**Supplemental Table 3.** Regression coefficients for the prediction model for likelihood of attaining an A1C <8% during 2017 based on patient demographic, clinical, and treatment-related variables during 2015-2016 in a cohort of patients with baseline A1C ≥8% in 2016. Results shown for total study cohort and a sensitivity analysis excluding 1,840 patients with no recorded A1C during 2017. Although the exact ORs were different between the two analyses, the effect of each predictor was similar.

|  |  |  |
| --- | --- | --- |
|  | **All Patients** (N=6,973) | **Excluding Patients with No A1C during 2017** (N=5,133) |
|  | OR | 95% CI | p-value | OR | 95% CI | p-value |
| Age | 1.009 | 1.003,1.015 | 0.003 | 1.009 | 1.003,1.016 | 0.006 |
| Race=White | Ref |  | 0.005 | Ref |  | 0.010 |
| Race=Black | 0.797 | 0.693,0.916 |  | 0.804 | 0.692,0.935 |  |
| Race=Other | 0.867 | 0.676,1.112 |  | 0.820 | 0.624,1.077 |  |
| Ethnicity=Hispanic Americans | Ref |  | 0.052 | Ref |  | 0.282 |
| Ethnicity=Not Hispanic or Latino | 1.391 | 1.054,1.836 |  | 1.219 | 0.898,1.655 |  |
| Ethnicity=Unknown | 1.504 | 1.001,2.261 |  | 1.424 | 0.905,2.241 |  |
| Insurance=Medicare | Ref |  | <0.001 | Ref |  | 0.007 |
| Insurance=Medicaid | 0.780 | 0.625,0.974 |  | 0.790 | 0.624,1.001 |  |
| Insurance=Private Health Insurance | 1.023 | 0.872,1.2 |  | 1.065 | 0.897,1.265 |  |
| Insurance=Other | 0.701 | 0.56,0.878 |  | 0.800 | 0.625,1.025 |  |
| A1C (11.4% vs. 9.6%)\* | 0.645 | 0.580, 0.717 | <0.001 | 0.636 | 0.549,0.737 | <0.001 |
| Time In Data Base (4.4 year vs. 1.7 year)† | 0.807 | 0.727, 0.895 | <0.001 | 0.865 | 0.808,0.926 | <0.001 |
| Encounters (8 vs. 3)‡ | 1.443 | 1.299, 1.603 | <0.001 | 1.026 | 0.989,1.065 | 0.173 |
| DPP-4 | 1.265 | 1.031,1.553 | 0.024 | 1.313 | 1.057,1.631 | 0.014 |
| TZD | 1.427 | 1.033,1.97 | 0.031 | 1.497 | 1.068,2.099 | 0.019 |
| Metformin | 1.512 | 1.24,1.845 | <0.001 | 1.352 | 1.094,1.672 | 0.005 |
| SGLT-2i | 0.825 | 0.535,1.271 | 0.383 | 0.876 | 0.559,1.372 | 0.563 |
| Insulin | 0.683 | 0.58,0.804 | <0.001 | 0.632 | 0.532,0.751 | <0.001 |
| GLP-1RA | 1.232 | 0.967,1.569 | 0.091 | 1.325 | 1.029,1.706 | 0.029 |
| Classes of Diabetes Medication | 0.774 | 0.682,0.879 | <0.001 | 0.885 | 0.778,1.007 | 0.063 |
| Obesity | 0.873 | 0.776,0.984 | 0.026 | 1.274 | 1.048,1.548 | 0.015 |
| Chronic Kidney Disease | 1.248 | 1.041,1.496 | 0.017 | 0.652 | 0.569,0.746 | <0.001 |
| CCI=0 | Ref |  | 0.145 | Ref |  | 0.351 |
| CCI=1 | 1.070 | 0.436,2.626 |  | 1.416 | 0.516,3.886 |  |
| CCI=2 | 0.885 | 0.36,2.178 |  | 1.229 | 0.446,3.382 |  |
| CCI≥3 | 0.989 | 0.402,2.436 |  | 1.376 | 0.499,3.789 |  |
| SGLT-2i \* Obesity | 1.472 | 0.87,2.492 | 0.150 | 1.464 | 0.848,2.526 | 0.171 |
| SGLT-2i \* Chronic Kidney Disease | 0.412 | 0.138,1.234 | 0.113 | 0.388 | 0.128,1.178 | 0.095 |

\* Restricted cubic spline with 3 knots (10th, 50th, and 90th) were used. The odds ratio compared the 75th (11.4%) vs. 25th (9.6%) † Restricted cubic spline with 3 knots (10th, 50th, and 90th) were used. The odds ratio compared the 75th (4.4 year) vs. 25th (1.7 year)

‡ Restricted cubic spline with 3 knots (10th, 50th, and 90th) were used. The odds ratio compared the 75th (8) vs. 25th (3).

CCI, Charlson Comorbidity Index; CI, confidence interval; DPP-4, dipeptidyl peptidase-4 inhibitor; GLP-1RA, glucagon-like peptide-1 receptor agonist; SGLT-2i, sodium glucose co-transporter-2 inhibitor; SD, standard deviation; TZD, thiazolidinedione