

# Adult Mental Health Needs Assessment for Kent Developmental Report using the Kent Integrated Dataset (KID)

May 2017



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**Produced by**

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## **| Contents**

<b>1. Introduction &amp; objectives .....</b>	<b>3</b>
<b>2. Identifying mental health conditions .....</b>	<b>4</b>
<b>3. Adults with mental health conditions .....</b>	<b>7</b>
3.1 Profiling & inequalities .....	7
3.2 Summary .....	16
3.3 Long term conditions: Matched cohort analysis.....	17
<b>4. Living alone .....</b>	<b>32</b>
4.1 Mental health conditions .....	33
4.2 Profiling & inequalities .....	35
<b>5. Excess alcohol use – indicative analysis.....</b>	<b>38</b>
5.1 Mental health conditions .....	40
5.2 Profiling & inequalities .....	42
<b>6. Carers – indicative analysis .....</b>	<b>46</b>
6.1 Mental health conditions .....	48
6.2 Profiling & inequalities .....	50
<b>7. BAME – indicative analysis .....</b>	<b>54</b>
7.1 Mental health conditions .....	56
7.2 Profiling & inequalities .....	58
<b>8. Veterans .....</b>	<b>61</b>
<b>9. Ex-prisoners .....</b>	<b>61</b>

**Annex A: Profile of GPs included in the analysis.....62**

## 1. Introduction & objectives

This document outlines analysis conducted by the Kent Public Health Observatory (KPHO) to support the development of a comprehensive Mental Health Needs Assessment for Kent.

This report focusses specifically on linked data analysis conducted using the Kent Integrated Dataset (KID). Figures presented from the Kent Integrated Dataset set are currently badged as 'Developmental Statistics' in order to reflect that the linked data set, and associated findings drawn from it, are new and still in development. These statistics should be sense-checked with existing non-linked datasets, and all supporting methodological notes read carefully.

In all cases, the analysis has been restricted to individuals registered with GPs who were successfully flowing full data on both events and consultations into the KID at the time of the analysis. **This means that the analysis is based on a sample of 115 of the c.200 GP practices in Kent (i.e. it covers around 60% of the Kent registered population) who we are using to represent Kent as a whole.** Detailed analysis of the extent to which the patients registered with these 115 practices is representative of the whole Kent registered population has been conducted and is provided in Annex A.

Whilst this analysis demonstrates that the patients of these 115 practices are broadly representative of the Kent registered population as a whole in terms of practice and patient characteristics, there are some biases evident in respect of CCG in particular, but also age. Weighting (by CCG and age) was investigated as a means of correcting for these known biases. Profile analysis was run on both unweighted and weighted data for all four definitions of mental illness. It was found that introduction of weighting made very little difference to the results, and so in the interests of simplicity and transparency all analysis presented in this report is unweighted

We welcome feedback from users and stakeholders on the progress of the KID, particularly as a means to build in quality at this early stage in its development,

**The key objectives for this analysis were as follows:**

- To understand inequalities and comorbidities associated with mental health conditions in adults, and how these compare with the wider adult population
- To understand variations in the inequalities and comorbidities associated with mental health conditions for particular vulnerable groups
  - These include carers, ex-prisoners, veterans, excess drinkers and BAME groups
- To further understanding of mental health conditions and the associated inequalities and comorbidities in the context of living alone.

This report is designed to provide the technical detail of the methodological approaches taken in the analysis, as well as to document the results. .

## **| 2. Identifying mental health conditions**

This analysis focusses on four distinct approaches to identifying adults suffering from mental health problems.

### **1. Individuals receiving secondary mental health services**

- This group is identified via data submitted to the Kent Integrated Dataset by Kent & Medway Partnership Trust (KMPT). Individuals have been identified who have contacts recorded within the KID secondary mental health records (provided by KMPT) for 2015/16, who are registered with a GP providing data to the KID and who are resident in Kent. Individuals who only have contacts recorded where the outcome is 'discharged no cluster' or where the cluster coding is still 'pending' have been removed (this may under represent those in contact who receive a diagnosis at a later date). Analysis has been conducted at cluster-level where appropriate.

### **2. Individuals recorded by GP as having a serious mental health problem**

- This group is identified via data submitted to the Kent Integrated Dataset by GPs. Individuals have been identified who have been recorded by their GP within the read-coded event data as having a serious mental health condition that was still active at the time of the extraction. This is roughly equivalent to the serious mental illness identified in QOF.

### **3. Individuals admitted to hospital as an emergency for a mental health condition**

- This group is identified via data submitted to the Kent Integrated Dataset by the acute providers (via the Secondary Uses Service (SUS)). Individuals have been identified who have been recorded within the SUS records as having been admitted to hospital as an emergency for a mental health condition (ICD10: F00-F99) during 2015/16, who are registered with a GP providing data to the KID and who are resident in Kent.

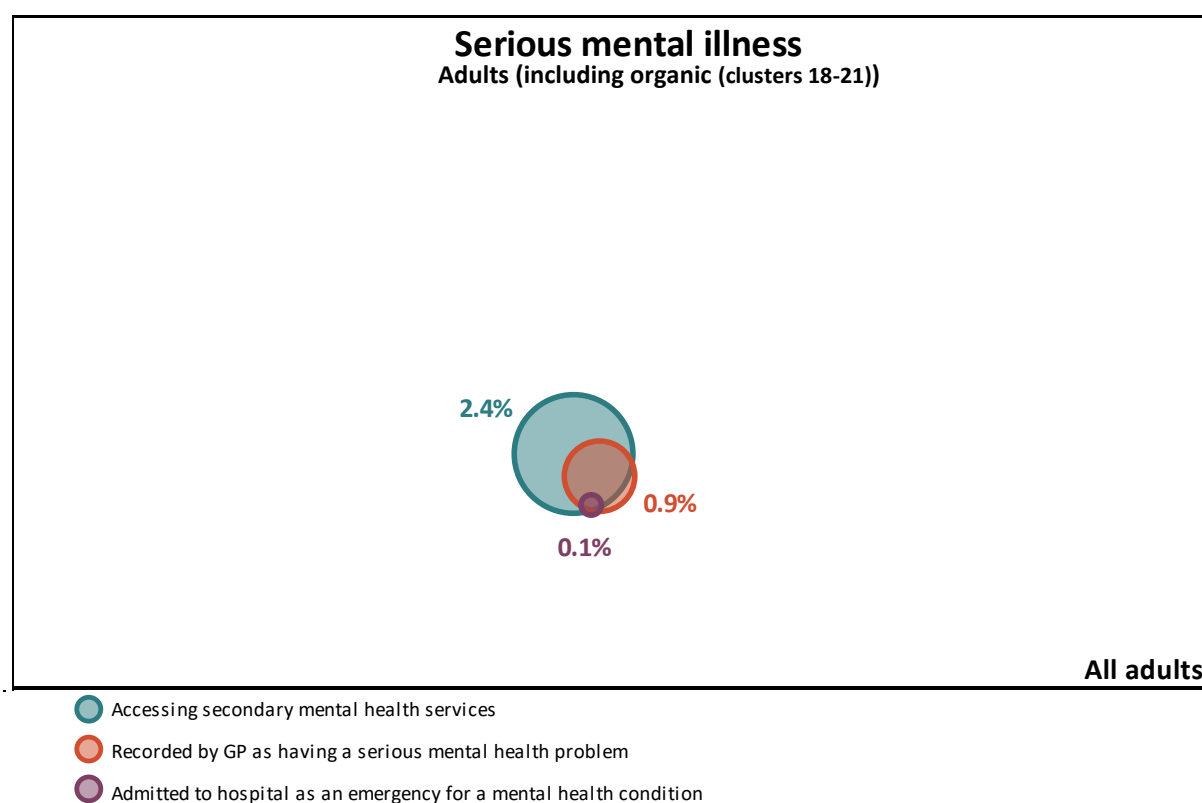
### **4. Individuals recorded by GP as having anxiety and/or depression**

- This group is also identified via data submitted to the Kent Integrated Dataset by GPs. Individuals have been identified who have been recorded by their GP within the read-coded event data as having either anxiety or depression that was still active at the time of the extraction. The analysis that follows summarises the recorded prevalence of these four mental illness groups<sup>1</sup> within our study population, and the overlap between them.

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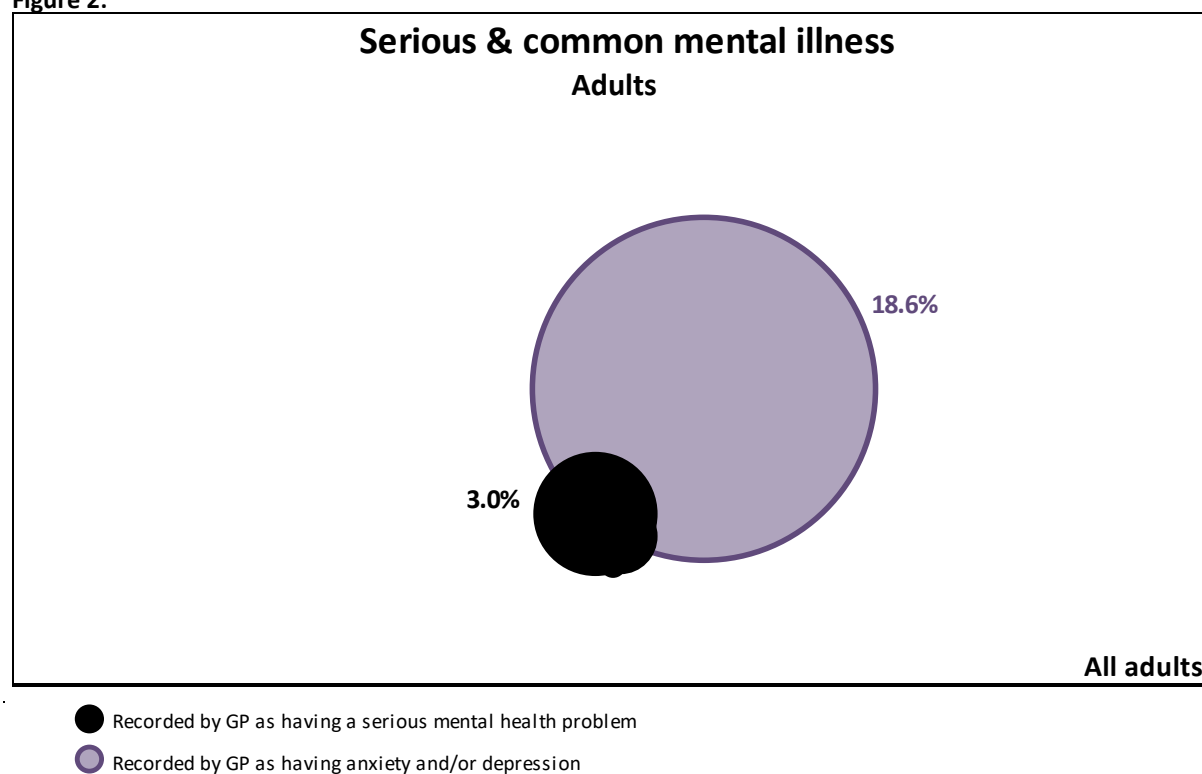
<sup>1</sup> Individuals receiving secondary mental health services, individuals recorded by their GP as having a serious mental health problem, individuals admitted to hospital as an emergency for a mental health condition and individuals recorded by their GP as having anxiety and/or depression.

**Figure 1:**



Source: RK KID (March April 2017) KPHO

**Figure 2:**



Source: RK KID (March /April 2017) KPHO

**Table 1: Serious Mental illness Adults: recorded prevalence (KID developmental statistics)**

	% of adult population	Estimated number of adults*
Accessing secondary mental health services	2.4%	28,600
Recorded by GP as having a serious mental health problem	0.9%	10,300
Admitted to hospital as an emergency for a mental health condition	0.1%	1,100
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem	0.4%	4,400
Accessing secondary mental health services <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.1%	600
Recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.1%	1,000
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	<0.05%	500
Accessing secondary mental health services <u>OR</u> recorded by GP as having a serious mental health problem <u>OR</u> admitted to hospital as an emergency for a mental health condition (i.e. any serious mental health condition)	3.0%	35,600

Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

\*Based on mid-2015 ONS population estimates. Rounded to the nearest 100.

### 3 3. Adults with mental health conditions

#### 3.1 Profiling & inequalities

Each of the four groups of mental health patients defined in Chapter 2 above have been profiled, with those receiving secondary mental health services also analysed by PBR cluster.

The analysis covers:

- **Equity characteristics** such as age, gender, deprivation and isolation
- **Service usage**, covering hospitals, GPs, social care and secondary mental health<sup>2</sup>
- **Comorbidities**, including key long term conditions and risk scores<sup>3</sup>

The analysis includes comparisons with the whole Kent registered adult population.

#### Commentary on the graphics in Figures 3 to 8.

In Figure 3 there are marked differences in the cohort receiving secondary mental health services and the GP patient list cohort as a whole. We hope this visual representation enables a clearer picture of the risks, the increased rates of GP consultations - over 12 consultations compared with 5 in this study as a whole, higher rates of long term conditions and numbers living alone. The Band 1 and Band 2 PARR risk scores (including GP practice data, in addition to the secondary care data), are higher and suggest there are opportunity to identify these patients with long term conditions and opportunities for clinical intervention. Social care and secondary, mental health costs are significantly higher as might be expected from secondary treatment but some expenditure is driven by crisis care which has significant cost implications. The quality of care received by this patient community could improve to reduce expenditure on unplanned care.

Figure 4 provides a graphic profile of the cohort of people identified by their GP as having a serious mental health condition; the graphics describe an increased rate living alone, double the rates of A&E attendances and emergency admissions and significant numbers living in Kent's most deprived deciles.

The graphics in Figure 5 - adults admitted to hospital as an emergency for a mental health problem- demonstrate the increase use of unplanned care and under use of planned care services. The increased rate in urgent care episodes and long term conditions associated with people who are also accessing secondary mental health services suggests the quality of

<sup>2</sup> It should be noted that figures exclude acute activity at Darent Valley Hospital, and as such are an underestimate of the true level of activity.

<sup>3</sup> See [https://www.kingsfund.org.uk/sites/files/kf/field/field\\_document/PARR-combined-predictive-model-final-report-dec06.pdf](https://www.kingsfund.org.uk/sites/files/kf/field/field_document/PARR-combined-predictive-model-final-report-dec06.pdf) for further details on the risk scores used. Band 1 corresponds to 'very high relative risk', Band 2 to 'high relative risk', Band 3 to 'moderate relative risk' and Band 4 to 'low relative risk'.



care could be improved for this easily identified cohort at double the risk of re-admission across Bands 1-3 and an overall risk score of 32.2 compared with the KID average of 6.9

In Figure 6 - Individuals recorded by their GP as having anxiety and/or depression – there is a marked gender imbalance which is reflected in the Adult Psychiatric Morbidity Survey 2014 which found that for all types of common mental health problems, these are more common in women than in men. The impact of females often having poorer mental health than males and requires strategic level initiatives to address.

**Table 2: Trends in Common Mental Health Problems: Men and Women 16 to 24 years**

APMS Year	1993 %	2014 %
Women	19.2	26
Men	8.4	9.1

Source APMS 1993 and 2014

The 2014 APMS survey highlights higher rates of common mental health problems being found among younger women (aged 16 to 24 years) compared to their male peers. In 1993, young women of this age group were twice (19.2%) as likely to have symptoms of a common mental health problem - at 19.2% - compared to young men - at 8.4%. This increased by 2014, where these symptoms are nearly three times more common in young women (26.0%) than men (9.1%). The findings also show that nearly 25% of young women in this age group have self-harmed in their life. These stark patterns indicate the need for the STP to support the development of effective strategies for preventing common mental health problems in women. It is likely that these strategies will need to take into consideration that men are known to be under represented in diagnosis of common mental illness, but, there are a combination of a range of factors which women are more vulnerable to experiencing in their life time (such as domestic violence, physical and sexual abuse) which interact with one another.<sup>4</sup>

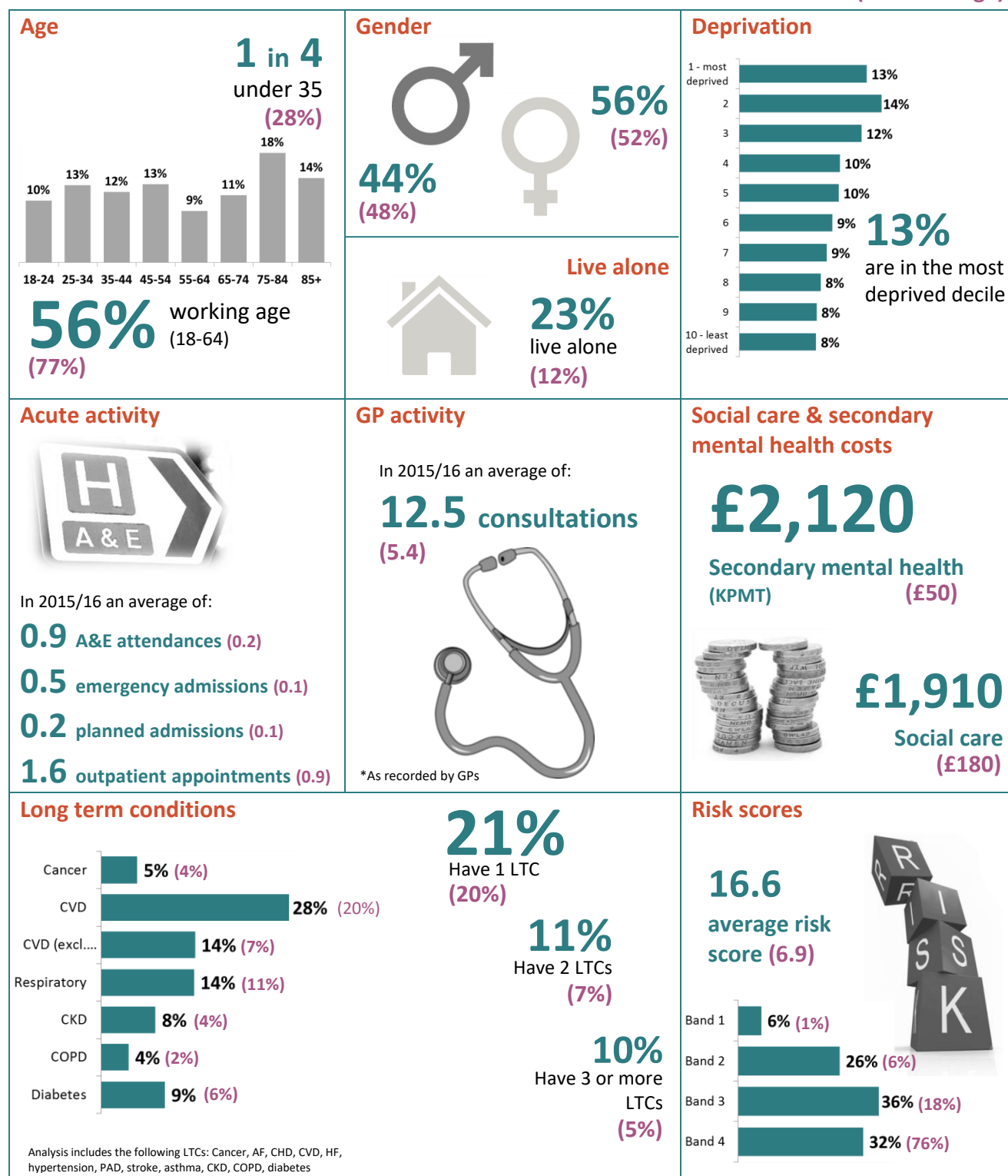
Figure 7 Individuals receiving secondary mental health services: Non-Psychotic continues to show high numbers of people living alone compared with the KID dataset as a whole. 14.8 GP consultations were made by this cohort compared to 5.2 and suggest more could be done to tackle issues such as isolation where interventions to tackle isolation have also reduced GP referrals; for example, KCC's Live Well Service user feedback suggest they see their GP less often. The number of individuals in the most deprived deciles is marked reflecting the low income and unstable tenancies experienced by people receiving secondary mental health services (Figures 7 and 8).

Figure 8 - organic brain disease - this older cohort will have higher rate of LTCs than KID.

<sup>4</sup> <https://www.mentalhealth.org.uk/blog/adult-psychiatric-morbidity-survey-highlights-mental-health-gender-differences>

**Figure 3: Individuals receiving secondary mental health services**  
(developmental statistics)

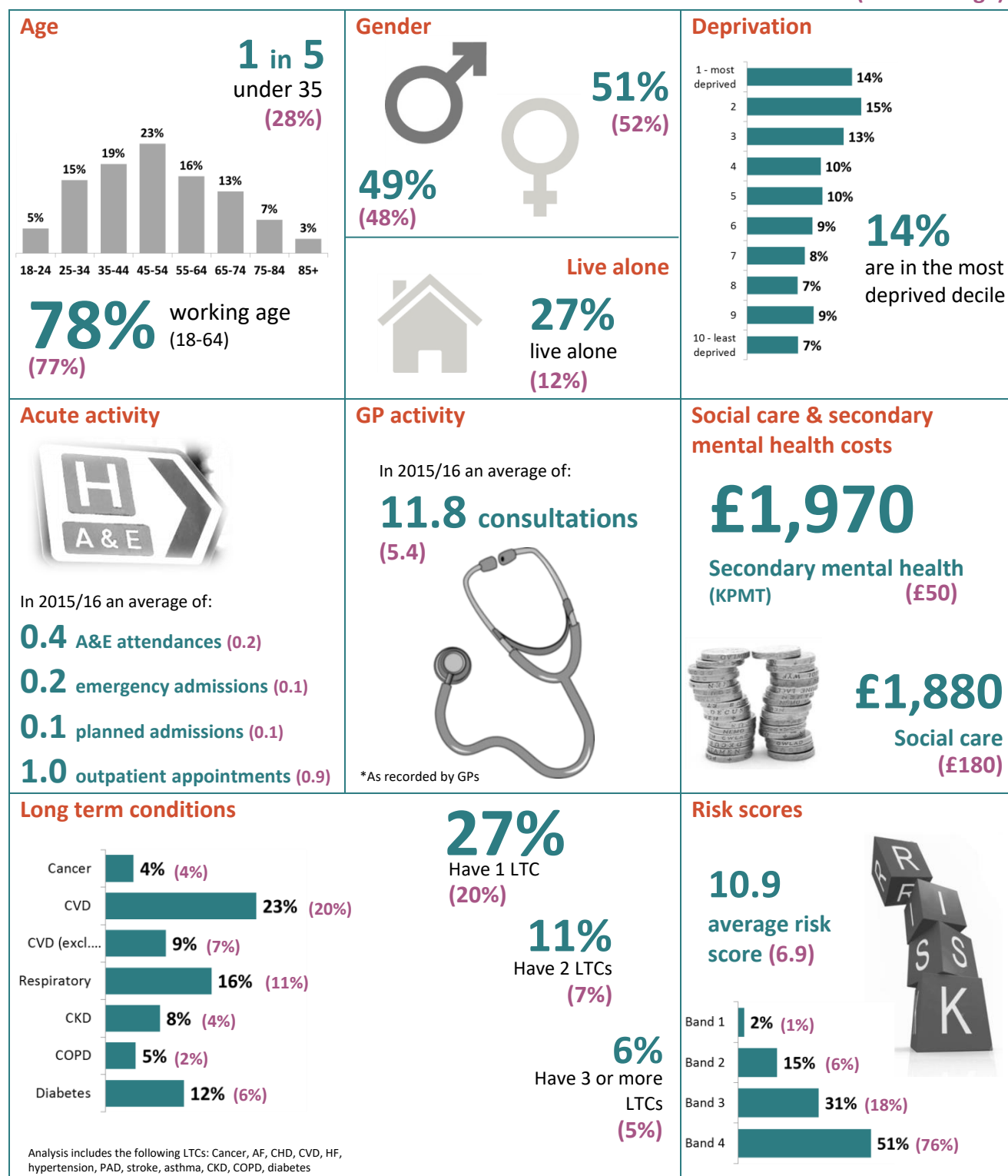
(Kent average)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 18209 individuals aged 18+ recorded within the KID secondary mental health records (provided by KPMT) as contacts during 2015/16, who are registered with a GP providing data to the KID and who are resident in Kent. Individuals who only have contacts recorded where the outcome is 'discharged no cluster' or where the cluster coding is still 'pending' have been removed. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 4: Adults recorded by their GP as having a serious mental health condition (developmental statistics)**

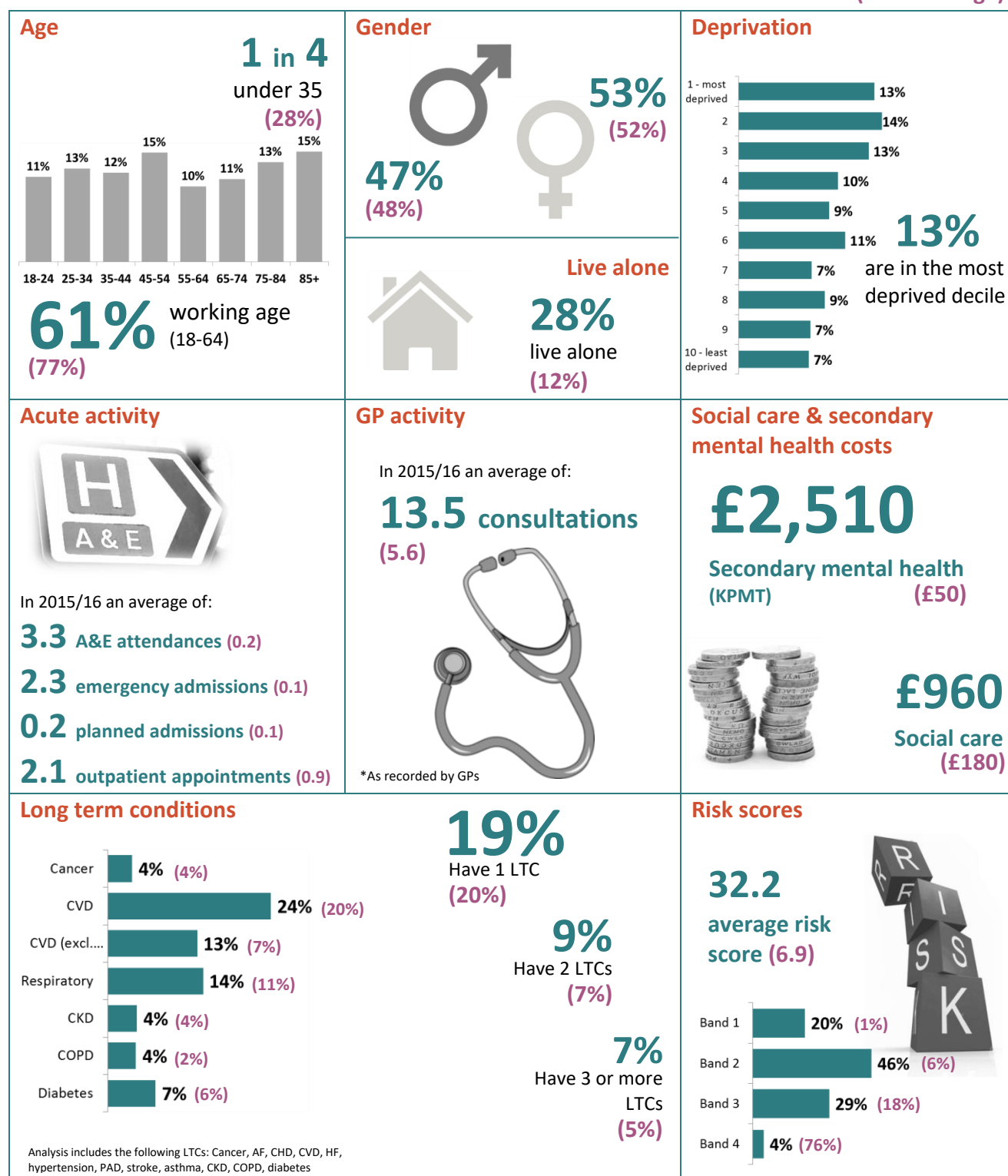
(Kent average)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 6392 individuals aged 18+ recorded within the KID GP records as having a current serious mental health condition and who are resident in Kent. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 5: Adults admitted to hospital as an emergency for a mental health problem (developmental statistics)**

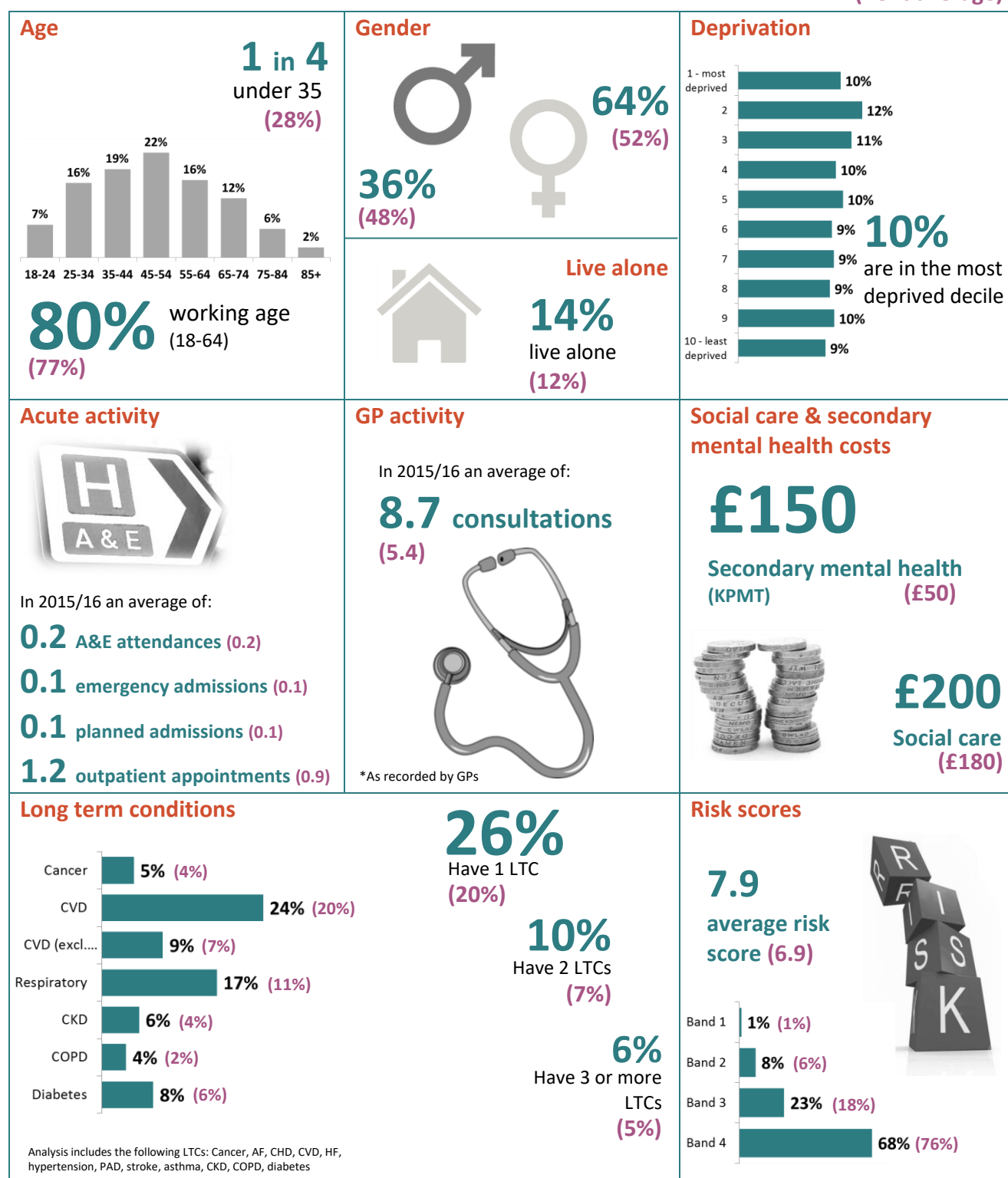
(Kent average)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 702 individuals aged 18+ recorded within the KID SUS records as having been admitted to hospital during 2015/16 as an emergency with a mental health primary diagnosis (ICD10: F) and who are resident in Kent. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 6: Individuals recorded by their GP as having anxiety and/or depression (developmental statistics)**

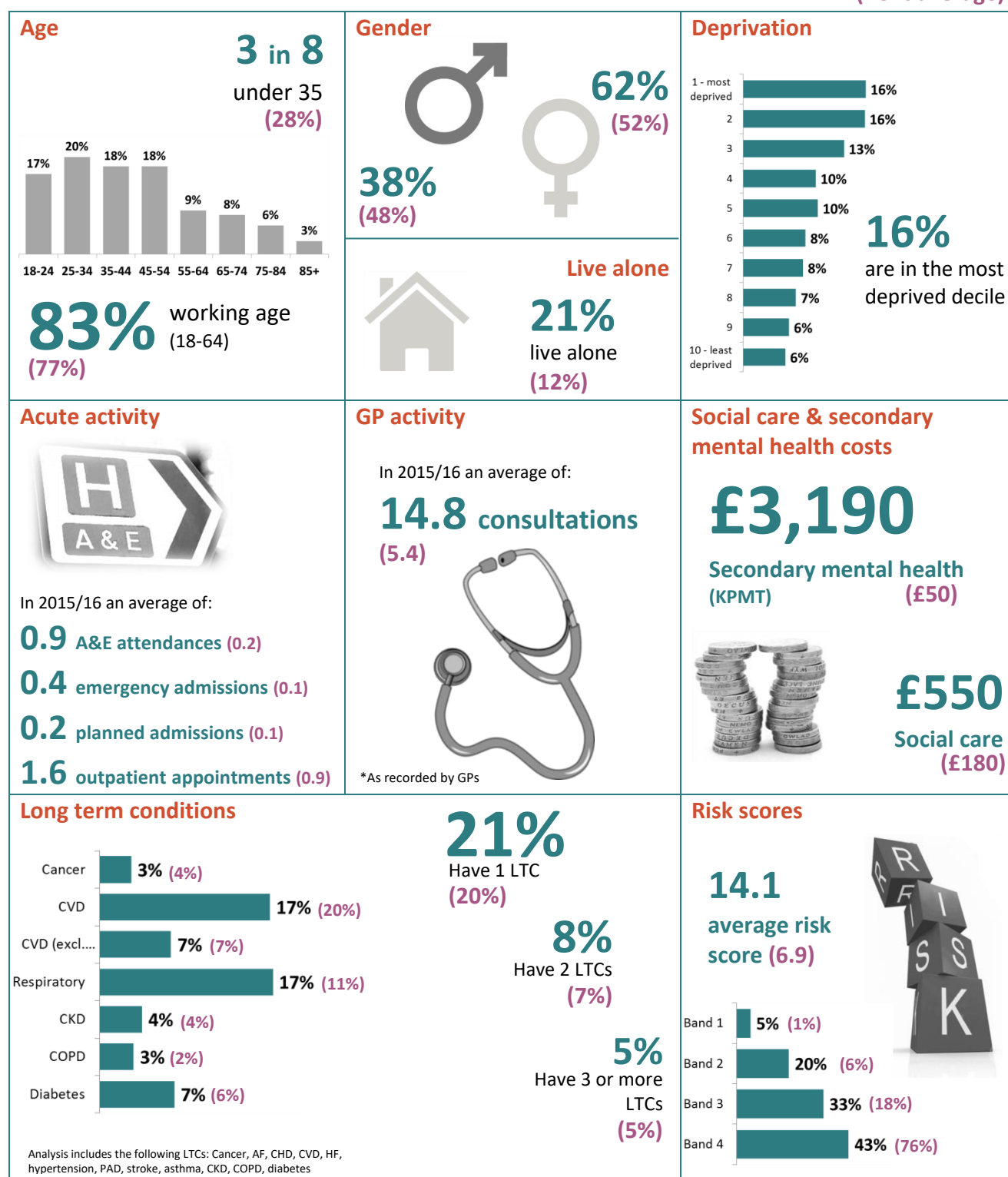
(Kent average)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 138019 individuals recorded within the KID GP records as current having anxiety and/or depression and who are resident in Kent. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health costs covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 7: Individuals receiving secondary mental health services: Non-Psychotic (developmental statistics)**

(Kent average)

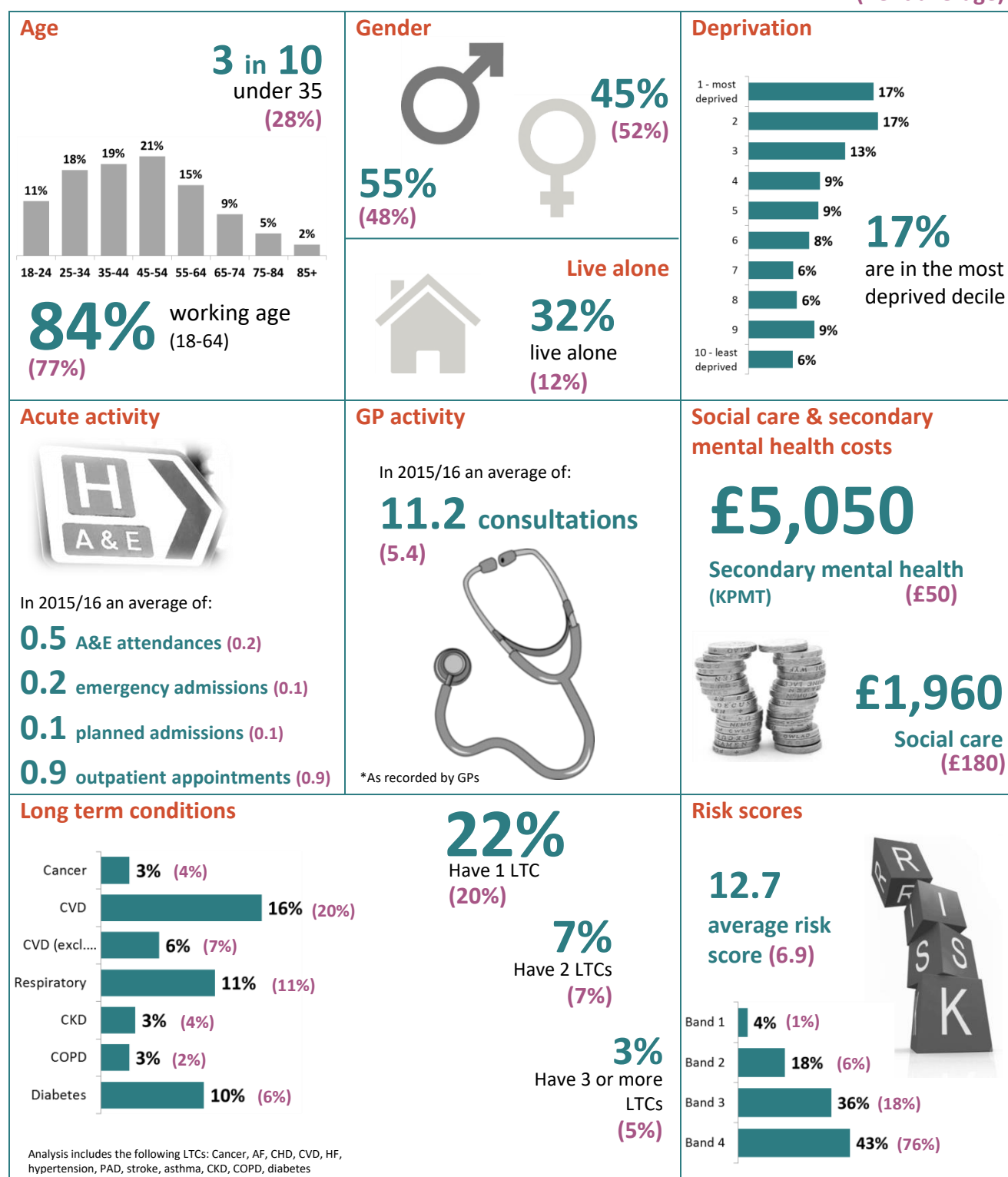


Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 5374 individuals aged 18+ recorded within the KID secondary mental health records (provided by KPMT) as contacts during 2015/16 and as falling into clusters 1-8, who are registered with a GP providing data to the KID and who are resident in Kent. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.



**Figure 8: Individuals receiving secondary mental health services:  
Psychotic (developmental statistics)**

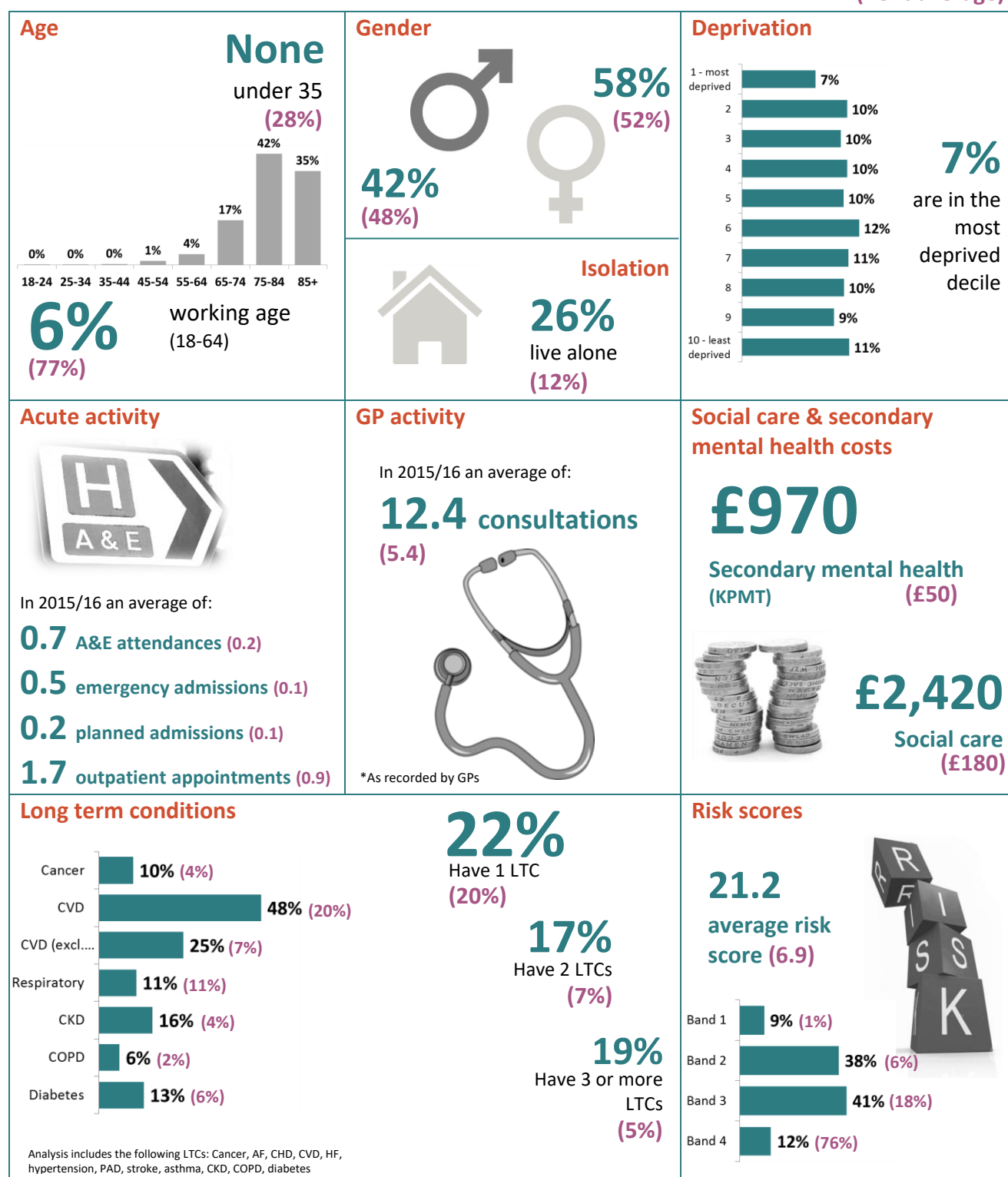
(Kent average)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 2279 individuals aged 18+ recorded within the KID secondary mental health records (provided by KPMT) as contacts during 2015/16 and as falling into clusters 10-17, who are registered with a GP providing data to the KID and who are resident in Kent. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 9: Individuals receiving secondary mental health services:  
Organic (developmental statistics)**

(Kent average)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 6075 individuals aged 18+ recorded within the KID secondary mental health records (provided by KPMT) as contacts during 2015/16 and as falling into clusters 18-21, who are registered with a GP providing data to the KID and who are resident in Kent. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.



## 3.2 Summary of the Graphics

This analysis suggests that:

- Adults with serious mental health problems are around twice as likely to live alone than the adult population as a whole.
  - This does not apply to individuals recorded as having anxiety and/or depression.
- Adults with serious mental health problems are also skewed towards our most deprived communities
  - Again, this does not apply to individuals recorded as having anxiety and/or depression
- Whilst those registered by their GP as having a serious mental illness divide roughly equally into men and women, women account for just under two-thirds of those registered as having anxiety and/or depression.
- Adults with serious mental health problems tend to have more contact with services, including more hospital and GP visits, higher social care costs and higher secondary mental health costs
  - Whilst those recorded by their GP as having anxiety and/or depression tend to have more contact with their GP than the adult population as a whole, their usage of acute hospital services and social care is similar to the Kent average.
- With the exception of secondary mental health service users falling into the organic cluster, adults with serious mental health problems and those recorded as having anxiety and/or depression have only a slightly elevated long term condition profile compared to the Kent adult population as a whole.
  - For example, 24% of those recorded as having anxiety and/or depression are also recorded as having CVD, compared with 20% of the adult population.
    - Equivalent figures for respiratory diseases are 17% vs 11%, for COPD 4% vs 2% and for diabetes 8% vs 6%.
- All mental health groups are assessed as higher risk than the population average
  - Those admitted to hospital as an emergency for a mental health problem have particularly high average risk scores.

### 3.3 Long term conditions: Matched cohort analysis

In the above analysis, mental health patients are compared with the overall adult population. This means that some of the differences observed could be attributable, at least in part, to e.g. age profile differences. Where a cohort of mental health patients is older than the general Kent population (as in the case of secondary mental health service users falling into the organic cluster) it is reasonable to expect higher levels of service usage and long term condition prevalence.

This analysis focusses particularly on individuals with mental health problems **who also have other long term conditions** and compares them with a matched cohort of adults from the general population.

The analysis considers the following long term conditions, as recorded by GPs:

- Cancer
- Atrial fibrillation (AF)
- Chronic heart disease (CHD)
- Cardiovascular disease (CVD)
- Heart failure (HF)
- Hypertension
- Peripheral Arterial Disease (PAD)
- Stroke
- Asthma
- Chronic kidney disease (CKD)
- Chronic obstructive pulmonary disease (COPD)
- Diabetes

All of the individuals included in the analysis presented in this section have at least one of these conditions currently recorded by their GP.

In addition, a matched cohort approach has been taken whereby each individual with a mental health problem that has been included in the analysis has been matched with an individual with the same key characteristics **except** for the mental illness. The groups can then be compared, with the suggestion being that differences between a group of individuals identified as having a particular mental health problem and their matched cohort can be interpreted as being the result of the presence of the mental health problem.

Individuals have been matched on the following:

- Long term condition profile (covering the 12 conditions listed above)
- Age (18-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85+)
- Gender
- Deprivation (deciles)
- CCG
- Acorn group

Where possible a match has been found on all six of these characteristics. This was possible for more than two-thirds (69%) of cases. Around 1 in 4 (24%) were matched on the first five 4% on the first four, 2% on just the first three, 1% on the first two and 1% on just the long term condition profile.

Each of the four groups of mental health patients have been analysed using this matched cohort approach. The analysis presents differences between the whole cohort of each type of mental health patient with a long-term condition with their matched group, and sub-groups of interest<sup>5</sup>, including:

- Individuals with different numbers of long term conditions (1, 2, 3+)
- Individuals with specific long term conditions (cancer, CVD, CVD excluding hypertension, respiratory disease, COPD, diabetes)
- Individuals from different age groups (18-44, 45-64, 65+)
- Men and women

The analysis itself looks at service usage (activity and costs), risk scores and living arrangements. Results are presented as the % difference between those with mental health conditions and their matched cohort (i.e. a figure of 50% indicates that those with the mental health condition under consideration have activity levels/costs 50% higher than their matched cohort).

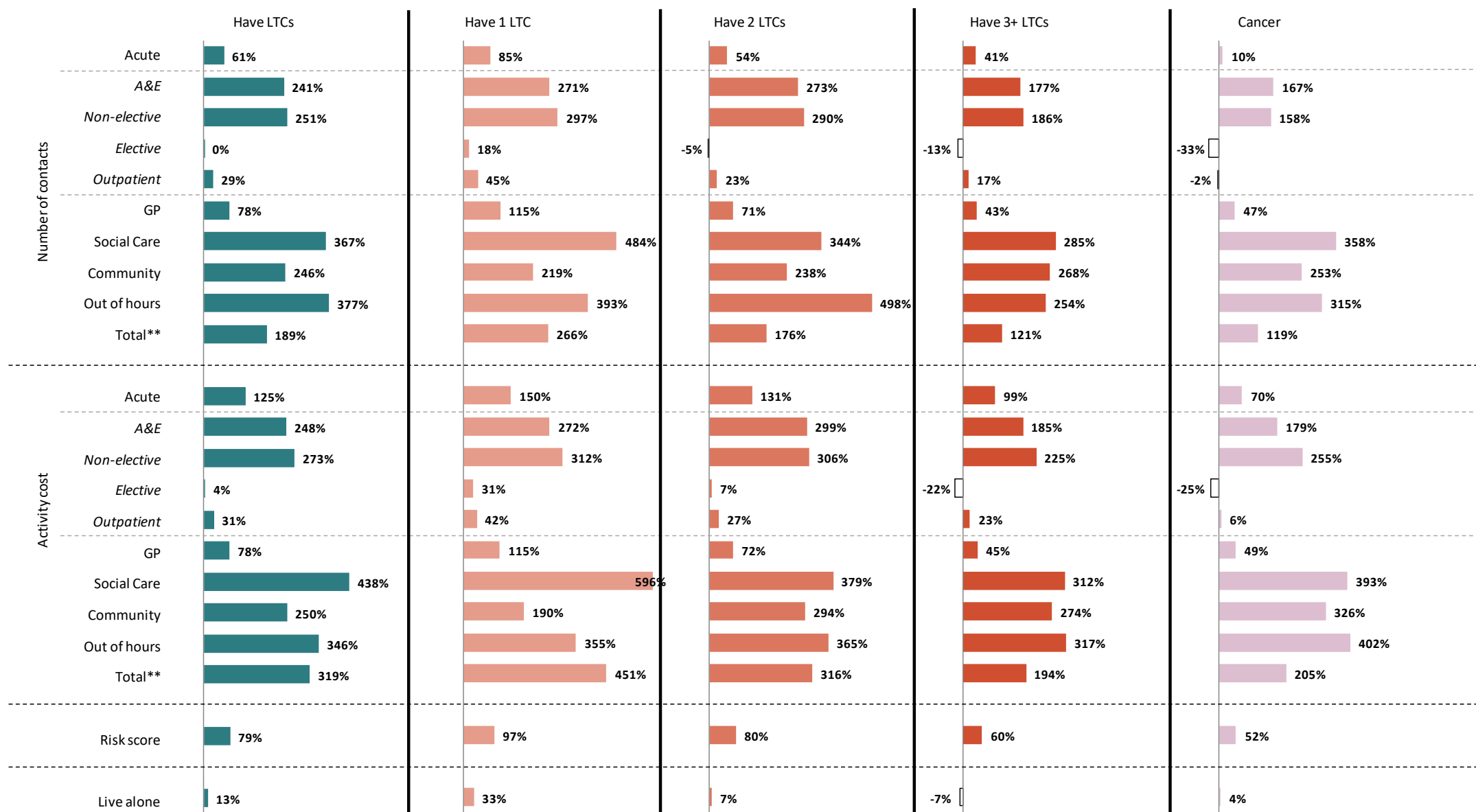
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<sup>5</sup> Please note that analysis has not been conducted where it would be based on fewer than 30 individuals.

Table 3a

**Adults receiving secondary mental health services, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: Have LTCs (7658), have 1 LTC (3923), have 2 LTCs (1952), have 3+ LTCs (1783), cancer (978)

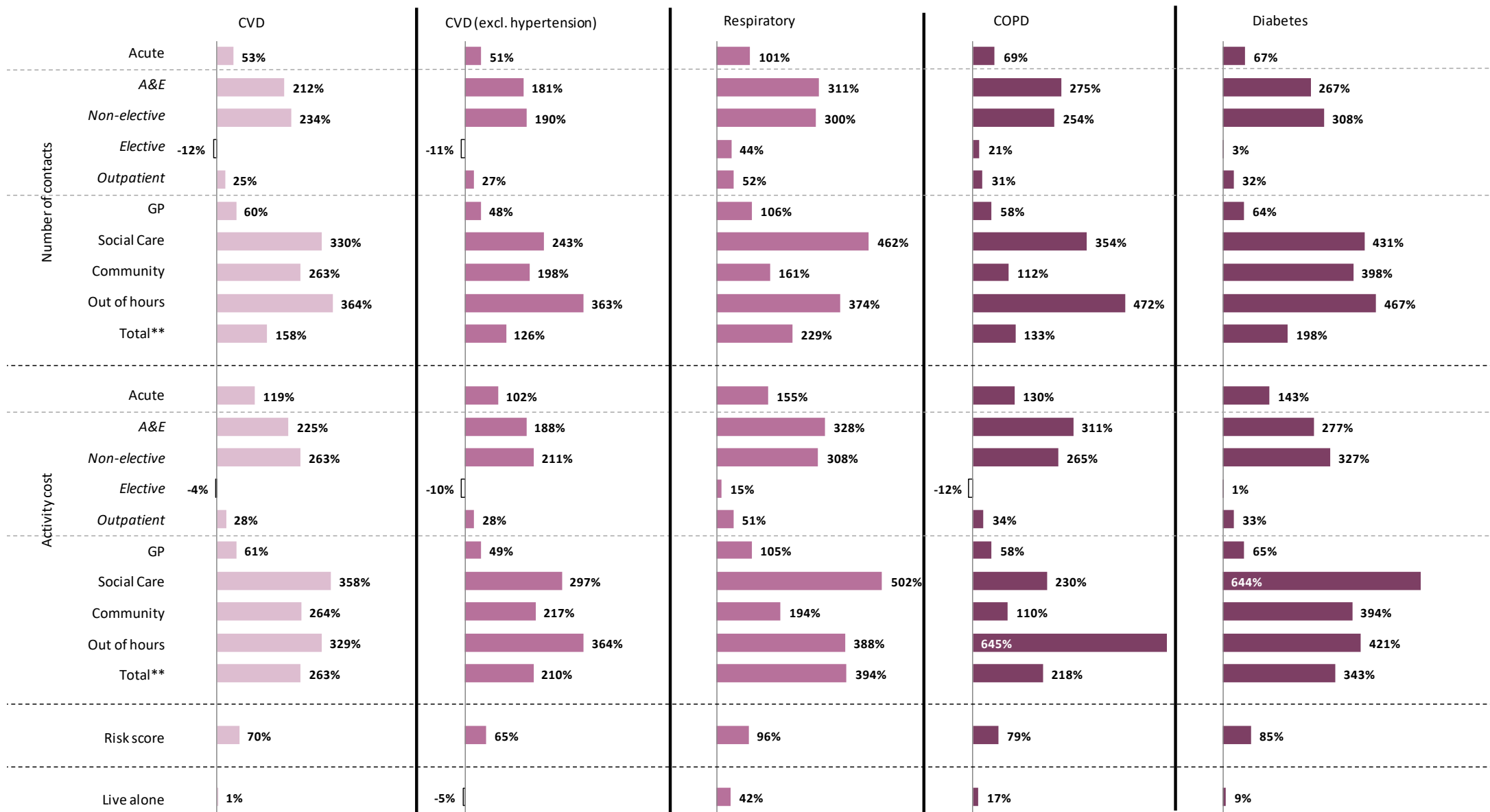
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

Table 3b

**Adults receiving secondary mental health services, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: CVD (5094), CVD excluding hypertension (2549), respiratory (2526), COPD (748), diabetes (1726)

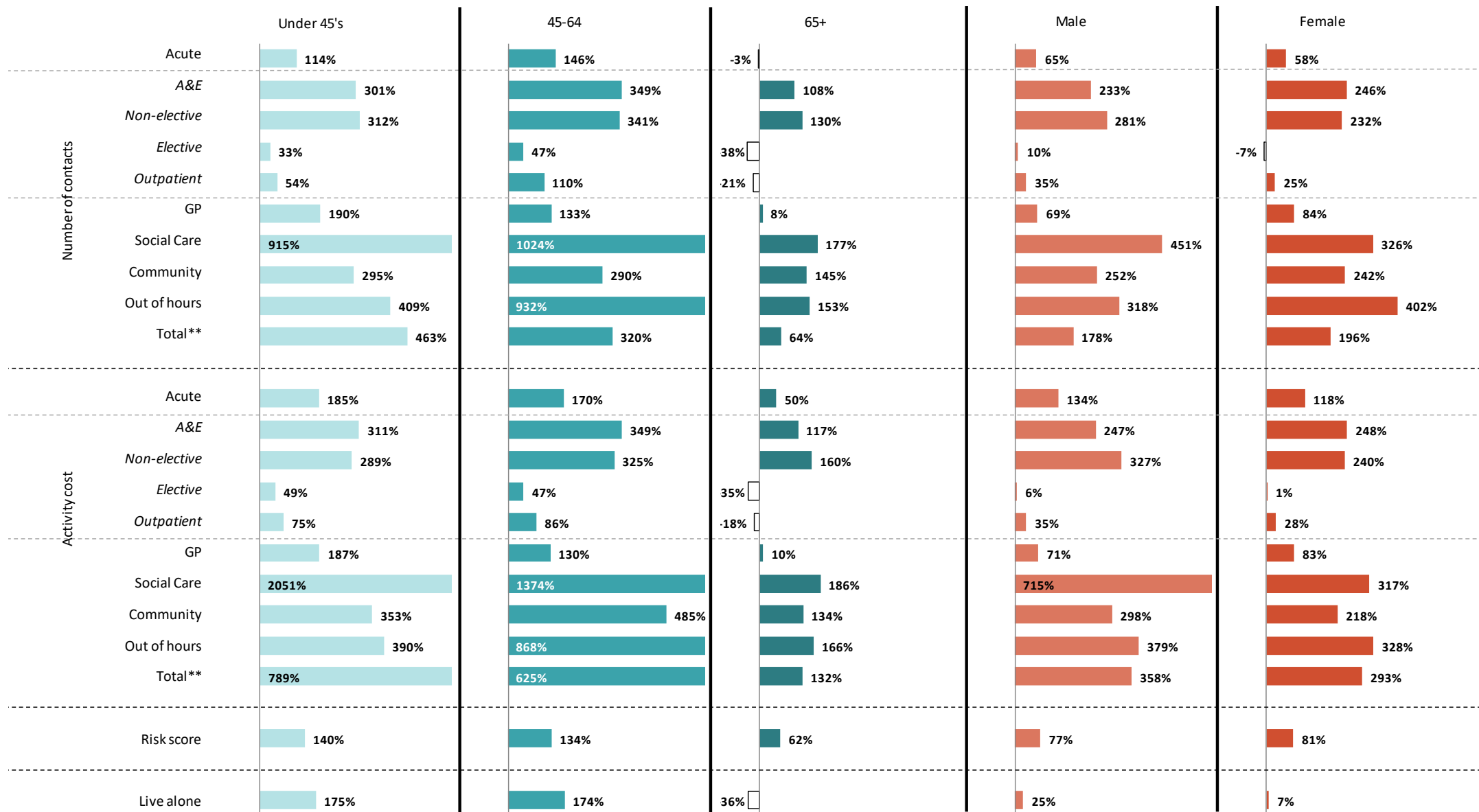
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

Table 3c

**Adults receiving secondary mental health services, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: Under 45s (1320), 45-64 (1675), 65+ (4663), men (3211), women (4447)

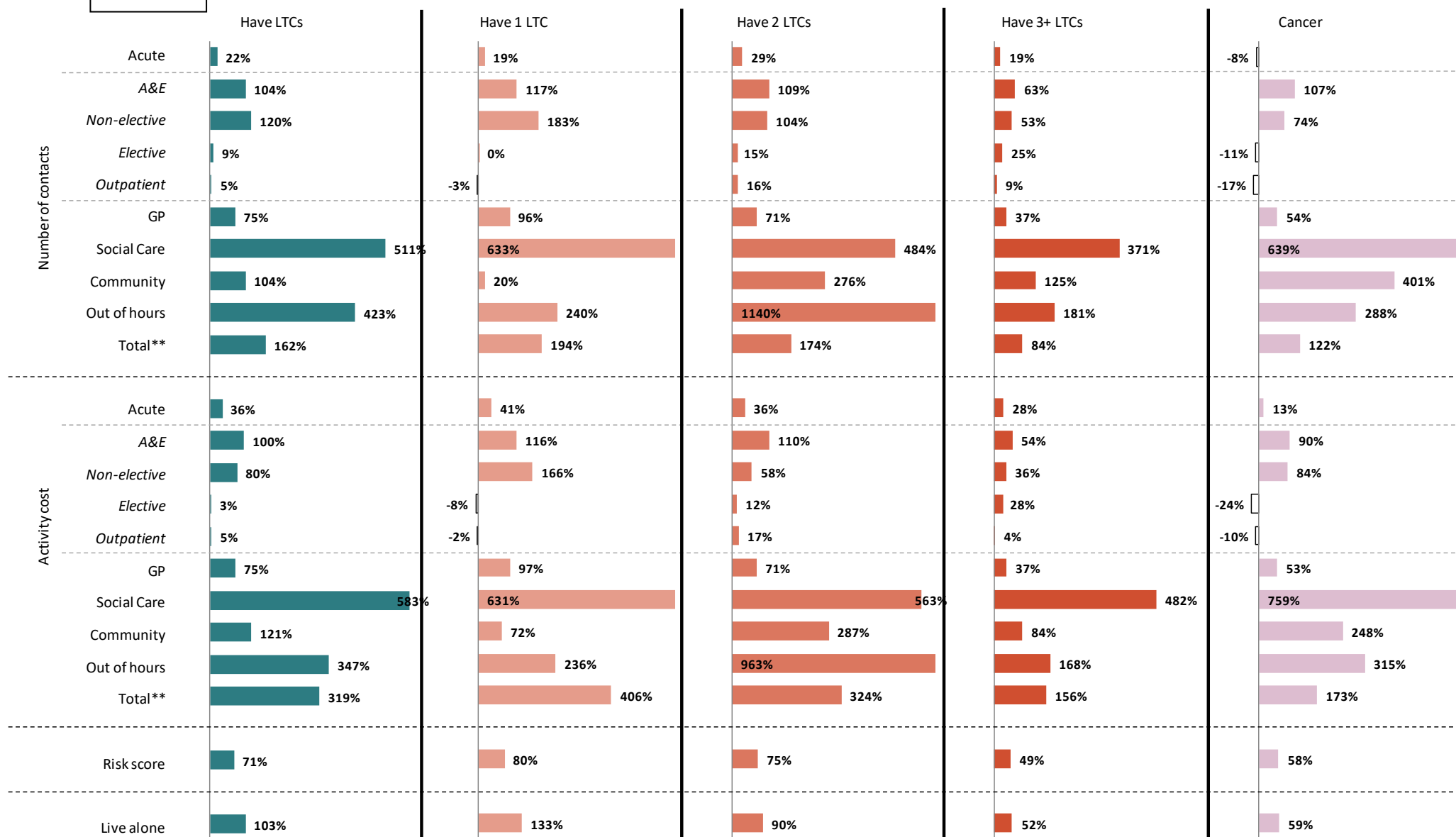
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

**Adults flagged by their GP as having a serious mental health condition as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

**Table 4a**

**Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)**



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: Have LTCs (7658), have 1 LTC (3923), have 2 LTCs (1952), have 3+ LTCs (1783), cancer (978)

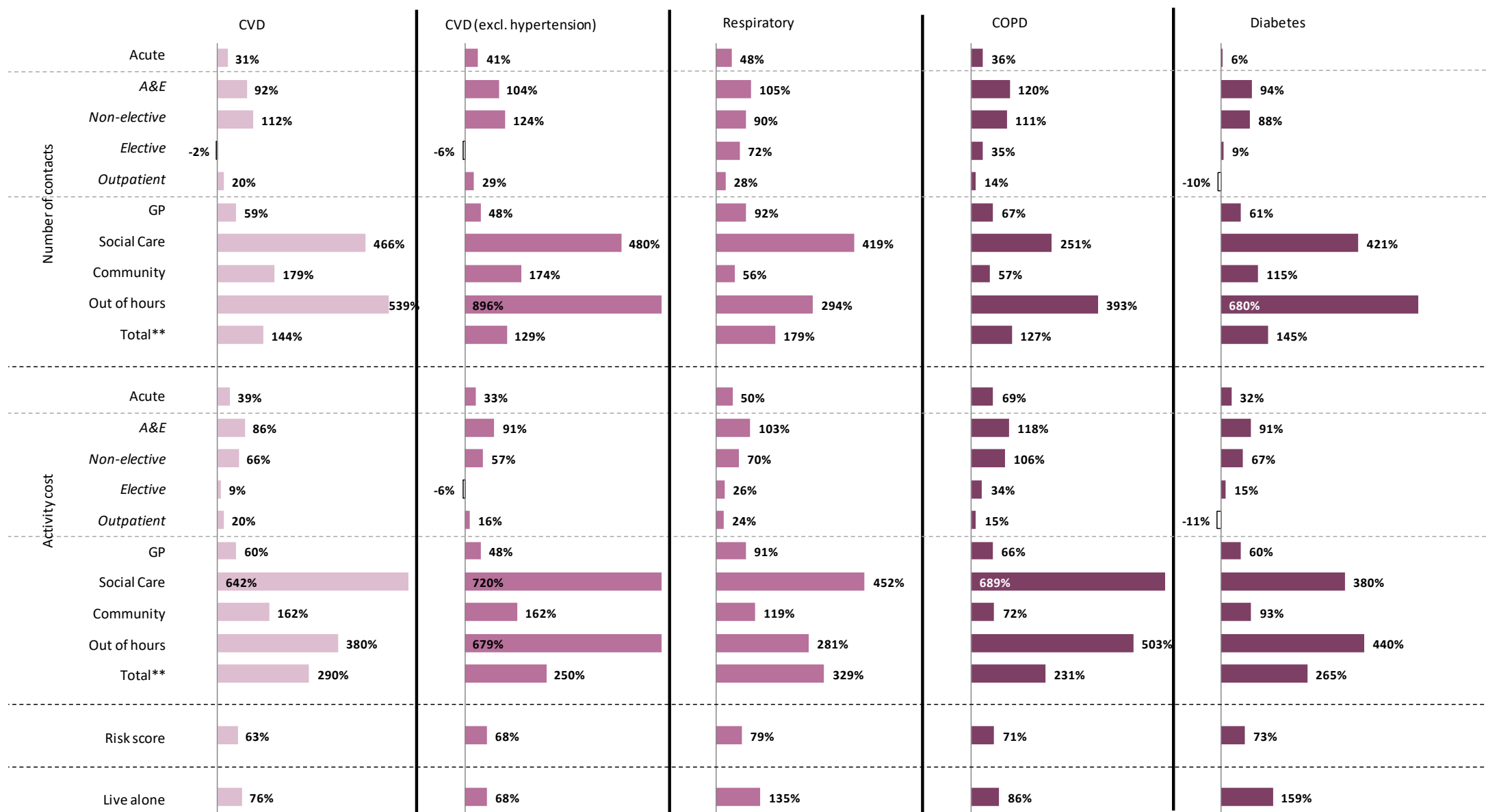
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

**Adults flagged by their GP as having a serious mental health condition as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

**Table 4b**

**Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)**



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: CVD (5094), CVD excluding hypertension (2549), respiratory (2526), COPD (748), diabetes (1726)

\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices



**Adults flagged by their GP as having a serious mental health condition as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)

**Table 4c**



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: Under 45s (1320), 45-64 (1675), 65+ (4663), men (3211), women (4447)

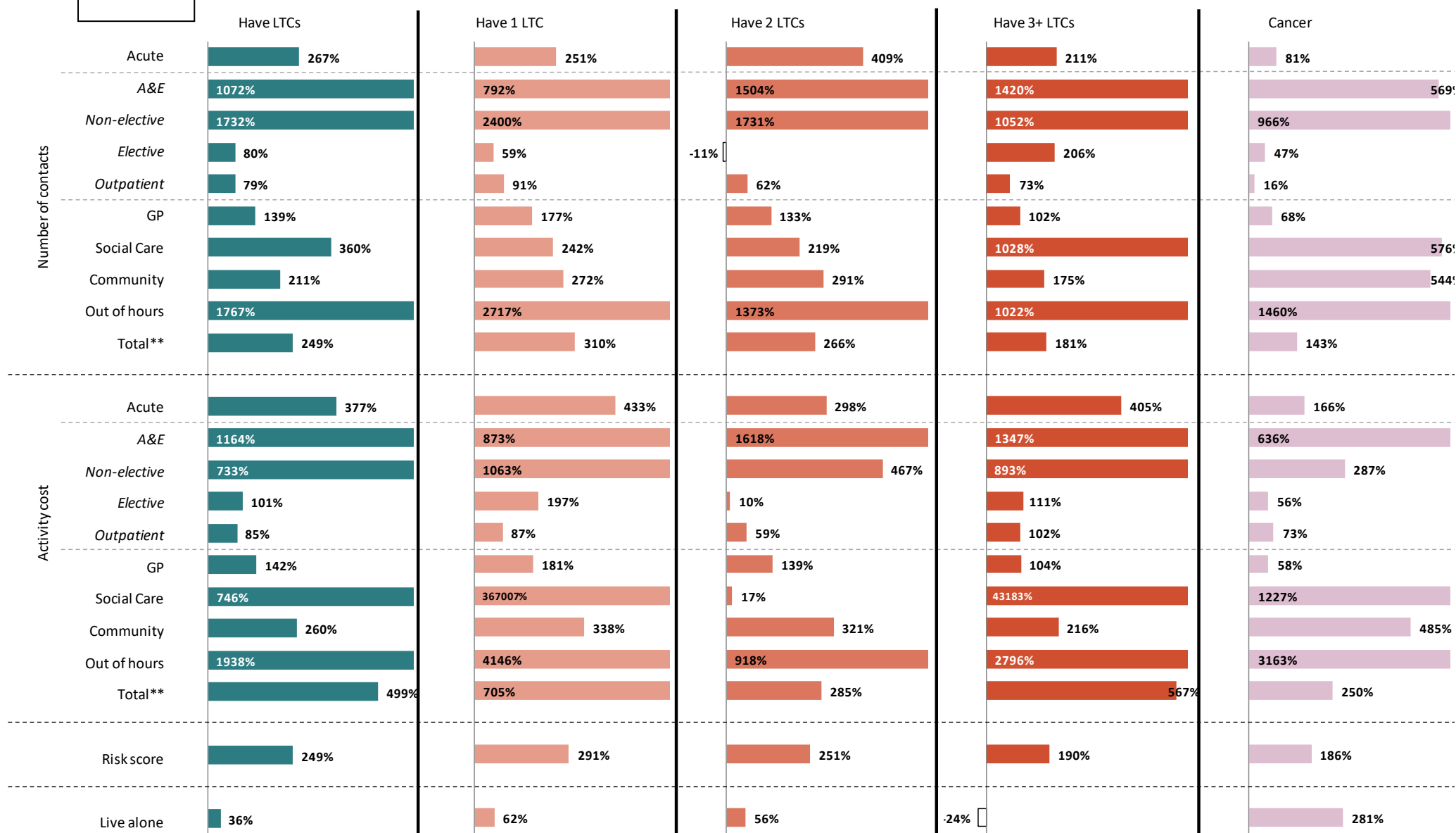
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

**Adults admitted to hospital as an emergency for a mental health problem, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

**Table 5a**

**Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)**



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: Have LTCs (7658), have 1 LTC (3923), have 2 LTCs (1952), have 3+ LTCs (1783), cancer (978)

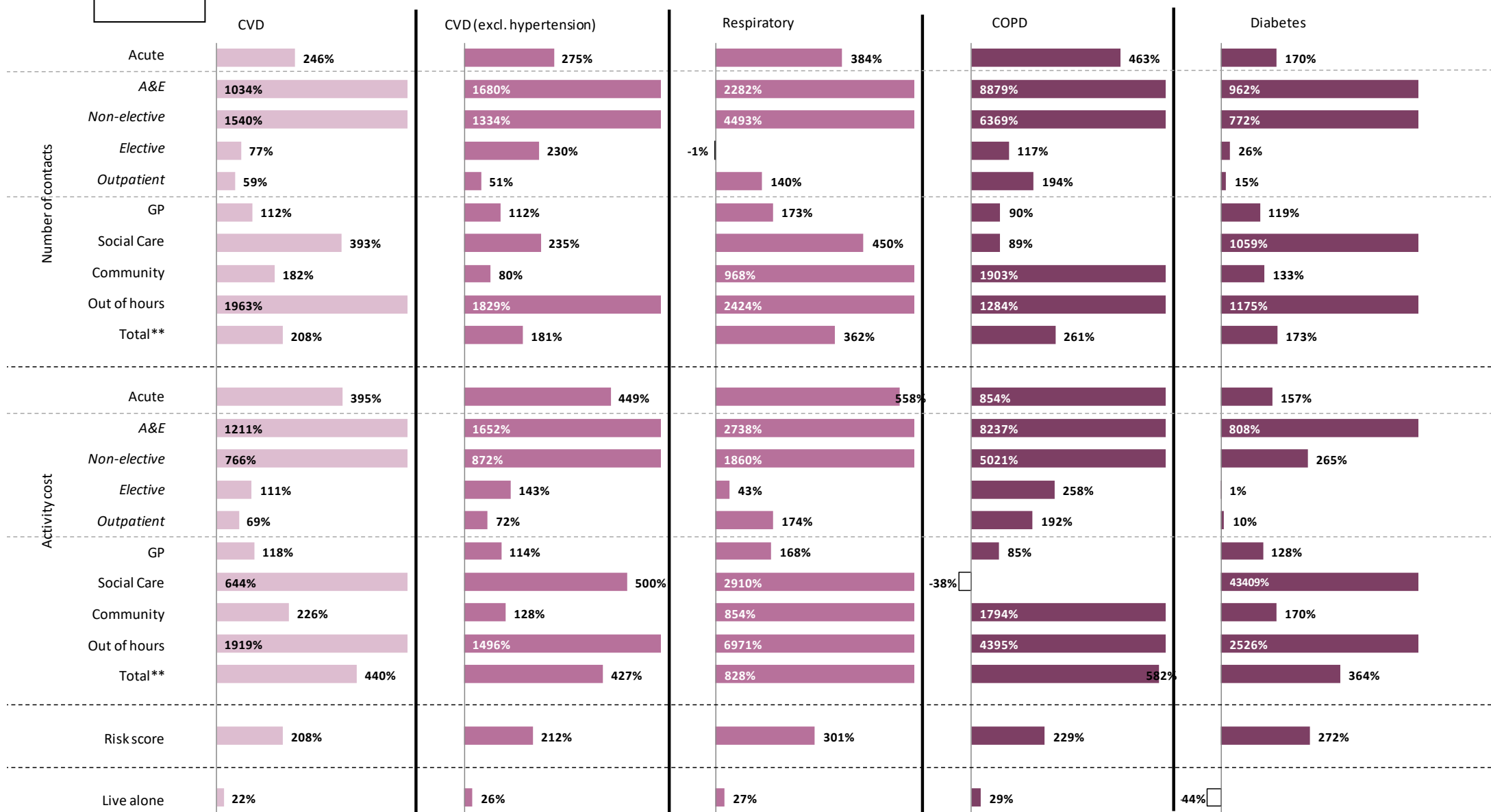
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

**Adults admitted to hospital as an emergency for a mental health problem, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

**Table 5b**

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: CVD (5094), CVD excluding hypertension (2549), respiratory (2526), COPD (748), diabetes (1726)

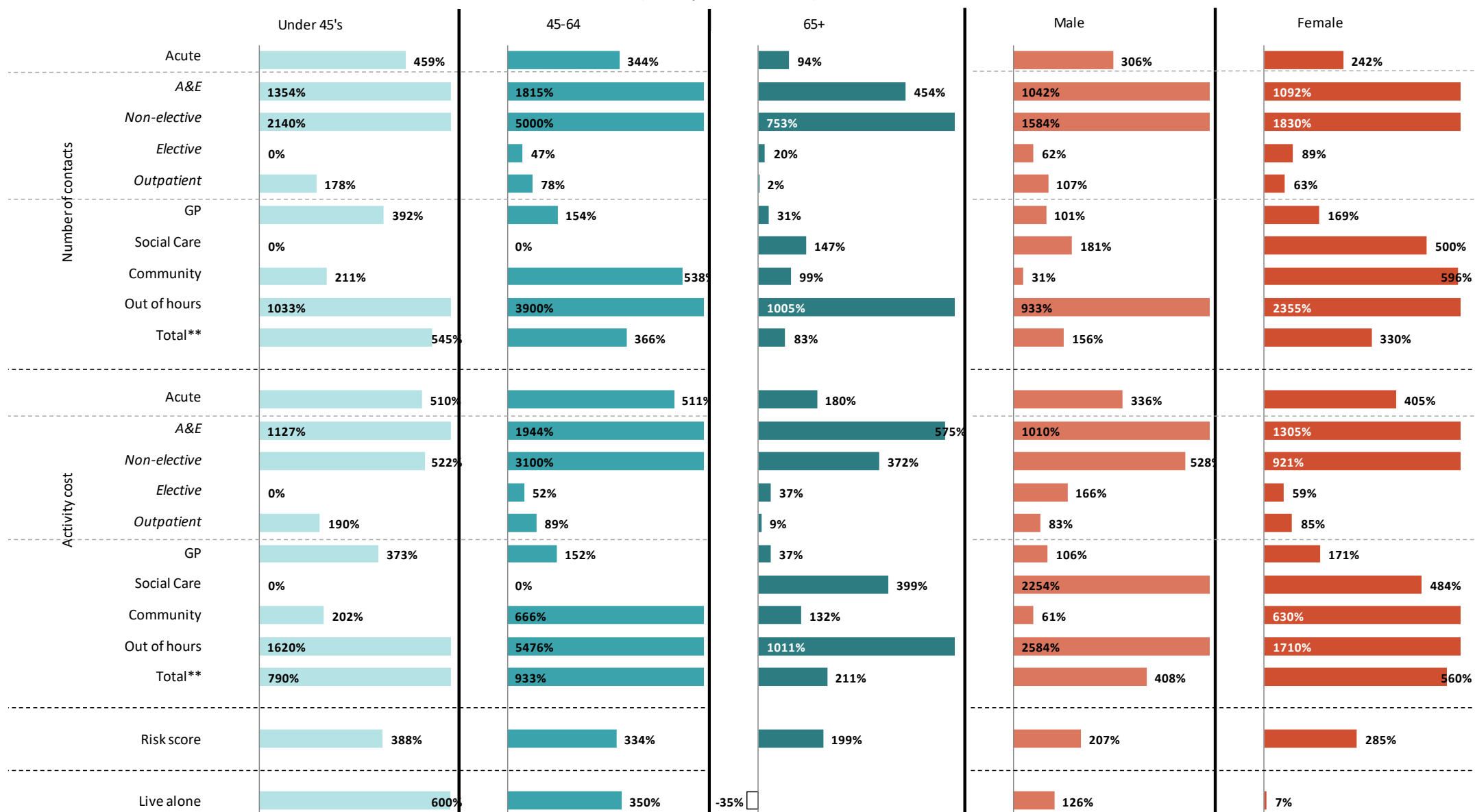
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

Table 5c

**Adults admitted to hospital as an emergency for a mental health problem, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: Under 45s (1320), 45-64 (1675), 65+ (4663), men (3211), women (4447)

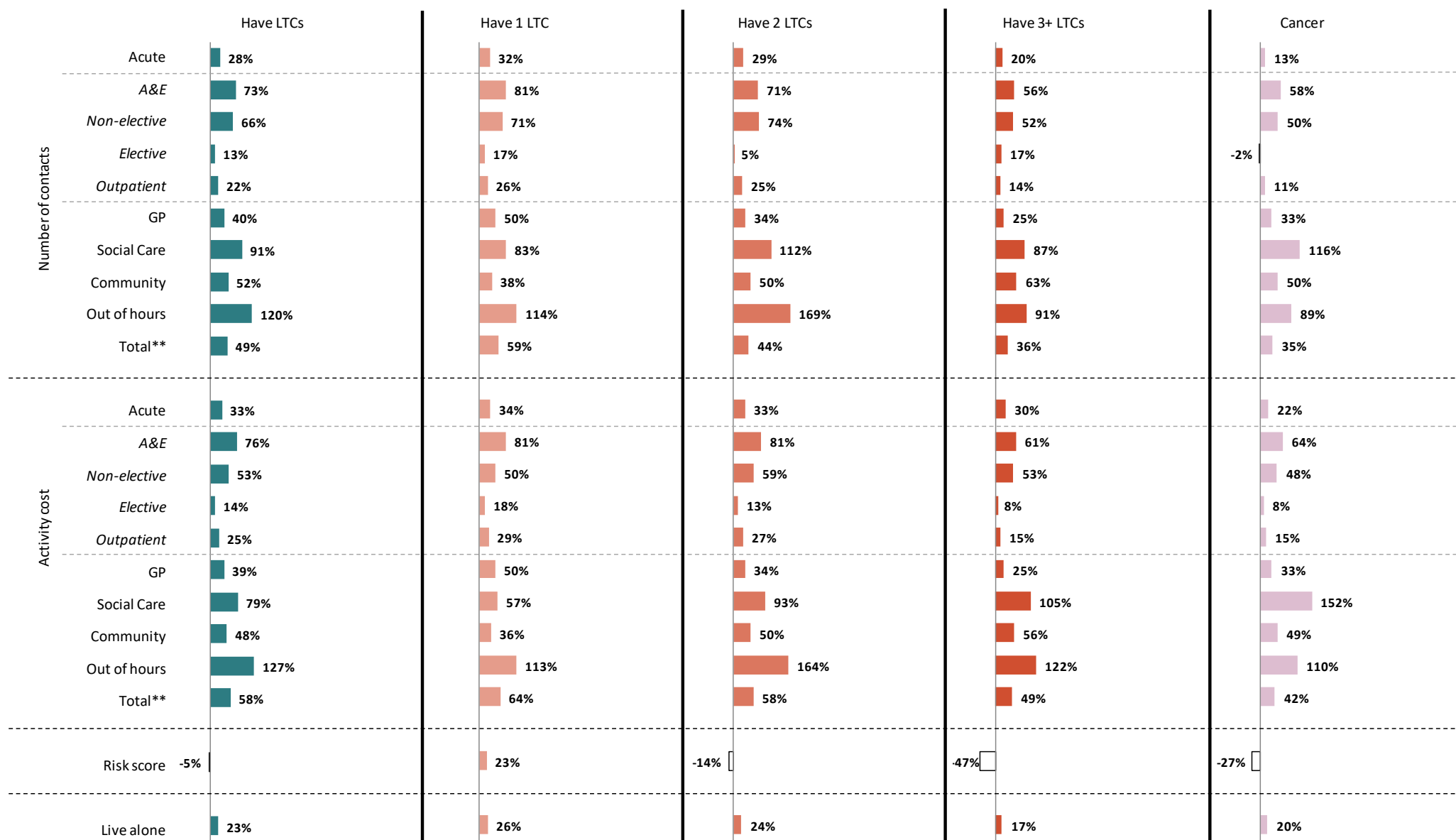
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

Table 6a

**Adults recorded by their GP as having anxiety/depression, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: Have LTCs (7658), have 1 LTC (3923), have 2 LTCs (1952), have 3+ LTCs (1783), cancer (978)

\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

Table 6b

Adults recorded by their GP as having anxiety/depression, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: CVD (5094), CVD excluding hypertension (2549), respiratory (2526), COPD (748), diabetes (1726)

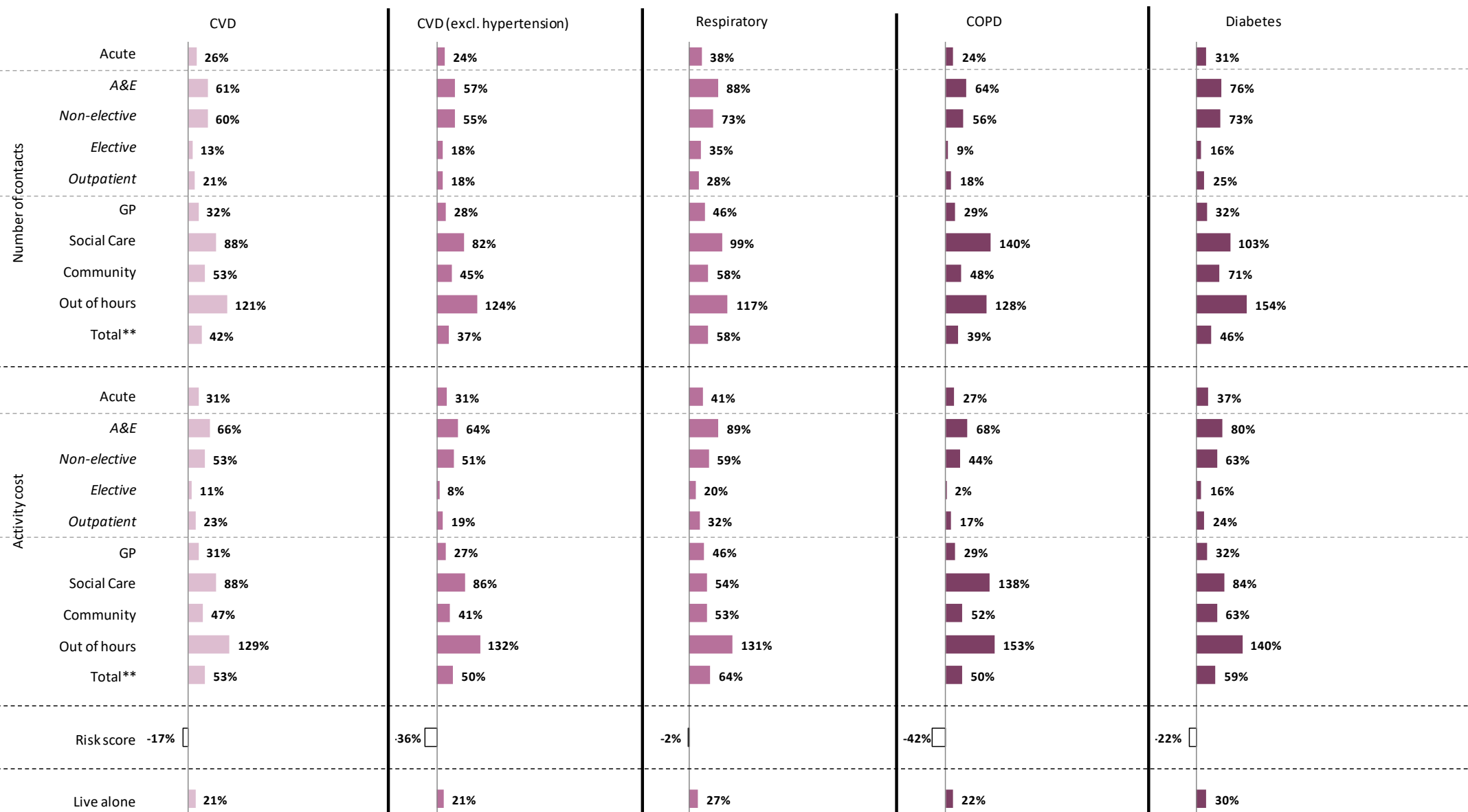
\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

Table 6c

**Adults recorded by their GP as having anxiety/depression, as well as having long-term conditions\*:  
Comparison with a matched cohort of adults without a mental health condition (% increase)**

Kent, Long-term conditions recorded March 2017, Recorded activity during 2015/16  
(developmental statistics)



Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Analysis based on the following numbers of individuals: CVD (5094), CVD excluding hypertension (2549), respiratory (2526), COPD (748), diabetes (1726)

\* Analysis covers the following long-term conditions: cancer, AF, CHD, CVD, HF, PAD, stroke, hypertension, asthma, CKD, COPD, diabetes

\*\* Total activity and costs cover NHS secondary care (hospitals-based activity), GPs, KCC social care, community health services, out of hours services, secondary mental health care and some hospices

This matched cohort analysis in tables 3a to 6c suggests that:

- Adults with long term conditions who also have serious mental health problems are far more likely to visit A&E, be admitted to hospital as an emergency, use both adult social care and community services, and the out of hours service.
  - Levels of elective hospital admissions and outpatient appointments are similar.
  - This analysis suggests that overall activity levels are around 3 times higher than the matched cohort, and costs around 4 times higher.
  - Amongst those with long term conditions who are recorded as having anxiety and/or depression, overall activity levels are around 50% higher than amongst a matched group of adults with similar long term conditions but not recorded as having anxiety and/or depression
- There is evidence to suggest that the gap between those with long term conditions who also have serious mental health problems and those who do not in respect of service usage reduces quite dramatically with age.
  - There is also some evidence to suggest a reduction in the gap as the number of long term conditions increases.
- There are no clear differences between individual long term conditions and between men and women.
- This analysis suggests that it is working age adults with serious mental health problems and long term conditions that are more likely than their peers (who have similar long term conditions/demographic profile) to live alone. Living alone is commonplace regardless of mental health problems amongst older people living with long term conditions.



## 4. Living alone

The 2011 Census recorded around 174,000 individuals in Kent aged 16+ living alone. Using the Unique Property Reference Number (UPRN) included within KID we have attempted to identify properties against which only one person has been recorded. This has identified around 152,000 adults (aged 18+) both resident in Kent and registered with a Kent GP who appear to live alone. If the analysis is restricted to the 115 practices that were successfully flowing full data on both events and consultations into the KID at the time of the analysis, the sample reduces to 86,084.

The analysis in Figure 10 compares the age and sex profile of the adults identified within the KID records as living alone with results for Kent from the 2011 Census.

**Figure 10:**

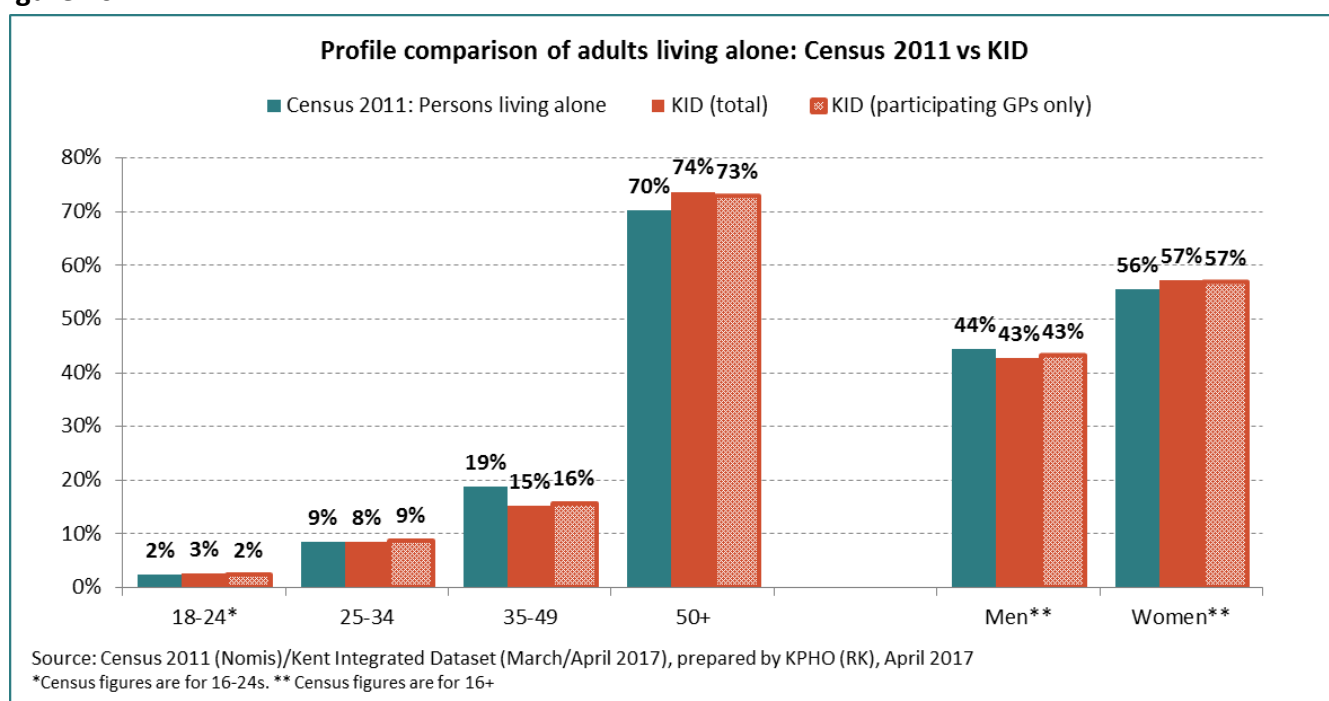
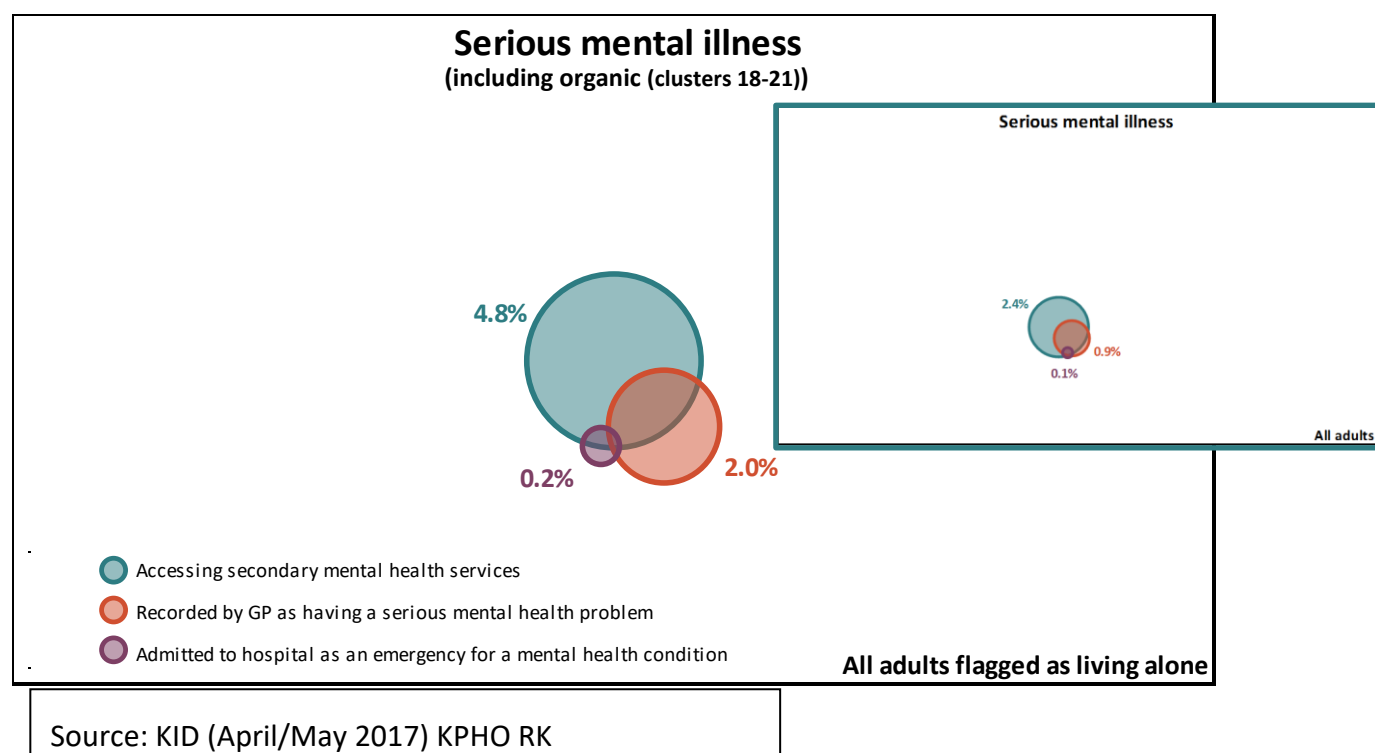


Figure 10 offers assurance on the robustness of KID demographic data; adults identified via the KID records as living alone have a very similar age and sex profile to that suggested by the 2011 Census.

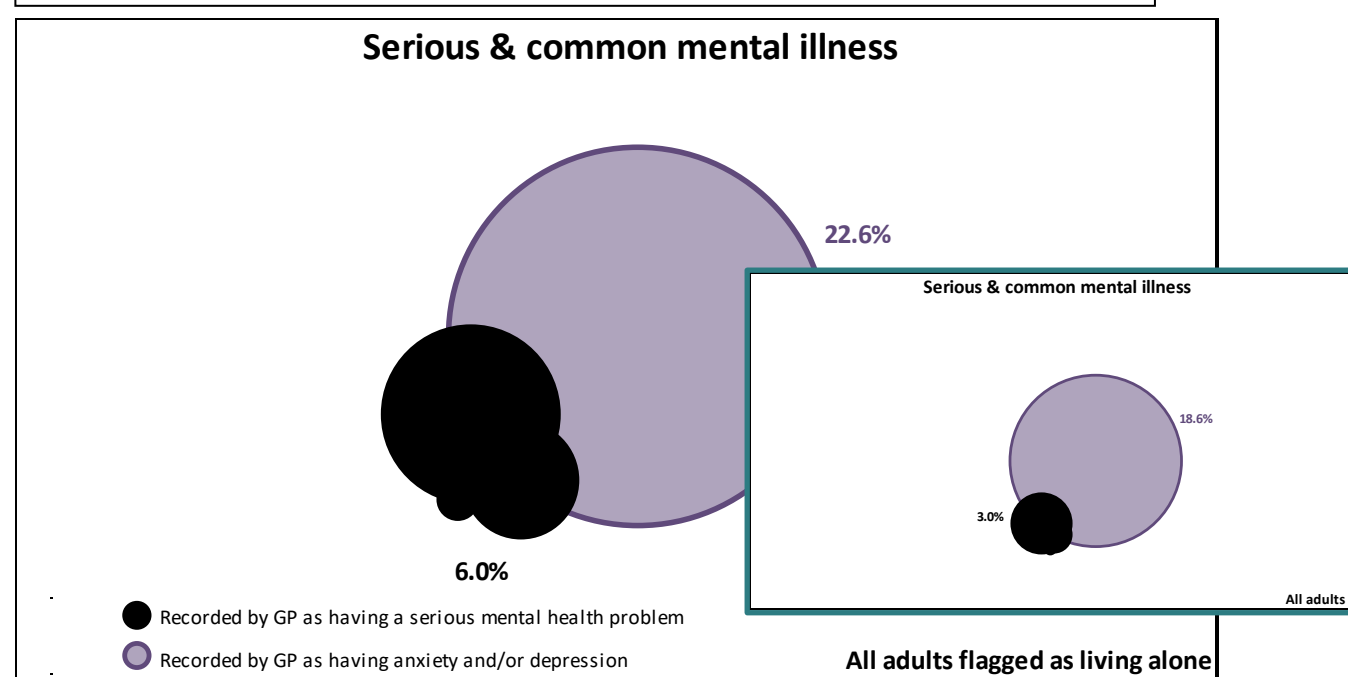
## 4.1 Mental health conditions and adults living alone

The analysis in Figure 11 summarises the recorded prevalence of mental illness amongst adults living alone, including organic, and the overlap between them; the inset boxes are all adults in the KID with serious mental illness. This is presented in tabular form in Table 4 which follows.

**Figure 11: Adults Living Alone with Serious Mental illness, including organic: recorded prevalence**



**Figure 12: Adults flagged as living alone with Serious and Common Mental Illness**



**Table 4: Serious mental illness amongst adults living alone compared with all adults in KID**

	% of adults living alone	% of total adult population
Accessing secondary mental health services	4.8%	2.4%
Recorded by GP as having a serious mental health problem	2.0%	0.9%
Admitted to hospital as an emergency for a mental health condition	0.2%	0.1%
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem	1.0%	0.4%
Accessing secondary mental health services <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.1%	0.1%
Recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.0%	0.1%
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	<0.05%	<0.05%
Accessing secondary mental health services <u>OR</u> recorded by GP as having a serious mental health problem <u>OR</u> admitted to hospital as an emergency for a mental health condition (i.e. any serious mental health condition)	6.0%	3.0%

Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Developmental analysis of the KID in Figure 12 suggests a higher prevalence of both serious and common mental illness amongst adults living alone compared with all adults (although differences in age profile must be taken into account when interpreting this result). Nearly 1 in 20 adults living alone (4.8%) had accessed secondary mental health services and 23% are recorded by their GP as having anxiety and/or depression (compared with 2.4% and 19% of all adults respectively)

## 4.2 Profiling & inequalities

Adults flagged as living alone and falling into any of the three definitions of serious mental illness used in this analysis<sup>6</sup> have been profiled, as have those identified as living alone and flagged by their GP as suffering from anxiety and/or depression. The analysis covers:

- **Equity characteristics** such as age, gender, deprivation and isolation
- **Service usage**, covering hospitals, GPs, social care and secondary mental health
- **Comorbidities**, including key long term conditions and risk scores

In this analysis **comparisons have been made with all adults flagged as living alone** (and not the Kent adult population).

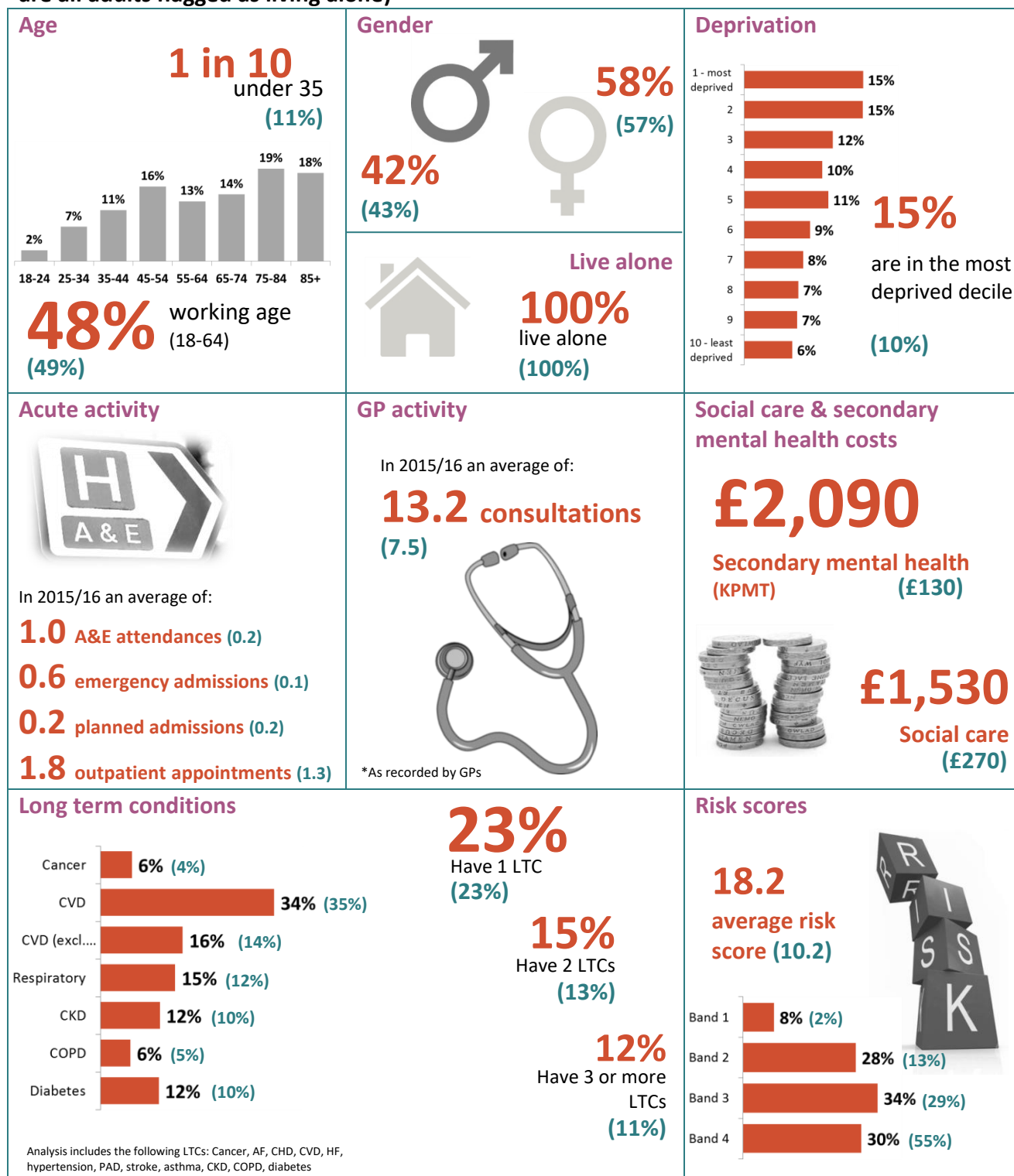
Analysis of Figure 13 suggests that:

- Adults living alone with serious mental health problems have a similar demographic profile in terms of age and sex, and a similar long term condition profile to all adults who live alone.
  - There is evidence to suggest a skew towards more deprived areas, with 15% of adults living alone with serious mental health problems living in areas in the most deprived decile, compared with 10% of all adults living alone (echoing the findings for all adults).
- There is some evidence to suggest a slightly elevated long term condition profile amongst adults living alone who are also recorded as having anxiety/depression in comparison with adults who live alone, with a skew towards women and towards adults of working age.
- Adults living alone with serious mental health problems tend to have more contact with services than those only flagged as living alone, including more urgent hospital attendances and visits to their GP: higher social care costs and higher secondary mental health costs are also evident. They are also assessed as higher risk.
  - Whilst adults living alone recorded by their GP as also having anxiety and/or depression tend to have slightly more contact with their GP than adults living alone as a whole, their usage of acute hospital services and social care, and their risk scores are similar.

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<sup>6</sup> i.e. individuals receiving secondary mental health services, individuals recorded by their GP as having a serious mental health problem and individuals admitted to hospital as an emergency for a mental health condition. See [Section 2](#) for more details

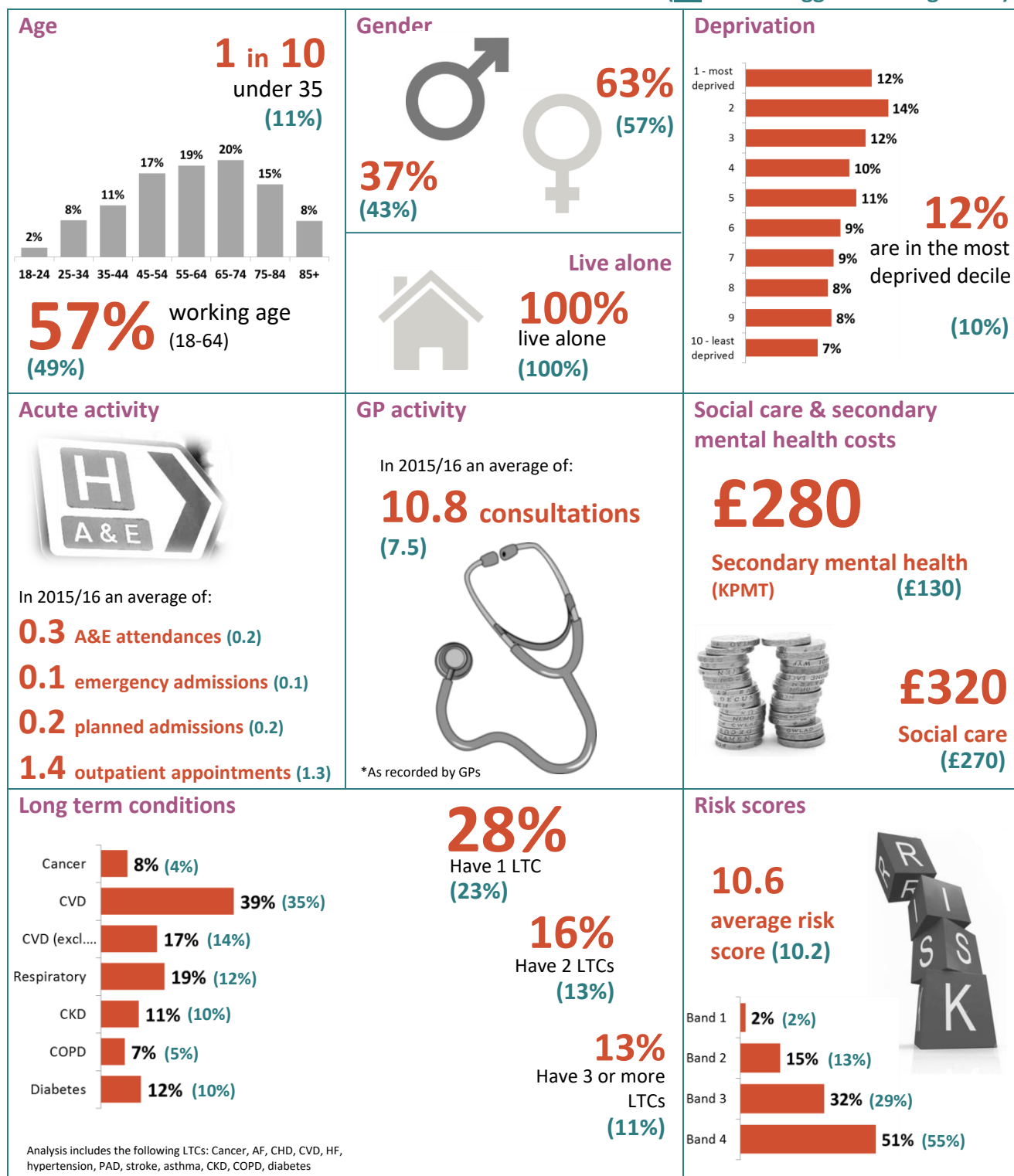
**Figure 13: Adults flagged as living alone and either receiving secondary mental health services, have been admitted to hospital for a mental health problem or recorded by their GP as having a serious mental health problem (figures in brackets are all adults flagged as living alone)**



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 5129 individuals aged 18+, resident in Kent, and the only individual recorded within the KID records as resident at their address (identified via Unique Property Reference Number (UPRN) and either recorded within the KID secondary mental health records (provided by KMPT) as contacts during 2015/16 (individuals who only have contacts recorded where the outcome is 'discharged no cluster' or where the cluster coding is still 'pending' have been removed), recorded within the KID SUS records as having been admitted to hospital during 2015/16 as an emergency with a mental health primary diagnosis (ICD10: F) or recorded within the KID GP records as having a current serious mental health condition. Comparisons have been made with all 86084 individuals aged 18+, resident in Kent, recorded within the KID as the only individual with that UPRN. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 14: Adults flagged as living alone and recorded by their GP as having anxiety and/or depression (developmental statistics)**

(All adults flagged as living alone)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 19477 individuals aged 18+, resident in Kent, and the only individual recorded within the KID records as resident at their address (identified via Unique Property Reference Number (UPRN) and within the KID GP records as currently suffering from anxiety and/or depression. Comparisons have been made with all 86084 individuals aged 18+, resident in Kent, recorded within the KID as the only individual with that UPRN. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

## 5. Excess alcohol use – indicative analysis

It has not been possible to identify individuals in alcohol treatment programmes within the KID, and so the focus of this analysis is individuals identified by their GPs as excess drinkers.

The 2015 Health Survey for England suggests that 23% of adults in England drink more than the recommended number of weekly units<sup>7</sup>. This would equate to around 275,000 adults across Kent.

Using GP records included within the KID in April 2017 we have been able to identify 13,244 adults living in Kent<sup>8</sup> with a read code added to their record since January 2015 that might suggest that they are an excess drinker. Taking the definition of excess drinking published on the CALIBER portal<sup>9</sup>,

Table 5. Read codes have been used in the analysis of excess alcohol use:

Excess drinker (5)	136K.00	Alcohol intake above recommended sensible limits
Excess drinker (5)	136P.00	Heavy drinker
Excess drinker (5)	136Q.00	Very heavy drinker
Excess drinker (5)	136S.00	Hazardous alcohol use
Excess drinker (5)	136T.00	Harmful alcohol use
Excess drinker (5)	136W.00	Alcohol misuse
Excess drinker (5)	13ZY.00	Disqualified from driving due to excess alcohol
Excess drinker (5)	E23..12	Alcohol problem drinking
Excess drinker (5)	E250.00	Nondependent alcohol abuse
Excess drinker (5)	E250000	Nondependent alcohol abuse, unspecified
Excess drinker (5)	E250100	Nondependent alcohol abuse, continuous
Excess drinker (5)	E250300	Nondependent alcohol abuse in remission
Excess drinker (5)	E250z00	Nondependent alcohol abuse NOS

Source: CALIBER portal

The number of adults recorded by their GP under these read codes as excess drinkers is clearly only a very small fraction of the total number of adults who are likely to be drinking at this level. This must be borne in mind when interpreting the results of any analysis of this

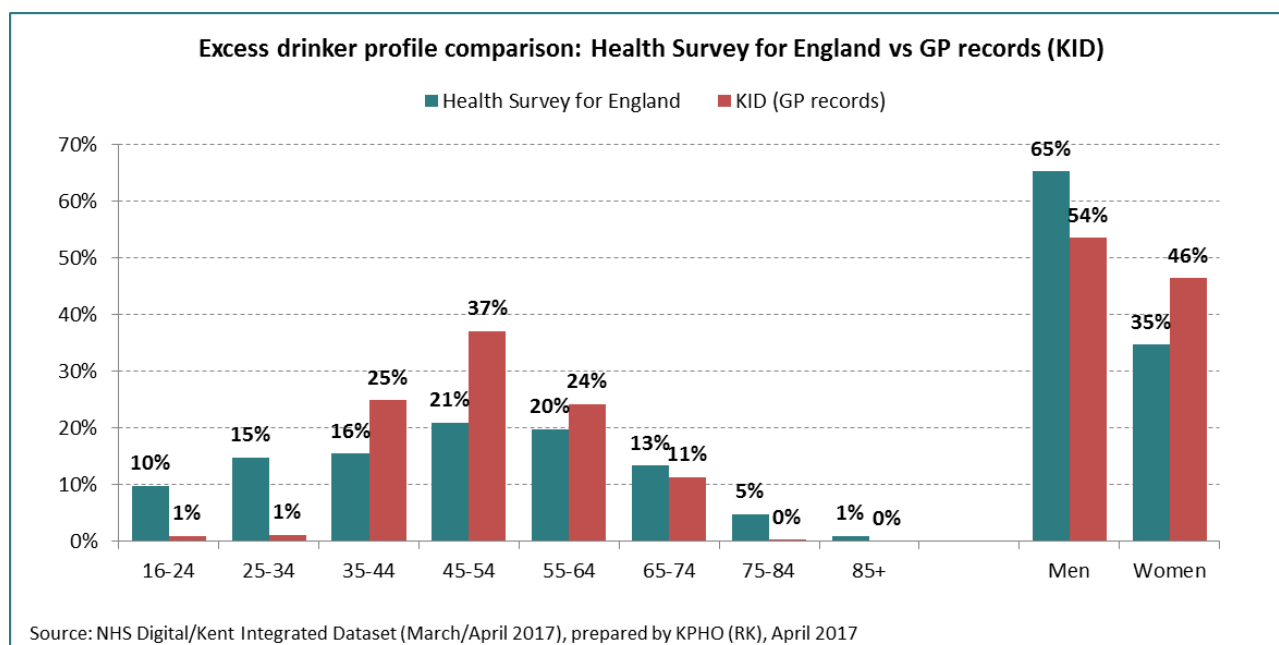
<sup>7</sup> Source: Health Survey for England 2015, NHS Digital. Please note that the figure quoted relates to persons aged 16 or over, but has been used in this indicative analysis to represent all adults (18+).

<sup>8</sup> and registered with one of the 115 practices who were successfully flowing full data on both events and consultations into the KID at the time of the analysis

<sup>9</sup> The CALIBER portal is a research platform led from the UCL Institute of Health Informatics and the Farr Institute of Health Informatics Research, London consisting of 'research ready' variables extracted from linked electronic health records (EHR) from primary care, coded hospital records, social deprivation information and cause-specific mortality data.

group, which **must be treated as indicative only**. The analysis in Figure 15 compares the age and sex profile of the patients identified within the KID GP records as excess drinkers with results from the Health Survey for England.

**Figure 15:**



This shows that adults identified via KID GP records as excess drinkers are very much skewed towards the 35-64 age group<sup>10</sup>, and have a more equal split between men and women.

**These findings must be borne in mind when interpreting the results of this analysis, with the cohort of excess drinkers analysed treated as a skewed sample of all excess drinkers in the population.**

A need for improved data on behaviour and lifestyle is again highlighted by this analysis. The recent publication from PHE *Better care for people with co-occurring mental health and alcohol/drug use conditions* tells us that people with co-occurring conditions are often unable to access the care they need. It appears from this developmental study that identification and treatment remains a challenge.

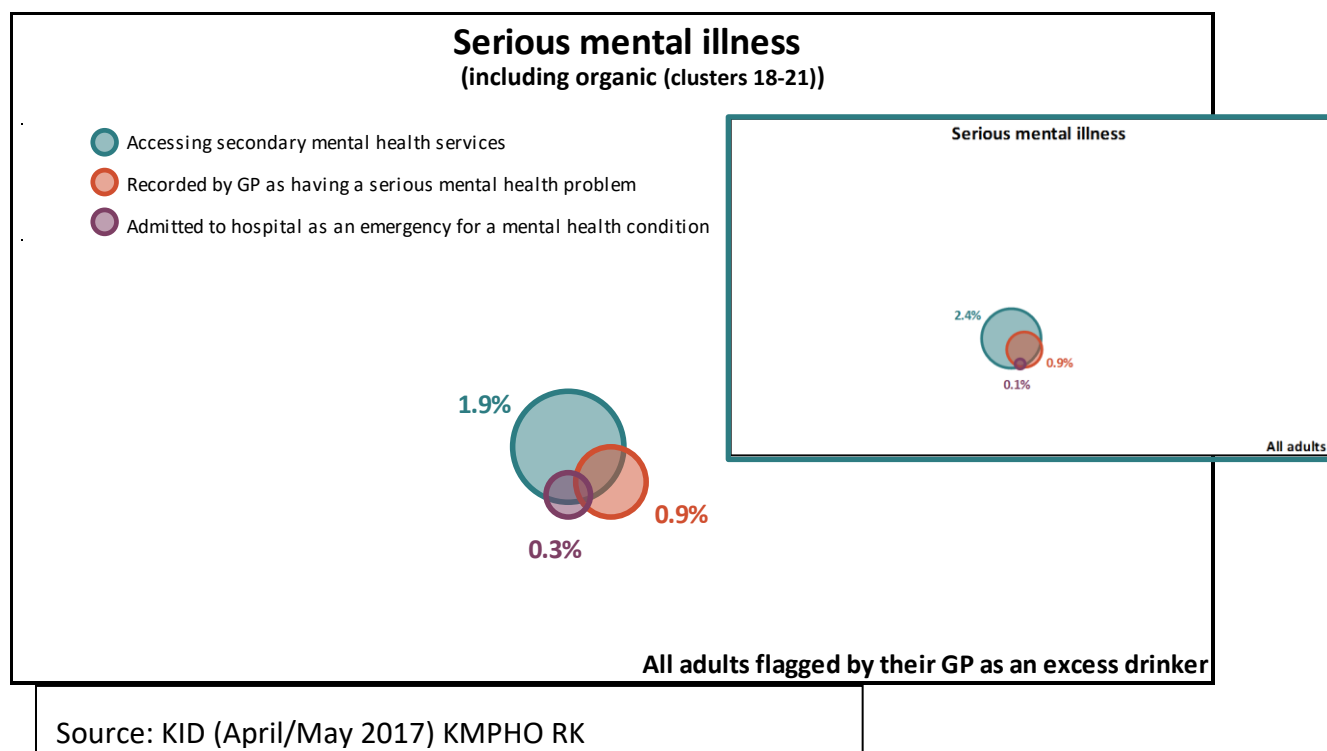
<sup>10</sup> Anecdotal evidence suggests that lifestyle factors such as excess drinking are most likely to be recorded by GPs where the behaviour is having an impact on the patients' health, which is arguably most likely to be the case within these age ranges.



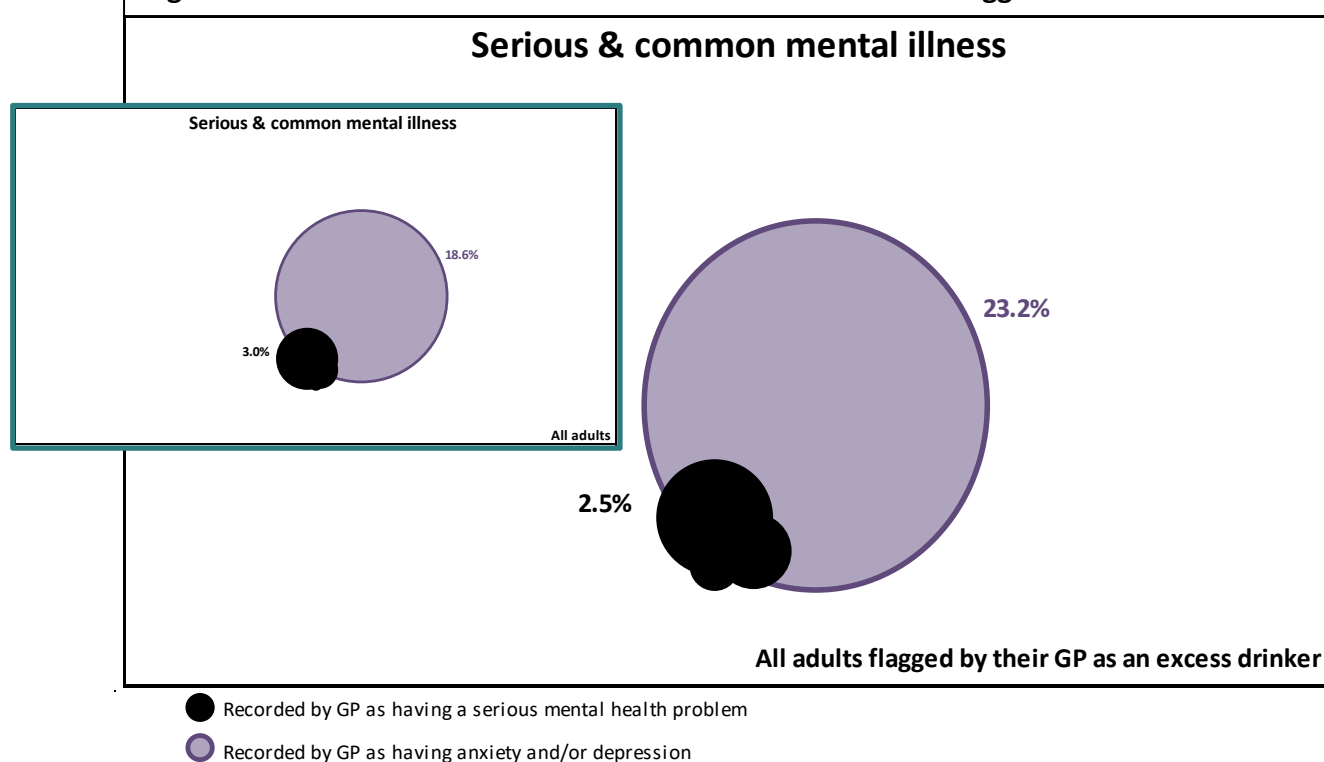
## 5.1 Mental health conditions

The analysis below summarises the recorded prevalence of mental illness within our sample of excess drinkers, and the overlap between them.

**Figure 16: Mental illness: recorded prevalence**  
(development al statistics)



**Figure 17: Serious and Common mental illness and all adults flagged as excess drinker**



**Table 6: Excessive drinkers flagged in KID with a serious mental health problem**

	% of excess drinkers	% of total adult population
Accessing secondary mental health services	1.9%	2.4%
Recorded by GP as having a serious mental health problem	0.9%	0.9%
Admitted to hospital as an emergency for a mental health condition	0.3%	0.1%
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem	0.4%	0.4%
Accessing secondary mental health services <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.2%	0.1%
Recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.0%	0.1%
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	<0.05%	<0.05%
Accessing secondary mental health services <u>OR</u> recorded by GP as having a serious mental health problem <u>OR</u> admitted to hospital as an emergency for a mental health condition (i.e. any serious mental health condition)	2.5%	3.0%

Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

There is no evidence to suggest that the prevalence of serious mental health conditions is any higher amongst adults flagged by their GP as excess drinkers than all adults, though there are higher emergency attendances (Figure 16) There is some evidence to suggest slightly higher rates of recording of common mental illness, with 23% of this sample of excess drinkers also recorded as suffering from anxiety and/or depression compared with 19% of all adults.

## 5.2 Profiling & inequalities

### Introduction to the graphics in Figures 18 and 19.

Adults flagged by their GP as excess drinkers and falling into any of the three definitions of serious mental illness used in Figure 18 <sup>11</sup> have been profiled, as have those identified as excess drinkers and flagged by their GP as suffering from anxiety and/or depression (Figure 19). The analysis covers:

- **Equity characteristics** such as age, gender, deprivation and isolation
- **Service usage**, covering hospitals, GPs, social care and secondary mental health
- **Comorbidities**, including key long term conditions and risk scores

In this analysis **comparisons have been made with all adults flagged by their GP as excess drinkers** (and not the Kent adult population). It is also important to note the known skews in excess drinkers identified via KID GP records (i.e. towards the 35-64 age group and women).

Analysis suggests that:

- It is the younger adults (aged under 35) flagged by their GP as being excess drinkers that are the most likely to have serious mental health problems.
  - Whether this reflects a higher propensity to record excess drinking amongst younger people when a serious mental health problem is also present, or whether this reflects true increased drinking prevalence amongst those with a serious mental health problem is unknown.

Many of the key findings for all adults also apply to those flagged as excess drinkers, particularly that:

- Identified excess drinkers with serious mental health problems are around twice as likely to live alone than those only flagged as excess drinkers (and with no serious mental health problem flagged)
  - This does not apply to excess drinkers recorded as having anxiety and/or depression.
- They are also skewed towards our most deprived communities
  - Again, this does not apply to excess drinkers recorded as having anxiety and/or depression

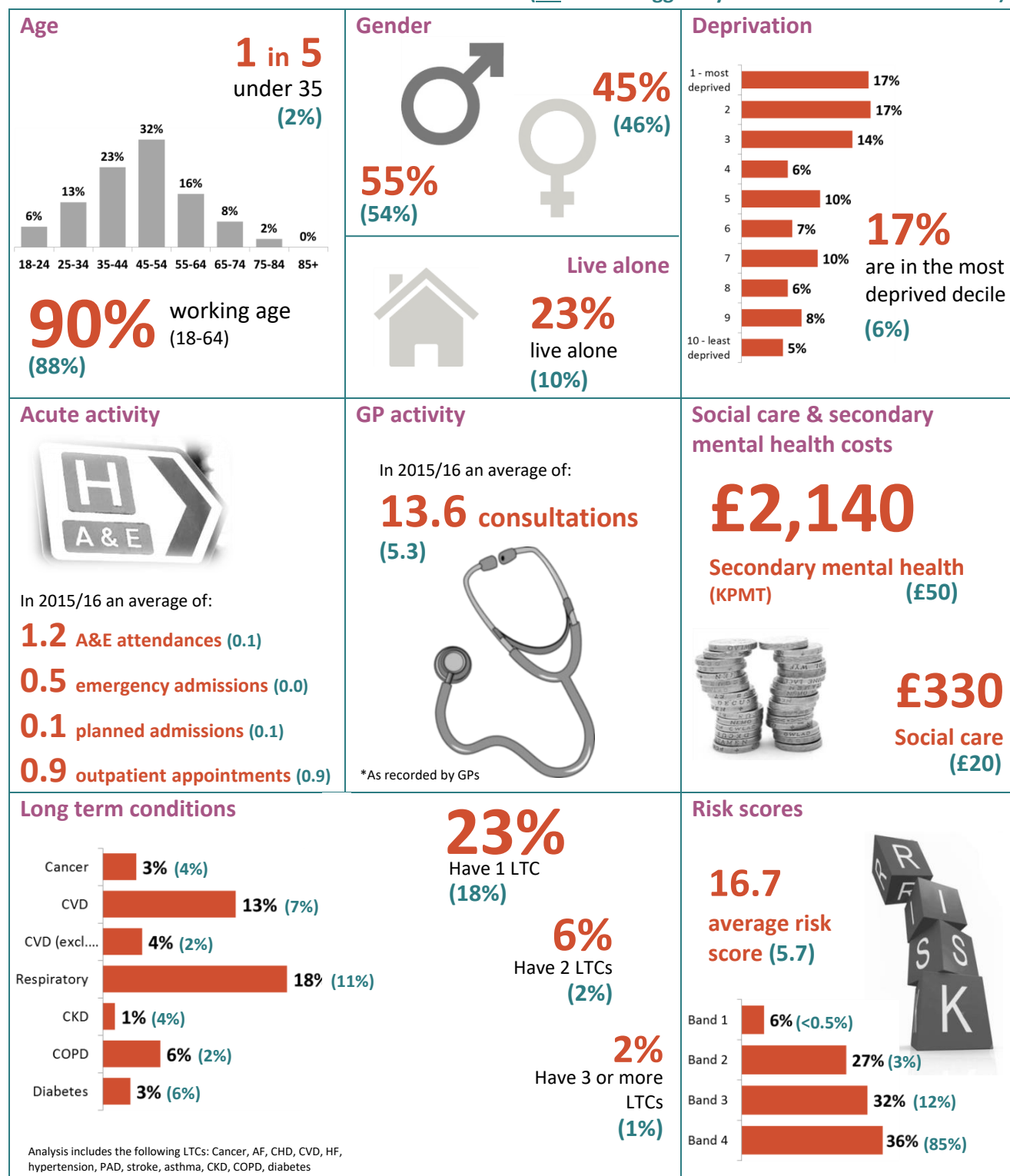
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<sup>11</sup> i.e. individuals receiving secondary mental health services, individuals recorded by their GP as having a serious mental health problem and individuals admitted to hospital as an emergency for a mental health condition. See [Section 2](#) for more details

- Identified excess drinkers with serious mental health problems tend to have more contact with services than those only flagged as excess drinkers, including more hospital and GP visits, higher social care costs and higher secondary mental health costs
  - Whilst excess drinkers recorded by their GP as also having anxiety and/or depression tend to have slightly more contact with their GP than the recorded excess drinking population as a whole, their usage of acute hospital services and social care is similar to the average across all recorded excess drinkers.
- Recorded excess drinkers with serious mental health problems and those recorded as having anxiety and/or depression have an elevated long term condition profile to GP-recorded excess drinkers as a whole.
- Identified excess drinkers with serious mental health problems are assessed as higher risk than GP-recorded excess drinkers as a whole.
  - Risk scores are also slightly elevated for excess drinkers who have also been recorded as having anxiety and/or depression.

**Figure 18: Adults flagged by their GP as an excess drinker and either receiving secondary mental health services, have been admitted to hospital for a mental health problem or recorded by their GP as having a serious mental health problem (developmental statistics)**

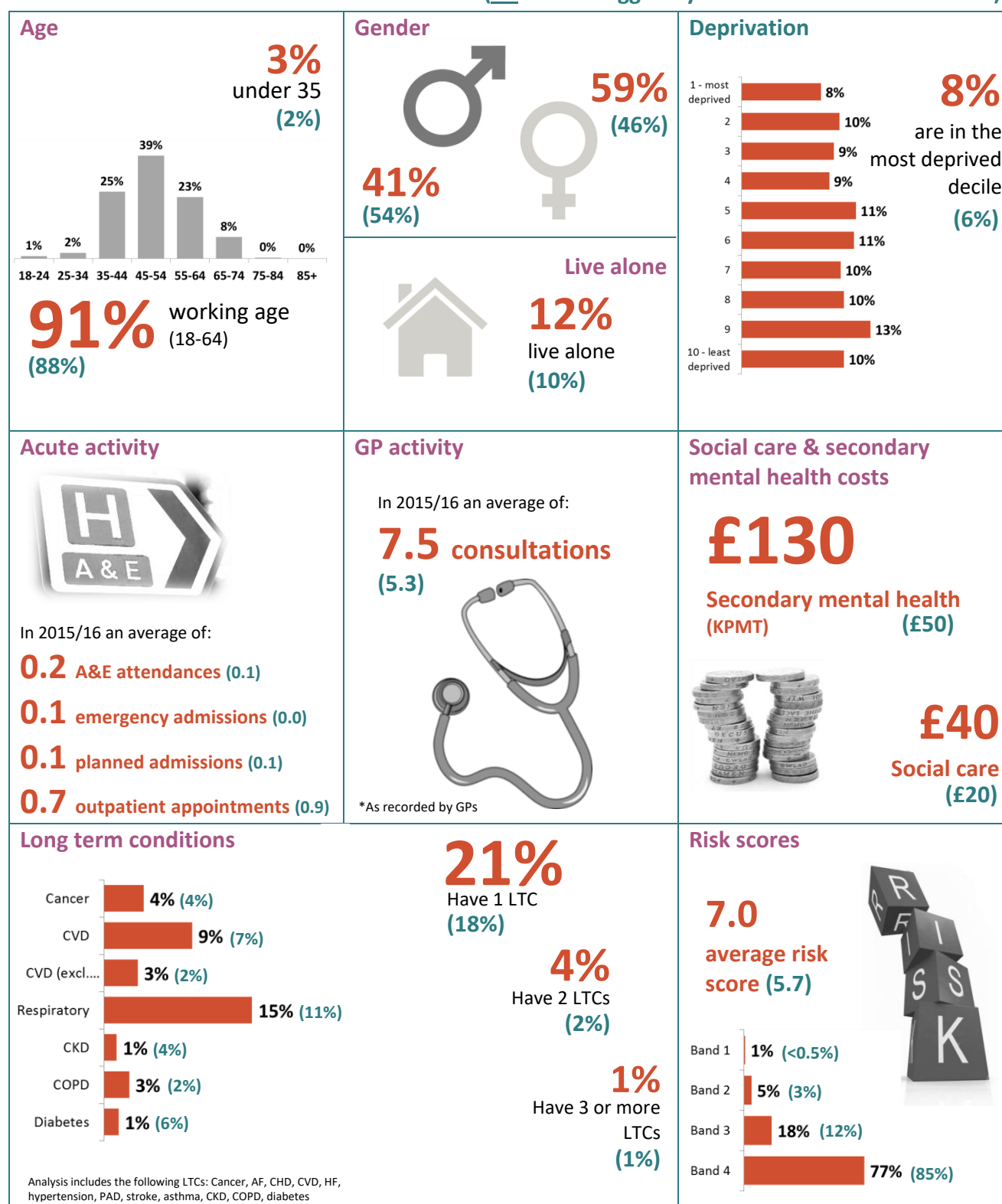
(All adults flagged by their GP as an excess drinker)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 332 individuals aged 18+, resident in Kent, recorded within the KID GP records as an excess drinker and either recorded within the KID secondary mental health records (provided by KPMT) as contacts during 2015/16 (individuals who only have contacts recorded where the outcome is 'discharged no cluster' or where the cluster coding is still 'pending' have been removed), recorded within the KID SUS records as having been admitted to hospital during 2015/16 as an emergency with a mental health primary diagnosis (ICD10: F) or recorded within the KID GP records as having a current serious mental health condition. Comparisons have been made with all 13244 individuals aged 18+, resident in Kent, recorded within the KID GP records as an excess drinker. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 19: Adults flagged by their GP as an excess drinker and recorded by their GP as having anxiety and/or depression (developmental statistics)**

(All adults flagged by their GP as an excess drinker)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 3070 individuals aged 18+, resident in Kent, recorded within the KID GP records as an excess drinker and within the KID GP records as currently suffering from anxiety and/or depression. Comparisons have been made with all 13244 individuals aged 18+, resident in Kent, recorded within the KID GP records as an excess drinker. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

## 6. Carers – indicative analysis

The 2011 Census suggests that around 148,300 adults in Kent provide unpaid care, and 35,600 provide more than 50 hours a week of unpaid care<sup>12</sup>.

Using GP records included within the KID we have been able to identify 4,513 adults living in Kent<sup>13</sup> with at least one read code added to their record since January 2015<sup>14</sup> that might suggest that they are a carer. The following read codes have been used in this analysis:

- Receiving carer allowance - 13VP0
- Carer strain index score - 388Q
- Carer annual health check - 69DC
- Carer health check completed - 8BAr
- Ref for GP carer's assessment - 8HkA
- Ref Princs Royl Trst carer cen - 8HkY
- Refer assessment needs carer - 8Hlw
- Carer annual health chck dcld - 8IEP
- Carer health check declined - 8IHE
- Carer support - 8O7
- Carer of pers with subs misuse - 918a
- Carer - 918A
- Cares for a friend - 918A0
- Cares for a neighbour - 918A1
- Cares for a relative - 918A2
- Carer of pers with alco misuse - 918b
- Carer of pers with chron disea - 918c
- Carer pers with ment heal prob - 918d
- Is a carer - 918G
- Primary carer - 918H
- Carer of pers with learn disab - 918W
- Carer of pers with physi disab - 918X
- Carer of person with dementia - 918y
- Carer of per with sens impairm - 918Y
- Carer - 9d46
- Carer health check offered - 9NSS

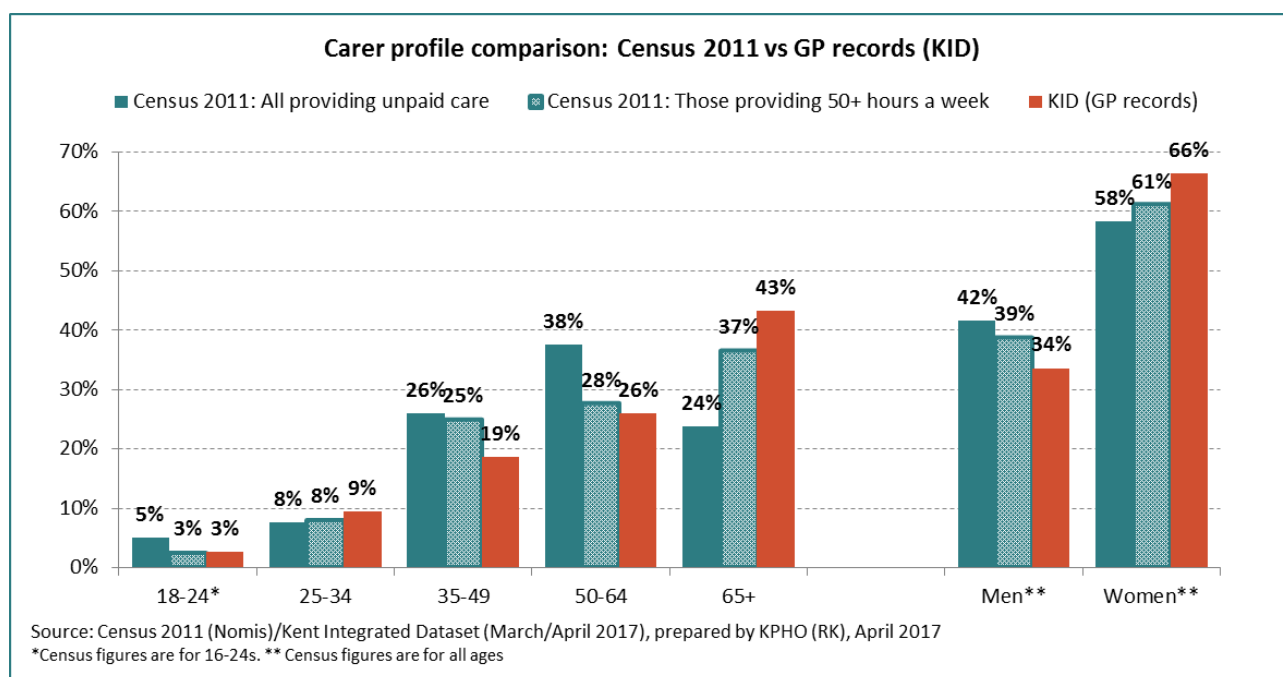
<sup>12</sup> Source: 2011 Census, Nomis. Please note that the figure quoted relates to persons aged 16 or over, but has been used in this indicative analysis to represent all adults (18+).

<sup>13</sup> and registered with one of the 115 practices who were successfully flowing full data on both events and consultations into the KID at the time of the analysis

<sup>14</sup> Only recently coded carers have been included since there is a concern that individuals may no longer be performing a caring role where no note has been made for 2 years+.

The number of adults recorded by their GP under these read codes as carers is clearly only a very small fraction of the total number of adults who are carers. This must be borne in mind when interpreting the results of any analysis of this group, which **must be treated as indicative only**. The analysis below compares the age and sex profile of the adults identified within the KID GP records as carers with results from the Census.

**Figure 20:**



Adults identified via KID GP records as carers in Figure 20 have a reasonably similar profile to those captured in the census who are providing 50+ hours a week of unpaid care. That is not to say that there are not any biases in those carers identified via KID GP records, just that they do not appear to be unduly biased in respect of age and sex. In particular, the likelihood of carers identified through GP records to be biased towards those suffering health problems as a result of their caring responsibilities must be considered when interpreting these results.

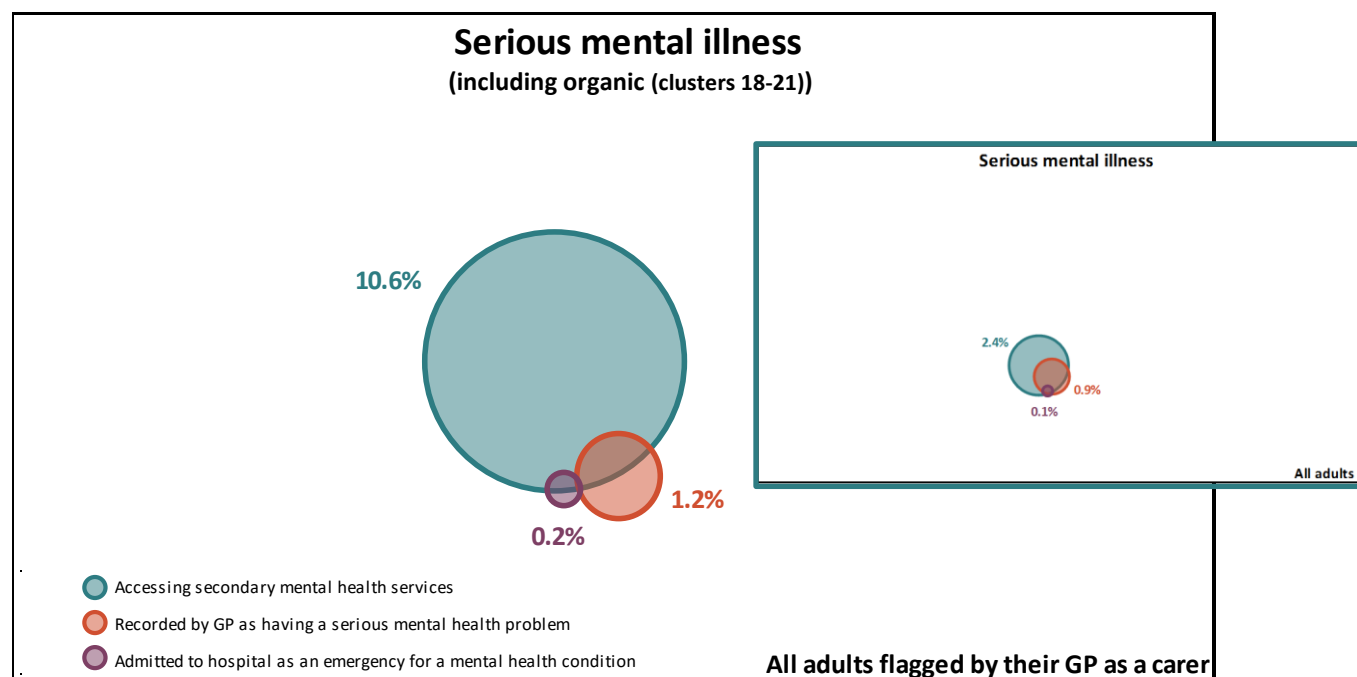
A need for more identification of carers is highlighted by this analysis.



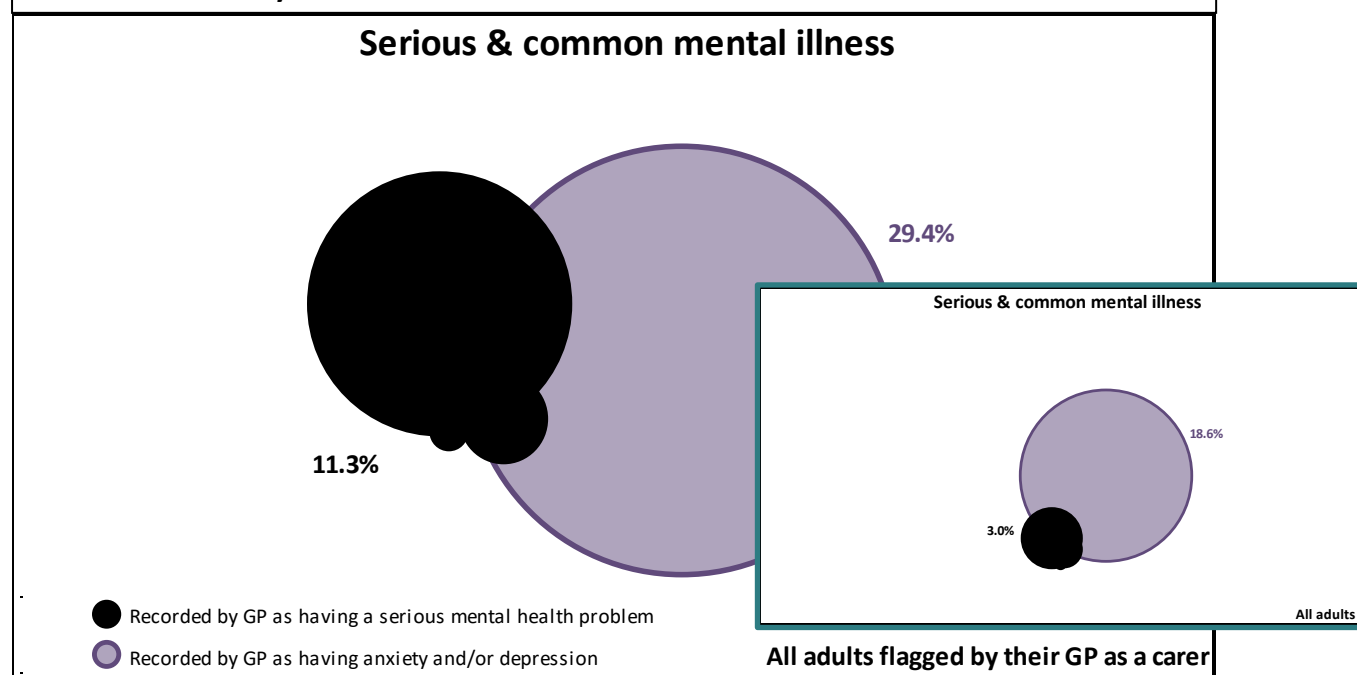
## 6.1 Mental health conditions

The analysis below summarises the recorded prevalence of mental illness within our sample of carers, and the overlap between them.

**Figure 21: Adult Carers Mental illness: recorded prevalence**  
(developmental statistics)



**Figure 22: Carers identified with serious and common mental illness compared with all carers identified by their GP**



**Table 7: Adult Carers with serious mental health conditions**

	% of carers	% of total adult population
Accessing secondary mental health services	10.6%	2.4%
Recorded by GP as having a serious mental health problem	1.2%	0.9%
Admitted to hospital as an emergency for a mental health condition	0.2%	0.1%
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem	0.5%	0.4%
Accessing secondary mental health services <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.1%	0.1%
Recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.0%	0.1%
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	<0.05%	<0.05%
Accessing secondary mental health services <u>OR</u> recorded by GP as having a serious mental health problem <u>OR</u> admitted to hospital as an emergency for a mental health condition (i.e. any serious mental health condition)	11.3%	3.0%

Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

Table 7 sets out the higher prevalence of both serious and common mental illness amongst carers compared with all adults (although the large differences in age profile must be taken into account when interpreting this result, in particular the older age profile of carers). Around 1 in 10 of the carers identified in this analysis (10.6%) had accessed secondary mental health services and 29% are recorded by their GP as having anxiety and/or depression (compared with 2.4% and 19% of all adults respectively).

## 6.2 Profiling & inequalities

Adults flagged by their GP as carers and falling into any of the three definitions of serious mental illness used in this analysis<sup>15</sup> have been profiled (Figure 23), as have those identified as carers and flagged by their GP as suffering from anxiety and/or depression (Figure 24). The analysis covers:

- **Equity characteristics** such as age, gender, deprivation and isolation
- **Service usage**, covering hospitals, GPs, social care and secondary mental health
- **Comorbidities**, including key long term conditions and risk scores

In this analysis **comparisons have been made with all adults flagged by their GP as carers** (and not the Kent adult population), so as to allow conclusions to be drawn about carers with mental health conditions flagged in comparison with their peers.

This analysis suggests that:

- It is the older adults (aged 75+) flagged by their GP as carers that are the most likely to have serious mental health problems.
  - The extent to which this reflects a higher propensity to record caring responsibilities amongst older people when a serious mental health problem is also present is unknown.
  - Two-thirds (68%) of the identified carers flagged as having a serious mental health problem are KMPT clients in the organic cluster. This compares with just 26% of all Kent adults with a serious mental health condition.
- Identified carers who have also been identified as having anxiety/depression have a far more similar age profile to all identified carers.
- Identified carers with serious mental health problems tend to have slightly more contact with services than those only flagged as carers, including more hospital and GP visits, higher social care costs and higher secondary mental health costs (although the difference is far less marked than for some other groups, such as excess drinkers).
  - Whilst carers recorded by their GP as also having anxiety and/or depression tend to have slightly more contact with their GP than the recorded carers population as a whole, their usage of acute hospital services and social care is similar to the average across all recorded carers.

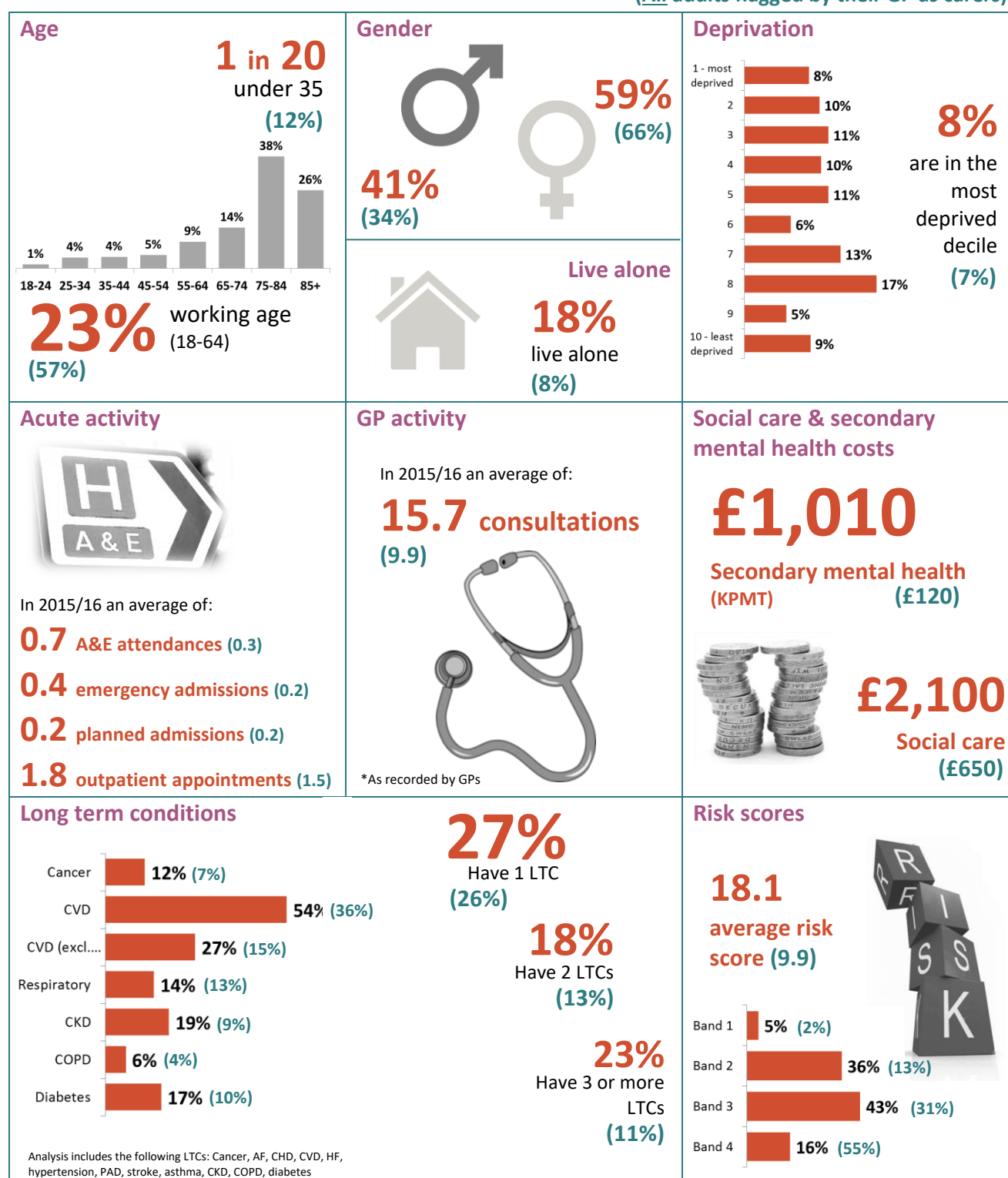
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<sup>15</sup> i.e. individuals receiving secondary mental health services, individuals recorded by their GP as having a serious mental health problem and individuals admitted to hospital as an emergency for a mental health condition. See [Section 2](#) for more details

- Recorded carers with serious mental health problems have an elevated long term condition profile compared with GP-recorded carers as a whole, although their older age profile must be borne in mind when interpreting this result.
  - Identified carers also flagged as having anxiety/depression have a similar long term condition profile to all identified carers.

**Figure 23: Adults flagged by their GP as carers and either receiving secondary mental health services, been admitted to hospital for a mental health problem or recorded by their GP as having a serious mental health problem (developmental statistics)**

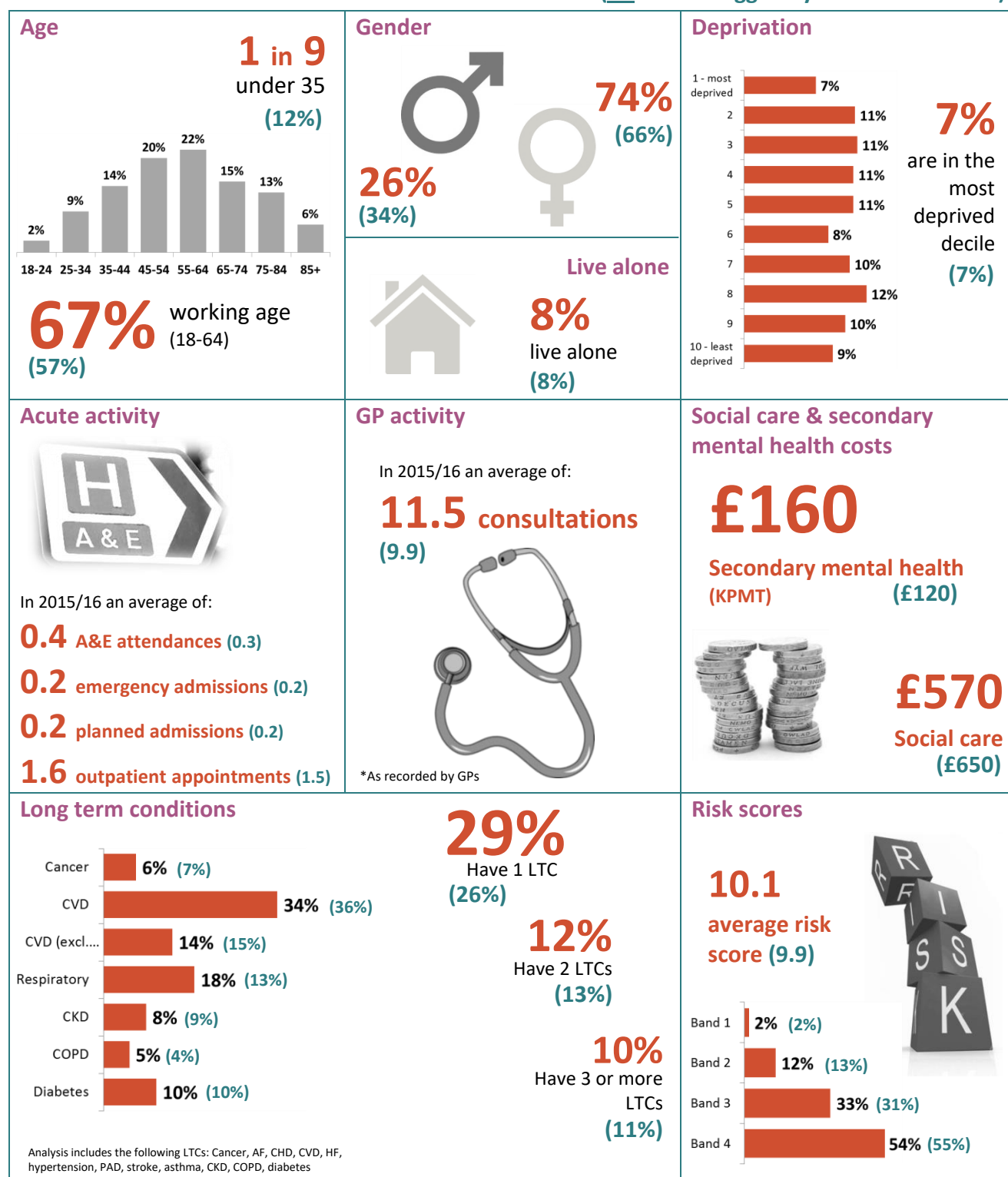
(All adults flagged by their GP as carers)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 511 individuals aged 18+, resident in Kent, recorded within the KID GP records as carers and either recorded within the KID secondary mental health records (provided by KMPT) as contacts during 2015/16 (individuals who only have contacts recorded where the outcome is 'discharged no cluster' or where the cluster coding is still 'pending' have been removed), recorded within the KID SUS records as having been admitted to hospital during 2015/16 as an emergency with a mental health primary diagnosis (ICD10: F) or recorded within the KID GP records as having a current serious mental health condition. Comparisons have been made with all 4513 individuals aged 18+, resident in Kent, recorded within the KID GP records as carers. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 24: Adults flagged by their GP as carers and recorded by their GP as having anxiety and/or depression (developmental statistics)**

(All adults flagged by their GP as carers)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 1329 individuals aged 18+, resident in Kent, recorded within the KID GP records as carer and within the KID GP records as currently suffering from anxiety and/or depression. Comparisons have been made with all 4513 individuals aged 18+, resident in Kent, recorded within the KID GP records as a carer. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

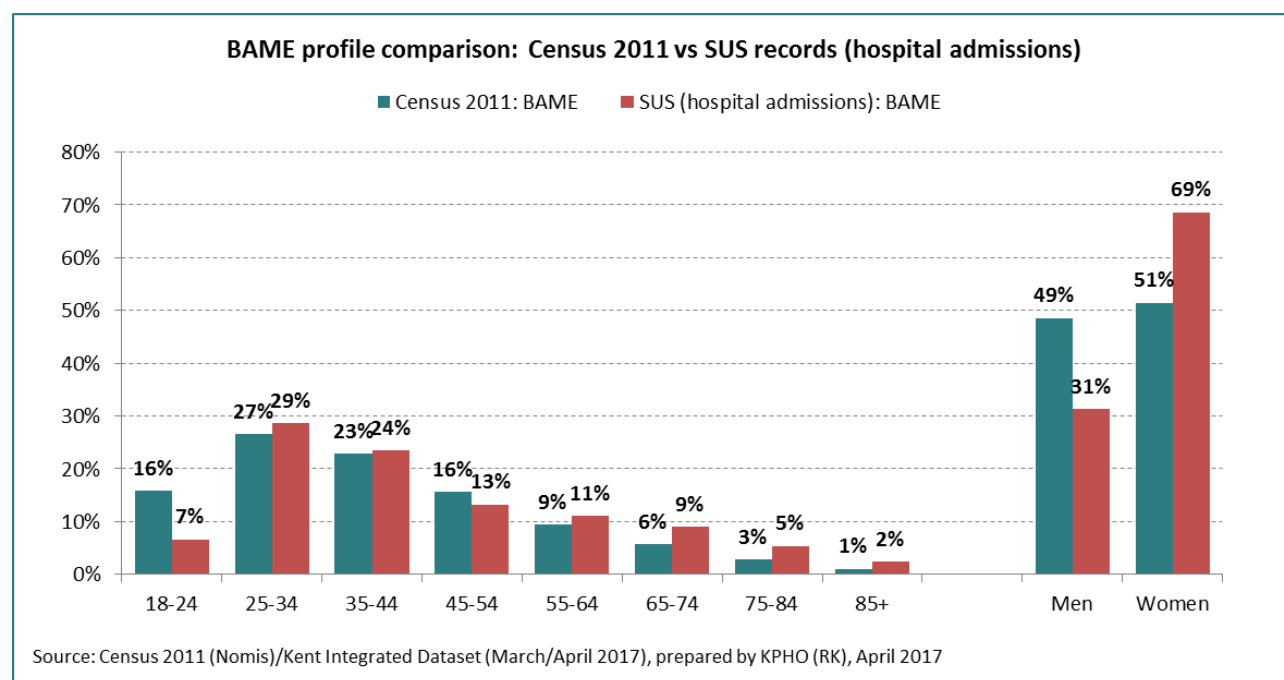
## 7. Black and Minority Ethnic Groups (BAME) – indicative analysis

The 2011 Census suggests that, at that time, there were around 118,000 BAME adults<sup>16</sup> in Kent.

Information on ethnicity is not available for all individuals within the KID, with the GP records not generally capturing this information within the read coded events data. For this reason, ethnicity information collected in connection with hospital admissions (via SUS) has been used. Using SUS records for hospital admissions since 2014 we have been able to identify 10,427 adults living in Kent<sup>17</sup> with a BAME ethnicity code.

The number of BAME adults identified via hospital admission records is clearly only a very small fraction of the total number of BAME adults in Kent. It is also clearly biased towards those likely to be admitted to hospital. This must be borne in mind when interpreting the results of any analysis of this group, which **must be treated as indicative only**. The analysis in Figure 25 compares the age and sex profile of the BAME adults identified within the KID hospital admission records with results from the 2011 Census.

**Figure 25:**



BAME adults identified via hospital admission records are very much skewed towards women, as well as being biased towards the older age groups.

<sup>16</sup> All ethnicities except White British.

<sup>17</sup> and registered with one of the 115 practices who were successfully flowing full data on both events and consultations into the KID at the time of the analysis

**These findings must be borne in mind when interpreting the results of this analysis, with the cohort of BAME adults analysed treated as a skewed sample of all BAME adults in the population.**

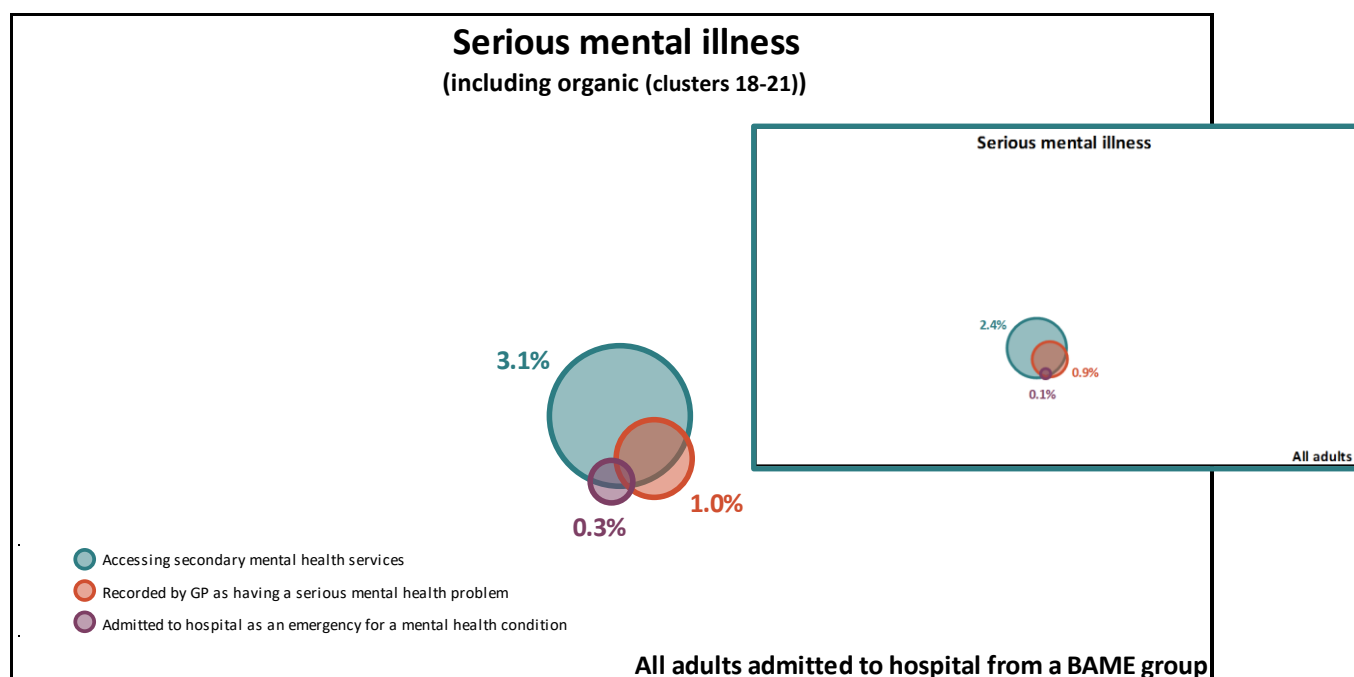
A need for improved data on ethnicity covering the whole population is highlighted by this analysis.



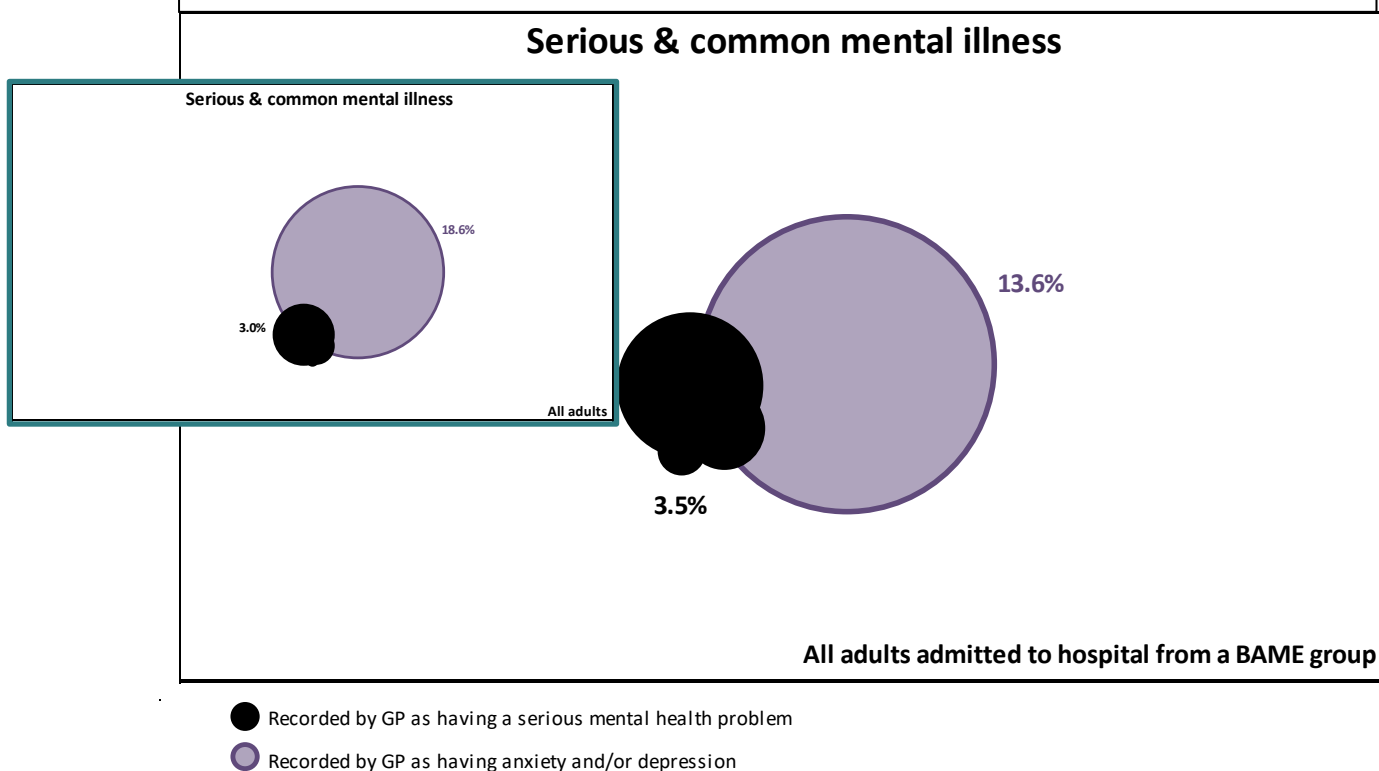
## 7.1 Mental health conditions

The analysis below summarises the recorded prevalence of mental illness within our sample of BAME adults, and the overlap between them.

**Figure 26: Mental illness: recorded prevalence**  
(developmental statistics)



**Figure 27: BAME with Serious or Common Mental Illness**



**Table 8: BAME with a serious mental health condition compared with total adult population in KID**

	% of BAME adults	% of total adult population
Accessing secondary mental health services	3.1%	2.4%
Recorded by GP as having a serious mental health problem	1.0%	0.9%
Admitted to hospital as an emergency for a mental health condition	0.3%	0.1%
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem	0.7%	0.4%
Accessing secondary mental health services <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.2%	0.1%
Recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	0.0%	0.1%
Accessing secondary mental health services <u>AND</u> recorded by GP as having a serious mental health problem <u>AND</u> admitted to hospital as an emergency for a mental health condition	<0.05%	<0.05%
Accessing secondary mental health services <u>OR</u> recorded by GP as having a serious mental health problem <u>OR</u> admitted to hospital as an emergency for a mental health condition (i.e. any serious mental health condition)	3.5%	3.0%

Source: Kent Integrated Dataset (March/April 2017), prepared by KPHO (RK), April 2017

The prevalence of serious mental health conditions amongst the BAME adults that we have been able to identify via hospital admission records is only slightly higher than that recorded across all adults (3.5% and 3.0% respectively). Given that the analysis is based on individuals who have been admitted to hospital (and so a skewed sample), we are interpreting this finding as suggesting that serious mental health prevalence is similar for BAME adults as in the adult population as a whole.

There is perhaps some evidence to suggest slightly lower rates of recorded common mental illness, with 14% of this sample of BAME adults recorded as suffering from anxiety and/or depression compared with 19% of all adults.

## 7.2 Profiling & inequalities

Identified BAME adults also falling into any of the three definitions of serious mental illness used in this analysis<sup>18</sup> have been profiled (Figure 28), as have those identified as BAME adults (via hospital admission records) and flagged by their GP as suffering from anxiety and/or depression (Figure 29). The analysis covers:

- **Equity characteristics** such as age, gender, deprivation and isolation
- **Service usage**, covering hospitals, GPs, social care and secondary mental health
- **Comorbidities**, including key long term conditions and risk scores

In this analysis **comparisons have been made with all identified BAME adults** (and not the Kent adult population). It is important to note the known skews in the BAME identified for the purposes of this analysis via hospital admission records (i.e. towards women, and older age groups).

Many of the key findings for all adults also apply to the identified BAME adults, particularly that:

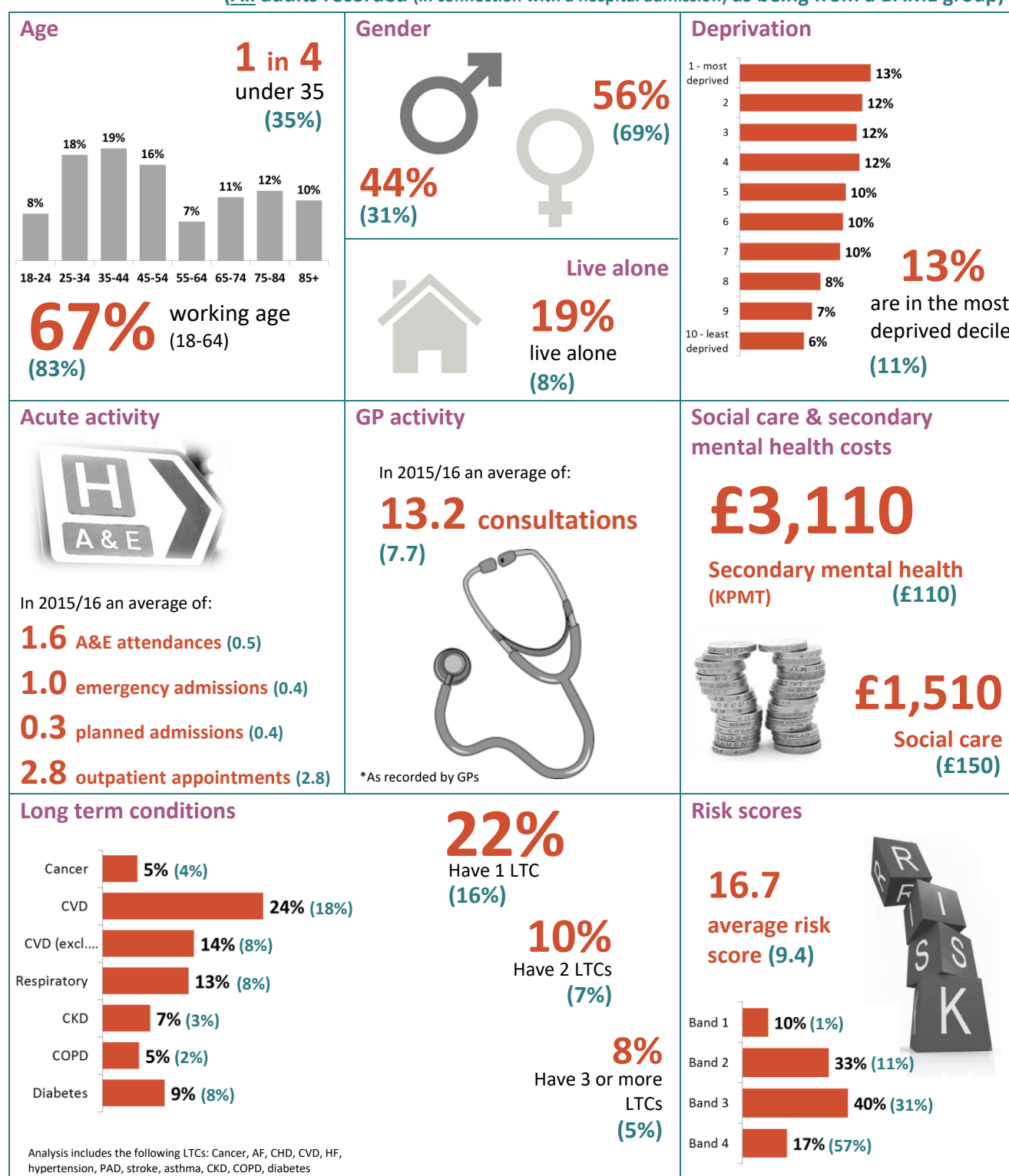
- Identified BAME adults with serious mental health problems are around twice as likely to live alone than all those flagged as BAME (and with no serious mental health problem flagged)
- They are also skewed towards our most deprived communities
- Identified BAME adults with serious mental health problems tend to have more contact with services than BAME adults as a whole, including more hospital and GP visits, higher social care costs and higher secondary mental health costs
  - Whilst BAME adults recorded by their GP as also having anxiety and/or depression tend to have more contact with their GP than the identified BAME adult population as a whole, their usage of acute hospital services and social care is fairly similar to the average across all identified BAME adults.
- Identified BAME adults with serious mental health problems and those recorded as having anxiety and/or depression have a slightly elevated long term condition profile to identified BAME adults as a whole.

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<sup>18</sup> i.e. individuals receiving secondary mental health services, individuals recorded by their GP as having a serious mental health problem and individuals admitted to hospital as an emergency for a mental health condition. See [Section 2](#) for more details

**Figure 28: Adults recorded (in connection with a hospital admission) as being from a BAME group and either receiving secondary mental health services, been admitted to hospital for a mental health problem or recorded by their GP as having a serious mental health problem (developmental statistics)**

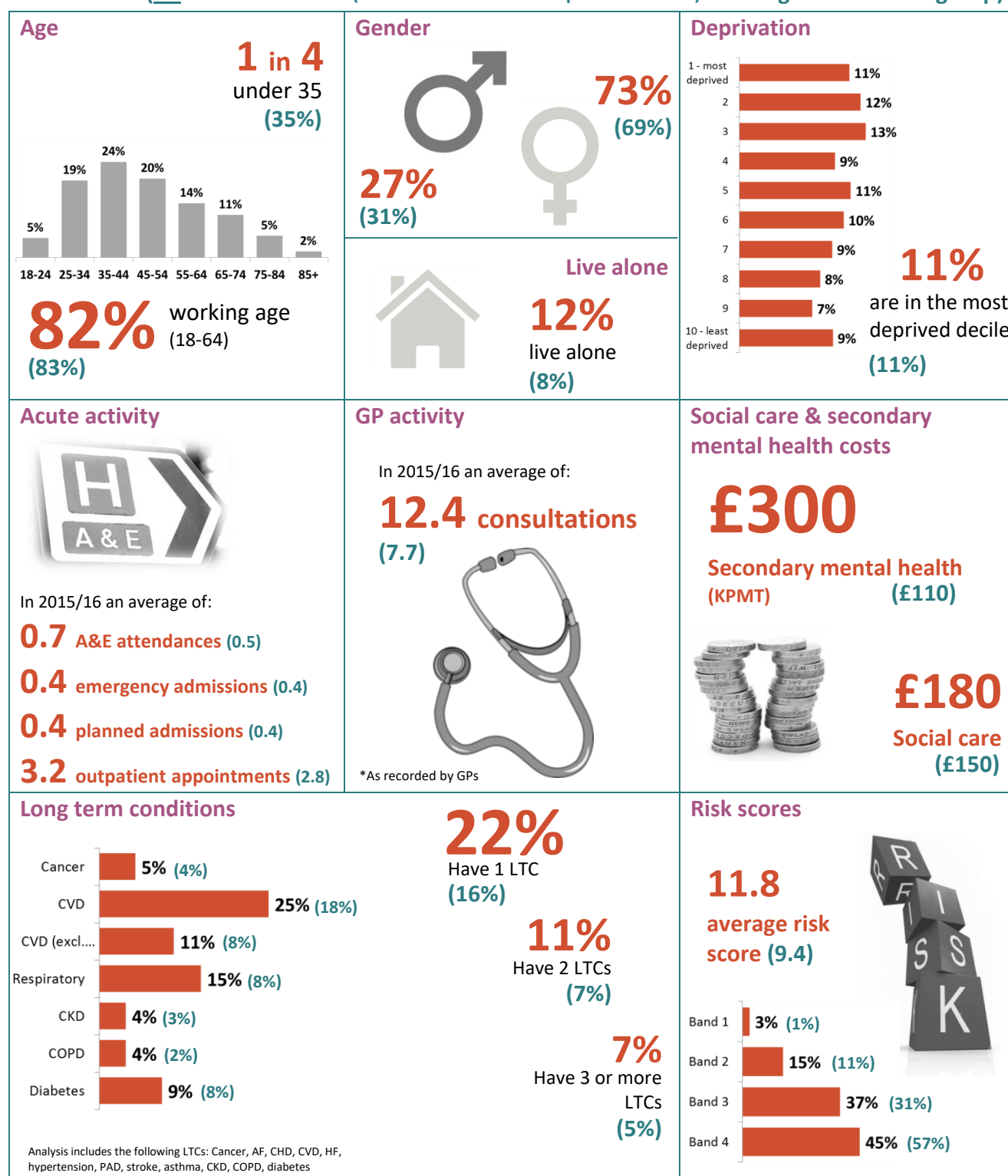
(All adults recorded (in connection with a hospital admission) as being from a BAME group)



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 365 individuals aged 18+, resident in Kent, recorded (in connection with a hospital admission since April 2014) as being from a BAME group and either recorded within the KID secondary mental health records (provided by KPMT) as contacts during 2015/16 (individuals who only have contacts recorded where the outcome is 'discharged no cluster' or where the cluster coding is still 'pending' have been removed), recorded within the KID SUS records as having been admitted to hospital during 2015/16 as an emergency with a mental health primary diagnosis (ICD10: F) or recorded within the KID GP records as having a current serious mental health condition. Comparisons have been made with all 10427 individuals aged 18+, resident in Kent, recorded (in connection with a hospital admission since April 2014) as being from a BAME group. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

**Figure 29: Adults recorded (in connection with a hospital admission) as being from a BAME group and recorded by their GP as having anxiety and/or depression (developmental statistics)**

**(All adults recorded (in connection with a hospital admission) as being from a BAME group)**



Source: Kent Integrated Dataset (KID), March 2017. Analysis is based on 1423 individuals aged 18+, resident in Kent, recorded (in connection with a hospital admission since April 2014) as being from a BAME group and within the KID GP records as currently suffering from anxiety and/or depression. Comparisons have been made with all 10427 individuals aged 18+, resident in Kent, recorded (in connection with a hospital admission since April 2014) as being from a BAME group. Not all Kent GPs flow data into the KID; this analysis is based on records from 115 GPs and presents information as recorded by GP systems. Acute, GP, social care and secondary mental health activity covers the period April 2015 to March 2016. Individuals living alone have been identified via UPRNs, where the individual is the only individual within the KID PMI data recorded at that property.

## 8. Veterans

Past local modelling suggests there are approximately 130,000 veterans in Kent and Medway, with the highest density in Thanet, Dover, Shepway, Swale and Medway<sup>19</sup>.

An attempt has been made to use GP records included within the KID to identify veterans living in Kent. The following read codes were used:

- Military veteran - 13Ji
- Army veteran - 13Ji0
- Royal Air Force veteran - 13Ji1
- Royal Navy veteran - 13Ji2
- Royal Marines veteran - 13Ji3
- Left military service - 13JR

This identified around 3,400 individuals where the GP had used one of these read codes, but further analysis showed that 14% of the individuals identified are aged under 18 (12% under 16) and more than half are women. This does not reflect the expected profile of veterans<sup>20</sup> and could suggest that GPs are using these read codes on the records of family members of veterans as well as the ex-service personnel themselves (although it is not possible to substantiate this). Given these concerns over the validity of the individuals identified as a group of veterans we feel that it would not be prudent to continue with any further analysis of this group.

A need for improved data on veterans is again highlighted by this analysis.

## 9. Ex-prisoners

An attempt has been made to use GP records included within the KID to identify ex-prisoners living in Kent. The following read code was used:

- Prison-record – 13H9

This identified less than five individuals where the GP had used this read code, and so it has not been possible to continue with any further analysis of this group.

A need for improved data on ex-prisoners is highlighted by this analysis.

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<sup>19</sup> Source: JSNA overview 2014/15.

<sup>20</sup> <http://www.kentcouncilleaders.org.uk/military/research/>

## Annex A: Profile of GPs included in the analysis

The table below compares the characteristics of the 115 GP practices included within this analysis with the remaining practices in Kent.

	Included in the analysis	Not included in the analysis	Index (included vs Kent)
<b>Coverage</b>			
Number of practices	59.0%	41.0%	
Number of patients	57.9%	42.1%	
<b>Practice Size</b>			
Average number of patients	7723	8083	0.98
Average GP FTE	3.6	4.1	0.95
Average number of patients per GP	2217	2124	1.02
% of practices that are single-handed	9.6%	8.8%	1.04
<b>Patient Characteristics</b>			
Average deprivation score (IMD 2015)	18.7	20.7	0.96
% of patients aged 65+	18.9%	20.6%	0.96
% of patients aged 85+	2.5%	2.8%	0.95
% of patients with a long-standing health condition	54.3%	55.8%	0.99
<b>Practice Quality</b>			
% of patients who would recommend practice	78.3%	78.6%	1.00

This analysis suggests that the 115 practices included in this analysis are broadly representative of all GP practices in Kent in respect of practice size, average deprivation scores, long-term condition prevalence and practice quality.

The table below shows the coverage of the analysis by CCG, age and deprivation, in respect of the proportion of the total registered population covered by the GPs included in the analysis.

	Included in the analysis	Not included in the analysis	Index (included vs Kent)
<b>Coverage</b>			
Number of practices	59.0%	41.0%	
Number of patients	58.2%	41.8%	
<b>Locality (patients covered)</b>			
NHS Ashford CCG	36.1%	63.9%	0.64
NHS Canterbury & Coastal CCG	37.0%	63.0%	0.65
NHS Dartford, Gravesham & Swanley CCG	98.9%	1.1%	1.74
NHS South Kent Coast CCG	51.9%	48.1%	0.92
NHS Swale CCG	55.1%	44.9%	0.97
NHS Thanet CCG	26.6%	73.4%	0.47
NHS West Kent CCG	64.4%	35.6%	1.14
<b>Deprivation (Kent decile)</b>			
1 - Most deprived	50.9%	49.1%	0.90
2	63.4%	36.6%	1.12
3	64.3%	35.7%	1.13
4	54.5%	45.5%	0.96
5	59.8%	40.2%	1.05
6	56.8%	43.2%	1.00
7	58.1%	41.9%	1.02
8	55.3%	44.7%	0.98
9	62.7%	37.3%	1.11
10 - Least deprived	56.5%	43.5%	1.00



	Included in the analysis	Not included in the analysis	Index (included vs Kent)
<b>Age</b>			
0	61.3%	38.7%	1.08
1-4	61.2%	38.8%	1.08
5-9	60.1%	39.9%	1.06
10-14	58.7%	41.3%	1.04
15-19	55.6%	44.4%	0.98
20-24	54.5%	45.5%	0.96
25-29	60.4%	39.6%	1.07
30-34	61.6%	38.4%	1.09
35-39	60.6%	39.4%	1.07
40-44	59.3%	40.7%	1.05
45-49	58.5%	41.5%	1.03
50-54	58.2%	41.8%	1.03
55-59	57.9%	42.1%	1.02
60-64	56.9%	43.1%	1.00
65-69	56.0%	44.0%	0.99
70-74	55.6%	44.4%	0.98
75-79	56.4%	43.6%	0.99
80-84	56.7%	43.3%	1.00
85-89	55.6%	44.4%	0.98
90+	53.7%	46.3%	0.95

This analysis shows some differences across the County, with Thanet CCG highlighted as particularly under-represented, and DGS as particularly over-represented.