Table S1: Documentation completeness analysis: Number of patients with SDOH records

|  |  |
| --- | --- |
| **Range of questions** | **Number of patients with SDOH records in the given range** |
| **All concepts** | **Alcohol use** | **Substance use** | **Sexual** **activity** | **Sexual orientation** | **Housing status** | **Employment****status** |
| 0 | 0 | 0 | 1 | 14 | 1419 | 54 | 93 |
| 1-49 | 835 | 1406  | 1231 | 1466 | 85 | 1450 | 1411 |
| 50 - 99  | 326 | 96 | 236 | 24 | 0 | 0 | 0 |
| 100-149 | 165 | 2 | 35 | 0 | 0 | 0 | 0 |
| 150-199 | 99 | 0 | 1 | 0 | 0 | 0 | 0 |
| 200-249 | 51 | 0 | 0 | 0 | 0 | 0 | 0 |
| 250-299 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300-349 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 350-399 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 400-449 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 450-500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table S2: Documentation completeness analysis: Number of patients with valid SDOH records

|  |  |
| --- | --- |
| **Range of questions** | **Number of patients with valid SDOH records in the given range** |
| **All concepts** | **Alcohol use** | **Substance use** | **Sexual** **activity** | **Sexual orientation** | **Housing status** | **Employment****status** |
| 0 | 0 | 14 | 2 | 20 | 1439 | 103 | 116 |
| 1-49 | 986  | 1425 | 1394 | 1477 | 65 | 1401 | 1388 |
| 50-99 | 302 | 63 | 106 | 7 | 0 | 0 | 0 |
| 100-149 | 129 | 2 | 2 | 0 | 0 | 0 | 0 |
| 150-199 | 60 | 0 | 0 | 0 | 0 | 0 | 0 |
| 200-249 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| 250-299 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300-349 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 350-399 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 400-449 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 450-500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table S3: Density completeness analysis: number of patients with SDOH records in the given time span

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Time Span (Years)** | **Alcohol use** | **Substance use** | **Sexual activity** | **Sexual orientation** | **Housing status** | **Employment status** |
| 0 | 480 | 485 | 513 | 1466 | 548 | 598 |
| 0.1-0.99 | 66 | 60 | 49 | 4 | 46 | 42 |
| 1-1.99 | 119 | 117 | 112 | 17 | 115 | 113 |
| 2-2.99 | 86 | 85 | 88 | 7 | 86 | 83 |
| 3-3.99 | 81 | 83 | 82 | 5 | 78 | 84 |
| 4-4.99 | 55 | 54 | 56 | 4 | 48 | 44 |
| 5-5.99 | 62 | 64 | 64 | 1 | 62 | 63 |
| 6-6.99 | 69 | 70 | 70 | 0 | 67 | 65 |
| 7-7.99 | 47 | 48 | 45 | 0 | 43 | 43 |
| 8-8.99 | 64 | 61 | 64 | 0 | 61 | 55 |
| 9-9.99 | 54 | 56 | 52 | 0 | 50 | 53 |
| 10-10.99 | 57 | 57 | 59 | 0 | 56 | 47 |
| 11-11.99 | 53 | 51 | 50 | 0 | 47 | 40 |
| 12-12.99 | 62 | 60 | 60 | 0 | 60 | 45 |
| 13-13.99 | 64 | 64 | 63 | 0 | 60 | 52 |
| 14-14.99 | 49 | 52 | 50 | 0 | 50 | 41 |
| 15-15.99 | 23 | 25 | 15 | 0 | 15 | 25 |
| 16-16.99 | 10 | 9 | 11 | 0 | 11 | 8 |
| 17-17.99 | 3 | 3 | 1 | 0 | 1 | 3 |

Table S4: Density completeness analysis: number of patients with valid SDOH records in the given time span

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Time\_span (Years)** | **alcohol\_use** | **substance\_use** | **sexual\_activity** | **sexual\_orientation** | **housing\_status** | **employment\_status** |
| 0 | 513 | 494 | 524 | 1477 | 605 | 626 |
| 0.1-0.99 | 64 | 59 | 47 | 4 | 37 | 42 |
| 1-1.99 | 116 | 116 | 114 | 14 | 114 | 112 |
| 2-2.99 | 84 | 86 | 88 | 4 | 79 | 77 |
| 3-3.99 | 78 | 78 | 78 | 5 | 80 | 83 |
| 4-4.99 | 55 | 55 | 57 | 0 | 49 | 44 |
| 5-5.99 | 59 | 62 | 65 | 0 | 57 | 61 |
| 6-6.99 | 63 | 71 | 69 | 0 | 60 | 61 |
| 7-7.99 | 48 | 49 | 48 | 0 | 44 | 43 |
| 8-8.99 | 61 | 60 | 58 | 0 | 52 | 55 |
| 9-9.99 | 50 | 55 | 52 | 0 | 48 | 49 |
| 10-10.99 | 56 | 56 | 59 | 0 | 53 | 46 |
| 11-11.99 | 55 | 52 | 49 | 0 | 43 | 38 |
| 12-12.99 | 61 | 62 | 59 | 0 | 59 | 44 |
| 13-13.99 | 62 | 62 | 62 | 0 | 57 | 50 |
| 14-14.99 | 45 | 50 | 50 | 0 | 46 | 38 |
| 15-15.99 | 21 | 26 | 14 | 0 | 12 | 24 |
| 16-16.99 | 10 | 8 | 10 | 0 | 8 | 8 |
| 17-17.99 | 3 | 3 | 1 | 0 | 1 | 3 |

Table S5. Number of patients for each SDOH domain in terms of gender

|  |  |  |
| --- | --- | --- |
|   | Male (Total #=713/713, 23.82%)  | Female (Total #=791/791, 26.42%)  |
| Alcohol use  | 708, 99.29%  | 782, 98.86%  |
| Substance use  | 712, 99.85%  | 790, 99.87%  |
| Sexual orientation  | 0, 0%  | 65, 8.21%  |
| Sexual activity  | 699, 98.03%  | 785, 99.24%  |
| Housing status  | 657, 92.14%  | 744, 94.05%  |
| Employment status  | 656, 92%  | 732, 92.54%  |

Table S6: Number of patients for each SDOH domain in terms of age

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|   | 18-34(#385, 12.96%)  | 35-44(#377,12.4% )  | 45-54(#276, 9.2%)  | 55-64(#193, 6.38%)  | 65-74 (#157, 5.3%)  | 75-84(#77, 2.5 %)  | >85 (#36, 1.2%)  |
| Alcohol use  | 381, 99.21%  | 374, 99.2%  | 274, 99.27%  | 192, 6.34%  | 153, 97.45%  | 77, 100%  | 36, 100%  |
| Substance use  | 384, 99.74%  | 377, 100%  | 276, 100%  | 192, 6.34%  | 157, 100%  | 77, 100%  | 36, 100%  |
| Sexual orientation  | 6, 1.55%  | 29, 7.69%  | 16, 5.79%  | 7, 0.2%%  | 5, 3.18%  | 1, 1.29%  | 1,2.7%  |
| Sexual activity  | 375, 97.4%  | 373, 98.93%  | 273, 98.91%  | 192, 6.34%  | 156, 99.36%  | 76, 98.7%  | 36, 100%  |
| Housing status  | 321, 83.37%  | 364,96.55%  | 263, 95.28%  | 187, 6.18%  | 153, 97.45%  | 76, 98.7%  | 35, 97.22%  |
| Employment status  | 289, 75.06%  | 372, 98.67%  | 269, 9.02%  | 192, 97.46%  | 156, 99.36%  | 75, 97.4%  | 35, 97.22%  |

Table S7. Number of patients for each SDOH domain in terms of education level

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   | 4-year college graduate (#242, 8.08% )  | Some College or 2 year degree (#464, 15.5%)  | Post graduate studies (#245, 8.18% )  | Some high school, but did not graduate (#222, 7.41%)  | 8th grade or less (#120, 4%)  | High School graduate or GED (#435, 14.53%)  |
| Alcohol use  | 242, 100%  | 460, 15.3 %  | 243, 99.18%  | 222, 100%  | 118, 98.33%  | 434, 99.77%  |
| Substance use  | 242, 100%  | 464, 100%  | 245, 100%  | 222, 100%  | 120, 100%  | 435, 100%  |
| Sexual orientation  | 21, 8.67%  | 28, 6.03%  | 11, 4.48%  | 7, 3.15%  | 2, 1.66%  | 14, 3.21%  |
| Sexual activity  | 242, 100%  | 463, 99.78%  | 244, 99.59%  | 221, 99.54%  | 119, 99.16%  | 431, 99.08%  |
| Housing status  | 240, 99.17%  | 452, 97.41%  | 240, 97.95%  | 212, 95.49%  | 116, 96.66%  | 417, 95.86%  |
| Employment status  | 241, 99.58%  | 456, 98.27%  | 242, 98.77%  | 216, 97.29%  | 120, 100%  | 424, 97.47%  |

Table S8. Number of patients for each SDOH domain in terms of living area

|  |  |  |  |
| --- | --- | --- | --- |
|   |  Urban (#283, 9.45%)  |  Sub-urban (#1100, 36.75%)  |  Rural (#11, 0.36%)  |
| Alcohol use  | 280, 98.93%  | 1090, 99.09%  | 11, 100%  |
| Substance use  | 283, 100%  | 1098, 99.81%  | 11, 100%  |
| Sexual orientation  | 6, 2.12%  | 56, 5.09%  | 0, 0%  |
| Sexual activity  | 277, 97.87%  | 1090, 99.09%  | 11, 100%  |
| Housing status  | 248, 87.63%  | 1041,94.63%  | 9, 81.81%  |
| Employment status  | 244,86.21%  | 1028,93.45%  | 10, 90.9%  |