

| | PHQ-9 ⁺ | | | CES-D [#] | | | SHI data ^s | | |
|--|------------------------|----------------------|----------|------------------------|------------------------|----------|----------------------------|--------------------------------|----------|
| | No depression symptoms | depression symptoms | p-value | No depression symptoms | depression symptoms | p-value | No depression symptoms | depression diagnosis | p-value |
| Sample size, n | 1396 | 183 | | 1321 | 258 | | 1225 | 354 | |
| Age (mean ± SD), years | 67.4 ± 9.7 | 64.0 ± 11.0 | 0.001** | 67.6 ± 9.7 | 64.1 ± 10.4 | 0.001** | 67.5 ± 9.7 | 65.1 ± 10.5 | 0.001** |
| Median | 70.0 | 64.0 | | 70.0 | 64.0 | | 70.0 | 66.0 | |
| Sex, female n (%) | 519 (37.2 %) | 78 (42.6 %) | 0.18 | 482 (36.5 %) | 115 (44.6 %) | 0.005** | 421 (34.4 %) | 176 (49.7 %) | 0.001** |
| Origin, Germany n (%) | 1252 (89.8 %) | 145 (79.2 %) | 0.001** | 1189 (90.1 %) | 208 (80.6 %) | 0.001** | 1088 (89.0 %) | 309 (87.3 %) | 0.44 |
| Family status, in a relationship, n (%) | 1171 (85.0 %) | 135 (75.8 %) | 0.001** | 1117 (85.7 %) | 189 (74.7 %) | 0.001** | 1042 (86.3 %) | 264 (75.9 %) | 0.001** |
| Marital status, n (%) | | | | | | | | | |
| Married | 1069 (76.9 %) | 119 (65.0 %) | 0.001** | 1023 (77.7 %) | 165 (64.2 %) | 0.001** | 946 (77.5 %) | 242 (68.6 %) | 0.001** |
| Divorce/separated | 85 (6.1 %) | 27 (14.8 %) | | 78 (5.9 %) | 34 (13.2 %) | | 74 (6.1 %) | 38 (10.8 %) | |
| Widowed | 168 (12.1 %) | 27 (14.8 %) | | 151 (11.5 %) | 44 (17.1 %) | | 160 (11.9 %) | 35 (15.2 %) | |
| Employment status, employed n (%) | 353 (25.8 %) | 49 (27.4 %) | 0.72 | 325 (25.1 %) | 77 (30.7 %) | 0.08 | 142 (11.6 %) | 53 (15.0 %) | 0.54 |
| Retirement status, retired n (%) | 979 (70.9 %) | 110 (60.1 %) | 0.001** | 940 (71.9 %) | 149 (58.2 %) | 0.001** | 869 (71.8 %) | 220 (62.3 %) | 0.001** |
| Level of education, ISCED ≥14 years, n (%) | 303 (21.9 %) | 34 (18.6 %) | 0.005** | 289 (22.0 %) | 48 (18.7 %) | 0.001** | 271 (22.3 %) | 66 (18.7%) | 0.001** |
| Diabetes duration (mean ± SD), years | 10.9 (8.3) | 11.8 (8.5) | 0.64 | 10.9 (8.3) | 11.7 (8.4) | 0.5 | 11.0 ± 8.3 | 11.0 (8.1) | 0.36 |
| median | 9.0 | 10.0 | | 9.0 | 10.0 | | 9.0 | 9.0 | |
| Type of Diabetes, n (%) | | | | | | | | | |
| Type 1 Diabetes | 110 (7.9 %) | 18 (10.0 %) | 0.65 | 101 (7.7 %) | 27 (10.6 %) | 0.36 | 99 (8.3 %) | 29 (8.3 %) | 0.10 |
| Type 2 Diabetes | 1192 (86.0 %) | 153 (85.0 %) | | 1132 (86.3 %) | 213 (83.9 %) | | 1053 (86.7 %) | 292 (83.2 %) | |
| Type unknown/other | 84 (6.1 %) | 9 (5.0 %) | | 79(6.0 %) | 14 (5.5 %) | | 63 (5.2 %) | 30 (8.5 %) | |
| Diabetes severity aDCSI (mean ± SD) | 3.0 (2.2) | 3.3 (2.3) | 0.39 | 3.0 (2.2) | 3.1 (2.2) | 0.005** | 2.9 (2.3) | 3.4 (2.3) | 0.05 |
| median | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Number of comorbidities (mean ± SD) | 3.6 (2.1) | 4.2 (2.1) | 0.001** | 3.6 (2.1) | 4.1 (2.2) | 0.001** | 3.4 (1.9)1384 | 4.7 (2.5) | <0.001** |
| median | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | |
| Treatment, n (%) | | | | | | | | | |
| Taking insulin | 416 (29.8 %) | 70 (38.3 %) | 0.001** | 393 (29.8 %) | 93 (36.1 %) | 0.05 | 374 (30.5 %) | 112 (31.6 %) | 0.74 |
| Taking oral antihyperglycemic drugs | 950 (68.1 %) | 121 (66.1 %) | 0.66 | 908 (68.7 %) | 163 (63.2 %) | 0.09 | 838 (68.4 %) | 233 (65.8 %) | 0.39 |
| Taking antidepressants | 184 (13.2 %) | 92 (50.3 %) | <0.001** | 165 (12.5 %) | 111 (43.0 %) | <0.001** | 86 (7.0 %) | 190 (53.7 %) | <0.001** |
| Health care costs for 2 years (mean ± SD), € | 9619.5 (12648.0) | 13963.6 (16281.2) | 0.49 | 9712.1 (12974.2) | 12226.5.1 (14073.2) | 0.49 | 8988.3 (12199.6) 5495.7 | 14049.5 (15540.8) 8187.7 | 0.49 |
| median | 5828.1 | 8627.5 | | 5794.8 | 7773.7 | | | | |
| Health related Quality of Life (mean ± SD) | | | | | | | | | |
| median | | | | | | | | | |
| PCS12 | 43.0 (10.4) 44.7 | 31.1 (8.8) 29.0 | <0.001** | 43.4 (10.3) 45.7 | 32.8 (9.3) 31.8 | 0.005** | 43.0 (10.6) 44.8 | 37.3 (10.8) 36.4 | <0.001** |
| MCS12 | 52.1 (8.9) 55.1 | 34.2 (8.7) 32.7 | <0.001** | 52.9 (8.4) 55.6 | 35.8 (8.6) 34.9 | 0.001** | 52.0 (9.0) 55.2 | 43.4 (12.3) 42.3 | <0.001** |
| PAID | 16.8 (15.0) 13.0 | 40.6 (22.5) 41.0 | 0.001** | 15.2 (13.4) 11.0 | 41.5 (20.1) 43.0 | <0.001** | 17.4 (16.0) 13 | 26.3 (21.0) 23 | 0.001** |
| Previous depression, n (%) | | | | | | | | | |
| Yes | 144 (10.3 %) | 81 (44.3 %) | <0.001** | 125 (9.5 %) | 100 (38.7 %) | 0.001** | 73 (6.0 %) | 152 (43.1 %) | <0.001** |
| No | 993 (71.3 %) | 48 (26.2 %) | | 969 (73.6 %) | 72 (27.9 %) | | 921 (75.4 %) | 120 (34.0 %) | |
| unknown | 255 (18.3 %) | 54 (29.5 %) | | 223 (16.9 %) | 86 (33.3 %) | | 228 (18.7 %) | 81 (23.0 %) | |

+ PHQ-9, Patient Health Questionnaire-9

CES-D, Center for Epidemiological Studies Depression Scale

\$ SHI data, statutory health insurance data

** - the difference between groups were statistically significant.

Appendix table 2: Description of persons identified by the different methods.