

SUPPLEMENTARY DATA

A. Model Specification

Risk Estimation. The probability of developing diabetes and the probability of death were estimated by fitting an exponential survival function. For the former, we controlled for gender, race (white, black, and other races), diabetes status, age at survey ($\text{Age} \leq 19$, $20 \leq \text{Age} \leq 29$, $30 \leq \text{Age} \leq 39$, $40 \leq \text{Age} \leq 49$, $50 \leq \text{Age} \leq 59$, $60 \leq \text{Age} \leq 69$, and $\text{Age} \geq 70$), and BMI (normal-weight: $18.5 \leq \text{BMI} < 25 \text{ kg/m}^2$, overweight: $25 \leq \text{BMI} < 30 \text{ kg/m}^2$, class I obese: $30 \leq \text{BMI} < 35 \text{ kg/m}^2$, class II obese: $35 \leq \text{BMI} < 40 \text{ kg/m}^2$, and class III obese ($\text{BMI} \geq 40 \text{ kg/m}^2$)¹. For the latter, in addition to the aforementioned covariates, we controlled for insurance status (whether an individual had any form of health insurance), duration of diabetes, and duration of diabetes squared.

We assumed that the probability of developing diabetes or death between time t and time $t + 1$ is $1 - \exp(-\lambda)$,

where $\lambda = \exp(\mathbf{x}'\boldsymbol{\beta})$, \mathbf{x}' is a vector of covariates, $\boldsymbol{\beta}$ is a vector of parameter coefficients to be estimated.

Cost Estimation. The age-, race-, gender-, and BMI-specific annual healthcare expenditures for both diabetics and non-diabetics were estimated using a two-part model.^{2,3} We used a logistic model in the first part and a generalized linear model with log-link and gamma variance function for the second part, controlling for gender, race, BMI, age, and diabetes status, insurance status, duration and squared duration of diabetes.

The expected value of annual healthcare expenditures (y) is expressed as a product of the probability that annual healthcare expenditures greater than zero and the expected value of annual healthcare expenditures conditional on expenditures greater than zero, i.e.,

$$E(y | \mathbf{x}) = P(y > 0 | \mathbf{x})E(y | y > 0, \mathbf{x})$$

The first part of the regression was estimated using a logistic model:

$$P(y > 0 | \mathbf{x}') = \text{logit}(\mathbf{x}'\boldsymbol{\delta})$$

Where \mathbf{x}' is a vector of explanatory variables, $\boldsymbol{\delta}$ is the corresponding vector of parameters to be estimated.

The second part is a generalized linear model with log-link and gamma variance function:

$$\ln(E(y | x)) = \mathbf{x}'\boldsymbol{\beta}$$

The variance function has a gamma structure:

$$v(y | \mathbf{x}) = \kappa(\mu(\mathbf{x}))^2$$

where κ is a positive constant, i.e. the standard deviation is proportional to the mean.

The predictions of annual healthcare expenditures are then given by:

$$\widehat{E}(y|\mathbf{x}) = P(\widehat{y} > 0|\mathbf{x})E(y|\widehat{y} > 0, \mathbf{x})$$

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B. Regression results

Supplementary Table 1. Estimation results for males: Probabilities of developing diabetes

	Coefficient estimates	Linearized Standard Error	t	P> t	[95% Confident Interval]	
BMI						
Overweight	0.39	0.06	6.56	0.00	0.27	0.50
Class I Obese	1.05	0.06	16.23	0.00	0.92	1.18
Class II Obese	1.42	0.08	17.23	0.00	1.26	1.59
Class III Obese	1.86	0.09	20.23	0.00	1.68	2.04
Race						
Black	0.29	0.06	4.94	0.00	0.17	0.40
Other races	0.37	0.08	4.73	0.00	0.21	0.52
Constant	-7.19	0.05	-136.35	0.00	-7.29	-7.08

Supplementary Table 2. Estimation results for females: Probabilities of developing diabetes

	Coefficient estimates	Linearized Standard Error	t	P> t	[95% Confident Interval]	
BMI						
Overweight	0.09	0.05	1.66	0.10	-0.02	0.19
Class I Obese	0.14	0.06	2.35	0.02	0.02	0.25
Class II Obese	0.27	0.10	2.85	0.01	0.08	0.46
Class III Obese	0.49	0.10	4.93	0.00	0.29	0.68
Race						
Black	0.04	0.05	0.65	0.52	-0.07	0.14
Other races	-0.65	0.12	-5.45	0.00	-0.89	-0.42
Constant	-6.84	0.04	-195.39	0.00	-6.91	-6.77

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Supplementary Table 3. Estimation results for males: Probabilities of death

	Coefficient estimates	Linearized Standard Error	t	P> t	[95% Confident Interval]	
Age groups						
20≤Age≤29	-0.35	0.38	-0.91	0.36	-1.11	0.41
30≤Age≤39	0.19	0.35	0.55	0.58	-0.49	0.88
40≤Age≤49	0.95	0.35	2.70	0.01	0.26	1.64
50≤Age≤59	1.26	0.35	3.64	0.00	0.58	1.94
60≤Age≤69	2.57	0.34	7.53	0.00	1.90	3.24
Age ≥70	3.65	0.34	10.81	0.00	2.99	4.32
BMI groups						
Overweight	-0.29	0.07	-3.86	0.00	-0.43	-0.14
Class I Obese	-0.12	0.11	-1.06	0.29	-0.33	0.10
Class II Obese	0.08	0.17	0.46	0.64	-0.25	0.41
Class III Obese	0.51	0.24	2.14	0.03	0.04	0.98
Race						
Black	0.48	0.09	5.24	0.00	0.30	0.65
Other	-0.34	0.16	-2.15	0.03	-0.66	-0.03
Insured						
Insured	-0.25	0.13	-1.91	0.06	-0.51	0.01
Diabetes						
Diabetes	0.47	0.15	3.06	0.00	0.17	0.77
Duration						
Duration	0.02	0.02	1.06	0.29	-0.02	0.05
Squared Duration						
Squared Duration	0.00	0.00	-0.54	0.59	0.00	0.00
Constant						
Constant	-6.40	0.36	-18.02	0.00	-7.10	-5.70

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Supplementary Table 4. Estimation results for females: Probabilities of death

	Coefficient estimates	Linearized Standard Error	t	P> t	[95% Confident Interval]	
Age groups						
20≤Age≤29	1.60	1.02	1.57	0.12	-0.40	3.61
30≤Age≤39	1.78	1.00	1.78	0.08	-0.19	3.74
40≤Age≤49	2.76	1.01	2.74	0.01	0.78	4.74
50≤Age≤59	3.34	1.01	3.31	0.00	1.36	5.32
60≤Age≤69	4.46	1.01	4.42	0.00	2.48	6.45
Age ≥70	5.72	1.00	5.69	0.00	3.74	7.69
BMI groups						
Overweight	-0.09	0.06	-1.45	0.15	-0.20	0.03
Class I Obese	-0.05	0.08	-0.71	0.48	-0.21	0.10
Class II Obese	0.06	0.11	0.52	0.60	-0.17	0.29
Class III Obese	0.55	0.13	4.28	0.00	0.30	0.80
Race						
Black	0.21	0.06	3.20	0.00	0.08	0.33
Other races	-0.27	0.13	-1.99	0.05	-0.53	0.00
Insured						
Diabetes	0.36	0.11	3.22	0.00	0.14	0.58
Duration	0.06	0.01	6.03	0.00	0.04	0.08
Squared Duration	0.00	0.00	-4.94	0.00	0.00	0.00
Constant	-8.89	1.00	-8.90	0.00	-10.86	-6.93

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Supplementary Table 5. Estimation results for males: Annual total healthcare expenditures

totexp_2000	Coefficient estimates	Linearized Standard Error	T	P> t	[95% Confident Interval]		Coefficient estimates	Linearized Standard Error	t	P> t	[95% Confident Interval]	
							Second part					
First part												
Age groups												
20≤Age≤29	0.149	0.156	0.960	0.338	-0.157	0.456	0.169	0.207	0.820	0.413	-0.236	0.575
30≤Age≤39	0.519	0.149	3.480	0.001	0.227	0.812	0.423	0.210	2.020	0.044	0.011	0.834
40≤Age≤49	0.908	0.151	6.020	0.000	0.612	1.204	0.738	0.210	3.510	0.000	0.325	1.150
50≤Age≤59	1.177	0.170	6.930	0.000	0.844	1.510	1.025	0.210	4.880	0.000	0.613	1.437
60≤Age≤69	1.531	0.188	8.150	0.000	1.162	1.899	1.260	0.209	6.030	0.000	0.850	1.670
Age ≥70	1.866	0.214	8.730	0.000	1.447	2.286	1.616	0.207	7.790	0.000	1.209	2.023
BMI groups												
Overweight	0.126	0.059	2.150	0.032	0.011	0.242	-0.047	0.068	-0.680	0.495	-0.180	0.087
Class I Obese	0.358	0.084	4.260	0.000	0.193	0.523	0.096	0.088	1.100	0.274	-0.076	0.268
Class II Obese	0.072	0.151	0.470	0.636	-0.226	0.369	0.142	0.118	1.210	0.228	-0.089	0.373
Class III Obese	0.389	0.252	1.550	0.122	-0.105	0.883	0.768	0.245	3.140	0.002	0.287	1.248
Race												
Black	-0.694	0.087	-7.950	0.000	-0.866	-0.523	0.011	0.130	0.080	0.934	-0.244	0.265
Other races	-0.172	0.062	-2.780	0.006	-0.293	-0.051	0.097	0.070	1.390	0.165	-0.040	0.233
Diabetes	1.125	0.295	3.810	0.000	0.546	1.704	0.683	0.172	3.960	0.000	0.345	1.021
Smoker	-0.146	0.052	-2.790	0.005	-0.249	-0.043	0.470	0.057	8.280	0.000	0.359	0.582
Insured	1.428	0.067	21.440	0.000	1.298	1.559	0.366	0.161	2.280	0.023	0.051	0.681
Duration	0.099	0.076	1.300	0.195	-0.051	0.248	0.008	0.020	0.390	0.695	-0.031	0.047
Squared Duration	-0.001	0.002	-0.570	0.567	-0.004	0.002	0.000	0.000	-0.720	0.474	-0.001	0.000
Constant	-0.418	0.152	-2.750	0.006	-0.717	-0.119	6.433	0.224	28.770	0.000	5.994	6.872
WAIC	51724.1											

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Supplementary Table 6. Estimation results for females: Annual total healthcare expenditures

totexp_2000	Coefficient estimates	Linearized Standard Error	t	P> t	[95% Confident Interval]		Coefficient estimates	Linearized Standard Error	t	P> t	[95% Confident Interval]	
logit							GLM					
Age groups												
20≤Age≤29	0.445	0.191	2.330	0.020	0.070	0.820	-0.074	0.212	-0.350	0.726	-0.490	0.342
30≤Age≤39	0.508	0.193	2.630	0.009	0.129	0.887	0.152	0.203	0.750	0.456	-0.248	0.551
40≤Age≤49	0.795	0.194	4.100	0.000	0.414	1.176	0.245	0.200	1.220	0.222	-0.148	0.638
50≤Age≤59	0.983	0.212	4.630	0.000	0.567	1.399	0.501	0.194	2.580	0.010	0.120	0.883
60≤Age≤69	1.027	0.243	4.230	0.000	0.550	1.504	0.551	0.201	2.750	0.006	0.158	0.945
Age ≥70	1.377	0.227	6.080	0.000	0.932	1.822	0.879	0.202	4.350	0.000	0.483	1.275
BMI groups												
Overweight	-0.138	0.084	-1.630	0.103	-0.303	0.028	0.014	0.044	0.330	0.742	-0.072	0.101
Class I Obese	-0.188	0.112	-1.690	0.092	-0.408	0.031	0.207	0.057	3.610	0.000	0.094	0.319
Class II Obese	0.397	0.180	2.210	0.027	0.044	0.750	0.321	0.087	3.680	0.000	0.150	0.492
Class III Obese	0.018	0.212	0.090	0.931	-0.399	0.435	0.220	0.086	2.550	0.011	0.051	0.389
Race												
Black	-0.599	0.112	-5.370	0.000	-0.818	-0.380	-0.055	0.078	-0.700	0.486	-0.208	0.099
Other races	-0.150	0.087	-1.720	0.085	-0.321	0.021	-0.063	0.040	-1.580	0.115	-0.143	0.016
Diabetes	0.878	0.337	2.610	0.009	0.218	1.539	0.431	0.091	4.710	0.000	0.251	0.611
Smoker	-0.082	0.075	-1.100	0.274	-0.230	0.065	0.165	0.038	4.330	0.000	0.090	0.240
Insured	1.744	0.073	23.820	0.000	1.600	1.887	0.629	0.144	4.370	0.000	0.346	0.911
Duration	0.010	0.046	0.220	0.824	-0.080	0.101	0.043	0.010	4.300	0.000	0.023	0.062
Squared Duration	0.000	0.001	0.040	0.966	-0.002	0.002	-0.001	0.000	-4.060	0.000	-0.001	0.000
Constant	0.571	0.193	2.960	0.003	0.192	0.949	7.024	0.252	27.840	0.000	6.528	7.519
WAIC	48514.3											

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C. Markov model parameters

Supplementary Table 7. Probabilities of developing diabetes by race and BMI groups for males

	Normal	Overweight	Class I Obese	Obese Class II	Obese Class III
White	7.57E-04	0.001115	0.002166	0.003141	0.004837
Black	0.001008	0.001485	0.002885	0.004183	0.006439
Other	0.001091	0.001607	0.003122	0.004527	0.006967

Supplementary Table 8. Probabilities of developing diabetes by race and BMI groups for females

	Normal	Overweight	Obese Class I	Obese Class II	Obese Class III
White	0.00107	0.00116	0.00122	0.00140	0.00174
Black	0.00111	0.00120	0.00127	0.00145	0.00180
Other	0.00055	0.00060	0.00064	0.00073	0.00090

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Supplementary Table 9. Probabilities of death for insured diabetics by gender, race, age and BMI groups

Female						Male					
White						White					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00016	0.00015	0.00015	0.00017	0.00028	≤19	0.00206	0.00155	0.00184	0.00223	0.00343
20≤Age≤29	0.00080	0.00074	0.00076	0.00085	0.00139	20≤Age≤29	0.00145	0.00109	0.00129	0.00157	0.00242
30≤Age≤39	0.00095	0.00087	0.00090	0.00101	0.00165	30≤Age≤39	0.00250	0.00188	0.00222	0.00270	0.00415
40≤Age≤49	0.00254	0.00234	0.00241	0.00270	0.00440	40≤Age≤49	0.00533	0.00401	0.00475	0.00576	0.00886
50≤Age≤59	0.00454	0.00417	0.00430	0.00482	0.00785	50≤Age≤59	0.00726	0.00546	0.00646	0.00785	0.01205
60≤Age≤69	0.01393	0.01280	0.01320	0.01478	0.02401	60≤Age≤69	0.02657	0.02004	0.02369	0.02871	0.04384
≥70	0.04782	0.04400	0.04534	0.05068	0.08139	≥70	0.07651	0.05810	0.06841	0.08250	0.12412
Black						Black					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00020	0.00018	0.00019	0.00021	0.00034	≤19	0.00332	0.00249	0.00295	0.00359	0.00551
20≤Age≤29	0.00099	0.00091	0.00093	0.00105	0.00171	20≤Age≤29	0.00233	0.00176	0.00208	0.00253	0.00388
30≤Age≤39	0.00117	0.00107	0.00111	0.00124	0.00202	30≤Age≤39	0.00402	0.00302	0.00358	0.00434	0.00668
40≤Age≤49	0.00312	0.00287	0.00296	0.00332	0.00541	40≤Age≤49	0.00856	0.00645	0.00763	0.00926	0.01422
50≤Age≤59	0.00557	0.00512	0.00527	0.00591	0.00963	50≤Age≤59	0.01165	0.00877	0.01038	0.01260	0.01932
60≤Age≤69	0.01708	0.01570	0.01618	0.01812	0.02941	60≤Age≤69	0.04241	0.03206	0.03785	0.04580	0.06961
≥70	0.05840	0.05376	0.05538	0.06187	0.09900	≥70	0.12024	0.09183	0.10779	0.12940	0.19208
Other						Other					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00012	0.00011	0.00012	0.00013	0.00021	≤19	0.00146	0.00110	0.00130	0.00158	0.00243
20≤Age≤29	0.00062	0.00057	0.00058	0.00065	0.00107	20≤Age≤29	0.00103	0.00077	0.00092	0.00111	0.00171
30≤Age≤39	0.00073	0.00067	0.00069	0.00077	0.00126	30≤Age≤39	0.00177	0.00133	0.00158	0.00191	0.00294
40≤Age≤49	0.00195	0.00179	0.00185	0.00207	0.00338	40≤Age≤49	0.00378	0.00284	0.00336	0.00409	0.00628
50≤Age≤59	0.00348	0.00320	0.00330	0.00369	0.00602	50≤Age≤59	0.00515	0.00387	0.00458	0.00556	0.00855
60≤Age≤69	0.01069	0.00983	0.01013	0.01135	0.01846	60≤Age≤69	0.01889	0.01424	0.01684	0.02042	0.03126
≥70	0.03686	0.03390	0.03494	0.03908	0.06300	≥70	0.05482	0.04151	0.04896	0.05917	0.08961

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Supplementary Table 10. Probabilities of death for insured non-diabetics by gender, race, age and BMI groups

Female						Male					
						White					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00011	0.00010	0.00011	0.00012	0.00019	≤19	0.00129	0.00097	0.00115	0.00139	0.00214
20≤Age≤29	0.00056	0.00051	0.00053	0.00059	0.00097	20≤Age≤29	0.00091	0.00068	0.00081	0.00098	0.00151
30≤Age≤39	0.00066	0.00061	0.00063	0.00070	0.00115	30≤Age≤39	0.00156	0.00117	0.00139	0.00169	0.00260
40≤Age≤49	0.00177	0.00163	0.00168	0.00188	0.00307	40≤Age≤49	0.00333	0.00251	0.00297	0.00360	0.00554
50≤Age≤59	0.00316	0.00290	0.00299	0.00335	0.00547	50≤Age≤59	0.00454	0.00341	0.00404	0.00491	0.00754
60≤Age≤69	0.00972	0.00893	0.00920	0.01031	0.01678	60≤Age≤69	0.01667	0.01256	0.01485	0.01802	0.02760
≥70	0.03353	0.03084	0.03178	0.03555	0.05738	≥70	0.04847	0.03667	0.04327	0.05233	0.07940
						Black					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00014	0.00013	0.00013	0.00015	0.00024	≤19	0.00207	0.00156	0.00184	0.00224	0.00345
20≤Age≤29	0.00069	0.00063	0.00065	0.00073	0.00119	20≤Age≤29	0.00146	0.00110	0.00130	0.00158	0.00243
30≤Age≤39	0.00081	0.00075	0.00077	0.00086	0.00141	30≤Age≤39	0.00251	0.00189	0.00223	0.00271	0.00417
40≤Age≤49	0.00218	0.00200	0.00206	0.00231	0.00377	40≤Age≤49	0.00535	0.00403	0.00477	0.00579	0.00890
50≤Age≤59	0.00388	0.00356	0.00367	0.00412	0.00671	50≤Age≤59	0.00729	0.00549	0.00649	0.00788	0.01211
60≤Age≤69	0.01192	0.01095	0.01129	0.01265	0.02056	60≤Age≤69	0.02669	0.02014	0.02380	0.02884	0.04404
≥70	0.04102	0.03774	0.03888	0.04348	0.07000	≥70	0.07685	0.05836	0.06872	0.08287	0.12466
						Other					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00009	0.00008	0.00008	0.00009	0.00015	≤19	0.00091	0.00069	0.00081	0.00099	0.00152
20≤Age≤29	0.00043	0.00039	0.00041	0.00045	0.00074	20≤Age≤29	0.00064	0.00048	0.00057	0.00069	0.00107
30≤Age≤39	0.00051	0.00047	0.00048	0.00054	0.00088	30≤Age≤39	0.00111	0.00083	0.00098	0.00120	0.00184
40≤Age≤49	0.00136	0.00125	0.00129	0.00144	0.00235	40≤Age≤49	0.00236	0.00178	0.00210	0.00255	0.00393
50≤Age≤59	0.00242	0.00223	0.00229	0.00257	0.00419	50≤Age≤59	0.00321	0.00242	0.00286	0.00348	0.00535
60≤Age≤69	0.00746	0.00685	0.00706	0.00791	0.01288	60≤Age≤69	0.01184	0.00891	0.01054	0.01280	0.01963
≥70	0.02580	0.02372	0.02445	0.02737	0.04428	≥70	0.03459	0.02612	0.03085	0.03736	0.05692

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Supplementary Table 11. Annual healthcare expenditures for insured diabetics by gender, race, age and BMI groups

Female						Male					
						White					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	3113	3140	3796	4347	3882	≤19	1588	1535	1805	1843	3542
20≤Age≤29	2932	2963	3586	4075	3655	20≤Age≤29	1908	1842	2161	2213	4239
30≤Age≤39	3681	3721	4503	5114	4589	30≤Age≤39	2531	2435	2842	2930	5573
40≤Age≤49	4065	4114	4980	5637	5068	40≤Age≤49	3544	3401	3954	4097	7750
50≤Age≤59	5268	5333	6457	7297	6566	50≤Age≤59	4774	4575	5310	5515	10404
60≤Age≤69	5544	5613	6796	7678	6911	60≤Age≤69	6105	5844	6770	7047	13262
≥70	7722	7823	9475	10680	9625	≥70	8772	8391	9707	10122	19013
						Black					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	2855	2867	3461	4027	3562	≤19	1451	1417	1695	1695	3333
20≤Age≤29	2719	2740	3311	3805	3391	20≤Age≤29	1766	1720	2048	2059	4025
30≤Age≤39	3418	3446	4165	4778	4262	30≤Age≤39	2401	2326	2744	2791	5388
40≤Age≤49	3793	3830	4632	5285	4729	40≤Age≤49	3426	3304	3872	3972	7596
50≤Age≤59	4927	4979	6024	6852	6143	50≤Age≤59	4661	4485	5237	5397	10270
60≤Age≤69	5188	5243	6344	7212	6468	60≤Age≤69	6021	5780	6725	6962	13181
≥70	7251	7336	8881	10055	9039	≥70	8711	8349	9690	10063	18987
						Other					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	2903	2926	3536	4062	3620	≤19	1715	1661	1960	1993	3848
20≤Age≤29	2740	2768	3348	3814	3416	20≤Age≤29	2067	1998	2351	2399	4614
30≤Age≤39	3441	3477	4207	4787	4290	30≤Age≤39	2755	2653	3104	3191	6087
40≤Age≤49	3804	3848	4657	5280	4743	40≤Age≤49	3871	3718	4330	4477	8488
50≤Age≤59	4932	4991	6042	6837	6148	50≤Age≤59	5224	5011	5823	6038	11410
60≤Age≤69	5191	5253	6360	7195	6471	60≤Age≤69	6694	6412	7433	7730	14563
≥70	7235	7328	8874	10012	9018	≥70	9631	9216	10668	11116	20897

SUPPLEMENTARY DATA

Supplementary Table 12. Annual healthcare expenditures for insured non-diabetics by gender, race, age and BMI groups

Female						Male					
						White					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	1917	1919	2313	2722	2392	≤19	657	648	787	772	1550
20≤Age≤29	1839	1849	2233	2585	2294	20≤Age≤29	808	794	959	947	1887
30≤Age≤39	2313	2328	2812	3249	2886	30≤Age≤39	1125	1097	1308	1312	2571
40≤Age≤49	2576	2597	3140	3601	3213	40≤Age≤49	1635	1585	1872	1901	3675
50≤Age≤59	3352	3383	4091	4675	4180	50≤Age≤59	2247	2170	2550	2607	5004
60≤Age≤69	3531	3564	4311	4922	4403	60≤Age≤69	2931	2822	3298	3395	6468
≥70	4947	5001	6052	6874	6167	≥70	4271	4102	4777	4940	9364
						Black					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	1690	1677	2014	2452	2112	≤19	524	527	661	622	1307
20≤Age≤29	1660	1659	1998	2368	2073	20≤Age≤29	660	660	821	781	1623
30≤Age≤39	2094	2094	2524	2982	2614	30≤Age≤39	965	955	1168	1136	2304
40≤Age≤49	2357	2365	2853	3330	2941	40≤Age≤49	1465	1437	1730	1715	3406
50≤Age≤59	3084	3100	3742	4340	3847	50≤Age≤59	2062	2012	2403	2407	4724
60≤Age≤69	3252	3270	3949	4573	4057	60≤Age≤69	2761	2679	3169	3212	6223
≥70	4592	4630	5596	6421	5727	≥70	4098	3959	4652	4756	9129
						Other					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	1773	1772	2134	2529	2213	≤19	690	683	835	812	1646
20≤Age≤29	1709	1717	2072	2410	2133	20≤Age≤29	852	841	1022	1001	2013
30≤Age≤39	2152	2162	2611	3030	2684	30≤Age≤39	1199	1173	1406	1401	2766
40≤Age≤49	2401	2418	2922	3364	2995	40≤Age≤49	1759	1709	2026	2048	3981
50≤Age≤59	3128	3154	3813	4370	3901	50≤Age≤59	2429	2351	2771	2822	5440
60≤Age≤69	3295	3324	4019	4602	4109	60≤Age≤69	3185	3072	3598	3693	7059
≥70	4624	4672	5653	6434	5766	≥70	4658	4479	5225	5391	10245

SUPPLEMENTARY DATA

Supplementary Table 13. Probabilities of death for uninsured diabetics by gender, race, age and BMI groups

Female						Male					
White						White					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00020	0.00018	0.00019	0.00021	0.00034	≤19	0.00265	0.00200	0.00236	0.00287	0.00441
20≤Age≤29	0.00098	0.00090	0.00093	0.00104	0.00170	20≤Age≤29	0.00187	0.00141	0.00166	0.00202	0.00311
30≤Age≤39	0.00117	0.00107	0.00110	0.00124	0.00202	30≤Age≤39	0.00321	0.00242	0.00286	0.00348	0.00535
40≤Age≤49	0.00311	0.00286	0.00295	0.00331	0.00539	40≤Age≤49	0.00686	0.00516	0.00611	0.00742	0.01139
50≤Age≤59	0.00555	0.00510	0.00526	0.00589	0.00960	50≤Age≤59	0.00933	0.00703	0.00831	0.01009	0.01549
60≤Age≤69	0.01703	0.01565	0.01613	0.01807	0.02932	60≤Age≤69	0.03407	0.02573	0.03039	0.03681	0.05609
≥70	0.05823	0.05361	0.05523	0.06170	0.09873	≥70	0.09741	0.07417	0.08720	0.10493	0.15687
Black						Black					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00024	0.00022	0.00023	0.00026	0.00042	≤19	0.00427	0.00321	0.00380	0.00461	0.00709
20≤Age≤29	0.00121	0.00111	0.00114	0.00128	0.00209	20≤Age≤29	0.00301	0.00226	0.00268	0.00325	0.00500
30≤Age≤39	0.00143	0.00131	0.00136	0.00152	0.00248	30≤Age≤39	0.00517	0.00389	0.00460	0.00559	0.00859
40≤Age≤49	0.00382	0.00351	0.00362	0.00406	0.00661	40≤Age≤49	0.01101	0.00829	0.00981	0.01191	0.01827
50≤Age≤59	0.00681	0.00626	0.00645	0.00723	0.01178	50≤Age≤59	0.01498	0.01128	0.01334	0.01619	0.02481
60≤Age≤69	0.02087	0.01919	0.01978	0.02214	0.03589	60≤Age≤69	0.05427	0.04109	0.04846	0.05857	0.08871
≥70	0.07103	0.06543	0.06739	0.07522	0.11984	≥70	0.15205	0.11664	0.13658	0.16341	0.24013
Other						Other					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00015	0.00014	0.00014	0.00016	0.00026	≤19	0.00188	0.00141	0.00167	0.00203	0.00313
20≤Age≤29	0.00075	0.00069	0.00071	0.00080	0.00130	20≤Age≤29	0.00132	0.00100	0.00118	0.00143	0.00220
30≤Age≤39	0.00089	0.00082	0.00085	0.00095	0.00155	30≤Age≤39	0.00228	0.00171	0.00203	0.00246	0.00379
40≤Age≤49	0.00239	0.00219	0.00226	0.00253	0.00413	40≤Age≤49	0.00486	0.00366	0.00433	0.00526	0.00808
50≤Age≤59	0.00426	0.00391	0.00403	0.00452	0.00737	50≤Age≤59	0.00662	0.00498	0.00590	0.00716	0.01100
60≤Age≤69	0.01308	0.01202	0.01239	0.01388	0.02255	60≤Age≤69	0.02426	0.01830	0.02163	0.02622	0.04006
≥70	0.04495	0.04135	0.04261	0.04764	0.07658	≥70	0.07002	0.05313	0.06259	0.07553	0.11385

SUPPLEMENTARY DATA

Supplementary Table 14. Probabilities of death for uninsured non-diabetics by gender, race, age and BMI groups

Female						Male					
White						White					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00014	0.00013	0.00013	0.00015	0.00024	≤19	0.00166	0.00125	0.00148	0.00179	0.00276
20≤Age≤29	0.00068	0.00063	0.00065	0.00073	0.00119	20≤Age≤29	0.00117	0.00088	0.00104	0.00126	0.00194
30≤Age≤39	0.00081	0.00075	0.00077	0.00086	0.00141	30≤Age≤39	0.00201	0.00151	0.00179	0.00217	0.00334
40≤Age≤49	0.00217	0.00199	0.00205	0.00230	0.00376	40≤Age≤49	0.00429	0.00322	0.00382	0.00464	0.00713
50≤Age≤59	0.00387	0.00355	0.00366	0.00411	0.00669	50≤Age≤59	0.00584	0.00439	0.00520	0.00631	0.00970
60≤Age≤69	0.01189	0.01092	0.01126	0.01261	0.02050	60≤Age≤69	0.02141	0.01614	0.01908	0.02314	0.03539
≥70	0.04090	0.03763	0.03877	0.04336	0.06980	≥70	0.06197	0.04697	0.05537	0.06686	0.10104
Black						Black					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00017	0.00016	0.00016	0.00018	0.00029	≤19	0.00267	0.00201	0.00237	0.00288	0.00443
20≤Age≤29	0.00084	0.00077	0.00080	0.00089	0.00146	20≤Age≤29	0.00188	0.00141	0.00167	0.00203	0.00312
30≤Age≤39	0.00100	0.00092	0.00094	0.00106	0.00173	30≤Age≤39	0.00323	0.00243	0.00288	0.00349	0.00537
40≤Age≤49	0.00266	0.00245	0.00252	0.00283	0.00461	40≤Age≤49	0.00689	0.00518	0.00614	0.00745	0.01144
50≤Age≤59	0.00475	0.00436	0.00450	0.00504	0.00821	50≤Age≤59	0.00938	0.00706	0.00835	0.01014	0.01556
60≤Age≤69	0.01458	0.01339	0.01381	0.01546	0.02512	60≤Age≤69	0.03423	0.02585	0.03053	0.03698	0.05634
≥70	0.04999	0.04601	0.04740	0.05298	0.08502	≥70	0.09784	0.07450	0.08759	0.10540	0.15754
Other						Other					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	0.00011	0.00010	0.00010	0.00011	0.00018	≤19	0.00117	0.00088	0.00105	0.00127	0.00195
20≤Age≤29	0.00052	0.00048	0.00050	0.00056	0.00091	20≤Age≤29	0.00083	0.00062	0.00074	0.00089	0.00138
30≤Age≤39	0.00062	0.00057	0.00059	0.00066	0.00108	30≤Age≤39	0.00142	0.00107	0.00127	0.00154	0.00237
40≤Age≤49	0.00166	0.00153	0.00157	0.00176	0.00288	40≤Age≤49	0.00304	0.00229	0.00271	0.00329	0.00505
50≤Age≤59	0.00297	0.00272	0.00281	0.00315	0.00513	50≤Age≤59	0.00414	0.00311	0.00368	0.00447	0.00688
60≤Age≤69	0.00912	0.00838	0.00864	0.00968	0.01575	60≤Age≤69	0.01521	0.01146	0.01356	0.01645	0.02520
≥70	0.03150	0.02897	0.02986	0.03340	0.05395	≥70	0.04431	0.03350	0.03954	0.04784	0.07268

SUPPLEMENTARY DATA

Supplementary Table 15. Annual healthcare expenditures for uninsured diabetics by gender, race, age and BMI groups

Female						Male					
White						White					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	1399	1381	1655	2057	1750	≤19	825	820	1008	973	1989
20≤Age≤29	1394	1388	1669	2008	1742	20≤Age≤29	1024	1013	1238	1205	2441
30≤Age≤39	1762	1755	2112	2531	2201	30≤Age≤39	1453	1426	1717	1702	3379
40≤Age≤49	1996	1997	2406	2841	2492	40≤Age≤49	2148	2092	2489	2505	4891
50≤Age≤59	2621	2628	3170	3711	3271	50≤Age≤59	2980	2889	3415	3465	6706
60≤Age≤69	2767	2775	3348	3913	3452	60≤Age≤69	3925	3790	4449	4554	8729
≥70	3927	3952	4773	5514	4899	≥70	5758	5543	6476	6668	12698
Black						Black					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	1146	1114	1327	1752	1436	≤19	627	636	811	748	1608
20≤Age≤29	1192	1172	1403	1768	1492	20≤Age≤29	797	805	1018	949	2016
30≤Age≤39	1514	1491	1786	2237	1894	30≤Age≤39	1197	1195	1483	1416	2929
40≤Age≤49	1752	1736	2085	2550	2190	40≤Age≤49	1862	1840	2242	2189	4419
50≤Age≤59	2328	2315	2783	3360	2908	50≤Age≤59	2660	2612	3149	3116	6199
60≤Age≤69	2463	2451	2947	3549	3076	60≤Age≤69	3618	3527	4205	4221	8266
≥70	3555	3556	4285	5062	4438	≥70	5435	5270	6230	6321	12234
Other						Other					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	1274	1253	1500	1889	1594	≤19	856	854	1060	1012	2093
20≤Age≤29	1281	1272	1528	1857	1601	20≤Age≤29	1068	1062	1308	1260	2581
30≤Age≤39	1621	1611	1936	2343	2025	30≤Age≤39	1536	1512	1833	1802	3610
40≤Age≤49	1845	1842	2218	2637	2303	40≤Age≤49	2295	2242	2680	2681	5271
50≤Age≤59	2428	2430	2929	3452	3031	50≤Age≤59	3203	3114	3696	3731	7260
60≤Age≤69	2564	2568	3096	3641	3201	60≤Age≤69	4247	4109	4838	4933	9496
≥70	3652	3671	4432	5143	4557	≥70	6260	6035	7067	7256	13861

SUPPLEMENTARY DATA

Supplementary Table 16. Annual cost estimates for uninsured non-diabetics by gender, race, age and BMI groups

Female						Male					
						White					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	717	691	821	1121	900	≤19	247	254	332	297	661
20≤Age≤29	765	747	892	1156	958	20≤Age≤29	319	327	424	383	842
30≤Age≤39	975	954	1139	1466	1221	30≤Age≤39	499	504	640	594	1269
40≤Age≤49	1143	1126	1349	1688	1430	40≤Age≤49	807	806	1002	955	1981
50≤Age≤59	1530	1513	1815	2236	1912	50≤Age≤59	1181	1171	1437	1391	2836
60≤Age≤69	1621	1605	1926	2365	2026	60≤Age≤69	1651	1624	1963	1936	3866
≥70	2366	2357	2835	3400	2955	≥70	2534	2475	2959	2960	5818
						Black					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	524	495	583	866	659	≤19	156	163	221	189	443
20≤Age≤29	595	570	676	943	747	20≤Age≤29	206	215	290	250	578
30≤Age≤39	764	734	871	1204	959	30≤Age≤39	342	353	466	412	929
40≤Age≤49	928	899	1070	1427	1163	40≤Age≤49	591	603	779	708	1547
50≤Age≤59	1267	1235	1473	1921	1587	50≤Age≤59	905	916	1165	1078	2309
60≤Age≤69	1349	1316	1571	2039	1689	60≤Age≤69	1338	1340	1672	1585	3305
≥70	2032	2001	2396	3004	2542	≥70	2152	2135	2621	2536	5170
						Other					
Age group	Normal	Overweight	Class I	Class II	Class III	Age group	Normal	Overweight	Class I	Class II	Class III
≤19	636	610	723	1008	798	≤19	244	253	334	295	664
20≤Age≤29	689	669	798	1051	863	20≤Age≤29	318	327	428	382	852
30≤Age≤39	879	856	1021	1336	1101	30≤Age≤39	504	513	658	603	1305
40≤Age≤49	1039	1019	1219	1547	1300	40≤Age≤49	829	833	1045	985	2068
50≤Age≤59	1396	1376	1649	2057	1746	50≤Age≤59	1227	1223	1514	1450	2989
60≤Age≤69	1481	1461	1752	2177	1852	60≤Age≤69	1738	1716	2090	2043	4118
≥70	2176	2163	2599	3146	2719	≥70	2696	2641	3175	3154	6248

SUPPLEMENTARY DATA

Supplementary Table 17. Bootstrapped means and standard errors of life years lost associated with diabetes for uninsured U.S. adults, 1997-2000.

Age ‡	BMI Class	White Female		Black Female		Other Female		White Male		Black Male		Other Male	
		LYL *	s.e.	LYL	s.e.	LYL	s.e.	LYL	s.e.	LYL	s.e.	LYL	s.e.
20-29	Normal weight	15.16	3.63	15.41	3.66	14.16	4.76	11.23	3.76	10.36	3.71	11.68	4.52
	Overweight	14.55	3.61	14.81	3.51	13.31	4.69	11.63	3.56	10.78	3.52	11.88	4.46
	Class I obese	14.24	3.57	14.34	3.46	12.92	4.65	11.06	3.81	10.21	3.73	11.21	4.67
	Class II obese	14.18	3.70	14.08	3.44	12.97	4.55	10.59	4.17	9.76	4.12	10.74	4.69
	Class III obese	14.31	3.31	13.73	3.10	13.72	4.25	9.48	4.57	8.75	4.36	9.47	4.77
30-39	Normal weight	17.08	2.90	16.54	2.97	17.28	3.95	10.62	3.41	9.44	3.29	11.36	4.22
	Overweight	16.90	2.88	16.35	2.83	16.88	3.93	11.25	3.26	10.07	3.16	11.87	4.22
	Class I obese	16.52	2.86	15.86	2.80	16.43	3.89	10.61	3.50	9.45	3.36	11.12	4.43
	Class II obese	16.05	3.00	15.27	2.83	16.03	3.78	10.04	3.84	8.91	3.71	10.52	4.44
	Class III obese	14.64	2.78	13.68	2.63	14.93	3.59	8.74	4.18	7.74	3.88	9.07	4.50
40-49	Normal weight	17.19	2.52	16.26	2.64	18.13	3.43	9.52	3.15	8.12	2.96	10.45	3.97
	Overweight	17.29	2.50	16.32	2.51	18.09	3.39	10.30	3.03	8.90	2.88	11.14	4.01
	Class I obese	16.91	2.51	15.88	2.51	17.64	3.39	9.63	3.26	8.26	3.06	10.37	4.22
	Class II obese	16.26	2.67	15.17	2.56	16.97	3.34	8.99	3.58	7.66	3.37	9.72	4.23
	Class III obese	14.08	2.53	12.97	2.41	14.88	3.30	7.58	3.88	6.40	3.50	8.17	4.29
50-59	Normal weight	15.90	2.25	14.80	2.36	17.18	3.12	8.32	2.83	6.77	2.55	9.39	3.67
	Overweight	16.16	2.24	15.03	2.26	17.34	3.09	9.22	2.76	7.65	2.54	10.24	3.75
	Class I obese	15.83	2.27	14.65	2.28	16.94	3.12	8.54	2.97	7.00	2.69	9.47	3.96
	Class II obese	15.11	2.43	13.92	2.33	16.20	3.09	7.86	3.26	6.37	2.94	8.78	3.97
	Class III obese	12.58	2.28	11.42	2.17	13.67	3.06	6.37	3.43	5.03	2.92	7.17	3.95
60-69	Normal weight	13.84	2.01	12.69	2.11	15.26	2.85	7.16	2.51	5.56	2.19	8.31	3.37
	Overweight	14.19	2.02	13.01	2.04	15.56	2.85	8.13	2.50	6.48	2.23	9.25	3.50
	Class I obese	13.91	2.05	12.71	2.07	15.22	2.89	7.45	2.69	5.85	2.36	8.51	3.70
	Class II obese	13.20	2.21	12.00	2.12	14.47	2.88	6.76	2.95	5.21	2.57	7.79	3.70
	Class III obese	10.58	2.04	9.45	1.93	11.80	2.82	5.27	3.03	3.89	2.45	6.20	3.64
70+	Normal weight	11.23	1.71	10.11	1.78	12.67	2.49	5.68	2.06	4.17	1.73	6.83	2.87
	Overweight	11.62	1.73	10.48	1.73	13.04	2.52	6.64	2.09	5.04	1.81	7.80	3.04
	Class I obese	11.38	1.77	10.24	1.78	12.76	2.57	6.00	2.24	4.47	1.89	7.10	3.20
	Class II obese	10.72	1.91	9.58	1.82	12.05	2.56	5.34	2.47	3.89	2.07	6.40	3.21
	Class III obese	8.21	1.71	7.20	1.60	9.43	2.44	3.98	2.46	2.72	1.90	4.91	3.07

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Supplementary Table 18. Bootstrapped means and standard errors of cost differentials (in 2010 U.S. dollars) associated with diabetes for uninsured U.S. adults, 1997-2000.

Age	BMI Class	White Female		Black Female		Other Female		White Male		Black Male		Other Male	
		\$ †	s.e.	\$	s.e.	\$	s.e.	\$	s.e.	\$	s.e.	\$	s.e.
20-29	Normal weight	58,368	21,868	50,576	18,171	57,602	19,742	46,490	19,439	36,600	16,653	55,101	23,634
	Overweight	58,894	21,051	50,421	17,495	57,498	18,910	48,148	20,639	39,121	17,650	56,522	24,826
	Class I obese	69,097	25,368	58,596	20,510	67,003	22,613	52,735	22,527	43,486	19,947	61,804	27,062
	Class II obese	74,957	29,473	64,757	24,623	72,880	26,130	50,934	22,296	40,316	18,627	59,565	26,388
	Class III obese	57,951	24,184	48,699	19,445	56,754	21,941	81,538	49,592	65,097	39,040	95,978	57,267
30-39	Normal weight	54,879	21,100	47,420	17,555	55,548	19,481	50,125	21,633	39,815	18,530	60,788	26,830
	Overweight	56,057	20,472	47,933	17,064	56,202	18,840	52,450	23,097	42,818	19,719	62,977	28,343
	Class I obese	65,885	24,775	55,895	20,080	65,667	22,641	56,739	25,097	46,858	22,158	68,059	30,804
	Class II obese	70,501	28,681	60,678	24,034	70,469	26,066	54,779	24,863	43,724	20,754	65,627	30,073
	Class III obese	52,932	23,088	44,662	18,664	53,246	21,540	85,411	54,697	68,571	42,992	103,090	64,605
40-49	Normal weight	46,974	20,137	40,444	16,684	48,950	19,054	50,584	23,075	40,194	19,523	63,082	29,202
	Overweight	48,620	19,654	41,495	16,313	50,216	18,556	53,732	24,911	43,680	20,987	66,293	31,176
	Class I obese	57,183	23,806	48,499	19,234	58,759	22,337	57,293	26,883	46,944	23,384	70,678	33,718
	Class II obese	60,101	27,506	51,426	22,961	61,970	25,659	55,064	26,682	43,946	21,988	67,922	32,974
	Class III obese	43,443	21,669	36,747	17,490	45,124	20,814	83,043	57,635	66,470	44,806	103,306	69,681
50-59	Normal weight	36,592	18,700	31,307	15,405	39,600	18,176	46,775	23,164	36,767	19,131	60,337	29,966
	Overweight	38,469	18,403	32,671	15,172	41,257	17,855	50,740	25,300	40,585	20,826	64,683	32,360
	Class I obese	45,192	22,260	38,199	17,893	48,255	21,490	53,213	27,147	42,768	23,012	67,920	34,878
	Class II obese	46,266	25,651	39,195	21,276	49,640	24,612	50,669	26,952	40,013	21,685	64,746	34,097
	Class III obese	31,735	19,606	26,908	15,742	34,331	19,449	73,560	56,568	58,419	43,052	94,790	70,275
60-69	Normal weight	22,652	15,816	18,858	12,895	26,616	16,053	36,723	21,028	27,174	16,535	50,530	28,380
	Overweight	24,595	15,695	20,395	12,774	28,511	15,899	41,707	23,438	31,492	18,511	56,268	31,187
	Class I obese	28,722	19,006	23,738	15,120	33,214	19,202	42,336	25,010	31,784	20,227	57,529	33,557
	Class II obese	27,656	21,759	22,535	17,812	32,471	21,825	39,204	24,519	29,051	18,816	53,651	32,430
	Class III obese	16,079	15,820	13,293	12,512	19,585	16,645	51,477	48,494	37,708	34,769	72,170	63,580
70+	Normal weight	13,075	13,328	10,626	10,808	17,065	14,025	28,393	18,427	19,943	14,012	41,174	25,620
	Overweight	14,819	13,332	12,068	10,775	18,885	14,005	33,474	20,819	24,093	15,966	47,288	28,527
	Class I obese	17,164	16,179	13,961	12,807	21,891	16,979	33,117	22,193	23,468	17,360	47,378	30,741
	Class II obese	15,039	18,475	11,664	15,016	19,960	19,225	29,966	21,757	20,998	16,161	43,406	29,649
	Class III obese	6,591	12,994	5,274	10,198	9,987	14,345	36,088	41,113	24,374	28,255	54,523	55,995

Notes: * LYL: Life Years Lost associated with diabetes, † \$: Healthcare cost differentials between diabetics and non-diabetics, ‡ Age refers to the average age of patients entering into the Markov model.

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Supplementary Table 19. Results summary of life years lost and cost differentials associated with diabetes

	Life Years Lost	Cost Differentials
Gender	<ul style="list-style-type: none"> Females lost more years than Males. 	<ul style="list-style-type: none"> Cost differentials are higher for females than males
Age	<ul style="list-style-type: none"> The number of life years lost declined with age. 	<ul style="list-style-type: none"> Cost differentials decline with age
Race	<ul style="list-style-type: none"> Individuals of other races lost more years than whites, and whites lost more years than blacks. 	<ul style="list-style-type: none"> Individuals of other races have higher cost differentials compared with whites, and whites have higher cost differentials compared with blacks
BMI	<ul style="list-style-type: none"> Life years lost demonstrates an inverted U-shape over most of the age-race-gender-BMI classification groups with peaks at the overweight group. 	<ul style="list-style-type: none"> Demonstrates an inverted U-shape over most of the age-race-gender classification groups with peaks at the Class II obese group for females. For males, cost differentials are weakly increasing over BMI groups.
Insurance	<ul style="list-style-type: none"> Similar patterns and magnitudes of life years lost are observed for the insured and the uninsured groups. 	<ul style="list-style-type: none"> Cost differentials for the uninsured show similar patterns compared with the insured. However, the size of the cost differentials are about 2 times smaller compared with the insured.

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Supplementary Table 20. Results of ANOVA tests comparing the predicted life years lost and healthcare expenditure differentials across age-race-gender-BMI classification groups

LYLs	P- value	F-stat	F-critical
Age	8.56E-06	6.77159	2.266062
Gender	1.32E-41	319.783	3.894232
Race	0.04953	3.090268	3.047012
BMI	0.005743	3.769581	2.423286
Cost Differentials	P- value	F-stat	F-critical
Age	1.69E-29	44.66282	2.266062
Gender	0.725907	0.123291	3.894232
Race	2.14E-05	11.43171	3.047012
BMI	0.257117	1.339633	2.423286

SUPPLEMENTARY DATA

References

1. World Health Organization (2000) Obesity: preventing and managing the global epidemic. *World Health Organ Tech Rep Ser*;894:1-253.
2. Mihaylova B, Briggs A, O'Hagan A, Thompson SG. Review of statistical methods for analysing healthcare resources and costs. *Health Econ* 2011;20(8):897-916.
3. Manning WG, Mullahy J. Estimating log models: to transform or not to transform? *Journal of Health Economics* 2001;20(4):461-494.