

Supplementary table 1. Subgroup analysis by gender

aOR (95% CI)	Depressive symptom severity*				<i>p</i> for trend
	none 0-4	mild 5-9	moderate 10-14	severe [†] 15-	
Male					
Prevalence					
Proportion (%)	14.7	21.2	21.6	13.5	
model1 ^a	1	1.67 (1.28-2.19)	1.75 (1.12-2.72)	0.91 (0.51-1.62)	0.008
model2 ^b	1	1.55 (1.17-2.07)	1.61 (1.04-2.50)	0.86 (0.47-1.54)	0.044
model3 ^c	1	1.37 (1.00-1.88)	1.25 (0.77-2.01)	0.67 (0.38-1.20)	0.508
Awareness [‡]					
Proportion (%)	74.8	73.4	66.1	89.6	
model1 ^a	1	0.94 (0.56-1.55)	0.67 (0.32-1.40)	3.94 (1.35-11.50)	0.598
model2 ^b	1	0.98 (0.60-1.61)	0.68 (0.31-1.49)	3.81 (1.21-12.01)	0.526
model3 ^c	1	1.01 (0.62-1.65)	0.59 (0.24-1.43)	3.34 (0.75-14.94)	0.728
Treatment [‡]					
Proportion (%)	82.9	72.4	71.2	61.3	
model1 ^a	1	0.55 (0.31-0.97)	0.54 (0.23-1.29)	0.43 (0.20-0.94)	0.006
model2 ^b	1	0.52 (0.31-0.88)	0.49 (0.21-1.14)	0.40 (0.19-0.84)	0.001
model3 ^c	1	0.51 (0.30-0.89)	0.35 (0.14-0.89)	0.35 (0.16-0.73)	0.000
Controlled [§] (HbA1c <7%)					
Proportion (%)	59.1	51.6	52.4	50.5	
model1 ^a	1	0.74 (0.52-1.06)	0.78 (0.43-1.38)	0.81 (0.43-1.52)	0.136
model2 ^b	1	0.77 (0.53-1.12)	0.82 (0.45-1.47)	0.86 (0.44-1.67)	0.223
model3 ^c	1	0.74 (0.49-1.10)	0.72 (0.39-1.33)	0.76 (0.40-1.44)	0.105
Female					
Prevalence					
Proportion (%)	12.4	17.6	22.6	29.2	
model1 ^a	1	1.51 (1.27-1.80)	2.25 (1.62-3.13)	3.33 (2.46-4.51)	0.000
model2 ^b	1	1.34 (1.10-1.62)	1.80 (1.28-2.55)	2.38 (1.74-3.26)	0.000
model3 ^c	1	1.18 (0.96-1.45)	1.50 (1.05-2.15)	1.81 (1.31-2.51)	0.001
Awareness [‡]					
Proportion (%)	66.7	82.1	78.2	83.9	
model1 ^a	1	2.30 (1.56-3.38)	1.83 (0.92-3.62)	2.70 (1.43-5.12)	0.001
model2 ^b	1	2.32 (1.58-3.41)	1.91 (0.99-3.68)	2.87 (1.51-5.44)	0.000
model3 ^c	1	2.15 (1.45-3.20)	1.68 (0.86-3.29)	2.38 (1.25-4.55)	0.002
Treatment [‡]					
Proportion (%)	74.5	79.6	77.6	76.3	
model1 ^a	1	1.32 (0.77-2.28)	1.26 (0.76-2.09)	1.17 (0.57-2.41)	0.674
model2 ^b	1	1.27 (0.75-2.15)	1.18 (0.70-1.98)	1.07 (0.53-2.15)	0.880
model3 ^c	1	1.18 (0.68-2.02)	1.12 (0.68-1.86)	0.88 (0.38-2.02)	0.755
Controlled [§] (HbA1c <7%)					
Proportion (%)	65.7	63.3	63.5	46.6	
model1 ^a	1	0.90 (0.65-1.24)	0.90 (0.53-1.53)	0.46 (0.26-0.82)	0.013
model2 ^b	1	0.99 (0.72-1.36)	1.02 (0.60-1.73)	0.49 (0.28-0.86)	0.044
model3 ^c	1	0.97 (0.72-1.32)	1.05 (0.62-1.76)	0.49 (0.28-0.87)	0.047

Statistically significant results were written in bold ($p < 0.05$)

Data are weighted to non-institutionalized US population

aOR: adjusted odds ratio, CI: confidence interval

Multivariate logistic regression analysis was used

^a adjusted for age, sex, race/ethnicity

^b adjusted for age, sex, race/ethnicity, body mass index, smoking, alcohol consumption, physical activity

^c adjusted for age, sex, race/ethnicity, body mass index, smoking, alcohol consumption, physical activity, marital status, education, household income, health insurance, healthcare utilization

* Depressive symptom severity was based on PHQ-9 score

† moderately severe (15-19) and severe (20 or higher) group were combined

‡ among participants with diabetes and available treatment data

§ among participants with diabetes and available HbA1c data

Supplementary table 2. Subgroup analysis by ethnicity

aOR (95% CI)	Depressive symptom severity*				<i>p</i> for trend
	none 0-4	mild 5-9	moderate 10-14	severe [†] 15-	
White					
Prevalence					
Proportion (%)	12.4	17.7	21.9	19.7	
model1 ^a	1	1.62 (1.32-1.99)	2.44 (1.62-3.69)	2.12 (1.38-3.25)	<0.001
model2 ^b	1	1.42 (1.13-1.79)	1.91 (1.27-2.87)	1.71 (1.15-2.54)	<0.001
model3 ^c	1	1.25 (0.96-1.63)	1.53 (0.99-2.36)	1.31 (0.89-1.95)	0.029
Awareness [‡]					
Proportion (%)	72.2	77.2	72.9	90.5	
model1 ^a	1	1.34 (0.82-2.17)	1.12 (0.53-2.39)	4.15 (1.08-15.91)	0.056
model2 ^b	1	1.36 (0.87-2.15)	1.17 (0.54-2.51)	4.63 (1.21-17.78)	0.031
model3 ^c	1	1.38 (0.86-2.20)	1.09 (0.48-2.46)	4.39 (1.06-18.14)	0.067
Treatment [‡]					
Proportion (%)	80.5	77.3	77.7	75.9	
model1 ^a	1	0.86 (0.51-1.47)	0.96 (0.47-1.96)	0.91 (0.34-2.40)	0.574
model2 ^b	1	0.75 (0.45-1.23)	0.74 (0.35-1.57)	0.82 (0.31-2.19)	0.306
model3 ^c	1	0.71 (0.41-1.22)	0.64 (0.31-1.34)	0.73 (0.25-2.09)	0.194
Controlled [§] (HbA1c <7%)					
Proportion (%)	66.9	59.3	61.8	42.8	
model1 ^a	1	0.69 (0.50-0.95)	0.73 (0.41-1.31)	0.31 (0.14-0.71)	0.002
model2 ^b	1	0.74 (0.52-1.06)	0.84 (0.46-1.52)	0.33 (0.15-0.70)	0.007
model3 ^c	1	0.70 (0.49-1.01)	0.82 (0.45-1.50)	0.31 (0.14-0.69)	0.007
Other – Ethnic minorities					
Prevalence					
Proportion (%)	16.2	21.6	23.1	30.0	
model1 ^a	1	1.49 (1.24-1.79)	1.49 (1.14-1.95)	2.27 (1.78-2.91)	<0.001
model2 ^b	1	1.40 (1.17-1.69)	1.38 (1.05-1.80)	1.82 (1.45-2.29)	<0.001
model3 ^c	1	1.26 (1.04-1.52)	1.14 (0.87-1.51)	1.42 (1.14-1.77)	0.006
Awareness [‡]					
Proportion (%)	69.9	79.7	77	79.2	
model1 ^a	1	1.72 (1.17-2.51)	1.45 (0.92-2.31)	1.73 (1.00-2.99)	0.005
model2 ^b	1	1.75 (1.18-2.61)	1.53 (0.94-2.48)	1.82 (1.06-3.13)	0.004
model3 ^c	1	1.57 (1.07-2.31)	1.24 (0.71-2.17)	1.34 (0.75-2.40)	0.070
Treatment [‡]					
Proportion (%)	77.3	75.2	72.5	69.6	
model1 ^a	1	0.90 (0.56-1.45)	0.79 (0.49-1.28)	0.68 (0.40-1.16)	0.076
model2 ^b	1	0.93 (0.60-1.46)	0.82 (0.50-1.36)	0.71 (0.40-1.24)	0.139
model3 ^c	1	0.90 (0.54-1.49)	0.78 (0.46-1.33)	0.57 (0.32-1.03)	0.0499
Controlled [§] (HbA1c <7%)					
Proportion (%)	54	56.1	56.4	53.0	
model1 ^a	1	1.05 (0.74-1.48)	1.04 (0.67-1.63)	0.90 (0.57-1.41)	0.840
model2 ^b	1	1.08 (0.76-1.53)	1.14 (0.73-1.76)	1.00 (0.63-1.60)	0.764
model3 ^c	1	1.07 (0.77-1.50)	1.13 (0.73-1.75)	0.97 (0.61-1.55)	0.840

Statistically significant results were written in bold ($p < 0.05$)

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Multivariate logistic regression analysis was used

^a adjusted for age, sex, race/ethnicity

^b adjusted for age, sex, race/ethnicity, body mass index, smoking, alcohol consumption, physical activity

^c adjusted for age, sex, race/ethnicity, body mass index, smoking, alcohol consumption, physical activity, marital status, education, household income, health insurance, healthcare utilization

* Depressive symptom severity was based on PHQ-9 score

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