



Analysis of Children and Young People in the South West with Mental Health Needs

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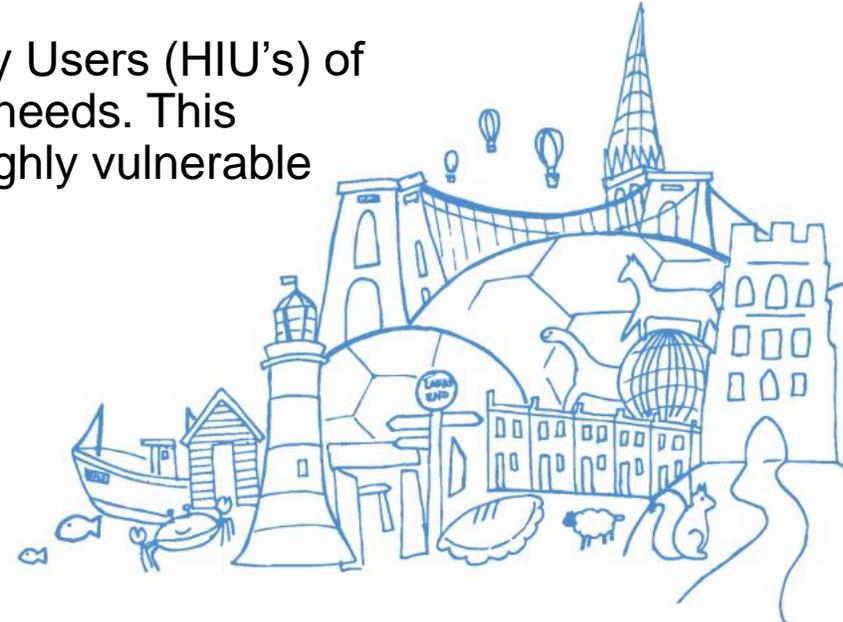


Summary

The South West Region has long been an outlier for a range of indicators in OHID data which relate to hospital admissions of young people in relation to self-harm and mental health conditions

Many areas within the Region see some of the highest rates of self-harm and mental health A&E admissions for young people in the country. This has contributed to the SW seeing significantly higher rates per 100,000.

Analysis has identified a cohort of young people who are High Intensity Users (HIU's) of A&E where self-harm or mental health has contributed to their clinical needs. This group has a disproportionate impact on demand and may represent highly vulnerable individuals who are not receiving the right care at the right time.



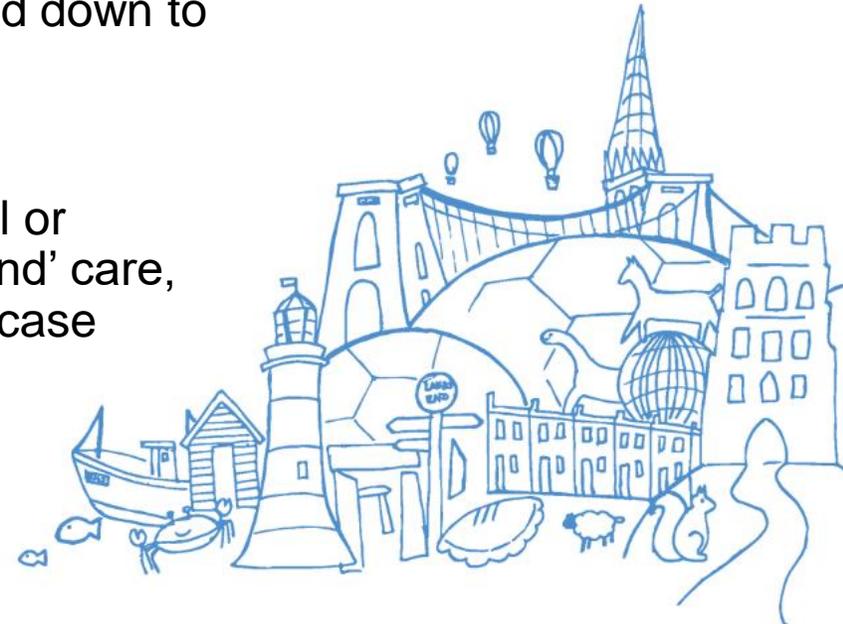
Recommendations

HIU young people with MH issues may represent an 'at risk' group for suicide attempts.

This cohort has a disproportionate impact on A&E, with just 370 individuals accounting for more than 4,800 attendances.

Geographic areas which have been identified as hosting high volumes of HIU patients may benefit from supportive measures. These can be identified down to Local Authority or PCN level.

If a test case is necessary, then it is recommended that Taunton, Yeovil or Bridgewater PCNs are considered for further engagement. 'Wrap around' care, drawing from Primary and Community Services may serve to improve case delivery and alleviate the dependency on A&E.



Methodology

- OHID

Annual statistics, published by OHID have been reviewed for the South West Region. Data is benchmarked against the distribution seen across England. There are markers for any statistical results which are abnormally high or low.

These indicators have been reviewed over time, across multiple measures, for separate CYP cohorts, by Gender and across South West Local Authority areas.

- High Intensity User (HIU) Analysis

HIU's have been identified via an extraction of SUS and ECDS data. Attendance records at A&E are compiled per individual. Patients aged 10 to 24, who have attended at least 5 times in 2022, are identified as HIU's. At least one of these attendances must have either a Diagnostic code or chief complaint which features in a list of Mental Health/Self-Harm related codes. (See Appendix A).

This patient set is then linked back to their home LSOA and PCN, allowing for analysis at local levels.

OHID Outlier: The SW Region

Table 1 (Right), illustrates that the SW Region is a negative outlier for multiple measures of self-harm, substance misuse and mental health conditions for multiple categories of Children & Young People.

Table 1: OHID Data (2021/2022)

● Better 95% ● Similar ● Worse 95% ○ Not applicable
 Recent trends: — Could not be calculated ➡ No significant change ⬆ Increasing & getting worse ⬆ Increasing & getting better ⬇ Decreasing & getting worse ⬇ Decreasing & getting better

| Indicator | Period | South West | | | England | | | |
|---|-----------------|--------------|--------|-------|---------|-------|-------|-------|
| | | Recent Trend | Count | Value | Value | Worst | Range | Best |
| 16 to 17 year olds not in education, employment or training (NEET) or whose activity is not known | 2021 | ⬇ | 5,980 | 5.3% | 4.7% | 5.4% | | 3.4% |
| First time entrants to the youth justice system | 2021 | ⬇ | 599 | 119.2 | 146.9 | 187.0 | | 119.2 |
| Children in care New data | 2022 | — | 6,530 | 60 | 70 | 110 | | 50 |
| Homelessness - households owed a duty under the Homelessness Reduction Act (main applicant 16-24 yrs) | 2021/22 | — | 5,690 | 2.3 | 2.4 | 2.7 | | 1.9 |
| Secondary school fixed period exclusions: rate per 100 pupils | 2016/17 | ⬆ | 29,235 | 9.4% | 9.4% | 16.0% | | 7.4% |
| Under 16s conception rate / 1,000 | 2020 | ⬇ | 144 | 1.6 | 2.0 | 3.3 | | 1.4 |
| Under 18s conception rate / 1,000 | 2020 | ⬇ | 918 | 10.5 | 13.0 | 18.6 | | 9.8 |
| Teenage mothers New data | 2021/22 | ➡ | 250 | 0.5% | 0.6% | 1.2% | | 0.3% |
| Population vaccination coverage: HPV vaccination coverage for one dose (12 to 13 year old) (Female) | 2020/21 | ⬇ | 24,511 | 75.0% | 76.7% | 69.1% | | 84.0% |
| <80% 80% to 90% ≥90% | | | | | | | | |
| Hospital admissions as a result of self-harm (10-24 years) New data | 2021/22 | — | 6,180 | 640.2 | 427.3 | 640.2 | | 229.7 |
| Hospital admissions due to substance misuse (15-24 years) | 2018/19 - 20/21 | — | 1,935 | 101.1 | 81.2 | 115.2 | | 56.5 |
| Admissions for asthma for young people aged 10 to 18 | 2020/21 | ⬇ | 315 | 56.1 | 54.8 | 82.1 | | 38.3 |
| Admissions for diabetes for young people aged 10 to 18 | 2020/21 | ➡ | 435 | 77.5 | 70.5 | 80.4 | | 57.5 |
| Admissions for epilepsy for young people aged 10 to 18 | 2020/21 | ➡ | 315 | 56.1 | 50.3 | 57.7 | | 42.8 |
| Hospital admissions for asthma (under 19 years) New data | 2021/22 | — | 1,095 | 95.2 | 131.5 | 181.7 | | 92.7 |
| Hospital admissions as a result of self-harm (10-14 yrs) New data | 2021/22 | — | 1,375 | 428.7 | 307.1 | 437.9 | | 174.7 |
| Hospital admissions as a result of self-harm (15-19 yrs) New data | 2021/22 | — | 3,100 | 993.5 | 641.7 | 993.5 | | 360.7 |
| Hospital admissions as a result of self-harm (20-24 yrs) New data | 2021/22 | — | 1,705 | 510.8 | 340.9 | 510.8 | | 159.8 |
| Admission episodes for alcohol-specific conditions - Under 18s | 2018/19 - 20/21 | — | 1,530 | 46.0 | 29.3 | 52.0 | | 14.3 |
| Hospital admissions for mental health conditions (<18 yrs) New data | 2021/22 | — | 1,670 | 153.6 | 99.8 | 153.6 | | 75.0 |
| Admissions for diabetes for children and young people aged under 19 years | 2020/21 | ➡ | 625 | 53.4 | 48.2 | 54.3 | | 37.6 |
| Admissions for epilepsy for children and young people aged under 19 years | 2020/21 | ➡ | 885 | 75.5 | 65.6 | 75.5 | | 52.8 |

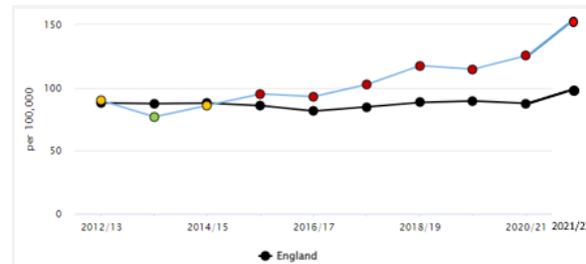
OHID Outlier: The SW Region

The South West has consistently been a negative outlier for admission rates across multiple age groups in 2020/21.

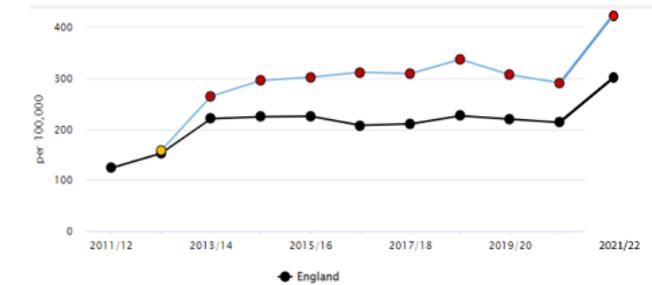
This indicates a difference in service provision, practice or demand which has endured across multiple years at a Regional level.

Hospital Admission Rates per 100,000 for mental health conditions (under 18) or as a result of self-harm (10-14, 15-19, 20-24 years old)

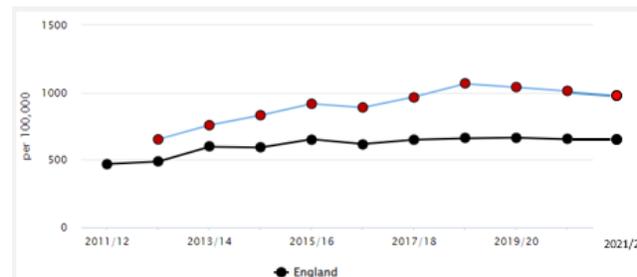
Under 18 mental health



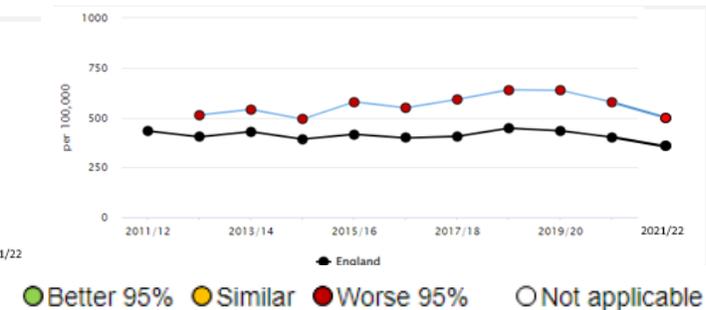
10-14 Years self-harm



15-19 Years self-harm



20-24 Years self-harm



● Better 95% ● Similar ● Worse 95% ○ Not applicable

OHID Outlier: The SW Region

Local area data can show deteriorating performance over a long period of time, resulting in rates of attendances which are significantly higher than the England and Regional levels. North Somerset, for example, has worsened over time and now reports rates which are 5 times higher than they were in 2010/11.

This indicates that, whilst there is evidence of a regional issue, some localities may be of particular interest in OHID data.

| Area ▲▼ | Recent Trend | Count ▲▼ | Value ▲▼ |
|-------------------------------------|--------------|-------------|-------------|
| England | ↑ | 10,586 | 87.5 |
| South West region | ↑ | 1,395 | 125.4 |
| North Somerset | ↑ | 110 | 251.0 |
| Devon | ↑ | 225 | 152.0 |
| Somerset | → | 155 | 139.3 |
| Gloucestershire | ↑ | 180 | 138.9 |
| Swindon | → | 60 | 118.2 |
| Bournemouth, Christchurch and Poole | → | 90 | 117.9 |
| Torbay | → | 30 | 117.7 |
| Cornwall | → | 125 | 114.4* |
| Bath and North East Somerset | → | 40 | 109.1 |
| Wiltshire | → | 115 | 108.2 |
| Dorset | → | 70 | 103.4 |
| Plymouth | → | 55 | 103.2 |
| Bristol | ↑ | 90 | 95.3 |
| South Gloucestershire | → | 50 | 83.4 |
| Isles of Scilly | - | - | * |

| Period | North Somerset | | | |
|---------|----------------|-------|--------------|--------------|
| | Count | Value | 95% Lower CI | 95% Upper CI |
| 2010/11 | 21 | 48.7 | 30.2 | 74.5 |
| 2011/12 | 21 | 50.7 | 31.4 | 77.5 |
| 2012/13 | 20 | 47.8 | 29.2 | 73.9 |
| 2013/14 | 33 | 78.2 | 53.8 | 109.8 |
| 2014/15 | 26 | 61.2 | 40.0 | 89.7 |
| 2015/16 | 27 | 63.4 | 41.7 | 92.2 |
| 2016/17 | 25 | 58.0 | 37.5 | 85.7 |
| 2017/18 | 37 | 85.7 | 60.3 | 118.1 |
| 2018/19 | 50 | 115.1 | 83.5 | 149.1 |
| 2019/20 | 55 | 125.8 | 96.8 | 166.4 |
| 2020/21 | 110 | 251.0 | 208.4 | 305.1 |

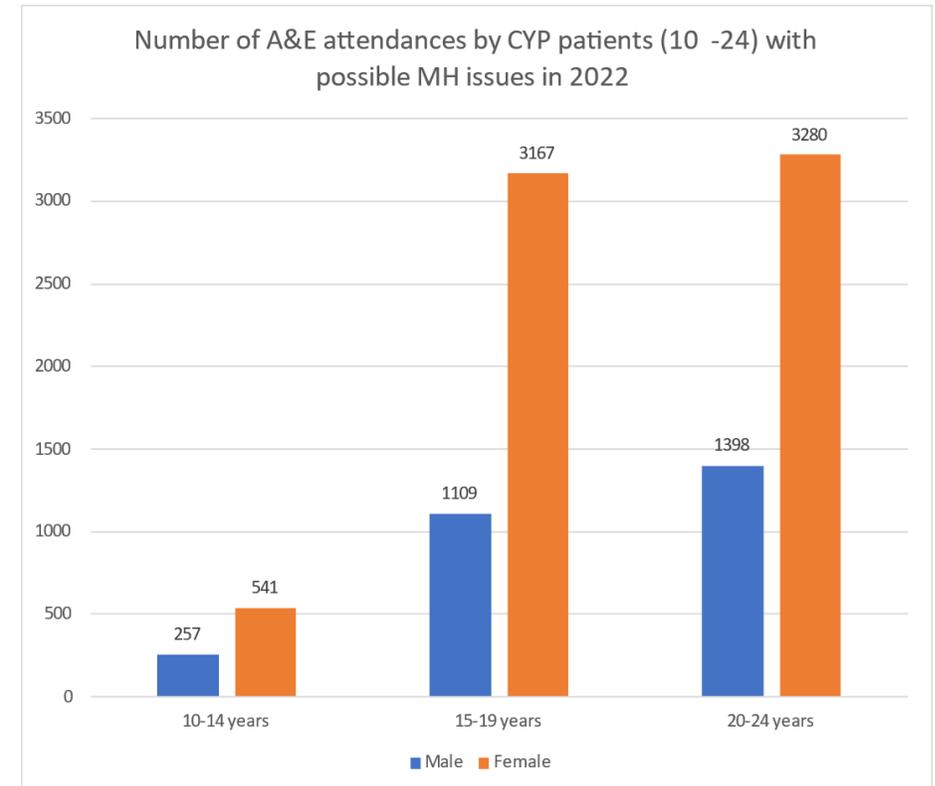
High Intensity MH/CYP Cohort

A&E data identifies 2,441 patients aged between 10 and 24 who have attended A&E 5 or more times in 2022, with at least one attendance meeting the chief complaint or diagnostic criteria.

In total, these **2,441 patients accounted for 9,767 attendances** in 2022.

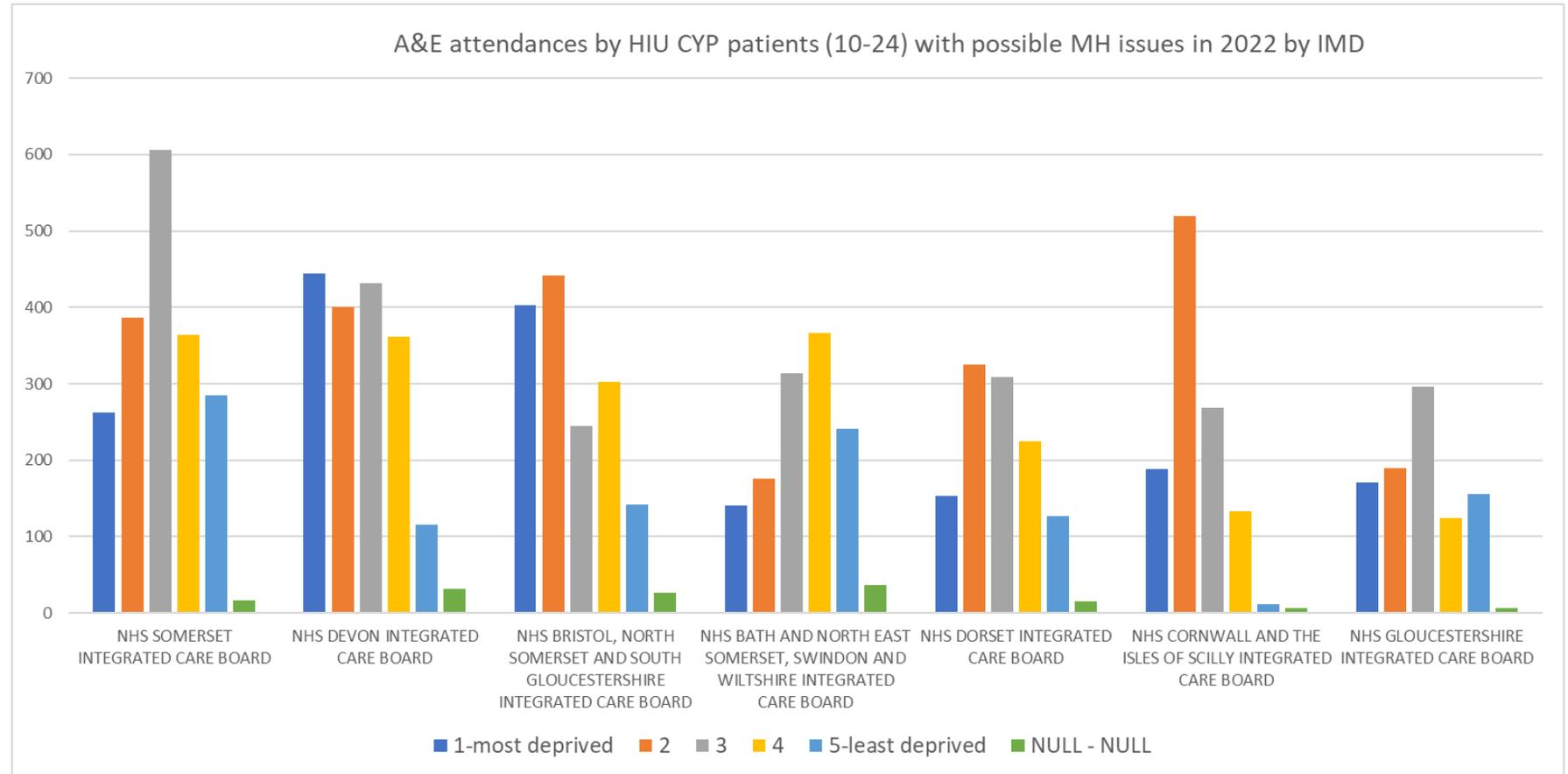
A stratification of the most prolific users indicates that **just 370 individuals accounted for 4,882 attendances.**

Female patients make up the majority of this cohort (72%) whilst the 15-19 and 20-24 age groups see the highest A&E attendance figures.



High Intensity MH/CYP Cohort

Initial analysis doesn't identify overrepresentation of lower socio-economic groups. Looking at deprivation levels of areas where patients live there doesn't seem to be evidence supporting the hypothesis that HIU CYP patients living in the most deprived areas are more likely to attend A&E than those living in more affluent areas. It appears that patient IMD quintiles seem to generally reflect distribution of deprivation levels across the ICB area where they live.



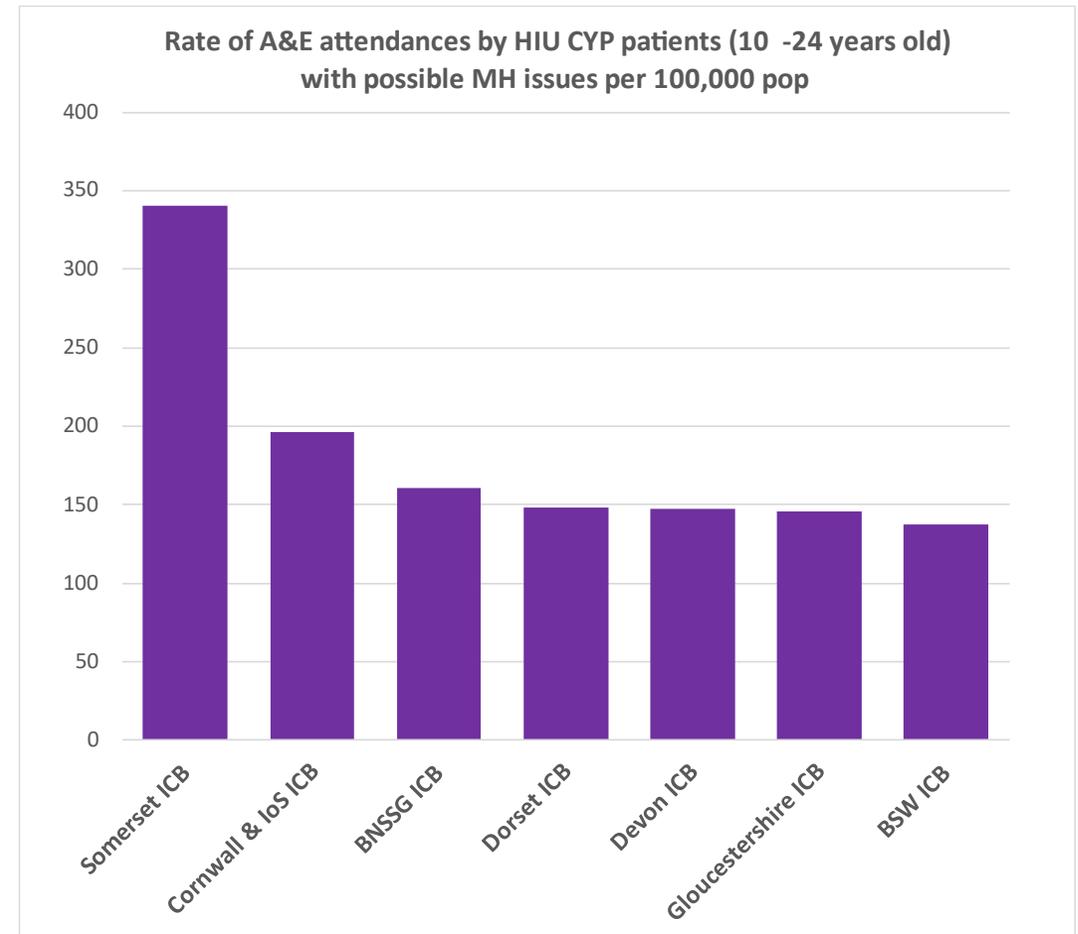
High Intensity MH/CYP Cohort

There were 1,920 A&E attendances by Somerset HIU patients with possible MH needs in 2022, which is the highest number out of all SW ICBs.

HIU CYP patients from Devon were responsible for 1,785 A&E attendances respectively.

However, when population of these two ICBs are taken into the account, it becomes apparent that CYPs from Somerset are more than twice likely to attend A&E than their counterparts from Devon.

In fact, CYPs from Somerset are on average twice more likely to attend A&E in comparison with their counterparts from any other SW ICB.



High Intensity MH/CYP Cohort: Somerset

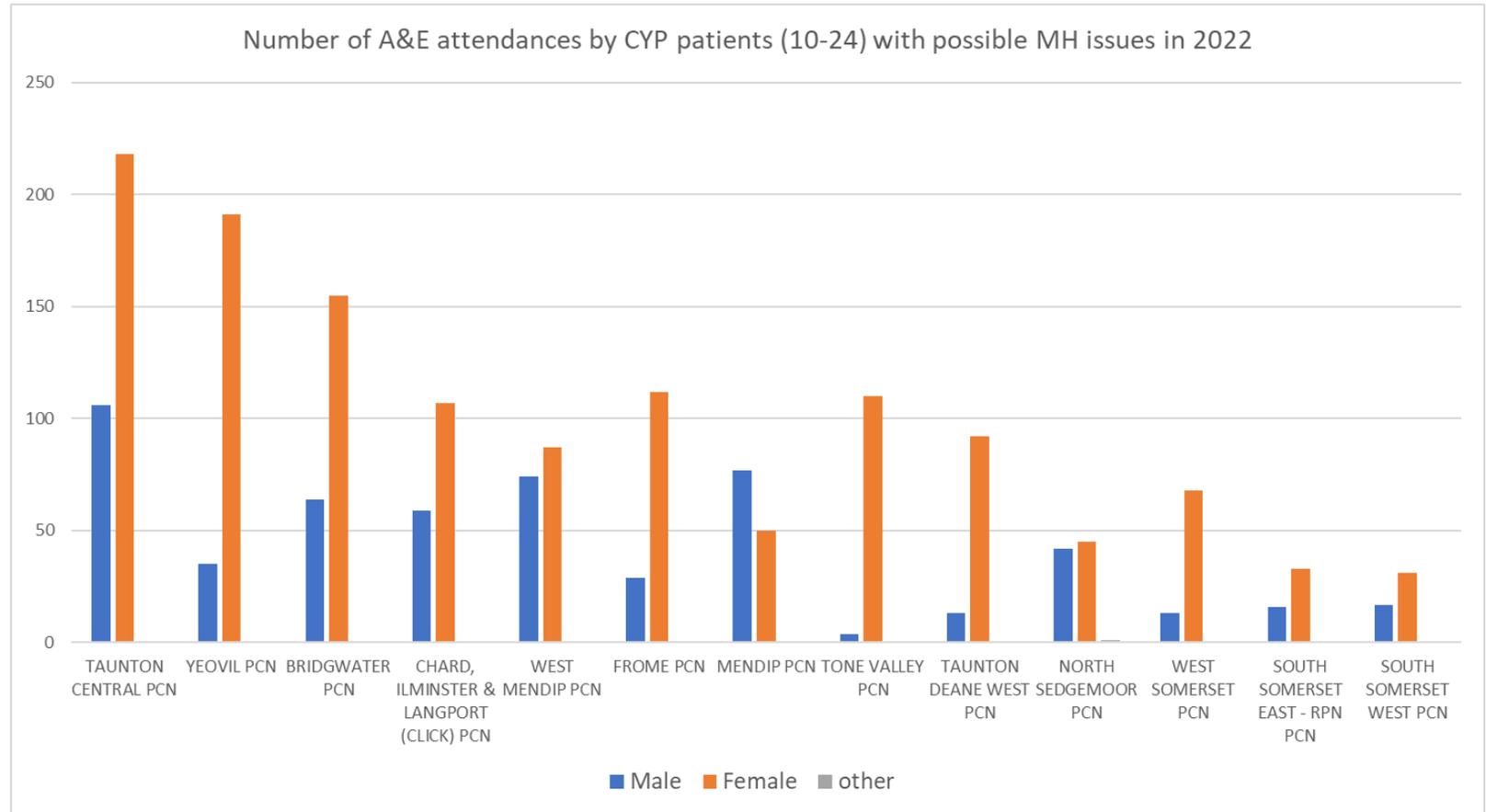
Taunton Central PCN had 43 patients responsible for 324 A&E attendances.

Yeovil PCN 54 patients and 226 attendances.

Bridgwater PCN 68 patients and 219 attendances.

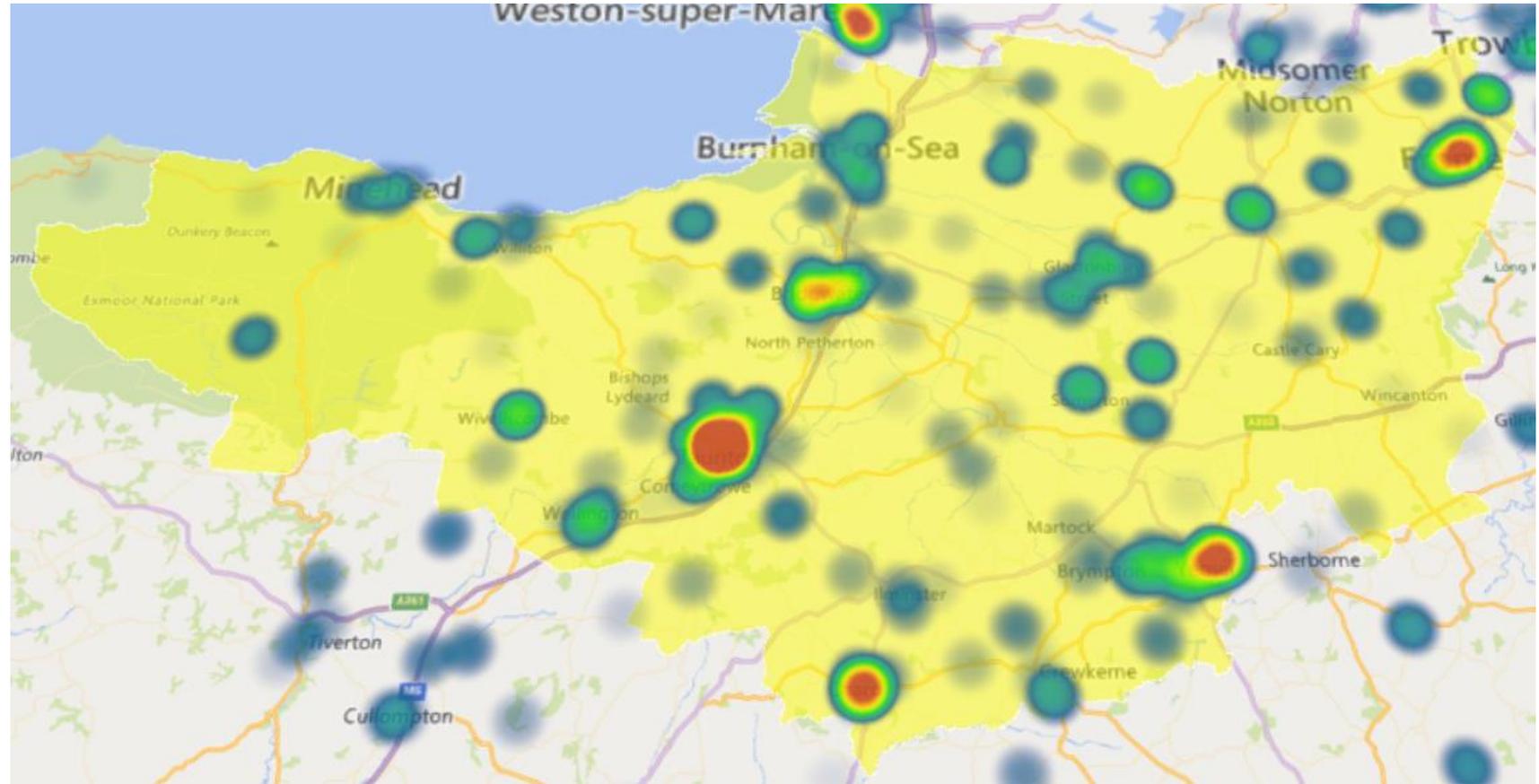
It's worth noting however that only 10 patients in Taunton Central PCN were responsible for as much as 73% all HIU A&E attendances. For Yeovil and Bridgwater PCNs this ratio was 62% and 49% respectively.

Therefore if only 10 HIU CYP patients in each PCN had their health needs assessed and appropriate treatment/care delivered outside of A&E setting that would likely significantly reduce HIU A&E attendances, as well as reduce non-elective hospital admissions.



High Intensity MH/CYP Cohort: Somerset

This heat map indicates areas of Somerset where HIU CYP patients responsible for high volumes of A&E attendances live. The most pronounced cities/towns are: Taunton, Chard, Yeovil and Frome.



Case Study

- Case study:

A 19 year old white female, living in Bournemouth area, Dorset, attended A&E departments at UH Dorset and Salisbury FT 57 times in 2022. What was recorded as the 'Chief Complaint' at the point of attendance included:

- Substance abuse (disorder)
- Complaining of feeling depressed
- Self-injurious behaviour (finding)
- Poisoning (disorder)
- Suicidal thoughts
- Laceration to forearm
- Bizarre behaviour

Case Study

Diagnoses noted on patient record following their attendance included:

- Acetaminophen overdose
- Depressive disorder
- Personality disorder
- Poisoning
- Overdose of antidepressant drug
- Alcohol intoxication
- Anxiety disorder

It is not known from available ECDS data if this patient had been a registered Mental Health patient, was receiving mental health treatment either in secondary, community or social care, or if not, whether at any point mental health assessment and potential referral to MH service had been offered.

This is one of many such examples where CYP patients with potential MH issues attend A&E multiple times throughout the year, sometimes every few days.

Conclusions & Recommendations

OHID outlier, for the region, over a long period of time, variation in SW e.g. Somerset

HIUs patient cohort – 2441 in the region, 370 make up 50% of attendances

Recommendations – small cohort of CYP patients attend A+E a lot, with MH elements – making the argument that they are more likely to be vulnerable, suicidal behaviour risks – not getting the right care at the right time in the right place hence relying on A+E

Primary, community, social inputs- supported by hospital in local areas for this small population

Highlight local areas (PCN) such as Taunton, Yeovil, Bridgwater for engagement and support

Potentially by identifying the xxx patients in these areas to assess care and social support

Appendix A: CYP HIU Criteria

Chief Complaint Description:

- Anxiety (finding)
- Bizarre behaviour (finding)
- Complaining of feeling depressed (finding)
- Hallucinations (finding)
- Laceration - injury (disorder)
- Palpitations (finding)
- Poisoning (disorder)
- Self-injurious behaviour (finding)
- Substance abuse (disorder)
- Suicidal thoughts (finding)
- Toxic effect of gas, fumes AND/OR vapours (disorder)
- Wound care (regime/therapy)

EC_Primary_Diagnosis:

- Acetaminophen overdose (disorder)
- Adjustment disorder (disorder)
- Adverse reaction caused by drug (disorder)
- Alcohol intoxication (disorder)
- Anxiety disorder (disorder)
- Bipolar disorder (disorder)
- Delirium (disorder)
- Depressive disorder (disorder)
- Dissociative convulsions (disorder)
- Dissociative disorder (disorder)
- Drug-induced seizure (finding)
- Eating disorder (disorder)
- Factitious disorder (disorder)
- Homeless (finding)
- Hypnotic or anxiolytic dependence (disorder)
- Illicit drug use (finding)
- Non-steroidal anti-inflammatory overdose (disorder)
- Opioid dependence (disorder)
- Overdose of antidepressant drug (disorder)
- Overdose of opiate (disorder)
- Personality disorder (disorder)
- Poisoning (disorder)
- Problem related to social environment (finding)
- Psychotic disorder (disorder)
- Schizophrenia (disorder)
- Sedative overdose (disorder)
- Social problem (finding)
- Somatization disorder (disorder)
- Somatoform pain disorder (disorder)