

Supplementary Material

Figure 2. GOF model 1

A - post-regression diagnosis

Goodness-of-fit test after logistic model

Variable: BiScore

Table collapsed on quantiles of estimated probabilities

Group	Prob	Obs_1	Exp_1	Obs_0	Exp_0	Total
1	0.0855	1	1.2	24	23.8	25
2	0.1313	3	2.5	21	21.5	24
3	0.1901	4	4.1	21	20.9	25
4	0.2298	5	5.1	19	18.9	24
5	0.2855	2	6.5	23	18.5	25
6	0.3483	12	7.8	12	16.2	24
7	0.4105	11	9.4	14	15.6	25
8	0.5170	11	11.0	13	13.0	24
9	0.6013	12	13.8	13	11.2	25
10	0.9630	18	17.6	6	6.4	24

Number of observations = 245
Number of groups = 10
Hosmer-Lemeshow $\chi^2(8)$ = 8.60
Prob > χ^2 = 0.3776

Figure 3. GOF model 2

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. estat gof, group(10) table  
note: obs collapsed on 10 quantiles of estimated probabilities.
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Goodness-of-fit test after logistic model
Variable: BiScore

Table collapsed on quantiles of estimated probabilities

Group	Prob	Obs_1	Exp_1	Obs_0	Exp_0	Total
1	0.0589	1	0.9	21	21.1	22
2	0.1072	1	1.9	21	20.1	22
3	0.1663	3	3.1	19	18.9	22
4	0.2157	3	4.1	18	16.9	21
5	0.2550	9	5.2	13	16.8	22
6	0.3244	4	6.4	18	15.6	22
7	0.4040	9	7.8	12	13.2	21
8	0.4981	11	9.9	11	12.1	22
9	0.6492	12	12.5	10	9.5	22
10	0.9446	15	16.2	6	4.8	21

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Number of observations = 217  
Number of groups = 10  
Hosmer-Lemeshow chi2(8) = 6.63  
Prob > chi2 = 0.5775
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Figure 4. ROC curve model 1

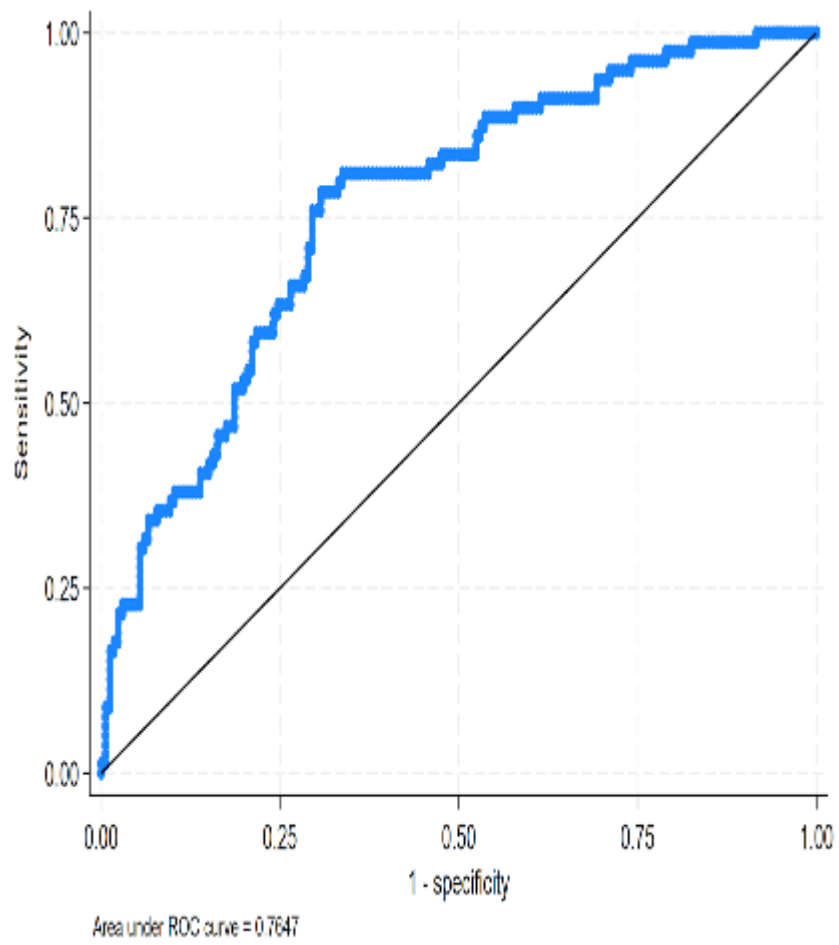


Figure 5. ROC curve model 2

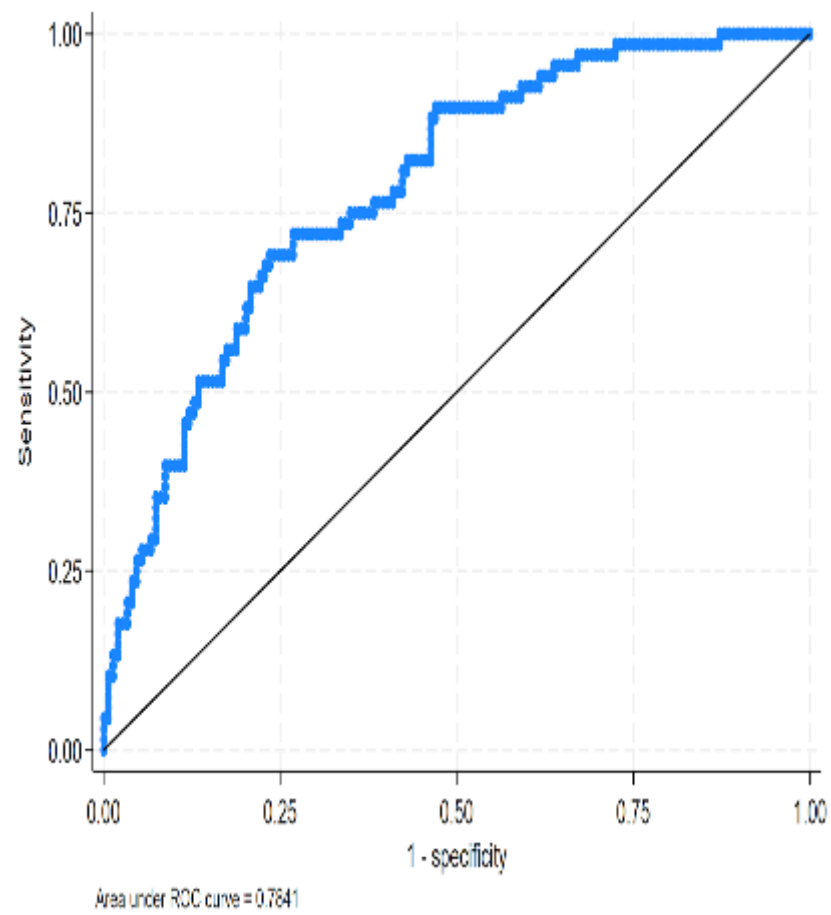


Table 4. Collinearity diagnostics. Model 1

Collinearity Model FULL		Diagnostics		
SQRT				
Variable	VIF	VIF	Tolerance	R- Squared
HABtog	1.07	1.04	0.9311	0.0689
PIRord	1.1	1.05	0.9118	0.0882
smoker	1.17	1.08	0.8532	0.1468
sleepcat	1.03	1.02	0.9666	0.0334
HHEatlessthanshould	1.21	1.1	0.8276	0.1724
realPHQ9	1.31	1.15	0.7624	0.2376
Atleastonecomorbidity	1.35	1.16	0.7413	0.2587
RaceEthnicityRecode	1.29	1.14	0.7723	0.2277
EducationLevelAdults20	1.37	1.17	0.732	0.268
AgeatScreeningAdjudicatedR	1.29	1.14	0.7742	0.2258
Gender	1.28	1.13	0.7812	0.2188
Anyactivity30d	1.12	1.06	0.8958	0.1042
drinker	1.21	1.1	0.8246	0.1754
Cafflcat	1.05	1.02	0.9544	0.0456
Mean	VIF	1.2		

VIF= Variance Inflation Factor.

Table 5 collinearity diagnostics. Model 2.

Collinearity Model 1+	Diagnostics			
SQRT Variable	VIF	VIF	Tolerance	R-Squared
HABatleast	1.13	1.06	0.8875	0.1125
PIRord	1.1	1.05	0.9126	0.0874
smoker	1.18	1.09	0.8457	0.1543
sleepcat	1.05	1.03	0.9486	0.0514
HHEatlessthanshould	1.29	1.13	0.7763	0.2237
realPHQ9	1.29	1.14	0.7754	0.2246
Atleastonecomorbidity	1.34	1.16	0.7476	0.2524
RaceEthnicityRecode	1.32	1.15	0.7577	0.2423
EducationLevelAdults20	1.37	1.17	0.73	0.27
AgeatScreeningAdjudicatedR	1.38	1.17	0.7252	0.2748
Gender	1.25	1.12	0.803	0.197
Anyactivity30d	1.13	1.06	0.8818	0.1182
drinker	1.19	1.09	0.838	0.162
Cafflcat	1.06	1.03	0.9422	0.0578
Mean	VIF	1.22		

VIF= Variance Inflation Factor.