

**Supplementary Table I (online only).** County-level models using rate per 1000 of amputation as outcome

Variable	Estimated coefficient (95% credible interval)
Major amputation county-level model (DIC = 157.41)	
Obesity rate per 1000	0.0022 (−0.0026 to 0.0068)
Hypercholesterolemia per 1000	−0.0004 (−0.0045 to 0.0037)
Renal failure rate per 1000	0.0044 (−0.0086 to 0.0174)
CKD rate per 1000	−0.0016 (−0.0078 to 0.0045)
COPD rate per 1000	−0.0026 (−0.0076 to 0.0023)
CHF rate per 1000	−0.0038 (−0.0109 to 0.0033)
CAD rate per 1000	0.0011 (−0.0042 to 0.0065)
Log (diabetes rate per 1000)	−3.2715 (−47.9764 to 41.9152)
PAD rate per 1000	−0.0067 (−0.0753 to 0.0623)
Diabetes with PAD rate per 1000	−0.0036 (−0.0710 to 0.0643)
Medicaid rate per 1000	0.0008 (−0.0062 to 0.0078)
Rurality	0.1463 (−0.4075 to 0.7019)
Minor amputation county-level model (DIC = 187.47)	
Obesity rate per 1000	0.0017 (−0.0023 to 0.0058)
Hypercholesterolemia per 1000	−0.0012 (−0.0049 to 0.0025)
Renal failure rate per 1000	0.0025 (−0.0089 to 0.0139)
CKD rate per 1000	0.0012 (−0.0042 to 0.0067)
COPD rate per 1000	−0.0009 (−0.0053 to 0.0035)
CHF rate per 1000	−0.0040 (−0.0102 to 0.0023)
CAD rate per 1000	0.0000 (−0.0047 to 0.0047)
Log (diabetes rate per 1000)	4.1831 (−38.2288 to 47.0341)
PAD rate per 1000	0.0023 (−0.0627 to 0.0678)
Diabetes with PAD rate per 1000	0.0124 (−0.0509 to 0.0762)
Medicaid rate per 1000	0.0010 (−0.0051 to 0.0071)
Rurality	−0.0165 (−0.5042 to 0.4721)
Major amputation zip code-level model (DIC = 1791.87)	
Obesity rate per 1000	0.0005 (−0.0020 to 0.0029)
Hypercholesterolemia per 1000	−0.0023 (−0.0042 to −0.0004) <sup>a</sup>
Renal failure rate per 1000	0.0017 (−0.0019 to 0.0052)
CKD rate per 1000	0.0003 (−0.0021 to 0.0027)
COPD rate per 1000	−0.0015 (−0.0033 to 0.0004)
CHF rate per 1000	−0.0010 (−0.0033 to 0.0013)
CAD rate per 1000	0.0011 (−0.0010 to 0.0032)
Log (diabetes rate per 1000)	35.3658 (21.3339-50.0095) <sup>a</sup>
PAD rate per 1000	0.0546 (0.0329-0.0772) <sup>a</sup>
Diabetes with PAD rate per 1000	0.0601 (0.0386-0.0825) <sup>a</sup>
Medicaid rate per 1000	0.0005 (−0.0016 to 0.0027)
Rurality	0.0362 (−0.3202 to 0.3923)
Minor amputation zip code-level model (DIC = 1884.68)	
Obesity rate per 1000	0.0005 (−0.0020 to 0.0030)
Hypercholesterolemia per 1000	−0.0011 (−0.0028 to 0.0006)
Renal failure rate per 1000	0.0005 (−0.0028 to 0.0037)
CKD rate per 1000	0.0025 (0.0002-0.0047) <sup>a</sup>
COPD rate per 1000	−0.0010 (−0.0025 to 0.0005)
CHF rate per 1000	−0.0019 (−0.0040 to 0.0001)
CAD rate per 1000	0.0002 (−0.0016 to 0.0020)
Log (diabetes rate per 1000)	27.8627 (15.0319-41.2191) <sup>a</sup>

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**Supplementary Table I (online only).** Continued.

Variable	Estimated coefficient (95% credible interval)
PAD rate per 1000	0.0395 (0.0198-0.0599) <sup>a</sup>
Diabetes with PAD rate per 1000	0.0514 (0.0317-0.0720)
Medicaid rate per 1000	0.0004 (-0.0016 to 0.0023)
Rurality	0.0725 (-0.2231 to 0.3698)

*CAD*, Coronary artery disease; *CHF*, congestive heart failure; *CKD*, chronic kidney disease; *COPD*, chronic obstructive pulmonary disease; *DIC*, deviance information criteria; *PAD*, peripheral arterial disease.  
<sup>a</sup>Statistically significant association.

**Supplementary Table II (online only).** County-level models using relative risk of amputation as outcome

Variable	Estimated coefficient (95% credible interval)
Major amputation county-level model (DIC = 145.36)	
Obesity rate per 1000	0.0022 (-0.0066 to 0.0104)
Hypercholesterolemia per 1000	-0.0004 (-0.0080 to 0.0072)
Renal failure rate per 1000	0.0047 (-0.0196 to 0.0288)
CKD rate per 1000	-0.0015 (-0.0130 to 0.0101)
COPD rate per 1000	-0.0025 (-0.0119 to 0.0066)
CHF rate per 1000	-0.0040 (-0.0171 to 0.0090)
CAD rate per 1000	0.0011 (-0.0087 to 0.0111)
Log (diabetes rate per 1000)	-0.3490 (-55.4056 to 55.3314)
PAD rate per 1000	-0.0022 (-0.0876 to 0.0838)
Diabetes with PAD rate per 1000	0.0006 (-0.0852 to 0.0871)
Medicaid rate per 1000	0.0009 (-0.0123 to 0.0138)
Rurality	0.1557 (-0.8694 to 1.2022)
Minor amputation county-level model (DIC = 143.34)	
Obesity rate per 1000	0.0017 (-0.0070 to 0.0100)
Hypercholesterolemia per 1000	-0.0011 (-0.0091 to 0.0068)
Renal failure rate per 1000	0.0029 (-0.0219 to 0.0274)
CKD rate per 1000	0.0013 (-0.0106 to 0.0133)
COPD rate per 1000	-0.0008 (-0.0104 to 0.0086)
CHF rate per 1000	-0.0047 (-0.0184 to 0.0089)
CAD rate per 1000	0.0004 (-0.0096 to 0.0105)
Log (diabetes rate per 1000)	2.3282 (-53.2750 to 58.5460)
PAD rate per 1000	-0.0008 (-0.0872 to 0.0862)
Diabetes with PAD rate per 1000	0.0099 (-0.0766 to 0.0970)
Medicaid rate per 1000	0.0010 (-0.0124 to 0.0141)
Rurality	-0.0200 (-1.0701 to 1.0473)
Major amputation zip code-level model (DIC = 1289.81)	
Obesity rate per 1000	0.0003 (-0.0015 to 0.0018)
Hypercholesterolemia per 1000	-0.0008 (-0.0021 to 0.0006)
Renal failure rate per 1000	0.0014 (-0.0012 to 0.0039)
CKD rate per 1000	-0.0003 (-0.0020 to 0.0013)
COPD rate per 1000	-0.0010 (-0.0022 to 0.0002)
CHF rate per 1000	-0.0006 (-0.0022 to 0.0011)
CAD rate per 1000	0.0002 (-0.0013 to 0.0018)
Log (diabetes rate per 1000)	16.2955 (5.7937-27.7623) <sup>a</sup>

**Supplementary Table II (online only).** Continued.

Variable	Estimated coefficient (95% credible interval)
PAD rate per 1000	0.0265 (0.0102-0.0443) <sup>a</sup>
Diabetes with PAD rate per 1000	0.0292 (0.0130-0.0469) <sup>a</sup>
Medicaid rate per 1000	0.0002 (-0.0014 to 0.0018)
Rurality	0.1721 (-0.0660 to 0.4060)
Minor amputation zip code-level model (DIC = 1251.23)	
Obesity rate per 1000	0.0005 (-0.0010 to 0.0019)
Hypercholesterolemia per 1000	-0.0002 (-0.0015 to 0.0010)
Renal failure rate per 1000	0.0004 (-0.0021 to 0.0027)
CKD rate per 1000	0.0016 (0.0001-0.0032) <sup>a</sup>
COPD rate per 1000	-0.0005 (-0.0017 to 0.0006)
CHF rate per 1000	-0.0011 (-0.0027 to 0.0005)
CAD rate per 1000	-0.0007 (-0.0021 to 0.0007)
Log (diabetes rate per 1000)	13.2024 (2.6292-24.9202) <sup>a</sup>
PAD rate per 1000	0.0182 (0.0020-0.0360) <sup>a</sup>
Diabetes with PAD rate per 1000	0.0261 (0.0098-0.0439) <sup>a</sup>
Medicaid rate per 1000	0.0007 (-0.0008 to 0.0022)
Rurality	0.0274 (-0.2021 to 0.2531)

*CAD*, Coronary artery disease; *CHF*, congestive heart failure; *CKD*, chronic kidney disease; *COPD*, chronic obstructive pulmonary disease; *DIC*, deviance information criteria; *PAD*, peripheral arterial disease.  
<sup>a</sup>Statistically significant association.