

APPENDIX

Table A-1. Coefficients for Stepwise Regression Model for ED Costs

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-3.594e+01	7.004e+00	-5.132	2.98e-07	***
StateAR	7.059e-01	1.888e-01	3.740	0.000186	***
StateLA	6.120e-01	1.815e-01	3.371	0.000754	***
StateNC	6.396e-01	1.658e-01	3.858	0.000116	***
EDs	2.355e-04	2.442e-05	9.642	< 2e-16	***
HOS	-3.244e-03	3.289e-04	-9.863	< 2e-16	***
POS	3.333e-05	2.402e-05	1.388	0.165229	
WhitePop	-1.525e-03	2.818e-04	-5.412	6.52e-08	***
HealthyPop	1.622e-01	3.041e-02	5.334	1.00e-07	***
ChronicPop	1.582e-01	3.048e-02	5.190	2.19e-07	***
Unemployment	-3.022e-03	9.798e-04	-3.084	0.002052	**
Income	5.833e-07	1.860e-07	3.136	0.001720	**
TotalChild	-1.894e-05	8.790e-06	-2.155	0.031242	*
TotalAdult	-8.395e-06	3.619e-06	-2.320	0.020377	*
Accessibility	-1.977e-03	9.347e-04	-2.115	0.034466	*
RankingsPCP	4.350e-04	1.287e-04	3.381	0.000728	***
RankingsFood	1.461e-02	4.180e-03	3.495	0.000478	***
RankingsHousing	3.031e-03	1.265e-03	2.395	0.016637	*
RankingsSocial	-3.096e-03	1.123e-03	-2.758	0.005842	**
Availability.NewLow	-8.406e-02	9.590e-03	-8.766	< 2e-16	***
Availability.NewMiddle	-1.795e-02	7.487e-03	-2.397	0.016555	*
Accessibility.NewHigh	1.508e-02	1.015e-02	1.485	0.137518	
Accessibility.NewLow	-2.937e-02	8.619e-03	-3.407	0.000662	***
log(EDs)	4.753e-01	1.832e-02	25.948	< 2e-16	***
log(POS)	-4.269e-01	1.792e-02	-23.822	< 2e-16	***
inv.logit(range01(ComplexPop))	4.360e+01	7.872e+00	5.538	3.22e-08	***
StateAR:EDs	-1.680e-04	2.608e-05	-6.441	1.30e-10	***
StateLA:EDs	-2.438e-04	2.391e-05	-10.197	< 2e-16	***
StateNC:EDs	-2.199e-04	2.360e-05	-9.319	< 2e-16	***
StateAR:POS	6.856e-05	2.678e-05	2.561	0.010478	*
StateLA:POS	1.229e-04	2.596e-05	4.736	2.24e-06	***
StateNC:POS	3.234e-05	2.251e-05	1.436	0.150953	
StateAR:HOS	-2.598e-04	5.388e-04	-0.482	0.629719	
StateLA:HOS	2.556e-03	3.566e-04	7.168	8.75e-13	***
StateNC:HOS	3.659e-04	4.678e-04	0.782	0.434113	
StateAR:HealthyPop	-3.990e-03	2.305e-03	-1.731	0.083435	.
StateLA:HealthyPop	-8.783e-03	2.180e-03	-4.029	5.70e-05	***
StateNC:HealthyPop	5.319e-03	2.084e-03	2.552	0.010728	*
StateAR:ChronicPop	1.797e-02	5.904e-03	3.044	0.002347	**
StateLA:ChronicPop	-5.479e-03	5.043e-03	-1.087	0.277272	
StateNC:ChronicPop	-1.376e-03	4.721e-03	-0.291	0.770762	
StateAR:WhitePop	2.522e-03	4.849e-04	5.201	2.07e-07	***
StateLA:WhitePop	4.116e-03	4.184e-04	9.835	< 2e-16	***
StateNC:WhitePop	3.774e-03	3.769e-04	10.013	< 2e-16	***
StateAR:Unemployment	-1.695e-03	1.839e-03	-0.922	0.356589	
StateLA:Unemployment	6.015e-03	1.375e-03	4.375	1.24e-05	***
StateNC:Unemployment	5.843e-03	1.221e-03	4.784	1.77e-06	***

 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1863 on 4971 degrees of freedom
 Multiple R-squared: 0.9027, Adjusted R-squared: 0.9018
 F-statistic: 1003 on 46 and 4971 DF, p-value: < 2.2e-16

Table A-2. Coefficients for Lasso Regression Model for ED Costs

EDs.scale	0.025719071
log.EDs.scale	4.649557028
HOS.scale	-0.507605034
POS.scale	0.368895811
log.POS.scale	-3.673061305
whitePop.scale	-0.026508246
BlackPop.scale	0.061560205
log.OtherPop.scale	0.053958665
inv.logit.ComplexPop.scale	0.223490320
Unemployment.scale	0.039003724
Income.scale	0.136306000
TotalChild.scale	-0.081588491
TotalAdult.scale	-0.094484690
Accessibility.scale	-0.018214088
Availability.scale	0.011219230
RankingsPCP.scale	0.071252293
RankingsHousing.scale	0.068348252
RankingsSocial.scale	-0.059057128
ProvDensity.scale	-0.010447672
RankingsFood.scale	0.060658901
StateAR	0.388276566
StateLA	0.053705383
StateNC	0.933901079
UrbanicitySuburban	0.010512010
UrbanicityUrban	.
Accessibility.NewHigh	0.009030693
Accessibility.NewLow	-0.020261292
Availability.NewLow	-0.064107472
Availability.NewMiddle	-0.002672922
EDs.scale:StateAR	0.858753189
EDs.scale:StateLA	.
EDs.scale:StateNC	.
POS.scale:StateAR	0.141267308
POS.scale:StateLA	0.814472016
POS.scale:StateNC	.
HOS.scale:StateAR	-0.609987429
HOS.scale:StateLA	0.075544890
HOS.scale:StateNC	-0.675640721
ChronicPop.scale:StateAR	2.344298328
ChronicPop.scale:StateLA	0.214942821
ChronicPop.scale:StateNC	.
whitePop.scale:StateAR	0.215967001
whitePop.scale:StateLA	0.342723428
whitePop.scale:StateNC	0.272727924

Table A-3. Coefficients for Lasso Logistic Regression Model for ED Costs

EDs.scale	8.7265046
log.EDs.scale	5.5777026
HOS.scale	-0.4139463
POs.scale	-4.5017671
log.POs.scale	-2.8222183
whitePop.scale	0.3791609
OtherPop.scale	-2.4775562
HealthyPop.scale	0.3568951
ChronicPop.scale	-4.5800366
Unemployment.scale	0.2850573
Education.scale	-0.3321390
TotalChild.scale	-0.4658248
TotalAdult.scale	-0.3322600
Accessibility.scale	0.1297254
Availability.scale	0.0278289
RankingsPCP.scale	1.0262392
RankingsFood.scale	-0.5619424
RankingsHousing.scale	-11.2473551
RankingsExercise.scale	-0.4384502
RankingsSocial.scale	0.3279465
ProvDensity.scale	1.1662827

Table A-4. Coefficients for Stepwise Regression Model for PO Costs

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	2.268e+00	2.876e-01	7.887	3.79e-15	***
StateAR	6.523e-01	2.767e-01	2.358	0.018419	*
StateLA	-9.287e-01	2.518e-01	-3.689	0.000228	***
StateNC	-6.300e-02	2.313e-01	-0.272	0.785334	
EDs	3.497e-04	2.481e-05	14.094	< 2e-16	***
HOS	-5.432e-03	3.348e-04	-16.224	< 2e-16	***
POS	9.001e-05	2.479e-05	3.631	0.000285	***
WhitePop	8.143e-04	2.557e-03	0.318	0.750180	
BlackPop	-8.204e-04	2.518e-03	-0.326	0.744547	
HealthyPop	-6.679e-03	1.184e-03	-5.643	1.76e-08	***
ChronicPop	-1.160e-02	1.852e-03	-6.261	4.15e-10	***
Unemployment	1.686e-03	5.543e-04	3.043	0.002358	**
Income	1.516e-06	3.634e-07	4.171	3.08e-05	***
UrbanicitySuburban	8.374e-02	1.126e-02	7.436	1.21e-13	***
UrbanicityUrban	7.819e-02	1.050e-02	7.443	1.15e-13	***
TotalAdult	-2.316e-05	2.833e-06	-8.176	3.69e-16	***
Accessibility	-2.548e-03	9.386e-04	-2.714	0.006661	**
RankingsFood	7.248e-03	4.422e-03	1.639	0.101274	
RankingsHousing	-1.850e-03	1.314e-03	-1.407	0.159390	
RankingsExercise	7.652e-04	1.797e-04	4.258	2.10e-05	***
RankingsSocial	-5.237e-03	1.159e-03	-4.517	6.42e-06	***
ProvDensity	-3.204e-02	1.273e-02	-2.518	0.011842	*
Availability.NewLow	-3.637e-02	1.019e-02	-3.569	0.000361	***
Availability.NewMiddle	5.905e-03	7.623e-03	0.775	0.438620	
Accessibility.NewHigh	-1.239e-02	1.022e-02	-1.213	0.225286	
Accessibility.NewLow	-3.323e-02	8.685e-03	-3.826	0.000132	***
log(EDs)	-4.787e-01	1.896e-02	-25.247	< 2e-16	***
log(POS)	5.950e-01	1.880e-02	31.651	< 2e-16	***
log(OtherPop)	8.172e-02	1.699e-02	4.809	1.56e-06	***
StateAR:EDs	-2.683e-04	2.637e-05	-10.173	< 2e-16	***
StateLA:EDs	-3.339e-04	2.417e-05	-13.813	< 2e-16	***
StateNC:EDs	-3.052e-04	2.389e-05	-12.778	< 2e-16	***
StateAR:POS	-6.200e-05	2.786e-05	-2.225	0.026115	*
StateLA:POS	-8.534e-06	2.661e-05	-0.321	0.748460	
StateNC:POS	-5.484e-05	2.332e-05	-2.351	0.018759	*
StateAR:HOS	2.101e-03	5.505e-04	3.816	0.000137	***
StateLA:HOS	3.952e-03	3.620e-04	10.917	< 2e-16	***
StateNC:HOS	1.228e-03	4.739e-04	2.590	0.009612	**
StateAR:HealthyPop	-2.594e-03	1.866e-03	-1.390	0.164514	
StateLA:HealthyPop	7.147e-03	1.825e-03	3.916	9.13e-05	***
StateNC:HealthyPop	1.514e-02	1.486e-03	10.194	< 2e-16	***
StateAR:WhitePop	4.356e-05	2.467e-03	0.018	0.985915	
StateLA:WhitePop	1.069e-02	2.301e-03	4.647	3.45e-06	***
StateNC:WhitePop	2.442e-03	2.121e-03	1.152	0.249564	
StateAR:BlackPop	6.372e-04	2.355e-03	0.271	0.786734	
StateLA:BlackPop	1.027e-02	2.202e-03	4.664	3.19e-06	***
StateNC:BlackPop	1.275e-03	2.074e-03	0.615	0.538766	
StateAR:Income	6.777e-07	6.269e-07	1.081	0.279796	
StateLA:Income	-6.804e-07	4.769e-07	-1.427	0.153746	
StateNC:Income	-9.624e-07	4.020e-07	-2.394	0.016695	*

 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1872 on 4957 degrees of freedom
 Multiple R-squared: 0.8436, Adjusted R-squared: 0.842
 F-statistic: 545.5 on 49 and 4957 DF, p-value: < 2.2e-16

Table A-5. Coefficients for Lasso Regression Model for PO Costs

EDs.scale	0.403377713
log.EDs.scale	-3.147789320
HOS.scale	-1.031777742
POS.scale	1.027193689
log.POS.scale	3.939940415
whitePop.scale	0.071184774
BlackPop.scale	-0.114635498
log.OtherPop.scale	0.229333708
HealthyPop.scale	0.101933954
ChronicPop.scale	-0.486146293
Unemployment.scale	0.106896883
Income.scale	0.297547972
Education.scale	-0.047711663
TotalChild.scale	-0.001419768
TotalAdult.scale	-0.174205204
Accessibility.scale	-0.043082965
RankingsHousing.scale	-0.259241903
RankingsExercise.scale	0.041644284
RankingsSocial.scale	-0.107607982
ProvDensity.scale	-0.082068126
RankingsFood.scale	0.036579910
StateAR	0.545071297
StateLA	0.158859990
StateNC	0.809169245
UrbanicitySuburban	0.080552477
UrbanicityUrban	0.077189495
Accessibility.NewHigh	-0.008474673
Accessibility.NewLow	-0.024340737
Availability.NewLow	-0.022716580
Availability.NewMiddle	0.013243155
EDs.scale:StateAR	0.160132980
EDs.scale:StateLA	.
EDs.scale:StateNC	.
POS.scale:StateAR	-0.345743678
POS.scale:StateLA	0.206841378
POS.scale:StateNC	-0.460107122
HOS.scale:StateAR	-0.367211723
HOS.scale:StateLA	.
HOS.scale:StateNC	-1.095893974
ChronicPop.scale:StateAR	.
ChronicPop.scale:StateLA	.
ChronicPop.scale:StateNC	-0.384469042
whitePop.scale:StateAR	-0.028372563
whitePop.scale:StateLA	.
whitePop.scale:StateNC	0.009119044

Table A-6. Coefficients for Lasso Logistic Regression Model for PO Costs

EDs.scale	-2.321796210
log.EDs.scale	-3.273302357
H0s.scale	-1.726061704
POs.scale	2.507838137
log.POs.scale	9.677463628
BlackPop.scale	-0.527938937
ChronicPop.scale	5.593264433
ComplexPop.scale	-2.305885630
Income.scale	2.391108722
Education.scale	-1.044769057
TotalAdult.scale	-0.858117782
Accessibility.scale	-0.006100989
RankingsFood.scale	2.384895486
RankingsHousing.scale	3.016731106
RankingsSocial.scale	-1.017411565
ProvDensity.scale	-1.206623431
UrbanicitySuburban	1.292047534
UrbanicityUrban	0.681708609
