

Appendix Table 2. Odds Ratio (95% CI) for Sub-Optimal Diabetes ABC Management by Food Insecurity and Diet Quality

	Total % (SE)	Food Insecurity			Diet Quality (HEI-2015) Quartiles			
		Food secure	Marginal	Food insecure	Q4 (High)	Q3	Q2	Q1 (Low)
HbA1c ≥7.0%	49.8 (1.8)							
Unadjusted		1.00	1.20 (0.85, 1.68)	1.33 (1.01, 1.75)	1.00	1.13 (0.81, 1.57)	1.36 (0.94, 1.97)	1.56 (1.04, 2.32)
Model 1		1.00	1.24 (0.85, 1.80)	1.36 (1.01, 1.83)	1.00	1.10 (0.78, 1.55)	1.36 (0.95, 1.95)	1.47 (0.96, 2.26)
Model 2		1.00	1.23 (0.85, 1.80)	1.44 (1.06, 1.96)	1.00	1.09 (0.77, 1.56)	1.39 (0.97, 1.98)	1.49 (0.95, 2.33)
Model 3		1.00	1.24 (0.85, 1.80)	1.44 (1.06, 1.97)	1.00	1.11 (0.78, 1.58)	1.42 (0.99, 2.03)	1.53 (0.97, 2.41)
Model 4		1.00	1.16 (0.78, 1.73)	1.47 (1.01, 2.16)	1.00	1.10 (0.76, 1.59)	1.27 (0.86, 1.88)	1.63 (1.10, 2.42)
Model 5		1.00	1.21 (0.78, 1.87)	1.62 (1.07, 2.47)	1.00	1.06 (0.72, 1.55)	1.29 (0.87, 1.92)	1.61 (1.06, 2.46)
HbA1c ≥8.0%	26.1 (1.3)							
Unadjusted		1.00	1.44 (0.92, 2.23)	1.76 (1.30, 2.37)	1.00	1.38 (0.93, 2.04)	1.36 (0.90, 2.06)	1.56 (1.06, 2.31)
Model 1		1.00	1.30 (0.82, 2.07)	1.52 (1.12, 2.05)	1.00	1.31 (0.89, 1.93)	1.27 (0.84, 1.93)	1.39 (0.92, 2.11)
Model 2		1.00	1.26 (0.77, 2.06)	1.48 (1.04, 2.10)	1.00	1.30 (0.88, 1.91)	1.24 (0.82, 1.89)	1.37 (0.90, 2.07)
Model 3		1.00	1.26 (0.77, 2.05)	1.45 (1.01, 2.09)	1.00	1.33 (0.91, 1.95)	1.29 (0.85, 1.95)	1.41 (0.93, 2.12)
Model 4		1.00	1.33 (0.81, 2.17)	1.54 (1.07, 2.23)	1.00	1.46 (0.89, 2.39)	1.31 (0.80, 2.15)	1.67 (1.09, 2.57)
Model 5		1.00	1.31 (0.81, 2.14)	1.71 (1.14, 2.56)	1.00	1.42 (0.85, 2.36)	1.35 (0.80, 2.26)	1.60 (1.01, 2.53)
HbA1c ≥9.0%	14.4 (1.0)							
Unadjusted		1.00	1.27 (0.77, 2.11)	2.03 (1.41, 2.91)	1.00	1.24 (0.76, 2.03)	1.07 (0.64, 1.80)	1.64 (0.93, 2.91)
Model 1		1.00	1.05 (0.61, 1.81)	1.61 (1.11, 2.34)	1.00	1.16 (0.70, 1.92)	0.91 (0.53, 1.55)	1.44 (0.78, 2.65)
Model 2		1.00	0.96 (0.55, 1.67)	1.40 (0.91, 2.17)	1.00	1.15 (0.70, 1.91)	0.89 (0.51, 1.52)	1.42 (0.77, 2.62)
Model 3		1.00	0.93 (0.54, 1.62)	1.34 (0.86, 2.11)	1.00	1.20 (0.73, 1.96)	0.93 (0.54, 1.63)	1.47 (0.81, 2.68)
Model 4		1.00	1.02 (0.56, 1.85)	1.46 (0.97, 2.21)	1.00	1.33 (0.74, 2.41)	0.97 (0.53, 1.78)	1.76 (0.97, 3.19)
Model 5		1.00	1.16 (0.61, 2.21)	1.59 (1.04, 2.43)	1.00	1.37 (0.76, 2.47)	0.98 (0.52, 1.84)	1.66 (0.91, 3.00)
Blood Pressure ≥140/90 mmHg	28.5 (1.5)							
Unadjusted		1.00	1.12 (0.76, 1.65)	1.08 (0.79, 1.50)	1.00	0.81 (0.56, 1.16)	1.00 (0.69, 1.46)	0.94 (0.68, 1.29)
Model 1		1.00	1.14 (0.81, 1.60)	1.17 (0.84, 1.64)	1.00	0.81 (0.54, 1.22)	1.08 (0.71, 1.64)	1.00 (0.68, 1.48)
Model 2		1.00	1.10 (0.79, 1.55)	1.10 (0.74, 1.63)	1.00	0.80 (0.53, 1.19)	1.03 (0.68, 1.57)	0.99 (0.66, 1.48)
Model 3		1.00	1.11 (0.79, 1.55)	1.11 (0.74, 1.64)	1.00	0.79 (0.53, 1.19)	1.03 (0.68, 1.55)	0.98 (0.66, 1.46)
Model 4		1.00	1.10 (0.80, 1.63)	1.05 (0.69, 1.60)	1.00	0.85 (0.55, 1.31)	1.05 (0.69, 1.60)	1.08 (0.68, 1.72)
Model 5		1.00	1.07 (0.75, 1.54)	0.99 (0.64, 1.53)	1.00	0.81 (0.52, 1.24)	1.01 (0.66, 1.54)	1.07 (0.67, 1.69)
Blood Pressure ≥130/80 mmHg	52.0 (1.5)							
Unadjusted		1.00	1.06 (0.67, 1.67)	1.01 (0.73, 1.40)	1.00	0.99 (0.69, 1.42)	1.06 (0.75, 1.50)	0.96 (0.69, 1.34)
Model 1		1.00	1.10 (0.71, 1.71)	1.08 (0.77, 1.52)	1.00	1.02 (0.70, 1.49)	1.11 (0.76, 1.63)	0.96 (0.66, 1.40)
Model 2		1.00	1.02 (0.66, 1.60)	0.96 (0.66, 1.40)	1.00	1.00 (0.69, 1.46)	1.10 (0.74, 1.63)	0.94 (0.63, 1.39)

Model 3		1.00	1.01 (0.66, 1.56)	0.96 (0.66, 1.38)	1.00	1.01 (0.69, 1.48)	1.13 (0.77, 1.67)	0.95 (0.64, 1.40)
Model 4		1.00	1.01 (0.65, 1.58)	0.91 (0.61, 1.35)	1.00	1.03 (0.67, 1.58)	1.12 (0.73, 1.74)	0.95 (0.62, 1.45)
Model 5		1.00	0.96 (0.59, 1.54)	0.88 (0.58, 1.33)	1.00	1.00 (0.65, 1.55)	1.12 (0.72, 1.74)	0.93 (0.60, 1.44)
LDL-C ≥100 mg/dL	41.8 (2.4)							
Unadjusted		1.00	1.62 (0.98, 2.68)	1.50 (1.05, 2.15)	1.00	1.37 (0.79, 2.36)	1.50 (0.91, 2.50)	1.40 (0.78, 2.52)
Model 1		1.00	1.36 (0.78, 2.39)	1.19 (0.76, 1.85)	1.00	1.15 (0.64, 2.06)	1.20 (0.71, 2.02)	1.12 (0.61, 2.06)
Model 2		1.00	1.21 (0.66, 2.20)	1.02 (0.65, 1.60)	1.00	1.19 (0.66, 2.15)	1.26 (0.76, 2.08)	1.25 (0.74, 2.04)
Model 3		1.00	1.18 (0.62, 2.21)	1.08 (0.69, 1.69)	1.00	1.16 (0.65, 2.06)	1.25 (0.74, 2.12)	1.10 (0.59, 2.02)
Model 4		1.00	0.98 (0.49, 1.99)	1.07 (0.63, 1.80)	1.00	1.17 (0.65, 2.10)	1.23 (0.72, 2.09)	1.05 (0.56, 1.97)
Model 5		1.00	0.95 (0.47, 1.95)	1.01 (0.60, 1.71)	1.00	1.06 (0.55, 2.02)	1.20 (0.70, 2.05)	0.97 (0.54, 1.75)
LDL-C ≥ 130mg/dL	18.0 (1.7)							
Unadjusted		1.00	1.60 (0.76, 3.37)	1.31 (0.77, 2.24)	1.00	1.07 (0.60, 1.91)	1.46 (0.75, 2.85)	0.82 (0.36, 1.88)
Model 1		1.00	1.34 (0.63, 2.83)	1.06 (0.60, 1.85)	1.00	0.85 (0.45, 1.61)	1.09 (0.55, 2.18)	0.64 (0.29, 1.44)
Model 2		1.00	1.17 (0.56, 2.47)	0.94 (0.46, 1.92)	1.00	0.88 (0.48, 1.63)	1.18 (0.59, 2.36)	0.65 (0.30, 1.37)
Model 3		1.00	1.16 (0.54, 2.48)	0.99 (0.50, 1.97)	1.00	0.91 (0.50, 1.67)	1.21 (0.60, 2.44)	0.63 (0.29, 1.35)
Model 4		1.00	0.77 (0.38, 1.55)	0.87 (0.42, 1.80)	1.00	0.75 (0.41, 1.38)	1.32 (0.63, 2.73)	0.56 (0.27, 1.18)
Model 5		1.00	0.70 (0.35, 1.40)	0.82 (0.40, 1.69)	1.00	0.76 (0.41, 1.40)	1.31 (0.61, 2.84)	0.57 (0.28, 1.18)
Any one elevated ABC [HbA1c ≥7.0%, BP ≥130/80mmHg, LDL ≥100mg/dL]	84.3 (2.1)							
Unadjusted		1.00	2.06 (1.06, 4.03)	2.71 (1.46, 5.06)	1.00	1.27 (0.55, 2.96)	1.68 (0.77, 3.67)	1.06 (0.45, 2.52)
Model 1		1.00	1.77 (0.95, 3.31)	2.09 (1.13, 3.88)	1.00	0.98 (0.41, 2.34)	1.30 (0.57, 2.96)	0.76 (0.30, 1.92)
Model 2		1.00	1.67 (0.91, 3.07)	1.88 (1.07, 3.30)	1.00	0.96 (0.40, 2.31)	1.28 (0.56, 2.97)	0.70 (0.28, 1.78)
Model 3		1.00	1.66 (0.90, 3.07)	1.89 (1.05, 3.39)	1.00	0.97 (0.41, 2.33)	1.30 (0.56, 3.00)	0.70 (0.28, 1.77)
Model 4		1.00	1.97 (0.91, 4.28)	1.91 (0.94, 3.89)	1.00	1.08 (0.40, 2.92)	1.41 (0.62, 3.22)	0.64 (0.24, 1.70)
Model 5		1.00	1.89 (0.84, 4.26)	1.89 (0.91, 4.94)	1.00	1.04 (0.38, 2.85)	1.30 (0.57, 2.99)	0.64 (0.23, 1.76)
Any one elevated ABC [HbA1c ≥8.0% and BP ≥140/90mmHg and LDL ≥130mg/dL]	55.2 (2.6)							
Unadjusted		1.00	1.57 (0.99, 2.82)	1.49 (1.00, 2.22)	1.00	1.24 (0.74, 2.08)	1.14 (0.65, 1.99)	0.83 (0.49, 1.39)
Model 1		1.00	1.45 (0.87, 2.41)	1.34 (0.91, 1.97)	1.00	1.08 (0.64, 1.82)	1.07 (0.59, 1.95)	0.76 (0.43, 1.34)
Model 2		1.00	1.28 (0.74, 2.21)	1.25 (0.85, 1.84)	1.00	1.06 (0.62, 1.81)	1.06 (0.58, 1.96)	0.75 (0.41, 1.36)
Model 3		1.00	1.26 (0.73, 2.19)	1.28 (0.85, 1.93)	1.00	1.10 (0.66, 1.86)	1.12 (0.61, 2.08)	0.76 (0.42, 1.37)
Model 4		1.00	1.18 (0.65, 2.12)	1.33 (0.84, 2.11)	1.00	1.15 (0.62, 2.11)	1.25 (0.67, 2.33)	0.78 (0.42, 1.42)
Model 5		1.00	1.14 (0.63, 2.06)	1.25 (0.76, 2.07)	1.00	1.10 (0.58, 2.06)	1.19 (0.61, 2.33)	0.72 (0.38, 1.37)

Model 1: adjusted for age, sex, race/ethnicity

Model 2: additionally adjusted for poverty income ratio, education, health insurance

Model 3: additionally adjusted for healthcare utilization (seeing physicians in past year, having HbA1c checked)

Model 4: additionally adjusted for smoking status, diabetes medications, blood pressure medication, cholesterol medication, BMI

Model 5: additionally adjusted for food security (when HEI is main covariate) or HEI (when food security is main covariate),

Boldface p-value indicates statistical significance of $p < 0.05$

SE, standard error