**Supplementary Table 1** Proportion of children in each trajectory who had an MBS-funded mental health attendance (excluding paediatrician contacts) from age 4-14 years, and the median (range) number of visits amongst those who had a contact.

|  |  |  |
| --- | --- | --- |
| Trajectory | Proportion with one or more MHS contactsa, % (N) | Median (range) number of contacts\*a |
| Low symptoms | 10.3 (333) | 4 (1 to 69) |
| High-decreasing symptoms | 26.4 (70) | 5 (1 to 23) |
| Moderate-increasing symptoms | 34.0 (235) | 7 (1 to 65) |
| High-increasing symptoms | 51.8 (87) | 7 (1 to 61) |

\*Among children with at least 1 contact

**Supplementary Table 2** Characteristics of the sample at wave 1

|  |  |  |  |
| --- | --- | --- | --- |
|  | Included in trajectories(n=4348) | Excluded from trajectories(n=635) | Total sample(N=4983) |
| Age, mean (SD), y | 4.2 (0.4) | 4.2 (0.4) | 4.2 (0.4) |
| Female, %  | 2127 (48.9) | 320 (50.4) | 2447 (49.1) |
| Total SDQ Scorea, mean (SD) | 9.2 (5.2) | 10.7 (5.7) | 9.4 (5.3) |
| Family SEPb, mean (SD) | 0.1 (1.0) | -0.5 (1.0) | 0.0 (1.0) |
| Neighbourhood SEPb, mean (SD) | 1012.4 (58.2) | 1002.6 (61.5) | 1011.1 (58.7) |
| LOTE spoken at home, % | 461 (10.6) | 163 (25.7) | 624 (12.5) |
| Single family home, % | 535 (12.3) | 162 (25.5) | 697 (14.0) |
| Parent mental healthd, mean (SD) | 4.3 (0.6) | 4.2 (0.8) | 4.3 (0.6) |
| Parent completed high school, % | 2636 (60.7) | 259 (41.0) | 2895 (58.2) |
| Parent age, mean (SD), y | 35.0 (5.3) | 33.2 (6.4) | 34.7 (5.5) |

a Higher scores represent more problems

b Higher scores represent less disadvantage

c Higher scores represent greater remoteness

d Higher scores represent poorer mental health

**Supplementary Table 3** Model fit indexes for latent class growth models of SDQ emotional and behavioural symptoms

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | L2 | BIC | AIC | Entropy | Vuong-Lo-Mendell-Rubin Likelihood Ratio Test |
| 1-class | -72560.66 |  145221.86 | 145145.33 | - | - | - |
| 2-class | -67675.92 | 135511.02 | 135389.85 | 0.90 | 1 vs 2 classes | <.0001 |
| 3-class | -66035.96 | 132289.73 | 132123.92 | 0.86 | 2 vs 3 classes | .0004 |
| 4-class | -65315.69 | 130907.83 | 130697.37 | 0.84 | 3 vs 4 classes | .0065 |
| 5-class | -65044.42 | 130423.93 | 130168.84 | 0.84 | 4 vs 5 classes | .6482 |

Note: L2= Likelihood-ratio statistic, BIC= Bayesian Information Criterion, AIC= Akaike Information Criterion

**Supplementary Table 4 Percentage (N) of children meeting criteria for lifetime minimally adequate treatment for each profession by trajectory**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Nature of Contact\*** | **Low symptoms****(n=3223)** | **High-decreasing symptoms****(n=265)** | **Moderate-increasing symptoms****(n=692)** | **High-increasing symptoms** **(n=168)** |
| **GPs** |  |  |  |  |
| **Met Criteria (%, N)**† | 0.1 (3) | 0.4 (1) | 0.6 (4) | 3.0 (5) |
|  4–7 visits + medication | 0.1 (2) | 0.4 (1) | 0.3 (2) | 2.4 (4) |
|  >8 visits + no medication | 0.03 (1) | 0.0 (0) | 0.0 (0) | 0.6 (1) |
|  >8 visits + medication | 0.0 (0) | 0.0 (0) | 0.3 (2) | 0.0 (0) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 9.2 (297) | 19.6 (52) | 29.1 (201) | 39.9 (67) |
|  4–7 visits + no medication | 0.1 (3) | 1.1 (3) | 1.3 (9) | 0.6 (1) |
| **No Contact (%, N)** | 90.6 (2920) | 78.9 (209) | 69.1 (478) | 56.6 (95) |
| **Psychologists** |  |  |  |  |
| **Met Criteria (%, N)**† | 2.0 (63) | 6.1 (16) | 10.8 (75) | 16.7 (28) |
|  4–7 visits + medication | 0.2 (7) | 0.8 (2) | 1.3 (9) | 7.1 (12) |
|  >8 visits + no medication | 1.6 (51) | 4.2 (11) | 7.1 (49) | 5.4 (9) |
|  >8 visits + medication | 0.2 (5) | 1.1 (3) | 2.5 (17) | 4.2 (7) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 2.2 (70) | 6.1 (16) | 8.3 (57) | 9.5 (16) |
|  4–7 visits + no medication | 2.4 (76) | 6.0 (16) | 6.8 (47) | 9.5 (16) |
| **No Contact (%, N)** | 93.5 (3014) | 81.9 (217) | 74.1 (513) | 64.3 (108) |
| **Psychiatrists** |  |  |  |  |
| **Met Criteria (%, N)**† | 0.2 (7) | 1.6 (4) | 1.3 (9) | 5.4 (9) |
|  4–7 visits + medication | 0.1 (2) | 0.8 (2) | 0.7 (5) | 4.2 (6) |
|  >8 visits + no medication | 0.1 (3) | 0.8 (2) | 0.4 (3) | 0.0 (0) |
|  >8 visits + medication | 0.1 (2) | 0.0 (0) | 0.1 (1) | 1.2 (3) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 0.5 (17) | 2.3 (6) | 2.9 (20) | 5.0 (7) |
|  4–7 visits + no medication | 0.1 (2) | 0.4 (1) | 0.7 (5) | 1.8 (3) |
| **No Contact (%, N)** | 99.2 (3197) | 95.9 (254) | 95.1 (658) | 88.7 (149) |
| **Paediatricians** |  |  |  |  |
| **Met Criteria (%, N)**† | 1.4 (45) | 6.0 (16) | 6.2 (43) | 25.6 (43) |
|  4–7 visits + medication | 0.5 (15) | 4.2 (11) | 4.8 (33) | 19.1 (32) |
|  >8 visits + no medication | 0.8 (27) | 0.8 (2) | 1.0 (7) | 1.8 (3) |
|  >8 visits + medication | 0.1 (3) | 1.1 (3) | 0.4 (3) | 4.8 (8) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 18.9 (610) | 26.4 (70) | 26.0 (180) | 34.5 (58) |
|  4–7 visits + no medication | 2.9 (93) | 7.6 (20) | 4.6 (31) | 6.6 (11) |
| **No Contact (%, N)** | 76.8 (2475) | 60.0 (159) | 63.3 (438) | 33.3 (56) |

†Within a 12 month period: 4–7 visits with a health professional plus medication, or ≥ 8 visits with or without medication. ‡Within a 12 month period: 1-3 visits or 4–7 visits without medication.

**Supplementary Table 5 Percentage (N) of children meeting criteria for minimally adequate treatment in between each wave by trajectory**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Nature of Contact\*** | **Low symptoms****(n=3223)** | **High-decreasing symptoms****(n=265)** | **Moderate-increasing symptoms****(n=692)** | **High-increasing symptoms** **(n=168)** |
| **4 to 6 years** |  |  |  |  |
| **Met Criteria (%, N)**† | 0.4 (14) | 3.0 (8) | 1.0 (7) | 10.1 (17) |
|  4–7 visits + medication | 0.0 (0) | 1.5 (4) | 0.4 (3) | 7.7 (13) |
|  >8 visits + no medication | 0.3 (11) | 1.5 (4) | 0.6 (4) | 1.2 (2) |
|  >8 visits + medication | 0.1 (3) | 0.0 (0) | 0.0 (0) | 1.2 (2) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 9.2 (297) | 16.2 (43) | 10.3 (71) | 28.6 (48) |
|  4–7 visits + no medication | 1.3 (43) | 3.8 (10) | 2.5 (17) | 2.4 (4) |
| **No Contact (%, N)** | 89.0 (2869) | 77.0 (204) | 86.3 (597) | 58.9 (99) |
| **6 to 8 years** |  |  |  |  |
| **Met Criteria (%, N)**† | 0.6 (18) | 2.6 (7) | 2.7 (19) | 10.1 (17) |
|  4–7 visits + medication | 0.1 (2) | 0.8 (2) | 1.3 (9) | 7.1 (12) |
|  >8 visits + no medication | 0.5 (15) | 1.1 (3) | 0.9 (6) | 0.6 (1) |
|  >8 visits + medication | 0.03 (1) | 0.8 (2) | 0.6 (4) | 2.4 (4) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 7.0 (225) | 13.6 (36) | 13.3 (92) | 26.2 (44) |
|  4–7 visits + no medication | 0.9 (28) | 4.2 (11) | 2.8 (19) | 6.6 (11) |
| **No Contact (%, N)** | 91.6 (2952) | 79.6 (211) | 81.2 (562) | 57.1 (96) |
| **8 to 10 years** |  |  |  |  |
| **Met Criteria (%, N)**† | 0.9 (28) | 6.0 (16) | 3.9 (27) | 13.7 (23) |
|  4–7 visits + medication | 0.1 (3) | 3.4 (9) | 1.7 (12) | 8.9 (15) |
|  >8 visits + no medication | 0.7 (23) | 1.1 (3) | 1.7 (12) | 3.0 (5) |
|  >8 visits + medication | 0.1 (2) | 1.5 (4) | 0.4 (3) | 1.8 (3) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 7.5 (240) | 15.1 (40) | 14.2 (98) | 32.7 (55) |
|  4–7 visits + no medication | 1.8 (57) | 7.6 (11) | 3.6 (25) | 4.2 (7) |
| **No Contact (%, N)** | 89.9 (2898) | 74.7 (198) | 78.3 (542) | 49.4 (83) |
| **10 to 12 years** |  |  |  |  |
| **Met Criteria (%, N)**† | 1.1 (35) | 5.7 (15) | 4.3 (30) | 14.3 (24) |
|  4–7 visits + medication | 0.3 (10) | 2.6 (7) | 1.7 (12) | 10.1 (17) |
|  >8 visits + no medication | 0.7 (23) | 2.6 (7) | 1.7 (12) | 3.0 (5) |
|  >8 visits + medication | 0.1 (2) | 0.4 (1) | 0.9 (6) | 1.2 (2) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 7.6 (245) | 10.6 (28) | 18.2 (129) | 31.6 (53) |
|  4–7 visits + no medication | 1.3 (41) | 6.4 (10) | 4.8 (33) | 16.1 (10) |
| **No Contact (%, N)** | 90.0 (2902) | 80.0 (212) | 72.3 (500) | 48.2 (81) |
| **12 to 14 years** |  |  |  |  |
| **Met Criteria (%, N)**† | 1.2 (40) | 1.9 (5) | 7.4 (51) | 11.9 (20) |
|  4–7 visits + medication | 0.3 (10) | 1.1 (3) | 2.5 (17) | 7.1 (12) |
|  >8 visits + no medication | 0.8 (25) | 0.4 (1) | 3.6 (25) | 1.2 (2) |
|  >8 visits + medication | 0.2 (5) | 0.4 (1) | 1.3 (9) | 3.6 (6) |
| **Did not meet criteria (%, N)**‡ |  |  |  |  |
|  1–3 visits | 7.2 (233) | 12.5 (33) | 16.6 (115) | 36.9 (62) |
|  4–7 visits + no medication | 2.1 (66) | 4.5 (12) | 5.4 (37) | 6.0 (10) |
| **No Contact (%, N)** | 89.5 (2884) | 81.1 (215) | 70.7 (489) | 45.2 (76) |

\*Reports the highest level of treatment for children attending more than one health professional; ≥ 8 visits + medication was deemed a higher level of treatment than ≥ 8 visits + no medication. Includes visits to psychologists, paediatricians, psychiatrists, general practitioners, occupational therapists, and social workers. †Within a 12 month period: 4–7 visits with a health professional plus medication, or ≥ 8 visits with or without medication. ‡Within a 12 month period: 1-3 visits or 4–7 visits without medication.