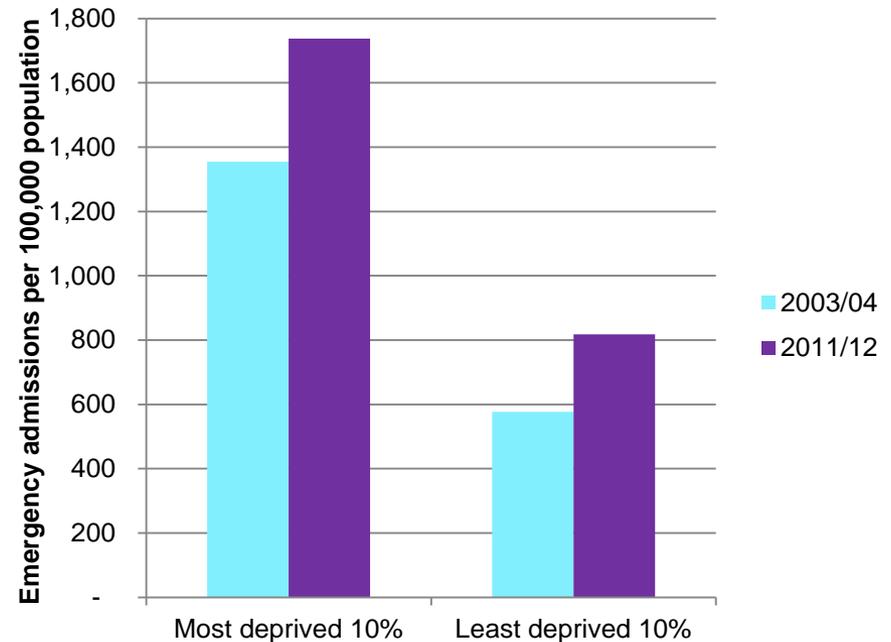
## Section 4: Methodology of the analysis

- The analysis includes, factors highlighted by others as having an impact upon emergency admissions<sup>1</sup>. For example the prevalence of long-term conditions and measures of socio economic deprivation, these are among the external factors highlighted on the previous slide.
- In addition to this, we used information from patient responses to the GP Patient survey to look at the importance of internal factors outlined on the previous slide.
- Looking at a range of both internal and external factors we performed a GP level analysis examining their relationship with the rate of emergency admissions. We used a multivariate regression analysis model to look at the significance of each of these factors. Further details of the approach to modelling and results is provided in a technical annex to this document.

<sup>1</sup>Tian, Dixon Gao (2012), Sims, Maxwell and Gilmore (2013)

# Section 4: Importance of demographic factors – socio-economic deprivation

- It can be seen that there is a strong positive relationship between the rate of emergency admissions and the level of relative socio-economic deprivation experienced by the local community.
- The chart to the right illustrates that in areas where the most deprived 10% of the population live, the rate of emergency admissions is more than twice that seen in areas where the most affluent 10% of the population of England live. This is a relationship that appears to hold over time.



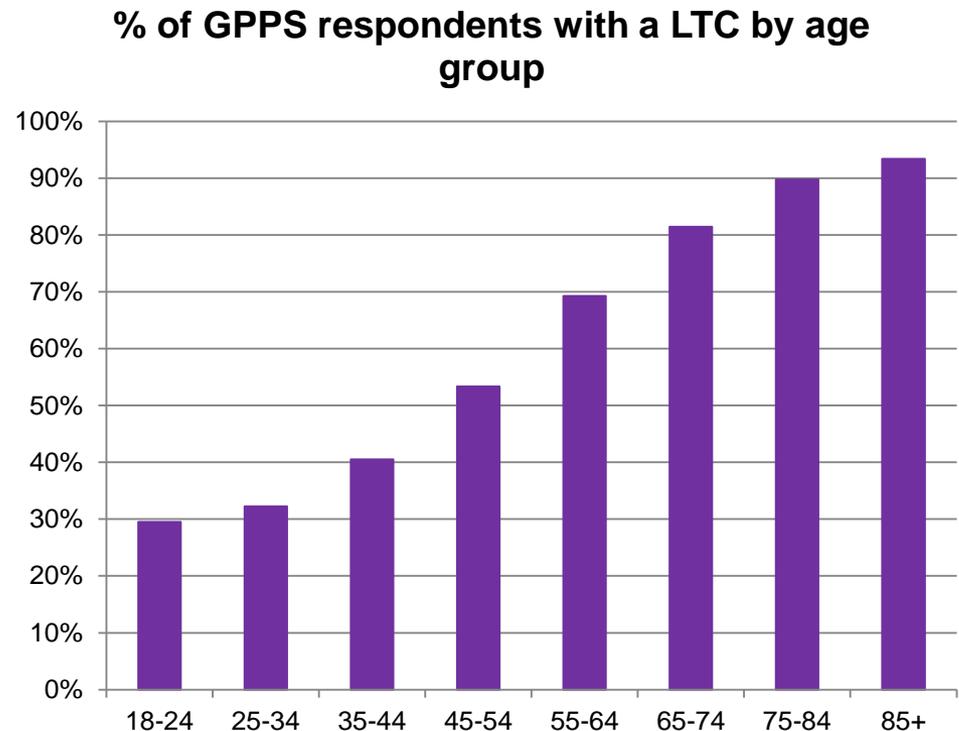
Rate of emergency admissions per 100,000 population for acute conditions by Index Multiple Deprivation level

## Section 4: Importance of demographic factors – socio-economic deprivation

- The multivariate regression analysis confirms the relationship outlined on the previous slide. Areas where a greater proportion of the population qualify for income support or pension credit, appear to experience higher rates of emergency admissions. We did not use the Index of Multiple Deprivation as a measure due to the fact that it contains a health component which could be argued to be driving the results.
- Areas where a higher proportion of the population were employed, either in full-time or part-time work appear to experience lower rates of emergency admissions. This could also be due to deprivation, as it assumed that areas where a higher proportion of the population are employed experience lower levels of deprivation.
- However the proportion of the local population in employment could also be representative of the age profile of the local population. Under 16s and over 65s are more likely to be admitted than those of working age.

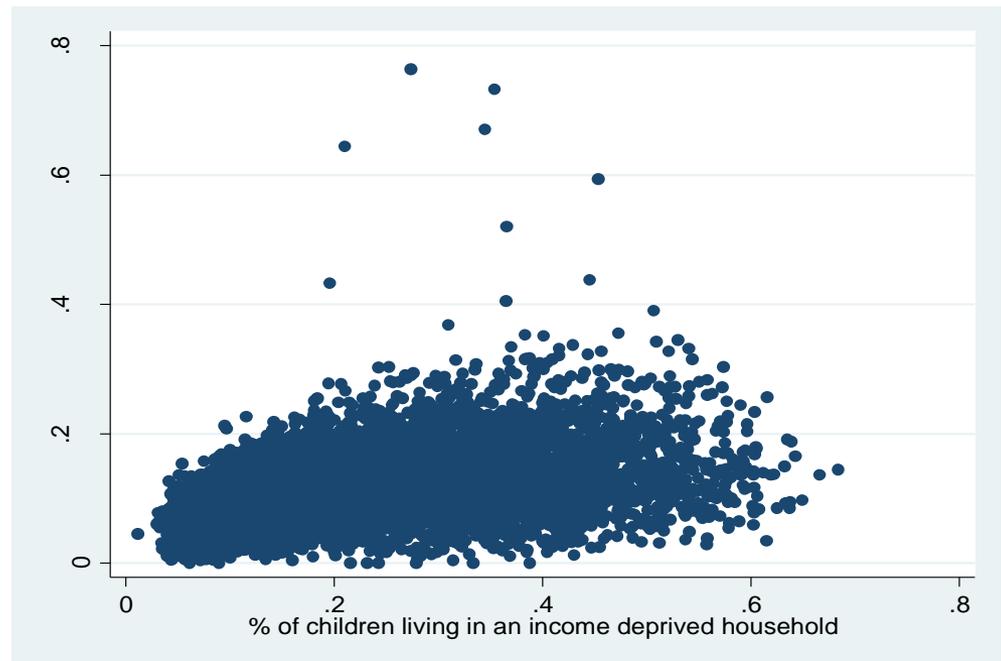
## Section 4: Importance of demographic factors – Age profile of the local population

- The chart below illustrates that older people are more likely to report having a long-term condition (LTC) than those in younger age groups.
- Our analysis found a significant positive relationship between the proportion of the population aged over 65 and the rate of emergency admissions.
- However, the analysis also highlighted that areas with a higher proportion of the population aged under 16 also experienced a higher rate of emergency admissions.



## Section 4: Importance of demographic factors – public health indicators

- The proportion of non-smokers and heavy smokers in the population had respectively a significantly negative and positive effect on the rate of emergency admissions. Smoking is linked to a range of health problems, however as the scatterplot below illustrates, there is a positive relationship between a proportion of heavy smokers in a local area and a measure of deprivation for that area.
- Our analysis suggested a positive relationship between the proportion of heavy smokers and a higher rate of emergency admissions. It is unclear whether this is driven by its link to income deprivation or its link with health outcomes.



## Section 4: Importance of demographic factors – health needs of the local population

- We found that there was a positive relationship between higher rates of admissions to local authority funded long-term institutional care for adults and higher rates of emergency admissions.
- Admission to a long term care home indicates that the individual has higher level care needs which cannot be supported in the community.
- There are a range of factors that affect rates of admissions to care homes – for example local supply of care home places. However this measure could be capturing the proportion of people in poor health, as well as the level of informal care available to the individual in the community.
- It could therefore be interpreted as a measure of how many people are extremely vulnerable from a health perspective.

## Section 4: Importance of social care provision

- The analysis also indicated that higher rates of expenditure on social care appears to be associated with lower levels of emergency admissions.
- Further work is planned to gain a greater understanding of this finding. However this finding highlights importance of the relationship between local community needs for health and social care, and the role that social care services can play in supporting people with complex health needs.

## Section 4: Importance of GP practice factors – How improving access to primary care can help

- The GP Patient Survey provides an important source of information for every GP surgery on different aspects of patient experience of primary care. The analysis looked at the importance of several aspects captured in the survey, including opening hours, ease of making appointments, helpfulness of GP surgery staff (receptionists, nurses and GPs) and out-of-hours services.
- From this analysis two factors appeared to have a significant relationship with a lower rate of emergency admissions:
  - The proportion of people who found it very easy to access their GP surgery on the phone;
  - The proportion of people who were always or almost always able to see their preferred GP if they had one and had tried to make an appointment with them in particular
- It is possible but we can not be sure that the relationship is causal.

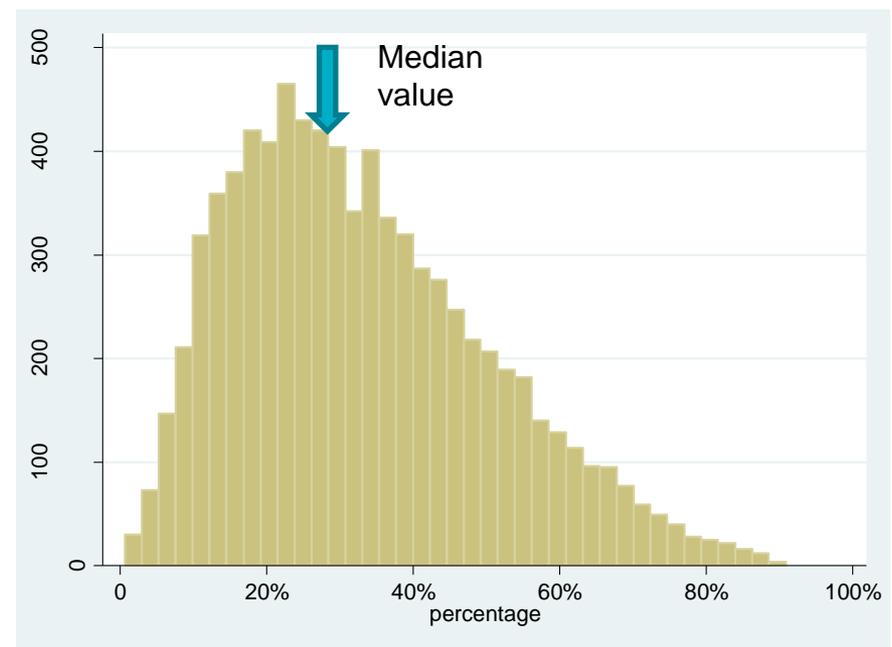
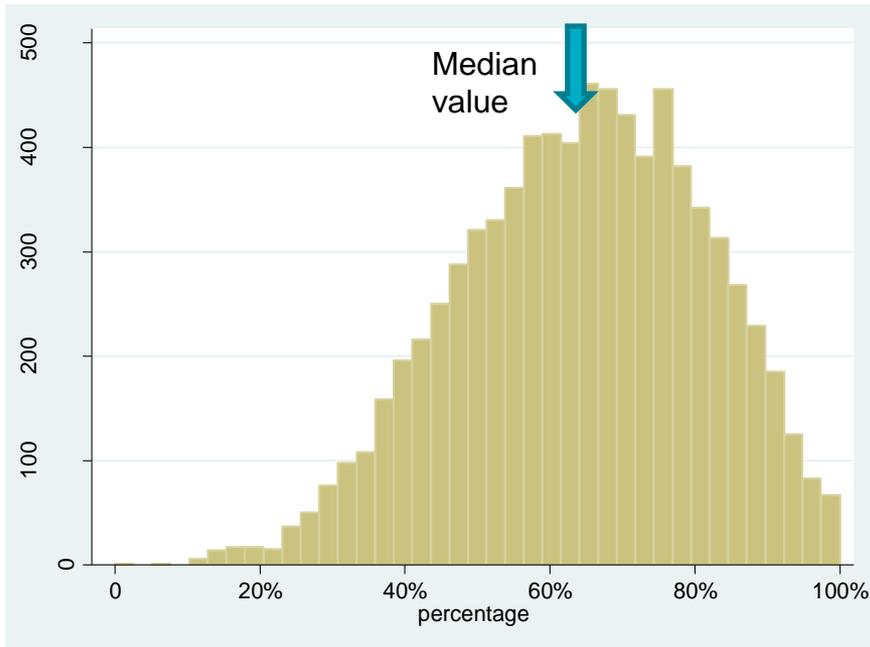
## Section 4: Variation in policy variables

- The histograms on the following slide illustrate the variation in the two significant policy variable values based upon responses to the 2012/13 GP patient survey.
- Across GP practices nationally the average (median) value of the policy variable measuring the proportion of people reporting that they were able to book an appointment with their preferred GP and had tried to do so was 65%.
- Looking at the proportion of people reporting that it is ‘very easy’ to get through to somebody on the phone at their GP surgery, the median value was 30%. However, in a quarter of practices, less than 20% of survey respondents report ‘very easy’ phone access.
- The charts highlight the wide variation in these measures between GP surgeries across England and therefore possible scope for improvement. However responses to this question may vary according to local circumstances of GP practices and therefore comparisons with similar practices locally would be more meaningful.

# Section 4: Histograms illustrating variation in policy variables (GP Patient Survey results 2012/13)

The percentage of people indicating they were able to book an appointment with their preferred GP and had tried to do so

The percentage of people reporting that it is 'very easy' to get through to somebody on the phone at their GP surgery



## Section 4: Further work

- In trying to support efforts to improve primary care services for patients with a view to reducing the rate of emergency admissions, we have made available the results from the GP Patient Survey at GP practice level for these two measures of patient experience alongside ACSC emergency admission rates. This is available at: <http://www.england.nhs.uk/ourwork/sop/plan-sup-tools/>
- Further work is needed to take this analysis forward. However we have sought comments from experts on the work done so far and the findings. On the basis of the feedback received we are confident of the results presented here. NHS England are planning to commission further research into the drivers of emergency admissions for people with ambulatory care sensitive conditions, and hope to be able to use this information to guide future planning.
- Here is a link to the technical appendix which provides further details of how the research and analysis was conducted  
<http://www.england.nhs.uk/resources/resources-for-ccgs/out-frwrk/dom-2/>