



Analysis of hospital admissions for self-harm

Self harm in children & young people in Kent

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Contents

Introduction & methodology

Scene setting: Self-harm in Kent

Demographic profile

Seasonal variation

Service usage

Introduction & methodology

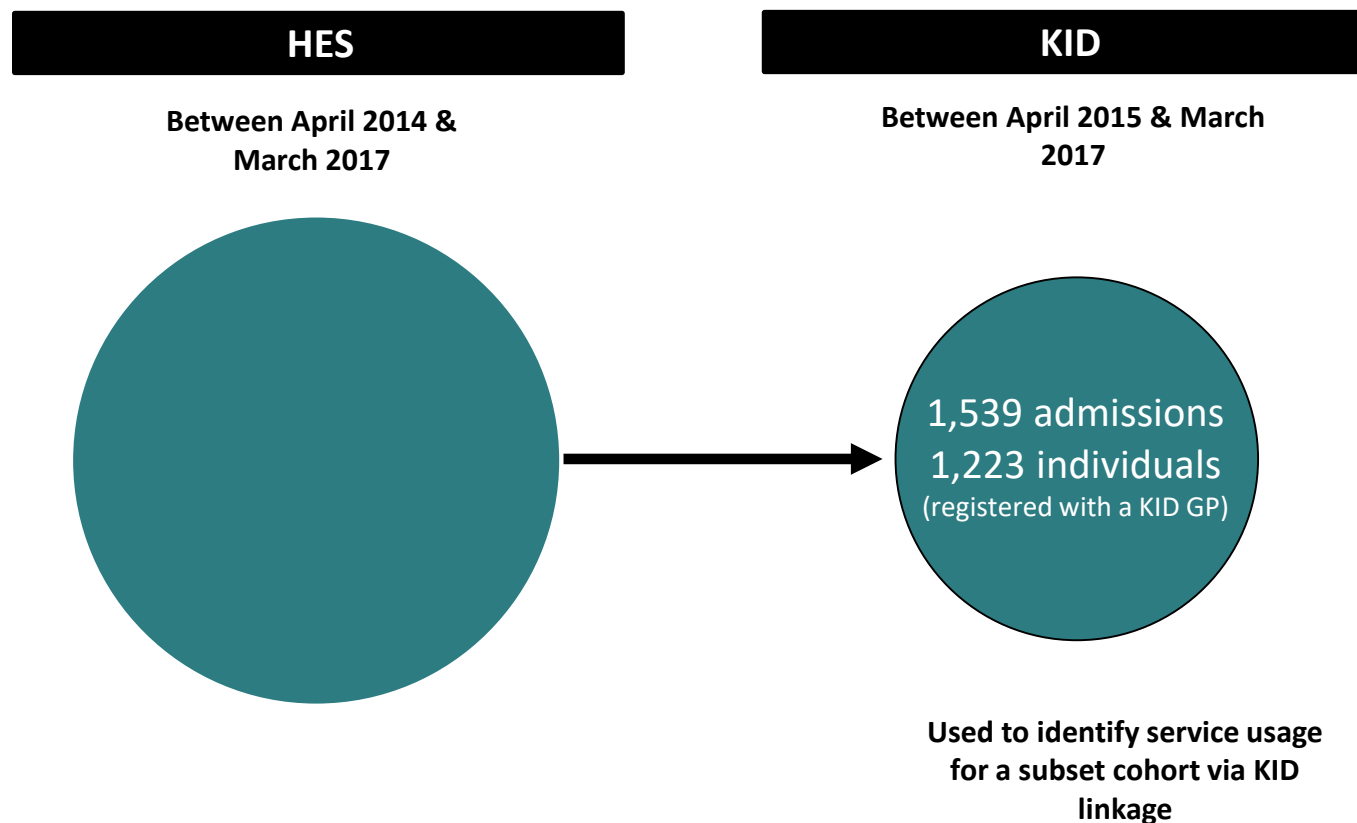
- Reducing self-harm amongst children & young people in Kent is a key objective for public health in Kent
- KSCB have identified a need to undertake a thematic review of teenage suicide
- To assist in this work, a need has been identified for a deeper understanding of children and young people hospitalised as a result of self-harm...(identified as a pre-cursor to suicide)
- The Kent Public Health Observatory (KPHO) have access to data on hospital admissions for self-harm via the following sources:
 - Hospital episode statistics (HES), containing detailed information on hospital admissions across England as well as locally
 - The Kent Integrated Dataset (KID), providing a link between local hospital admission data and usage of other health and social care services
- This analysis provides insight into the profile of children & young people admitted to hospital for self harm and their usage of other care services, both before and after the self-harm incident

Methodology: Defining self-harm

🍊 This analysis focusses on hospital admissions where one (or more) of the following ICD10 diagnosis codes have been used:

- X60-68: Intentional self-poisoning by and exposure to:
 - nonopioid analgesics, antipyretics and antirheumatics
 - antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified
 - narcotics and psychodysleptics [hallucinogens], not elsewhere classified
 - other drugs acting on the autonomic nervous system
 - other and unspecified drugs, medicaments and biological substances
 - Alcohol
 - organic solvents and halogenated hydrocarbons and their vapours
 - other gases and vapours
 - pesticides
- X70-X84: Intentional self-harm by:
 - Hanging, strangulation and suffocation
 - Drowning and submersion
 - Handgun discharge
 - rifle, shotgun and larger firearm discharge
 - other and unspecified firearm discharge
 - Explosive material
 - Smoke, fire and flames
 - Steam, hot vapours and hot objects
 - Sharp object
 - Blunt object
 - Jumping from a high place
 - Jumping or lying before moving object
 - Crashing of motor vehicle
 - by other specified means
 - By unspecified means

Methodology: Analysis groups



Contents

Introduction & methodology

Scene setting: Self-harm in Kent

Demographic profile

Seasonal variations

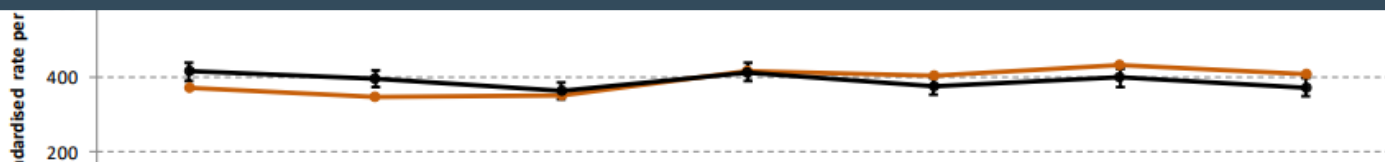
Service usage

Emergency hospital admissions for self-harm in young people aged 10-24 years: trend

Age standardised rate per 100,000 children and young people aged 10-24 years, ICD 10: X60-X84 (main recorded cause)



In 2016/17 alone, there were 1,018 admissions to hospital for self-harm amongst 10-24 year olds resident in Kent, involving 823 individuals



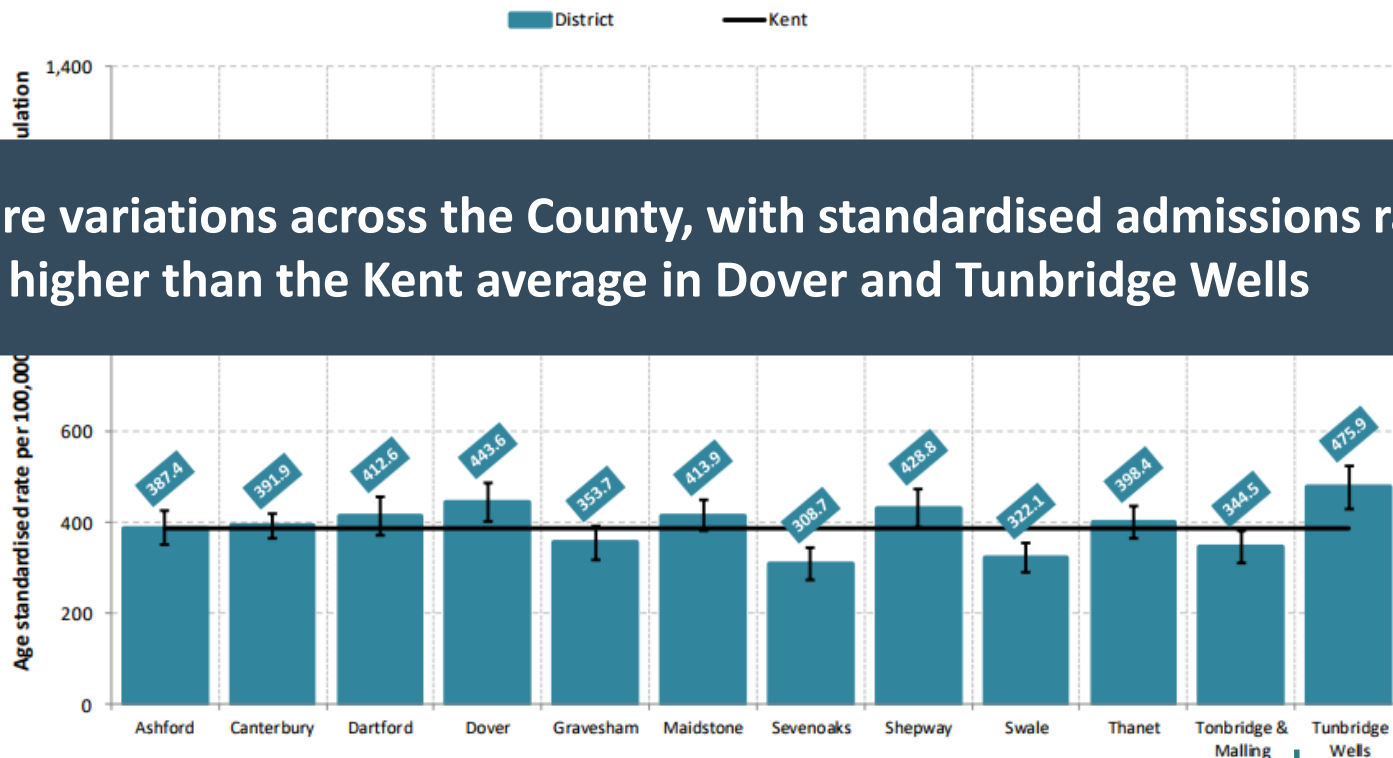
Admission rates have remained stable over time

Source: Hospital Episode Statistics (HES), NHS Digital, ONS, prepared by KPHO (RK), Nov-17



Emergency hospital admissions for self-harm in young people aged 10-24 years: by district

Age standardised rate per 100,000 children and young people aged 10-24 years, ICD 10: X60-X84 (main recorded cause), 2012/13-2016/17

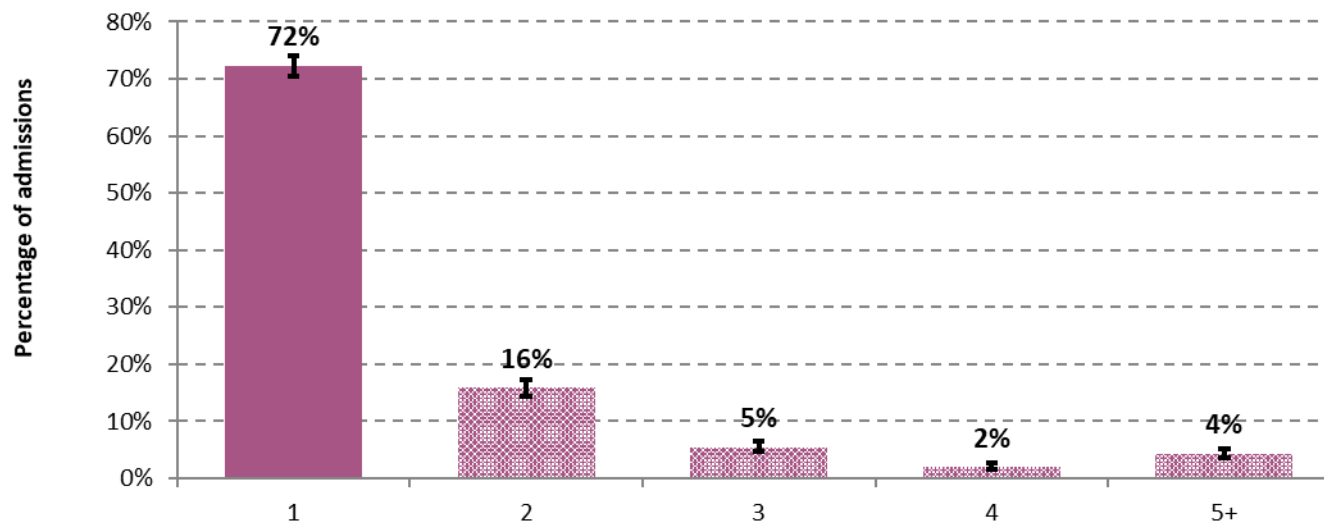


Source: Hospital Episode Statistics (HES), NHS Digital, ONS, prepared by KPHO (RK), Nov-17

Starting Well: Children in Kent (Districts)

Includes one individual with a large number of admissions over this 5-year period. If this individual is removed from the analysis the ASR reduces to 419.3 per 100,000

Individuals admitted for self-harm: Number of admissions per person
ICD10: X60-X84, ages 10-24 at time of incident, individuals admitted 2014/15-2016/17,
number of admissions since 2010/11



Source: HES, prepared by KPHO (RK), March 2018

28% of the individuals admitted to hospital for self-harm between April 2014 and March 2017 had been admitted on more than one occasion since April 2010

Contents

Introduction & methodology

Scene setting: Self-harm in Kent

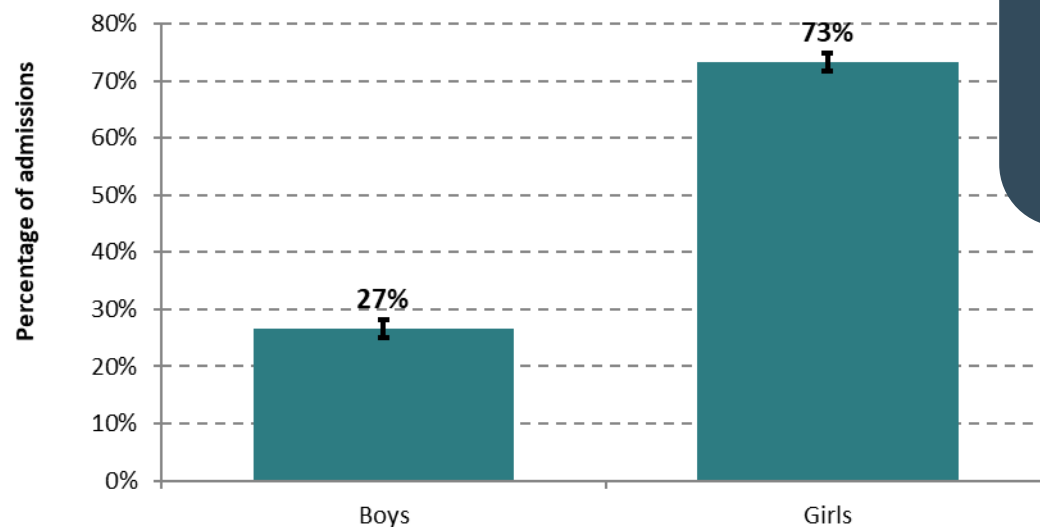
Demographic profile

Seasonal variation

Service usage

Gender

Hospital admissions for self-harm: Gender profile
ICD10: X60-X84, ages 10-24 at time of incident, 2014/15-2016/17

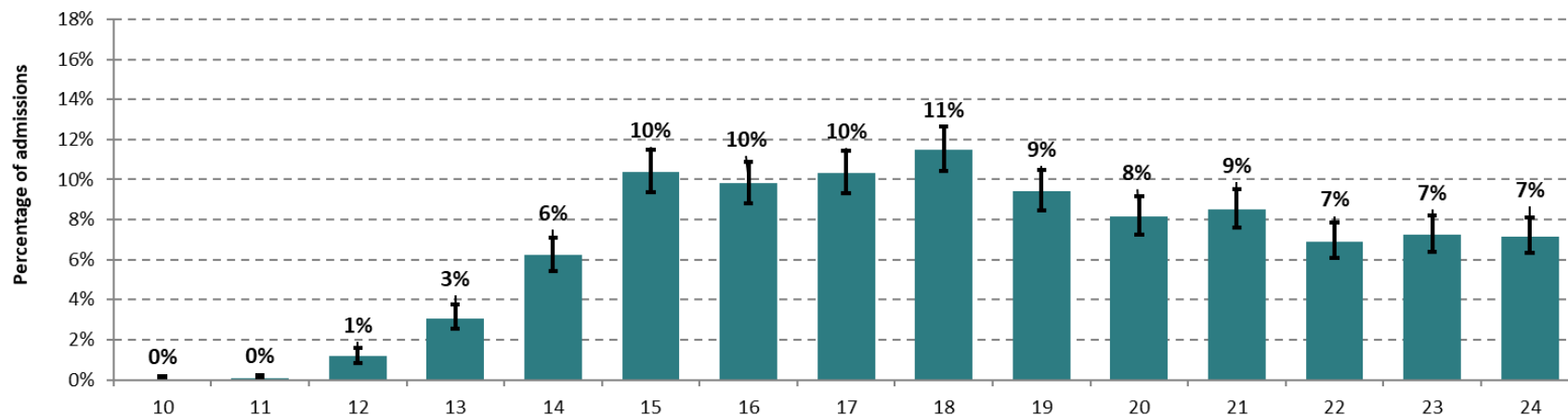


Source: HES, prepared by KPHO (RK), March 2018

Girls account for almost three-quarters of the admissions for self-harm amongst 10-24 year olds in Kent

Age distribution

Hospital admissions for self-harm: Age profile
ICD10: X60-X84, ages 10-24 at time of incident, 2014/15-2016/17

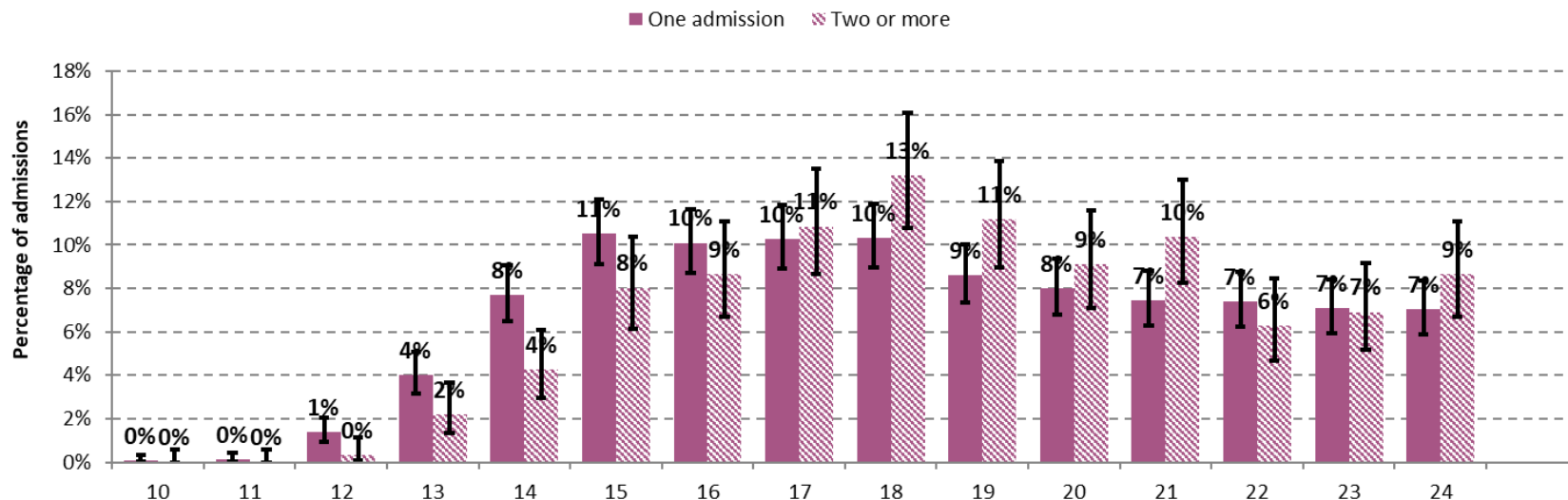


Source: HES, prepared by KPHO (RK), March 2018

**Around half of these admissions
involve young people aged
between 14 and 18**

Age: By number of admissions

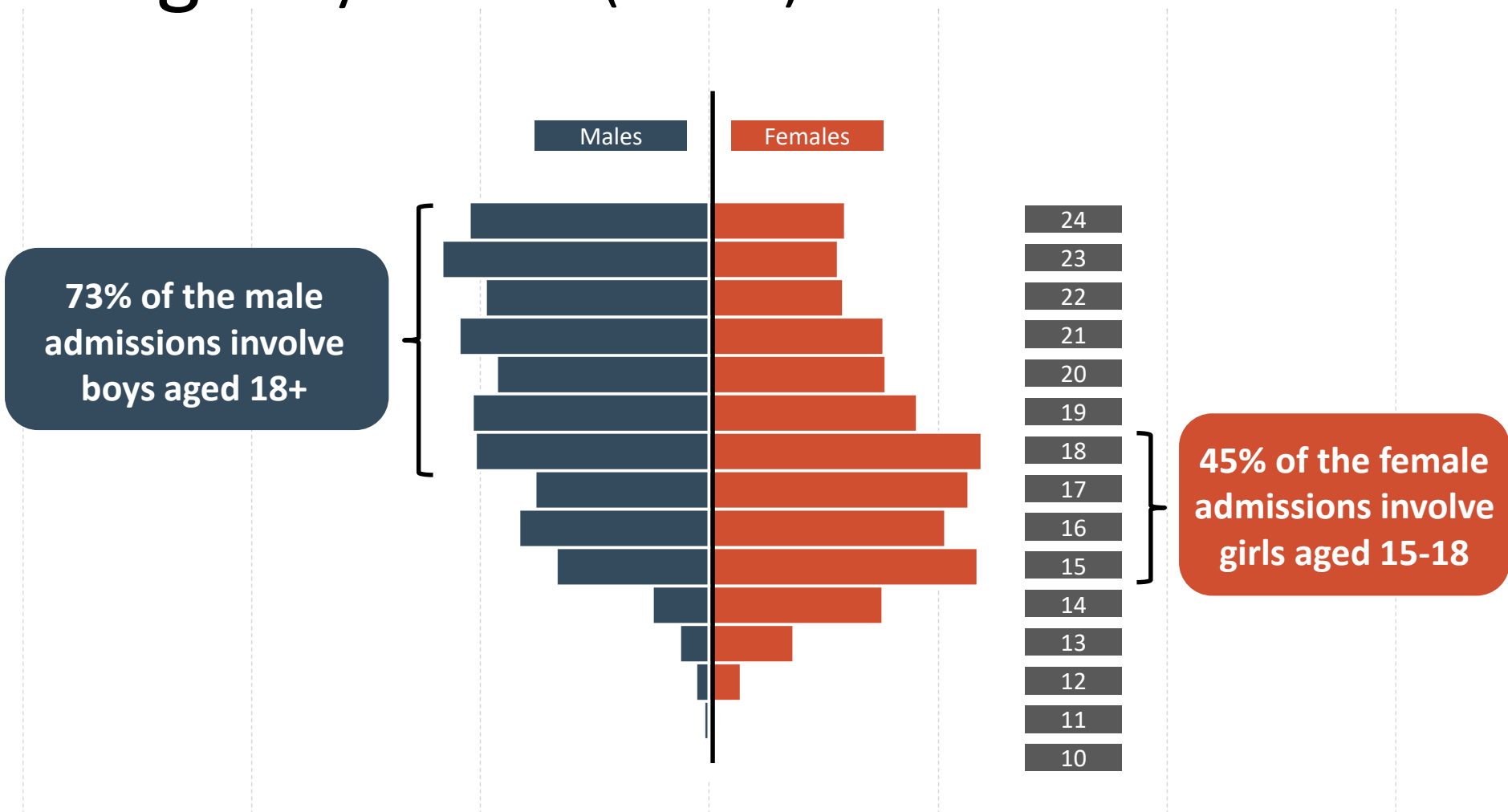
Individuals admitted to hospital for self-harm: Age profile by number of admissions
ICD10: X60-X84, ages 10-24 at time of most recent incident, 2014/15-2016/17



Source: HES, prepared by KPHO (RK), March 2018

The age profile of those admitted on multiple occasions (at their most recent incident) is similar to those admitted just once

Age: By Gender (mode)

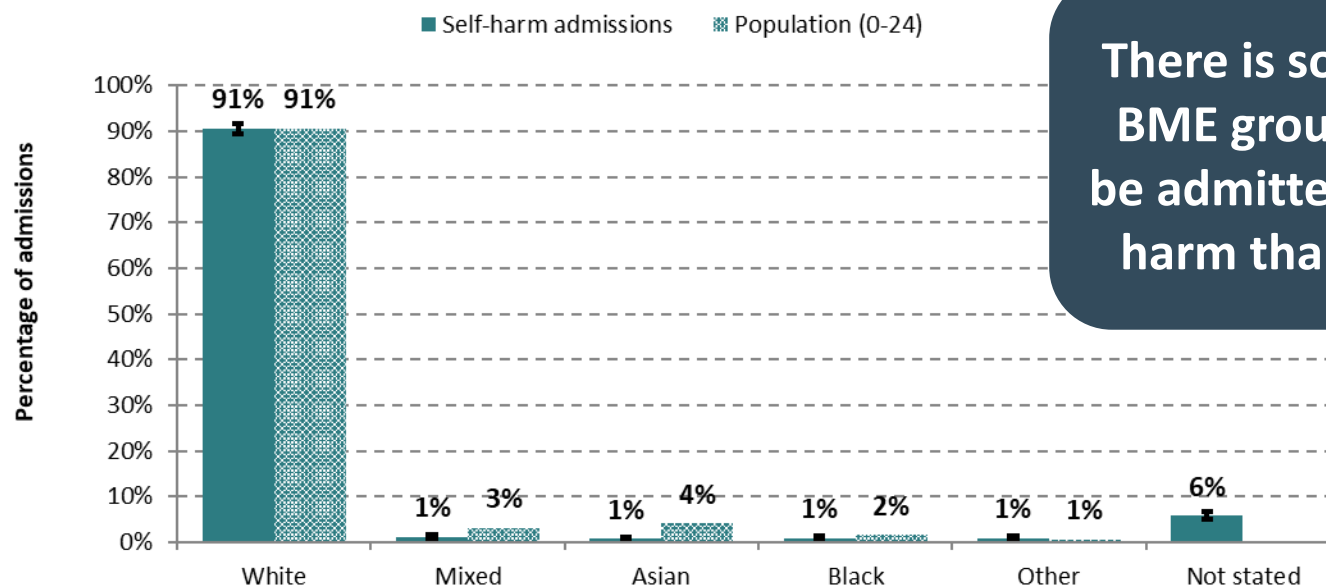


Source: HES, prepared by KPHO (RK)

Analysis of hospital admissions for self-harm

Ethnicity

Hospital admissions for self-harm: Ethnicity profile
ICD10: X60-X84, ages 10-24 at time of incident, 2014/15-2016/17



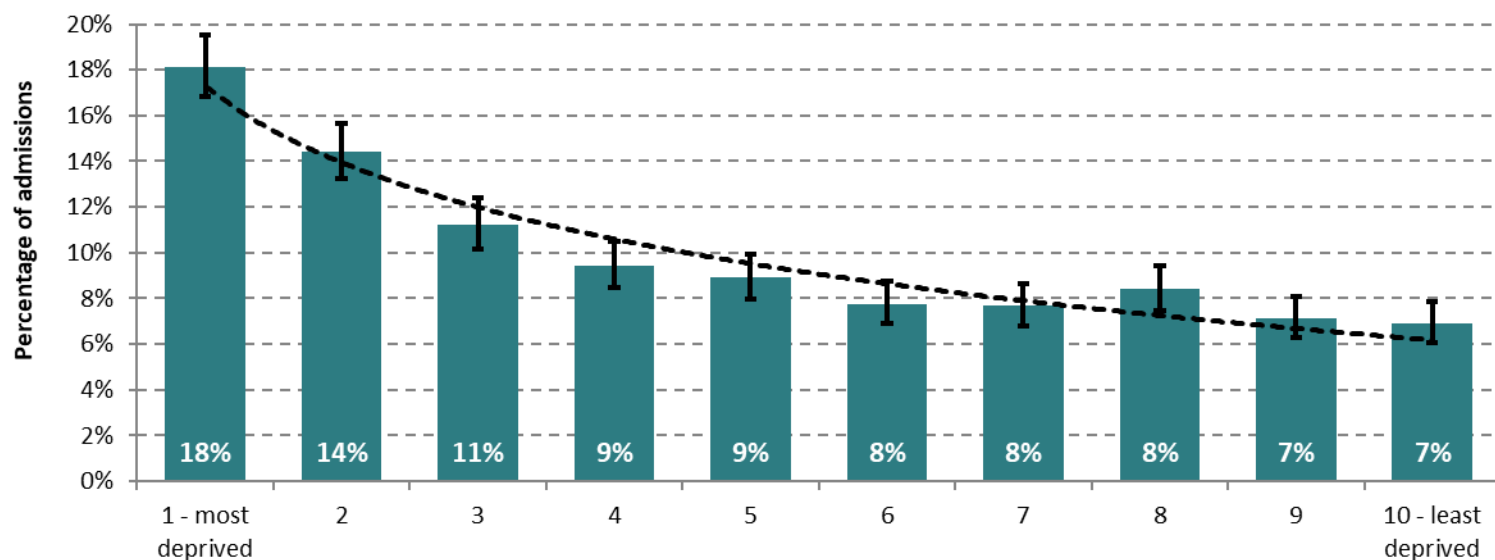
There is some suggestion that BME groups are less likely to be admitted to hospital for self harm than their white peers

Source: HES, Census 2011, prepared by KPHO (RK), March 2018

Deprivation

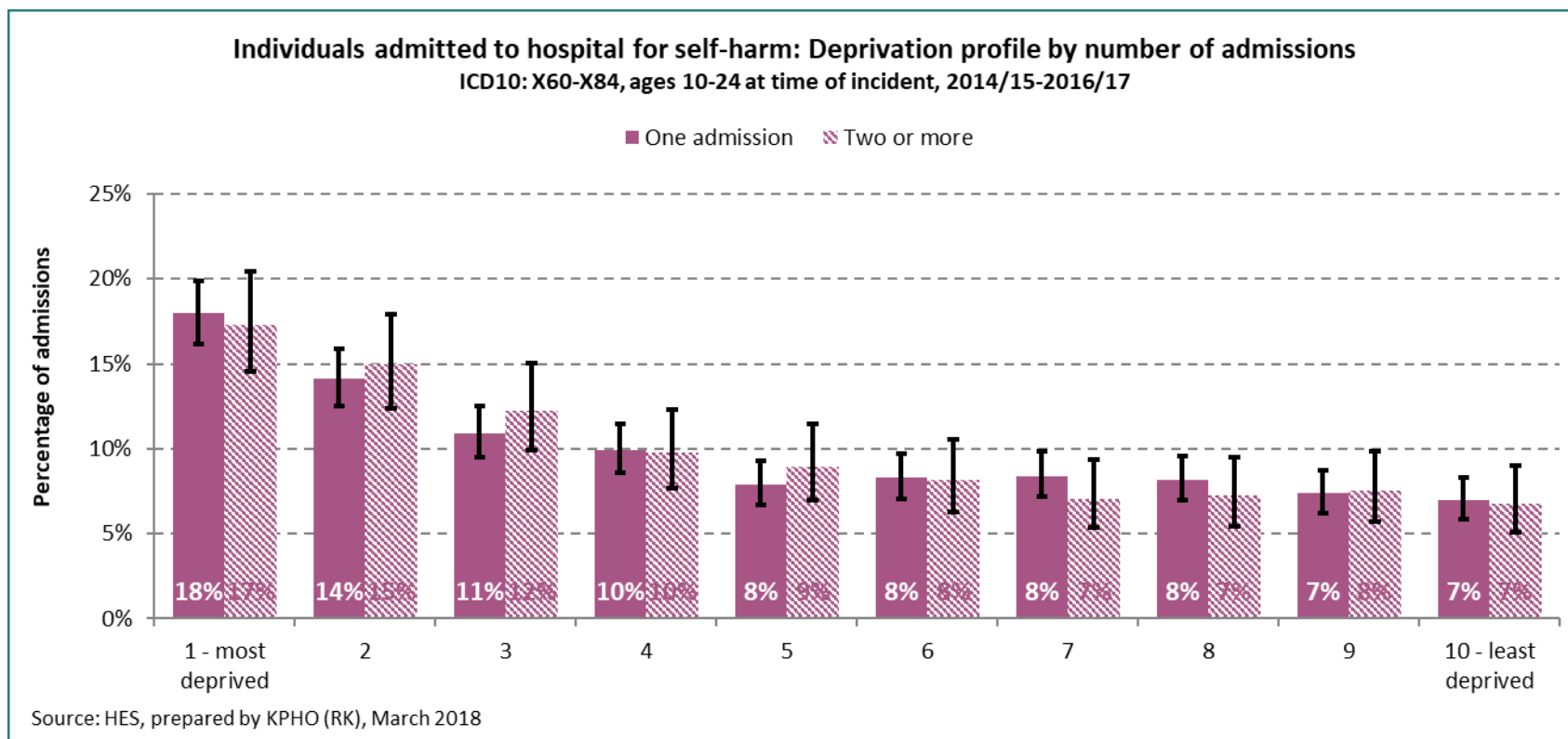
A third of the admissions for self-harm involve children & young people living in the 20% most deprived areas

Hospital admissions for self-harm: Deprivation profile
ICD10: X60-X84, ages 10-24 at time of incident, 2014/15-2016/17



Source: HES, prepared by KPHO (RK), March 2018

Deprivation: By number of admissions



Contents

Introduction & methodology

Scene setting: Self-harm in Kent

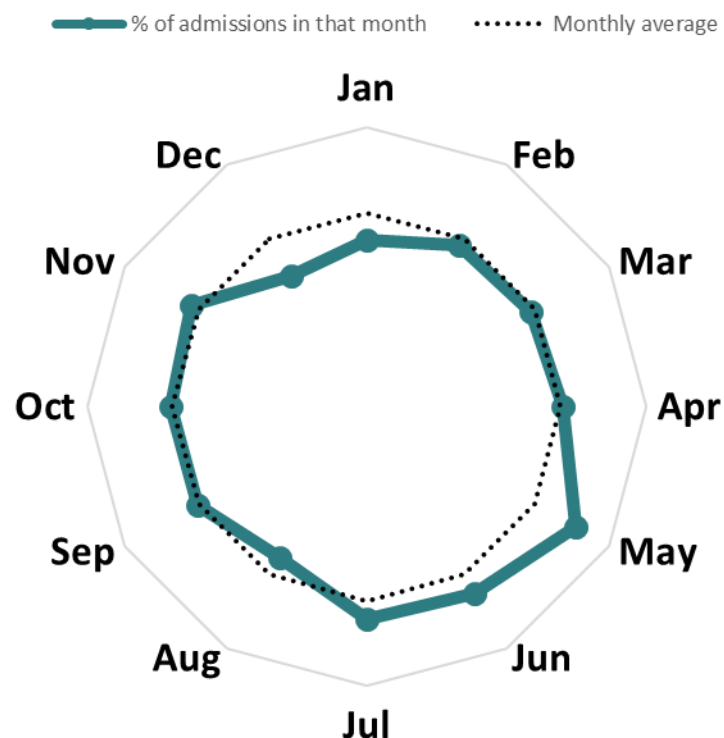
Demographic profile

Seasonal variation

Service usage

Seasonal variation

Hospital admissions for self-harm: Time of year profile
ICD10: X60-X84, ages 10-24 at time of incident, 2014/15-2016/17

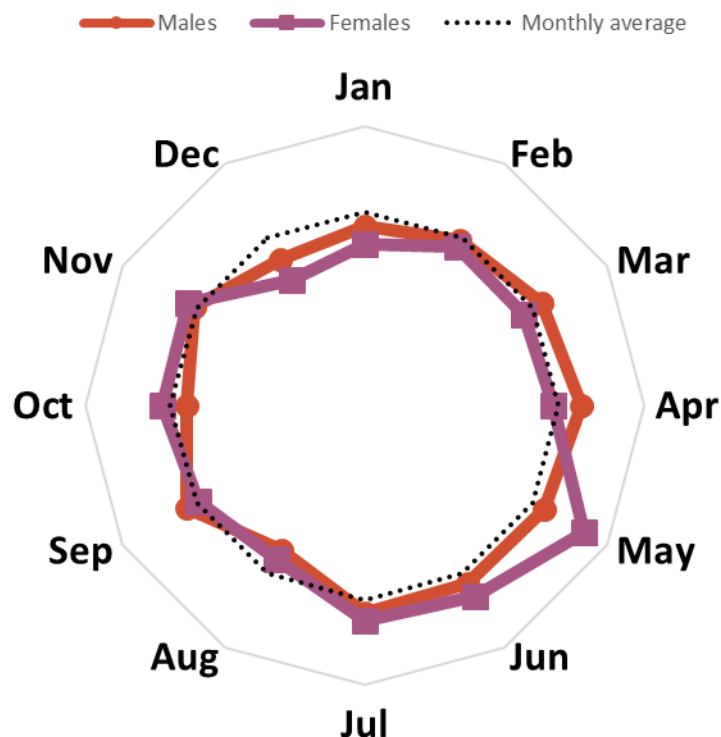


Source: HES, prepared by KPHO (RK), March 2018

There is some evidence for a peak in admissions during the main exam season

Seasonal variation

Hospital admissions for self-harm: Time of year profile by gender
ICD10: X60-X84, ages 10-24 at time of incident, 2014/15-2016/17



This exam season peak is particularly evident amongst girls

Source: HES, prepared by KPHO (RK), March 2018

Contents

Introduction & methodology

Scene setting: Self-harm in Kent

Demographic profile

Seasonal variation

Service usage

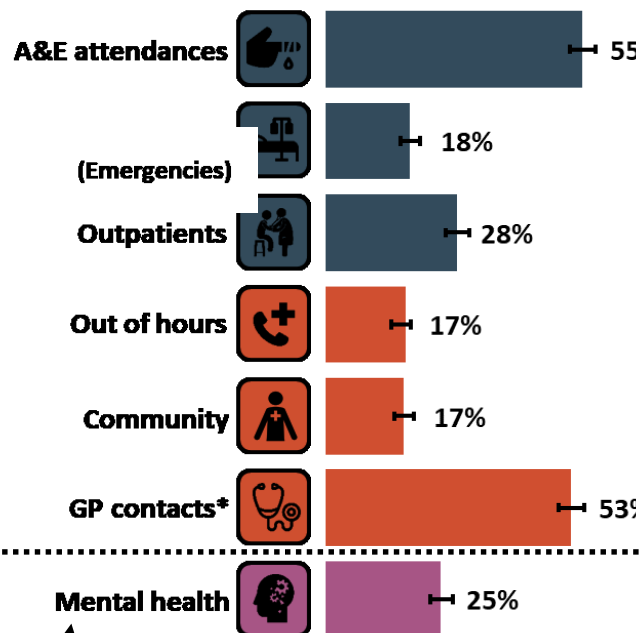
Service usage: Methodological notes

- Usage of acute, out of hours, community and (adult) secondary mental health services have been explored using data contained within the Kent Integrated Dataset (KID)
- KID covers activity from April 2014
- This analysis focusses on 10-24 year olds admitted for self-harm in 2015/16 or 2016/17, but NOT in 2014/15
 - This then allows before-and-after analysis of service usage for a cohort of children & young people admitted to hospital for self-harm

Service usage

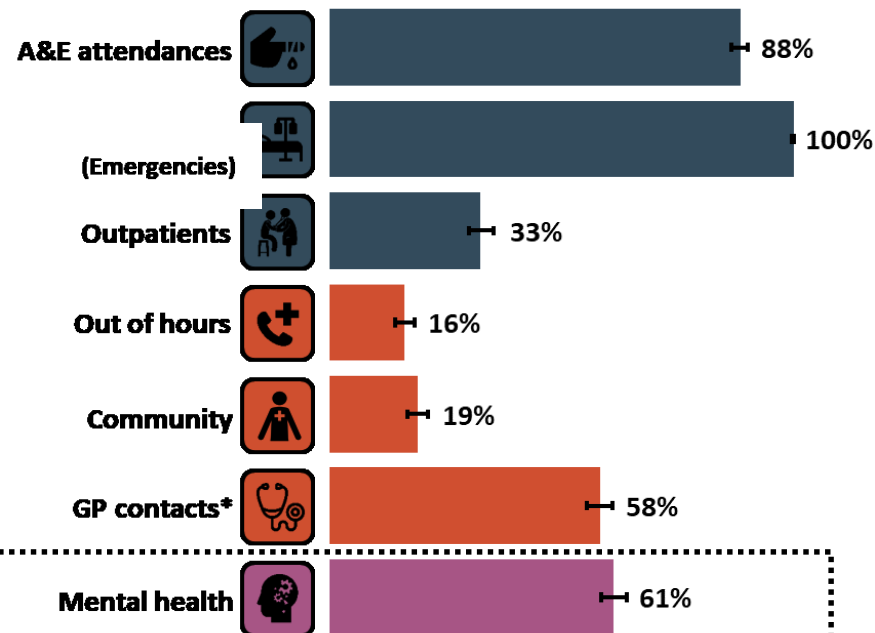
DEVELOPMENTAL STATISTICS

IN THE YEAR PRIOR TO THE FIRST SELF-HARM ADMISSION



IN THE YEAR AFTER THE FIRST SELF-HARM ADMISSION

Including the admission day



Source: MBC, KID, prepared by KPHO (RK)

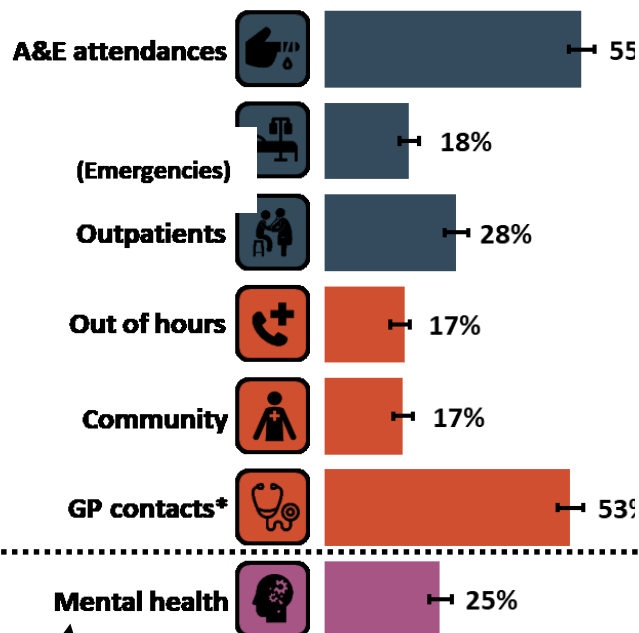
Images from Noun Project

ADULT ONLY

Service usage

DEVELOPMENTAL STATISTICS

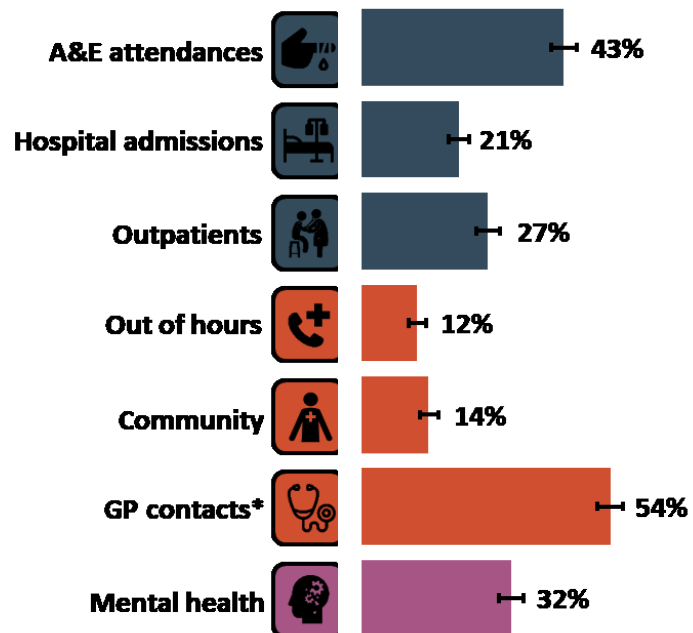
IN THE YEAR PRIOR TO THE FIRST SELF-HARM ADMISSION



ADULT ONLY

Analysis of hospital admissions for self-harm

IN THE 3-12 MONTHS AFTER THE FIRST SELF-HARM ADMISSION



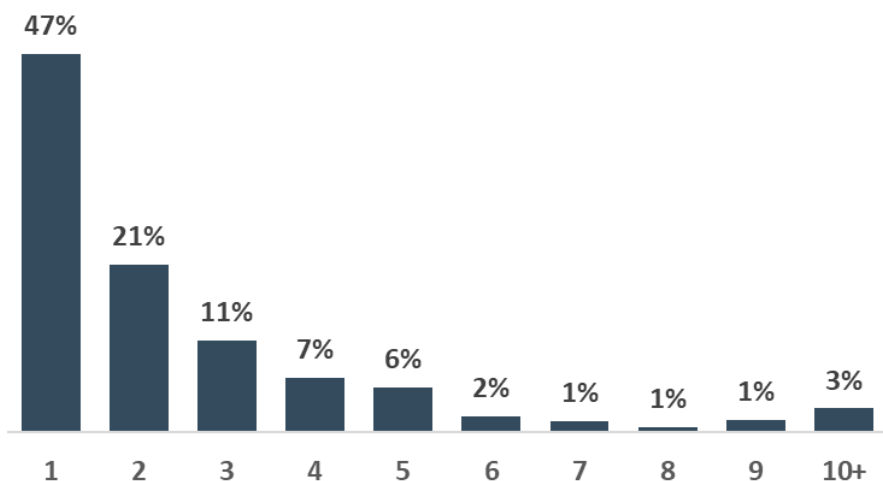
*includes telephone consultations
Analysis restricted to individuals registered with a GP flowing data to the KID

Service usage: Prior usage of A&E

DEVELOPMENTAL STATISTICS

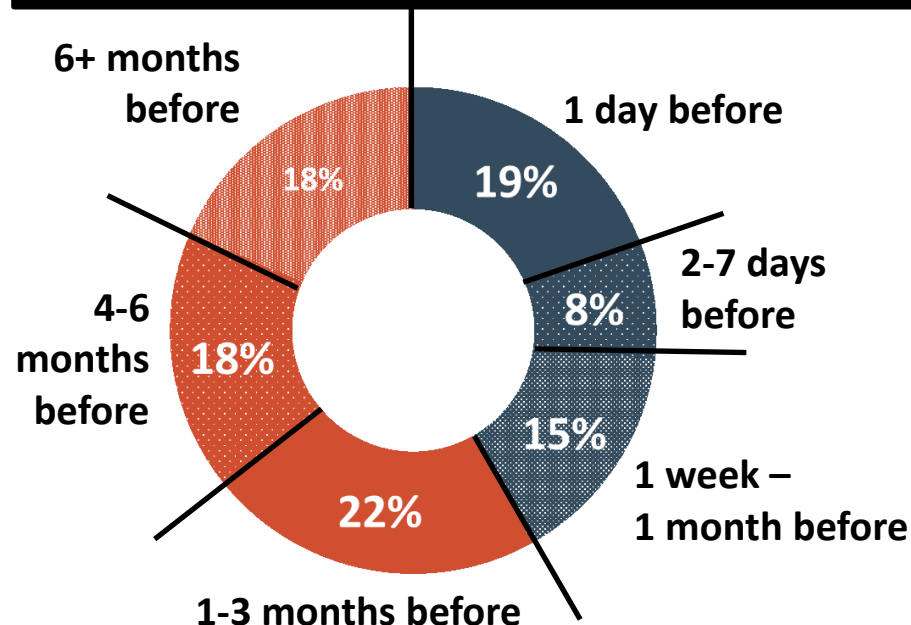
FREQUENCY OF USAGE

A&E in the 12 months prior to first self-harm admission



TIMING OF USAGE

Timing of latest A&E in relation to first self-harm admission



44%

Were discharged
with no follow-up
required

18%

Were discharged
to GP follow-up

9%

Left before being seen
or refused treatment

Key issues_1

- Around 50% people aged 10-24 who are admitted for self-harm are aged between 14 and 18 (adults only)
- The multiple admission ratio among self harm admissions is around 1.3 this equates to around 300 persons being admitted more than once over the study period
- Females account for almost three-quarters of the admissions for self-harm amongst 10-24 year olds in Kent
- Females are more likely to be admitted at a younger age when compared to males
- A third of admissions for self-harm involve children & young people living in the 20% most deprived areas in Kent
- There is some evidence for peak in admissions during the main exam season

Key issues_2

- Around 25% of persons were already known to MH services prior to admission for self harm.
- This increases to around 60% in the 12 months following admission (including day of admission)
- However, in the 3-12 months following admission contact with MH services 'normalises' to around 30%
- Around a quarter (23%) of persons had been seen in A&E in the month before admission for self harm