Supplementary Figure 1 – Data Flow Diagram

|  |  |
| --- | --- |
| HES-APC Admissions | England Birth Records |
| Exclusions (n): Unknown Residence (3,390) Recorded Death (14,048) Missing Sex (235) Missing Ethnicity (35,876) No Birth Record (199,569)  Total Admission Episodes: 353,465  Total Admission Spells: 312,362  CYP with Admissions: 210,973  SRP Admission Episodes: 109,271  SRP Admission Spells: 96,484 CYP with SRP Admissions: 70,843  Duplicates removed (n): Exact duplicates (609)  Admission Episodes between 1 April 2014 and 15 March 2020 individuals aged 11-15 years: 983,729  Planned admission episodes (363,682)  Imputed Ethnicity from OPA and Birth Records (42,510) | Total Birth Records: 2,419,103  Imputed Ethnicity from OPA and Birth Records (433,893)  Exclusions (n): Unknown Residence (103,408) Recorded Death (13,453) Missing Sex (7,409) Missing Ethnicity (352,209)  England Birth Records between 1 April 2003 and 15 March 2008: 2,895,582 |

Supplementary Table 1 – Characteristics of young people born in England between 1 April 2003 and 15 March 2008. *Note all numbers rounded to nearest 5.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***n (%)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **Total** | 1742180  (72.0) | 149300  (6.2) | 30545  (1.3) | 48180  (2.0) | 64125  (2.7) | 91695  (3.8) | 33685  (1.4) | 55140  (2.3) | 30105  (1.2) | 76360  (3.2) | 27085  (1.1) | 70700  (2.9) | 2419105  (100.0) |
| **Female** | 841770  (48.3) | 72310  (48.4) | 14860  (48.7) | 23110  (48.0) | 30630  (47.8) | 44005  (48.0) | 16280  (48.3) | 26350  (47.8) | 14565  (48.4) | 37440  (49.0) | 13170  (48.6) | 34205  (48.4) | 1168685  (48.3) |
| **Male** | 900415  (51.7) | 76995  (51.6) | 15685  (51.3) | 25070  (52.0) | 33495  (52.2) | 47695  (52.0) | 17405  (51.7) | 28790  (52.2) | 15545  (51.6) | 38920  (51.0) | 13915  (51.4) | 36495  (51.6) | 1250415  (51.7) |
| **Region** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **North East** | 113480  (6.5) | 1015  (0.7) | 325  (1.1) | 1005  (2.1) | 840  (1.3) | 1290  (1.4) | 970  (2.9) | 1020  (1.8) | 35  (0.1) | 595  (0.8) | 120  (0.5) | 1550  (2.2) | 122245  (5.1) |
| **North West** | 258770  (14.9) | 7660  (5.1) | 2245  (7.3) | 3355  (7.0) | 4455  (6.9) | 13975  (15.2) | 3580  (10.6) | 7740  (14.0) | 985  (3.3) | 4465  (5.9) | 1280  (4.7) | 3790  (5.4) | 312305  (12.9) |
| **Yorkshire and Humber** | 202020  (11.6) | 4910  (3.3) | 1930  (9.0) | 3915  (8.1) | 3700  (5.8) | 20410  (22.3) | 1550  (4.6) | 3965  (7.2) | 830  (2.8) | 2745  (3.6) | 780  (2.9) | 3890  (5.5) | 251450  (10.4) |
| **East Midlands** | 152970  (8.8) | 3745  (2.5) | 4335  (6.3) | 3425  (7.1) | 6130  (9.6) | 2995  (3.3) | 810  (2.4) | 2430  (4.4) | 1115  (3.7) | 2340  (3.1) | 920  (3.4) | 12655  (17.9) | 191465  (7.9) |
| **West Midlands** | 181160  (10.4) | 11475  (7.7) | 2735  (14.2) | 4930  (10.2) | 13595  (21.2) | 23190  (25.3) | 4905  (14.6) | 3790  (6.9) | 5695  (18.9) | 5040  (6.6) | 1515  (5.6) | 6575  (9.3) | 266195  (11.0) |
| **East of England** | 203130  (11.7) | 14885  (10.0) | 3575  (11.7) | 5515  (11.4) | 4085  (6.4) | 7365  (8.0) | 2675  (7.9) | 3185  (5.8) | 1160  (3.8) | 4470  (5.9) | 765  (2.8) | 2920  (4.1) | 253725  (10.5) |
| **London** | 160190  (9.2) | 64880  (43.5) | 8970  (29.4) | 15680  (32.5) | 22850  (35.6) | 14735  (16.1) | 16875  (50.1) | 25690  (46.6) | 18645  (61.9) | 49780  (65.2) | 20255  (74.8) | 32260  (45.6) | 450810  (18.6) |
| **South East** | 281350  (16.1) | 34540  (23.1) | 3730  (12.2) | 7045  (14.6) | 6300  (9.8) | 6980  (7.6) | 1815  (5.4) | 5865  (10.6) | 1050  (3.5) | 4975  (6.5) | 950  (3.5) | 5255  (7.4) | 359850  (14.9) |
| **South West** | 189110  (10.9) | 6195  (4.1) | 2695  (8.8) | 3310  (6.9) | 2170  (3.4) | 760  (0.8) | 505  (1.5) | 1460  (2.6) | 590  (2.0) | 1950  (2.6) | 500  (1.8) | 1810  (2.6) | 211055  (8.7) |
| **IMD Quintile of Deprivation** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **1 (most)** | 396765  (22.8) | 38565  (25.9) | 12005  (39.4) | 13860  (28.8) | 19625  (30.6) | 55040  (60.1) | 23695  (70.4) | 19245  (35.0) | 16420  (54.6) | 42130  (55.3) | 14710  (54.4) | 28270  (40.0) | 680330  (28.2) |
| **2** | 355930  (20.5) | 34170  (22.9) | 7830  (25.7) | 11035  (22.9) | 17395  (27.2) | 20125  (22.0) | 5720  (17.0) | 14925  (27.1) | 8320  (27.7) | 20305  (26.6) | 7850  (29.0) | 17845  (25.3) | 521450  (21.6) |
| **3** | 336295  (19.3) | 26385  (17.7) | 4790  (15.7) | 8620  (17.9) | 12080  (18.9) | 9075  (9.9) | 2335  (6.9) | 9525  (17.3) | 3290  (10.9) | 8185  (10.7) | 2710  (10.0) | 11030  (15.6) | 434330  (18.0) |
| **4** | 326555  (18.8) | 22665  (15.2) | 3155  (10.4) | 7275  (15.1) | 8085  (12.6) | 4530  (4.9) | 1070  (3.2) | 6365  (11.6) | 1240  (4.1) | 3395  (4.5) | 1095  (4.1) | 7730  (11.0) | 393165  (16.3) |
| **5 (least)** | 324030  (18.6) | 27320  (18.3) | 2715  (8.9) | 7315  (15.2) | 6850  (10.7) | 2785  (3.0) | 825  (2.5) | 4975  (9.0) | 780  (2.6) | 2175  (2.9) | 665  (2.5) | 5720  (8.1) | 386150  (16.0) |

Supplementary Table 2 – Characteristics of young people with emergency hospital admissions of any type 2014-2020. *Note all numbers rounded to nearest 5.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***n (%)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **Total** | 161480  (76.5) | 7145  (3.4) | 2825  (1.3) | 3910  (1.9) | 4360  (2.1) | 9500  (4.5) | 2815  (1.3) | 4305  (2.0) | 2220  (1.1) | 4855  (2.3) | 2335  (1.1) | 5220  (2.5) | 210975 (100.0) |
| **Female** | 75940  (47.0) | 3240  (45.3) | 1335  (47.3) | 1755  (44.9) | 1830  (42.0) | 4125  (43.4) | 1230  (43.7) | 1820  (42.2) | 1030  (46.3) | 2160  (44.5) | 1100  (47.0) | 2300  (44.1) | 97860 (46.4) |
| **Male** | 85540  (53.0) | 3905  (54.7) | 1490  (52.7) | 2155  (55.1) | 2530  (58.0) | 5375  (56.6) | 1585  (56.3) | 2490  (57.8) | 1195  (53.7) | 2695  (55.5) | 1235  (53.0) | 2915  (55.9) | 113115 (53.6) |
| **Region** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **North East** | 12320  (7.6) | 65  (0.9) | 45  (1.5) | 90  (2.3) | 65  (1.5) | 180  (1.9) | 80  (2.8) | 75  (1.7) | X  (X) | X  (X) | X  (X) | 125  (2.4) | 13100 (6.2) |
| **North West** | 28355  (17.6) | 395  (5.5) | 270  (9.5) | 355  (9.1) | 400  (9.2) | 1750  (18.4) | 350  (12.5) | 560  (13.0) | 100  (4.5) | 355  (7.3) | 155  (6.6) | 380  (7.3) | 33425 (15.8) |
| **Yorkshire and Humber** | 18690  (11.6) | 300  (4.2) | 195  (6.9) | 310  (7.9) | 235  (5.4) | 2270  (23.9) | 130  (4.6) | 300  (6.9) | 65  (2.8) | 170  (3.5) | 80  (3.4) | 255  (4.9) | 22995 (10.9) |
| **East Midlands** | 13685  (8.5) | 255  (3.6) | 215  (7.7) | 250  (6.4) | 560  (12.9) | 255  (2.7) | 60  (2.1) | 205  (4.8) | 85  (3.9) | 155  (3.2) | 90  (3.9) | 390  (7.5) | 16210 (7.7) |
| **West Midlands** | 17170  (10.6) | 520  (7.3) | 535  (18.9) | 610  (15.5) | 1050  (24.0) | 2655  (28.0) | 440  (15.6) | 435  (10.1) | 500  (22.6) | 470  (9.7) | 155  (6.7) | 505  (9.7) | 25050 (11.9) |
| **East of England** | 17365  (10.8) | 790  (11.1) | 325  (11.5) | 460  (11.8) | 265  (6.1) | 715  (7.5) | 210  (7.5) | 250  (5.8) | 115  (5.1) | 320  (6.6) | 125  (5.4) | 285  (5.5) | 21220 (10.1) |
| **London** | 8820  (5.5) | 2755  (38.6) | 665  (23.5) | 990  (25.3) | 1140  (26.1) | 885  (9.3) | 1365  (48.5) | 1935  (45.0) | 1205  (54.3) | 2760  (56.9) | 1500  (64.2) | 2540  (48.7) | 26560 (12.6) |
| **South East** | 25900  (16.0) | 1680  (23.5) | 315  (11.1) | 590  (15.1) | 510  (11.7) | 715  (7.5) | 140  (4.9) | 465  (10.8) | 85  (3.9) | 435  (9.0) | 180  (7.7) | 610  (11.7) | 31625 (15.0) |
| **South West** | 19175  (11.9) | 380  (5.3) | 265  (9.3) | 260  (6.7) | 130  (2.9) | 80  (0.8) | 45  (1.6) | 80  (1.9) | 60  (2.6) | 150  (3.1) | 40  (1.7) | 130  (2.5) | 20785 (9.9) |
| **IMD Quintile of Deprivation** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **1 (most)** | 35775  (22.2) | 1695  (23.7) | 1060  (37.6) | 1170  (30.0) | 1150  (26.4) | 5635  (59.3) | 1845  (65.5) | 1420  (33.0) | 1145  (51.6) | 2535  (52.2) | 1070  (45.8) | 1945  (37.2) | 56450 (26.8) |
| **2** | 30900  (19.1) | 1595  (22.4) | 700  (24.8) | 895  (22.8) | 1125  (25.8 | 2070  (21.8) | 515  (18.3) | 1140  (26.5) | 640  (28.9) | 1310  (27.0) | 730  (31.3) | 1330  (25.5) | 42950 (20.4) |
| **3** | 31220  (19.3) | 1235  (17.3) | 450  (15.9) | 680  (17.4) | 830  (19.1) | 955  (10.1) | 280  (9.9) | 795  (18.5) | 265  (11.8) | 530  (10.9) | 280  (12.0) | 800  (15.3) | 38315 (18.2) |
| **4** | 31470  (19.5) | 1135  (15.9) | 345  (12.2) | 560  (14.3) | 600  (13.8) | 490  (5.2) | 105  (3.7) | 495  (11.5) | 95  (4.3) | 270  (5.5) | 150  (6.3) | 565  (10.8) | 36275 (17.2) |
| **5 (least)** | 32120  (19.9) | 1480  (20.7) | 270  (9.5) | 605  (15.5) | 655  (15.0) | 350  (3.7) | 75  (2.6) | 450  (10.4) | 75  (3.4) | 215  (4.4) | 110  (4.6) | 585  (11.2) | 36985 (17.5) |

Supplementary Table 3 – Characteristics of young people with emergency hospital admissions for stress-related presentations (SPRs) 2014-2020. *Note all numbers rounded to nearest 5.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***n (%)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **Total** | 55935  (79.0) | 2250  (3.2) | 945  (1.3) | 1290  (1.8) | 1235  (1.7) | 2920  (4.1) | 915  (1.3) | 1200  (1.7) | 680  (1.0) | 1300  (1.8) | 685  (1.0) | 1480  (2.1) | 70845 (100.0) |
| **Female** | 34585  (61.8) | 1345  (59.8) | 600  (63.5) | 760  (58.9) | 640  (51.8) | 1560  (53.4) | 495  (54.1) | 645  (53.8) | 405  (59.6) | 720  (55.4) | 420  (61.3) | 865  (58.5) | 43045  (60.8) |
| **Male** | 21350  (38.2) | 900  (40.0) | 345  (36.5) | 535  (41.5) | 595  (48.2) | 1360  (46.6) | 415  (45.4) | 555  (46.3) | 275  (40.4) | 580  (44.6) | 265  (38.7) | 615  (41.6) | 27795  (39.2) |
| **Region** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **North East** | 3810  (6.8) | 20  (0.9) | 10  (1.1) | 20  (1.6) | 15  (1.2) | 40  (1.4) | 25  (2.7) | 20  (1.7) | X  (X) | X  (X) | X  (X) | 35  (2.4) | 4015  (5.7) |
| **North West** | 10340  (18.5) | 130  (5.8) | 100  (10.6) | 115  (8.9) | 105  (8.5) | 495  (17.0) | 105  (11.5) | 160  (13.3) | 35  (5.2) | 100  (7.7) | 50  (7.3) | 110  (7.4) | 11855  (16.7) |
| **Yorkshire and Humber** | 5985  (10.7) | 95  (4.2) | 70  (7.4) | 105  (8.1) | 70  (5.6) | 665  (22.8) | 35  (3.8) | 75  (6.3) | 15  (2.2) | 30  (2.3) | 15  (2.2) | 70  (4.7) | 7230  (10.2) |
| **East Midlands** | 4720  (8.4) | 85  (3.8) | 75  (7.9) | 85  (6.6) | 135  (10.9) | 70  (2.4) | 15  (1.6) | 55  (4.6) | 30  (4.4) | 40  (3.1) | 30  (4.4) | 110  (7.4) | 5450  (7.7) |
| **West Midlands** | 6475  (11.6) | 165  (7.3) | 175  (18.5) | 210  (16.3) | 326  (26.4) | 880  (30.1) | 140  (15.3) | 130  (10.8) | 150  (22.1) | 135  (10.4) | 45  (6.6) | 150  (10.1) | 8985  (12.7) |
| **East of England** | 5920  (10.6) | 260  (11.6) | 100  (10.6) | 170  (13.2) | 80  (6.4) | 230  (7.9) | 75  (8.2) | 75  (6.3) | 30  (4.4) | 90  (6.9) | 40  (5.8) | 90  (6.1) | 7155  (10.1) |
| **London** | 2770  (5.0) | 840  (37.3) | 195  (20.6) | 305  (23.6) | 325  (26.3) | 270  (9.3) | 465  (50.8) | 530  (44.2) | 370  (54.4) | 710  (54.6) | 430  (62.8) | 705  (47.6) | 7920  (11.2) |
| **South East** | 8715  (15.6) | 515  (22.9) | 115  (12.2) | 180  (14.0) | 145  (11.7) | 230  (7.9) | 40  (4.4) | 130  (10.8) | 30  (4.4) | 140  (10.8) | 55  (8.0) | 170  (11.5) | 10460  (14.8) |
| **South West** | 7195  (12.9) | 135  (6.0) | 110  (11.6) | 95  (7.4) | 40  (3.2) | 35  (1.2) | 15  (1.6) | 30  (2.5) | 20  (2.9) | 45  (3.5) | 10  (1.5) | 35  (2.4) | 7770  (11.0) |
| **IMD Quintile of Deprivation** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **1(most)** | 12600  (22.5) | 520  (23.1) | 350  (37.0) | 375  (29.1) | 350  (28.3) | 1720  (58.9) | 625  (68.3) | 400  (33.3) | 365  (53.7) | 660  (50.8) | 300  (43.8) | 580  (39.2) | 18850  (26.6) |
| **2** | 11000  (19.7) | 495  (22.0) | 245  (25.9) | 295  (22.9) | 315  (25.5) | 655  (22.4) | 155  (16.9) | 290  (24.2) | 185  (27.2) | 360  (27.7) | 210  (30.7) | 335  (22.6) | 14540  (20.5) |
| **3** | 11050  (19.8) | 395  (17.6) | 145  (15.3) | 235  (18.2) | 220  (17.8) | 295  (10.1) | 90  (9.8) | 230  (19.2) | 80  (11.8) | 150  (11.5) | 85  (12.4) | 240  (16.2) | 13215  (18.7) |
| **4** | 10735  (19.2) | 375  (16.7) | 115  (12.2) | 185  (14.3) | 170  (13.8) | 150  (5.1) | 25  (2.7) | 140  (11.7) | 30  (4.4) | 75  (5.8) | 55  (8.0) | 160  (10.8) | 12215  (17.2) |
| **5(least)** | 10550  (18.9) | 460  (20.4) | 90  (9.5) | 200  (15.5) | 185  (15.0) | 100  (3.4) | 20  (2.2) | 140  (11.7) | 20  (2.9) | 55  (4.2) | 35  (5.1) | 165  (11.2) | 12025  (17.0) |

Supplementary Table 4 – Proportion of all emergency hospital admissions deemed stress-related presentations (SPRs) 2014-2020, stratified by gender

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***n (%)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **Total** | 77156  (32.5) | 2898  (29.9) | 1307  (30.2) | 1753  (30.0) | 1582  (25.2) | 3838  (24.0) | 1157  (27.5) | 1502  (23.8) | 887  (24.9) | 1624  (20.6) | 891  (25.7) | 1889  (26.1) | 96484  (30.9) |
| **Female** | 51410  (42.4) | 1842  (39.6) | 885  (40.0) | 1118  (39.7) | 867  (31.9) | 2146  (29.3) | 660  (33.6) | 862  (31.2) | 559  (31.1) | 940  (25.7) | 578  (33.3) | 1150  (34.2) | 63017  (40.3) |
| **Male** | 25746  (22.1) | 1056  (20.9) | 422  (20.0) | 635  (21.0) | 715  (20.0) | 1692  (19.5) | 497  (22.1) | 640  (18.0) | 328  (18.6) | 684  (16.1) | 313  (18.1) | 739  (19.2) | 33467  (21.4) |

Supplementary Table 5 – Rates of admissions for stress-related presentations (SPRs) for young people aged 11 to 15 years 2014-2020 per 1,000 births, stratified by gender

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Rate per 1,000 (95% CI)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **11** | 8.23  (8.10 - 8.37) | 4.06  (3.74 - 4.38) | 8.90  (7.85 - 9.96) | 6.95  (6.21 - 7.70) | 5.79  (5.20 - 6.37) | 10.95  (10.28 - 11.62) | 7.57  (6.64 - 8.50) | 6.69  (6.01 - 7.37) | 6.44  (5.54 - 7.35) | 5.33  (4.81 -5.85) | 7.20  (6.19 -8.21) | 5.53  (4.98 -6.08) | 7.75  (7.64 -7.86) |
| **Female** | 8.67  (8.47 - 8.86) | 4.12  (3.65 - 4.59) | 8.95  (7.43 - 10.46) | 6.62  (5.57 - 7.67) | 5.78  (4.93 - 6.63) | 11.14  (10.16 - 12.12) | 6.88  (5.61 - 8.15) | 6.34  (5.38 - 7.30) | 6.66  (5.34 - 7.98) | 5.37  (4.63 - 6.11) | 7.75  (6.25 - 9.24) | 5.17  (4.41 - 5.94) | 8.04  (7.88 - 8.21) |
| **Male** | 7.83  (7.65 -  8.01) | 4.00  (3.55 -  4.45) | 8.86  (7.40 -  10.33) | 7.26  (6.21 -  8.31) | 5.79  (4.98 -  6.60) | 10.78  (9.85 -  11.70) | 8.22  (6.88 -  9.56) | 7.02  (6.05 -  7.98) | 6.24  (5.00 -  7.48) | 5.29  (4.57 -  6.01) | 6.68  (5.33 -  8.04) | 5.86  (5.08 -  6.65) | 7.47  (7.32 -  7.62) |
| **12** | 11.59  (11.41 -  11.76) | 5.84  (5.40 -  6.29) | 11.86  (10.48 -  13.25) | 10.36  (9.32 -  11.39) | 7.77  (6.99 -  8.55) | 13.33  (12.49 -  14.18) | 8.94  (7.80 -  10.07) | 8.47  (7.60 -  9.34) | 7.66  (6.57 -  8.76) | 7.44  (6.74 -  8.14) | 9.75  (8.45 -  11.05) | 8.66  (7.87 -  9.45) | 10.81  (10.67 -  10.96) |
| **Female** | 14.15  (13.87 -  14.43) | 7.19  (6.48 -  7.91) | 15.19  (12.95 -  17.43) | 12.44  (10.81 -  14.08) | 7.93  (6.79 -  9.07) | 13.91  (12.67 -  15.16) | 9.48  (7.80 -  11.16) | 9.74  (8.39 -  11.10) | 9.76  (7.98 -  11.54) | 8.12  (7.08 -  9.16) | 11.68  (9.65 -  13.72) | 9.83  (8.62 -  11.04) | 13.01  (12.77 -  13.24) |
| **Male** | 9.19  (8.97 -  9.41) | 4.58  (4.03 -  5.14) | 8.68  (7.02 -  10.34) | 8.43  (7.14 -  9.73) | 7.62  (6.56 -  8.69) | 12.81  (11.66 -  13.95) | 8.43  (6.89 -  9.97) | 7.30  (6.18 -  8.42) | 5.72  (4.40 -  7.03) | 6.79  (5.85 -  7.72) | 7.92  (6.28 -  9.55) | 7.56  (6.54 -  8.59) | 8.76  (8.58 -  8.95) |
| **13** | 16.36  (16.11 -  16.60) | 8.17  (7.52 -  8.81) | 17.57  (15.58 -  19.57) | 15.24  (13.74 -  16.74) | 9.75  (8.72 -  10.77) | 15.40  (14.33 -  16.46) | 12.48  (10.90 -  14.05) | 10.39  (9.24 -  11.54) | 10.59  (9.09 -  12.09) | 8.89  (7.97 -  9.81) | 10.41  (8.86 -  11.97) | 11.14  (10.06 -  12.23) | 15.03  (14.83 -  15.23) |
| **Female** | 23.79  (23.37 -  24.21) | 10.92  (9.85 -  11.98) | 27.82  (24.25 -  31.38) | 22.41  (19.79 -  25.02) | 11.28  (9.68 -  12.88) | 18.45  (16.76 -  20.13) | 15.94  (13.38 -  18.50) | 13.22  (11.34 -  15.09) | 15.23  (12.64 -  17.82) | 11.53  (10.03 -  13.03) | 15.19  (12.50 -  17.87) | 15.64  (13.79 -  17.50) | 21.50  (21.16 -  21.85) |
| **Male** | 9.39  (9.13 -  9.65) | 5.59  (4.85 -  6.33) | 7.75  (5.89 -  9.62) | 8.62  (7.05 -  10.19) | 8.35  (7.04 -  9.66) | 12.63  (11.30 -  13.97) | 9.23  (7.35 -  11.12) | 7.83  (6.45 -  9.21) | 6.32  (4.71 -  7.92) | 6.37  (5.28 -  7.46) | 5.92  (4.28 -  7.55) | 6.97  (5.77 -  8.17) | 8.98  (8.76 -  9.20) |
| **14** | 25.74  (25.36 -  26.12) | 12.76  (11.74 -  13.78) | 24.30  (21.37 -  27.24) | 23.60  (21.24 -  25.96) | 12.53  (11.07 -  13.99) | 20.69  (19.15 -  22.23) | 20.40  (17.89 -  22.91) | 14.01  (12.31 -  15.70) | 14.04  (11.93 -  16.15) | 12.14  (10.73 -  13.54) | 16.95  (14.52 -  19.37) | 17.42  (15.68 -  19.16) | 23.38  (23.06 -  23.69) |
| **Female** | 40.61  (39.93 -  41.29) | 19.85  (18.03 -  21.67) | 36.97  (31.83 -  42.12) | 35.99  (31.81 -  40.18) | 17.86  (15.34 -  20.38) | 28.74  (26.11 -  31.36) | 27.53  (23.37 -  31.70) | 19.62  (16.72 -  22.52) | 18.79  (15.26 -  22.32) | 16.13  (13.82 -  18.45) | 24.57  (20.38 -  28.76) | 25.77  (22.73 -  28.81) | 36.35  (35.79 -  36.90) |
| **Male** | 11.83  (11.47 -  12.19) | 6.10  (5.12 -  7.09) | 12.20  (9.28 -  15.13) | 12.26  (9.90 -  14.63) | 7.69  (6.10 -  9.27) | 13.43  (11.71 -  15.15) | 13.68  (10.81 -  16.56) | 8.95  (7.07 -  10.82) | 9.68  (7.24 -  12.11) | 8.31  (6.68 -  9.94) | 9.81  (7.23 -  12.39) | 9.64  (7.83 -  11.45) | 11.27  (10.97 -  11.57) |
| **15** | 38.38  (37.72 -  39.03) | 19.43  (17.63 -  21.24) | 41.76  (36.19 -  47.33) | 37.60  (33.21 -  41.99) | 19.12  (16.54 -  21.71) | 26.06  (23.59 -  28.54) | 29.09  (24.91 -  33.28) | 23.81  (20.57 -  27.05) | 25.28  (21.29 -  29.28) | 13.73  (11.53 -  15.93) | 23.01  (19.06 -  26.97) | 25.09  (22.11 -  28.07) | 34.79  (34.25 -  35.33) |
| **Female** | 60.40  (59.22 -  61.57) | 28.71  (25.58 -  31.84) | 67.51  (57.41 -  77.61) | 57.89  (50.02 -  65.75) | 24.42  (20.19 -  28.65) | 37.64  (33.35 -  41.93) | 38.55  (31.70 -  45.40) | 34.19  (28.56 -  39.82) | 37.88  (30.94 -  44.82) | 18.85  (15.17 -  22.53) | 37.60  (30.41 -  44.80) | 35.59  (30.55 -  40.63) | 54.04  (53.08 -  55.01) |
| **Male** | 17.79  (17.16 -  18.42) | 10.61  (8.74 -  12.48) | 18.17  (13.02 -  23.31) | 19.63  (15.23 -  24.03) | 14.33  (11.23 -  17.43) | 15.62  (12.96 -  18.27) | 19.99  (15.10 -  24.87) | 14.61  (11.11 -  18.10) | 13.21  (9.14 -  17.27) | 8.80  (6.32 -  11.28) | 9.18  (5.67 -  12.69) | 14.99  (11.75 -  18.23) | 16.81  (16.27 -  17.34) |

Supplementary Figure 2 – Yearly incidence of emergency hospital admissions for stress-related presentations (SPRs) 2014-2020 per 1,000 births of young people born 2003-2004

A graph of different colored lines

Description automatically generated with medium confidence

Supplementary Table 6 – Cumulative Incidence between ages 11 and 15 of emergency hospital admissions for stress-related presentations (SPRs) 2014-2020 of young people born 2003-2004, stratified by gender

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***% (95% CI)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **11** | 0.72  (0.69-0.75) | 0.51  (0.42-0.61) | 0.61  (0.39-0.82) | 0.64  (0.45-0.82) | 0.59  (0.45-0.74) | 1.11  (0.95-1.27) | 0.76  (0.54-0.98) | 0.38  (0.25-0.51) | 0.59  (0.40-0.78) | 0.50  (0.37-0.64) | 0.49  (0.31-0.67) | 0.51  (0.37-0.64) | 0.69  (0.67-0.72) |
| **Female** | 0.74  (0.69-0.78) | 0.56  (0.42-0.70) | 0.76  (0.41-1.11) | 0.71  (0.43-0.99) | 0.55  (0.34-0.75) | 1.06  (0.83-1.29) | 0.59  (0.32-0.87) | 0.37  (0.19-0.56) | 0.55  (0.28-0.82) | 0.59  (0.38-0.80) | 0.56  (0.28-0.84) | 0.52  (0.32-0.71) | 0.71  (0.68-0.75) |
| **Male** | 0.70  (0.66-0.74) | 0.47  (0.34-0.59) | 0.46  (0.20-0.73) | 0.58  (0.34-0.82) | 0.64  (0.43-0.84) | 1.16  (0.93-1.39) | 0.92  (0.59-1.25) | 0.38  (0.20-0.55) | 0.63  (0.35-0.91) | 0.42  (0.25-0.59) | 0.42  (0.18-0.66) | 0.50  (0.31-0.69) | 0.68  (0.64-0.71) |
| **12** | 1.54  (1.50-1.58) | 1.12  (0.98-1.26) | 1.44  (1.10-1.77) | 1.41  (1.13-1.68) | 1.35  (1.13-1.57) | 2.05  (1.83-2.27) | 1.38  (1.09-1.67) | 0.83  (0.64-1.03) | 1.13  (0.86-1.40) | 1.05  (0.86-1.24) | 1.02  (0.75-1.28) | 1.03  (0.84-1.22) | 1.47  (1.44-1.51) |
| **Female** | 1.70  (1.64-1.76) | 1.34  (1.12-1.56) | 1.95  (1.39-2.51) | 1.63  (1.20-2.06) | 1.25  (0.95-1.56) | 2.12  (1.80-2.45) | 1.22  (0.83-1.62) | 0.90  (0.61-1.19) | 1.24  (0.84-1.65) | 1.17  (0.87-1.46) | 1.23  (0.81-1.65) | 1.20  (0.90-1.49) | 1.63  (1.57-1.68) |
| **Male** | 1.39  (1.33-1.44) | 0.92  (0.74-1.09) | 0.97  (0.59-1.35) | 1.21  (0.86-1.55) | 1.44  (1.13-1.75) | 1.98  (1.68-2.28) | 1.53  (1.10-1.96) | 0.78  (0.52-1.03) | 1.03  (0.67-1.39) | 0.94  (0.68-1.19) | 0.81  (0.48-1.14) | 0.87  (0.62-1.12) | 1.33  (1.29-1.38) |
| **13** | 2.53  (2.47-2.58) | 1.85  (1.67-2.02) | 2.34  (1.91-2.76) | 2.41  (2.05-2.76) | 2.13  (1.86-2.41) | 3.05  (2.78-3.32) | 2.20  (1.83-2.57) | 1.47  (1.22-1.73) | 2.05  (1.69-2.42) | 1.65  (1.41-1.90) | 1.79  (1.43-2.14) | 1.64  (1.40-1.88) | 2.41  (2.37-2.46) |
| **Female** | 3.09  (3.00-3.17) | 2.24  (1.96-2.52) | 3.15  (2.44-3.87) | 3.10  (2.51-3.69) | 2.05  (1.66-2.44) | 3.20  (2.80-3.60) | 2.22  (1.70-2.75) | 1.76  (1.35-2.17) | 2.46  (1.90-3.03) | 1.96  (1.58-2.33) | 2.21  (1.65-2.77) | 1.94  (1.56-2.31) | 2.91  (2.84-2.98) |
| **Male** | 2.01  (1.94-2.08) | 1.48  (1.26-1.70) | 1.59  (1.11-2.08) | 1.79  (1.37-2.21) | 2.21  (1.82-2.60) | 2.91  (2.55-3.28) | 2.17  (1.66-2.69) | 1.22  (0.90-1.54) | 1.66  (1.20-2.12) | 1.36  (1.05-1.67) | 1.38  (0.95-1.81) | 1.36  (1.05-1.67) | 1.95  (1.90-2.01) |
| **14** | 3.82  (3.75-3.88) | 2.81  (2.59-3.02) | 3.49  (2.98-4.01) | 3.61  (3.18-4.05) | 2.89  (2.57-3.21) | 4.19  (3.88-4.51) | 3.44  (2.98-3.90) | 2.20  (1.89-2.51) | 3.14  (2.69-3.59) | 2.27  (1.99-2.55) | 2.67  (2.24-3.10) | 2.61  (2.30-2.92) | 3.62  (3.56-3.68) |
| **Female** | 4.99  (4.88-5.10) | 3.63  (3.28-3.99) | 4.94  (4.05-5.83) | 4.69  (3.96-5.41) | 2.96  (2.49-3.43) | 4.65  (4.17-5.13) | 3.71  (3.03-4.39) | 2.54  (.05-3.04) | 3.81  (3.10-4.51) | 2.73  (2.29-3.18) | 3.43  (2.73-4.13) | 3.33  (2.84-3.82) | 4.65  (4.56-4.74) |
| **Male** | 2.73  (2.65-2.81) | 2.02  (1.76-2.28) | 2.18  (1.61-2.75) | 2.67  (2.15-3.19) | 2.82  (2.39-3.26) | 3.78  (3.37-4.20) | 3.18  (2.56-3.80) | 1.89  (1.49-2.29) | 2.50  (1.94-3.06) | 1.83  (1.47-2.18) | 1.96  (1.44-2.47) | 1.92  (1.55-2.29) | 2.66  (2.59-2.73) |
| **15** | 5.30  (5.22-5.38) | 3.86  (3.61-4.12) | 4.81  (4.20-5.42) | 4.92  (4.41-5.43) | 4.02  (3.64-4.39) | 5.37  (5.01-5.73) | 4.64  (4.11-5.18) | 3.22  (2.84-3.60) | 4.48  (3.94-5.01) | 3.02  (2.70-3.35) | 3.86  (3.35-4.38) | 3.60  (3.24-3.96) | 5.01  (4.94-5.07) |
| **Female** | 7.13  (7.00-7.26) | 4.98  (4.56-5.39) | 6.58  (5.56-7.60) | 6.64  (5.78-7.50) | 4.29  (3.73-4.85) | 6.32  (5.76-6.89) | 5.28  (4.47-6.09) | 3.85  (3.25-4.45) | 5.84  (4.97-6.71) | 3.73  (3.21-4.25) | 5.05  (4.21-5.89) | 4.86  (4.27-5.46) | 6.63  (6.52-6.74) |
| **Male** | 3.61  (3.52-3.70) | 2.81  (2.51-3.12) | 3.21  (2.52-3.90) | 3.42  (2.84-4.01) | 3.77  (3.27-4.27) | 4.51  (4.06-4.97) | 4.03  (3.33-4.73) | 2.66  (2.19-3.13) | 3.18  (2.54-3.81) | 2.35  (1.94-2.76) | 2.75  (2.14-3.36) | 2.39  (1.98-2.80) | 3.51  (3.43-3.58) |

Supplementary Table 7 - Trends in the proportion of young people with singular and repeat SRP admissions across racial-ethnic groups, stratified by gender

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***% (95% CI)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **1** | 58.6  (58.2-59.0) | 64.2  (62.2-66.1) | 58.7  (55.6-61.8) | 60.5  (57.9-63.2) | 60.9  (58.2-63.6) | 52.3  (50.5-54.1) | 61.8  (58.7-65.0) | 60.2  (57.4-63.0) | 59.3  (55.6-63.0) | 60.1  (57.4-62.8) | 63.6  (60.0-67.3) | 62.0  (59.5-64.5) | 58.8  (58.5-59.2) |
| **Female** | 55.8  (55.3-56.3) | 61.6  (59.0-64.2) | 55.7  (51.7-59.6) | 56.6  (53.1-60.1) | 60.9  (57.2-64.7) | 52.6  (50.1-55.1) | 61.8  (57.5-66.0) | 60.2  (56.5-64.0) | 57.7  (52.9-62.5) | 59.8  (56.2-63.4) | 61.4  (56.8-66.1) | 62.1  (58.8-65.3) | 56.4  (55.9-56.8) |
| **Male** | 63.1  (62.5-63.8) | 68.0  (64.9-71.0) | 64.0  (58.9-69.0) | 66.1  (62.1-70.1) | 60.8  (56.9-64.7) | 51.9  (49.3-54.6) | 61.9  (57.2-66.5) | 60.1  (56.1-64.2) | 61.7  (55.9-67.4) | 60.5  (56.5-64.5) | 67.2  (61.5-72.8) | 62.0  (58.1-65.8) | 62.6  (62.0-63.2) |
| **2** | 21.0  (20.6-21.3) | 19.8  (18.1-21.4) | 19.9  (17.3-22.4) | 18.3  (16.2-20.5) | 21.3  (19.0-23.5) | 22.0  (20.5-23.5) | 17.8  (15.4-20.3) | 22.1  (19.7-24.4) | 19.7  (16.7-22.7) | 17.7  (15.6-19.8) | 16.9  (14.1-19.7) | 21.4  (19.3-23.5) | 20.8  (20.5-21.1) |
| **Female** | 21.6  (21.2-22.0) | 20.2  (18.0-22.3) | 22.3  (19.0-25.7) | 19.4  (16.6-22.2) | 20.2  (17.0-23.3) | 21.1  (19.1-23.2) | 17.3  (14.0-20.6) | 21.9  (18.7-25.1) | 19.9  (16.0-23.8) | 18.7  (15.9-21.6) | 17.4  (13.8-21.0) | 20.8  (18.1-23.5) | 21.3  (20.9-21.7) |
| **Male** | 19.9  (19.3-20.4) | 19.2  (16.6-21.7) | 15.6  (11.7-19.4) | 16.9  (13.7-20.0) | 22.4  (19.1-25.8) | 22.9  (20.7-25.1) | 18.5  (14.7-22.2) | 22.3  (18.8-25.7) | 19.3  (14.7-24.0) | 16.4  (13.4-19.4) | 16.2  (11.8-20.7) | 22.3  (19.0-25.6) | 19.9  (19.4-20.4) |
| **3** | 8.8  (8.5-9.0) | 8.0  (6.9-9.2) | 8.6  (6.8-10.3) | 9.3  (7.7-10.9) | 7.3  (5.8-8.7) | 8.9  (7.8-9.9) | 8.4  (6.6-10.2) | 7.8  (6.3-9.3) | 7.8  (5.8-9.8) | 8.0  (6.5-9.5) | 7.4  (5.5-9.4) | 7.8  (6.5-9.2) | 8.6  (8.4-8.9) |
| **Female** | 9.3  (9.0-9.7) | 9.1  (7.6-10.7) | 9.2  (6.9-11.5) | 10.9  (8.7-13.2) | 7.8  (5.7-9.9) | 8.7  (7.3-10.1) | 8.0  (5.7-10.4) | 7.5  (5.4-9.5) | 9.3  (6.5-12.2) | 8.7  (6.7-10.8) | 9.0  (6.3-11.8) | 8.1  (6.3-9.9) | 9.2  (9.0-9.5) |
| **Male** | 7.8  (7.4-8.2) | 6.4  (4.8-8.0) | 7.5  (4.7-10.3) | 6.9  (4.8-9.1) | 6.7  (4.7-8.7) | 9.1  (7.5-10.6) | 8.9  (6.1-11.6) | 8.3  (6.0-10.5) | 5.5  (2.8-8.2) | 7.1  (5.0-9.2) | 4.9  (2.3-7.5) | 7.5  (5.4-9.6) | 7.7  (7.4-8.0) |
| **4+** | 11.7  (11.4-12.0) | 8.0  (6.9-9.1) | 12.9  (10.7-15.0) | 11.8  (10.1-13.6) | 10.6  (8.9-12.3) | 16.9  (15.5-18.2) | 11.9  (9.8-14.0) | 9.9  (8.2-11.6) | 13.2  (10.7-15.8) | 14.2  (12.3-16.1) | 12.0  (9.5-14.4) | 8.8  (7.3-10.2) | 11.8  (11.5-12.0) |
| **Female** | 13.2  (12.9-13.6) | 9.1  (7.5-10.6) | 12.8  (10.2-15.5) | 13.1  (10.7-15.5) | 11.1  (8.7-13.5) | 17.6  (15.7-19.4) | 12.9  (9.9-15.8) | 10.4  (8.0-12.8) | 13.0  (9.8-16.3) | 12.8  (10.3-15.2) | 12.1  (9.0-15.3) | 9.1  (7.2-11.0) | 13.1  (12.7-13.4) |
| **Male** | 9.2  (8.8-9.6) | 6.4  (4.8-8.0) | 13.0  (9.4-16.5) | 10.1  (7.6-12.7) | 10.1  (7.6-12.5) | 16.1  (14.2-18.1) | 10.8  (7.8-13.8) | 9.3  (6.9-11.8) | 13.5  (9.5-17.6) | 16.0  (13.0-19.0) | 11.7  (7.8-15.6) | 8.3  (6.1-10.5) | 9.8  (9.4-10.1) |

Supplementary Table 8 - Trends in the proportion of SRP admissions with a duration of 0, 1, 2, 3-4, 5+ days across racial-ethnic groups, stratified by gender

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***% (95% CI)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **0** | 45.1  (44.7-45.4) | 44.9  (43.1-46.7) | 41.2  (38.5-43.8) | 43.0  (40.7-45.3) | 46.7  (44.3-49.2) | 44.6  (43.0-46.2) | 41.7  (38.8-44.5) | 45.1  (42.6-47.6) | 45.3  (42.0-48.6) | 47.8  (45.4-50.2) | 42.6  (39.4-45.9) | 43.4  (41.2-45.6) | 44.9  (44.6-45.3) |
| **Female** | 42.0  (41.6-42.4) | 42.8  (40.6-45.1) | 39.2  (36.0-42.4) | 39.5  (36.7-42.4) | 43.9  (40.6-47.2) | 42.5  (40.4-44.5) | 40.3  (36.6-44.0) | 42.1  (38.8-45.4) | 43.1  (39.0-47.2) | 46.5  (43.3-49.7) | 41.0  (37.0-45.0) | 40.2  (37.3-43.0) | 42.0  (41.6-42.4) |
| **Male** | 51.2  (50.6-51.8) | 48.5  (45.5-51.5) | 45.3  (40.5-50.0) | 49.1  (45.2-53.0) | 50.1  (46.4-53.7) | 47.3  (45.0-49.7) | 43.5  (39.1-47.8) | 49.1  (45.2-52.9) | 49.1  (43.7-54.5) | 49.6  (45.8-53.3) | 45.7  (40.2-51.2) | 48.4  (44.8-52.0) | 50.5  (49.9-51.0) |
| **1** | 33.7  (33.4-34.1) | 32.6  (30.9-34.4) | 34.1  (31.6-36.7) | 32.2  (30.0-34.4) | 31.0  (28.7-33.3) | 32.3  (30.8-33.8) | 32.0  (29.3-34.7) | 29.4  (27.1-31.7) | 30.3  (27.3-33.4) | 28.1  (25.9-30.3) | 30.4  (27.4-33.4) | 31.4  (29.3-33.5) | 33.3  (33.0-33.6) |
| **Female** | 34.7  (34.2-35.1) | 33.0  (30.9-35.2) | 35.3  (32.1-38.4) | 31.9  (29.2-34.7) | 31.7  (28.6-34.8) | 32.6  (30.6-34.6) | 31.1  (27.5-34.6) | 30.9  (27.8-33.9) | 31.7  (27.8-35.5) | 28.3  (25.4-31.2) | 29.4  (25.7-33.1) | 33.0  (30.2-35.7) | 34.2  (33.8-34.5) |
| **Male** | 31.9  (31.4-32.5) | 32.0  (29.2-34.8) | 31.8  (27.3-36.2) | 32.6  (29.0-36.2) | 30.1  (26.7-33.4) | 31.9  (29.6-34.1) | 33.2  (29.1-37.3) | 27.5  (24.0-31.0) | 28.0  (23.2-32.9) | 27.8  (24.4-31.1) | 32.3  (27.1-37.4) | 29.0  (25.7-32.2) | 31.7  (31.2-32.2) |
| **2** | 9.2  (9.0-9.4) | 9.2  (8.2-10.3) | 9.6  (8.0-11.2) | 10.0  (8.6-11.4) | 10.5  (9.0-12.0) | 9.8  (8.8-10.7) | 10.1  (8.4-11.8) | 9.6  (8.1-11.1) | 8.6  (6.7-10.4) | 10.0  (8.6-11.5) | 10.3  (8.3-12.3) | 10.5  (9.1-11.9) | 9.4  (9.2-9.5) |
| **Female** | 9.9  (9.7-10.2) | 9.8  (8.4-11.1) | 9.0  (7.2-10.9) | 10.8  (9.0-12.6) | 11.4  (9.3-13.5) | 10.5  (9.2-11.8) | 11.4  (8.9-13.8) | 10.1  (8.1-12.1) | 8.1  (5.8-10.3) | 10.1  (8.2-12.0) | 11.8  (9.1-14.4) | 11.2  (9.4-13.0) | 10.0  (9.8-10.2) |
| **Male** | 7.8  (7.5-8.2) | 8.2  (6.6-9.9) | 10.7  (7.7-13.6) | 8.5  (6.3-10.7) | 9.4  (7.2-11.5) | 8.8  (7.5-10.2) | 8.5  (6.0-10.9) | 8.9  (6.7-11.1) | 9.5  (6.3-12.6) | 9.9  (7.7-12.2) | 7.7  (4.7-10.6) | 9.3  (7.2-11.4) | 8.1  (7.8-8.4) |
| **3-4** | 6.0  (5.9-6.2) | 5.9  (5.1-6.8) | 7.8  (6.3-9.3) | 6.7  (5.6-7.9) | 6.7  (5.5-7.9) | 7.2  (6.4-8.1) | 8.5  (6.9-10.1) | 7.7  (6.4-9.1) | 6.4  (4.8-8.0) | 6.5  (5.3-7.7) | 7.9  (6.1-9.6) | 6.9  (5.7-8.0) | 6.2  (6.1-6.4) |
| **Female** | 6.6  (6.4-6.8) | 6.2  (5.1-7.3) | 8.6  (6.7-10.4) | 8.9  (7.2-10.5) | 7.3  (5.5-9.0) | 7.3  (6.2-8.4) | 9.1  (6.9-11.3) | 7.7  (5.9-9.4) | 7.3  (5.2-9.5) | 7.4  (5.8-9.1) | 8.5  (6.2-10.7) | 7.5  (6.0-9.0) | 6.8  (6.6-7.0) |
| **Male** | 4.9  (4.6-5.1) | 5.5  (4.1-6.9) | 6.2  (3.9-8.5) | 3.0  (1.7-4.3) | 6.0  (4.3-7.8) | 7.2  (5.9-8.4) | 7.6  (5.3-10.0 | 7.8  (5.7-9.9) | 4.9  (2.5-7.2) | 5.3  (3.6-6.9) | 6.7  (3.9-9.5) | 6.0  (4.2-7.7) | 5.1  (4.9-5.4) |
| **5+** | 5.9  (5.7-6.1) | 7.3  (6.4-8.3) | 7.3  (5.9-8.8) | 8.1  (6.8-9.4) | 5.1  (4.0-6.2) | 6.1  (5.3-6.9) | 7.8  (6.2-9.3) | 8.2  (6.8-9.6) | 9.4  (7.4-11.3) | 7.6  (6.3-8.9) | 8.8  (6.9-10.6) | 7.8  (6.6-9.0) | 6.2  (6.0-6.3) |
| **Female** | 6.8  (6.6-7.0) | 8.2  (6.9-9.5) | 7.9  (6.1-9.7) | 8.9  (7.2-10.5) | 5.7  (4.1-7.2) | 7.1  (6.0-8.2) | 8.2  (6.1-10.3) | 9.3  (7.3-11.2) | 9.8  (7.4-12.3) | 7.7  (6.0-9.4) | 9.3  (7.0-11.7) | 8.2  (6.6-9.8) | 7.0  (6.8-7.2) |
| **Male** | 4.1  (3.9-4.4) | 5.8  (4.4-7.2) | 6.2  (3.9-8.5) | 6.8  (4.8-8.7) | 4.5  (3.0-6.0) | 4.8  (3.8-5.9) | 7.2  (5.0-9.5) | 6.7  (4.8-8.7) | 8.5  (5.5-11.6) | 7.5  (5.5-9.4) | 7.7  (4.7-10.6) | 7.3  (5.4-9.2) | 4.6  (4.4-4.8) |

Supplementary Table 9 – Proportion of SRP Admissions with a recorded diagnoses related to (a) Psychosomatic (b) Internalising (c) Externalising (d) Thought disorder (e) Self-harm symptoms. Note: *Results for Mixed White-Black race/ethnicity, Mixed Other race/ethnicity and Indian groups with recorded diagnoses related to Thought disorder censored due to small cell count, gender breakdown not available due to small cell counts*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***% (95% CI)*** | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| **Psycho-somatic** | 75.9  (75.6-76.2) | 78.2  (76.7-79.7) | 75.4  (73.1-77.8) | 77.4  (75.4-79.3) | 89.3  (87.8-90.8) | 92.7  (91.9-93.5) | 86.9  (84.9-88.8) | 87.9  (86.3-89.6) | 80.9  (78.4-83.5) | 88.6  (87.1-90.2) | 80.4  (77.8-83.0) | 81.9  (80.2-83.6) | 77.6  (77.3-77.9) |
| **Female** | 69.9  (69.5-70.3) | 72.3  (70.2-74.3) | 71.5  (68.6-74.5) | 71.4  (68.7-74.0) | 84.3  (81.9-86.7) | 89.4  (88.1-90.7) | 82.0  (79.0-84.9) | 82.8  (80.3-85.3) | 75.1  (71.6-78.7) | 84.4  (82.0-86.7) | 74.4  (70.8-78.0) | 76.9  (74.4-79.3) | 71.6  (71.3-72.0) |
| **Male** | 87.8  (87.4-88.2) | 88.6  (86.7-90.6) | 83.6  (80.1-87.2) | 87.9  (85.3-90.4) | 95.4  (93.8-96.9) | 96.8  (96.0-97.6) | 93.4  (91.2-95.5) | 94.8  (93.1-96.6) | 90.9  (87.7-94.0) | 94.4  (92.7-96.2) | 91.4  (88.3-94.5) | 89.7  (87.5-91.9) | 88.9  (88.5-89.2) |
| **Internalising** | 15.9  (15.6-16.1) | 16.4  (15.1-17.8) | 14.8  (12.9-16.8) | 16.2  (14.5-17.9) | 8.2  (6.8-9.5) | 5.9  (5.1-6.6) | 8.5  (6.9-10.1) | 10.5  (9.0-12.1) | 9.5  (7.5-11.4) | 7.1  (5.8-8.3) | 10.5  (8.5-12.6) | 13.4  (11.9-15.0) | 14.9  (14.6-15.1) |
| **Female** | 19.0  (18.6-19.3) | 20.7  (18.8-22.5) | 17.5  (15.0-20.0) | 19.8  (17.4-22.1) | 10.3  (8.2-12.3) | 7.8  (6.6-8.9) | 11.5  (9.1-14.0) | 13.3  (11.1-15.6) | 12.3  (9.6-15.1) | 9.0  (7.2-10.9) | 11.8  (9.1-14.4) | 16.1  (14.0-18.2) | 18.0  (17.7-18.3) |
| **Male** | 9.7  (9.3-10.0) | 9.0  (7.3-10.7) | 9.2  (6.5-12.0) | 9.9  (7.6-12.2) | 5.6  (3.9-7.3) | 3.4  (2.6-4.3) | 4.4  (2.6-6.2) | 6.7  (4.8-8.7) | 4.6  (2.3-6.8) | 4.4  (2.9-5.9) | 8.3  (5.2-11.4) | 9.3  (7.2-11.4) | 8.9  (8.6-9.2) |
| **Externalising** | 8.5  (8.3-8.7) | 6.4  (5.5-7.3) | 8.3  (6.8-9.8) | 7.1  (5.9-8.3) | 2.1  (1.4-2.8) | 1.8  (1.4-2.2) | 2.4  (1.5-3.3) | 3.2  (2.3-4.1) | 7.6  (5.8-9.3) | 2.3  (1.6-3.1) | 4.7  (3.3-6.1) | 5.4  (4.4-6.4) | 7.7  (7.5-7.8) |
| **Female** | 7.6  (7.4-7.9) | 5.1  (4.1-6.1) | 7.0  (5.3-8.7) | 6.0  (4.6-7.4) | 1.7  (0.9-2.6) | 1.4  (0.9-2.6) | 1.7  (0.7-2.6) | 3.2  (2.1-4.4) | 6.1  (4.1-8.1) | 2.1  (1.2-3.1) | 3.1  (1.7-4.5) | 5.7  (4.4-7.1) | 6.9  (6.7-7.1) |
| **Male** | 10.2  (9.9-10.6) | 8.6  (6.9-10.3) | 11.1  (8.1-14.1) | 9.0  (6.8-11.2) | 2.5  (1.4-3.7) | 2.4  (1.7-3.2) | 3.4  (1.8-5.0) | 3.1  (1.8-4.5) | 10.1  (6.8-13.3) | 2.6  (1.4-3.8) | 7.7  (4.7-10.6) | 4.9  (3.3-6.4) | 9.1  (8.8-9.4) |
| **Thought Disorders** | 0.46  (0.41-0.51) | 1.00  (0.64-1.36) | X | X | X | 0.39  (0.19-0.59) | 0.86  (0.33-1.40) | 1.07  (0.55-1.58) | 1.69  (0.84-2.54) | 1.35  (0.79-1.92) | 2.47  (1.45-3.49) | 1.11  (0.64-1.58) | 0.54  (0.50-0.59 |
| **Self-Harm** | 33.5  (33.2-33.9) | 29.3  (27.7-31.0) | 35.0  (32.4-37.6) | 32.9  (30.7-35.1) | 15.4  (13.6-17.2) | 10.1  (9.2-11.1) | 17.7  (15.5-19.9) | 18.2  (16.2-20.1) | 28.1  (25.1-31.0) | 15.3  (13.5-17.0) | 27.2  (24.2-30.1) | 25.7  (23.7-27.6) | 31.2  (30.9-31.5) |
| **Female** | 42.6  (42.2-43.0) | 38.4  (36.2-40.6) | 41.4  (38.1-44.6) | 43.9  (41.0-46.8) | 23.3  (20.5-26.1) | 15.6  (14.0-17.1) | 27.3  (23.9-30.7) | 26.7  (23.7-29.6) | 36.9  (32.9-40.9) | 22.8  (20.1-25.4) | 34.9  (31.1-38.8) | 34.1  (31.3-36.8) | 40.4  (40.0-40.7) |
| **Male** | 15.4  (15.0-15.9) | 13.5  (11.5-15.6) | 21.6  (17.6-25.5) | 13.5  (10.9-16.2) | 5.9  (4.2-7.6) | 3.2  (2.4-4.0) | 5.0  (3.1-7.0) | 6.7  (4.8-8.7) | 13.1  (9.5-16.8) | 5.0  (3.3-6.6) | 12.8  (9.1-16.5) | 12.6  (10.2-15.0) | 40.4  (40.0-40.7) |

Supplementary Table 10 – Proportion of recorded SRP-related diagnoses during SRP Admissions across racial-ethnic groups, stratified by gender

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *% (95% CI)* | | | | | | | | | | | | | |
|  | White British | White Other | Mixed White-Black | Mixed Other | Indian | Pakistani | Bangladeshi | Asian Other | Black Caribbean | Black African | Black Other | Other | All |
| 1 | 74.2  (73.9-74.5) | 75.9  (74.4-77.5) | 73.8  (71.5-76.2) | 73.9  (71.8-75.9) | 87.4  (85.8-89.1) | 91.3  (90.4-92.2) | 86.6  (84.6-88.6) | 84.0  (82.1-85.8) | 78.5  (75.8-81.2) | 87.9  (86.3-89.5) | 80.4  (77.8-83.0) | 78.6  (76.7-80.4) | 75.9  (75.6-76.1) |
| Female | 70.4  (70.0-70.8) | 71.5  (69.4-73.6) | 70.8  (67.9-73.8) | 68.7  (66.0-71.4) | 83.9  (81.4-86.3) | 88.5  (87.1-89.8) | 80.9  (77.9-83.9) | 79.2  (76.5-81.9) | 75.0  (71.4-78.5) | 84.4  (82.0-86.7) | 78.9  (75.6-82.2) | 73.6  (71.0-76.1) | 71.8  (71.5-72.2) |
| Male | 81.9  (81.4-82.4) | 83.6  (81.4-85.8) | 80.1  (76.3-83.9) | 83.0  (80.1-85.9) | 91.7  (89.7-93.8) | 94.9  (93.8-95.9) | 94.2  (92.1-96.2) | 90.3  (88.0-92.6) | 84.5  (80.5-88.4) | 92.7  (90.7-94.6) | 83.1  (78.9-87.2) | 86.3  (83.9-88.8) | 83.5  (83.1-83.9) |
| 2 | 18.3  (18.0-18.5) | 17.5  (16.1-18.9) | 19.2  (17.1-21.3) | 18.9  (17.0-20.7) | 10.2  (8.7-11.7) | 6.7  (6.0-7.5) | 10.5  (8.7-12.2) | 12.0  (10.3-13.6) | 15.9  (13.5-18.3) | 9.6  (8.2-11.0) | 14.8  (12.5-17.1) | 15.7  (14.0-17.3) | 17.2  (17.0-17.5) |
| Female | 20.7  (20.4-21.1) | 20.4  (18.5-22.2) | 21.1  (18.4-23.8) | 21.9  (19.5-24.3) | 12.7  (10.5-14.9) | 8.8  (7.6-10.0) | 15.0  (12.3-17.7) | 14.8  (12.5-17.2) | 18.2  (15.0-21.4) | 12.0  (9.9-14.1) | 16.1  (13.1-19.1) | 19.3  (17.0-21.6) | 19.9  (19.6-20.2) |
| Male | 13.4  (12.9-13.8) | 12.5  (10.5-14.5) | 15.2  (11.7-18.6) | 13.5  (10.9-16.2) | 7.1  (5.2-9.0) | 4.1  (3.2-5.1) | 4.4  (2.6-6.2) | 8.1  (6.0-10.2) | 11.9  (8.4-15.4) | 6.3  (4.5-8.1) | 12.5  (8.8-16.1) | 10.0  (7.8-12.2) | 12.3  (11.9-12.6) |
| 3+ | 7.5  (7.3-7.7) | 6.6  (5.7-7.5) | 7.0  (5.6-8.3) | 7.2  (6.0-8.5) | 2.4  (1.6-3.2) | 2.0  (1.5-2.4) | 2.9  (2.0-3.9) | 4.1  (3.1-5.1) | 5.6  (4.1-7.2) | 2.5  (1.8-3.3) | 4.8  (3.4-6.2) | 5.8  (4.7-6.8) | 6.9  (6.7-7.1) |
| Female | 8.9  (8.6-9.1) | 8.1  (6.9-9.4) | 8.0  (6.2-9.8) | 9.4  (7.7-11.1) | 3.5  (2.2-4.7) | 2.7  (2.0-3.4) | 4.1  (2.6-5.6) | 5.9  (4.3-7.5) | 6.8  (4.7-8.9) | 3.6  (2.4-4.8) | 5.0  (3.2-6.8) | 7.1  (5.6-8.6) | 8.3  (8.1-8.5) |
| Male | 4.7  (4.5-5.0) | 3.9  (2.7-5.0) | 4.7  (2.7-6.8) | 3.5  (2.0-4.9) | 1.1  (0.3-1.9) | 1.0  (0.5-1.5) | 1.4  (0.4-2.4) | 1.6  (0.6-2.5) | 3.7  (1.6-5.7) | 1.0  (0.3-1.8) | 4.5  (2.2-6.8) | 3.7  (2.3-5.0) | 4.2  (4.0-4.4) |

Supplementary Figure 3 – Relative Risk Visual Summary (To be viewed alongside Supplementary Table 11)

* This figure provides a visual summary of the Relative Risk for outcomes (re-admission, duration, types, multiple diagnoses – described below) where cell shading indicates the magnitude of the point estimate. Point estimates and associated 95% CI are outlined in full in Supplementary Table 11. Reference group for each outcome (column): All racial-ethnic groups combined.
* Re-admission: Proportion of young people with repeat SRP admissions between April 2014 and March 2020 across racial-ethnic groups compared to the overall proportion for all groups combined.
* Duration: Proportion of SRP admissions with a duration ≥3 days across racial-ethnic groups compared to the overall proportion for all groups combined.
* Types: Proportion of SRP Admissions with recorded diagnoses related to (1) Psychosomatic (2) Internalising (3) Externalising (4) Self-harm symptoms compared to the overall proportion for all groups combined. These are not mutually exclusive.
* Multiple Diagnoses: Proportion of SRP Admissions with >1 recorded SRP-related diagnoses across racial-ethnic groups compared to the overall proportion for all groups combined.

*Note: Relative risk does not account for person-time.*

A close-up of a chart

Description automatically generatedReference group for each outcome (column): All racial-ethnic groups combined.

Supplementary Table 11 – Relative Risk Data Summary (To accompany Supplementary Figure 3)

|  |
| --- |
| *Relative Risk (95% CI)* |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **White British** | 1.00 (0.99-1.02) | 0.97 (0.94-0.99) | 0.98 (0.97-0.98) | 1.07 (1.04-1.09) | 1.10 (1.07-1.14) | 1.07 (1.06-1.09) | 1.07 (1.05-1.09) |
| **White Other** | 0.87 (0.82-0.92) | 1.07 (0.98-1.18) | 1.01 (0.99-1.03) | 1.10 (1.01-1.20) | 0.83 (0.72-0.96) | 0.94 (0.89-0.99) | 1.00 (0.94-1.07) |
| **Mixed White-Black** | 1.00 (0.93-1.08) | 1.22 (1.07-1.39) | 0.97 (0.94-1.00) | 0.99 (0.87-1.13) | 1.08 (0.90-1.29) | 1.12 (1.04-1.21) | 1.09 (0.99-1.19) |
| **Mixed Other** | 0.96 (0.90-1.03) | 1.19 (1.07-1.34) | 1.00 (0.97-1.02) | 1.09 (0.98-1.21) | 0.92 (0.78-1.09) | 1.05 (0.99-1.13) | 1.08 (1.00-1.17) |
| **Indian** | 0.95 (0.88-1.02) | 0.95 (0.83-1.09) | 1.15 (1.13-1.17) | 0.55 (0.47-0.65) | 0.27 (0.19-0.38) | 0.49 (0.44-0.55) | 0.52 (0.46-0.60) |
| **Pakistani** | 1.16 (1.11-1.20) | 1.07 (0.99-1.16) | 1.19 (1.18-1.21) | 0.40 (0.35-0.45) | 0.23 (0.19-0.30) | 0.32 (0.29-0.36) | 0.36 (0.33-0.40) |
| **Bangladeshi** | 0.93 (0.85-1.01) | 1.31 (1.15-1.49) | 1.12 (1.09-1.15) | 0.57 (0.47-0.69) | 0.31 (0.22-0.45) | 0.57 (0.50-0.64) | 0.56 (0.48-0.64) |
| **Asian Other** | 0.97 (0.90-1.04) | 1.28 (1.14-1.44) | 1.13 (1.11-1.15) | 0.70 (0.61-0.82) | 0.42 (0.31-0.55) | 0.58 (0.52-0.65) | 0.66 (0.59-0.75) |
| **Black Caribbean** | 0.99 (0.90-1.08) | 1.27 (1.09-1.48) | 1.04 (1.01-1.08) | 0.64 (0.52-0.78) | 0.99 (0.78-1.24) | 0.90 (0.81-1.00) | 0.89 (0.79-1.01) |
| **Black African** | 0.97 (0.91-1.04) | 1.14 (1.01-1.28) | 1.14 (1.12-1.16) | 0.48 (0.40-0.57) | 0.30 (0.22-0.41) | 0.49 (0.44-0.55) | 0.50 (0.44-0.57) |
| **Black Other** | 0.88 (0.80-0.98) | 1.35 (1.16-1.56) | 1.04 (1.00-1.07) | 0.70 (0.58-0.85) | 0.61 (0.45-0.82) | 0.87 (0.78-0.97) | 0.81 (0.71-0.93) |
| **Other** | 0.92 (0.86-0.98) | 1.19 (1.06-1.32) | 1.06 (1.03-1.08) | 0.90 (0.80-1.01) | 0.70 (0.58-0.85) | 0.82 (0.74-0.92) | 0.89 (0.81-0.97) |
|  | **Re-admission** | **Duration** | **Psycho-Somatic** | **Internalising** | **Externalising** | **Self-harm** | **Multiple Diagnoses** |

Reference group for each outcome (column): All racial-ethnic groups combined.

Supplementary Figure 4 – Relative Risk Visual Summary: Thought Disorders (To be viewed alongside Supplementary Table 12)

* Thought Disorders: Proportion of SRP Admissions with a recorded diagnoses related to Thought Disorder symptoms compared to the overall proportion for all groups combined. *Note: Only includes racial-ethnic groups with cell count ≥10.*

*Note: Relative risk does not account for person-time.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Supplementary Table 12 - Relative Risk Data Summary: Thought Disorders (To accompany Supplementary Figure 4)   |  |  | | --- | --- | | ***Relative Risk (95% CI)*** | | | **White British** | 0.85 (0.74-0.97) | | **White Other** | 1.85 (1.28-2.69) | | **Pakistani** | 0.72 (0.43-1.21) | | **Bangladeshi** | 1.59 (0.85-2.97) | | **Asian Other** | 1.98 (1.21-3.25) | | **Black Caribbean** | 3.13 (1.88-5.21) | | **Black African** | 2.50 (1.64-3.82) | | **Black Other** | 4.57 (3.00-6.97) | | **Other** | 2.06 (1.33-3.17) | |  | **Thought Disorders** |   Reference group for each outcome (column): All racial-ethnic groups combined. |