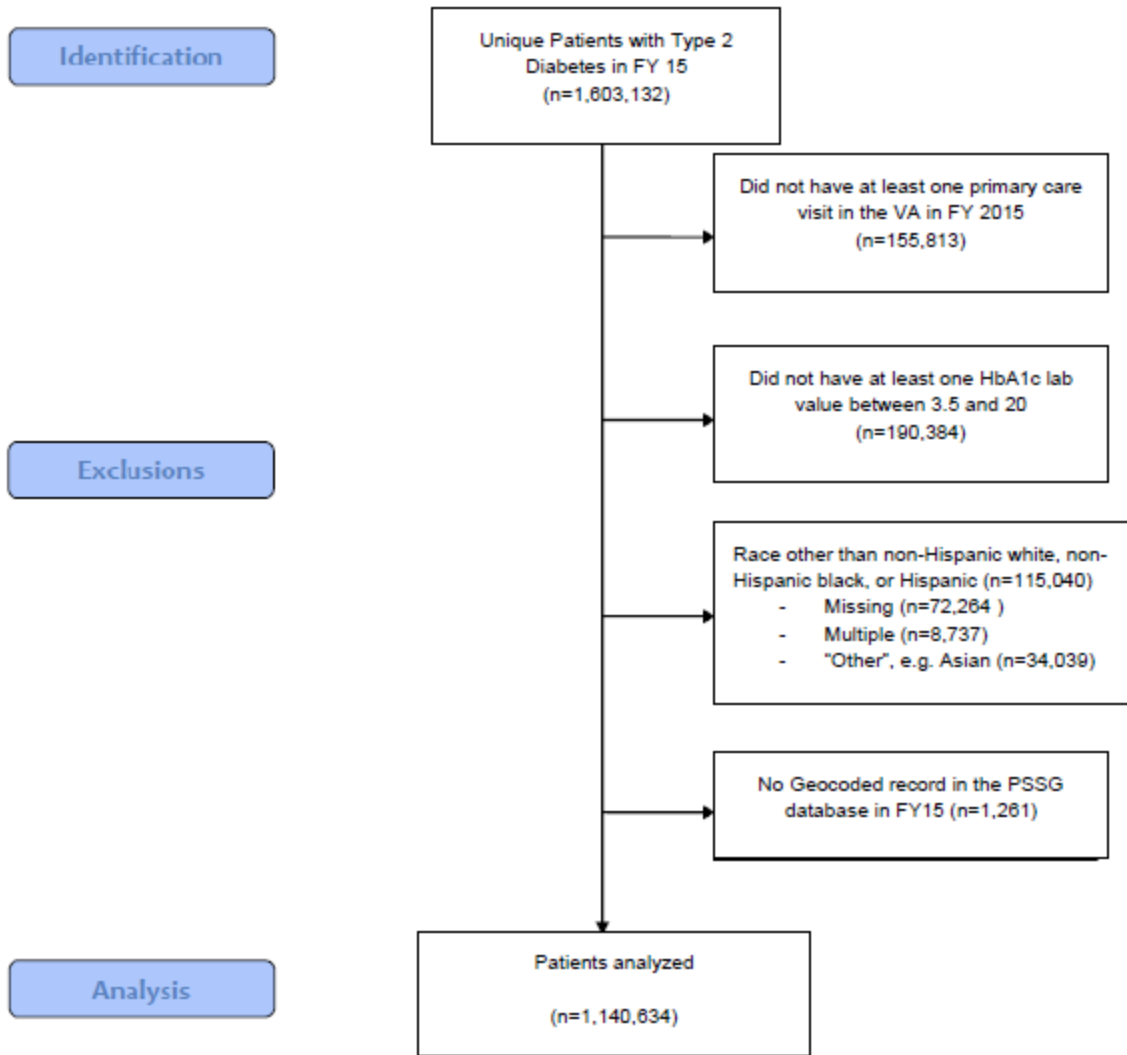**Online Table 1.** Posterior odds ratios (95% credible intervals) for sub-optimal relative to good glycemic control with a HbA1c cut-point of ≥ 7% (≥53 mmol/mol) and a HbA1c cut-point of ≥ 9% (≥75 mmol/mol) for Model 3 and Model 4.
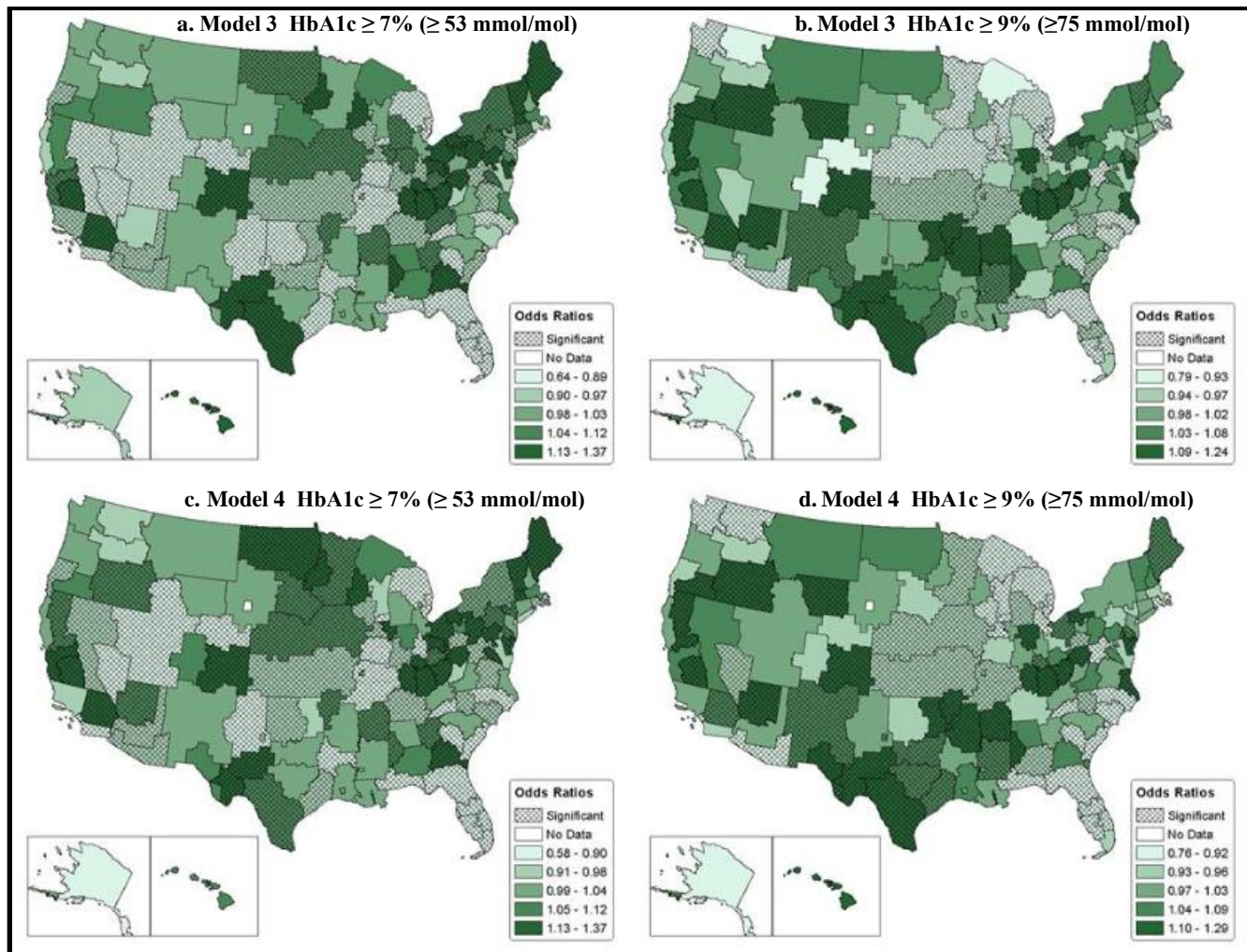
	HbA1c ≥7% (≥53 mmol/mol) Model 3 (n=1,140,634)	HbA1c ≥9% (≥75 mmol/mol) Model 3 (n=1,140,634)	HbA1c ≥7% (≥53 mmol/mol) Model 4* (n=815,255)	HbA1c ≥9% (≥75 mmol/mol) Model 4* (n=815,255)
Race				
non-Hispanic White	1.00	1.00	1.00	1.00
non-Hispanic Black	0.94 (0.93, 0.95)	1.31 (1.28, 1.33)	0.95 (0.94, 0.97)	1.27 (1.25, 1.29)
Hispanic	1.18 (1.16, 1.20)	1.47 (1.44, 1.50)	1.20 (1.17, 1.22)	1.43 (1.39, 1.46)
Age (1 year) [†]	0.98 (0.98, 0.98)	0.95 (0.95, 0.95)	0.98 (0.98, 0.98)	0.95 (0.95, 0.95)
Male (female)	1.21 (1.19, 1.24)	1.20 (1.16, 1.24)	1.24 (1.21, 1.28)	1.21 (1.17, 1.25)
Service Connected Disability ≥ 50	0.83 (0.82, 0.84)	0.83 (0.82, 0.83)	0.84 90.83, 0.85)	0.82 (0.81, 0.83)
Married (not married)	0.99 (0.98, 1.01)	0.82 (0.81, 0.83)	0.99 (0.97, 1.01)	0.85 (0.84, 0.86)
van Walraven Comorbidity Score[†]	0.98 (0.98, 0.98)	0.98 (0.98, 0.98)	0.98 (0.98, 0.98)	0.98 (0.98, 0.98)
Diabetes Medications				
No Medications	1.00	1.00	----	----
Orals only	3.55 (3.52, 3.59)	2.94 (2.86, 3.00)	1.00	1.00
Insulin only	12.54 (12.34, 12.73)	11.84 (11.52, 12.13)	3.50 (3.46, 3.55)	4.36 (4.27, 4.43)
Both orals & insulin	17.80 (17.57, 18.04)	14.28 (13.91, 14.63)	4.80 (4.74, 4.86)	4.52 (4.45, 4.60)
Medication Adherent (vs non-adherent)	----	----	0.98 (0.97, 0.99)	0.68 (0.67, 0.69)
Outpatient Visit Days				
1-3 visit days per year	1.00	1.00	1.00	1.00
4-11 visit days per year	0.84 (0.82, 0.85)	0.88 (0.86, 0.9.91)	1.05 (1.03, 1.08)	1.00 (0.98, 1.03)
12-23 visit days per year	0.73 (0.72, 0.74)	0.79 (0.77, 0.81)	1.03 (1.01, 1.05)	0.94 (0.92, 0.97)
≥24 visit days per year	0.61 (0.60, 0.62)	0.65 (0.63, 0.67)	0.88 (0.86, 0.90)	0.79 (0.76, 0.81)
Primary Care Drive Distance				
Quartile 1 (≤ 6 miles)	1.00	1.00	1.00	1.00
Quartile 2 (7-12 miles)	1.00 (0.99, 1.02)	0.98 (0.96, 0.99)	1.02 (1.01, 1.04)	0.97 (0.95, 0.99)
Quartile 3 (13-23 miles)	1.03 (1.02, 1.04)	0.98 (0.96, 0.99)	1.04 (1.02, 1.05)	0.97 (0.95, 0.99)
Quartile 4 (>23 miles)	1.03 (1.02, 1.04)	0.97 (0.95, 0.99)	1.03 (1.01, 1.04)	0.97 (0.95, 0.99)
Wait Time Primary Care (1 day)	1.00 (1.00, 1.00)	1.01 (1.01, 1.02)	1.00 (1.00, 1.00)	1.01 (1.01, 1.01)
Rural (vs Urban)	1.03 (1.02, 1.04)	1.03 (1.02, 1.04)	1.04 (1.03, 1.05)	1.04 (1.02, 1.06)
Spatial Variance	0.07	0.03	0.09	0.03

*Limited to those taking medication. [†]Tight confidence intervals are the result of very large sample size.

Identification

Unique Patients with Type 2
Diabetes in FY 15
(n=1,603,132)

Did not have at least one primary care
visit in the VA in FY 2015
(n=155,813)

Did not have at least one HbA1c lab
value between 3.5 and 20
(n=190,384)

Exclusions

Race other than non-Hispanic white, non-
Hispanic black, or Hispanic (n=115,040)
- Missing (n=72,264)
- Multiple (n=8,737)
- "Other", e.g. Asian (n=34,039)

No Geocoded record in the PSSG
database in FY15 (n=1,261)

Analysis

Patients analyzed

(n=1,140,634)

Online Figure 1: Consort Diagram

Online Figure 2 a-d: Spatial random effects models for catchment area. Shading indicates quintiles of the adjusted odds ratio of uncontrolled diabetes in each catchment area relative to an average catchment area. Thus, odds ratio greater than one have higher odds of uncontrolled diabetes relative to an average catchment area, and odds ratios less than 1 have lower odds of uncontrolled diabetes relative to an average area. Models are adjusted for covariates indicated in Online Table 1 with Figure 2a corresponding to Model 3 HbA1c ≥ 7% (≥53 mmol/mol); Figure 2b corresponding to Model 3 HbA1c ≥ 9% (≥75 mmol/mol); Figure 2c corresponding to Model 4 HbA1c ≥ 7% (≥53 mmol/mol) and Figure 2d corresponding to Model 4 HbA1c ≥ 9%(≥75 mmol/mol) .

Online Figure 3: Medication Prescribing Patterns. Unadjusted percent of patients on (a) no medication, (b) insulin only, (c) orals only, and (d) both insulin and oral medications by catchment area.