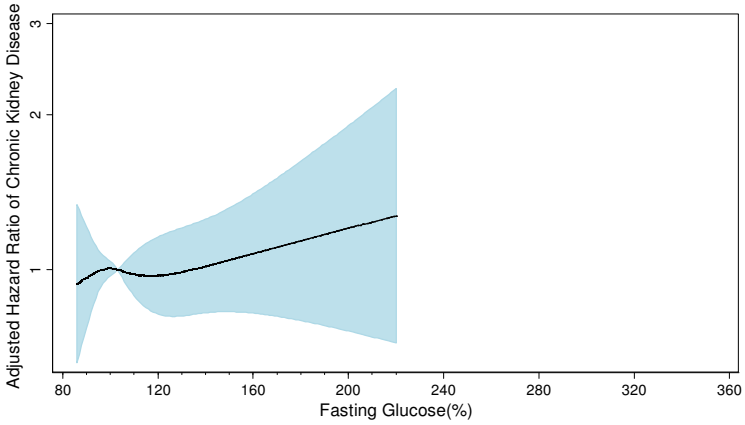
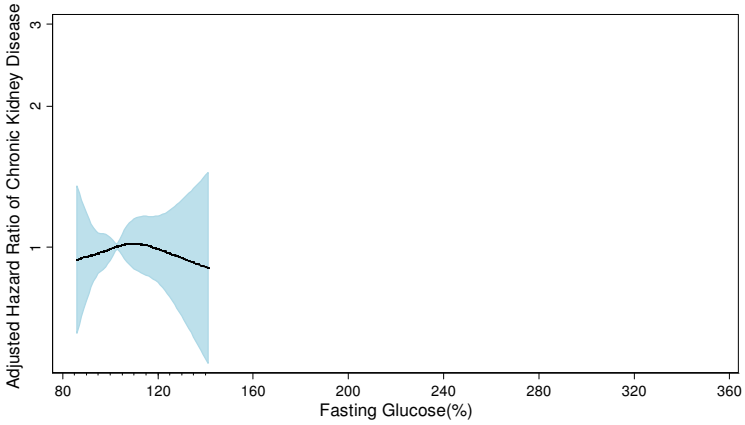
Supplementary Figure 1. Adjusted Hazard Ratio of Incident Chronic Kidney Disease According to Baseline Fasting Glucose Value

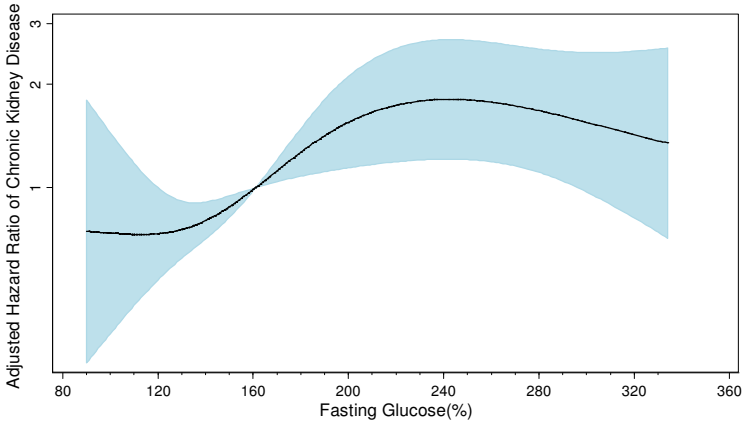
Total Population



Persons without a History of Diabetes

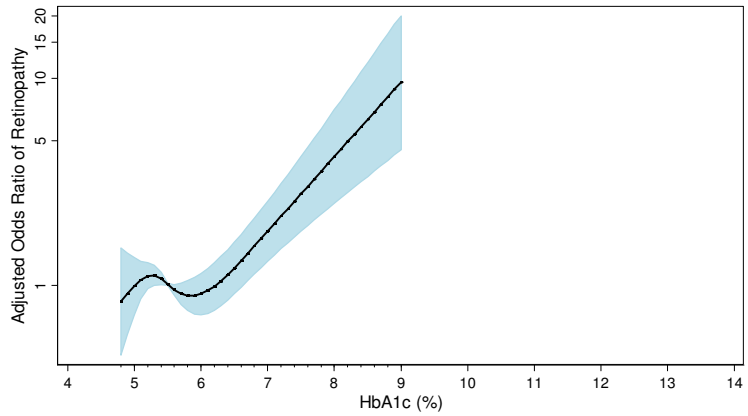


Persons with a History of Diabetes

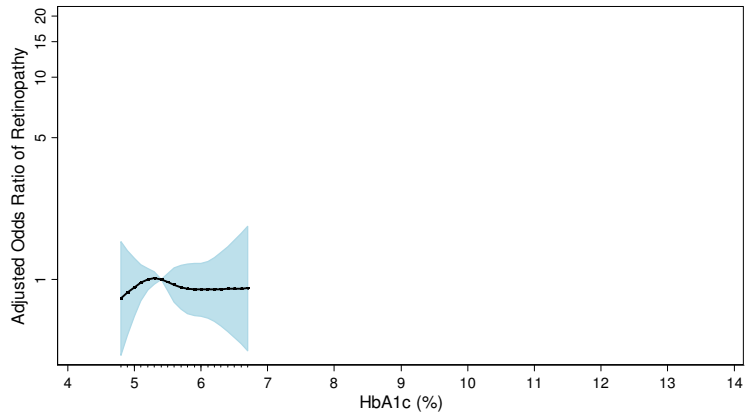


Supplementary Figure 2. Adjusted Odds Ratio of Any Retinopathy (ETDRS ≥14) According to Baseline Glycated Hemoglobin Value

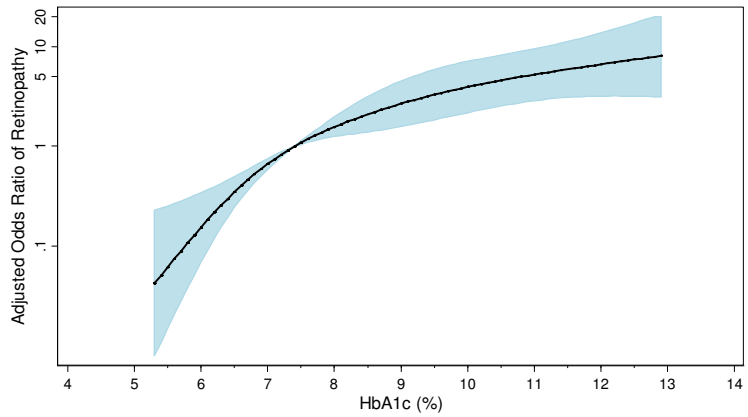
Total Population



Persons without a History of Diabetes

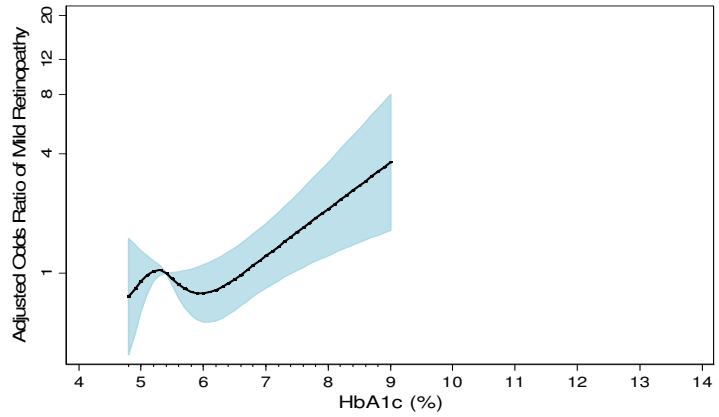


Persons with a History of Diabetes

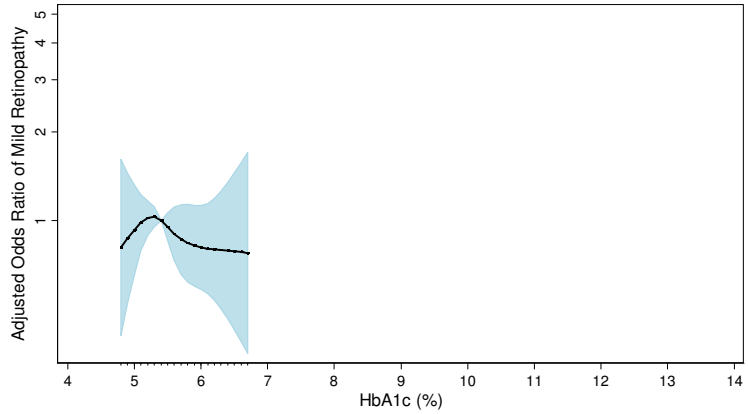


Supplementary Figure 3. Adjusted Odds Ratio of Prevalent Mild Retinopathy Only (ETDRS 14-20) According to Baseline Glycated Hemoglobin Value

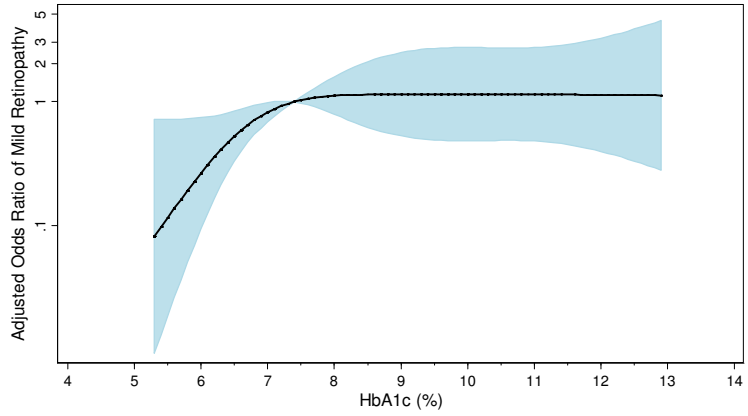
Total Population



Persons without a History of Diabetes

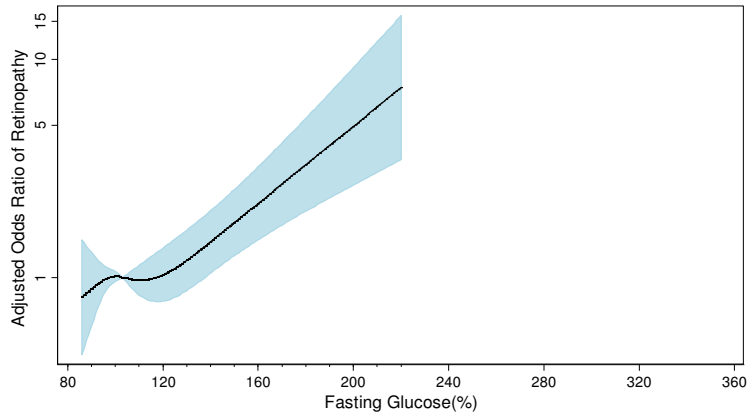


Persons with a History of Diabetes

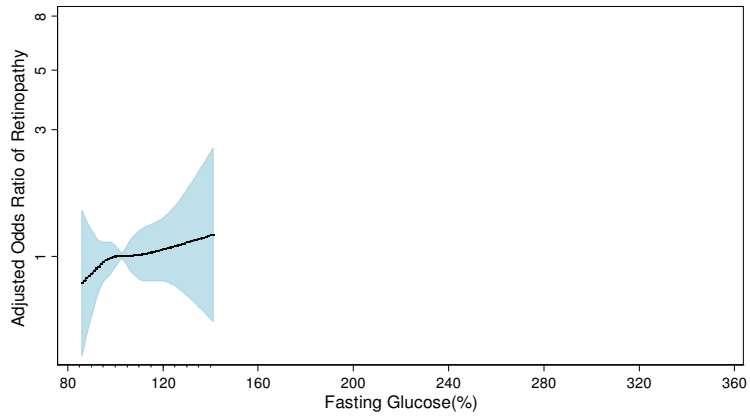


Supplementary Figure 4. Adjusted Odds Ratio of Any Retinopathy According to Baseline Fasting Glucose Value

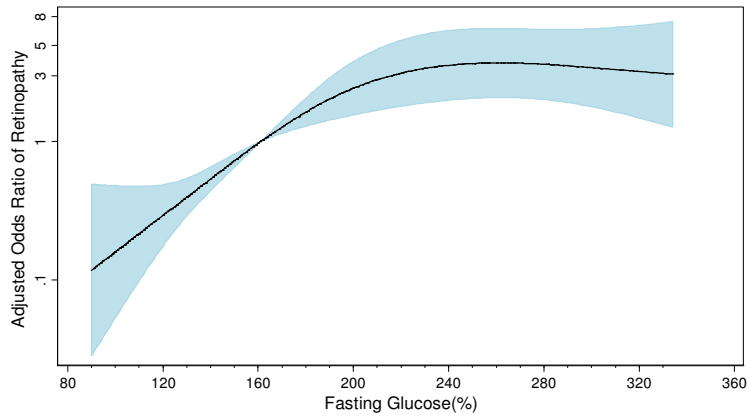
Total Population



Persons without a History of Diabetes



Persons with a History of Diabetes



Supplementary Table 1. Testing for Thresholds (Maximum Likelihood Ratio Method) – Approach #1

P-values for the Presence of a Glycated Hemoglobin Threshold in Models of Incident Chronic Kidney Disease (Cox proportional hazards regression)

	Overall	Without DM	With DM
Crude	0.836	0.772	0.896
Model 1	0.848	0.540	0.944
Model 2	0.364	0.588	>0.999

P-values for the Presence of a Glycated Hemoglobin Threshold in Models of Prevalent Retinopathy (Logistic regression)

	Overall	Without DM	With DM
Crude	0.616	0.996	0.668
Model 1	0.484	0.912	0.684
Model 2	0.432	0.992	0.628

P-values for the Presence of a Glycated Hemoglobin Threshold in Models of Prevalent Moderate/Severe Retinopathy (Logistic regression)

	Overall	Without DM	With DM
Crude	0.773	0.998	0.736
Model 1	0.519	0.952	0.764
Model 2	0.633	0.908	0.820

Approach #1: The maximum likelihood ratio test comparing an unrestricted model with a linear term only to a model including a linear spline with a single knot.

Supplementary Table 2. Testing for Thresholds (Maximum Likelihood Ratio Method) – Approach #2

P-values for the Presence of a Glycated Hemoglobin Threshold in Models of Incident Chronic Kidney Disease (Cox proportional hazards regression)

	Overall	Without DM	With DM
Crude	0.646	0.564	0.616
Model 1	0.500	0.718	0.624
Model 2	0.612	0.788	0.614

P-values for the Presence of a Glycated Hemoglobin Threshold in Models of Prevalent Retinopathy (Logistic regression)

	Overall	Without DM	With DM
Crude	0.512	0.670	0.606
Model 1	0.502	0.744	0.554
Model 2	0.574	0.888	0.596

P-values for the Presence of a Glycated Hemoglobin Threshold in Models of Prevalent Moderate/Severe Retinopathy (Logistic regression)

	Overall	Without DM	With DM
Crude	0.486	0.544	0.518
Model 1	0.544	0.548	0.552
Model 2	0.668	0.540	0.598

Approach #2: The maximum likelihood ratio test comparing a model where the slope is zero compared to a model with a linear spline with a single knot.

References for threshold models:

References:
1. Davies RB. Hypothesis Testing when a Nuisance Parameter is Present Only Under the Alternatives. Biometrika. 1987;74(1):33-43.

2. Pastor R, Guallar E. Use of two-segmented logistic regression to estimate change-points in epidemiologic studies. Am J Epidemiol. 1998 Oct 1;148(7):631-42

3. Pons O. Estimation in a Cox Regression Model with a change-Point According to a Threshold in a Covariate. The Annals of Statistics, Vol. 31, No. 2 (Apr., 2003), pp. 442-463